

CHAPTER OF ABANA

Hot Iron News

VOICE OF THE NORTHWEST BLACKSMITHS ASSOCIATION

FALL 1991

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IN THIS ISSUE

NWBA Officers Inside Front Cover
President’s Message 4
Treasurer’s Report 5
Board Meetings 6
Let There Be Light 8
Hot Twisting Jig 12
ferro•arc•a•phobia 14
Sam’s Hammer 16
Jeffrey, Charlie N’ Me 19
Flamingo Panel Centerfold
Friends 22
Letters. 23
Tips & Techniques 24
Technical corner 29
ABANA News 32
Editors Page & Coming Events 38
This N’ That 39

Front Cover:
**MIXED-MEDIA PANEL FROM
JEFFERY FUNK WORKSHOP**

PRESIDENTIAL PONTIFICATION

Hi Boys & Girls!!!

Was that a great Fall Conference or what? Many thanks to Jeffery Funk, Jon Soini and Thomas Huntziger for their tremendous contributions to making the Conference what it was...a huge success. Thanks to Smokey Adams for a great job of organizing the event. Thanks to our auctioneer, Bill Carrell. Thank you Barney Coski and Ed LaCasse for your hospitality in providing space for our visitors. Thanks to Jack Slack for the entertainment, but we really don't need two Smokeys. Thanks to Margaret Byers for a tremendous amount of work before, during and after the Conference. Thank you Tom Graham for your many hours. And thanks to all those who gave of their time and resources. Oh, yes, and thanks to whoever the heck it was that provided the wonderful facility for our Conference.

We're planning to hold the Spring Conference at St. Helens, Oregon again next year in April 1992. Fall 1992 Conference is tentatively planned to be at Barney Coski's in Tacoma, Washington. Novice workshops will be held in January, and April and I strongly encourage our newer members to attend. This is a great chance to get your feet wet (or fingers burned?) and get to know other folks in the Organization. Jerry Culberson is a great teacher and never leaves anyone disappointed. Other workshops are being planned, watch your Newsletters and Updates for further information.

An expanded schedule of open forges is being planned. These are quite informal events held at the shops of willing smiths. Anyone is welcome to come for conversation, camaraderie and a little mucking around with iron. This is a good time to meet people, try out some new ideas, see other peoples shops, and just play around.

If you've ever wanted to get involved in the N.W.B.A. this is the time to do so. We have over

three hundred members to serve and there are opportunities to do just about anything you would like. A few ideas;

Chair a committee doing something YOU think the organization should be doing.

Work on a committee

Write an article for the newsletter, or a tip or news item, or write in just to express your views.

The N.W.B.A. has the resources to finance just about any worthwhile endeavor. Just keep in mind our purpose is education and the subject IS blacksmithing.

Speaking of the newsletter, waddaya think of this one? Thanks to the many people who contributed, it's packed with news, tips, and great articles. Margaret has done an outstanding job, don't you think? Let's ALL work together to keep our HOT IRON NEWS the outstanding chapter publication it's always been. Many of the things you've figured out are still befuddling someone else. We're all friends here and everyone would enjoy seeing what's on your mind. ALL submissions will be printed (subject to editing for good taste), there won't be any editerrorizing done around here! I've seen newsletters that are JUST made up of reprints from other newsletters. Let's keep ours one that others take their reprints from! The HOT IRON NEWS is supposed to be "The Voice of the Northwest Blacksmiths". Working together we can make it be heard loud and clear.

Well, I guess that's about all for now (running out of paper and all that).

Warm Hugs,

Grant (you can call me Prez) Sarver



Northwest Blacksmith's Association

P.O. Box 81041

Seattle, WA 98108

**Preliminary
Treasurers Report for Fall '91 Conference**

Credits		Debits	
Attendance Fees*	\$2830.00	Banquet (65 dinners)	\$1157.40
Auction	1612.40	Demonstrator Fees	600.00
		Travel Expenses (Demonstrators)	388.97
*Total Attendance	89	Food & Misc. Expenses	526.05
Members	69	Plaques	96.00
Total Credits	\$4442.40	Total Debits	\$2768.42

Many thanks to Grant and Margaret for organizing a great Conference. Thanks to Smokey for the banquet.

Tom Graham,
Treasurer

NWBA BOARD MEETING

OCTOBER 5, 1991 Tacoma, WA

In attendance, Smokey Adams, Kent Rudisill, Ike Bay, Joe Elliott, Grant Sarver, Margaret Byers and Tom Graham.

Meeting was called to order at 12:45 by Smokey. Joe Elliott was welcomed to his first meeting as a board member.

OLD BUSINESS -

Secretary reviewed the election results in regard to the by-laws - 22 affirmative votes, no negative.

Report from the editor, Margaret Byers covered some general material. It was clearly stated that the editor will get the full support of the board in her work.

Yater Swedge Blocks, a Smokey project, and not officially an association project. We are close to shipping and Smokey will keep us informed on this group purchase.

Computer: the computer had been looked at by several folks and it was determined to auction all but the printer off, telling the potential buyers of its true condition. The editor will use equipment at her place of employment and at her home. At the spring Conference in 1992 we will auction off the desk.

FTL, Inc. will pick up the benches at Apex Forge and transport them to and store them in Portland.

NWBA Assets, items belonging to the Association:

- Smokie has several flood lights
- Jerry Culberson has the food kit
- Tom Graham has the coffee set up
- Bill Carrell has the meat spit and related stuff
- Mike Falk has the un-edited video tapes of

workshops and conferences

Grant has the video equipment except for a few items

Smokey has the Clifton Ralph tapes

Ike will store the benches

Questions of other items, such as an association library of books was raised - no one had any info.

Joe Elliott will take charge of the demonstrator archives, identifying the maker of each piece and finding a way to permanently display and store them.

Secretary will act as lending librarian of the Clifton Ralph tapes and other items. A procedure for deposit, length of time for a lending, actual costs, etc. will be developed. These materials are for the benefit of the members and we want to keep track of them in an orderly manner.

NEW BUSINESS:

Elections of officers was held and Grant Sarver is the new President, Ike Bay kept on as Secretary, Joe Elliott elected as Vice-President and Tom Graham's term of office is not up until next spring.

Discussed having a producer take on responsibility for videos of our workshops and conferences rather than volunteers. Board gave it's approval for the President to pursue this.

Discussion on hiring a mailing/printing service to do the grunt work associated with the newsletters. Board approved editor using such a service.

NWBA pins were discussed and a run of silver ones were authorized for sale. A second run will be worked on before they can be utilized.

1:30 p.m. adjournment

NWBA BOARD MEETING

Minutes of board meeting, NWBA, Saturday, November 9, 1991, Portland, Oregon

Meeting called to order by President Grant Sarver, at 1:30 PM. In attendance were Grant Sarver, Joe Elliott, Jeff Holtby, Tom Graham, Ike Bay, Kent Rudisill, and Margaret Byers, Newsletter editor. The President had invited Jeff Holtby to fill in for Mike Falk.

Minutes of last meeting approved as sent out.

The meeting started off with a lengthy discussion of workshops, conferences, open forges (open shops), costs, policies, procedures, tradition, etc. During this discussion, the President reported to the board that Jerry Henderson had taken the job of chairman for the spring 1992 conference. The conference will be at the St. Helens Fair Grounds April 24, 25, 26. This site was well liked last year.

The treasurer was directed to pay the shortfall on the Herson Workshop by unanimous affirmation of those present.

The board adopted a policy to make the disposition of workshop product determined in advance of the event.

The secretary is to draft budget and information sheet forms to add to the current forms and checklist provided those persons heading up events.

Novice workshops will be hosted by Jerry Culberson on the last week in January and the first week in April - Friday, Saturday and Sunday, \$120 per participant, limit 12 students. Participants get to keep what they make.

Lengthy discussion about the President's plans for

a very active board and the need to get articles, photos, workshop and conference notes, etc. from the membership. The quality of the newsletter is dependent on the members efforts. The following duties were assigned to individuals:

Joe Elliott - archives and workshop event coordinator or board contact person.

Ike Bay - library and conference coordinator, secretary

Kent Rudisill - member surveys

Tom Graham - finance

Jeff Holtby - video equipment storage and transport

Jennifer Slack - video tape

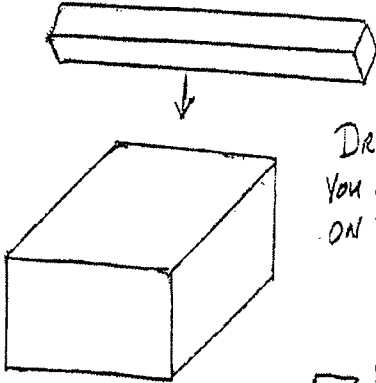
Special people are deemed worthy of special recognition and Jeff is heading up a committee of Darryl Nelson, Jack Slack, Grant Sarver and Kent Rudisill, to work on developing a list. Grant is working on some other gestures of gratitude.

Kent will write up an article on open forges (open shops, as some folks don't seem to understand the concept).

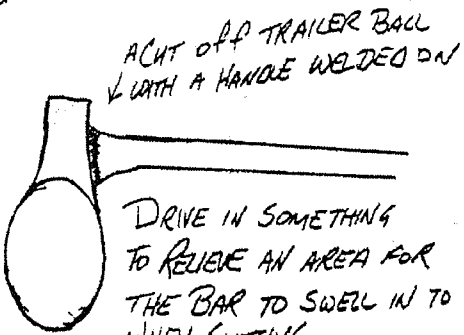
The meeting was adjourned at 3:15 PM.

Grant took possession of the power hammer tapes and will sent them to Hugh Eddy when he is finished, then Joe Elliott, Kent and Jeff.

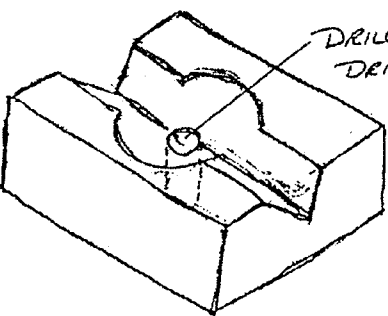
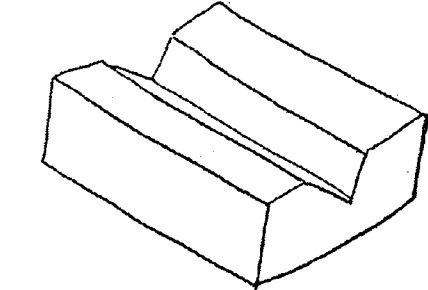
LET THERE BE LIGHT



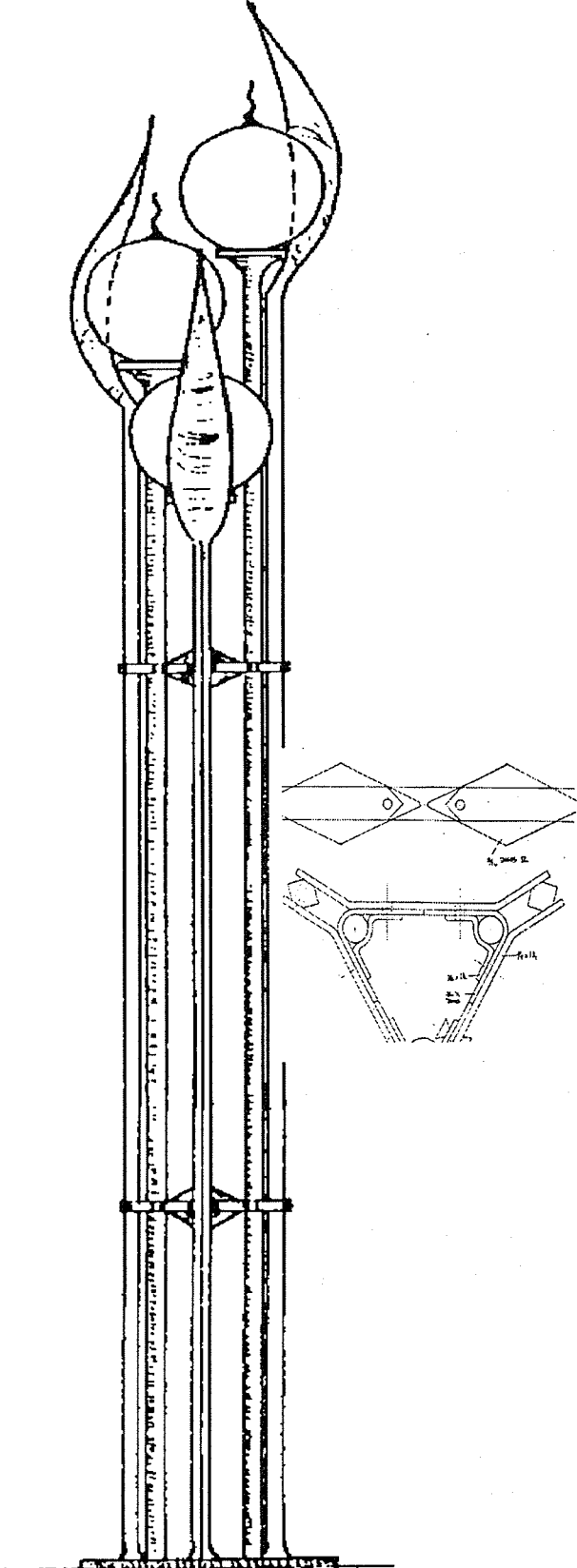
DRIVE A BAR THE SIZE THAT YOU ARE GOING TO SLIT INTO A BLOCK ON THE DIAMOND



DRIVE IN SOMETHING TO RELIEVE AN AREA FOR THE BAR TO SWELL IN TO WHEN SLITTING



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LET THERE BE LIGHT

A Workshop with Dave Thompson
June 14-16, 1991

First I want to thank Joe and Dave for all of the effort that went into this fine workshop. There is a wealth of knowledge at these workshops and I don't understand why I don't have to fight my way into them. There ought to be people standing in line to sign up.

The workshop was held at "The Traditional Blacksmith Shop" owned by Joe Elliott in Redmond, Oregon. The project was a three globe lamp post approximately 9 1/2 feet tall. Dave Thompson came up with a dynamic design that used a variety of different technics. (I would like to stress that the design is copywrite protected and cannot be reproduced without Dave Thompson's permission). The crew consisted of Dave Thompson, Joe Elliott, Jeremy Lewis, Bill Duff, Dennis Prince, Grant Sarver and John Burks.

Dave's design taught us things such as "slitting square stock on the diamond", "flaring" and "necking down pipe", "upsetting" and tool-making to mention a few. It also taught us the iimportance of starting with a good plan.

We began by making some of the tools that we would need, like a "slitting block" for slitting on the diamond and "spring swage" for necking down pipe. Some of the pieces had to be very precisely fit, so jigs were make for them. For some of the others we just used our artistic talent. As one person remarked, this was a "Measure with Micrometer - Mark with Chalk and Cut with Axe" operation.

One of the nifty tools that Dave brought was a "Rivet Header" that I have attempted to illustrate.

After tool-making, we broke off into groups and took various pieces of the "puzzle" to make. When spreading the leaves that go behind the lights we got a little bit carried away and worked them until you could see through them. It is sometimes hard to

remember that at these workshops we are there to learn new and improved ways of doing different operations and not necessarily to produce a finished product.

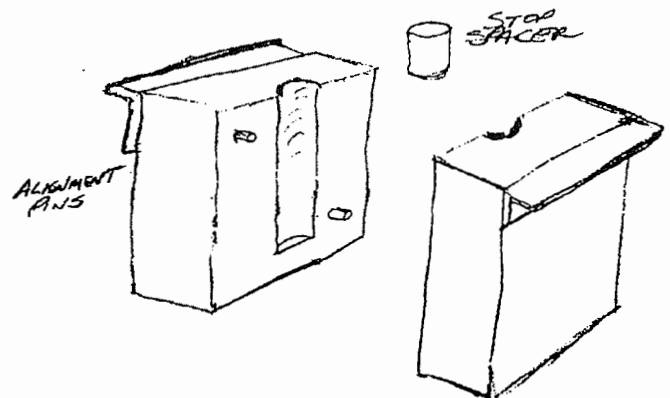
Saturday morning Joe's new hammer (a 4B Nazel) was delivered. He sure was excited about his new toy.

As always, a summer workshop at Joe's shop is hot to say the least. (The temperature was 100+). But the knowledge, teamwork and camaradery were well worth the price and effort. What I learned just from standing around and "BS-ing" made it more than worthwhile. I don't know if Joe planned it or not, but we even had an Ice Cream Truck stop by - a welcome surprise during a hot afternoon.

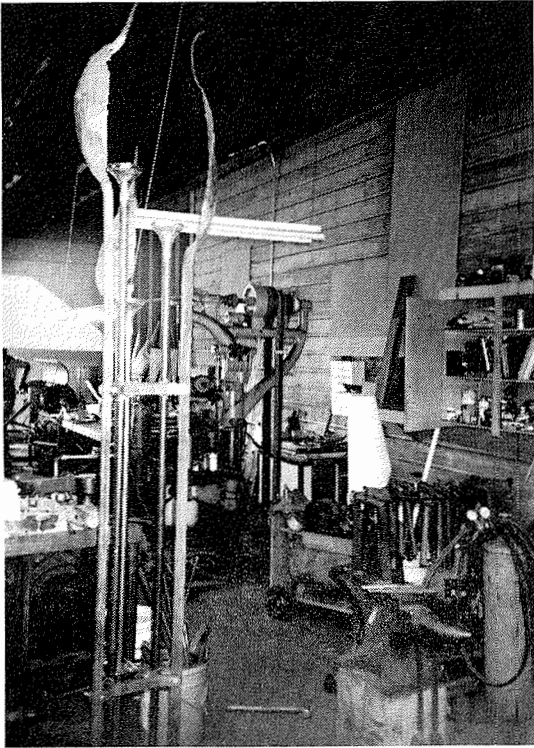
I was fortunate enough to receive a scholarship to this workshop and I would like to think that I was the best candidate, but the truth is that I was the ONLY APPLICANT. I believe that the scholarship program is a great idea, but like many great ideas, if people don't take advantage of them they tend to die out and nobody benefits. I encourage all interested people to apply.

Again, thanks to all of the people who gave their time and knowledge to help educate and motivate the rest of us.

Dennis Prince
Grizzly Mountain Forge
Madras, Oregon



LET THERE BE LIGHT

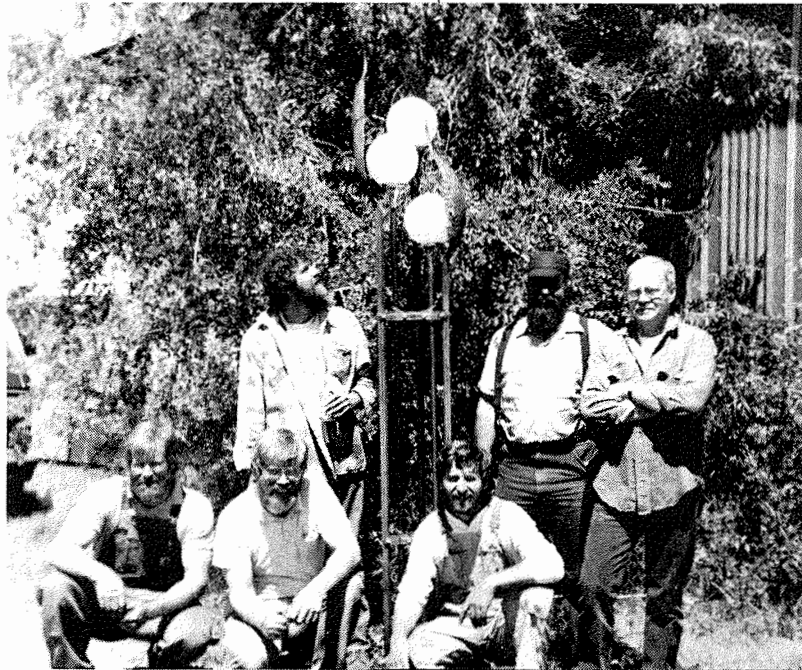


DAVE THOMPSON WORKSHOP

ASSEMBLED IN JOE'S SHOP

THE LIGHT BRIGADE & THEIR
PROJECT

PHOTOGRAPHS BY GRANT SARVER



ACTIVITIES

You've read his book, seen the videos, Now see him live! A chance to have your questions answered and learn more about a power hammer and it's tooling than you ever thought possible!

MISTER POWER HAMMER! CLIFTON RALPH!

We are putting together a workshop for early in July right after the ABANA conference in California. Estimated price will be about \$200.00 per attendee. Workshop will run three days plus evening entertainment. Tentative location is Grant Sarver's shop in Tacoma. Expect this workshop to be sold-out early in the new year.

\$100.00 deposit required to hold your spot.

For registration and information contact:

Jeff Holtby - Chairman

Phone: (206) 868-9531

22929 Union Hill Road

Redmond, WA 98053

"Don't miss any chance to see this man do his stuff. Although his background is in large steam hammers, he has had a 100# Mayer hammer at home for years. The things he has done with this hammer are incredible. I don't know of anyone who wouldn't benefit from this man." (Grant)

HOT TWISTING JIG

by Berkley Tack

Here is a hot-twisting jig that I made out of necessity when I was faced with putting a 7" twist in several hundred 5/8" square railing pickets. It works great for fire tools or anywhere you need to make a number of identical pieces using stock from 1/4" to 3/4" square.

To build it, you first bend a piece of flat bar edgewise into a "U", then weld it roughly in the center of a length of square tubing. Then cut a piece of this tubing about 6" long out of the middle of the "U" to allow a wrench to rotate there. Cut a few short pieces of tubing that slide snugly over the long pieces, and weld two sizes of notched tabs on top and bottom of each piece and a set screw on the side.

Putting two tabs on each slider gives you more combinations with less pieces. Make a stop piece with a couple sizes of pipe sections welded on for the stock to butt into and rotate within. (This helps hold the stock straight.) Lastly, get an old monkey wrench and weld a handle on the head for a two-handed grip.

The setup for twisting is as follows:

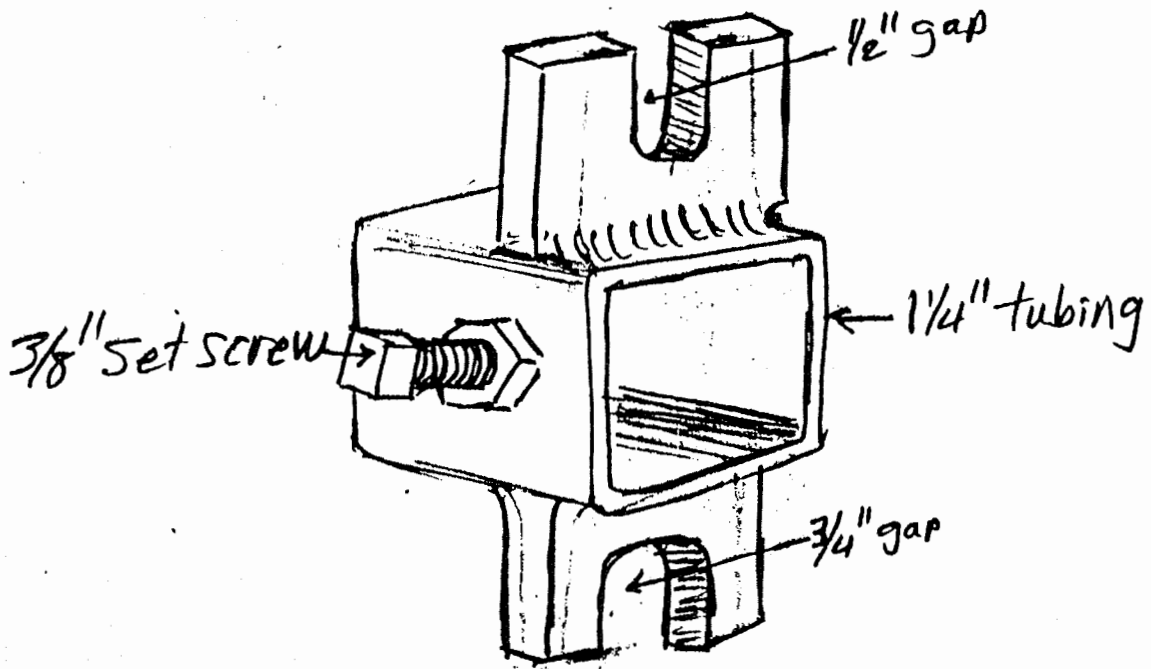
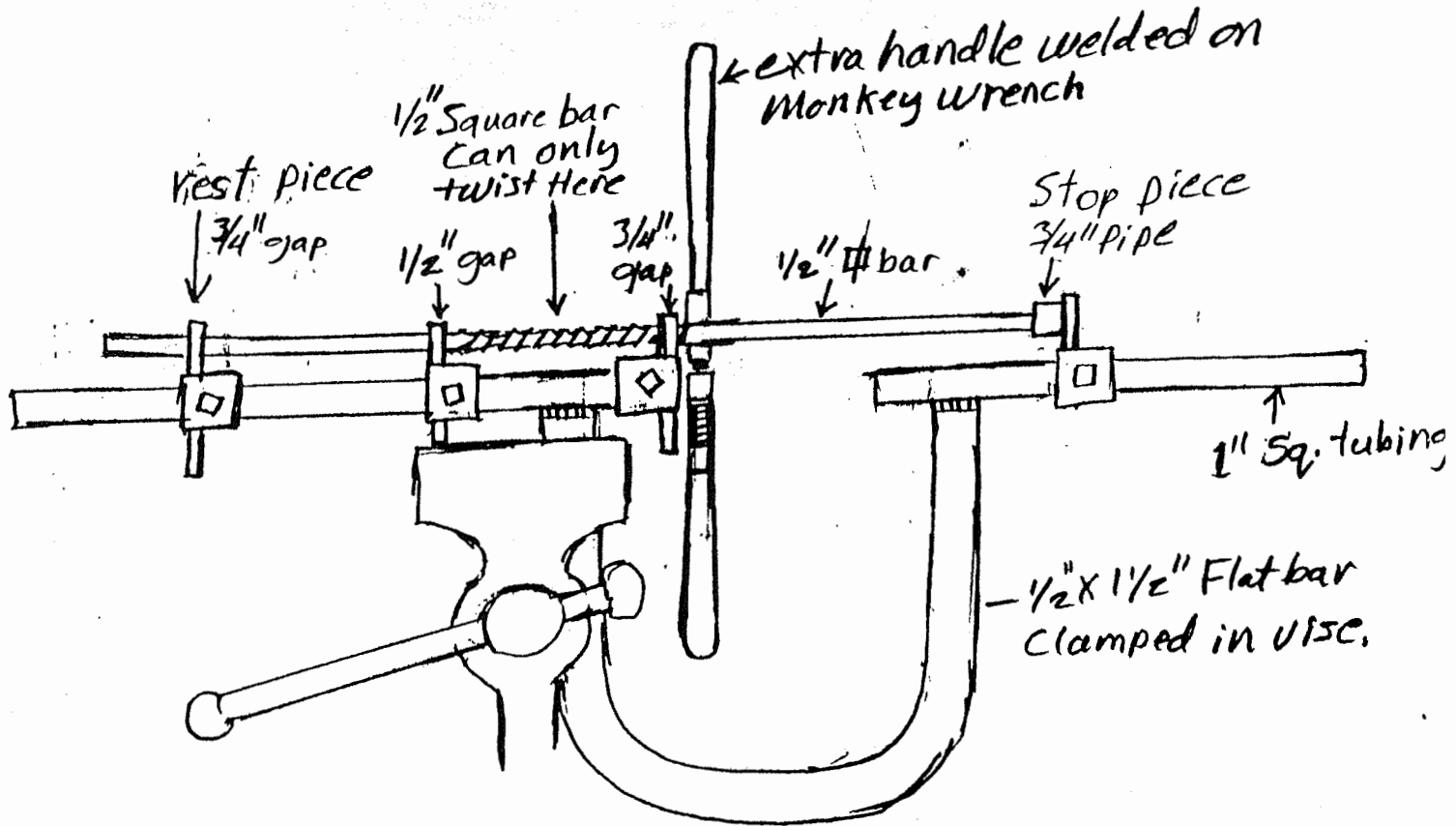
Cut a square bar of, say, 1/2" diameter and any length desired. With soap-stone, mark the length and location of the desired twist on this bar and use it to locate where the various sliding pieces go on the jig. Put a 3/4" notched piece nearest where the wrench will by. This will be one end of the twist. Then, slide a 1/2" notched piece where you want the other end of the twist. Then put a 3/4" notched piece near the end of the square bar to act as a rest. Finally, slide the stop piece on the jig at the other end, such that the nose of the bar to be twisted will slip into the short piece of 3/4" pipe and stop.

Tighten all set screws, and you're ready to go. Fire up the gas forge, and slip the marked bar through until the part to be twisted is centered in the fire. Set up a stop on the far side. I use a piece of angle iron C-clamped to the hearth. When the bar heats where desired, (this may take some adjustment of the stop) slide several more bars in to heat.

Take the hottest bar out and slip its nose into the short piece of pipe on the stop piece. Then lower the bar into the other three notches. Grasp the bar with the double-ended wrench 1/8" from the 3/4" notched piece and turn evenly, counting turns until twist is tight enough. Adequate length of heat is important for an even twist, and, even then, a can of water nearby is handy to cool the tighter parts. With the proper heat, though, water is usually not needed. Sight the piece for straightness, and lift out. It is possible to make several hundred identical pieces in a day with this jig, but I use it even for small amounts because of its ease of operation and uniform results.

Berkley Tack has been a full time smith for twelve years, doing business as "**Berkley Tack, Blacksmith**" in Rainier Oregon. From the hills overlooking the Columbia River valley, Berkley works on architectural iron, hardware and light industrial forgings.

HOT TWISTING JIG



side and having suspended water used as an amusement ride.
ferro- [*< L. ferrum, iron*] a combining form meaning: 1. iron 2. iron and iron) of, containing, or derived from iron: also *ferrite* (fĕt'it)

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ferro•arc•a•phobia (fer'ō ark'ā fō be â), n. [ferro + arc + phobia] an irrational and persistent fear of arc welding, usually manifested in blacksmiths. Symptoms are; not using welds when they make sense, hiding welds so they can't be seen, and grinding welds smooth in order to pretend they're not there.

© 1991
 by Grant N. Sarver Jr.

Without a doubt one of the most useful techniques ever developed for iron working, arc welding for some reason, is looked on with scorn by most modern blacksmiths. It will be the purpose of this article to determine the reasons and rationales of this phenomenon.

Excepting the blacksmith determined to work in a particular time period/style, It's a little difficult to pin-point the rationale for not welding. If it were a desire to use only traditional techniques, why the prevalence of cutting torch, cut-off saw, disc grinder, electric drill, etc? We're left to assume then that it must be the result, or the appearance of the finished product at the root of the problem. For now let's proceed from that premise.

I guess I could be accused of taking a somewhat backward approach in analyzing a situation; conclusion first, then checking to see if the evidence supports such a finding. But, in the above case I have a strong feeling most of the problem is lack of attention in the design stage of a project. Almost all of the usual techniques are defined and refined at this time. Arc welding on the other hand is left to a hit and miss (weld-as-needed) situation.

About 10 years ago Jim Garrett & I collaborated on a gate project at a large condominium. The design was pretty well fixed by the architect and allowed for only minor changes (details not affecting the overall design). After making the changes necessary to incorporate forged joinery we were left with only one problem. The architect had designed a col-

umn between the vehicle gate and the man gate, composed of two 2" square verticals with a plate covering the space in between. In this case the most obvious connection was by arc welding and the architect had spec'ed out something like 2" weld on 12" centers in typical engineering fashion.

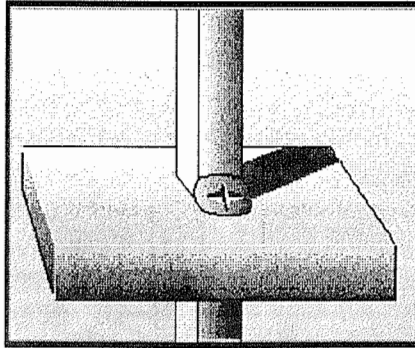
This design was not really in harmony with the button head rivet style we had chosen for the rest of the gate, but it didn't lend itself to riveting either. With the idea of making the welding an integral part of the design, I proposed we use a sort of button head weld, made by holding the rod in one place and stirring it around in a circular motion. This gave a visual "feel" equal to the rivet heads and, together with Jim's eye for harmony in design, helped bring the whole thing together.

Throughout this article we will assume that as much skill and care will be used in the welding as in the forging. Poor quality welding is probably a major factor in the equation. But, of course poor forging doesn't look so hot either. To integrate welding requires that skills be developed to an equal degree as in forging.

We might conclude from the foregoing that no welds should be put in that haven't been designed with as much care as the rest of the joinery. This means no tacks here and there "just to hold things together". You wouldn't put rivets just anywhere and expect them to look good. Why should welding be any different? Even the tack welds need to be located in the design stage! Every hour spent planning can

save two or more in the shop.

Let's think of a few ways to incorporate welding that might be more palatable to some. The first is what might be called "the sealing wax technique". Here, as in some to follow, the weld is forged while still hot by use of a stamp. The welding is best done with solid wire MIG using 98-2 or any gas that leaves the puddle very hot (for very large welds, CO2 could be used). Used in small fillets such as bar crossings or where one bar passed through another such stamps could add beauty to otherwise boring intersections. Some might call this hiding the weld - let's just think of it as not leaving the weld in it's "raw" state.



"sealing wax" weld

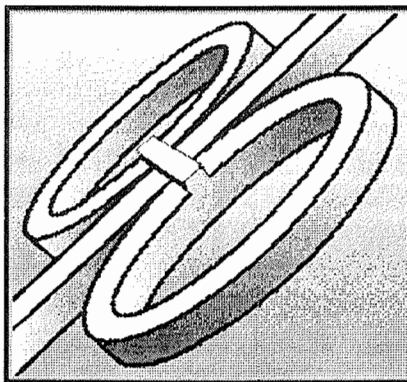
When you think about it, welding is really just a casting process with the added benefit that it can be forged. Now, why not use a mold to shape it just like we want? Won't need anything on the bottom, the part will support it there. A shaped copper plate with a small "window" can be used to dam the liquid metal. A "collar" might be made this way (See drawing). We'll need to leave some draft in the form so it can be removed. Alternately it could be made in two pieces. If you try this, be sure to clamp the plate down and don't let the arc strike on the copper.

After removing the plate we could forge the weld as above, grind it flat (at a higher elevation than the part, as shown in the drawing), or even leave it natural. If you want to forge it, I'd mount the plate on a vice-grip so it can be gotten off fast. Ground flat, it could be forged, stamped, chiseled, or chased. Might even be a nice distinctive place to put your name.

Plug welding is a technique popular with some people. Maybe because they're easy to hide.(?) Plug

welds are made by putting a hole in one part and welding to the adjacent part through the hole. Personally, I like the look of them when they're done hot and left as shallow craters. Using our copper form idea, they could be built-up and headed with a cup tool. Another way to use plug welds might be on tenons in lieu of heading, or even combined with heading. The most seen part of tenonned pickets is the shoulder and the most work is the heading in final assembly. By plug welding, the tenons could be left 1/8" or so below the surface or with a form it might be left 1/8" above. Actually the tennon could be left out completely and a plain upset plug welded to the bottom bar.

I'll be very interested in your reaction to the foregoing. I have very strong opinions on how things ought to be done, but my basic position is not to place artificial limits on what I do and how I do it. I'm not an artist, but it seems to me there can be no artistic expression if we only do things in a certain, prescribed manner using only "approved" methods.



welded "collar"

I hope the above has been of some interest and you have a new insight in the possibilities of doing new things with welding. If not, then, maybe at least some of the philosophy will have some application in what you are trying to accomplish. Let's see some letters! (Addressed to the Hot Iron News), I certainly don't expect everyone to agree with me.

Thanks to Grant Sarver. Grant is currently President of NWBA and has been a professional smith for 18 years. He is part owner of Apex Forge & Tool Co. in Tacoma, Washington.

SAM'S HAMMER

This past fall there was a TV show about the civil war, and there was also an article in the October 1990 issue of The Smithsonian about the part Black soldiers played in that war. However, many people do not know of the skills that one of the black people learned and followed in the blacksmith trade, so I want to dedicate this story, as I remember it, to a Black blacksmith whose only name I ever knew was "Sam", and also to Mr. William K. English in whose shop he worked.

In the early 1990's, Mr. English, "Bill", moved to the San Fernando Valley of California, and built a shop in Northridge. Like most of the shops of the day, his had a line shaft system run by a gasoline engine, which ran a radial post drill, horse clippers, a grinder and a drag saw to cut iron bars. In a shed out back he had an acetylene generator, which produced the fuel gas for a torch, the only other means of welding than using a forge, and, from the stories I have heard about those early torches, they were about as safe as an open can of black powder.

Just before "Sam" was hired, a G.E. Electric Generator had been installed as an early type of arc welder which used bare rod, or in fact any kind of rod, as a filler rod.

Electricity was used solely for lighting and to run the two forge blowers.

During the busy seasons--plowing and harvesting time--Bill hired men who were called "tramp smiths," men who wandered the country with their bedrolls looking for a day's work and bedding down in a barn or shed. These men supplied the muscle power to weld plow share points and other large jobs. One spring a Black man who said his

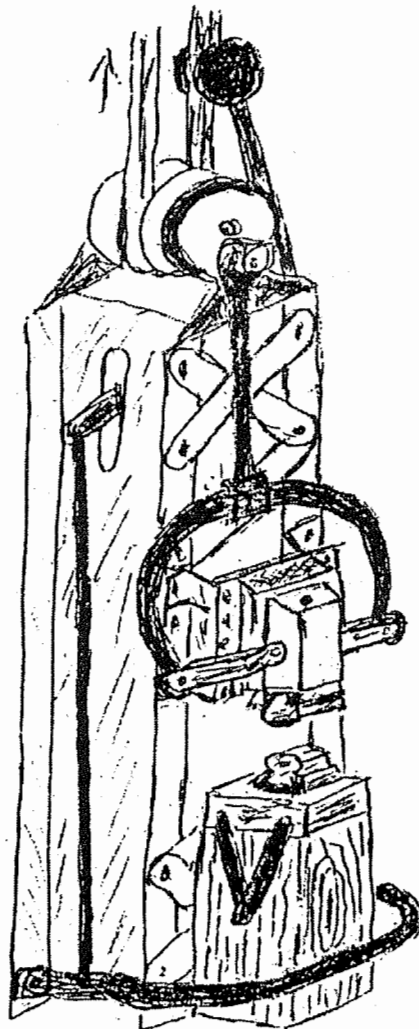
name was Sam came to the shop with his bedroll and asked Bill if he could get some work so he could eat. Since Bill really didn't need help, he just dismissed the man and went about his work. Sam, however, looked around and watched the men welding plow shared and at the end of the day he was still there. Bill asked Sam why he was still hanging around.

"Mister, you don't have a power hammer," Sam answered.

Bill said, "Damned right I don't. They're too damned expensive."

"Well, if you'll put me to work for food and a place to sleep," Sam said, "I'll build you a hammer for your shop." And with simple tools and without the help of a machine shop, Sam built a power hammer for Bill's shop that served him in good stead for many years. The following describes "Sam's Hammer" a sketch of which is included.

Seems that this hammer, like so many things done in this kind of shop, was laid out on the floor, and approximate measurements decided upon. It wasn't designed by measured plan, so we never knew for sure, but the head was reckoned afterwards to weigh about 150 lbs. Out of several junk yards came the necessary bushings, a piece of shafting, a mower pitman, car springs, and a 10 ft piece of XYZ structural column for the support frame.



SAM'S HAMMER

The anvil or bottom die support was a piece of 8" X 8" square white oak with a cap on top to which was welded the dove tail die holder. These two pieces were set into a concrete block about four ft square.

The head was a box made of 3/4" plate approximately 5" wide and 4" deep with a bar through the box for ears to hold the linkage between the head and spring bow unit. The spring bow was of 2" wide auto spring leaves.

The slide plate and box unit were bolted to the column and made with shims to be removed when the unit wore and let the head get sloppy. The head unit box was filled with lead for weight.

The pitman crank was out of an old mower, with cast iron bushings on the head shaft. The original head pulley was a 4" wide flat belt pulley with plates bolted on each side to hold the flat belt in place as this was a slack belt drive unit. The belt tightener pulley was wood with a cast iron sleeve bushing. The connecting rod was about 1 1/2' long without adjustment for work thickness.

The dove tail die holders were hand-cut, after the extra stock was removed by drilling

holes, they were then cut with chisels to shape and filed to the line, then welded to their respective places.

The dies were also handmade, but the grinder was used to remove excess stock and the tapers weren't very deep.

It is my understanding that outside of replacing the spring bow to head linkage arms and bolts, and repairing the main drive pulley, that this hammer ran about 55 years before the shop was sold when Mr. English died.

Quite a few new blacksmiths trained on "Sam's hammer," including myself. I can still hear the "Ka Chunk! Ka Chunk!" as it hammered on plow shares and shaped the many things we made and repaired in those days.

When I started my shop I remembered how things were hand made with simple tools and how well they worked, so to this day with nothing more than my forge, grinders, drill press, and welders, I do as Sam did: I make one piece at a time, being sure it is as near perfect as I can get it before I go to the next piece.

Sam worked for Bill several years before he took up his bedroll, said goodbye and

went down the road, presumably to greener pastures, leaving a monument behind: the power tool always called "Sam's Hammer."

Physical dimensions:

Real XYZ column was 84" above the floor with a 14" high drive pulley unit above the column.

Pitman was 12" in diameter with a 10" stroke.

Connecting Rod was 16" long, of 1 1/2" shafting.

Spring bow had a 20 1/2" throat spread 12" high, with 8 pieces of 2" wide auto spring leaves bent to bow shape.

Anvil block was 8" X 8" X 27" above the floor, white oak wood with a 6" high cap plate including die shoe and die.

Dies were approximately 2 1/2" wide and 5" long, and we had several sets to do the parts we manufactured during winter months.

I wish we knew who to credit this wonderful article to. It was mailed to us without any identification. - *editor*

FUNK WORKSHOP

JEFFREY FUNK
"HISSELF"

PHOTOGRAPH BY GRANT SARVER



DARRYL NELSON
DOIN HIS RENDITION
OF "BEAT IT"

PHOTOGRAPH BY GRANT SARVER

JEFFREY, CHARLIE, N' ME

by Joe Elliott

This article was written to briefly describe the process (as opposed to "How To") of a workshop led by Jeffrey Funk. The hours were long and the work hard, but the final product was a fine addition to the world of contemporary iron work. Jeffrey was unwavering in his strive for perfection and the skills of the attending craftsmen self-evident.

It was a cool October night when Jeffrey pulled up. Waiting in my shop were Smokey Adams, Ike Bay, Dave Thompson, Grant Sarver, Jeff Holtby, Darryl Nelson, and Thomas Hunziker, (some heavy hitters). Jeffrey did his best to shake off a 17 hour drive and we talked a bit about the panel design and materials. We all thought it was a somewhat ambitious project, but achievable in the three day time allotment.

Day 1 (Tuesday) 8 am - 11pm

The design was drafted to full scale, stock was cut to size, and Jeffrey demo-ed some of his wonderful tooling. Veining has begun on frame, tenons on branches started, and the brass cut and "outlined". We left the shop feeling good.

Day 2 (Wednesday) 8 am - 2 am

Frame veining, chamfering was completed, top and bottom pieces were bent and most of the holes punched and drifted. The "stiffness" of stainless proved to be an asset during this process since there was basically zero edge distortion. Branches were drawn out to basic shapes; tenons completed. Main body of Charlie (Flamingo) was done and mostly planished. Copper rosettes were started. All in all another feel good day but there was a general feeling that we had to be real busy boys tomorrow. We also knew that about half the gang had to leave Thursday evening.

Day 3 (Thursday) 7 am - 3 am

Frame was done. Rosettes done. Branches fitted, riveted, and bent to shape. Trunk welded into place. There was an afternoon demo on the very upper forging range of bronze resulting in a slight design change. Charlie's legs were forged, his neck and head cut, repossed and planished. At 3 am there were four of us left standing. However, we were all brain dead. (with the exception of Darryl, who was grinding until 5 am). We all had to be 350 miles north (for the NWBA Conference) by 8 am

Saturday, so we had most of Friday to finish the panel - no problem.

Day 4 (Friday) 7 am - 3 am

Peel Darryl off shop floor. Heated tree and textured, silver solder rosettes in place, assembled Charlie and fit to panel. At 3 pm panel was masked and ready for sand-blasting, and we thought we had it made. Half hour for blasting, one hour for patinas and on the road at 5pm - WRONG. The sand-blasting equipment was totally inadequate and rather than risk damage to the panel (and ourselves) we decided to call it quits and bring the panel to the Conference as is. By 7 pm we were on the road north, slightly bummed but knowing we did our best.

Day 5 (Saturday)

As Darryl and Jeff are driving into the Conference they spot a cloud of dust. A couple hours later we retrieve our sand-blasted panel. The next hours were spent wire brushing, tapping holes, and applying patinas and finishes. By 8 pm it was done and it was beautiful. It was an emotionally magical moment - joyous in its completion and yet sorrow that it was over. The prior days all began to make sense as did the many special moments found within those long nights.

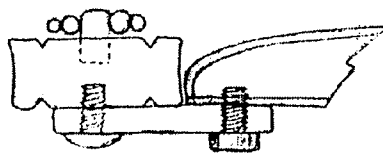
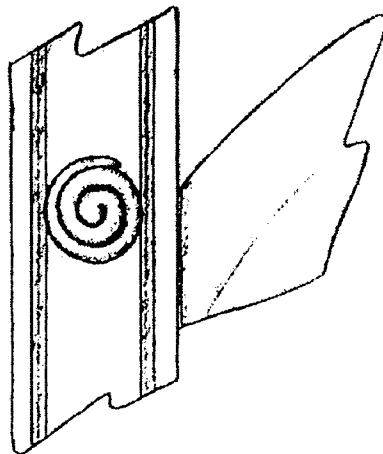
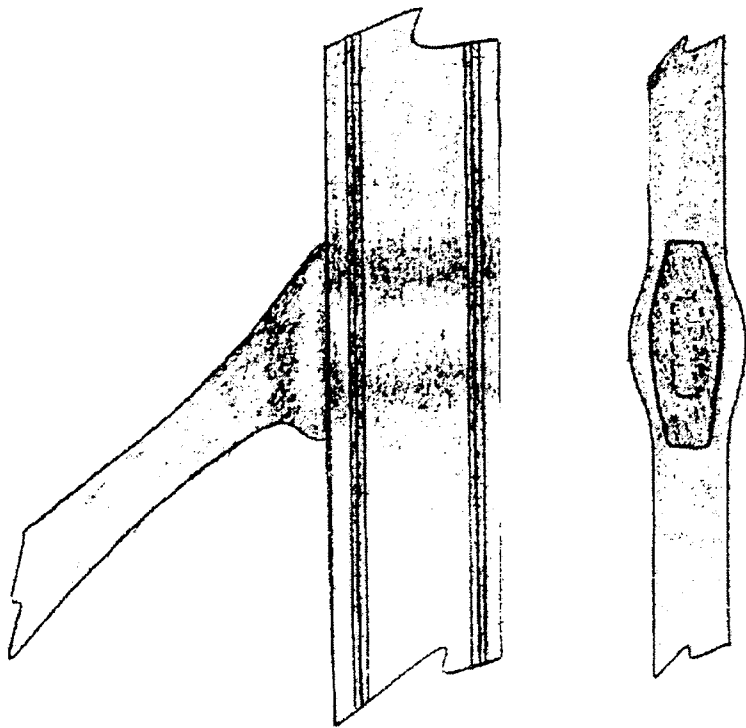
Thank you Jeffrey for sharing so much,

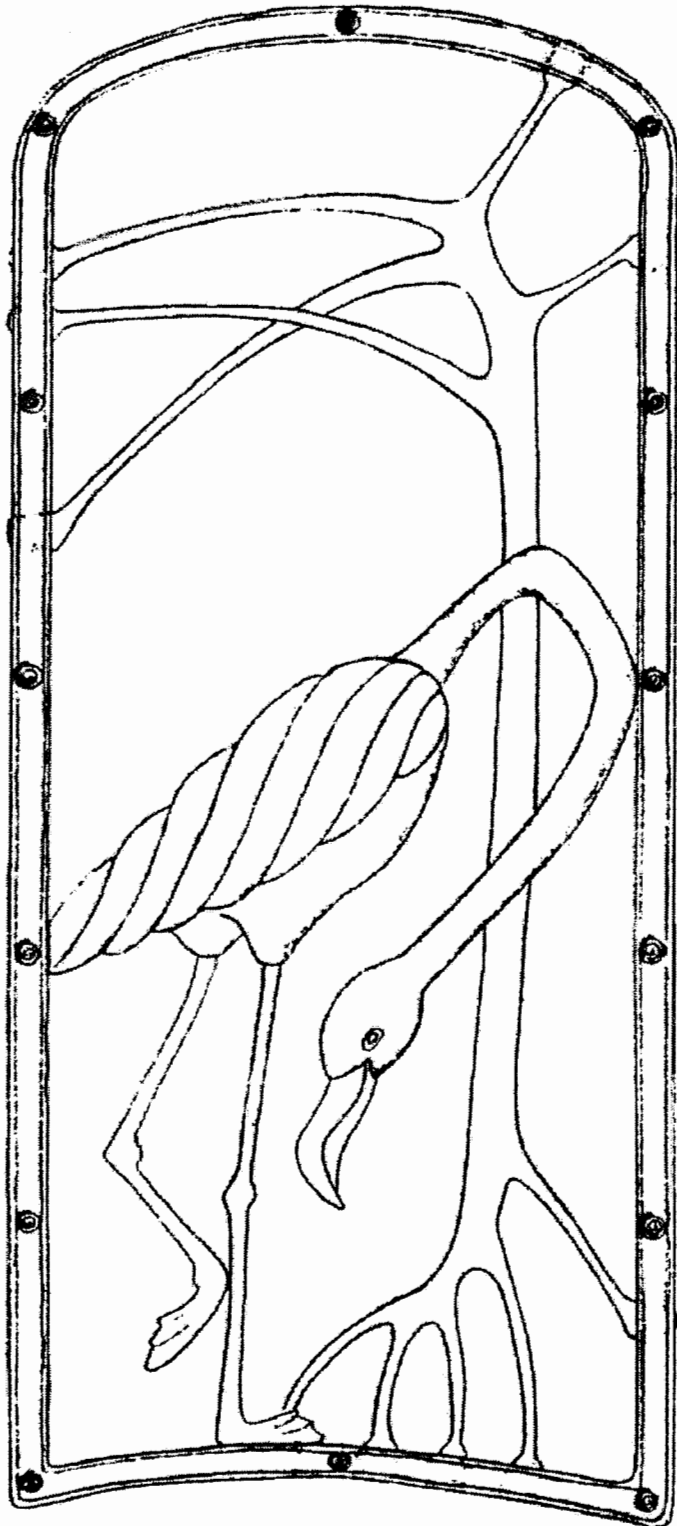
Joe

Frame: 304 Stainless 5/8" x 1 1/2"
Tree: A-36 1/2" x 1 1/4" and 1/4" x 2 1/2"
Charlie : 206 brass 1 gauge
460 bronze 1" round
Rosettes: copper 1/4" round

Joe Elliott is the proprietor of "The Traditional Blacksmith Shop" in Redmond, Oregon. Although "traditional" doesn't describe Joe's approach, he does architectural work as well as hardware. Joe has been BS'ing full time for the last six years. His recent acquisition of an enormous 4-B Nazel hammer indicates his intention to stay with it.

FUNK WORKSHOP FLAMINGO





Workshop Dentio Gate/Screen		
SCALE: 3/4" = 1"	APPROVED BY	DRAWN BY
DATE: 9/25/91		K. Greg Funk
Frame: 304 SS	bird: 240 brass + H&H bronze	
tree: steel	rivets: copper	
Overall dimensions: 68" x 26" x 1"	DRAWING NUMBER	1

FRIENDS

Golden Pheasant Art-Metal
3011 Innis Street
Boise, Idaho 83703

Nov. 5, 1991

Dear Fellow Blacksmiths:

Thank you for the beautiful "Life Time Membership Award Plaque" that was presented to me, by our chapter, at our Fall Conference Banquet.

My thanks also to the designer and those who took time to make and frame said plaque.

I enjoyed the Fall Conference very much. Seeing old friends, our fine demonstrators and being in a shop such as Grant Sarver has. It has been a while since I have been around machinery of such size and caliber.

I am sorry Al Bart wasn't present to share with me the receiving of our awards. I am glad you, Al, were the recipient of the other plaque. It is nice to be so honored in our time.

My appreciation also to our departing officers for their part in charting our course during the past year, and for the new officers and editor, Margaret.

All seem so enthusiastic and only wait our participation and feedback to help them in their endeavors.

Thanks again I remain,

Sincerely yours,

Nahum "Grandpa" Hersom

QUILTING BEE

June 29th & 30th, Mary Dwyer, Nora Carrell, Betty Hedgelin, Vernell Henderson, Ina Rattenbury and Phyllis Tice met at St. Helens to start piecing the Charm Quilt together.

Several of the ladies from the Retirement Center gave us their expertise of many years and lent many an hour to the quilt.

By Sunday we had the quilt on the frame and had taken our first stitches. (Many a bleeding finger and Ohh!----- later) Nora and Ida had to start their long drive home before dark so the remainder of us with help from the C.H.R.C ELVES made our first turn and called it quits.

During the following week Phyllis and Vernell spent much of their spare time stitching away with much help from the "elves."

While I was away for four days I came home to a finished quilt, the "elves" had been working night and day. It is now in Ina's care and she is binding the edges.

We now know what an "old fashioned Quilting Bee" was as we experienced it first hand. I personally learned much and many an idea came forth for the next and the next and the *****

At our next "Quilting Bee" Louise, one of the elves, is going to teach us how to do a Cathedral Window Quilt and we'll be designing a Blacksmith Quilt so come down and join us if you can.

Vernell Henderson

LETTERS

Dear Margaret & Members:

At the Fall Conference auction last night some doubt was expressed as to whether "The Bible", "Elementary Forge Practice" by John Lord Bacon was still in print. I'm happy to say that it is. Lindsay Publications, Inc. is currently selling copies for \$9.95, plus \$.75 shipping and handling. It may be ordered by writing to:

Lindsay Publications, Inc
PO Box 538
Bradley, IL 60915-0538

Or Phone: (815) 935-5353
and requesting catalog number 4457, "Elementary Forge Practice".

Lindsay's catalog is packed full of hard to get reprints of technical books. The prices are very reasonable and the service I've had is great. Even if you don't order the book, write or call for a catalog. You'll be impressed.

Sincerely,

Albert Brown
Ravensdale, Washington

Notes from the State of Jefferson

I wish to thank Louie Raffloer for the very nice article and compliments he has given me. Now that some of my work has cleared up and I feel better I want to give some tips that might be helpful. In Louie's article he shows an edge splitting tool that I use quite often. He is right about avoiding injury but another reason is that you do not have to reach as high to strike. When I watched a smith using a long chisel, with the work held in a leg vise and the head of the chisel was shoulder height the smith could not apply the full force of the blow to the work. With the edge of the chisel sharpened and held horizontally the blow comes down much lower and more of the force is applied to the work. Try it.

The next sketch below is of shearing light plate. The chisel should be turned over so the flat side is resting on the vise. Actually we used a rivet busting chisel shaped as in the following sketch:



Length of the chisel was generally ten to twelve inches.

On the wizard head I generally use 3/8" square on the letter openers and on steak turners.

On the vise tool the first one I saw was made out of triangular steel. Coming home I didn't have any and I was taught to use what was available. I made mine out of angle iron. What this tool does is it brings the work up closer to eye level and the angle is much easier to work.

While I'm at it, let me add another tip. This summer I've been helping a couple of miners who have miner's picks (or drift picks). To keep the handles from drying out I taught them to scratch a little trench, place the pick in it standing up and cover lightly with dirt. The ground should not be wet, it only needs to be slightly damp. This keeps the handle from drying and will only draw the moisture needed to keep it tight.

Al Bart
Yreka, California

TIPS & TECHNIQUES

NEED TO MARK OFF EQUAL DIVISIONS ON A RING? Sometimes it's difficult even if you have a traveler (that pizza cutter looking device that wheelwrights used to use) because they may slip and slide and then you have to start over. Stepping off with calipers is too time consuming. We put a mark on the side of each ring, lined up the mark against one on the top of the workbench and rolled the rings along the bench edge until the mark touched the bench again. Here we made another mark on the bench. Now we had the circumference of the rings laid out straight. It was easy to measure the straight length, divide it by the number of segments and mark it off on the bench top. We transferred the divisions to the rings by re-rolling them and marking the ring when it touched a mark on the bench. (You may need to use the floor for large rings.) We checked our accuracy by measuring the straight line measure between the marks on the rings. Dead on!

WHEN MAKING LONG BASKET TWISTS it is sometimes difficult to open them evenly to get a nice overall shape. First, 4 rods of 3/8" steel are tacked together with the arc welder, and the ends fire welded and drawn to round points. Then the bundle is heated in the gas forge to get the whole thing to an even bright orange heat. The rods are next twisted together medium tight by clamping one end in a vise and turning the other end with a special twisting wrench that consists of a bar of 3/8" X 1" steel with a round cornered, 3/4" square hole in the middle. This wrench is placed right at the "loose" end of the fire weld and the shape of the hole (essentially the cross section of the bundle of four rods) helps keep the weld from coming apart. The next step is to re-heat the bundle and untwist it some while pushing down on the wrench. The problem is that the long twist wants to open at the ends, but not in the middle, developing a figure eight shape. I find that if I quench the ends on the first untwisting heat, the basket will begin opening in the middle. I then re-heat the whole thing, and repeat the untwisting process to open the basket to its full volume.

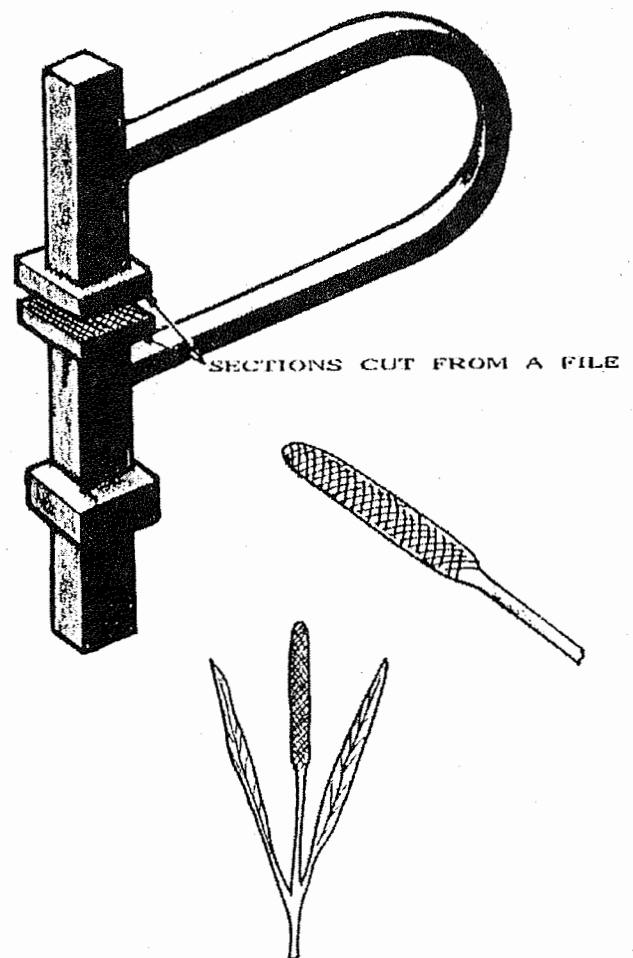
Re-printed from the Blacksmiths' Guild of the Potomac, Inc. July/Aug1991 by Brad Silberberg.

TEXTURING TOOL BY PETER KING

Peter King describes a useful tool which can be used for producing a texture on the forged seed heads of grasses and rushes.

At a recent Forge-in I was asked how I textured the spike of grass by a very knowledgeable member. Well, if he didn't know and was interested enough to ask, I thought other members would be interested. The drawing shows the spring tool that I use, with the two sections cut from a file welded as shown - I use a stainless steel rod for this weld. The forging is done at red heat, the grass spike being rotated between the file sections as the blows are struck with the tool.

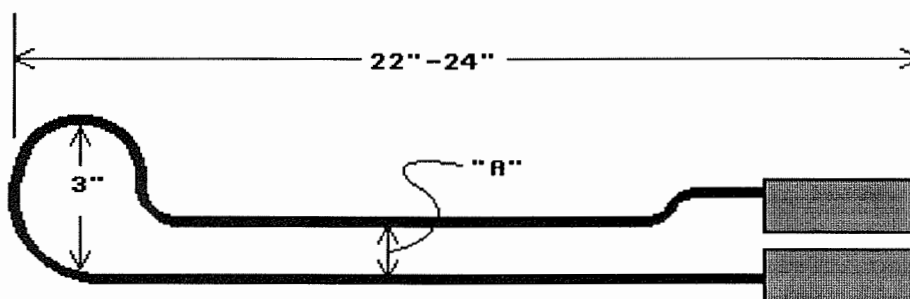
Re-printed from the British Blacksmith



SPRING TOOLS

Recently I made grapes, a total of about 400 of them. I decided after a days working with my spring tool dies, that something was wrong - ie. my left hand and thumb joint got terribly sore. Something had to be done. Then I remembered Jerry Culberson had bought a bunch of spring dies from an old shop that had very long handles.

So I lengthened mine to 22" long, which gave me a smoother action and not such a violent vibration.



"A" Keep this distance, between arms about 1" high, so it will fit easily in hand.

I made my arms a 1/4" X 1" mild steel flat bar and tempered ends in a Sodium Hydroxide solution - which by the way has been outlawed by O.S.H.A. so be very careful how you use it - facemask and lots of ventilation.

"Grandpa"

Editors note: *"Damn, why didn't I think of that!"*

RIVET OR HEADING TYPE TOOL

by Clifton Ralph

A gentleman asked how I would forge a rivet with the power hammer. One way to do this would be to make a tool using a pipe and two pieces of round steel. Let's say we want to make a 1/2" rivet, 1 3/4" long. A 2" heavy wall pipe or bushing, should be large enough to control the alignment, take the force and absorb the heat, with little damage to the tool.

Cut pipe, 1 3/4" for shank, plus 3/4" for head, plus at least 1" for guide or 3 1/4" long.

Make a round with a 3 3/16" hole in the center, 1 3/4" long and 1/16" larger diameter than the

ID of the pipe. Bevel the edges on one end of this bushing. Heat the pipe and drive the bushing beveled edge down to the bottom of the pipe. You will need a spacer plug of some kind.

When it cools, the pipe will be tight on the bushing. If you want to fill the beveled edge with weld, okay, don't let the weld project above the base of the tool. Make a round top tool that will slide inside the pipe freely, and have a minimum amount of side movement. This tool needs to be 1" or more higher than the depth of the bottom tool, or 2

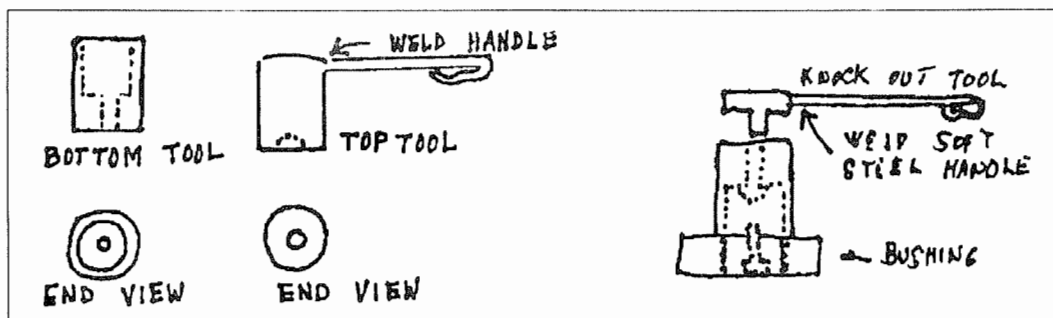
3/4" high. It has to project above the pipe enough for a handle or tongs. Bevel both edges of the top tool. This will allow it to go in and out better. It will cause the lines of force to be directly over the material to be headed, especially with worn dies on the hammer.

1. Heat treat and harden both tools and make them tough not brittle. If you can heat just a little more than 3/4" of the 1/2" x 3 1/4" rod.
2. Stick the rod in the tool cold

If the guide depth is too long it makes it more difficult to place the material and top tool into position and get the job done while the metal is hot.

This type of tool would work very well for rosettes. Just make the shape in the top tool, the opposite of what you want the rosette to be. Volume of material, shape, heat location, scale, expansion, shrinkage and tool tolerance are all critical in this type of forging. The round container is

strong and reasonably easy to make. It has good knock out support. This type of tool



end down. Place the top tool in the pipe and hit it down until the flat surface of each tool meets.

3. Remove the top tool, turn the bottom tool over, and center it over a bushing, 1 1/4" high.
4. Place the knock tool over the end of the rivet and punch it out.

You should have a pretty little rivet, with the head centered on the shank.

If you have plenty of space between the dies, you could make the pipe and top tool longer and you would not need a bushing to knock the rivet out.

works good for uniform heads or collars. For other shapes you have to have some type of guides to hold the top tool in one specific position in relation to the special shaped steel blank and the bottom tool.

Keep Hammerin'
Clifton Ralph

Re-printed from the Forge Fire,
Newsletter of the Indiana Blacksmiths Association
May, 1991

GRAMPA HERSOM'S APRON

Last year when I was at the Colorado Rocky Mountain School I was asked about my aprons I wear and how to make them so I also pass on the info to our members.

I bought a remnant of cotton denim and was able to make 3 aprons as drawn.

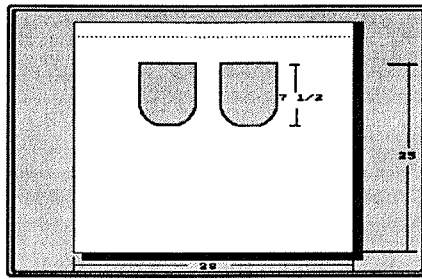
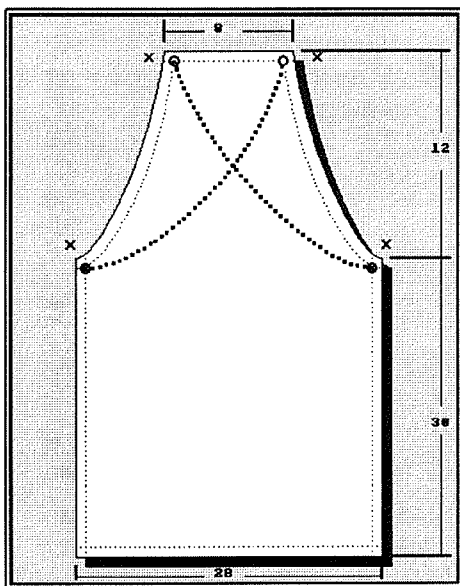
From another piece of denim I made a short apron that I use for demonstrations or when ever it is hot.

Unless I am doing a lot of big forgings or welding I never wear leather, just denim which is most of the time. I wear the long aprons for my general shop work.

Perhaps you can use this info for one of your issues.

Sincerely,
Nahum "Grandpa" Hersom

Use cotton denim for all pieces



Fold down 2" for belt

Pocket same as long apron

Double stitch with heavy thread

Be sure to use cotton so hot scale doesn't plop holes as polyesters do. Can be fire proofed with boric acid solution.

— ALL EDGES HEMMED —

1" at top & sides

1/2" other sides

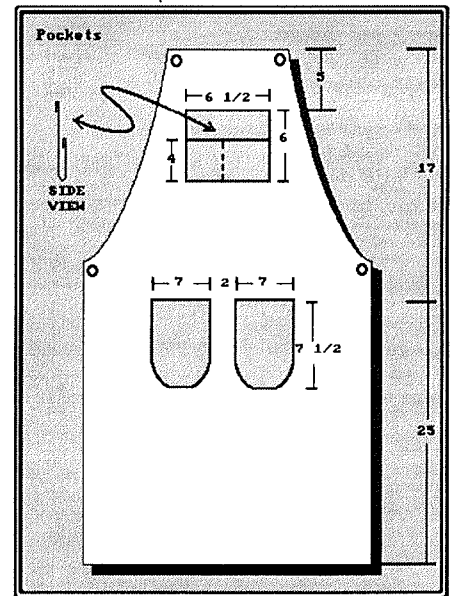
corners "X" re-inforced

for 3/8" gromets

1. Use 3/4" dress makers tape for sholder straps. Tape is knotted thru grommets to keep in place and goes across back of person.

2. Lower pockets hem 1/2" all sides & sew on with several rows of stitches. Round corners seem to last longer. Pockets set equal on apron vertical center line.

Dotted lines left are tapes long enough to tie in back at waist line. This puts weight of apron on shoulders instead of across neck.



Cut top pocket material 7 1/4" x 10 3/4". Sew spaces in 4" x 6 1/2" sections for pencils & scales, etc. Hem all sides 3/8"

"ADJUST ALL DIMENTIONS TO SIZE OF MAN, IF NEEDED"

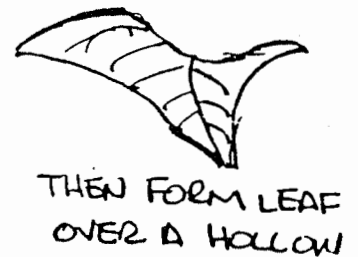
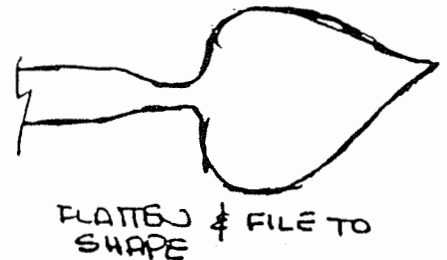
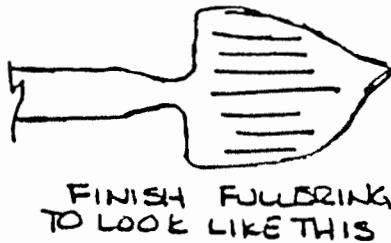
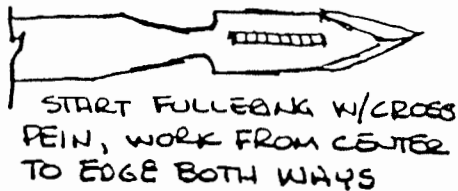
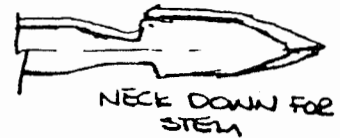
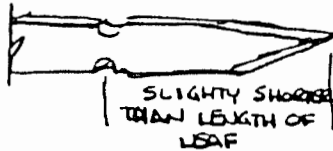
ONE MORE WAY TO MAKE LEAVES

From
Bill Hahn
Firelands Forge

Start with 1/4" x 3/4" or 1" stock, depending if you want a wide or narrow leaf. Point up the end on the diamond, then fuller both edges back from the point slightly shorter than the finished length of leaf desired. Reduce the shank behind the fullered area to a tapered 1/4" square then round up. This will be the stem of the leaf. Then get the leaf area good and hot, cross pean starting from the center and work both ways. Work the center first, the edges will come along quite well by themselves. Stay away from the

point, that will also come later. Once you have cross peaned to the approximate shape, flatten and then dress-up the edges with a file. Veining can be done hot with a veining fuller. Be careful not to cut too deeply, you just want to crease it. When the leaf looks good, cut it off and draw down stem. You can then heat up the leaf one last time and shape it up over a smooth-edged depression in a wood block or metal using a ball faced hammer.

From NORTHWEST OHIO BLACKSMITHS' Newsletter, Oct. 1990



THE TECHNICAL CORNER

Dear Editor:

In working with a propane furnace there is a totally different type of scale formed on the iron as from scale formed in a coal forge. The propane fire scale is hard, difficult to remove and tends to produce severe pitting.

Is there any source of information available that would help with this problem?

Paul Hinds
Milwaukie OR

Dear Paul:

There are two conditions present in any forge: heat and atmosphere. It's the interplay of these two factors that give all results, positive and negative. In a coal forge we have a relatively high temperature and an atmosphere of oxides of carbon. In a gas forge we have a relatively lower temperature and an atmosphere of oxides of carbon, oxides of hydrogen (mostly water) and a product called wet hydrogen.

The high temperature and intimate contact in a coal forge promote fast heating which reduces the time for scale to form. The carbonaceous atmosphere low in oxygen in a properly operated coal forge further reduce scaling.

In a gas forge the steel

takes longer to heat and thus may scale more. It's also necessary to balance the atmosphere for the desired result. A lean mixture promotes scale from excess oxygen. A rich mixture produces less scale but a lot of wet hydrogen which is a severe decarburizing agent. The latter is quite detrimental to tool steels. For tool steel a neutral to slightly oxidizing fire is considered best. For decorative work a decidedly rich mixture should be used.

There can be a number of causes for the condition you describe. The most common is poor mixture control or the ratio of fuel to air burned.

The forges with forced air blowers are generally easier to control. After adjusting to the approximate heat you require either the air or gas control should be adjusted to give the loudest "roar". Then it should be set so that a small amount of flame can be seen in the exhaust. This will be a slightly rich mixture. For a neutral fire adjust so the flames just disappear.

If the problem still exists I would check to make sure the flame is not impinging directly on the work. Until the combustion process is complete there is free oxygen in the mixture which can cause scaling. In a refractory furnace the flame should heat the walls of the furnace which

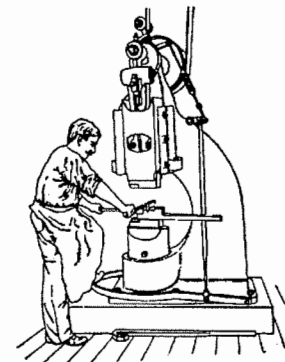
will incandescence and radiate infra-red and broad spectrum light. It is actually this radiation that does most of the heating of the work.

Other causes can be; too high a heat for the amount of work to be done to the piece, too many heats for the amount of work done or use of a high carbon or alloy steel.

Although a gas furnace is easier to just dive into and use than a coal forge, in the end you will find it requires every bit as much experience, care and attention as a coal forge. It is not a cure-all and it's unique character needs to be understood to get most out of it.

Hope this will be of some help to you. tech ed

If anyone out there has had similar experience and found solutions, let me know. There always seems to be several solutions to any problem. Editor.



H & K PUBLISHING
P.O. Box 284 Xenia, OH 45385

As a fellow ABANA member and blacksmith I think the people in your organization will be interested in the enclosed flyers.

The book is scheduled for Jan/Feb distribution and it looks good. Not only does it cover rebuilding the Little Giant hammer but it includes the only history available on the company and the founders. I feel certain that there will be information in there that even the most experienced smith will not be aware of. There was excellent feedback and response to the book and newsletter during the QuadState Blacksmith' Roundup at the end of September.

The newsletter starts in Jan/Feb but is designed to cover all makes of powerhammers both old and new. It will have articles on repair, use and history. One of the rumors you may have heard is that parts are available for the Little Giant hammer. This is true. Sid Suedmeier, 420 4th Corso, Nebraska City, NE 68410 (402-)873-4373 bought what was left of the trip hammer manufacturing operation. That occurred just this summer and he is making parts available on an application basis. Saw blocks are probably gone by now and will need to be recast. He does have the original pattern and is investigating the cost of new castings. He has offered to supply the date your hammer was made and who it was sold to if you supply the serial number to him via letter. Be sure to include SASE when making the request. Sid will be contributing to the newsletter.

I would appreciate it if you would share this information about the book and newsletter. I am soliciting advance sales and offering a discount on the book for this purpose through the end of December. Although I am not familiar to you I can supply references if you want them.

Richard R. Kern
Editor

REBUILDING THE POWERHAMMER
VOLUME I

Partial contents:

- Dismantling
- Rebabbiting bearings
- Hammer assembly
- Toggle arms
- Treadle assembly
- Adjustments
- Motor mountings
- Pictures & diagrams
- History of the Little Giant Co.

THE BOOK FOR EVERY POWERHAMMER LOVER

A detailed approach to rebuilding a powerhammer and showing how it's done. Includes methods and techniques. Plus the ONLY available history of the Little Giant Company.

Retail price to be \$29.95

Pre-publication offer

\$24.95

Postpaid USA - (plus \$1.00 outside US, US funds, S&H)

If ordered before Dec. 31,1991

Order your copy NOW!

by

RICHARD R. KERN

BI-MONTHLY NEWSLETTER ON THE USE, TOOLING, REPAIR, TYPES OF HAMMERS, BLADESMITHING, HISTORY AND PEOPLE ASSOCIATED WITH THEM.

YES I WANT TO SUBSCRIBE TO THE POWERHAMMER

@ \$12.00 FOR SIX ISSUES.

NAME _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

Membership Application
Mail to:

**Northwest Blacksmith's Association
C/O Tom Graham, Treasurer
PO Box 81041, Seattle, WA 98108**

Membership Application: New Renewal New Address?

Annual dues are \$15 and include a subscription to Hot Iron News. Please make your check to NWBA and mail to the above address.

Date: _____ Are you a member of A.B.A.N.A.? _____

Name: _____

Firm: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____



Membership Application for:

**ARTIST-BLACKSMITH' ASSOCIATION OF NORTH AMERICA
MAIL TO:
ABANA
BOX 1181
Nashville, IN 47448**

Membership in ABANA includes a subscription to the Anvil's Ring, member discounts at conferences and on back issues of the magazines.

Full time student -	\$ 25	Regular member -	\$ 35
Family membership -	\$ 40	Seniors over 65 -	\$ 25
Overseas member -	\$ 45	Contributory -	\$100
Public library -	\$ 25		

Name: _____

Street Address: _____

City: _____ State: _____ Zip: _____



P.O. Box 1181, Nashville, Indiana 47448
Executive Secretary, Janelle Gilbert

Office Hours: 7:30-11:30am & 1:30-4:30pm
Phone: (812) 988-6919

PRESIDENT'S MESSAGE

November 1991

Dear Fellow Blacksmiths,

In many parts of the country, the trees are displaying a panoramic view of color and the cooling temperatures invite us into our forges with renewed enthusiasm. I hope you are taking advantage of this wonderful time of year!

The election ballots are in and the final votes have been tallied. I want to thank all of you who voted within our pressing time frame. 24% of the membership voted this year with a total of 692 ballots that were postmarked by the October 10 deadline. The results are:

* Bill Callaway	628	Those that have an
* Toby Hickman	582	asterisk are the new
* Jim Ryan	560	ABANA Board Members
* David Norrie	551	and will join us at
* John Pollins, III	542	the November board
Joel Schwartz	477	meeting in Tipp City.

Congratulation to those who will be taking their places on the ABANA Board. Thanks to all the running candidates in this election. We would like to see more candidates on the slate for next year, so please be thinking about nominations from your chapter's group who might be interested in running.

The drawing from the ballots for a free ABANA membership resulted in a winner from Mooresville, North Carolina; Rick Hartline, a member of the North Carolina Chapter of ABANA and the Alabama Forge Council. Congratulations Rick! We have extended Rick's membership to include a free year of benefits and subscription to The Anvil's ring. Rick didn't think he'd ever win anything from a drawing but we're glad he sent in his ballot anyway!

There will be more news in the winter issue of The Anvil's Ring about the upcoming 1992 ABANA Conference being held June 18-22 at Cal Poly University in San Luis Obispo, California. Previews of demonstrators, lectures and events will give you an idea about this exciting and valuable opportunity next summer. We are looking forward to being within a ten minute drive of the ocean this time. You may want to consider ABANA's national event, located in an area of great sight-seeing, to be included as a part of your family vacation planning. If you think you may be taking family members to the conference, don't forget to renew your ABANA membership at the Family Member rate to get a discount at registration.

We will be giving you a summary of the ABANA Board Meeting in the next chapter mailing. Thanks to the ABANA Chapter officers who have given their input to the Chapter Liaison Committee for this meeting.

Warm regards,

Dorothy Stiegler
ABANA President

Mark your calendar, wax your boards and start saving up the spare change because the big waves are coming in next June! ABANA's international conference will be held at Cal Poly (California Polytechnic Institute) in San Luis Obispo, CA. The conference dates are June 18-22. Thursday the 18th is slated for arrival, registration, check-in, and welcome party. The program will run from Friday the 19th through Sunday the 21st. Monday the 22nd is departure day. While all the details of the program will not be completed in time for this issue, we can tell you that the conference committee is striving to bring forth some superb talent from around the world.



professional metals studio. He will be moderating panel discussions and leading workshops on design. Goro Hatanaka and Kotaro Kurata are two of Japan's leading smiths working in the area of architectural and sculptural commissions.

As a point of interest, George Dixon, chief blacksmith at Samuel Yellin Metalworkers, will be leading an ongoing, hands-on teaching workshop throughout the conference. The 17 permanent forging stations at Cal Poly will be made available for the workshop, making this a unique opportunity. As always, a broad range of programs and demonstrations is being planned, as well as interesting activities for

On the international front the committee has confirmed, to date, Manfred Bergmeister and Hermann Gradinger from Germany, Peter Parkinson from England and Goro Hatanaka and Kotaro Kurata from Japan. Manfred Bergmeister owns and operates one of the largest and most prestigious shops in Europe. Many of the major commissions which they produce for clients worldwide, are forged bronze. Hermann Gradinger, a renowned smith, as well as a professor of metal arts, is a leading designer in the area of forged lighting fixtures.

Peter Parkinson, a professor of design, also operates his own

accompanying family members. All this will be detailed for you in both the upcoming issues of the Anvil's Ring and in the conference information packets you will receive at a later date.

Located on the beautiful coastline about halfway between Los Angeles and San Francisco, San Luis Obispo is less than a day's drive from many of California's best vacation spots (Big Sur, Yosemite National Park, Disneyland, etc.) and only a half-hour drive from the outrageous Hearst Castle. So pack up the family and head for the beach!

1992 INTERNATIONAL ABANA TOUR TO THE LIGHT INDUSTRIES & HANDICRAFT FAIR MUNICH, GERMANY, MARCH 15 TO 22

The sixth ABANA tour in 1992 will be to Munich, Germany. It is designed for those that are interested in the business, as well as the technical aspects of iron work. The major focus will be the International Light Industries & Handicrafts Fair (Handwerksmesse). There will be about 1700 exhibitors, with 20% non-German. All aspects of the production and sales of wrought iron are covered. In addition Munich, while more famous for its beer, has a very high concentration of wrought iron work on public buildings and private homes. Manfred Bergmeister, who's shop we will visit, has put up many of the gates and fences

in and around the area. He will personally conduct a tour for the ABANA group. In addition, we will also see one or two other local workshops and some world famous museums. Hotel accommodations are presently planned in a small, recently built, Bavarian style hotel south of Munich.

Included in the price of the tour will be R/T airfare from NY, some meals, admission to the fair and museums, travel insurance. There must be a minimum of 15 people or the tour will be subject to cancellation. It is anticipated that the cost will be approx \$1500. See final tour offering and itinerary, now in preparation, for complete details. For more information write the address below or call (914) 739-5475.

SERIOUS INQUIRES ONLY, PLEASE!!!!!!!!!!!!!!

Leonard and Lilo Masters
PO Box 343
Crompond, NY 10517



WHAT'S THAT YOU SAY? - During last months Chapter calls, Doug Johnson, President of the Guild of Metal-smiths, reminded me of what should be a very important topic to us all...HEARING PROTECTION! It is something that may not be taken as seriously as it should be by some of us.

There was a time when I was just such a fellow. I considered hearing protection to be an uncomfortable nuisance. I worked in an industrial plant where the process machinery was really loud. At that time, rules regarding ear protection were rarely enforced in industry. I can tell you now, from my own personal experience: if you do not protect your ears, you will lose some (or all) of your hearing. My ears ring all the time, and the hearing I have lost will not come back. I now jealously guard the hearing I have left, up to and including wearing ear plugs on airplanes!

Please, do yourself and your club a favor - insist on hearing protection. If you are not quite sure that the noise is too loud - IT IS!

DO YOU LIKE WHAT YOU SEE? - Some folks call me a "safety nut". I make everyone wear visitor specs if they come in to the shop without eye protection while work of any sort is in progress. No exceptions.

I used to work with a guy named Walter, who truly was a "nut" on eye protection. I once asked him why, and he told me that he could only see out of one of his eyes! It seems that one day he was using a punch, when a small piece flew off and right into his eye. He said it was as if someone was very slowly turning out the lights. The entire process took about fifteen minutes, then total darkness. Only having one eye to see with has forever changed the way he views the world. Walter even wore safety glasses while eating lunch! I guess I couldn't blame him for that.

Please, do yourself and your club a favor - insist on eye protection. Just one incredibly brief moment can change your whole life. I want you to be able to look me in the eye, and tell me I'm a nut!

Alright, alright, I am now off my soap box!

OCTOBER CHAPTER CALLS - Thanks for all the great comment and conversation during last months Chapter cal-

ls. Some of the best ideas we have had come from these calls to interested and concerned folks like you. All comments are compiled and taken to the ABANA Board meeting in November. the Membership Services Committee (which includes this Chapter Liaison Committee) then figures out how best to handle what we have heard. The Membership Services Committee will also be examining how well it did those things it determined to do since the last Board meeting. I will tell you more about the Board meeting next month.

NEW BOARD MEMBERS - At the November Board meeting we will be welcoming new ABANA Board members Toby Hickman from California, John Pollins from Pennsylvania, and Jim Ryan from Iowa. There is plenty to be done, and I know they are up to the task.

Current Board members Bill Callaway from Arizona and David Norrie from Ontario were re-elected and will continue their work.

DEPARTING BOARD MEMBERS - Ward Brinegar from New Mexico will be missed. Ward is largely responsible for setting up the Chapter Liaison Committee, and later the Membership Services Committee. Ward was the principle "architect" for the methods used by these Committees to interact with the Chapters, and has been a driving force and advocate for the Chapters.

Randy Calhoun from Colorado will be missed. Randy has done a great deal of work on the ABANA Booth used at major trade shows. We are well past the orange crate and plywood stage - Randy came up with a very professional looking display that we can all be proud of, and coordinated it's movement around the country.

Mark Smith from Pennsylvania will be missed. Mark has put a lot of effort into both the Anvil's Ring Committee and the ABANA Five Year Plan. Mark has worked diligently on all the projects he has undertaken.

THANKS - To all the chapters that have sent their newsletters our way. Clayton Carr, Chapter Liaison Committee, Rt. 2 Box 2911, Kennewick WA 99337.

ITS' HAPPENING AGAIN!

IT'S THE J. CULBERSON WILD WEST SHOW &
NOVICE WORKSHOP!!!

JANUARY 24, 25, 26, 1992

OR

APRIL 3, 4, 5, 1992

ALL YOU CAN EAT!
LIVE ENTERTAINMENT!

DANCING GIRLS!

IF YOU FIT IN THE
CLASSIFICATION OF NO-VICE
YOU NEED THIS CLASS!

SEE WILD-MAN JOE
ELLIOTT & CRAZY
GENE CHAPMAN!

LIMITED OPENINGS,
SO SIGN UP NOW! (void where prohibited!)



Yes! I'm tired of being a no-vice. Sign me up today! I have enclosed
my check M.O. Cash Gold I.O.U.
for \$ 120.00 (such a deal!) January April

Name _____

Address _____

City _____ State _____ Zip _____

Next of kin _____ Sex Y N

Burial Preference Cremation Live Burial

Return to:

or contact:

N.W.B.A.
P.O. Box 81041
Seattle, WA 89108

Gene Chapman - Chairman
(206) 297-2495

The Original Drawing
of my Steam Hammer
sent out from my Science Book June 26, 1868

James Nasmyth

224/5294

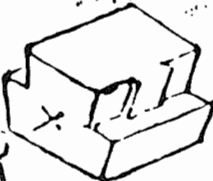
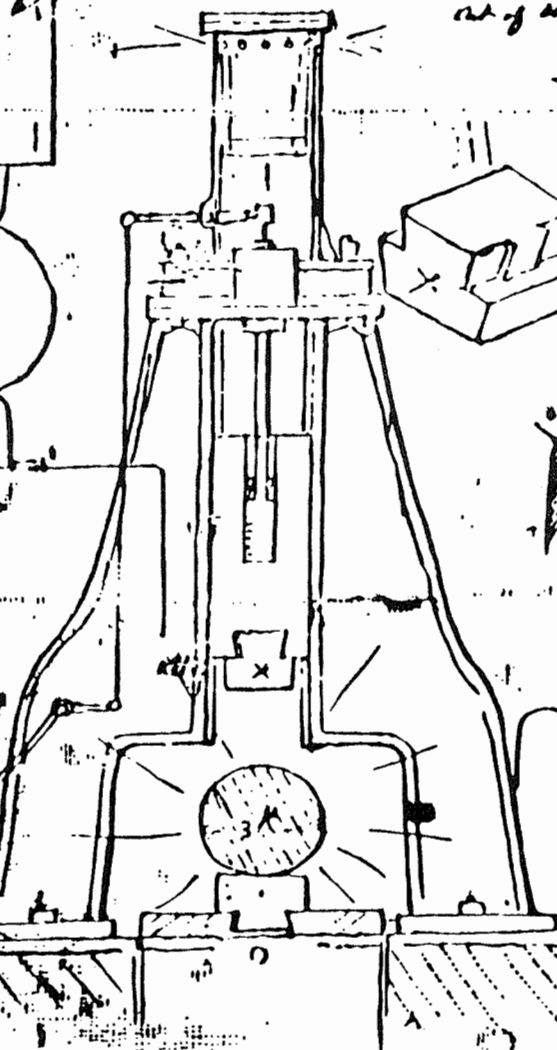
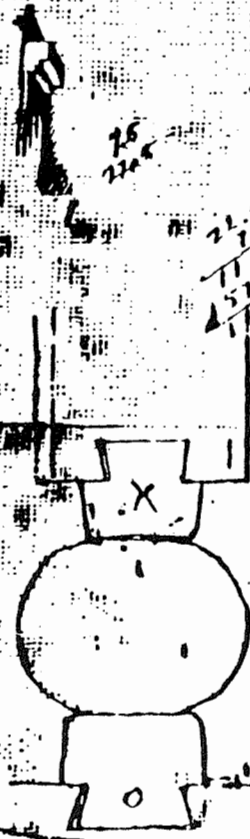
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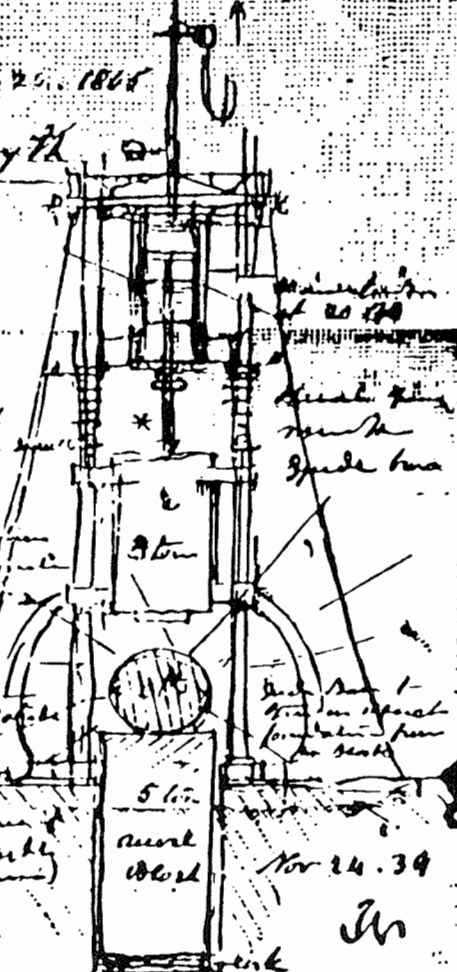
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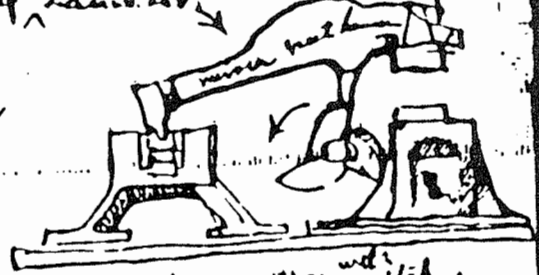
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Nov 24. 34

JN

First sketch of self acting steam
Tilt - feasible to all sizes
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of



all over new with
monsters



The old steam hammer

ACTIVITIES

HOSSFELD BENDER WORKSHOP!! WITH GRANT SARVER

THIS IS AN OPPORTUNITY TO LEARN SOME OF THE INCREDIBLE VARIETY OF THINGS YOU CAN DO ON A HOSSFELD BENDER. MANY OF THE TECHNIQUES GRANT WILL BE SHARING ARE THINGS HE LEARNED WHILE WORKING AT THE BREKKE CO. IN BALLARD. OTHERS WERE DEVELOPED OVER THE PAST TWELVE YEARS OF SUFFERING COMMONLY KNOWN AS SELF-EMPLOYMENT.

BRING YOUR QUESTIONS, PROJECTS, PROBLEMS AND IDEAS. A TIME FOR LEARNING AND SHARING. TWO DAYS OF INTENSIVE STUDY WITH A VERY RESOURCEFUL STUDENT OF BLACKSMITHING.

WORKSHOP FEE: \$60.00
DATE: JANUARY 18&19 1992
TIME: 8:00AM- GOD ONLY KNOWS
LOCATION: APEX FORGE
2311 ROSS WAY
TACOMA, WASHINGTON

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Return to: N.W.B.A.
P.O. Box 81041
Seattle, WA 98108

EDITOR'S PAGE

I hope you like this issue of the Hot Iron News. It definitely has a new look that I hope isn't too much of a change. Some of the ideas have been mine (all the good ones!) and some Grant's. I am enjoying the work involved in putting this together, and I have learned many things.

I appreciate and want to thank the people that have sent things to me - the articles, pictures, tips, hints - everything. With anything I receive, there is a 99.9% chance that I will print it. If it is from a reader, they must have thought it worthwhile and so will I. We have a wide spread of blacksmithing interests and abilities, every tip is worthwhile to someone. Remember, you found your tips helpful to yourself and now maybe your talents have grown greatly since then, but it was something you learned to help you progress. It will help someone else. The person just starting would love any and all tips and/or techniques.

As a way of thanking our gracious contributors to the Newsletter and Updates, I will be putting your name - once for each submission - into a hat for a drawing the night before the Spring and Fall Newsletters go to print. (That's so I can give the winner's name in that issue). The winner will receive (2) Conference tickets and (2) Banquet tickets. Send as many as you would like - it isn't the old "one entry per envelope, please". Send 50 in one envelope if you would like. I would like letters, comments on what you would like to see happening with the Hot Iron News and /or NWBA, articles, pictures (maybe of your own work?) Help me make this a great Newsletter.

Just your type(ist),

Margaret

COMING EVENTS

Jan 18-19, '92 Hossfeld Bender Workshop, Tacoma, Washington
Jan 24-26, '92, No-Vice Workshop, Jerry Culberson, Allyn, Washington
Mar 15-22, '92, ABANA International Tour, Munich, Germany
April 3-5, '92, No-Vice Workshop, Jerry Culberson, Allyn, Washington
April 24-26, '92, Spring Conference '92, St. Helens, Oregon
May? '92, Racer Forge Workshop, Darryl Nelson, no date yet,
June 18-22, '92 ABANA Conference, San Luis Obispo, California
July '92, Clifton Ralph Workshop, 3 days, Tacoma, Washington
Fall Conference '92, Barney Coski's, Tacoma, Washington
May '93, Spring Conference '93, Timberline Lodge, Mt. Hood, Oregon

THIS N' THAT

CLASSIFIED

BLACKSMITH WANTED - Established Blacksmith business needs full time help, good pay and benefits. Must be proficient in basic forging skills with a clear understanding of traditional joinery. A background in architectural work and its installation helpful. Please provide references and resume. Contact Heritage Forge, Corkey Storer, 19709 Maxwell Road SE, Maple Valley, WA, 98038. Phone: 206-432-1468, Fax: 206-432-4329.

FOUND: Small steel ID stamp "Bug" at Fall Conference. Call (206) 572-7460 and identify. I'll get it to you.

If you own Little Giant-Mayer Bros. power hammers you have a new supplier. Automotive Inc. (Big A Auto Parts) of Nebraska City has bought all of the parts, patterns, and tooling from the Little Giant factory in Minnesota. You can send the size and serial number of your hammer to find when your hammer was built and to whom it was first shipped. Just write Harlan (Sid) Suedmeier at 420 4th Corso, Nebraska City, NE 68410 or call (402) 873-6603 business hours or (402) 873-4372 evenings. Sid says he has parts, used and rebuilt hammers from 25-lb to 500-lb. He is also buying parts and complete hammers for reconditioning.

STERLING SILVER PINS. Limited quantities, NWBA Commemorative Pins, \$17.00 each. Contact Tom Graham, P.O. Box 81041, Seattle, WA 98108.

1992 IRONWORK CALENDAR. Twelve 8 x 10 black and white photographs of examples of both old and new British ironwork. Send \$7.95 each + \$1.50 postage & handling to Mac's Industries, P.O. Box 1140, Benton City, WA 99320. WA state residents add 7.5% sales tax.

WANTED: Will pay top dollar for old hunks of cast iron, any condition! Preferably with sufficient rust to prevent movement of of any of the working parts. Contact Geo Rolstad.

250# Little Giant. Late model, motor drive, excellent condition, \$2500.00. Contact Dave Thompson, 503-688-2348

ROOMERS

Rumor has it that **Jerry Culberson** has invented a "hot air hammer". Powered by the one thing Jerry has always had in great abundance, this hammer runs at an incredible speed. Says the inventor "every time I try to throttle it back my face turns red and my belt pops!" Kind of Like the Great Hulk I guess - Well, sorta anyway. According to Jerry most blacksmiths he has met will have no trouble operating this hammer at maximum efficiency.

One of our spies reports seeing **Smokey Adams** actually pounding on something. We are checking further to see if it was iron. Will report back later.

Ever wonder how **George Rolstad** stays in such great shape? Have you seen the obstacle course he climbs over every day? We won't even mention the workout he gets moving all that stuff around.

Understand **Nelson** was up at Silcox when he saw a rather disheveled looking doe come wandering out of the woods. Darryl swears she said "That's the last time I'll do that for two bucks!"

My favorite quotes. by **Joe Elliott**;
From Thompson workshop: "Tell me again why we can't use the arc welder, I forget."
(Sarver)

At fall conference: "We all demonstrate the same stuff, we just make different things"
(Funk)

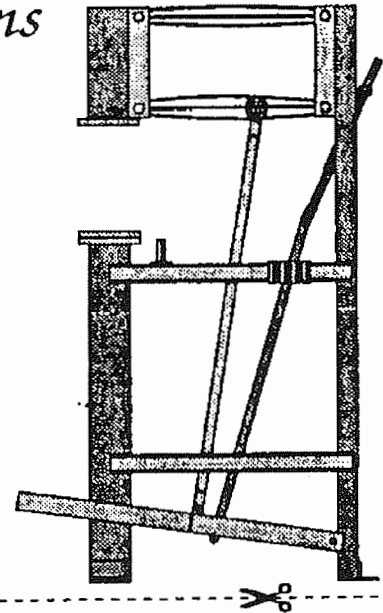
Little Tree Designs

28800 Pine Crest Road
Willits, CA 95490

TREADLE HAMMMER PLANS and KITS

designed by
Jere Kirkpatrick
Valley Forge & Welding
Willits, California

Take advantage of our quantity discount by getting five or more people together and having a Treadle Hammer making workshop.



Name _____

Address _____

State _____ Zip _____

Telephone _____

Make checks payable to:
Little Tree Designs
28800 Pine Crest Road
Willits, CA 95490
(707) 459-1934

No. of plan sets at \$12.75 _____

Number of kits at \$475.00 _____

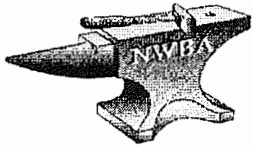
Five or more kits at \$465.00 _____

Subtotal _____

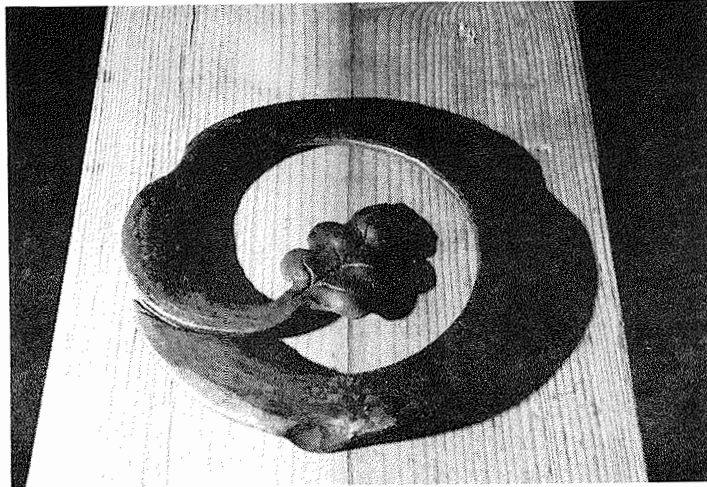
CA residents add 7.25 % tax _____

Total _____

Kits are shipped F.O.B. Willits, CA



Hot Iron News



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PHOTOGRAPH BY LLOYD HEDGLIN

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