# Saltfork Craftsmen Artist-Blacksmith Association

November 2015



Mark Aspery demonstrating elements of the ABANA National Curriculum Grille before a dozen attendees at the 2015 Aspery Clinic in Nemo, Texas.

Plans are already set for next year's clinic. (See page 33.)

#### Saltfork Craftsmen Artist-Blacksmith Association Officers and Directors

580-381-0085

918-230-2960

580-549-6824

405-824-9681

580-515-1292

918-691-2173

405-476-6091

405-650-7520

918-633-0234

918-230-2960

President: David Seigrist P.O. Box 163 Hollis, Ok 73550 dseigrist2004@yahoo.com Vice-President/Conference Chair: Doug Redden 2050 E. 410 Rd. Oologah, Ok. 74053 Doug.redden2@att.net Secretary/Regional Meeting Coordinator: Diana Davis 23966 NE Wolf Rd. Fletcher, Ok 73541 Diana.copperrose@gmail.com Treasurer: Teresa Gabrish P.O. Box 18389 Oklahoma City, Ok. 73154 tgabrish@gmail.com Director/Workshop Coordinator: Mandell Greteman Rt. 2 Box 130 Foss, Okla. 73647 mandell01@windstream.net Director/Swage Blocks: Bill Kendall 1756 E. 59th St Tulsa Ok. 74105 wwkendall@aol.com Director: Terry Jenkins 222 N. Washington

Blanchard, Ok. 73010 Director/Cones: Byron Doner

6520 Alameda, Norman OK 73026 byrondoner@esok.us

Assignments:

Editor: Russell Bartling 70 N 160th W. Ave Sand Springs, Ok 74063 rbartling@ionet.net

Webmaster: Dodie O'Bryan Pawnee, Ok scout@skally.net

Librarian: Doug Redden 2050 E. 410 Rd. Oologah, Ok. 74053 Doug.redden2@att.net **Editors notes...** 

As I write this, it has only been a week since I, along with several other Saltfork members, returned from the three day hands on clinic with Mark Aspery in Nemo, Texas.

For me those clinics are a rare chance to suspend the everyday reality of work and just concentrate on quality forging time. Unfortunately, the old saying is true - time flies when you are having fun.

But even though the three days of direct access to a teacher and coach like Mark Aspery is all too limited, I feel like my skill level is significantly improved. At the least the understanding of what I want to do is improved. Now the trick is to find time to practice so that understanding becomes second nature in concert with a cooperative muscle memory and hammer control. Mark makes moving hot metal look easy and, there's no easy way around it, a lot of that skill takes physical practice.

During the clinic, we picked up a lot of tips and tricks that are too numerous to include in one newsletter. I have just summarized the overall clinic in this issue. Look for more information on some specific subjects in following issues as I get time to organize them. Many of the tips and tricks are related to making certain tools but are also applicable to forging in general.

Mark promotes making your own tools. He was taught early on that he could only buy tools after he learned to make a workable version of them himself. And then the allure of buying a tool seemed to vanish. There is a unique satisfaction from making and using your own tools and I think many of us left the clinic feeling empowered have done just that.

Mark referred to two types of muscle while first pointing to his head and then pointing to his bicep. There is a time and place for each and I think the attendees of Mark's clinic learned to use both a little better. Hopefully, we will be able to share some of that same information in upcoming newsletters.

- Russell Bartling - Editor

The Saltfork Craftsmen Artist-Blacksmith Association, a non-profit organization Our purposes are the sharing of knowledge, education and to promote a more general appreciation of the fine craftsmanship everywhere. We are a chapter of the Artist-Blacksmith Association of North America

Material from this newsletter may be freely copied without permission for non-profit purposes. Please credit the author and this publication.

Visit our Saltfork Craftsmen Website: www.saltforkcraftsmen.org

# **President's Notes:**

Hello Folks,

The weather couldn't be any better for smithin than it is now. I certainly hope you're taking advantage of it every chance you get.

I'd like to take a chance and speak to our newer and less experienced members about the advantage of attending monthly meetings.



Several years ago it was very frustrating for me to spend much time at the forge. I could kinda get through some of the basics but the metal wouldn't move the way I wanted it and there wasn't anyone nearby who could show me the ropes. Even my forge wasn't cooperating and I didn't know why.

It became so bad the thought briefly crossed my mind to give it up and move on to something else. Then, it dawned on me that instead of taking my forge to the meetings it would be better if I showed up with a list of skills needed, and have someone walk me through it. WOW! What a difference it made and meetings became much more important. Forging back home became increasingly more productive and much more enjoyable.

There's a difference between asking a blacksmith to show you something and having them teach you a skill. On the one hand the blacksmith is entertaining you, not what I recommend, and on the other hand after you see them demo, you take the hammer and try your best under close supervision to duplicate the skill.

So, during your forging at home when you come across something you're having trouble with write it down and at the next meeting ask folks to show you how. They will be happy to help and your level of frustration will go down.

There's just something therapeutic about mom's apple pie, the smell of gun powder, and hitting hot metal with a hammer!

Be careful and we'll cya soon,

- David

# **Division of (Volunteer) Labor**

Its been suggested that we need to clarify who does what in terms of the Saltfork Board members and other positions of responsibility. This list is an attempt to expand on the definitions of these roles to help in getting the right person when needed. Please keep in mind that everyone on this list gives their time on a volunteer basis and this list may change, expand and evolve over time:

Name	Position	Address	Phone	Duties
David Seigrist	President	P.O. Box 163 Hollis, Ok 73550 dseigrist2004@yahoo.com	580-381-0085	President BOD Meeting Chair Help Where I can
Doug Redden	Vice President/ Conference Chair	2050 E. 410 Rd. Oologah, Ok. 74053 Doug.redden2@att.net	918-230-2960	Vice President Conference Chair Librarian
Diana Davis	Secretary	23966 NE Wolf Rd. Fletcher, Ok 73541 Diana.copperrose@gmail.com	580-549-6824	Secretary Club Membership BOD Meeting Agenda BOD Meeting Minutes
Teresa Gabrish	Treasurer	P.O. Box 18389 Oklahoma City, Ok. 73154 tgabrish@gmail.com	405-824-9681	Treasurer
Mandell Greteman	Director/Workshop Coordinator	Rt. 2 Box 130 Foss, Okla. 73647 mandell01@windstream.net	580-515-1292	Workshop Coordinator
Bill Kendall	Director/Swage Blocks	1756 E. 59 <sup>th</sup> St Tulsa Ok. 74105 wwkendall@aol.com	918-691-2173	Swage Block Ship- ping Quotes Swage Block Ship- ping
Terry Jenkins	Director	222 N. Washington Blanchard, Ok. 73010	405-476-6091	
Byron Doner	Director/Cones	6520 Alameda, Norman OK 73026 byrondoner@esok.us	405-650-7520	Cone Shipping
Russell Bartling	Editor	70 N 160th W. Ave Sand Springs, Ok 74063 rbartling@ionet.net	918-633-0234	Newsletter Editor Regional Meeting Coordinator
Dodie O'Bryan	Webmaster	Pawnee, Ok scout@skally.net	_	Website Updates Web Calendar Up- dates

# **Work Shop Schedule**

**Jan 30 – Beginning Blacksmithing Workshop:** to be held at the Route 66 Blacksmith Shop in Elk City. More details will be provided in next month's newsletter. Class size is limited so it is encouraged to sign up as soon as possible. Contact Mandell to register.

Jan 30 – Beginning Blacksmithing Workshop: to be held at Bill Kendall's workshop in Tulsa. Instructors will be Doug Redden and Tracy Cowart. Lunch will be provided. Cost will be \$30. More details will be provided in next month's newsletter. Class size is limited so it is encouraged to sign up as soon as possible. Contact Doug Redden to register.

Mandell Greteman is the SCABA Workshop Coordinator. Contact Mandell at 580-515-1292.

#### **SCABA Library Titles:**

Robb Gunter Basic Blacksmithing parts1,2,3 and the controlled hand forging series

Clay Spencer SCABA conf.2013 pts. 1,2 and 3

Jerry Darnell 18th century lighting, door latches and hinges

Brent Baily SCABA conf. 2011

Mark Aspery SCABA conf. 2011

Robb Gunter SCABA conf. 1998

Robb, Brad and Chad Gunter 2009 joinery, forging, repousse, scrollwork, etc.

Bill Bastas SCABA 2002 pts. 1 - 6

Jim Keith SCABA conf.2007

Power hammer forging with Clifton Ralph pts. 1 - 5

Doug Merkel SCABA 2001

Bob Alexander SCABA 2008

A. Finn SCABA 2008

Bob Patrick SCABA 2004

Gordon Williams SCABA 2010

Daryl Nelson SCABA 2010

Jim and Kathleen Poor SCABA 2001

Ed and Brian Brazeal SCABA 2006

Ray Kirk Knives SCABA 2002

Frank Turley SCABA 1997

Frank Turley SCABA 2003

Bill Epps SCABA 2003

M. Hamburger SCABA 2007

When I copy a set for someone I make three copies. Best time to contact me is in the A.M. by phone.

- Doug Redden, Librarian

#### \*\*NOTICE\*\*

Diana is handing over the job of keeping track of the monthly regional meetings to me. It seems to work best combined with the newsletter editor job.

If you plan to host a monthly meeting, please send your information to:

Russell Bartling 918-633-0234 rbartling@ionet.net 70 N 60th W Ave. Sand Springs, OK 74063

E-mail is the most convenient for me, followed by phone, then by regular mail. But whatever method works for you is fine.

Thanks!

#### **Regional Meeting Schedule**

- SE regional meeting Nov 6th: No meeting. SCABA Annual Conference Nov 6 and 7th.
- **NE Regional meeting November 14th:** Will be hosted by Ed McCormack at his home in Okmulgee at 15100 N.270 Rd. (see map.) His trade items is a flower. Lunch will be provided but help out by bringing a side dish.
- SC Regional meeting November 21st: Will be hosted by Anthony Griggs. Lunch will be provided but please bring a dessert. This will be an outside event due to the small size of my smithy. If necessary we can move into the barn. If you are interested in building a tire power hammer, a vertical forge with a blown burner, or a horizontal forge with Venturi burners, you are welcome to look at mine. I have built all three and can explain the process to you. I also built an electronic heat treat oven you can see. Feel free to bring cameras and notebooks for notes. The club forges will be set up for play and demo's if anyone will volunteer to use them. The trade item will be a fire poker or rake for a stove or coal forge. Please come to have fun and learn. Please bring a chair. Wear heavy clothes if it is very cold. Directions: (I will have a sign at our driveway.)

If you are coming on the Turner Turnpike from OKC or Tulsa:

Exit at the Chandler exit on highway 18 Go south on highway 18 through Chandler. Continue on south on 18 for about 7 miles to junction 18 and 18B Turn east as if going to Sparks. Travel 1 and 3/4 miles east on 18B. We are the rock house on the south side of the road on a hill.

If you are coming old highway 66:

Turn at Chandler onto highway 18. Continue on south on 18 for about 7 miles to junction 18 and 18B Turn east as if going to Sparks. Travel 1 and 3/4 miles east on 18B. We are the rock house on the south side of the road on a hill.

If you are coming Interstate 40 either east or west:

Exit at the Meeker/Shawnee exit #186. (This will put you on highway 18) Travel north on highway 18 about 8 miles to Meeker. (NOTE THE SPEED LIMITS FROM SHAWNEE THROUGH MEEKER. THEY WILL GIVE YOU A TICKET.)

Continue north on highway 18 about 6 miles to junction 18 and 18B.

Turn east as if going to Sparks.

Travel 1 and 3/4 miles east on 18B.

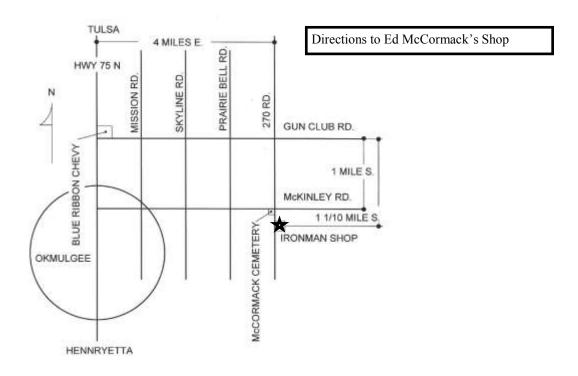
We are the rock house on the south side of the road on a hill.

Time wise:

We are about 50 minutes east of Norman, OKC, and Edmond.

We are about 1 hour and 15 minutes from Tulsa, Henryetta, and Okmulgee.

NW Regional meeting November 28th: will be hosted by Mandell Greteman, 580-515-1292, at his home in Foss, OK. Directions: Exit 53 off I-40 go north on Hyw 44 across the RR tracks one block, turn left, go 2 blocks to big gray building (or follow signs). For more info. 580-515-1292 or <a href="mandell01@windstream.net">mandell01@windstream.net</a>. Trade item is three links of chain. Lunch will be provided but bring a side dish to help out.



2015/2016 meeting dates					
SE Region (1t Sat ) Jan.3rd Feb. 7th March 7th April 4th May 2nd June 6th July 4th August 1st Sept. 5th (Open) Oct. 3rd. (Bill Phillips) Nov 7-8 Conference Dec 5th	NE Region (2nd Sat ) Jan 10th Feb. 14 March 14th (James Mabery) April 11th (Doug Redden) May 9th (Ed McCormack) June 13th (Doug Redden) July 11th (Brendan Crotty) August 8th (Open) Sept. 12th (Open) Oct. 10th Nov. 14th (Ed McCormack) Dec. 12th (Charlie McGee)	SC Region (3rd Sat) Jan. 17th (Byron Doner) Feb. 21st (Tony Cable) March 21st April 18th May 16th (JJ McGill) June 20th (R. Vardell) July 18th (Larry Mills) August 15th (US Cavalry Assoc.) Sept. 19th (Jim Dyer) Oct. 17th (John Cook) Nov. 21st (Anthony Griggs) Dec. 19th	NW Region (4th Sat) Jan 24th (Gary Seigrist) Feb. 28th (Bob Kennemer) March 28th (Mandell Greteman) April 25th (Dorvan Ivy) May 23rd (Terry Kauk) June 27th (Don Garner) July 25th (Gary Seigrist) August 22nd (Monte Smith) Sept. 26th (Roy Bell) Oct. 24th (Cheryl Overstreet) Nov. 28th (Mandell Greteman) Dec: 26th (Merry Christmas)		
Jan.2nd (Open) Feb. 6th (Open) March 5th (Open) April 2nd (Open) May 7th (Open) June 4th (Open) July 2nd (Open) August 6th (Open) Sept. 3rd (Open) Oct. 1st. (Open) Nov 5th (Open) Dec 3rd (Open)	Jan 9th (Open) Feb. 13th (Open) March 12th (Open) April 9th (Open) May 14th (Open) June 11th (Open) July 9th (Open) August 13th (Open) Sept. 10th (Open) Oct. 8th (Open) Nov. 12th (Open) Dec. 10th (Open)	Jan. 16th (Open) Feb. 20th (Open) March 19th (Open) April 16th (Open) May 21st (Open) June 18th (Ricky Vardell) July 16th (Open) August 20th (Open) Sept. 17th (Open) Oct. 15th (Open) Nov. 19th (Open) Dec. 17th (Open)	Jan 23rd (Open) Feb. 27th (Open) March 26th (Open) April 23rd (Open) May 28th (Open) June 25th (Open) July 23rd (Open) August 27th (Open) Sept. 24th (Open) Oct. 22nd (Open) Nov. 26th (Open) Dec:24th (Merry Christmas)		

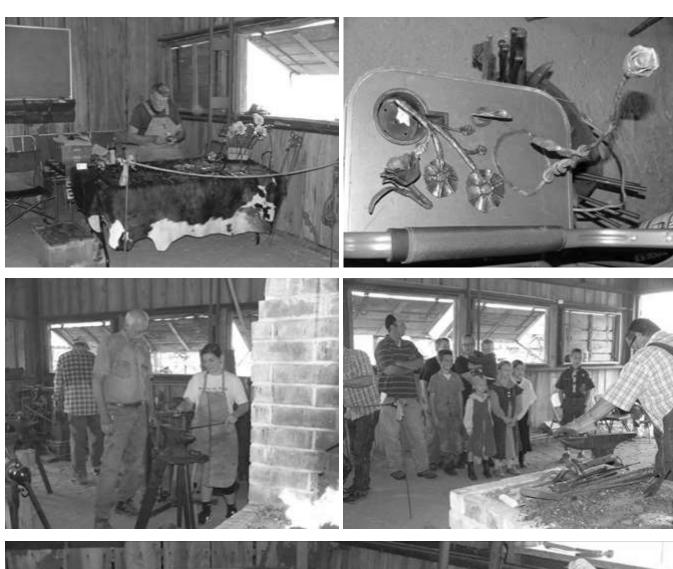
Meeting hosting form can be found on the last page along with membership application form. Russell Bartling will now keep track of the monthly meetings. Regular monthly meetings are always open to anyone that wishes to attend. If you want to host a meeting in your area please fill out one of the host forms in the newsletter and get it mailed in as soon as possible.

-Russell Bartling 918-633-0234 or rbartling@ionet.net

#### **Around the State....**

#### **NW:** North West Region September Meeting:

The NW region September meeting was hosted by Roy Bell. There were a lot of onlookers and it was a beautiful day. We would like to thank everyone for coming. - Mandell





**SE:** South East Region October Meeting: The South East Region October meeting was hosted by Bill Phillips. There were about ten smiths in attendance. The trade item was a bird feeder hanger/Shepard's hook. We had three trade items made. Lunch was Chili Mac with corn bread. We had two forges going most of the morning. Thanks to everyone who came to the meeting. - Bill



NE: North East Region October Meeting: No meeting was held in October.

SC: South Central Region October Meeting: No meeting notes available.

#### **Tulsa State Fair:**

Doug Redden spearheaded Saltfork's representation and setup at this year's two week long Tulsa State Fair. Located near one of the main entrance gates, there was a steady stream of traffic past the demo area every day and the weather was mostly cooperative.

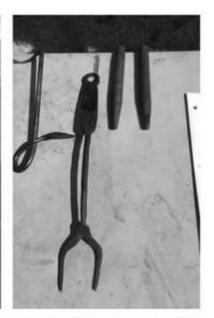
Several Saltfork members brought a variety of stock to work on and contributed time at the demo stations making many different large and small items. Oddly enough, young visitors seemed to be particularly interested in small swords made from flattened double headed nails. Almost everyone was fascinated by the forge fires and glowing steel.

Many old newsletters were handed out to potential new members and a very large stack of application forms were distributed over the course of the fair. A handful of new members signed up on the spot. There were a lot of inquiries about Saltfork Craftsmen as most of the onlookers were completely unaware that there was an active blacksmith organization in their area. Overall, there was a lot of exposure for the organization to a lot of potentially interested people.

Thanks to Doug and everyone who contributed time at the forges at this event. - Editor.









# Tulsa State Fair (Continued...)







Saltfork Craftsmen Artist-Blacksmith Association

#### **Wagner Tractor Show:**

This was the First Tractor show for Wagner, Okla . It was hot on October 3rd but the weather was outstanding. There were a LOT of tractors. We were the only Blacksmith set up. There were a lot of onlookers. Mandell demoed for eight hours, answering a lot of questions about the Saltfork Craftsmen club and blacksmithing in general. - *The Gretemans* 





Saltfork Craftsmen Artist-Blacksmith Association

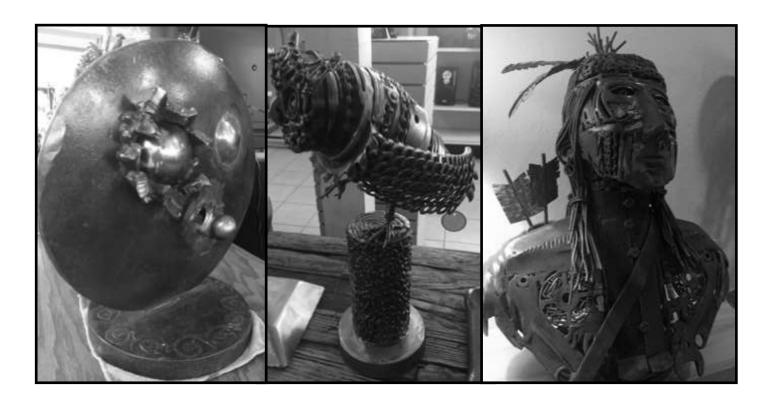
#### **Metal Art in Elk City:**

The next time you are in Elk City, you might want to drop by H&H Electronics downtown right on Route 66 and take a look at store owner Randy Haggard's metal sculptures. Approaching the store, you would have no idea that the interior is decorated with fascinating metal art sculptures worthy of any serious art gallery. Randy's sculptures are full of details that take some time to fully appreciate. The more you look, there more there is to see. The sculptures cover a range of styles from figures and animals to steampunk (if you don't know what steampunk is, think Victorian high tech, Jules Verne, HG Wells, etc. to get an idea.) There is also a Crucifix sculpture on display in the entrance of St. Mathews Catholic Church just east of town that is really amazing. Also check out Randy Haggard Metal Sculpture on Facebook - *Editor* 



Saltfork Craftsmen Artist-Blacksmith Association

# **Metal Art in Elk City (Continued...)**





Saltfork Craftsmen Artist-Blacksmith Association

# **Metal Art in Elk City (Continued...)**



Saltfork Craftsmen Artist-Blacksmith Association

#### The Amazing Metal Art of Joe Smith:

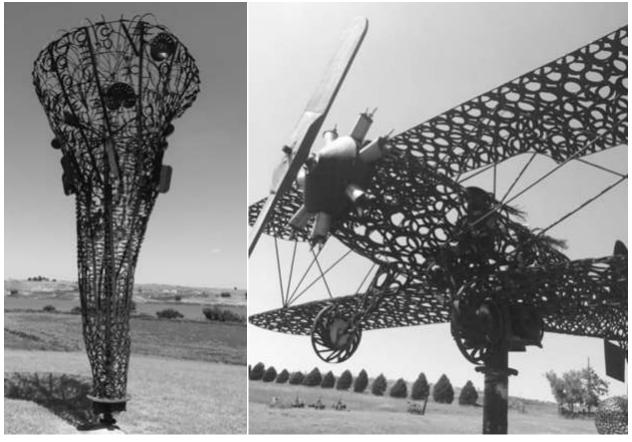
After I became a member of Saltfork Craftsmen, it took awhile before someone told me about Joe Smith. Residing near Leedey, Ok, Joe is an artist and collector who has created a proliferation of utterly amazing metal sculptures that have to be seen to be believed.

Joe's creations have been written about in various publications, a few of which I had looked up after being told about Joe and his artwork. When I attended one of the monthly meetings at Elk City, I thought I had some idea what we would see when a small group made a side trip to go visit Joe at his ranch. But I was wrong.

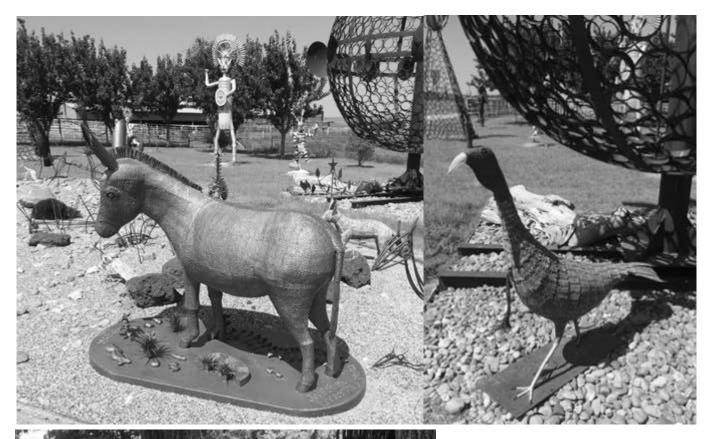
Even before entering the driveway, there is too much to see without slowing down and really taking time to look. Joe has lined the entrance and pasture fences at the road with standardized sixteen foot panels made up of all kinds of antique tools and metal items. The repetitive overall form of the panels along with the varied nature of the individual items has a certain beauty that is very unique. And Joe has made a LOT of panels. In fact, he still makes them.



Between the entrance way and the house, there are many larger than life sculptures including towering Kachinas, a tornado of horseshoes that rotates, a horseshoe airplane that rotes with a propeller that spins, and a very realistic looking welded wire burro.



#### The Amazing Metal Art of Joe Smith (Continued...)





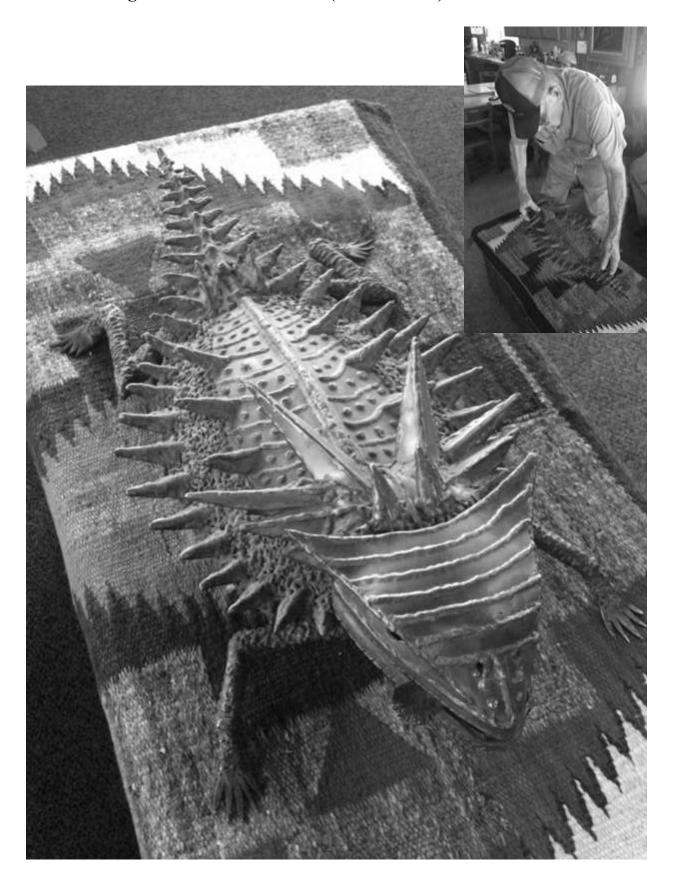
And the sculptures don't stop there. All around and inside the house and shops are large and small sculptures that capture the imagination.

The Smiths are some of the nicest people you would want to meet and Joe seems to enjoy visiting about his artwork and extensive collection of old tools, western art and authentic Navaho blankets. Joe's amazing work has to be seen to be appreciated and it would definitely take more than one trip to take it all in.

If you get the chance to go by and see Joe, it is certainly an experience that you won't soon forget!

- Editor

# The Amazing Metal Art of Joe Smith (Continued...)



# The Amazing Metal Art of Joe Smith (Continued...)

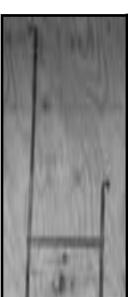








Saltfork Craftsmen Artist-Blacksmith Association



# Tall Boot Scraper

# Gerald Franklin and Bruce Willenberg

In the August 2015 issue of the SCABA newsletter, page 11, there is a picture of Bruce Willenberg's boot scraper trade item for the South Central monthly meeting. That boot scraper has a mushroom cap handle on the tall riser and two tenon crossbars. This project, by Gerald Franklin, was the inspiration for that one. Gerald has graciously shared his construction notes and he and Bruce spent time in the shop to do some detailed photos of the construction steps. This completed project will be auctioned off at the 2015 SCABA Conference. Thank you Gerald and Bruce! - Editor

#### **Cut List:**

1/2" x 1/2" x 52" (Tall Riser)

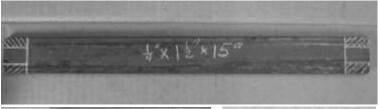
1/2" x 1/2" x 24" (Short Riser)

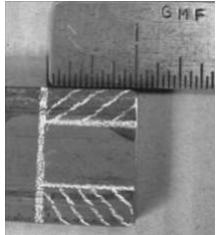
1/4" x 1 1/2" x 15" (Blade)

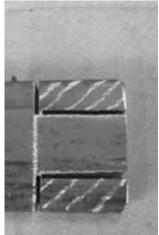


#### Blade:

Cut 3/4" wide tenon, 1" in length, centered on both ends of blade. This will leave 1/2" beyond risers for upsetting tenon head.

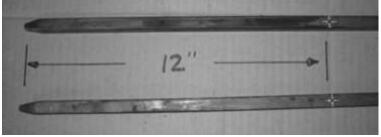






#### **Risers:**

Forge a blunt square taper about 1/2" long on one end of each riser. Mark each riser with center punch 12" from end of taper. The "near" edge of your slot punch will lie on this mark.



# Tall Boot Scraper (Continued...)

#### **Mortises:**

Punch slots in risers with a 3/4" x 1/8" slot punch and drift with a 1/4" x 3/4" drift.









#### **Finials:**

Forge a snub end scroll finial on each riser. Taper each riser for 4 to 5". The taper should be 1/4" thick at the snub end finial.



# Tall Boot Scraper (Continued...)





#### **Twist:**

Twist each riser for 4 flats. Straighten with a wooden mallet and wood block "anvil" if required. Clean off the scale to prepare for assembly.





# Tall Boot Scraper (Continued...)

#### **Final Assembly:**

Assemble the tenons, heat with torch and peen the ends. Do a final cleaning and apply finish as desired.











# **Old Traditions, New Words...**

#### - Russell Bartling

I have always loved to make things. Especially out of metal. I have also always loved visiting a quality junkyard, though it seems like they are rapidly becoming extinct. It may sound strange but some of the best times I remember are working with my dad scrounging and then fabricating all kinds of useful equipment from what most people would call junk. There is an undeniable satisfaction that comes from making your own tools or equipment and then successfully using them. If you read this newsletter, I am sure you would agree.

And, it could be considered traditional for blacksmiths and other good craftsmen to make do with the materials available. Making and modifying as required to accomplish the particular task at hand. I think that is a tradition worthy of a certain pride.

It seems like there has been a disappointing trend of dumbing down the ability to use our hands to create over the last several decades. But there are pockets of resistance to that way of thinking including the blacksmith community. You may or may not be aware of another group called "*Makers*" that seem to still be on the upswing in more urban settings. This is a group that likes to build creations, sometimes pretty leading edge, with their own hands using a wide variety of tools methods including metal work. Thinking about this group and some other sources led me to consider some terms that, loosely defined, might be useful (or at least entertaining) for blacksmiths to know. (It can't hurt to modernize the vocabulary every once in awhile I guess.)

Makers sometimes pool their resources in the urban settings to provide a shared work environment where paid members of the group can have access to tools and equipment they probably couldn't get by themselves. These work environments, whether shared or individual workshops, are called "*Maker Spaces*."

Junk is no longer called junk but rather is referred to as "found items." Specific types of junk that are old are elevated to the status of being "vintage."

Using junk in any way is called "repurposing."

Repurposing is considered "environmentally friendly" and "sustainable" because it reduces the "carbon footprint" that would be required to manufacture the original items from scratch.

Putting a bunch of junk (er...I mean *found items*) together quickly without any plan whatsoever could be called "*rapid prototyping*."

So the next time you find yourself in black stained overalls getting a blank stare when some young urbanite asks you what you do, the problem might be with the words you used. Instead of "*I'm a blacksmith. I hand forge stuff in my smithy by traditional methods.*" You could try the following:

"I do rapid prototyping and repurpose found and vintage items in my maker space using sustainable, environmentally friendly methods that minimize carbon footprint."

Just don't mention that you burn coal. It might only confuse matters.

# Making a Dog Using Using Two Split Crosses by Dominick Andrisani

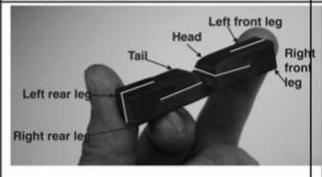


The square stock used was ½" square and 3.5 inches long. The material was silicon bronze 655, although any square stock will do. The first step is to make the two band saw cuts that separate the legs.

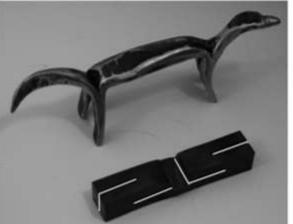


Second step is to forge a ½" indentation in the middle of the ½" square stock so that the ¼" wide band saw blade will fit in. This allows the saw to make the two cuts (visible above) that separate the head and tail from the stock. These last two cuts overlap the first two cuts by half the width of the square stock

(1/4").



In this illustration the band saw cuts have been accentuated with white lines. The next step is to heat up the material in the forge. Silicon bronze should be heated up to a dull red color. When hot the head and tail material can be lifted and bent forward and aft respectively. Then the legs can be bent and forged to project downward.



The two split crosses have allowed the blacksmith to get the metal is approximately the right place. At this point the smith can forge the four-legged critter to look like anything (dog, cat, etc.). The resulting dog was about 5 inches long. Feel free to experiment with the dimensions.

#### Paper Towel Tip...

Ever had paper towels mounted on a roll outside in the wind or in a moving RV with an open window? If you have, you might have seen just how quick the wind can unwind your nice new roll of towels into an empty cardboard tube. Here is a quick tip from Saltfork Member Harvey Bohannon to fix that problem. Take a shape for the "weight" (in this case an old hinge) and secure it to the back of the holder with a small hinge (in this case wrapped and riveted). As the roll gets smaller, the weight will drop down keeping the towels from unrolling.



I am fortunate to have a great next door neighbor, Mr.Brown, who gave me two 30mm switchable magnetics last winter. I knew immediately they would be great for a number of jobs around the forge. One of the first jobs I used them for was cleaning up metal shavings from the drill press and lathe. What a gift, with a 1/2

turn of the switch it was shavings and by turning those pesky rascals into

Because the magnetic non-electric with no position the tool precisely Once positioned you can etc.with a holding power amazing just how strong



no problem to pick up off the switch, dropping the trash.

can be turned off,( its batteries), its easy to on your welding table. attach your metal jigs, of up to 150 pounds. Its this little monster is.

I'm old and have hand

tremors, so it is difficult to hold small items on my anvil face while center punching. Even before I was old this could be an irritating problem. Not any more. Now I simply attach the Forney Square to the face of my

Industrial Pro Mag anvil and the Hammer the magnet, and mark. I

The retail price sticker on not cheep, but and convenience, I consideration. Obviously welding magnets will do a the convenience of a

What uses could you find in your shop?



my little magnet was \$47, considering multiple uses believe it would be worth other less expensive. similar job but not with switchable tool.

blank or round bar next to

love this thing.

for a switchable magnet

Magswitch Technology Inc. 621 Southpark Drive #1800 Littleton, Colorado 80120

WWW.Magswitch.com.au

Article provided courtesy of Artist/Blacksmith Ron Stafford, Nemo, Tx, hotshuz002@gmail.com - Editor

# Getting The Most Out Of Your 110 MIG Welder

### By Harold Hilborn

Lately, I have been asked a lot of questions regarding welding issues of all types. Someone even suggested I write some articles to help with some of these problems you might be having. I also know for some of you purists, WELD is a four letter word unless preceded by the word forge, but it is a necessary evil in a modern shop today.

Before I begin, maybe I should start by giving you some of my background, so those who do not know me, will feel comfortable with the advice I suggest to you. I have been working as a welder/ fabricator for 32 years. During this time I have had two years in a vocational school and another two years at a university studying welding technology. I have worked as a master welder and fitter and have certifications in all major welding process on ferrous and non ferrous materials. I also have ASNT certifications as a welding inspector and have also been a welding instructor. All this being said, I still can not weld the crack of dawn or fix the crack in a broken heart.

So some of you might have been lucky enough to have received a sweet, new 110 volt MIG welders from the fat man in the big red suit for Christmas. You might have an older one, or if you're lucky, a larger machine. Hopefully this article will help all of you who have not had formal welding training unlock some of the mysteries of your machine.

Let's begin with some basics and the term MIG, it is an acronym for metal inert gas or the correct definition GMAW, gas metal arc welding by the American Welding Society. This is a welding process using a continuously fed wire with an inert gas for shielding.

For those of you who do not have a MIG welder yet and have thought about purchasing one, let's look at machine selection first. I recommend you go to a welding supplier who carries either Miller or Lincoln. Try to stay away from buying your machine from Home Depot (Lincoln Handy MIG), into someone's shop, the first thing I notice is that Sears (Hobart which is made by Miller) or other home improvement centers or catalogs. These machines do get the job done and the price is usually better than your local welding supplier, but

the dirty little secret is though they might look alike on the outside, they are not the same on the inside. In Lincoln's case they refer to their older model as a Weld Pac 120HD. The HD stands for Home Depot, not heavy duty, It is not the same as the SP model they sell in the welding supply store. The bottom line is, the welding supply machine will cost you a little more, but it should last you longer and if it does break, it will be easier to get it fixed. Also, name brand consumables, like contact tips and cable liners, are easier to get.

Models that come from home improvement centers usually come set up for self shielded wire. (which we will cover later in this article). So if you want to run shielding gas you will have to go to your local welding supplier anyway.

We also need to explain duty cycle. This is the time a machine can run at maximum amperage in a 10 minute period. Most 110 machines are 20% duty cycle, which means they will weld 2 minutes in a 10 minute period. Machines that run on 220 amps are usually rated at 60% duty cycle. It is very hard to exceed a 60% duty cycle.

Now, let's decide what kind of shielding gas you should run. The two most popular ones are 100% carbon dioxide or 75/25 which is 75% carbon dioxide and 25% argon. I run CO2 in my shop, it is far less expensive. It gives better penetration and handles rusty material better. The disadvantages are that there can be more spatter and it is harder to run on thin gage material (16 gauge or thinner). Both of these disadvantages can be overcome if your machine has a variable voltage control. 75/25 is a more refined gas. It produces better bead definition and less spatter and works better on sheet metal. The draw backs are, less penetration and higher cost. Oh yes, don't be shy about negotiating with your supplier. Everyone does not pay the same price.

When I get requests for help from people or go most machines are not set up correctly. If the machines do run satisfactorily, they are afraid to touch the settings and they weld everything on one setting.

16 The Anvil's Horn Let's begin with drive roller tension. You should be able to pinch the wire with your thumb and index finger at the end of the contact tip and almost be able to stop the feed when the trigger is pulled. (Be careful not to feed into a grounded table or part.) The wire speed and voltage parameters that are given on your machine are a good place to start. Keep in mind that these are laboratory settings and are for welding usually in the flat position. Do a test weld on the same material you're going to weld before welding the actual piece.

Next lets talk about the term sickout. This is the un-melted wire distance from the end of the contact tip to the weld puddle. This should be ¼ " to 3/8" of a inch. Practice holding it up to a piece of material of the same thickness to get a good visual picture. It is very important to maintain this distance when welding because, along with your wire feed speed, it controls the welding amperage. If you go closer, the amperage goes up. If you pull back, your amperage will go down. Your voltage controls the heat and the arc length.

There are 3 types of metal transfer. This is the way the metal melts off the end of your wire. They are, short circuit transfer (sometimes referred to as short arc), globular transfer and spray transfer. It is important to know all these and that they are controlled by wire diameter, voltage settings, and shielding gas. To keep it simple, for now, we will concentrate on the short arc because that is what is happening for us.

Polarity is the direction the current flows when we weld. We weld with DC current, in this case, reverse polarity. Which means the current travels from the welder, through the ground, into the part and across the arc gap, into the wire. A droplet of wire melts off and is deposited into the puddle. This happens between 20 to 200 times a second depending on settings. Your welding gun should be on the + lug on your machine and your ground on the - lug. Herein lies the most common problem I see with beginning welders. The machines that come from home centers are set up to run self shielded wire (instead of shielding gas), which means they are set up to run straight polarity. Often when people need help, it is when they are switching over to hard wire and don't know to change the polarity of their machine.

Since we are talking about self shielded wire let's look a pros and cons. The pros are portability and

being able to weld in a windy environment. The cons are more spatter, more skill is required to weld out of position, and larger diameter wire is required to get the same size weld. For example, if you are running .023 hard wire you would need to run .035 flux cored wire to get the same deposition rate.

So, now you are up and running, I hope. When welding you must be able to see. Keep your lenses clean and get cheater lenses (magnifiers) if you need them. You can't make a good weld if you can't see what you are doing. "Let the force be with you" does not apply here.

Let's discuss welding technique and what we should weld with our 110 MIG welders and what we should not. Unless you are a seasoned welder, you should not weld anything over ¼ thick and nothing that someone's life depends on, such as, trailer hitches and automotive suspensions. Even if you are a seasoned welder, there are almost always better choices.

Weld vertical up when strength counts. Remember, when you weld vertical down it might look pretty, but the penetration and strength in the throat of the weld are not there. Concentrate your wire on the leading edge of the puddle. Wire concentration in the middle or in the back of the puddle will lead to lack of penetration or cold lap as it is commonly called. When welding thicker than 16 gauge manipulate or oscillate your welding gun like a small cursive e, or in and out; back and forth. I am sorry I don't have the ability to draw in this article. It probably would make more sense. Above all, practice, practice, practice.

Hopefully, this will help you in your welding needs. If you need help or have questions please feel free to contact me. Remember a "Beautiful Weld" is a good thing. It does not always have to be ground off, blended, or hidden just because it is an electric weld.

hhilborn@aol.com

Article courtesy of the Arizona Artist Blacksmith Association, Anvil's Horn January 2010 - Editor

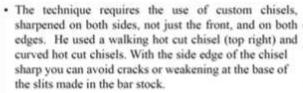
#### Blacksmith Week Demonstrator Roberto Giordani Tool Building and Sculptural Flower from One Piece

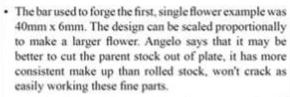


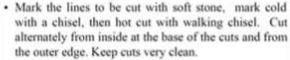
Roberto demonstrating with the translation assistance of Bruno Donati, friend & photographer.

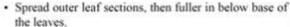
Roberto Giordani, all the way from Mercato Saraceno, Italy, demonstrated three mornings in a row for all who attended Blacksmith Week. After his demo each day he gave an afternoon hands-on class for 8 fortunate students.

Roberto demonstrated the techniques he learned from Angelo Bartolucci, his teacher and master blacksmith, forging a stem with leaves and a flower from one piece of bar stock. The photos in this article illustrate the process described.













Sketch of chisel tip view, without and with sharpened edges.







Hot Iron News Page 23 2015-3

#### Blacksmith Week Demonstrator Roberto Giordani Tool Building and Sculptural Flower from One Piece

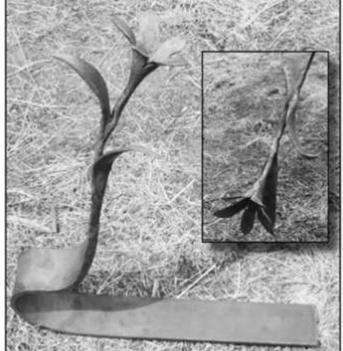






- Flatten by hammering on edge and spread leaves with cross-peen perpendicular to the stem.
- Cross-peen flower section, spreading at the top. Mark cuts in flower to form the petals, and hot cut.
- Knock off the corners of the petals, file off any rough edges, then flatten and flare the ends of the petals. Decorative lines were forged into the underside of the petal.
- Roll flower hot into a cone, tight at the bottom and more open at the top, then shape the petals to a gentle flare.
- Finish the leaves, spreading at the base adjacent to the stem as much as possible, thinning the leaf and enabling the leaf to wrap around the stem in a more natural manner.
- · Fine tune the flare of the petals and leaves.
- In this demo example, the end of the bar was bent into a curved base.

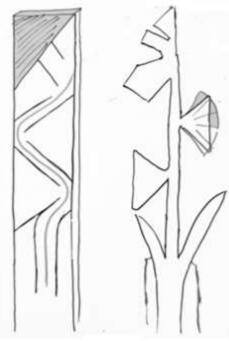




Hot Iron News Page 24 2015-3

# Roberto Giordani Sculptural Flower from One Piece

#### Multiple Flowers On One Stem



- The complexity of the cut-out pattern increases with the number of flowers.
- The above left drawing illustrates the cut pattern: top corner cut completely off, dark lines are cuts, the grey line follows the stem
- Photo above: Bar with cold chisel marked cut pattern.
- The drawing above right represents the desired breakout and alignment for the stem, 2 leaves, 3 flowers and buds at the top.
- Roberto used his small hardy anvil and peen side of the hammer to forge on the tight, hard to get at inside edges. Use whatever tools necessary to develop the stem, flowers and leaves.







31





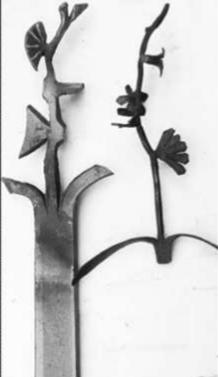
#### Roberto Giordani Sculptural Flower from One Piece

#### Multiple Flowers On One Stem



The stem, leaves and flowers are developed in the same way as shown for the single flower.





#### Roberto Giordani Hands on Workshop

Eight students signed up for this great opportunity to learn directly from Roberto. As is often the case, the demonstration looked easier than it proved to be, the hands need a lot of practice to produce what the mind can conceive. As Roberto so eloquently put it, "Seeing is easy, but doing is hard."

The class began with forging the chisels essential for the precision cutting of this project. When their chisels were ready for use the students proceeded onto the Flower from One Piece of steel project, some attempting the single flower version, others with more confidence began with the more complex multiple flower stem. The projects were completed to varying degrees, with most going home with more to do to perfect their flowers.



The small hardy anvils were essential for this project, Roberto brought with him a set of 6 of them for the hands-on class to use. Three of them will stay at the Blacksmith Shop at Summit Camp, and three are being sent to Michael Bondi's shop in California where Roberto was hosted for another workshop the week before Blacksmith Week. THANK YOU ROBERTO for the generous donation to the Blacksmith Shop at Summit Camp.

Find out more about Roberto Giordani online: WWW.ROBERTOGIORDANI.COM

Roberto also heads the international art academy **Arts Factory** where artists can learn sculpture, blacksmithing, ceramics, design, and more. WWW.ARTSFACTORY.EU

Page 26 2015-3



# Four Days with Mark Aspery...

Mark Aspery returned to Nemo, Texas this year for the second hands on clinic hosted by Saltfork member Ron Stafford at his home/shop. I was fortunate enough to attend the first clinic last year as well as this one and they were definitely time well spent.

The day before the actual clinic, Mark started off with a half day demo of his miner's candlestick at Brookhaven Community College north of Dallas. Several of us attended this demo on our way down to the actual clinic. Mark kicked off the demo as "desert island blacksmithing" since his shipment of tooling had

gotten misrouted to oblivion. The silver lining for the attendees of the demo was that we got to watch Mark make the required tooling on the spot and he extended the planned half day demo to late afternoon in order to finish the candlestick project.

Mark started by hand forging bottom swages with the assistance of our own Byron (Korny) Doner as striker. Then he forged and heat treated his signature style of hot slitting chisel from sucker rod and delighted the crowd by rapidly cold cutting about a 4" length of some 1/8" scrap sheet steel in the post vice (with no ill effects to the chisel).



Mark Aspery style hot slitting chisel forged and heat treated at the Brookhaven demo



Cold cut about 4" long in a scrap piece of 1/8" sheet steel to demonstrate the toughness of the newly forged slitting chisel.



Mark showing the intermediate progress of the miner's candlestick with upset areas that will become upset square corners later on.

Mark also forged a slot punch and drift then demonstrated several fine points of their effective use to make holes in square bar stock.

The methods for forging the Aspery slitting chisel, slot punch, heat treating, and



Mark finishing up the miner's candlestick demo.

making the bottom tools can found in Mark's first book "Mastering the Fundamentals of Blacksmithing." (The skills of a Blacksmith Series Vol 1). There are three books in the series. In my opinion, anyone interested in learning both the fundamentals on a solid level and taking their existing skills to the next level should consider these great resources for their library.

After finishing the tooling and providing some theory on forging the candlestick, Mark proceeded with the step by step process for forging the individual elements including some upset square corners.

This project is outlined in the Winter 2015 Issue of ABA-NA's Hammers Blow (Vol 23, #1). Victoria Patti also has a very helpful series on this project where she

interviews Mark on the detailed steps involved and why they are done that way. Refer to her website www.blacksmither.com and click the podcast tab. There are four modules on the candlestick project.

The finished candlestick tapped into the anvil block. Notice the upset corners where the bend comes together.

After the demo concluded, it seemed like everyone leaving to attend the clinic had their own traffic adventures getting out of Dallas. I, for one, was

very happy to get closer and closer to Nemo where the population density started to drop to more familiar levels. Ron and Kathy Stafford graciously opened their beautiful



The blown over beveled leaf scroll from the ABANA National Curriculum Grille Project

home and shop to the clinic attendees and most of us setup our forge stations that evening to start bright and early the next morning. The "theme" for this year's clinic was learning to handle some of the trickier elements of forging the ABANA National Curriculum Grille project.

We started with a warm up project doing the blown over beveled leaf scroll and water leaf element that is welded onto the grille when completed. There are several tools required to complete this project including a leafing stake and a leafing hammer. Since we were tasked to make these tools as well, we also had to make the slitting chisel and small and large eye drifts. All of this is in keeping with the fundamental traditions that blacksmiths can make most of their own tools and with Mark's philosophy that doing so improves your skill set.

Most of us were more than happy to make tools required to make other tools required for the final project. And Mark explained that in the European Journeyman evaluations, you would be required to produce the tooling used on your project.



Ron Stafford cutting sucker rod for the small hammer eye drift



Mark giving a practical lecture on heat treating forged tools



Mark forging the large hammer eye drift from a Klein Bullpin



Mark showing the intended shape for the large hammer eye drift



Mark slot punching the leafing hammer eye



Gerald Franklin working on the leafing hammer



Mark Carter hot rasping the leafing hammer face

Mark is one of those rare smiths who not only know how to move hot metal with a clear purpose and without any wasted motions, he is also an excellent teacher.

His approach was to first show us exactly how to do the task at hand then send us to our forges to repeat what we just learned. Invariably, what was absolutely clear in the demo turned into a lot of detailed questions when we put the ideas into practice. Hence the follow up demo by Mark in which we knew a lot more about what specifics each person needed to really pay attention to. It is a system that seemed to work very well. And Mark is always available during the hands on forging to answer individual questions and lend a hand when anyone became stuck.



Examples of the beveled leaf demo repeated a few times for the class



Mark drawing out the cheeks of the leafing hammer





Mark forging a bottom tool blank in an upsetting block

LEFT: The forged leafing stake which is placed in the hardy hole and used with the leafing hammer to crimp the water leaf element



Starting to make the "die" shape for the forge welded grille collar tool which will be "set in" to the bottom tool block.



Starting to rough out the depressed form in the bottom tool. This tool is used to form the round collar forge weld on flat tapered stock in the grille project.



Attendees of the 2015 Aspery Clinic

Ron Stafford and Kelly Kring (full time blacksmith and part time blacksmith instructor at Brookhaven Community College) were also available to lend assistance as needed. Basically everyone seemed comfortable and productive no matter what their current skill level was coming into the clinic.

Though nothing can take the place of one on one coaching with Mark, you can find more information on a lot of what we worked on in his three books.

Details of the National Grille project as well as the leafing hammer, stakes and other tooling required are in Mark's second book "Mastering the Fundamentals of Leafwork." If you buy them from www.markaspery.com, you can get them signed by Mark (or you can bring them to the next clinic and get them signed there.)

This year's clinic lasted three days and I think most of the attendees were capable yet sufficiently challenged at some point or another to have a definite improvement in their skill level. Most of the conversation at the end of the last day seemed to be geared toward returning next year.

Since most of us planned to show up next year anyway, Ron and Mark have already arranged next year's **Advanced Clinic** which will be themed "Tools that hold things and forge welding." The dates are set to be **October 30th, 31st and November 1st**.

There is also a new twist next year with a more **Fundamental Clinic** scheduled on **November 3 through the 5th** designed to allow more exposure to Mark's teaching for those with less experience. If interested, contact:

Ron Stafford at 209-610-3348 or hotshuz002@gmail.com

-Editor

#### SCABA Shop and Swap

#### For Sale:

6" round nosed pliers (great for putting scrolls on small items) \$5.00 each.

Brooms tied, \$20.00 on your handle Please contact me for help with handle length.

Contact Diana Davis at Diana.copperrose@gmail.com

#### For Sale:

24"(wide) x 1"(thick) Ceramic fiber blanket (similar to Kao-wool) \$1.00 per inch of length. Twisted solid cable 1/2" diameter \$2.00 per ft.

Contact Larry Roderick at 940-237-2814

#### Wanted:

Advertising Coal Hammers, Contact Mike George at 1-580-327-5235or o Mike-Marideth@sbcglobal.net

#### Club Coal

Saltfork Craftsmen has coal for sale. Coal is in 1-2" size pieces The coal is \$140.00/ton or .07 /pound to members .**No sales to non-members.** 

NW Region coal pile is located in Douglas, OK. If you make arrangements well in advance, Tom Nelson can load your truck or trailer with his skid steer loader for a fee of \$10 to be paid directly to Tom. Tom has moved his skid steer and must now haul the loader to the coal pile to load you out, hence the \$10 charge. You may opt to load your own coal without using Tom's loader. The coal can be weighed out at the Douglas Coop Elevator scales. Contact Tom Nelson (580-862-7691) to make arrangements to pick up a load. Do not call Tom after 9 PM!! Bring your own containers and shovels. Payment for the coal (\$.07 per pound) should be made directly to the Saltfork Treasurer.

**NE Region coal location: Charlie McGee** has coal to sell. He lives in the Skiatook, Oklahoma area. His contact information is:

(home) 918-245-7279 or (cell) 918-639-8779 Please text his cell phone number if you would like to make arrangements to get coal.

**S/C region coal location**: Club coal is now available at Norman at Byron Donor's place. Call Byron to make arrangements to come by and get coal.

SCABA swage blocks \$150.00 plus shipping. (Same price to members and non-members.) Contact Bill Kendall for more information





SCABA Floor Cones are now available from Bill Kendall, Byron Donor and Gerald Franklin. The price is \$200 plus shipping and handling.









Show your pride in SCABA!

License plates for \$5.00 each.

We have a few caps for \$10.00.

We have SCABA t-shirts available. They are a grey pocket "T" with the SCABA logo on the pocket. Contact Diana Davis for information. The t-shirts cost \$15.00 ceach. Free shipping is you

information. The t-shirts cost \$15.00 each. Free shipping is you buy 2 or more. Add 2.00 for shipping of only one shirt. (Anything larger than 3X is considered special order and will take up to 2 weeks and will be at extra cost.)

#### SCABA Membership Application

January 1, 2015 to March 31, 2016

New Member	
Membership Renewal	

Please accept my application	Date:
------------------------------	-------

E-mail \_\_\_\_\_\_ ABANA Member? \_\_\_ Yes \_\_\_ No

I have enclosed \$20.00 for dues for the period ending March 31, 20 16

Signed:

Return to: Saltfork Craftsmen, 23966 N.E, Wolf Road, Fletcher, OK 73541

# Saltfork Craftsman Regional Meeting Hosting Form

Region\_\_\_\_SE\_\_\_NE\_\_\_S/C\_\_NW

Date: Month\_\_\_\_\_\_ day\_\_\_\_ [correct Saturday for region selected above]

Name

Address\_\_\_\_\_\_Phone/email

Directions or provide a map to the meeting location along with this form.

\*\*All meeting are scheduled on a first come basis. Completely filled out form <u>MUST</u> be received by Regional Meeting Coordinator no later than the 15th of the month <u>TWO</u> months **PRIOR** to the meeting month.

Completed forms can be mailed or emailed.

You will receive a conformation by e-mail or postcard.

A form must be filled out for each meeting.

If you don't receive something from the Regional Meeting Coordinator within 10 days of your sending in your request, call to verify that it was received.

An online form is also available on the website in the top banner of the Calendar Tab: www.saltforkcraftsmen.org/Calendar.shtm

Saltfork Craftsmen Artist Blacksmith Assoc. Inc. 23966 NE Wolf Rd. Fletcher, OK 73541

Non Profit Organization U S Postage Paid Oklahoma City, Ok Permit #2177

Address Service Requested

