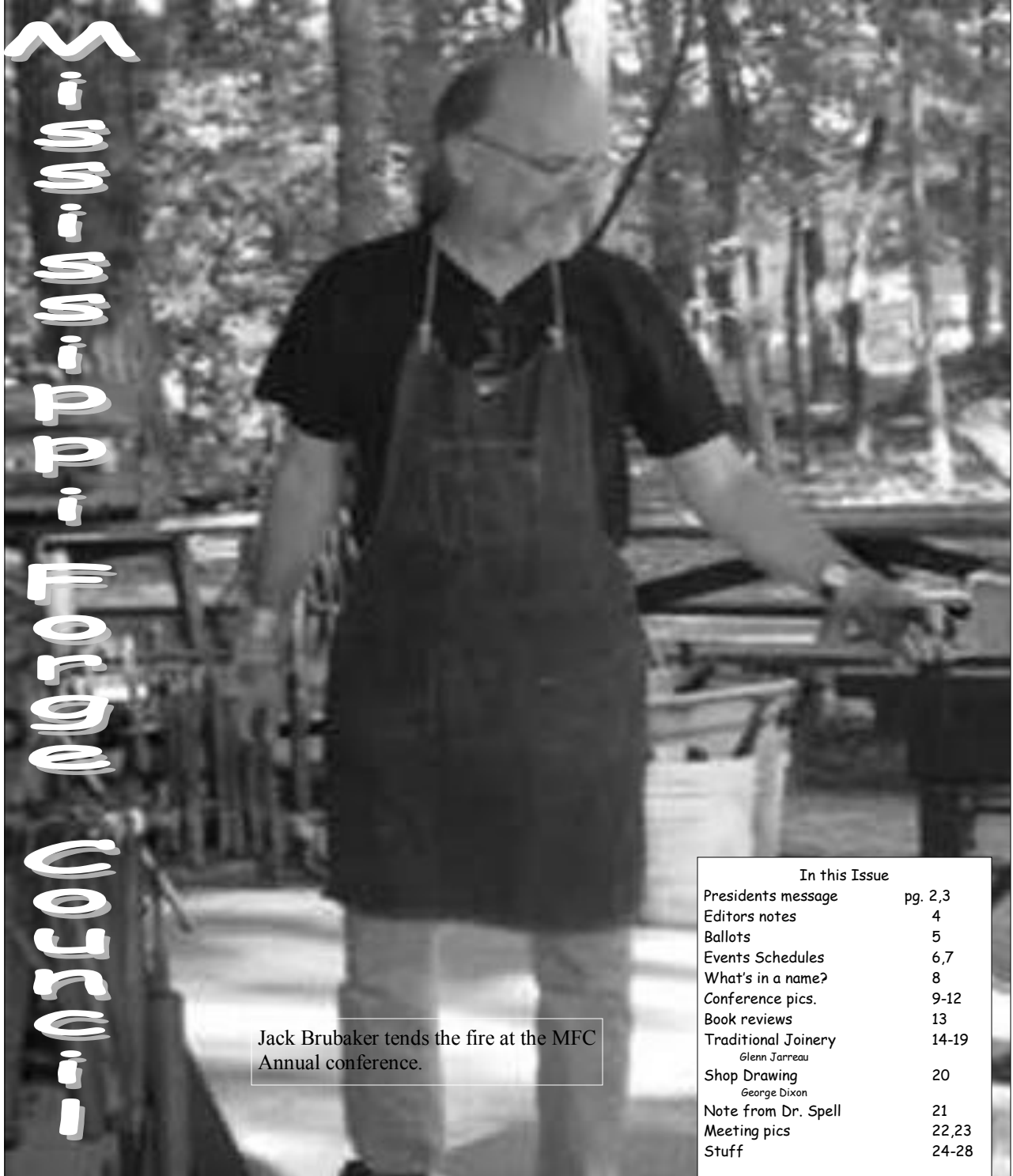


The Upset



Jack Brubaker tends the fire at the MFC Annual conference.

In this Issue

Presidents message	pg. 2,3
Editors notes	4
Ballots	5
Events Schedules	6,7
What's in a name?	8
Conference pics.	9-12
Book reviews	13
Traditional Joinery	14-19
<i>Glenn Jarreau</i>	
Shop Drawing	20
<i>George Dixon</i>	
Note from Dr. Spell	21
Meeting pics	22,23
Stuff	24-28

**Officers and Board of
MFC****President**

Bill Pevey
1021 Pevey Lane
Crystal Springs, MS 39059
601-892-1867
WBPevey@aol.com

Vice-President

Steve Norquist
3433 Lanell Lane
Pearl, MS 39208
601-939-5227
Miwde3derj8@aol.com

Secretary

Steve Paulson
2007 Pleasant Gift Rd.
Canton, MS 39046
601-859-3855

Treasurer

David Williams
P.O. Box 13515
Jackson, MS 39236
Ph- 601-957-2455
davidw629@aol.com

At Large Board Members

Benny Crevitt
1573 Marion Russell Rd.
Meridian, MS 39301
601-483-7025

Max Goodman
404 Parkway Rd.
Brandon, MS 39042
601-992-0383
ogremax@msn.com

Editor

Jim Pigott
136 Munich Dr.
Madison, MS 39110
601-540-6030
jpigott@jam.rr.com

**President's Message**

As I look back on our conference, I feel really good about our council. We had a good turnout and really good participation from our members. "Thank you" is in order to all of you that took the time and effort to make items for the auction. Our coffers are much better off because of your generosity. Thanks to each of you!

Our demonstrators did a magnificent job. We had scheduled only one but due to the efforts of Tommy Ward we had an additional three demonstrators, the multitalented Tom Clark, along with his assistants, Ed and Brian Brezeal. Thank you Tommy for helping make this a conference we will remember.

Who would have ever thought that a bunch of crusty blacksmiths would ever consider having a wine and cheese party? Somebody did and we had a great time. We got to show off some of our creations and most of these were quite impressive. Our spouses and children got to come and see what we do when we disappear for a Saturday or a weekend and come back with soot on our face, soot on our hands, sooty clothes, and a smile on our face, and maybe something that we made. Thank you Jim Pigott for the idea.

Jack Brubaker, our featured demonstrator, did a tremendous job showing us how to manipulate metal in ways that I certainly had never thought about. Sand and Schedule 40 pipe and fire add up to a pretty impressive demonstration when conducted by a man of Jack's talent and expertise.

Making parts, sawing them apart, and putting them back together again can be applied to other processes that we might want to try.

I was grateful to have Mr. Ernest McIntosh visit with me at
(continued on pg.3)

Committees / Members**Event Scheduling**

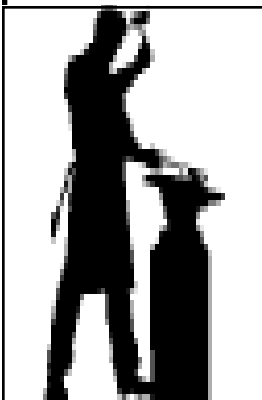
Ardell Hinton
326 Longmeadow Dr.
Ridgeland, MS 39157
601-856-2314

Robert Pyron
513 Robinson Thompson
Winona, MS 38967
662-283-3719

Shop Committee

Dale Jones
French Camp Academy
French, Camp, MS
39745
662-547-5318

Ricky Wynn
117 Sumac Dr.
Madison, MS 39110
601-856-2493



(continued from pg. 2)

our conference meeting. He and several members of his family came to the conference to see how the blacksmith shop was being taken care of. He expressed concern that some of the products of his fathers' labors had disappeared. I explained that we had also lost some items and he said that he would ask Dr. Spell to let us install the gate and fence at the entrance to the shop.

While we were talking I asked him if we could possibly get a history of the blacksmith shop. Mr. McIntosh said that his brother would write a history and send it to me. It wasn't very long until a handwritten history arrived by mail. To say the least I was thrilled to be able to read about how the shop came into being at a time during the midst of the depression.

We have since gotten permission to install the gate and fence the perimeter so that no one can gain access to the shop, though they may still view it. The plan is to set up a forge, anvil, post vise, slack tub, and other items of interest in the front part of the shop so visitors can see what a typical blacksmith shop would have looked like in years gone by. Also a photograph of Mr. McIntosh in the shop will be displayed in a prominent place on the front of the shop. I think this may help people see this is not just a structure but a historic place where a man accomplished his daily work. Here he worked 12 hour days to make a living for his family and from the history did better than the average man. By his persistent hard work and ingenuity he produced products that satisfied his friends and customers needs and therefore was successful. Thank you Mr. McElroy McIntosh for this insightful history of the McIntosh Blacksmith Shop.

The demonstration at Buddy Holmes' shop was a big success! That's what I've been told by more than one of the people who attended this special event. The class was full and it seemed that everyone came away with a better understanding of ways to design and manipulate copper to make a wide range of items. Our thanks go out to our friend and fellow council member Buddy for taking time out of his busy schedule to do this class for us. I hope maybe we might do it again at some point in the future.

My thanks go out to all that participated at the June demo at the conference Dr. Spell was hosting. He sent us a nice letter and we appreciate that. It is always rewarding to demonstrate for a group like he invited to the Ag Museum.

We will have our business meeting in September. Between now and then start thinking about who you would like to nominate for various offices. We need volunteers for several different committees and I think you will get great satisfaction if you will commit to becoming part of one of these essential groups.

Bill

EDITORS NOTES

When I walked in the door to the Ag Museum, I was, I shouldn't have been, but, I was, taken aback. There was beautiful ironwork everywhere. As close as I am to this organization, I thought I had seen most of what we were capable of creating. Wrong! I haven't seen anything that would have prepared me for the tables full of art that filled the foyer. I am really impressed with the quality of the work that was presented at the wine and cheese party. If I say so myself, this was a wonderful idea. It was about time we celebrated our successes of the last few years by presenting our work to our friends and families. I particularly enjoyed having so many spouses of members attending this function. We had the largest attendance of any function, ever, and Jack Brubaker was the perfect speaker for the occasion. His slide show presentation with the video of the Modern Masters show highlighting his life and work was inspirational. It appears everyone had a good time, I certainly had a good enough time for all of us.

The enthusiasm spilled into the demonstrations Saturday. Jack took us to the next level with his ideas in creating free-flowing art straight out of your imagination. I could visualize filling pipe with sand and being able to bend it without collapsing the pipe, but I did not conceive that it was possible to take it to that extreme.

Mr. Brubaker is well known for his ability to design jigs for reproducing ideas in the shop. I understand that he has spent as much as two weeks designing a jig for a particular project. This is an area where I need a lot of help. Designing a piece of work is one thing but building a jig around it so you can reproduce the same work again can be a complicated mind bender. The idea of working in negative spaces creates a negative space between my ears. Jack's demonstration was one of those "you had to be there to see it to believe it" demos.

We were the recipients of a stroke of luck when Tommy Ward met Tom Clark at the Southeastern Conference in Madison, GA. Tommy convinced Tom and his two assistance, Ed and Brian Brezeal, to come to our conference the next weekend. Tom is a pretty popular figure in the blacksmithing circles and has a lot to offer our group. His demonstrations with the power hammer and hand tools left us wanting more time with him, so we invited him to be our featured demonstrator next year. We are considering having a one or two day class before the conference with Tom as the teacher. With 10 people committing to the class we can make it happen. Contact Bill Pevey if you are interested.

June is normally an open month for us but this year several members went to Buddy Holmes shop in Prairieville, LA., where Buddy taught a class on making copper waterfalls /fountains. Those attending had a wonderful time, I haven't stopped making waterfalls since. You might remember Buddy's demonstration at our 2002 conference. Well, word of his skill and humorous presentation got out to the rest of the world and now Buddy will be a featured demonstrator at the Alabama Conference at Tannehill State Park in September. You have another chance to see him in action.

We have elections in September, most of you got your fliers a few weeks ago and have an idea of what we need to do. Results of the questionnaire and nominations are published in this issue, along with a ballot. If you can't make it to the meeting, and want to vote or volunteer for a position, send the ballots to David Williams, his address is on page 2. Do it soon.

Ballots Elections, September 2003

Officers

President Bill Pevey _____

Vice President _____

Secretary Steve Paulson _____

Treasurer Stacy Stegall _____

Board Members

Conference Ed Benton _____

Activities Ardell Hinton _____

Communications Jim Pigott _____
 Bill Pevey _____

Editors Note

The above people have volunteered for the positions indicated. We still need a vice president, an assistant for the secretary and the treasurer. We need three volunteers for the conference commission (one to chair) and someone to help with planning the activities. There have been some nominations for some positions but we need to know if those nominated will serve, so we will do what we can at the business meeting in September.

A big "Thank You" goes to the seven members that actually filled out the questionnaire and got it back to us.

"The ballot is stronger than bullets"

Joseph Schumpeter, Capitalism, Socialism and Democracy

Schedule of MFC events

September 13- Meeting at the Ag Museum. This will be a business meeting and elections. Your attendance will be greatly appreciated. If you can't make the meeting please fill out the ballot in this issue and mail it to David Williams in time to get to us before the meeting.

October 11- We have been invited to demonstrate at the Soule' Live Steam Museum in Meridian. This is the Mississippi Industrial Heritage Museum, 402 19th Avenue, Meridian MS. The MFC members will be given a private tour of the museum starting at 8:00 am and we will be demonstrating for the general public starting at 10:30. Booths can be made available if you have something to sell. For more information contact Benny Crevitt 601-483-7025

November 5-8—Harvest Festival demonstration at the Ag Museum. This is our annual demonstration at the Ag Museum. There will be approximately 5,000 public school children bussed in from all over the state over the 3-day period 5-7. On the 8th we will have our meeting and continue the public demonstrations. This is the only time of the year that the Ag Museum will have everything functioning. It is a great thing to see and be a part of. Please plan to spend some time during this period with us. Contact Bill Pevey and let him know when we can count on your help. If you haven't demonstrated before, we will help you, you will really enjoy it.

December 13— It's "POT LUCK PARTY TIME" again. Our annual Christmas party and open forge will, again, be held in the shop of Laura and James Monday in Canton, MS. This is my favorite meeting of the year. If Laura gets James into the woods soon enough we will be feasting on those glorious deer steaks with biscuits and gravy. We always have an overabundance of good food. Chili, soups, casseroles, sausages, veggies and deserts galore fill the tables in the shop. Don't miss this one. Contact Ardell Hinton 601-856-2314 to see what you can bring

1

CHRISTMAS PARTY DIRECTIONS

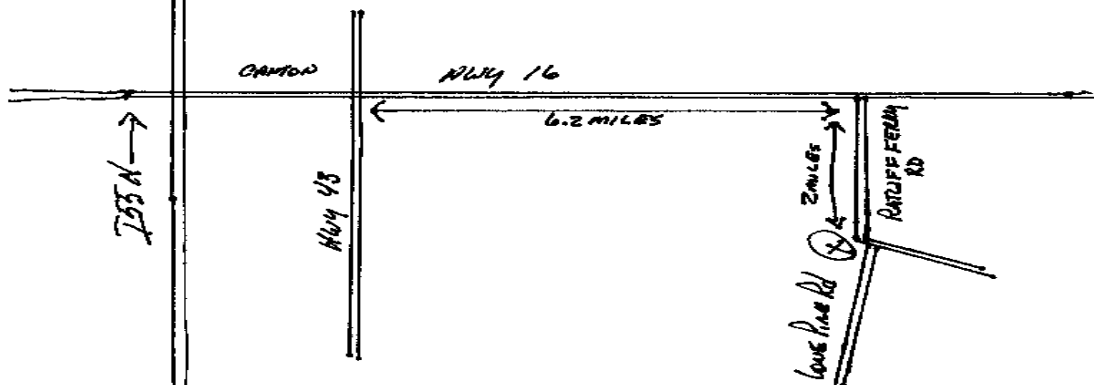
DIRECTIONS TO THE Monday home

From I55 take the Hwy 16 exit (Canton) go east through Canton when you cross Hwy 43 you will go 6.2 miles farther to Rattiff Ferry Rd - go rt - south about 2 miles. When you get to Long Pine Rd you ARE LOOKING AT THE Monday PLACE.

From the Natchez Trace go west on Hwy 16, between mile markers #123 and #124 you will see Rattiff Ferry Rd on your left.

JAMES & LAURA MONDAY
593 LONG PINE RD.
CANTON, MS 39046
601-859-6537

For directions you can also call
601-540-6030



NOT EVEN CLOSE TO SCALE

Events of Interest

September 5, 6 & 7- Alabama Forge Council Conference at Tannehill State Park, McCalla AL. Demonstrators will be Buddy Holmes of Waterfall Forge demonstrating his world famous copper fountains and Ray Spiller of Mt. Sharon Forge near Nashville demonstrating a forged table and discussing various aspects of making a living as a blacksmith. See more information at the AFC web site www.afc.abana-chapter.com The conference site is worth the trip alone, but add the demonstrations, tailgating, camping and friends you will really have a great time.

September 26—28 SOFA, Southern Ohio Forge and Anvil hosts the Quad State Conference in Troy, Ohio at the Miami Fairgrounds. Demonstrators are: Jody Best, traditionally hand crafted metal vessels, Jerry Darnell, traditional techniques, Rich Furrier, knife making, Brian Thompson, Beginning /Hands-on Instruction, James Viste, Forge welding and Doug Wilson, Sculpture. For more information go to www.sofasounds.com

October 11—13 Florida Artist Blacksmith Association (FABA) conference in Blountstown, FL at the Panhandle Pioneer Settlement. Demonstrators include: Billy Christie / Beginning Blacksmithing, Charlie Stemmann / Intermediate Blacksmithing, Patty Draper / Forge Welding, Diane Perez / Stepping Stones, Rick Jay / Copper Flowers, Mitzi Bazzell / Stained Glass Light, Judy Chavers / Toothbrush Rugs and Jeff Mohr / Broom Making. For more information see their web site www.blacksmithing.org

National Ornamental Metals Museum
374 Metal Museum Drive
Memphis, TN 38106
901-774-6380

Located in Memphis, Tennessee, the National Metals Museum is the only museum in the United States dedicated exclusively to the exhibition and preservation of fine metalwork.

The Anniversary Gates at the Museum entrance are a striking introduction to the world of fine metalwork. Designed by Richard Quinnell of England, the gates mark the 10th anniversary of the Museum which opened to the public in February 1979. The rosettes, designed specifically for the gates, were created by metal smiths from all over the world.

The Museum's changing exhibits range from jewelry and sculpture by the finest contemporary metal artisan to displays of medieval armor and 3rd century swords.

In the Scherring-Plough Smithy, staff blacksmiths may be working on anything from bronze leaves for the Oklahoma state capitol building to a statue of Elvis Presley. There is a viewing area for visitors.

A fine place for a family picnic, a party, or a wedding, the grounds offer a spectacular view of the Mississippi River, a view described by Mark Twain as "the finest between Cairo and New Orleans. Visit their web site at www.metalmuseum.org.

REPAIR DAYS AND AUCTION

A great way to see the Museum and have a memorable time would be to attend their annual Repair Days Weekend and Auction, October 17,18,19. Over 100 volunteers, some from out of country, converge for this annual fund raiser and invite the public to bring "anything metal" that needs repair. Estimates are all free and all proceeds go to build the new library. They will fix anything but "cats, cars and broken hearts." Volunteers will be well fed, including a venison stew before the auction Saturday night. To get in on this action, call Judy Davis at the number listed above. Why don't a bunch of us go this year, it will be a good time.

What's in a name?

Recently, I gave my sister-in-law a copy of the "Upset." As she is not a blacksmith the term "upset," as it is used here, is not familiar to her. I told her we weren't mad at anyone and tried to explain the term in blacksmithing language. Upsetting is a process where we are able to change the dimensions and mass of a piece of iron by heating the iron in a specific area and hammering it into itself.

Her question then was, "Is that the purpose of the "Upset," to change the dimensions and mass of our brains with knowledge?"

Good question Claire, my feeble response was " that's what it was called when I took over as editor."

Her next question was "By the way, what is the purpose of the "Upset"? I couldn't find it explained anywhere in the newsletter."

My response started with, "well, it's not explained anywhere in the newsletter", "Why not?."

Another good question Claire. I then started telling her we are a 501-C non-profit teaching organization our goal is to preserve and teach traditional blacksmithing techniques in decorative ironwork. We also enjoy exploring all types of metal craft.

"I didn't know that, you should let people know what you are about."

I am on the ropes now. Claire is a published author she also made a strong run against John McCain for a senate seat in Arizona. Time for me to listen, I might learn something.

"Do you have an open forum for questions or discussion of ideas?"

Well, no.

"A "letters to the editor" section of the newsletter?"

NO!

"Why not?"

We seem to have trouble getting any input from most of the members.

"Are you making it easy for them to contact you, with e-mails and such?"

I think so, but we only have about 40 e-mail addresses out of 130 members.

"Web site?"

Not updated in a while, lost our webmaster. *

As you can see, a seemingly harmless gesture, like giving someone a newsletter, can lead to some very sobering results. This is good input, we need more like it, constructive and thought provoking. The idea of a "letter to the editor" section is a great place to start. **It starts with you.**

* David Mudge, editor and webmaster of the Louisiana Metalsmiths Assoc. has volunteered to help, and teach, me how to update our ABANA website. The time involved with the newsletter, website and making a living can be overwhelming sometimes. Claire is right, time for me to get moving. Send your letters and tips. If you are not receiving e-mails from the MFC- Send your address to the editor, it will help a lot.

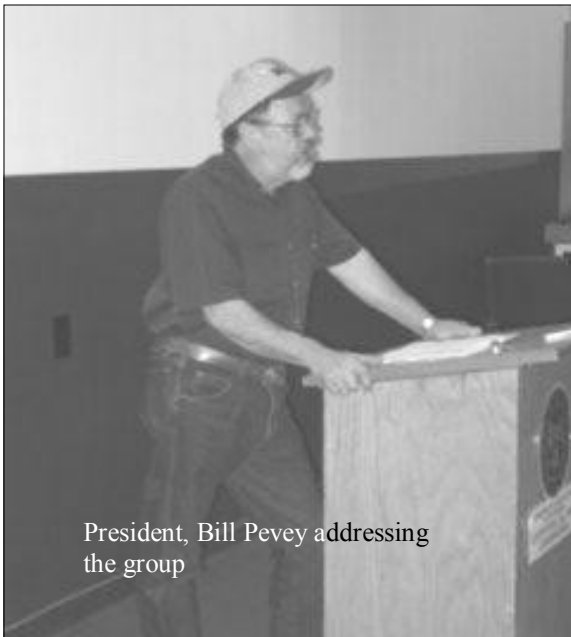
Jim

Conference Pics

From David Williams



Getting ready for Jack Brubaker's slide show



President, Bill Pevey addressing the group



The "show and tell" table



Tom Clark



Our "quiet princess" you don't hear much from her but her help with our registration process is greatly appreciated. Thanks to Joyce Boutwell and her daughter Kelly

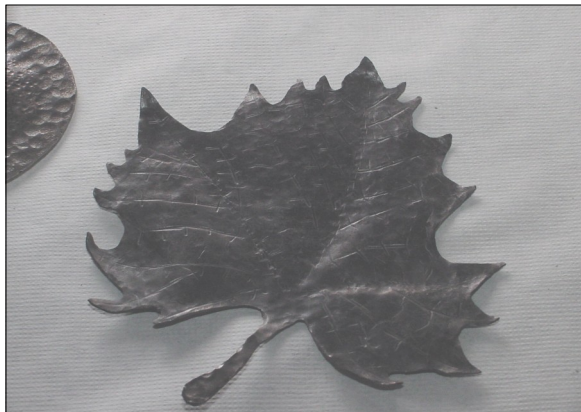


The auction table looked great this year, thanks to all



The Brezeal brothers, Ed and Brian, were a surprise treat. See the horse head they did, to the right,





These are some of the items on display at the wine and cheese party. We will have to do this every year. We owe it to ourselves to bring all this talent out of hiding.



Ed and Brian Brezeal and Tom Clark are doing their impersonation of a power hammer.



Jack Brubaker is doing his magic with the pipe and bending forks.



Some of the several interesting jigs from Jack's extensive collection



The results of some fancy twisting and turning of pipe by Jack Brubaker.



Book Reviews

Book Review by Bill Pevey
 Title A Museum of Early American Tools
 Author Eric Sloane
 ISBN 0-486-42560-6
 Copyright 1964, Paperback 108 pages



As a self-proclaimed sketchbook of ancient implements and tools this book delivers as promised. It is also a testament to how much information, both visual and written, can be packed into a book of only 108 pages.

The author was a collector of tools as well as information. In his quest for new specimens he said the tools had a price on them but the information and knowledge he gained were priceless.

The title of this volume aptly describes the contents between its covers. What would you think a pounding commander, a hitting beetle, a paring slick, a poke or a twistil might look like? You will recognize all of these as something familiar though the names are not.

Another aspect of his descriptions involve the evolution of design over time as well as comparisons of forms and shapes from Europe to America. Even handle shapes have names and each roughly conforms to a time period.

Looking back in time before the end of the 1800's we see unending and diverse array of iron articles that were in demand from an ever expanding population on the American continent.

The blacksmith filled this demand with skill, ingenuity and pride.

I found this book at Lemuria Book Store in Jackson, 4465 I-55 North, phone 601-366-7619

Book Review by Bill Pevey
 Title The Blacksmith, Ironworker & Farrier
 Author Aldren A. Watson ISBN 0393-320-57X
 Copyright 1977, 1968 Originally published under the title: The Village Blacksmith

In the preface, the author tells us there are 42 new illustrations and two new chapters. These two new chapters cover, respectively: Building a Forge and Building a Bellows. Both are interesting informative and complete.

Under the spreading chestnut tree
 The village smithy stands
 The smith, a mighty man is he
 With large and sinewy hands:
 And the muscles of his brawny arms
 As strong a iron bands.

With these first six lines of Longfellow's poem Mr. Watson sets the stage for the Prologue to this book wherein he describes what a blacksmith was and what his profession called him to do.

I have not read any of the author's other five books. Looking at the titles gives a hint that none are directly connected to blacksmithing. Looking at the forty volumes in the bibliography, we see a wide time of reference, from the 1914 book; *Steelworking and Tool Dressing* to a later work of 1966 titled *Early American Ironware, Cast and Wrought*.

Considering all of the main parts of the book are written in third person and the fact the bibliography is so large and comprehensive, I feel this book to be one conceived as a research project more than a personal experience. This comment is not disparaging but merely an observation.

I enjoyed the book immensely for several reasons. Not only does it cover most all of the activities of a typical blacksmith, it tells about hardware, hardness, wagons, buggies, sleds and shoeing a horse. Along with what he has to say about different things, the illustrations add immeasurably to the enjoyment of the book. We can see more clearly how tools were used, for what purpose, and what they were called.

Another section that was very interesting to me was the description of a typical year in the life of a New England blacksmith and how the requirements of his customers changed as the seasons came and went.

This is a most enjoyable book and I believe each of you would be proud to have it in your library. I got my copy at Lemuria, in Jackson. If they do not have it in stock they will be glad to get it for you.



Advanced Blacksmithing: Traditional Joinery

April 6-12, 2003 (1st Week)

Front Row: Brett Dalke (Steamboat Springs, CO.), Paul Garrett (Mooresville, NC), Terry Lee (Vinemont, AL), Glenn Jarreau (Greenwell Springs, LA), Preston Farbow (Knoxville, TN)

Second Row: Jerry Fletcher (Malone, NY), Jason Herrera (Oak Ridge, TN), Greg Price, Assistant Instructor (Warrenton, VA), Andy Morris (Colorado Springs, CO), Clay Spencer, Instructor (Murphy, NC), Ray Robinson (Laurel, MS), Matt Jenkins (Brasstown, NC)

Third Row: Karen Rudolph (Brasstown, NC)

Not Shown: John Wayne Taylor (Montgomery, AL)

EDITOR'S DELIGHT

Glenn Jarreau was awarded the Francis Whitaker Blacksmith Educational Foundation Scholarship. With this scholarship, he attended the Advanced Blacksmithing Traditional Joinery class from April 6 thru 12, at the John Campbell Folk School, taught by Clay Spencer. The following five pages are the report Glenn prepared from his participation in the class.

It's a great day in an editor's life to receive this kind of article, ready to print.

Thanks Glenn, and thanks for your support and friendship.

Jim Pigott

I recently received a scholarship from the Francis Whitaker Blacksmith Educational Foundation that allowed me to attend the Advanced Blacksmithing class taught by Clay Spencer at the John C. Cambell Folk School. Traditional joinery is a prerequisite for any project that is constructed in this class.

I designed and began construction of a mirror frame wall hanging. I found a bar splice joint in the March 1993 issue of The Blacksmith's Journal wanted to incorporate in the design. The joinery technique I used for the frame corners required $\frac{1}{2}$ " x 1" rectangular holes to be pierced perpendicular through $\frac{1}{2}$ " by $1\frac{1}{4}$ " top and bottom rails. These holes would accept side rails of similar dimensions reduced on the ends to $\frac{1}{2}$ " x 1" (Figure 1).

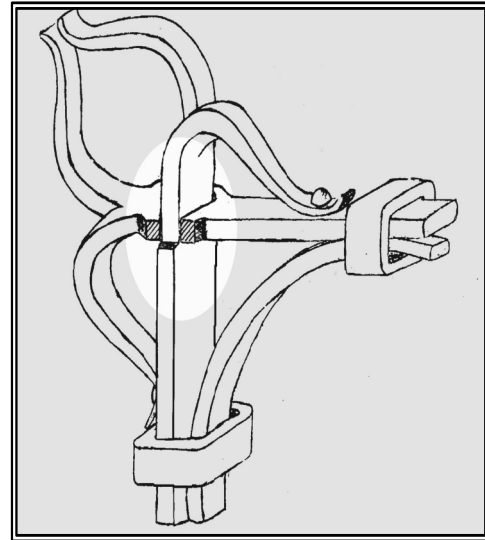


Figure 1
Detail of Frame Corner

After completing a test piece, I discovered the pierced bar was thinning and stretching at the ends of the slits located in the middle of the bar and the slits were not

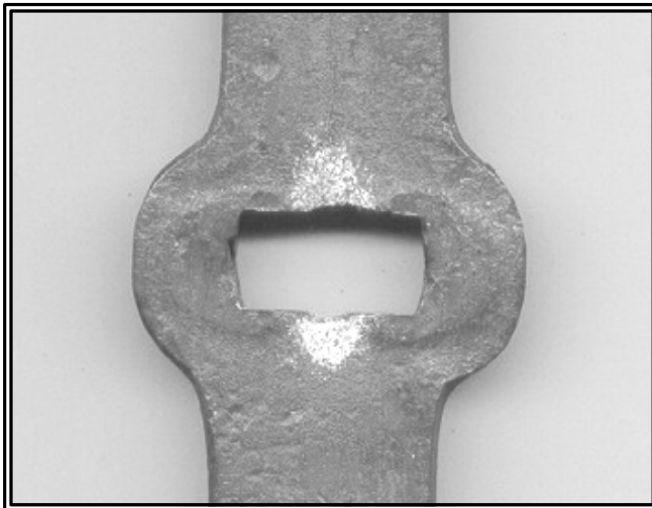


Figure 2
Thinned Spots at the Ends of the Slit
Highlighted with Chalk. Ends of Slit are
Still Visible After Stretching

completely disappearing when the bar was drifted (Figure 2).

These thinned spots would not have been a problem if the side rail tenons were shouldered on all four sides and the ends of the side rails were riveted on the outside to hide the thinned spots. The design I used has the side rail tenons shouldered on only two sides. This with the scroll work on the outside of the frame hides only a very small area of the pierced holes allowing discrepancies in the piercing to show on both sides.

The slitting chisel width had been calculated matching the area of the finished dimensions of the rectangular hole ($.5$ " x 1 " = $.5$ in²) and a comparable area for a round hole listed in Francis Whitaker's The Blacksmith's Cookbook. The closest equivalent area for a round hole is $\frac{13}{16}$ " which fell between the listed chisel edge length for a $\frac{3}{4}$ " hole of 1.050 " and a $\frac{7}{8}$ " hole of 1.225 " in Table I on page 85. This worked out to a slitting chisel edge width of $1\frac{1}{8}$ ". A slitting chisel was forged and ground at this width with the addition of a center point.

The center point acts as a locator to find a center punched mark identifying the center of the area to be slit (Figure 3)



Figure 3
Slitting Chisel
Note Center
Point

Thinking the slitting chisel was too wide, I reduced the chisel width to 1" in an attempt to eliminate the visible edges of the slit. A second test piece was made yielding essentially the same results, thinning at the slit ends and the slit ends slightly less visible.

A discussion in class with a fellow student yielded information about an old chisel design that cut the center slit with the edges of the chisel punching two round holes at the same time. Without taking the time to forge and shape a 2nd chisel as described, I decided to drill two 1/8" holes at the termination points of the slits before the slit was cut. The holes were drilled 1/16" inside the 1" marks to yield 1" outside to outside dimensions. This would allow clearance for the slitting chisel edges (after reducing the width again) to complete the slit between the drilled holes without cutting into the outer walls of the drilled holes. (Figure 4).

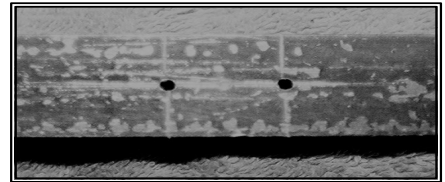


Figure 4
Bar Drilled Before Slitting.
Center Punch Mark to Align
Chisel is Barely Visible

I reduced the edge width of the chisel again from 1" to 7/8" to ensure the chisel would not cut into the outer edges of the drilled holes. The bar was heated and the slit was cut between the drilled holes (Figure 5)

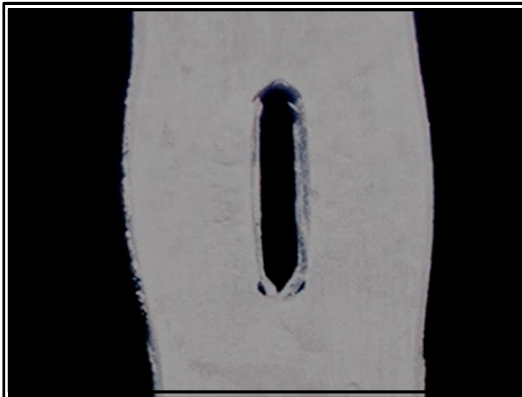


Figure 5
Slit Made Between Drilled Holes
Note Rag Pushing Into Holes

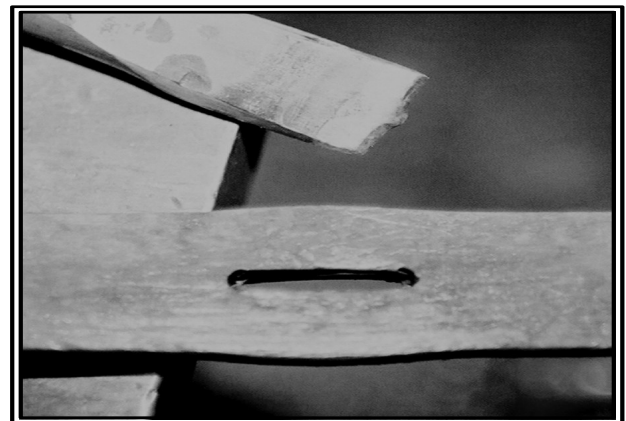


Figure 6
Hole Opened with
Slitting Chisel Enough
to Allow Drift to Enter

The bar was heated again and the slitting chisel was used to open the hole enough to allow a 1/2" x 1" drift to be inserted with the 1" sides of the drift parallel to the sides of the bar (Figure 6 and 7). The chisel was driven only far enough into the slot to drift the hole open without the chisel edges cutting into the outer walls of the drilled



Figure 7
1/2" x 1" Rectangular Drift

holes.

The 1/2" x 1" rectangular drift is centered and driven into the bar equally from both sides with the 1" sides parallel to the bar until the 1/2" edges just begin to touch inside the slit. The slit is supported over the hardy hole in this and all subsequent drifting operations with the edge and ends of the slits pulled or pushed to one corner and edge of the hardy hole as the drift is driven deeper into the bar. (Note: A vice, swage block, or some form of bolster can be used if the drift you are

using will not fit in the hardy hole.) This operation opens the slit in the bar enough without too much distortion to begin the process of upsetting the bar. At all times the bar and the ever widening hole and shoulders around the hole should be maintained straight and parallel. The difficulties encountered in trying to upset a crooked bar is well worth the extra time in maintaining a straight bar and a centered hole.

The upsetting operation will transform the oval shaped hole, still parallel to the bar, to a round, and eventually to an oval shaped hole perpendicular to the bar. The drifted slit is reheated close to a welding heat and the heat localized to the slit area by maintaining a small diameter forge fire and periodically cooling the areas on either sides of the slit with water. This is important to create the upset at the slit area and to reduce upsetting and distorting the bar above or below this location. It is worth noting that a coal forge has a distinct advantage over a gas forge in concentrating the heat in a localized area for this type of operation. Three heats generally were required to transition the hole to a perpendicular position across the bar (Figures 8, 9, and 10).

Before drifting the hole perpendicular, ensure that rag from the slitting operation does not interfere with the proper alignment of the drift across the bar. Stop



Fig 8
Upsetting Bar Using
Floor Plate
The Bar is Rotated
90° Between Strikes
on Floor Plate to
Maintain Even Upset

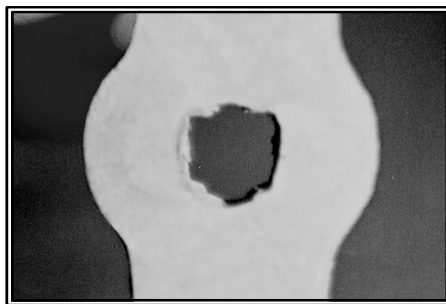


Figure 9
The Oval Has Been
Upset to a Round Hole
Note Side Walls Are
Equal and Have
Essentially the Same



Figure 10
The Hole Parallel to the Bar
Has Been Changed to an
Opening Perpendicular to
the Bar

and file or chisel out the rag before proceeding any further. Work until the drift can be inserted 90° to the bar. The angle of the hole to the bar cannot easily be changed after the hole is drifted. Two out of ten holes that I had completed for the project did present some problems with the drift not aligning in the hole perpendicular to the bar.

The $\frac{1}{2}$ " x 1" rectangular drift (Figure 7) can now be used across the bar to open the hole to the finished size. Reheat the hole and insert the drift, ensuring the drift is centered, 90° to the bar, and as before driven into the bar equally from both sides. The 1" sides will now be perpendicular to the bar. As before, the area around the hole is supported over the hardy hole with the edge and ends of the hole pulled or pushed to one corner and edge of the hardy hole as the drift is driven deeper into the bar (Figure 11).



Figure 11
Drifting the Hole
Perpendicular to the Bar

Continue the drifting operation until the rectangular drift passes through the hole (Figure 12).



Figure 12
Hole Drifted to Full Dimensions

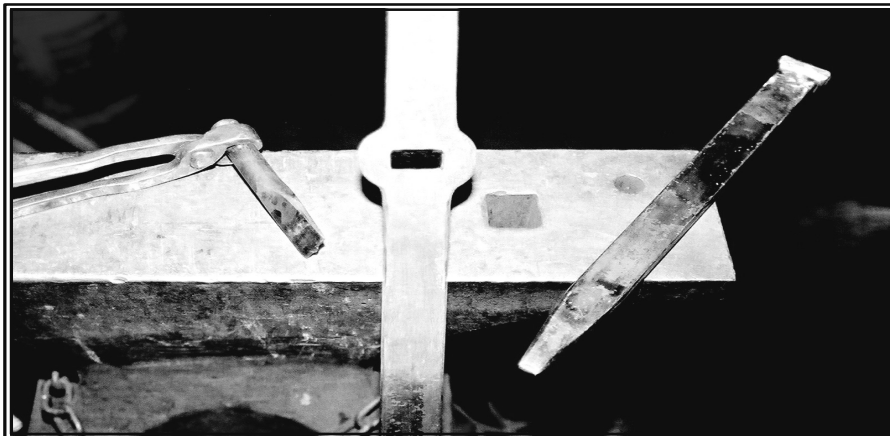


Figure 13
Hole Complete.
Thinning was Minimized and Ends of the Slit Have
Disappeared by Drilling the Bar Before Slitting

Drilling the ends of the slit greatly reduced the degree of thinning at the slit ends. The drilled holes disappeared when the hole was complete (Figure 13).

Normally a drift would be tapered at the hammer end to allow the drift to pass completely through the hole from one side unimpeded as

the drift is hammered through the bar. The drift I forged was upset on the hammer end and dressed with a radius under the head (Figure 11, and 12). This was an option I had set up to blend the edges of the hole with the thinning areas, but fortunately it was not required. Because of the upset head, the drift had to be removed by hammering on the inserted end. This caused some minor upsetting and sharp corners to develop that required redressing the inserted end between holes (Figure 13). Forging a drift tapered on the hammered end reduces or eliminates the need to redress the inserted end of the drift.

Overall length must be considered in a project like this. Each of the pierced holes reduced the bar length by $\frac{1}{2}$ " for each hole produced. This measurement had to be considered to prevent it affecting the final dimensions of the project.

The pierced holes required for this project were all satisfactory and after development of the required steps, predictable. It is important that the same steps and the order in which these steps are performed are adhered to produce pierced holes of equal and repeatable dimensions (Figure 14).

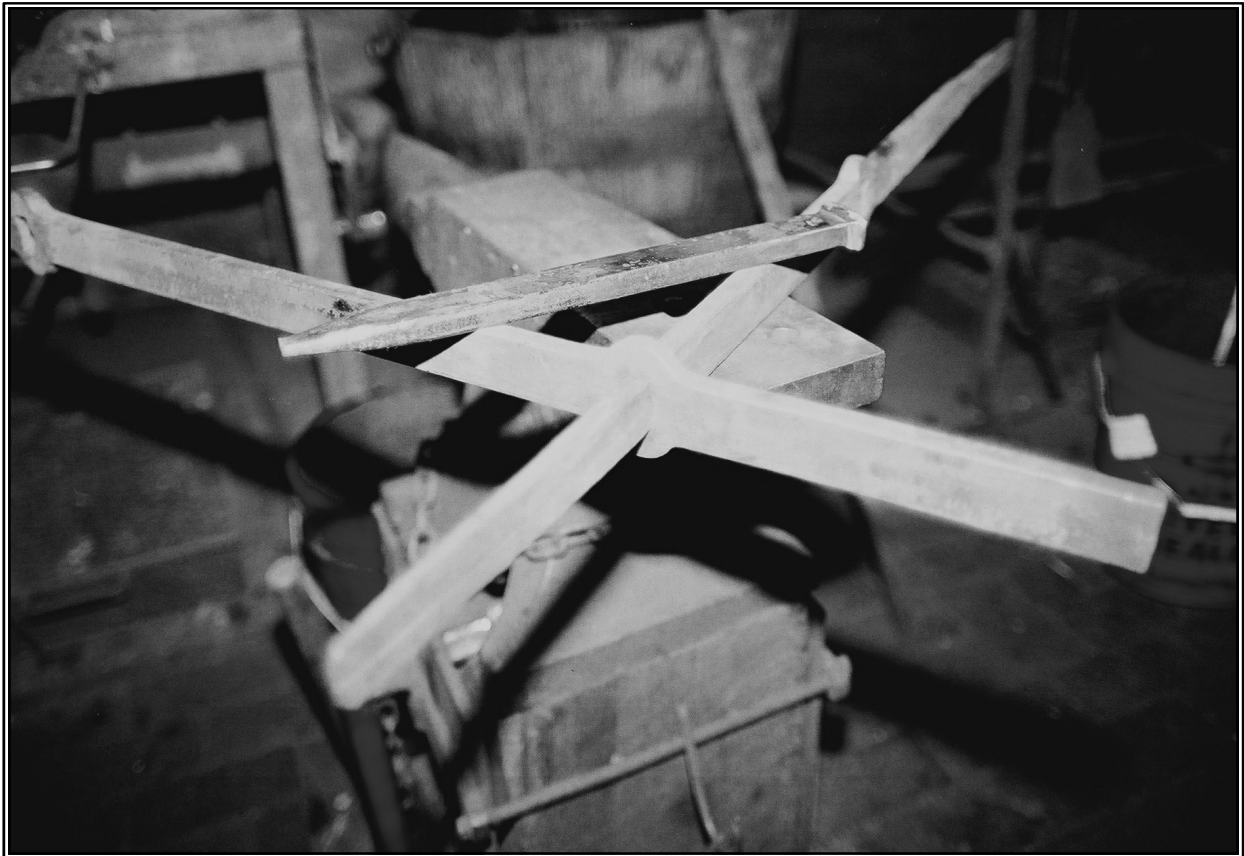


Figure 14
Pierced Bottom/ Top Rail with Side Rail Inserted
Each Hole Reduced the Length of Bar by $\frac{1}{2}$ "





Shop Drawing

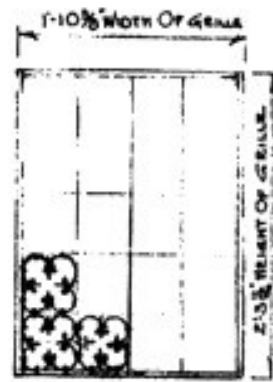
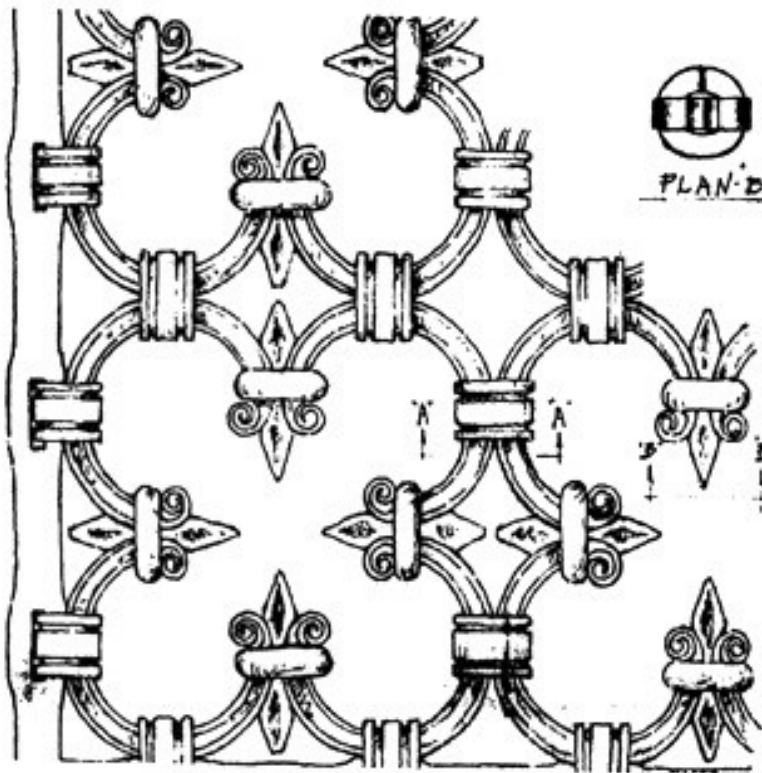
Shown below is a section of a grille. For all the information shown in the left side of the drawing, there is more information needed to fully understand the total look of the piece. To supply that information two conventions are used on the right side of this drawing. One is the PLAN view of the details shown in the upper right of the drawing. The 'A'-A' and 'B'-B' details are slices through the work that have been rotated 90 degrees revealing the cross section of the forged components shown in 'A' and the roundness of the collar in plan 'B'. A quick glance at the drawing shows where the sections were taken from. The other convention used is the scale drawing of the entire project in the lower right corner. The overall dimensions are noted, the scale detail to the project is displayed.

The more detail and information your drawing contains, the better that drawing will serve you. It is far less expensive to work out the design and mechanical relationships on the drawing board than in the shop with hot iron.

SECTIONAL NOTATIONS

Here is a set of symbols used to designate stock type and cross sections in shop drawings.

SECTIONAL SQUARE	
SOLID-RECTANGLE	
SOLID-ROUND	
TUBE-SQUARE	
TUBE-RECTANGLE	
TUBE-ROUND	
PIPE	
ANGLE IRON	
CHANNEL	
BEAM	



Detail of a Grille by Samuel Yellin

by George Dixon
 © 2003
 www.traditionalmetalsmith.com

STATE OF MISSISSIPPI
DEPARTMENT OF AGRICULTURE AND COMMERCE
LESTER SPELL, JR., D.V.M.
COMMISSIONER

June 18, 2003

Mr. Jim Pigott
136 Munich Drive
Madison, MS 39110


Dear Mr. Pigott:

Thank you so much for your help — and the help of the other volunteers — with the event held at the Ag Museum this past June 8, 2003. Having a working blacksmith shop really helped to make Small Town, Mississippi, a wonderful tour.

SASDA, the Southern Association of State Departments of Agriculture, includes 15 states and 2 territories. These individuals attend many events, and we've been told that our Mississippi event was the best they've attended. The Museum was in top-notch shape, and the entire Sunday evening could not have been any better.

Thank you so much for what you do at the Museum; it truly is appreciated!

Sincerely,



Lester Spell, Jr., D.V.M.
Commissioner of Agriculture and Commerce

P.O. BOX 1609 • JACKSON, MISSISSIPPI 39215
TELEPHONE (601) 359-1100 • FAX (601) 354-7710

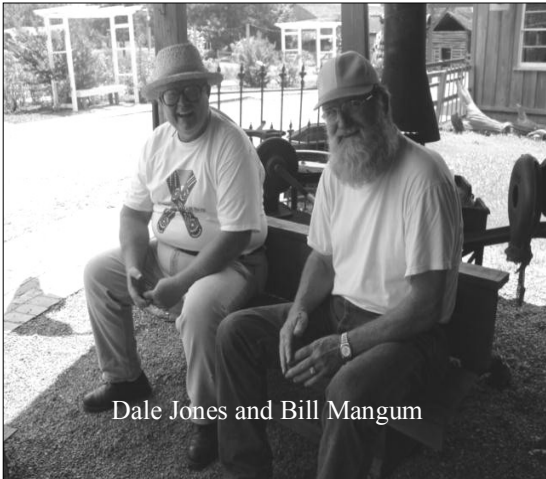
July meeting



Tommy Ward saves the day with his impromptu demonstration of tools and techniques for working with sheet metal. As usual, Tommy is able to go into great detail on the "how to" and "look out for" what works and what won't.



When Tommy speaks, people listen.



Dale Jones and Bill Mangum

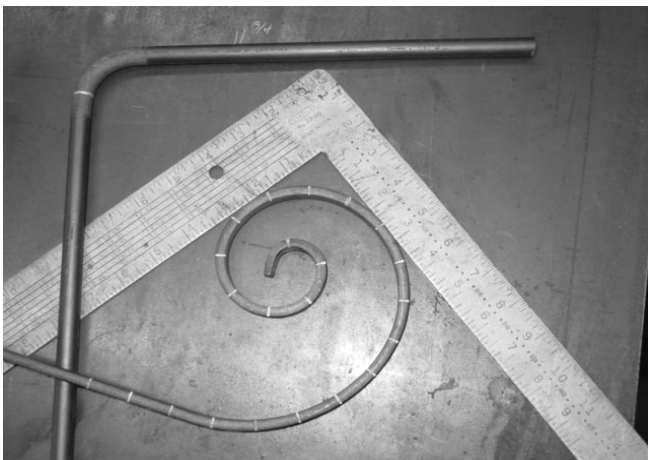


Proud graduates of the Green Coal school

Need Coal?

Bill Mangum, in the picture, above left, has volunteered to be available, to those needing coal, on the months we are not meeting at the Ag Museum. Bill lives in Vicksburg so it will be necessary to call him and make arrangements 601-636-8408. Bill originally agreed to be available on the second Saturday of the month but if he does that he will miss the meetings. So, I am suggesting he be available on the third Saturday, if this is not ok with Bill we will let you know.

August meeting



The August meeting was held at Steve Norquist's shop. Steve gave a demonstration on cold bending techniques. Steve has been working with iron for many years and is extremely skilled. It is always an education to be around him when he volunteers to share his knowledge with us, he even provided lunch, can't beat that.

ABANA Conference 2004

July 7-11, 2004

The 2004 ABANA Conference will be on the campus of Eastern Kentucky University in Richmond, Kentucky

Why not plan a family vacation in the Richmond area to coincide with the ABANA Conference? Get a load of these interesting places to visit in Kentucky!

Places of Interest Near Richmond. (www.Richmond-ky.com) Explore Daniel Boon's fort, Bybee Pottery, historic homes, Civil War tour, ferry, planetarium, golf, Kentucky Artisan Center and more.

Shaker Village of Pleasant Hills. Twenty-five miles southwest of Lexington on U.S. 68. (www.shakervillageky.org) You may visit many Shaker buildings in their original condition.

Old Fort Harrod State Park. A few miles from the Shaker village on U.S. 69. See the restored fort, George Rogers Clark Museum and the Mansion Museum with Indian and Civil War artifacts.

Mammoth Cave. (www.cavecity.com) This one needs no explanation.

Louisville Area. (www.gotolouisville.com) Over 90 attraction including Louisville Slugger Museum, and Churchill Downs.

Abraham Lincoln Birthplace National Historic Site. Hodgenville on U.S. 31E. When in the area, this is a must.

Bardstown Area. (www.bardstowntourism.com) My Old Kentucky Home State Park (Stephen Foster), Kentucky Railway Museum, Old Talbott Tavern, Oscar Getz Museum of Whiskey History, Jim Beam, Evan Williams and Makers Mark distilleries and much more.

For lots of other places to see go to (www.kentuckytourism.com)

Bob Fredell, Chairman
Member Services Committee
(763) 389-5119
bobfredell@abana.org

For more information on the ABANA Conference, go to www.abana.org

Classifieds



Linda Crevitt Brooms

You don't need to find a witch to get a good broom tied. Linda Crevitt will make your fireplace set stand out with these beautifully crafted brooms. All shapes and sizes for all purposes.

Linda Crevitt 601-483-7025

crevtrad@bellsouth.net

The best source for blacksmithing books is Norm Larson. You can reach him at 5426 E. Hwy 246, Lompoc, CA 93436, or call him at (805) 735-2095

L Brand Forge coke now packaged in 50 pound bags, 1,000 pound bulk sacks on pallets and 2,000 pound bulk sacks on pallets. Send your zip code for a quote on price including delivery. 1-800-441-0616 or LBrandForgeCoke@aol.com

Custom Cutting

Steel Roses \$6. 5for \$25
Copper Roses \$11, 5for \$50
 Have Lilies, Gladioluses, Daylilies, Daisy, Iris,
 Dogwood and several different leaves.
 Your design or mine, 28 ga. to 1"
Rick Jay, 850-722-1811

New Vendor

Bells Novelty Casting Co.

Anniston, Alabama

Anvils, blacksmiths tools,
bells, etc.

Iron and aluminum castings

Looking for dealers

www.bellsandmore.com

Tom Clark has expanded his line of hand forged Hofi style hammers to include a nice rounding hammer and punches, drifts, tongs etc. He is also importing a new line of air hammer, the Sayha from Turkey and just got a shipment of punches, shears, belt grinders and gas forges. For more info on the tools contact him at (573)-438-4725

IRONY is a new publication by Stephen McGehee. It is full of metalworking projects as well as his own brand of wit. Subscriptions are \$35 per year or \$65 for two years. Send checks to P.O. Box 925, Corydon, IN 47112

Subscribe to Jerry Hoffman's Blacksmith Journal, a monthly publication for blacksmiths. Call 1-800-944-6134 for more information

Little Giant

Power Hammers

Parts, Repairs, and Classes

Sid Suedmeier

420 4th Corso

Nebraska City, NE 68410

402-873-6603

Revell

HARDWARE & INDUSTRIAL SUPPLY

**FLORENCE/
RICHLAND**
1899 Hwy. 49 South
932-2690

BYRAM
5726 Terry Rd.
at Siwell Rd.
371-8429

CLINTON 120 E. Northside Dr. at Pinehaven 924-4510	JACKSON 3876 Terry Rd. at Savannah St. 372-5534	PEARL 2509 Hwy. 80 East at Bierdeman Rd. 939-2861
---	--	--

**"IF IT'S
HARDWARE,
WE HAVE IT"**

ACE
Hardware

*Serving
Central
Mississippi
Since
1950*

ACME PRINTING

After talking to several printing companies, who thought our newsletter was too small a job to deal with, I was referred to the Wagner brothers at Acme Printing. With them there was no question about the size of the newsletter or the quarterly printing. Not only did they give us a good quote but they referred us to Dearing Addressing who takes the printed newsletter and labels and bulk mails the issues for us. All this not only saves us a huge amount of time but they do it for what it was costing us to do it the hard way. Support those that support us. For your printing needs contact

printing needs contact

Acme Printing

601-856-7766

If you like what they are doing for us, give them the opportunity to work with your printing needs.

Free Catalog

Rocky Comfort Forge offers a FREE catalog of Video / DVD offerings from 21 Master Blacksmiths demonstrating at Blacksmith Annual Conferences throughout the United States. To get your free catalog send your name and address to Rocky Comfort Forge, 6323 Pat Thomas Parkway, Quincy, FL 32351 or request one by e-mail:

rockycomfortforge@gdsys.net be sure to include your name and mailing address and the number of catalogs you would like.



Name: _____ e-mail: _____
 Address: _____ www url: _____
 City: _____ Phone: _____
 State: _____ Zip/PC: _____ Fax: _____
 Country : _____

Type of Membership New Member Renewal
 Regular - \$45.00 Contributing - \$100
 Student - \$35.00 Library - \$35.00
 Senior (65+) - \$40.00 Overseas Air - \$80.00

Credit Card Information
 Visa Mastercard Expiration Date: _____
 Card # _____
 Submit check, money order (U.S. banks only), or by credit card:

ABANA Chapter Affiliation: _____
 LeeAnn Mitchell
 P.O. Box 816
 Farmington, GA 30638 Phone: 706.310.1030
 Application may also be made at the ABANA web site: www.abana.org Fax: 706.769.7147

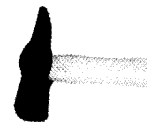
M E M B E R S H I P A P P L I C A T I O N

The Traditional Metalsmith
Blacksmithing: Illustrated & Explained
 By George Dixon, former Head Blacksmith
 Samuel Yellin Metalworkers

Annual Subscription Please mail \$28.00 to:
 \$28 US & Canada \$40 Overseas
The Traditional Metalsmith
 1229 Bee Tree Lake Road
 Swannanoa, NC 28778
www.traditionalmetalsmith.com


KAYNE & SON *Blacksmithing & Metalworkers*
TOOLS - EQUIPMENT - SUPPLIES

100 Daniel Ridge Road • Candler, NC 28715
 (828) 667-8868 or 665-1988
 Fax: (828) 665-8303
 Email: sales@kayneandson.com
www.kayneandson.com


BIG BLU

**We carry the
 world's finest
 blacksmith's
 tools at
 affordable
 prices**


**Off Center
 Tools**


**PEDDINGHAUS
 2 HORNED
 ANVILS**


BLU CRUSHER

Mississippi Forge Council Membership Form

Date _____

Name _____

Spouse _____

Address _____

City _____

State/Zip _____

Phone _____

E-mail _____

Make check for \$25.00 payable to MFC and send to:

David Williams, Treasurer
P.O. 13515
Jackson, Ms. 39236

MFC is an affiliate of the Artist-Blacksmith Association of North America (ABANA) Dues are \$25.00 per year and include subscription to The Upset.

Disclosure:

Blacksmithing is inherently a dangerous occupation. You are responsible for using eye, ear and respiratory protection and safe work methods. The Mississippi Forge Council, it's Officers, demonstrators, writers, editors and members specifically disclaim responsibility for any damages, injuries or destruction of property as a result of the use of any information published in the Newsletter, demonstrated at conferences or at meetings. Every effort is made to insure the accuracy and safety of information provided, but the use of any material is solely at the user's own risk.

Newsletter Policy:

Material is composed and written by the editors except as indicated. Unless otherwise noted, material herein may be reprinted without written permission provided proper credit is given. This is YOUR newsletter and contributions are encouraged and needed. A SASE should accompany any material you wish returned. Any suggestions or comments regarding the newsletter are welcome.

Send contributions to:

Jim Pigott
136 Munich Dr.
Madison, MS 39110
jpigott@jam.rr.com

MISSISSIPPI FORGE COUNCIL
P.O. BOX 13515
JACKSON, MS. 39236

Presorted Standard
U.S. Postage Paid
Jackson, MS
Permit No.80