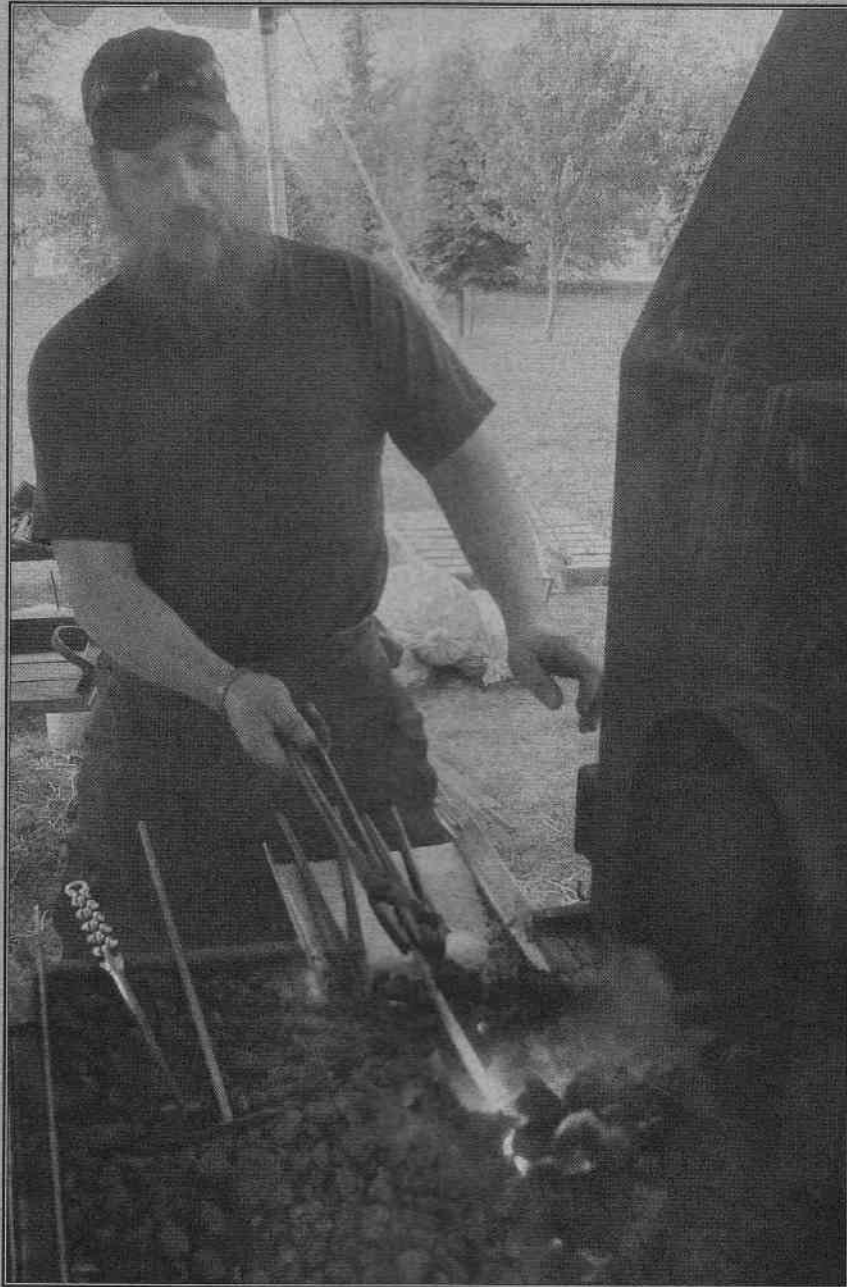


# RAM

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September—October 2001

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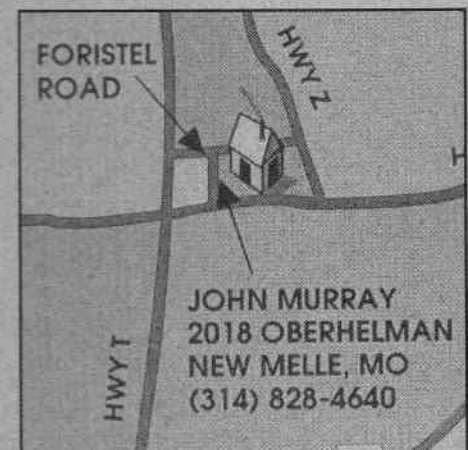
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**Newsletter of the  
Blacksmiths  
Association  
of Missouri**

*Volume 18 No. 5*

**September — October 2001**

*Our cover: Chris Marks was one of the demonstrators at the latest blacksmithing for the public event held at St. Louis County's Faust Park. Photo by Jim McCarty.*

**Editor**

Jim McCarty

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Tiffany Ehrenberger  
Bob Stormer  
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Joe Wilkinson

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The Newsletter of the Blacksmiths Association of Missouri is published six times a year and is mailed to members of BAM. 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 65110; (573) 395-3304 or you can send e-mail to jimmac@socket.net. BAM membership inquiries should be addressed to: Bruce Herzog, 2212 Aileswick Dr., St. Louis, MO 63129; (314) 892-4690 or send e-mail to bjherzog@msn.com. 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: \_\_\_\_\_  
E-mail: \_\_\_\_\_

New Member     Renewal     ABANA member?

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

Memberships are for one year from receipt of dues. Dues are \$20, which includes a subscription to the bimonthly BAM newsletter. Please make checks payable to Blacksmith Association of Missouri.

**ABANA Membership Application**

Primary ABANA Chapter Affiliation: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Phone: (     ) \_\_\_\_\_ Zip: \_\_\_\_\_

New Member     Renewing Member

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

- Regular Member .....\$45 yr.
- Senior Citizen (Age 65+) .....\$40 yr.
- Fulltime student .....\$35 yr.
- Overseas airmail .....\$80 yr.
- Overseas surface mail .....\$60 yr.
- Contributory .....\$100 yr.
- Full time student .....\$35 yr.
- Public library .....\$35 yr.

*See reverse*





## Editor's anvil

Greetings! It's past time for another BAM news so I am burning the midnight oil once again, working this in between supper, Cub Scouts and bed time. What I really want to do is head out to the shop and work on that dining room table I am never going to build. It's getting a lot closer -- I have a drawing made that can't be forged and also plans to get a sandstone top made at Rosati Sandstone, a recent acquaintance due to a Rural Missouri story. Neat stuff that stone and I think it will lend itself well to some black iron.

The weather has been pretty nice for all those weekend festivals, that is except for the Hartsburg Pumpkin Fest. This year Saturday was a complete rainout. The rain started the exact second I dumped a bag of coal in the forge.

Bill Irvin set up next to me and he did pretty good selling his plasma cut artwork. Bill has some nice stock that would lend itself to weather vanes, yard art and the like. He's also got the BAM logo scanned in and is selling BAM signs. See the Bulletin Board page for more info.

Bill tells me the Chinese have just about shut down his main enterprise, selling targets. I'm hearing from a lot of folks that business could be a lot better but then again most folks are staying busy.

Brother Pat turned me on to something real interesting on the Internet. Bill Epps, our good buddy from Texas, gets online with the Guru, Jock Dempsey, who is the host for the Anvilfire.com web site. Bill does a virtual hammer-in on Anvilfire every Wednesday evening. You can watch his demo unfold and ask questions for parts you didn't understand.

Best of all, it is all saved and there are 100 episodes archived on the site. It's good stuff too. Among the offerings are Bill's scorpion from a lag bolt, an apple (Pat showed this off at Faust Park), Bill's take on Jerry Hoffmann's angle iron eagle and a ton of tooling. There are other demonstrators there besides Bill but for some reason his stuff interested me the most.

Check it out sometime. I tried the eagle and it turned out pretty nice. Just have to figure out what to do with it now. I also tried the mule but it looked more like a dog that kissed a freight train. The ears are easy but you have to bend the chin real tight or the forehead is too high.

Here's one vote to bring Bill into Missouri as a demonstrator. He's got more tricks than anyone else I've seen demo.

There's a lot of news in the blacksmithing community. First of all some sad news, Bonnie Pieh, wife of the late Bill Pieh of Centaur Forge fame, died Oct. 15 after falling at her home. Bill and Bonnie deserve a lot of the credit for saving blacksmithing. When all the other suppliers of blacksmithing equipment shut down Centaur kept it alive, first for the farriers but later for us art smiths.

They were a mainstay at our conference, hauling tons of gear to Missouri every year and putting up with our dirty hands all over the books and tools. I wish we all had just one more opportunity to tell them thanks. We'll miss you guys. hope Centaur stays in

business.

Also heard that Floyd Daniel was in the hospital. Floyd was one of the original ABANA directors and just a real classy guy. Here's hoping Floyd gets back on his feet soon.

From the ABANA web site comes word the Boy Scouts have finally resumed the blacksmithing merit badge. Actually it is a metalworking badge and it has three areas a Scout can work in including tinsmithing, silversmithing and blacksmithing. If you've ever seen the criteria for the old blacksmithing merit badge, you will see that this one is really watered down. In the past you had to forge upset corners, forge weld and a lot of other stuff that I sure can't do.

I know BAM's Steve Wilsie and a lot of other folks worked real hard to convince the Scouts this was worthwhile. If you know some Scouts why not offer to teach them the ropes?

That's all I know. Hope to see you all at John Murray's. Until then, "Don't forge like my brother."

— Jim McCarty





## **BAM Coal Supply and Distribution**

### **BAM Members**

1. We have exhausted our only supply of coal at Bob Alexander's bunker. Bob's situation is changing and beginning in spring of next year, he will be out of the state for extended periods of time, serving as an instructor at various places, therefore he will not be available to distribute coal as he has in the past. We owe Bob our thanks for the service he has provided for us the last three years.

2. Two options were discussed at length at the BAM meeting at Bob Ehrenberger's shop on Sept. 11, 2001. They are as follows:

A. Locate and build a new bunker at some location not yet determined, as it will require a site where someone is usually present and can expect to be there for a considerable number of years. Cost of a new bunker is estimated to be about \$4,000. Tom Clark of Potosi and Alice James and Japh Howard of Salisbury have agreed to be considered.

B. Locate BAM volunteers who have the facilities and will agree to store smaller amounts, 60 to 100 bags or so, on their property around the state. 60 bags consumes about 48 sq. ft. of floor space. This will be a volunteer effort and relocated at the volunteer's expense, however a \$.50 surcharge for every bag will be considered reasonable to help defray the cost of transportation. All coal will be available to our members at the same price, not different prices at different sub-stations. It is important to remember that coal must be stored indoors, away from sun and rain.

3. A lengthy discussion followed at the meeting and a vote was taken. Option "B" was preferred overwhelmingly and volunteers for approximately 700 bags were offered immediately. It should be remembered that because of the location of the meeting, the responses were weighted in favor of the N/E coner of the sate and along I-70. Hence the reason for this memo, to determine the interest of the entire state and neighboring areas.

4. To determine if Option "B" is workable I need to know how many members will be available to store coal on their property and be willing to transport it from the bunker at Bob Alexander's shop in DeSoto, Bob has agreed to at least one more load if we can remove most of it no later than spring of next year. We are expecting a load of coal to arrive before November. Members who think they can help, please contact me as soon as possble, either by phone or mail to start moving the coal before winter.

Joe Wilkinson  
(573) 943-6779  
Rt. 1 Box 132  
Morrison, MO 65061

## Joe's jive

We had a fine meeting at Bob Ehrenberger's shop this past September. Enjoyed the demos by Ed Harper and Doug Clemons. Thanks to you Bob and your family for hosting the meeting.

At the meeting we decided not to participate in the ring project for ABANA 2002 Conference. However, we will try to design and produce a chapter flag. The design phase is still open to all ideas so if you have a design in mind send it to me or bring it to the next meeting.

We also discussed our coal situation. All members should be getting a letter soon that gives all the particulars of our situation and solution.

We also discussed the anvils that Fred Weisenborn has proposed and decided that BAM will buy two smaller ones for the trailers and a larger one to raffle off at our spring conference.

I have appointed Mike Williamson, our 1st vice president, to be in charge of setting up a "New Members Packet" that hopefully will answer most questions about BAM that prospective new members might have. After we are satisfied with the packet it will be stocked and distributed by our library.

I will take this moment to thank all of the members who called or sent a card to wish me well for my recovery

from a heart attack. The event came as a complete surprise as I have never had high blood pressure or cholesterol. But none the less, I had two arteries 95 percent clogged behind my heart. This was repaired by the insertion of two metal stints that, when expanded, open the arteries to allow 100 percent flow.

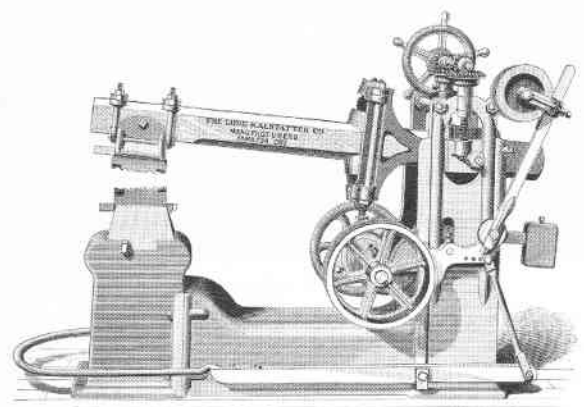
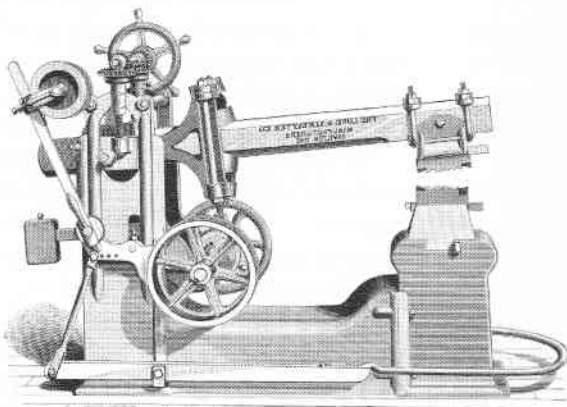
Doc says he can not detect any permanent damage.

I am pain free and I feel fine.  
Thanks to all of you for your concern.  
Happy Hammering,

— Joe Wilkinson

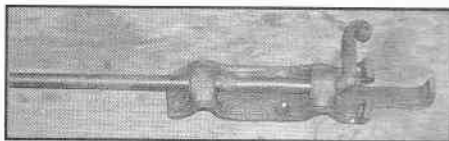


That's Joe's granddaughter, Becky, learning a new skill from Maurice Ellis at the Oktoberfaust event.



# BAM

## Sept. MEETING



Photos by Tiffany Ehrenberger and Bob Stormer

*Doug Clemons made a Hofi-style door bolt for his meeting demo with some assistance from Bob Ehrenberger. He even remembered to put the parts together before he bent the bolt up. That's Doug's bolt at left.*

by Bob Ehrenberger

After showers off and on all week we ended up with a beautiful day for the BAM meeting. About 50 members gathered at our shop just outside of Shelbyville. Daniel and I had spent the whole week getting ready and Ed Harper agreed that it was just short

of a miracle to get our shop that clean. Like usual lots of rusty iron changed hands in the parking lot, especially since Ray Carpenter is moving to Florida and he had a virtual rolling garage sale.

Ed Harper started off the demonstrations by making a pot lid lifter that looks like a long horn steer. The hand crank blower seemed to confuse him so I sat there and cranked for him. Mainly I just wanted to get a really good seat for the demo, and

you can't get any closer than that. Ed must think that we are slow because he did each step twice. His piece really looked like a steer and did a good job of lifting a lid. Note: I made one the next day and it looks like a

prop for "Death Valley Days" so I guess I missed some of the details. Come to think of it he only punched the eye and nose holes once, maybe I am slow.

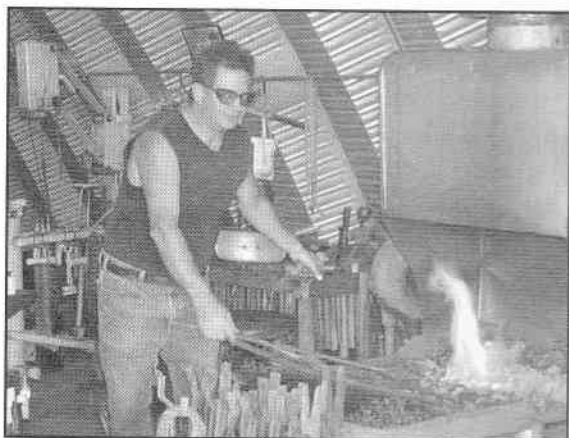
Doug Clemons was up next to make a dead bolt latch. He had laid out the piece with a cold chisel at home so the whole thing went pretty smoothly. Doug managed the blower pretty good by himself so I had to hold for him in order to get a front row seat. When he got done he confessed that this was the first time he remembered to put the bolt in before bending up the stop tab. Good job Doug.

John Murray wound things up with an impromptu demonstration of one of his medieval arrowheads. Nice to have members who are eager to share with others.

We broke for lunch and I think everyone enjoyed the home baked goodies.

After lunch and the business meeting, Bruce Herzog showed off the prototype for the BAM gas forge workshop and Preston Williams had his latest gas forge to play around with.

As people were wandering off,

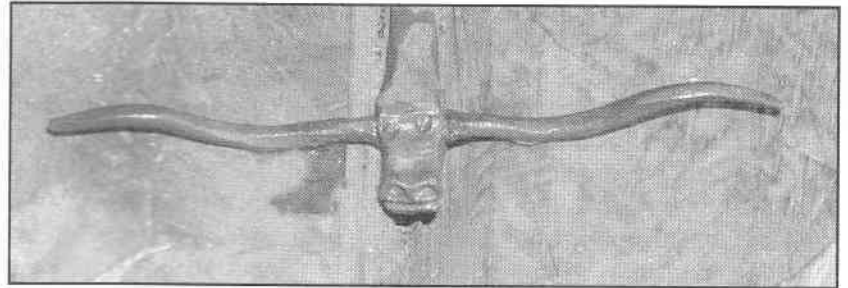
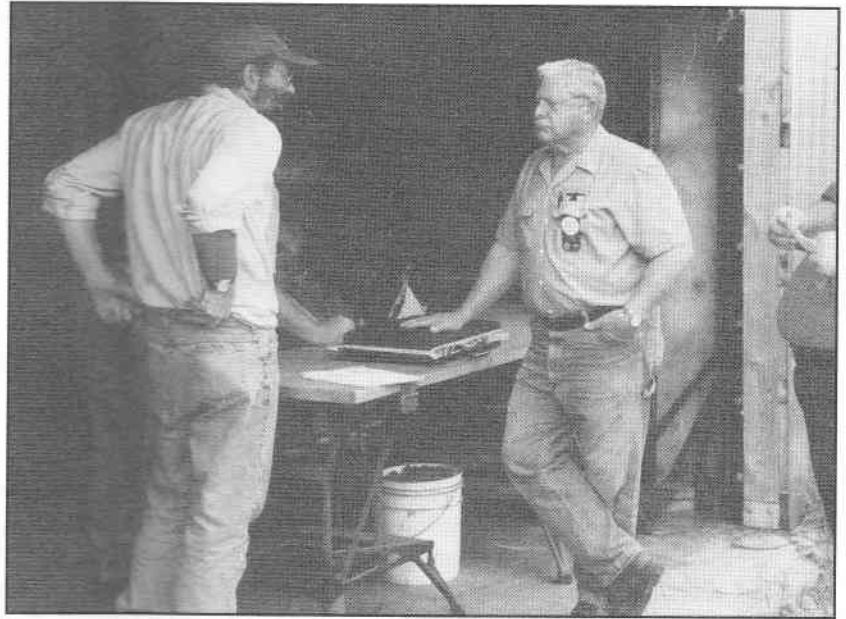


*John Murray gets hot and sweaty making a medieval iron arrowhead. John has the bows to go with it.*





*Left: Ed Harper makes his steer head lid lifter. Below: Our fearless leader swaps lies before the meeting.*



some of them found their way back to Daniel's shooting range. He was eager to show off his new shooting bench. Our neighbors are used to a lot of shooting from our direction so I'm sure they didn't give it a second thought.

I'd like to give a special thanks to Maurice Ellis for making a special trip to Doug Henderson's to get the BAM coffee pots and supplies.

My wife enjoyed meeting all of you and finally putting a face with the names she has heard for so many years. She can see now why I never want to miss a meeting. In fact, we have already volunteered to host the September 2003 meeting.

### Minutes

- Thanks to the Ehrenbergers for hosting us, a great lunch and great weather.

- Minutes accepted as published.

- Joe brought up both the chapter flag idea and ring project. Flag voted on and approved, send designs to Joe.

- Lou Mueller has urged any BAM members interested to demo and sell at Faust Park.

- Joe spoke on the coal situation. Thanks to Bob Alexander for handling it the past three years. Joe has called for volunteers to store coal — it needs to be under roof and out of the weather. More to come.

- Don Nichols spoke on the grill workshop, as shown in the newsletter. The grill will be built at Tom Clark's shop, tentatively on Saturday Nov. 24.

- Fred Weisenborn spoke on the Czech anvil buy. The shipping and brokerage sound very reasonable, this should be a great deal.

- Fred made a motion to buy two of these to be BAM's traveling anvils — motion approved. Motion made and approved to buy one anvil to raffle at our 2002 conference.

- Don Nichols & Joe spoke on BAM scholarship program.

- Bess Ellis spoke on a big auction coming up at La Plata, Mo.

- Bruce Herzog gave a treasurer's report and spoke on the gas forge workshop.

- Mike Williamson spoke on the BAM library. He says, "Get those books back."

- Peggy Williamson spoke on BAM's tent at the State Fair.

Meeting adjourned.

*Respectfully submitted,  
John Murray, secretary*



# ABANA

## ABANA Chapter Liaison Letter

September 2001

The blacksmithing community has been busy on the chapter level since I wrote my last letter. CanIron III, sponsored by the Western Canadians and the Saskatchewan Crafts Council, held at the Western Development Museum, North Battleford, Saskatchewan was a wonderful conference in the tradition of the previous CanIrons. Canada has come a long way in spirit and organization with just three conferences and are looking to further extend their organizations' reach and educational opportunities. More on that in the next issue of *The Anvil's Ring*. John and Nancy Little from Canada, Mike and Robin Boone from the US, Bob and Mary Patrick from the US, and Shona Johnson and Peter Hill from Scotland were just some of the demonstrators. Many other demonstrators showed their best stuff and innovations, and all attendees had a great time and learned much. Dorothy Stiegler and Will Hightower were also there, showing ABANA support of the conference and the smithing community to the north. CanIron IV will be hosted by the Ontario Artist Blacksmith Association in July 2003 at McMaster University, Hamilton, Ontario. Based on the past three, this one will only be better, and there have been many others and even more to come. Check out the ABANA web site, chapter newsletters and other calendars for more

events during this productive and busy fall season. I got a chance to attend a fund raiser for Peter's Valley Craft Education Center, the Wrought Iron Conference in Dover, DE, and other meetings of the NJ and PA chapters. All great events. There never has been more activities than now.

The Boy Scouts have re-instituted blacksmithing in their merit badge program. The new metalwork merit badge includes blacksmith, founder, silversmith and sheet metal mechanic/tinsmith as options to pursue after completing introductory requirements to learn about metallurgy. The requirements and more information will be listed on the ABANA web site soon. To become a merit badge counselor, contact your local Boy Scout Council (listed in the phone book) or go to [www.scouting.org](http://www.scouting.org), then local chapters, and then use the local chapter locator to find the chapter nearest you. They can give you information on becoming merit badge counselor, or drop me a line and I will help. More information will be in the latest *Hammer's Blow* and also in the upcoming Fall *The Anvil's Ring*.

The ABANA library is getting a new home. The National Ornamental Metal Museum in Memphis, TN is raising funds through a capital campaign for their new library. To be

housed in the "White Building" on site this library will be the best metal arts library in the world when finished. As part of their mission, the River Bluff Forge Council is holding an auction in conjunction with Repair Days on 20 October at the Museum to support the Museum's campaign. Money raised will be matched by an anonymous charitable organization. For more information contact the Museum at (901) 774-6389 ([www.metalmuseum.org](http://www.metalmuseum.org)) or RBFC president Richard Carr at (901) 872-4009. And if possible join many fellow smiths at Repair Days. The event is lots of fun, fellowship, food, and work for a worthwhile cause.

As I write this, the news of the World Trade Center, Pentagon and hijacking terrorist attacks today casts a painful and somber pall over all that Americans, indeed all decent persons in the world, think and do. Please remember all those involved and affected in your thoughts and prayers over the coming days and months. God Bless America.

Safe and Productive Forging

Doug Learn  
ABANA President  
121 Pebble Woods Drive  
Doylestown, PA 18901-2907  
[cjfdlearn@mindspring.com](mailto:cjfdlearn@mindspring.com)

# BAM

## Bulletin Board

For sale: Beverly shear B2, \$300. Angle iron shear, will cut up to 2" x 5/16, \$150. I have two anvils I would part with, both Peter Wrights. 150 pounds, \$250, 130 pounds, \$200. Both need some work. Jim McCarty, (573) 395-3304 or e-mail to [jmccarty@socket.net](mailto:jmccarty@socket.net).

Little Giant 50 lb. Power Hammer, SN K5141, new style, flat dies, new spring, links, arms, bushings and pins. Excellent condition, \$3200. Ellis Mitre Bandsaw, model 1500, USA, 3 speed, 3/4 hp motor, cuts 9" round at 90°, 7" round at 45°, blade 9' 6" x 3/4" x .032, quick acting vise, excellent condition. \$800. Platen Table, 4' x 5' x 5" thick, about 3000 lb., 1 1/2" square holes, heavy stand, 25" high, rack underneath, \$700. Marshalltown Rotary Shear, 18, Lennox Throatless, cuts inside and outside curves, 18 gage steel, \$200. Index Vertical Milling Machine, Model 645, USA, 1965, 3/4 hp, 9" x 40" table, up to 1" diameter shanks, 9 speeds 80 to 2700 rpm, power down feed, power table left and right, head swivels R-L, front and back, 4" vise, works well, \$1500. Milling Attachment for 10" South Bend lathe, fits in tool post socket, 3" x 4" vise, 3 1/2" vertical travel, \$100. Rotary Table with 4" + X and Y adjustments, 8" dia., use on drill press or milling machine, \$100. Large Dumore Tool Post Grinder, 1 hp, 230 volt, single phase, 3450 rpm, 2 1/4" dia spindle, 1/2" arbor size, my guess for 14" dia. lathe or larger, \$200. Sears Portable Air Compressor, "5 hp" (really 3 hp), 230 volt, 10 gal tank, 6 cfm, 2 cylinder compressor (replacement), filter and regulator, \$100. Commercial Sewing Machine, on table with 3 phase motor, \$75. Bench Drill Press, antique, hand crank, 1/2" dia.

chuck, 19" horizontal flywheel on top of spindle, \$75. Clay Spencer 934 Partridge Lane, Murphy NC 28906 (828) 837-0708 [Clay@webworkz.com](mailto:Clay@webworkz.com).

For sale: 5" leg vise, \$100; 3-1/2" bench vise, small anvil on rear, 40 lbs., \$50. 3 bags BAM coal, \$21. Champion No.3 blower, hand crank, on stand, \$200; Buffalo electric blower, 200 silent 14", \$140; #400 whirlwind fire pot with tuyere assembly 12x14" heavy duty, no burn out, set in steel table 24x24" on wheels, has hood and stack, \$300; Gas forge, new, never used, by BAM complete with regulator, hose, fittings, etc. \$350; Canedy-Otto post drill, hand crank, automatic, has original chuck and Craftsman 1/2" chuck, mounted on steel post with feet, 5'5", \$130; Di-Acro Spartan roller Model #4, 24", \$150. Emil Bubash, (314) 892-4086.

100# Little Giant, new style, new babbitt, new 3 h.p. motor, new dies, spring, and clutch ring, plus a spare set of oversized flat dies. Photos available. All in excellent condition. Asking \$3,500 Call Dick Wright (502) 479-1926 during the day or (502) 222-0736 in the evening.

Smithin' Magicians — as featured in the Blacksmith's Journal. Includes mild steel tool blank, \$275. Call Bob Woodard at (618) 692-6508.

Ray Chaffin has a new computer operated plasma cutting system that can cut anything out of metal. Mail, call or e-mail your design for a price quote. Also hardwood blocks 2-2 1/2" x 12-14" are \$5 each in curly maple, straight maple, English walnut, birch laminated. Ray Chaffin, (660) 438-6720 or Ray's Welding, RR 3, Box 279, Warsaw, MO 65355.

Heavy duty frying pan blanks: Steel, approximately 9 inch in diameter with 2 inch sides. 12 gauge thickness. Available with or without two 3/16 inch holes for handles. Now tumbled clean. 1-4 \$9 each; 5-9 \$8 each; 10 or more \$7 each. Shipping \$2.50 plus \$.50 for each pan. Contact: Bob Tuftee, 3855 Aspen Hills Dr., Bettendorf, IA 52722.

Custom-built air hammers. 6-pound table top model \$1,300; 20-pound table top model \$1,900; 20-pound floor model

\$2,200; 40-pound floor model \$2,600. Some modifications to the basic hammers can be made to your specifications. Also custom metal spinning in copper, brass, pewter, and steel. Contact Maurice L. Ellis, Route 1, Box 1442, Belgrade, MO 63622-9709. Phone: (573) 766-5346. E-mail: [mbellis@misn.com](mailto:mbellis@misn.com).

BAM members, I have a CNC plasma cutting system in my shop in Columbia and will offer my services to BAM members at a 10 percent discount. From art to parts I do it all. Now offering: 12" x 18" BAM logo signs plasma cut from 1/8" A36 steel plate, \$25 BAM members, \$35 non-members. Call (573) 474-8749 and ask for William Irvin.

Kayne and Son Custom Hardware, 100 Daniel Ridge Road, Candler, NC 28715. (828) 667-8868 fax (828) 665-8303, email: [kaynehdwe@ioa.com](mailto:kaynehdwe@ioa.com), website: [www.kayneandson.com](http://www.kayneandson.com). Offering Big Blue 100 ram air hammers, Peddinghaus 2 horn anvils, Offcenter tongs and swages, etc, hammers, tongs, the Blu Crusher rolling mill and Forgemaster gas forges. We ship and accept Visa and Mastercard.

Tom Clark has expanded his line of hand forged Hofi style hammers to include a nice rounding hammer and punches, drifts, tongs etc. He's also importing a new line of air hammer, the Sayha from Turkey and punches, shears and gas forges. For more info on the tools contact him at (573) 438-4725.

Power hammer history! *Pounding out the Profits — A Century of American Invention* by Douglas Freund (hardbound, 317 pages, profusely illustrated) is available for \$32.50 plus \$4.50 shipping and handling through Mingus Mountain Machine Works, PO Box 532, Jerome, AZ 86331.

For blacksmithing books contact Norm Larson, 5426 E. Hwy. 246, Lompoc, CA 93436 or call (805) 735-2095. Ask for his catalog.

George Dixon is starting a new blacksmithing publication called "The Traditional Metalsmith". For \$28 you will get four issues of how-to information. Contact him at 1229 Bee Tree Lake Road, Swannanoa, NC 28778.



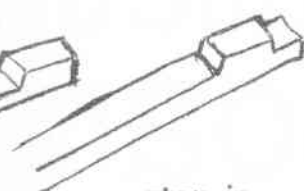
# Nail Notes by Ike Bay

Nail Header Forging

1



or



step in nose

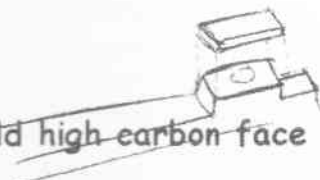
punch/drill 3/8" or 1/2"

2



3

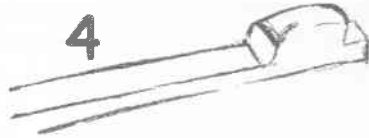
weld high-carbon face on boss



long taper punch

forge into convex profile

4



5

back punch through steel face support on wood block



6-forge handle

7-file face & hole

8-heat treat



radius top edges of hole see cut away view

By Jim Slining  
704-539-5332

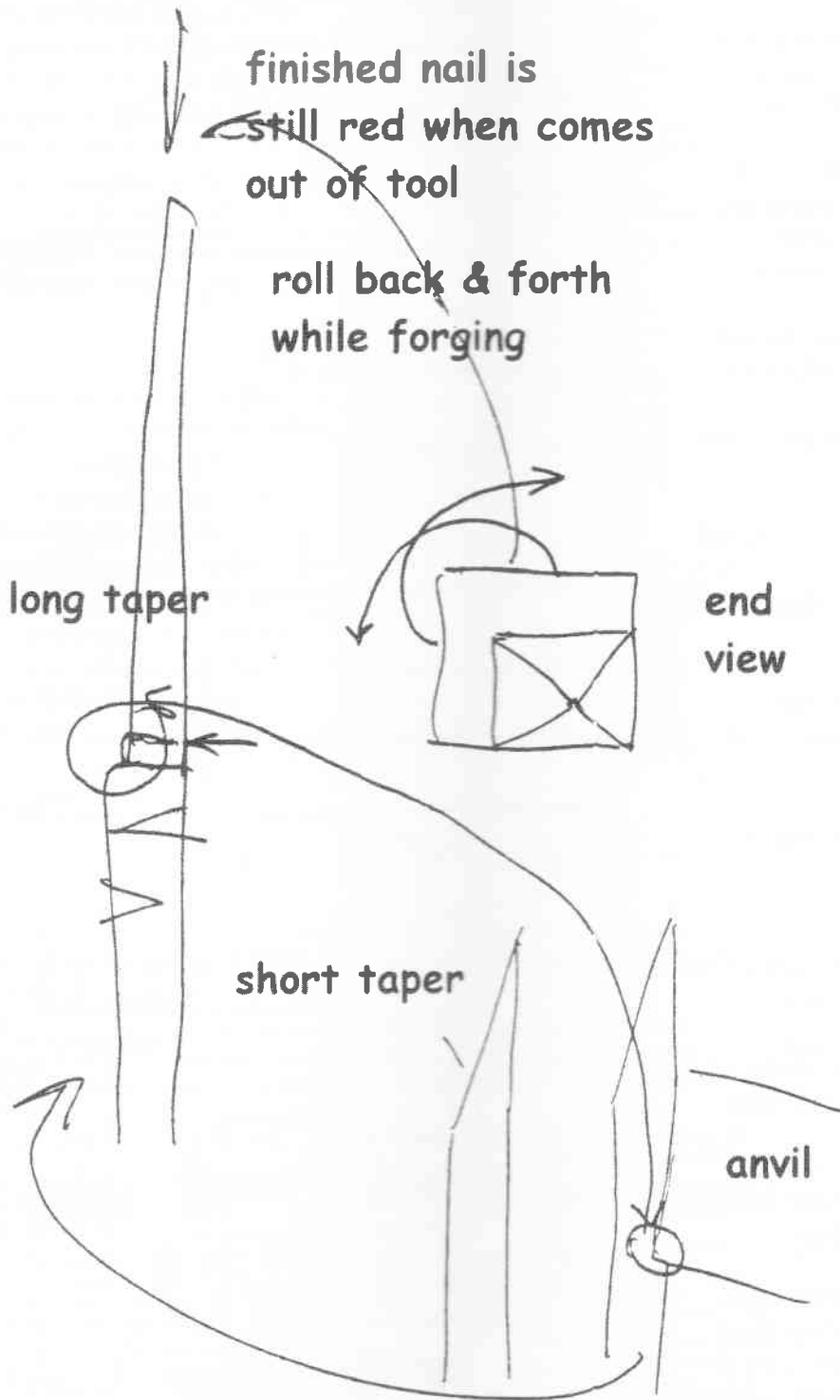


Nail Header





# How A Nail is Made



# Lonnie Alverson Report # 2

## Colonial Fire Striker

Lonnie Alverson's scholarship article from the Peter Ross class: *Rushes, Grease & Wax - Lighting for the home.*

I would like to thank NCABANA for my scholarship, so I could attend the Peter Ross at the John C. Campbell Folk School. Peter brought several lighting devises from Colonial Williamsburg to give us ideas for our projects. Thanks again NCABANA!!!

Note : Steps 1 through 9 are preformed hot.

Fig # 1 Hot cut a 3" piece of spring steel.

Fig # 2 Forge the rough shape over the anvil horn.

Fig # 3 Flatten into a finished shape of a 3/16" in thick and 3/4 "in width bar.

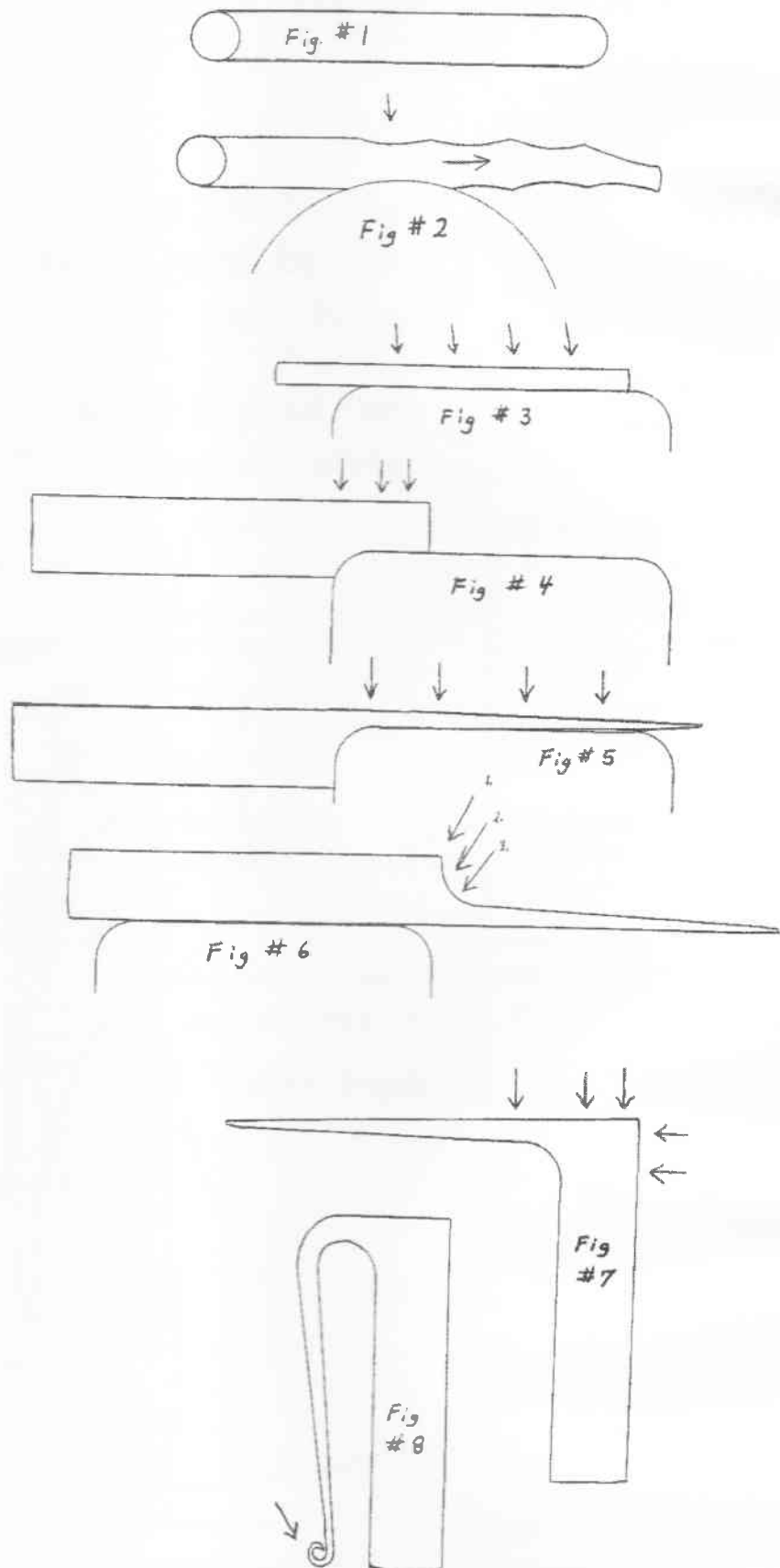
Fig # 4 On the rounded edge of your anvil face use 3/4" of your material for your handle.

Fig # 5 Bring the handle down into a nice even taper as shown.

Fig # 6 With the striker on the anvil face as shown take a good heat and forge a 90 bend in it.

Fig # 7 Your striker should look something like this.

Fig # 8 Using the tip of the anvil horn bend the handle down and finish the handle tip with a curl. Set it off to the side and let it cool. File the striker face flat.



### Colonial Fire Striker

#### Continued...

Fig # 9 At this point your colonial fire striker may look complete but your not finished yet. Bring the face of your striker up to a good even bright cherry red heat ( 1400° to 1500° ). At this point you only want to quench a ¼" of the working edge of the striker, keeping the striker moving in the water tub as you go. When the color is completely gone from the rest of the striker slowly dip and cool off the entire striker.

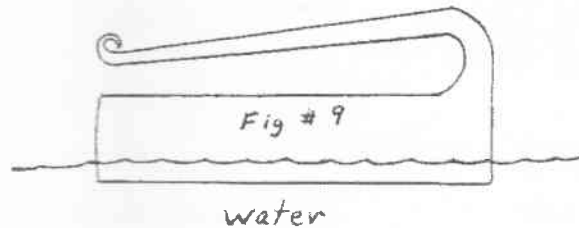
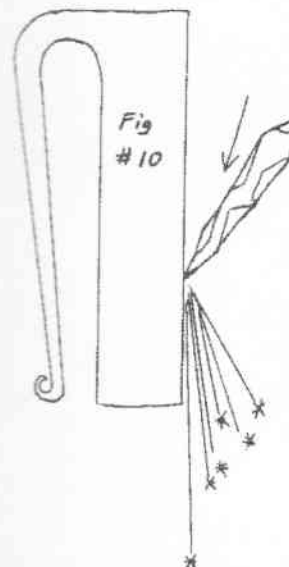


Fig # 10 Clean the scale from the striker face with a file. Take a piece of flint or quartz, and with a smooth striking action hit the striker face with the flint, you should get a good shower of sparks. ( Be careful not to strike your fingers with the flint.) If you don't get a good shower of sparks after some practice, your striker face maybe too hard. If this is the case repeat Fig # 9 and cool at a slower pace.



[From Dick Sherman's 1915 Sears and Roebuck Tools, Machinery and Blacksmith supplies Catalog]

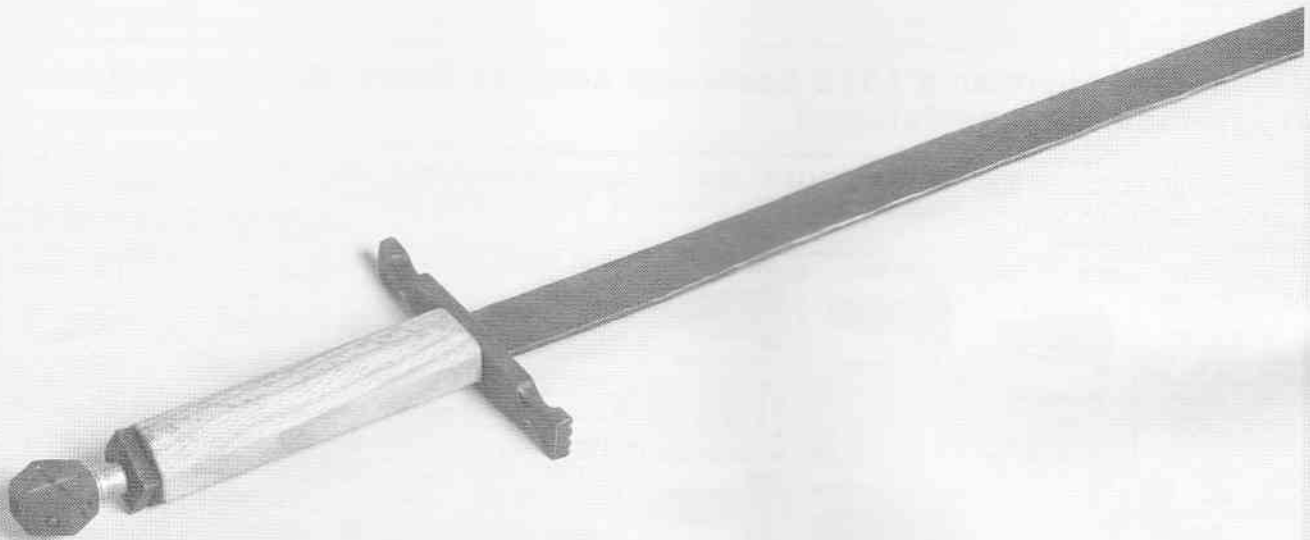
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<p><b>COLD CUTTER.</b> No. 983195 Weight. Cuts About Price 1 1/4 in. 2 1/2 lbs. 27c</p>	<p><b>STRAIGHT HARDIES.</b> No. 983199 Weight. Shank About Price 1/2 in. 1 lb. 12c 3/4 in. 1 1/2 lbs. 15c 1 in. 1 3/4 lbs. 18c</p>	<p><b>HALF ROUND HARDIE.</b> No. 983199 For cutting off heels of shoes. Shanks, 3/4-inch. Weight, about 1 1/4 lbs. Price ..... 35c</p>	<p><b>BOTTOM SWAGEL.</b> No. 983204 Weight. Size About Price 1/4 in. 1 1/2 lbs. 25c 1/2 in. 2 1/2 lbs. 29c 1 in. 3 1/2 lbs. 32c</p>	<p><b>ROUND HAND PUNCHES.</b> No. 983212 Hexagon steel, 8 in. long. Size point, inch..... 1/4 3/8 1/2 Size steel shank, inch... 1/2 3/4 1 Weight, ounces, about... 12 12 18 Price, each..... 11c 12c 13c</p>	<p><b>ROUND HAND PUNCHES.</b> No. 983194 Weight. Cuts About Price 1 1/2 in. 2 1/2 lbs. 44c</p>	<p><b>COLD CUTTER.</b> No. 983194 Weight. Cuts About Price 1 1/2 in. 2 1/2 lbs. 44c</p>	<p><b>STRAIGHT HARDIES.</b> No. 983196 Shank Wt. Abt. 1/2 inch 1 lb. Price ..... 18c 3/4 inch 1 1/2 lbs. Price ..... 21c 1 inch 1 3/4 lbs. Price ..... 24c</p>

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# Forge a Sword

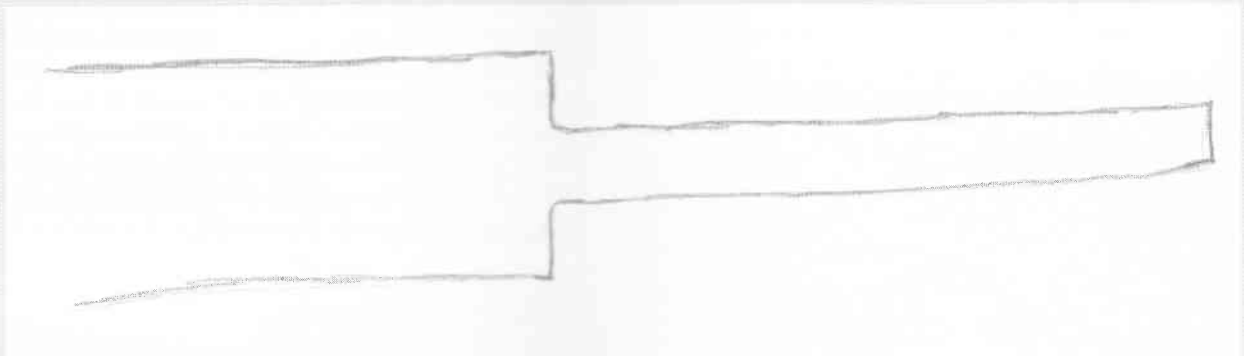
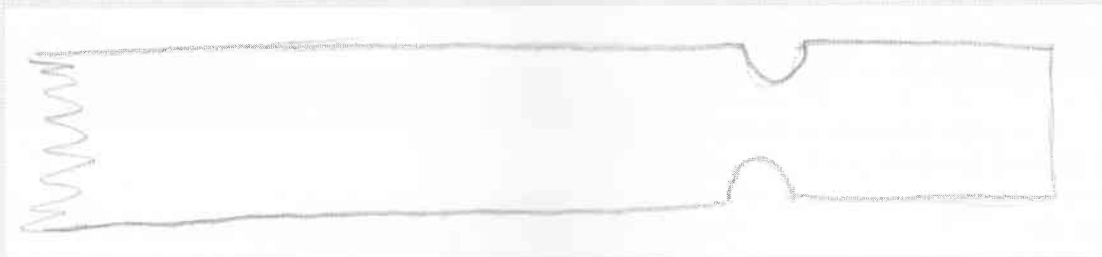


by Jim McCarty

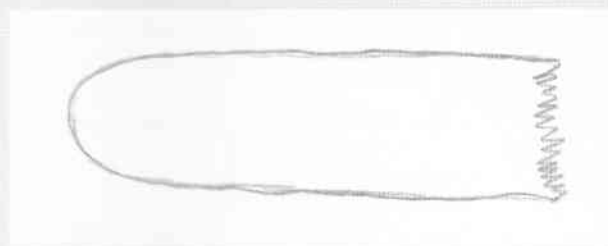


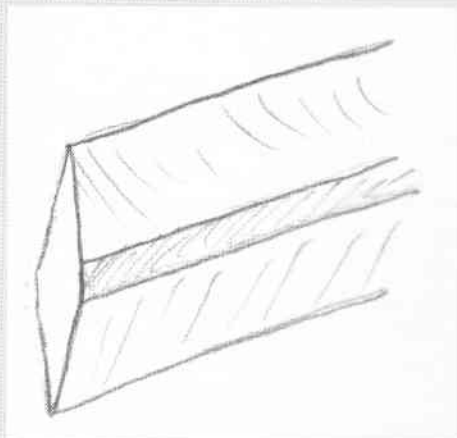


Forged these two swords as Christmas presents for my boys. I first saw this done by my brother Pat at one of the Okterberfest events at Faust Park. The directions I'm going to give you won't make you one of those world class swords that we saw at the last Conference but it will give you something that looks pretty good next to the fireplace which is where mine sits. This is meant to be a crude medieval looking thing so don't get too hung up on making the blade. I purposely left the end and edges dull so my boys wouldn't hurt themselves. This is well within the reach of any patient smith. Begin by fullering a piece of 3/16 x 1-1/4 x 36" about 3" from one end. (Lengths are approximate — you are going to make the tang and it's better to have too much. You can always cut some off later.)

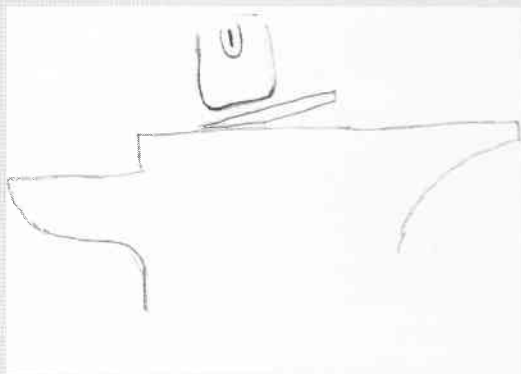


Once you have the tang fullered draw it out to about 7 inches. This length minus what you will thread for the handle end should be long enough to feel comfortable in your hand. The 7 inch length feels good to me for one or two handed holding. I filed the tang area flat so that it would mesh better with the guard. Seems I have read that this can weaken the tang but it seemed like the thing to do at the time. You can also work it vertically in the hardy hole to get it right. Keep the tang flat and work hot so it doesn't break off. You do this end first because if it cracks you won't waste a finished blade. Next put the point on the other end. Mine was blunt like this:

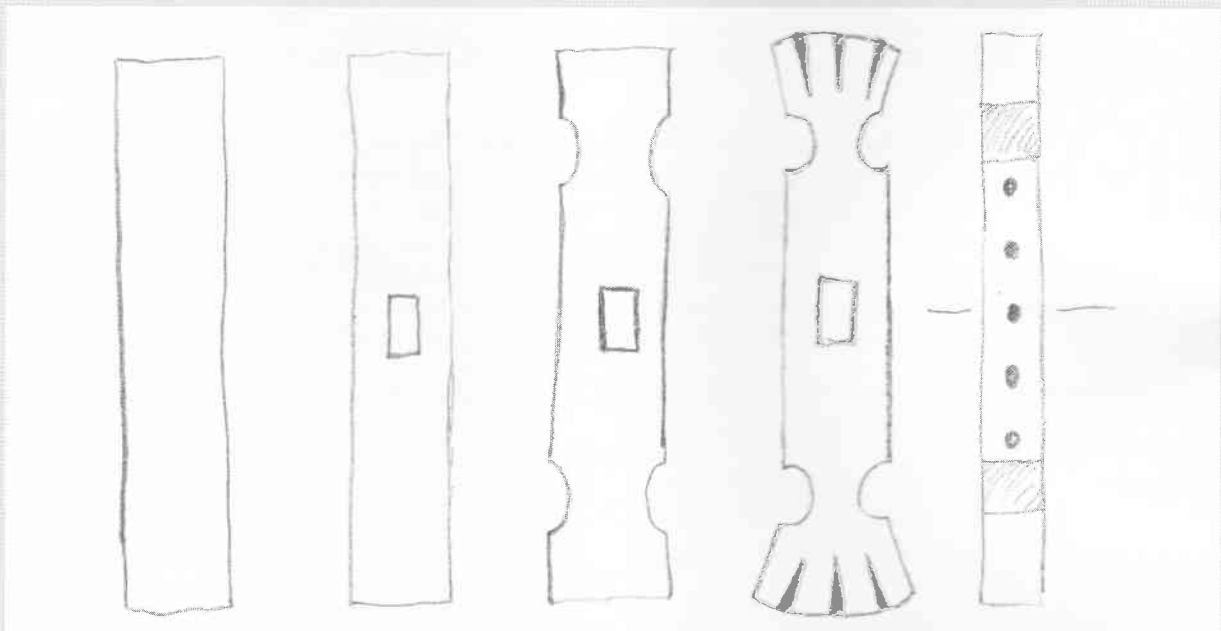


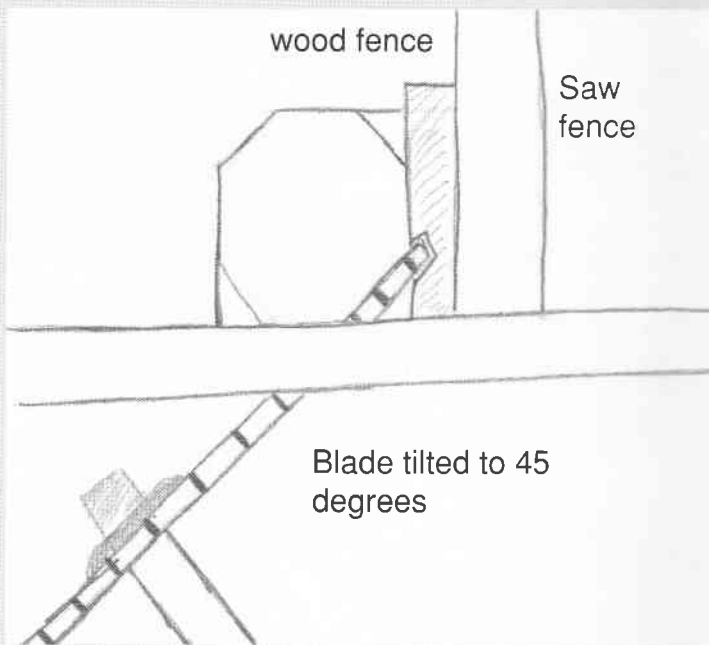


The next step is to forge the blade. While this is not easy if you work patiently you can do it. Don't try to work too much of the blade at once. This will take you a long time. Work one side and count your blows, reheat and work the other side the same number of blows. As you work the blade will try to bend as you stretch the metal on the side you are working. By alternating sides you will keep it straight. Don't let the blade get too crooked. From time to time put it on the anvil with the edge side down and forge it straight. As you work keep a slight angle off the anvil. I like a flat place in the center of the blade. If it ends up a little crooked don't worry, this is supposed to look old.



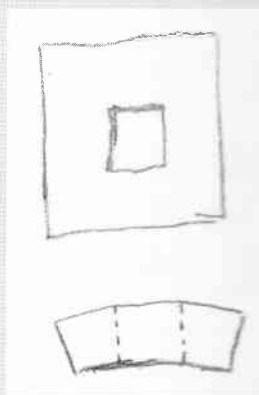
With the blade finished it's time to work on the blade guard. You can really use your imagination here. Half penny scrolls, fishtail scrolls, a snake, face or a lot of other ideas could be incorporated. Mine was 1/2" square pure iron which took on a nice patina from my scarred anvil. You should punch the hole first and then work out from this to get things centered. Chop off an end if it's off center. When it's done heat the guard and drive it on the tang to get it to fit. You must drive it off before it cools or it will be stuck. When everything fits nicely (use that file!) you are ready to make the handle.



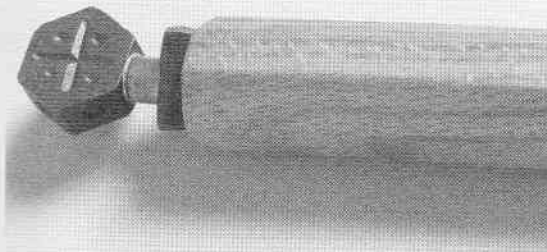


Again you can use your imagination on the handle, choosing from a variety of woods (I used walnut and oak), bone or even metal. You can turn a round handle if you have a lathe but I like the look and feel of an octagon. This is simple to make. You need a table saw with a tilting blade or table. Set the blade to 45 degrees. Clamp a wood fence to the saw's fence. Mark your stock to saw off 45 degrees on each corner. Now line up the marked end with the saw blade and raise and lower the blade until it cuts to the lines you drew. You need to start the saw and move the wood fence into it so that with each pass the wood is supported. Keep adjusting until the cut just leaves your line showing. Now you just rotate 90 degrees and make another pass until it's an octagon. Cut to length and bore a hole that is just a little smaller than your tang. So how do you get a square hole in a piece of wood? Easy: Heat the tang and drive your handle onto the hot tang. It will burn the hole. When it bottoms out take it off quickly. Watch the jet of flame and smoke that will come out the back side!

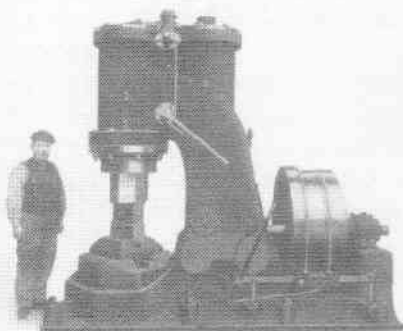
You will need one of these to go on the end of your sword. Guess you could call this a washer. It's a 1/2" piece sliced off the end of a piece of 1" square. The center is punched and the sides are upset at an angle to give it an arched top.



Here's another fun part. The handle end can be a lot of things. Pat forged a big bail. I sliced a piece off some 2" round, punched the center and used a star drill around it. The other sword (right) featured a piece of hex stock sawed off. Whatever you use, tap it so that you can screw it on the tang. Forgot to mention, the tang is threaded to accept whatever you end the sword with. I used 1/4-20 tap and dies because I had them. This is a little lite but did the job. All that's left is to assemble the thing. You have to work out the length for the tang, allowing enough stock for the threads. Measure careful, this is a bad time to cut too much off the tang. If you make one send me a picture.



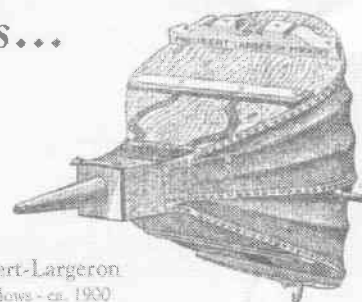
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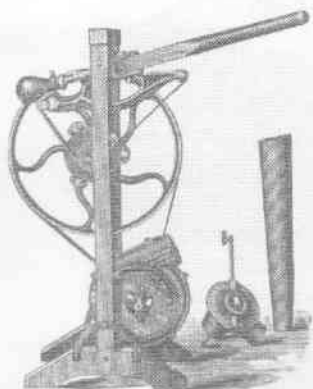
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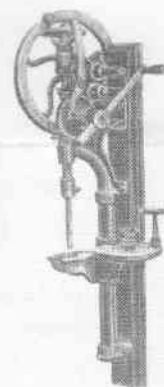
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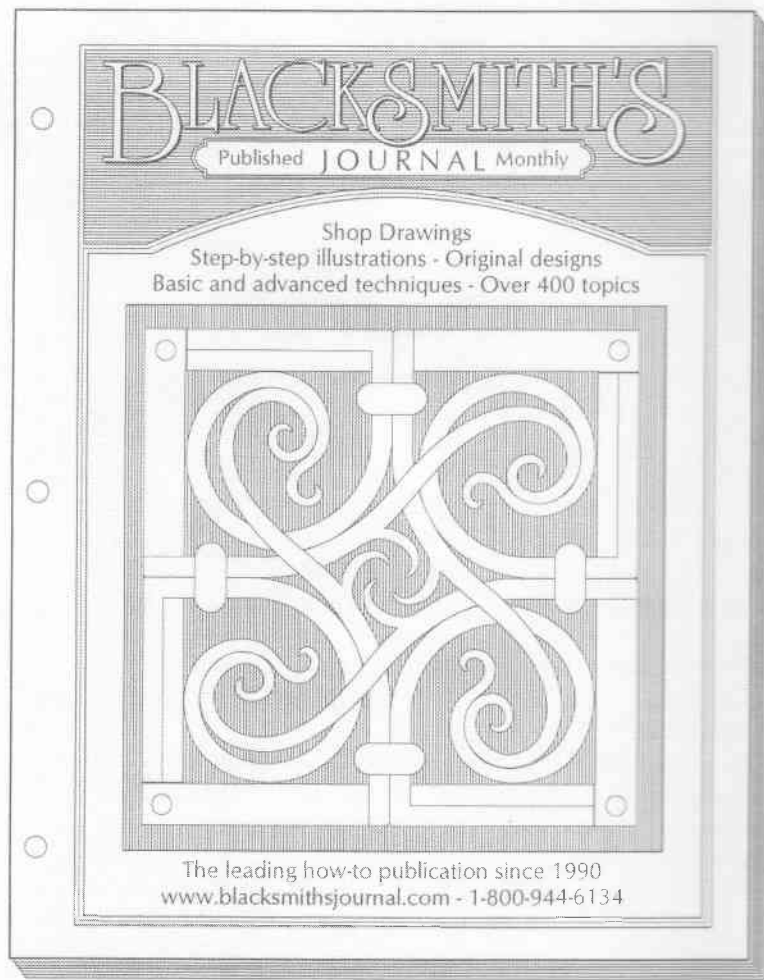


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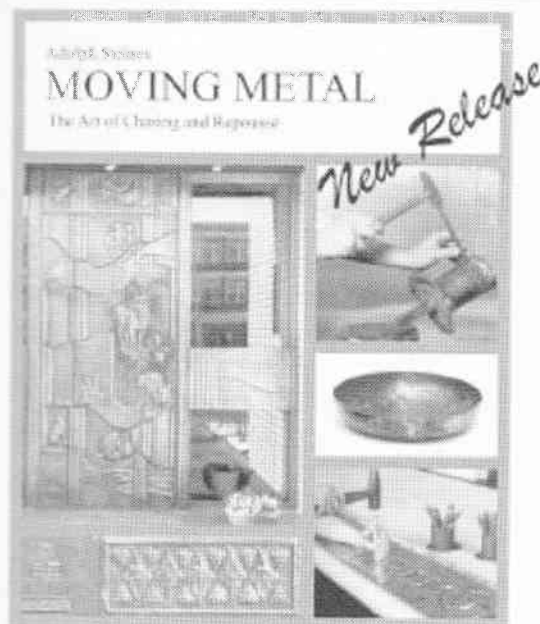
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# BAM NEWS

## 2002 BAM meetings

Our new meeting date chairman Kirk "Raoul" Sullens has things just about lined up for 2002. The first meeting will be Jan. 19 at the new home of Japheth Howard and Alice James in Salisbury, Missouri. If you're looking for it on the map it is north of the Missouri River near Moberly. Japh says they hope to have a big Nazel power hammer going by then and also a 1,000 ton forging press. Their new shop is an old school and Japh says there is room for folks to pitch a sleeping bag on the floor. Trade item is a bell. Japh and Alice are two of the finest blacksmiths in the nation and it is an honor to have them in Missouri.

The March meeting will be held in Illinois at the shop of John Medwedeff. Seems like some of us took a peak at John's shop when Andy Mac hosted us awhile back. More details on this one to come, but the date is March 30.

We'll return to Bass Pro Shops in May. No date on this one but Raoul says look for it to be late May. He's still working on July and November but the September meeting is set. That will be at Jerry Hoffmann's new shop in Washington and the date is Sept. 21.

Looks like a great lineup of meetings. We'll get you more details as they come in.

## More info on the anvil buy

A little more information on the anvil buy: The anvils will all be delivered to St. Louis, Missouri. They

need to be picked up there when the pick-up dates are announced, otherwise arrangements will have to be made in advance.

The shipping will not be known until we have a final weight on the entire order. As a gauge to figure the cost, I calculated that one of the 242-pound units would cost about \$40 to ship. Add to this the brokerage fees and customs. The total should be in the \$50 to \$60 range. The shipping will vary as to the size of the anvil and the total weight of the order. The other fees will vary as to the total number of anvils ordered. Another consideration is the stability of fuel prices....anyone's guess.

The supplier even warned that variations in the exchange rates and price increases from the manufacturer may affect the base cost of the anvils, the prices in the newsletter were quoted on July 4, '01. These are all chances any wholesale importer takes and passes the cost onto the customers.

If there are any more questions please call Fred Weisenborn at (417) 589-2497 or via e-mail at [jweisenb@llion.org](mailto:jweisenb@llion.org).

## Gas forge update

Here's the latest on the BAM Gas Forge workshop. The workshop will take place on December 1 at Lou Mueller's shop in Fenton, Mo. Letters have been sent to all who were on the Gas Forge list. The workshop is limited to 50 people. If anyone else is interested, call or e-mail Bruce Herzog to see if there is any space available.

## Grill workshop

On Nov. 24-25 BAM members are invited to come work on the 2002 Conference grill designed by Walt Hull at Tom Clark's Ozark School of Blacksmithing in Potosi. The goal of the workshop is to get the grill portion done but if there is time members might be able to knock out a few rosettes as well. Workshop organizer Don Nichols says it's not too early to get your rosette started. Just use your imagination and keep it in the 2 inch range, either round or square or ???.

Also put a 1/4 inch hole for a rivet or

weld a piece of 1/4 inch round on the back for mounting to the grill. Either bring it to the workshop or the next meeting or get it to Don, Tom or Walt somehow. The grill is the one featured in the last BAM news.

## Forgin' in the Forest

The Kentucky Blacksmiths Association is sponsoring their conference Nov. 2-4 at Bernheim Arboretum & Research Forest in Clermont, Ky. Featured demonstrators are Tom Clark, Elizabeth Brim and Danny Downs. For more information contact Larry Zoeller at (502) 361-0706 or e-mail to [zman@ntr.net](mailto:zman@ntr.net). Let's send a bunch of BAMers to support our neighbors in this effort!

## Reinventing the wheel

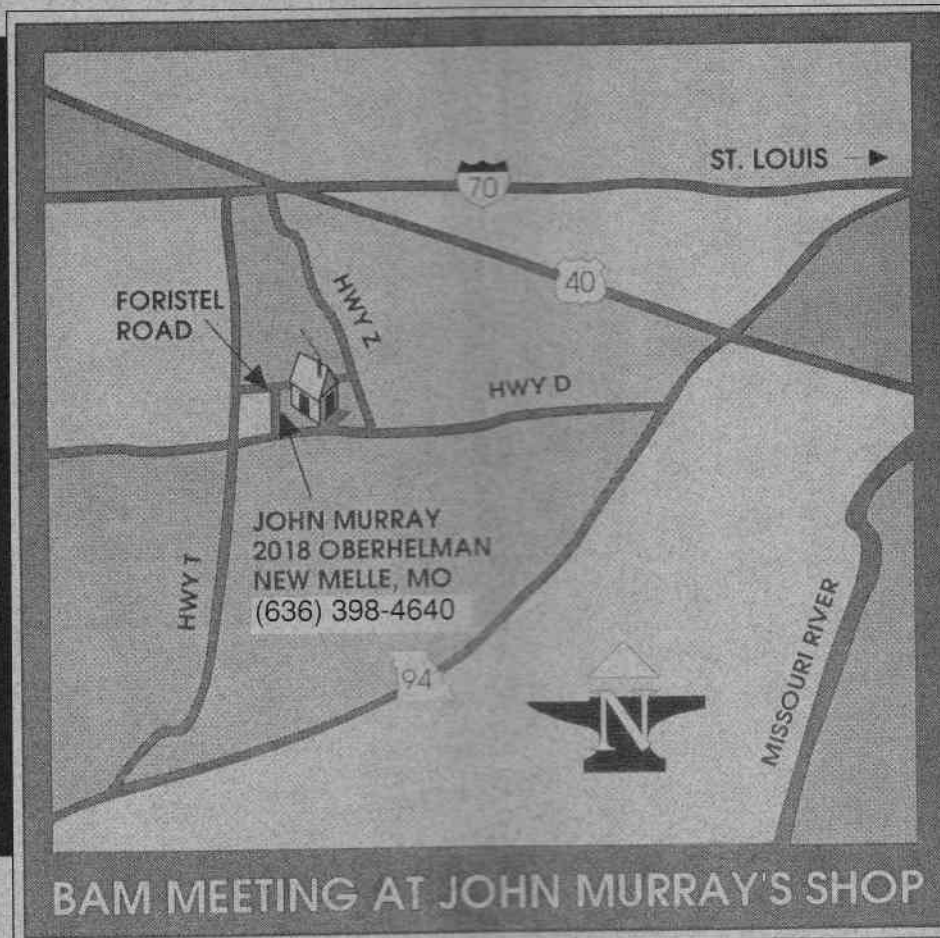
Artists from Munich to Santa Fe respond to the challenge to create their interpretations of the wheel. For an exhibit at the Metals Museum in Memphis, Tenn. Phil Goulding sends his colorful and fun piece "The Four Tops". The tops range in size from 8 inches to 4 feet in diameter. There is jewelry from Arlene Fisch and Claire Sanford, vessels of rubber and metal by Aimee Mattila, *mokume gane* from Steve Midgett, intricate work based on the wheel from Earl Krentzin, sculpture from Stefan Durst and Tom Joyce.

Also included in the exhibit is work by John Medwedeff, Arthur Johns, Robly Glover, Audry Herber, Michael Good, Alice James, Nana Schowalter, Deborah la Grasse, Marilyn da Silva, James Cooper, Marcia Macdonald, Jimmy Descant, Wendy Yothers, Jack da Silva, Kathleen Hart, Michael Bondi, Keny Marshall, Guido Mattei, and Susan Ewing.

## New Appalachian chapter site

FYI- the Appalachian Blacksmiths Assn. website has moved to [www.appaltnet.net](http://www.appaltnet.net). Our old site, located on AOL's slowest server, will remain indefinitely to inform visitors of the change. Please visit [www.appaltnet.net](http://www.appaltnet.net) when you are surfing and bookmark it.

# Next meeting: Nov. 10, New Melle



**J**ohn Murray is the host for BAM's Nov. 10 meeting to be held at his shop in New Melle. John's not too far off I-70 in St. Charles County, the map above should get you there. If you get lost the phone number is printed above. Trade item is a sun dial.

John is our big hammer guy and you can expect some good demos under his Nazel or Chambersburg. Usually the smallest stock in John's shop is 2 inch round but he can make you 1/4 inch square in a few

there are a number of interesting projects going on, such as airplanes being rebuilt, medieval bows being created etc. We never know what to expect so come prepared for anything!

As usual, please bring something for the iron in the hat, which is our raffle of all things blacksmithing related. If you can't find something to bring along at least bring some cash for some tickets.

See you all at John Murray's in November.

wacks with those monsters. Normally



## 2001 — 2002 Meeting schedule

### November Meeting

John Murray  
New Melle, MO  
November 10  
Trade item: Sun dial

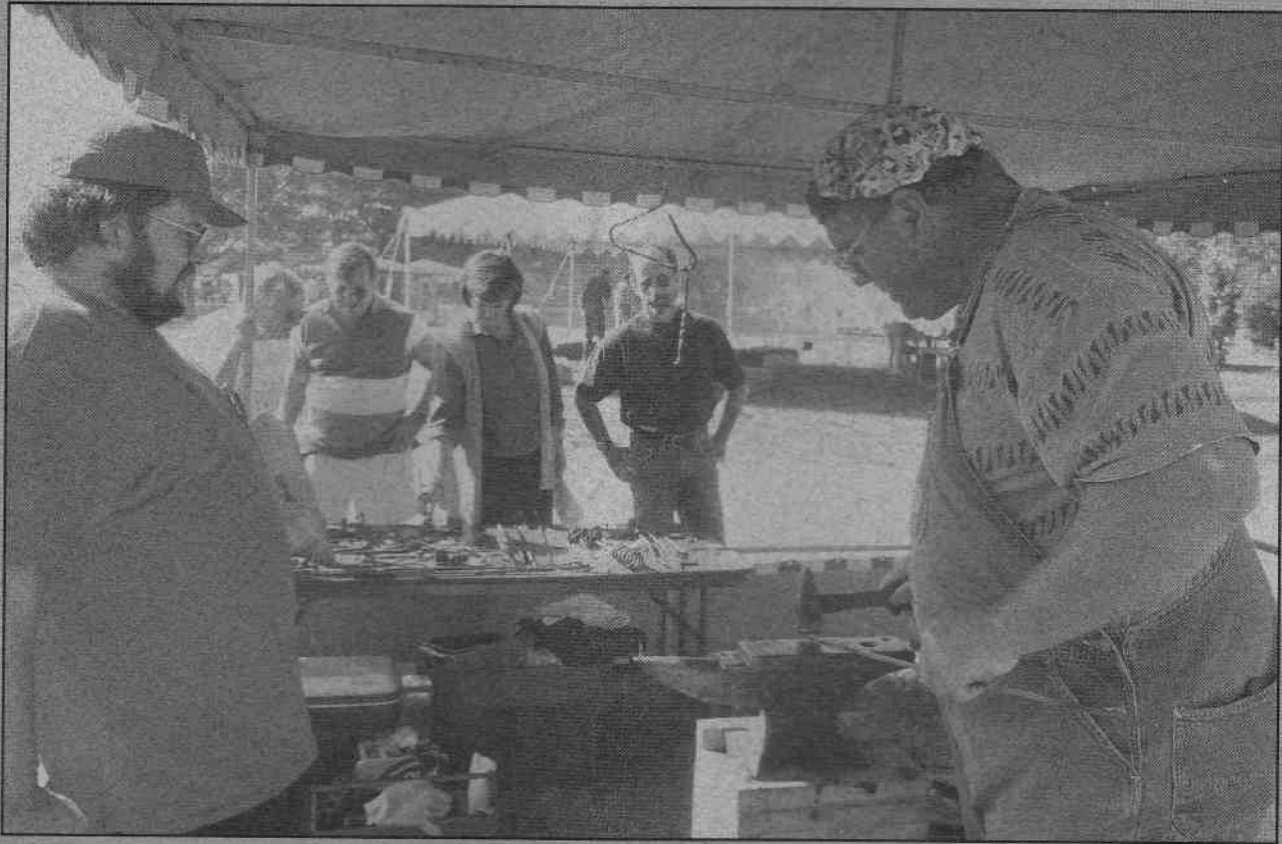
### January 2002 Meeting

Japheth Howard/Alice James  
Salisbury, MO  
Jan. 19, 2002  
Trade item: Bell

### March 2002 Meeting

John Medwedeff  
Murphysboro, IL  
March 30, 2002  
Trade item: TBA





*Mike Williamson and Fred Weisenborn took turns at the anvil during the Oktoberfaust event which showed the public that blacksmithing is alive in Missouri.*

**BAM**

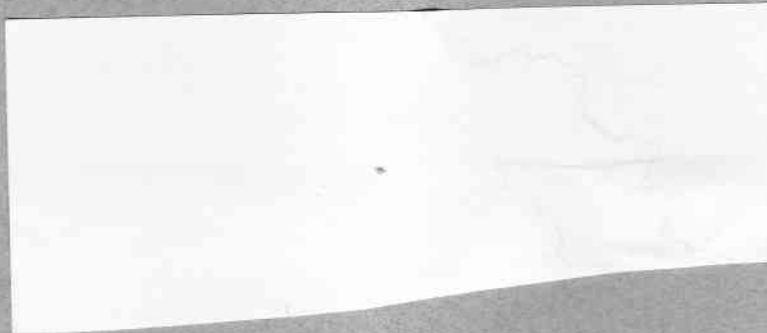
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