

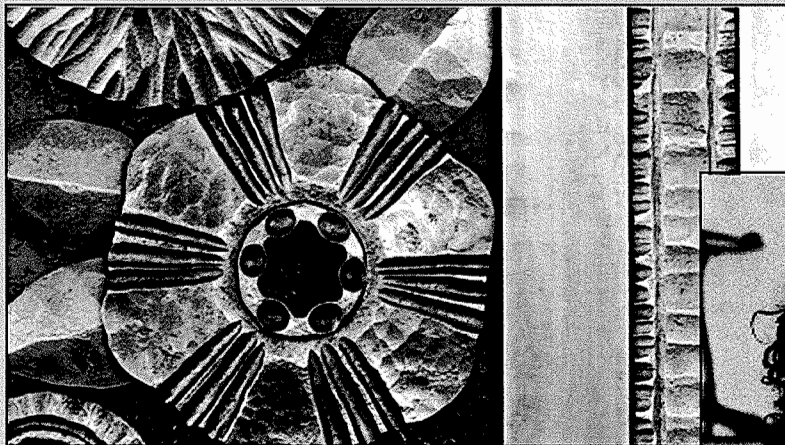
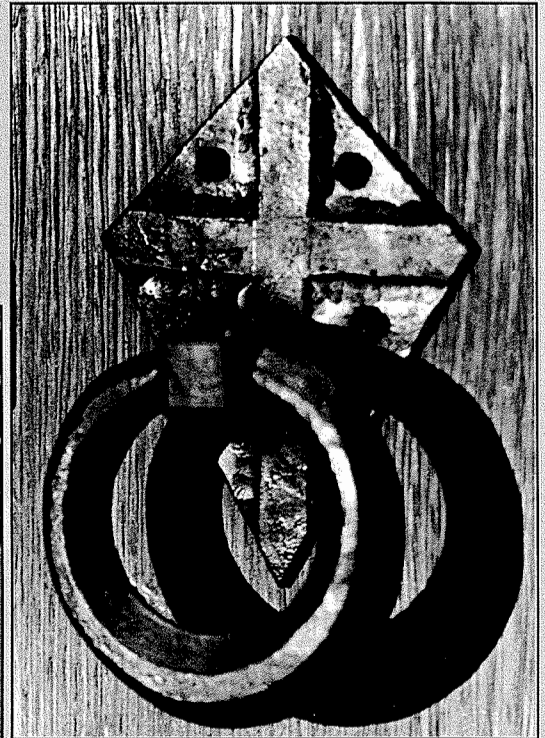
Hot Iron News

A publication of the Northwest Blacksmith Association
First Quarter, 2005 \$4.00

NWBA Spring Conference May 13-15, Corvallis, Oregon

Map, Schedules, Lodging page 25, 26

Featured
Conference
artist
Frank
Turley



Conference Demonstrator
Maria Cristalli and detail
from a fireplace surround



"The craft takes 60 years to learn, and then you die." Al Bart Memorial Grant recipient Tim Middaugh tells the story of learning to be a blacksmith. Page 31

Russell and Willene Jaqua write a letter or thanks to all members, page 17

Dear Northwest Blacksmith Association Members

A message from the president

As your elected representatives, the NWBA board is a group of nine volunteers who participate because of their love for and dedication to the art of blacksmithing.

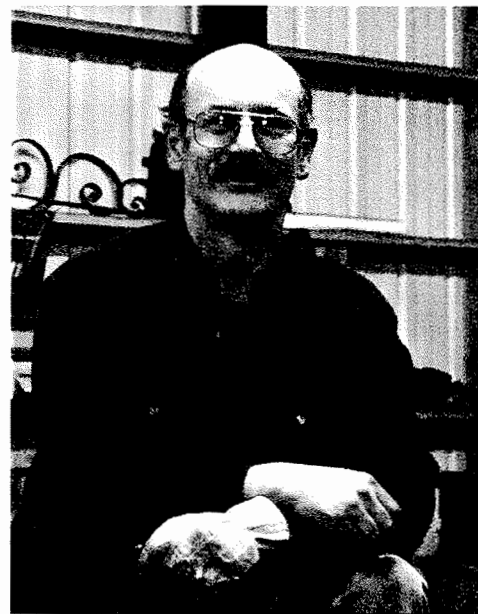
By the Spring 2005 Conference we hope to have a by-laws revision ready to be presented to you, the members, for a vote by early summer. If you have input please contact me, Ina Culberson or any other board member.

We are hard at work developing a policy and procedures manual to assist this group in continuing for another quarter century. This handbook will define responsibilities and establish guidelines to ensure conferences are well planned, that there will be quarterly newsletters, meaning four each year — one every three months — and encourage participation from you, the members.

In our recent election we had 127 votes cast out of over 500 ballots sent out. I received 123 of those votes. I feel this is a vote of your confidence. Your elected board members will always strive to make the necessary informed decisions to keep the NWBA at the forefront of blacksmithing groups today.

At the January 15 board meeting in Seattle, we voted to end our relationship with Jerry Kagele as editor of the Hot Iron News after he produced the issues we had paid him for (issue four of 2004 and issue one of 2005). There were seven "yes" votes to terminate his editorship, one vote to have him continue and one abstaining vote.

During the next week Kagele continued to make threats of legal action and at the January 29



continuation meeting in Olympia, a unanimous vote was made to terminate him immediately.

Kagele informed us that issue four of 2004 was at the printers and we agreed to let him publish it. At this point he owes the NWBA a refund of \$4,150.00 that he was paid for issue one of 2005. He has not done this and has refused to return any of NWBA's properties in his possession.

This decision was made for several reasons, but the most compelling was that during his seven years as editor, Jerry Kagele ignored requests for receipts and invoices from the treasurers of NWBA. We have no idea how much printing, mailing or other expenses have actually cost, an

NWBA Spring Conference

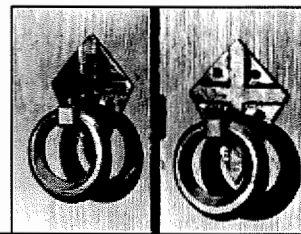
CORVALLIS — May 13-15

Guest Artists & Demonstrators

Frank Turley, Santa Fe

Maria Cristalli, Seattle

See Pages 25-26
For Details



President's letter, continued

untenable situation in the business of a non profit organization or in any business, for that matter.

Your elected board has a fiduciary responsibility to you, the members, and to the ongoing nature of the organization. Having nearly \$120,000.00 unaccounted for put us in a situation we could not allow to continue.

Each time over seven years we tried to gain any control over our organization's largest expense, Kagele has threatened us with legal action. He would not sign a contract with NWBA and has refused to send a blue line or proof copy to any board member.

Mr. Kagele has consistently refused to meet any criteria not his own. Publications are printed and mailed without an attempt to keep them on a quarterly schedule, costing NWBA thousands of dollars over the years to send out separate mailings for the conferences. We could not depend on getting four publications yearly, something members are told to expect when they join NWBA.

Our by-laws and past policy clearly put the responsibility for selecting an editor in the hands of the board and it is not only our right but our obligation to make this and other decisions. Consequently we have hired a new editor, Jim Almy, who has years of experience in the publishing business and is committed to delivering a timely publication without sacrificing quality or content of the *Hot Iron News*. Please give him a hand by submitting articles, tips, photos, classified ads and announcements or coming events.

We need your participation so please step forward and volunteer for committees, run for a board position, help out at conferences, write an article for the *Hot Iron News*, vote in the elections — Iraq and the Ukraine both have higher percentage of voters than we do.

Whether you agree or disagree with what your board is doing the way to change things is through active involvement. Please give us feedback on how you would like the NWBA to serve you and be prepared to be part of the solution.

Finally, please do not allow the current situation to detract from the fact that we have had some fine editions of the *Hot Iron News*. We the board would like to thank all who have helped make them possible.

The spring conference will be held in Corvallis, Oregon, May 13 through May 15 with Frank Turley of Santa Fe, New Mexico, and Maria Cristalli of Seattle as our featured demonstrators. The NWBA board will meet at 4:00 P.M. on Friday and the general meeting will start at 7:00 P.M. on Saturday.

Jorgen Harle hosted a workshop where a group of us fabricated anvil bases to be used in our hands-on workshop areas. It was a beautiful day on Orcas Island. The anvils are on their way and a down payment on the trailer has been made.

I hope to see them getting a lot use at future conferences.

Respectfully,
Terry Carson



Ripple Coffee Table

**Russell Jaqua
Pages 17-19**

**Art
Deco
Piece**



Northwest Blacksmith Association

Officers and Directors

President

Terry Carson

7926 320th St E
Eatonville, WA 98328
253-847-3235
tlcforge@aol.com

Vice President

Ina Culberson

220 E Cronquist Rd
Allyn, WA 98524
360-275-6769
oldcedarforge@wavecable.com

Secretary

Torvald Sorenson

58907 N 423 P.R. NE
Benton City, WA 99320
509-967-9402
e-mail: tovald-s@juno.com

Treasurer

Ken Williams

22908 Bassett Rd
Sedro-Woolley, WA 98284
360-856-6584
willynred@yahoo.com

Jorgen Harle

PO Box 341
Eastsound, WA 98245
360-376-5506

Kris Ketchum

11224-B 87th Ave NE
Marysville, WA 98271
360-658-0803

David Lisch

9239 8th Ave SW
Seattle, WA 98106-2925
206-919-5431
amlisch@earthlink.net

Renato Muskovic

19185 - 90 Avenue
Surrey, BC V4N 3X2
CANADA
604-888-9388
muskovic@hotmail.com

Jerry Zygmuntowicz

1648 Bailey Street
Philomath, OR 97370
541-929-3775
debnjerz@comcast.net

Committees

Standing Committees:

Publications/Communications:

Ina Culberson, Chair; Jerry Zygmuntowicz
Finance and Budget: Ken Williams,
Chair; Kris Ketchum

Member Services: Torvald Sorenson,
Chair; Renato Muskovic

Conferences/Events: Dave Lisch,
Chair; Jorgen Harle

Special Committee:

Bylaws: Ina Culberson

Subcommittees (to date):

Roster/Mailing List: Al Karg

Spring Conference 2005: Jerry
Zygmuntowicz and Mark Manley

Fall Conference 2005: David Lisch and
Jorgen Harle

Grants: Dave Lisch

Library: Looking for volunteer

Workshops/Education: Looking for
volunteer

Club Storage/Trailers: Jorgen Harle

Archives: Jack Slack, Ina Culberson

Insurance: Ina Culberson

NOTE TO ALL NWBA MEMBERS:

All Committees are in need of and
welcome committee members. Contact
any board member to get involved and
get more out of your organization.

The **Hot Iron News** is the official publication of the Northwest Blacksmith Association. Submission of articles, photos and other relevant materials is encouraged. All materials contained herein are copyrighted. Other **ABANA** affiliates, blacksmith associations and non-profit educational metals-oriented groups have permission to reprint materials in the **Hot Iron News** as long as credit is given to the authors, the magazine and the **NWBA**. The Northwest Blacksmith Association and this publication point out that blacksmithing is inherently a dangerous activity. You are responsible for yourself and your visitor for using eye, ear, respiratory and other protection as required, and use safe work methods. The NWBA, its officers, demonstrators, writers, editor and members specifically disclaim responsibility or liability for any damages, injuries, or destruction of property as a result of the use of any information published in the **Hot Iron News** or demonstrated at conferences or meetings. By requesting or renewing membership you are stating that you agree with this release.

NWBA Website at www.blacksmith.org, Kent Rudisill, Webmaster
For NWBA correspondence or membership write to:

Northwest Blacksmith Association

8002 N.E. Highway 99, #405
Vancouver, WA 98665

Annual Dues: \$35,
(foreign, \$39), and includes
a quarterly subscription to
Hot Iron News.

MEETING ANNOUNCEMENTS

Board meeting Friday, May 13, 4:30 to 7:00 p.m. at the Spring Conference.

General membership meeting Saturday, May 14 at the Spring Conference following the dinner hour and before the auction.

This is the time of year in my shop for some clean up, sorting and reorganization after the year end flurry of "got to have yesterday" deliveries. Attention to this task seems to allow more productive time as we ramp back up on the larger projects to start the year.

As this first issue of the *Hammer's Blow* speeds to the press, there are a few small items to share with you members as I clean off my desk.

One of the highlights of the past conference at Richmond was the different entries in the "Banners and Standards" exhibit. The creative talents and technical skills exhibited really showed that a little competition is a GREAT motivator of our ABANA Affiliates. The display area for the banners was a favorite of the camera toting crowd. Just look for pictures in the Winter issue of *The Anvil's Ring* (in the mail now) if you missed the display.

The NYSDB affiliate was the sponsor of the banner contest at Richmond, ably chaired by Al Butlak. I have received correspondence from Al that he has a group willing and able to repeat the "Banners and Standards" project at the 2006 ABANA conference in Seattle, Washington. Look for a news item from his group to your newsletter editor on the "competition" details. It is always fun to see the results of creative juices that flow as your group rises to the challenge. I look forward to see-

ing your affiliate's banner project in Seattle.

When your ABANA Board met in Seattle, one of the most important business items as usual, was ABANA's Financial Review and Annual Budget approval process. The annual dues structure was reviewed in relationship to its portion of membership income and expenses. After much soul searching, the board, rather reluctantly, approved an increase of basic annual dues to \$55.00, beginning on January 1, 2006.

The good news in the 2005 budget was pared to allow the present dues structure to remain until December 31, 2005.

And more good news...You may opt for a two-year dues renewal during 2005 at the existing dues structure. The first quarter dues notices are now hitting the mail, so consider opting for two years renewals as you send in your dues.

Well, off to sort out some more of the detritus in my shop. I REALLY wish I could find my favorite twisting wrench.....

Don Kemper
20100 NW 61st Avenue
Ridgefield, WA 98642
(360) 887-3903
dkemper@abana.org

Content

Members Comments	6 - 10	Al Bart Memorial	
Build a Ribbon Burner	11 - 14	Testimonial	30 - 34
Ina weighs in	15 - 16	Hey, Let's Make Hammers	35 - 37
Russ & Willene say thanks	17 - 19	Off Center Forge	38 - 40
NWBA is sued	21	NWBA Makes Anvil Stands	41 - 43
Conference Demonstrator		Shops and Money	44 - 45
Frank Turley	22 - 24	The Bender Bar Blues	46
Spring Conference	25 - 26	More Tips, Stuff,	
Conference Demonstrator		Classifieds	47 - 51
Maria Cristalli	27 - 29		

The argument as I see it

(A letter initially sent to Jerry Kagele and reprinted with permission as a member's comment.)

Dear Members:

I could not believe your article in the latest issue of hot iron news. Who are these people?! Not being privy to both sides of the argument, I'll address the crux of each argument, as I see it.

1) That HIN does not represent the NWBA. Sure HIN does not represent EVERY member's work in every issue.

However, I feel that it more than adequately shows who's doing what, and consistently shows something new that's happening in the NWBA membership. I'm especially pleased to see that works in other metals are receiving some ink as well. As a smith who's self taught at this point, of course I'd like to see more how-to's (and BTW, thanks for the how-to on the 90 deg bends, because I've

been driving myself nuts and wasting a lot of metal trying to figure out how to make a nice square) but more than a good how-to, seeing what others are doing and what inspires them, inspires me to try new harder things and expand my abilities and the quality of the work I produce.

2) That you are a poor editor. Frankly, this is an absurd notion and should be beneath even the most ardent critic to attempt to attack your editorial abilities and duties. Granted, the page transition in your photo essay in said issue (the essay at Fort Canby) may have been a little rough when the text spanned the binding, but aside from that the quality of photos and the article selections have been excellent.

I'm interested to know what the detractors have in mind for a newsletter. To that end I propose that we kill two birds with one stone. Let them have the website. It would need conditions, first that the "Newsletter" on the website be update no more frequently than the other issues that

the website deals with (or quarterly, which ever is more frequent. So if there is legitimately no new news in a 3 month span, they can still update their "newsletter"). This means that the For sale/wanted, events, Library, etc. must be updated before any work can begin on the newsletter. Second, the newsletter must be clearly identified as the Unofficial newsletter of the NWBA. Third it may not share titular components with the *Hot Iron News* (no "Hot Iron News On Line", for example. If they want separate, they'll get separate). Fourth, editing/publishing the NWBA website that is greater than the compensation that the HIN editor receives from NWBA. Which is to say, none. At a later date, should the website take on actual life, the issue of paying for BOTH services may again be raised. Further, as a member of NWBA I would like any offer of monies to any parties for "work" on the website be retracted.

Here it is in a nutshell. I think you're doing a hell of a job. The website sucks. WE need leadership to LEAD the NWBA membership, stop the rift from growing (over something like a newsletter?!) and at the very least let us vote on the issues at hand. You have the mailing list and the bulk mail permit (per the bylaws), if Mr. Carson won't OK an all NWBA vote, I think the permission of the VP should be sufficient.

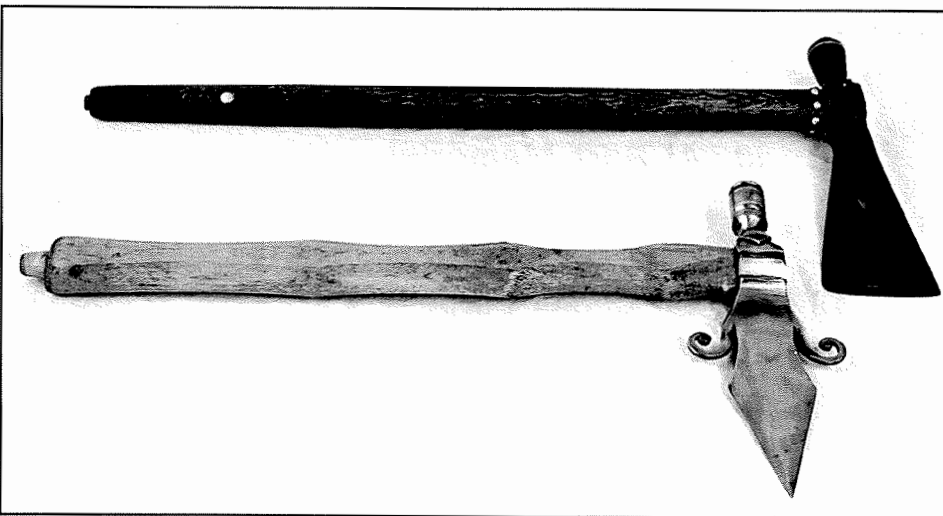
I've rambled enough.

Thanks for your hard work and hang in there.

Kristopher Skelton

Lynwood

engboy@yahoo.com



A pipe and a tomahawk by featured demonstrator at the spring conference in Corvallis Frank Turley.

Past editors weren't mediocre, didn't self-promote

Dear Members:

Woow, am I really one of those "vigilante minority gang of disgruntled, reactionary, apathetic, non-contributing, dissident, Mongol, cronies hellbent to destroy the *Hot Iron News* and launch a jihad against the Hot Iron News editor" or do I just want a regionally relevant and timely newsletter.

I understand the allure of using glossy paper, colored covers, electronic wizardry, but if the content is irrelevant and the newsletter is late... what good is it.

Maybe those "good ol' boy" editors (whose shoulders Kagele is standing on) didn't have it so wrong. Our past editors worked hard to grow and support our association and its sad that Kagele thinks so little of them as to call them "plagiarizing" and "mediocre".

They didn't have the glitzy, pretentious appearance, but they did promote conferences and upcoming events in a timely way. An important ingredient to

getting high attendances and revenue.

They were never used for self-promotion or personal agendas such as this last newsletter. For an editorial to state that "its not about me (Kagele)" it sure seemed to be all about him. I did this and I did that, mixed in with a bunch of "legalese" doesn't make it right. And what does "assert my legal rights... I intend to exercise those skills (i.e. as a lawyer)... whatever steps are necessary" mean.

Sounds like he's posturing himself to bring lawsuits against the NWBA. I would suggest that members do a Google search on Kagele to draw their own conclusions about his intentions. (I found Communities for Lawyer Ethics web page to be most interesting).

Contrary to Kagele's statement that I don't "want or understand change",

I really do want change. I applaud the long overdue actions of the board in terminating the editor. Let there be a flash and him be gone.

Proud member of the "Founder Faction".

Joe Elliott

Redmond, Oregon

Editor lacks sense of propriety

Dear Members:

I received and read the latest issue of the NWBA magazine today.

To say that I am disappointed at the back stabbing and pettiness currently going on regarding the magazine content would be an understatement.

Character assassination and the attempted justification by the editor is completely uncalled for. I do not know either party personally, the



Edgar Brandt inspired fireplace surround by Maria Cristalli, featured artist who will be demonstrating at the Spring NWBA Conference in Corvallis May 13-15.

Members Comments, cont.

politics of either faction, but feel the editor lacks a sense of propriety.

This kind of attack on one of our members using the NWBA magazine in a one-sided forum is unjustified and reprehensible. The editor owes an apology to Mr. Nelson and the NWBA.

The kind of divisiveness exhibited in the current issue of the magazine will only do harm to the hard work and good will given freely by our members.

I call upon the president of the association to institute changes to promote the well being of the association.

John Emmerling

Gearhart, Oregon

gearhartironwerks@direcway.com

Trust board members to make right decision

Dear Members:

As a long time member of the NWBA I feel a need to respond to Jerry Kagele's writing in the last issue of the Hot Iron News.

First off I do not know what all transpired at the last board meeting nor do I really want to. As a member of the NWBA I feel my vote for the board members reflects my trust in them to make management decisions for the good of the association. I trust the board to hire and fire at will those subcontractors as they see the need.

In my opinion this means the newsletter editor as well as caterers for conferences, demonstrators, T-shirt printers, insurance agents, and basically those who provide any services needed by the association.

I do not think there is any way the

general membership can have the working knowledge to make these decisions and I fully trust the board to have the best intentions of the association in doing so. If I feel I have been misrepresented by the board I do have the ability to cast my vote differently the next time around.

I find it unfortunate that the newsletter was used by Jerry Kagele to attack the board in such a manner as he did. I would assume that as a



Commemorative hammer by Tom Joyce. Making hammers article by Ike Bay on page 35.

subcontractor he would accept their decision and we could move on. Since that was not the case it seems that the board has no alternative but to respond to Jerry's allegations and have a full disclosure to the membership as to why Jerry was asked to resign or be fired. I myself am not sure which was the case.

I do know that if the board does not respond with full disclosure there will be ongoing gossip and unrest that can only serve in a negative capacity.

I for one support the board's decision to replace the Hot Iron News editor. I hope that all who received the last issue noticed it arrived the second weekend of February '05 yet was dated as the fourth quarter of '04. In it Jerry states that only 15% of the NWBA membership signed the petition asking for a new editor. It is my understanding that only 20% of our membership voted in the last election. If my math skills are correct then this means 75% of the number of votes cast in our last election signed a petition asking for a new editor.

I do not know the fine print of the editor's contract, but I do know what I expect. I expect four issues per year, and I expect the issue preceding the spring and fall conferences to arrive in a timely fashion before those conferences with information about the demonstrators and with accurate information as to the dates and locations.

I do not need or expect to know the behind the scenes problems between the board and the editor. It is now obvious for all the membership to see there

were some, how many and to what extent we do not know. What were they?

I have trusted the board to make these decisions. Jerry feels he was wronged and has gone to the general membership with his grievances. For the well-being and healing of the NWBA I think it is best for the board to inform the membership why Jerry was dismissed.

Once the facts are disclosed we can put it behind us and move on.

I was very saddened to see Jerry

Kagele's personal attack on Jerry Zygmuntowicz and Darryl Nelson. I have known both of these men for decades and have always admired them both for their integrity. I have no reason what so ever to feel that their actions as well as the rest of the board came from any place other than what is best for the NWBA.

I applaud and thank all of you on the board for your donations of time and energy to the association. I trust your decisions but feel a response to Jerry Kagele's last editorial should be made to the general membership. It will help bring understanding to the difficult situation that has the potential to polarize and erode the NWBA.

Thank you for your time.

Roger Olsen
erik@methow.com

Support Board 100%

Dear Members:

I support the NWBA board decision to replace the editor 100%.

My opinion is the recent *Hot Iron News* "Editor's Notes" comes across as the whining of a crybaby as I read it.

The man brings dishonor to

himself.

I hope we have a new editor soon!

Rick Leeson
Custer, Washington
BlacksmithRick@aol.com

Fine smith's work was not being acknowledged in newsletter

Dear Members:

Drama.

Just what a blacksmith newsletter needs.

What's next, fashion tips?

Of all the ways to waste expensive newsletter space, airing dirty laundry has got to be the most ridiculous. And, the editor knows many ways to waste space — in the winter issue of our newsletter over a dozen pages were totally dedicated to the editor's own private agenda.

Those pages could have been dedicated to content of interest to our membership. For example, some of the fantastic forging tips from those "Good ol' boy newsletters" that the editor derides.

Since most of our membership do not get to see these gems of knowledge that are freely offered to

other ABANA affiliates, they would be amazed at the quality and quantity of information available. The editor knows that reprinting these articles would not constitute plagiarism (no matter how you misspell it). Just read our own disclaimers in the front of *Hot Iron News*.

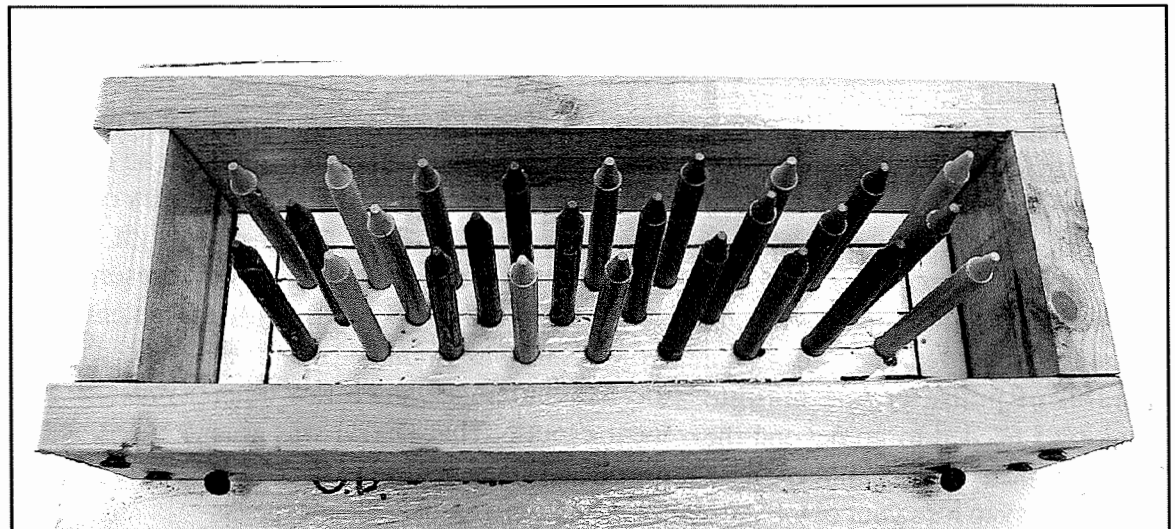
It would be easy to go on about Kagele's rant and the volume of misinformation it contained, but it would not address the main issue.

To me, the main issue is whether the members of the NWBA get what they want from their newsletter. Do we need a high gloss fifty plus page opus to "the higher theoretical plane" of forging? Could we "celebrate the culture of iron" and still have content that would be of interest to, oh I don't know, a BLACKSMITH maybe?

If you do the math you will quickly realize that the *Hot Iron News* is a very expensive publication. Do we get our money's worth? Would we be better served to have a more down to earth newsletter that focused on events, information, and news of the Pacific Northwest?

After all, ABANA's two publications cover all the national events. It is irritating to receive

Looks like
crayons in a
form, real
blacksmiths
immediately
recognizing
what's going on
here. Everyone
else can turn to
page 11.



Members Comments, cont.

Anvils ring one day and then get the NWBA newsletter that has all the same pictures in it the next day. Don't you ABANA people talk to each other?

The NWBA has in its membership some of the finest smiths in the country doing work that needs to be acknowledged. It is truly a shame that they cannot get their work published because of who they know or don't know, who their friends are, or because there isn't enough space between the redundant ABANA information and the whine and cheese.

I have talked with many members who have made submissions of their work to the Hot Iron News with no results. I have myself. It would be easy to develop a "why bother" attitude when your major projects are snubbed in favor of some neo-sophisticate's underexposed travel photos and really bad prose.

As one example of opportunities missed, I offer David Tuthill's project for the San Francisco Botanical Gardens, a major project by anyone's standards, which involved several members of our association and received no mention at all in our magazine. To see the superb design and forge work that went into this project, and to see a shop so well tended and active, is an education unto itself. It would have made a great article for the newsletter.

Like Jerry, I was an "award winning editor" and published a national newsletter. In reality, I was just a small fish in a small pond and at one point I let my ego and a handful of praise delude me into thinking I needed to go beyond the stated purpose of the publication.

It is so easy to lose your objectivity

when the content is yours to choose. Even a small newsletter needs an editorial board to maintain focus.

In a disgusting and very public display of tantrum, Ol' Joe Humble has embarrassed himself, our organization, and shown a complete disdain for his fellow members and the very purpose of their endeavors. No amount of legalese, bluster, self-promotion, half-truths, or exclamation marks can hide that fact.

Proof in point is the fact that he has managed to put the very existence of the NWBA in jeopardy in terms of our tax-exempt status, just to satisfy his wounded pride.

It is to the board members credit that they stood together and called the bluff of an editor whose personal agenda included the threat of legal action if anyone tried to take away his toy. The board is a very good cross section of the membership who voted overwhelmingly to replace the newsletter editor.

The editor's animus toward Darryl Nelson is quite clear.

His argument is that the founding fathers of the NWBA are a minority who are afraid of change. Why does he think that? Darryl is obviously not afraid to change newsletter editors.

I can't think of anyone who has devoted more to this organization than Darryl and he has only the good of the entire organization in mind when he raises issues that would never be printed in the newsletter.

The petition for a change in newsletter editors was politely worded and was circulated openly at the fall conference and a few other local events. That Darryl was able to collect fifteen percent of the club's roster in such a casual manner speaks

loudly, especially considering the low attendance at conference.

I'm having a very hard time envisioning our present board as a "vigilante group" that doesn't have the best interests of the NWBA in mind.

Kagele knew that a simple ballot referendum on his dismissal would have been to his advantage. If the membership had only the one-sided diatribe presented in the latest issue of our newsletter, they would not have been able to make an informed choice.

Fortunately, we have a first class board of directors who can make informed decisions for the good of the NWBA.

Mike Neely

Keep up the good work

(A letter originally sent to Jerry Kagele and printed here by permission.)

Dear Members:

I just wanted to send you a note of applause and express gratitude for your great efforts in producing such a fine publication *Hot Iron News*. In talking with other active and full time blacksmiths NWBA members here in Boise, we are of the same feeling, that you are doing a fantastic job. I have read other chapter news letters, and they certainly don't come close to the high standards of outstanding presentation, and thoroughness of content of the HIN.

Keep up the good work, we are with you!

Rick, Mary and Hallie Toews

Build a Ribbon Burner

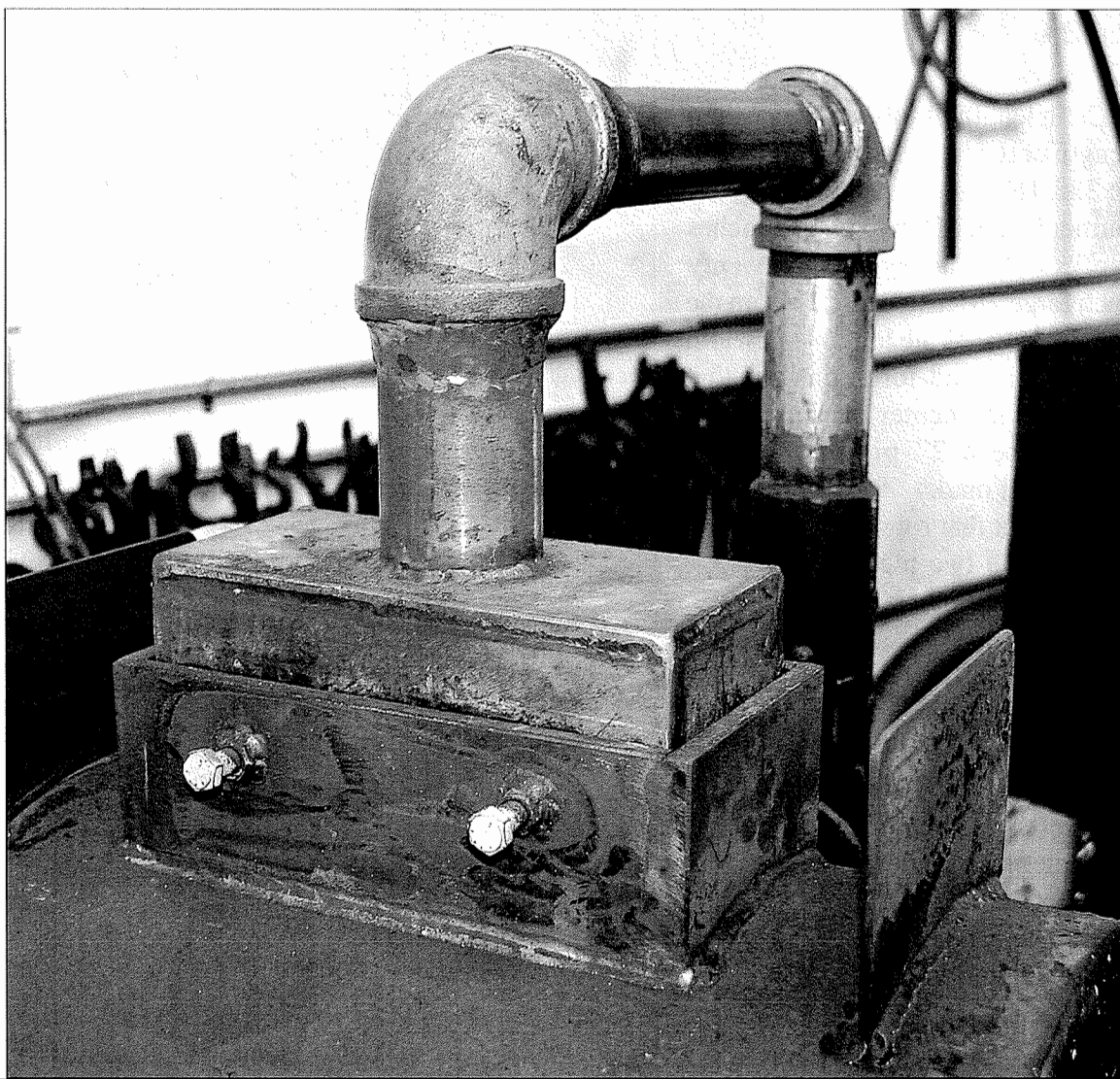
*by John Emmerling
Gearhart Ironwerks
gearhartironwerks@direcway.com*

About five years ago, a glass artist purchased the building next to mine and set up his glass blowing studio. Since glass blowers use copious amounts of gas and efficiency is paramount, I was immediately curious to see how his furnace and glory hole were heated. He showed me his ribbon burners and gave a hand in making my own.

Using a ribbon burner has improved the performance of my forge immensely as the heat and gas efficiency are truly amazing.

For those of us who prefer the control of a blown forge, a ribbon burner is probably one of the most efficient and quiet. The beauty of this burner is that

Take a box of crayons, the advice of a glass blower and build yourself a more efficient furnace.



it can be made in any configuration depending upon the size and shape of the heat desired. There are no hot spots as in a venturi burner forge and combustion is complete at the burner and not dependent on the swirling motion of a blown pipe forge.

The forge itself can be made in any configuration...pipe, tube, fire brick or just about anything one wants to heat steel in.

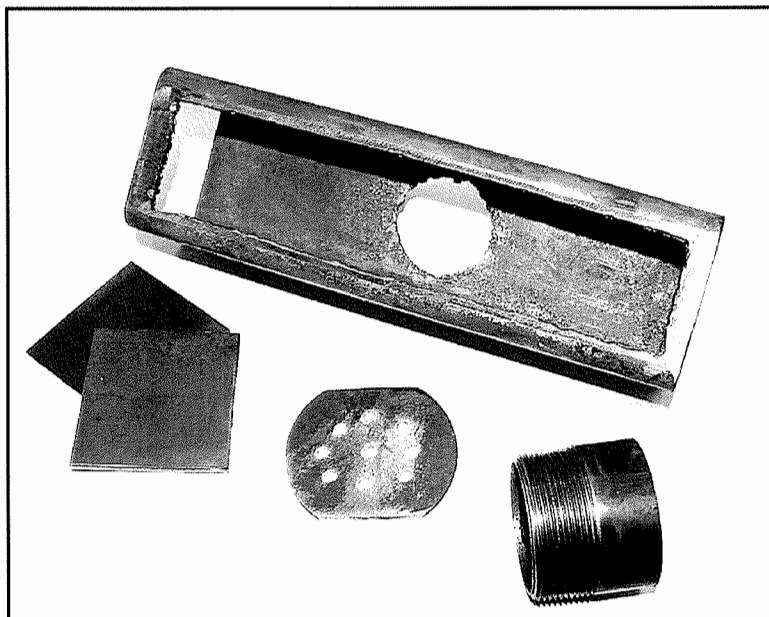
The ribbon burner can easily be built from materials found in most shops or obtained locally. The castable refractory used in the burner can be purchased in a 50 pound bag, which is enough to make many burners.

Step 1

Cut a length of tube to the desired length of the heat. In this case I used 3x3x3/16" by 10 inches long. (A burner length of ten to twelve inches works well in an eighteen to twenty inch forge.) Measure in 1/2" from the outside edge of the length and width of the tube and torch cut out that piece. In the center of the reverse side, take a 2" pipe nipple and mark and cut out that round.

Next, cut two pieces of 3/16" flat stock for the end caps. The last part is the baffle. I used a 3" diameter punching and ground the edges flat to fit the inside diameter of the tube. Any piece large enough to cover the hole will do. Drill several holes in the baffle to allow some air to pass through.

Fig 1



Step 2

Weld in the baffle on the pipe side of the tube first. It should be welded in 5/8-3/4" up from the opening to allow some of the air/gas mixture to go through the drilled holes and the remainder to circulate to the edges of the burner.

Next, weld on the pipe nipple and end caps. The end caps can be flush or inset. Either way, grind the welds flush (for mounting later). Make good welds as no air should escape.

Fig 3

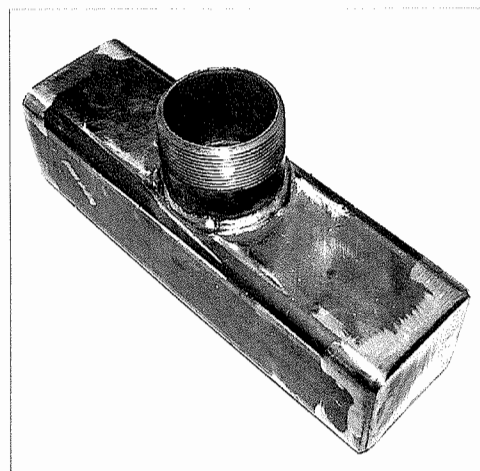
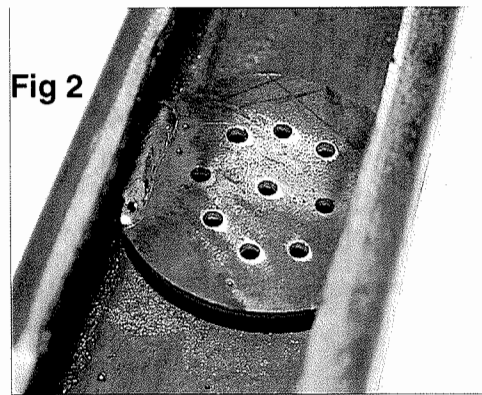


Fig 2



Step 3

Find a piece of 3/4" plywood that is several inches larger than the burner and trace the O.D. of the burner on it. Measure and mark the O.D. of the cutout as well. On this burner the cutout measures 2"x9". I used 1/2" spacing between the rows of air holes and 1" between the holes. Alternate holes and rows. (Fig 4)

Step 4

Buy a box of Crayola crayons and remove the paper. (A utility knife works well.) On a drill press, drill holes in the marked plywood to accommodate the crayons. Usually a 5/16" or 25/64" hole will work. The crayons should fit snug in the holes and the hole depth should be about 3/8" deep. If your drill press has a stop, set it and keep the holes consistent.

The dam for the castable is made from 1"x3" (3/4 x2 1/2"). Cut and screw together the

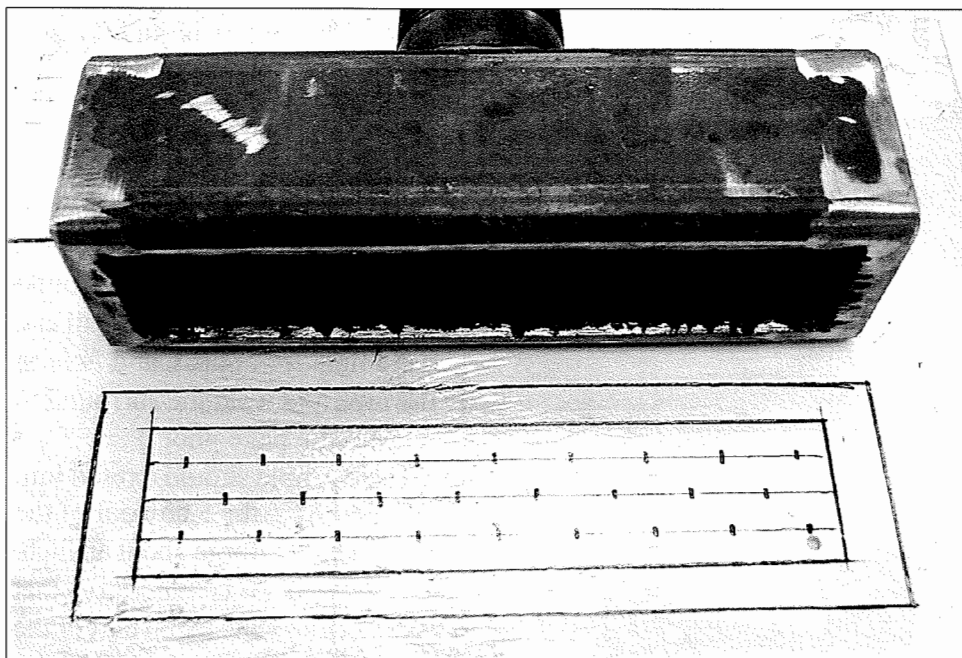
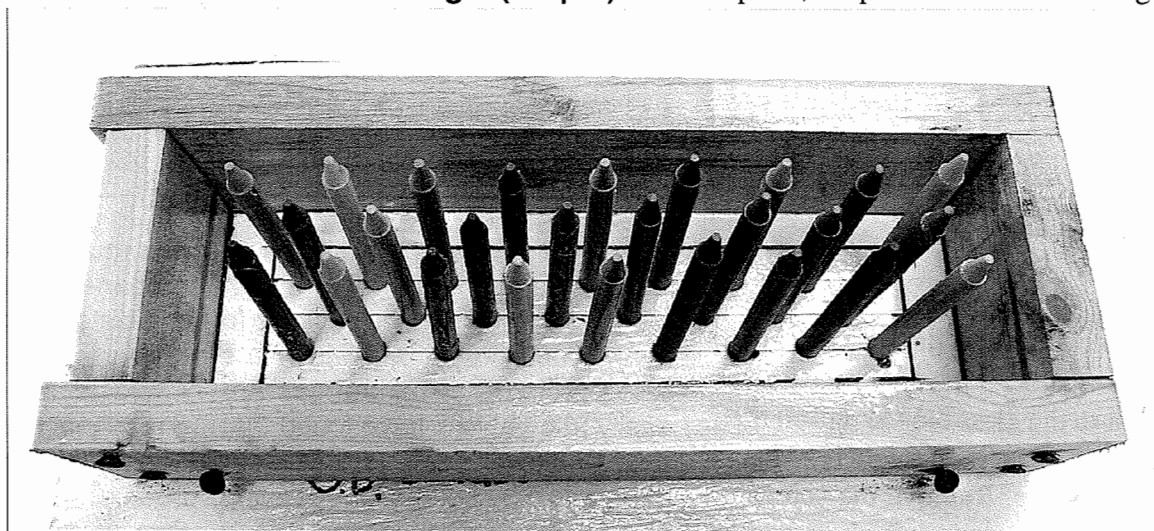


Fig 4 (Step 3)

pieces to the size of the exterior of the burner. Attach the dam to the plywood with screws. (Fig 5)

Fig 5 (Step 4)



Step 5

On the burner, tack weld on both sides a stopper (which will be removed later) $3\frac{1}{4}$ " up from the opening. (Fig 6)

The stopper allows the burner to only penetrate the castable $3\frac{1}{4}$ " in depth. When cured, the castable will be locked in place in the burner body.

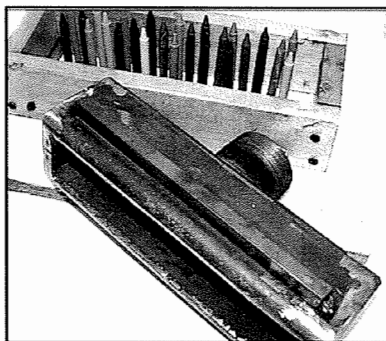


Fig 6

Step 6

The castable refractory I use is Mizzou or HPV-ESX castable, both of which are purchased at Harbison-Walker in Portland, OR. (www.hwr.com). They come in 50 lb. bags and cost approximately \$35.00. Other high temperature refractories can be used.

Your local refractory distributor or ceramics shop should be able to cross reference brands.

Mix well with water to the consistency of peanut butter. Too much water (concrete consistency) will make a weak burner and cause cracking. Mist the inside of the wooden dam with WD-40 as a release agent. Using your fingers or a spoon, drop in the mixture taking

care not to break or loosen the crayons. Fill the dam nearly to the top and allow for some displacement. Straighten the crayons as necessary. (Fig 7)

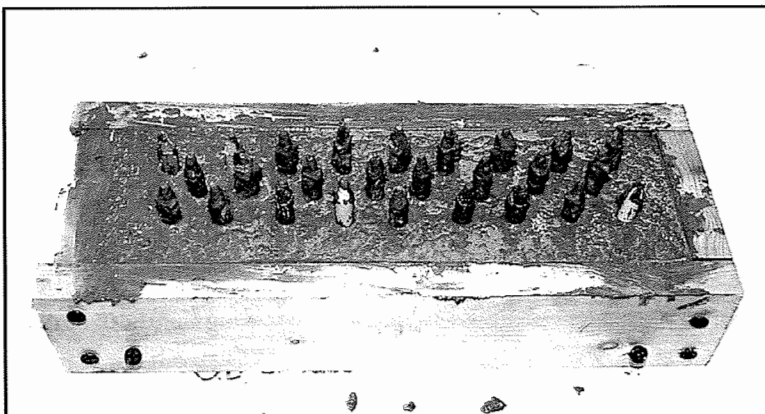


Fig 7

Center, and insert the burner into the dam to the stopper depth. Lightly shake the plywood to settle the castable around the inside edges of the burner.

The casting is now complete. (Fig 8)

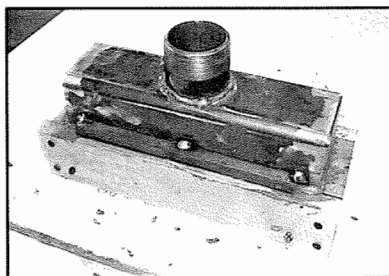


Fig 8

Step 7

Allow several days setup time in cold weather. I take my burners next door to the glass blower and sit them by his furnace. Overnight is adequate in that case. Remove the screws to the wooden dam and plywood and with a screw driver/chisel, gently pry the sides away. Grind off the two stoppers. Then, lay the burner on its side on the edge of a table (with the castable supported by the table) and tap the plywood to break the crayons.

Remember, the castable is still green and care must be taken in handling the burner.

I like to drill out the crayons using an undersized bit in the drill press. Burning them out in a coal forge is

an option, but it is smelly and messy. (Fig 9)

Step 8

The burner mount depends upon your forge configuration. For a pipe forge, construct a surround of 1 1/4" x 2" flat stock and drill and weld nuts for bolts. Cut a hole in the pipe and weld the surround to it. (See title page photo)

The castable should extend into the Kaowool of the forge about an inch. It is imperative that the metal part of the burner NOT be inside the cavity of the forge. This burner can be mounted in any position on the forge.

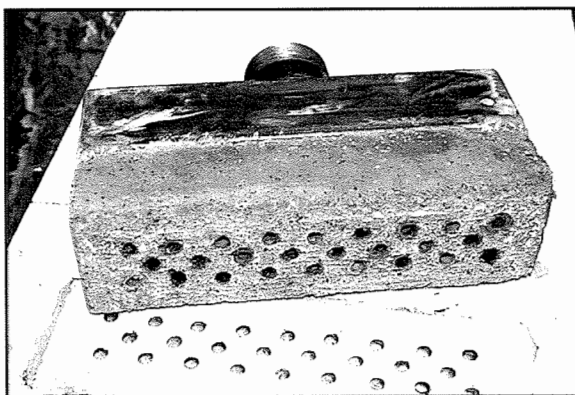


Fig 9

Notes

The first several firings should be short in duration and not at a high temperature to allow the castable to cure. Once cured, welding heats using propane or natural gas are easily attainable. I have found that a large blower (mine is a Centaur forge with a Baldor motor) operating at capacity in combination with a gate valve to reduce the volume gives the most control. Since gas pressure is not as great an issue when using propane (as in a venturi burner), an orifice of 1/16" is adequate. With natural gas, 1 1/4" seems to work well for me having 2 lbs. of line pressure. As a rule of thumb, natural gas should be introduced into the air line at a distance of at least nine times the diameter of the supply pipe. So, a 2" pipe times 9 equals 18 inches

minimum from the burner. Since propane mixes more readily with air, the distance can be shorter. As the burner is long in relation to the forge, I weld heat shields on the pipe to limit direct heat to the ends of the burner. Longevity of the castable depends upon usage and abuse. My forge run time averages twenty-five hours plus per week, and that often includes on and off operation several times daily. Expansion and contraction of the burner ultimately takes its toll. The castable in my original nine inch long burner has been replaced once in the past five years. Recasting the burner is simple and quick if you keep the wooden pieces.

Finally, safety comes first. Put on your safety glasses and turn on the air prior to lighting the forge.

Happy Forging,

Reorganize, Restructure, Revitalize

3 R's for 2005

by Ina Culberson
NWBA Vice President

My first task as NWBA Vice President was to present a "Vice President's Report" at the Board Meeting on January 15, 2005. I'd like to share that report with you.

As the newly elected Vice President for NWBA my first responsibility is to embrace the position and its duties so that I may best serve the membership.

As an under-study for the presidency in 2006, I take this role very seriously and to that end have invested many hours in study and research, in addition to my years of observation.

My study and observation unfolds two dynamics: One, the

NWBA is a great organization providing avenues for anyone who wishes to learn and to participate in the art and craft of blacksmithing. It has grown from a small charter group with a vision in 1979 to today's membership of over 500.

I have greatly enjoyed my participation in the group over the past 18 + years and now I am proud to represent the membership as an officer on its Board of Directors.

On the other hand, I note some grave concerns: As an IRS designated 501-C-6 organization and as a state non-profit corporation, the NWBA has glaring holes and lacks documentation in its operation and function. In my course of study I have asked for copies of past

minutes; the Articles of Incorporation; the bylaws; financial particulars; a list of committees, their structure, purpose and members; copies of insurance policies (I've been asked and accepted chairmanship of the Insurance Committee), etc.

Most of what I've asked for isn't available upon request. Some of what I had been given was in fact not the "real thing" but rather someone's recall—or I was told "this is how we've been doing it

for years". This is totally unacceptable to me and, in fact, is illegal in many instances.

We have some major issues confronting us today that, if our by-laws, policies and procedures were in order and in writing, would not be issues.

This is a sad state of affairs.

I don't purport to have all the answers (no one does). BUT, as an officer of the board I am willing to pledge and carry through on a commitment to get this organization on legal, financial, auditable footing.

*...a committment to
get this organization
on legal, financial,
auditable footing.*

I operate from this standpoint: responsibility and accountability.

A 501-C-6 organization and a state non-profit corporation, i.e., the NWBA, must operate according to the law. Period. I believe in following the laws of the land and as vice president of this organization I have a duty and responsibility to ensure that structure is in place for proper, legal functioning.

We will all need to embrace change and make a contribution, collectively and individually. We



cannot continue to be irresponsible and disregard the law. Change won't be easy; it will take time; it must be done."

Two recommendations were made into motions and adopted:

1) The General Membership and the Board of Directors meetings of the NWBA be conducted adhering to Robert's Rules of Order.

2) The 1996 Bylaws of this organization be reviewed and amended by establishing a **Bylaws Committee**.

President Terry Carson appointed me chair of the Bylaws Committee. Using the ABANA bylaws as a working model and the 1996 NWBA bylaws, the amending process began.

Input from board and committee members was received and the first draft of proposed bylaw changes was completed February 20, 2005.

Board members and selected advisory members are currently studying the first draft.

It is the Board's plan to have the proposed bylaws available at the Spring Conference in May for general membership review and feedback. Following the conference, proposed amended bylaws will be mailed to each NWBA member of record along with a ballot to vote yes or no for adoption.

This will complete the first steps of reorganization.

Next comes restructuring.

The Board began this process at its meetings January 15 and 29. It was decided that the NWBA consist of four standing committees whose chairs are responsible for reporting to the Board. All standing committee chairs may form subcommittees and

solicit assistance from both the general membership and others as long as NWBA policies are abided by and they comply with budgets as approved by the Board.

The four standing committees are: Finance and Budget, Communications and Publications, Member Services, Events and Programs (which includes conferences).

There are eight directors on the Board in addition to the President. Each of the four standing committees has a chair, and an assistant, i.e., two board members serve on each committee. I'll elaborate more on this in the next issue of the Hot Iron News.

Meanwhile, check the listing elsewhere in this publication (page 4) for who's responsible for what, as well as the subcommittees identified thus far.

The NWBA has grown large enough to require an operations document detailing committee structure, job descriptions, and roles and responsibilities of the people, both volunteer and paid, who perform the actual work. Producing this document will be the next step for the Bylaws Committee.

In addition to reorganizing and restructuring, the financial affairs of the organization are also being brought into compliance with federal and state requirements.

The Board has a good start on the first two R's: reorganizing and restructuring.

The third R, revitalizing, requires every member's participation. The Board is committed to providing information so that you know what's happening, when and where, in a timely manner. I'm asking you, the members, to do your part. How, you ask? If you

haven't been to a conference in a long time—come and bring a friend; if you haven't volunteered at a conference, step forward and help out for a few hours; if you haven't sent information, photos, tips, or items of interest to the *Hot Iron News*, do it.

The NWBA has a rich 25-year history with regional, national, and international importance. We can be proud of our great talents and diversified perspectives, especially our personalities. All these are strengths. The NWBA and its members are fully capable of sorting our differences of opinion while becoming stronger in the process. It's full speed ahead as we embrace change and begin our 26th year.

.....

Revitalization requires YOU!!

**Come to the NWBA
Spring Conference
in Corvallis May
13-15!**

Bring a Friend!

**Volunteer at a
conference or
other NWBA event!**

**Send you stories,
tips, photos or
other items of
interest to the
Hot Iron News!**

Dear NWBA Friends,

We write with great eagerness to thank all of you for the marvelous generosity of the *Russell Jaqua Appreciation Fund*, established at the Fall 2004 conference.

When Terry and Louise Carson came personally to Port Townsend to deliver a "surprise" we knew something was up, but never in our wildest dreams did we guess at your outpouring of support. It meant a great deal to both of us.

It was not until we recently received the 2004/4 issue of the *Hot Iron News* that we learned all the details of the demos, auction, Lisch/Harle/Carson garden sculpture that made it all possible.

Thank you so much to everyone for your caring and your prayers and your cards. We can't keep up with it all, but we so appreciate it!

On August 26 Russell was diagnosed with ALS (Lou Gehrig's Disease). One month later the top neurologist at the Seattle VA Medical Center broke

the news that he has a rarer form of the disease which progresses extremely rapidly. He advised that we prepare for him having perhaps 6 months to live.

We immediately closed our

medicine has nothing to offer, we began investigating literally hundreds of alternative therapies and finally chose a traditional Chinese medicine protocol that is reporting excellent results in an ALS clinic in Shanghai.

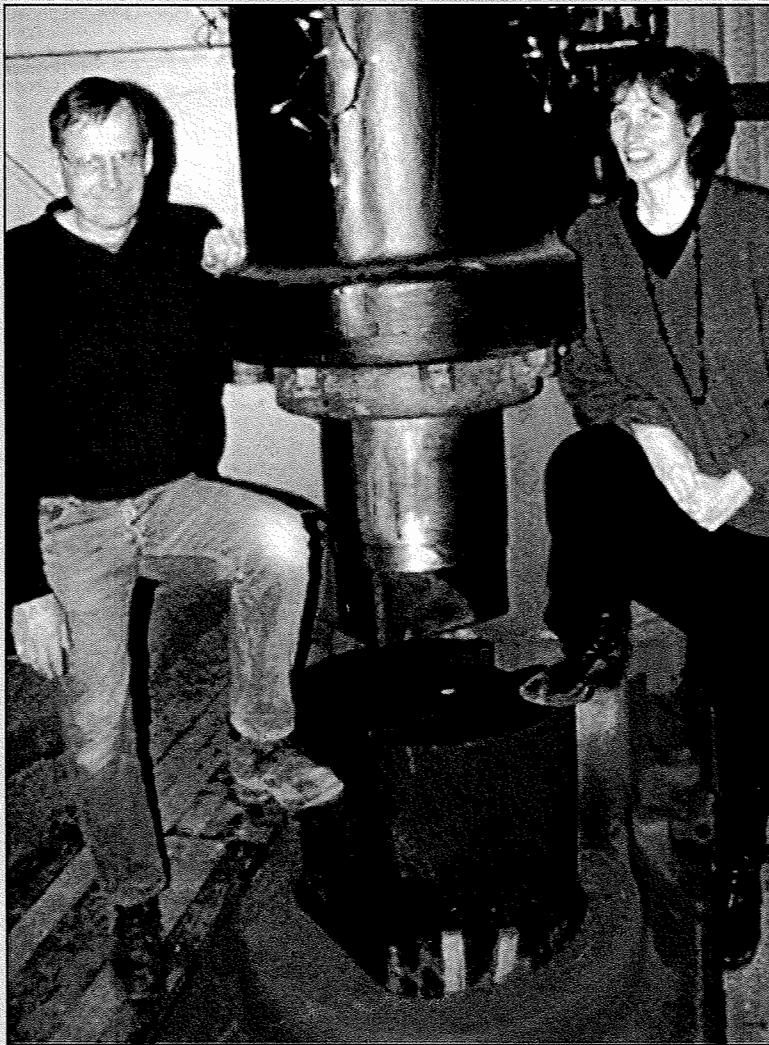
Russell receives daily acupuncture, stinky Chinese herbal teas, a specific Qi Gong exercise series called *Eight Pieces of Brocade* and a daily IV injection of glutathione, a powerful anti-oxidant of the brain.

A simple macrobiotic diet and plenty of rest support everything else.

The good news is that he is responding beyond anyone's expectations. He still has complete motor control except for a slurred speech that makes

it difficult to understand him. He gets tired easily, but still puts in a more physical day than most.

The VA doctors are completely amazed. (The other veteran who please see "Dear Friends" on page 18



Russell & Willene

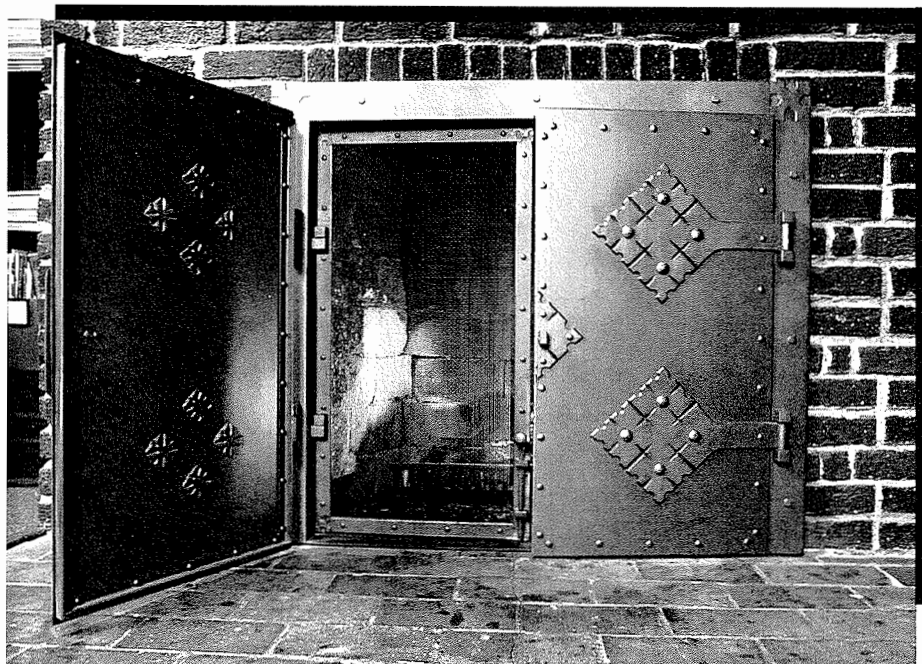
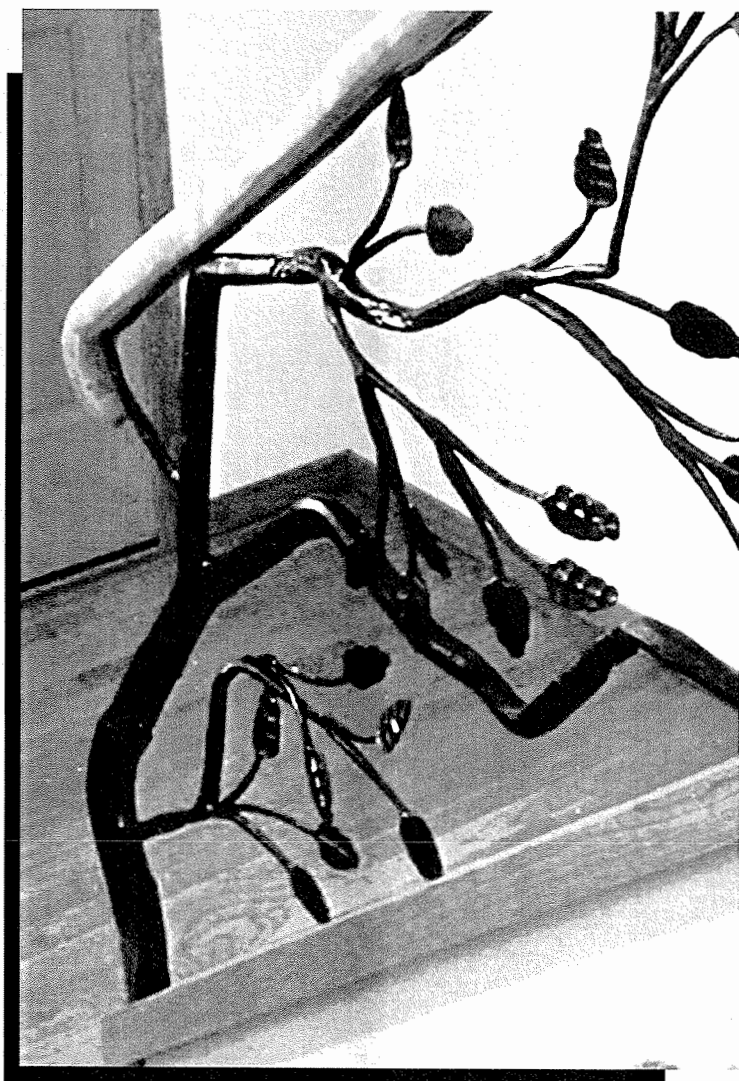
architectural metalwork business by transferring all of our jobs to other metalsmiths. We have been living on the retail sales of our anvils which, miraculously, had the best year ever in 2004.

As conventional Western

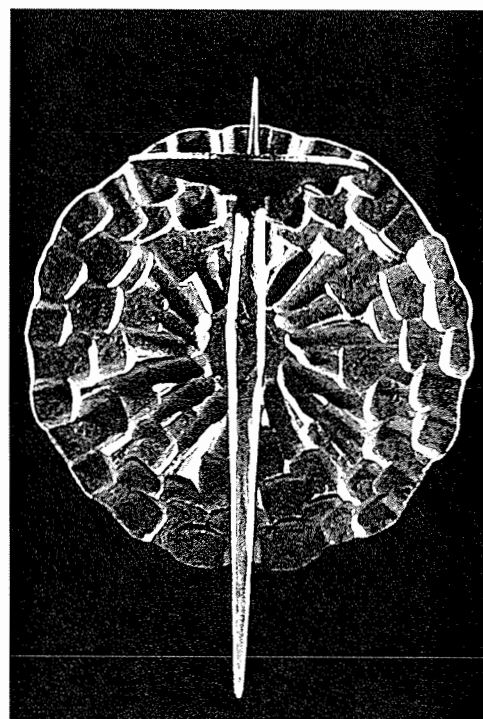
Russell Jaqua

Fine Blacksmithing
from the beautiful
Olympic Peninsula

*Detail of Oakleaf
Stair Rail*

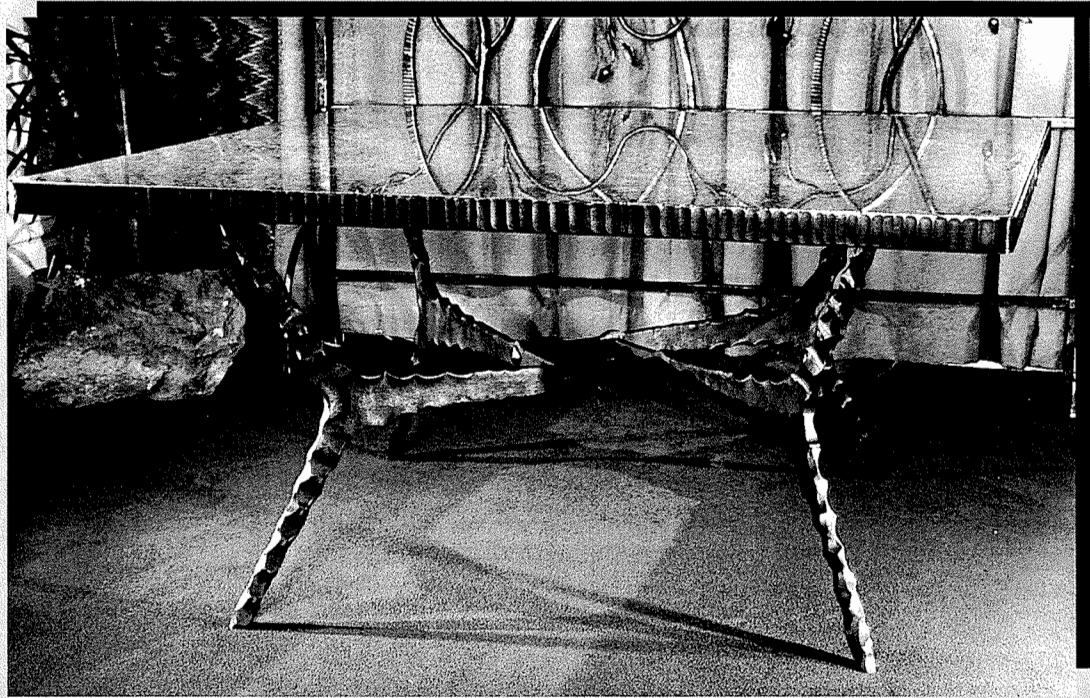


Fireplace Door



Candle Holder

*Classic
Table Base*



*Grand
Stair Rail*



Adjusting to industrial chic

Dear Friends...

after Russell's diagnosis, we had our huge estate sale and sold everything! It is a very liberating feeling.

We are now in the process of moving into Nimba Land, renovating the office building into a funky industrial apartment live/work space.

We are happily adjusting to industrial chic.

One of our favorite sayings is in fact a piece of Chinese wisdom: *Now that my barn has burned down, I can see the moon.*

We know that, ultimately, we are not in charge of how long we live, but how well we live.

Some of you have already helped us to put that knowledge into action with a real and enduring hope.

For that, we have no words...

Russell and Willene Jaqua

Shop Hints

by Gene Chapman

Square and round tubing make up this tool container, it holds chisels and hot stamps. It fits in a movable stand and is usually close to my anvil. Tong rings hang on a small "S" hook. Seems you never have enough tong rings. A silver drawing pencil lives there too (right front). These pencils are stored in various locations around the shop for instant use.

Most of my hot stamps and touchmarks are homemade from yard sale auto wheel lug wrenches. Lug wrench appears to be medium or high carbon steel. Hot stamps are ground, filed, sawn, drilled, and forged. My homemade stamps don't need to be heat treated as they are only used for hot work, with the exception of copper which can be cold stamped if annealed.



SPECIAL ANNOUNCEMENT:

If you are not now a member of NWBA but once were or would like to join we'd really be happy to see you again. Call anybody listed on page four. Offer good only while supply lasts.

IRONS IN THE FIRE: forging and- irons

Jay Close, ten year veteran
of Colonial Williamsburg
blacksmith shop.

October 28-30, 2005

Subject: Forge and assemble a classic 18th century style andiron, or fire dog. Reinforce fundamental forging skills as you create a three piece andiron typical of the early American hearth.

Location: Meridian Forge, a fully equipped teaching facility outside Eatonville Washington, camping available on site, motel accommodations and restaurants in Eatonville

Instructor: Jay Close, The Iron Rose Forge, Clover SC. 10+ year veteran of Colonial Williamsburg blacksmith shop and member of ABANA's Controlled Hand Forging Committee.

Cost: \$275, \$100 up front to register, down payment not refundable for cancellations in which a replacement student can not be found. Class limited to 12 students

Pre-Workshop Assignments: To maximize the 3 days; pre-class assignments are made relative to tooling needed for the class. They tend to be simple items like tongs, punches and drifts. Detailed descriptions of these items are sent out several months before the workshop.

For more details on workshop, instructor and accommodations please contact Ike Bay.

Former editor sues Northwest Blacksmith Association

Former *Hot Iron News* editor Jerry Kagele has filed suit against the Northwest Blacksmith Association and its president.

The suit came as a result of Kagele's removal from the editorial position after two NWBA board meetings in January. Kagele had served as editor of the News for seven years and is an NWBA member.

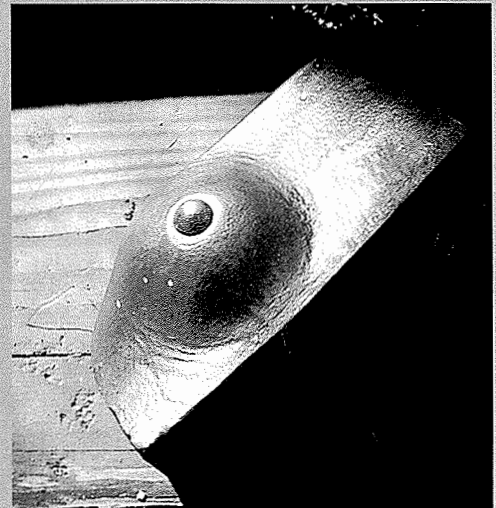
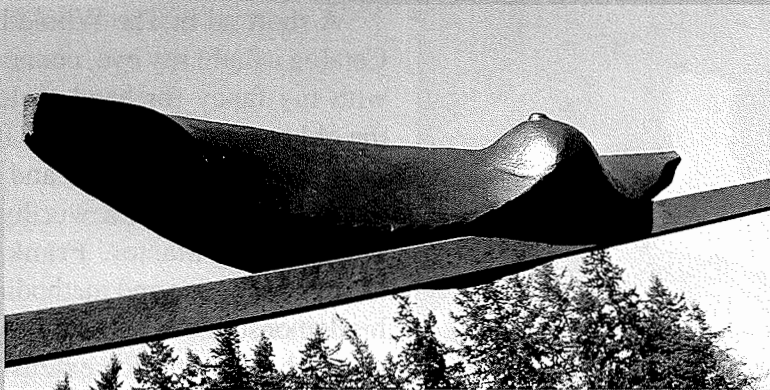
A twenty-page summons was delivered to NWBA President Terry Carson on February 28. Carson forwarded it to NWBA attorney Karen Lindholt, whose office is in Spokane. Details of the summons are not immediately available, but there is extensive discussion of the issues surrounding the change in editorship in the Members

Commentary section of this edition and in the President's letter, also in this edition.

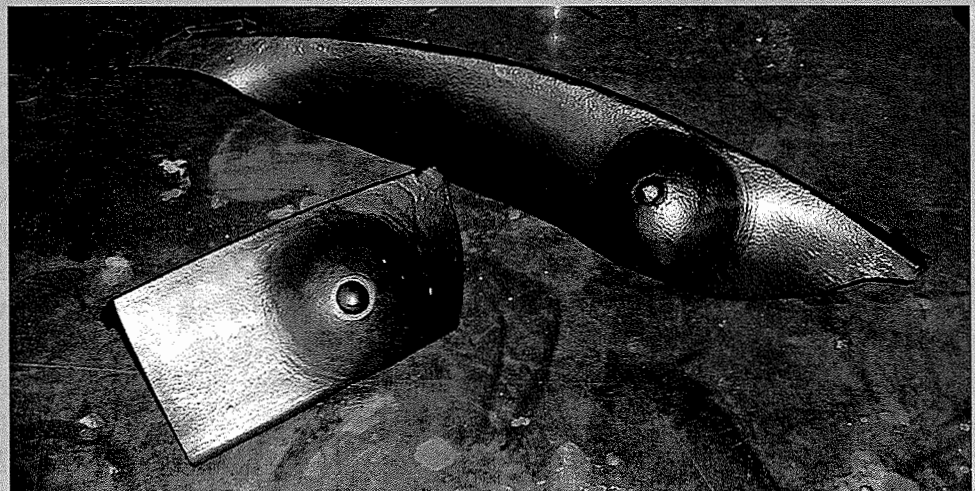
Carson was also subpoenaed on March 6 to appear in Kagele's Spokane office for a deposition and examination on March 15. That date has been extended.

The NWBA has established a legal advise and defense fund. Contributions have raised about \$1250 to date. Members wishing to contribute to this fund may send their contributions to NWBA Treasurer Ken Williams at 8002 NE Highway 99 #405, Vancouver, WA 98665. Contributions should be clearly marked for that purpose. Funds not used for legal defense will be put toward improving the association's educational activities.

Vladimir Sokhonevitch



When Vladimir Sokhonevitch finished demonstrating his world class technique at the Fall NWBA Conference in Oakland, Oregon, he had produced these two sculptures of human form which many in attendance did not have a chance to view.



Featured Artist at NWBA Spring Conference this May in Corvallis

The Frank Turley Mystique

by Jerry Zygmutowicz,

(with thanks to Barry Rice and Rob Edwards'

Anvil Interview from Jan., 2000)



One of the great teachers, Corvallis Spring Conference Featured Artist Frank Turley at his coal-fired forge in Santa Fe, New Mexico

Frank Turley is a master blacksmith, and also a great teacher, imparting wisdom and humor along with real skills. He engages his students with his passion for the blacksmithing craft and his encyclopedic knowledge of its history and secrets.

He keeps them laughing with pithy sayings, and wondering with obscure stories.

I met Frank in 1972 as an eager young student in his six-week blacksmithing program (which has since been shortened to 3 weeks).

A short ad in *The Whole Earth Catalog* caught my eye, connecting with my fancy for hand tools and the old ways of living on the land.

I arrived in Santa Fe, and soon knew I had chosen a worthy and entertaining master. Frank was always deliberate and methodical in his demonstrations and lectures. He researched his topics extensively, drew his forging out on the layout table, and executed them precisely and with great pride in craftsmanship.

His school included lectures on the manufacture of iron and steel, on metallurgy, hardening and tempering, the evolution of tooling and blacksmithing techniques, as well as styles of ornamentation.

Some of Frank's thorough and researched approach may trace to his time as Conservator at the Museum of New Mexico, handling Spanish colonial artifacts. This historical immersion culminated in

his book with Mark Simmons, "Southwestern Colonial Ironwork".

Frank showered his students with historical and technical context for American Colonial and English ironwork as well.

These concepts were illustrated with meticulous line drawings and notes in Frank's beautiful calligraphy.

Frank's conservator's approach combines with his wry humor in what he calls "Artifakes", his admitted copies of antique artifacts.

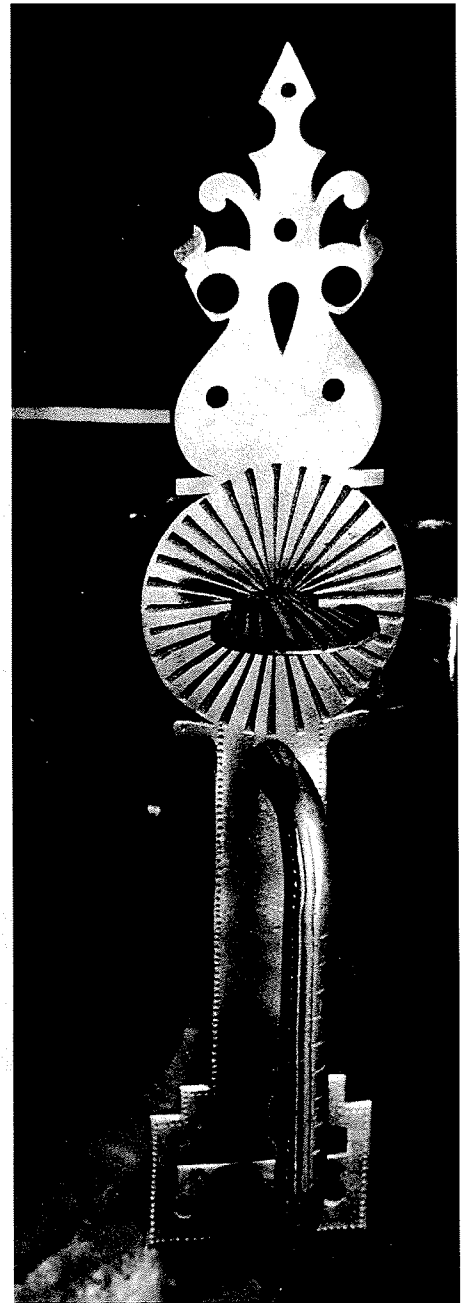
One of Frank's trademarks is his interest in movement, which takes several forms. When forging iron at the anvil, Frank is focused and purposeful, yet relaxed. His posture and body mechanics while working hot iron are an important component of his instruction in forging.

This awareness of studied and expressive motion stems partly from two of Frank's other passions, Indian dancing and Tai Chi.

Frank has been Indian dancing since his days as a Boy Scout, and now he and his wife Juanita, a Native American originally from Taos Pueblo New Mexico, attend powwows regularly.

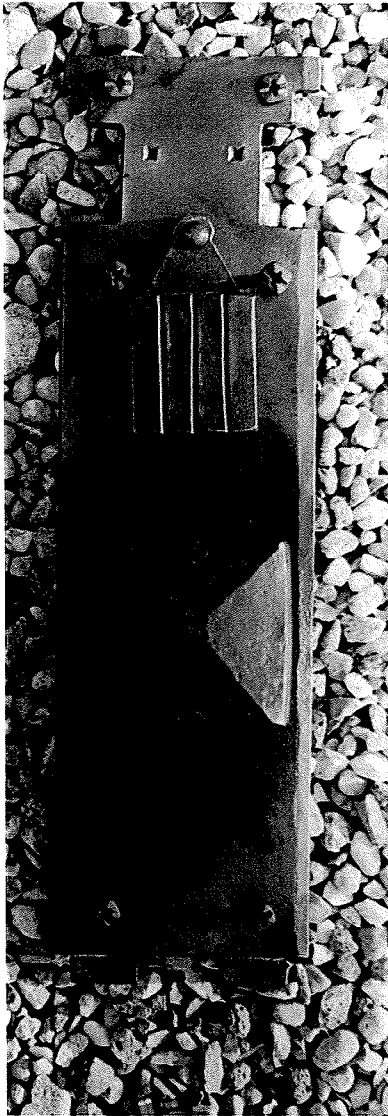
Frank also discovered the ancient art of Tai Chi, and has adapted some of these movements as ergonomic stress reduction exercises for the blacksmith.

Frank is often noted as well for his humor and dry wit. I recall such



Thumbblatch

Thumbblatch



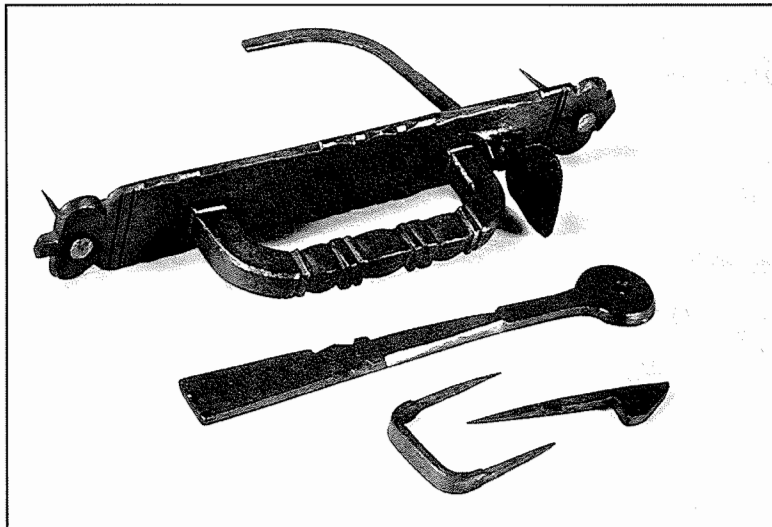
Frank Turley Demos:

Friday, 1 to 5 pm, Saturday, 1 to 5 pm, Sunday, 9 to 12 noon

NWBA Spring Conference May 13, 14, 15 Corvallis, Oregon, Fairgrounds



Interior Lock



Lock Set

pithy sayings as "you'll go to hell for beating on cold iron", and "nobody knows 10% of anything".

Turley Forge is called "The Granddaddy of Blacksmithing Schools", as it was founded in 1970 as the first school dedicated solely to blacksmithing since the 1930's.

Frank is credited as one of the driving forces in the renaissance of blacksmithing through the '70's and 80's, and has trained many of today's finest Artist Blacksmiths.

The NWBA is fortunate indeed to have a Master Blacksmith of Frank's caliber and entertainment value as our featured demonstrator.

Don't miss it!

Lockcove



NWBA SPRING CONFERENCE

May 13 – 15, 2005
Benton County Fairgrounds
Corvallis, OR

Featured Demonstrators:

Frank Turley: Turley Forge School of Blacksmithing, Santa Fe, New Mexico

Maria Cristalli: NWBA Artist Blacksmith from Seattle, Washington

Bonus and Hands-On Instructors:

Jerry Henderson: Repousse Demo, Blacksmith from St. Helens, Oregon

Alan Flashing: Flashing Forge, Oakland Oregon

Mark Manley: Silverton, Oregon, Past NWBA President

Bob Race: Portland, Oregon, NWBA Blacksmith

Members: \$60

Guests: \$20

Schedule of Events, Lodging, Map on next page

SCHEDULE of EVENTS

Friday, May 13

9-12:00 AM Maria Cristalli
 1-5:00 PM Frank Turley
 4-6:30 PM Board Meeting
 7:00 PM Slide Show
 Midnight Madness

Saturday, May 14

8-9 AM Jerry Henderson
 9-12:00 AM Maria Cristalli
 1-5:00 PM Frank Turley
 6:00 PM Banquet
 7:00 PM General Membership Meeting
 7:30 + Auction
 Midnight Madness

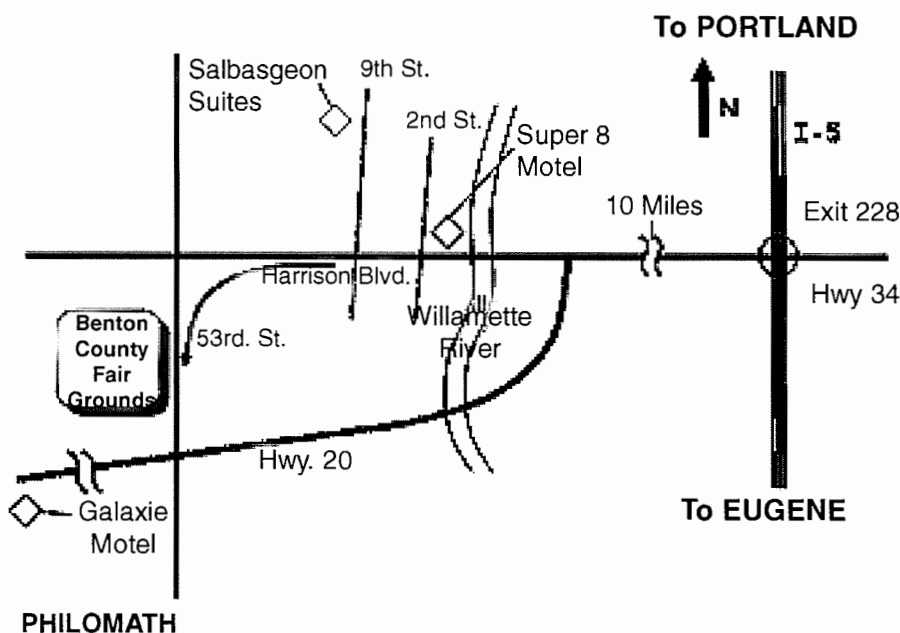
Sunday, May 15

8-9:00 AM Jerry Henderson (repeat)
 9-12:00 AM Frank Turley
 12:00 NOON Conference Ends

Conference Co-Chairs:
 Contact us to Volunteer!

Jerry Zygmuntowicz: 541 929-3775,
 debnjerz@comcast.net

Mark Manley: 503 873-8918,
 mmw@open.org



CAMPING (@Fairgrounds): New bathhouse with Showers and bathrooms

- Tents: \$7/ night
- RV's (Power only): \$15/ night
- RV's (Full Hookup) available by request

LODGING: Corvallis is a college town, and motels fill up. To ensure rates and availability, call in for a reservation before May 1.

Salsbasgeon Suites \$67 King Suite, \$69 2 bed Queen Suite, includes full Hot Breakfast, 1730 NW 9th St, Corvallis, OR 97330, 800 965-8808, ask for "NWBA" **Rate** This is a quality property, pool and hot tub, restaurant and bar, fridge, MW, coffee

Super 8 Motel \$49 1 Bed, \$57 2 Bed, includes Continental Breakfast, 407 NW 2d St. St, Corvallis, OR 97330, 541 758-8088, ask for "NWBA" **Rate** This is budget property, pool and hot tub, coffee

Galaxie Motel \$35 Single, \$45 2 Beds no Hot Breakfast, 104 S. 20th St., Philomath, OR 97370, 541 929-4334. No frills, but clean, fridge, MW

SPECIAL EVENT for SPOUSES or GUESTS:

OREGON WINE TASTING TOUR

Saturday, May 14,
 10:30 am – 3:30 pm, \$35 per person for Charter bus roundtrip from Fairgrounds (Tasting fees and lunch not included)
 Visit Oregon Wineries, have lunch, and visit the Oregon Wine Tasting Room, featuring 60 Oregon wines

Please RSVP by May 1 to: Debbie Zygmuntowicz,
 541 929-3775 or
 debnjerz@comcast.net

We need your reservations to make this event happen!

Maria Cristalli

A Northwest artist with a national following

Seattle's Maria Cristalli, a rising star in the NWBA, has become one of the top emerging smiths in the nation, recognized as an outstanding artisan and sought out for her meticulous approach to her work.

She will bring her creative skills to the NWBA Spring Conference this May as one of two featured artists.

"I took every arts and crafts class offered at Mercer Island High School," Cristalli said. "I liked the design part."

Cristalli added a welding class and pursued her interest as a photographer, quickly advancing from amateur hobbyist to qualified pro.

But it was the first blacksmith class she took at Black Dog Forge in Seattle that hooked her into hot iron.

"I was obsessed with it," she said.

Setting out to get the best education possible, Cristalli cited her training at Fire Mountain Forge with Darryl Nelson as one of the best learning experiences of her career.

Today she has a shop in the Big Building in Seattle. Most of the work she does is designed and built for specific clients. An ongoing



"I love that there is always a chance for improvement. I learn new stuff with each project."

project has been placing multiple pieces of iron work in an English Garden which a client is developing on property overlooking Puget Sound.

Her work is described as having a light, elegant touch and includes traditional joinery and rosettes.

"I always try to design in

some new element with each job that I've never forged before. It helps to expand my skills."

Maria lives in Seattle with her husband, Marc, a practicing architect, her dog, Weezy and cat, Buzzy. She will be demonstrating various joinery techniques and leaf building at the spring conference.

Demonstrating

Friday, May 13: 9 - Noon

Saturday, May 14: 9 - Noon

Maria Cristalli...

a Northwest artist with a national following



This English Garden gate boasts two of Cristalli's strengths, fine joinery and life-like leaf design.

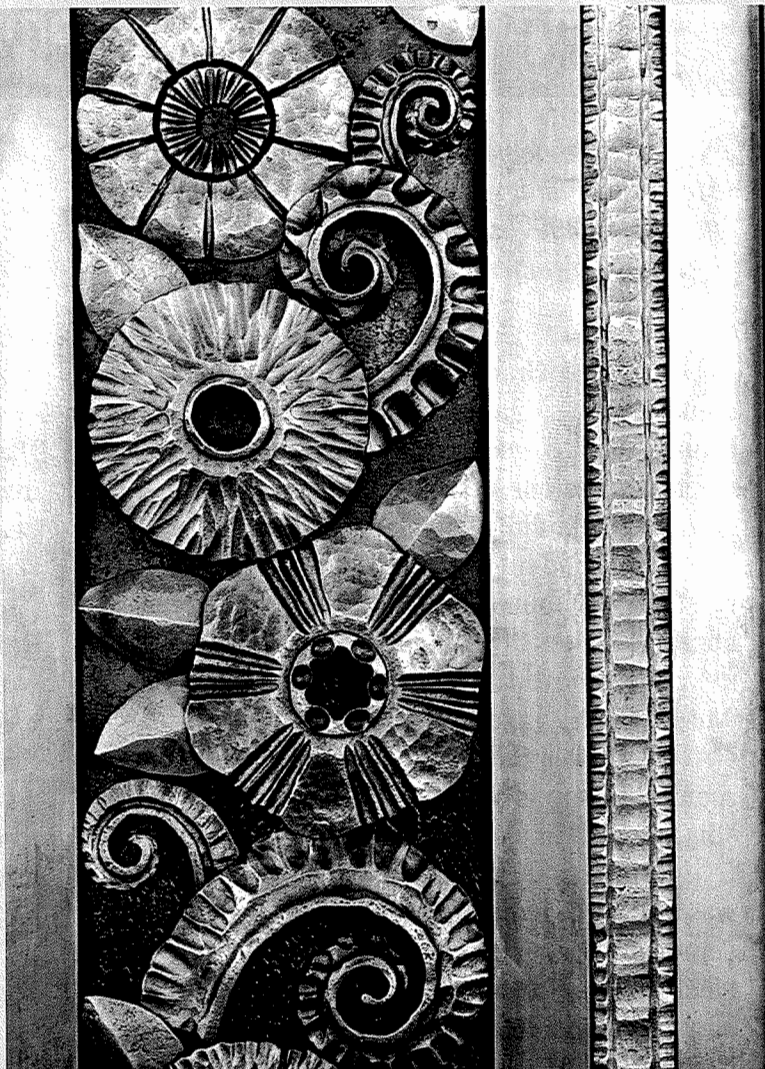
Detail of well cover in English Garden.

Regular tending with waxes and oil keeps the ocean side ironwork rust free.

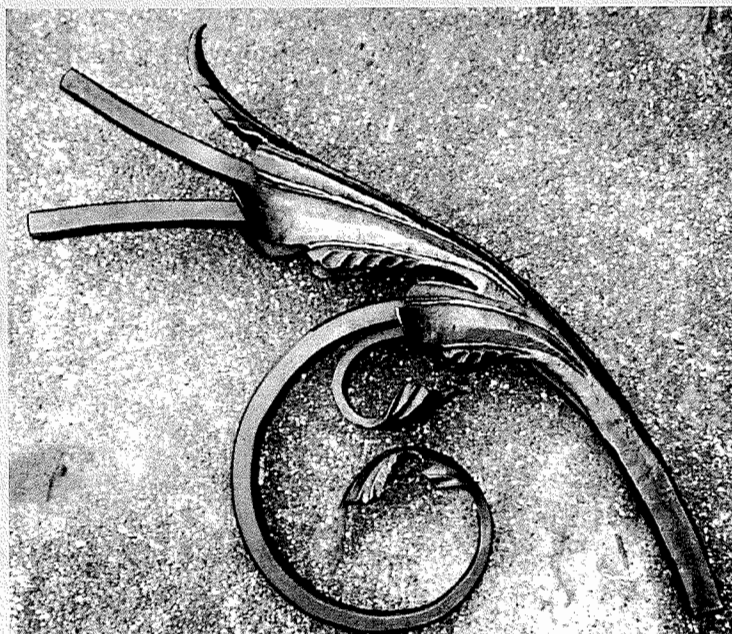




Corner railing, tulips and joinery designed to reflect patterns of the leaded glass windows in the background.



Detail of Edgar Brandt inspired fireplace surround. Finished iron work was brass plated, then rubbed out to a golden finish. Photo of complete surround on page 7.



Leaf work as used on well cover.

The Al Bart Memorial Grant Story

To re-acquaint members with the Al Bart Memorial Fund, we are reprinting an article from the Spring 2000 issue of the Hot Iron News written by NWBA member David Tuthill.

The Al Bart Grant is designed to enable up-and-coming smiths to attend a variety of educational forums such as workshops, classes, traveling research missions, etc. (listed in application), the cost to the individual being one of returning knowledge and information to the NWBA. The reason that I point this out is that I realized the appropriateness of giving the grant his name during my phone conversations with the three gentlemen who so kindly gave me their time.

Al Bart was a full-time blacksmith who was running a shop in Yreka, California, when he was “discovered” in about 1978 by a man named Dwight Irish, out of Astoria, Oregon. Dwight Irish was putting together an iron-pouring demonstration, combined with various blacksmithing demonstrations, at an old army barracks converted to and called Camp Rilea, in the summer of 1979. Al Bart was in attendance as an observer at this demonstration, which was to become the first NWBA Conference. Also in attendance as a demonstrator was Francis Whitaker.

Now, Al was not an ornamental ironworker. His experience was one of a more practical design, working primarily with the logging industry in Northern California. His knowledge, though, was vast—in the same class as Francis Whitaker—only from a slightly different school. From what I am told, Mr. Bart would offer up help at the drop of a hat and was very enthusiastic about sharing his enthusiasm with people who wished to learn from him.

I hear that he was a quiet, charming, friendly man and a real problem solver. He also had a quick wit and a keen sense of humor, with a playful quality that could light up the day's or evening's activities. He was in attendance at every conference,

including the 10th Anniversary NWBA Conference, at which he demonstrated. He died on March 9, 1996, of a stroke while pruning his fruit trees. I hear that he loved this as much as any blacksmithing that he ever did.

My curiosity poked at me, as I also love to spend time in the garden. And, I discovered that when he would prune back the fruit trees, his wife would bake him a pie! Ah! It doesn't get much better than that.

I will end this article by saying that through my research possibly the two most valuable bits of information I gained are actually philosophies that he apparently lived, as well as shared.

The first being the lesson of The Hare and the Tortoise.

We often get so caught up in deadlines and quotas that we forget that if we just pace ourselves and pay attention to what we are doing, and don't give in to pressure and stress, we can have “more iron on the floor at the end of the day,” than if we hastily run around trying to do this and that.

The other is that we should be able to, with a clear conscience, use the tools we have at our disposal, perhaps some more than others, integrity and quality being of the utmost importance. Also, don't worry about being the image of a blacksmith, but of being a blacksmith.

I would like to thank, in the order in which I spoke to them, the three gentlemen who helped me to compile this information: Jack Slack, Darryl Nelson and Joe Elliot. I hope that I have, in some way, done a service not only to Al Bart but to the NWBA, which I believe he loved.

Thank you.

The Garden Gate Project

by Tim Middaugh

About six years ago I saw a living history demonstration of blacksmithing.

At the time I didn't know that people still did this kind of work. Watching a useful and elegant object emerge out of a simple piece of steel fascinated me and I wanted to know more. Shortly thereafter I found a copy of the *Hot Iron News*. It listed Don Kemper as the President - - so I gave him a call and asked how to learn more about the craft. He referred me to Bob Race and my odyssey began.

Bob had a small shop attached to his home in Southeast Portland. He graciously invited me over and showed me the basics of drawing out, fulling, twisting, scrolling, and cold filing. At the end of the afternoon I owned a steak turner made out of 3/8" square stock with a traditional handle.

Bob could see my enthusiasm. As I was leaving, he said "If you really want to learn how to do this you need to take a class from Jerry Culberson in Allyn, Washington."

Soon I registered for a three day beginners workshop at Jerry Culberson's Old Cedar Forge.

"Three whole days!" I thought, "How hard can it be?"

I had visions of soon making elaborate lighting elements, garden trellises and gates.

Jerry's class was a baptism of fire. The group of ten of us were greeted by a salty, sixty year old former naval officer

who was no stranger to grit, sweat and hard work. Soon it was clear that he expected the same out of us. He had faced life one hammer blow at a time and looked like he had been hammering steel since time began.

Jerry introduced himself and said, "If

you think that you are going to be a blacksmith at the end of these three days, you are wrong. This craft takes sixty years to learn and then you die!" (we were relieved to know that the die part was no time soon).

The beginning class took us through a series of demos that included a punch, a chisel, a pair of 5/8" V-bit tongs and a stylized fire poker complete with a scrolled

*"This craft
takes sixty
years to learn,
and then you
die!"*

handle drawn down from a tenon we made on the end of a 5/8" square bar.

My first glimpse of Jerry's mastery came when I saw him create a pair of tongs out of two pieces of 5/16 x 1" 9 & 1/2" long in about 20 minutes without the aid of



Tim Middaugh, hammer in hand and a piece of steel about to bend to his direction.

a power hammer. When he was done he threw them on the ground next to another pair that matched perfectly. He then told the bewildered group - "Now you do it."

The third day of the beginning class was open ended - we listed objects on the black board that we wanted demos of. They included utensils, a pot lifter, a forge welded socket chisel, butchers, hammers and various leaves. Jerry forged them all on demand with grace and ease.

Soon after, we did our best to duplicate his samples.

In short, I took Jerry's beginning class six times. This allowed me to get a firm handle on the basics and I became capable of more and more on the third day (the open day) of the workshops.

Over the years, in addition to the six beginning classes at Jerry's, I took an additional ten or so intermediate and advanced workshops at Old Cedar Forge. Here I learned to make scroll tongs, pick up tongs, V-bit tongs, box jaws, top tools, hardies, hammers etc, etc.

My projects included a large six candle chandelier complete with leaves, scrolls and collars, an adjustable free standing lamp, and a 5ft x 5ft sign bracket with eight different kinds of scrolls.

In the last six years I have taken several classes from master blacksmiths on the west coast as well as several master smiths from the east coast at John C. Campbell Folk School in Brasstown, North Carolina. All the experiences have been valuable.

The difference between Jerry's advanced classes and others is that

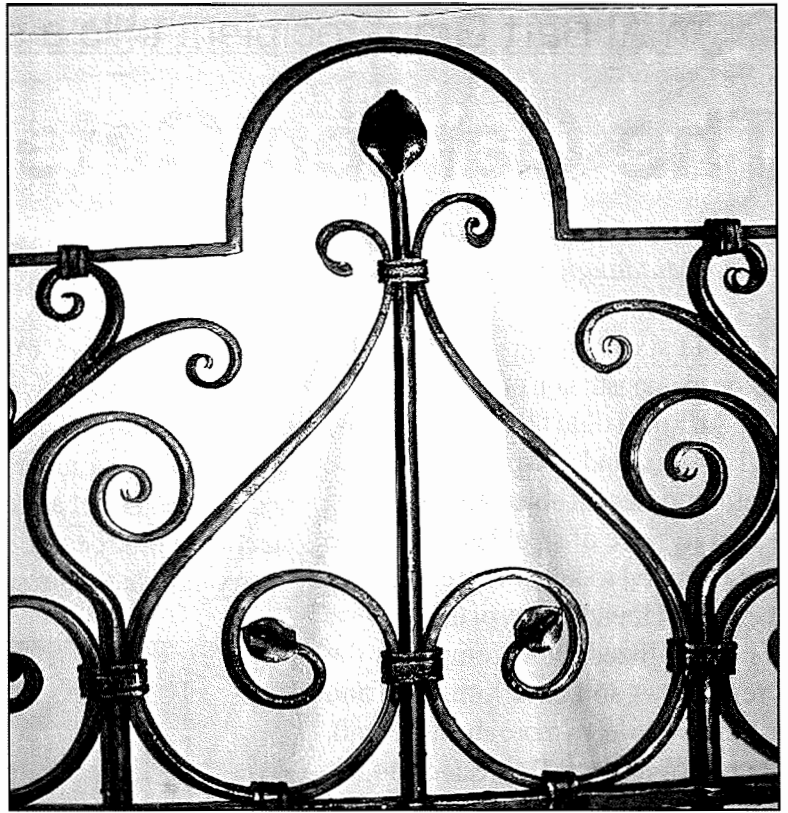
Jerry's advanced classes have no set curriculum.

The curriculum is what ever you make it.

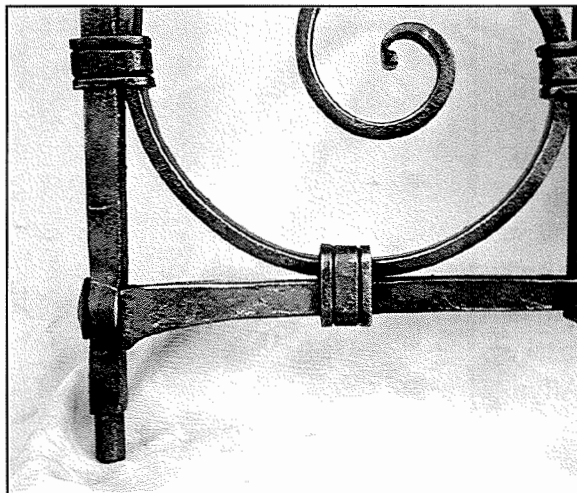
For me, I have found what works best is to show Jerry my design - - get his input and approval, then build as much of the project as possible at home in

my shop and then bring it to class.

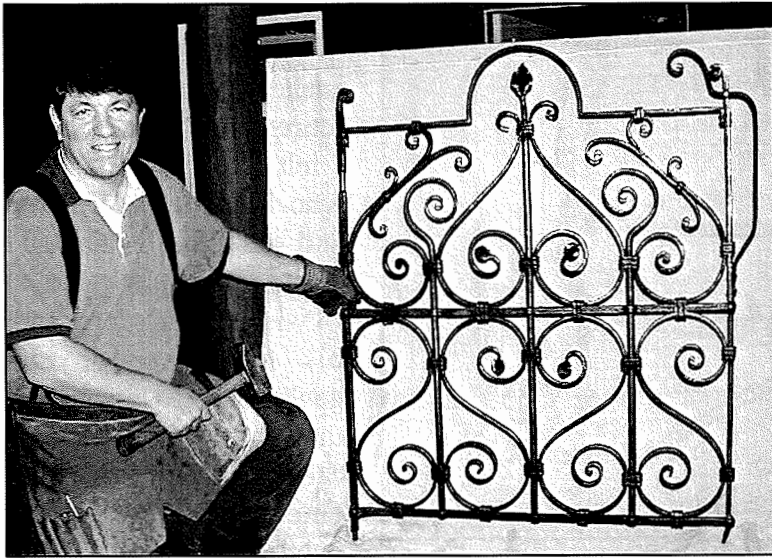
In this way, I do not spend valuable class time doing things that I already know how to do. This format can only work if the instructor is a true



Details of the Garden Gate



"Three days, I thought, how hard can it be?"



**The
Garden
Gate that
wasn't
run over.**

master blacksmith with a near limitless reservoir of knowledge to share. This is why Jerry has been referred to as the Dean of Blacksmith Teachers in America.

In a typical advanced class at Old Cedar Forge you will have five other classmates that are all working on separate projects that may include sculpture, hanging art, railings, gates, decorative hinges, door knockers, and any type of blacksmithing tool. My classmates have come as far as California, Alaska, Australia, and both sides of the Mississippi. More than once I have looked up from my project and marveled at the amazing things that my classmates were making.

Last winter I decided that I was due to make a project that was larger in scope than my last ones. I chose a garden gate. I wanted to include upset corners, leaves, a heel bar, mortis and tenon joints and multiple slitting and drifting in a single bar. However,

I wanted the gate to be simple enough so that I could reproduce it as a standard in my product line for

my customers. Thus, I began a design for my "Garden Gate Project".

Jerry approved my drawing and we determined the parent stock sizes of all the pieces and the specific tenon sizes for each bar.

I was ready to begin the project at my shop in an effort to have it ready for assembly at his upcoming class in May. In the interim period I applied for an Al Bart Grant to offset some of my tuition costs. Graciously, the NWBA board approved my request and I was ready to roll.

"The main problem is that if you are going to make something ugly out of steel, it is going to be ugly for a long time. I think that you should just back over this with your Camero and start over."

At Jerry's May class I arrived with the frame basically complete and nearly all of the scroll work done. I told him that I saw some problems

in the lower four scrolls. He said "I can see that and I can tell you what is wrong with the other twelve scrolls that you made. The main problem is that if you are going to make something ugly out of steel, it is going to be ugly for a long time. I think that you should just back over this with your Camero and start over. If you are looking for applause from me, you are not going to get it!!"

Though I didn't drive a Camero, I did get the sense that he was not happy with my scrolls. Eventually we got down to business and these were his points:

- 1)The scrolls too egg shaped.
- 2)They had obvious flat spots.
- 3)The parent stock did not have enough length to begin with.
- 4)Therefore, there was too much empty or negative space in the gate.
- 5)The gate should follow the 4" rule so that a 4" ball could not pass through the open areas between the scrolls.
- 6)Each scroll -- regardless of its size should "flow open" with the expanding grace of a true nautilus curve.

Our solution was:

- 1)Lay out and remake test pieces for all the scrolls with all leaves and adornments.
- 2)Go home and forge all of the scrolls a second time using the test pieces as models.

In October I returned to the advanced class with the reworked gate very near completion. Jerry helped me "re-tweak" of a few of the scrolls. At this point I could see the problems but I needed his expertise

to find the solutions.

Assembly and hot collaring were more time consuming than I thought it would be. We assembled the frame from the bottom up and installed the scrolls from the bottom up as well.

True to the old world traditions we heated the collars in the forge without relying on the torch.

Jerry's main "take home messages" in building the gate were:

1)The heel bar is the most critical joint. Make the tenon as large as possible.

2)Make the heel bar joint first and let the two bars cool without quenching. Then do the layout on a cold bar at rest.

3)3/4" square stock is as light as you should go for the lower bar and the vertical bar that attaches the hinge points.

4)Use the monkey tool on all the round tenons to insure proper fit and to minimize the amount of upsetting needed for each tenon.

5)3/8 x 3/4" stock is as light as you should go for infill scrolls.

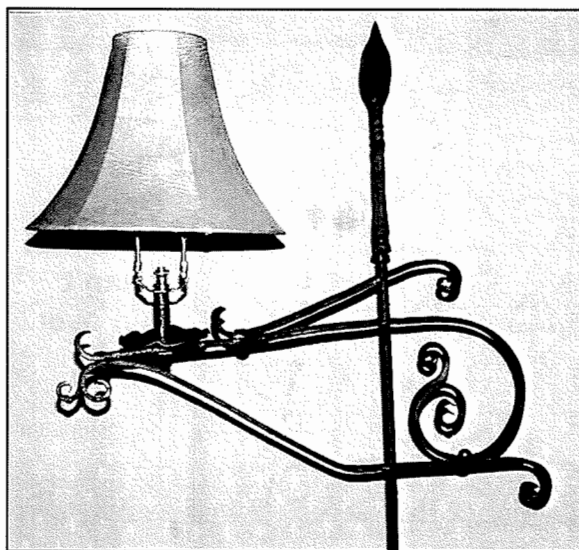
6)To minimize building tension into the gate that will later cause racking, make sure that all your scrolls are "dead flat" and in the same plane prior to assembly.

7)Use 1/4 x 1" stock for all major collars.

Sadly, upon completion of the gate Jerry told me that he thought that this class may be his final one.

He said "I only have so much juice left to put into this craft and I need to save it to work on some special projects while I am still on this earth."

As news of Jerry's retirement from teaching began to sink in I told a friend and he said "You are kidding



A Middaugh lamp stand

-- without the students around, who is the old bird going to grouse at? He needs us!"

My thoughts moved ahead to my commitments to the craft:

- To continue to expand my product line and my number of retail outlets.

- To continue to attract and produce custom work

- To continue to teach 6-7 beginning and intermediate classes per year at my shop in White Salmon, Washington.

- To continue to spend 8-10 days per year in workshops as a student.

On the 4 hour drive home I reflected on the 48 some odd days I have spent taking classes in Jerry's shop. On one hand I felt the exhilaration of completing my most challenging project. On the other I pondered the notion of the possibility of no more workshops at Old Cedar Forge.

I hoped maybe it would be like in the mid 1980's when we were told that there would no longer be any more Coca Cola made as we knew it. Then after a few months, the bottling company reversed itself and

gave us Coca Cola Classic. Yeah - that's it! That notion sounded better than Jerry's retirement from teaching. I felt like the young kid who heard the bad news and said "Say it ain't so, Joe."

I wish to thank Jerry and his wife Ina for the generosity and hospitality they have offered me and other beginning and emerging blacksmiths over their many years of teaching this ancient and

honorable craft. Thank you to Bob Race for helping me get started and to Jerry's apprentice and understudy Elijah Burnett for his endless tips on ways to do things just a little bit better. Thanks to my classmates at Old Cedar Forge for their insights and camaraderie.

Special thanks to the NWBA board and the Al Bart Grant for support that helped make the Garden Gate Project a success.

Al Bart Grant Information

Grants in the amount of \$250 per person per year are available and equally open to all current NWBA members. The Board has allocated a maximum of \$1,500 per year for grants. Recipients are asked to write an article for the *Hot Iron News* about their experience. They are also encouraged to demonstrate what was learned to other members, whether as an evening impromptu forging at a conference or a stand-up-in-front-of-the-crowd show and tell. Application blanks are available on the NWBA website at www.blacksmith.org, or call any Board member.

The Al Bart Memorial Grant

Some thoughts on hammer making

A collection of ideas, observations and experiments

by Ike Bay

This is not an article on how to make a hammer, rather it is a collection of ideas, observations and experiments in hammer making aimed to increase your comfort level and hopefully entice you to consider making a few.

I will also be taking the liberty of offering some of my own opinions at various points.

There is no practical need to make your own forging hammers given the wide variety of sizes and shapes available on the market today. I would respectfully suggest that there is some magic in the making and use of your own hammer(s).

We present for your study a wide variety of hammer photos to show you the quality and variety of options.

Hammer making introduces many smiths to their first experience working large stock. This complicates the processes of making an eye and forging a pein. You need a way to hold the material and work the material as the forging progresses.

It is strongly suggested that you have a drawing and a plan to help you progress toward a know goal.

Keeping control of the piece through the forging process is a good rule regardless of the size of the

finished piece.

Here are a few of the problem areas you will encounter in hammer making:

Working with square stock in the 1.5" range is a challenge by itself. It takes time to heat, it radiates heat when you work it, it can be hard to hold and really tests your tooling. It's

very well. Large sized flat tongs also work well when you are holding the hammer blank flat on the anvil surface. 6' of 1.5" square stock at a near welding heat flying around the shop is sure to get your attention and scare the heck out of anyone who you have invited in to help with this project.

Some folks weld on a handle rather than going the tong route, I don't, but it is a matter of personal preference.

Hoffi style hammer by Tom Clark

best to cut a hammer blank from the parent bar and work this smaller piece of material. The larger bar is hard to move and the bar will act as a heat sink increasing the heating cycle.

When forging the pein you will find the outside of the bar moves faster than the center. This causes a severe crease to form, the quickest solution is to allow extra material for this eventuality and just trim to final shape totally eliminating the cold shut from the hammer pein.

Punch or slit/drift the eye and forging the pein are functions requiring strong blows and maybe the use of a striker for all of us without power hammers. The application of all this power also challenges our ability to hold the hammer blank firmly.

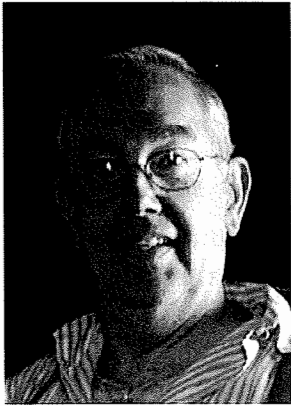
Grant Sarver's Off Center Forge makes some great "V" jawed tongs that will hold square and round stock

Radiant heat from the hammer blank will give you quick feedback on the holding and use of chisels, punches and drifts. I favor the slit

**Planish-
ing ham-
mer by Ike
Bay.**

**This is a
cold work
hammer for
work such
as spoon
bowls over
a stake
worked
cold.**





**Ike Bay
makes
his ham-
mers in
Portland**

and drift method over the punching the eye and use a set of tool holding tongs to keep my hands from being toasted.

There are a lot of fancy alloy steels that work well in larger pieces of hot material but I tend to stay with simple tool steels and pamper the tools to make up for the fact that they are not H-13. I also am very careful of quenching hot chisels in the slack tub. You can over cool and make them brittle.

Hand made is not bad made.

Hammer making is also an area where lots of smiths scrounge around for scrap that will fit the bill. You may find that round stock that may need some upsetting and squaring is very cheap but lots of work. Buying a known medium or high carbon steel alloy of the right size is a great place to start. If you want to go the scrap route, wrist pins from the pistons of large diesel truck engines are readily available from repair shops and give you enough stock to make a nice size finished forging hammer.

You must take extra care to insure that your finished blank has 90° corners and is rectangle or square as opposed to parallel gram in shape.

Dressing the surfaces with a flatter

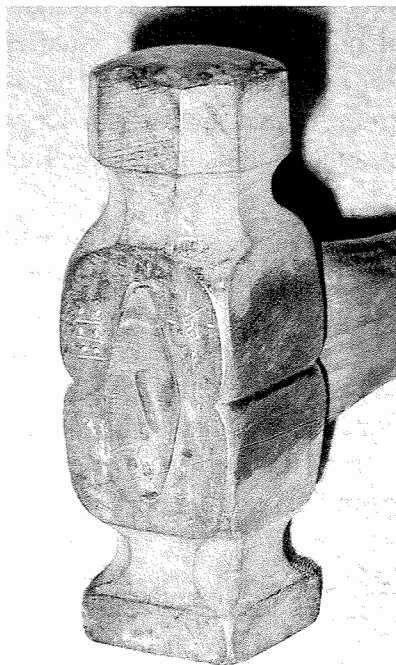
removes all the hammer dings and gives you a clean surface to do your lay out marking.

There are different ideas on the proper sequence hammer forging. Body-pein-eye and body-eye-pein are the two most prevalent methods.

I prefer the body-eye-pein method. In the straight backed, traditional cross pein hammers I am currently making this method gives me the finished product I am after. The body is slightly wider at the eye and wider still at the pein. My preference is a hammer that does not look like it was made in a closed die.

Brent Bailey did a wonderful workshop at Don Kemper's and he does the eye last in the forging process. Notes from that workshop

Ike calls this Phil Baldwin hammer "sweet" because he says Phil puts a lot of functin and design into his hammers and they are truly eye sweet. Two views.



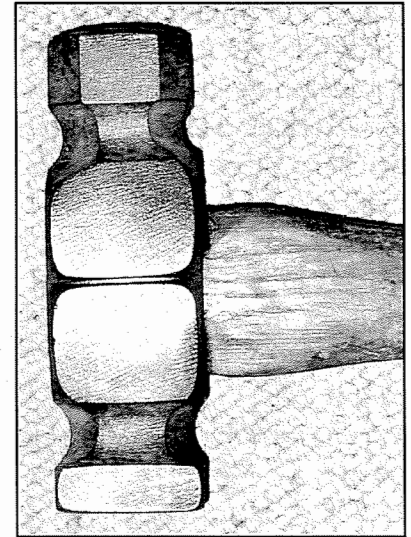
are available from the author.

Hand made is not bad made, all steps in the process have to be executed well.

Starting with a piece of material the proper size means little work on the

initial size. Look for the size that you want the finished face to be, if square or rectangle shapes are your target. Other shapes add some complexity to the project.

The hardest part of hammer making is the eye. There are several



types of errors that are the most likely.

1. Finished eye is not centered in the material; one side is noticeably thicker than the other.

2. Viewing from side, finished eye is 90° to top/bottom center line of hammer, failure means your handle comes out of the hammer head up or down.

3. Viewing from the top or bottom the finished eye is properly centered and the hammer does not have a bias left or right. Every one sees if you screw up #1 but it seldom has any affect on function. Mess up #2 and/or #3 and you may have trouble making the hammer work well for you.

Correcting #1 type problems: if the initial cut is off center but parallel, or tipped to left or right; correction is possible by taking a new cut or chopping out area large enough to

take in all problem areas. Can also be a function of improper heat, uneven heat means uneven spread.

Slit/drift Vs Punch.

My preference for slit and drift is because it is easier to control for a smith who works mostly alone. It is also easier to take corrective action if things start to go wrong. Punches also require a good striker, the punch needs to be used in very hot material and it needs to go with considerable force.

Even with ideal conditions you may get a slight depression around the punched hole. This is called "punch suck" and I think it detracts from the finished piece.

Drift in stages, mashing in the sides each time will reduce eye wall thickness and/or amount of bulge desired. As you mash in the sides the slit grows in length and the next drifting needs to remove any sign of a crack. Your drifts need enough length to accomplish this. Drifts that function as an internal anvil should be made from tool steel.

Combination tools that are both a chisel and drift can also be used.

The initial cut should be less than the length of the finished eye. If you are not going to work the sides, but let the bulge just be then a slit the height of the eye should give you a nice clean eye.

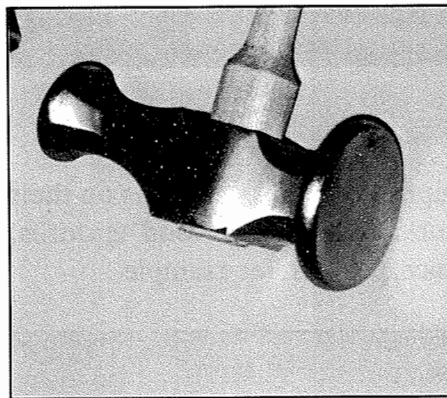
Pein problems:

Forging without a cold shut is almost impossible without a power hammer, because you do not have enough power for the force to go deep into the material and move the center. Live with it rather than waste time trying to conquer it.

Another option is to make hammers



A collection of Baldwin hammers, each designed for a specific function.



Chasing hammer (left) for finish work.

in pairs; siamese twins joined at the pein. Separate after both peins have been formed.

My preference is the classic flat back style and it may be best to use and make.

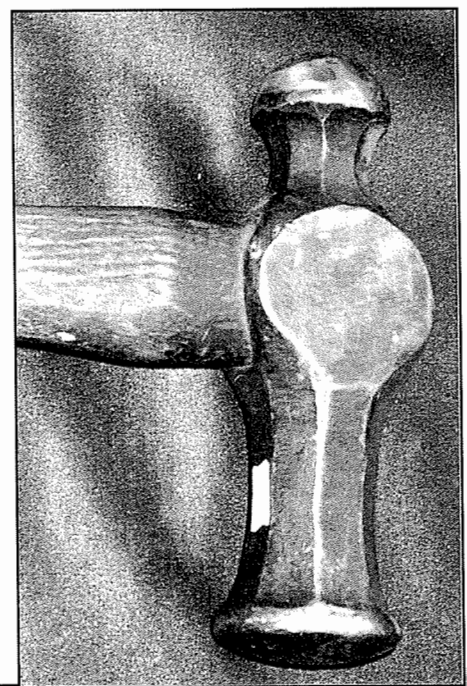
Pein and eye forging process leads to a slight taper of hammer body rather than parallel sides left to right.

Front/back stays rather parallel.

Dressing sides, no dings, use flatter w/ striker, work down to low heat to clean up scale. The corners on the face can be "busted" to your own preference.

Now you have gone through the mental game and are ready to make it happen. This publications would like to see your results, please send your photos and notes or stories.

U.K. smith Ken White created this hammer out of a standard ball pein hammer, a way to customize a hammer without starting with just bar stock.



Off Center Forge



Grant Sarver's hobby with a national following

Behind the new cedar fence surrounding his rural Pierce County, Washington, property, Grant Sarver plays with big pieces of steel.

There are shops plopped around his comfortable country home and in those shops Sarver makes tools that have a worldwide reputation and market.

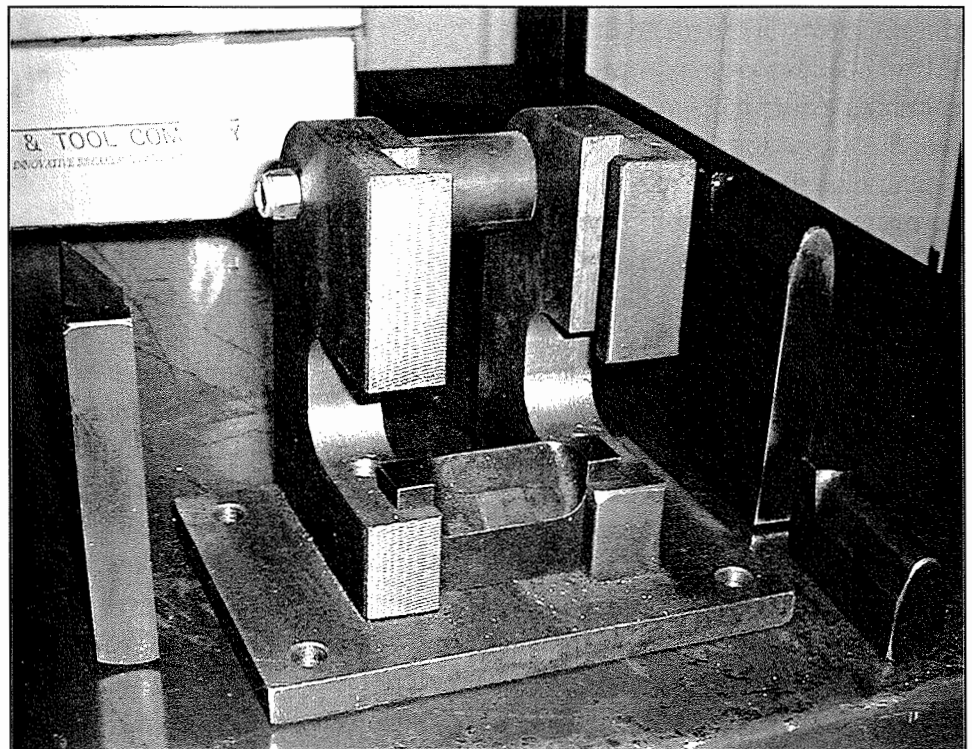
He also makes other forging devices, plinking around with drawings and slabs of steel and metal saws and cutters and dies until the blacksmith's next must-have helper sits on one of his tables waiting for its first taste of hot iron.

Sarver will sort of "ah shucks" you about his shops and operations until you start looking around and asking questions. Then the boxes start opening; the tools come out; the tour of the bucolic industrial campus begins.

Best known are the spring swages and various tongs Sarver manufactures at Off Center Forge. There are over 200 different patterns of swages which allow smiths to

imprint countless patterns on their work, things like wood textures, vines, pebbles, for example.

The swages are distributed to his large international following through Kayne and Son at their web site,



An Off Center Forge blacksmith's helper, the Guillotine tool. It facilitates top and bottom edging at the same time. Shown here are sets of fuller edges and cutting edges.

through Kayne and Son at their web site, Kayneandson.com. He is also a major supplier to blacksmithtools.com.

"My swages are made from 4140 steel," he says, "and they're made to last."

Sarver spent fifteen years working with metal on a much larger scale before developing his interest in blacksmith tools.

He ran a plant on the Tacoma tideflats that made industrial size demolition tools. By the nature of their use, demo tools wear out quickly, so Sarver's operation was also heavily involved in tool restoration and repair.

About seven years ago he began the transition from big to little, the result being Off Center Forge and the tools it is noted for.

But the change in focus hasn't stopped Sarver from his ongoing development of new tools and machines.

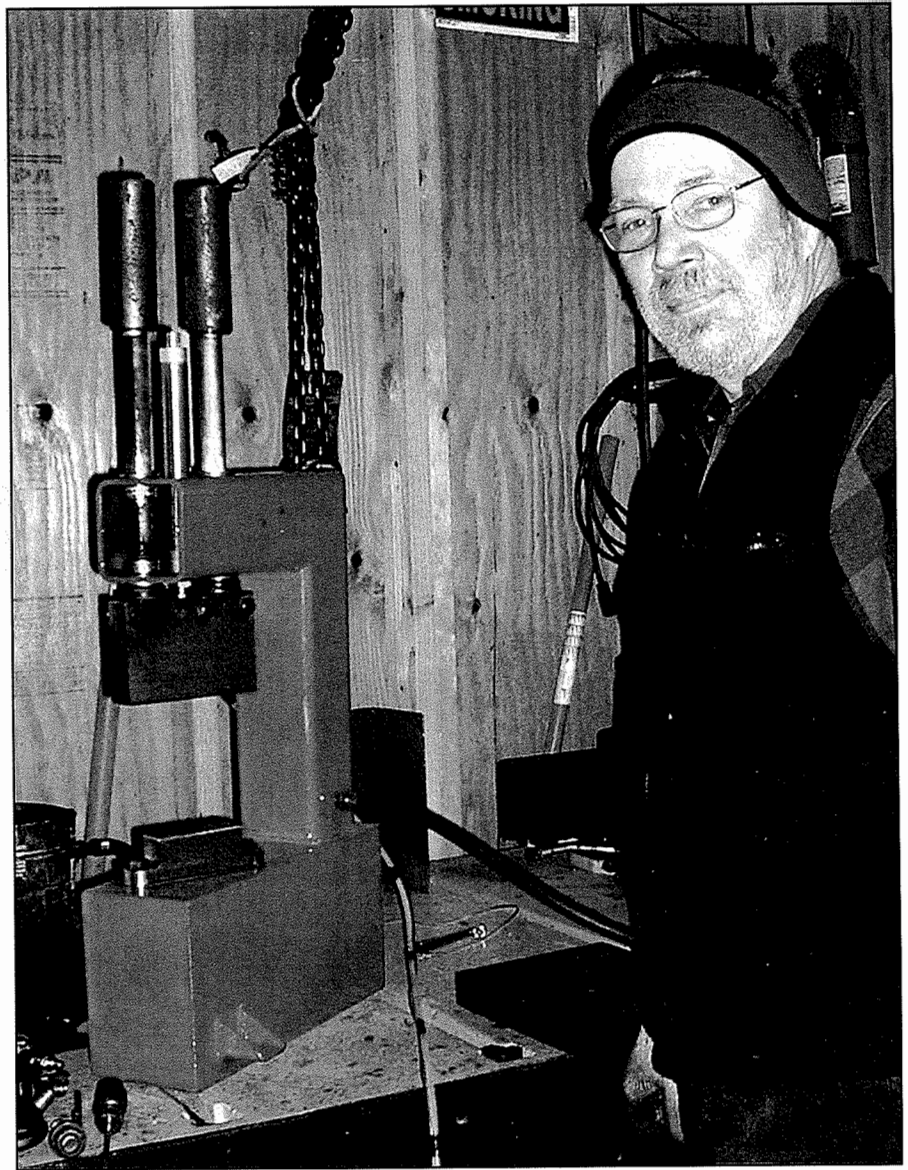
On one of the benches in his large main shop sits a prototype tabletop air hammer. Sarver calls it a 25 pound hammer that runs off the smallest air compressor. "It's not intimidating, but it does serious forging," he said. Sarver expects to be selling his hammer for under \$2,000.

Another nifty little blacksmith's helper Sarver is making is a device for edging two sides of a piece of metal at the same time. The Guillotine tool is set up so that a pair of edges can be used at once, speeding up that part of the design process.

"What I love about this business is that the number of tools I can make is endless," Sarver said.

A tour of the grinding shed,

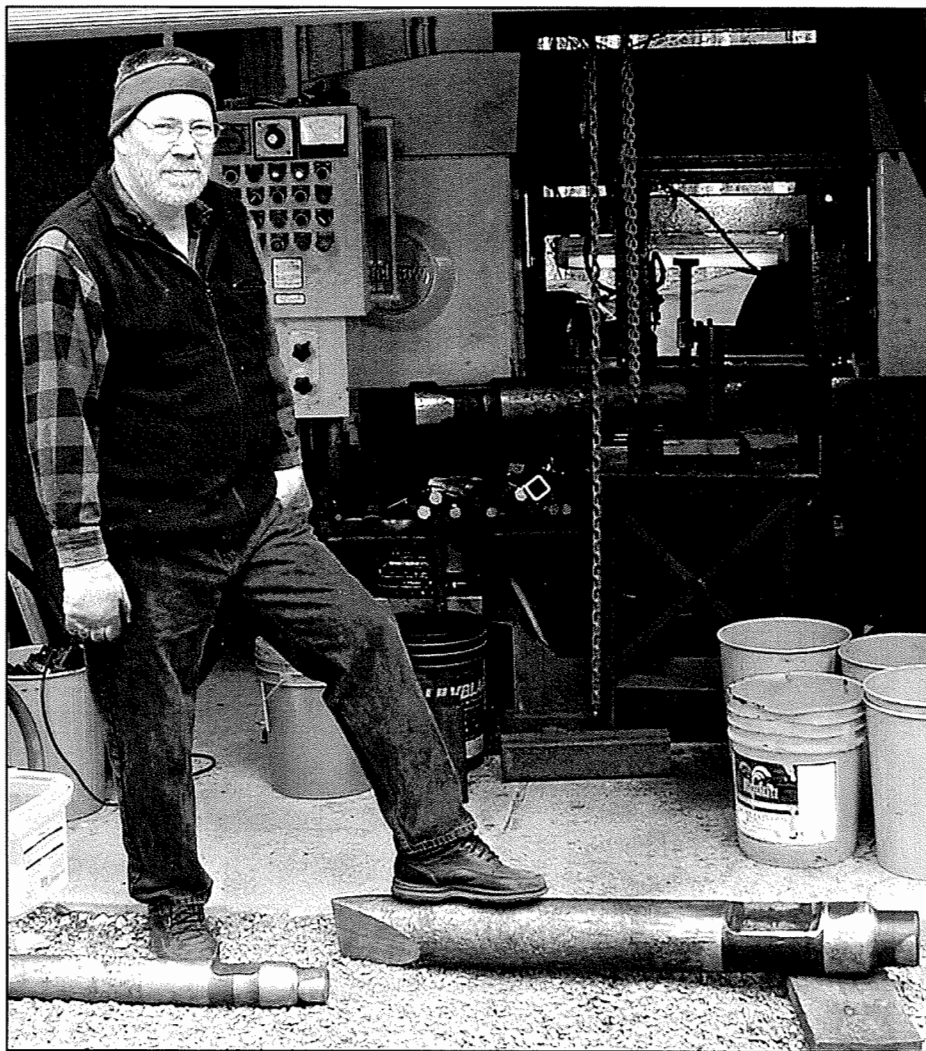
continued on page 40



Grant Sarver stands next to his tabletop air hammer. "Not intimidating but it does serious forging."



A 4140 steel slug that will become an Off Center Forge swage.



Sarver

the saw shed, the various storage sheds and his main shop is testimony to that. Pieces of steel perch everywhere, somewhere between the drawing stage, the mock up stage, and the final stage towards becoming another blacksmith's helper.

Grant still does work on demolition tools. His foot rests on a giant chisel bit that has had a new business end recently cut into it. Behind him another chisel is being cut.

Gunmakers fair in Corvallis will feature metal working, finishes, knife making

The Northwest Blackpowder Gunmakers Fair will be held in Corvallis the same weekend as the Northwest Blacksmith Association Spring Conference, May 13-15, and will feature displays on a variety of metal working.

Steve Nelson and Jerry Huddleston will cover the entire spectrum of metal finishes including bluing, graying, browning and casing.

Andy Evans will lead a

discussion and demonstration of abrasives with special attention to polishing and honing.

Damascus forging and knife making will be put on by Ford Swauger.

There will also be an exhibit of 18th Century European horse pistols along with exhibits of long rifles and other blackpowder guns.

The gunmakers fair will be at the shop of Warren Adair, 835 Cattle Drive in Corvallis.

Hot Iron News

Classifieds are free!

Articles are invited — email (ideally by copying your text onto the email), jpeg your art, send original articles and pics.

Let me know about stories.

DEADLINES

May 15, Aug. 15

Nov. 15, Feb. 15

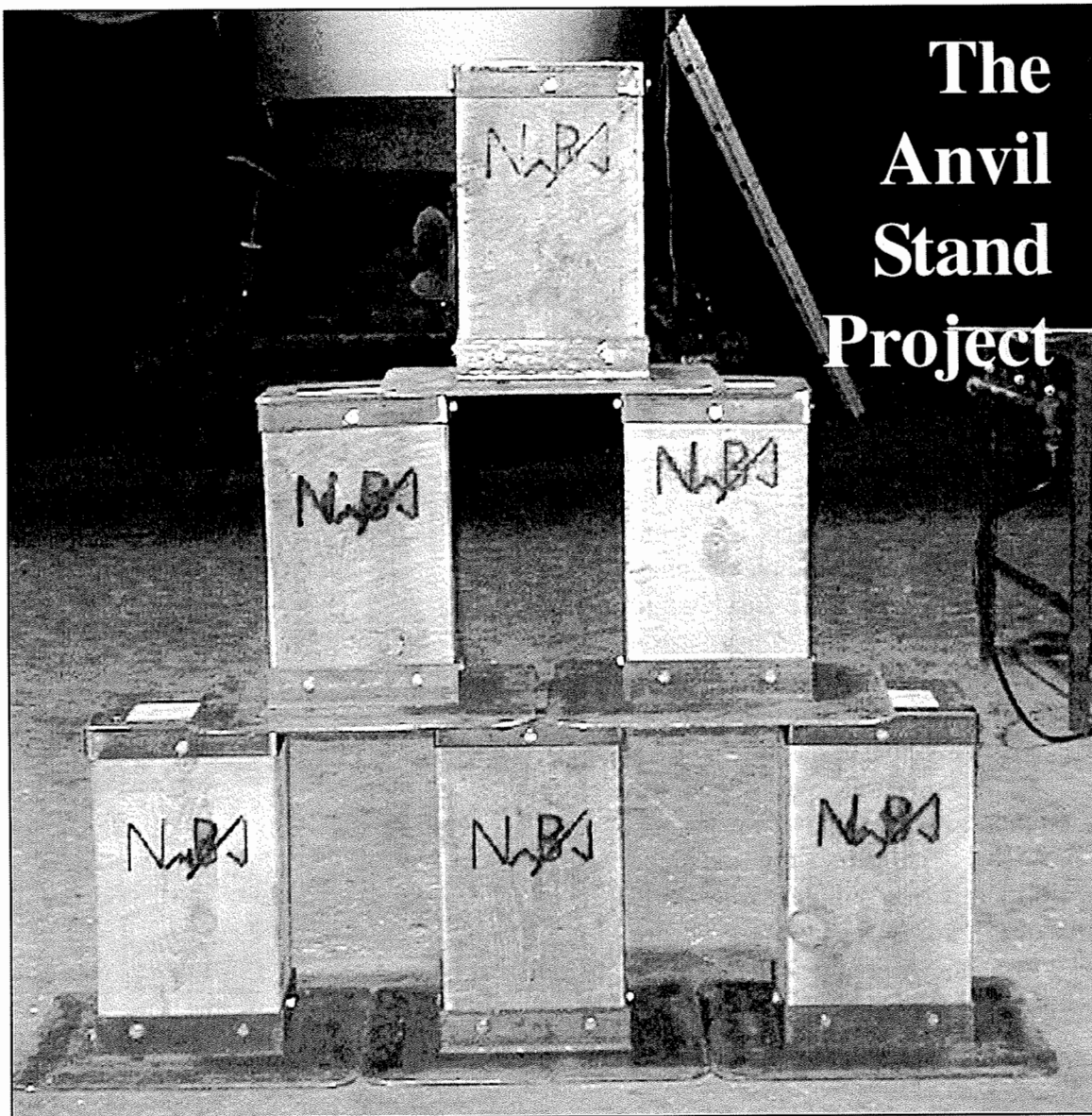
(Sooner is always better than later)

1531 N. Prospect St.

Tacoma, WA 98406

jma66mn@thewiredcity.net

253-879-8455



The Anvil Stand Project

Members
gather on
Orcas
Island to
build
anvil
stands
for the
NWBA

by Andrea Moore Lisch

Clear skies and sunshine greeted our little spot of Western Washington February 19. And what really made the day incredible was the really wonderful gathering of NWBA members on Orcas Island. All came to work together for the betterment of our organization.

All of us were gathered to make anvil stands for the conference workshops.

As you know we have decided to improve and expand our workshop portion of the conference. Not only

are we now offering a small payment to the instructors, but we have ordered six anvils from Old World Anvils. They are scheduled to arrive in mid March, so we wanted to make the stands with plenty of time before the Spring Conference in Corvallis in mid May.

The beauty of the stands we built is in their uniform design. Everything is standardized so set up was easier and the final product has a clean and functional look.

Jorgen Harle procured the beautiful wood blocks from the sawmill next to his shop. He generously donated much time cutting most of the metal

to size before everyone arrived Saturday morning.

The design itself is simple with angle for the base and angle for the top frame. The anvils themselves will be held in place with two 3-inch flat bars that are forged to match the curves of the anvil base. These are welded to the top frames once the anvils arrive.

With so many people willing to help, the project went smoothly and easily.

Everyone took on one of the jobs and got to work.

Once one part of the job was completed people pitched in to help



Jorgen Harle
punching holes.

on the next step.

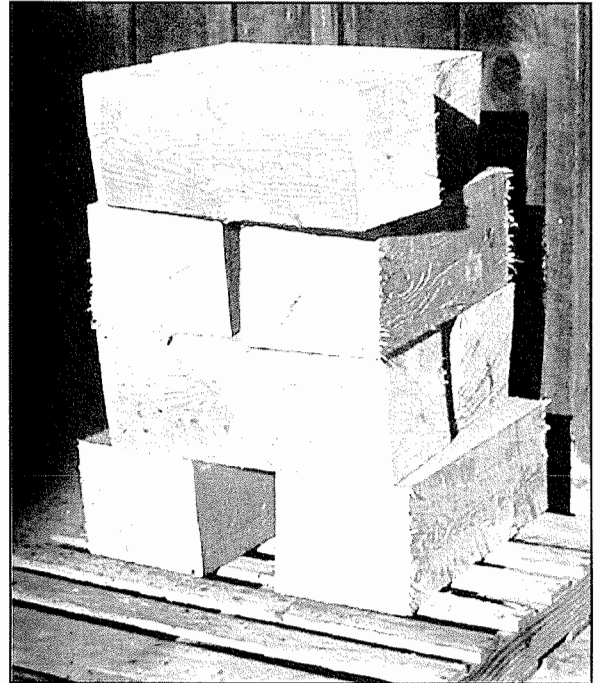
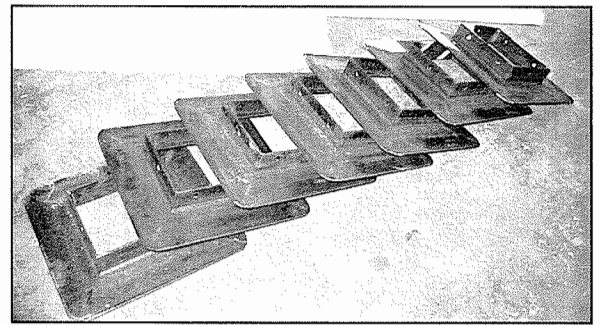
Jeff Holtby jumped on the saw to finish cutting the angle, then laid out the hole spacing while Dave Neeley was busy cutting and sanding the wood blocks to square.

Dave's brother Mike started off weld prepping the angle iron before giving them to Jorgen, who quickly punched the holes for the lag bolts.

Once this step was completed Kris Ketchum would fit the frames together and then Dave Lisch could weld them up. Terry Carson and his daughter, Annie, forged the flat bar to fit the anvil bases.

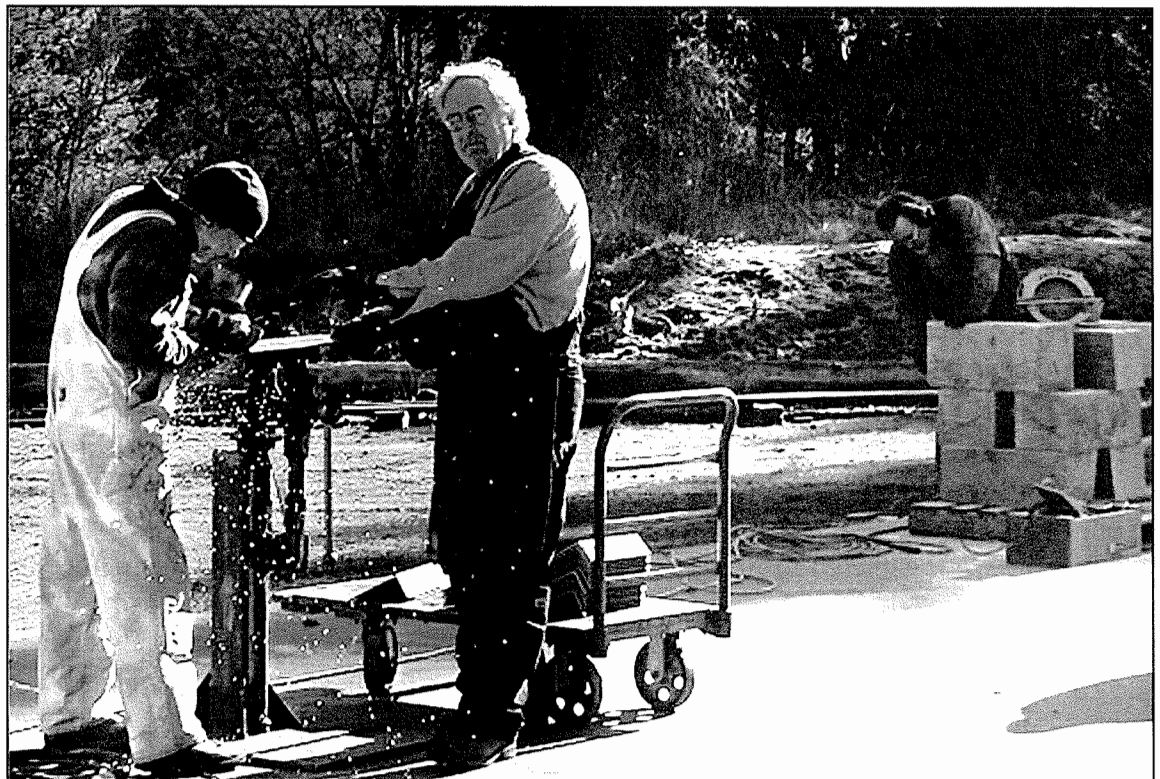
Fortified with lunch, the group got back to work.

The bases were fine tuned by Ken Williams, who would radius the corners before they were finessed into place



Bases (upper right)
and the wooden anvil
blocks that will soon
be fitten into them.

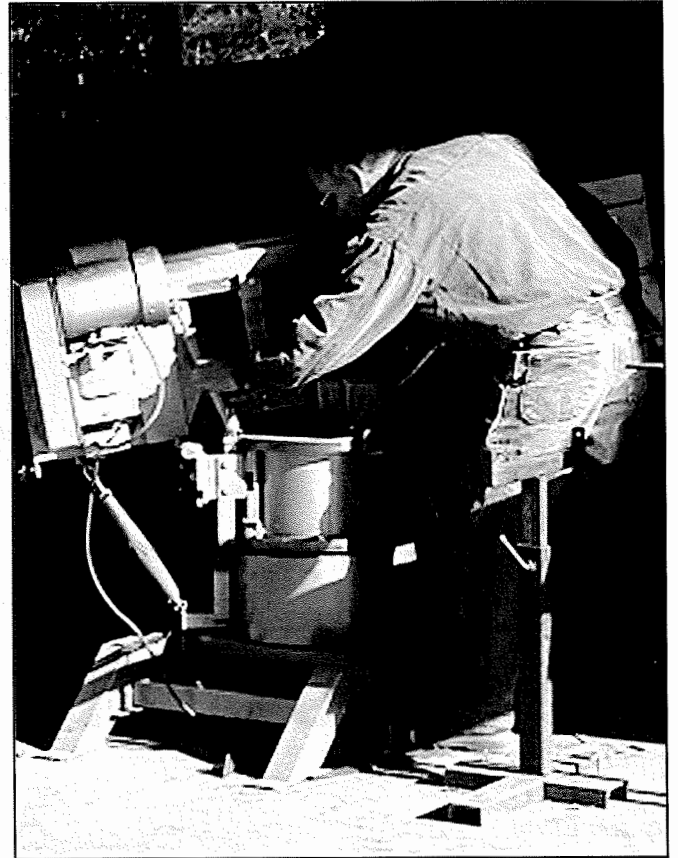
Mike Neeley and
Ken Williams
grind metal, Ken
holding the smart
end of the
project. In the
background Dave
Neeley does
some finish work
on the blocks.





NWBA President Terry Carson said he was working, but it looks like he was just taking more cold medicine.

Jeff Holtby manning the saw.



and attached with lag bolts.

Top bolts went next and the day progressed smoothly.

Everyone lent an extra hand and we even got a couple of the locals in on the act.

After the stands were completed, we were treated to a small tour of the farm that surrounds Jorgen's shop. We started in his beautiful old barn, populated by several horses, a bull, and featuring a great ceiling swing. We went on to admire the farmer's grand home and ended the tour by peeking in through the windows of the oldest cabin on the island, built in 1850. It is a beautiful place to work and live and very kind of Jorgen and the landowner to share it with us.

The finished stands stood to show

that the project was a success, though the real success was shared by everyone who worked on the project. It reaffirms for us the reason we donate our time to our group, we want to see our craft continue into the future.

And what better way to do it than through education and sharing.

These stands will allow our group to provide better workshops — they are a sound foundation for the future.

At the end of the day we all went home knowing we had accomplished something positive for the NWBA.

WHAT???!!!

You're not a member of the Northwest Blacksmith Association?

**Fix that right now, neighbor, by logging onto our website at
www.blacksmith.com or contact any of the people listed on page 4.**

6,735.98
+47,000.00
-11,633.12
(1,466.10)
\$100,000.00



=The nuts and bolts of shop finances

by Joe Elliot
dcf@empnet.com

A shop profile of Dry Canyon Forge

Overview: My first exposure to artisan blacksmithing was at the 1976 ABANA conference in Carbondale Ill.

I was totally enamored with both the transformation of the metal and those who chose blacksmithing as their profession. From that weekend forward I knew it is what I wanted to be.

In 1986 I opened my shop in its present location. I have the daunting task of moving my business this year due to a road project, which forced my relocation.

I am also including some financial information and hoping to encourage others to do the same. I think it would be useful information for beginning smiths needing to develop realistic business plans and having to deal with financial institutions

Location: I currently have my business located in a 6,500 sq ft old warehouse.

My forging area is about 1,200 feet, show room 700 ft and office 400 ft, with the remainder of the building used for storage (for myself, my kids, my friends, dogs, and seemingly anyone else that needed a place to put stuff).

The Help: I currently employ 2 people.

They earn from \$15 -\$18 per hour, have health insurance and paid holidays. They work 4 - 10hr days and say that they feel very lucky that they are with me.

I also employ the services of a bookkeeper and CPA. In addition I subcontract out plasma/laser cutting, machining, sheet metal forming, & powder coating.

We make banisters (hate them), door hardware, fireplace accessories, furniture, signage and lighting. In the past 5 years lighting has gone from 15% of the business to over 50%.

Money: My shop has been grossing about \$200,000 per year and I have a take home pay of around \$45,000. We charge \$60 per hour and will increase this to \$65 per hour after the move.

Equipment: The usual blacksmith hand tools, vises, anvils, stick, mig & tig welder, propane forge, propane torch, platen/acorn table, 125lb and 250lb Beaudry mechanical hammers (set up), mechanical fly

Shop profile, con't

press, tumbler (18" diameter x 85" length).

Work: We have a small line of production items that account for about 10% of the sales and the rest is from custom work.

Clients include the usual suspects.... homeowners, contractors, architects, designers, my wife, etc.

We make banisters (hate them), door hardware, fireplace accessories, furniture, signage, and lighting. In the past 5 years lighting has gone from 15% of the business to over 50%.

Last year we went through the procedure of getting the shop U.L. listed at a cost of \$8,000 with annual fees in the \$1,500 range. We don't do repair work unless it is within a historical context and then we call it restoration.

Design: Almost every design includes customer's desires, architecture, budget, function, and my understanding of working metal.

I often find myself communicating how forging is different then other ways of working metal. I encourage the customer to come see and touch samples.

If budget constraints persist I suggest we use "less design" in lieu of traditional joinery and finishing the metal natural.

The ability to reveal these processes is unique to our profession and makes for a much more dimensional piece.

Shop tips

Electric weld:

We try not to leave any exposed welds when assembling a piece (arc-phobia as described by Grant).

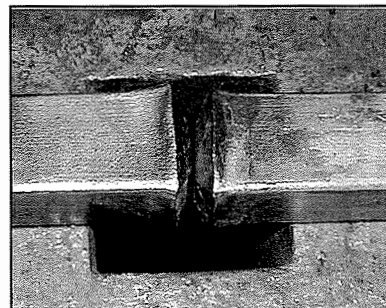
If we do its either a TIG weld or forge weld.

For a variety of reasons we often have to join pieces (especially in banister work, top and bottom rails in long runs). In my opinion grinding metal sucks. Not only is it noisy, smelly and hazardous, it introduces new color and textures to the forging.

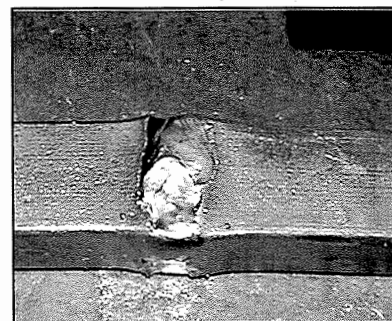
Instead we upset the ends (pic upsetweld 1) in preparation for "butt-welding" (pic upsetweld 2). Weld with MIG or stick (pic upsetweld 3). Then forge (pic upsetweld 4). Growth is minimal (pic upsetweld 5) but a test piece for accurate calculations is suggested.



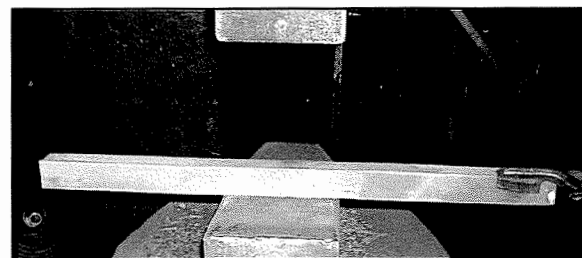
Upsetweld 1



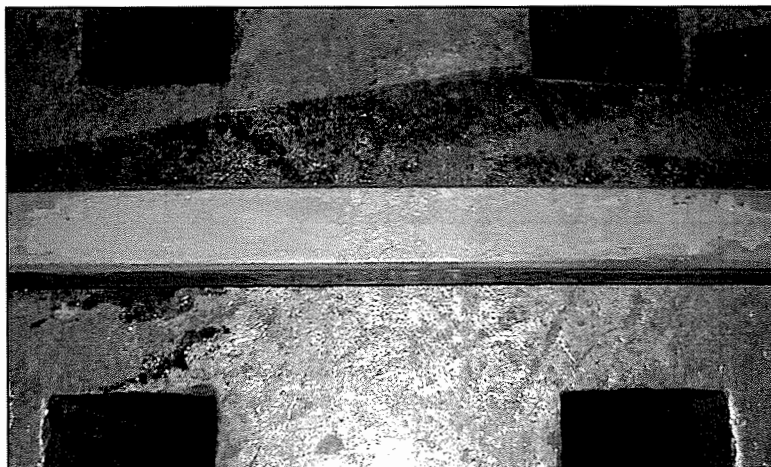
Upsetweld 2



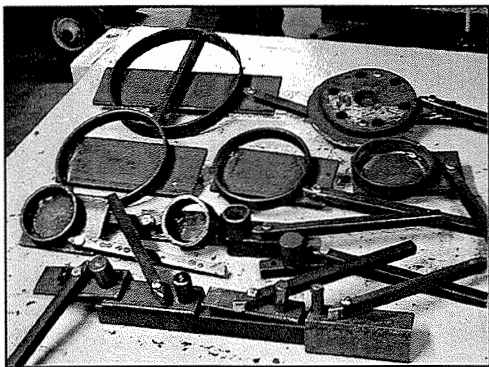
Upsetweld 3



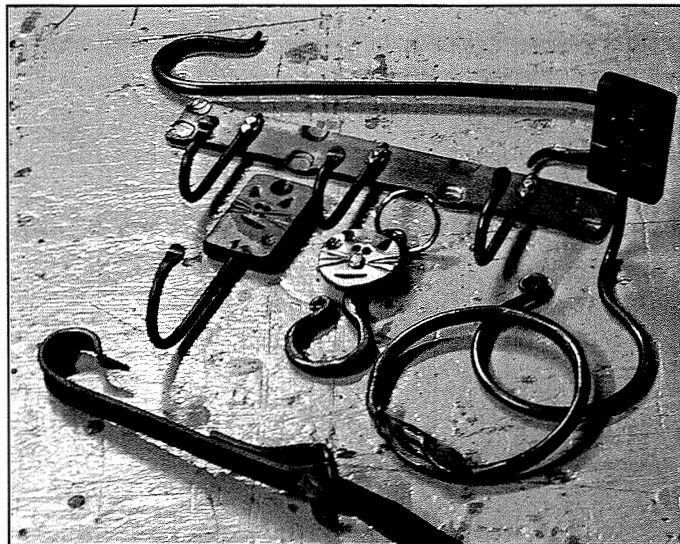
Upsetweld 4



Upsetweld 5



Build a bender bar



by Gene Chapman
Oak and Iron Publishing

These homemade pinch bar benders were made over the years from scrap materials. One is a ship pipe flange rescued from a marine scrap yard. Some rings were rolled on a ring roller, and others, cut from pipe or solid stock.

All are welded to various bases which include angle iron, flat plate and a few on solid bar. The ones on flat plate have flat stock welded on the bottom for holding in a vise. Rolled rings and pipe are welded on the inside.

The smaller benders mounted in angle iron are plug welded from the bottom.

on small hooks.

Bender sizes range from about 12-8-6-5-4-3-2 3/8-1 7/8-1 1/4-1-3/4-9/16-1/2 (sizes are in outside diameter inches)

This 12" bender is mounted on 3/8" plate. The half ring is 3/16" X 1". A 3/4" stub is used on this bender instead of a pinch bar. A wedge is used to hold steel and can be hammered in place. The dog on the end can be smacked to loosen the wedge. I hand bend 3/8" X 3/8" mild steel bar on this cold. It's mainly used for garden and wall hooks.

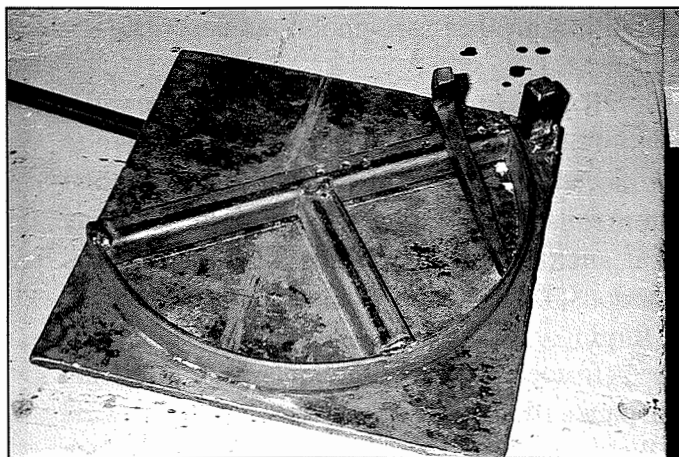
Some or all of these small potatoes forged pieces were shaped on my small benders to make duplicate parts the same size. Shown are "S" hook, 3 hook wall hook set. Cat hook, copper cat face bottle opener, hoop snake and the top piece in a hanging candle holder.

Before making a variety of benders my guarantee was, "No two alike", now with the sized benders, it's, "Most are alike". Have fun you iron pounders, go make some benders



This close-up of a small bender made from 1 1/4" black iron pipe, welded on square stock. The pinch bar is 1/2" mild steel. A 1/4"-20 bolt holds the bar on the base. Bolts are only hand tight.

This is the bender used the most



12-inch bender mounted on 3/8 inch plate. Wedge for holding steel can be hammered into place, smacked loose by hitting the dog on the end.

Anvil restoration

by Robb Gunter and Karl Schuler

This process works well on wrought iron base and cast iron base anvils with a good tool steel top. It was developed with the help of several metallurgists and welding engineers at Sandia National Laboratories.

Grind all surfaces to be welded. Expose good clean material. Grind through all folds or fractured chips. Chamfer any holes or severe depressions in preparation for welding.

Preheat a wrought iron base anvil to 400F and a cast iron base anvil to 450F. The temperature can be verified with a "Tempil Stick" crayon available at your welding supply store, which melts at a given temperature.

A propane fired weed burner works well to preheat the anvil. A wood fire can also be used if care is taken to wire brush off all carbon and smoke deposits before welding. Be careful to not overheat the anvil, particularly the heel and hardy hole area as it's a thinner cross section and heats faster than the more massive parts.

If your anvil has a wrought iron base and the damaged area goes through the tool plate so that you have to begin the repair by welding to the wrought base material, use Stoodly 2110 (or equal) 3/16-inch rod; DC reverse works best however it will run AC: unlimited passes. Expect 45 Rockwell C as welded. When you can finish building up the repair area in no more than 3 passes (or layers thick) use Stoodly 1105 (or

Began life as a ball pein hammer



Gene Chapman forwards this photo of a piece of work by Rik Palm, a knifemaker in Southern California. Palm forged this tomahawk from a ball pein hammer. Gene says that he makes some terrific knives. We'll try to get some more info on his work for later editions.

equal) 1/8-inch rod; DC reverse (or AC); expect 50 to 52 Rockwell C as welded, which should be consistent with the original hardness of the tool plate. The Stoodly 1105 is a particularly good match for the W-1 tool steel tops of most anvils and is designed to be impact resistant.

When welding to a cast iron base anvil and on to the cast iron a base, a layer of NI rod (high nickel) must be put down first. Build up over the NI rod with Stoodly 2110 (or equal); unlimited passes; DC reverse; expect 45 Rockwell as welded. The last 3 passed (or layers thick); use Stoodly 1105 (or equal) 1/8-inch rod; DC reverse; expect 50 to 52 Rockwell C as welded if you don't exceed 3 passes thick.

Cast steel anvils repair well using the combination of the Stoodly 2110 and the Stoodly 1105 (last 3

passes).

Repair to the horn of a wrought iron base anvil can be accomplished with 6010 welding rod as needed. If the point of the horn is blunted or slightly broken off we usually put the end of the horn in a coal forge, heat it to a bright orange and forge it out to the desired shape using a 12LB sledge to back it up and a 2LB rounding hammer on top. Repairs to the horn of cast iron anvils are usually done by welding with the NI rod and grinding.

If the area around the hardy hole or pritchel hole needs repair, weld using the above detailed process; however, inserting a chill (or form) of 1/16-inch sheet copper into the respective hole before we ding will save you a lot of grinding and filing to true up the hole.

continued on page 48

What's your experience with sash weights?

Does anyone remember when Mike Linn had the wrought iron sash weights from an old Seattle building? It was years ago. I bought several at the time and used one for various projects.

Recently I wanted to play with some under the fly press. When cutting with my import 63&1/2 inch band

saw two carbon steel blades were ruined quickly. That 2-inch wrought iron bar has some crud or something embedded in it.

Anyone else have similar experiences with those bars?

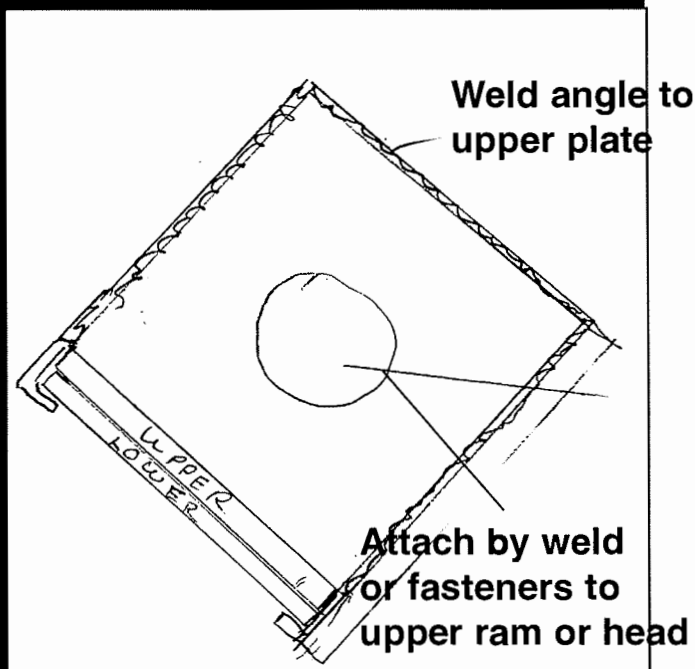
Let me know at oakniron@centurytel.net.

Thanks, Gene Chapman.

Shop Hints

Dave Davelaar, Dog Island Forge

A quick tip for those of you wishing to make top tools and quick change tool holders for your fly press, hydraulic press, or treadle hammer. As a former building contractor I caught the idea of using a backing plate for tool plates. These are backing plates for building tiedowns and are readily available at lumber yards, building supply outlets, etc. They come in various sizes but I used the 3/4 hole size. I took three pieces of 3/4 inch angle formed into U shape and stacked two plates atop this u shape with a business card in between, welded the angle to the top plate and you have a tool holder. Because these plates have a pre-drilled hole in the center, welding tools and receiver is a cinch without further dressing.



Anvil Restoration, from page 47

The hard surfacing rods used here to repair anvils are quite gravity sensitive during the welding process. If you can lean the anvil at 45 degrees against a cinder block while welding on the edges, you'll have more of the somewhat expensive welding rod on the anvil and less on the floor.

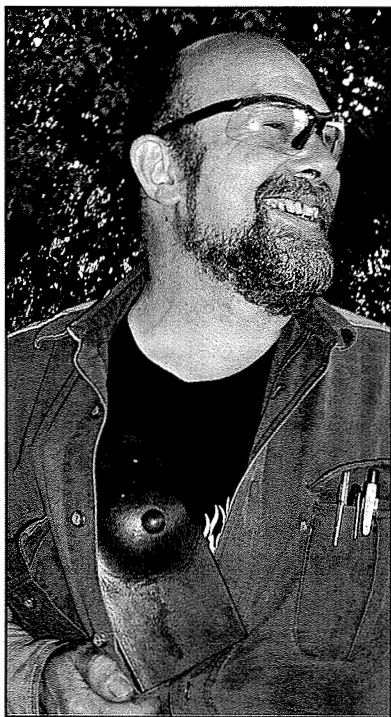
After all welding repair is complete and you are sure that there is sufficient build up to allow for grinding to the desired finish (check with a straight edge), post heat back to 400F or verify with the "Tempil Stick" that the anvil is still that hot from welding. Pack the anvil in Vermiculite (crushed mica), available at most nurseries, to allow it to slow cool for a minimum of 8 hours. This will minimize the potential for stress cracking from welding.

Grind the anvil to the desired finish. We start the grinding process with a 24 grit cup stone on a large body grinder. It is quite aggressive at quickly removing metal. Be careful to keep it running flat (sparks coming off on both sides of the cup stone). Continue the grinding process using flex back metal sanding discs, starting with 24 grit and working down to 240 grit, in 5 or 6 steps. Until now, all edges should be kept sharp and square.

With 100 grit or finer sanding disc radius the edges to your desired shapes. Near the anvil step the radii are typically ground to a 3/16-inch or 1/4-inch radius and tapering to a nearly no radius at the heel of the anvil. The edge of the step and the heel are usually left rather sharp and only broken with a file. A final polish can be done with a "Scotch Brite" disc and you can usually see your face in the anvil top.

This anvil restoration process has been used on several hundred anvils around the country with great success.

(Mark Manley forwarded this article from Forgeco Architectural Metals in Tijeras, New Mexico, where Robb and Karl restore anvils.)



If you always thought Darryl Nelson was a boob, your suspicions have been confirmed.

Fall Workshop

Based on Fort Vancouver artifacts

The Peter Ross Institute of Higher Learning fall workshop will offer a second weekend of instruction with a real touch of Northwest history thrown in.

After the first weekend of hands-on instruction, October 28-30, there will be a session the weekend of November 4-6 at the Fort Vancouver blacksmith shop, Fort Vancouver National Historic Site, Vancouver, Wash.

The emphasis will be on period work based on actual artifacts from the extensive collection at the fort.

The cost is \$20 per day for Fort

Vancouver Craft Guild members. Non members pay the same amount, but have to pay \$10 to join.

You can buy as many day as you want.

The shop offers everyone a good view plus the work on the anvil is projected to an overhead television screen to insure that everyone receives a great educational experience.

For more information please contact Dean Moxley, 503-284-6163, virus2@comcast.net, or Ted Anderson, 360-696-2648, nils@pacifier.com.

Shop Hints

by Mark Manley

I like to make simple measuring gauges (similar to the one drawn here) when I need to have uniformly forged parts.

I prefer using 1/8x1/2 inch flat bar (though any flat bar will work) cut to length with a short 1/2 inch 90 degree leg bent at one end.

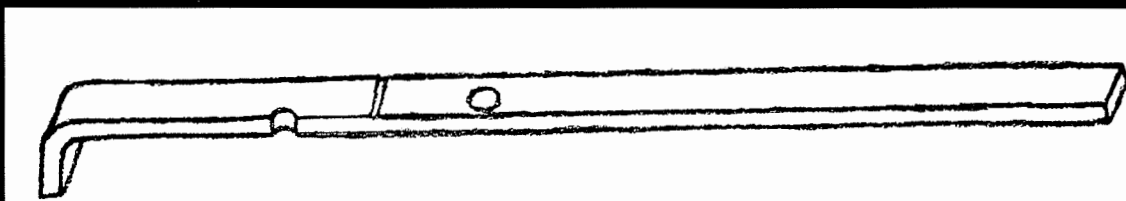
Along the length of the bar I mark out a series of reference points pertaining to a particular forging. These marks can be made in any number of ways: grinding or filing notches into the side of the bar; a filed or chiseled line across the bar; or a drilled hole.

A Simple Measuring Gauge

I like to use a drilled hole to reference where I would like to place a center punch mark on a forging. This way I can simply lay the gauge on top of the piece and center punch through the hole. I will usually stamp some reference data next to each mark such as dimensions or forging operations to be performed.

Some identifying data on the handle to reference the forged part is also a good idea.

I find gauges like this to be very useful when forging cabinet hardware, or parts for a grill with a repeating pattern where it is desirable to have consistent forgings.



Announcements

NWBA Spring Conference,

Friday, May 13 through Sunday, May 15, at the Benton County Fairgrounds, Corvallis, Oregon. Jerry Zygmuntowicz and Mark Manley have put this event together. Santa Fe smith Frank Turley and Seattle smith Maria Cristalli are the featured demonstrators. Schedules, map, other information on pages 25-26 of this edition of the *Hot Iron News*.

Fall NWBA Conference.

Friday, October 14 through Sunday, October 16 at the Skagit County Fairgrounds in Mount Vernon, Washington. Demonstrators will be John Adolph, a Canadian blacksmith, and Steve Lopes from Port Townsend. Jorgen Harle and David Lisch are hosting this conference. More details in the June edition of the *Hot Iron News*.

Two Workshops at Meridian Forge,

Traditional Joinery and Forging Copper & Bronze. The Joinery workshop will take place April 22-24, the Copper & Bronze shop June 3-5. Meridian Forge operates its workshops to maximize the students' time on project. Small classes (limited to 8); individual workstations and all specialty tools provided. Standard class fees are \$300. All classes have a \$100 non-refundable deposit. Darryl Nelson, instructor. Meridian Forge, 37010 Meridian East, Eatonville, WA, 98328. 360-832-6280.

Kemper Workshops! Basic Repousse'

April 23. Back by popular demand and an overflow of the Feb. 19 class, a basic course to acquaint you with the tools and techniques used in "stake repousse'." We will start with a review of tools used, demo their use and move on to "hands-on." Tools and materials will be furnished, but will send a copy of basic hammers/stakes for anyone wanting to make their own tooling. Stake #2-5 and Hammers #5-H and #6-H are the choices for this workshop. Jerry Henderson, instructor. Fee \$75. Contact Don Kemper (see next notice.)

Advanced Repousse Workshop

June 3-5. Tools and techniques of "stake" repousse'. Acanthus leaves for scrolls, both full form and on the flat of scrolls. This will be an intensive, advanced workshop and a once-in-a-lifetime chance to work with a renowned master in his mid-80's. Students must have taken a basic stake repousse' workshop to develop their skills and lining techniques.

We will start with a review of tools used, go to hands-on, and cover pattern cutting. Tools and materials will be furnished but it is recommended that students develop their own tooling. If possible we will send a copy of basic hammers/stakes/tooling to anyone who desires making some of their own tooling hands-on. Fee \$225.

For all workshops dress warmly (natural fiber clothing). You must wear safety glasses. You are also encouraged to bring cotton or leather gloves, earplugs, notebook and pencils. You are welcome to bring your own basic hand tools if you like. For information contact Don Kemper,

Ridgefield, WA, at 360-887-3903.
kemper@pacifier.com.

Mountain High XV — Metal At Timberline

September 3 through October 9, 2005. This is a celebration of metal work at the 1936 WPA built Timberline Lodge on Mount Hood in Oregon. Mountain High is a bi-annual event which celebrates an art or craft used in the construction of Timberline Lodge, including weaving, carving, painting, metal work. Metal at Timberline will involve a five week long exhibit of works of over thirty northwest smiths who have done work for the lodge since restoration was started. There will be blacksmithing demonstrations on the opening weekend and guided tours of the ironwork at the lodge.

ABANA SEATTLE 2006 Conference.

Dates are set for July 5 through 9 at the University of Washington and Sandpoint Park. Now is the time to volunteer because the current list of things that need doing has reached a million items. The official ABANA Seattle 2006 Conference website is www.abanaseattle2006.com. It will be continually updated to provide comprehensive information about the conference and tourist information for out-of-region visitors.

Winthrop Blacksmith Shop for Sale.

Retail/Demo shop in beautiful mountain tourist town. Est. 15 years. Loyal customers. Great opportunity for energetic blacksmith. Original owner seeks retirement. Own building on main street. Fixtures, inventory. Price negotiable. D.J. Stull, Winthrop Blacksmith Shop, PO 63, Winthrop, WA 98862. 509-996-2703.

From the editor

Taking pictures, writing stories, making sure the printer doesn't print a page upside down, those are my professional skills. But I've hung out with Terry Carson and Daryl Nelson for twenty years — guys who always put a hammer in your hands when you drop by — so I've handled a little bit of hot iron.

Handling the *Hot Iron News*, though, while much like other publications I've produced, has come with its own relationship. Overwhelming at first, like a new friend after a few weeks, and full of surprises.

The people who submitted articles (and I hope there are many more of you out there) are great writers. It comes from being familiar with the subject matter and from clearly loving

what they do and write about.

I've owned and published a community newspaper, published for school districts, travel agencies, other groups and organizations. Blacksmiths are a lot more fun.

Now just throw out all your PC's and I'll be happy.

In 1985 my wife and I bought the Eatonville Dispatch. Two months later we set up the first Macintosh publishing operation in Washington with a 512, a MacSE and an HP printer. After 20 years I'm pretty committed to staying with my gear, so best to send me articles by just copying them onto your emails. Pics should come on jpegs. Written copy and photographs or drawings work too.

Our intention is to wrap up each newsletter by June 1, Sept. 1, Dec. 1

and March 1 and mail within two weeks of those dates. The closer to those dates you send information, the less likely it will be to get in, so give yourself a couple weeks at least.

A lot of space in this newsletter has been devoted to issues surrounding the change in editorships. My hope is that what needs to be said will end with this edition, though members comments will always, within the limits of liability, be published.

Let me know what you think about this newsletter. It's a work in progress, as are we all.

Jim Almy
1531 N. Prospect St.
Tacoma, WA 98406
253-879-8455
jma66mn@thewiredcity.net

One Man's Trash

Is another man's treasure. The Blacksmith Swap Meet. It's pure pleasure. Come with a little, leave with a lot. Put it in your truck. Let's see what you got. Sat., July 30, 10a.m. to 3 p.m. Vender load in at 9 a.m. Fourth Annual Blacksmith Swap Meet, 2600 E. Marginal Way, Studio 3, Seattle. More info: 206-919-5431.

ATTENTION: POWER HAMMER ENTHUSIASTS

Call for articles, pictures and designs for hammer installation, power and belt drives, brakes, dies and tooling, etc. Send to: Jorgen Harle, Orcas Island Forge, P.O. Box 341, Eastsound, WA. 98245

Square Platen Tables

Good shape, 3000# with square holes, with legs \$750, table only \$650. Will load on your truck. Also, representing Striker Pneumatic

Classifieds

Hammers to Northwest blacksmiths. Call to test drive a 55 or 88# unit. Don Kember, 360-887-3903.

For sale: Anvils, post vices, swage blocks, anvil repair, Bill Apple, 360-876-8405

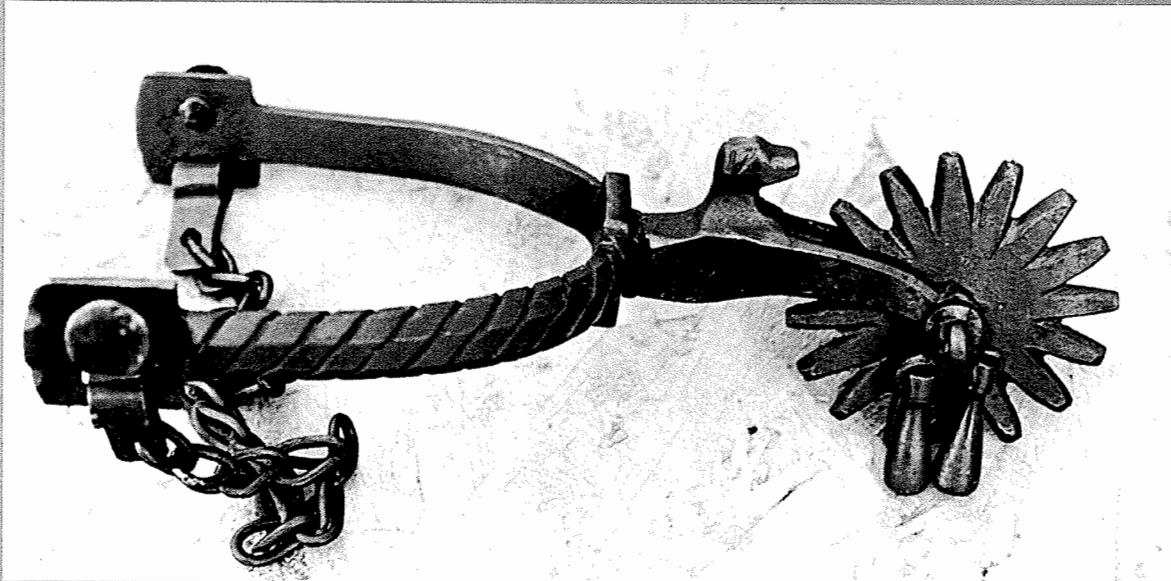
Misc. blacksmith tools and Big Blue air hammer for sale. Bob Watts, 509-922-5969

SEND YOUR CLASSIFIEDS TO jma66mn@thewiredcity.net or call 253-879-8455

Searching for old NWBA records

As the NWBA celebrated its 25th anniversary, the Archives Committee noted that there is a big hole in the Association's written, recorded history and, thus, in its archives. Currently the Committee is on a mission to collect any recorded minutes of the past 25 years in any form for any length of period—one meeting, one year, one notebook, one box full, whatever. We're hoping some of you who have been with the

organization a long time and have old minutes stowed amongst other NWBA "stuff" and would be able to assist with filling this void. Please send whatever you have to: Ina Culberson, 220 E Cronquist Rd, Allyn, WA 98524 or bring it to the Spring Conference and give it to one of the Committee Members (Jack Slack, Gary Strausbaugh, Jeff Sawyer, Andrea Lisch, Ina Culberson). Thank you.



Frank Turley spurs

**Demonstrating at the NWBA Spring Conference
Corvallis, Friday through Sunday, May 13-15**

Hot Iron News
A publication of the
Northwest Blacksmith Association
1531 N. Prospect St.
Tacoma, WA 98406

Presorted Standard
U. S. Postage
PAID
Tacoma, Washington
Permit No. 1235

Postmaster: Address Service Requested

Jeff Wilson
24664 Bond Rd NE
Poulsbo WA 98370-0810

720