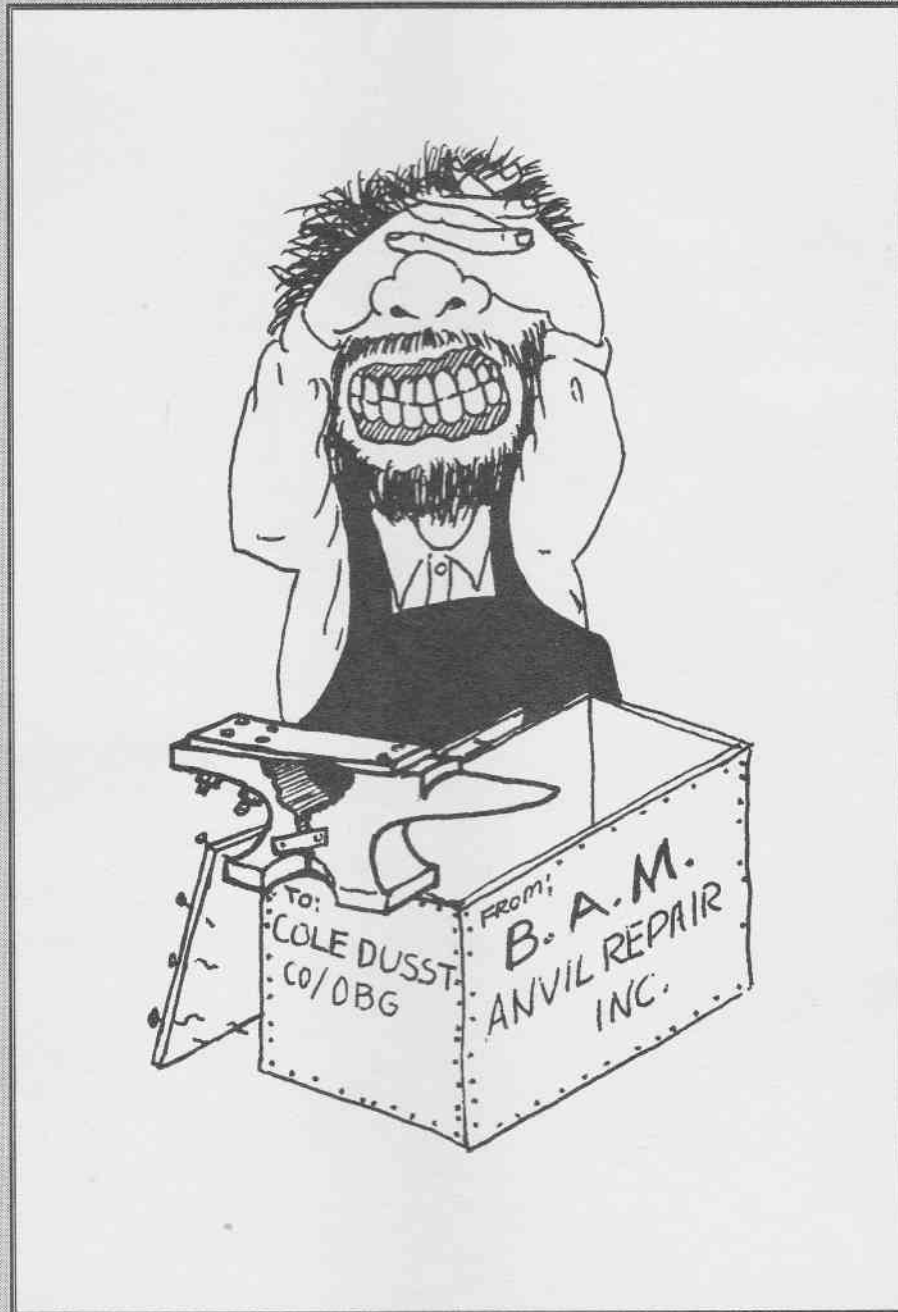


B.A.M.

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NEWSLETTER of the BLACKSMITHS ASSOCIATION OF MISSOURI

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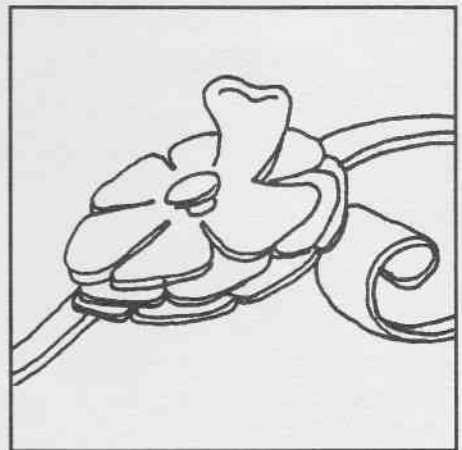
23 Dale Kirby hosts an unusual BAM meeting at his cooperage in Higbee.



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**Newsletter of the
Blacksmiths
Association
of Missouri**

*November — December
1996*

Volume 13 No. 6

Our cover: Donnie Fulwood, editor of the Ocmulgee Blacksmith Guild Newsletter, thinks he's real funny. Think we should go "fix" his anvil?

Editor

Jim McCarty

Contributing Editors

Donnie Fulwood

V.J. McCrackin

Pat McCarty

Jim Kendzora

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.

BAM Membership Application

Name: _____

Address: _____

City: _____ State: _____

Phone: () _____ Zip: _____

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.

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 mai\$50 yr.
- Contributory\$100 yr.
- Public library.....\$25 yr.

See reverse

Editor's anvil

In November I had the unique opportunity to attend the ABANA Board meeting held at Emmert Studebaker's Homestead in Tipp City, Ohio. Emmert is one of the founding fathers of ABANA and also part of the Studebaker car family.

His home sits in one of those picturesque corners of Ohio where the old barns compete with the scenery for attention. He has an incredible machine shop out back but the real interesting part is the Homestead area where SOFA used to hold their Quad State Round-up.

This place is a collection of old log cabins moved to the site and reconstructed. Wrought iron is everywhere, from the front gates to the little railing surrounding a statue of a blacksmith.

Emmert is a true gentleman, always dressed very dapper. He took me on a tour of his car collection and through the factory where I saw machines for working iron I can't even describe.

There are two things in life you never want to see made — sausage and the ABANA budget. With sausage, they throw everything in but the squeal. With the ABANA budget a lot of folks squeal.

Somehow, thanks to some ramrodding by Hans Peot, the thing gets done. If you know any of the directors give them a pat on the back — they work hard all year long.

I learned a real interesting fact at the meeting. For the \$35 in dues you put into ABANA you get back \$50 in services. The additional money comes from the conferences, sales from the office and library rentals. That's a pretty good return on your investment, if you ask me.

ABANA does two publications, sets up exhibits of member work, maintains a library of videos and books, offers plans for machinery, maintains a list of demonstrators and does much more to keep blacksmithing alive.

Isn't it time you joined? There's an application form in this issue. . .

If you haven't heard our own Lou Mueller was elected ABANA presi-

dent at the board meeting. I will miss Joe Harris who did an excellent job running what is getting to be a complex organization. But we all know Lou is a worthy successor.

I have been finding a little bit of forge time this fall, and I am happy to report that my wood stove does a passable job of taking the chill off the place. I hope to get some of the central Missouri folks together for a little hammer in soon.

One project I have on the back burner is to forge a bell stand for Father Helias' old bell. Father Helias was a priest who founded 7 small towns in central Missouri, including Taos and Loose Creek where I used to live. I named my forge for him.

He died ringing this bell, which is now housed in the little museum under the church in Taos. The museum committee asked me if I could create a stand for the bell so they could display it better.

Anyone interested in helping with this task let me know and I'll set up a time and place.

I missed both events at Lou Mueller's this fall but I understand they were well attended. Thanks Lou for hosting us and thanks also to Doug Hendrickson for supplying the beer that led to Doug Merkel coming to Missouri (it's a long story, you don't want to hear it...).

Lou thinks more events like these are possible down the road.

The Ozark Conference is shaping up nicely. Mike Boone is the featured demonstrator. Besides being a lot of fun, Mike is an excellent demonstrator following in the footsteps of his father Dan. (Yep, these two are descendents of the original D.Boone.)

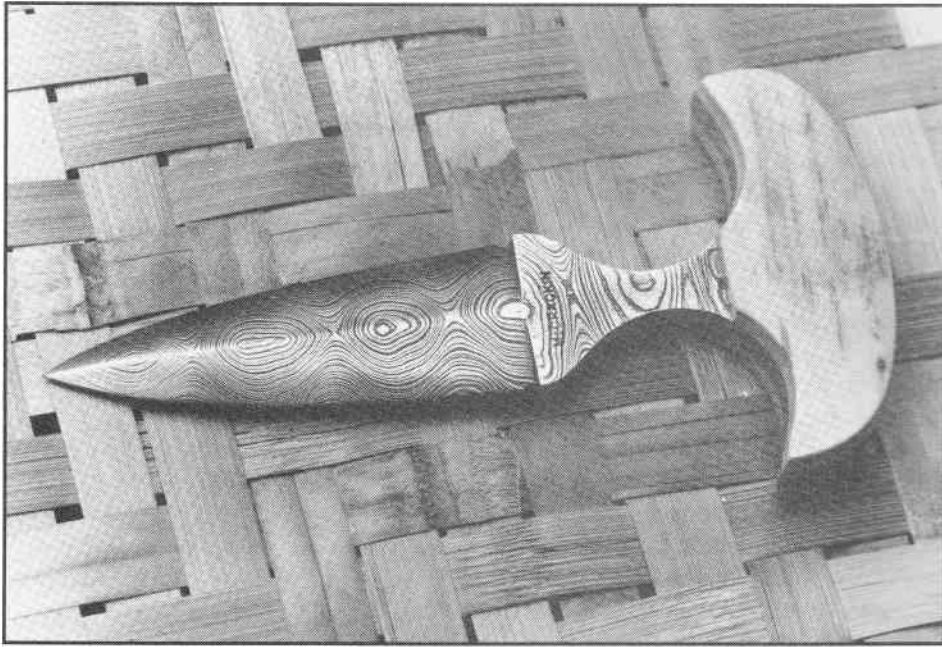
More info will be coming, but mark the first weekend in May for the conference and plan to be there.

That's all for now. To quote Doug, I gotta beat it.

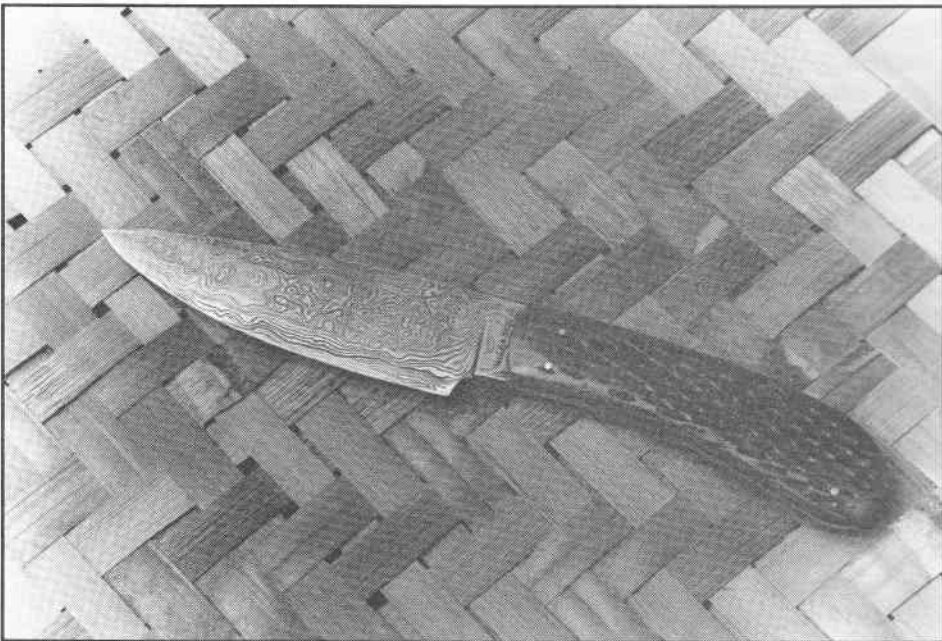
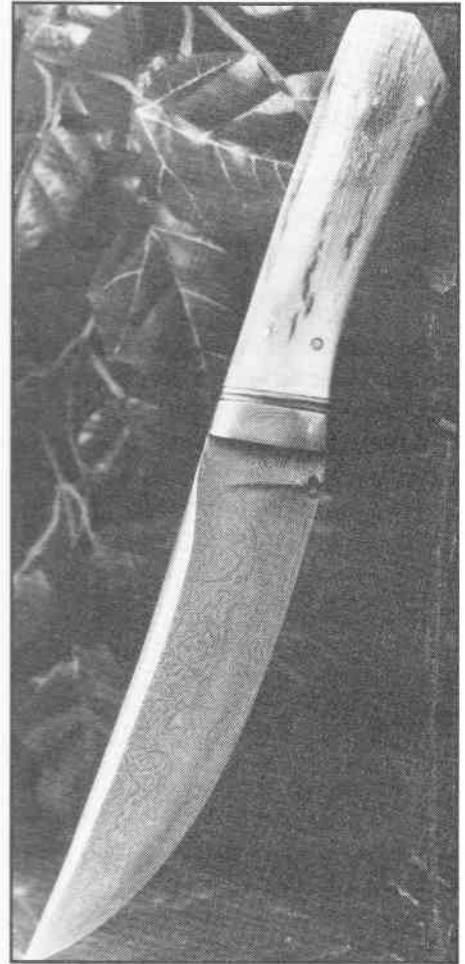
— Jim McCarty



McCrackin Knives



Here's some more nice knife work by V.J. McCrackin, master bladesmith. The photo above shows a Damascus push dagger, ladder pattern, O1 and mild steel. 5 inches long overall, 1 inch wide, mammoth ivory handle. At right is a random Damascus knife with Damascus bolsters, mammoth ivory handle. 10-1/2 inches long overall, 1-3/8 wide. Below is a Damascus hunter, random pattern, red bone handles, brass pins, 8 inches overall. All photos by Kevin McCrackin.



Pat's Place

As usual I've waited till the last minute to start cutting firewood. It seems I've been doing so much blacksmithing lately that I've neglected my chores.

I had a good show at Luxenhaus Farms this year then it was the workshop at Mt. Vernon, Ill. featuring Bob Patrick. Bob put on a good demo as always.

This weekend was the BAM meeting at Joe Wilkinson's shop. Joe had his shop addition done, with lots of room to watch the demos.

Lou Mueller started off with a demo on slitting. I was up next, I demoed spoons from horseshoe nails and a letter opener. Bob Alexander did his scholarship demo on light fixtures he learned at John C. Campbell school.

After lunch John Murray drew out a plow share and V. J. McCrackin hammered out a knife blade. Tom Clark shot the anvil at lunch and bragged about how his anvil goes higher than Gay Wilkinson's.

Next weekend was the Doug Merkel workshop at Lou's in Valley Park. After that I was free until the treadle hammer workshop.

Maybe I can get some firewood cut. Does any one know what type steel would be good for a splitting wedge? I split all my wood by hand and my wedges are looking sad.

I would like to compliment everyone who forged an item for the trade item exchange. We have been getting some very nicely forged items. Please keep in mind that this needs to be something your forged, not an item purchased somewhere.

While we want this to be a learning experience, make sure the person who receives your item is going to cherish it. If you don't feel like you are ready for the exchange, try making the item anyway. If it didn't quite work bring along the result and ask someone to point you in the right direction.

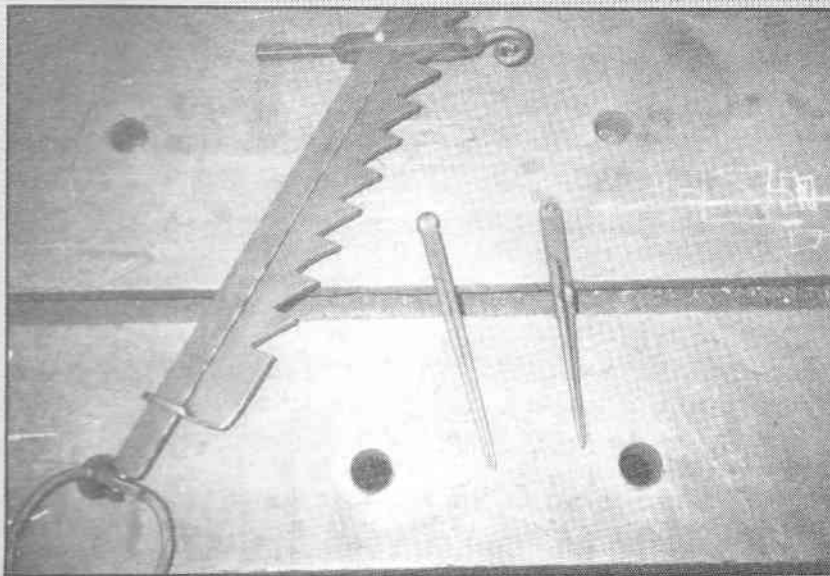
The item for our January meeting is a flower or some type of vegetation. Hope to see everyone in Higbee.

— Pat McCarty

Doug Merkel Workshop



Lou Mueller and Doug Hendrickson purchased the rights to use Doug Merkel at the North Carolina chapter auction last summer. In November Doug paid his dues at Lou's shop. Doug made a trammel and some dividers (bottom photo) during his demo. Thanks to Lou for hosting it and for Doug for traveling to Missouri. Lou says it went so well that he might do this again.



BAM

NOV.

MEETING

BAM members learned some traditional blacksmithing techniques at the November meeting held at Joe Wilkinson's Hope Forge in Hope, Mo. Joe searched high and low for someone who could show us how to sharpen plow shares.

He finally found his man in John Murray, a person who is willing to give anything a try. John looked lost without his trusty Nazel or Chambersburg nearby but we soon learned he swings his hammer just as hard as they do (perhaps not for as long, however).

Joe had a couple of plow shares handy and he didn't tell John until he was finished that the neighbor who owned them was in the audience. Didn't matter — John knew what he was doing.

He's one of those rare demonstrators who can talk and hammer at the same time. Thus we got the history of plow sharpening, including the interesting fact that most of the 25 and 50 pound Little Giants were set up, from the factory, for the purpose of sharpening plows. For this reason they came with a flat die on bottom and a drawing die on top.

After John drew out the point he tempered it and talked us through the whys and hows of this procedure. Don't think I'll ever try this but it was real interesting.

Before John did his thing, BAM President Pat McCarty showed us how he makes his little Cocaine spoons. Well, Pat claimed they were medieval spice spoons but we wonder...

Pat uses a horseshoe nail for the spoons. It's a simple process — flatten the head for the bowl, sink it with a ball punch and put a little twist and curl on the handle. Good demo and nice sales item for craft shows.

We also saw Lou Mueller do an interesting demo on how he punches square holes in a piece of flat stick. Lou could do this a lot easier with all the machinery he has but it's nice to know he is looking for a better way for the rest of us.

Lou had an old Bob Bergman brand chisel resharpened so that it had a point on each side of the chisel edge. The chisel was exactly the width of his hole, and the stock was laid out and drilled in each corner. The little points easily find the holes and hold the tool in place while he drove it through.

Everyone had a little trouble with Joe's Champion 400 blower. It was funny watching folks look for the switch, even funnier to see a seasoned smith pull a piece of too hot steel from the fire! I think Joe proved that 400s really move some air!

Bob Alexander really wowed us with his scholarship payback. Bob took Jerry Darnell's Colonial Lighting class last summer and he paid attention. He brought a number of his pieces with him and showed us how to forge a two-light hanging candleholder. He even made the forge weld on the first try!

My favorite demo was seeing V.J. McCrackin knock out a knife blade from a piece of spring steel. V.J. is a master bladesmith and he sure makes it look easy. He doesn't put the banana curl in the stock before forging as I've seen other knife makers do but instead hammered on the cutting edge to keep it inline.

I missed the host's demo but understand he welded some aluminum with his gas torch. Joe says that was the first time he'd done that in many years.

Tom Clark was on hand to launch the anvil at noon and that was a nice plus. We also had a good turnout for the tailgate area.

Joe added on to his shop since we last saw it and the additional 12 feet made a big difference. There was plenty of room around the forge and

we had our TV monitor in the other room for those who wanted to follow the action and visit with each other.

Thanks to Joe and Phyllis for putting up with us. Can't wait to go back.

Minutes

— Thanks to Joe and Phyllis for hosting us.

— Minutes approved as published.

— Old Business: Pat asked about response to "Blacksmith for Sale Auction" at Ozark Conference.

— Congratulations to Jim McCarty, new editor of *Anvil's Ring*, bringing it home to Missouri.

— Still looking for a trailer.

— New business: Pat mentioned a railing job available, call him for more information.

— Pat showed a useful "Hot Sparks" safety sign, we may have them printed up for members' shops.

— Illinois Valley Blacksmith Association is selling inscribed bricks for the sidewalk at Jefferson County Historical Site. BAM may buy one to be installed at the blacksmith shop.

— Maurice Ellis spoke on Doug Merkel workshop at Lou Mueller's shop on Nov. 9. Also on the open house at Lou's on Oct. 19. It was quite successful.

— Maurice gave his treasurer's report. We have \$5,000 plus in the bank. There are a couple of scholarships outstanding.

— Keep track of expiration date on your membership; it is marked on the mailing label of your newsletter.

— Bruce Herzog spoke on the BAM library. Donations welcome, also suggestions for books to be bought.

— Tom Clark spoke on treadle hammer workshop Feb. 28-March 3.

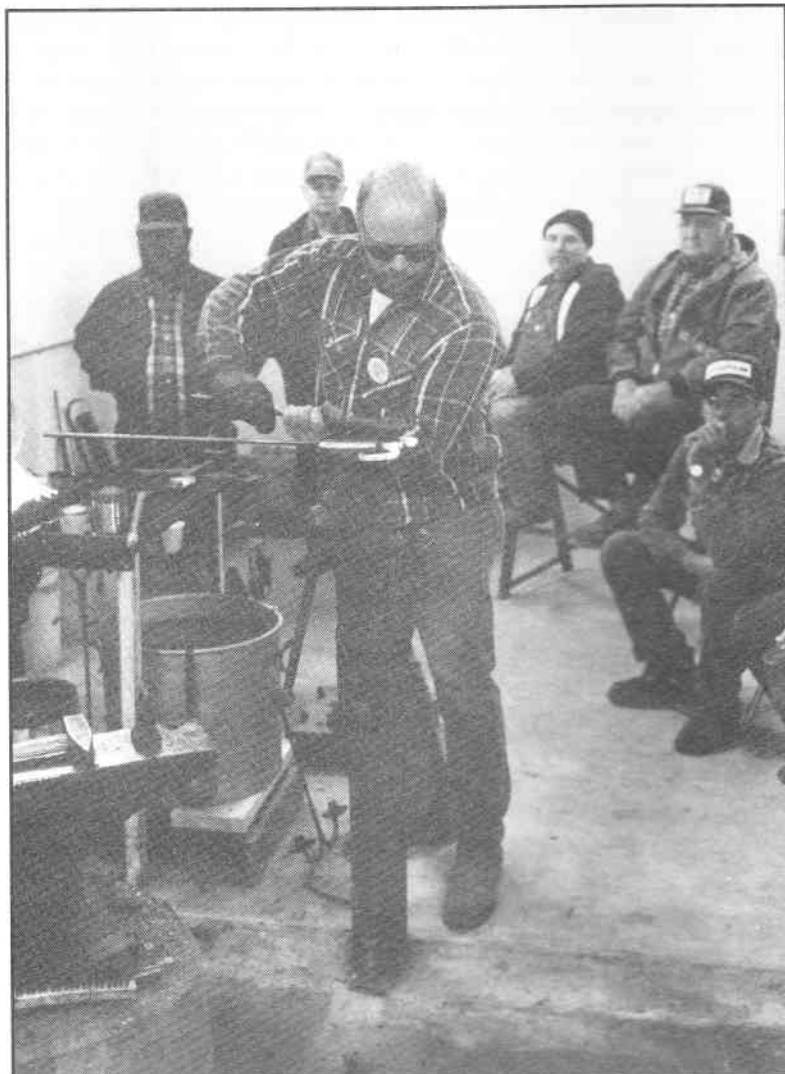
— Jim McCarty spoke on January BAM meeting at A&K Cooperage in Higbee. Trade item a flower, date to be announced.

— Tom spoke on Uri Hoffi teaching program. Uri will teach one week classes at Lion's Den in Potosi. This will be just prior to Ozark Conference. This will be an intensive learning opportunity.

— Meeting adjourned, back to the fire!



Left: Bladesmith V.J. McCrackin stepped up to the forge and knocked out a quick blade from a piece of spring.



Above: Lou Mueller, left, and Pat McCarty team up to show us a new way to punch holes. Left: Bob Alexander does his "payback" demo at the November meeting. Bob demonstrated Colonial lighting techniques learned on a BAM scholarship to the John C. Campbell Folk School.



President's Message December 1996

As Joe Harris stated in his first President's Message, I also think it appropriate to look back for a moment and thank Emmert and Jane Studebaker for hosting our annual four day board meeting. In addition, I would like to thank the retiring board members; Clay Spencer, Jay Burnham-Kidwell and Will Hightower for their time and hard work, along with volunteering to serve as off-board members. Joe retired as president but will stay on the board. With Joe's council, along with the new and remaining board members, I hope to be a successful president as Joe was.

In addition to a change in the president's position, Tal Harris will serve as 1st Vice President and Toby Hickman will serve as 2nd Vice President. ABANA's Secretary, Hans Peot was re-elected as was Treasurer Pete Brandenburg.

You might have noticed in Joe Harris' last message for November, he mentioned that there would not be another message until January 1997. But due to the important resolutions made by the ABANA Board at the November budget meeting, it seemed necessary to send out this extra mailing. Carefully read the enclosed Chapter Liaison Newsletter containing information about Chapter incorporation requirements and 1998 membership dues increase. Please publish these announcements in your chapter newsletters and at up-coming meetings.

I will leave you with this thought: "You only get out of an organization what you put into it."

Best Wishes for the Holiday Season,

A handwritten signature in cursive script that reads "Lou".

Lou Mueller
ABANA President



CHAPTER LIAISON NEWSLETTER

ABANA - PO Box 206 - Washington, MO 63090 phone/fax (314) 390-2133

November
1996

CHANGES FOR THE FUTURE

At the November 16, 1996 meeting of the ABANA Board of Directors, after long consideration, the Board passed two measures that are tied directly to the future of ABANA.

Chapter Incorporation

The recent by-laws change concerning Chapters had the effect of drawing attention to an issue that has long needed to be addressed. The Board voted that,

“the ABANA Board directs its president to notify each chapter, in whatever political jurisdiction, that ABANA now requires each chapter to acquire and maintain corporate status or its equivalent. Existing chapters will have until December 31, 1998 to acquire incorporation. New chapters will have a two year probation period to achieve incorporation. The Services Division will provide all possible assistance in advising chapters about this process. All chapters are to provide a copy of their incorporation documents to the ABANA Office.”

In an unincorporated Chapter, all of the personal assets of every member can be at risk in the event of a lawsuit arising from an injury at a Chapter hammer-in or meeting. ABANA could be liable as well. To resolve this, the Board passed the motion requiring ABANA Chapters to incorporate. The Board chose a December 31, 1998 date to allow sufficient time for any Chapter to take the necessary steps. The provision for Chapters that are having difficulty incorporating to become affiliated with another Chapter, where possible, is to assure that every Chapter, no matter how small, can work through this process while getting the legal protection that they currently do not have.

This not an attempt to change the style or direction of any Chapter. Quite the opposite, it is directed at safe-guarding each Chapter's members so that they may continue to participate locally. The two lawyers on the ABANA Board, Andy Quittner (Texas, 512-888-5564) and John W. Pollins, III (Pennsylvania, 412-834-8880) have volunteered their time to help you get the incorporation filed.

Increase in membership dues

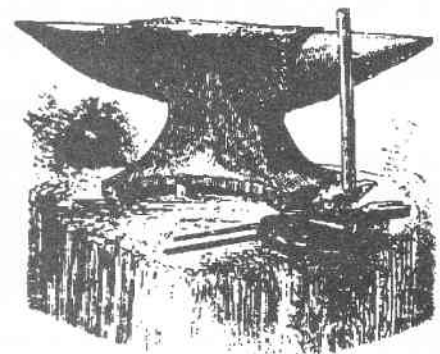
In another motion passed at the November 16, 1996 meeting of the ABANA Board of Directors, the Board voted that,

“as of January 1, 1998 the dues for a Regular Membership shall be \$45 and an increase of \$10 per membership category shall be applied across the board.”

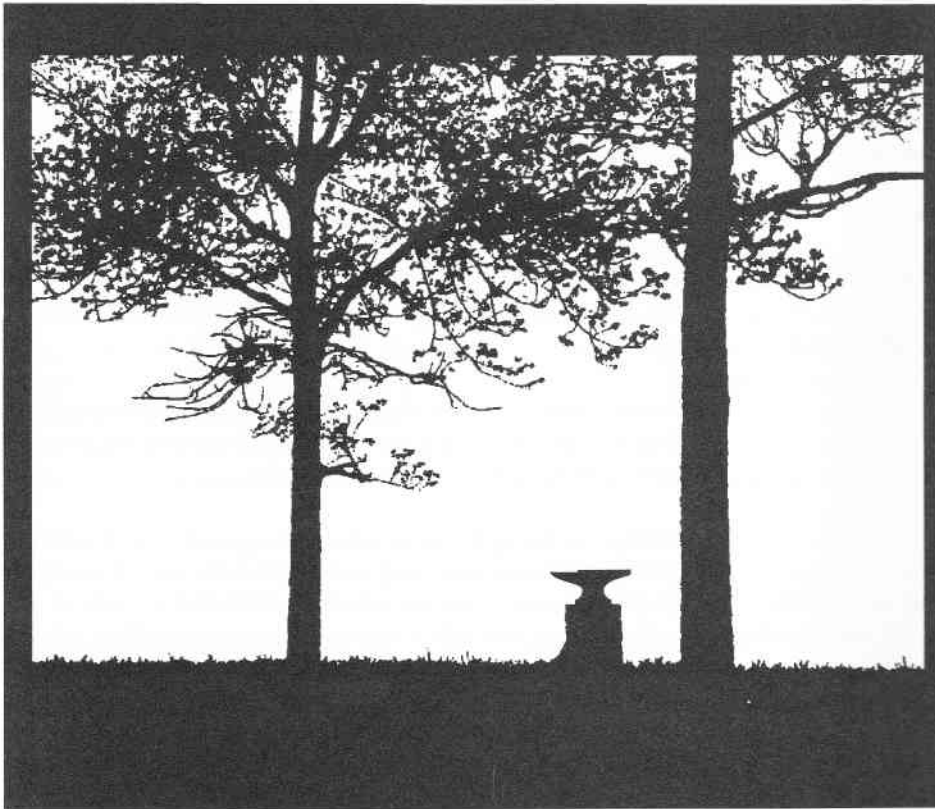
During the budget discussions it became clear that costs for publications and operating the organization had risen over the past decade while membership dues had remained unchanged. It was also clear that in spite of cutting programs, publications, and services as much as possible (while maintaining a growing organization) a shortfall would occur in 1997 that would require spending a portion of ABANA's financial reserves just to balance out the year.

ABANA has been kept in good fiscal health over recent years and for it to remain that way it is necessary to accept that a decade of inflation and the addition of a second quarterly magazine has stretched the dues dollar to the limit. With careful management, ABANA will continue to grow as it constantly seeks to increase services to its members. Careful management also means making the hard calls for the long-term good of ABANA.

Tal Harris
ABANA Services Division



OZARK BLACKSMITHS



Ozark Blacksmith Conference

May 2-4, 1997

Potosi Lion's Club Park, Potosi, MO

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

_____ # of people registering for Conference @ \$25 =
\$ _____

Make checks payable to BAM and send this registration form and payment to: Ozark Conference, Maurice Ellis, Rt. 1 Box 1442, Belgrade, MO 63622-9801

NOTE: A new Super 8 Motel is now open in Potosi for your convenience during the conference. The phone number is (573) 438-8888. When making reservations indicate that you are with the Blacksmiths Association of Missouri to get special group rates beginning at \$38.79 plus tax up to \$76.50 for the hot tub suite (for you romantics).

Plans are almost complete for the 1997 Ozark Blacksmiths Conference set for May 2-4 in Potosi, Mo. The featured demonstrator will be Mike Boone from Colorado. Mike will be demonstrating all day Saturday, May 3.

The event kicks off at noon Friday for the early birds. Todd Kinnikin will be leading a Damascus project for the bladesmiths. This will be an on-going event. Also, a number of BAM's finest will be at the forge until Friday evening. At that time we will have the world's largest bonfire and a forging competition. Details on the challenge haven't been worked out but we'll let you know when they are.

On Saturday Mike will demo. When he wraps up we will again have our auction of blacksmithing items. Please get started soon on your item to donate to the auction. This is where most of BAM's money comes from that we use to sponsor workshops, the coal supply and more.

On Sunday Bob Alexander and his team of noble helpers will demonstrate Colonial Lighting fixtures. Bob learned his skills from a BAM Scholarship to the John C. Campbell Folk School where he studied under Jerry Darnell.

Something new for this year is the BAM Boutique. You may remember last year when two of the BAM spouses took on the task of selling T-shirts and hats, along with a few items that made nice Mother's Day gifts. This year Ruth Hull and Mara Harper want to expand the line-up to include small, inexpensive gifts made and donated by BAM members. This can be key chains, trivets, candle holders, etc. priced to sell under \$10. Since our conference comes just before Mother's Day we thought it would be a nice way to raise a little extra money for the treasury and help you with your shopping.

Janelle will be pleased to learn Potosi has a new Super 8 Motel and she won't have to stay at the Austin Inn anymore. If you want to get registered early fill out the form on this page and send your check to Maurice Ellis.

For sale: 50 pound Little Giant, old style, year 1914, 1/2 rebuilt, have motor, new flat dies. \$800. 2 Johnson older style 3-port gas forges w/lids, 1 like new, other new solenoid, \$300 and \$200. Also pieces of barn timbers and granite pieces. Plus, Country custom home with timber framed blacksmith shop on 2 3/4 wooded acres 30 miles southeast of St. Paul, Minnesota. Francis and Mary Bauer, 20215 Orono Trail, Hastings, MN 55033. (612) 437-7850.

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. He is also selling a nice line of tongs.

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.

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. I have one Buffalo Climax blower, \$40 and one Champion gas forge blower, needs motor\$35. Would trade Hossfeld bender for a Beverley shear. 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.

New source for coal: Andrew MacDonald called with a new source of

coal on the east side. It's loose coal, good stuff. They have a loader. Call (618) 684-3166 for more details. This is a trial run so go buy some so they will keep it up.

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 decorative 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. Maurice is also looking for a circle cutting shear.

Fairbanks 150# Power Hammer for sale. Asking \$4,500 or best offer, this hammer is in excellent condition. If you are interested in this contact: Danny Downs
Louisville, Ky
(502)231-3880

For sale: 123 pound Peter Wright anvil, good condition, \$200. Tinner's stake, shaped like an anvil, 38 inches by 18 inches high, \$75. 2 bench shears, heavy cast iron, \$75 each. contact Bernie Tappel, (573) 496-3793.

Bob Patrick is making tongs. They are light, easy to use, and made of high carbon steel. Here is the deal: High carbon tongs to your specs — describe jaw shape, style, length of reins, etc. \$20 + \$5 shipping for one pair. \$20 + no shipping for two or more pair. Snail Mail: Bob Patrick, Anvils Metalworking, HC 67, Box 176, Everton, Arkansas 72633; E-mail: clinker@centuryinter.net. Bob says once things get busy he won't be able to fill tong orders so if you want some get them now.

BAM

Bulletin Board


For Sale: #100 Murray Hammer. "Like New", it sat in a warehouse, unused, for 40 years. Flat dies and a 5hp 3 ph motor included. Recently cleaned and painted. asking \$4,000 or best offer. Contact: Station Master, 414-923-3920, Route 2, Waupun, WI 53963.

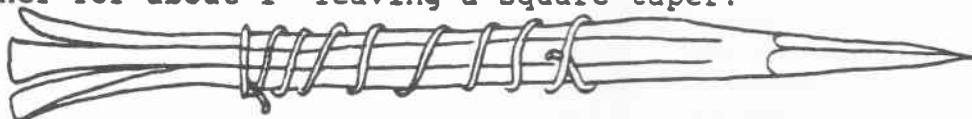
Starting in December, all orders for Skipjack Press books, Jack Andrews operation, will be filled by Bookmaster's Inc, which specializes in fulfilling book orders. You may now order by calling 1-800-247-6553 (24 hours, 7 days a week), by fax, by e-mail by regular mail and by the World Wide Web. Major credit cards accepted. Orders are shipped the next day via UPS. Here's the details: BookMasters, Inc., PO Box 388, Ashland, OH 44805. Fax: (419) 281-6883. e-mail: order@bookmaster.com. Internet: www.bookmasters.com/skipjack Jack wrote the classic "Edge of the Anvil" and also offers books on Sam Yellin and Julius Schramm.

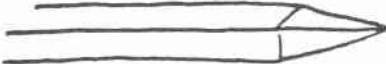
ATTACHING BASKET HANDLES TO SHAFTS

By David Fink
Ocmulgee Blacksmith Guild
Chapter of A.B.A.N.A.

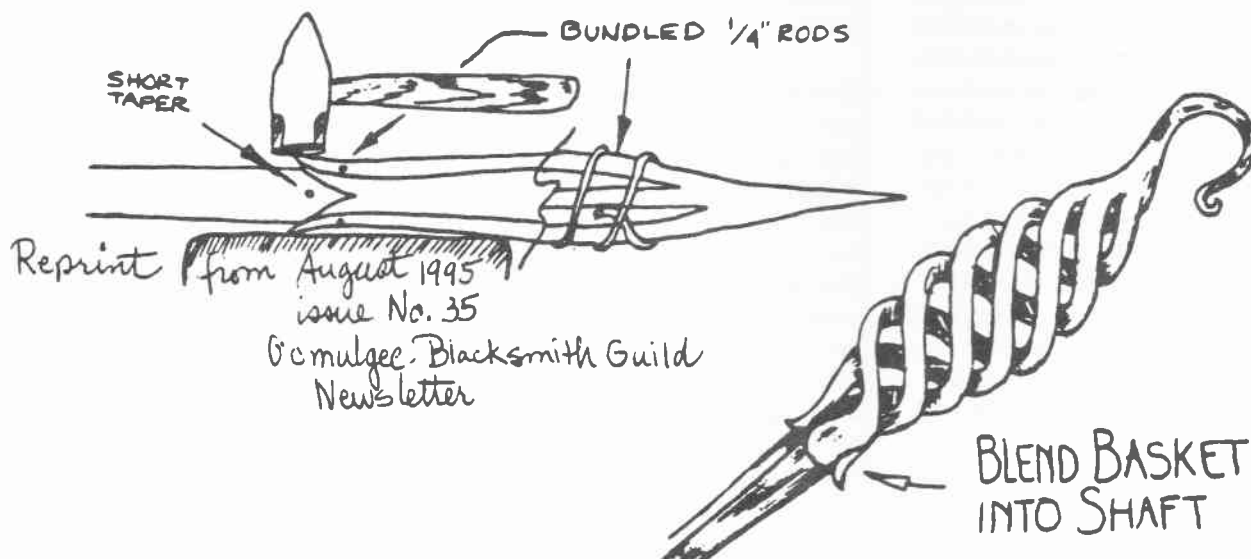
To save a weld on a basket handle, and to get a very nice blended finish:

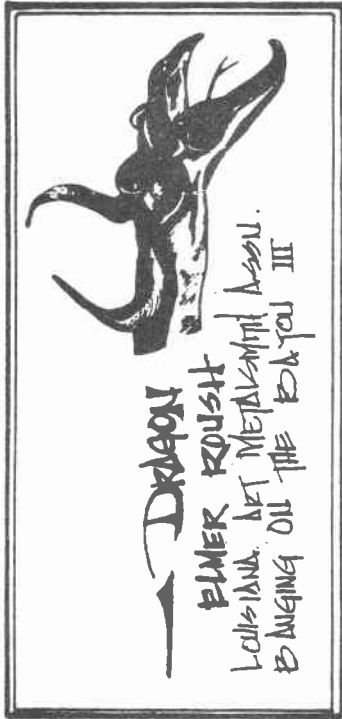
- 1- Cut four pieces of $1/4$ or $5/16$ round about 7" long
- 2- Flatten one end of each of these 4 rods to a thin fan shape 
- 3- Bundle all four together with mechanics wire and weld the unforged ends together for about 1" leaving a square taper.



- 4- Forge one end of the $3/8$ or $1/2$ " shaft material to a short (1") tapered point. 

- 5- Heat and align the bundles flattened ends to fit shafts point.
- 6- Heat and flux the shaft and the bundle, then remove the bundle from the fire and continue to heat the larger, heavier shaft until it somewhat short of welding heat. Replace bundle in the fire and bring it and shaft up to welding heat.
- 7- Insert shaft taper into bundle and take 3 or 4 light welding blows. Return to fire and take full welding heat, finish weld and blend all of the pieces into one.
- 8- Do basket as usual by twisting then untwisting and adjusting.
- 9- Forge hangup hook and finish the other shaft end into whatever.





5 SPLIT OPENING FOR MOUTH TO A POINT EVEN WITH EAR SIDE OF NOSE SOCKETS.

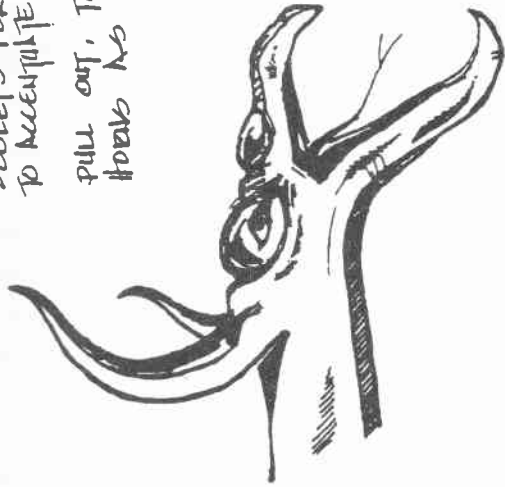


6 TAPER FROM TOP & BOTTOM OF BEAK OVER HORN OF ANGLE & SHAPE AS INDICATED.

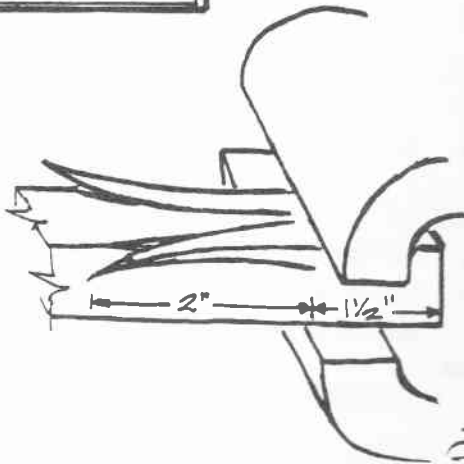


7 USE A HOLLOW PUNCH TO PREPARE EYE BALL AND A POINTED PUNCH FOR PUPIL.

8 USE CURVED CHISEL BEHIND SOCKETS FOR EYES & NOSE TO ACCENTUATE - ADD VEINLES. PULL OUT, TAPER & SHAPE HORNS AS INDICATED.



9 THE ADDITION OF A FORGED TONGUE FROM A BRASS ROD WILL ADD OTHER FEATURES.



1) LANKY 1/2" OR 3/4" SQUARE, HEAT FIRST 3/8", PILE IN VEE & USE CHISEL ON TWO CORNERS TO SPLIT OUT HORNS FOR 1/2" TO 2".

3 EYE SOCKETS NOSE

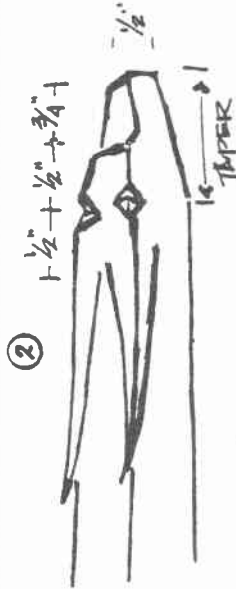


TAKE A POINTED PUNCH & MAKE IMPRESSION ON BOTH CORNER NOTCHES TO MARK FOR STARTING EYE SOCKETS. THEN USE A ROUND NOSE PUNCH & DRIVE EYE SOCKETS BACK TO WITHIN 5/8" IN FRONT OF HORNS.



4 EYE SOCKET

REPEAT THE PROCESS FOR HORNS FOR A DRAGON, THE HORNS SHOULD BE EXAGGERATED FOR EFFECT, BUT THE CAVITY WILL BE 1/3 TO 1/2 LESS THE SIZE FOR EYE SOCKET.



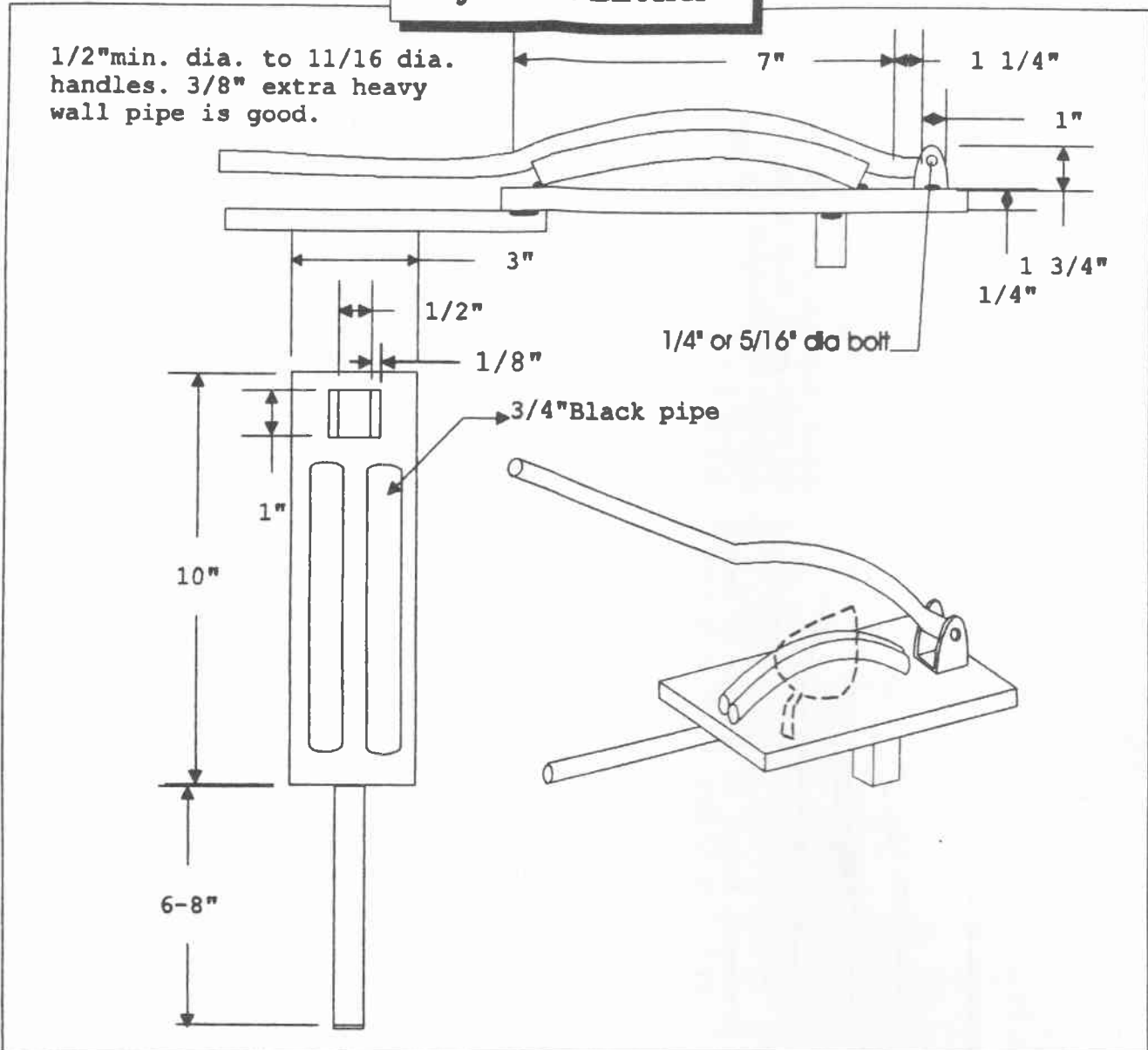
2 BEGINNINLY APPROX. 1/2" IN FRONT OF HORNS, NOTCH BOTH CORNERS ON EDGE OF ANGLE FOR EYES. TAPER BOTH SIDES IN FRONT OF HORNS TO TIP. NOTCH ABOUT 1/2" IN FRONT OF CORNER NOTCH FOR NOSE.



POINTED PUNCH

ROUND NOSE PUNCH

LEAF BENDER
by Bruce Birtciel



This was the first model I made and I did no more experimentation. The only important measurement on this tool is the gap between the two curved bottom bars (or pipes). There has to be enough gap for the top bar to push the material down far enough to put a good bend in it. Start with a 1/2" gap. It might be an improvement to:

- A) Make one end of the gap wider than the other.
 - B) Make the bottom pipes adjustable.
 - C) Have interchangeable top handles of different diameters.
- In one heat, a leaf can be rippled completely without leaving any hammer marks. Just lay the leaf on the two curved bars (or pipes) and squeeze again. Repeat

as many times as needed in as many different directions as you want to.

I bent nearly 200 leaves with this and no two were bent alike. If you want them to look alike, that can be done too.

The dimensions given are for leaves up to 3", possibly 4" wide and 16 to 14 gauge.

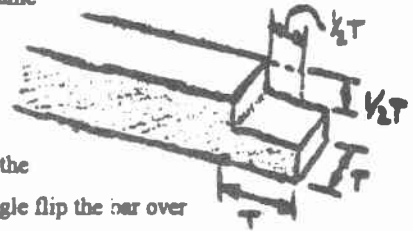
No Weld Ram's Head

Chuck Clarkson

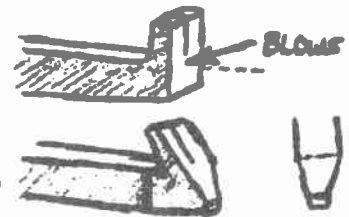
I learned the technique described in this article several years ago at the Quad State round up in Tipp City. That weekend, Rob Gunter demonstrated how to make a ram's head without welding. He also emphasized the realism of the head. Several of the ram's heads that I have seen are stylized with a large disc on the side of the head coming from long horns coiled up. The procedure described below doesn't create this look and I like the result a little better. Give it a try and decide for yourself.

I use five eighths inch square hot rolled stock. It has plenty of size and makes it easy to work in the details. Smaller would be OK if you have punches and other tools sized appropriately. I start by pinching off a piece about half the stock size back from the end and drawing this down to half the bar thickness at the same width. This piece will become the horns. Split the extension down the middle to form the two horns. Don't draw them out yet or you will lose them to scale.

With the flat side against the anvil and the step over the edge, bend the extension down to form a right angle. Be careful not to hammer the inside corner of the



bend against the anvil. After bending to a right angle flip the bar over and close the angle down to about 45 degrees by upsetting the end of the bar in. At the same time taper the outside corner of the bend to a short flat taper. This will become the face of the ram.

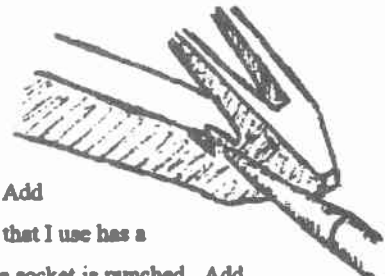
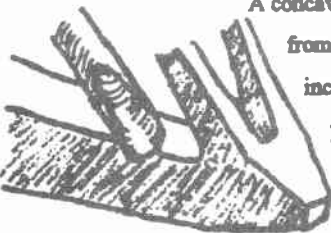


Spread the horns slightly using a broad punch to separate the horns just over the head. Take a convenience bend on each horn in turn then draw out to about 2 inches long. This gives three quarters to one full turn on the horns as you finish them. I generally leave the horns square as this gives a good approximation of the flat surfaces seen on a ram horn.

Use a chisel on the corner of the bar about one half inch back from the base of the horn to lift an ear out of the bar.

A concave chisel will give the best shape. After lifting it up from the back, punch into the front side at the base to increase the depth. Then use a flat faced punch to push the ears forward under the horns.

Round up the neck just behind the horns. Add eyes about one third down the face. The eye punch that I use has a teardrop shape with a hemispherical cavity in the end. This forms the eyeball as the eye socket is punched. Add nostrils at the top front corners, the a mouth around the bottom edge. Bend the horns around and back up. If you plan to use this head as part of a handle make sure that the pointed ends of the horns turn slightly towards the head to keep anyone from hooking their hands on them. Put on your touchmark and the date and you're done.



INDIANA FORGE FIRE JUNE 1996

A ROSE DOOR KNOCKER

By David Fink, Lumpkin, GA

Material needed:

Item #1	1/2 x 3/16 x 15 inches
Item #2	1/2 x 1/2 x 1-3/4 inches
Item #3	1/2 x 1/2 x 3/8
Item #4	A Disc of 18 gauge x 2-1/8 Dia.
Item #5	A Disc of 18 gauge x 2-3/8 Dia.
Item #6	A Disc of 18 gauge x 2-5/8 Dia.
Item #7	A Double headed "Staging" nail
Item #8	2 #8d nails
Item #9	1/8 x 2 x 10 to 12" long

Procedure:

Step #1 - Flatten one end of Item #1 to a fan shape keeping taper uniform. *See figure 1 at right*

Step #2 - on other end of above piece, turn on edge and forge flat 1/8 thick x 1/2" wide (length unimportant), but flat must be 90 degrees from rest of bar. Scroll fan end into spiral and drill 3/16 hole through the flat on other end. *See figure 2 at right.*

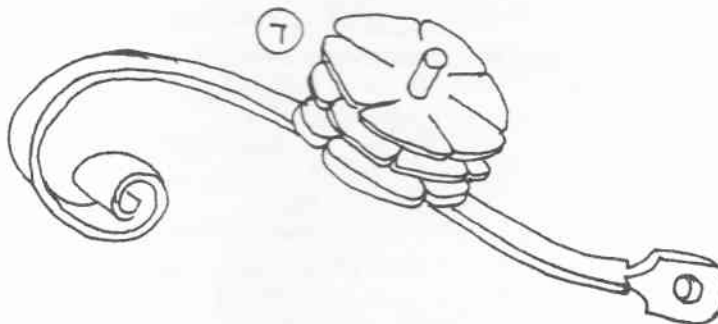
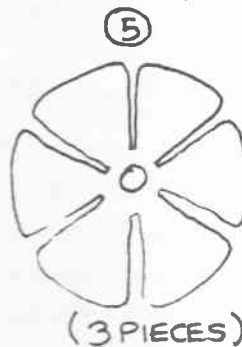
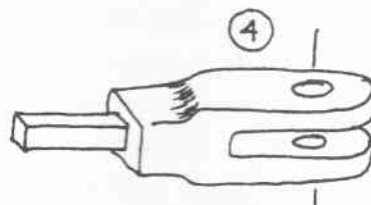
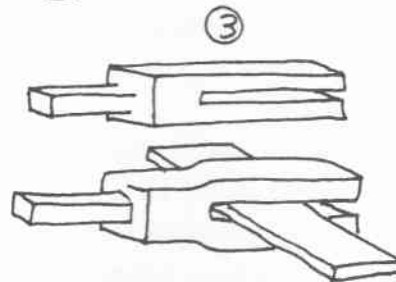
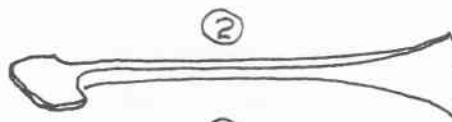
Step #3 - On a piece of 1/2 square (to make Item #2), forge a 1/4" tenon. Cut off at 1 3/4" (excluding tenon length). Saw a slot in the end 3/4" deep, heat and spread, forge over 1/8" stock to form *Figure 3 at right*. Drill 9/64 in center of split.

Step #4 - Mark center of Item #3 and drill with 9/64 hole. *See figure 4 at right.*

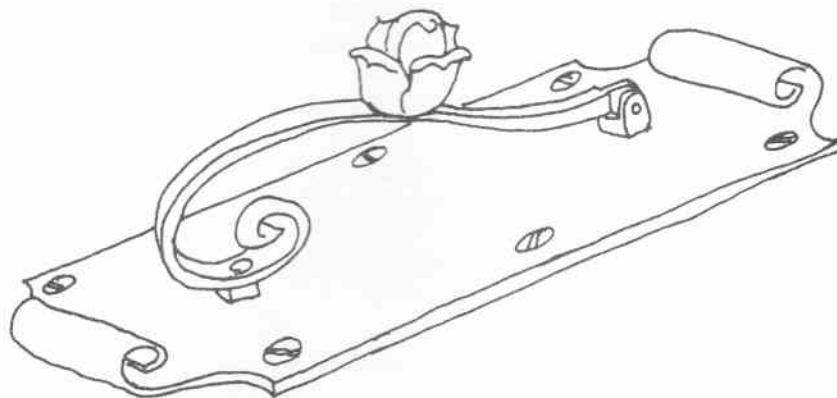
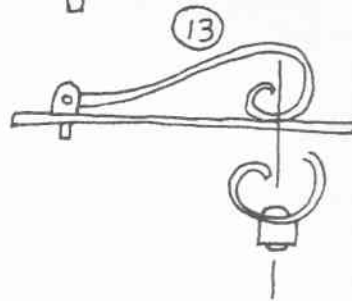
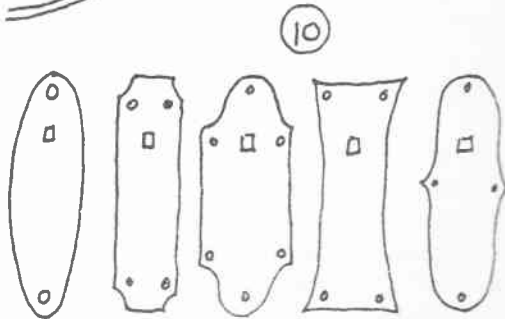
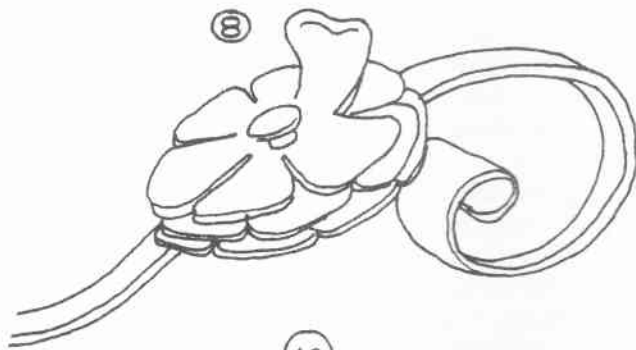
Step #5 - Mark discs (items #4,5, and 6) in 6 equal segments and drill center with 3/16 hole. Snip or saw to within 1/4" of the hole. Round corners of each segment with snips or file. *See figure 5 at right.*

Step #6 - Cut top head from Staging nail. Center punch center of scroll and drill 3/16" hole. Place the nail in the hole, measure for length to cut the nail for use as a rivet.

Step #7 - With cuts in the discs staggered, place them on the top part of nail and form rivet head on both ends of the nail. *See figure 7 at right.*



6



Step #8 - With an acetylene torch or carefully in the forge so as not to burn the thin discs, heat them and bend each petal of the top disc upward with needle nose pliers. Carefully bend each disc segment into a natural, cup shaped, rose petal. Repeat the process with the center then the lower disk. See figure 8 at left.

Step #9 - Check the rivet for tightness and rest if necessary.

Step #10 - Lay out a pleasing design on the base plate (Item #9 in the materials list). See figure 10 for examples. Mark, center punch, and drill the mounting holes in the back plate. Decorate as desired with hammer texture, engraving, beveling or what ever you find attractive.

Step #11 - Punch a 1/4" square hole in the backing plate near the top center of the plate leaving at least the length of the scrolled piece from the hole to the bottom edge of the backing plate. See figure 11 at left.

Step #12 - Take the split and tenoned piece made in Step #3, and rivet it in place on the scroll.

Step #13 - Place the scroll on the back plate and mark the point on the scroll where it contacts the back plate. Drill a hole in the scroll at the mark and using a 8d nil with the head on the inside of the scroll, rivet the small block (Item # to it.

Step #14 - Clamp top of scroll in vice and rivet the tenon in the hole in the back plate.

Step #15 - Cleanup as necessary with a file and apply finish of your choice.

David Fink

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

Editor's note: Quite often people post questions on theForge, ABANA's Internet mail list. The answers come back from a variety of sources. In this issue I thought I would share some of the dialogue for those of you who aren't on the 'net.

Question:

Anyone know who supplies tin powder, or any methods of tinning copper?

Answers:

OK, as a retreaded coppersmith I can help here. To tin copper, take some good old block tin, some flux (soft solder flux or sal ammoniac, or killed salts), a wad of cotton cloth, a hunk of stiff wire, and some plain old thick gloves. Pour the flux into a dish, make a dauber with the cotton cloth and wire (wad of rag on a handle). Soak the dauber in flux till it's wet (just shy of dripping). Heat the copper to about boiling and swab it good with the flux. The flux should give you a nice red color. If not, clean it all up and try again. When you have the area you want to tin all nicely fluxed, increase the heat and rub the stick of block tin on the heated surface. Increase the heat till it just

melts. Use the flux-saturated swab to evenly coat the copper.

If you heat things up too much, you're gonna burn the flux, oxidize the tin, and have a general mess on your hands that you'll have to clean up before you try again. Try to keep the temperature just a tad above the melting temperature of the tin.

The biggest thing going here is practice. If you get too much tin on, you won't have a nice clean coat. Not enough, you won't get the coverage. Too much heat burns things. Not enough and the tin doesn't melt.

— Morgan Hall

Use a product called TinRite, made by The Canada Metal Company. It's a mixture of tin powder and a bodacious powerful flux. Heat the copper, dump on some TinRite, heat some more and when the tin begins to bead, swab it around with a leather swab or steel wool. (The latter risks leaving bits of steel wool in the tinned finish.) Makes quite a bit of acrid smoke. You can do it over a coal fire but it's not a good idea. Bits of coke and flyash adhere to the copper and make nasty little pits. A charcoal fire is ok, as is a big propane torch.

I once called the manufacturer and spoke to someone in the lab who assured me that the metal in the product was pure tin, no lead. (If anyone has reason to believe that this is false, I'd really like to know it. On the other hand, I recently had a complete heavy/toxic metals blood workup and I was clean after cooking in a TinRite-plated pot for a decade.)

— Michael Spencer

TinRite is available from the following source:

The Canada Metal Company, LTD.,
721 Eastern Avenue, Toronto, ON,
Canada M4M 1E6; 1-800-268-6702
or (416) 465-4684 phone; (416) 465-8053 fax.

— Mark Williams

Question:

Now that I have finally gotten my forge working I am wanting to

make a hardie and am wondering what a good material would be. Would 4140 make a decent hardie? I have a couple of 1 1/2 square pieces of this. I can get small amounts of 01 and A2, but the 4140 is easier to work with.

Answers:

If its really your first, I had great luck with a truck axle. Cheap, easy to harden and temper, and if I messed up, there was more on the end of the stick.

— Tom Vincent

I have made hot and cold hardies out of old jack hammer bits. The collar on the bit makes a nice "stop" for the hardie cutter in the hardie hole.

— Phil Rosche

It should make excellent hardies. I make them from axle which may be commonly made from 4140. They work well when quenched in water and tempered to blue or little lighter. Same process for old jackhammer bits, but I don't think they are 4140.

— Clay Spencer

The jack hammer bit suggestion is good, but don't harden it too much or it will chip easily. I found that the torsion bar from an old trailer worked great. I made one from one several years ago and it is still in perfect condition. I would imagine any axle from a car or truck would be somewhat similar steel and would be good material. You generally will not have to worry about getting it too hard either. One other thing that I like is that the hardie will not be hard enough to take a bite out of a hammer if you ever miss your mark...course none of us ever do that. :-)

— Ron Reil

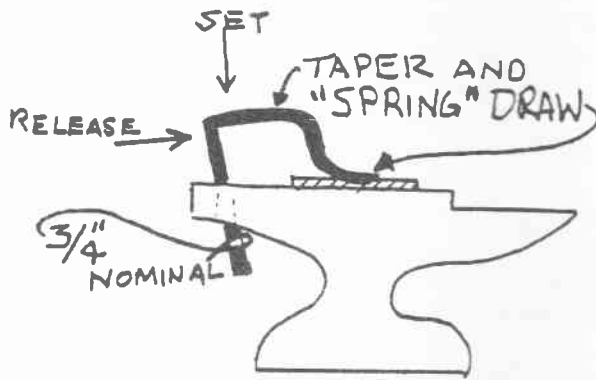
If you have a question send it to the editor and I will find an answer and share it with everyone else. Please keep your tips coming, the well's running dry!

Hot Tips

Reprint from HOT IRON NEWS, North West Blacksmith Association
 Fall 1996

ANVIL HOLD DOWNS

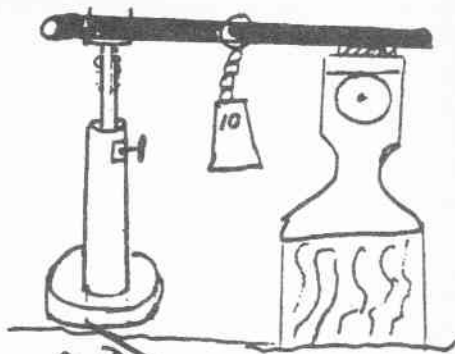
TRADITIONAL



SPRING

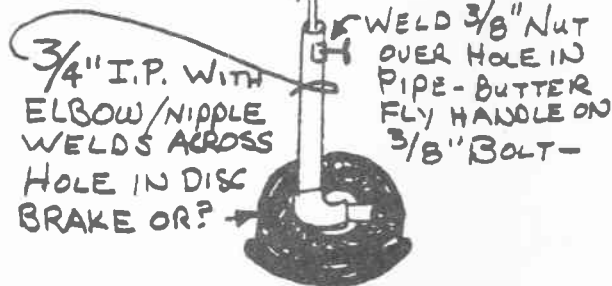


DEAD MAN

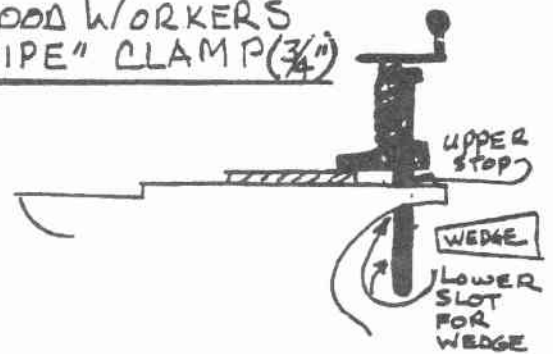


DETAIL OF "HELPER"

1/2" REBAR



WOOD WORKER'S "PIPE" CLAMP (3/4")



By Don Kemper

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.

Are your dues due?

BAM dues (\$20) expire one year from the date you first joined. While we don't send notices to everyone reminding them of their need to renew, you will find that information on the mailing label of each newsletter. Look above your name to see when your dues expire. Maurice Ellis highlights each one that has expired to remind you to send in your check.

If you are renewing please send your money to Maurice at the address on the bottom of the back cover, not to the editor who will have to send it to Maurice anyway! While you're at it, check your label to see if the

address is correct. If not the Post Office will return it to me, delay your newsletter and cost BAM more money. Send address changes to Maurice.

Maurice is always interested in updating the list for the newsletter. Please update your addresses as soon as possible and also send him your phone number. Many of our original members don't have phone numbers in Maurice's database and it would be nice to include that info. Also, if you have an e-mail address let us know what it is. Send it to Maurice and we will add that field to the roster.

Coming attraction

Southeastern Regional Blacksmith Conference, May 15-17, Madison Ga. Demonstrators: Bob Becker, Roberta Elliott, Tal Harris, Bob Patrick. For more info contact Bill and Brenda Pate, 1611 Oakley Rd., Castle Hayne, NC 28429; (910) 763-7326.

Be at Bill's

Make plans to attend Bill Gichner's annual event on 11 & 12 January 1997. Where: Iron Age Antiques, Central Avenue, Ocean View, Delaware, Phone: 302-539-5344 Cost: This year we are going to try to defray some of the cost associated with hosting this gathering. Fees are: \$20 if registration received by 26 December 1996, \$25 if received after 26 December 1996. Cost includes continental breakfast and lunch Saturday and Sunday.

Register by sending name, address and \$20 per person (you can send a group check, make check payable to Bill Gichner) to Bill Gichner, P.O.Box 8, Bethany Beach, DE 19930 Lodging - A block of rooms have been set aside for Friday and Saturday nights at the Sheraton Fontainebleau Hotel, 2100 101st Street, Ocean City, MD. Make your reservation directly with them: 1-800-638-2100. Room fees are \$55 for a double room with 2 people per room, \$15 for each additional person. Hospitality - A hospitality room will be open at the Sheraton Friday & Satur-

day evenings, with a special program planned for Saturday. Happenings - Plenty of demonstrations during the days. Gather your extra tools and such for some great tailgating! Bring something for a gallery display (work or pictures). A slide show is being planned for Saturday evening. PLEASE bring something for Iron in the Hat.

Spin some metal

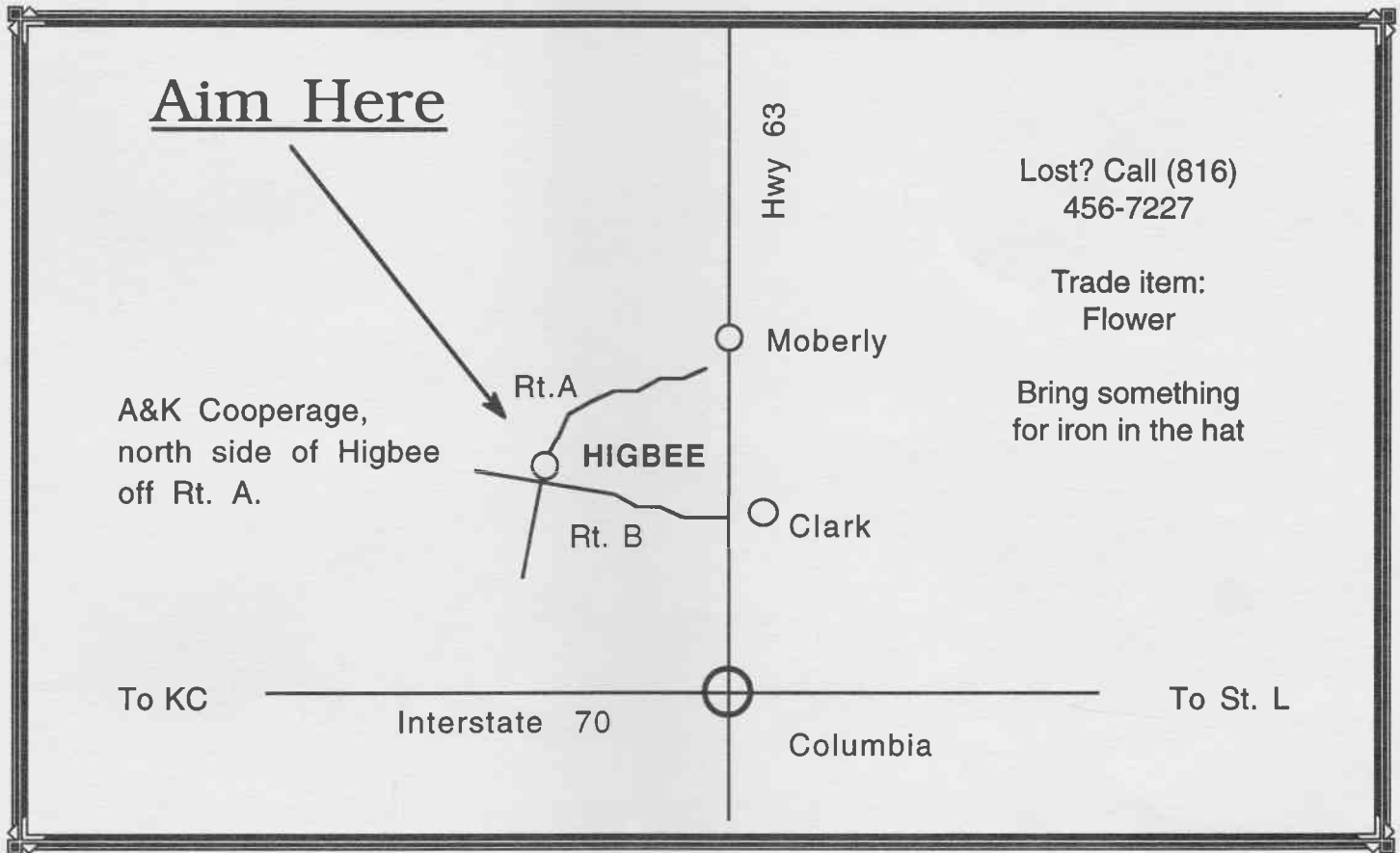
Interested in learning to spin metal like Maurice Ellis and Russell O'Dell do? Anyone interested in a one-day seminar on metal spinning should give Maurice a call. He says the workshop is tentatively scheduled for mid-April 1997. Maurice makes dippers, frying pans and bowls from several materials on a wood lathe. Add a handle and you've got a nice item for sale. We assume he will also be selling his "Leave Money in Can" franchises. Maurice earns his keep this way at regional conferences around the country. You can reach Maurice at (573) 766-5346, or fax to (573) 766-5451. His address is Rt.1 Box 1442, Belgrade, MO 63622.

BAM has coal

New members may not realize that one of the best benefits of belonging to BAM is the coal supply. Whenever the supply runs low we dispatch a tractor trailer to West Virginia to fetch us another load of their high calibre coal. It comes in 50-pound bags and is available to members only for \$7.50 per bag. The coal is stored at Lou Mueller's shop in Valley Park, Mo., a St. Louis suburb. Call Lou at (314) 225-3252 for directions. This is his shop number so call during working hours. Editor Jim McCarty has also been keeping a pallet available for those of you in central Missouri. Call (573) 395-3304 after 5:30 p.m. for more information — I am down to about 10 bags but hope to reload soon. This is really good coal, the kind that gives you really good black boogers!

There's another source of coal on the Illinois side. See page 13 for details.

Next meeting: Jan. 18, A&K Cooperage, Higbee, Mo.



Dale Kirby will host BAM's January meeting at his cooperage (read barrel shop) in Higbee, Mo. If you've never been to Dale's business you shouldn't miss this one. Besides the usual blacksmithing demonstrations and tool sales, Dale promises to build a barrel from start to finish.

Dale tells me the barrel business went mechanical before the Civil War and I am sure some of his equipment goes back at least that far. He builds barrels for the wine and whiskey industry and his production sells out

long before it's made.

Dale's wife runs an antique shop next door to the cooperage and there's some neat stuff for sale there. He also promises to have some barrels for sale if anyone is looking for a deep quench tank.

Higbee's not hard to find if you haven't been there. Take Highway 63 to Rt. B just south of Moberly. turn west on B and stay that way until B turns into A. Keep going north on A until you see the cooperage on the north side of Higbee.

Trade item is a flower or other plant life. Keep in mind this needs to be something you forged. As usual, please bring something for the iron in the hat.

The local Lion's Club is cooking lunch. Dale asks that everyone who plans to come drop him a line so he can tell the Lion's Club how many to expect. His address follows:

A&K Cooperage, PO Box 218, Higbee, MO 65257.

Wear your Carhardtts — the shop stays a little cool in January.

BAM 1996 Schedule

January 1997 Meeting
A&K Cooperage,
Higbee, Mo.
January 18, 1997

March 1997 Meeting
Maurice Ellis
Belgrade, Mo.
March 22, 1997

Treadle Hammer
Workshop
Lou Mueller
Valley Park, Mo.
Feb. 28-Mar. 1

Ozark Conference
Potosi, MO
Mike Boone, demo.
May 3-4



Jim Kendzora sent in this eyewitness view of Christmas Eve at his forge near Sunrise Beach. The coal was for Jim, who was bad on purpose all year long as his supply was running low. To quote the man in red, Merry Christmas to all and to all a good weld!

BAM
5821 Helias Dr.
Jefferson City, MO 65101

(Note New Address)



Address correction requested — check label for dues expiration

Please send changes and dues to Maurice Ellis, Rt. 1, Box 1442, Belgrade, MO 63622