

Saltfork Craftsmen Artist-Blacksmith Association

February 2021



Project by Terry Jenkins Donated for the Online Auction In the Works. We Are Asking for Donation Items to Help Make Up for the Canceled 2020 Conference. (Page 9.)

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Editor's Notes:

Saltfork Craftsmen 2021 Director Elections:

The terms for three SCABA Directors are up this year. Byron Doner, Mandell Greteman and Don Garner are all up for re-election. Don Garner does not plan to run for re-election.

If you would like to run or nominate someone else to be on the Board of Directors, please do so as soon as possible. We will hold elections for these positions at the Annual Picnic in April.

Please send any nominations for other candidates to either the Secretary, any current Board member or the newsletter editor by March 20th to be on the printed ballot.

-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.

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Visit our Saltfork Craftsmen Website:
www.saltforkcraftsmen.org



President's Notes:

Happy New Year. I hope every one is ready for it.

I'm ready to get the club back on track of having meetings, picnics, conferences and classes for new and old members. We might have to think out of the box to get things back on track. We are open to any suggestions anyone might have.

Some of our own members have had Covid and some have had a bad time with it. I hope everyone is doing well with it and just getting older in good health.

Thats enough bad news. Lets get things rolling. We are about to have another election for the board of directors. Throw your name in the hat if you are interested.

I have had people ask me where to get gas forges. Nolan at Nature Farms Farrier Supply in Norman is a good place in Oklahoma to start and will be hard to beat on price. You can compare what is out there. There is a lot to choose from in the USA.

We are working on having a picnic and conference this year. Watch your newsletter for info.

Use your flatter where you can. It will save on filing.

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 of 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.

2021 Workshop Schedule

Currently no workshops are scheduled.

The Board of Directors and the Workshop Coordinator are always looking for feedback from members on what workshops you would like to see from fundamentals to advanced. Please let them know! If there is group interest in a specific workshop topic, they will work hard to try to make it happen.

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.

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

REGISTRATION WILL OPEN SOON - SAVE THE DATE!
CBA SPRING CONFERENCE
2021



April 16 - 18, 2021
FRI-SAT-SUN

great educational program of essential skills for all levels

- ★ Hands-on Education!
- ★ Forging Games & Competitions!
- ★ Auctions!
- ★ Midnight Madness Forging!
- ★ Vendor and Tailgate Sales
- ★ On-site Camping & Food!
- ★ Nearby Lodging Discounts!
- ★ Iron-in-the-Hat!
- ★ Art Gallery

Vista Forge at the Antique Gas & Steam Engine Museum
2040 N Santa Fe Ave. Vista, California 92083 (760) 941-1791 www.agsem.com
For questions or to volunteer to help, email: agsemblacksmiths@gmail.com

2021 REGIONAL MEETING SCHEDULE

NE Region (1st Sat)	SE Region (2nd Sat)	SW Region (3rd Sat)	NW Region (4th Sat)
Jan 2nd (Open)	Jan 9th (Open)	Jan 16th (Open)	Jan 23rd (Open)
Feb 6th (Open)	Feb 13th (Open)	Feb 20th (Open)	Feb 27th (Doug Hyde)
Mar 6th (Open)	Mar 13th (Open)	Mar 20th (Open)	Mar 27th (Open)
Apr 3rd (Open)	Apr 10th (Open)	Apr 17th (Open)	Apr 24th (SCABA Picnic)
May 1st (Open)	May 8th (Open)	May 15th (Ricky Vardell-Tentative)	May 22nd (Open)
Jun 5th (Open)	Jun 12th (Open)	Jun 19th (Open)	Jun 26th (Open)
Jul 3rd (Open)	Jul 10th (Open)	Jul 17th (Open)	Jul 24th (Open)
Aug 7th (Open)	Aug 14th (Open)	Aug 21st (Open)	Aug 28th (Open)
Sep 4th (Open)	Sep 11th (Open)	Sep 18th (Open)	Sep 25th (Ron LehenBauer as Host - Don Garner as Contact Person-Tentative)
Oct 2nd (Open)	Oct 9th (Conference Setup)	Oct 16th (Conference Weekend)	Oct 23rd (Open)
Nov 6th (Open)	Nov 13th (Open)	Nov 20th (Open)	Nov 27th (Open)
Dec 4th (Open)	Dec 11th (Open)	Dec 18th (Open)	Dec 25th (Christmas Day)

2021 Fifth Saturdays:

January 30th (Open)
 May 29 (Open)
 July 31st (Open)
 October 30th (Open)

February 2021

NE Regional Meeting February 6th: Open.

SE Regional Meeting February 13th: Open.

SW Regional Meeting February 20th: Open.

NW Regional Meeting February 27th: Will be hosted by Doug Hyde at Mandell Greteman's shop in Foss, OK. (409 E Broadway, Foss, OK 73647)

The trade item is a Friedrich's Cross.

Lunch will be provided but please bring a side dish or desert to help out.

Contact Doug Hyde at 806-679-7297 if you have any questions.

March 2021

NE Regional Meeting March 6th: Open.

SE Regional Meeting March 13th: Open.

SW Regional Meeting March 20th: Open.

NW Regional Meeting March 27th: Open.

Around the State...

NW Region January Meeting: No meeting was held.

NE Region January Meeting: No Meeting was held.

SE Region January Meeting: No Meeting was held.

SW Region December Meeting: No Meeting was held.

2020 Conference Toolbox

Since the 2020 Conference was canceled, Bill Corey modified the graphics on the toolbox. The current plan is to offer tickets for a drawing at the spring picnic. Stay tuned for details!



2020 SCABA COVID CONFERENCE

We did not have a cash flow in 2020 like we usually do after a conference due to Covid cancellations. I would like to propose that we have a silent auction and/or a live auction online to increase our cash flow. The board members have voted affirmative to have one. Therefore, we are asking for donations to auction off. Ordinarily we would have asked for donations for our conference. If you could let me or a board member know what you would be willing to donate, as soon as we have enough donations, we will organize the auction(s). Thank you for caring about our organization.

I received a beautiful blacksmith heart with roses from Terry Jenkins and an awesome welding helmet from EWS for the auction. Gerald Franklin has donated 3 books. We have heard from a few others. If you could get your donations to me, or any board member, we will compile them. This should be fun! Text or email me with any questions!

Carol Doner, 405-760-8388, caroldoner7@gmail.com

Carol Doner,
State SCABA Secretary



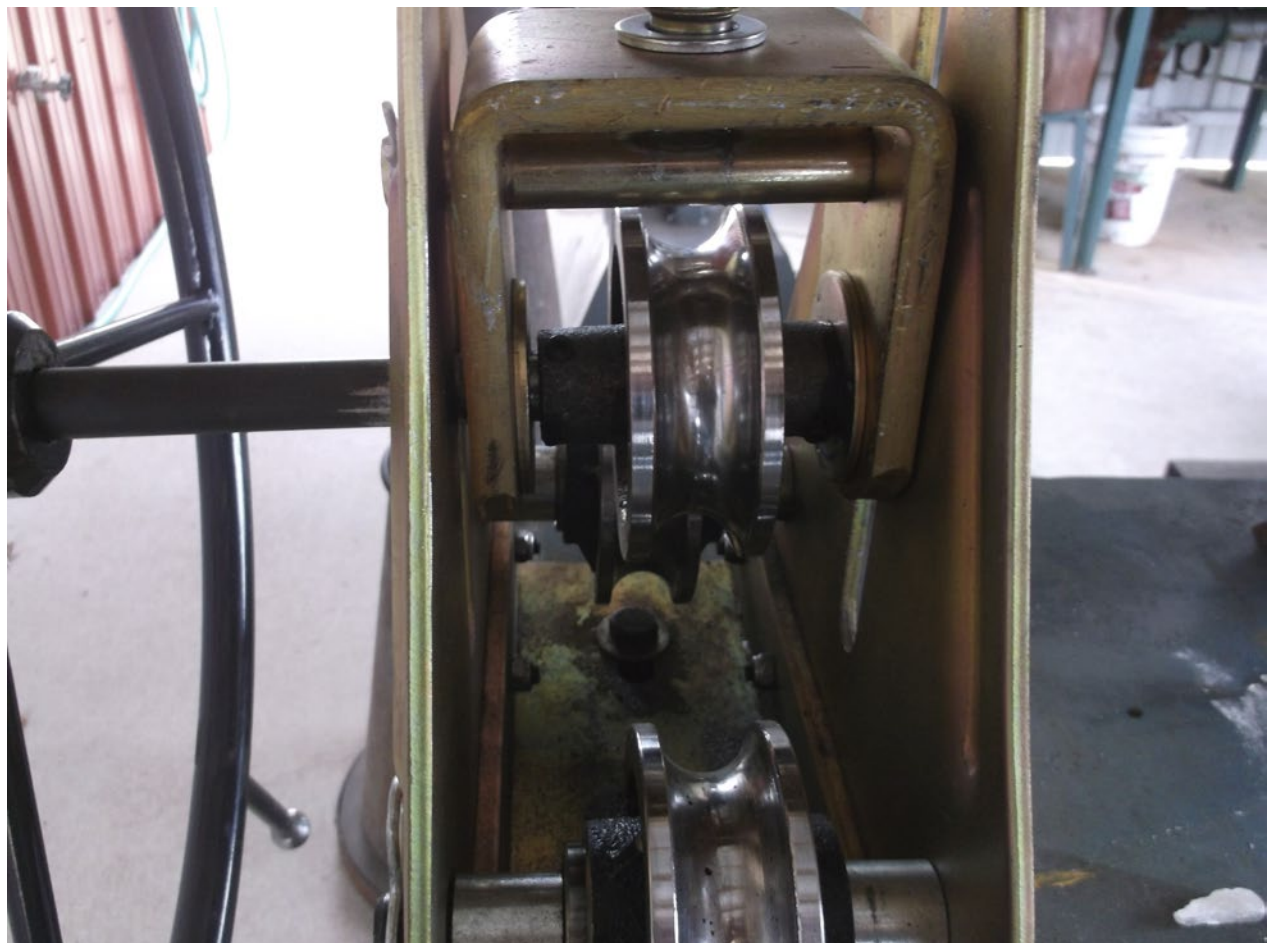
Member Gallery

My New Bicycle By Gerald Brostek

The bike is not functional. I created it just to be a giant yard ornament. The wheels are bent out of 1 1/2" roll cage tubing. The spokes are 5/16" round bar. The frame and handle bars are of 1" tube. I bought a Harbor Freight tube bender for \$150 but had to modify it as it was struggling to roll the 1 1/2" tube.

The tube bender modifications were to add four handles to the operating wheel for more leverage. The set screws that hold the main drive roller stripped out after just a few passes. I had to drill them out and thread the holes for larger size set screws. This tube roller has no name on it or country of manufacture. I am assuming it was made in China. It will roll 1" tube OK. I believe if I were to make rollers for flat stock it would handle flat bar fine up to perhaps 3/8 thickness. It is not a tool for industrial applications for sure. For a hobbyist or occasional use it works OK. Harbor Freight sells them for \$189 I got mine for \$149 with a discount coupon.- Gerald Brostek





Member Gallery (Continued)

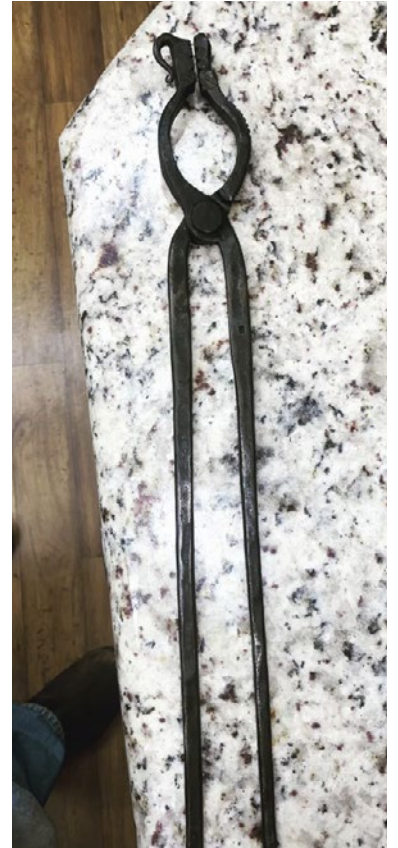
Headboard by Don Garner

Headboard with hand forged pintle hinge accents.



Member Gallery (Continued)

Dragon Tongs by Rory Kirk



2021 New Announcements:

Recent Board of Directors Meeting: The board was finally able to meet on January 24th to discuss a number of items. This is a summary to bring you up to date:

- **Interim Director Change:** Saltfork Director Ricky Vardell has asked to resign from the board due to a current overload of work and personal time commitments. Ricky's term would not be up until next year so the board appointed Rory Kirk who agreed to serve the remainder of the term when the normal bi-annual election process will be due for Eric, J.J., Rory and Russell. Thank you for your past efforts Ricky and welcome Rory!
- **2021 Director Elections:** Byron Doner, Don Garner, and Mandell Greteman are up for re-election this year. Don is not running for another term so we will only have two incumbents this year. As always, **we are asking for nominations** if you would like to volunteer to be a director or if you know someone who has agreed to do so. Directors must be members in good standing but these positions are open to anyone who might be interested in helping direct the club activities. Please consider filling one of these positions if you are interested. We always need new people and ideas to keep the club vibrant. Brad Nance from Muldrow has expressed an interest in running but no other nominations are on the table at this point.
And if you have read this far, the board has agreed to a special 2021 Covid stimulus which doubles the salary for new directors. That's right DOUBLE! Of course the base salary is zero so, sorry that the math sometimes kills our dreams.
- **SCABA Annual Picnic:** We are moving forward with plans for the annual picnic. The date is set for April 24th at the Murray County Tractor Show grounds north of Sulphur (Same location as the last few conferences.) The contest is being directed by Rory Kirk and will be a free forged penny end scroll (no jigs can be used.) Look for details in the next newsletter.
- **SCABA Annual Conference:** The Conference dates were finalized (October 16th-17th) and we will move forward with planning a conference in 2021. There are many details that are not yet confirmed and we will probably have to remain flexible until closer to the conference date than we would like given the uncertainties that Covid has thrust on us all.
- **Club Coal Price Increase:** We have had to increase the price of club coal from \$0.07/Lb to \$0.15/Lb. The board never likes to increase prices and this one is a bit overdue. But the costs for the club to obtain coal have increased to the point that it was necessary.
- **Swage Block and Cone Price Increase:** Just like coal, the costs to the club for being able to provide swage blocks and cones has dictated a price increase. Swage Blocks will now be \$250.00 each plus shipping and Cones will be \$275.00 each plus shipping.
- **Next Board Meeting:** The next board of directors meeting is scheduled for March 21st. The meetings are open to all members. If you have good ideas, or want to bring up a club related matter, or just want to hang out and stare at the board members then feel free to attend. If you plan on coming to discuss something specific, please let the secretary know prior to the meeting to get on the agenda.

Tendonitis Relief by Gerald Franklin

Tendonitis in the elbow, sometimes referred to as “Tennis Elbow” is a common ailment among blacksmiths. The main cause, I’m told, is gripping things too tightly (like hammers or tongs). Once you get it, treatment is a long process. It’s easier and more pleasant to prevent it in the first place.

Exercise is the key to both prevention and cure. It works by strengthening the set of muscles that oppose the ones that we use to grip things. To perform the exercises you’ll need 3 fairly stout rubber bands. I like the ones that the mail carrier uses to hold the mail in a bundle. Put the set of bands around the ends of your fingers as the photos show. Spread the fingers out as far as they will go and then bring them back towards the start point. This is one repetition, or rep. Do three sets of ten reps three times a day for a total of 90 reps per day.



I like to keep my bands close to my favorite recliner so that they are handy. As you strengthen the opposing muscles, you will progress toward “Tendonitis Immunity”. If you have to treat a case of tendonitis, don’t expect quick results but if you stay with it, you should eventually get well. When you do get well, keep doing the exercise daily to prevent future attacks.

Gerald Franklin
Black Bull Forge
Norman, OK

Letter/Number Stamp Holder

by Bill Corey

When it's time to stick a label of some kind on your project such as your name or the date one of the inexpensive Letter and Number Stamp Sets can get you by. Our favorite store that handles every tool made in China sells different sizes under the brand name of "Pittsburg" and if used on hot steel they'll actually last quite a while. Now if your name is Stanley Wojciehowicz it's going to take you a while to stamp in your last name and the year a letter at a time. However if you had a way to hold a few letters all at once and actually strike them all at once it will help.

So here's my answer. You can buy these apparatuses already made however they cost quite a bit more than the \$10 set of stamps. The set of "Pittsburg 1/8" stamps are made of square stock that measures 6mm and the fact that 1/4" is 6.35mm comes in handy in the construction.

I start by cutting the two 1-1/2" X 2-1/2" X 1/4" side pieces. Then I cut off two short pieces of 1/4" square stock, one 2-1/2" and the other 2" long (Photo 1.)

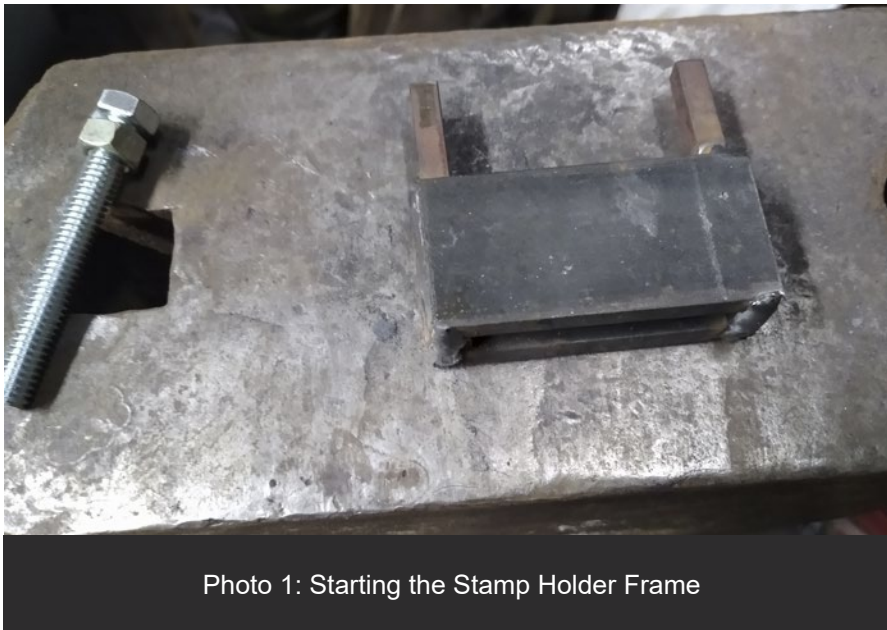


Photo 1: Starting the Stamp Holder Frame

I then weld the longer 1/4" square stock sandwiched by the two sides all the way down the end (Photo 2.) And then weld the shorter 1/4" piece at the other end sandwiched in the sides but only welded at the top and bottom (Photo 3.) This is where that handy part I was talking about comes in, the 6mm numbers and letters slide just about right into the gap made by the 6.35mm upright pieces that were just welded in.



Photo 2: Welding the End Pieces



Photo 3: View from the Bottom

Then find the center of the end where the shorter 1/4" piece is welded in and drill a 5/16" hole all the way down to the inside of the other 1/4" piece (Photo 4.) This will shave a slight bit off of the side pieces so that a 5/16" bolt will slide all the way through and is grabby so hold on to it good (Photo 5.)



Photo 4: Drilled Hole



Photo 5: Bolt Inserted

Then with the bolt in place weld a 5/16" nut on the end (Photo 6.)

Continued on next page...



Photo 6: Welding the Nut for the Clamp Bolt

Now weld on the 9" (or how ever long you want) 1/2" square handle onto the ends of the 1/4" pieces (Photos 7,8 and 9.)

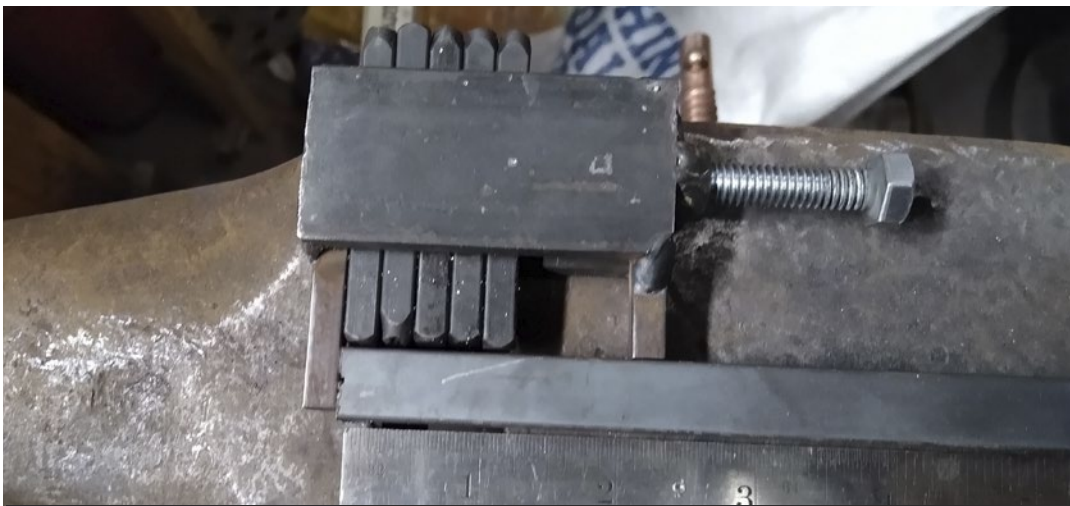


Photo 7: Positioning the Handle for Welding



Photo 8: Handle Welded

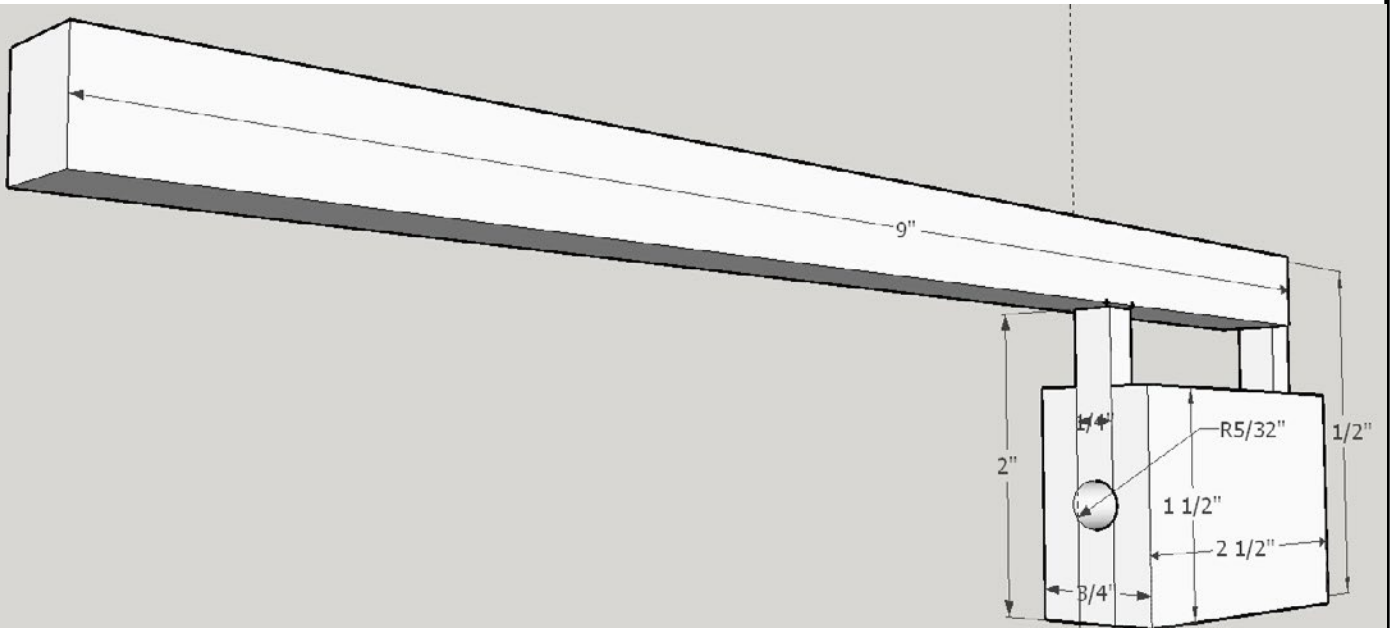


Photo 9: Another View of the Handle

Now all that is left is put the letters and/or numbers that you are wanting to stamp (I always rap it on a piece of wood to check that I've got them in the right order) and give the handle a good rap with a hammer right over top of the end of the stamps remembering "You only get one chance to make a good first impression." (Photo 10.)



Photo 10: Finished Stamp Holder



The Rounding Hammer.

By Steve Taylor, with Mark Aspery



This hammer is based on Brian Brazil's style of rounding hammer, that I believe Brian learned while working for Alfred Habermann in Europe.

Before we begin making the hammer, I think that it's important that we look at some of the tooling.

This hammer is made as a smith and striker team, and as such, the anvil height is set to make the striker more comfortable and efficient.

The anvil is purpose built, and in this case, consists of a block of mild-steel 3-inches thick, 5-inches wide and 7-inches long. The block has a 1-inch hardy hole set at one end of the block.

The block is welded to a section of ½-inch steel plate. The plate has a round hole cut in it to allow clearance for any hardy hole related tooling or techniques.



There are three legs welded to the underneath of the steel plate. The legs are 2-inch square tubing, ¼-inch thick wall (hitch receiver material).

The tubing is capped to prevent it sinking into soft dirt, the caps are larger than the tubing to give added support, and have a ½-inch hole drilled into them to allow the anvil to be pegged out in the dirt to prevent movement.

The length of the legs, and ultimately the height of the anvil surface from the ground, is dictated by the height of your striker, but a good average height would be 24 to 26-inches to the top of the anvil face from the ground.

This allows for the material and top tooling to be added to the anvil height and still have your striker hit flat and square to the work with ease.

The tongs are made from ½-inch round bar, upset around the boss area to accommodate the rivet, with longer than usual jaws to grasp either end of the stock.

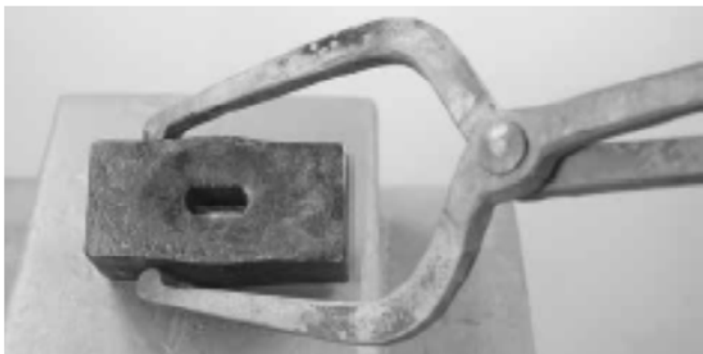
The jaws of the tongs are also set wide to allow the hammer material to fit between them.

If you want to stay with one pair of tongs, then the jaws should be set in such a way that they can grab the hammer material at the eye, and hold the stock securely.

Turning the stock end for end is shown on the opposite page, as is the punch.



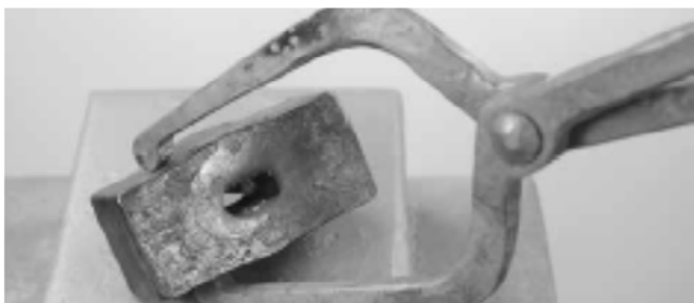
Tongs gripping the stock with the tips of the jaws in the hammer eye



To turn the bar end-for-end, lift the tongs and turn the bar to lay on its left corner



Start to lower the tongs while continuing to turn to the left



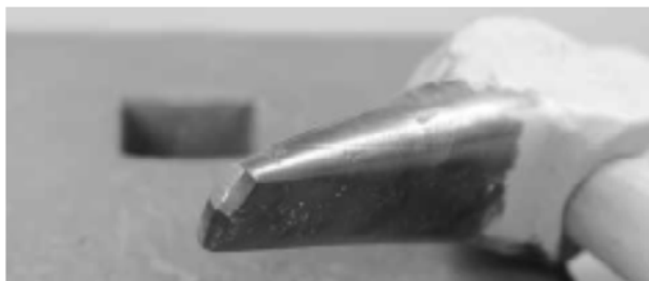
Continue to turn the tongs to the left (counterclock-wise) allowing the bar to pivot in the tongs



The stock now sits outside of the tong jaws, and has turned end-for-end, with the same side of the bar up



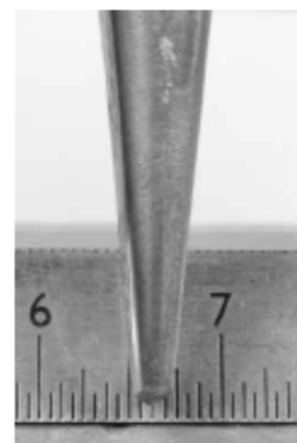
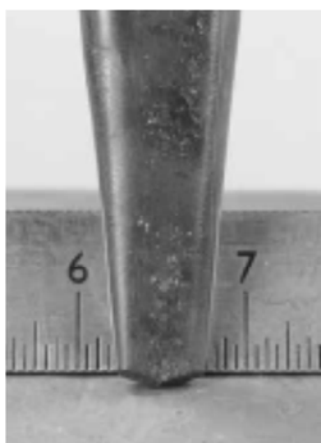
Continue turning the tongs to the left. Note the jaws of the tongs are drawn for support where they make a bend



The hammer-eye punch has a slight point and is beveled on each side. Punch is 1/2" wide by 1/16" thick



The bar should continue to pivot between the jaws as you continue to turn the tongs



I'm going to demonstrate making a 2lb rounding hammer, starting from 1.5-inch square material. Brian prefers round stock, but I feel that there are some advantages to using square stock if you are just starting out making this style of hammer.

The 1.5-inch 1045 square stock is cut to 3.25-inches in length. I prefer to use 1045 (heavy axle material) as it's easy to find, but 4140 works just as well.

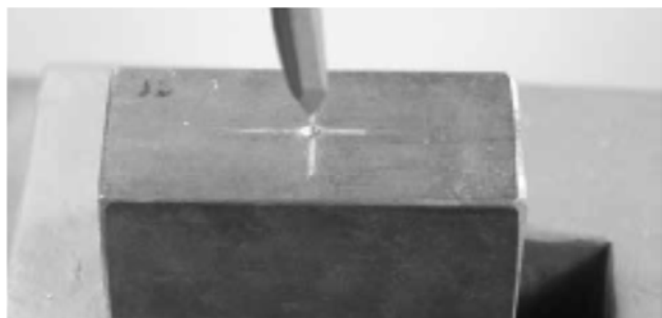
Using a pair of Dog-leg dividers or an adjustable set-square (shown), find the center of the bar, both lengthways and width-ways.

Mark and center punch both sides of the bar, this will aid in placing the hammer-eye punch.

A uniform heat is critical when punching a hole in the middle of the bar. If one side of the proposed hole is hotter than the other, the tool (in this case the punch) will migrate to the path of least resistance – and that's the hotter side.



Using a set of Dog-leg dividers or an adjustable square, find the center of the block



Center punch the middle of the block. Note that this punch has a square end, making it easier to find when hot

Stand the hole vertically in the solid fuel fire to get an even heat, turning 180° as needed.

You don't need to worry if there is a gradient of heat from top to bottom, just make sure that the bar is equally hot from one side to the other.

In an effort to keep the hole centered, I'm going to turn the bar, end-for-end, between blows. Notice the position of the tongs on the stock as you examine the photographs of the process.

The slot punch has a tough job punching through a thick billet of medium carbon steel. The slot punch shown here is of the same steel alloy as the billet and the only way the slot punch survives is if the punch stays cool and the billet stays hot.

I clear the punch after each single hit, and cool the punch in water.

Once you have the hole well started on one side, then switch to the other side while, again, turning the bar end-for-end between blows.



*Working from one side, punch half way through the bar.
Turn the bar end-for-end between blows
Aim to join the two holes in the center of the bar.*

Working solely from one side of the bar until you feel the anvil will push an excess of material ahead of the punch to the side that's resting on the anvil.

That's going to be difficult to rectify when drawing the cheeks of the hammer, which we want to be identical in size and shape.

There are other advantages to joining the hole in the center of the bar such as, if you don't quite get a penny-on-a-penny hole, then the hole can possibly be straightened out within the bar by the drifting action also, any rag formed on punching is buried within the hammer-eye.



Turn the bar over and punch from the other side, again turning the bar end-for-end as you work



The result of the work of the punch

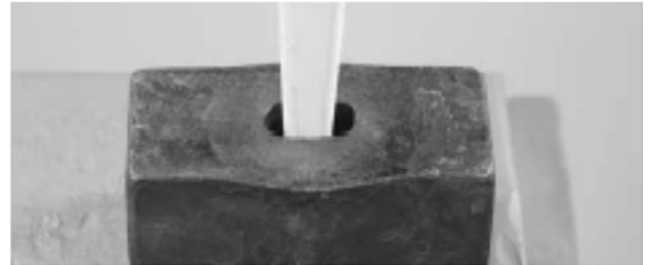
The business end of the slot punch is ground to best handle the heat, and although the punch is pointed, not flat faced, it does produce a slug.

With the hole punched, it's time to start the drifting process.

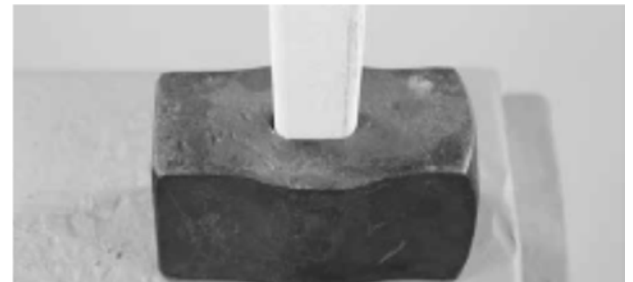
I say process because it's not a one-time deal. We're going to do a little bit with the drift, then we're going to work on the cheeks of the eye, spreading

the hole along the centerline of the bar. Then we're going to catch up with the drift, then spread some more and so on.

If you attempt to get all the drifting done now, the hammer-eye will be stretched far too much to be suitable for practical purposes. Not insurmountable, but not what we're aiming for with this project.



Support the block over the hardy hole and drive in the tapered drift



Drive the drift until it fills the hole created by the punch, no more



Turn the bar over and drift from the other side

At this stage the block of steel has had the sides blown out slightly proud of the bar, but the top and bottom should be reasonably flat.

We are now going to isolate the material for either face of the hammer, as well as define the material for the cheeks of the hammer.

I have two sets of top and bottom fullers. One set is forged to ½-inch diameter, half round, and the other is set to ¾-inch diameter, half round. Utilizing the ½-inch diameter set of fullers, you are going to create a ½-inch groove behind each face of the hammer.

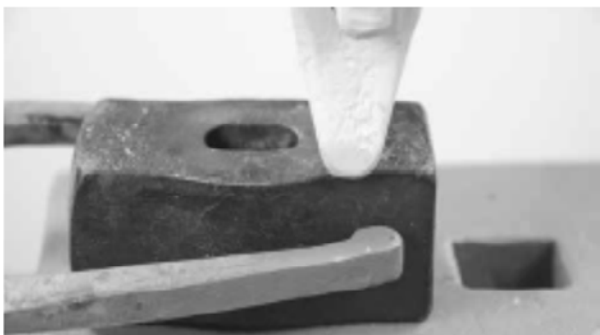
If you've worked with a striker and these type of tool often, then you may go straight to using both tools together at the hardy hole.

If you're not so practiced, and I'm going to presume that that's the case, then we'll build some training wheels to get you started.

As the top and bottom of the hammer are flat, you can place it on the face of the anvil with either the top or the bottom surface uppermost.

You are going to place the fuller in such a spot as to leave ½-inch of material for each face, while giving the eye about ⅛-inch of clearance.

No need to go too deep as you fuller a groove, just make a shallow depression that you can use to capture the bottom fuller later.



Being flat, the stock will sit on the anvil as you create a fullered groove defining the body and the faces



Work the top and bottom surfaces. The sides have been pushed out by the punch and are not flat

Turn the bar over 180 degrees, so that the opposite side is uppermost, and repeat the process.

It can be advantageous to have a 'pillow' of ½-inch diameter, half round stock or less, to place under the hammer as you fuller the second groove above.

Now, with the ½-inch bottom fuller in the hardy hole, rest one of the grooves on the fuller. You can see in the next photograph that the tongs being used to grip the material in the punched eye.

Make sure that your holding the stock level, and turn the bar 90-degrees.

Looking from above, you should see both of your grooves on either end of the bottom fuller. Place the top fuller immediately over the bottom fuller and have your striker deliver one blow.

Check your alignment and have another go. To keep the fullering equal in the bar, turn the bar over 180-degrees, so that you are working on the other side of the bar and repeat the process.

You should already have a mark to go by. Make sure that it's in the right place and have your striker deliver a couple of blows.

Now turn the bar 45-degrees and knock the corners off within the grooved material. Again, to keep the material centered on the centerline of the stock, work all four corners individually.

When you're happy with the result, change ends and repeat the process.



Capture one of the grooves on the bottom fuller and turn the bar 90°. Fuller the sides of the face

Having these grooves in place allows a little clearance for the fuller that you will use to pull out the cheeks of the hammer, protecting the two hammer face ends from damage.

You may find that the above work has stretched your hammer-eye a little, by pulling some material into the groove is not a problem! Ignore the damage at this point in time.



Turn the bar around and complete the same steps on the other end

Turning your attention to spreading the cheeks of the eye, you will be working directly over the punched and drifted hammer eye. That hole will need to be protected from damage as you spread the cheeks to the hammer.

At the moment, the top and bottom surfaces of the hammer are still reasonably flat. Place the hammer eye over the hardy hole and tap in the drift into place.



Re-drift to correct for any damage to the hammer eye. Drive the drift in until it 'seats' in the hole

You're not trying to re-size the eye, just set the drift securely in the hole, filling its perimeter.

As you are working with a tapered drift, only one side of the eye will be filled completely, there is a gap surrounding the drift on the other side.

With the hammer now firmly attached to the drift, move to the flat face of the anvil and with the eye horizontal, use your 3/4-inch top fuller and mark the bar along the centerline as seen going from face to face of the hammer.

Don't kill the stock with your fuller, just make a slight groove – as you did earlier when isolating the material for the two ends of the hammer, then turn the bar over and do the same on the other side of the bar.



Start to spread the center of the cheeks on the face of the anvil, refine the work between matched fullers

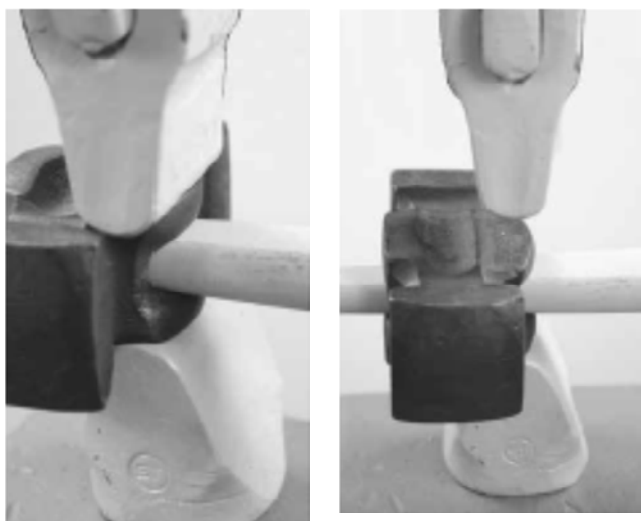
Now place the ¾-inch bottom fuller into the hardy and further refine the center grooves, working on both sides of the bar. Don't go too deep yet. Wait until you have the accompanying left and right grooves in place.

Going too deep now creates vertical walls on the edges of the fullered groove, these can, without care, create cold shuts later as you fuller either side of the central groove.

If at any time the hammer feels loose on the drift, then tap the struck end of the drift onto the face of the anvil to secure the hammer. Be wary of falling scale as you do this – wearing a welding glove here may be to your advantage.

Once you are happy with the center grooves, then move the fullers towards the struck end of the drift, where the drifted eye has support. Moving the other way will collapse the eye.

Depending on the work that you have done, you may or may not be able to go back to the face of the anvil to start the upper grooves on the hammer cheeks.



Working towards the struck end of the drift, create a second fullered groove on the cheeks of the hammer

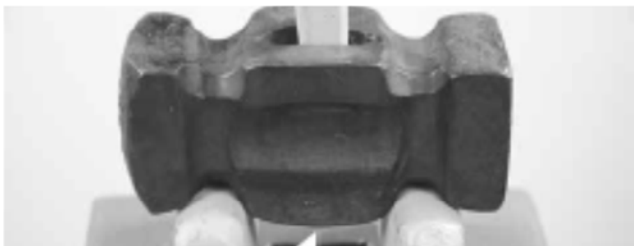
If you can, then do so, otherwise work over the bottom fuller.

Knock the drift out of the hammer eye by placing the tip of the drift on the anvil face and giving the hammer stock a crack with your hammer – perhaps crack's not the right word....

If the drift doesn't immediately pop free, then rest one end hammer stock on the face of the anvil and have your striker hit the other end with their sledge. That should be enough to loosen the grip of the hammer-eye on the drift.

The issue now is working the other side of the hammer. As you have spread the cheeks on one side of the hammer with the fuller, the hammer no longer sits flat on the anvil.

I have spacer blocks that I can position either side of the hardy hole to support the hammer head while I drive in the drift from the other side of the hammer eye.

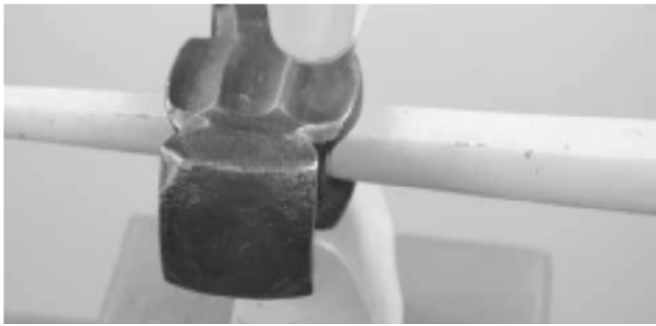


Supports are required to prevent damage to the cheeks as you drift from the other side of the bar

Take another heat, and after driving the drift in from the other side of the hammer, work the lower surface of the hammer cheek.

For any one heat, you are restricted to working the center of the cheek and the groove immediately to the drift struck end. The lower groove is unsupported by the drift and the eye will be damaged by the fullering action.

Work the fullered grooves down until they are equal in depth to the grooves around each face.

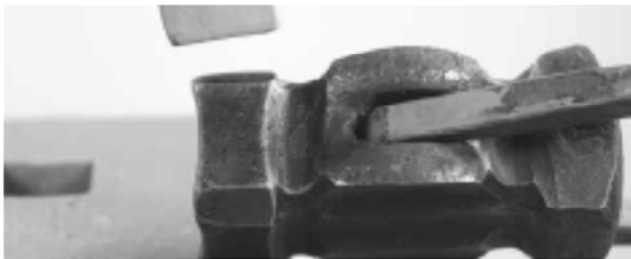


Again, working towards the struck end of the drift, create a third fullered groove on the cheeks of the hammer

The preceding steps show that you are limited in width for your top and bottom fullers by the distance between the grooves for both faces.

Once you're happy with the results of drawing the cheeks of the eye, then it's time to turn your attention to the ball face of your hammer.

The finished eye is a waisted eye. Setting the drift in at opposite ends to create the waist.



Use a set hammer as you work with your striker to knock the corners off each face

Drift from the top of the billet on the last go, making that end of the eye a bit larger. I mark the billet to remind me which is the top of the billet.

"Square, octagon and then round". Knock the corners off the faces so that you're left with an octagon. Knock those corners off until you get a round end to one face of your hammer.

Depending on your workshop and its contents, you might want to stay with the heat and hot rasp the round end to a dome.

If you've a large belt grinder available, then move on to the other face of the hammer.

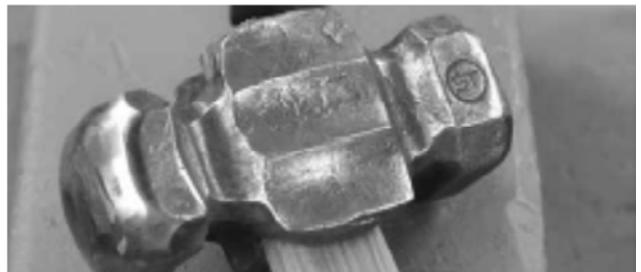
I like the flat face of my hammer to be octagonal. Having the corners knocked I find to be very useful, especially when drawing down.

Rasp the face when you're done. A flat face to me has a crown, around 1/16th-inch proud of the edges.

When all the rough work is complete, take a general heat to the lower critical temperature of the steel that you're using.

Let the hammer soak in the heat for a little while, and either stress relieve (allowing the hammer to cool at the side of the forge or anneal the hammer-head in a bucket of Vermiculite or builders lime.

Dress the faces and heat treat according to the steel used. I use strips of worn out grinder belts to shoe polish the bottom edges of the eye, so that I don't get shavings when set the handle into the billet.

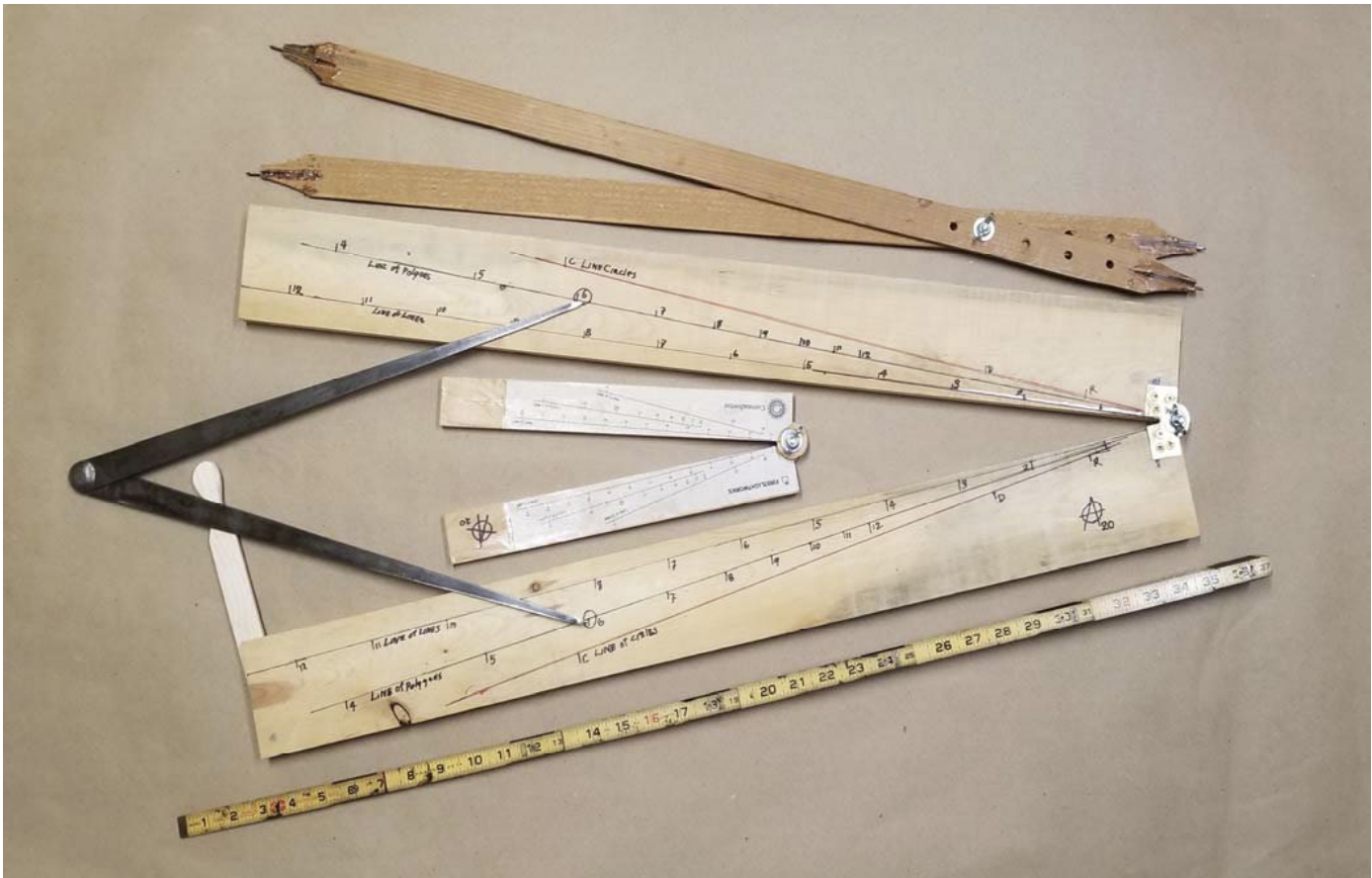


The ball-face or rounding face of the hammer



The flat face of the hammer

This article is reprinted courtesy of the New England Blacksmiths newsletter Fall 2020



The Sector Look Mom no Fractions

By Steve Alling, a MABA member

The Sector is a simple tool that allows you to divide a line of any length into any number of equal parts. You can make a polygon in a circle of any number of sides, and if you know either the radius, diameter or circumference of a circle you can find the other two. Simply by using a pair of dividers to perform these measurements; therefore, you don't have to deal with any fractional dimensions.

The sector works on the principal of proportions therefore it can be made in any size that's convenient. The sector is laid out on two arms that are hinged together on one corner. And from the center of the hinge in this sector radiate 3 lines, one line is used to divide a line into equal parts, that line is called the line of lines. There is a second radial line that allows you to make polygon of any number if you know the radius of your circle. It's called the line of polygons. The third line allows you to find two of these three measurements, radius, diameter or circumference if you know one

of them. This line is called the line of circles. There are many other sectors that are used in all kinds of old fashioned pre calculator days and ship navigation, surveying, and art with vanishing points.

There are three sites you can look up on the internet to understand this tool.

The first is <https://www.burn-heart.com/sector> they have a nice tutorial showing you how to use the tool and they offer a workshop to make one.

The second one is <https://www.firstlightworks.co.uk/post/coronasector> and they will allow you to download a copy of the sector that they make and sell so you can make your own.

The third site is <https://redrosereproductions.com/sector/> they sell a ready-made metal one for \$200.00

I downloaded the free pattern from First Light Works and made up my own sector. The first thing I discovered was you could only find the circumference of a circle about 2 1/2 inches in diameter. Because the sector is not accurate when opened beyond 45 degrees.

If you want to make this small sector, I suggest

you cut the pattern out with a razor knife being careful with the inside edge and the hinge edge. I would continue those two lines to the center of the hinge and then you can use that corner on the corner of your board. It's critical that all the sector lines radiate on the hinge pin. So, by lining up that corner you're assured you have them in line. You can then go ahead and do whatever relieving you need to place your hinge. To stick your pattern down there are a couple of ways to do this. There is the spray stick and contact cement but these are going to make it really hard to get things lined up. There is a neat trick you can do with yellow carpenter's glue. With a squeegee spread a generous layer of glue on your board and allow to completely dry, then carefully place the pattern where it should be, cover part of it with a protective piece of paper and hit it with a hot iron for just a second or two. You don't want the glue to bubble. Then you can go ahead and move on to the part you have been holding. This will not distort the paper so you get an accurate job.

So, to make a sector large enough to accommodate circles that would be used say in trivets and the like, the sector needs to be much larger, 6 or 7 inches in diameter. Now you clever computer guys probably can take the downloaded pattern and increase it's

size to what you need. I did it mechanically by making a pair of proportional dividers. The overall length was $33 \frac{1}{4}$ inches and the hinge was $7 \frac{3}{16}$ inch from one end. I used some pieces of scrap that were $1 \frac{1}{4}$ inch by $\frac{1}{4}$ inch and I made a saw cut in the end to accommodate finish nails which I epoxied in the slots and then ground to equal lengths and sharpened. This increased the sector to about 32 inches. I made it on two pieces of 1 X 4, the angle of the sector lines is not critical but they must radiate from the center of the hinge. I picked up the dimensions with the small end of the dividers always starting in the center of the hinge and transferred them to the new sector lines. This is not a terribly accurate way of doing it but it gets you very close. I approached it the same as the little sector by adding the hinge after all the sector lines were in place.

I'm looking forward to using it in the shop where I won't be straining my brain trying to figure out which little mark on the scale is the one for 32nds.

This article is reprinted courtesy of the Michigan Artist Blacksmith Association "The Upsetter" newsletter NOV-DEC 2020.

Interested in More?:

If you like this kind of information, I highly recommend a few resources you would also like from [Lost Arts Press](https://lostartpress.com). Lost Arts Press focuses mainly on woodworking books and videos but they have a few titles that focus on artisan geometry. "Back in the day" it was more common for craftsmen to measure by proportion than to work up set dimensions and work with a rule as the primary measurement tool. For example, a lot of work to scale a part up or down, divide a space by a given set of increments, etc. can all be done without using any calculations and it can be done quickly. These books give an idea of how this was commonly done and also shed light on the basic proportions that are generally considered a "good" design that appeals to the eye.

I would recommend "By Hand and Eye" and also the light version "By Hound and Eye." Even if you choose not to use these methods to design or layout your own work, they provide an interesting glimpse into the mind of many craftsmen of the past.

<https://lostartpress.com/collections/artisan-geometry-tolpin-walker>

-Russell Bartling, Editor



2020 SCABA T-Shirts

For a LIMITED time, new 2020 SCABA T-Shirts are available. These were planned to be the Conference T-Shirts (an annual tradition) but since the conference is canceled, the design has been modified to acknowledge the reason for the cancellation. (And it infers how most people feel about COVID-19!)



Gildan Adult Heavy Cotton™ 5.3 oz. Pocket T-Shirt

	S	M	L	XL	2XL	3XL
BODY LENGTH	28	29	30	31	32	33
BODY WIDTH	18	20	22	24	26	28
SLEEVE LENGTH	15.625	17	18.5	20	21.5	22.875

Fabric

- 5.3 oz., 100% cotton
- Safety Pink, Safety Green, Neon Green, Graphite Heather and
- Heather Radiant Orchid are 50/50 Cotton/Polyester

Available Colors: View the Newsletter Online to See the Sample Colors Available



Graphite Heather



Heliconia



Irish Green



Orange



Red



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Safety Green



Sapphire



Sport Grey



Remember When Choosing Your Colors: The Printing is Black and White so Lighter Colors Will Have the Best Visibility.



Example: Sapphire



Example: Graphite Heather

T-Shirt Order Form

First Name _____ Last Name _____

Address _____

City _____ State _____ Zip _____

Phone (Best Number to Contact) (_____) _____

e-mail _____

Size	Color	Quantity	Price Each	Sub-Total

Shipping: \$2:50 for first shirt plus \$0.25 for each additional shirt:

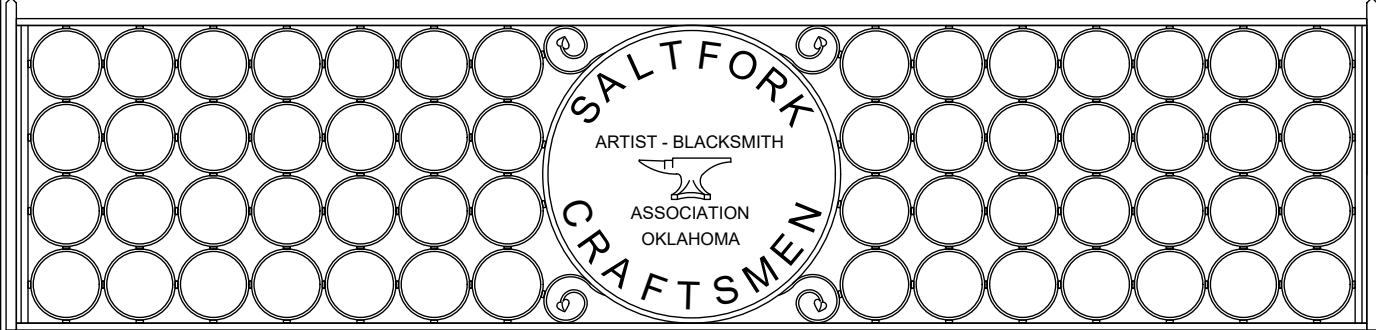
T-Shirt Price:	
Small to 3X:	\$15 Each
4X to 6X:	\$20 Each

Total:

Mail this form with payment to:

*Teresa Gabrish
322 Washington
Blanchard, OK 73010*

The Saltfork Gate Project Still Needs More Rings!



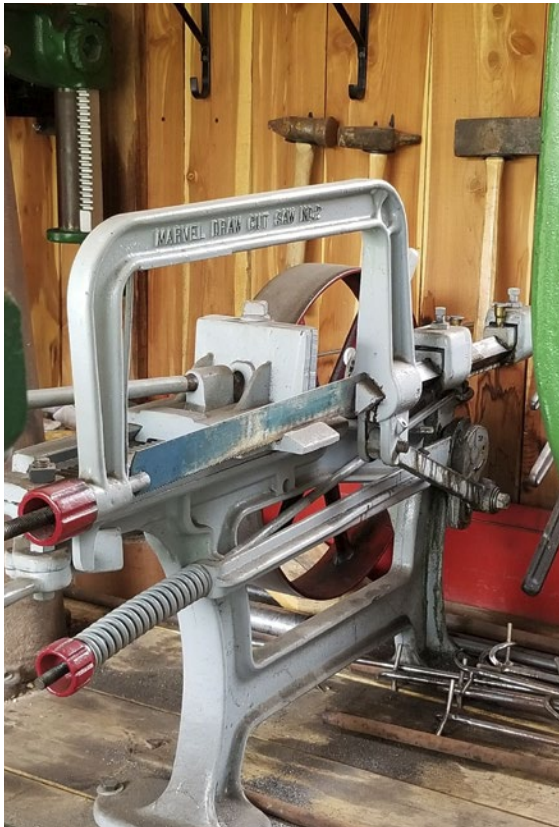
This is a community project that is open to all Saltfork members regardless of skill level or experience. There is still room for more rings. You can see more details about the project in any of the past newsletters from August 2019 through January 2021.

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.**

SCABA Shop and Swap

Wanted to Buy:

I am Saltfork member James Bohrer and I am looking for a powered hacksaw or drawsaw and also line shaft stuff for my forge. The attached photos are the kind of saw I am looking for. Thank you. **Contact James Bohrer at 405-566-8550.**



SCABA Shop and Swap



Your one-stop-shop for
Quick and Rapid Tongs,
blacksmithing tooling,
accessories, apparel, and
the MZ75 Power Hammer.

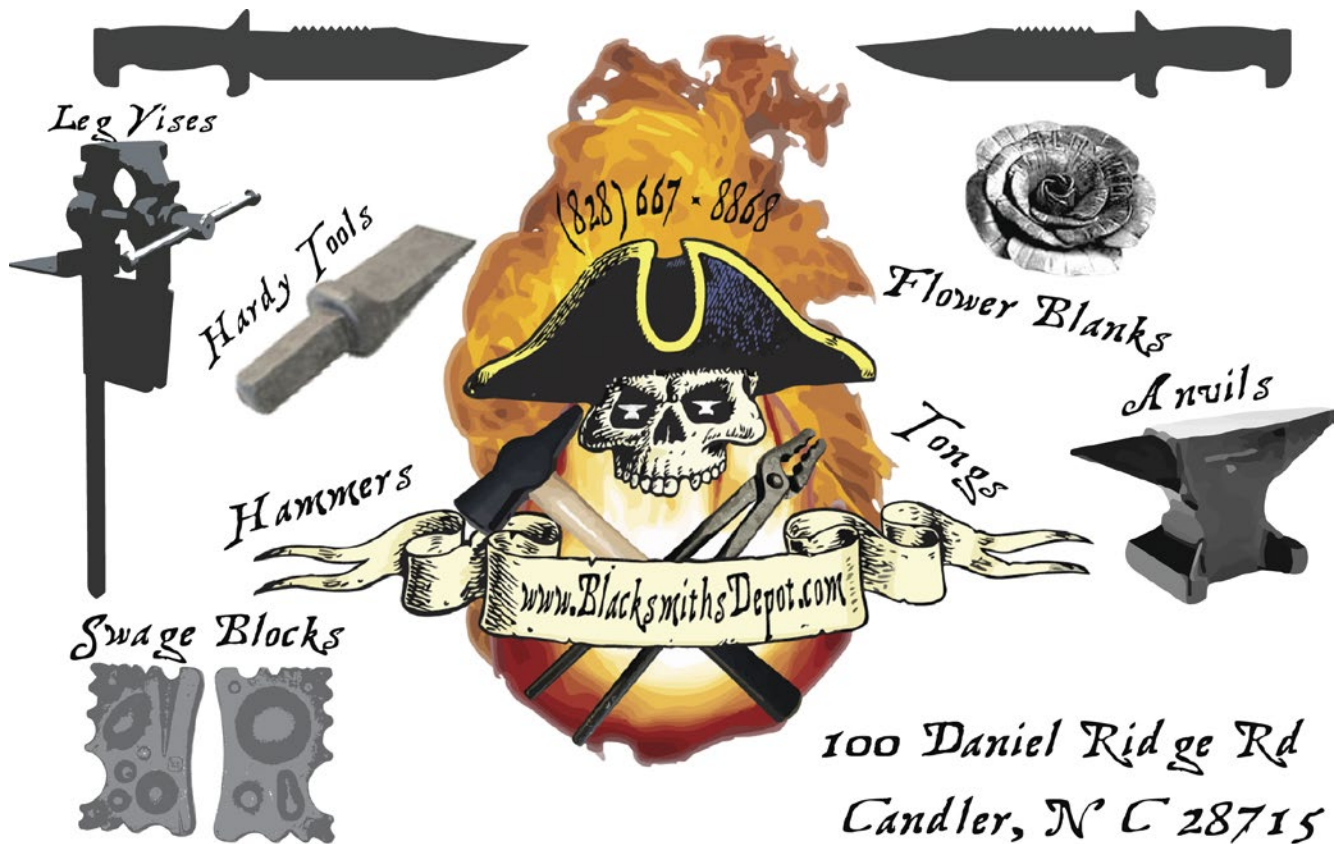


WWW.KENSIRON.COM

Ken's Custom Iron

37634 County Road 9, Avon, MN 56310 | 320.746.8161 | mail@kensiron.com

SCABA Shop and Swap



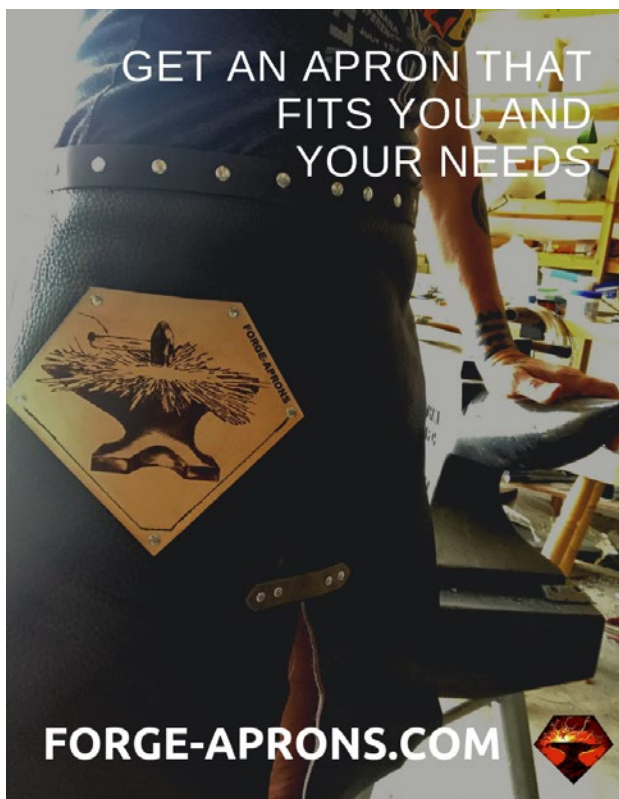
For Sale: 15 Lb Tire Hammers:

\$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

GET AN APRON THAT
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SCABA Shop and Swap



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Thank you to our Conference Vendors who graciously donated items for the Conference Auctions!

Their contributions helped to support SCABA. Please consider patronizing these vendors to return the favor!



Reeder Products Inc.

3201 Skylane Drive, Suite 114
Carrollton, Texas 75006 United States
(469) 257-1000

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

**** (NOTICE: Price Change) ****

\$250.00 plus shipping.
(Same price to members and non-members.)



SCABA Floor Cones



\$275.00 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:

**** (NOTICE: Price Change) ****

Saltfork Craftsmen has coal for sale. Coal is in 1-2" size pieces. The coal is \$300.00/ton or .15 /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 (\$.15 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. \$5.00 (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.



SCABA Membership Application

For Annual Membership

(Please Print Clearly!)

Date _____

New Member _____

Renewal _____

First Name _____ Last Name _____

Married? _____ Yes _____ No _____ Spouse's Name _____

Address _____

City _____ State _____ Zip _____

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

Region: _____ NE _____ SE _____ SW _____ NW

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. Meetings are scheduled 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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