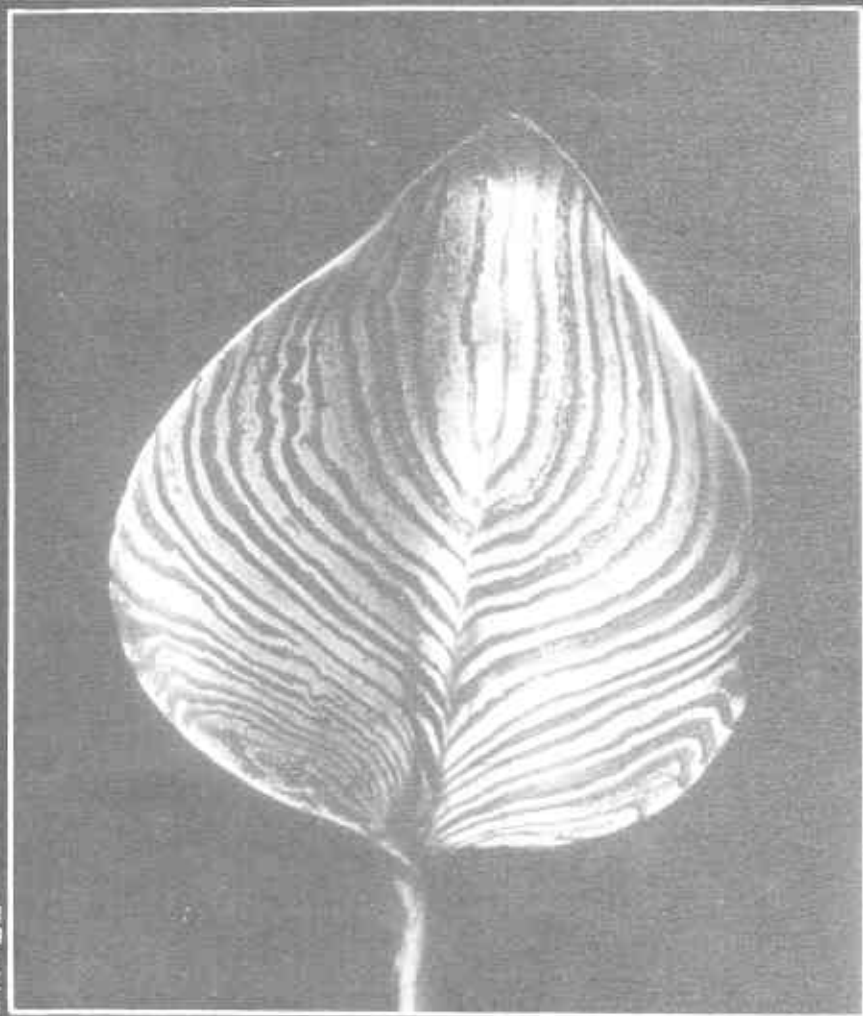


Newsletter ^{of the} Blacksmiths Association of Missouri

AUG. - SEPT. 1989



JH.88

The Blacksmiths' Association of Missouri is a chapter of The Artist-Blacksmiths' Association of North America. This organization is devoted to preservation, advancement, and communication between blacksmiths of Missouri and surrounding areas. BAM's newsletter's goal is to support these ideas. Letters to the editor, tech tips, tools for sale, or any ideas which further these ends will be considered for publication.

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BAM MEMBERSHIP APPLICATION

Name: _____:

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Dues are \$15.00 per year, which includes a subscription to the bimonthly BAM newsletter. Please make checks payable to Blacksmith Association of Missouri.

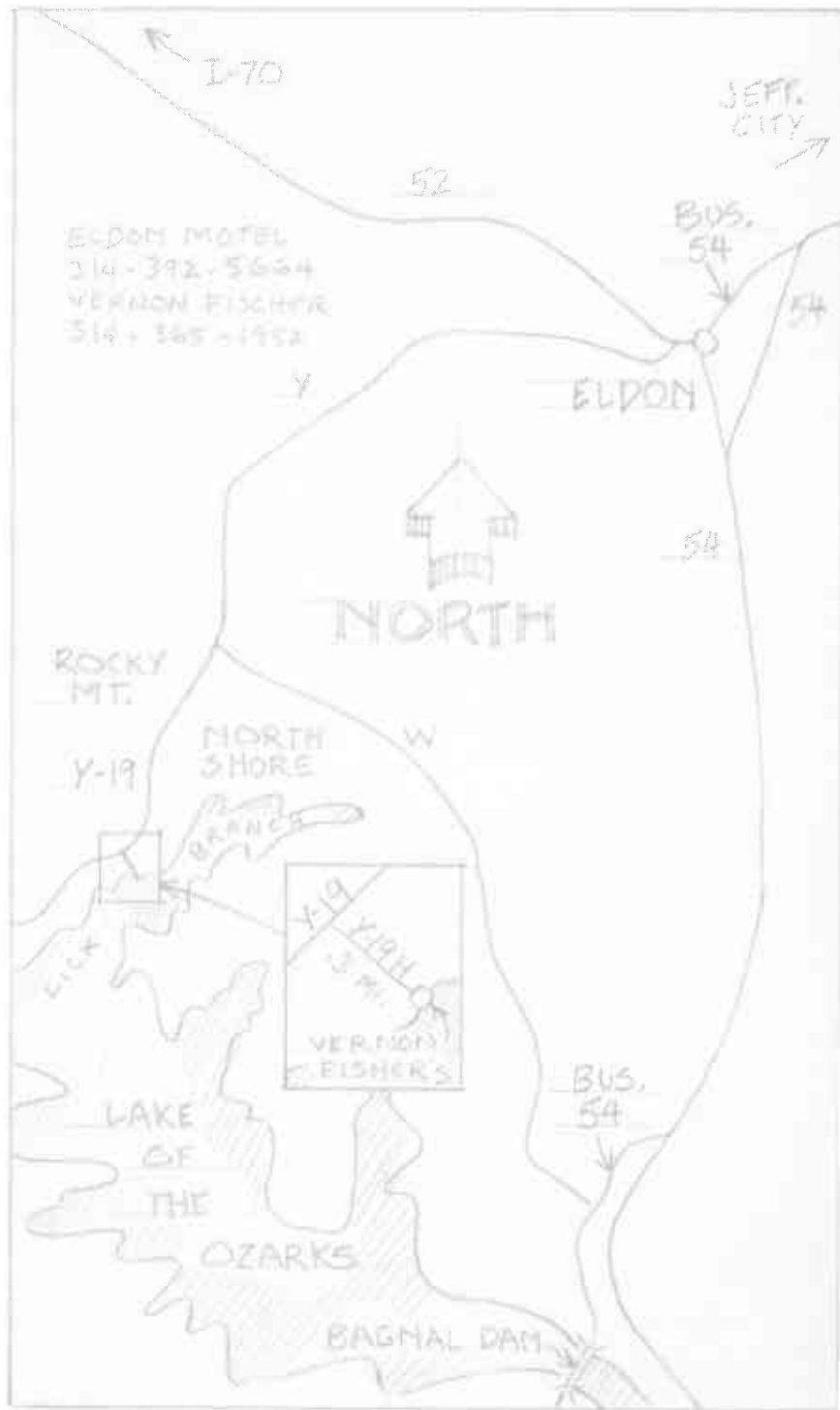
SEND CHECKS TO: Steve Austin
44 N.E. Munger Road
Claycomo, MO 64119

Next Meeting

September 23rd Meeting

Vernon Fisher will host the September meeting at his place on the shores of the Lake of the Ozarks. The trade item will be a fireplace broom.

With that in mind you might find this helpful. The newsletter of Southern Ohio Forge and Anvil tell us that Cathy Washburn will tie hearth brooms on your handles. For information call (208) 743-0350.



July Meeting

July Business Meeting

Bernie Tappel called the meeting to order. Our treasurer was absent so no report was made.

Colin Campbell reported that the March workshop with Peter Ross is set. Tom Gipe and Colin have yet to set a date. Walt Hull, in his capacity as project director for the maple top food preparation center, reported no progress as of yet and asked for volunteers to accept forging assignments. Contact Walt at: 2043 Massachusetts Lawrence, KS 66046

The floor was opened for nominations for Treasurer and President. Steve Austin was again nominated and elected treasurer. Steve Baker was nominated and elected by a vote of acclamation for President for the next 2 years.

Fun at Dr. Iron's

July Meeting Report

The weatherman gave us a beautiful weekend for our meeting, camp out, and float trip. Many of you will remember past Julys in Lesterville, hot, muggy and generally uncomfortable. I guess it was our turn for nice weather and we all took advantage of it. Outside of Doug Hendrickson's smithy the usual activity took place, lots of leaning over pickup beds, spitting, trading of tools and swilling an occasional beer. Inside of the shop the activity was whipped to a lather with the design and assembly of our 10" ring project. It's really hard to say exactly who did what without leaving someone out but I think all will agree the basic design work

was accomplished by Al Stevens, Walt Hull, and Bernie Tappel, with a lot of help from their friends. After their full scale drawing was put on to the layout table and jobs were assigned, the work began. George Kaull made the links. Walt got after the small tongs which grace the crest. Al began forging the horizontal member. Steve and others cut grooves, drilled holes, turned scrolls and generally did what needed to be done to finish the project. Stan Winkler took the piece home to clean it up, make it presentable, and put it on display in the showroom of his shop in Ste. Genevieve.

The trade item was a shovel this time with about 15 guys taking part in it. The designs ranged from the wild forms from our new members from Arkansas to carefully executed classic fire place shovels. Numbers were selected and shovels traded. Your editor drew an especially nice brass bladed shovel by Al Stevens. Al even threw in a matching poker to complete the set of tools.

Lunch, business meeting, and trade item completed Bonnie Hendrickson took kids, wives and friends to the river for a cool swim. Too bad the brief shower cut their swim short. The blacksmiths returned to their work for a few more hours and then hit the river to cool off and clean up.

Camp was set up at near by Riversedge Camp ground, dinner was served from the leftovers, and the evening bull session around the camp fire began.

Sunday brought us another beautiful day for the float trip. It was all so fine.

Photo Review of the July Meeting and float trip of the Black River.



Out going President Bernie Tappel working on the scrolls for the crest of the ring project.



Parson and John composing the ring project.



Presidential Yacht with Vice President Dan Whitmore at the bow and BAMS new President Steve Baker at the stern.



Our Leader!

Nov. Meeting

November Meeting

We will meet at the Stone County Iron Works in Mountain View Arkansas. See the next newsletter for details.

News Extras

Southern Ohio Forge and Anvil (SOFA) a chapter of ABANA will be throwing their Quad State Blacksmith Roundup September 23 and 24, 1989 in Tipp City, Ohio.

SOFA has been throwing this event for some years now and do a bang up job. The roundup is at Emmert Studebaker's place. Emmert has several shops and sheltered gathering places on the grounds making an ideal place for a blacksmith meet.

The demonstrators this year include:

Jack Brubaker
Jay Reakirk
Jim Rubley
Russ Swider
Barry Wheeler
Bruce Washington
Jim Tyson
Don Witzler
and
Bob Patrick the founder and first president of BAM.

For information contact:

SOFA
7158 Klyemore Dr.
Dayton, Ohio 45424

The Artist Blacksmith Association of North America will be holding it's Biennial International Conference of Blacksmithing Wednesday June 27, 1990 to Sunday July 1, 1990. The host site is the campus of Alfred State College at Alfred, New York.

The conference committee has requested that those publications most helpful to our members and the metalworking public be asked to help us.

We expect a stellar lineup of demonstrators/lectures. The list of invited guest demonstrators thus far includes:

Tom Joyce	Randy McDaniel
Manfred Bredohl	David Norrie
Serge Marechal	Claire Yellen
Leonard Urso	Robert Griffith
Bob Becker	Pete Cassidy
Phil Baldwin	Jack Andrews
Glen Gilmore	Glen Zwegardt
David Latane	Ray Nager
Alex Klahm	Simone Benetton
Peter Ross and the Williamsburg Smiths	
Joel Swartz	Mathis Peters
Bill Senseney	Ed Grove
Mitch Fitzgibbon	Dan Maragni
Clay Spencer	Cathy Morgan
Albert Paley	LMC Corp. French Repousse Restorers of the Statue of Liberty

Francis Whitaker and Jud Nelson have been invited as honored guests and will be demonstrating or teaching at a special forging station.

Some of the above will be presenting slide/lectures or taking part in a symposia regarding various aspects of blacksmithing.

For instance, Jack Andrews will be presenting information on computer aided design as an aid to blacksmiths. Claire Yellen will be presenting a historical retrospective of her fathers work as well as the present and future work of the Yellen Ironworks.

Paul Lundquist will be heading a seminar/symposium/case studies program dealing with business practices as they relate to blacksmithing. Hopefully this will cover everything you forgot to ask when you started that nagging question "How do I go about enlarging my business?"

The special programs for the rest of the family looks very exciting. All kinds of crafts, swimming, and other activity programs. More later.

More on smith VS smithy

Frank Turley writes "Some would blame Longfellow. However, he is not to blame. If we could but recall the opening lines of his epic poem."

Under the spreading chestnut tree the village smithy stands. The smith a mighty man is he with large and sinewy hands.

Frank Turley is a master blacksmith and teacher. His school was founded in 1969 in Santa Fe, New Mexico.

For information on Mr. Turley's blacksmithing classes write him at:

Turley Forge
Blacksmithing School
Rt. 10 Box 88C
Santa Fe, NM 87501

SPOT HARDENING

Joe E. Jay & Pat Cheatham
The Concho Forge, San Angelo

Reprinted from Texas Forge Review

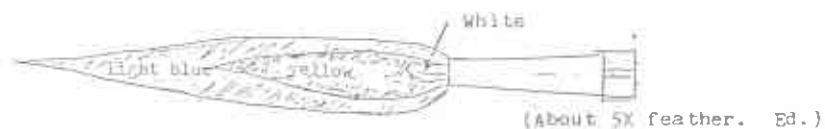
Spot hardening with an acetylene torch, on specific areas of mild steel forged items, is quick and accurate and can be used to toughen high-wear areas of hinges, latches or any other hardware that moves and wears. If you need a hot punch or chisel and you have no tool steel, make them from mild steel and harden the points and strike caps.

Your acetylene torch is a self-contained heat and carbon induction medium. The only other equipment needed is a can of old crankcase oil for quenching. Do not use new oil or water - these will cause the new carbon to disseminate into the liquid. Old crankcase oil helps bond the carbon within the steel.

Hardening Procedure for punch from mild steel:

Tip: Large

Flame setting: carburizing (adds carbon or retards carbon burnout).



First heat: Heat about 1" of punch point to yellow heat. Quickly turn off oxygen; turn acetylene down to a dark, smokey flame (this is the carbon source). Direct this flame on the tip of the punch, allowing a layer of

soot to build up on the heated area. Keep this up until punch has cooled somewhat, then adjust flame to heat the punch again. On subsequent heats, do not go hotter than brighter red - this protects the previous applications of carbon.

Second Heat: Repeat procedure as in first heat, using a bright red heat. Allow punch to cool a few minutes. Set Torch to heat; heat punch tip to critical temperature (use magnet). Quench in old crankcase oil; when cool, check hardened area with a file.

Repeat on striking end of punch; protect the area already hardened by cooling in water as needed. Two applications to each end of a tool should give medium hardness, barely scratched by a file. If more hardness is desired, use 4-6 applications. This might be a bit brittle, so some colors may have to be run to draw out some hardness.

One final note: While using a raw acetylene flame, use a suction fan or work under a forge hood that draws well: otherwise there will be soot balls all over the shop.

Blacksmiths and Buckskinners

Many BAM members are involved with reenactments, black powder rendezvous, buckskinning and other historical activities. Forged iron is very important to people who recreate these historic periods. Your editor is totally uninformed about these activities. Any member who would like to pass on information about meets, shoots, projects or whatever, is urged to use this newsletter to that end.

Some Thoughts on Demonstrating Blacksmithing to the Public by Brad Silberberg, Bradley Metal Design, Inc.

Hobbyist-blacksmith and professional alike, we all get asked from time-to-time to stand in front of a group of strangers and work our magic. With Blacksmithing Days 1989 fast approaching, it seems like a good time to set down some thoughts on demonstrating the art of blacksmithing to the non-blacksmithing public. I know that when I was first starting out, any chance to work at a forge was exciting all by itself, and that to have an audience at the same time made it even more so. These days, I realize that a demo is not really just a work session with spectators, but a performance in front of a live, interactive audience. Whether in your own shop or under a tree at an outdoor event, there are a few things that we should all bear in mind.

First of all, consider the safety of yourself and your audience. Forge welding is absolutely out of the question. The shower of molten goo that fire welding throws with tremendous force can ruin people's clothes, cause burns, scare the daylights out of them, and possibly blind someone. Don't be macho. If someone asks you to forge weld, simply tell them that it's too dangerous. While I refuse to work inside a corral of posts and ropes, it is wise to make the public keep their distance. Just tell them to step back from your anvil before you bring out that piece of hot iron. If your workpiece is throwing a few sparks (it may be too hard to judge your heats in bright sunlight), make the first few blows light ones until the danger of spraying the crowd is past, then blast away. Be especially aware of the children in the audience. Their little faces are right at anvil height and in a direct line with flying slag and hot scale. Children are very inquisitive, and will reach for anything as soon as it hits the ground. Never make a cut-off all the way through on the hardie. It's better to cut it most of the way, and then break it off with the tongs rather than risk a flying, red-hot projectile. People want to be helpful, and will try to pick up tools or work pieces that fall off your anvil. Warn them not to grab for things as you begin to see them fall. Be careful where you lay hot bars, and try to remember which end is hot. It may be best to quench anything you

are finished working on. I always wear my safety glasses when working, and require them for admittance to demonstrations in the Bradley Metal Design shop. Study your craft, and get your facts straight. People often ask questions that they already know the answers to, to see if you know your stuff. If you don't know the answer with certainty, be honest and tell them so. During some of my first demos, I would try to impress the crowd with what I knew, only to find out later that my facts were a little off. Learn the answers to the most often asked questions: "How hot is that?", "What is the difference between wrought iron and steel?", "How does quenching steel change it?", etc. If need be, study your blacksmithing books before your demo so that you will know how hot a fire gets, what tempering is, and where the Pritchel hole got its name.

Plan out what things you will be demonstrating. Practice them until you have them down at least fairly well. A demo is not a good time to try something new. You will at least want to look like you know what you are doing. You don't have to plan out your demo minute by minute, but make a list of the things that you can do well, and people seem to enjoy seeing. Then just do things from your list in whatever order seems to fit at the time. Good things to demonstrate for the general public seem to be small objects that can be completed in just a few heats. The best things are small objects or even sketches that you can complete quickly, and are willing to give away! Learn to make nails. Here is something you can make in one heat and hand out, that everyone seems to find interesting, particularly if you explain how all the hardware used to be made by hand by a blacksmith. I refuse, however, to be stuck making and dispensing nails all day long to a long line of crying kids, with "mom" saying: "Johnny, if you don't get the next one we'll have to leave". I avoid this scene by handing out my prizes randomly to everyone, and by only making six or so in a row before moving on to something else. I also make and give out "two heat leaves", explaining how Freddie Haberman taught me how to make them. Another

favorite demo of mine is to make a ginko leaf, always making certain that I have brought a natural specimen with me so that I can compare the two as I go along.

Don't try to bring along your whole shop when you go out to demonstrate. In addition to selected hand tools, I suggest: a small portable forge, hand-cranked blower, small anvil (150 lbs. or less), workbench with a small leg vise, and something heavy, maybe a swage block, to use as ballast to keep the bench from moving. Make sure when you pack up for the big day that you bring the special tools and materials to make the things on your demo list in addition to the general tooling and supplies. Make yourself a checklist, and check off each item as you load it. That way you will be less likely to end up without matches or coal or that little pipe that connects your blower to the forge. If possible, bring along finished examples of the things you will make so that your audience has some idea of where all this noise and motion is leading.

Learn to talk and work at the same time. People will soon lose interest in you if you don't explain what you are doing. I talk almost constantly when I demonstrate, even while hammering. Tell them some interesting blacksmithing stories as well as the play by play of what you are creating. These stories can give you a much needed break from swinging a hammer, and give the crowd a chance to know you a little better. Jokes are good too, but make sure you know your audience a little before you make jokes at their expense. Try not to get too technical or long-winded in your explanations, or everyone will start heading for the food stands. Sometimes, when you pause to chat with some interested onlooker, the group that had been watching you will think that you are finished and walk away. To assemble a new group, all you have to do is start hammering again. The sound and motion will bring them in.

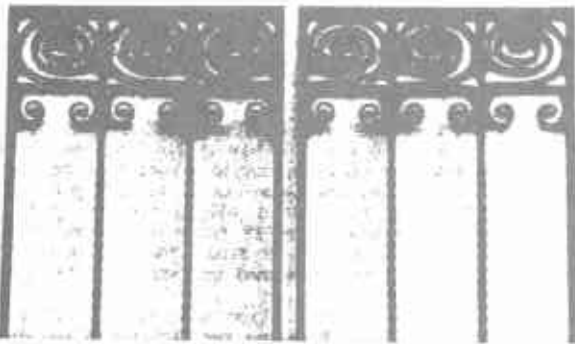
Over the years I have developed little "routines" that I do at public demonstrations. Explaining and making

nails, listing the things that modern blacksmiths make, "anvil anatomy" (a run through of the names of the parts of an anvil), and "pinching off" or making and cutting off several different things from the same bar, are part of my repertoire. Other favorites include making several styles of leaves, "Blacksmith Action Figures" (animal heads), and my biggest crowd pleaser - the "pineapple" twist. This is one time I don't show the crowd what the end result will look like beforehand. I start by explaining the steps necessary to make this twist: groove each face of a square bar, twist six quarter turns clockwise, hammer back to square, groove each face again, and untwist two quarter turns. After the second step, I keep asking them what steps remain. They really get into it! The final result always brings a round of applause and some joker walking up and asking how I did it - to which the group responds by chanting the steps in unison...just like I taught them.

I don't often get a group of non-blacksmiths in my own shop for a demonstration, with a recent demo for the D.C. chapter of the American Society for Metals and an upcoming "shop tour" demo for the National Building Museum being exceptions to the rule. On my own turf, I usually start off with the same hand forging demos that I do anywhere, but quickly progress to the air hammer and "Shamu, the Killer Flypress". I try to impress upon my audience that I am a modern blacksmith, combining ancient methods and modern (well, fairly modern) machinery and tools to create useful works of art in forged iron.

Most of all, public demonstrations of blacksmithing are hard work. I put all I have into demos, and by the end of the day, I am totally exhausted. These days, I refuse to do a demo if I can't get someone to be with me to help carry equipment, control the crowd, allow me to walk away for a minute to get a drink, and put everything away at the end of the day. I am also very selective as to which demos I will agree to do. I will no longer dress up in colonial "drag" or do local craft shows, school

festivals, etc. My favorite demos are for museums and arts related groups. They are truly interested in what I do, and show it by asking intelligent questions and by being an appreciative audience. Maybe my best group so far was the half dozen sixth graders from a local Quaker school who came to my shop. They were studying medieval guilds in class, and had chosen blacksmithing as their specialty. They were reading Alex Bealer's book The Art of Blacksmithing for class, and knew a great deal about the subject already. For an hour or so I worked for them, and gave each one in turn the small objects I had made. I tried to impress upon them how I used geometry, algebra, physics, and chemistry every day. I wanted to show them that working with your hands was as valid as computer programming. They thought I was more than valid...they thought I was...awesome!



Detail of dining room door grilles, 15 x 72"
Brad Silberberg
Bradley Metal Design, Inc.



Detail of dining room door grille
Brad Silberberg
Bradley Metal Design, Inc.

ABANA Wants Help From Living History Smiths

Those of us who work in living history museums, public parks, and the like have a unique OPPORTUNITY to serve on the front lines in promoting ABANA. We see the public daily, and it's our job to talk about blacksmithing with them. While we are doing this it's often a natural part of the conversation to talk about the resurgence of blacksmithing and the role ABANA has played in this regrowth. I keep a stack of ABANA brochures in the shop to pass out to anyone who's interested. It has worked too. A significant percentage of the ABANA members in Nebraska joined as a result of visiting Stuhr Museum and talking with me.

As an ABANA board member and a component of the famous Nol's Network, I am asking all of you who work in a situation where you are with the public, to keep some ABANA brochures around to pass out. It may not always work easily if you are in a strict first-person interpretive setting, but there are unobtrusive ways to share our organization with those who are seeking.

If you will drop me a card (Ward Brinegar, 1709 West Charles Street, Grand Island, NE 68803), I will be sure that a supply of brochures is mailed to you. Please help ABANA this way. Thanks.

Ward Brinegar

Tongs, Anvils, and Vises

I stopped by Jay Hurley's store and blacksmith shop in Shepherdstown, WV recently. Jay and Dan Tokar have cleaned out all of the extra tools that were cluttering up their shop. These items are for sale at very reasonable prices. They have lots of anvils, vises, a big stack of tongs, and lots of handled tools of all types for sale. Look for O'Hurley's Store on the southeastern edge of Shepherdstown, near the railroad tracks, on Rt. 230 from Harpers Ferry. See the map.

ABA Catalogue

The Appalachian Blacksmith's Association is proud to offer the 1909 Champion Blower and Forge Company Catalogue-Collector's Edition Reproduction. This rare and excellent catalogue is 8½ x 11" and has 36 pages with a plastic spine. Included are blowers, forges, firepots, post drills, upsetting and welding machines, tire and axle shrinkers and more. To get your copy, send \$6.50 (postpaid) to:

Bob Wagner, Secretary ABA
Rt. 1, Box 9A
Old Fields, WV 26845

From Jan Kochansky:

Save plastic ketchup bottles to use as welding flux containers. The squeeze bottles can give a thick or thin coating of flux. Just don't get the bottle too close to the fire!

From Adrian Clary:

The accepted way to turn on the valves of your oxyacetylene outfit is to crack the acetylene tank valve open only ¼ turn. This allows you to shut it off quickly if there is danger of an explosion or fire. The oxygen tank's valve is opened up completely to allow full flow.

Use caution when using whip hose ends. They can restrict gas flow. This can create a dangerous situation if rosebud tips are used. Big rosebud tips require a lot of gas flow. Explosions have occurred in the lines because of restricted flow.

Always keep your tanks chained in place. Screw on the safety caps when transporting the tanks. When an acetylene tank detonates, there is not much left of people, vehicles, or buildings around them. If you break off the valve of an oxygen tank it can take off like a rocket. Be careful.

Some of the demonstrators scheduled to be at FIFI are: Alfred Haberman, Achim Kuhn, Takay Oshi Komin, Dorothy Stiegler, Albert Paley, Bryan Russell, Sergai Marchal, Claus Appel, Simon Benetone, Charles Normandale, Eric Moebius, Christoph Friedrich, and Tom Joyce.

Shop Tips

by Brad Silberberg, Bradley Metal Design, Inc.

For those really big twisting jobs, keep your eye out at the flea market for a very LARGE monkey wrench with a straight all metal handle. You can then use a "cheater bar" made from a length of pipe with the end flattened a little to match the cross section of the handle to lengthen the handle, and increase your leverage. You can also weld a heavy flat bar to the wrench to make it a two-handed twisting wrench.

To mark drilling centers on the angled ends of bevel-cut square pickets, make a simple marking jig. Find a piece of flat bar that is half as thick as the picket to be marked. Bevel the end of this flat bar to an angle steeper than the angle of the picket bevel, and clamp it to your bench with the flat side up. To use the marking jig, slip the toe of the bevel-cut picket under the beveled end of the jig onto the picket. Now flop the picket 90°, push it back against the edge of the jig bevel, and scribe again. This marking jig will also work on square ended bars. Grind back the bevel on the marking jig when it begins to show wear, or make a hardened one if you make a lot of beveled stair rails.

Beginners tip: Trying to forge a pair of tongs? Having trouble forming the shoulder or step for the jaw at the right place? Proceed by laying a heated workpiece on the anvil face with the place you want to become the inside corner of the step, face down at the near edge. Now tip the handle end of the work down a little, and strike your first blows in toward the anvil corner. This will become the limit of the shoulder. Now raise the handle end of the bar slowly as you continue flattening, striking straight down. You will be able to feel the mark you made by pushing it against the side of the anvil edge as you hit. This will keep the work from jumping on and off the anvil, and your step from becoming two or three steps. Finish flattening the jaw to the desired thickness. To keep both jaws of a pair equal, mark your anvil face with chalk or magic marker where the tip of the bar will rest on the anvil face. As you forge each piece, lay it flat on the anvil up to the

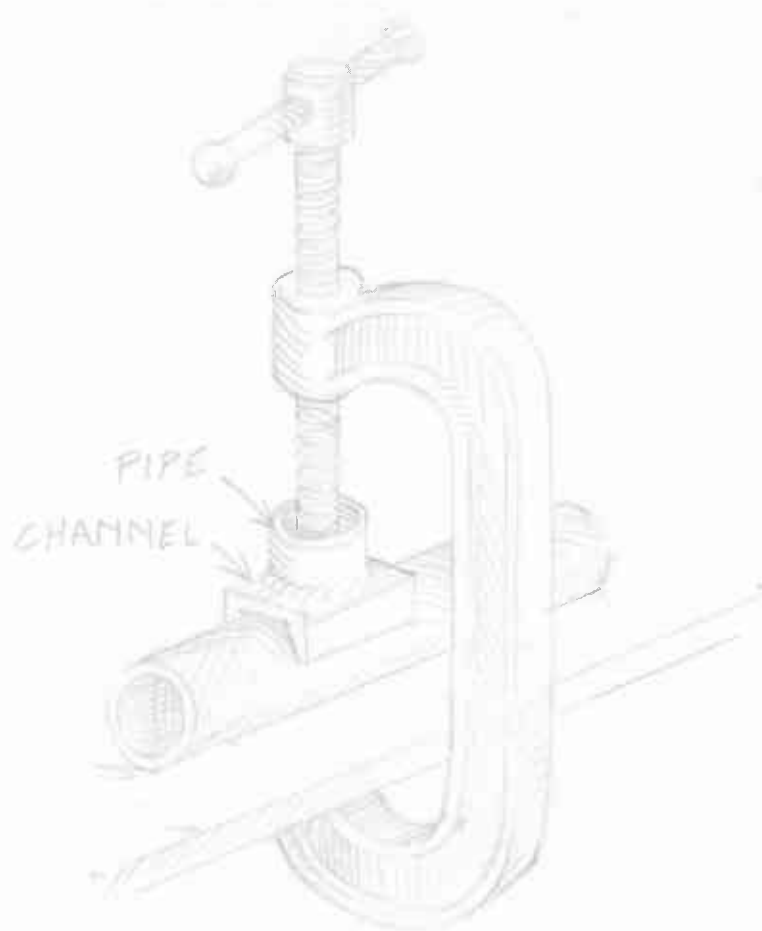
line before tipping the handle end, and striking the first blow.

I recently discovered a wonderful new power tool, the angle drill. The one I bought is made by Sioux for Milwaukee tools. This drill is small and fairly powerful, with the chuck at 55° angle to the body. It looks like a humming bird with no wings when a bit is in the chuck. It can be used safely with one hand, and is less than four inches from the tip of the chuck to the back of the housing. Using short, screw-machine drill bits (see last shop tips), you can make that one rivet hole you forgot to drill before you welded the framework of your latest railing project together. It allowed me to drill pilot holes for mounting screws with a railing in place, instead of having to mark the holes in pencil, remove the rail, drill the holes, and put the railing back into place before running in the screws. Since this model is variable speed and reversing, I was even able to use it to drive the screws! The Milwaukee model is the same as the Sioux (Model #8000) with the colors of the housing reversed. Harbor Freight Salvage sells the Sioux by mail for \$128.99. I paid \$119.00 for my Milwaukee at a local discount tool place, and it paid for itself the first time I used it.

Don't hesitate to use your welding torch as a pinpoint heat source for jig-bending small parts. We make pot rack hooks by forging the point, curling the tip, and bending the "J" part of the hook with forge heats. The "J" bend is made on our jig. Without removing the hook from the jig, a pin is inserted into a hole in the jig, and the torch is used to double the end of the bar back on itself around the pin to form the hanging part of the hook. I use the torch with a similar jig to bend the ends of trunk handles.

Mike Yinhap's solution for clamping pipe to a flat surface using a "C" clamp.

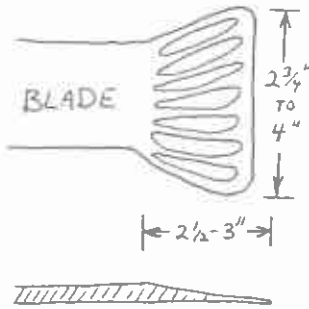
Reprinted from the newsletter of the North Carolina Blacksmith Association.



The Ohio Newsletter also says Farm Supply stores carry a selection of implement pins which will fit your Hossfeld.

FORGING A GARDEN HOE
by
Gary Doub

Get an old spring-tooth from a harrow, or use an old car spring about 3/16" to 1/4" thick by about 2" to 2 3/4" wide, and 8" to 10" long. 8" long works about right for me. Heat one end to a bright orange or dark yellow. Spread the blade out with the crosspein of a hammer, and flatten it.

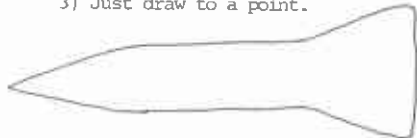


Go to the other end, and heat to a medium yellow. This end can be done several different ways:

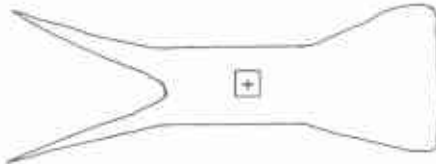
- 1) Spread out this end of the blade to match the other end.
- 2) Use a half-round hot cut, and cut a half-circle. Use a straight-cut to meet with the half-round cut to make a fork or tines on this end. Draw out the tines to suit, but no too thin.



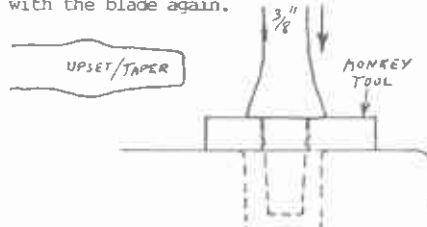
- 3) Just draw to a point.



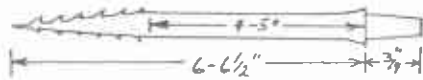
Find the center of the blade, and punch a 3/8" square hole.



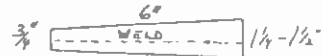
Upset a 3/8" square bar about 3/4" from the end. Taper the end bluntly, and check its fit in the blade. Re-heat to a bright yellow, and set in a 3/8" square hole or monkey tool to form a shoulder. Check the fit with the blade again.



Cut off the 3/8" bar about 4 to 5" from the end, and taper the shaft to about 6". Cut barbs on the taper.



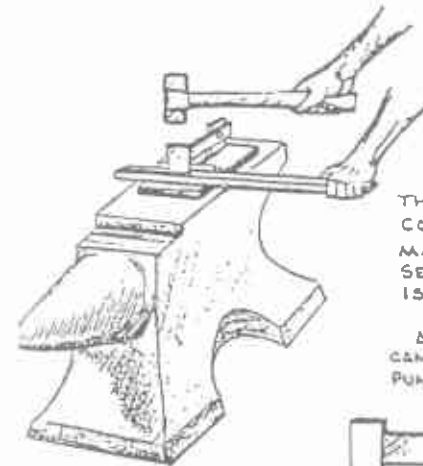
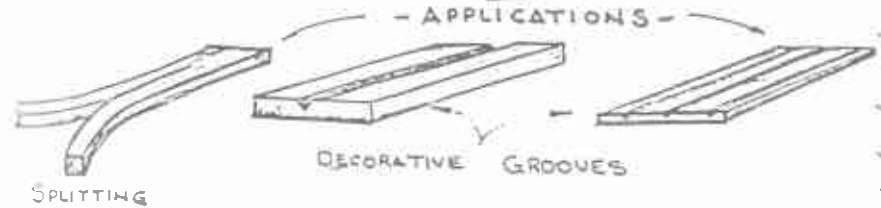
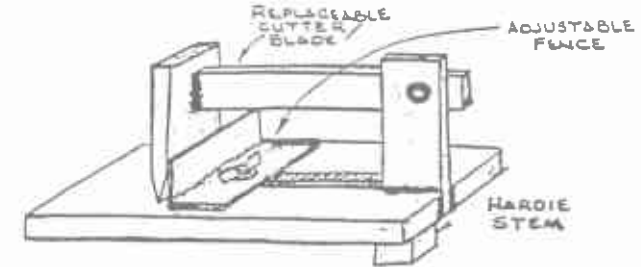
Heat the end of the 3/8" square bar or spike to a medium yellow. Clamp in vise tightly with the blade end up. Rivet the blade on. Heat the first 1/2" of blade to a cherry red, dip in oil until cool. This finishes the hoe blade.



If you want to make your own handle, start with the ferrule. Take a piece of 16 ga. sheet metal, and roll it into a cone. The size of the cone depends on whether you forge weld or electric weld the seam. Make the handle out of hickory or locust, and shape to suit. or electric weld the seam.

ADJUSTABLE SPLITTER

E.J.F.
12/88



THE ADJUSTABLE SPLITTER IS A TOOL THAT HELPS IN MAKING FAST AND UNIFORM GROOVES AND SPLITS

THE ADJUSTABLE FENCE KEEPS A CONSTANT DISTANCE FROM THE BLADE MAKING IT EASY TO SPLIT A LONGER SECTION IN ONE HEAT SINCE NO TIME IS SPENT ALIGNING THE BLADE.

A VARIETY OF REPLACEABLE BLADES CAN BE MADE FOR DIFFERENT STAMPINGS/PUNCHINGS.



Joe Fawcett
December, 1988

P.S. I have not yet made one of these rigs but saw Bill Michener selling one at the '87 Madison Compoce. I've needed one ever since.

Joe Fawcett 2/13/89



The John C. Campbell Folk School Announces

Blacksmithing Calendar of Events for 1990



- MARCH 2-4 - Clay Spencer
- MARCH 4-10 - Joe Miller
- MARCH 11-17 - Elmer Roush
- MARCH 18-24 - Charlie Fuller
- MARCH 25-30** - Clay Spencer
- APRIL 1-14 ADVANCED IRONWORK
Francis Whitaker
- APRIL 15-20 - Charles Orlando
- APRIL 27 - 29 - Jim Batson
- APRIL 29 - MAY 5 - Jim Batson
- MAY 6-12 - Clay Spencer
- MAY 13-18 ** - Ira DeKovan
- JUNE 16-22 *** - Jerry Darnell
- JULY 15-21 - Dan Easley
- JULY 22-27 ** - Dan Easley
- JULY 27-29 - Clay Spencer *
- JULY 29 - AUGUST 4 - Claiborne Smith
- AUGUST 12-17 ** - Joe Miller
- AUGUST 17 - 19 - Charles Orlando
- AUGUST 19-25 - Charles Orlando
- AUGUST 25-30 ** - Charlie Fuller
- SEPTEMBER 3-9 - Elmer Roush
- SEPTEMBER 9-15 - Bob Becker
- OCTOBER 14-19 ** - Jim Batson
- OCTOBER 19-21 - Jim Batson
- OCT 21 - Nov 3 ADVANCED IRONWORK
- Nol Putnam

- NOVEMBER 1 - BLACKSMITH AUCTION
- NOVEMBER 11 - 17 - Elmer Roush
- NOVEMBER 25 - DECEMBER 1
- Michael Saari
- DECEMBER 2-3 - Elmer Roush

**Indicates Short Week, registration on Sunday, students depart after lunch on Friday
 ***Indicates Course begins on Saturday and ends on Friday after lunch.

Course Descriptions

Jim Batson (4/27-29) The students will make the necessary tools and learn how to forge Wizards, Turks, a Bishop, and a bald headed Chinaman.

(4/29-5/5) - The students will weld up a multi-layer billet of high and low carbon steels and forge this billet into a knife blade of their design. This blade will then be hand finished, heat treated and etched. The knife will then be shafted with a handle supplied by the student. Various pattern development and metal combinations will be explored.

(10/14-19) Each student will be assisted in the forging of his or her selected blacksmith project or projects.

(10/19-21) - This course is for the craftperson or the blacksmith who wishes to make his or her own tools. Each student will be assisted in the forging of his or her selected tools. You will be exposed to Blacksmith metallurgy.

Bob Becker (9/9-15) - Perfecting basic skills, making tools for joinery techniques, flowers, leaves, and animal faces. To stimulate personal interest and to complete several small projects incorporating the above designs.

Jerry Darnell (6/16-22) - Intermediate to advanced blacksmith students will study restoration English hardware, and make iron door hinges, latches, knockers, boot scrapers, kitchen utensils, etc.

(over)

1990 Course Descriptions (cont.)

Ira DeKovan (5/13-18) - This course is open to all skill levels and will emphasize innovative ways of working with iron. The class will also explore the uses of non-ferrous metals, such as: brass, bronze, copper, and aluminum.

Don Easley (7/15-21 - 7/22-27) - Beginning to intermediate students will learn the basic processes of blacksmithing, covering fire management, upsetting, splitting, forge welding, twisting, hammer control and how to use the tools of the blacksmith.

Charlie Fuller (3/18-24; 8/25-30) - Beginning to intermediate students will focus on the management of the forge fire, splitting, upsetting, forge welding, twisting, hammer control and how to use the various tools associated with blacksmithing.

Joe Miller (3/4-10; 8/12-18) - Beginning class in basic blacksmithing techniques such as upsetting and drawing out and forge welding. Small objects such as hooks, pokers, hangers, etc. will be accomplished.

Charles Orlando (4/15-20; 8/19-25) - Beginners to intermediate students will learn the fundamentals of forging and fabrication of functional and ornamental ironwork through practice and incorporating necessary techniques into a mutually designed project.

Nol Putnam (10/21-11/3) - Advanced Ironwork course of 2 weeks will cover design, including computers, layout, construction, feedback, tricks, special demonstrations, business necessities and such other items that will make these two weeks productive, great fun, extraordinarily useful and very human. Students are expected to submit a to-scale drawing and materials list three weeks prior to the class.

Elmer Roush (9/3-9; 11/11-17; 12/2-8) - Beginning to intermediate students will study basic blacksmithing techniques to learn the art of ornamental ironwork. Hooks, pokers, hangers, etc. can be made using the basic hand-forging skills.

Michael Saari (11/25-12/1) - Intermediate to advanced students will study construction of architectural hardware ranging from nails to large hinges and latches. Layout, assembly, and benchwork will be addressed.

Claiborne Smith (7/29-8/4) - Beginning to intermediate students will cover the craft of blacksmithing from upsetting and drawing out to forge welding with emphasis on hand operations. Work will highlight objects and methods from the period of the 1800's.

Clay Spencer (3/2-4; 3/25-30; 5/6-12; 7/27-29*) - Beginning to intermediate class will learn to make useful and decorative hand-forged items for the home such as coat racks, pot racks, fireplace equipment, etc.

*This weekend course will cover the important points in designing a treadle hammer, how to make your own, the many operations a treadle hammer can be used for and the tools which are used with it.

Francis Whitaker (4/1-14) - This 2-week Advanced Ironwork course will cover all aspects of architectural ironwork: design, layout, selection of material sizes, forging, fitting, assembling, preparation for installation, and various finishes. Students are to submit to-scale drawings and materials list for inclusion in this class.

For further information, please write or call:

The John C. Campbell Folk School

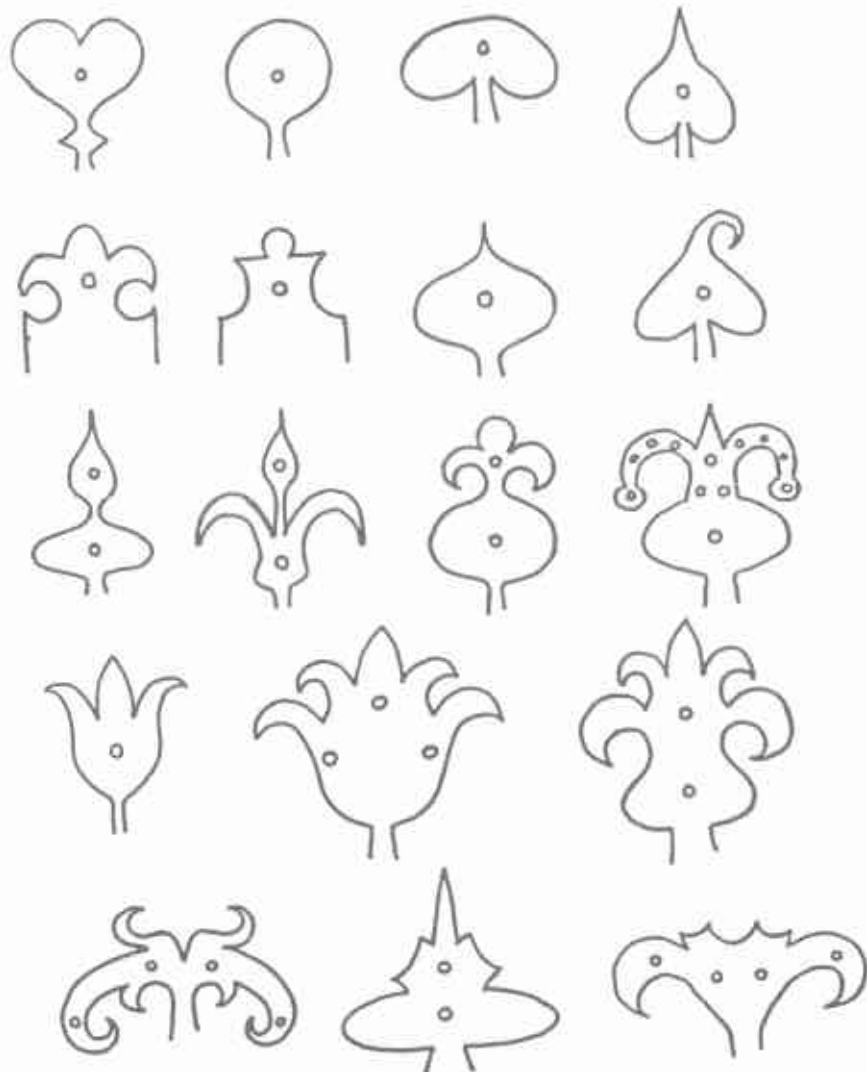
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