

Newsletter ^{of the}
Blacksmiths
Association
of Missouri

February / March 1992

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OZARK BLACKSMITHS CONFERENCE



POTOSI, MISSOURI APRIL 25-26 1992

President's Message

BAM is on the move; we are blessed with a well rounded membership that is eager to learn and willing to share their knowledge.

In addition to our regular meetings in 1991, we had a two-day workshop with Fred Caylor, a two-day workshop with Clifton Ralph, and a three-day workshop again with Fred Caylor. All very good learning experiences.

1992 is off to a big start with our Ozark Conference coming up in April. We are also considering hosting the 1994 ABANA Conference.

I feel everyone with blacksmith interest should belong to ABANA and a local chapter. The more active one becomes (professional or hobbyist) the more they get in return. BAM has a growing membership both in and out of state. We invite you to join; if you do, we will treat you like family and send a newsletter six times a year.

Tom Clark
President

To: All ABANA Chapter Presidents

For the last twenty years, I have been an amateur blacksmith (still am). In 1991, I decided it was time to get out and mix with the world outside of our state.

As "punishment" for doing so, I was elected president of the Blacksmiths' Association of Missouri (BAM).

Most, if not all chapters, have an exchange program wherein a newsletter is sent to each other's editors. I would like to see this program expanded to include the presidents. That is each chapter would send all other chapter presidents a copy of each newsletter.

So, to get things rolling, we are sending a copy to all of you beginning with our next copy. This copy which is also announcing our Ozark Conference is being mailed to all ABANA members. You will also get an additional quantity of this one issue to pass out to any of your members that may not belong to ABANA.

My hope is that this will open a dialogue that will be rewarding to all.

Please consider this a personal invitation to attend BAM's first Ozark Conference April 25-26 which has a host of good demonstrators and other activities of interest.

Forge on,
Tom Clark
HC 87 - Box 5780
Potosi, MO 63664

Newsletter of the Blacksmiths Association of Missouri

VOL. 8 NO. 7

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ABANA Membership Application

Name: _____

Address: _____

City: _____ State: _____

Phone: () _____ Zip: _____

New Member Renewing Member

How did you learn about ABANA? _____

- _____
- _____
- Regular Member\$35.00 yr.
 - Family Membership (one Vote)\$40.00 yr.
 - Senior Citizen (age 65)\$25.00 yr.
 - Overseas Membership\$45.00 yr.
 - Contributory\$100.00 yr.
 - Library\$25.00 yr.

See reverse

BAM NEWS

February Meeting

February 8th dawned cold and cloudy, but the weather was not so severe as to deter the 45 or 50 enthusiastic smiths who gathered at **Bob Patick's Poker** Stanley Winkler's Muleskinner Forge in Ste. Genevieve, MO. Stan's is as nice a shop as you'll see, spacious, well organized, and well-

equipped, with gas and coal forges, clean anvils (looked like about a 275# Trenton to me), 25# and 100# Little Giant hammers, sheet metal shear and slip roll, a small ironworker, drill press, band saw, chop saw, power hack saw, wire and stick welders and a generous miscellany. Stan says some of this equipment can actually be started and run. The brick coal forge is one of the nicest I've ever seen. It's side-draft, built off the ABANA plans with Stan's special touches, and it'll suck the change out of your pocket if you don't hold on.

Stan started the day's demonstrating with a piece of Mokume (non-ferrous laminated metals) that almost worked . . . but we got the idea. Then guest star Charlie Or-

lando (more about him later) stepped up to prove that a good take on the basics is **always** worth a trip. Charlie says he likes demonstrating the "simple" stuff because it makes him focus on what is **really** happening, not

what he thought ought to be. I missed some of his leaf demo but caught the bit on slitting and drifting a hole and I was impressed with the analysis; these little operations bear analysis. Some things that stuck in my mind: rotate

your splitting chisel 180° occasionally end to end to detect and (sometimes) neutralize flaws.

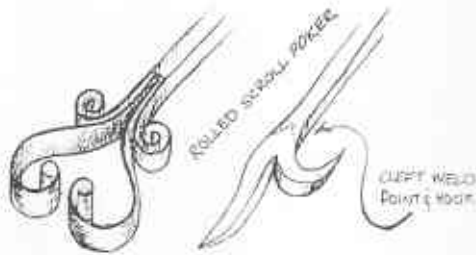


One damn' fine forge.

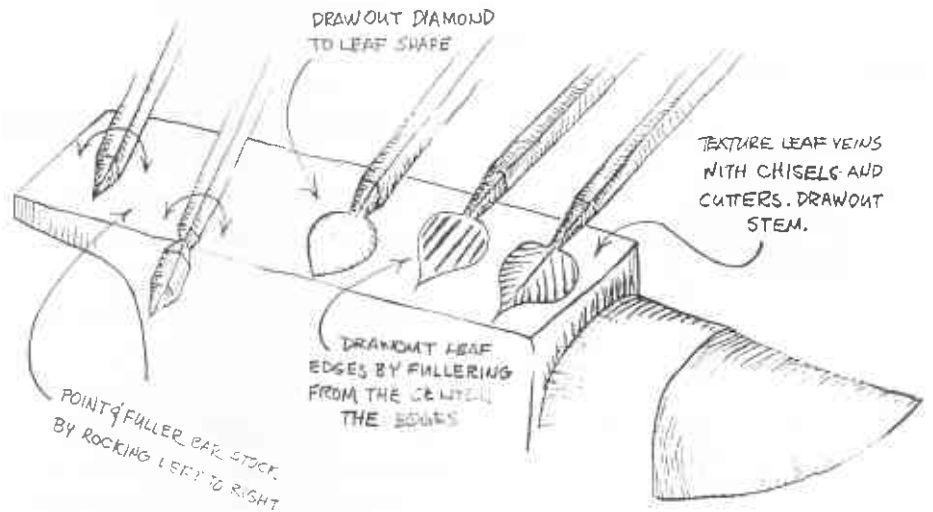
Chisel edge should be 1 1/2 times as long as the diameter of the finished hole. Upset hole to correct depth before drifting. Charlie does not heat treat hot work tools. The blunt ones don't need it, and the thin ones lose it. Cool the tool but not so much it stays wet.

Bob Patrick, whom we hope to see more of, demonstrated a poker handle with a rolled scroll and a welded point attributed to Francis Whitaker before lunch, and after lunch a spiral welded gun barrel. Jerry Hoffmann closed with a 4-

continued



Charlie Orlando's Leaf



Drawings by David Hartman. Not to be reproduced without permission.



Our founding mothers, or some of them, from left: Steve Baker, Bernie Tappel, Bob Patck and Doug Hendrickson.



Rose by Robb Gunter

way split in a piece of square stock.

At lunch time we drew for the exchange item, a flower. This was one of the best exchanges we've had, and we've had some good ones. The submissions ranged from Robb Gunter's accurate and delicate rose to Big E's whimsical flower child to a big-hammer hyacinth by John Murray (my personal trophy for the day). A good meeting, Stan. Real good. Thanks.



Daryl Meier

Stanley's Flower



February Business

In addition to the two conferences, we discussed the following items:

The coal is sold, but the membership authorized another purchase, to be stored again at Lou Mueller's. Doug Henderickson will handle the arrangements.

Tom Clark has suggested that not only newsletter editors, but

chapter presidents exchange newsletters. Good idea. Note notice on inside front cover.

This issue of the newsletter is being sent to a wider list in hopes of attracting more members and, immediately, more interest in the Ozark Regional in April. See details elsewhere in this issue.

BAM Considers Hosting 1994 ABANA Conference

Tom Clark discussed the possibility of BAM hosting the 1994 ABANA Conference at a special meeting at Lou Mueller's.

Washington University has agreed to let us use their grounds, dorms, food service, gallery and various other services and facilities. Hank Knickmeyer, Jerry Hoffmann, Tom Clark and Charlie Orlando visited Washington University to review the whole program with a representative of their summer program staff. All involved feel Washington University would be a fine facility for the conference. Much of the nuts and bolts work would be done by Washington University: such as security, tents and bleachers for demo sites, 2-way radios for staff communication (a real important aspect of a conference), publicity and much more.

Charlie Orlando is an ABANA Board Member and would be BAM's connection with ABANA. Charlie was director for the 1990 ABANA Conference in Alfred NY. The Alfred meeting was one of the best organized conferences ABANA ever sponsored so having Charlie in our corner is a great plus.

Charlie spoke to the problems and rewards for the host chapter.

1. A core of 14 people did the planning for the Alfred Conference. Scores of other volunteers helped make it happen.

2. Matching the people with the jobs to be done is very important.

3. Some of these can be done by individuals outside the local organization or by the members of the Board of Directors, depending on need. The more available locally, the easier it is to coordinate. Some tasks can be done easier than others.

Overall Coordinator

Organize and Supervise committees. Summarize progress monthly. Liaison with ABANA Board Representative.

COMMITTEES:

Finance - keep money, books, pay expenses and demonstrators.

Gallery - organize gallery, set up, take down, send back items, oversee security, arrange for gallery opening.

Promotional items - investigate sources, identify items to be sold, arrange for production, pre- and on-site sales.

Equipment/site preparation - arrange for equipment for forging stations, set up and take down.

Logistics - work out signing arrangements, have signs produced, placement, and removal.

Social Programs - identify and arrange for social gatherings, entertainment.

Auction - collect and prepare items for auction, arrange for pre-auction viewing, sale and financial arrangements

Iron in the Hat - collect prizes for raffle and other iron in the hat activities, raffle tickets sale.

Special programs - Opening and closing ceremony, special exhibits, tours, etc.

Volunteers - identify volunteers, obtain information on each, identify and assign jobs.

Program development: Demonstrators - identify possible demonstrators, obtain information on each, submit to committee for selection, send out contracts, arrange transportation when needed, help complete vouchers for payment, identify material and tools needed by each demonstrator, arrange schedule.

Program development: Business, design, and slide/lecture programs - identify possible candidates, select with committee, obtain AV equipment and supplies needed for programs.

Program development: beginners workshop - organize staff and stations for beginners workshop, teaching station(s).

Program development: Family programs - identify likely programs for spouse and family, obtain leaders and instructors as needed, organize and supervise.

Trade show - send out announcements to possible trade show participants, work out arrangements, arrange for materials and supplies being sent in, organize trade show facilities and hours.

Publications - get or make copy for publicity in Anvil's Ring, Anvil, organize copy for registra-

continued

tion packet, gallery show, participants' conference materials (welcoming packet).

Supplies - obtain supplies needed for physical demonstration programs.

Conference communications - organize for on-site communications, e.g. demonstrators, mikes, committee radios, message/swap board.

Tailgate sales - organize tailgate sale site, fees if any, donations, etc.

Registration and printing

Charlie felt that the core of 14 or so people would invest from one to four days a month for the next 18 to 24 months of lead time between now and summer of 1994. This time would not necessarily be evenly spaced. ABANA will give the host chapter \$10,000 seed money to get it planned and executed. The NY chapter that did the Alfred Conference turned a \$48,000 profit for ABANA and received \$2.00 per head for their own coffers. Two dollars times attendance could equal \$1,200 to \$1,400.

ABANA's liability insurance will cover the host chapter and no bonding will be necessary.

ABANA would also take care

of the following:

National promotion; theme and logo; outline types of programs they would like; contact special demonstrators: international, etc.; determine fees for conference and room and board; arrange for official airlines.

Washington University would be responsible to:

Provide site; collect registration and fees; printing if possible; provide security; meals; housing; record keeping; handle promotion items if possible; help with setup and takedown; provide communications, radio & telephone; provide bleachers and tents; electricity.

After Charlie's presentation Tom Clark asked for comments and responses from those present. The nature of the responses ranged from enthusiastic to warnings. Several of our members have been involved in events such as this and their responses were negative, too much work and head aches. Others had had more positive experiences.

President Clark wants the membership to ponder the questions - should we or should we not do it? Do we have what it takes? Do we have the time? Do we have the commitment? Are we willing to work our butts off?

Dear Editor,

I am very impressed with the new format for the BAM newsletter. Now all I need is a binder to hold them together, similar to Jerry's.

In reading the articles on gas forges there was a tremendous amount of information given. In several of the articles on propane gas forges there was a warning about Kao-wool being a irritant to the throat. Kao-wool is a ceramic fiber type insulation and is sold under several different names, what is important is the composition of the insulating material. Ceramic fibre when heated to approximately 1000° C forms crystalline silica which may cause delayed lung injury. Ceramic fibre is suspected to be an animal carcinogen. I am writing to you so you can inform other blacksmiths about this product not as a scare but to get information for themselves as to the proper handling of the product and if respirator protection would be necessary.

All insulating products when purchased the buyer should ask for a Material Safety Data Sheet (MSDS), so that they are informed about the product. The manufacturer does not always include it in the box or package. Enclosed is a copy for Cer-wool made by Combustion Engineering.

Sincerely, Gary Kobermann

Dear Gary,

Thanks for the note. For reasons of space I'm not reproducing the MSDS, but your point is well taken. We should all get these, read them, and try to understand them. -Editor

T-Shirts!

Now that you've got your new BAM t-shirt (ain't it great?!) it's time to get your old BAM t-shirt. Bring a blank shirt to Potosi and Doug Henderickson will screen it for you with the old triple-striking logo. Any t-shirt will work as long as (1) it isn't black (2) it doesn't have a bunch of stuff on it already and (3) it doesn't smell too bad.

You say you don't have your new shirt yet? Bring six bucks and talk to Ken Markley. He's got neat hats, too.

Material Choices for Pattern Welding

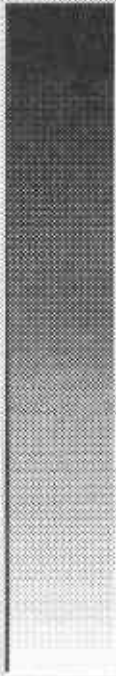
The choice of materials used in a pattern welded object will be a major factor in determining both its visual appearance and its physical characteristics. Being able to predict a material's lightness or darkness after the etch is a great help in planning a billet.

In my experience, the higher the carbon, the deeper (darker) a steel will etch. Conversely, the lower the carbon and higher the percentage of chromium or nickel the lighter an alloy will etch. The following is a list of the steels that I commonly use and their approximate place on the gray scale.

Notes:

Contrast is more important than position on the scale. The farther apart on the above scale the greater will be the contrast.

I usually etch in muriatic acid or ferric chloride. Ferric chloride seems to be better when the pattern contrasts depend on carbon differences. I use the muriatic acid as it comes out of the bottle and dilute the ferric chloride with about three parts water.



1095, W-1, W-2: will etch dark because of high carbon content.

O-1: about the same carbon content as 1095, but a little lighter because of .5% chromium.

52100: high carbon, but lighter yet because of 1.5% chromium.

5160: medium carbon and .7% to .9% chromium make a medium gray.

L6 (?): I'm using sawmill band saw blades and guessing on the alloy. Probably .7% to .9% carbon and 2% to 3% nickel.

Mild Steels: vary a lot, but generally are lighter than the above steels and darker than wrought iron.

Wrought Iron: Light gray with nice "grain" in wide layers.

203E: low carbon and 3% nickel make it very light.

Pure Nickel: silvery white.

Use of an Ignitor for your Gas Fueled Furnace

Small ignitors, sometimes used, create a situation in which a person could singe himself or possibly be injured from a small explosion.

The following is a circuit diagram for use of a spark plug ignitor.

Note: This works on the principle that when one pushes (closes) the momentary on switch, the coil builds up a magnetic field in the primary coil wires of the coil. After one or two seconds - you release the switch (opens). The collapsing magnetic field induces (creates) voltage across the secondary windings of the coil and hence the spark for the spark plug (15,000 to 40,000 volts) depending on the coil.

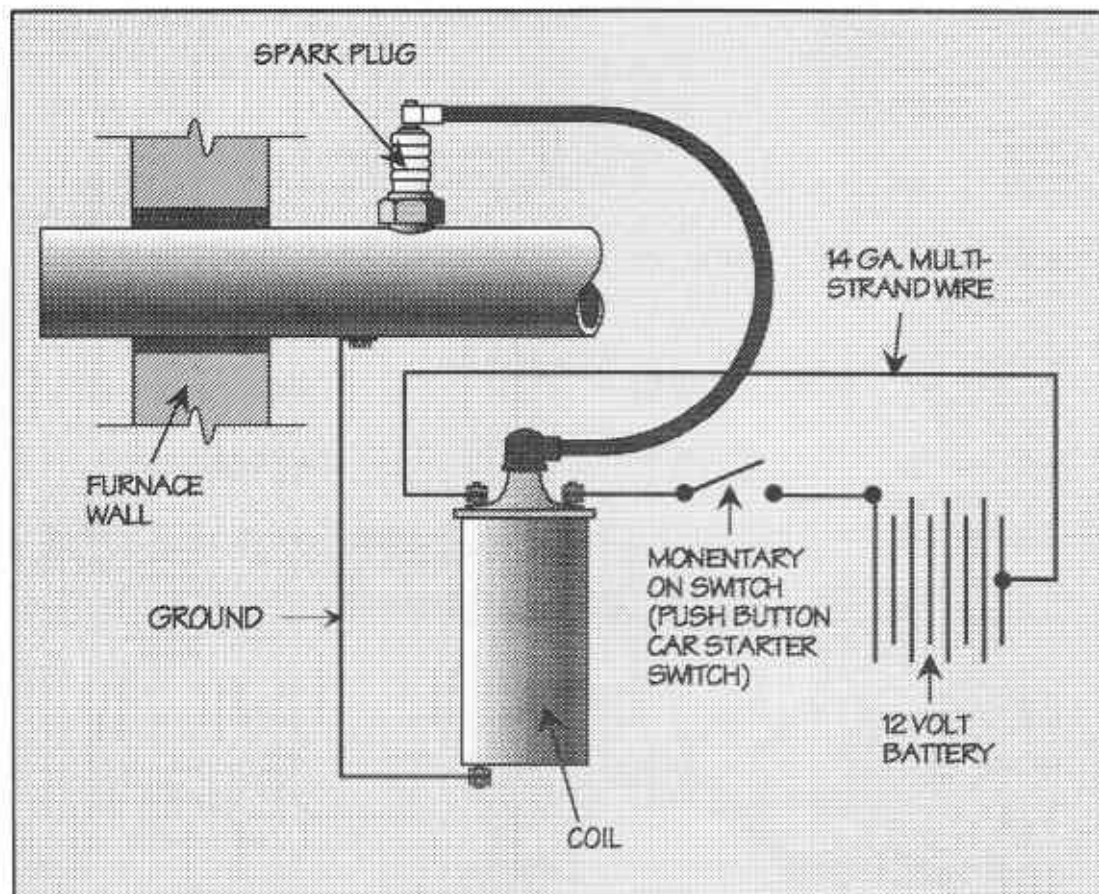
Never hold down the switch for

more than a few seconds. This allows the high current of the battery to flow. Since it is only needed for a second or two there is no need to do longer.

BILL OF MATERIALS:

(estimated cost \$15.00 less battery)

1. Pipe nipple and unions - size to fit your furnace.
2. Spark plug.
3. Spark plug tap - size to be determined by the threads of spark plug used. Tap may be obtained from auto parts store.
4. Spark plug wire and caps - one for spark plug and one for coil. Length to be determined by distance between spark plug and coil.
5. Coil - any will do, source Walmart, K-Mart, auto supply houses, car junk yards.
6. Momentary on switch - any that can carry high amperage will do, like a push button for a tractor.
7. 12-volt battery and battery terminals.
8. Two pipe clamps - one for the pipe and one for the coil body.
9. Ground wire - 12-gauge solid, length determined by distance between pipe and coil.
10. 14-gauge **Multistrand** wire - carries high current. Length determined by distance between coil and battery.



September 11, 1982

Dear Bob:

Carl forwarded your request to me for handling and I am indeed glad to assist in any way possible. Carl will send you a list of ABANA members in Missouri.

Since there is no chapter in Missouri I would suggest that you take in all of the state as your boundaries, give any one in the state a chance to join and you will be surprised at the number that will join although they might be too far away to come to the meetings.

Since you are located about in the center of the state why not have the first meeting at your forge? Organize at your first meeting. Elect a President, Vice-President and Secretary-Treasurer at least. You need a board. You can elect a board of any number you desire. (The officers of the Appalachian Area Chapter also serve as the board members because our members are so spread out. We had five at our first meeting and now our chapter numbers over a hundred so you don't need many to get started).

You should meet at least once a month in order to keep your members active. Have your meetings in different parts of the state so that some can attend at least once in a while. A monthly news letter is very important. Members and guests can keep up with the chapter activities and they will pass the news letter on and it will result in getting new members. You exchange news letters with other organizations, (Here is a copy of our news letter and I will place you on our mailing list and when you get started we would appreciate getting on your mailing list.)

After a couple of meeting write your constitution and by-laws. Also, it would be to your advantage to get a non-profit status. When you are ready I will be glad to send you samples and help in any way that I can.

Here are the requirements for becoming an ABANA Chapter:

1. You must have at least five ABANA Members in your chapter.
2. Send a request to the President of ABANA to become a chapter. This should include:
 - a. Names and title of your officers.
 - b. List of names and address of your members.
 - c. The boundaries of your chapter.
 - d. A copy of your constitution and by-laws.

The board will vote on your request by mail and a charter will be sent. This may sound like a lot of trouble but it really isn't.

To conduct a educational program with Smiths, Archetecteds, interior designers etc. The best way would be to meet with the heads of their organizations and set up a tentative program.

Try and get as much news paper and TV coverage as possible. (Every time we get any news coverage we pick up new members.)

Glad to hear from some one in Missouri. I was borned and raised in the Ozark Mountains of Southwest Missouri and attended Southwest State College in Springfield.

Please let me know how I can be of further help.

Good Luck,

Joe Humble
Chapter Coordinating Chairman

CIRCUIT FOR SPARK PLUG IGNITOR FOR GAS FURNACE PROCEDURE:

(Always use proper safety procedures and caution)

1. Disconnect fuel source from furnace - make sure valve is closed.
2. Drill and tap for spark plug hole in fuel infeed pipe. Source for spark plug tap are most auto supply houses.
3. Insert spark plug - may use fiber gasket.
4. Place pipe clamp around infeed pipe, place one end of ground wire between clamp and pipe. Tighten.
5. Clamp other end of ground wire to coil. In most cases this is body of coil housing.
6. Attach spark plug wire to plug and coil.
7. Attach 14-gauge wire to one terminal of coil and one side of switch. May solder wire to switch.
8. Attach 14-gauge wire to other side of switch and to positive post of battery, use battery terminal clamp.
9. Attach another 14-gauge wire to other terminal of coil and to negative post of battery.

The letter at above right surfaced as I was rummaging thru the archives. It is from Joe Humble, then Chapter Coordinating Chairman of ABANA, to Bob Patrick.

If memory serves (it doesn't always), it was at a meeting at Bob's shop in Bethal, MO in Jan. '86 that the members voted to apply to become an ABANA chap-

ter. Your present editor did not vote, being not a member but a mere starry-eyed hanger-on.

I remember as present at that meeting: Bob Patrick, Steve Austin, Grady Holley, Clarissa Gyorgy, Dan Whitmore, Doug Hendrickson, Jerry Hoffmann and Don Asbee. I think Steve Baker and Bernie Tappelwere there, but

there was a lot of coal smoke, and it was a long time ago.

The group has held up pretty well, don't you think? And the new blood continually coming in keeps us from getting stale.

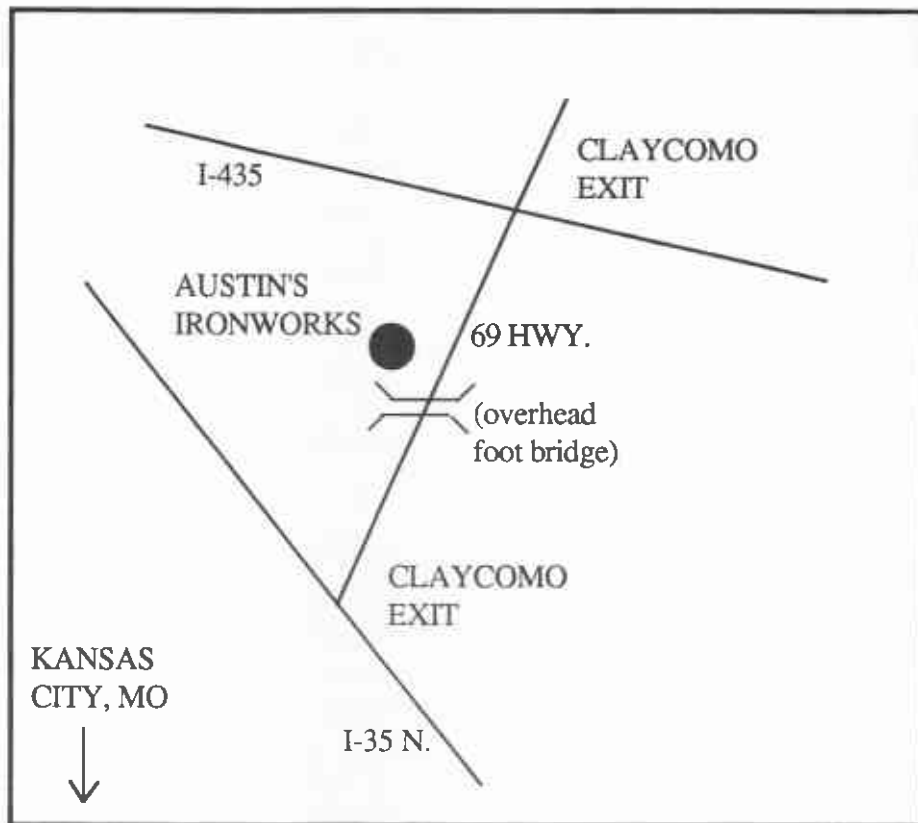
If we decide to take on the 1994 conference we will be taking on the task of making ABANA glad we joined. -ED

Next Meeting

— May 3 —

The meeting will be held in Claycomo, MO at Austin's Ironworks. Steve Austin can be reached at 816-454-7736 (day) or 816-781-1512 (home). This is not a GREAT map, but it's right on the highway and it LOOKS like an iron shop, and well, blacksmiths are all real smart, and you can't miss it.

NOTICE: BAM didn't have much time to make plans for the Ozark Conference this year and we apologize for the late notice. We hope you can still attend, but if you can't we hope to see you at the 1993 Ozark Conference.



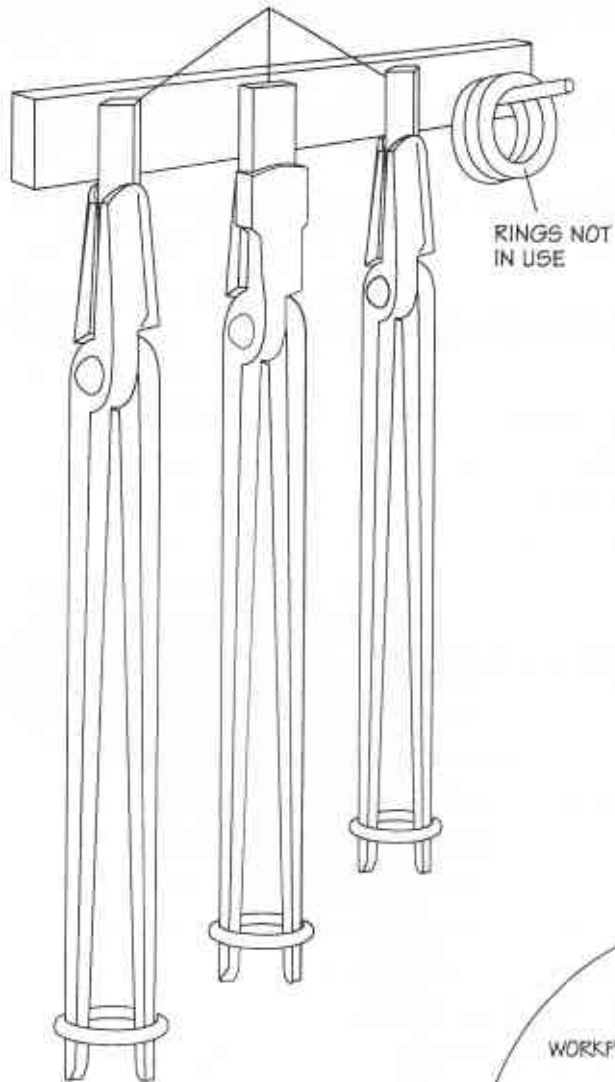
AUCTION

HERE'S YOUR CHANCE TO HAVE FUN, HELP BAM, BE A BIG GUY AND FORGE SOMETHING NEAT.

1. FORGE, SOMETHING NEAT.
2. BRING IT TO POTOSI FOR THE OZARK CONFERENCE.
3. DONATE IT.
4. WATCH WHILE HUNDREDS VIE FOR THE OWNERSHIP OF YOUR NEAT THING.
5. FEEL LIKE A BIGGUY. AND ACCEPT CONGRATULATIONS

TIPS

THE SIZE STOCK
HELD BY EACH TONG
WELDED TO RACK



TONG RACK

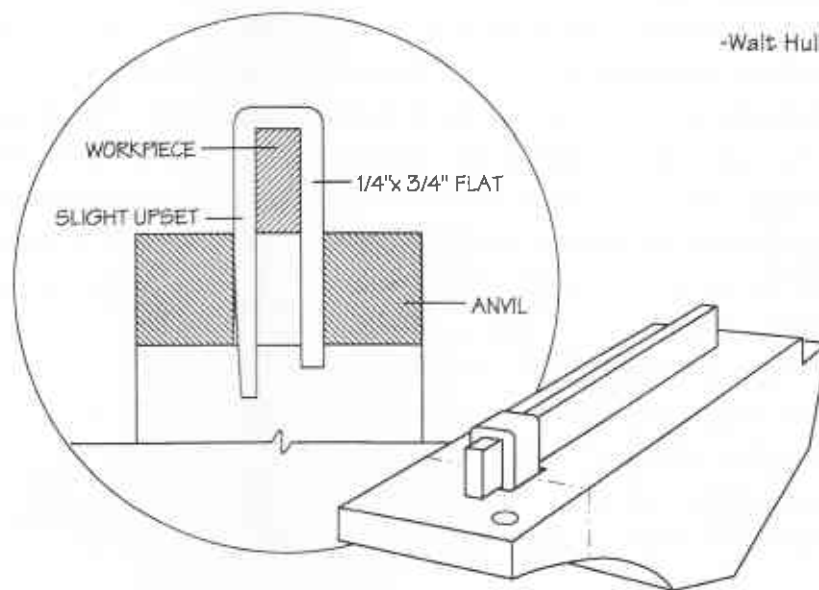
With this tong rack you always know what size stock the tong is made for. Handle clamp rings hold tongs in place on the rack.

-Tom Clark

HARDY HOLE HOLD DOWN

I recently needed to slot punch 1/2" flat bar the hard way. The worst part was trying to hold the bar on edge to hit it. This little hardy hole hold-down really helped.

-Walt Hull



OZARK BLACKSMITHS

Spring has come early this season, and we are all ready to get a fresh start on the year that lies ahead. What better way to get started than by attending the first annual Ozark Blacksmiths Conference. The conference site, centered in the rolling foot hills of the ozark mountains, will provide the setting for an unforgettable blacksmithing experience.

For starters, Robb Gunter, developer of the now famous Sandia gas forge, will be forging some of his "critters" and "cartoons in iron" as well as some architectural items. Clay Spencer, known for his use of the treadle hammer, will show you innovative tooling and treadle hammer techniques. Other demonstrations include Jerry Hoffmann's "Blacksmith Journal Techniques", Bob Patrick and Hank Knickmeyer teaming up to forge a damascus gun barrel and Stan Winkler on making tomahawks.

Other events include an anvil shoot, forging contest, tailgate tool sale, auction and a bon fire you'll have to see to believe. There will be a lot for the family to experience too. Traditional craft demonstrations include spinning wool, weaving carving and log cabin building. There will also be a tour of local antique shops and other points of interest.

Make your plans now and receive a free BAM hat for sending in the registration card included in this newsletter. The Ozark Conference is sure to become one of the best annual blacksmithing events to attend -don't miss the first one.

FEATURED DEMONSTRATORS

Robb Gunter (and son)

Clay Spencer

BAM DEMONSTRATORS

Doug Hendrickson

Jerry Hoffmann

Hank Knickmeyer

David Mathews

Dallas Nichols

Bob Patrick

Bernie Tappel

Stan Winkler

FOOD & LODGING

Meals will be available at the conference site during all daytime events, but are not included in the conference fee. Other options include fast food and a few local restaurants.

Lakeside rooms and cabins are available at the Sunnen Conference center located about twelve miles from the actual conference site. Several motels close to the site are also available. See the conference map for complete listing and locations of available lodging. Please make your reservations ahead of time.

CONFERENCE

HANDS-ON FORGING

In addition to the two main forging stations, there will be several "green coal" forges available to anyone who wants to use them. Two new air hammers offered for sale and available for demonstrations will be set up and running.

TAILGATE SALE

Bring your old or new tools and equipment to sell and swap on both days. The conference grounds are fenced in to provide limited security, and there is no fee for tailgaters, but we do ask that you donate an item for the auction.

AUCTION & EXHIBITION

Auctioneer Dr. Tim Ryan will try to persuade you to open your check book and make a donation at the auction Saturday night. BAM members are encouraged to donate their valued works of art to this worthy cause. However, if you have a hard time parting with your work, you might want to display it in an exhibition open to all who want to participate.

OZARK CONFERENCE CONTEST

Our Saturday night contest is open to any team (blacksmith & striker) who wishes to participate. The object is simple: pound a piece of 1¼" round x 3" long stock into a 1½" cube. You are allowed twenty minutes to complete a cube that will be judged on size (equal all six sides) squareness and quality of surface & edges. Tools are limited to hammers, anvil and flatter; no special swages are allowed. Good luck!

FOTOSI, MISSOURI APRIL 25-26 1992

ABANA NEWS

President's Message

March 1992

Dear Friends,

It's almost Spring, and just in time too!! I've had it with this rain!!

Take a good look at the message from the overall Conference Chairman, Michael Bondi. He has some very important information concerning the upcoming conference in June. Mark your calendars for the event, and I hope to see you there. This should be a very impressive gathering, and you won't want to miss it.

I finally got an interpretation of the letter that I received from Russia, the latter part of January. With the change in government, it has put a major kink in their financial situation, but it hasn't hampered their enthusiasm one bit. They are a tight crew and send their best wishes to all of us, here in the states.

The Russian blacksmiths are hosting the third All-Union Blacksmithing School and Scientific-Practical Conference entitled "Ecology of Blacksmithing Culture" and the Twelfth Readings devoted to the scientific legacy and development of the ideas of Professor A. I. Zimin that will be held at the Museum of Blacksmithing Science and Technology on June 4-5, 1992, in Moscow. The school-conference and readings will examine and discuss basic problems in blacksmithing culture, science, technology, production, art, craft, and history. Topics covered will be: Philosophical problems; new problems in the theory; research on forge press equipment; theory of plastic deformation; pressure working of materials; terminological problems, and so on. The Blacksmiths, Ecology, Culture, The Fatherland will be held June 6-7, on the grounds of the Museum of Blacksmithing Science and Technology.

If you would like to attend, please contact me ASAP and I will send you all of the information that I have. I will also send you a letter of introduction, and if you agree, a letter about ABANA to be read to their panel.

In any event, it is great that the Russian smiths are positive in their approach to the art of blacksmithing. They finish with the announcement of the All-Union Festival of Blacksmiths to be held August 15-16, same place, and they invite any Americans to participate in the various categories of competitive blacksmithing works.

Hoping to see you in June!



Dorothy Stiegler
President of ABANA

1992 ABANA Conference

Now, just in case you somehow failed to see the introduction to the conference program in the Winter issue of the *Anvil's Ring*, here's a brief summary. Our international guests on the program are:

Manfred Bergmneuster (Germany) has what is, arguably, the leading blacksmith shop in Europe. They produce major commissions in iron and forged bronze.

Alan Evans (England) is one of the brightest stars from the UK, with a number of Major commissions in contemporary design.

Hermann Gradinger (Germany), smith, designer and academic of the field, has produced award-winning designs, particularly in the area of light fixtures.

Goro Hatanaka and **Kotaro Kurata** (Japan) form a team producing extraordinary work in the architectural and sculptural areas of design.

Peter Parkinson (England), an artist-blacksmith and professor of design has a wealth of knowledge and talent to offer.

Walter Suter (Switzerland), a leading force in the Swiss blacksmithing world, is an accomplished smith, designer and author.

In the area of new talent, we will have a tandem demonstration by two young smiths, **Cara Frost** and **Claudia Petley**, also from England. These women are serious smiths and come to us with high

recommendations by none other than Richard Quinnell.

The North American group of demonstrators — consisting of both hot, young talent and seasoned veterans — follows:

Joe Anderson (North Carolina), **Jim Austin** (California), **Petr Baloun** (Ontario), **Louie Barrette** (Quebec), **Joseph Bonifas** (Ohio), **Jay Burnham-Kidwell** (Arizona), **Eric Clausen** (California), **Jeffery Funk** (Montana), **Hoss Haley** (New Mexico), **Daniel Miller** (North Carolina), **Eric Moebius** (Wisconsin), **Daryl Nelson** (Washington), **Bruce Northridge** (California), **Brad Silberberg** (Maryland), **Rick Smith** (North Carolina), and **Doug Wilson** (Maine).

Special Blade and Damascus Program

Phil Baldwin will give a demonstration/lecture entitled "A Sampler of Handle-Making Techniques," and, lecture on "Making Your Own Steel, the Carburization of Wrought Iron.

Gene Chapman will conduct two sessions on primitive folding-knife mechanisms.

Bill Fiorini's lecture is entitled "Historic: and Contemporary Pattern-Welded Gun Barrels, a Smith's View." He will also be demonstrating both "Forging a Pattern-Welded Barrel" and "Tomahawk Forging."

Jim Hrisoulas will lecture on "Getting Started: Basic Shop Set-Up for a Beginning Knifemaker," and demonstrate "The Hollow-ground Blade."

Scott Lankton, will lecture on "Special Problems in Historical Recreations," and demonstrate

"Historic European Pattern Welding, Twist Steel Blades."

Dan Maragni will give two lectures: "Basic Metallurgy" and "How Every Sword Was Ever Made in Any Place at Any Time." He will also demonstrate "Basic Blade Forging and Heat Treatment."

Daryl Meier has two lectures scheduled: "Special Problems in Pattern Development: How I Developed the American Flag Pattern on the Bush Bowie," (see "Bush Bowie" article, current issue A.R.) and "European Iron-Age Blade Structures."

All of the above lecturers and demonstrators will participate in a panel discussion dealing with contemporary bladesmithing. The discussion will include a question and answer period with special emphasis on technical matters. **Phil Baldwin** will moderate the discussion.

Farrier Program

For the first time ABANA will feature a program by farriers at the bi-annual conference. Although many farriers are adept at making a wide variety of horseshoes, as well as the tools with which to make them, some also do decorative and functional ironwork for fun and profit. In fact, many of our leading artist-blacksmiths and blacksmithing teachers started their forging careers as farriers. Come see what they have to offer.

The following people have been scheduled for lectures, demonstrations and instruction:

Bruce Daniels has been shoeing horses for over 40 years. He had his own school for horse shoeing for over 10 years in Mullica



Hill, New Jersey. He has won the North American Challenge Cup and the Mustang Champion Forging Buckle at the American Farriers Association Convention. He has competed on and coached the American Farriers Team in England, Ireland, and Scotland a number of times, and is a former president of the American Farriers Association. Bruce is in wide demand for clinics and contest judging all over the country.

He is also known for his tool-making skills and for decorative and functional ironwork. He is an excellent teacher and demonstrator. He will present a slide program on both tool making and decorative ironwork, and two three-hour forging demonstrations on how the farrier can use his/her blacksmithing skills in the making of tools and production of beautiful ironwork.

Gene Armstrong has been the farrier instructor at Cal Poly for many years. He is an excellent horseshoer and teacher, and has taught many of the best farriers in the United States.

Charles Orlando has been shoeing and doing blacksmithing for 14 years. He has participated widely in horseshoe forging competitions for the past twelve years, as well as teaching blacksmithing

at the John C. Campbell Folk School and at local and regional workshops.

Gene and Charley's program will feature the "Farrier as Blacksmith." They will demonstrate the blacksmithing techniques the skilled farrier uses in many types of shoeing situations. They will form shoes showing the various blacksmithing techniques of drawing out, upsetting, forge welding, and forge brazing.

Frank Turley shod horses for many years, and has been teaching blacksmithing at his Turley Forge School in Santa Fe, New Mexico, for over twenty years. There are few blacksmiths who have not been in one of Frank's classes or seen him demonstrate. He is an excellent teacher and toolsmith as well. Frank will be demonstrating how to fashion a front and hind shoe for Morgan horses, either English Pleasure or Park, and will discuss the reasons for the different features of each shoe. In addition, Frank will cover some of the farriers tools, and how they are made.

Other Programs

There will be a tremendous hands-on teaching program lead by George Dixon, chief smith from Samuel Yellin Metalworkers. It will be taught in a super facility, complete with 17 permanent stations, which the university maintains.

Robb Gunter will conduct a lecture on the "Sandia" forge, which he helped develop. He will also be on hand for discussion. We will have one of these forges in operation at the conference.

When Hammers are Resting...

Foreign guests on the program will also be offering slide shows of their work and, in some cases, participating in some of the panel discussions. Most of the North American demonstrators will also be showing slides of their work and serving on various panels. The following are some of the topics, and the people taking part in the talks, lectures, panel discussions and slide shows:

Dimitri Gerakaris (New Hampshire) will be lecturing on the use of hot-dip galvanizing. Points he will cover are: 1) how to prepare your work for the galvanizer; 2) the results you can expect; 3) how to paint afterwards; 4) how to find and contact a galvanizer. He is sponsored in this by the American Galvanizers' Association.

Leonard Masters (New York) promises to lead a panel debate which will generate some sparks on the difference between the formal European apprenticeship program and the learn as you can American experience. Some heavy hitters will be in on this one!

Joe Pehoski (Texas) is chairing a panel to include Eric Moebius, Peter Parkinson and Melvin Rose. They will explore the question of "Where have we come from and where are we going with blacksmithing?" This is quite timely as ABANA approaches it's 20th anniversary next year.

We hope to also have a presentation of new Swedish blacksmithing work presented by a delegation from Sweden. Sweden has been something of a sleeping smithy until recent years. Sparked by workshops lead by Achim Kühn, the

Swedes have sprung forth from their art-smithing slumber with great vitality and fresh ideas.

Other Activities

There will be plenty of evening social events (a barbeque banquet and a town party in the village of San Luis Obispo, for starters), the trade show area to explore, the auction to attend, and viewing the members show in the conference gallery. Part of the gallery will include a special exhibition of the works of Carl Jennings, the honorary chairman for this conference.

Hearst Castle:

For those of you who are unable to make your own side trip to see this stunner close at hand, the conference committee is working on making limited tours available to members. Details on preregistering will appear in the conference registration packet to be mailed to all ABANA members.

For the family:

There will be reasonably priced child care available. In addition to the nearby sand and surf, a creative program is in the works for the adults and, in some cases, children. Cal Poly will be making their craft center facilities available to us both for class instruction and drop-in projects. Descriptions of the classes and pre-registration details will arrive in the conference registration packet which will be mailed out to all ABANA members. The topics will include:

- Calligraphy
- Custom Picture Frames
- Marbling Techniques
- Nature Photography Walks
- Silkscreening
- Tie-dyeing
- Toymaking

Where:

Cal Poly (California Polytechnic Institute) In San Luis Obispo, CA. Located on the beautiful coastline about halfway between Los Angeles, and San Francisco, San Luis Obispo is an easy half-day's drive from many of California's best vacation spots (Big Sur, Yosemite National Park, Disneyland, etc. to name a few) and only a half-hour drive from the outrageous Hearst Castle.

When:

June 17-21, 1992. The arrival/registration day is slated for Wednesday the 17th. The program will run June 18-20, with Sunday the 21st as the departure date.

Registration Packets:

If you are already an ABANA member you will automatically receive a conference registration packet. For registration packets, please call: Devon Shearer (805) 756-1586 at the Housing & Conferences Services Office Cal Poly State University in San Luis Obispo, CA.

How to get there:

Of note: we have a special "star account" (#0162-V-5) established with American Airlines which will yield the lowest possible fare for those conference attendees wishing to fly. Renting cars (Budget: 1-800-227-3078). Best Assistance from "Conventions in America" 1-800-535-1492, ABANA Group #553.

Cost:

Registration: \$175 (\$200 after 6/1)
\$50 spouses
\$75 Day Tripper Rate

Room & board

(4 days & nights): \$175 (\$210 Single Room)

Gallery Exhibition: Work must be received by June 1 for Main Gallery

ABANA Membership (required): \$35
Regular/\$25 Senior Citizen/\$40 Family/
\$45 Overseas Member/\$100 Contributory
Member/\$25 Public Library.

-If you wish to join ABANA please write to: ABANA, P.O. Box 1181, Nashville, IN 47448 or phone (812) 988-6919.



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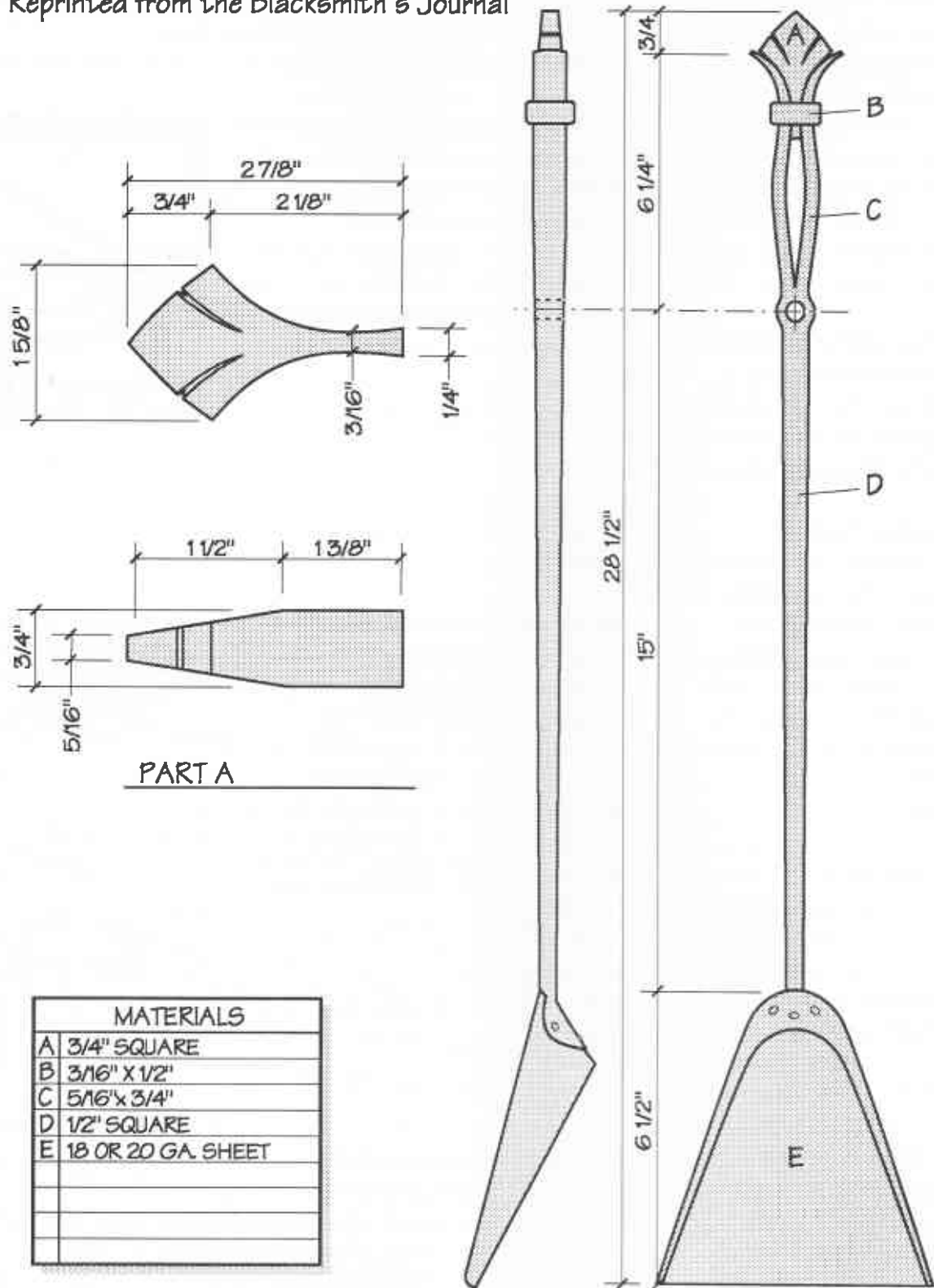


Treadle Hammer Kit
Kit includes all material required for completion (except lead for head). All material is cut and mitered. Hole locations have been center punched. Assembles in 7 to 10 hours. Easy to follow assembly instructions included. Treadle Hammer designed by Jere Kirkpatrick of Valley Forge & Welding. Kit \$475.00

Call or write for more information.

FIREPLACE SHOVEL

Reprinted from the Blacksmith's Journal



PART A

MATERIALS	
A	3/4" SQUARE
B	3/16" X 1/2"
C	5/16" X 3/4"
D	1/2" SQUARE
E	18 OR 20 GA. SHEET

JOURNAL PLANS

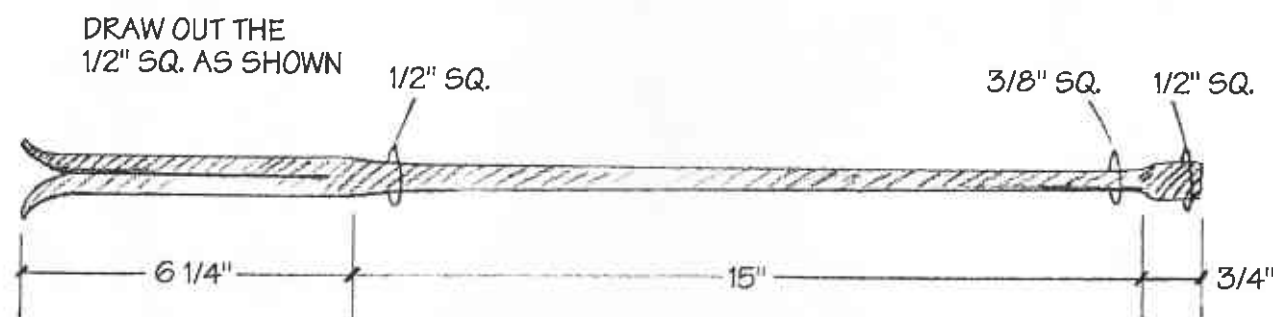
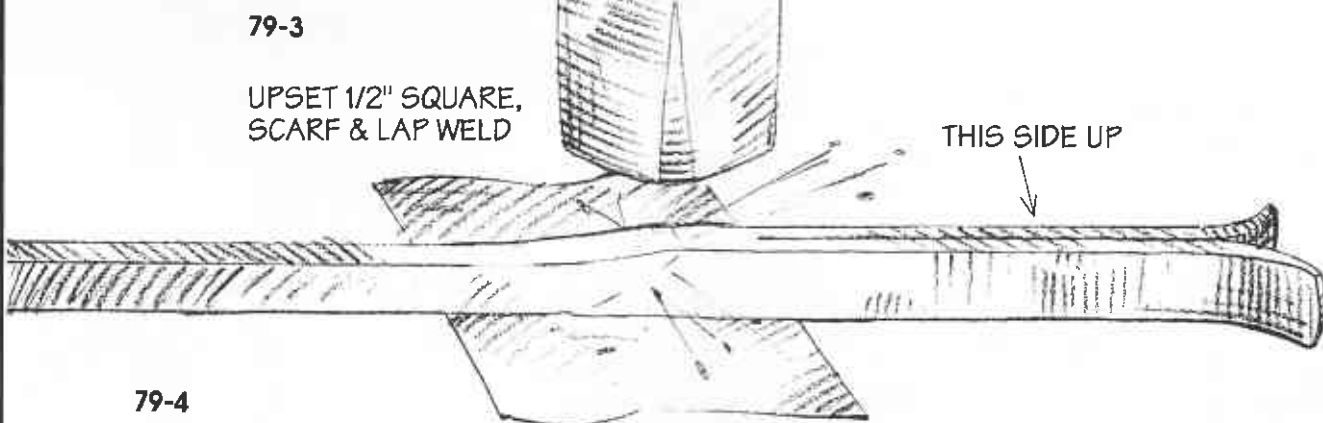
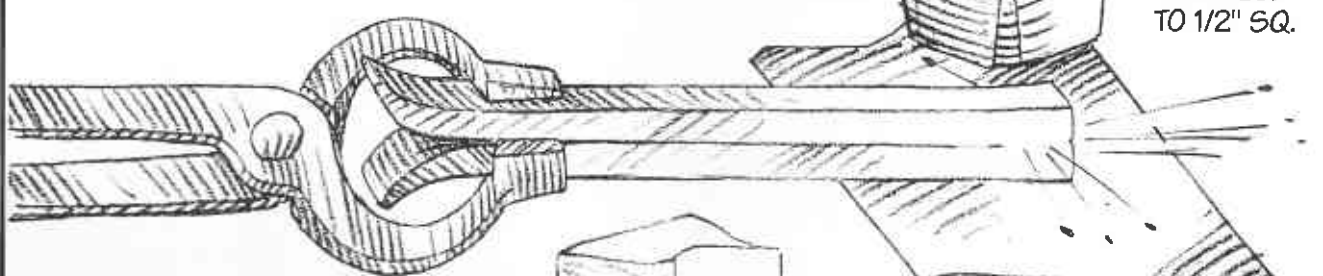
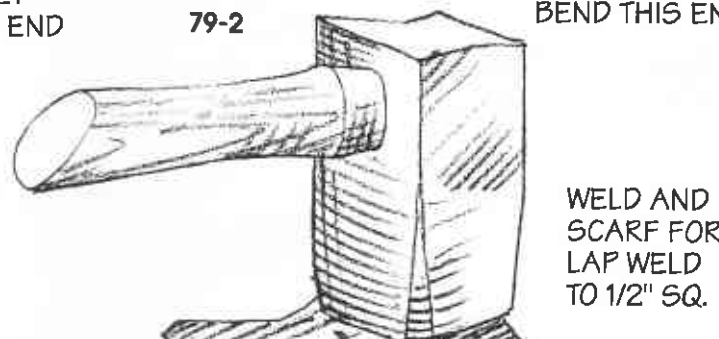
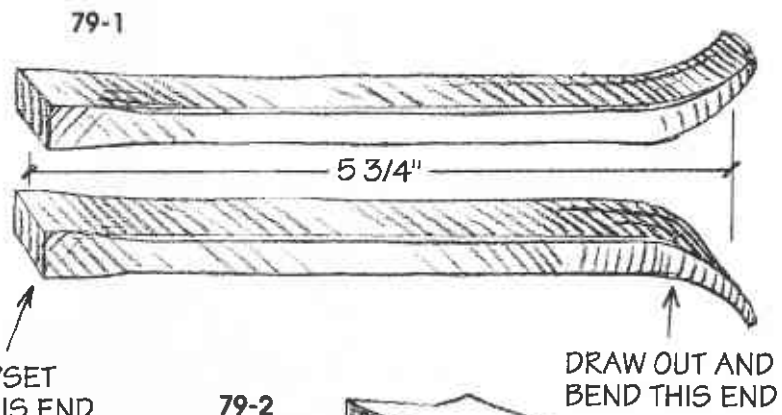
FIREPLACE SHOVEL

NOT TO SCALE

FEBRUARY 1992

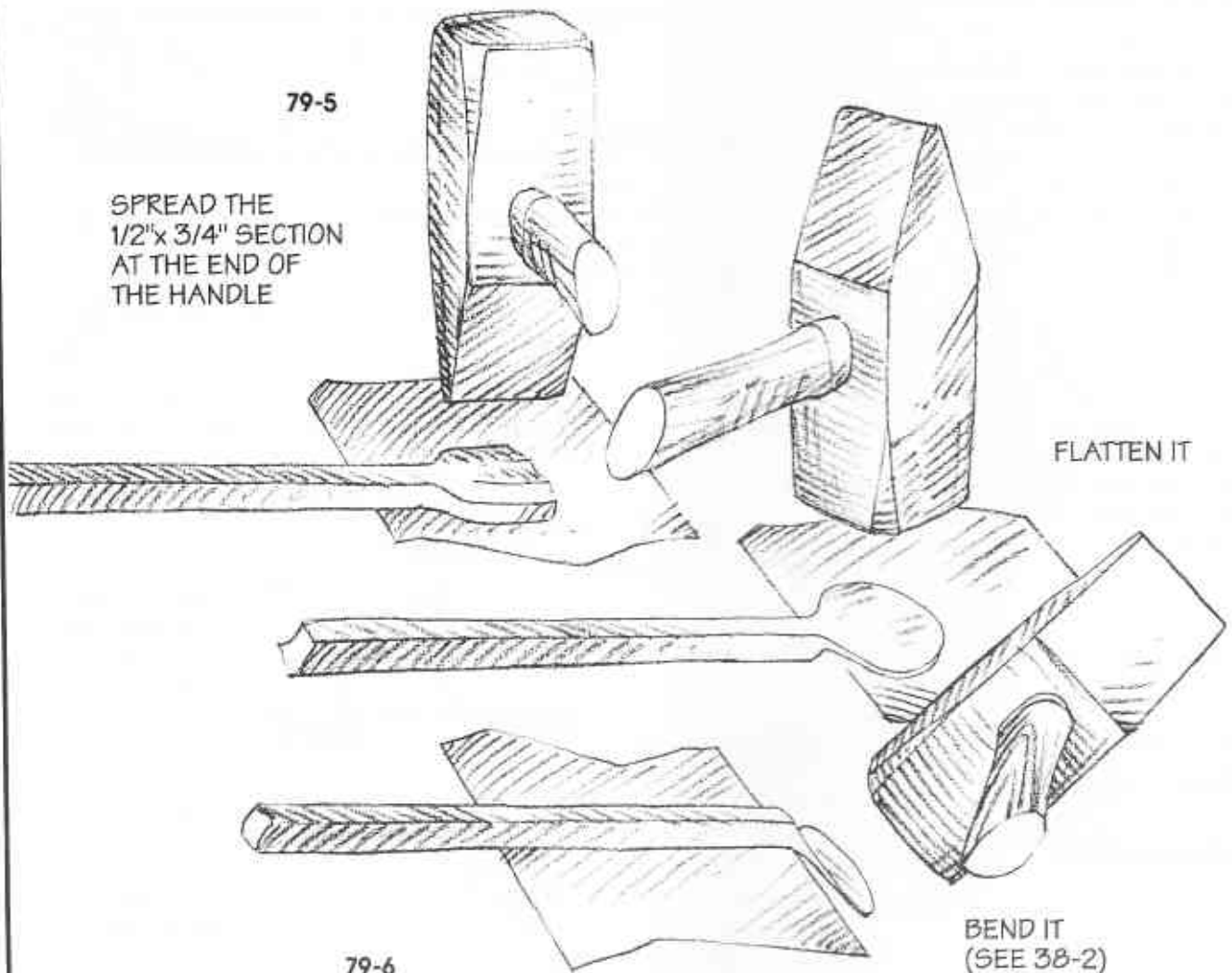
Fireplace Shovel

Forge welding is commonly used to make the transition between handle and stem on fireplace tools. This example is no exception, however, it could be made by splitting and drawing out $3/4$ " square on a power hammer. The lap weld must be positioned as shown in fig. 79-3 so that it does not split when slot punching in fig. 79-8. Do not punch or drift below a bright cherry heat to prevent splitting the weld. Adjust the two handle parts so that they spring together to hold part A in place when collaring.



79-5

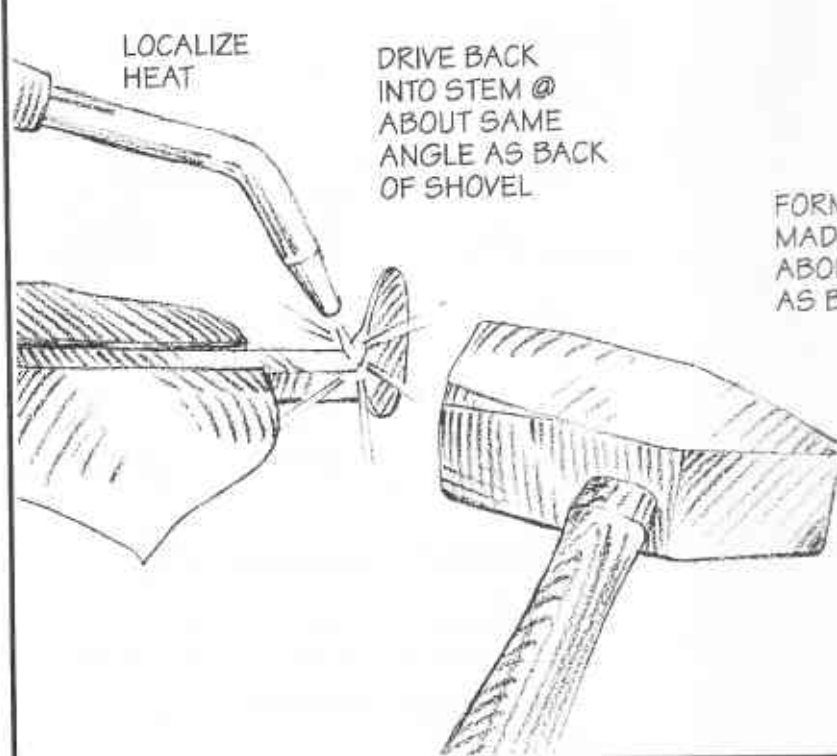
SPREAD THE
1/2"x 3/4" SECTION
AT THE END OF
THE HANDLE



79-6

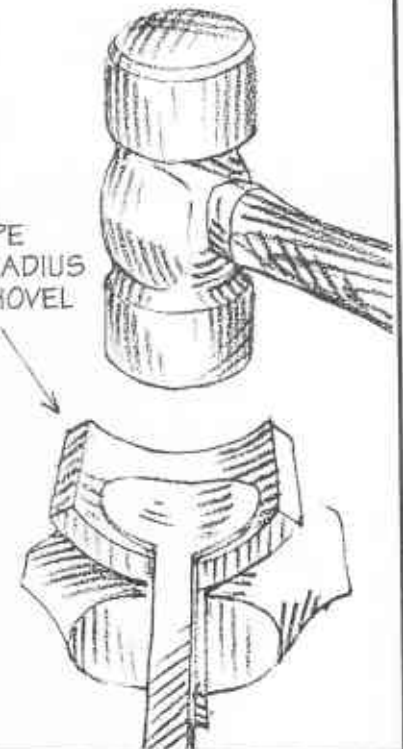
LOCALIZE
HEAT

DRIVE BACK
INTO STEM @
ABOUT SAME
ANGLE AS BACK
OF SHOVEL



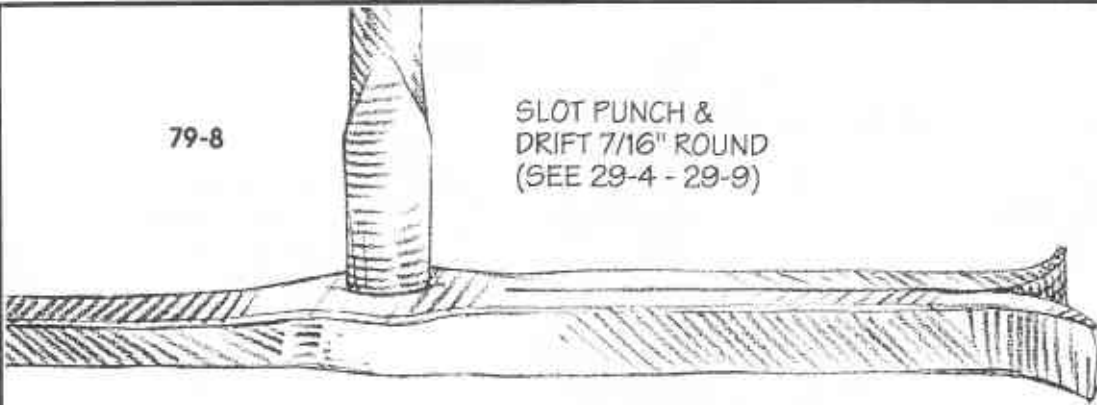
79-7

FORMING TOOL
MADE FROM PIPE
ABOUT SAME RADIUS
AS BACK OF SHOVEL



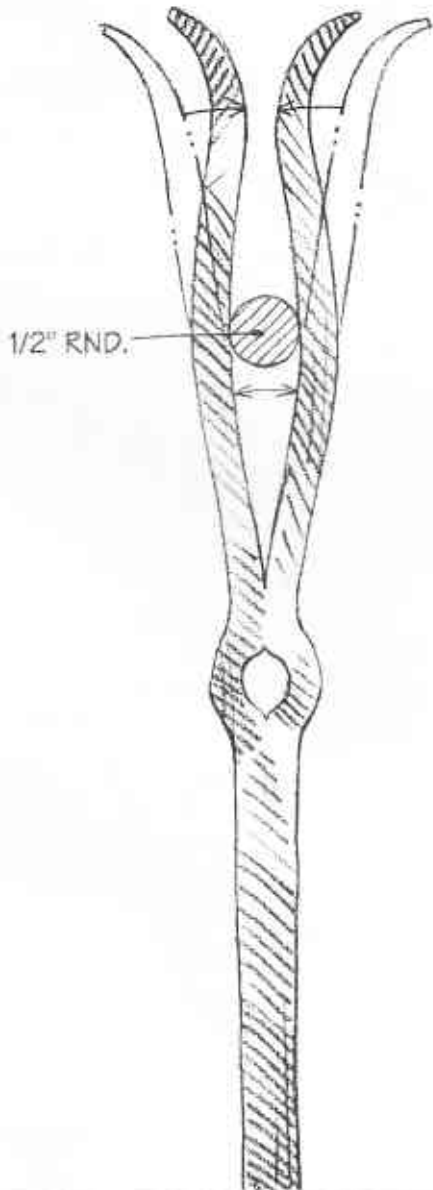
79-8

SLOT PUNCH &
DRIFT 7/16" ROUND
(SEE 29-4 - 29-9)



79-9

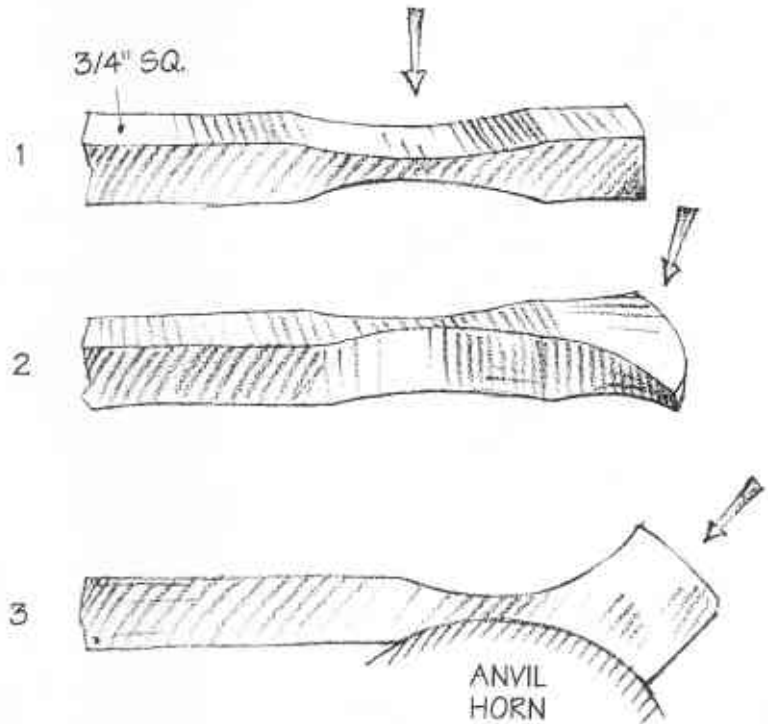
OPEN, THEN CLOSE
AGAIN AROUND 1/2"
ROUND TO FINISH
FORMING THE HANDLE



1/2" RND.

79-10

FORGE PART A
AS SHOWN



3/4" SQ.

1

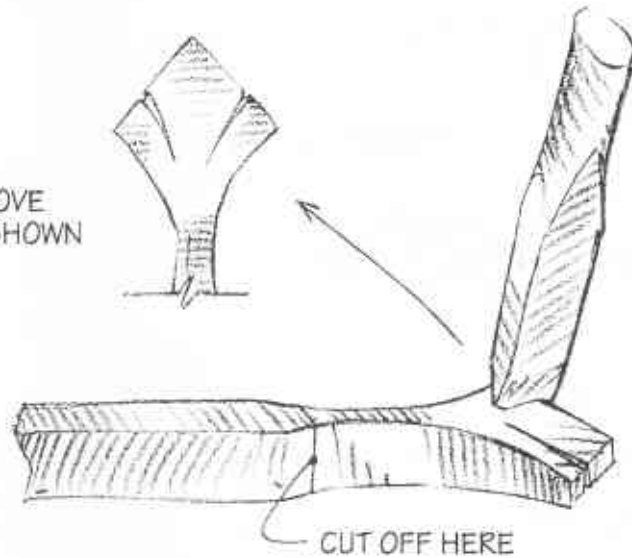
2

3

ANVIL
HORN

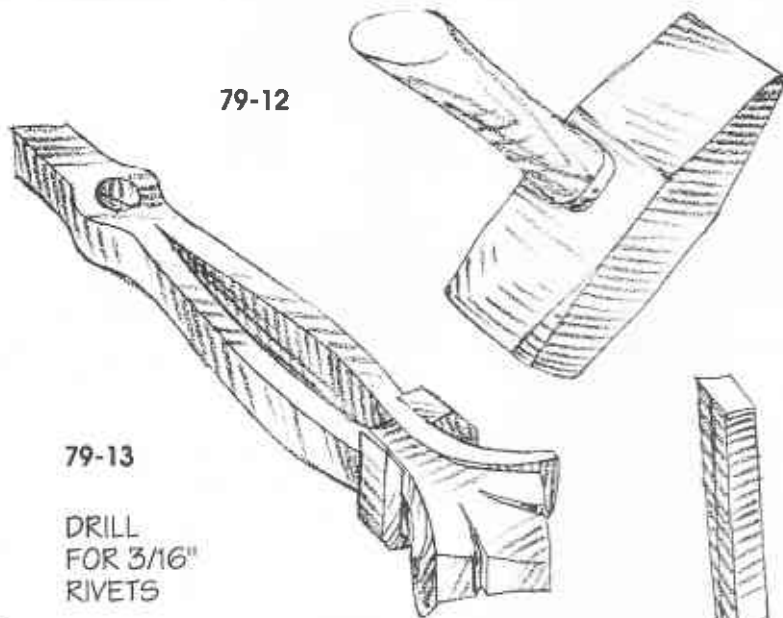
79-11

GROOVE
AS SHOWN



CUT OFF HERE

79-12



PRY HANDLE
APART SLIGHTLY,
INSERT PART A
AND COLLAR

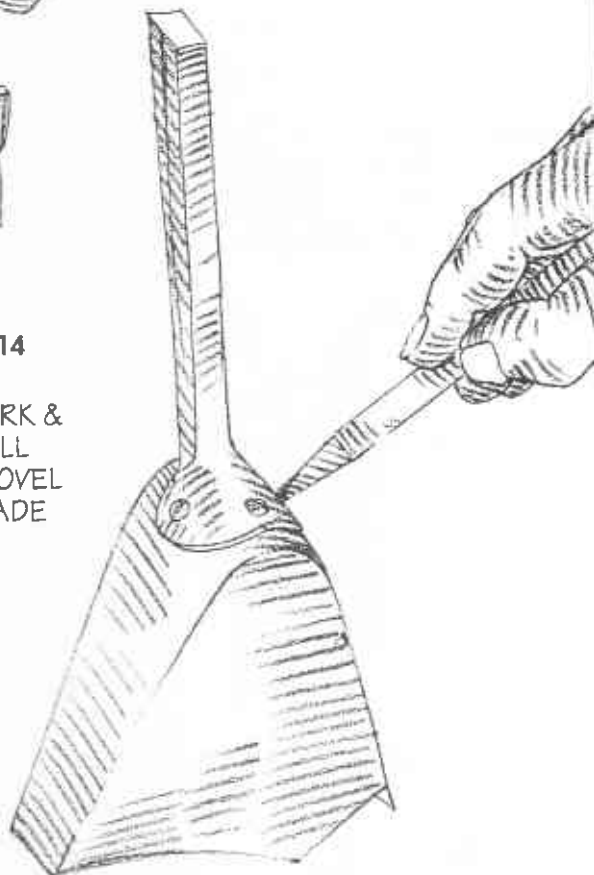
79-13

DRILL
FOR 3/16"
RIVETS



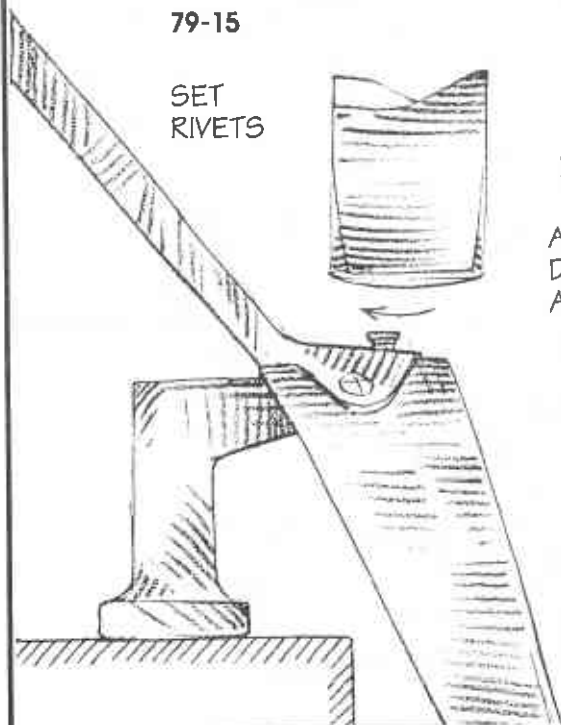
79-14

MARK &
DRILL
SHOVEL
BLADE



79-15

SET
RIVETS

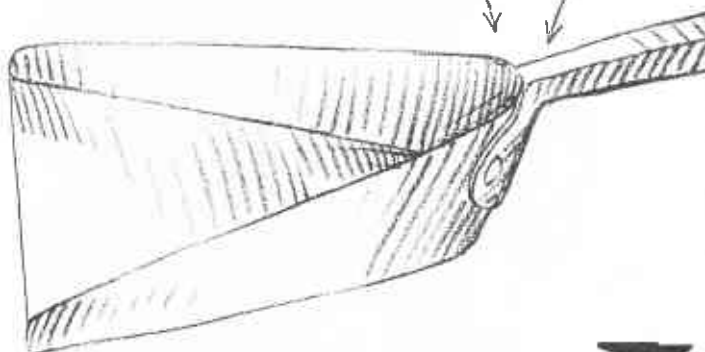


79-16

ADJUST TO
DESIRED
ANGLE

SQUARE
WITH
HANDLE

HEAT



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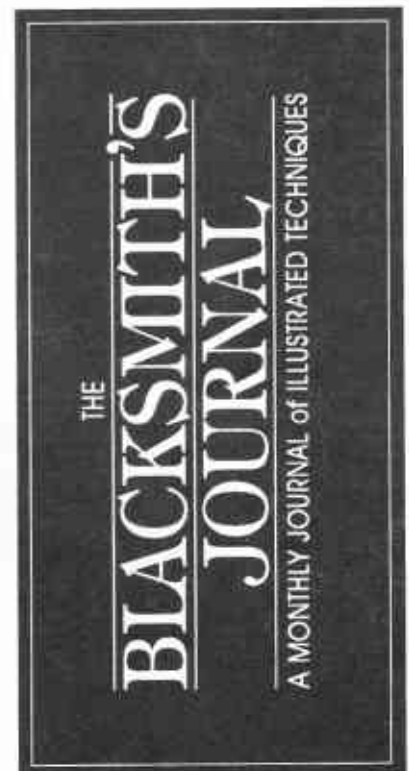
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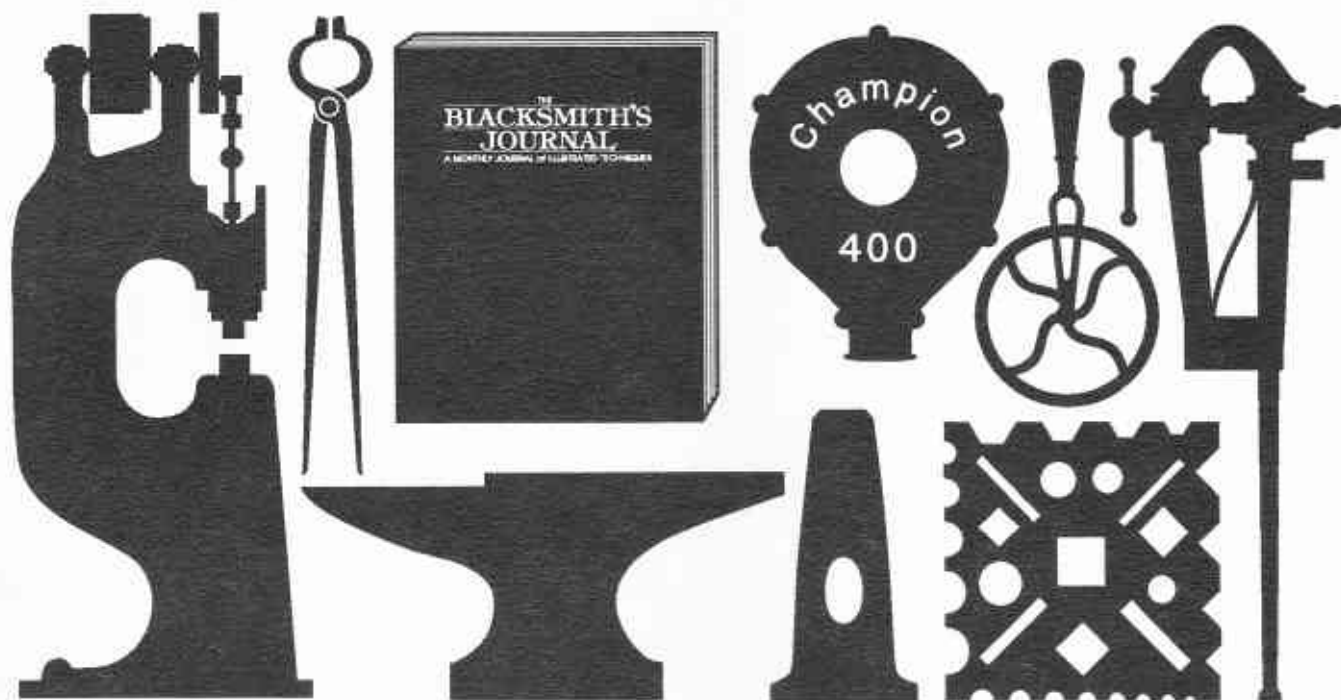
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