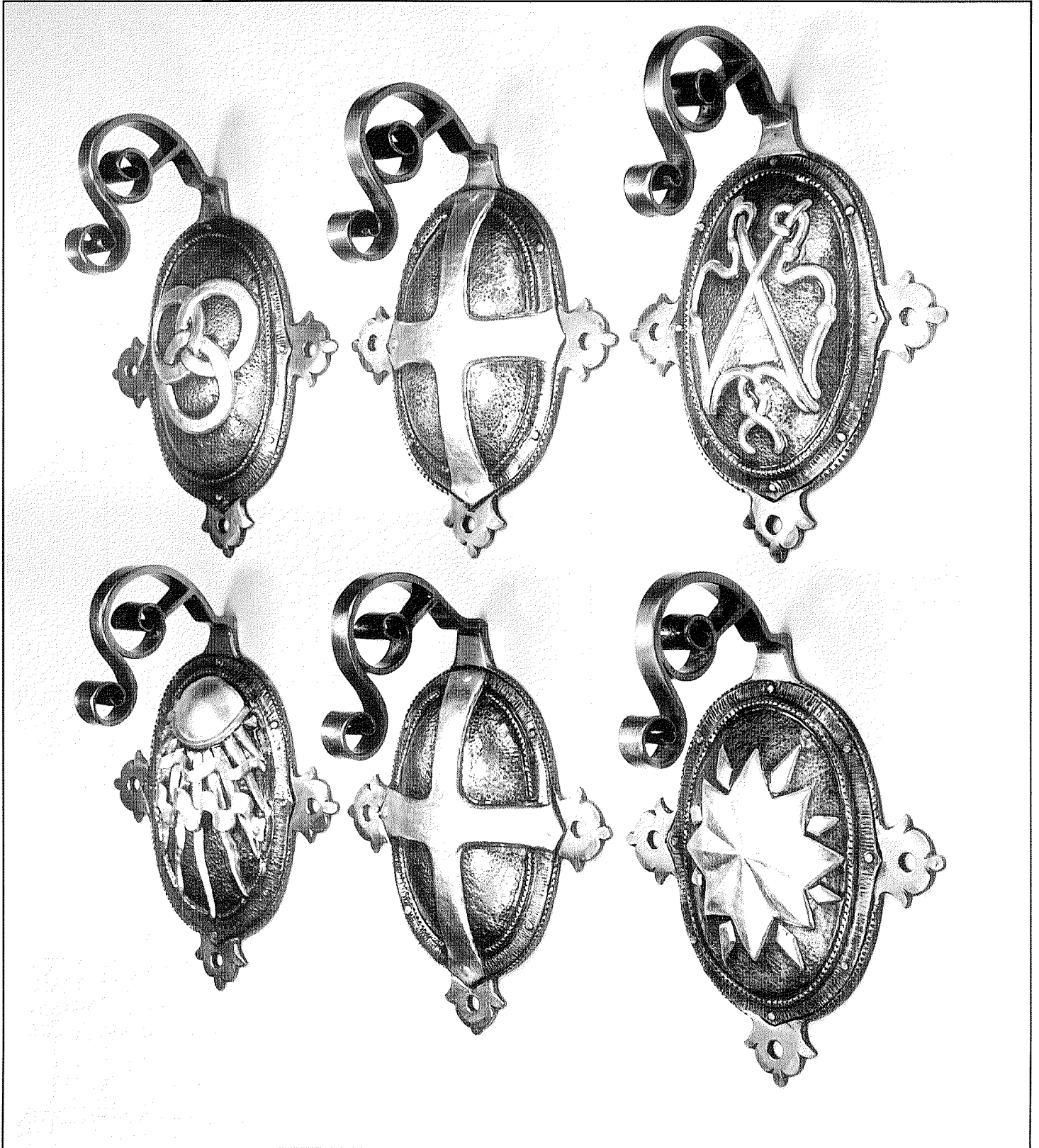


Summer 1999

# HOT IRON NEWS



VOICE OF THE NORTH WEST BLACKSMITH ASSOCIATION





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*Cover Ornaments by James Horrobin*





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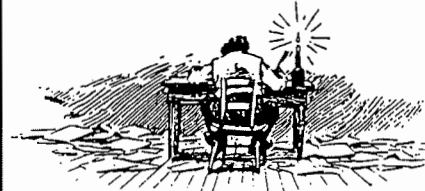
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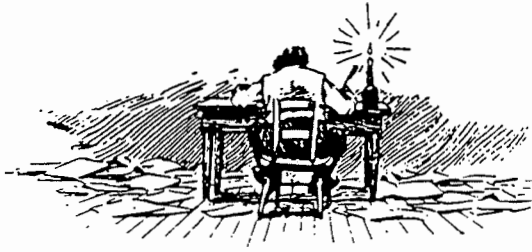
Membership includes a subscription to the Anvil's Ring and The Hammer's Blow magazines. Regular membership is \$45, Senior (65+) \$40, Student \$35.



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*Editor's Notes*



While I have absolutely no compunction against publishing photos of N.W.B.A. members caught in unguarded moments (S-1 Guy!), it certainly goes against the grain to have to do it to myself. But, I got nailed, fair and square, so . . . But did it *have* to be quite so unflattering?!

I'm still recuperating from having two wild Israeli blacksmiths in my house for a week and a half. Uri and Amit (also known as Golda because of his role as Uri's Jewish Mother!) were tons of fun. I had the Prez come over to help me babysit them. We tried to get them lost in the wilds of Idaho on a snipe hunt, but to no avail. Amit and I had to loosen up the Prez a little but this was accomplished by inflicting late-night Adam Sandler movies on him! We were also able to extensively debate Uri's demo comment that Amit is, "in a sense" already a blacksmith. We decided that it depends on what the definition of "is" is.

We are going to have a stellar line-up of demonstrators for the Twentieth Celebration. There will be tons of other activities for all interests. Alice James will be conducting a panel discussion, vendors will be present, and it looks like we might even have some mystery guests from across the country. Now, all I have to do is remember to register before September 15 so that I can have dinner Saturday night! It would be a sad sight--the Editor standing there like Little Orphan Annie watching everyone else eat!


And you'll have to be on your toes--I'm appointing Babe Brandon as the Official Hot Iron News Press Corps Correspondent for the event!


My thanks to Bill Fiorini for the excellent article on Damascus. Bill is definitely someone that we need to have demonstrate this great art-form.

I was also impressed by the exceptional quality of the ironwork in the Gallery and at the Auction in Winthrop. I feel that a picture of ironwork is worth a lot of words and that we all learn by seeing others work. I look forward to the Fall iron projects.

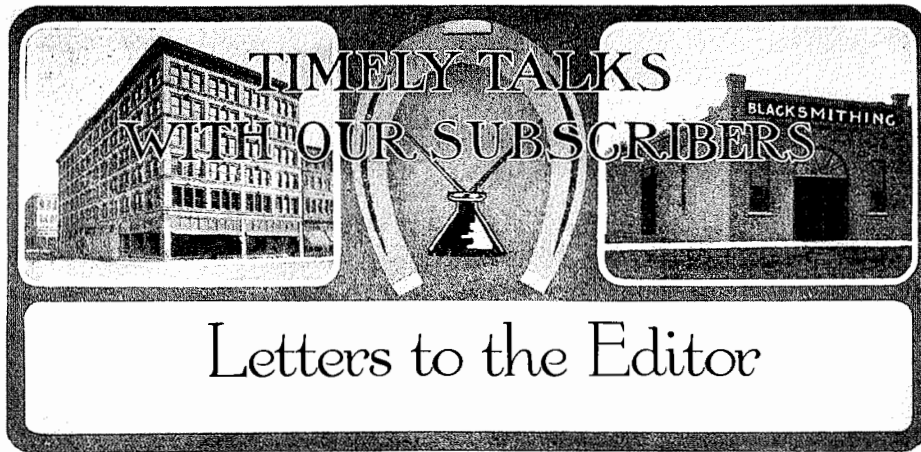
The Hay-Budden article has attracted a lot of interest. I received a call from Dick Postman, author of *Anvils In America*, inquiring about a photo of Walter Ring, the Hay-Budden business manager who went on to found the American Wrought Iron Anvil Company, also in Brooklyn. Dick gave me the name and address of Frederick C. Budden's grand-daughter who is in her eighties and lives in Boxford, Massachusetts. I've sent her a copy of the News. The photo of her grandfather is the only known photo of him as a younger man. Dick is hard at work on a supplement to his *magnum opus* on anvils.

Darryl Nelson and his committee have been hard at work to ensure that the Twentieth Anniversary Celebration is memorable. It's going to be a lot of fun and with some good demonstrators. And, remember, your auction project will be immortalized forever in these pages! See you in Chehalis!

*The Readers Revenge . . .* 



*Lulled by the Anvil's Lullaby, our illustrious editor contemplates the next issue of the Hot Iron News. Photo and caption by Mario Suquamish.*



## Letters to the Editor

Dear Editor:

We would like to tell N.W.B.A. members and guests how much we, and all the business people of Winthrop, enjoyed having them come to Spring Conference in our little town.

At what is a slow time of the year for us, especially with the North Cascades pass opening late, merchants and innkeepers really appreciated the boost in business. And, as when we hosted the conference a few years back, we keep hearing what a nice group the blacksmiths were to have in town.

Personally, we want to thank everyone who helped make this happen. I want to thank the "blacksmith ladies" for their help when I could not be at the Barn. And I especially want to thank them for their thoughtful gift of the beautiful roses. It was a wonderful birthday surprise.

Sincerely,  
 Carol and D.J. Stull  
 D.J.'s Winthrop Blacksmith Shop  
 P.O.B. 63  
 Winthrop, WA 98862



D.J. and Carol Stull get showered with well-deserved Roses . . .

Ina Photo

N.W.B.A. Friends:

What can I say? D.J. and Carol Stull did it again! Thanks for a great conference. You two always make things look so easy. The Saturday catered meal was superbly done, great plenty for all, even seconds, and enough to feed the group on Sunday plus seconds also. How much better can it get?

Thanks Jerry Kagele for bringing Uri Hofi and assistant Amit Har-lev in as demonstrators. I know that you put them up at your home and brought them to Winthrop, then after the conference you took them back to your home, that is such a nice gesture. Dave and I remember Willem Jonkers whom you also brought over. Gee, I can't wait to see the next one you bring over.

Dave still hasn't stopped talking about Uri and Amit, kept us awake all 500 miles home. He is still remembering things he forgot to tell me.

Getting to see and greet new and old friends always makes the week-end complete. Welcome back Lloyd and Betty Hedglin, its been awhile for them, time out to take care of family, we truly missed them. Betty remember the conference at Month Day's "Onion Creek Forge," October 1 and 2, 1988? The men cooked the beef roast on a spit, and you and I received the cooked dishes for the potluck and stored them either in our camper stoves or refrig's, as we did not have the use of the home on site. If I remember, we did have fun working together. Betty once again pitched right in and helped as always. Thanks also to the new ladies that helped, I wish I could remember all your names. I'm sure we can use help at the 20th Year Conference this Fall. Just come and say, "I'm here, what

can I help with?"

Not enough "good" things are ever said about the OFFICERS of N.W.B.A. They work many hours before a conference and hours after. They have to be on call every minute during the conference. When you see you tell them how much you appreciate him or her. It's easy to say, "Why don't they do this or that." Maybe you ought to ("do this or that"). Volunteer your time, don't wait to be asked. I'd like to thank a young girl who did just that, came to the kitchen just before lunch and asked for a plastic sack so she could go outside and pick up trash that was laying around. Her mother and dad should be real proud of her. I was.

I hope everyone will be able to make it to the 20th Year Fall Conference, with the Good Lord Willing, we will be there. Thanks again Friends for making this Spring Conference a great memory.

Ma and Pa Brandon from Montana



### TREASURER'S REPORT

#### Spring 1999

**Expenses:**

<i>Copies of roster</i>	52.
<i>Soulder Creek Deli</i>	80.70
<i>Tent rent</i>	972.
<i>Beer permit</i>	10.
<i>Propane/tables</i>	93.65
<i>Food, etc.</i>	292.94
<i>Banquet</i>	2500.
<i>The Barn</i>	30.
<i>Demonstrators</i>	2000.
<i>Tee Shirts</i>	788.
<i>Pins</i>	961.77
<i>Total</i>	<b>7781.06</b>

**Income**

<i>Tee Shirts</i>	550.
<i>Decals</i>	99.
<i>Pins</i>	146.
<i>Anvils</i>	430.
<i>Raffle tickets</i>	525.
<i>Dues</i>	1960.
<i>Auction</i>	4422.50
<i>Registration/Donations</i>	5925.
<i>Total</i>	<b>14057.</b>
<i>conference profit:</i>	<b>\$6276.44</b>

**Kent Rudisill, N.W.B.A. Treasurer**



# Board Minutes



The meeting came to order at 5:30 p.m. Those attending were Don Kemper, Matthew Tilton, Maria Cristalli, Paul Thorne, Ralph Hinds, Derry Cook, Dennis Prince, Kent Rudisill, Lynn Cane, Jack Slack and Darryl Nelson. The minutes from October 2, 1998 were approved. Kent reported that before the conference we had \$18,278.88 in the bank. A more detailed report will be sent to all board members after the conference.

Spring Conference update: everything is going fine. The Board approved additional expenses for lodging for Uri Hofi and Amit Har-lev. Jerry Kagele and Don Kemper have graciously offered to cover their other expenses.

Fall Conference will be October 8-10 including all day on Friday the 8th. Our demonstrators will be James Horribin from England, Peter Happny from New Hampshire, Jay Burnham-Kidwell from Arizona, Maria Gioia and Kelly Gilliam from Black Dog Forge in Seattle, Gene Chapman from Kingston, Phil Baldwin, Snohomish, WA and, hopefully, Wayne Goddard from Eugene, OR. This is going to be a big event and only open to N.W.B.A. members. The conference fees will be \$80 and we want all of the membership to attend. We are selling raffle tickets for a Russell Jacqua Nimba Forge Anvil, a cone mandrel, a set of Grant Sarver's tongs, and a small swage block. The conference will be heavily promoted in the next Hot Iron News and a registration sheet will be included. We will also send out a reminder postcard at the end of August with the cut-off date for registration being September 15.

On the issue of storage for the ITT Rainier equipment, so far Kent and Ralph haven't been able to find a trailer but are still looking.

The grant program was okayed for \$1,000 for this year. Derry and Ralph are the Grant Committee Chairs. The library spent \$507.27 last year and was approved for \$1,000 this year. We are still having trouble with new members not being acknowledged when they join and not knowing what N.W.B.A. is all about. It was decided that the Treasurer will call and welcome new members and confirm their address and a membership handbook is being worked on by Matthew Tilton, Maria, Paul, and David Tuthill. They will present a proposal to the Board.

The ABANA Board has had various problems with management and finances. The Board unanimously approved a resolution of support for ABANA Board Member Dorothy Stiegler in her efforts, along with other ABANA Board members, to restore order to the organization.

The Board approved 100 copies of the original print of vises by Kathrine Dawson. The Board approved the use of some of the association equipment by Matt and crew for Art Fest in September. A list of policies was handed out for review. We will revisit this issue at our July meeting. Kent reported that the new registration receipts are in use and working great. The Board approved up to \$200 for a book for the library in memory of Russell Maugans.

The July Board meeting is scheduled for July 11th at Don Kempers in Ridgefield, WA. The meeting adjourned at 7:12 p.m.

May 2, 1999. The meeting was called to order at 8:05 a.m. Present were Don, Matt, Derry, Dennis, Kent, Ralph, Jerry, Ina and Phyllis. The Fall Board Meeting will be held at 6 p.m. on October 7 so that the Board can enjoy the entire conference as it will be a don't-miss event. We ran into a problem getting the association trailer to the conference because of the lack of a license. At this point we don't know where the title is, but that is being looked into and Matthew Tilton will get it properly licensed. Also, moisture got into the trailer and started to rust the archives. Gene Chapman graciously volunteered to clean the archives but steps need to be taken so that this doesn't happen again. Matt is going to get moisture collectors for the trailer and check into inside storage at a building close to him. Ken Tice volunteered to paint the trailer and we will supply the materials. Matt and Ken will work together on this.

Kent and Ralph are in charge of Spring 2000 and are looking into Alan Flashing's shop in southern Oregon for the location. The grant program is not being used as much as it should so we need to promote it with an article in the Hot Iron News. We have had problems with members not receiving their News. It is being looked into to see if the addresses are correct. Addresses were checked and corrected on all conference participants, hopefully that will help. Each Board member will receive four extra copies of the News so that if they are contacted by anyone not receiving their News they can send them one. Unused copies will be returned to the Editor. Adjourned at 9:02 a.m. Respectfully Submitted, Your Scribe, Dennis Prince.

# RAMBLINS FROM THE PREZ . . .

As we have come to expect in the N.W.B.A.--Another *fantastic* Conference was enjoyed in Winthrop. So many people to Thank--D.J. and Carol Stull are just the beginning of the long list. So----

THANKS EVERYONE!!!!

“WHOOOPS”--for those who missed the Spring Conference in Winthrop, -- “Whoops, then its done.” Uri Hofi brought the N.W.B.A. much more than his striker, Amit Har-lev--he brought new ideas, new methods and his own way of looking at things. The principles of tooling and design that he shared have been documented from history long before--many have been written about and discussed for years--but Uri has absorbed and distilled these elements and principles through his own personality.

Just as the composer Rimsky-Korsakov did not put a tape recorder inside a bee hive to capture *The Flight of A Bumblebee*, Uri's efforts show his being sensually involved with the shapes his efforts seek--and emotionally involved with its human environment. He confided that it is the human element that is foremost to consider as one

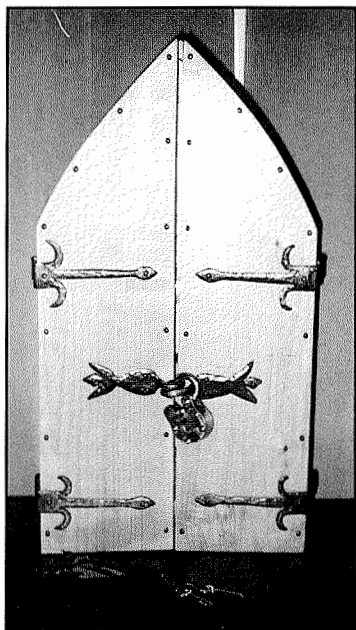
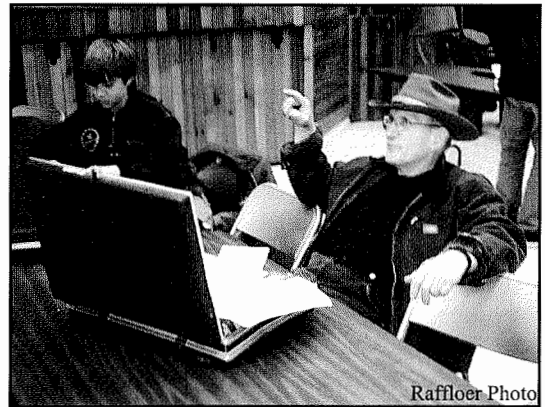
approaches and accomplishes your design. Plus, always challenge tradition with your education and experience. It is in this way that the best of traditional designs grow and, with these improvements, survive. Does this include using new metal shapes and tooling that industry provided us? YES!

Each era of iron design took advantage of these--the Gothic design changed to Baroque as the way to manufacture round stock added to the square/rectangular previously available stock shapes--just as the development of rolling mills added plate material--until . . . The tools and materials today make new, more creative designs possible.

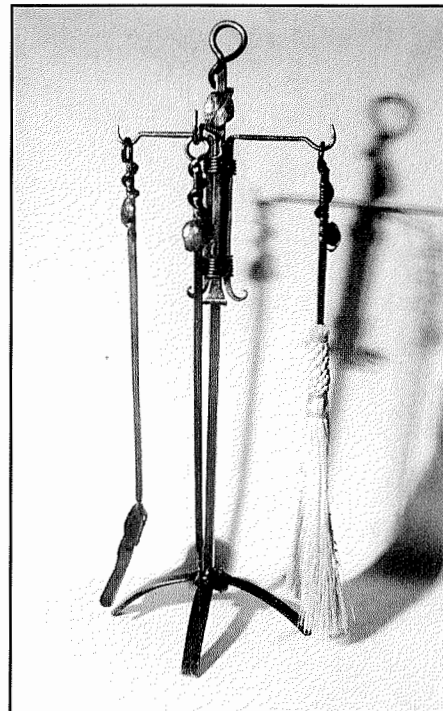
N.W.B.A. members Japh Howard and Roger Olson were demonstrators at the Northern Rockies Blacksmith Conference, which follows our Spring Conference, at Dan'l Moores Coon Hollow Forge at Kalispel. On Friday night Japh showed slides of recent work. The slides included a magnificent stair railing with balconies. He confided that the balusters were connected to the top railing with a water-jet-cut “fork,” forge-welded to the baluster--and each were embedded at the bottom, into the staircase, with epoxy. Was the design traditional? Were the methods current with today's “traditions”??? You bet! Yes, to both questions!

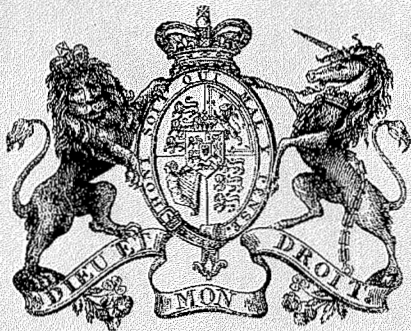
Great things are happening on the international scene--and on N.W.B.A.'s own turf. It's an exciting time to see new designs--and new ways to accomplish them!

May a forge-welding berry never stick between your fingers!



Kemper art





# James Horrobin

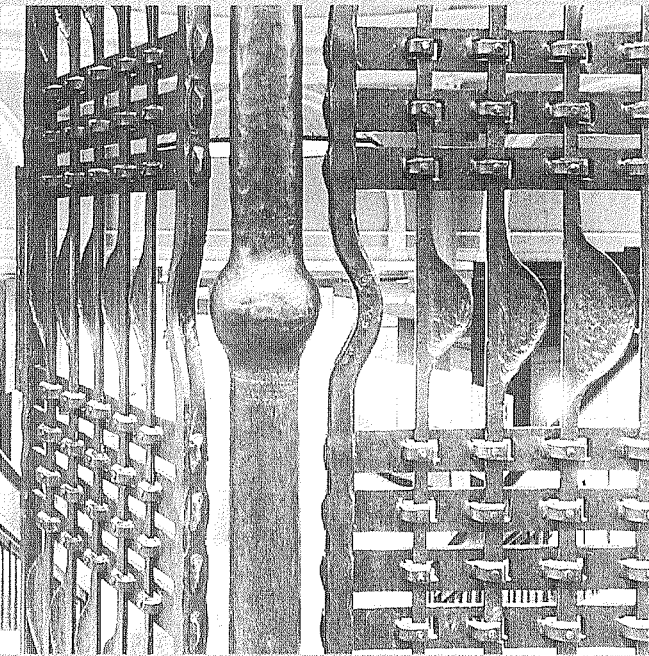
Doverhay Forge Studios  
Porlock Minehead Somerset

Jim Horrobin began shoeing horses in 1961, at the age of 15, at his father's forge at Bridgetown in the Exe Valley of England. By 1981 he had been commissioned to do the gates for the Metalwork Gallery at the Victoria and Albert Museum in London. This led to other prestigious commissions including the Queen Elizabeth Gates at Hyde Park, a screen and railings for the Savoy Theatre in London and, as part of his increased international scope, lanterns for the Portico of St. Paul's Chapel in New York.

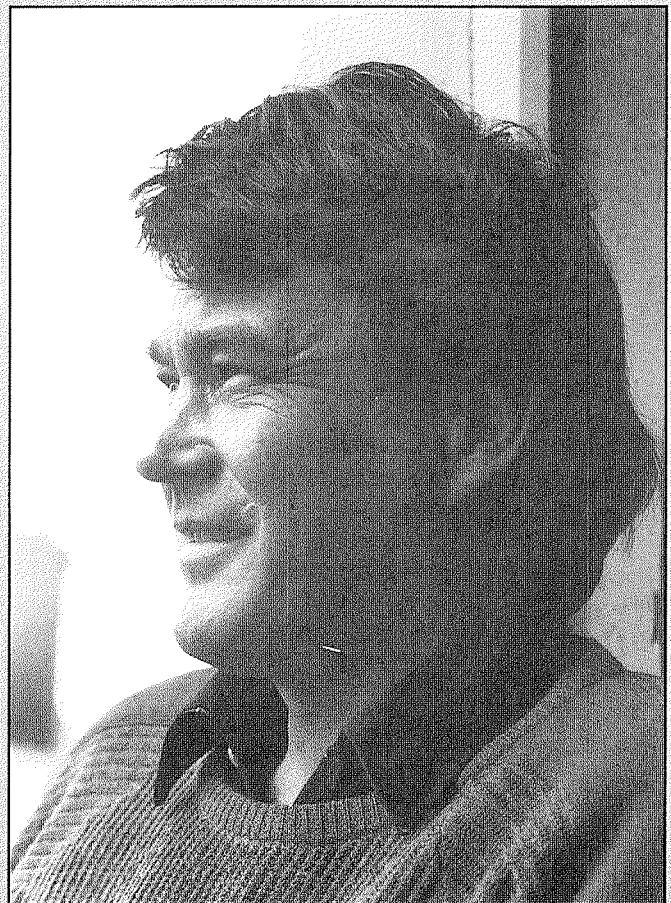


Jim was in at the beginning of the British Artist Blacksmiths' Association. He says, "I decided to go along and this really proved a pivotal moment in my career. I met American and German smiths who were making the shapes which I had thought about for so long but which I hadn't had the confidence to try." Jim set out to create innovative designs and to expand the scope of his work from traditional forging to larger scale architectural pieces. By 1996 he was awarded the prestigious Silver Medal by the Worshipful Company of Blacksmiths.

The Victoria and Albert Museum houses one of the world's largest and most important collections of wrought ironwork. It was intended that the gates be working exhibits, representing the best in modern design in wrought metal. Jim says, "The techniques used in making the gates were basically traditional, punching holes, riveting, stretching, bending and drawing down." The horizontal bars each had five tongues split out and shaped. The splitting was achieved by using a hot set and an assistant swinging a 16-pound sledge hammer. Says Jim, "We were able to cut 12-15 tongues a day, there being a total of 90." The second stage involved making the vertical bars. Bar stock was first rough cut with an oxyacetylene torch and then drawn out under a power hammer. The four main frame verticals were produced by hammering with a sledge hammer into a pre-shaped bottom tool.



Gate at Victoria and Albert Museum



The center post was made from 150 mm tube in four sections. The end of each section was belled out then welded and re-forged to form 200 mm diameter spheres. Assembly was by riveting, using oxyacetylene for heating. The finish was a combination of red oxide coated with wax then coated with black etch primer.

The decorative quality derives wholly from its integral form and methods of construction. He has stated that, to some extent, when forming the design he was thinking of the way water ripples out from an object dropped into it. The gates turned out to be the break between his prior traditional work and the subsequent work which was to involve the greater use of modern technique.



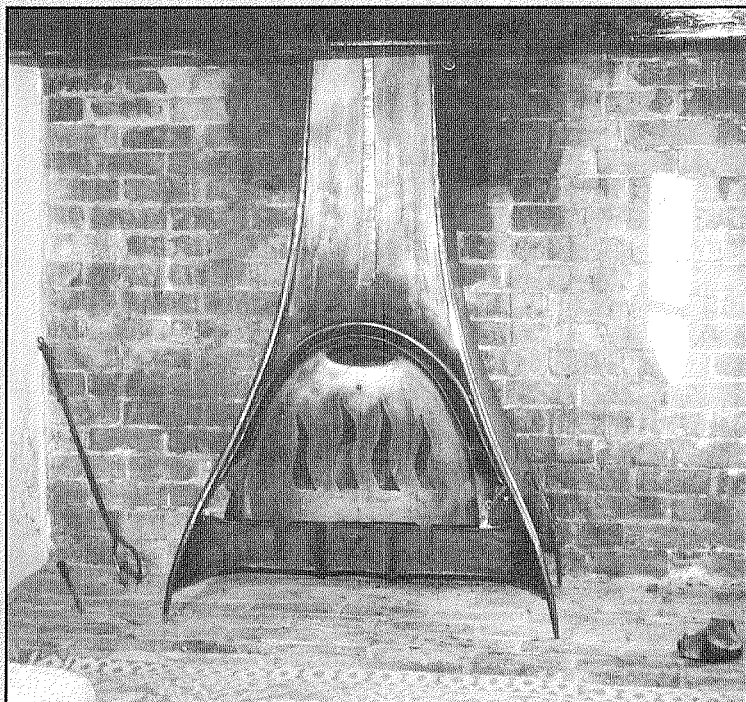
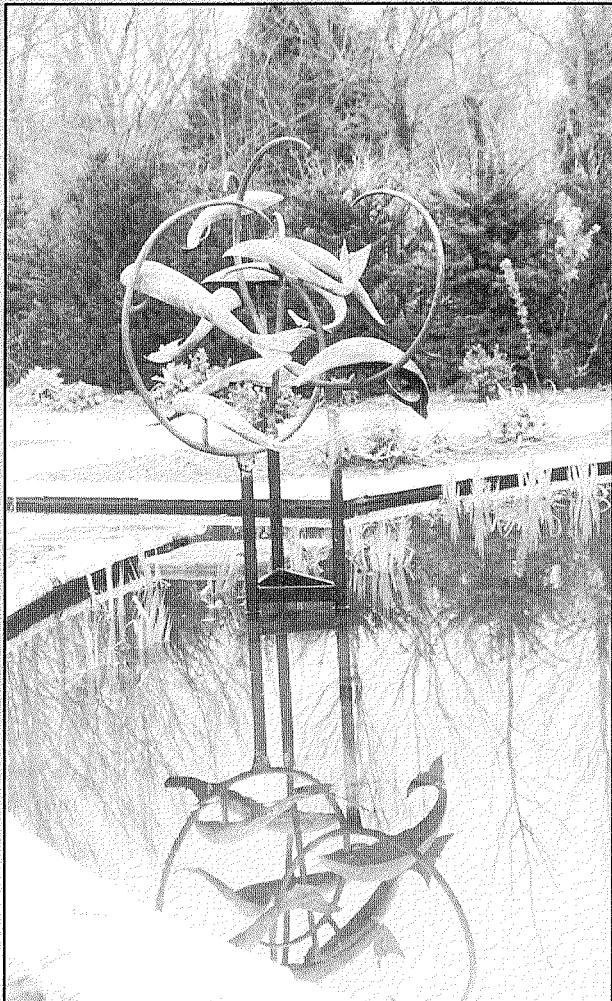
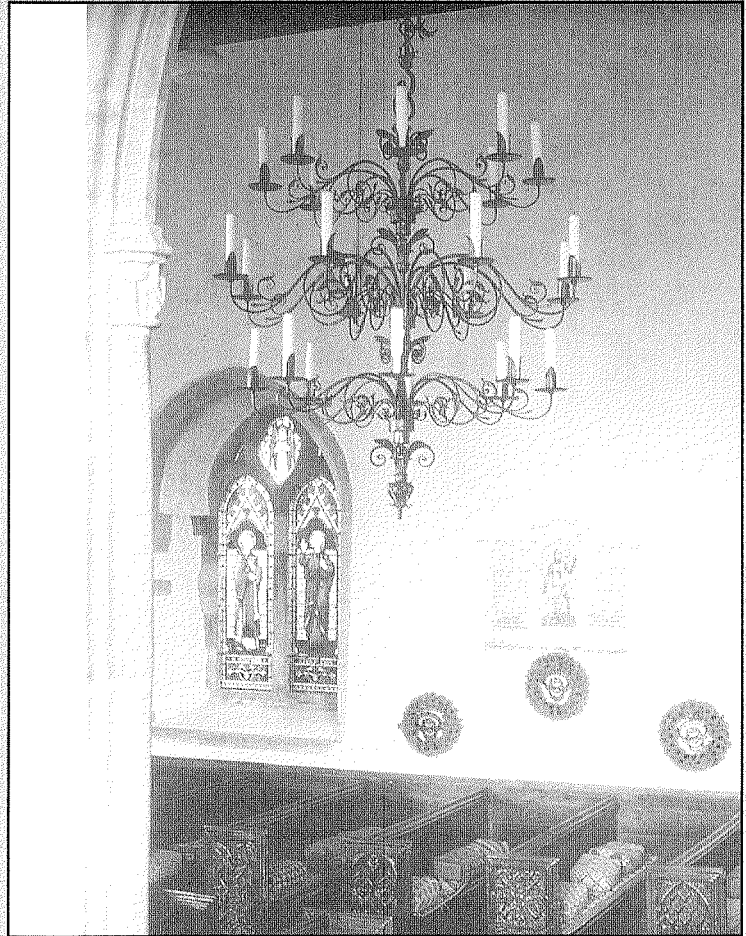
Since the Victoria and Albert gates, Jim has had a full range of forging projects which have included both traditional and modern architectural. He shod his last horse in 1973 . . . but claims that he can still do it although it would take him four times longer! Economy of motion is a factor that he confronts in all of his projects. "With the initial design complete, there are half-a-dozen different approaches I could take," he explains, "I have to have a rough idea for it to be economical but, at the same time, it is fulfilling to retain a level of spontaneity. I often see the opportunity for a shape whilst in the middle of a piece and I enjoy following this up. You can either decide that an extra two hours' work is not worth it or you can pursue the emerging idea. Blacksmithing can be very exciting in this way and it is something which I would not want to lose."

Jim still maintains his ties with his hometown. "I like working on projects in and around Exmoor," he says, "because it is nice to see pieces which I have made down the years. I still craft many of the more traditional objects, such as rams-head door-knockers or fire-irons and I find the physical side of this very rewarding. You get to know a method so well that it has a fluidity about it. Every blow of the hammer comes as second nature and this can be very therapeutic."

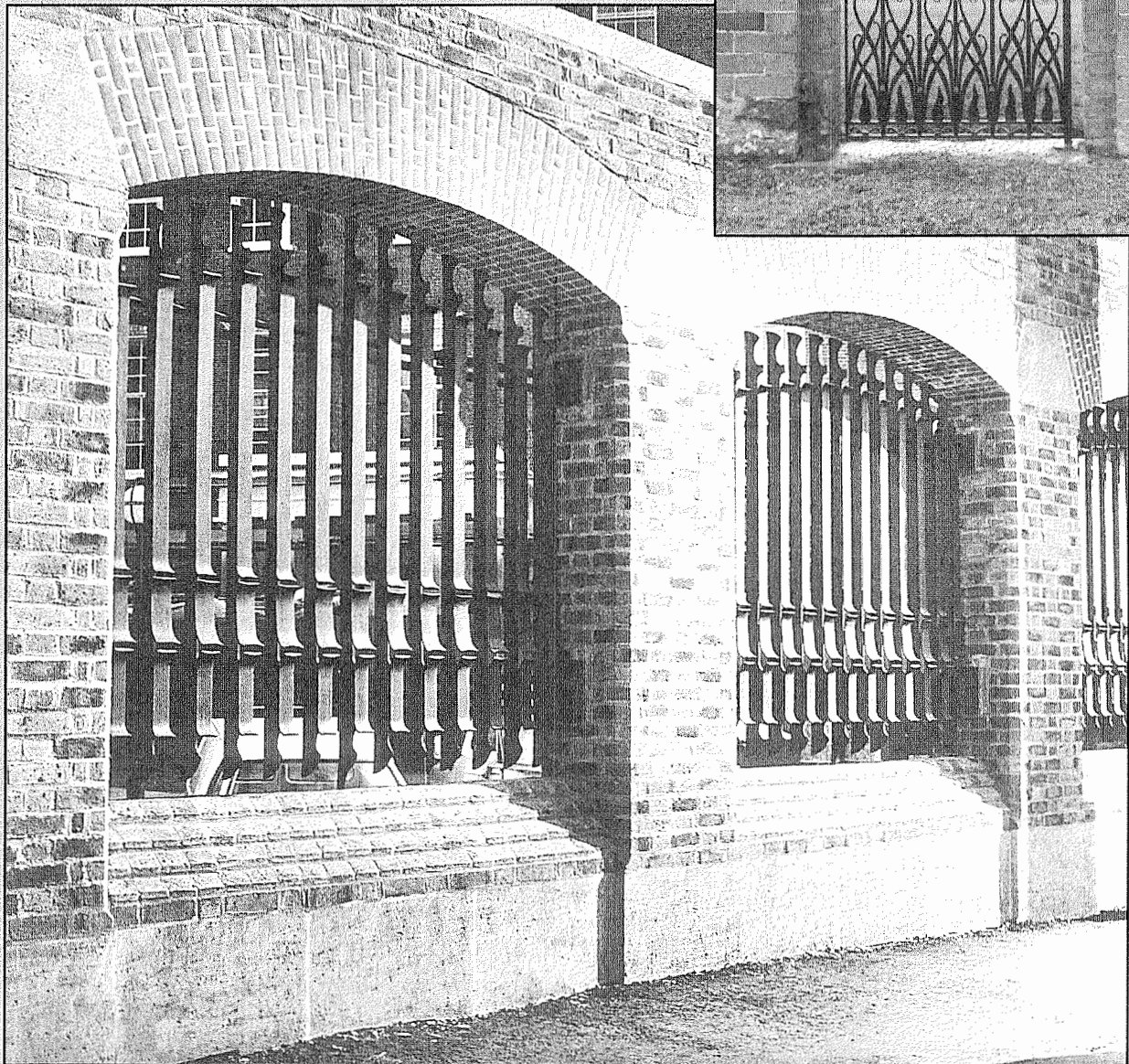
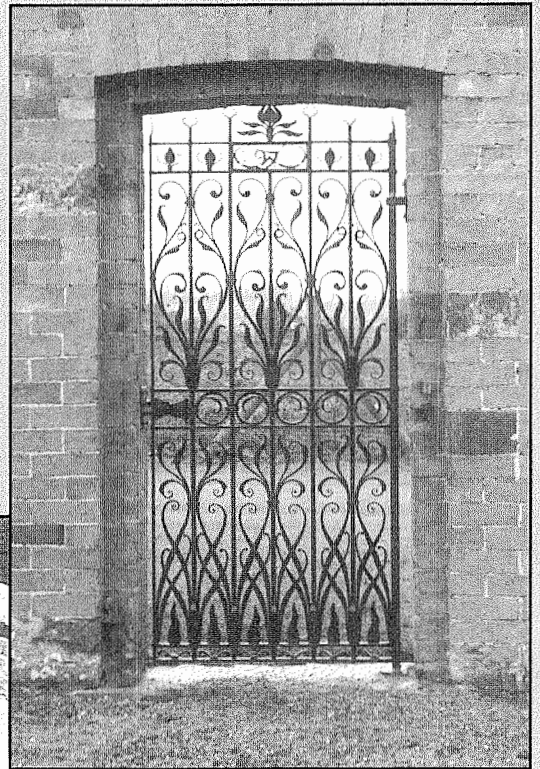
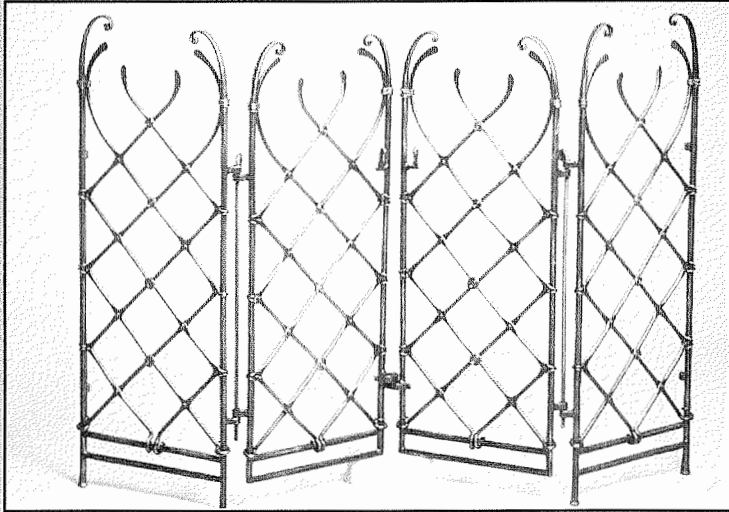


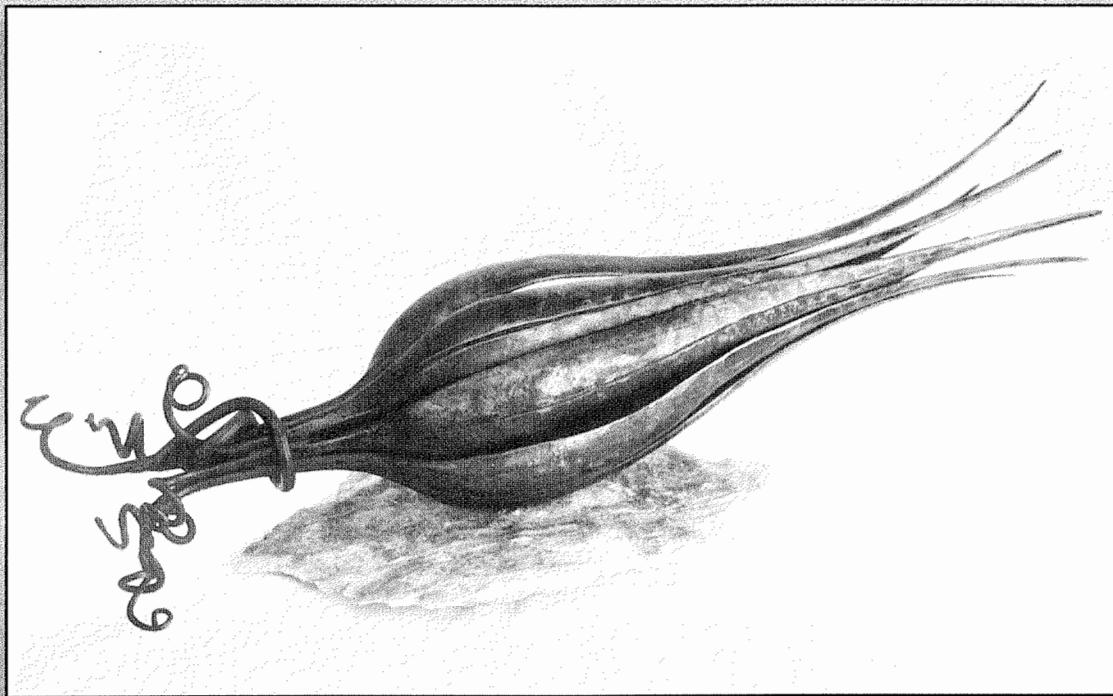
One of Jim's early "traditional" pieces is an enormous chandelier in the Crowcombe Church near Bridgwater. So large, it nearly dwarfs the little church. It represents one of Jim's more ambitious projects during his early years. It is modeled on the brass ones so popular in the 17th Century but far beyond these in its ornate fantasy. The vicar of the church himself seems to have been a somewhat larger-than-life character who rode around his parish on horseback in cowboy outfit complete with boots and Stetson!

Jim will be demonstrating at the Fall Conference and will be able to visit his son Matthew who lives in Seattle. Jim will also be accompanied by his long-time partner Gabrielle Ridler, an accomplished artist in her own right. She will demonstrate the art of applying gold leaf to steel. This is a rare technique which adds a rich dimension to a forged piece.



Horrobin, continued . . .

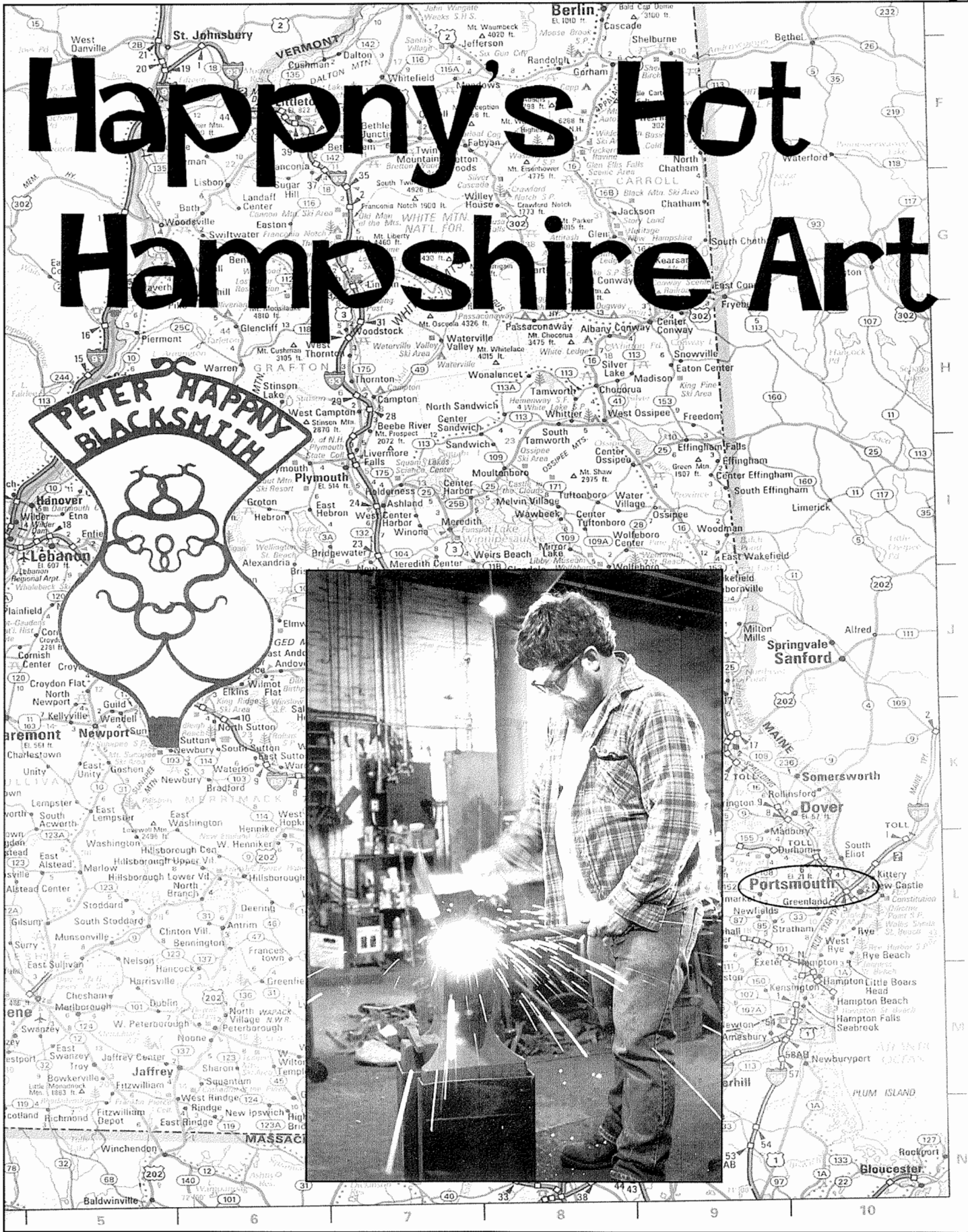
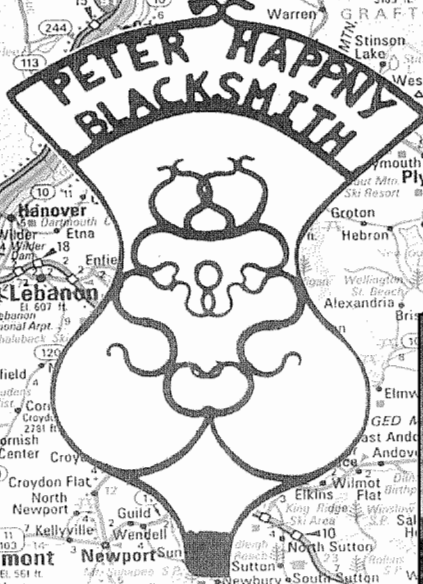




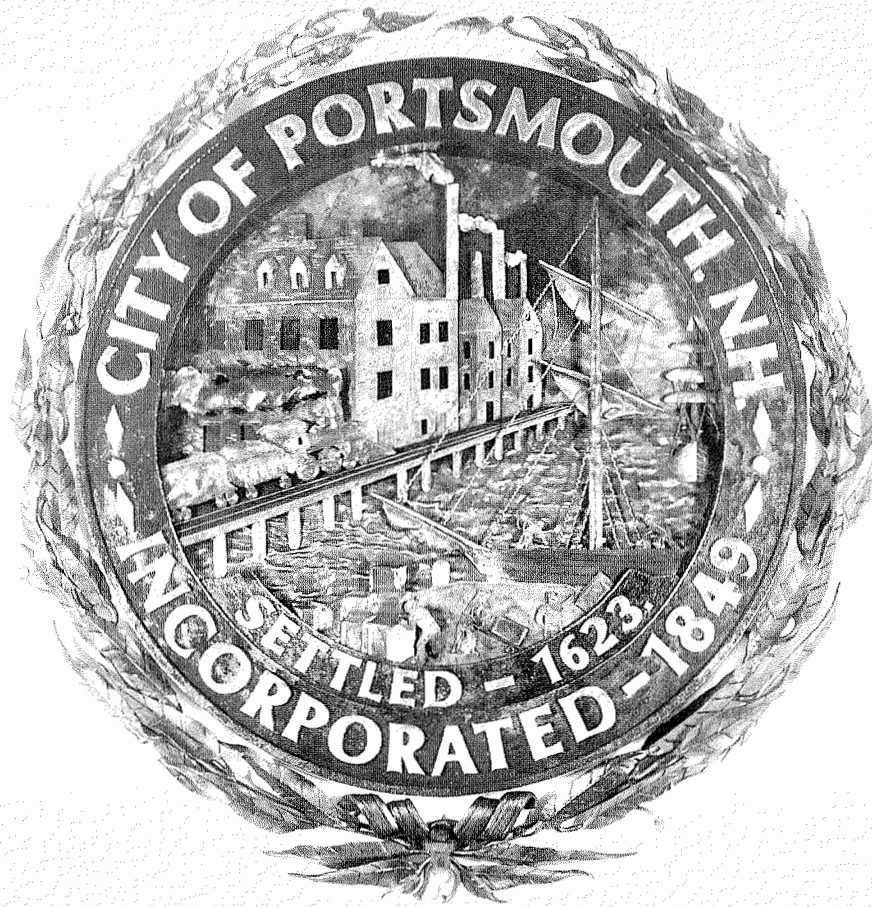
Ancient Porlock. Located Southeast of London in the Exmoor Region. Legend connects King Arthur to the area. Home to the Doverhay Forge Studios. The parish church has a touching epitaph to Thomas and Prudence Rawle, who died within 24 hours of one another: "He first departed; she for one day tried to live without him, liked it not and dyd."



# Happy's Hot Hampshire Art



Six-foot diameter blow-up  
of Portsmouth, New Hampshire City  
Seal. Letters are  
gilded with gold leaf.



Peter Happny claims that he will encourage heckling at his Fall Conference demonstration! He plans to follow a theme of "Forging with Humor," something that most of us do inadvertently all the time! Peter operates a forging business producing functional and decorative ironwork and abstract sculpture, often incorporating non-ferrous metals and glass. He plans to illustrate ways of approaching forged steel, solid, hollow and sheet, that "play against the age-old problems of doing it within budget." He will offer "helpful hints on how to keep your interest going, your humor up, and your creative juices flowing!" He claims that his techniques are "some orthodox and some a little left of left."

Bear in mind that we're dealing here with a blacksmith who walked up to an interviewing newspaper reporter with an iron bar that had been sitting in the fire which was now red-hot, and exclaimed, "Give me a quarter and I'll lick it." Well, maybe this was a talent that blacksmiths gain over the years—the reporter couldn't be sure. Regardless, it would be worth a quarter to find out. So, the reporter gave Peter the quarter. Peter licked the quarter and put it in his pocket.

Peter claims that there are four things that you can do with metal, "You can taper metal, which is making it thinner. You can upset it, which is causing the metal to swell so it gets thicker. Metal can be welded or you can poke, pierce, or twist it. And lastly, metal can be forge welded. Peter further explains his attraction to forging, "The original attraction for me was the ability to take a piece and completely change the shape as opposed to just cutting or welding it."

This type of forging requires careful planning. Peter states that "With hot manipulation it is not the material's fault when you screw up, it's your fault. When you make a component you need to invest energy and time. When you bend it you need a model—it takes so much work and expense that you don't want to have to bend it more than once."




You can see an example of Peter's careful execution if you drive past Fire Department Station No. Two in Portsmouth. *The Fireman* is a one-ton, thirteen-foot tall, 3/16" forged-steel plate sculpture that was erected as a memorial to firefighters. The piece has a rust finish and is treated with linseed oil every six months.

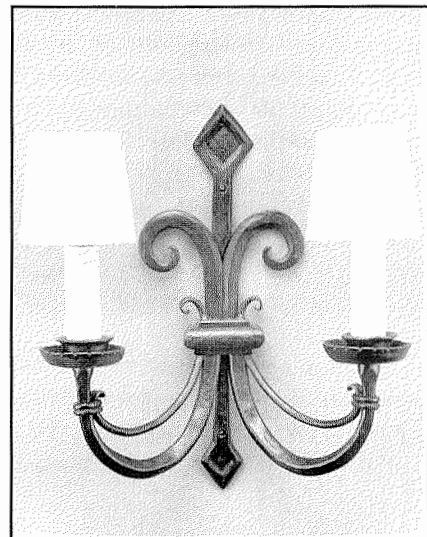
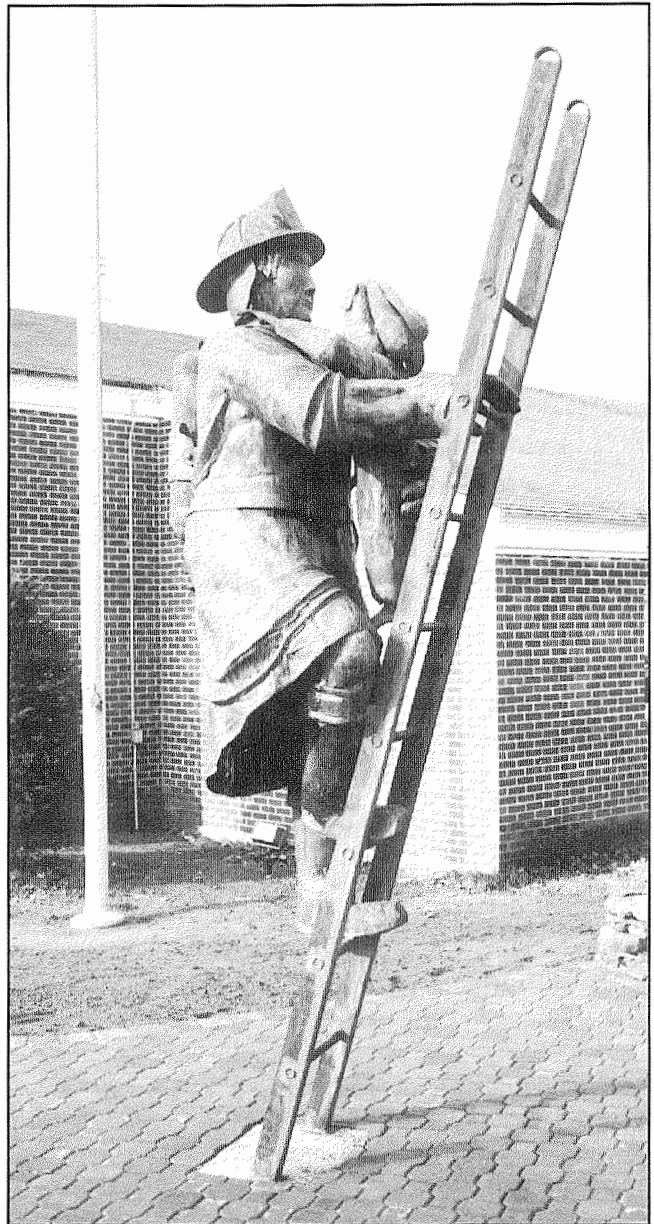
Peter's childhood would definitely get him on the school counselor's list today, "As a child, around nine or ten years old, I played in a junk yard. One of the things we used to do is tie a junk car to a rope that went up to a pulley. We would tie the other end of the rope to a truck. When we drove forward it would lift the car into the air. We would then push another car under the car that now dangled in the air. Then we would back the truck up really quick. The car on the rope would fall and smash the car under it. That was the way they crushed cars before the large compactors. As a kid it was fun to help because we got to crush cars."

"One of the projects this experience led to was turning three-dimensional objects into two-dimensional objects. For example, we would take metal toys, dismantle them, flatten out the pieces then reassemble them. The result was really interesting."

This background also qualified him to be an ABANA Director from 1988 to 1992. His *Sub Sandwich* (on the Back Cover) won the prestigious Wally Award in 1996. This is a British artistic award for sculpture. He was presented with the Copper Button Award by German smiths for promoting the art of blacksmithing internationally. Perhaps one of his most unique distinctions and honors is to be named on Page Four of Alex Bealer's classic *The Art of Blacksmithing* as one of the "young contemporary smiths . . . who show great promise in upholding the highest standards of their exciting art." The classic *Decorative Ironwork* by Dona Meilach, published in 1976, also contains photos by his work.

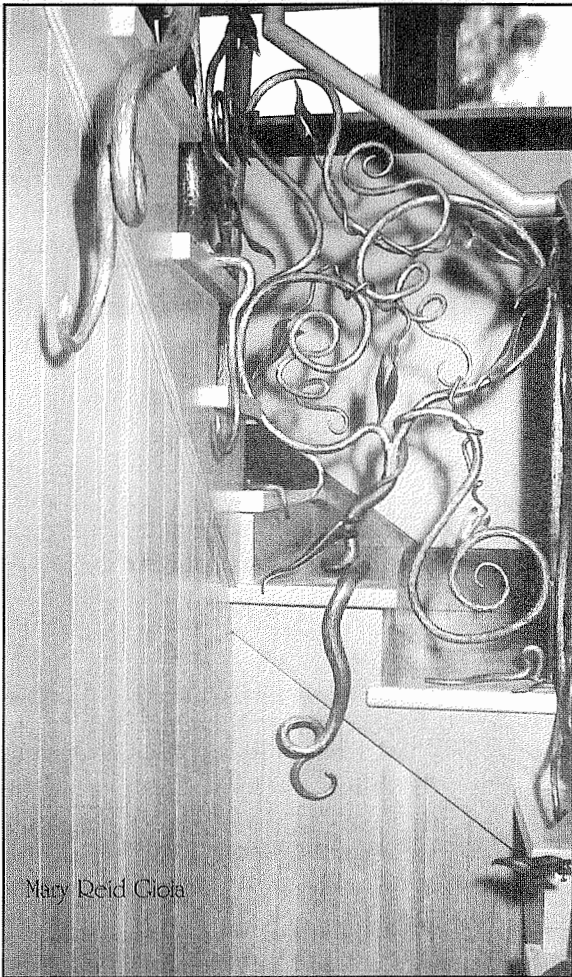
Peter completed the University of New Hampshire in 1972 with a degree in Education . . . ??? He presently owns and operates Rock Street Forging which employs five smiths. Peter is active on the demo circuit and has taught at Penland, Haystack, Horizons, Campbell, and Peters Valley School of Arts and Crafts. N.W.B.A. will have some serious heckling to do!

 Peter Happy  
Rock Street Forging  
66 Rock Street  
Portsmouth, New Hampshire 03801  
(603) 436-4859





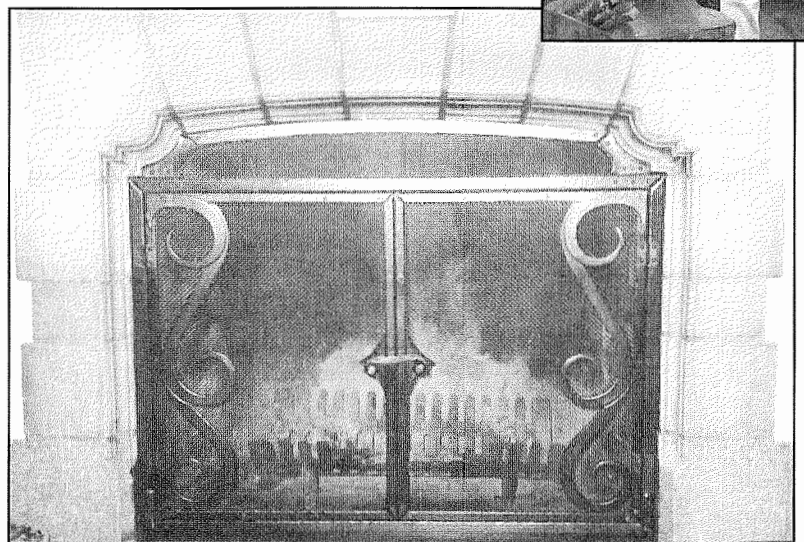
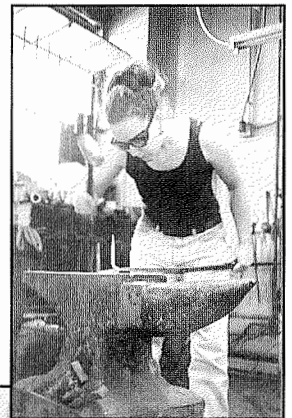
# “Seattle’s Best” ... Blacksmiths



Mary Reid Gioia



Kelly Gilliam and Mary Reid Gioia will be combining their considerable efforts to do a team demonstration at the Fall Conference. When asked the theme of their demo, both merely assumed the facial characteristics of The Cheshire Cat.



Mary Reid Gioia



# SMEDLEY'S PARTNER

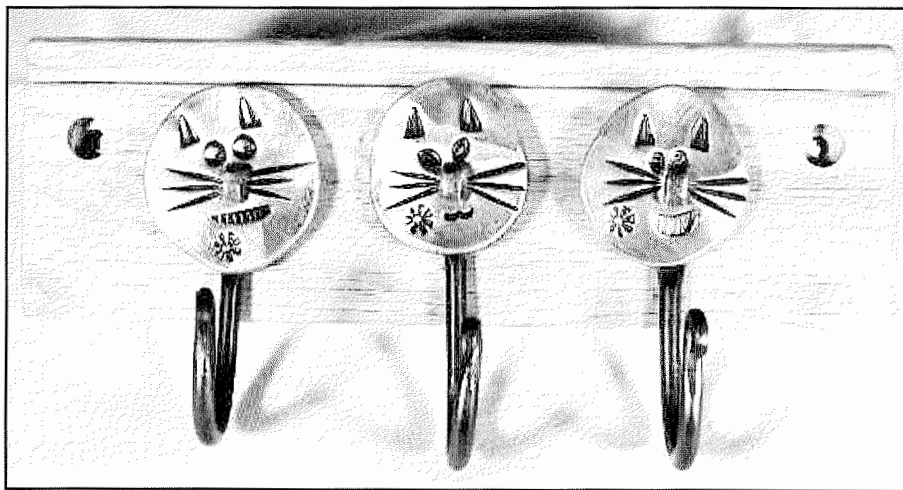


**A GOOD EXAMPLE OF A TYPICAL SKUNK WORKS IRON CO. PRODUCT!**

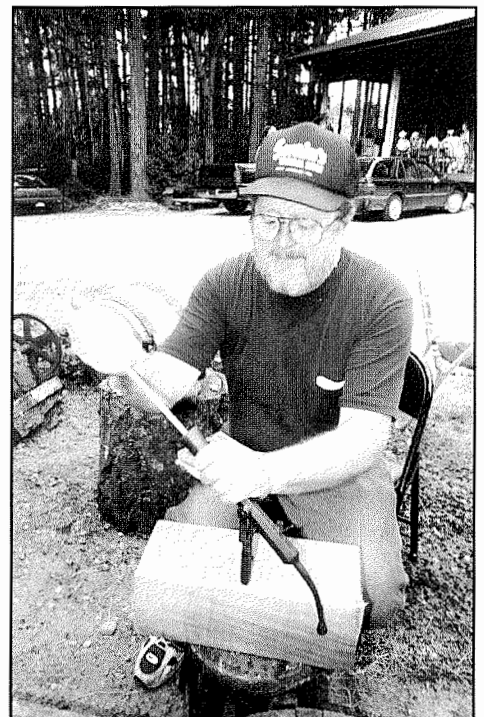
in commerce and crime, and alleged shirt-tail relative, Gene Chapman, has found it hard over the years to move outside the shadow of the flamboyant Smedley Soapstone. Smedley has always insisted on hogging the lime-light and Gene has always been content to just be the brains behind the often ill-fated business operations of the duo. As faithful readers of the News will recall, the aluminum tongs idea didn't seem to pan out. The two then opened the defunct magnesium mine west of their Gamble Bay, Washington, hideout. The idea was that the magnesium would make for even *lighter* tongs. They're both still trying to re-grow some of their hide lost when Smed lit a railroad flare in the mine for light! They still talk about the orange fireball around Gamble Bay! The two then ganged up with Mario Suquamish to try to corner the reconditioned-Little Giant market. Trying to repeat the same success they had from the bulletin board at the BP Gas & Grocery in Kalama, Washington, where they had found a bargain Little Giant for \$100, the three spent weeks, and drove hundreds of miles to read every truckstop bulletin board between Oysterville and Point Roberts. After leaving Point Roberts, the three almost weren't allowed back into the United States because they couldn't prove they were U.S. citizens, especially since Smed's pick-up's Canadian license plate didn't match his Washington State vehicle registration.

Even a blind pig occasionally finds an acorn and the acorn that the boys had found in Kalama was to be their last. There just weren't any other bargain Little Giants to be found around Mukilteo, Sequim or Sekiu. Besides Deputy Bobbo was getting more suspicious of their nocturnal outings and began following them. He could see them real well through the new windshield of his patrol car--the replacement which the boys had paid for after blowing out the old one in the Gamble Bay Pumpkin Shoot! So with the twin pressures of the law and economics breathing down their backs, the boys decided that maybe it was time for Every-Man-For-Himself for awhile.

When the invitation to demo at the Fall Conference came in the mail, it was merely addressed to "Head Blacksmith, Skunk Works Iron Company." Of course, Smed immediately snatched the invitation and began thinking about what he'd demonstrate. It was only after Mario pointed out that Gene was the only one whose probation allowed him to leave Kitsap County did Smed reluctantly turn over the task. They knew that Deputy Bobbo was camped on the county line just waiting for the Smed and Mario to make a false move. Gene was It!

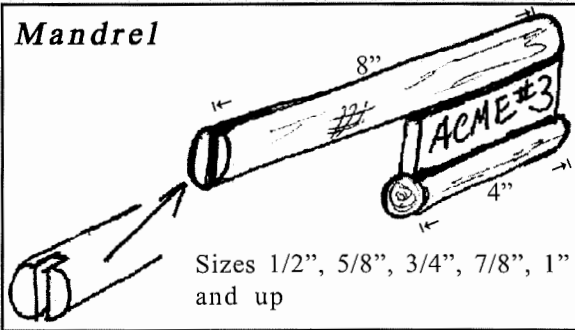


**CHAPMAN'S HALLMARK CREATIVE COPPER CATS!**



**GENE PREPARES TO OPEN FIRE!**

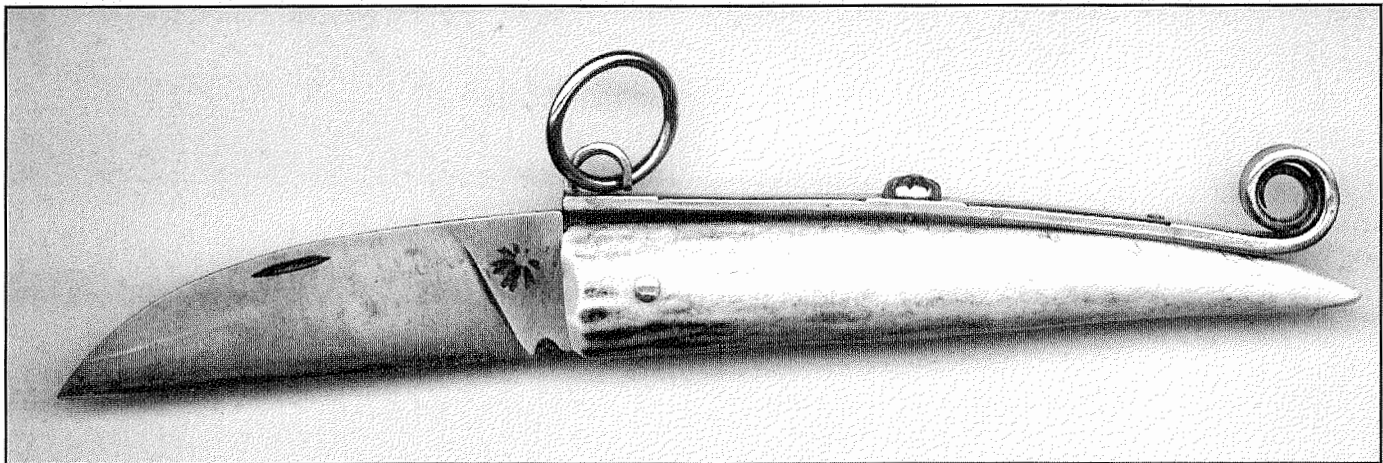
**Mandrel**



**"A SIMPLE MANDREL/RING TOOL CAN BE EASILY FABBED UP FROM ROUND AND FLATBAR. IF YOU DO ONE YOU MIGHT AS WELL DO A VARIETY OF SIZES. THE SLOT IN THE END IS MADE BY DRILLING A HOLE THEN HACKSAW OUT THE STUFF YOU DON'T WANT. MOSTLY, I USE THEM HORIZONTALLY IN A POST VISE BUT THEY COULD BE MOUNTED VERTICALLY TO WIND RINGS. ADJUST DIMENSIONS TO SUIT YOUR NEEDS."**

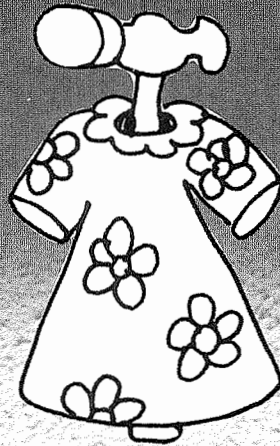
**CHAPMAN ON HIS 20TH ANNIVERSARY DEMO: "KNIVES, TOOLING, BENCH TECHNIQUES AND FUN STUFF. LET'S HAVE FUN!"**

Gene and Peg Chapman *always* have fun! When they're not spoiling their grandkids, Gene continues publishing an excellent series of *Oak and Iron Publishing* knifemaking books that are now sold nationally. He joined NWBA in 1981 and started doing demos in 1985. His bladesmithing started in 1984. In 1993, Gene and Peg became the Editors of the Hot Iron News and transformed it into a national ABANA-Award Winning Publication, winning the Humble Award at the ABANA Conference at Alfred, New York in 1996. After Gene took over the News, Smedley Soapstone began mysteriously appearing in the pages! Gene is one of the most creative blacksmiths in the NWBA. All of his work is marked by innovation and originality. After developing his successful line of Mountain Man Knives, he has begun developing what he styles as "a line of trinkets and forged iron that can be made without a power hammer." A lot of this forging is done in copper. His trademark animals have become a specialty. Referring to a Chapman Dog Trivet on consignment in his Winthrop shop, D.J. Stull said that once tourists were explained the subtle humor of the piece, they loved it! Gene's mischievousness shines through in both his writing and his art! He retired in 1996 after 35 years in Navy-related industrial maintenance. This *really* opened up his time and allowed expansion into other art forms such as Bonsai. The fact that Peg is still employed does keep him on his toes and he constantly has to keep looking over his shoulder and telling himself, "Peg's coming, look busy!" So far he's been able to keep her convinced that he and the cat *really* are busy all day long while she's away! Gene and Peg have been NWBA stalwarts over the years and anyone who shows up at Gene's demo is guaranteed to go away with a lot of really nifty ideas and tips!



**"THIS IS MY PERSONAL FOLDER I MADE. MY SPECIALTY HAS BEEN MOUNTAIN MAN FOLDERS OVER THE YEARS, BUT DON'T MAKE MANY NOW . . . HAVE OTHER FISH TO FRY! THE FOLDER IS 7 1/4" OVERALL LENGTH. BLADE IS O-1, SAMBAR STAG HANDLE, RAKE TINE SPRING."**

# Fashion Tips by Wade Wade

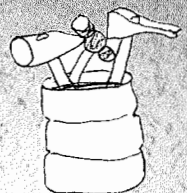


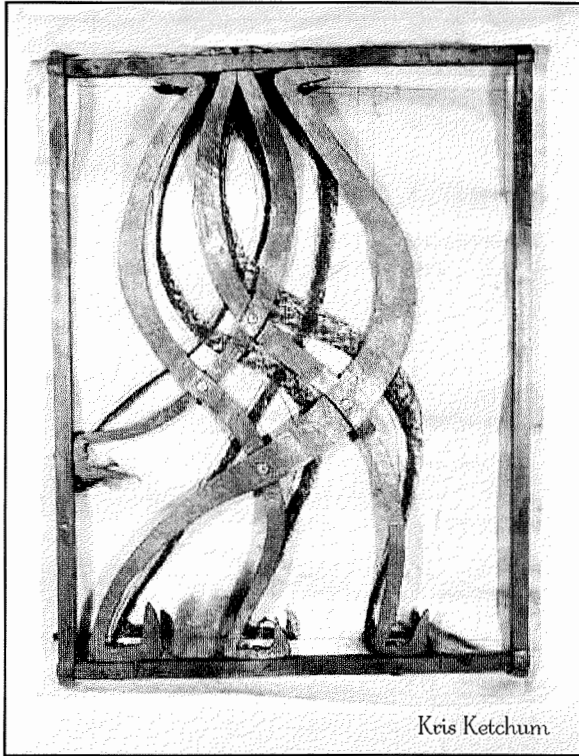
## HANDLE DRESS



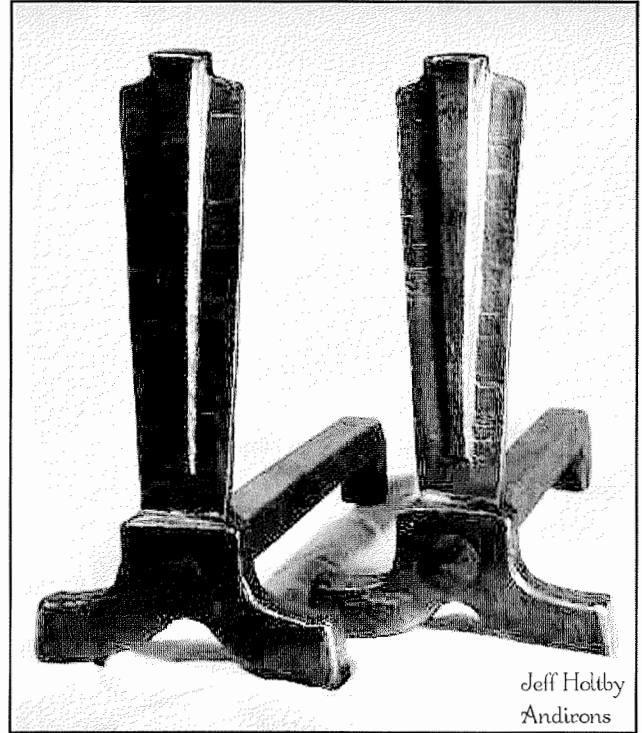
...to tighten your hammer handles  
...in antifreeze, make sure you use  
... "antifreeze" and not the modern  
Terry Willis tells me it is the glycol  
content that makes this work!

Personally, I like to soak my handles in Raw linseed oil. Smells nice, softens your hands (Do YOU want soft hands?). Needs to be redone once in a while.

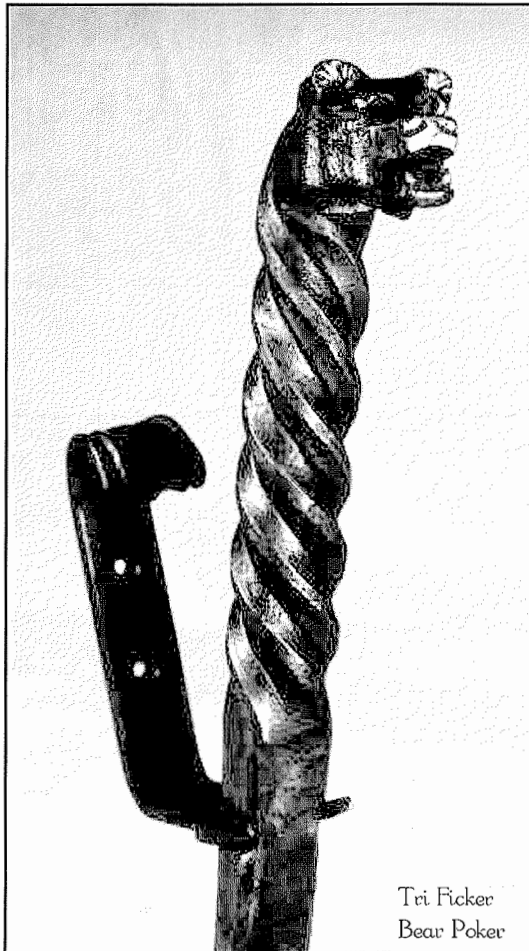




Kris Ketchum



Jeff Holtby  
Anvils



Tei Ficker  
Bear Poker

Gallery

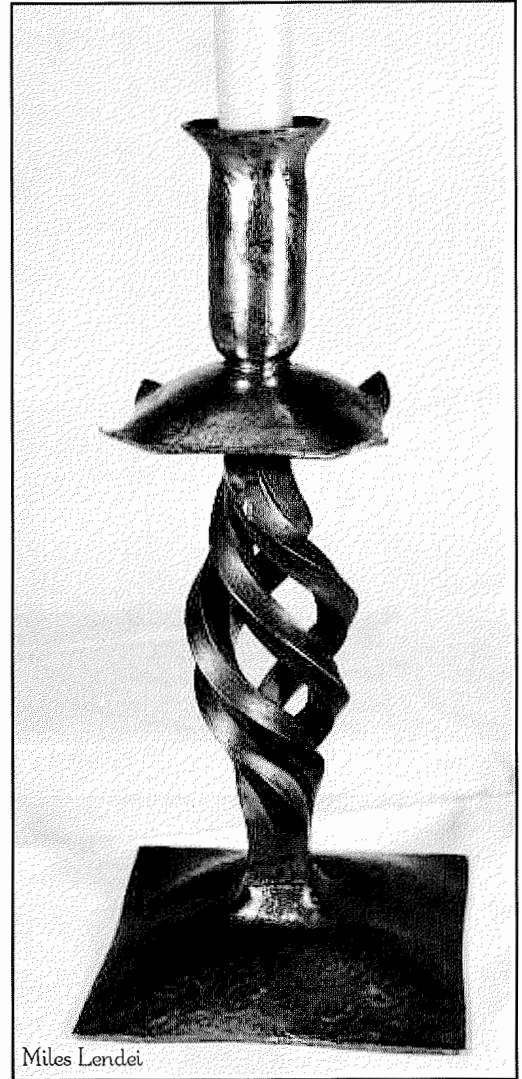


Dick Naven  
Vine Lamp

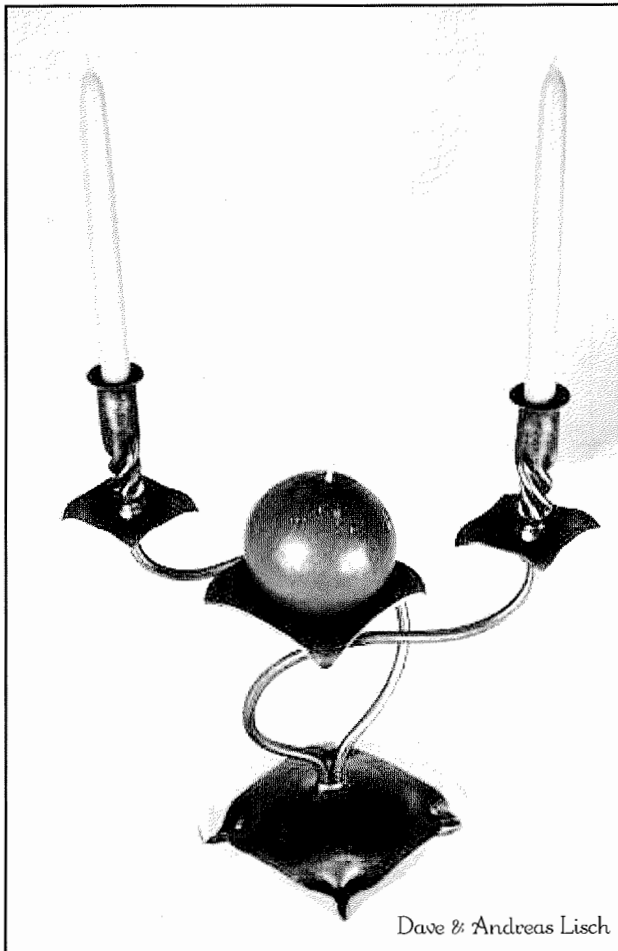




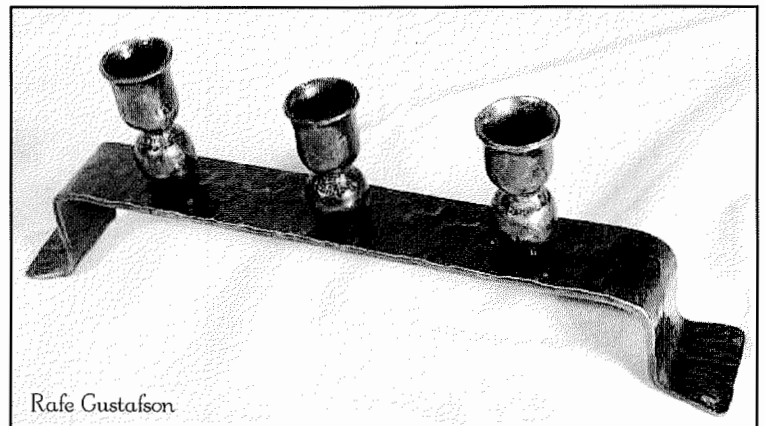
Don Frick  
Big Feet Candleholder



Miles Lendei



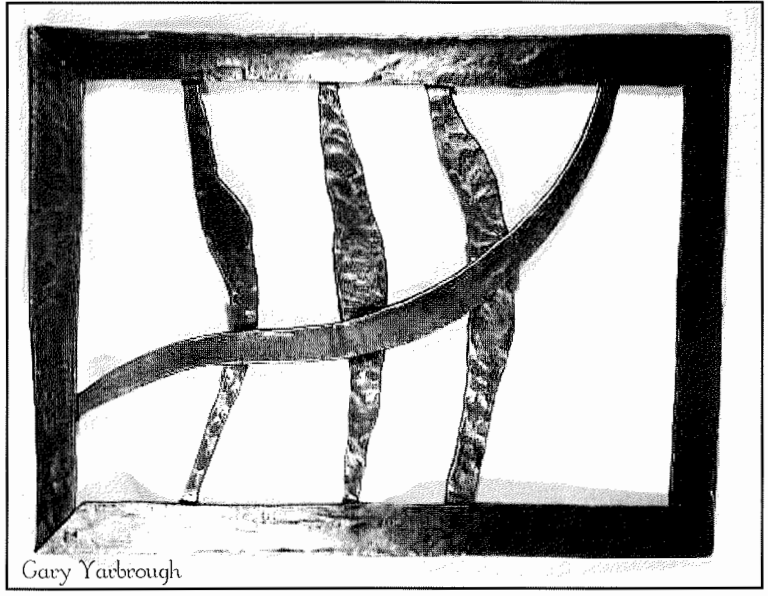
Dave & Andreas Lisch



Rafe Gustafson



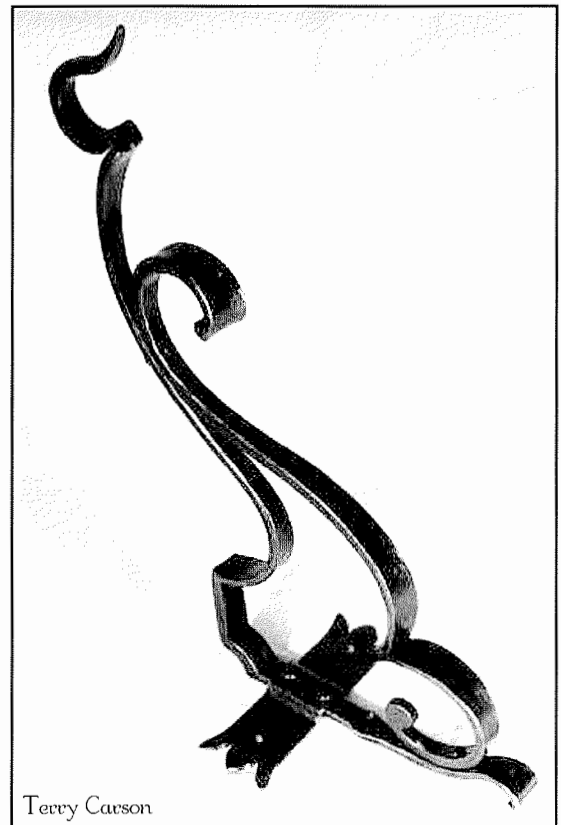
Mark Manly



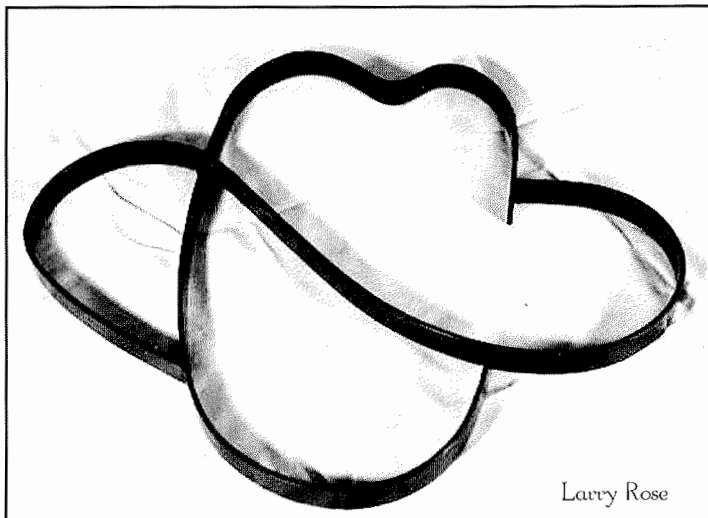
Gary Yarbrough



Gary Yarbrough



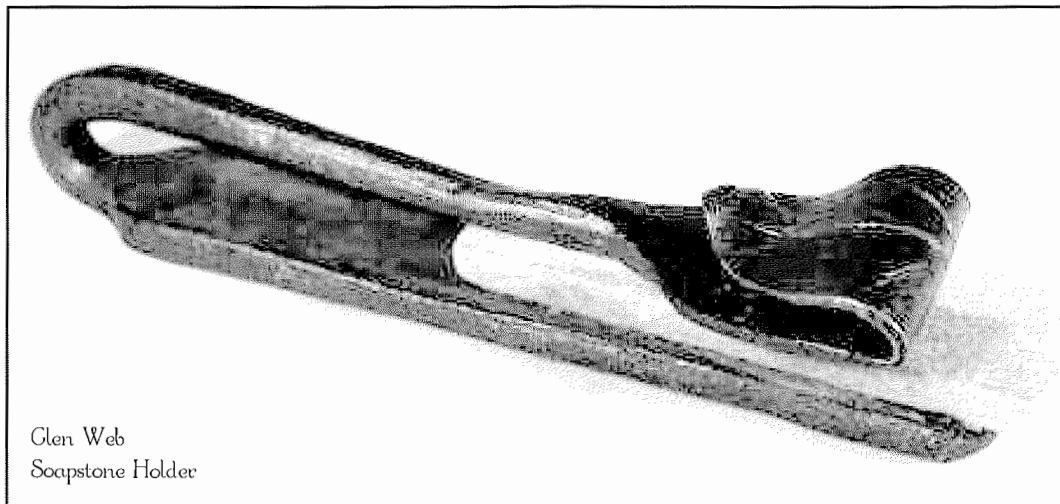
Terry Carson



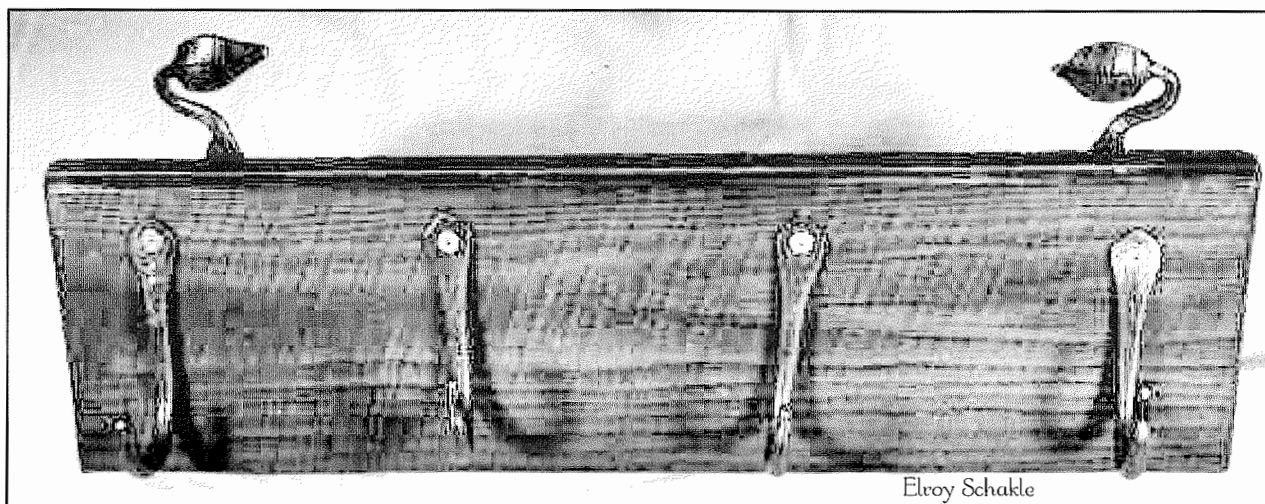
Larry Rose



Dave Brandon

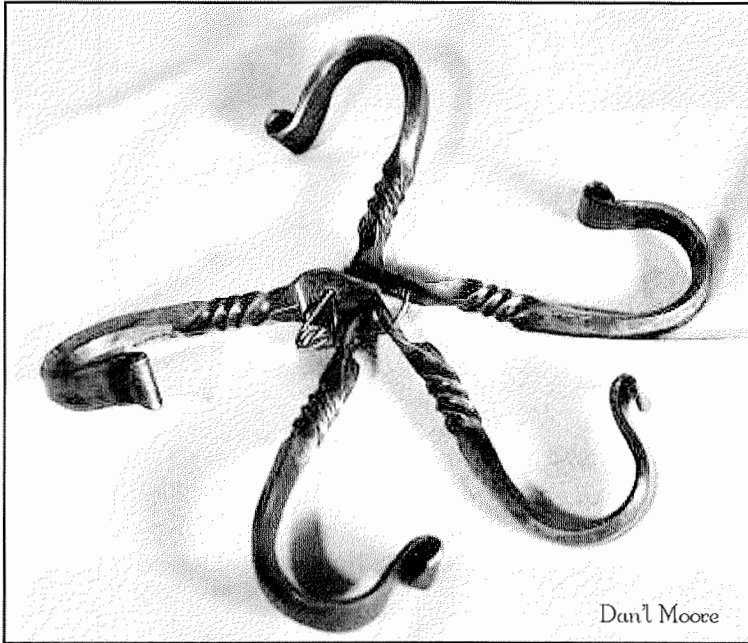


Glen Web  
Soapstone Holder

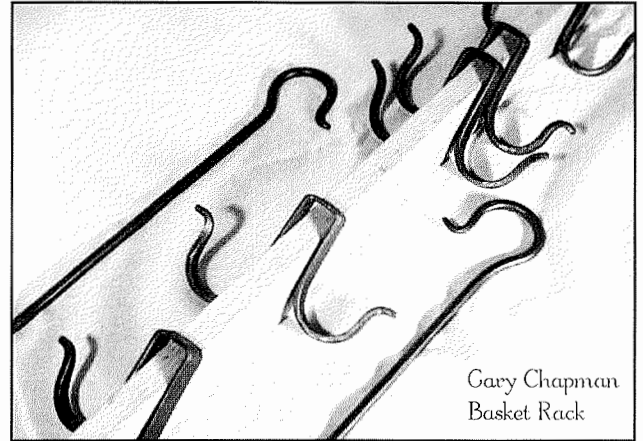


Elroy Schakle





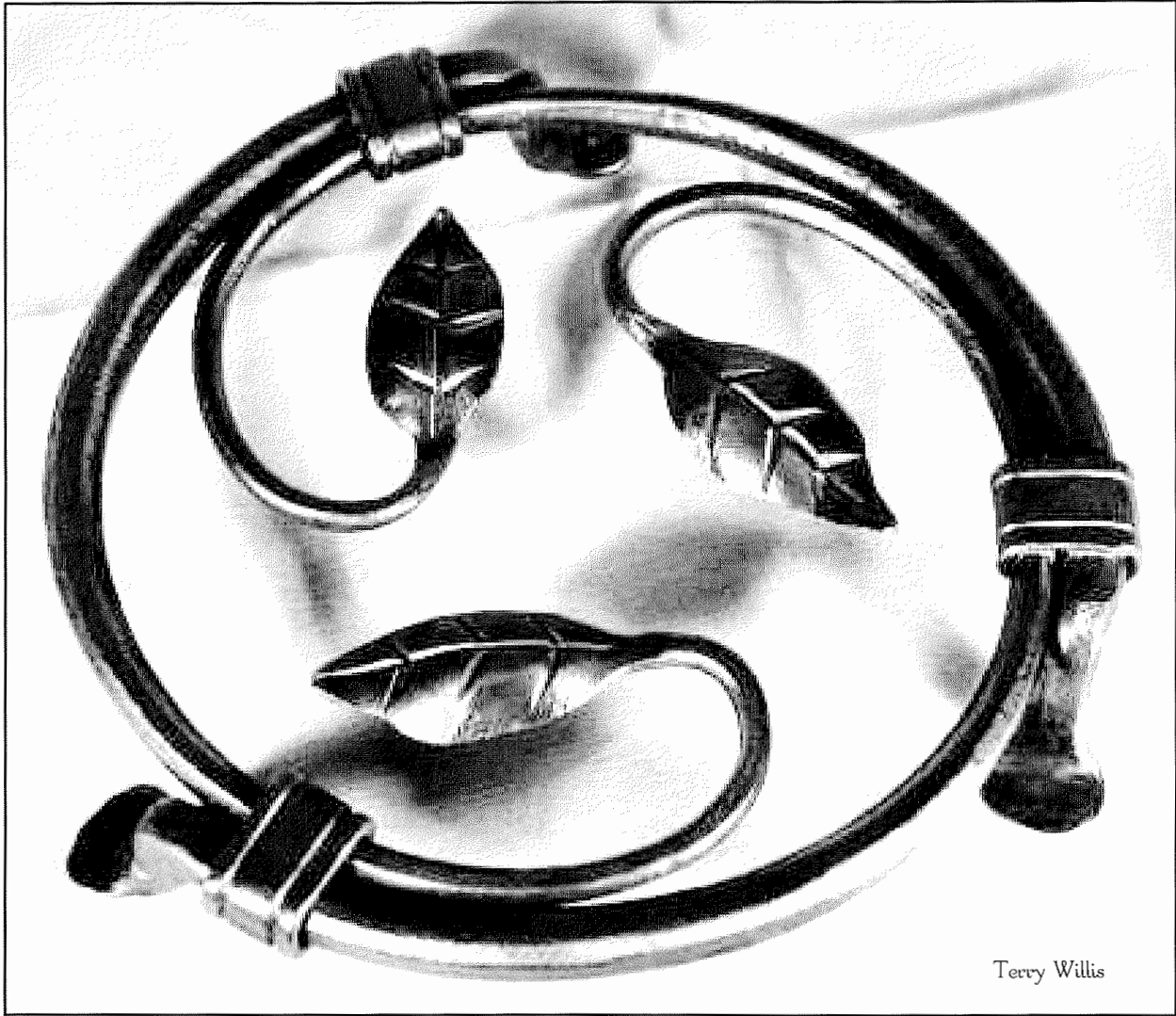
Dan'l Moore



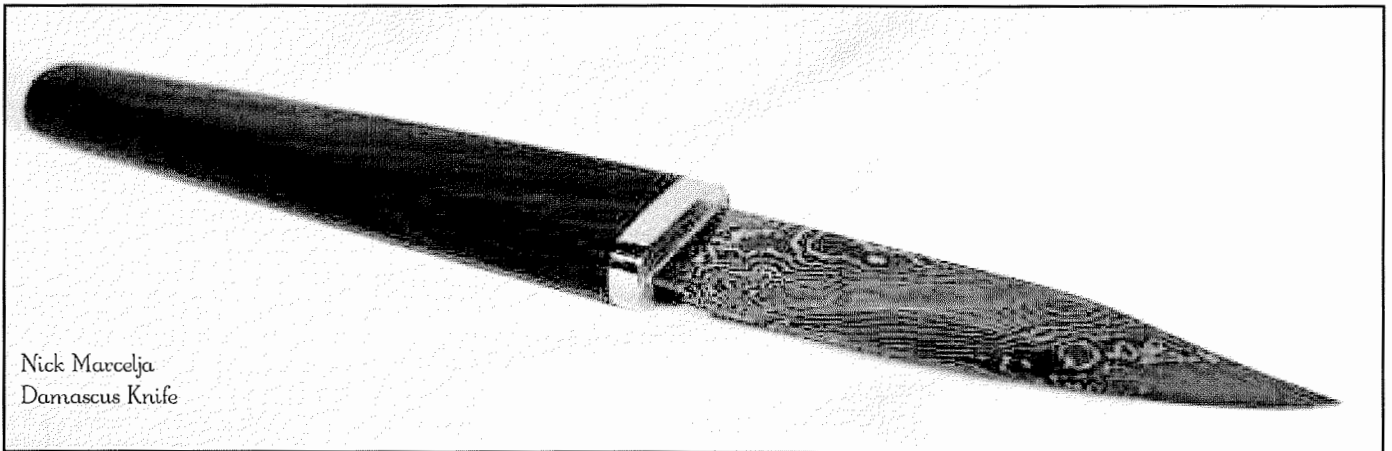
Gary Chapman  
Basket Rack



DJ Stull  
Curtain Rod Hangers

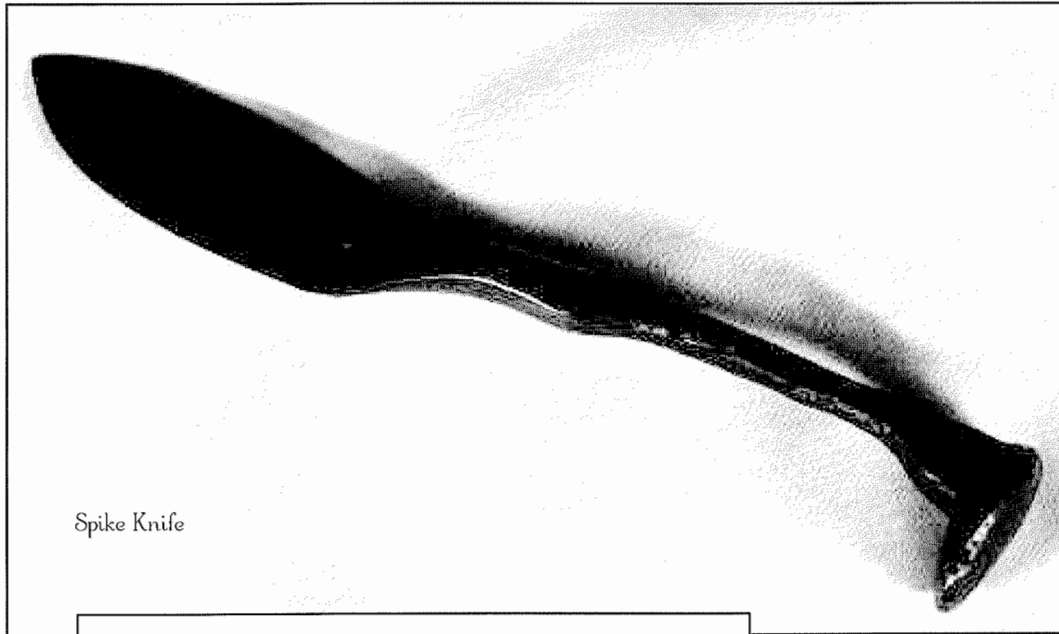


Terry Willis

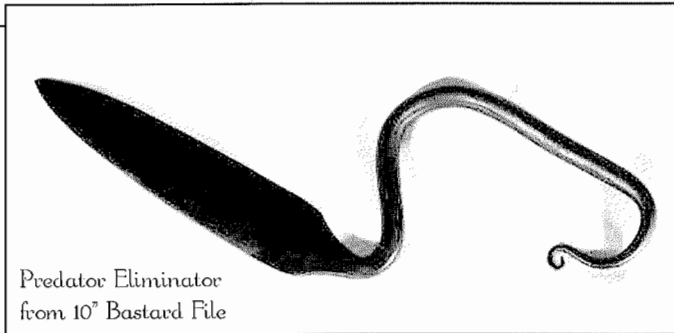


Nick Marcelja  
Damascus Knife

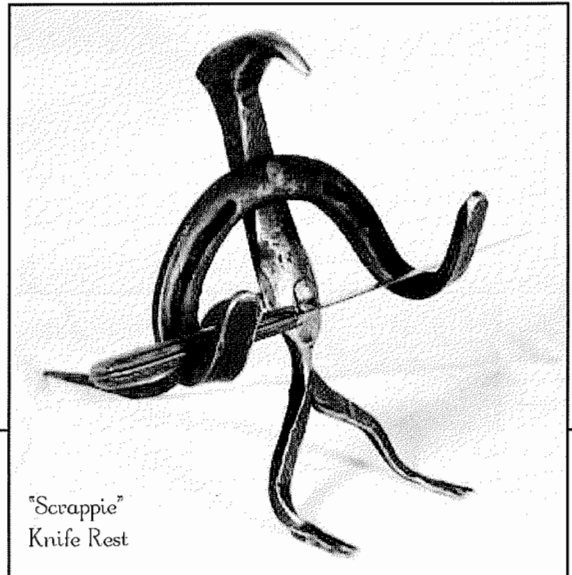
The Art of John T. Abken



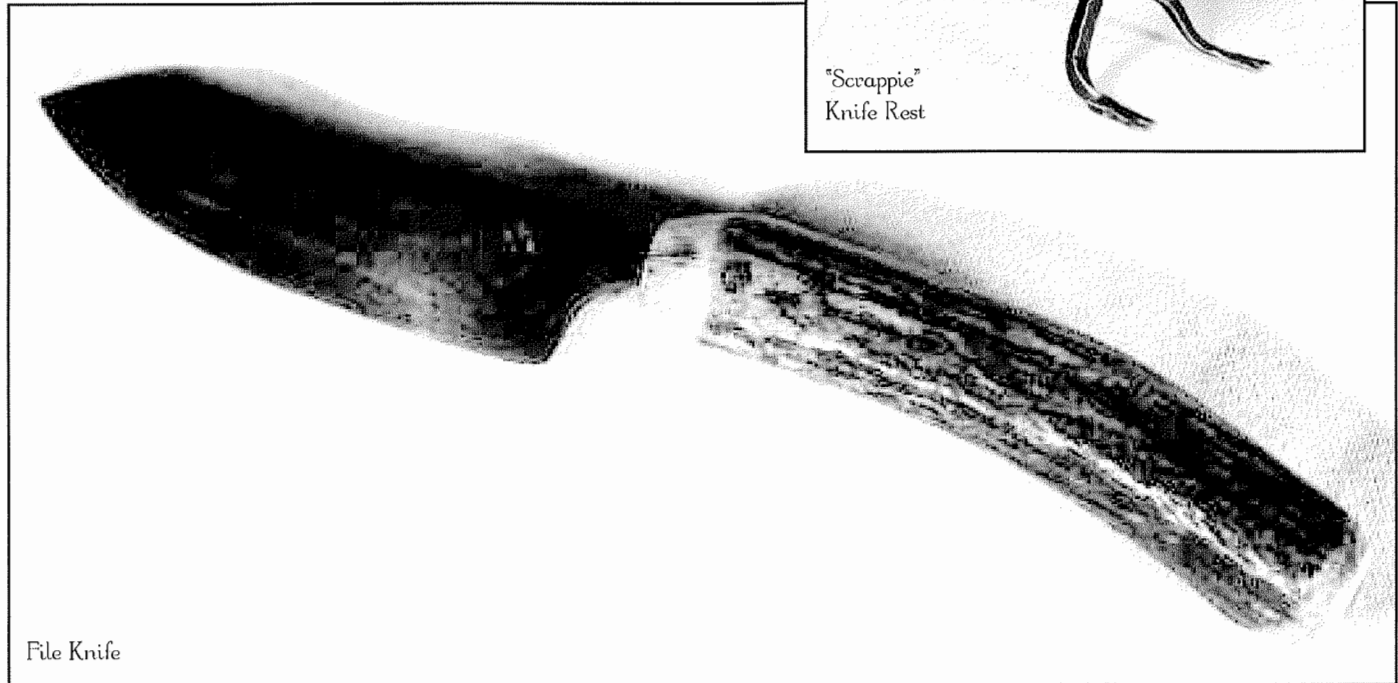
Spike Knife



Predator Eliminator  
from 10" Bastard File

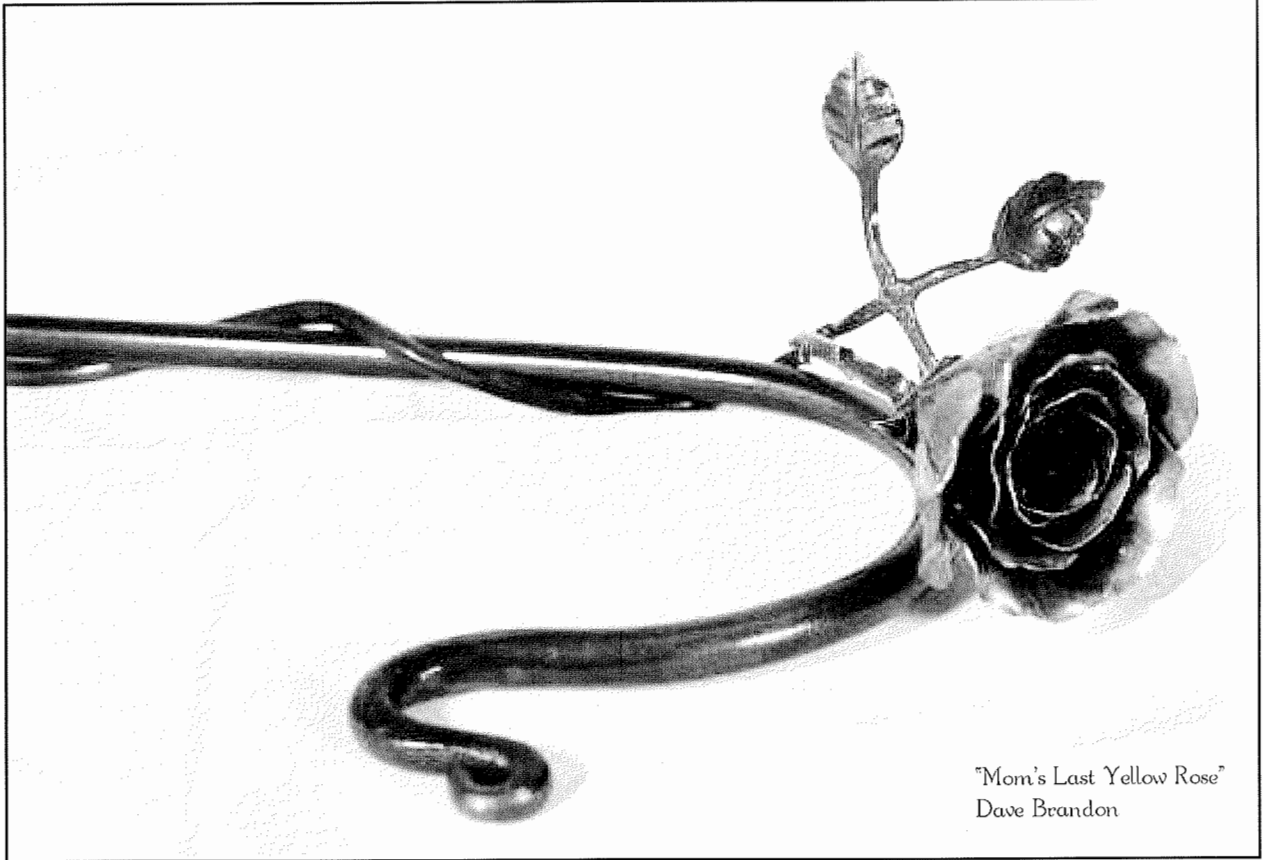


"Scrappie"  
Knife Rest

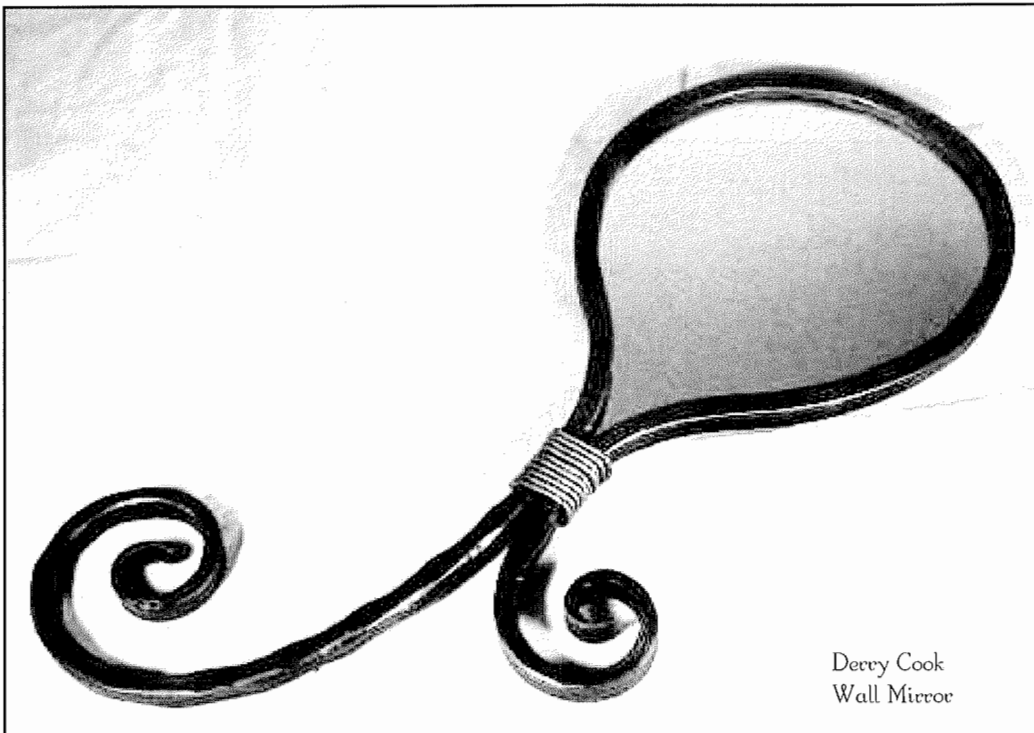


File Knife





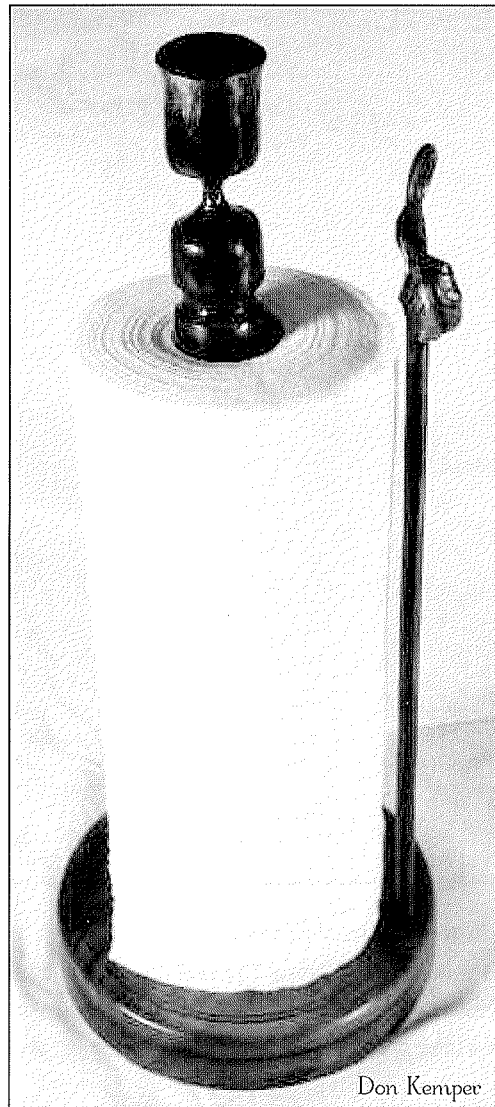
"Mom's Last Yellow Rose"  
Dave Brandon



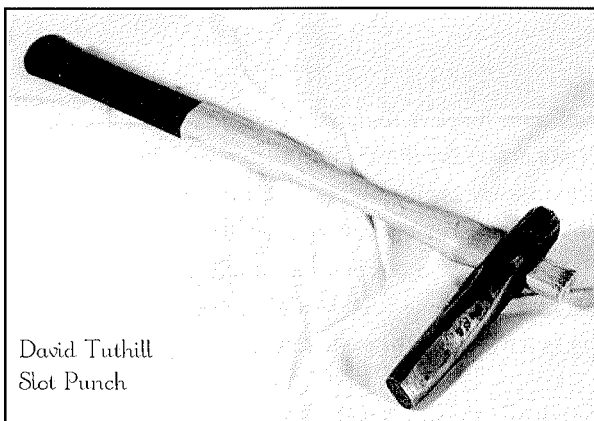
Derry Cook  
Wall Mirror



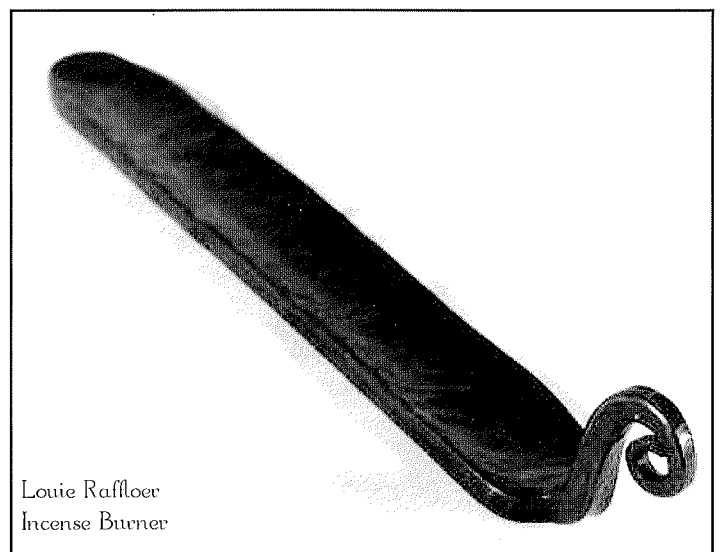
Don Monroe



Don Kemper



David Tuthill  
Slot Punch



Louie Raffloer  
Incense Burner



The Fine Art of

# Damascus

by Bill Fiorini



Pattern-welded steel has been produced by many cultures for centuries. In Western Civilization, pattern-welded steel was made by the Normans and the Franks. In the East, pattern-welded steel was found in many cultures in and around Persia. In Indonesia the Kris was pattern-welded steel. The Japanese sword has been a highly-prized pattern-welded steel tool and art form since prior to the 13th Century.

Damascus (pattern-welded steel) is basically a diffusion of two or more types of iron, steel or nickel in a layered billet. The diffusion process is a technical processing of materials that allows them to join and become a single bar or billet at approximately 2/3 the melting temperature of the lowest melting material. This process is called forge-welding.

There are many types of forges used in this process. The most common forge is the coal or coke forge. This type of forge uses low sulfur, high b.t.u coal or metallurgical coke (pea coke) for the billet processing. The Japanese swordsmith uses an in-ground, side-draft, charcoal forge. Contemporary knife makers and gun-barrel makers use gas forges. The gas forge can be either propane or natural gas. Most of the new gas forges are cylinder forges that have the burner attached to the side which allows the flow of the gas flame to circulate around the cylinder. In all of the examples listed here, the most important factor is to have a highly-reduced flame and high temperature. The gas forge used as an example of technical contemporary forging is a cylinder forge that reaches approximately 2300 degrees F within twenty minutes.



To help maintain a clean oxide-free surface on the billet materials, fluxing agents have been developed. Straight borax is a very good fluxing agent and can be purchased in either standard form or anhydrous. Commercial fluxes are manufactured also for this process. A very good fluxing agent is four parts borax to one part boric acid (by volume). This fluxing agent cleans the metal and protects it from further oxidation while the billet is technically being processed.

Depending on the composition of the laminated materials, set-up of the billet will vary. In most cases the billet will be made up of one or more carbon contents and alloys in ferrous metal. Nickel, a non-ferrous metal, may also be used or it may be contained in one of the ferrous alloys. Various metal compositions are used for a number of reasons. The material may be used for knife blades or tools which means that the billet composition should be of higher carbon content than billets used strictly as a decorative embellishment. Decorative embellishment may occur if used for jewelry processing or Mosaic Damascus that may need high contrast.

### ***Random Billets***

The initial billet is set up with alternating layers of the composition materials being used for the project. I personally use 1" x 6" x 1/4" thick material for random patterns. Random pattern billets usually end up being wood-grain or straight-line patterns in the forging. They may also be altered by fullering or machining to develop a variety of pattern definitions. A good reason for using only 1" to 1 1/2" widths is to aid in the elimination of flux and slag inclusions in the interior of the billet during welding. If using wider sections of metal, you may have to bevel the faces of the stock to allow for removal of flux during the welding process.

The surfaces of the materials for welding are cleaned with a body-grinder, surface-grinder or acid bath prior to layering. The billet is then tacked on the ends with a electric welder to hold the material together until the forge-welding takes place. Both ends are tacked to keep softer materials from extruding out of the billet during the forge-welding process. The spot-welded ends will eventually be removed from the billet. At this time attach a handle or have an extension of material on the billet for manipulation with tongs. The billet is now ready for forge-welding.

The forge fire is very important for the successful welding of a pattern-welded billet. If you are using a coal forge, bank a large amount of coal on both sides of the forge so that you can maintain a reduced atmosphere. Use as little air as possible to maintain a welding heat (approximately 2300 degrees F). In a coke fire place bricks or sections of steel on both sides of the fire bowl to increase the depth of the bowl and fire. Also use a large amount of fuel on the forge bed. If using a gas forge, bring the temperature up to approximately 2300 degrees F before attempting to forge-weld. You will have to adjust the forge for temperature and reduced atmosphere.

In a bottom-draft forge the billet should be placed with the edges of the material in a vertical position for proper saturation of heat. This is not really a concern when using a gas forge that has a circulation movement of the reduced flame. Bring the billet up to heat by turning it occasionally for total saturation of heat. When the billet is at a low-red heat (approximately 1000 to 1200 degrees F), flux the billet. Place flux on all sides so that the billet is extremely clean and the flux also acts as a heat sink to hold the heat in the billet during welding. The interior layers of the billet will coat with flux by capillary action. The billet should be welded at the lowest possible welding temperature. For this reason a touch-rod made out of 1/4" round mild steel is use to test the material. When the touch-rod attempts to diffuse or stick to the billet, the billet is ready to weld. Heat the end of the touch-rod as the billet is coming up to temperature and brush the end before testing on the billet. Billets should be welded at their lowest temperature so that carbon migration does not become extreme. Characteristics of the metal , hot-short and cold-short, are also good reasons to weld at the lowest possible temperature.

Weld the billet by hammering from one end to the other. Do not randomly hammer the billet. This may cause the billet to have flux or slag inclusions. Use light rapid blows at first and then increase the force. The hammering can be done by hand or power-assist. Power-hammers and hydraulic presses are used very successfully in the welding of Damascus. Once the billet is welded, draw the billet out to at least one-half its original thickness. At this time you may place the billet on edge to straighten or decrease the width. The billet is now cut into sections, cleaned with a body-grinder or other desirable methods and restacked for the next welding. Always remember your layer count. If you cut the billet in half you double the layers, etc. Stack the billet so that the layers are still alternated.

After making the total amount of layers in the billet necessary for your project, the billet is forged to the shape needed. At this point you may want to machine the material. If you are machining the material, it must be properly normalized and annealed. I normalize three times by taking low red heats (below annealing temperature) and allowing the billet to air cool to black heat. Anneal by bringing the metal up to critical and placing in vermiculite or lime. Use a commercial heat-treating furnace for the annealing. Preheat to 1350 degrees F and hold for two hours. Allow the metal to cool to room temperature in the furnace. If you use a plasma cutter on the material or attach a tang on a knife using an electric welder you must go through the annealing process again.

### ***Turkish Damascus Billets (Twisted Strands)***

A Turkish billet is set up basically the same as a random billet. The only concern is that layer amounts depend on the final use of the twisted material. A good general layering is from 21 to 64 layers. After the layers are welded, the material is drawn to a square bar and chamfered on the edges in preparation for twisting. Most bars for twisted strands are sized anywhere from 1/4" to 1/2 " square.

Twisting can be done with a twisting wrench one inch at a time or in six-inch increments. Make sure that the twist is even throughout. Because of the stress placed on the billet, always twist at a fairly high heat. The chamfering of the edges helps to eliminate shearing of the material. After twisting a section the material is once again heated and the twisted section is forged flat. This is done so that the layers have more width than height for the multiple-strand weld that is the next step in the billet processing. Strands of material can be twisted the same direction or opposite directions depending on the final pattern development. Strands of twisted material can also be alternated with bars of straight line.

Clean the twisted strands as you would any other material in preparation for welding. The strands are then stacked and electric welded on both ends. Weld the strands as you would weld normal layers. After welding, forge to compact before turning on edge to finish the billet. Do not elongate to any great extent. The more you elongate the billet the more distorted and drawn out the pattern will be. If you wish to have a star-type pattern, the billet must be left thick and round. The stars begin to appear approximately 1/4 of the way into the bar from either side.

Most materials can be processed as stated above. However, if you are using Nickel 200 or pure nickel you must jacket the billet during the processing. This can be done by using a non-nickel alloy around the billet. It can be rather thick or as thin as 16-gauge sheet. If using 16-gauge sheet, the jacket will disappear after approximately three welds or heats. The material is cleaned before placing in a jacket and all of the edges of the jacket are sealed with an electric welder. Flux placed on the billet will aid in reaching the proper welding temperature and the use of the touch-rod, but will not be necessary for the interior of the billet. The billet interior will maintain its reduced atmosphere and weld properly.

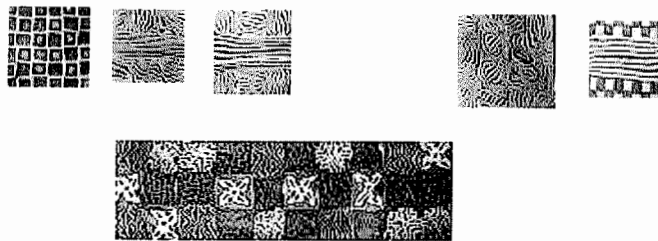




### ***Mosaic Damascus***

Mosaic Damascus is pattern-welded steel that characteristically has the major pattern going length-wise through the bar rather than relying on the flat surface that we develop in random or twisted-strand Damascus. The use of this material is dated back to the gun barrel patterns that we see in Western and Near Eastern cultures. Some of the simple patterns in mosaic are Parquet, Checkerboard and Spider. The Parquet pattern is used as a sample billet for this technical article.

The Parquet pattern is developed in the same manner as the random or Turkish Damascus. Multiple layers are developed by welding two types of steel or a combination of steel and nickel. Normally to achieve a bold pattern, 16 layers or less are used in the initial billet. After welding the billet it is drawn to a smaller square dimension (possible 1/4" to 1/2") and cut into equal lengths. Half of the billet lengths are now rotated 1/4 turn and the parquet pattern is developed. This material is then welded. Variations on this pattern can be made by using three types of material in the initial billet or adding nickel to the billet during pattern manipulation prior to final welding.



### ***Composite Mosaic Damascus***

A Composite Mosaic billet is a continuation of the mosaic billet. It is developed in a similar manner to Turkish Damascus. After the Mosaic is finished, it is twisted full-length and multiples of the twisted mosaic are welded side-by-side. The pattern that is achieved is a spiraling pattern of the original mosaic. An example of this may be a series of checkerboards top and bottom in the original mosaic with a center section of straight lines. This billet will form a composite of a section of Turkish with swirls of checkerboards on both sides. In this type of mosaic the pattern is seen on the flat rather than on the end grain.



### ***The Forged Blade***

One of the obvious indications of Damascus being made by the bladesmith is the pattern configuration in the steel. This is especially true with Turkish and Composite Mosaic Damascus. When a Damascus-maker forges a blade the pattern normally follows the cutting edge rather than running straight out in parallel with the back of the blade.

As an example of forged-to-shape Damascus, I will use Turkish or multiple-strand Damascus in the text. After welding the Turkish and forging it to the required billet bar size, the end of the billet being used for the point is cut at a 45 degree



angle. Use a chop-saw for this process rather than hot cutting. The less stress on the pattern material, the less chance of having a break in the welds. Heat the billet and slowly work the point so that the pattern follows the cutting edge of the blade. This is also done when making a Mosaic Damascus blade that has a twisted strand as the cutting edge. After working the point, forge the basic shape of the knife blank. You may want to make a pattern out of scrap sheet to keep on your anvil during the forging process. When patterns are used, blades vary in size from the original pattern depending on the billet and type of Damascus. If you are using Mosaic or very complicated Mosaic Composite material you may want to electric weld a tang on the blade rather than having complicated Damascus under the handle. Depending on the pattern that you have developed the next step is to forge the cutting edge of the blade. Normally only do this if you are working with random materials. With most other patterns do not forge the cutting edge. The reason for this is that no distortion should occur in the patterns or figures of the materials.

The forging process for the cutting edge is as follows. Bend the blade so that the back is curved. The forging of the cutting edge will straighten the back as you work the edge. Continue to work back and forth in this manner until your blade is finished.

After forging the blade to shape, normalize three times as stated earlier and anneal. After the annealing, mark the blade with a pencil using the pattern blank as an example and body-grind the outline and remove the scale built up during forging and heat treatment. The blade can now be ground on a belt-sander. After working the blade to-shape on a belt-sander, down to 60 grit, harden/temper the blade. Prior to belt-sanding it is a good idea to mark and drill all holes needed for the handle materials.

A good method of heat treatment is to differentially harden and temper the blade. Heat the cutting edge in a coal or coke forge so that approximately 1/4 to 3/8 of the cutting edge comes up to critical heat. It is then placed in warm oil until it reaches approximately 300 degrees F. From here it goes into a 300 degree F oil bath for one hour, then quenched cold. The blade is then cleaned to remove scale and oil. At this time a triple differential tempering is done with a small Prestolite torch. Draw the cutting edge to a dark straw color and the back to a purple. These are oxide colors that come up on the steel during this process. Quench each time so that the color does not exceed the limit you require.

After heat treatment, work the blade down to 600 emery by hand and etch. Most etching is done with Ferric Chloride solution. Cut the Ferric Chloride using 4 parts distilled water and 1 part Ferric Chloride by volume. The blade being etched is cleaned with a degreaser and placed in the bath for 10 minutes. It is then removed and cleaned with baking soda and pumice powder. The blade is etched two more times as stated above and cleaned after each etching period. After the final cleaning the blade is coated with cold gun-bluing solution and emiered with 1000 grit emery. To protect the knife after final finishing, I use a combination of 50 percent gun oil and 50 percent lemon oil mixed together and placed on a gun cloth. This solution is good for maintenance of knives from this point on.

### ***Damascus Gun Barrels***

The plain skelp barrel was the first iron barrel used in rifles, pistols and shotguns. These were made from flat iron strap folded around a mandrel and forge-welded together. On the European continent, pattern-welded skelp barrels were being made during the 18th Century. These were called Damascus barrels and were produced in Europe from the 18<sup>th</sup>-Century until the early to mid-1900's. Most were made in the Vesdre Valley of Belgium, France and Birmingham, England.

During the 19th Century a more aggressive direction was taken with the pattern development of gun barrels by such men as Bernard and Leclerc from Paris and W.W. Orener from Birmingham. The patterns manufactured ranged from the most simple to highly developed patterns.



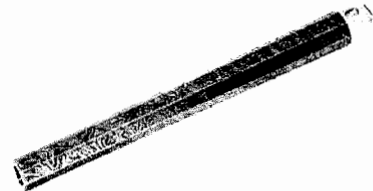
Damascus gun barrels are made out of low-carbon and shock-resistant steels. I use primarily wrought iron and mild steel for this process. The center core can be made out of either of the above materials or 4140. Most of the contemporary barrels are made out of 4140 which is a shock-resistant steel. The pattern Damascus you use is basically up to you, but in most traditional barrels the skelp was Turkish or Mosaic Composite.

Processing is as follows. After deciding on the pattern, the billet is forged and possibly twisted the same as we normally do with Turkish Damascus. Turkish Damascus will be used as an example. After the twisted strands are made, you may use reverse twists, two or three of the strands are welded together. Forge the bars into a square after twisting. One foot of gun barrel takes approximately 7 feet of skelp, so two strands of 7 foot skelp are used for a double skelp barrel and three strands for a triple skelp barrel. Each of these produce a different figure. The twisted skelp produces a figure of lines in a spiral. This can be a bit confusing because of the tendency of the barrel having a watered or wood grain surface included in the spiral if the twist is not extreme. A close visual pattern to the above-mentioned process is the skelp gun barrel.

Regardless of the figure in the skelp (riband), the length of skelp is spiral welded to produce a spiral figure or pattern. There are a number of ways of welding the spiral. After the skelp is forge-welded and edge-beveled (placed on the diamond configuration) it is spiral-formed with either a solid core, a tube (liner) or independent coil as the total of the barrel stock. The diamond configuration is very important for the lap weld of the spiral. The final welding takes place as a series of forge welds or diffusion welds in rotation between jump welding on a floor anvil and flat welding in a swage block. After welding, the rough barrel is forged to octagon or round and processed into the style and type barrel desired.

There are many ways to construct a figure in a pattern-welded steel gun barrel. The major patterns are composites of twists, reverse twists, straight-like skelps, mosaics and twisted mosaics.

Mosaic figures are more complex than the simple twist variety although twists can be used to produce extremely technical mosaic patterns. Some mosaic patterns are produced by edge-cutting and laying the mosaic side-by-side or by twisting the mosaic bars into composites and cutting into the hidden pattern.



### ***Japanese Sword Forging***

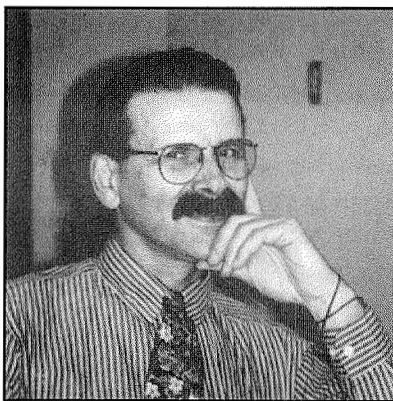
Japanese Sword forging is a tradition that goes back in time many centuries. Most Japanese swords are processed much the same as other Damascus-related blades except that the forge is a charcoal forge rather than forges mentioned in this article that were used by other cultures. The process that will be briefly explained here is in the Gassan Tradition. The forging of a Japanese Sword begins by forging out Tamahagane ( a processed iron ore that comes from black iron sand). After the Tamahagane is forged out into a flat sheet, it is quenched cold in water and broken into pieces. The pieces are graded according to carbon content and stacked on a Tamahagane plate for welding. Many times the smith will take scrap Tamahagane and introduce carbon into the iron by dropping the Tamahagane through a charcoal fire and heat soak for 45 minutes to 1 hour.

After the first weld the billet is drawn out, it is cut width wise, stacked and welded again. The amount of times that this process is done depends on the smith and pattern he wishes to make. The process also has alternate cuts utilized in the pattern development. The smith alternates from width cuts to length cuts. After the final layering of the billet, the smith will draw out the material into a Sunobe ( sword blank). The multiple layer billet is used by itself if making a Tanto (short

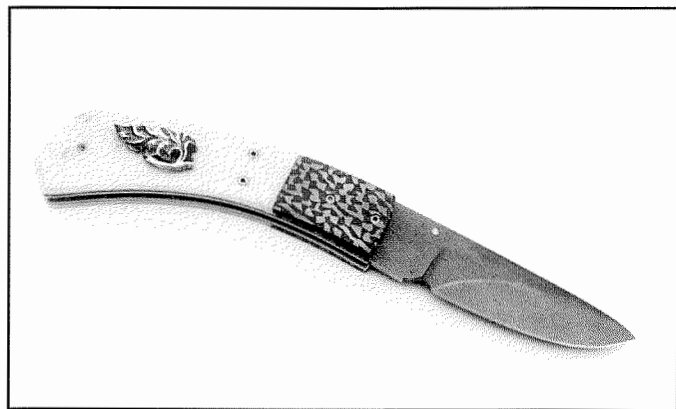
blade) or a core is placed into a U-shaped multiple layer billet to form a Wakizashi or Katana (long blades). The core is normally of extremely low carbon Tamahagane.

After the Sunobe is forged the Japanese swordsmith will forge the cutting edge and final profile of the sword. The blade is then ground or filed to prepare the sword for heat-treating. The sword is then coated with an earth compound mixed with water, thick at the back and thin at the cutting edge. Definition of the Hamon (hardening line) is developed with the earth materials. The blade is then heated in the charcoal fire and quenched. A curvature occurs during this process and is adjusted after the quench. Rough foundation polish is done by the smith at this time to see if the blade has all of the properties of a good sword. It is then sent to the polisher.

As in many technical processes, this article is only a starting place for technical information. Experimentation with the material and processes will lead you into new directions and possibly more technical advances.



Bill Fiorini



Lockback Folder Knife by Bill Fiorini. Parquet Mosaic Blade, Checkerboard Mosaic Bolsters, Fossilized Walrus Handle, Chased Leaf Chasing. Photos by Kirsten Skiles.

A former president of ABANA, Bill Fiorini is well-known in knifemaking and blacksmithing circles. Bill has been a professional metalsmith and Professor of Art at the University of Wisconsin-LaCrosse since 1968. Constantly in demand as a demonstrator, he has conducted workshops at Penland School, Arrowmont School of Arts and Crafts, Haystack Mountain School of Crafts, Peters Valley Craft School and the National Ornamental Metal Museum as well as workshops for numerous arts groups.

A few of the positions held by Bill over the past years are: President of ABANA, current ABANA Board Member, The International Damascus Society, and Chairman of the University's Art Department. Bill has been invited to show his work in many juried and invitational shows nationally and internationally over the years. His work has been published in many magazines and books including the Anvil's Ring, Blade Magazine, Edges Magazine and Jewelry-Contemporary Design and Technique by Chuck Evans. Bill has conducted extensive research in Mokume-Gane and Pattern-Welded Steel (Damascus) over the last ten years and has received research grants and published research papers on pattern development processes in both ferrous and non-ferrous materials. Bill has the exclusive Master Bladesmith status from the American Blade Society and voting status with the Knifemakers Guild.



**KOKA METALSMITHS**



**Bill Fiorini**

ABS Mastersmith

Mosaic Damascus Metalsmith

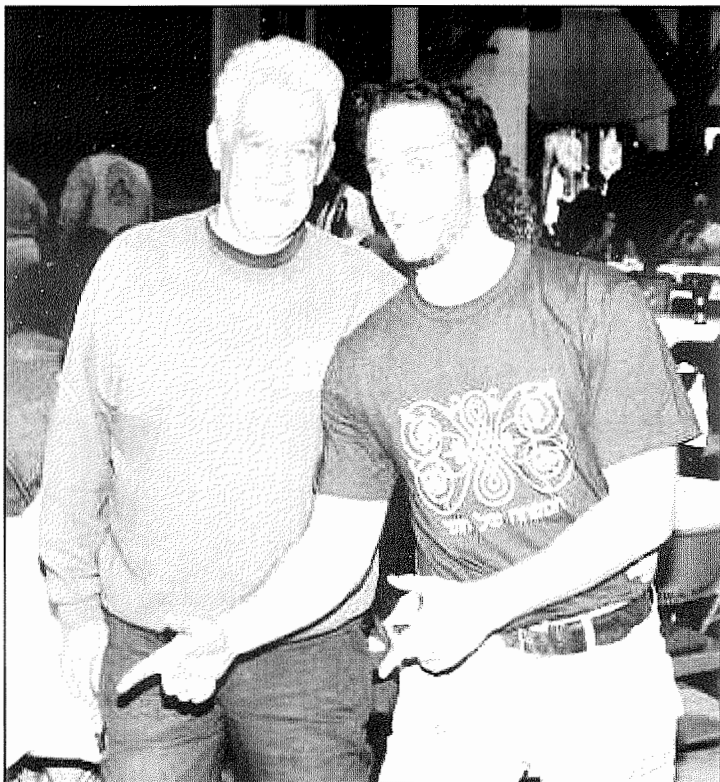
380 River St. • P.O. Box 237 • Dakota, MN USA 55925-0237

*Back Cover.* Mosaic Damascus Bowie, Checkerboard Center, Parquet border and L6/1095 Twist Cutting Edge. Fossilized Walrus Ivory and Sterling Silver Chasing.

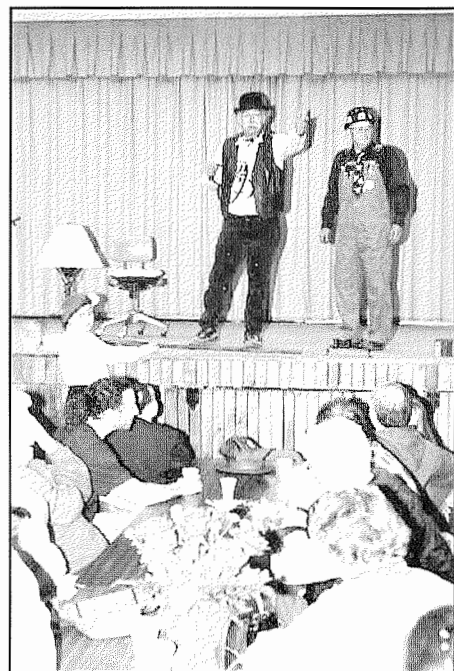
Copyright 1999 William Fiorini (Koka), all text, photos & artwork.



## **PARTY TIME AT WINTHROP !!!**

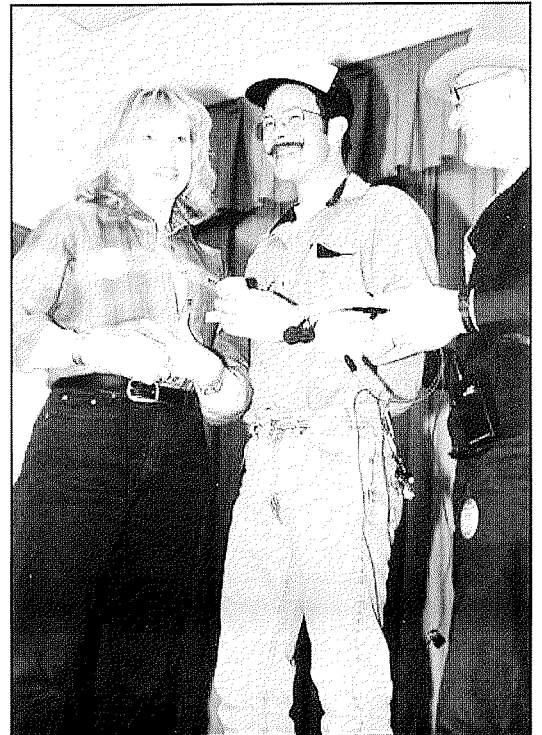


**ISRAELI FOLK DANCERS**

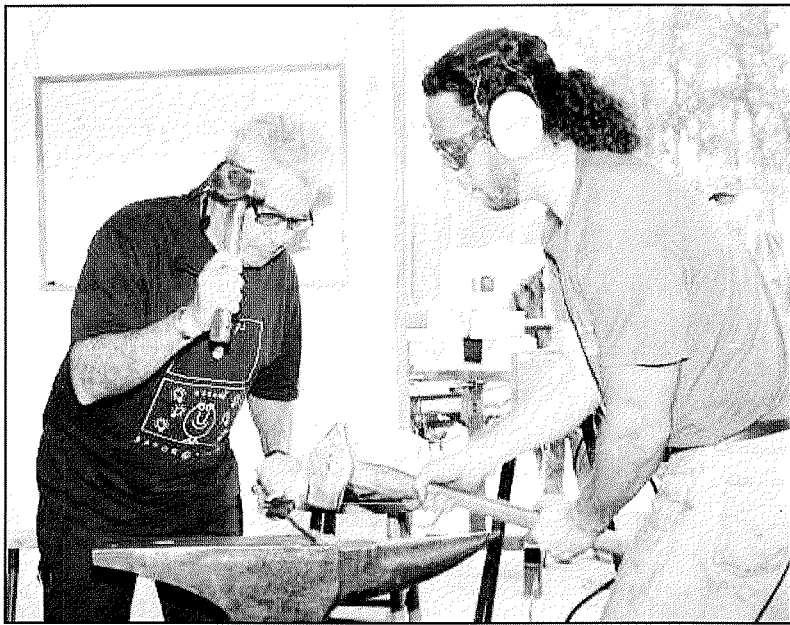




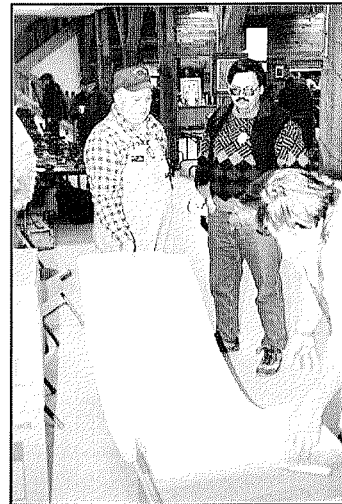
**THE "WHAT WOULD WE EVER DO WITHOUT YOU" TEAM!**



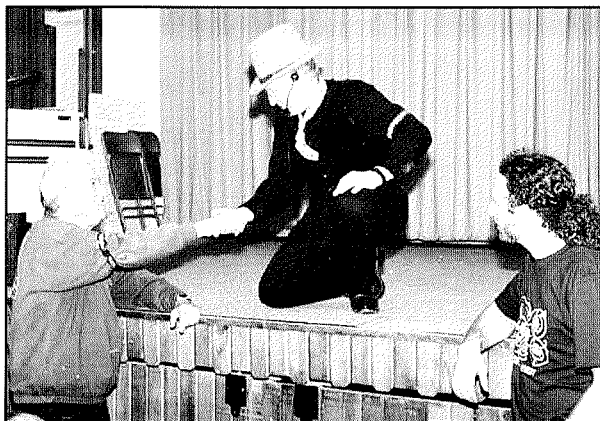
**KRIS KETCHUM POPS THE BIG QUESTION TO A SURPRISED LAURA COOPER**



**GUEST DEMONSTRATORS URI HOFI & AMIT HAR-LEV**



**JERRY HENDERSON & FORGE FIBER**



**THE PREZ GIVES AN AWARD**



**NIMBA FORGE/OLD CEDAR FORGE**

# Civic Art in Penticton

by Nathan Howell of Red Willow Forge 

In 1998 I was commissioned to build two fruit sculptures for the City of Penticton, British Columbia, Canada. They were to depict the fruit that grows in the Okanagan Valley. They are four feet high and two feet wide and bolted to two pillars of rock with four timbers held by metal connectors, bolts and washers I built.

There are apples, pears, and peaches, made out of 2 1/2" Schedule 40 pipe. Plums and apricots are made out of one-inch Schedule 40 pipe. The grapes and cherries were made out of 3/4" solid, with a top and bottom die on my 25 lb. "Canadian Giant" hammer. A local machinist friend made the dies. I put one banana in each sculpture without telling them to see the response. They didn't see them!

Each type of fruit has leaves to match. We have plenty of orchards around so it was easy to research the designs.

The large fruit made out of 2 1/2" pipe was started on the power hammer and finished on the anvil with a five-pound hammer. It took a lot of power so I could only work on them a few hours a day. The pears were really hard to do so there were only about fifteen in both sculptures. I included lots of apples and peaches, about 120 of each. I had to build special tools to make the peaches. About 60 plums and apricots, 80 cherries and 300 grapes were made. I also made three bananas, two for my (nicknamed) "Fruit Piles," and the other for my fruit bowl.

After a few weeks of making fruit it was time to put it together. I made a frame of 1/2" round. The bottom was 1/2" by 3" flatbar with their bolt pattern drilled for 3/4" bolts that were cast in the cement top, or base for the piles. One of the frame pieces went to the top and back down to lift them in place. The other two uprights went to a ring 6" down from the top.

It took about two weeks to put them together so that they looked good. Leaves and fruit were welded together with a tig welder. For a finish, I thinned tung oil with paint thinner and brushed it on. I applied two coats of oil and after it dried I painted it with black paint. The oil went into the places where the paint wouldn't go, to stop the rust. After one year outside, there are just a few small spots of rust on it, which you can see only if you get right up to them. But as they are seven feet up the base, the rust really can't be seen.

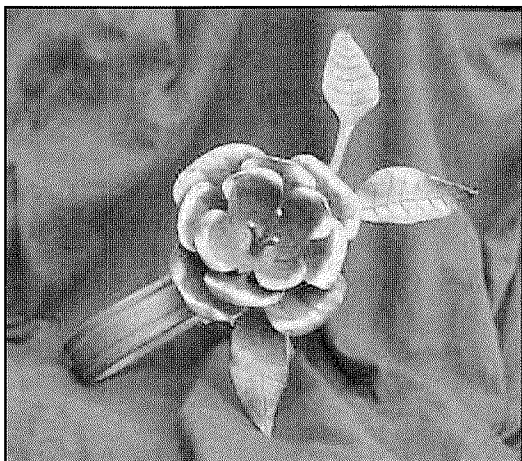
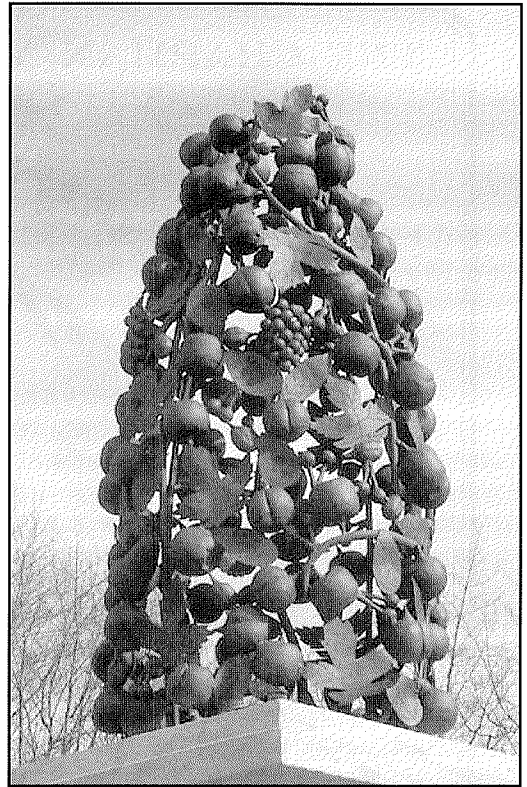
After two hours of lifting, they graced the entrance sign to downtown Penticton.

As for me, I'm a self-taught blacksmith from the British Columbia bush. In the area where I used to live I couldn't get coal so I got plans for a retort and made my own charcoal out of local hardwood. After a year, I found a supplier of good blacksmith coal--What a difference!

I had the opportunity to blacksmith as an exhibitor in the Folk Life Pavillion at Expo '86 in Vancouver, B.C., and have slowly built a business from there. After ten years as a hobby, I am now full-time. It took about two years to become established, but now I'm very busy, and do only custom work.

I now use a home-built propane forge, built from N.W.B.A. plans.

**Check out Nathan's Web Page at: [www.redwillowforge.com](http://www.redwillowforge.com)**





# THE CHAPMAN MINT PROUDLY ANNOUNCES

"I will Ask No More Forever!"

THE PAUL THORNE S-1 COMMEMORATIVE MEDALLION



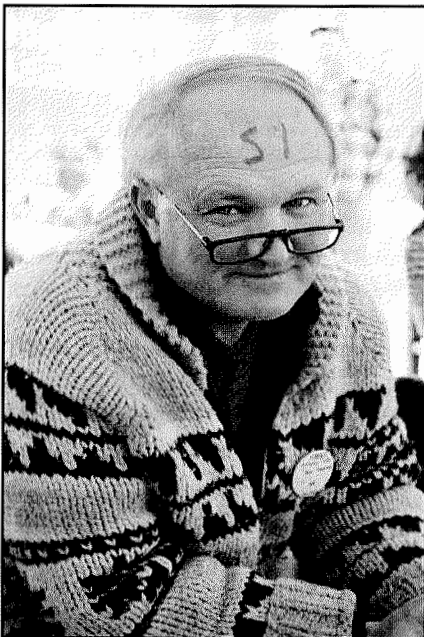
Struck in Highest Quality  
S-1 Chisel-Grade Steel!



**NOW YOU CAN OWN THE LATEST CHAPMAN MINT MEDALLION HONORING GREAT MOMENTS IN BLACKSMITH HISTORY. ONLY FIVE PAYMENTS OF \$39.95 EACH. SEND TO:**

S-1 Medal, The Chapman Mint, Skunk Works Iron Company, Gamble Bay, Washington

All Sales Final



## ANY MORE QUESTIONS?

When Uri Hofi was doing his demonstration at Winthrop, N.W.B.A. Vice-President Paul Thorne asked what metal Uri used in his chisel. "S-1," came the reply. A little while later the Vice-President again asked Uri, "What was that metal?" Again came the reply, "S-1." Sure enough, a while later came the *third* inquiry from Paul about the metal composition of Uri's chisels! Uri quietly put down his hammer, picked up his black Magic Marker, walked over to Paul . . . and made some graphic and indelible notes in a place where Paul could review them while shaving!

P.S. (Few people know that our Officers are all former Rocket Scientists!)







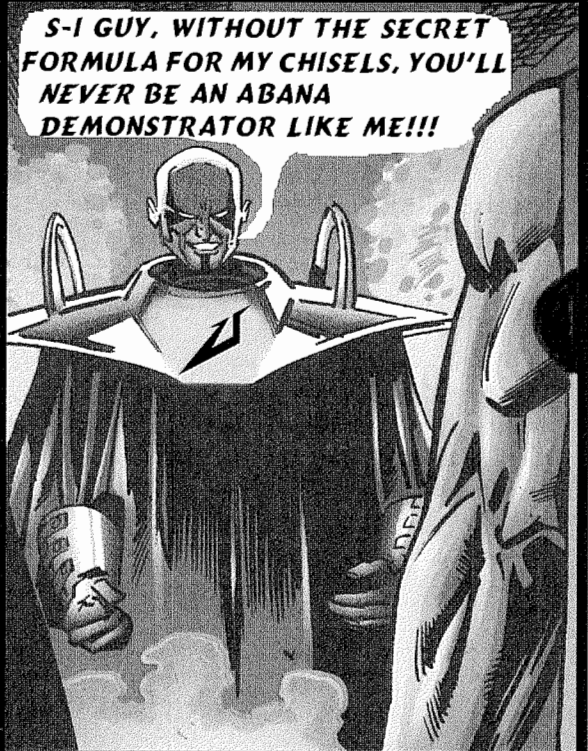
# THE ADVENTURES OF ... S-I GUY !!!



**LOOK! UP IN THE SKY!  
IT'S S-I GUY FASTER THAN  
A SPEEDING BILLET! MORE POW-  
ERFUL THAN A NAZEL! ABLE  
TO LEAP TALL ANVILS AT A  
SINGLE BOUND!**

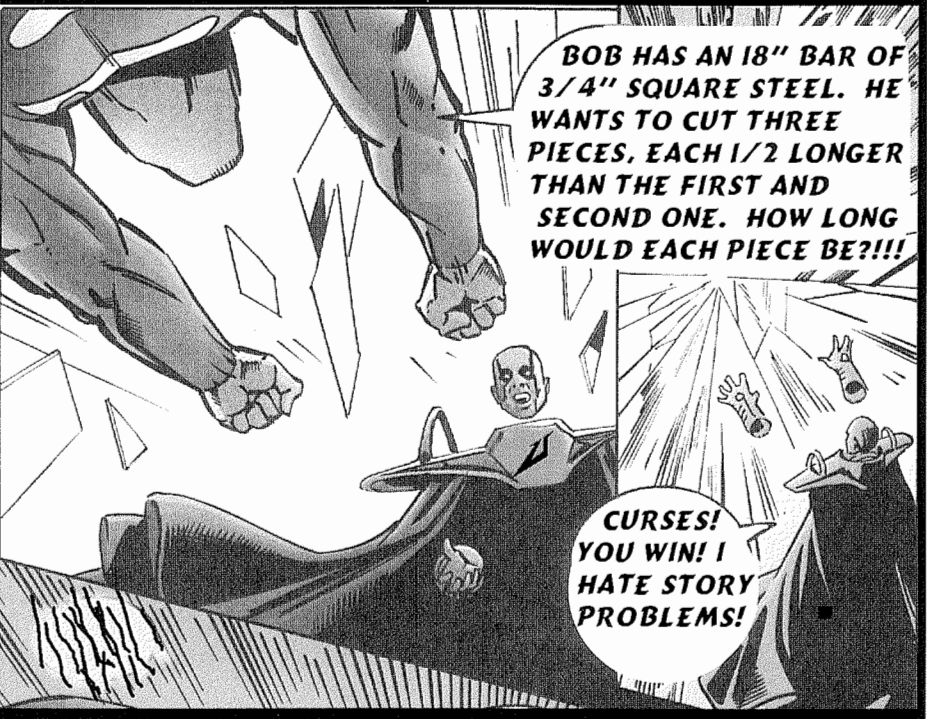
**AND WHO, DISGUISED AS A MILD-MANNERED  
ANACORTES BLACKSMITH, LEADS THE STRUGGLE  
FOR TRUTH, JUSTICE AND THE BLACKSMITH WAY!**

**... S-I GUY CONFRONTS URI, THE  
EVIL HAMMER MAGICIAN ...**



**S-I GUY, WITHOUT THE SECRET  
FORMULA FOR MY CHISELS, YOU'LL  
NEVER BE AN ABANA  
DEMONSTRATOR LIKE ME!!!**

**BUT S-I GUY LAUNCHES HIS SECRET  
STORY PROBLEM WEAPON !!! ...**



**BOB HAS AN 18" BAR OF  
3/4" SQUARE STEEL. HE  
WANTS TO CUT THREE  
PIECES, EACH 1/2 LONGER  
THAN THE FIRST AND  
SECOND ONE. HOW LONG  
WOULD EACH PIECE BE?!!!**

**CURSES!  
YOU WIN! I  
HATE STORY  
PROBLEMS!**

**THANKS TO S-I  
GUY THE SMITHY  
IS SAVED!**





# Twentieth Plans Set!

by Darryl Nelson . . . Fall Conference Chair



logo by patrick maher

Congratulations! N.W.B.A. is turning Twenty-years Old and we've got **BIG** plans to celebrate it. Our Anniversary Conference will be held October 8-10 at the Lewis County Fairgrounds in Chehalis, Washington. The Fairgrounds is located mid-way between Seattle and Portland on the I-5 Corridor. The three-day event, which will get underway at 9 a.m. on Friday morning, will include a great line-up of demonstrators, a Vendor's Row, a panel discussion, a fantastic Gallery, and a Hands-On area.

We have four great demonstrators coming: **Jay Kidwell** of Arizona, **Peter Happny** of New Hampshire, and **James Horrobin** and **Gabrielle Ridler** from England. Our local demonstrators are **Phil Baldwin**, **Paul Casey**, **Gene Chapman**, and **Kelly Gilliam** together with **Mary Reid Gioia**. A founding member of N.W.B.A., Dave Thompson, will give a slide show representing his many years of blacksmithing here in the Northwest. In addition to the demonstrations, there will also be two hands-on stations where members can sign up for one of five three-hour classes or help add links to the N.W.B.A.'s portion of the chain for the **Year 2000 ABANA Conference**. There is a large secure building where the **Gallery** will be housed. Everybody is encouraged to bring ironwork for display (but please don't ship it!)--historical pieces, collected works and fine examples of your own work, past and present, are all needed. We hope to have a representation of all of the N.W.B.A.'s Twenty Years displayed.

In addition to the famous N.W.B.A. **Auction**, to which **all members are urged** to donate ironwork and other items, there will be a **Raffle** with impressive prizes: a 260-lb. Centurion anvil from Russell Jaqua's Nimba Forge, a cone mandrel from Laurel Machine and Foundry in Mississippi, a swage block donated by the Brandon's, and a set of tongs from Grant Sarver's Off-Center Products.

Because we are anticipating such a large turn-out, pre-registration is required if you want to eat at the Saturday Night Anniversary Dinner. **Your registration MUST be mailed no later than SEPTEMBER 15 if you want to eat at Saturday Night's Dinner!**

Camping and R.V. sites are available at the fairgrounds but check the list provided for other accommodations such as motels and B&Bs.

If you have any questions or need additional information, please contact: Darryl Nelson, 36914 Meridian E., Eatonville, WA 98328-9031 (360) 832-6280.

## Schedule of Events

### Friday

8 A.M.	Registration Begins.		
9 A.M.	Demos and Hands-On Class	1:30 P.M.	Demos and Hands-On Class
Noon	Lunch	5:30 P.M.	Dinner, Raffle, Auction
1:30 P.M.	Demos and Hands-On Class		Midnight Madness
4:30 P.M.	Dinner break		
6:00 P.M.	Gallery Opening		
7:30 P.M.	Panel Discussion		
Midnight Madness to Follow Panel			

### Sunday

9 A.M.	Demos and Hands-On Class
Noon	Clean-up

### Saturday

9 A.M.	Demos and Hands-On Class
Noon	Lunch

## Accommodations



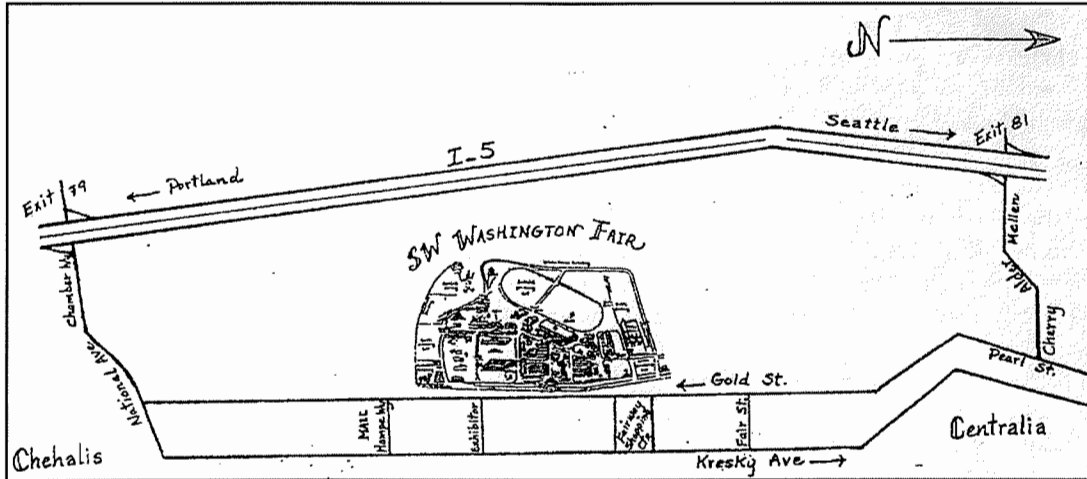
**Howard Johnson** 122 Interstate Ave., Chehalis, 800 446-4656, 360 748-0101  
**Relax Inn** 550 SW Parkland Dr., Chehalis 800 843-6916, 360 748-8608  
**Centralia Day's Inn** 702 W. Harrison, Centralia 800 329-7466 360 736-2875  
**Centralia King Oscar** 1049 Eckerson Rd., Centralia 800 578-7878 360 736-1661  
**Ferryman's Inn** 1003 Eckerson Rd., Centralia 360 330-2094  
**Motel Six** 1310 Belmont Ave., Centralia 800 466-8356 360 330-2057  
**Park Motel** 1011 Belmont Ave., Centralia 360 736-9333





# Hammer In Hand

The theme of the Twentieth Anniversary—emphasizing hand forging!



From the North (Seattle): Take second Centralia Exit #81 Mellen St. Turn left under overpass, drive approximately six blocks to first stop light. Turn right on Pearl St. (one-way south), cross over viaduct to Gold St. and proceed south to Fairgrounds.  
 From the South (Portland): Take third Chehalis Exit #79 Chamber Way. Turn right over bridge, then left on National Ave. at stop sign. Proceed north on Kresky Ave. (one-way north) past Lewis County Mall. Turn left on Exhibitor Rd. for South Fairgrounds and south parking lot.

**Registration and Fees**

I am a member of N.W.B.A. { }

Pre-Registered before September 15th (Dinner Included) \$80 \$ \_\_\_\_\_

Please check one: Regular Meal ( ) Vegetarian Meal ( ) Low-Fat Meal ( )

After September 15th (Dinner *not* included) \$80 \$ \_\_\_\_\_

Each additional family member \$15 x \_\_\_\_\_ = \$ \_\_\_\_\_

N.W.B.A. Membership (Required for Admission) \$35 (\$39 non-US) \$ \_\_\_\_\_

Camping and R.V. Sites without hook-up \$10/night x \_\_\_\_\_ nights= \$ \_\_\_\_\_

R.V. Sites with hook-up \$12/night x \_\_\_\_\_ nights= \$ \_\_\_\_\_

**Total** \$ \_\_\_\_\_

Name: (Print) \_\_\_\_\_

Family Members: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Make check payable to N.W.B.A. and mail to: N.W.B.A., 8002 NE Highway 99, #405, Vancouver, WA 98665  
 Include names of all attendees, address, phone and E-mail address.

*Safety glasses are required at all demonstrations. Please Comply. Dogs are not allowed on the Fairgrounds or in the camping area. Please leave doggies home (sorry, Cisco).*

Now, one of the Ancient Legend-Keeper of the N.W.B.A. Clan, Jack Slack, remembers . . .

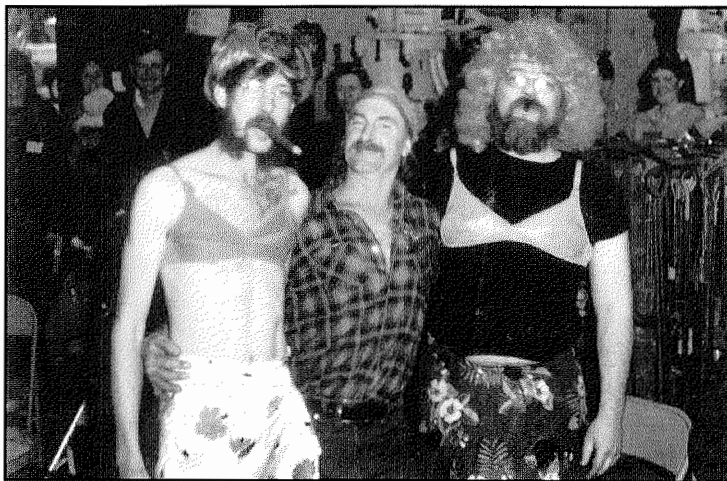
## THE LEGEND OF HEPHAESTUS AND THE N.W.B.A. MORTALS

We left off last issue as N.W.B.A. was beginning its growth into the '80s, well on the way to becoming the second-largest regional blacksmiths group in the country (dare I say the world?). Our pattern of two get-togethers a year, Spring and Fall, was by now pretty well established, with smaller meetings and workshops happening wherever and whenever time and space would allow.

As one of our "outside" demonstrators, we invited Beau Hickory from San Francisco to be our guest at a Fall gathering, at what was then SeaForge, in Seattle. We had a great turn-out, and Beau was in rare form. Things did get a little out of hand at the end though . . . But first, a little background. Beau had demonstrated at the ABANA/CBA conference in Santa Cruz. Always entertaining, Beau's demo closed with a vignette depicting Hephaestus and the Golden Handmaidens, complete with scantily-clad young women bearing wine and food on silver salvers.

When Beau came here to the Northwest he was unable to bring his handmaidens with him. Considering it an affront to N.W.B.A.'s world-reknowned hospitality to deprive Beau (and the conference attendees) of a chance to ogle his able assistants, the female smiths of NWBA looked about for volunteers. Not being able to find any, they settled for the next best thing (well, you be the judge). A quick trip to the local Goodwill provided the raw materials, and before you could spell "Hephaestus", they had crafted a couple of reasonable replicas, complete with garbage-can lids hammered into passable serving trays. A Mason jar of cheap plonk and a couple of evil-smelling stogies rounded out the ensemble; Beau seemed mighty pleased with their handiwork!

In an attempt to protect the innocent and/or the guilty, we'll forego the naming of names, but at least three of the perpetrators are faintly visible lurking in the background, looking mighty pleased with themselves. Just for fun, see if you can put names to faces; all will be revealed at the 20th Anniversary Conference in the Fall!



Hephaestus and his Golden Handmaidens

Well, we've always known how to have fun, then as now, and it didn't stop there. We've always been fortunate as a group to be able to bring in some incredible talents for demonstrations and workshops, as well as growing a pretty impressive list of our own. It would be difficult (especially with fading memories) to name them all, but we'll continue with a few highlights.

The ABANA conference in '82 saw the first time that an Iron Curtain smith was allowed "out". Fredi Haberman of Czechoslovakia, a wonderfully puckish fellow in Lederhosen, amazed the crowd with his skill. He was so popular that an impromptu "whirlwind tour" of regional groups around the country was hastily arranged to make good use of his remaining "free" time, and we were fortunate to have Fredi stop off for a few days in the Northwest.

We scurried about organizing a demonstration site for him and on extremely short notice it all came together. Fredi spoke little English, but we had no trouble understanding we were watching a master at work. Fredi related how, when a woman came to his shop, he would forge a leaf, and present it to her, requesting a kiss in payment; he forged a lot of leaves that day!

Just to prove that we don't always need outside demonstrators to have a good time with, Mark Solomon hosted a get-together at his shop in Moscow, Idaho, billing it as a catapult building workshop. Mark is perhaps best known for his propane-fueled (or is that "armed") Fire-Breathing Dragon, mounted on the chassis of an ancient truck, so you'll get the idea of what we've come to expect from Mark. I'll say no more, except to note that several signs were posted around the shop stating: "Volkswagens! Park here at your peril!"



The Solomon Fire-Breathing Dragon

By the middle of the decade we had grown respectable enough to be invited to participate with Northwest gold and silver smiths in Mountain High V at Timberline Lodge on Mt. Hood, at what was then billed as the "2nd Annual Western States Blacksmithing Conference", intended to be a "filler" between ABANA conference years, and attempting to provide for closer venues than ABANA, which was then largely an East Coast organization. There was a stellar line-up of demonstrators, including some of our very own, but the undisputed star of the show was the Lodge itself; iron everywhere, both decorative and functional; truly inspirational!

ABANA President Stan Strickland presented N.W.B.A. with our ABANA Chapter charter, thus making us finally "official" in the eyes of the national organization.

As the decade wound on towards the celebration of our first ten years, we had grown to nearly 200 members, with folks reporting in from nine states and one province. Members of our group were beginning to establish themselves, and starting to become "outside" demonstrators for other groups. Especially noted should be Darryl Nelson, who was awarded the internationally prestigious "Wally" Award at the Flagstaff ABANA conference, for his "perfectly useless Damascus giraffe".

Never one to rest on his laurels, Daryl "invented" the Racer forge and began extolling its virtues to the group. Cheaply and easily constructed from materials at hand, it introduced us to the joys of having gas (tho the Buick hubcap listed on the Bill of Materials caused some consternation, with many arguments as to what might be a suitable substitute).

By now, the Hot Iron News had evolved, first from postcards to laboriously typed "letters" to a page in the Blacksmith's Gazette to just about its present form, as an awarding-winning magazine, each issue chock full of newsy tidbits and helpful hints. In reviewing past issues for this article, I was struck by how much really useful stuff is contained in the back issues; perhaps it's time for N.W.B.A. to seek out a willing volunteer to serve as archivist to compile a "Best of . . ." collection; any takers?

Francis Whitaker, Peter Ross, Al Bart, Ken White, Nahum Hersom, Carl Jennings, Russell Maugans, Steve Bondi, Richard Pozniak, . . . I know, I said I wouldn't name names, but they're all folks who've shared their knowledge with us, and I needed a way to mention one more; our very own Harry Robinson. Harry came out of retirement to teach us all a trick or two, and taught us all how to forge-weld chain links, a task now ably carried on by Berkley Tack, in the spirit that makes the N.W.B.A. such a great group of folks to hang out with.

That spirit of volunteer effort and willingness to share what we've each learned at the anvil is what's brought us to this point, coming up on our 20th Anniversary. Next time, we'll kick off with our 10th Anniversary, but we could use your help; pictures, anecdotes, tall tales, recollections are all needed. Mark 'em carefully, and there's every chance you'll get them back! Send whatever you've got to Terry Carson, 7926 320 St E, Eatonville, WA 98328. or drop an e-mail to [tlcforge@aol.com](mailto:tlcforge@aol.com)

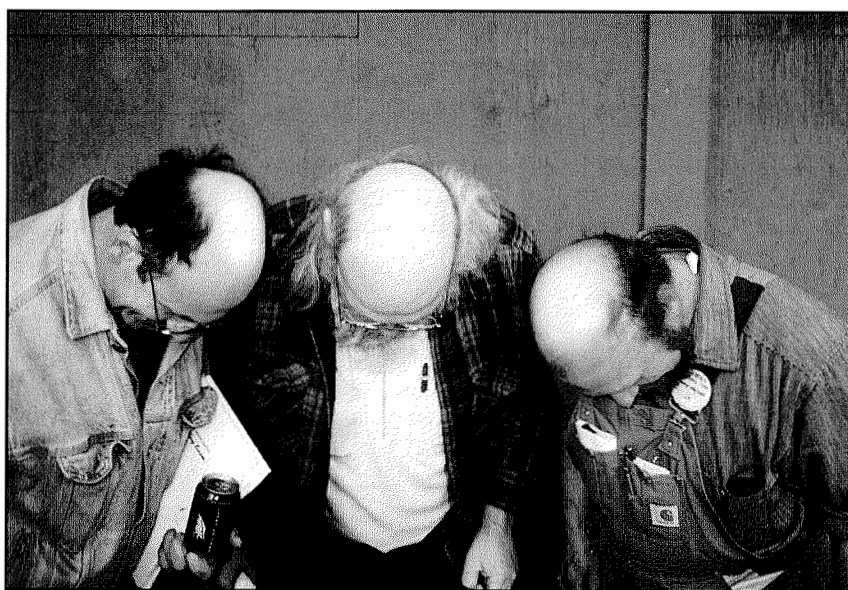
## Three Old-Timers Demonstrate the effects of 20 Years of Partying in the N.W.B.A.!!!



Terry Carson

Darryl Nelson

Author: Jack Slack



Louie Raffloer Photos





### Ryan Wilson. Ten-- and busy Hammerin' . . .

Most of the blacksmiths who saw the artistic Courting Candle at the Winthrop auction probably didn't realize that they have projects-in-progress in their shops older than the blacksmith who forged the candle! Ryan lives in Poulsboro, WA with parents Jeff and Pam. He's ten years old and home-schooled.

He became interested in blacksmithing during a family vacation in Virginia City, Montana last summer. He sat on the boardwalk for several hours in 100 degree weather, watching Jon Scott forge barbeque hooks.

When he returned home he visited Gene Chapman in Kingston who opened up his forge and let Ryan try it out. On Gene's suggestion, Ryan and his dad attended the Fall 1998 Conference in Mt. Vernon. Ryan's been actively forging ever since!

Ray Baker, volunteer blacksmith at Fort Nisqually, responded to an internet inquiry and invited Ryan to visit and try forging with coal as it was done in 1855. Ryan is now on the volunteer staff and portrays the blacksmith apprentice every Wednesday and at special events.

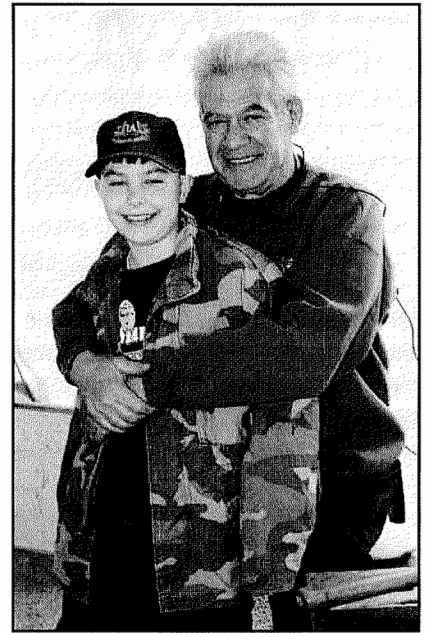
When he visited Grant Sarver in Tacoma, he was given a bottom die from a steam hammer to use as his first anvil, to replace the railroad iron he had been using.

Ryan and his family attended the Spring Conference in Winthrop where he was honored by being asked to assist demonstrator Uri Hofi make a nail.

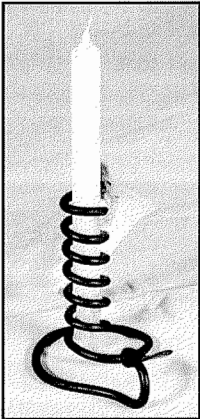
Ryan just graduated from Jerry Culberson's Old Cedar Forge "Basics of Blacksmithing" workshop.

Ryan is a Boy Scout and plays soccer for the North Kitsap Soccer Club. He also enjoys fishing with his dad.

Plan on seeing Ryan demonstrate at the 2006 Fall Conference!



Ryan and Uri Hofi



Ryan's Auction Item

From our Mississippi River Correspondent--this shows what happens when N.W.B.A. members stray too far from home.

**Certificate of Achievement**

*This certifies that*  
**Hugh Eddy**

*is the first recipient of*  
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*"Nobody Starts Them Better."*  
Tom Clark

*"A dangerous man I've ever seen one."  
"Pyromaniacs are born, not made."*

  
 Signature    Bob Patrick    April 30, 1999  
                   Instructor

  
 Signature    Tom Clark    April 30, 1999  
                   Administrator

# THE ANVIL'S FARTHEST SIDE BY BOB RACE

There has not been too much going on at the Fort as things have been getting a little quiet. One reason for this is that Mike Darrig's condition has not improved and the poor man is still away from work and little has been heard from him or his wife for the past several months. There is a temporary Ranger who has taken charge of the blacksmith shop and things have been running on an even keel since the beginning of late Winter. His name is Bill DeBerry and he is in charge until Mike can return to work. This will not, however, stop us from coming up with new stories which may have occurred during the late 1900's or mid-1800's. I have contacted John Prutsman and he assures me that he has been able to contact John McLoughlin about some of the wonderful times they had back during the 1830's through the 1850's. Until John P. can bypass the Y1.9k interchange we will have to patiently wait for the information that pass through the portals of this hardy-hole. The following are the last two letters that I received from John P. and I hope you find them as entertaining as those previously sent.

John and Harry's Letters, October 12, (Columbus Day) 1998

Dear Mike,

We sure miss you down here at the blacksmith shop. A bunch of us were talking after the water fight the other day about how things just aren't the same here without you. The candlelight tour went really well. This year we made it a lot more authentic experience for the visitors. The blacksmiths in the shop were all swearing and fighting just like it probably was in 1840. Some people got offended, but we told them to lighten up and threatened to have Jim Marson kick the crap out of them if they tried to start trouble. I doubt if any of them would want to tangle with Big Jim. I think most of the people really liked the hands-on approach. It was the first time many of the people had ever tried blacksmithing. I just wish we had time to give them a little safety training. One guy really made a fool of himself over a minor incident. I told him Harry never fussed like that when he cut his finger off. Most people really like the background music. About the only ones who complained were the ones who don't like heavy-metal rock. (What else would you have amongst men pounding iron? BR)

We hope you're getting better. It should make you feel better knowing that Harry and I have everything here at the blacksmith shop under control, Regards, "F Troop" PS: If you hear anything about a lawsuit just ignore it

October 20, 1998 Dear Mike,

I thought I'd better bring you up to speed with what's going on down here at the blacksmith shop. Harry and I are still holding down the fort (so to speak) on Mondays.

Last Monday Harry and I made a bunch of new tools. Harry made a couple of scrapers from the blades of those squares that were hanging on the wall and not being used. They are going to be great because you can still see the old measuring numbers on them and see how much you're grinding off when you sharpen them. I've been trying to make a punch using those old taps that hung by the door. I am having some trouble forging it because of those raised thread cutters. I may have to anneal it and file them off.

As chairman of the safety committee, you'll be glad to know that Harry and I were able to put our first aid skills into action the other day. It called for a little creativity, but were able to cut up one of those leather aprons to use for a tourniquet. I told Harry I had reservations about using it for a head wound but he said we'd never know whether or not it would work until we tried it. It sure stopped the bleeding and only caused one other problem. The kids were getting in the way of blacksmithing so we had to put the barriers back up. Bob Race made a nice long section of chain we use between two of the posts. The kids kept wanting to lean on it so Harry brought down a spare electric fence charger that we hooked up. Boy, the kids sure scatter when we throw the switch on that thing.



posts. The kids kept wanting to lean on it so Harry brought down a spare electric fence charger that we hooked up. Boy, the kids sure scatter when we throw the switch on that thing.

We've also decided to have a Halloween party for the kids who stop by. Those slack tubs are going to be great for bobbing for apples. We've also got some games planned like tossing burning coal and clinker fights. Some of us are not going to wear the clothes we normally wear in the shop but dress up like blacksmiths instead. It should be a lot of fun.

Regards, "F Troop"

## THOUGHTS ON RETIREMENT

I had to admit that I felt rather honored that Gene Chapman would use me for a model for his idea of a "retirement smile". However, since less than ten percent of our workforce are government employees, I thought I would enlighten you as to the consequences of early retirement at age fifty-five. Since I wanted to leave a couple of weeks prior to my birthday I had to go before a review board with reasons why I should be let out before the designated day. The following is a brief description of my cross-examination by that board, made up entirely of engineers, most of whom were older than myself.

I was told to report a week prior to the last day at 10 A.M. and present answers to questions asked by members of the board. There were seven men and one woman, who was the presiding officer of the hearing. Ms E opened the meeting and proceeded to inform the magnificent seven why we were there. "Yes! We know!" was the unified earth-shattering response. Ms E then opened the panel up to questions which were directed at me. E1 said, "Well, men, I think we can cut this down to just a few minutes. After all Bob has been a familiar face in these hallways for over a quarter of a century. Why, he has been here longer than E5 and he's a dinosaur." Laughter sprang up from the group. E1 continued on, "Do any of you have any questions of Bob?" Ms E, "Yes. Bob, what do you think of females as engineers?" E3 jumped in before I had a chance to answer, "What the hell does he know about such things—he's only a white male technician!" There were a few murmurs and snickers, but all were shaking their heads in a "yes" motion. E7, an electrical engineer, asked, "Bob, what are your plans when you leave here? You do realize many of your predecessors don't last over a couple of years before they head for the Engineering Post in the Sky? Just what are you going to do?" I replied, "I was planning to fix up my shop and become a full-time blacksmith" M piped in, "What?! You're going to shoe horses? E2 couldn't let that go by, "Haven't you learned anything M, farriers shoe horses, not blacksmiths. I know this because my daughter shoes her own horses and she explained to me that's the way it is."

"Gentlemen, gentlemen. Let's not get carried away. It's getting close to lunch and I have a hair appointment." quipped Ms E. "I too, have an engagement," said E7, and the others all chimed in with similar responses. "Ahem," said E6 "Bob, what do you think will be your greatest relief after leaving this office?" This unexpected question drew not only everyone's attention but a few stifled gasps as well. As a matter of fact the deafening silence and waiting anticipation gave me a little time to think and I casually said, "It would be a relief to no longer have to be politically correct." Ms E fainted and slumped forward on the table. M said, "there goes her hair appointment." E2 stood with his mouth open. E1 said, "Gosh, what are we waiting for. Why don't we all sign Bob's request and add our names to it? "Excellent idea," said E7 "I've always wanted to tell the administration my true feelings." The rest all joined in, signed the document and laid it in front of Ms E. "There, she can figure out what to do with this when she wakes up. Let's take Bob to lunch." Stated E3. Lunch was easy as all I wanted was a bowl of oyster stew, so they each gave me a dollar and sent me down the street to the Oyster Bar.

*Bob*



A YOUNG SMITH'S CLEVER WORK

**N.W.B.A. Wants to Help YOU!** The N.W.B.A. Grants Committee has money to assist you in furthering your education in blacksmithing. If you would like to attend one of the many workshops being held regularly in the N.W.B.A. area, simply write to: Grants Committee, N.W.B.A., 8002 N.E. Hwy 99, #405, Vancouver, WA 98665. A grant application will be mailed to you!

**A Basic Novice Workshop** will be taught by Berkley Tack on October 22, 23 and 24. This class will teach the fundamentals of blacksmithing--with hands-on experience to follow each demonstration. Registration fee is \$200. Also, . . .

**A Specialized Workshop on Hollow Tube Forging** by Dave Thompson will be held October 29, 30 and 31, 1999. Dave's technique of forging tubing will bring new resources to your art and architectural designs. Registration fee is \$200. For information and a prospectus on both of these workshops contact Don Kemper, (360) 887-3903 or [Kemper@pacifier.com](mailto:Kemper@pacifier.com)

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**N.W.B.A. Fall Twentieth Anniversary Celebration** October 8, 9 and 10, Lewis County Fairgrounds, Centralia, WA.

**Peter Ross Box Joint Tools Workshop**, November 5-7. Contact Bob Race (503) 253-7334.

**Peter Ross at Fort Vancouver**, for lectures and demonstrations. Contact Dean Moxley, 5537 NE 37th, Portland, OR 97211 (503) 284-6138

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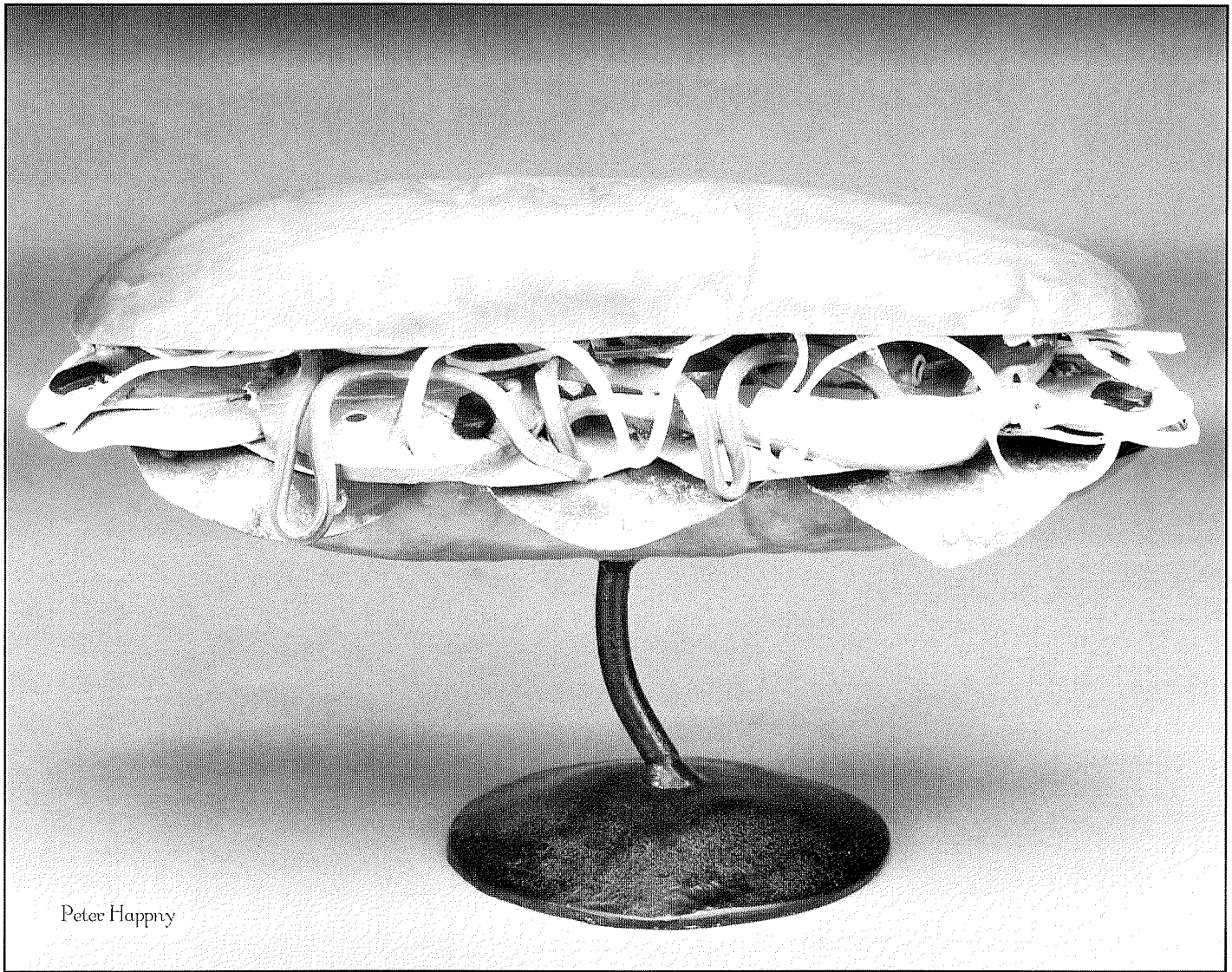
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**AND WHILE YOU'RE AT IT . . . DEADLINE FOR THE NEXT ISSUE OF THE HOT IRON NEWS IS AUGUST 15. PHOTOS OF PROJECTS, YOUR VACATION AT YOUR MOTHER-IN-LAWS, HOT TIPS, PROJECTS, SOOTH-SAYING, MILLENIUM DOOMSDAY PREDICTIONS--SEND EM' ALL IN!**

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Auctioneer Jerry Culberson and Wyatt Heiserman with his evening purchase.

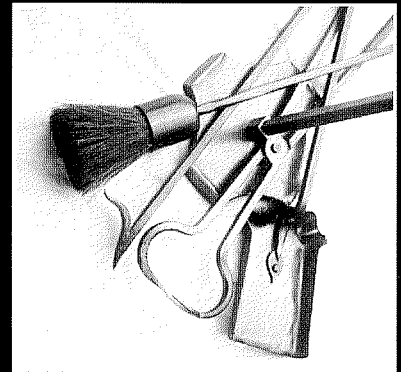


Peter Happy



## PAUL CASEY

ANOTHER FALL DEMONSTRATOR, HAS HIS STUDIO AT 800 MERCER STREET IN DOWNTOWN SEATTLE. MOST OF HIS WORK IS COMMISSIONED ARCHITECTURAL PIECES. HIS EARLY METAL EXPERIENCE WAS IN JEWELRY AND NON-FERROUS METALS. HOWEVER, FROM THE FIRST TIME THAT HE WORKED HOT IRON, THE INTEREST GREW TO A PASSION. HIS PARTICULAR INTERESTS INCLUDE EDGE TOOLS AND LOCK-WORK. THE GREATER THE COMPLEXITY AND SUBTLETY, THE STRONGER THE INTEREST! 





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