Saltfork Craftsmen
Artist-Blacksmith Association
June 2020

COVID-19 for the Saltfork Gate Project
(Page 22)

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Editor's Notes:

I have a general rule of thumb that I try to follow of rarely putting any pictures of me or my projects in the newsletter. Mostly that is to avoid any kind of perceptions of excessive self promotion.

But as it turns out, it is not really a hard rule to follow. It seems like I spend much more time working than doing any forging at all. But I do want to apologize for breaking that rule in this issue with a full blown article and cover photo. But given the current state of affairs around the world, I just couldn't resist.

I don't know if anyone will be interested in my nonsense and I don't really expect anyone to duplicate the project. But I often look to the various how-to articles as useful for inspiration and generating new ideas for techniques that might apply to some completely different project. And I hope this one does that for someone.

I jumped into this project with little planning and just took a few photos with my smart phone. I left my good camera, tripod, etc. in the case on purpose.

I am always asking others to do this on the fly so I thought I would give it a go myself. To be honest, I started taking a few photos half heartedly "just in case." I really wasn't thinking seriously about doing an article. Then I thought if don't do some kind of article I really can't keep prodding everyone else for one.

-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.

Visit our Saltfork Craftsmen Website:
www.saltforkcraftsmen.org

President's Notes:

Hello everyone. I hope everyone is doing well. I will be glad when things kind of get back to normal. I am sure every one will be too.

The NTXBA is trying to get the ABANA Conference in their area for 2022. That would really be nice for our club to attend and it will be closer to home than most of them have been for several years. The NTXBA has contacted us to see if some of us would help them so you might keep that in mind if you are interested in helping.

I am still plugging along in my shop and not getting much made. I really miss seeing my fellow smiths. I try to call someone about two times a week but its not like actually seeing everyone that I can.

I have had people calling from other states looking for coal. I have been told that a lot of mines have closed. The mine we use is also closed they tell me that they plan on opening the middle of June.

At this point our conference is still set to go on. We haven't had a board meeting lately because of this virus but we plan to as soon as we can. I don't think we will have a problem staying far enough apart.

We would like your input on anything that might help make our conference better. Any ideas would be welcomed.

Keep your anvils clean. Thanks, - Mandell

All Regional Meetings are Free to Attend and are Always Open to Any Member or Guest…

New to Saltfork or just want to check out Blacksmithing but don't know where to start? These meetings are a great place for new members or guests who just want to see what it is all about to come network with like-minded people. If you want some pointers on how to get started, there is always someone happy to help get you started hammering. And guests are always welcomed.

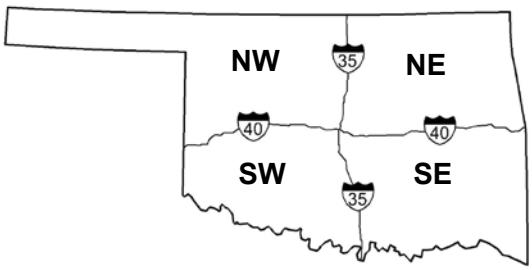
Want to host a meeting? The meeting hosting form can be found on the last page along with membership application form. If you want to host a meeting in any area, please fill out one of the host forms on the website under the calendar section or in the newsletter and e-mail the information or mail the hard copy form in as soon as possible. If you mail a form, please call or e-mail to verify that it is received. E-mail is the most convenient for me, but you can also phone in the information if you prefer. The sooner the meeting is scheduled, the more time there is to get the word out to potential attendees. -Russell Bartling 918-633-0234 or rbartling@ionet.net

What's My Region?

The four main regions are currently defined within the state by being separated by I35 and I40. (For example, the NW region is anything north if I40 and west of I35.)

All meetings are encouraged. These boundary definitions and regional meeting dates are a suggested framework to facilitate orderly meeting scheduling, planning and promotion with a minimum of overlaps and a maximum exposure to the greatest number of members. Not all meetings fit precisely within a rigid boundary definition and members in an area may want to hold meetings on a date that doesn't match their physical region or at a location other than their own region. This may be especially true in the center of state for areas that are close to the I35 and I40 boundary crossing. Special events such as shows, fairs, etc. may also dictate adjustments to the meeting dates within a region.

SCABA Regions



The regions are meant to be a simplification and clarification to the regional boundaries rather than a rigid restriction to any meeting scenario. ***Saltfork members all belong to one club.*** Regional boundaries are not intended to imply division within the club, but are intended to help spread distribution and promote monthly meetings.

Safety

Blacksmithing can be an inherently dangerous exercise. There is no substitute for personal responsibility and common sense and no list of safety rules can adequately cover every situation. Every person who attends a meeting, demonstration or event sponsored by the Saltfork Craftsmen Artist Blacksmith Association (SCABA) or its members does so at their own risk and assumes all responsibility for their own safety needs. The SCABA organization, its officers, members, demonstrators, volunteers and guests disclaim any responsibility for any damages, injuries, or destruction of property resulting from the use of any information or methods published or distributed by SCABA or demonstrated at workshops, meetings, conferences or other events. SCABA recommends proper attire and safety gear and standard shop safety procedures appropriate for blacksmithing and shop work during any event where blacksmithing and other related methods are involved. Safety attire includes, but is not limited to, appropriate clothing, eyewear, hearing protection, gloves, and face shields when appropriate. It is every individual's responsibility to provide for their own safety, to determine what safety gear is appropriate for each situation and to provide, maintain and use that gear as appropriate for each individual situation.

Around the State...

NW Region April Meeting: No Meeting was held.
NW Region May Meeting: No Meeting was held.
SE Region May Meeting: No Meeting was held.
SW Region May Meeting: No Meeting was held.

Due to the COVID19 safety directives, no regional meetings were held last month.

Coronavirus Safety Concerns/Event Cancellations:

With recent developments concerning COVID19, a large number of blacksmithing related events have been canceled for safety reasons. It will be more important than ever to stay posted with websites, social media, etc. and to double check before assuming events will be held.

-Russell Bartling, Editor

Membership Dues:

Thanks to Eric Jergensen, starting with April, **your membership expiration date is now printed on the back of the newsletter.** Memberships are no longer limited to the March to March duration but are a full year from the date of registration or renewal. So the back of the newsletter will now be a quick reference to check your renewal date. - Editor

2020 Workshop Schedule

Currently no workshops are scheduled.

Have an idea for a workshop or class? If you have an idea for a workshop that you would like to attend (or teach), please let the workshop coordinator know so that details for time and place can be worked out.

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

2020 REGIONAL MEETING SCHEDULE

NE Region (1st Sat)	SE Region (2nd Sat)	SW Region (3rd Sat)	NW Region (4th Sat)
Jan 4th (Open)	Jan 11th (Byron Doner)	Jan 18th (Open)	Jan 25th (Rory Kirk)
Feb 1st (Open)	Feb 8th (Byron Doner)	Feb 15th (Open)	Feb 22nd (Monte Smith)
Mar 7th (Open)	Mar 14th (Open)	Mar 21st (Bruce Willenberg) CANCELLED	Mar 28th (Mandell Greteman) CANCELLED
Apr 4th (Open)	Apr 11th (Open)	Apr 18th (SCABA Picnic) CANCELED	Apr 25th (Don Garner) CANCELED
May 2nd (Open)	May 9th (Open)	May 16th (Ricky Vardell) CANCELED	May 23rd (Terry Kauk-CANCELED)
			May 23rd (SW-JJ McGill Boy Scouts-CANCELED)
Jun 6th (Open)	Jun 13th (Open)	Jun 20th (Jim Obenshain **-CANCELED)**	**Jun 27th (Everett Timmons)**
Jul 4th (Open)	Jul 11th (Open)	Jul 18th (Open)	Jul 25th (Open)
Aug 1st (Open)	Aug 8th (Open)	Aug 15th (Open)	Aug 22nd (Open)
Sep 5th (Open)	Sep 12th (Open)	**Sep 19th (Ricky Vardell - JJ McGill - Sulphur Tractor Show)**	**Sep 26th (Ron Lehen-Bauer as Host - Don Garner as Contact Person)**
Oct 3rd (Open)	**Oct 10th (Conference Setup Work Day)**	**Oct 17th (Conference Weekend)**	**Oct 24th (Rory Kirk)**
Nov 7th (Open)	**Nov 14th (Bill Phillips)**	Nov 21st (Open)	**Nov 28th (Bob Kennemer)**
Dec 5th (Open)	Dec 12th (Open)	Dec 19th (Open)	Dec 26th (Open)

2020 Fifth Saturdays:

February 29th (Tong Making Class in Elk City - See Workshop Schedule)
May 30 (Open)
August 29th (Open)
October 31st (Open)

June 2020

NE Regional Meeting June 6th : Open.
SE Regional Meeting June 13th: Open.
SW Regional Meeting June 20th: Will be hosted by Jim Obenshain. **Meeting CANCELED.**
NW Regional Meeting June 27th: Will be hosted by Everett Timmons at the Route 66 Museum Blacksmith Shop in Elk City. (Pending open or closed status at the time and if meetings are no longer restricted at that time.) Lunch will be provided but please bring a side dish or desert to help out. The trade item is an egg spoon. (Everett says when you research this item it should be interesting and will be enlightening on what your work is worth.) Contact Everett at 806-930-0052 if you have questions.

July 2020

NE Regional Meeting July 4th: Open.
SE Regional Meeting July 11th: Open.
SW Regional Meeting July 18th: Open.
NW Regional Meeting July 25th: Open.

Correction:

In the May 2020 Saltfork Newsletter, there is an error in the storyboard for Eric Jergensen's Timer Knob Article (Page 19.) The intermediate steps are out of order:

Timer Knob From 3/8" Rod

2020 Saltfork Conference Demonstrators

The 2020 Saltfork Conference demonstrators have been selected. Based on demonstrator availability and an online member voting survey implemented by Saltfork Director, Eric Jergensen, this year's demonstrators by popular demand are:

Brent Bailey
(California)

Joey Van Der Steeg
(Netherlands)

J.J. McGill and Eric Jergensen have arranged commitments from both demonstrators for the Conference.

As with recent years, both demonstrators will remain after the Conference for workshops with a limited number of participants.

Details of the Conference demonstration and workshop topics will be posted once they are arranged. Stay tuned for more information in upcoming newsletters.

If you are not already familiar with these demonstrators, they both have a strong You-Tube presence. Just look them up by name.

UPDATE: At the present time, the Saltfork Conference in October is on with no plans of canceling. Hopefully, October is far enough out to be unaffected by the Coronavirus. If conditions change, updates will be posted as soon as possible. - Editor

Where is YOUR Part of the Saltfork Gate Project?

This is a community project that is open to all Saltfork members. The project is a four-foot-high by sixteen-foot-long gate to be displayed outside at the Route 66 Blacksmith Shop Museum at Elk City.

Secure your place in Saltfork History FOREVER!*

**(This statement has not been verified by God, Mother Nature, Father Time, Current Scientific Understanding of Metal Oxidation, or the Elk City Museum Management. But probably for a long, long time at least. - Editor)*

Participating members will be given a steel ring that can be filled with any (family appropriate) forged work that will fit in the ring and be permanently attached to it.

Mandell Greteman is coordinating the project and will provide the standardized rings. All of the rings will be provided to ensure they are a standardized size. Once the projects are returned, Mandell will weld them into the gate to be displayed at the museum.

You can submit multiple entries if you would like. If the gate fills up and we have extra entries, we can do additional gates.

Your Facebook post will most likely be forgotten in two days but daily visitors from around the world will see your gate project for years at the Elk City Museum. Don't forget your touchmark!

Contact Mandell if you have any additional questions or to find out where to obtain one of the project rings: **Mandell Greteman 580-515-1292**.

Member Gallery

The Latest Get Project Submission by Gerald Franklin
(Norman, OK)

My third ring for the gate project. It is all mild steel and textured on the power hammer. I used different thicknesses from 1/8” to 3/8”, stick welded from behind with “gorilla welds” (ugly but strong.) Back side is covered with a piece of 16 gage plate that covers the uglies. - Gerald

Member Gallery (Continued...)

Spatula by Everrett Timmons (Borger, TX)

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Multi-Position Bending Fork

Text and Photos by Jim Carothers

For quite some time I've been noticing that many farriers are also really good blacksmiths and that some of their tools are special or different for their work. In particular, some of the farriers' anvils have two really handy bending pins (like a bending fork on its side) sticking out from a side of the anvil.

At the 2005 Saltfork Craftsmen ABA Annual Conference (http://www.saltforkcraftsmen.org), I also noticed that professional demonstrator Peter Happny repeatedly used a heavy bending fork mounted in the anvil hardie hole. However, Peter's bending tool was not pinned solidly to the borrowed demo anvil; each time he hit or pulled on a piece of metal the bending fork would move.

Photo 01: From these observations came the idea for the Multi-Fork you see presented here in these notes. This is simply a combination of the farriers' horizontal bending pins and traditional anvil mounted vertical bending fork. I turned the legs of the vertical fork 45 degrees to the anvil center line; it seems to be handy for me in that orientation. My cut-off hardie is also rotated the same way as this bender.

As old as the blacksmith's craft is and as new as I am at this craft, I expect that I am not the first person

Photo 01: Multi-Bending Fork

to think of making a bending tool like this. The pins are spring steel; the inside spacing between the legs of both forks is 1". The pins are not heat treated – only annealed after forging to shape. The parts were preheated before welding.

Notice also in Photo 01 the tapered pin lying on the anvil. This was made from 1/2 of a horseshoe (my favorite piece of scrap steel).

Photo 02 shows the Multi-Fork firmly pinned to the anvil. With only a light hammer tap on the tapered pin the tool is locked in the hardie hole. You can turn the anvil stand over before moving the tool.

Photo 02: The Multi-Fork Secured in the Hardie Hole with Tapered Pin

Photo 03 shows how the pin is used with a hardie stem or peg made from
U-bending basic flat bar stock. For my tools that I want firmly mounted to the anvil (anvil cone for example), I have been making the hardie stems in this manner. A second benefit is that the tools are lighter than if the hardie stem was solid bar.

Photo 04 shows the end of the U-shaped hardie stem and the tapered pin as seen from the underneath side of the anvil heel. I really like this old Trenton anvil, but the factory did not do any finishing work to the under sides of the heel or the horn.

Photo 03: The Hardie Stem and Tapered Pin

Photo 04: The Hardie Stem with Tapered Pin in Place

Shop Made Centering Head

Text and Photos by Jim Carothers

The idea for this centering head is not original to me; I think I saw something similar on a woodworking site several years ago. Today I needed a centering head and decided to take these photos:

ABANA Raffle

Artists Blacksmiths Association of North America | FUNDRAISER

Thu, April 30, 2020 @ 12:00 PM — Sat, August 01, 2020 @ 07:00 PM

BAM box -Pat McCarty

100 lb. rebuilt Big Blu

240 lb. Peter Wright
-Richard Wright

BAM box tools/items

1. Matt Parkinson

2. Sam Perakis

3. Jonathan Nedbor

4. Ellen Durkan

5. Mark Aspery

6. Derek Heidemann

7. Dana Flanders

8. Kelly Kring

9. Bob Compton

10. Dick Sargent

11. Jordan LaMothe

12. Mark Aspery

13. Bob Valentine

14. Dennis Dusek

15. Steve Gurzler

16. Nick Downing

17. Bob Menard

18. Gaylan Veater

Due to COVID-19 we were unable to have our ABANA 2020 Conference but we still have our raffle items. Help us rise from the ashes by purchasing raffle tickets for these great prizes.

Tickets are $10.00

At press time, only 40/2000 tickets remain available.

Purchase by July 31st.

First prize:
BAM box filled with tools made by prominent smiths

Second prize:
Re-built 100 lb Big Blu air hammer

Third prize:
240 lb Peter Wright anvil

My Favorite Tongs

By Steve Anderson, a MABA member

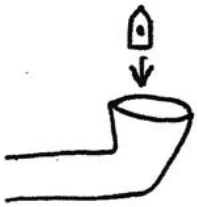
This article is reprinted courtesy of the Michigan Artist Blacksmith Association "The Upsetter" newsletter May-Jun 2020

My Favorite Tongs are a unique design which allows forging a larger bit with less work to draw out the reins. They are extremely versatile and their light weight makes them feel like an extension of your hand.

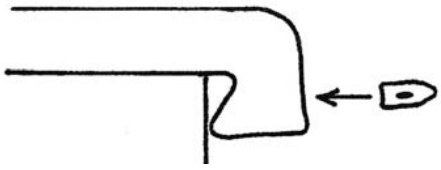
Stock Size	Stock Length (2X*)	Rivet Size	Bit Drill Size
3/8" round	**11" (22")**	**3/16"**	**3/16" or 1/4"**
7/16" round	**12" (24")**	**1/4"**	**3/8"**
1/2" round	**13" (26")**	**1/4"**	**7/16" or 1/2"**

**cut the stock twice as long and forge bits on both ends, then cut in center to avoid having to use tongs.*

Bend the stock up 90 degrees. Bending 3/4" of an inch for 3/8" stock and 1 inch for other dimensions.

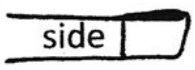


Upset.

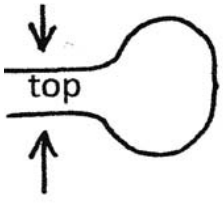


Square up bit ends.

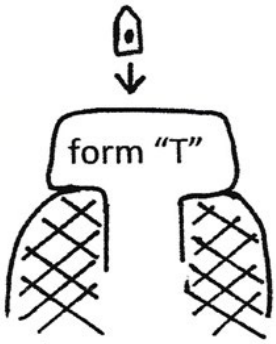
Repeat upset and square steps to drive bit end further down to almost as thick as stock, keeping it square.



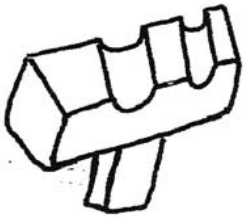
Forge upset down to stock thickness at welding heat.



Slightly flatten sides.

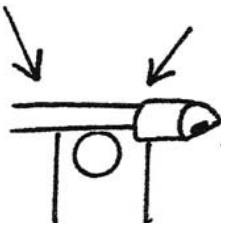


Form "T" in post vise, then square ends on anvil.

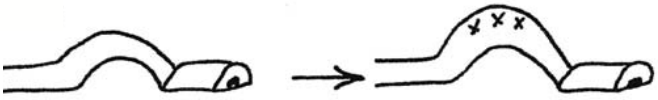


Round the bits in a swage.

Drive a 1/4" rod into the ends to form a groove.



Form an arch by hitting alternately on both sides of the horn **NOT on top**.



Spread pivot point with ball pein, and then re-flatten.

Draw out reins to length and align as shown above.

Slit and drift rivet holes and drill to size.

Assemble with a temporary bolt and set bits, offsetting them as shown.

Grind bits to match, and then hold in vise just behind the pivot with a thin spacer. Hold bits together with vise grips and drill hole for bit size from chart.

File grove in bits to taper back and soften edges.

Reset bits if necessary, finish with a file, and rivet.

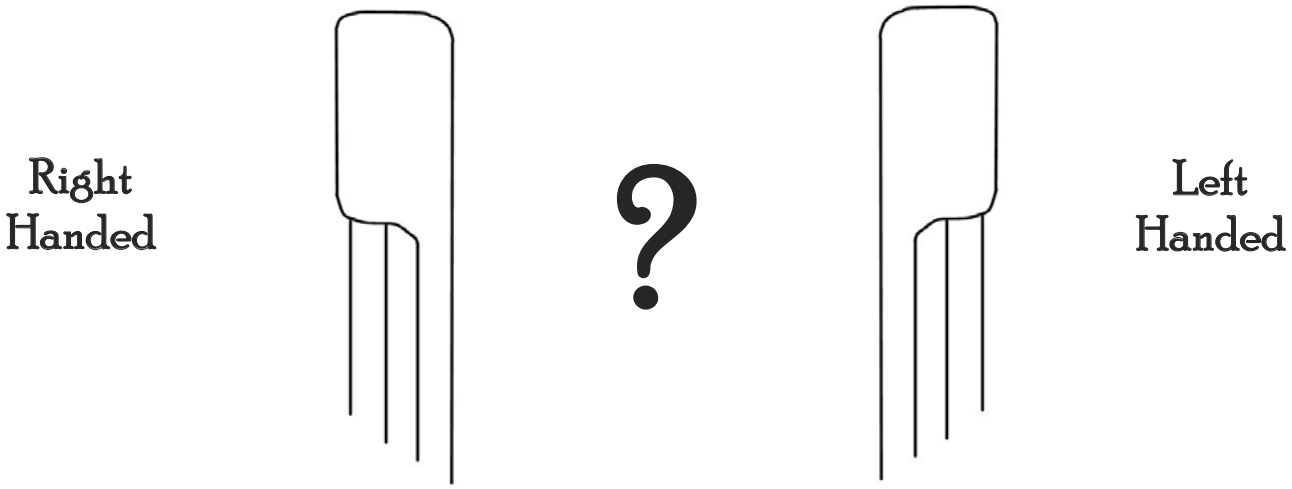
Hold odd shapes easily and function as pass through tongs.

Hold any shape of stock firmly.

Works well as bolt tongs.

Excellent for forging rings and chain making.

Two pair can be used as bending forks.



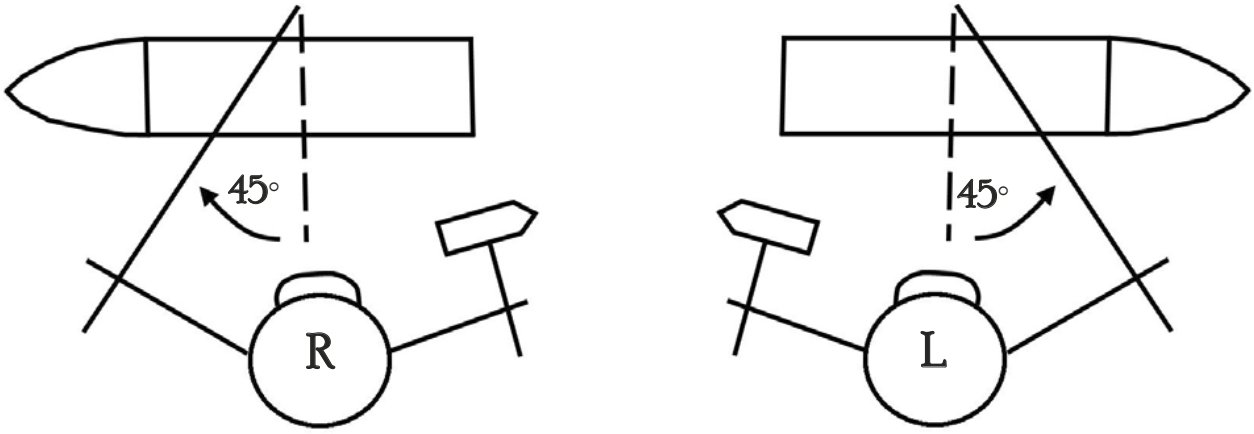
Handed Tongs

By Steve Anderson, a MABA member

A blacksmith holds his tongs in his dominant hand to pick up steel, place it in the fire, and remove it.

He only puts his tongs in his non-dominant hand to hold things while he hammers. since the opening and closing is done primarily by his dominant hand, a right handed smith prefers right handed tongs whereas a Southpaw prefers them left handed. In both cases the bottom tong rein is on the outside, making it easier to reach with his hand.

When teaching students to make tongs, there is a simple way to instruct them. They first forge a flat bit holding their steel in their non-dominant hand. Next all they need to do is move their tong piece AWAY from their body 45 degrees to forge the offset. This is why a right handed smith will automatically, without thinking, forge right handed tongs and vice versa.



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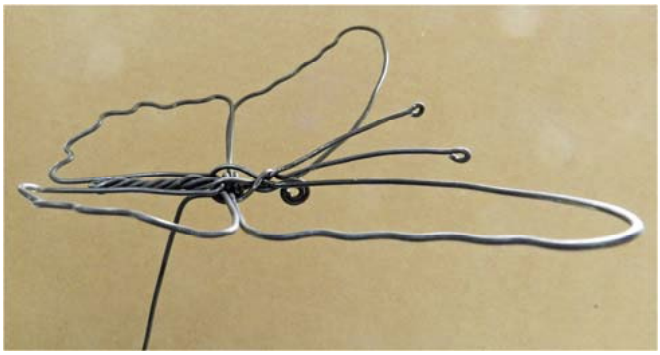


Wired Butterfly

By Steven Spoerre, a MABA member

A wire butterfly with stake, antennae and proboscis.

This could be an exercise in spatial relations. Generally the top pair of butterfly wings are larger/wider than the bottom pair. A lobed shape, with or without a "wiggle" will look like a butterfly if the proportions are right. If you want a particular butterfly... then you have to be more exact with the outline.

Draw a wing outline so the bent wire can be compared/ matched to it.

Pick a wire gauge that compliments, or is proportional to, the size of the profile (16 gauge tie wire was used for the butterfly pictured and has a 6 inch wing span). Tie wire is easy to bend and gets you through the bending process. The smaller the wire gauge number is, the larger the wire diameter, and the harder it will be to bend and twist it. For 9 gauge you'll need a torch. For safety sake, put a little curl at the end of the wire, or use some masking tape to cover the sharp ends.

Estimate how long the wire needs to be for the wings, and how long the stake will be. Allow 4 - 6 inches for the proboscis and add it to the stake length. For the 1-1/2 inch abdomen in this example, 48 inches of wing wire is doubled over, but the more complex the wing design, the longer the wire needs to be. It's also better to trim the ends when the butterfly is done, than to come up short.

Double the wires over, but not tightly, and put them together at the bends – oriented 90 degrees to each other.

Make a convenience bend if needed, then use any kind of clamp or pliers (round nosed or scrolling pliers work best) that won't mar the wires, leaving 1-1/2 inches from the end exposed.
Twist the 4 wires together to create the abdomen, when done, straighten all 4 wires parallel to the abdomen.

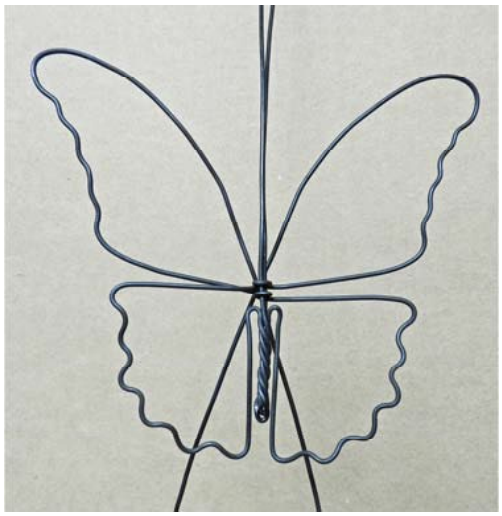
Leaving the stake and proboscis wires parallel to the abdomen, bend the 2 wing wires back, along the side of the abdomen.

Just beyond the end of the abdomen, and taking care not to cross the wires, bend the 2 wires at the same time above the abdomen, to the shape of the lower wings.

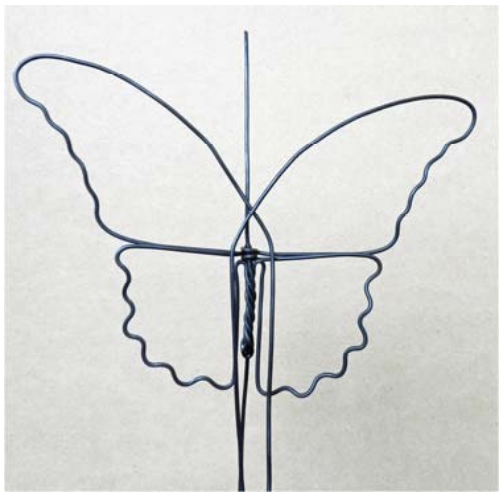
-End view

When the wing design is back to the top of the abdomen, bend the wires back in, and wrap around the 2 center wires 1-1/2 times.

Form the upper wings together, ending back at the abdomen.

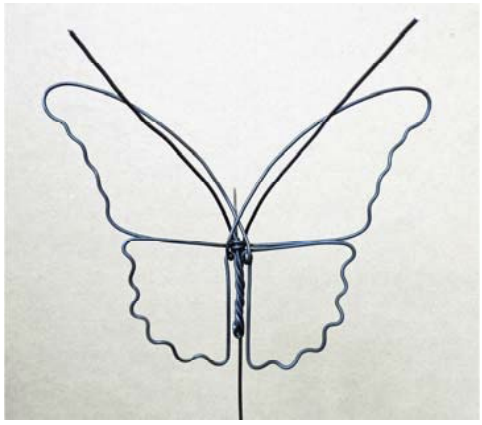


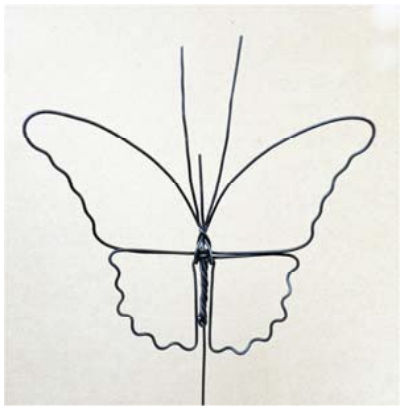
Fold the wings flat with the abdomen.



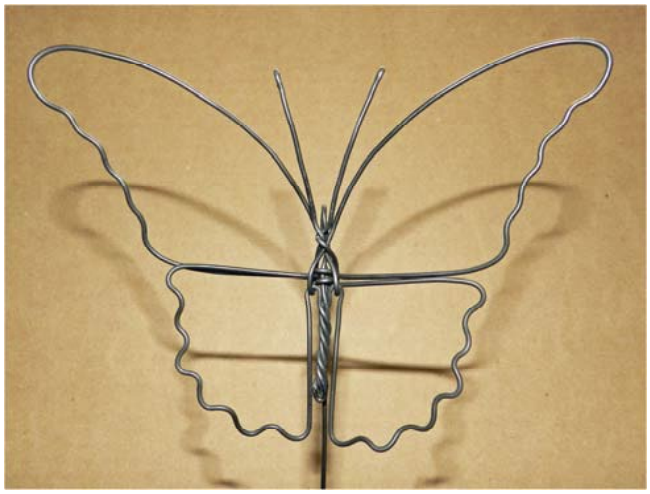
Bend the stake down under the abdomen and bring the loose/free ends of the wing wires to the top of the abdomen.

Pass one of the wing wire ends around the lower wing on the opposite side of the abdomen. Repeat for the other side. Pass the wire ends through the upper wings, so the ends are above (on top of) the wings.





Cross the ends tight by the wings and twist them together to create the antennae.
Trim the proboscis about an inch from the antenna twist.
Curl the proboscis under the head and put loops on the ends of the antennae.
Bend the stake 90 degrees down under the abdomen.
Contour the wings and antennae into gentle curves to give the appearance of floating.



This article is reprinted courtesy of the Michigan Artist Blacksmith Association "The Upsetter" newsletter May-Jun 2020

COVID-19 for the Saltfork Gate Project

By Russell Bartling

The Finished COVID-19 Project

This project was kind of a spur of the moment attempt at making an entry for the Saltfork Gate Project. Given the current focus of the entire world on the COVID-19 pandemic, it seems to be a relevant subject. I doubt that the actual virus looks anything like what I made here but I tried to stay true to the first image that I remember which seemed to be everywhere when the pandemic concerns were mainstream news. I guess this is my interpretation of an artist's interpretation of the real virus.

This isn't really the type of project I am normally drawn to, so it was a little different approach overall for me. I started out with only a general idea and not too much planning (other than it had to fit in the standard 10" diameter gate ring.)

I started with the ball, or body, of the virus. I wanted it to be a little heavier than it probably needed to be, and I found the material I had on hand was either too thin or too thick to satisfy me. I found a scrap of 3" pipe that was perfect for the purpose with a little more than 3/16" wall. It was even better since the inside of the pipe was heavily pitted and corroded. I thought that texture would be nice for the outside surface and save me a lot of work trying to artificially create that texture. I knew I would lose a lot of it during dishing, but I hoped with careful heat and hammering, I could keep a lot of it.

I marked the pipe for cutting to length and then cutting in half to get two equal squares after flattening. They turned out to be 4 3/4" square. The two

The Scrap Pipe Used for the Virus Body

The Pipe Cut in Half for Flattening

cut halves were no problem to flatten cold. After flattening, I marked out the circumference on each one and cut. I did all the cutting with a 4 1/2" angle grinder which worked very well. I was careful to keep both circles as close to the same dimensions as practical since I wanted to minimize any variations that could come back to haunt me later when joining both halves.

Flattening the Pipe Halves to Make Material for Dishing

Cutting the Circles with C-Clamp Held in Post Vice

I used a C-clamp held in an outside post vice to hold the material for cutting the circles. Then I

The Circles Ready for Dishing - Outside Face Up

made a quick first pass at dishing cold just to get a start. The Saltfork Swage Block was a tremendous asset for this dishing process. I found that two dish forms in the block worked perfectly for the size I was after. I used a regular ball pein hammer to start the dishing process.

First Pass of Dishing with the Saltfork Swage Block

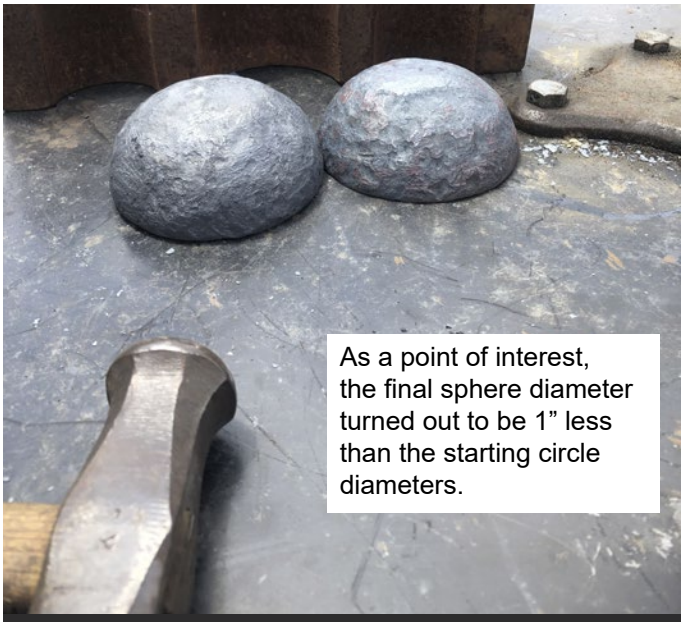
On the following passes of dishing, I heated the halves in the coal forge and started sinking in the larger form on the Swage block. I started hammering from the center of the dish and worked outward in a spiral pattern until I could feel the dish start to bottom out in the large form. Then I switched to the

smaller form which was a closer match to the final radius of the ball. It took about three passes working hot from the center out until I got the two halves dished deep enough to make a true sphere. I used more than one heat in some cases and tried to true up any irregularities at the end of each pass to keep as much order as I could.

First Pass of Dishing with Heat

Second Pass of Dishing with Heat

As the dishes got deeper, I used a deeper rounding hammer to get into the center and I matched each half to make the diameters line up. By keeping symmetry all along the process, it only took minor adjustments to get a good match at the end.



Final Pass on the Left, Right Half Needs More Dishing

The next process was to make the "spikes" for the virus. I used 3/8" rod and forged a small head structure with a rounded neck. Everything was done by eye and I tried very hard not to over think it. I specifically tried to remind myself not to overdo it on the finish. I wanted to make each one a little rough and keep some hammer marks. I wanted to keep and organic feel and show enough imperfections to make it look right.

I wasn't sure how many spikes I would need and estimated around 24 should be close. I forged 26 to have a couple of extras (actually 27 if you count the one that fell into some kind of space-time vortex in the coal fire and was never seen again.)

The Forged "Spikes"

I started to forge small tenons on the base of the spikes so they could be riveted to the sphere but I ended up grinding them later.

For placing the spikes, I again tried to keep it somewhat random and tried to avoid too much regularity. Although the underlying placement was based on a fairly regular spacing. I ended up using 11 spikes on each half. I marked the locations by eye and drilled the mounting holes on the drill press.

Holes Drilled and Ready for the Spikes

I riveted the first few spikes as planned but quickly realized that it was very hard to keep them placed while riveting. Due to the irregularities (which I wanted) it made each spike sit better in a specific orientation. I ended up changing my approach and just oxy-acetylene welding the spike bases inside the spheres with a torch instead of peining with a hammer. That approach worked much better and really seemed to be just as fast. The first two or three welds looked terrible and then they started looking just a little better. Or maybe it was just that I had on clear safety glasses and forget to grab the tinted welding goggles. I welded all of the spikes in place prior to moving on to the support bar that secures the virus body to the gate project ring.

Spikes Torch Welded on the Inside of the Sphere

In hindsight, I wish I had given a little more attention to seating the spikes a little tighter against the spheres. A few of the spikes have a small gap which I really should have addressed.

In making the support bar, I wanted to have the year, 2020 included. That is so that many years from now anyone who has no clue what this thing is will hopefully connect the 2020 to the pandemic and maybe figure it out.

I used 1/4"x2" flat bar for the material. Again, I knew I was making more work for myself than was probably necessary but I wanted it to be sturdy in the ring. I started by finding a good font that I thought would lend itself to cutting around and printing two "20's" to place on the bar. I secured them with common rubber cement (a trick from Ernie Dorrill) which holds well, dries fast, but is fairly easy to remove when done.

Placing the 2020 Guides on the Support Bar

With the 2020 in place, I chiseled a guide mark around each number and removed the paper guides. That is when the real work of this part actually started.

The 2020 Marked and Ready for Cutting

I started by drilling around the numbers to remove as much material as I could by drilling and chiseling. I used a small drill bit (I think it was about 3/32") for most of it and used a larger drill bit for the inside curves where could. After drilling, it was fairly easy to chisel out the webbing between drilled holes and remove large sections of the bar.

Choosing the drill bit size is a compromise. The smaller the drill, the closer you can get to the work and deeper into inside corners. But you have to drill more holes. Drilling seems tedious but machinists say that drilling is the most efficient way to remove material. So get a sharp bit and don't think about it too much. Just "drill baby drill!" I also made a couple of cuts on each end with the angle grinder. Then started chiseling. Once the material was removed, the final step here was to use various files to smooth everything up.

Drilling to Help Remove Some Steel

The Drilling Done and a Couple of Cuts on Each End

Most of the Waste Material Chiseled Out of the Way

The Support Bar After Filing

I cut notches in to the inside edge of each sphere half to sandwich around the support bar and then made adjustments until everything mated up well.

The Support Bar Resting in the Notches

Before welding the halves together, I used a slightly domed support from the hammer end of a large drift pin and placed my touchmark on one of the sphere halves (heating the spot with the torch.) I chose to torch weld the sphere halves together because the torch was already out and ready to go and I thought it would also make a better blend with the other textures. I clamped the halves together with a C-clamp and used bailing wire for the filler rod.

The Two Halves Welded Together

Since I didn't want to the weld to show up, I wanted to make it match the rough texture of the sphere as closely as I could. I heated the completed weld with the torch up to just below welding heat and lightly peined all over with a small ball pein hammer.

The Weld After Peining (To Hide It)

The final step was to weld the support bar to the standard ring provided for the gate project. This was also done with the torch.

The Support Bar Torch Welded to the Gate Ring

I held off applying a finish for now since the project will be welded to the gate assembly.

I hope you find something helpful in this write up. (Maybe what NOT to do?) Or I at least hope you were entertained. - Russell

Large Rain Gauge

By Steven Spoerre, a MABA member

It seemed to be a good project to work on this Spring. They can be made as free standing or mounted to a fencepost or railing. The round glass gauges found in our hardware store came in two sizes – averaging .75 to 1 inch and 1.75 to 2.25 inches in diameter.

A stake mounted rain gauge will stand above the tallest flowers and can be easily moved.

Start by getting the rain gauge, then determine the length of stock needed. The gauge tube pictured is 1-¾ inches in diameter and 8 inches tall (the lip is 2-¼ inches in diameter). Find the circumference of the cylinder, and determine how far apart you want the hoops to be, then add up the lengths. Circumference + distance between + circumference + distance between + offset + height above ground + distance into ground.

Using ¼ inch stock, start by rounding up the stock end before making the top hoop. The stock can be wrapped around a pipe that's close to the diameter of the rain gauge, or by using an eccentric bending jig with an insert close to the gauge size.

Work the stock through the jig to form the top hoop and check for fit to the glass tube.

Put a 90 degree bend near the end of the hoop, then slip it over a bending jig. The jig is a pipe that's close to the rain gauge diameter and has two holes drilled through, so two bolts can be inserted and held in the vise jaws. Depending on the stock size a locking pliers may be needed to hold the stock against the first bolt.

Holder will now look like this

Put the holder back in the bending jig and make the second hoop. This project is being done cold, so a small diameter pipe is placed over the stock to keep the non-hoop area as straight as possible.

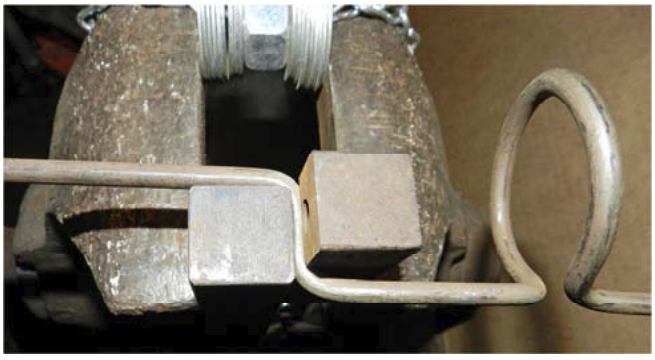
The finished second hoop

Put a 90 degree bend in the second hoop.

To make the short, tight bends under the rain gauge, I used a jig. It is made from two pieces of 1 inch square stock, is chamfered on one side, and will hold three sizes of round stock. One piece has clearance holes for the bolts, while the other has threaded holes. If you're going to make one, clamp a business card between the two pieces before drilling the three stock holes, so when tightened, the jig will clamp tightly against the stock.

The second bend is done first because the jig is wider than the offset. Note one of the bolts is removed so the jig can be clamped firmly in the vise.

To make the tight offset, the jig was taken apart and the piece with the groove and chamfer were placed into position, while the other half was replaced with a piece of 1 inch square and positioned in the vise. The rain gauge holder is then bent up over the stem.



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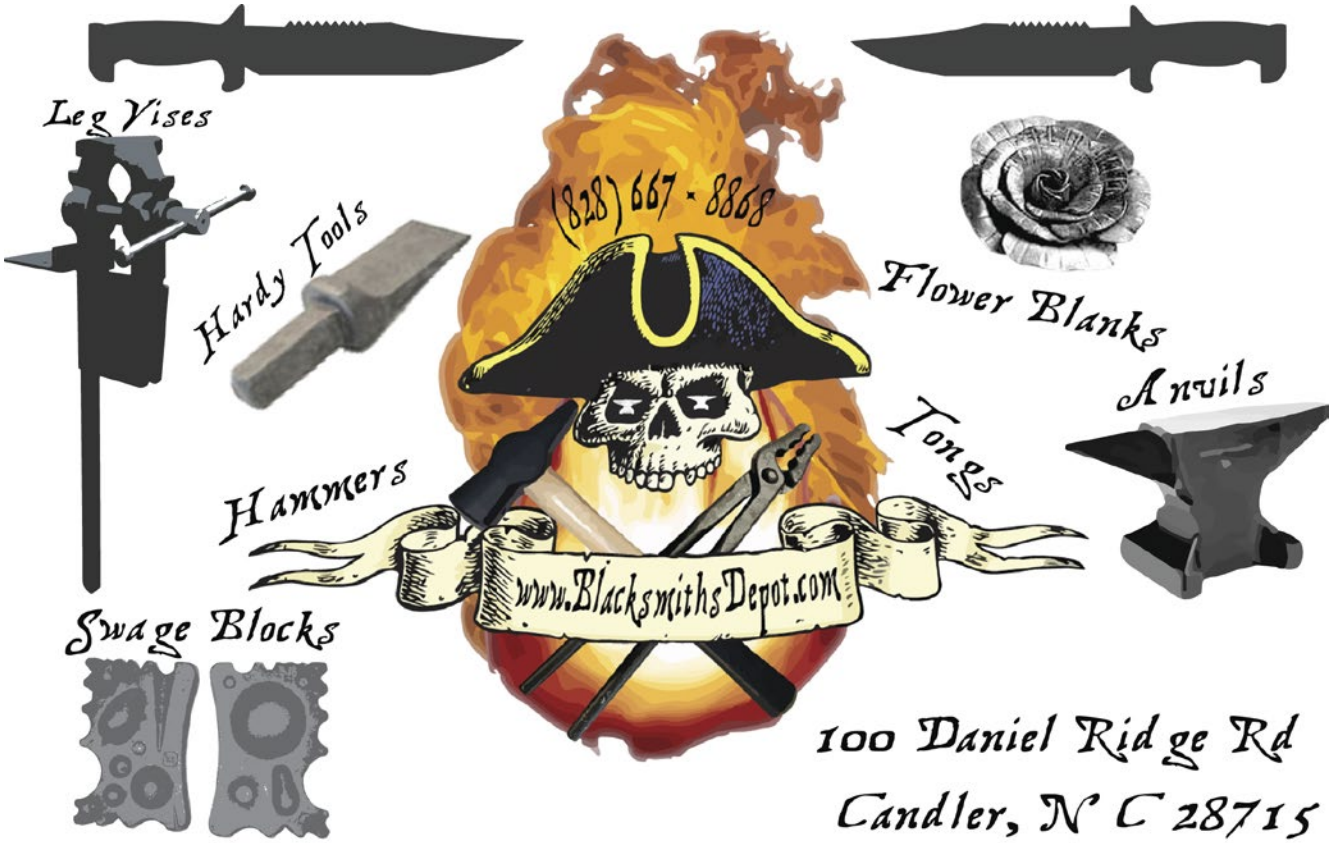
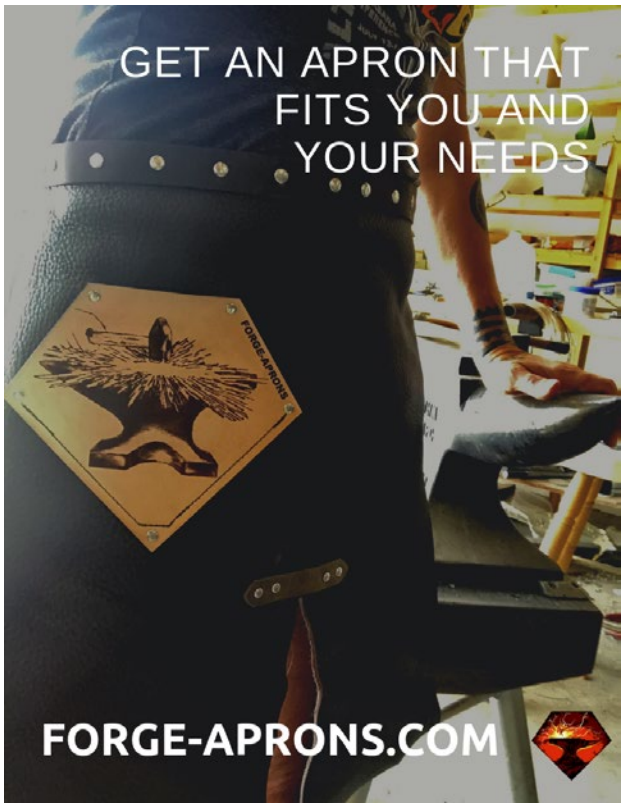
SCABA Shop and Swap



For Sale: 15 Lb Tire Hammers:

$1,200 for everything from the base plate up. Two rounding dies included as standard. Has 1/2 HP 115V Motor. Contact: David Barfield - 580-595-1476

SCABA Shop and Swap



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Bill Davis Forge Welded Tomahawk DVD

This DVD is now available to members for a minimal cost (cost of DVD's is minimal to cover reproduction and shipping if applicable.) Contact the SCABA Librarian, Don Garner, if you would like to get a copy of this DVD.
Don Garner: 580-302-1845
(Call or Text. If you get voice mail, Please leave a message.)

For Sale:

Tire Hammer Plans by Clay Spencer
Send a check or money order for $30 US to Clay Spencer, 73 Penniston Pvt. Drive, Somerville, AL 35670-7013. Or send $32 US to Paypal.Me/ClaySpencer. E-mail me at clay@otelco.net. PDFs will be e-mailed outside US. Phone 256-558-3658

Beverly shear blades sharpened
Remove your blades and send in USPS small flat rate box with check for $41 US to 73 Penniston Pvt. Drive, Somerville, AL 35670-7103.

For Sale: I have numerous old tools and collectible items of various kinds including blacksmith related tools and equipment. Too many tools to list them all. Inventory is always changing.
Contact: Craig Guy (SCABA Member), Piedmont, OK
Cell Phone: 405-630-7769 (Call or Text)

SCABA Shop and Swap

SCABA Library DVD's Available:

This is a partial list of the DVD titles available to members from the SCABA Library. Contact the Librarian (Don Garner) if you would like to obtain a copy of any listed title or if you have questions on any other titles that may be available. Additional titles are listed on the website. DVD's are available for a very minimal cost to offset the blank disc and cases or sleeves. Shipping cost applies if you need these delivered by mail.

- Robb Gunter Basic Blacksmithing parts 1,2,3 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

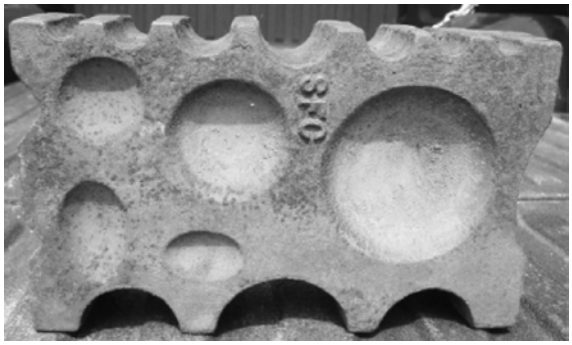
Librarian: Don Garner 580-302-1845 (Cell)
Call or Text. If you get voice mail, please leave a message.

Have an Item for Sale? Item Wanted?

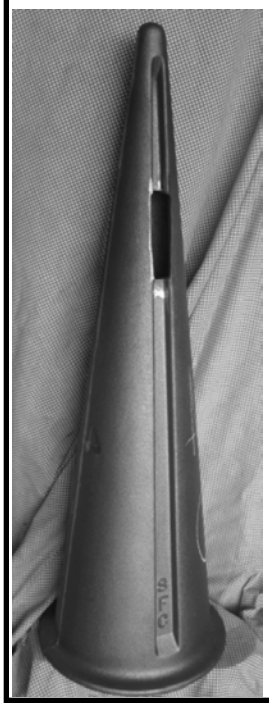
If you have any items that are appropriate for Blacksmiths that you would like to list in the Shop and Swap section (or items you are looking for), please send me your description, contact info, and any photos that you have.

SCABA Swage Blocks

$200.00 plus shipping.
(Same price to members and non-members.)



SCABA Floor Cones



$200.00 plus shipping.

(Same price to members and non-members.)

To order swage blocks or cones, contact our distributor:

Nolan Walker at Nature Farms Farrier Supply in Norman, OK.

405-307-8031

SCABA Shop and Swap

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 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.

NW Region Coal Pile in Thomas:
Don Garner now has a new pile of club coal available for sales to SCABA members. The shop is at 23713 E 860 Rd in Thomas, OK. (One mile west, then one mile north of Thomas.) Contact Don at 580-302-1845 (Cell Phone) to arrange details for purchases.

NE Region coal location:
******NOTICE:******
Charlie McGee is no longer hosting the coal pile in the NE region. If you would be interested in hosting a location in NE, let one of the SCABA Board members know.

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

SCABA T-Shirts!

2018 Saltfork Collector T-shirts are available with the 2018 Conference Logo. $20.00 (plus shipping if applicable.) Contact Josh Perkins to check sizes and quantities that are still available.

Legacy SCABA T-shirts and long sleeve denim shirts are also available on clearance while supplies last. T-Shirts are $5.00 and Denim Shirts are $10.00. (Plus shipping if applicable.) Contact Josh Perkins to check sizes and quantities that are still available.

If you would like to purchase shirts, contact Josh Perkins (918) 269-3523.

Have an Item for Sale? Item Wanted?

If you have any items that are appropriate for Blacksmiths that you would like to list in the Shop and Swap section (or items you are looking for), please send me your description, contact info, and any photos that you have.

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Renewal _____

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Married? _____Yes _____ No Spouse's Name _____

Address _____

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Phone (Best Number to Contact) (_____)_____

e-mail _____

ABANA Member? _____Yes _____No

I have enclosed $30.00 for dues for one year membership from the date of acceptance.
Signed: _____

Return to: Saltfork Craftsmen, 6520 Alameda, Norman, OK 73026
Note: Registration online by Paypal OR credit card is available from the website.
www.saltforkcraftsmen.org
You do NOT need a Paypal account to use your credit card and registration/renewal is immediate.

Saltfork Regional Meeting Hosting Form

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Date: Month _____ Day _____ Year _____

Name: _____

Meeting Address: _____

Host Phone (Best Number to Contact) (_____)_____

Host e-mail _____

Trade Item: _____

Lunch Provided: _____ Yes _____ No

Please provide detailed directions and/or a map to meeting location if possible. Meetngs are schduled on a first come basis.

Return to: **Saltfork Craftsmen Regional Meeting Coordinator, Russell Bartling**
70 N 160th W Ave
Sand Springs, OK 74063

You can also send the information in an e-mail or text or fill out the online form available on the website in the top banner of the Calendar Tab: www.saltforkcraftsmen.org/Calendar.shtm

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