Saltfork Craftsmen
Artist-Blacksmith Association
July 2019

The First Blacksmith Shop in Guthrie, OK. Circa 1889.

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SCABA Board of Directors Meeting

There is a Board of Directors meeting scheduled for

2:00 PM July 14th, 2019

at Byron Doner's Shop in Norman.

(6520 Alameda, Norman, OK 73026)

Board meetings are open to any member to attend. This is the best place to offer comments, ideas or criticisms you have on how the club operates or where it is heading in the future. This is a great chance to help forge the future of the club and your ideas will be welcomed.

Feel free to attend. If you plan to attend and have an issue that you would like addressed in the meeting, please send your topic(s) to the Secretary, Carol Doner, to get on the agenda prior to the meeting date. - 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, I hope everyone is doing well. I'm sure people are getting sick of the rain. But I just think of a few years ago where everyone was running out of water. I was told that "your lake would never fill up again." Now they are complaining about how full it is. Mother nature has a way of humbling you.

When I was young I wanted to be a welder and metal worker. Being raised on a farm I thought that I new how to weld especially since I took welding in FFA. When I got out of school I heard how much welders made in the oil field.

So I went to an advanced welding class. We started learning about different welding rods then we started welding. The instructor gave me a 10" square piece of 1/4" stock. He had us start making passes back and forth to help our control and after five hours I took my peace to the instructor. He gave it back and said don't bother me until you have a boat anchor. This taught me the more you do the better you get.

When I help teach blacksmith classes I say hammer control helps you a long way while making something. I feel, the same as with welding, the more you do the better you get and you can make things faster and better. But as I get older it seems as though it takes longer than ever to get something right.

Keep your anvils bright.

- Mandell Greteman

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.

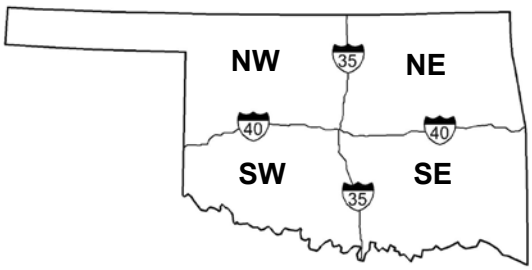
Want to host a meeting? The meeting hosting form can be found on the last page along with membership application form. If you want to host a meeting in any area please fill out one of the host forms on the website under the calendar section or in the newsletter and e-mail the information or mail the 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.

2019 Workshop Schedule

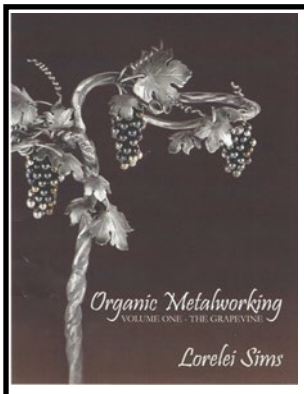
No Workshops are currently scheduled until the After-Conference Workshops in October.

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.

We Have a Proof Reader!

Carol Doner has graciously volunteered to act as the much needed Proof Reader for the Saltfork newsletter. And I can already tell you she is good at it! Especially since there is very little time when the newsletter approaches completion to the time it needs to go to the printer. THANK YOU CAROL!!!
- Editor



Organic Metalworking Vol. 1

by Lorelei Sims

Limited Copies Available

Lorelei Sims has a great new book illustrating her methods for organic metalworking. (See details in the October 2016 newsletter, Page 35.) Volume 1 is first in a series of planned books on different aspects of organic forging. This is a very good how-to book heavily illustrated and has something for beginning and advanced smiths alike.

Lorelei's methods are easy to understand and execute but the finished work is beautiful (at least hers is beautiful!) You will probably want a copy of this book in your library. I highly recommend it.

Due to continued demand, we have a second shipment of this book and many have already sold. The price of the book through SCABA is the same as the price directly from Lorelei and proceeds from sales benefit SCABA. **Contact Josh Perkins (918) 269-3523** if you would like to purchase a copy. *- Editor*

2019 REGIONAL MEETING SCHEDULE

NE Region (1st Sat)	SE Region (2nd Sat)	SW Region (3rd Sat)	NW Region (4th Sat)
Jan 5th (Josh Perkins) (Unless Other Host Interested)	Jan 12th (Byron Doner)	Jan 19th (Open)	Jan 26th (Rory kirk)
Feb 2nd (James Schaefer)	Feb 9th (Open)	Feb 16th (Open)	Feb 23rd (Monte Smith)
Mar 2nd (Josh Perkins) (Unless Other Host Interested)	Mar 9th (Open)	Mar 16th (Bruce Willenberg)	Mar 23rd (Mandell Greteman)
Apr 6th (Diana Simon-Cherokee Strip Hist. Society)	Apr 13th SCABA Picnic	Apr 20th (Open)	Apr 27th (Rory Kirk)
May 4th (Josh Perkins) (Unless Other Host Interested)	May 11th (Open)	May 18th (Open)	May 25th (NW-Terry Kauk) May 25th (SW-JJ McGill, Boy Scouts)
Jun 1st (Josh Perkins) (Unless Other Host Interested)	Jun 8th (Open)	Jun 15th (Ricky Vardell)	Jun 22nd (Mandell Greteman)
Jul 6th (Open)	Jul 13th (Open)	Jul 20th (Open)	Jul 27th (Open)
Aug 3rd (Open)	**Aug 10th (Joe Hamil)**	Aug 17th (Open)	Aug 24th (Open)
Sep 7th (Open)	Sep 14th (Open)	**Sep 21st (Ricky Vardell - JJ McGill - Sulphur Tractor Show)**	**Sep 28th (Ron Lehen-Bauer as Host - Don Garner as Contact Person)**
Oct 5th (Open)	**Oct 12th (Conference Setup Work Day)**	**Oct 19th (Conference Weekend!)**	**Oct 26th (Bob Kennemer)**
Nov 2nd (Open)	**Nov 9th (Bill Phillips)**	**Nov 16th (Anthony Griggs)**	Nov 23rd (Open)
Dec 7th (Open)	Dec 14th (Open)	Dec 21st (Open)	Dec 28th (Open)

2019 Fifth Saturdays:

March 30th (Beginner Blacksmith Classes Planned for NE and NW Regions. Touchmark Class at Byron Doner's Shop.)

June 29th (Knife Basics Class with ABS Journeyman Anthony Griggs!)

August 31st (Open)
November 30th (Open)

July 2019

NE Regional Meeting July 6th : Open.
SE Regional Meeting July 13th : Open.
SW Regional Meeting July 20th : Open
NW Regional Meeting July 27th : Open

August 2019

NE Regional Meeting August 3rd : Open.
SE Regional Meeting August 10th: Will be Hosted by Joe Hamil at “Everything Welding Safety, Inc.” 3451 N Flood Ave, Norman, OK 73069. Look for “EWS” sign one block south of West Tecumseh Rd on Flood Ave. The trade item is pot luck. Lunch will be provided but please bring a side dish or dessert to help out. Contact Joe Hamil at 405-623-9009 or joe@hamilinc.com if you have questions.
SW Regional Meeting August 17th : Open
NW Regional Meeting August 24th : Open

** NE Region Notice!**

Due to changes in his work schedule and obligations, Josh Perkins will no longer be able to host informal meetings at his shop in the NE Region.

Around the State...

NW Region May Meeting:

The Northwest meeting was held at Terry Kauk's shop near Leedey. It rained most of the day before, but was a pretty day for the meeting. The trade item was a paper towel holder and we had some really nice ones. The meal was Sloppy Joes with lots of sides and desserts. We had a turnout of about 25 and had a good day forging and visiting. Thanks to all who came. And thanks to LaQuitta for the photos. - Terry Kauk

(Photos by LaQuitta Greteman)

SW Region May Boy Scouts Meeting:

Well this years Boy Scout blacksmithing camp out was as active as the ones in the past five years. The Scouts arrived about 9:45 on Friday night. With the past years of thunderstorms during the camp out they didn't even bring their tents. They just brought bed rolls and slept in the meeting hall. There were 14 scouts and 6 adults. We started the blacksmith workshop after they prepared a breakfast of Pancakes and sausage. All early arriving blacksmiths were asked to join in.

This year the Scouts voted to make serving spoons off of the large spoon mold in the SFC swage block. Stock was pre cut and ready for them to begin hammering on. They were allowed to make the handle of any shape as they saw fit. This allowed them to use their creative side. They were all up to the challenge as normal. When the lunch bell rang, all but two were done with their spoons and ready to start making sharp things as in the past.

The Scouts provided lunch for the Smiths. On hand for the workshop was Ricky Vardell, Bruce Willenberg, John (Mountain John) Cook, and Anthony Griggs. A BIG THANKS YOU goes out to theses guys for coming and HELPING OUT WITH THIS HIGHLY STRESSFUL EVENT!

Ricky was brave as normal to take on the first timers. He had three young men at his station. A pair of wild RED headed twins and a Wonderful young man by the name of LUKE. The twins mastered burning up metal! But young Mr. Luke hung on every word and movement Ricky made. And the picture of the young man and his projects show it! Yes, I said projects. After completion of his Spoon he asked it he could make a Fork to eat with. So after lunch with the guidance of Ricky that's what he did!

I finally got all the forge fires put out about nine O'clock that evening. Ricky and I were worn to a frazzle, but the Scouts were still wanting to forge more! And they want to come again in 2020. Will keep y'all posted as to when they want to do it again. Thanks to all for your help again! - JJ McGill

(Photos by JJ McGill)

SW Region June Meeting:

Ricky & Nikki Vardell hosted the SW District June Meeting. Around 15 people attended, two of them being our newest members, Craig Christan of Wichita Falls, TX and S. Ray Kimbrell of Punkin Center. One local young man, Mat Mallow, came and tried his hand at forging and I am pretty sure he has the bug. It was a hot day but there was plenty of shade for everyone to be under. Some of the younger members forged while the seasoned forgers were nearby and ready for advice if needed. Our daughters, Hassie Moiser and Hannah Crowley, helped prepare the brisket for lunch along with the variety of food and sweets brought by other members. After our meal with did the drawing for the trade item. There were 6 entries of unique forged trivets. LaQuitta ans Mandell Greteman, Don Garner, Eric Jergensen, and Korny worked/played with the wireless microphone for upcoming demonstrations. (It takes a village, LOL.) This will be a great tool for us to utilize. Thanks! -Ricky and Nikki Vardell

(Photos by Nikki Vardell and LaQuitta Greteman)


Great Horned
Forge

NE Region June Meeting: No meeting was held in June.

SE Region June Meeting: No meeting was held in June.

Saltfork Gate Project!

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

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. Each ring will be approximately 10 to 12" in diameter. You can start thinking of ideas for your project if you wish to participate.

Mandell Greteman is coordinating the project and will provide the standardized rings. Once the projects are returned, Mandell will weld them into the gate to be displayed at the museum.

Additional details on the project and how to obtain one of the rings for your work will be announced when they become available.

OKLAHOMA STATE FAIR DEMONSTRATORS NEEDED

Hello Saltfork Club members. The Oklahoma State Fair is quickly approaching. I have begun to put together demonstrators for this event promoting the club. If you would be interested in signing up, please let me know sooner rather than later.

The OK State Fair will run Thursday, September 12 through Sunday September 22, 2019.

We are seeking those who would like to help promote and talk about the club by demonstrating to fairgoers. Those demonstrating will be given a gate and parking pass. In years past we have also had a complimentary hotel for those traveling a greater distance from out of town. Consideration is given on a first requested and distance traveled consideration.

If you would like more information about this fun event, please contact:

Richard Blasius 405-881-0804 or his wife Michele 405-550-9850.

Member Gallery

Phoenix Lantern

By Gerald Brostek

The phoenix lantern I created several years ago. Many of our Saltfork members have seen it over the years and I entered it in the ABANA gallery in Rapid City SD (2007) I think.

It is hand forged from all mild steel, and the finish is all heat colored and polished with renaissance wax. I had no pattern or drawing to go by. Just what I dreamed up in my head.

It was a bit tricky to heat color it. My oven was not large enough to color the bird in one piece so it was oven colored in three pieces at a temp. of about 480 degrees to get the bronze color. The rest of the frame work was colored with a propane weed burner till the dark blue appeared.

Overall size is 42” x 22”. - Gerald

The 2019 SCABA Conference is Coming Soon!

It is time to make your plans and mark you calendars for the 2019 Annual Saltfork Conference!

Conference weekend is:

Saturday October 19th and Sunday October 20th.

This year's conference will be held at the Murray County Antique Tractor Association Club grounds just north of Sulphur, OK. (Same place as the last three years.)

This year's demonstrators are Peter Ross and Ken and Mary Lou Zitur.

There will be limited-space workshops with the demonstrators during the three days following the Conference Monday October 21st through Wednesday October 23rd. This is a great opportunity to work with these demonstrators to advance your skills!

As usual, in these last few months approaching the Conference, we will be needing to make tools and other items for the Conference Tool Box and acquire donations for the Iron in the Hat and Conference Auction. And PLEASE come to the Pre-Conference set up the weekend before the Conference if you can! It seems there are never enough volunteers available.

This year's Conference will continue the Peoples' Choice Gallery with two categories of "Traditional" and "Open." Even if you don't want to enter an item in the Gallery for voting, please consider bringing a display-only item.

The Conference sign up sheet and much more detail will be included in next month's newsletter. Stay Tuned!

Cool Tools for your Vice

By Mark Teece

Holding round stock or pipe in a vice.

Helpful for working on pipe or round hand tools. Two pieces of angle iron welded to a third piece that rests on the jaws. The short piece of round stock stops the tool falling off the vice when you remove your work-piece.

Holding short pieces of bar stock.

To stop the jaws from "rucking" and being able to hold on to short pieces of stock, a set of spacers are really helpful.
This great and simple tool was made from 1/8" thick pieces of plate by Bryan Moran from the Mohawk region.

Holding a workpiece that has a taper.

The tool is made from a large piece of angle iron (1/8" or thicker), as wide as your vice. Then weld a piece of 1/2" round bar (or thicker) to the middle of the angle. The iron swivels on this round bar and automatically adjusts to the taper.

Vice tool for working on animal heads.

Made from two pieces of angle iron welded at 90^{o} to each other. A short piece of steel welded at the end of the vice piece stops the tool sliding off the vice.

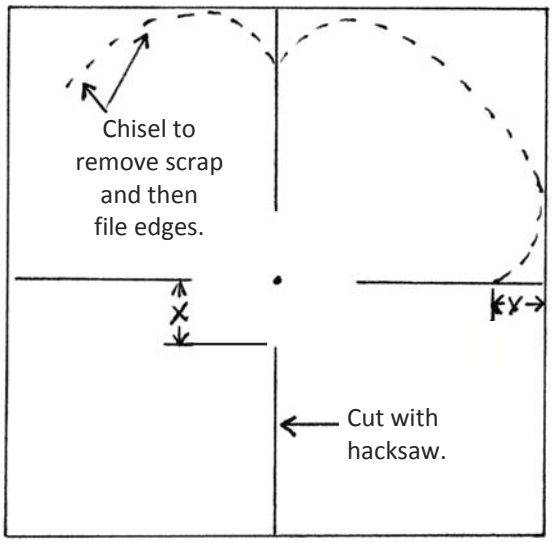
This article is reprinted courtesy of the New York State Designer Blacksmiths “Anvils Chorus” newsletter Spring 2019.

Two Simple Flowers

By Steve Anderson, a MABA member

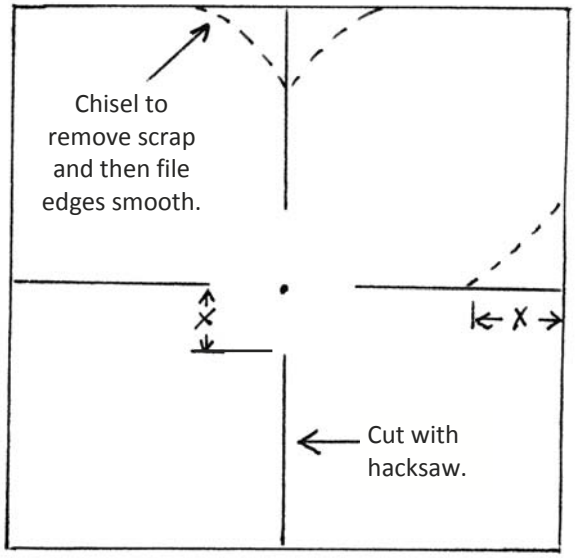
Stock size-16 to 10 gauge sheet steel.

Round Petal Flower



Flower blank	*Dimension X*	*Rivet size*
2 x 2	3/8	3/16
3 x 3	7/16	1/4
3 ½ x 3 ½	½	1/4
4 x 4	9/16	1/4

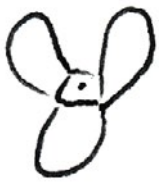
Square Petal Flower



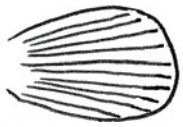
Mark the flower center but don't drill the hole until after forging the petals.

Cut, chisel and file edges.

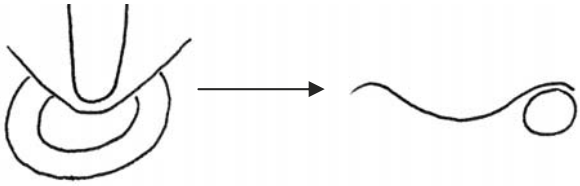
Bend the opposite petals down. And the other two petals up.



Use a cross pein hammer to spread and texture the petals.



Flatten the petals allowing them to overlap.



Cup the center of the flower down, then curl edges over. Time to drill the rivet hole.

Clean up the flower on a wire wheel, then clear coat and wax to seal.

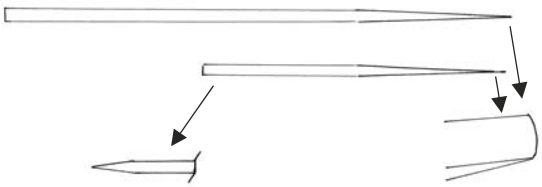
Attach the flower to your project using a plain or decorated rivet.

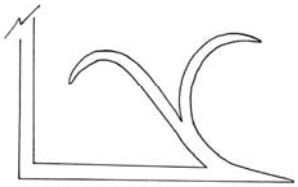
Windowsill Flowers

By Steve Anderson, a MABA member

Optional treatments for the welded end.

Stock-
Small size: ¼ x ¾ inch, two pieces
8 inches and 28 ½ inches
Large size: ¼ x 1 inch, two pieces
11 inches and 36 inches

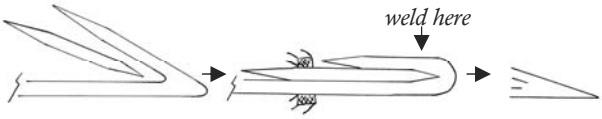




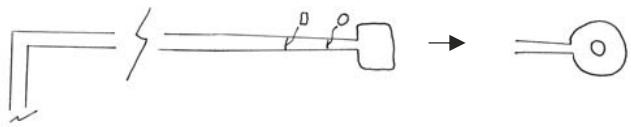
Hold welded end in a vise, then open and position the leaves.

Forge a long thin taper on the flat side of one end of each piece, slightly rounding the end. These ends will form leaves. Then forge a ¾ inch scarf on opposite end of the short piece.

Next forge a square corner 10 inches from the welded end on the small stock or 12 inches from the end on the large stock.



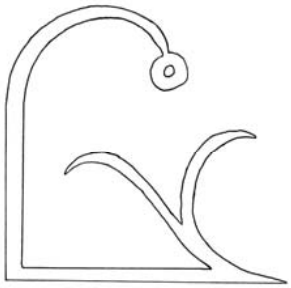
Bend the long piece 7 ½ inches from the tapered end on the small stock or 10 inches from the tapered end on the large stock. Insert the scarfed end of the small piece, flux and weld together. Hold pieces with a vise grip when welding. Forge this end down to a point, maintain the original stock width.



To make the flower stem, start tapering 7 ½ inches from the corner on the small stock or 9 ½ inches from the corner on the large stock. Taper down to about ¼ inch square leaving a square tab on the end.

Round the last 1 inch of the taper, then rotate the tab 90 degrees.

Forge the tab round, drill the rivet hole and counter sink it from the back side to attach the flower.



Bend stem to locate the tab above the leaves. Adjust with the flower in place before riveting.

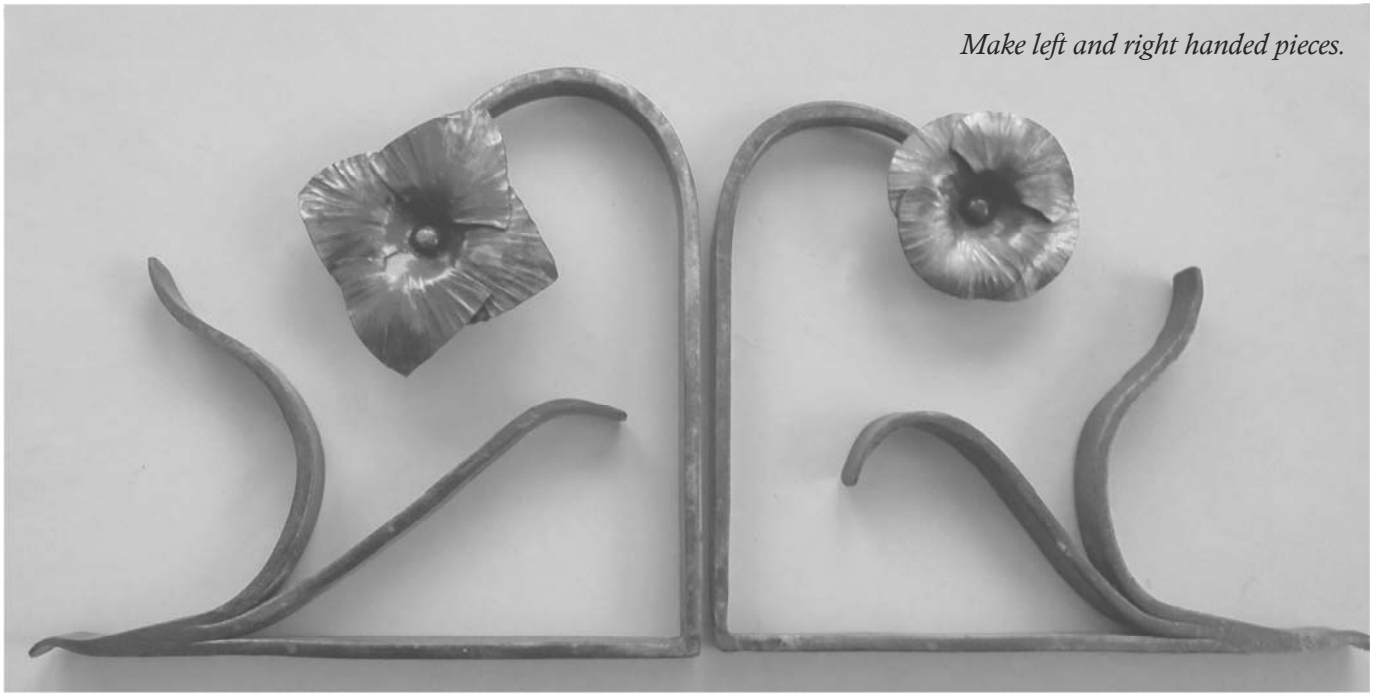
Attach the flower with the appropriate rivet.

For the small stock use a 3 ½ inch round flower or a 3 inch square flower.

For the large stock use a 4 inch round flower or a 3 ½ inch square flower.

Wire wheel the completed piece. Use a brass brush to highlight if desired. Apply one coat of Penetrol, then apply three coats of wax when dry. Or use a finish of your choice.

A how to on making daisies is available in the MABA archive issue- Daisies, 2016-4-Upsetter-Jul-Aug Steve Anderson



Make left and right handed pieces.

Sucker Rod Steel Type by Manufacturer Code

Steel type AISI grade	Stamp marking on knuckle flat	Manufacturer of sucker rod
4130	SM	Highland / Corod Inc.
4130	SMR	Highland / Corod Inc.
4130	DLR	Highland / Corod Inc.
4130	DL	Highland / Corod Inc.
4142	D61	Trico Industries
4320	90	Norris Sucker Rods
4330	97	Alberta Oil Tool
4337	50	Upco Inc.
4623	45	Upco Inc.
4623	K65	Trico Industries
4720	95	Upco Inc.
4130M	S200H	Schoeller-Bleckmann
4135M	S200H	Schoeller-Bleckmann
4138M	XD	National-Oilwell
4140M	S200H	Schoeller-Bleckmann
4142H	SAE	Avan SAIC
4142M	78	Norris Sucker Rods
4142M	75A	Upco Inc.
4142M	D	Highland / Corod Inc.
4320M	90	Norris Sucker Rods
4330M	97	Norris Sucker Rods
4330M	75	Alberta Oil Tool
4338M	HS	Continental Emsco Co.
4621M	40	Norris Sucker Rods
4621M	K	National-Oilwell
4621M	N2P	Schoeller-Bleckmann

This table was submitted by Mandell Greteman. The information was obtained from online sources and the original source is not available to credit.

Several manufacturers have more detailed information available online if you can identify the code number on a specific batch of sucker rod. (Sometimes this is difficult on old scrap.) Not all sucker rod is created equal but most of it is readily available in our area and usually makes decent material for tools.

This article is reprinted courtesy of the Pittsburgh Area Artist-Blacksmiths Association newsletter July 2019.

PAABA/ABA Member
Bob Elliott Knows How to Shovel It!

Talent and kind are the two words that first come to mind when speaking of Bob Elliott. Bob has been a successful blacksmith for many years and has tackled some challenging projects throughout the years. Decorative gates, many, many feet of custom railing, and just about everything in between has been in his shop. He is also an extremely talented tin smith just to add to his list of accomplishments. But, kindness and generosity are also part of Bob's make up. This past spring, Bob held the ABA Annual Business Meeting at his shop located in Fairmont, West Virginia. There were a number of newly interested members in attendance and Bob demonstrated how to make a fireplace shovel using a minimum of tools and equipment. His purpose was to demonstrate, but also encourage those in attendance that you don't need a lot of additional tools, fancy equipment or the latest blacksmith gadget to be successful...practice and developing your "eye" can be the best "tools" you possess!

1. Start out with a shovel blank shape made from 16ga. Use a ball pein hammer to begin hammering out the back of the shovel over the hardie hole. Choose a ball-pein that is not real "pointy". The key to hammering this area in to NOT get any wrinkles. It is better to heat several times and progress slowly than to develop a wrinkle.
2. Start to "roll" the back up (curve) using the face of the anvil.
3. Change hammers to a rounding hammer and round out the back, keeping in mind symmetry. Match the left side to the right side. This is very good practice, because it helps train your "eye".
4. Change hammers to a flattening hammer to even out shape.
5. To establish the two sides use the anvil's heel to dictate the sides. (Bob's anvil was 4 1/2" wide which was the perfect size using 6 1/2" wide shovel blank. This measurement allowed one inch margin for each side. If you have a swage block, you can also shape it in the shovel indentation, but if not, this is good practice!
6. You have a general shovel, however, to add some style, move to the upper side of the shovel and develop a flare for a more attractive line. This can be done over the horn of the anvil.
7. Use the hardie hole to adjust. The trick to using the hardie hole successfully, is to make sure the hammer strikes IN the hardie hole not on the edges/margins of the hardie hole, this will disfigure the shape of your metal.

——-The pattern outline of the shovel blank is on the address side of this newsletter!——

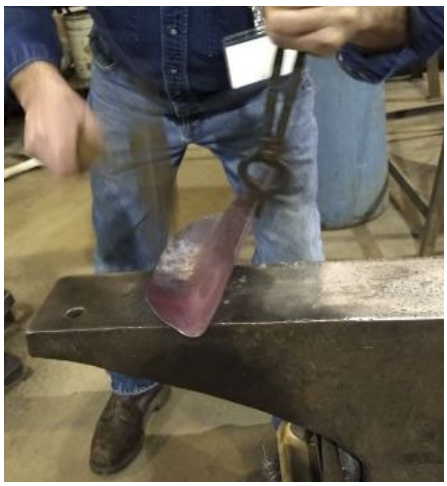


Photo Left—Using the hardie hole to shape the back of the shovel, make sure your hammer strikes in the hardie hole to avoid dents or undesired markings. Middle Photo—Define your sides of the shovel by using the heel of your anvil. Bob's anvil measures 4 1/2" wide, the perfect size for a 6 1/2" shovel blank. To make yours work, you may have to make adjustments. Photo Right– Add a flare to each side to make the shovel more graceful, use the horn of the anvil to add flare. Keep in mind symmetry, match one side to the other the best you can!

Hard to Handle?....Not!

Adding a handle on a shovel may seem to be straight forward, and it is... in theory, but there are a few tips Bob Elliott offered to make your project more successful.

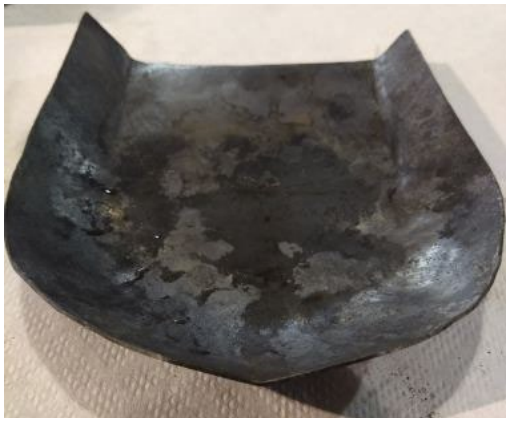
1. Bob uses 3/8" round material for a handle, but you can use square. If you do use square, make sure you "think" in terms of what is up and what is turned down. Working with round material is a bit easier because to adjust round material is just a matter of a slight twist for correction.
2. When designing a handle, keep in mind, it can have multiple purposes for other projects such as a plant hanger, stand, or handle for other tools.
3. Bob made a leaf as his handle termination. Each person has their own style of leaf "making". Bob uses a rounding hammer to draw out the left and right side of his leaves leaving a ridge in the middle for added detail and strength. If you do make a leaf termination on a handle, make sure you have smooth edges and not knife–like perimeters. You do not want to grab a sharp metal edge. You can use a jig to round out the shape on your handle, but you do not need one. Shape your handle on the horn of the anvil.
4. If you would like to add a "knot" in the handle length, it is a quick procedure. Have your vise ready to size so you can capture metal length quickly. Set vise grips to get extra leverage and control of the metal length. Remove from forge, quickly set perpendicular to vise, bend 90 degrees AND turn /twist metal to form knot. Straighten horizontally in vise and adjust.

Photo Left– When making a leaf, consider leaving a ridge in the center for a "vein" and to add strength. Photo Middle– Use the horn of the anvil to shape handle grip. If you make a leaf termination use caution while shaping the grip. Photo Right: Making a "knot" use a vise and quickly bend material 90 degrees then twist AND turn material to form a knot

Bob's New "Fit Bit"!

To fit the handle onto the shovel, takes a bit of a finesse. An extra set of hands can be helpful but not imperative. You will need two rivets to hold shovel in place because using one will eventually turn.

1. Make a short point. Create a boss (ridge) on the anvil, flatten out to tear drop shape. Repeat, for a second rivet and hammer flat.
2. You will need to have the flat side against the shovel to fit. If you make a slight "peak" in the center of the back of the shovel, the handle will rest more comfortably.



Left– Two tear drops for rivets. Middle- Center indentation to set handle. Right– Completed shovel w/ fitted handle ready for rivets

This article is reprinted courtesy of the New England Blacksmiths newsletter Spring 2019. Please keep in mind that the author is pursuing the artistic aspects of his blacksmithing path. Not everyone would agree that “art” surpasses “craft” or that “advanced blacksmithing” could not be defined as better execution of forging craft works (which can be considered works of art as well.) - Editor

The Pencil vs The Hammer

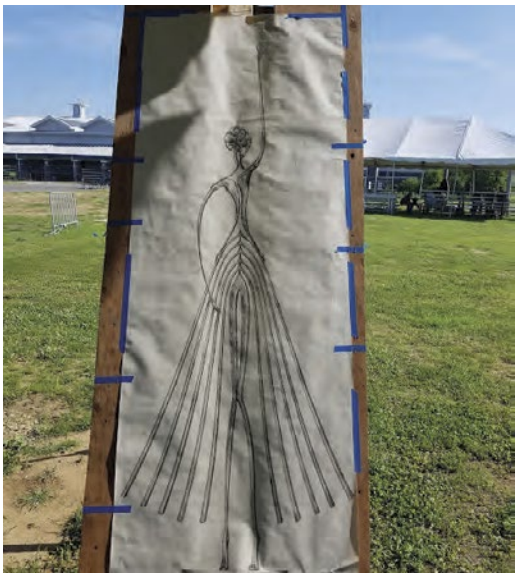
By Russ Jennings

At the 2018 ABANA Conference, I had the opportunity to meet lots of talented smiths, and see numerous examples of beautiful artwork. From the gallery, where I could see and touch amazing sculptures, to slideshows of incredible ironwork hosted by their creators. Best of all, were the blacksmiths at work, creating art right before my eyes.

This was my first exposure to blacksmithing and metalwork as "art." I had only seen functional things made well, like gates or furniture. It had only vaguely occurred to me that you could make something meant to hang on a wall and view as you would a painting. Iron Art was on display at all scales, ranging from small items that one might hang in a living room, to large public installations.

I was driven to ask myself; why does this work look better than my own? What skills do I need to refine, what concepts should I master, what aspects of blacksmithing do I need to improve upon to become an artist? I've been very lucky so far; I've attended some excellent classes as well as worked alongside some talented artists. I have a good understanding of the basics; I can taper, scroll, and bend, I can use tools and jigs. So why doesn't my art look like the stuff that's on display?

One of the demonstrators was Pavel, a European smith who makes dynamic sculptures. He was forging a ballerina in a dress. The dress was made of multiple pieces of steel, forge welded in the center, and then curved gracefully into an arc with a point in the center. These arcs stacked atop one another in such a way that they could spin, yet remain balanced and standing. The sculpture would move and sway just like a real dancer.



The Pencil vs The Hammer continued

While watching Pavel work I realized he wasn't doing anything that I couldn't do myself. The most complicated part of the project was the simple fagot weld in the center of the bars. No individual piece was complicated or unusually shaped. He did the basics well. After every heat, he would compare the piece he was working on to a full sized drawing he had nearby. By alternating between forging and comparing the piece in his hand to the full size drawing, nothing was left to chance. Each piece was planned, already sized and laid out.

Another talented presenter was Mark Aspery, someone I have met a few times before. I asked him a question, "If things like tapers, bending, hooks, and scrolls are all 'The Basics,' then what is advanced? What skills are "Blacksmithing 102?"After a long conversation, we agreed that there aren't any "advanced" forging techniques. Maybe traditional joinery counts, but even that has less to do with how well you forge, and more to do with how well you measure.

Don't get me wrong, I understand there is difficulty in creating masterful art. After all, getting the spacing correct on balusters is plenty difficult, as is ensuring that a myriad of different pieces all match.

What I learned from the conference is that you reach a point where your skill with a pencil matters as much as your skill at the forge. A pleasing design is the most important part of a project. Once you have a good drawing, you can get to the forge and produce results right away.

With that in mind, I did some brainstorming with a sketchbook and designed an artistic sculpture piece. I've always liked sea monsters, and I wanted to create something that looks weightless and sinister, floating weightlessly. It only took a few rough sketches for me to nail down exactly what I had in mind. I broke it down into smaller, simpler shapes, and then set to making it.

The Pencil vs The Hammer continued

The frame was simple, just an upset at each end and an upset corner. The curved shapes are simple straight tapers bent around a circle jig. The hardest part was tapering the pipe, that was done with a three sided jig in a power hammer. The small tentacles were tapered, then bent using a torch after everything else was assembled. The individual pieces aren't complicated when viewed on their own. In the unassembled photo you can see them. Once assembled, they produce an artistic whole greater than the sum of its parts. Building these pieces was relatively quick and straightforward. I have a bad habit of going into the forge with a rough idea of what I want to make and then getting stuck in the details. This time I had a list of easy to make components, and it was just a matter of forging them out. Starting work on an abstract idea is much harder to finish than a planned design.

In my quest to become an artisan blacksmith, I've learned that my blacksmithing can only go as far as my artistic abilities. The advanced parts of smithing have nothing to do with the hammer but with the pencil. Studying traditional art, from Ancient Egypt to art deco, has put me on the right path to becoming a better artist.

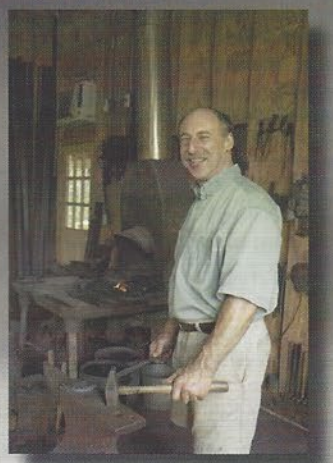
Master of None

by

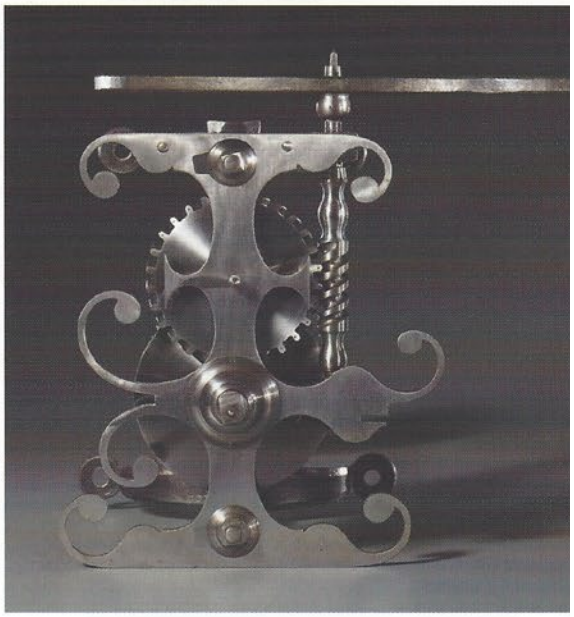
Peter Ross

Siler City, NC

Photos by Peter Ross

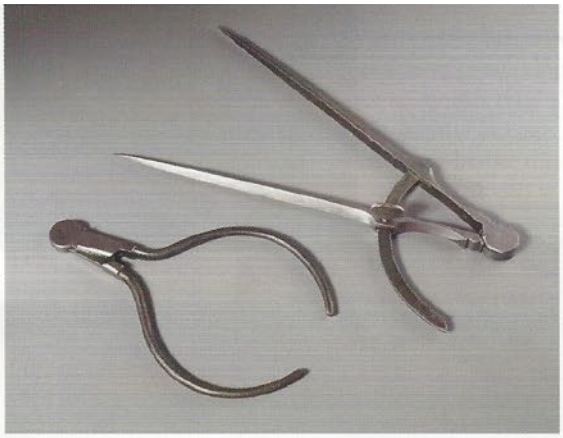


The years as Master of the Anderson Blacksmith Shop, Colonial Williamsburg Foundation (CWF), were some of the most stimulating and challenging of my career. This was due to several factors, most importantly the context and the fellow smiths. The daily museum activities, coupled with a vigorous restoration program, provided a steady list of interesting projects, including: door locks, printing presses, spitjacks, plows, wagon hardware, a hand pumped fire engine, lightning rods, weathervanes, and hundreds of tools commonly found in 18th-century workshops. Working alongside knowledgeable smiths offered steady interaction- common problem solving, differing opinions, debate- missing in a one-man shop. I am incredibly grateful for the highly skilled group of journeyman smiths that made up the shop staff. Rick Guthrie, Ken Schwarz, Jay Close, Jim Slining, Steve Mankowski, and Shel Browder were all in the shop together for many years and are still respected leaders in the field of historic restoration and *reproduction.*



Above: Bracket. Forged and filed wrought iron. 16" x 20". 1994

Right: Spitjack reproduction. Forged, filed and turned. Wrought iron, high carbon steel. Height: 15". Penetrol™ finish.



Above:
Compass (right) and caliper reproductions. Forged and filed wrought iron. Compass length: 12"

Goals

For the founders in the 1920's, CWF's original goal was preservation- objects, buildings, the town, and the knowledge of 18th-century events. At some point, the preservation goals expanded to include preserving skills and trades. The blacksmith shop contributed to the effort by:
(1) Studying 18th-century forged iron artifacts in order to learn about their materials, original appearance, and manufacture.
(2) Re-creating a period-correct workshop environment.
Those goals are probably the easiest to achieve as they are straightforward tasks to document the types and styles of tools available in the 18th-century. Store inventories, workshop inventories, manufacturer's catalogs, newspaper advertisements, archaeological finds, paintings and book illustrations are all excellent sources. While designs differ, the list includes many types of tools found in a modern shop, minus the electrical/hydraulic/pneumatic power.
(3) Re-discovering and practicing the manufacturing methods used in 18th-century forge shops and demonstrating them to visitors.
(4) Furnishing the museum with iron products used in 18th-century Williamsburg. Reproductions are expendable compared to the originals, many of which are quite rare. With good reproductions available, the artifacts can be retired and protected from wear and damage.

The pursuit of these goals led my fellow smiths and me down an interesting path.

Part 1: Museum Smiths

How do these goals compare to smiths working in the present? The basic and most telling difference is that handwork is now an outlier in our society; a novelty in the larger culture. Modern smiths have an opportunity to create and design something "special" (even a nail) and are encouraged to produce pieces that are personal. This personal connection has special value in today's culture.

This is quite different from 18th-century demands, when most smiths worked diligently to conform to the standardized patterns and designs of everyday goods.

House hardware and tools are both good examples of the discipline and control required to produce cheap, uniform goods. A study of pieces used in colonial America shows mostly standard forms, with only a few regions of marked contrast (southeastern Pennsylvania, Connecticut River Valley). Even the humble nail was standardized, with published specs for each size and type, including length, weight per thousand, and quantity per pound. This uniformity was expected while making up to 2,000 per day per person. At that speed, there is no time to gauge accuracy except by eye and familiarity. Yet, uniformity was achieved.

Right:
Antique Nails.
Length: 1-1/2" to 4"

For the modern smith doing careful reproductions, shedding modern culture is the greatest challenge. He/she must reproduce an object without adding a single bit of their personality. This means: do not straighten something originally made crooked, do not correct sloppy or odd details, do not adjust proportions to make it look better, do not spend extra time making decoration perfect or more elaborate, do not incorporate modern knowledge to avoid original weaknesses. If any of these things are done, the reproduction will not look right. More importantly, those nagging irregularities are important clues to understanding how the original was made; how fast, how carefully, what tools were used, etc. Once you start down the road of improving (fixing) the original you are rationalizing how you think it should be made and ignoring what the original maker was thinking.

Right and Left:
Crooked antique thumb latch examples.
Length: 8"-9"

This is one of the biggest challenges in good reproduction work and a difficult discipline to develop in museum craftsmen. Today's smith often has had years of praise for exhibiting personal expression. Putting that aside to become anonymous is a challenge that many contemporary craftsmen will not accept.

Apprenticeship Training

This challenge guided the interview process for new apprentices. I did not always value skill at the anvil as the primary qualification. Instead, I looked for candidates who had a good eye and could articulate what they saw. Could they describe how one curve was different from another, or where a taper began and ended, or explain what caused the asymmetry in a piece? Museum smiths must able to understand the artifact, aesthetically and technically.

Because we needed permanent staff, apprentice training was intended to produce career journeymen who would stay for the long term. Our museum smiths had to be capable of copying work of local 18th-century smiths, and products of specialty shops in England. (Most modern blacksmiths are surprised to learn that the vast majority of tools and hardware used in colonial America were imported from England, where they were produced by highly skilled specialists such as hinge makers, locksmiths, file makers, cutlers, nailers, edge tool makers, etc. A small-town smith in 18th-century America was mostly a repairman…not a manufacturer…and generally could not match the quality, consistency, and low price of imports.)

This presented a dilemma of authenticity; representing the trade as actually practiced would not satisfy the need for reproductions. As you might guess, museum needs won out, and a broader training program was designed. To that end we formulated a list of items that all apprentices would learn to make during their apprenticeship (typically six years but sometimes longer). Each project was designed to build on the skills of those before it. For example, towards the end of the program, apprentices made several locks. First a padlock, then a stock lock, then an iron rim lock. Each lock was considerably more intricate than the last, using the same skills but at a higher level. Each sequential lock incorporated more complicated forgings, tighter tolerances, and better surface finish.

Left: Padlock works. Reproduction. Mild steel. Height: 5"

Right: Stock lock. Reproduction. Forged and filed wrought iron, oak. 5" x 8"

Right: Stock lock works; detail of interior.

Left: Rim lock works. Antique example. 4-1/2" x 7"

In the beginning, there was lots of repetition. Regardless of experience, all new hires made nails until they achieved the shop's minimum standard (60 8d nails per hour, including forge welding the short nail rods). Their first couple of years included many hours making nails, sizing stock for more experienced workmen, forging basic cooking utensils, small furniture hinges, etc.

The apprentice was expected to learn many things: quick and dependable eye judgement (keeping the bar straight, forging to specified size, judging hole locations by eye, smooth curves, etc.) good fire management, simple lap welding, and how to forge smooth, dent-free, scale-free surfaces ready for filing (without a wire brush).

At the vise, he/she must learn to file straight, flat, and round, judging all by eye. Bench work also included various assembly methods and how to precisely fit parts to each other. In historic work, these are basic skills, and mastering them on simple projects is essential in anticipation of the more complicated things to come.

Right: Welded eye hooks and staples. Reproductions Forged mild steel. Length: 5"

Right: Tasting spoon. Reproduction. Forged and filed mild steel. Lenght: 11"

Left: Welded eye hasps and staples. Reproductions. Forged mild steel. Length: 8"

At this initial stage of training, apprentices kept working on the same project until they could produce acceptable results (even if their speed was slow). While the first successful attempt with a new form was rewarding for them, I focused on whether they could make five successful pieces in a row (with no failures) as proof that the skills were actually mastered. Some projects would take 15 or 20 repeats, some fewer.

Right: Hinge reproductions. Forged and filed mild steel. Largest hinge length: 7"

Museum Obstacles

"Success" includes both the quality of the finished piece and skill of the workman. The quality of the object is relatively easy to measure (surface finish, deviation from target dimensions, uniformity, delicacy of decoration). Skill is more subjective. Almost anyone can turn in acceptable results given unlimited time, so a limit was applied. The challenge/skill is doing proper work within a reasonable time.

One failing of museum training is that it is impossible to become as fast or as skilled as 18th-century smiths while working in a museum environment. Even highly skilled craftsmen coming from industry lost their speed and finely-honed skills after a few years at Colonial Williamsburg. The average day in our shop included several hours of interaction with visitors, leaving only two or three hours for forge work. Using nail-making as an example: every smith in our shop could make 8d nails (2 ½" long) in one heat, at the rate of at least 100 per hour (when they exerted themselves). That sounds pretty good compared to what I've seen around the country these days. However, 16-year-old boys in the 1700's were doing much better, and by their adult years were customarily making 2,000 per day. In that light we did rather poorly.

Right: Nail reproduction. Forged mild steel. 1-1/2" to 3-1/2"

Below: Hacksaw reproduction. Forged filed and turned. Mild steel and beech. Length:12"

In one sense, we were misrepresenting the trade, as the typical tourist watching us thought our mediocre speed was authentic. It was very difficult to convey the idea that as wonderful as we might seem by modern standards, we were nothing special compared to the average performance from the era of handwork. Our speed was always poor compared to 18th-century tradesmen, but that was a failing we had to accept. On the plus side, we were making correct nails for use in the museum, and hopefully visitors went away with some better understanding of the process, even if it was flawed.

Part Two: Evolution of Thinking

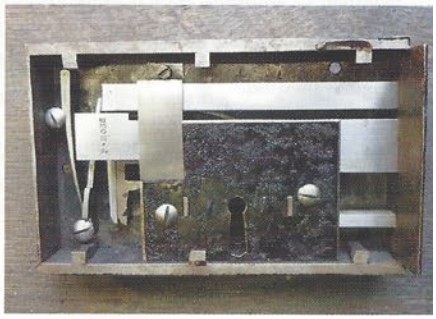
My tenure at Colonial Williamsburg led me through several phases of understanding 18th-century objects and how they were made (to the best of my knowledge). The first phase involved studying the object. I became familiar with many artifacts and could easily pick out forged or filed surfaces, punched holes, etc. I learned to differentiate standard manufactured goods from local one-off examples. I could make good reproductions of these pieces, with correct dimensions and surface textures, though I was not too concerned with how my tools might resemble the original maker's. Sometimes I used a modern drill press when the hole would be obscured by rivets or tenons. Most of the work at this stage was done with mild steel.

Spending years at this level gave me some ability at judging material amounts, what bar sizes to start with, how much to allow for stretch, etc. The penalty for using too much material was extra hours of filing; a lesson that is learned quickly. This was the first realization of understanding old methods: without a penalty for poor judgement, not much is learned. If I had used electric grinders, saws, and cutting torch, I would not have developed the skill of good estimating.

Left: Hoe reproduction. Forged mild steel. Length:13"

This approach served me well for the simpler projects. However, one day we needed to make a copy of a three-bolt iron case rim lock.

Right: Three-bolt lock works. Reproduction. Forged and filed mild steel, wrought iron, high carbon steel. Painted. 4-1/2" x 7"



Measuring/Precision

To begin, I dutifully copied each part to the best of my abilities, measuring each with calipers and a modern finely calibrated rule. Thinking that a punched hole and a drilled one were almost the same, and that punching holes in the sheet metal case would be less accurate, I located and drilled as many holes as I could, measuring perfectly from the original. However, when it came time for assembly, things did not go well. In spite of my careful copying, the lock could not even be assembled. I measured more precisely than was possible in an 18th-century shop and had no success. How could this be?!

What followed was a tremendous amount of fussing- shifting holes slightly to get better alignment, stretching or adjusting parts, remaking a couple. In the end, the lock worked. When I compared it to the original, I immediately saw that there was no evidence of fussing on the antique; no shifted holes, no parts fixed or stretched. "Aha!" I said, "...those old locksmiths were much better skilled than I. This is my first lock and I'll get better with practice." The next lock went slightly better, but not well enough. In fact, I never got to the no-fussing stage.

Finally, the other smiths in the shop suggested there could be a construction sequence that would eliminate the need for re-doing parts. This was based on Donald Streeter's research showing that English lock cases were proportioned from the keyhole dimensions. After measuring several locks and some experimenting, we determined that all the holes in the case could be located and punched in advance by using some simple layout rules based on the keyhole size. The small parts were then forged with enough allowance to fit them to the holes. This lock worked better than any previous attempts... and no fuss!

The drill press kept me from an important realization: using only period correct tools was actually a path to better methods (at least when copying historic pieces). The drill press, with its associated precision, turned out to be a hindrance and a time waster.

Flaws in the products also led me to another realization: precise copying of an artifact can obscure much of what it has to teach us. Being careful to faithfully copy every mark and detail may replicate the object but will never offer any insight into original methods, which consisted mainly of freehand work with a few basic tools. One analogy is the task of copying another's signature. While the original is done with a freehand flourish, the copy is done with the opposite; precise studied concentration. The more intense the effort, the more difficult it is to capture the spontaneous nature of the original. In addition, several signatures by the same author are not identical. Which one do you copy? Which characteristics of each one are shared by the group? My lesson: perfect copies do not reflect original method.

Working with less precise measurement means:
(1) Complete the steps that are more difficult to control first. In this case, punch holes before finishing parts, as punching is less precise than filing.
(2) Since the forgings will be filed to fit their mounting holes, the forgings can be less precise; quicker and easier to make. Usually, there will only be one critical measurement needed in the forging, not several.
(3) Like signatures, antique ironwork varied slightly from piece to piece, but maintained a recognizable character and spontaneity. It is important to understand the allowable range of variation and stay within it, not copy one piece exclusively.
(4) With a good sequence and relaxed forging tolerances, you can focus on one or two important specifications instead of many.
(5) Duplicating the method produces better reproductions than duplicating the object.

Tools

We came to realize that limiting oneself to period-correct tools does not ensure original method. For example: I often demonstrate the making of three-leaf and five-leaf compasses (a common carpenter's and joiner's tool used for everyday layout and scribing of woodwork joints).

Left: Compass joints. five leaf on left, three leaf on right.

Right: Compass reproductions. Forged and filed mild steel 7" and 6"

The compass joint is a friction joint, meaning it holds its setting without a locking screw. The five-leaf version presents a tougher problem as the leaves are quite thin and the corresponding slots in the opposite compass arm must be thin as well. So, what is the method to make the perfectly layered friction joint? With a modern milling machine and a bandsaw, this would be easy: carefully saw the slots, file the leaves, and drill the hole for the rivet.

There is no question that the hand-equivalents of these tools were commonly found in the 18th-century. Even small shops in Williamsburg were equipped with hacksaws, files, brace and bits for drilling holes, so this method could be used successfully in 1770; it could have happened. Do I think it did? Absolutely not!

Careful scrutiny of original examples showed scarfs from welded layers and forged surfaces between the layers with no evidence of sawing or filing. It was clear that the joints were assembled at the anvil and not at the bench. This evidence was enough for us to attempt the welded approach and after 25 or 30 tries we had dependable success. (Note: after the evidence for a historic method becomes clear, you still need to practice.)

Rather than careful cold fitting, the two arms and their rough assembled leaves are slipped together hot and mashed flat with a sledge and a flatter. The leaves of the joint conform to each other instantly without precise machining. I am convinced this follows the original 18th-century method (though I still have not figured out some details).

Comparing the two methods, the cut and filed joint satisfies the modern blacksmith/mechanic/machinist's familiarity with fitted joints. Even if it is a cumbersome method, it makes perfect sense to the modern mind. The welded joint is counter-intuitive, takes more practice, but is faster and requires very few tools. It also reflects the surviving evidence and a departure from conventional modern thinking; a mark in its favor.

Lesson learned: it is not enough to use period tools; it is also necessary to overcome the modern mind.

Materials

The final aspect of discovering old method is in the materials. For the last 100 years, most smiths have used mild steel as their basic material. However, in the 1700's, wrought iron was the basic material. Its grain makes it behave differently from mild steel. Consequently, many forging processes that succeed with steel fail when applied to iron. For this reason, I find it is imperative to use iron when testing old methods. For the serious student of historic method, iron is the final factor.

Part 3: Contrasting Values

My unusual experience, with a leg on both sides of the divide, offers a few impressions.

First: Beauty and Implied Value

The aesthetic of historic work is foreign to most contemporary smiths. A problem in understanding the connection between old work and new is that our value system for judging work has changed. I am often aware of the contrasts while attending ABANA conferences and teaching classes. My students are much more obsessed with careful measurement and layout, and believe the closer they get to perfect dimensions, the more skill they are exhibiting (a debate for another article).

Looking at an old railing with unevenly spaced pickets they might say, *"No self-respecting craftsman would let that leave the shop!"*. To them, and many in our present society, irregularity is the mark of incompetence. In that context, much old work looks simple, sloppy, or even careless.

Yet, many modern pieces are intentionally left with obvious random forging evidence. Modern emphasis is often about textured surfaces. Highlighting the material's "squish" with deep fuller, peen, or hammer marks are the glorification of the hand and the "honest" involvement of the smith. Today, perfect layout is paramount, though it is usually only aesthetic (or used to imply the high skill of the workman), not functional.

The very attributes of fine modern forged work are the same details that would be evidences of poor work 250 years ago. After all, it takes no special skill to make (or leave) peen marks. I know…I have seen it happen in many beginner classes.

Perfect layout tends to produce a mechanical looking result, devoid of the wonderful spontaneity found in nature. Consequently, old work, even architectural, tends to place less importance on precise layout, but rather cleanly forged and graceful elements are what's critical. Like the common signature, individual pieces vary but maintain a harmonious character and unity. Hypothetically, I can hear both "camps" denigrating the other's work, as both see what merits high praise for one as poor quality for the other.

Second: Workmanship & Skill

From the 18th-century perspective, modern workmanship looks pale in both range and depth. I'm speaking of skill at the anvil; the ability to explore and manipulate the material to its fullest. Modern work, though often well designed and worked, tends to use basic techniques…drawing, upsetting, punching, twisting, bending, and welding… but are used in very standard and limited ways. For example, I see very little forge welding in modern work, and what is there is limited to lap, faggot, and occasionally corner welds. Very little welding of complex bunches of parts, very little welding at odd angles, or in awkward locations. In much of today's architectural work (even high end) there is no forge welding at all.

Surviving artifacts such as locks, wood chisels, and door latches, all illustrate well practiced skills at the anvil and vise. The pieces were quickly forged, evidenced by clean surfaces, low finishing heats and little or no fussing at the bench. Add the challenge of wrought iron and it is clear smiths (including women and children, who made up a large percentage of the English ironworking labor force) were very capable (and this was the easy stuff). The better smiths were employed in making fancy coach and carriage hardware, gates and railings, fine household goods such as spitjacks, elaborate fireplace accessories, etc. Many of these were filed and polished, demanding even better forgings and extensive design training.

Making good copies of these pieces is humbling- they involve drastic changes of cross section, multiple forge welds, precise spacing of mortises and joints, and all exhibiting graceful flowing curves and clean surfaces.

Modern journeyman skills are rarely up to the challenge (these details are now usually fabricated rather than accomplished at the anvil). Even after decades at the work, I find it difficult to match the quality of the average work of 200 years ago. It was not uncommon in our museum shop to make multiple tries (sometimes taking weeks) before approximating what was probably the casual one-off work of a teenager back then.

The range of perfectly welded joints in old work continues to amaze me; from simple lap and T, to laminated tools, jump, cleft, branching welds, tiny to large, etc. Products included all manner of axes, spitjack faces, jump welds on top and bottom anvil tools, gears and other machinery. Add to this mix larger pieces such as vises, anvils, complicated architectural work, laminated tool faces and edges such as hammers, scissors, coffee grinders, etc., all performed with basic hand tools (and tools you could make yourself using those hand tools).

The modern smith has much to learn besides anvil and vise work. There is a great range of modern welding processes, machinery to buy and maintain, basic metallurgy, familiarity with various alloys and their specific heat treating requirements, surface finishing and preservation knowledge, a variety of installation skills, marketing, design and presentation skills, competitive bidding, etc. Very few of these skills were in the minds of historic workmen. They, along with associated knowledge, are learned and improved with practice. This broader knowledge base often means there is less time to refine any single skill. Thus, it is no surprise that few modern smiths can match the effortless output of a nailmaker making 2,000 nails per day and do it again day after day.

On the other hand, I doubt many 18th-century smiths would find it easy to become adept at the range of modern shop duties. Modern tools also play a part. Locksmiths of old turned out complicated locks and keys with a small handful of tools, while most modern smiths are at a loss to even attempt one without drill press, torches, welder, lathe, etc. On the flip side, assembling a gate with a welder, drill press, and torch available makes for a tremendous improvement in speed and certainty.

Third: Art

I'm not foolish enough to bring up the question of whether what we make is art, but I do have some thoughts about the cultures that we are contrasting. First, our ABANA membership includes many smiths who are hobbyists. This kind of recreation simply did not exist in earlier times. Relatively inexpensive equipment, tools, and metal, readily available training materials, sophisticated and precise tooling, shorter work weeks with ample free time and disposable income, and the reward of tangible physical work in an otherwise sedentary lifestyle have encouraged the hobbyist to thrive (none of these conditions were present in the 1700's).

Of course, there are many excellent professional smiths who make modern ironwork, but we have two different motivations to acknowledge and understand. Both modern groups are markedly different than 18th-century smiths.

Most modern smiths that I speak with (hobbyist or professional) sooner or later get around to discussing how their personal expression comes out in their work. Some are admitted artists, experienced designers with special concepts and ideas to capture. Others are occasional beginners who talk about how they did a twist one way or put in a curl 'cause they liked it. I suspect that the universal acceptance of personal expression as "basic to hand work" is a mark of modern culture. Whether sophisticated or not, every smith I have come across has felt some conviction to make things their own way, even if it is a bad idea. This thread in our culture has allowed many talented smiths to produce superbly designed work, as firmly rooted in the present as other decorative arts. I am regularly impressed and gratified by innovative design that appears within the forging community.

From my experience training others, it is clear that the conviction to constantly express oneself makes it difficult for many people to learn historic skills. Early methods relied on repetition to attain control and speed. While 18th-century trainees may have made simple items by the hundreds or thousands before moving on to more difficult work, I have a hard time in many of my classes convincing students to make two of something. On one hand, personal expression has never been more widespread (or more automatically praised). On the other hand, skills that require repetition are never properly learned.

Evidence

I feel fortunate to have been interested in historic study and restoration early in my career and benefitted from lucky timing. I had little understanding of the academic environment I was about to enter in Colonial Williamsburg. Until then, my exposure to other restoration-oriented smiths was with a few talented individuals, each very knowledgeable about local history and surviving hardware. They had developed their own work practices, and rarely traveled to see each other. None had academic backgrounds in history or decorative arts.

The Colonial Williamsburg Foundation provided the opposite environment. Suddenly, I was working with professional archaeologists, architects, and curators, most with degrees from prominent institutions. It was not enough to present strong technical opinions; I had to have evidence. This "*see the evidence before you accept something*" attitude became the professional level of discussion among fellow Colonial Williamsburg smiths, other staff, and even those at other museums. It was normal to hear "What is your source?" being asked of any new bit of information or research finding. It allowed the information to be rated as strong or weak in terms of evidence. Further, this type of dialog shared discoveries of new sources.

Gradually, I learned to create a larger and clearer picture of each object. Regarding the compasses mentioned earlier (they are one of the easier items to document), evidence for their design and use included: 18th-century catalog illustrations, prints and paintings from the period, "how to" instructions in 18th-century books, personal tradesman's inventories, signed (dateable) pieces in the acquired collections, tool marks left on local furniture and houses, local store inventories, and finally, archaeological finds from Williamsburg itself.

Altogether, these sources confirmed this tool was in use during our period and location, but told us nothing about how they were made. Unfortunately, the best clues for historic method are mistakes found on old work; rarely do perfect pieces tell you much. It can take months or even years to find one dateable example that answers your big question. Often it takes five or six examples from different museums or excavations to collect enough information to proceed with confidence. I examined at least 15 to 20 examples to narrow down the approach (one example is not enough to identify a common approach- it could be the work of a whacko).

Almost every piece that we copied went through evaluation of this sort, though most were harder to document. Common freight wagons are a good example. There are many mentions of wagons in period texts, letters, diaries, inventories, and paintings. A few old wagons can be found, but none are dateable or can be identified as a "Virginia wagon" (as they were often called). What made a Virginia wagon distinct? That is still largely a mystery to me. When building wagons at Colonial Williamsburg we settled for a standard compromise- we copied surviving examples found in various collections up and down the East Coast. They were handmade vehicles but could not be identified as Virginia made or 18th-century versions.

Power of Tradition

I am always interested to hear the word "traditional" in conversations with other smiths. I suspect it has come to mean "made without electricity" or "made following historic design", even if by modern method. It is clear that the association with "tradition" is important to many of us, while the interpretation of that tradition is incredibly varied.

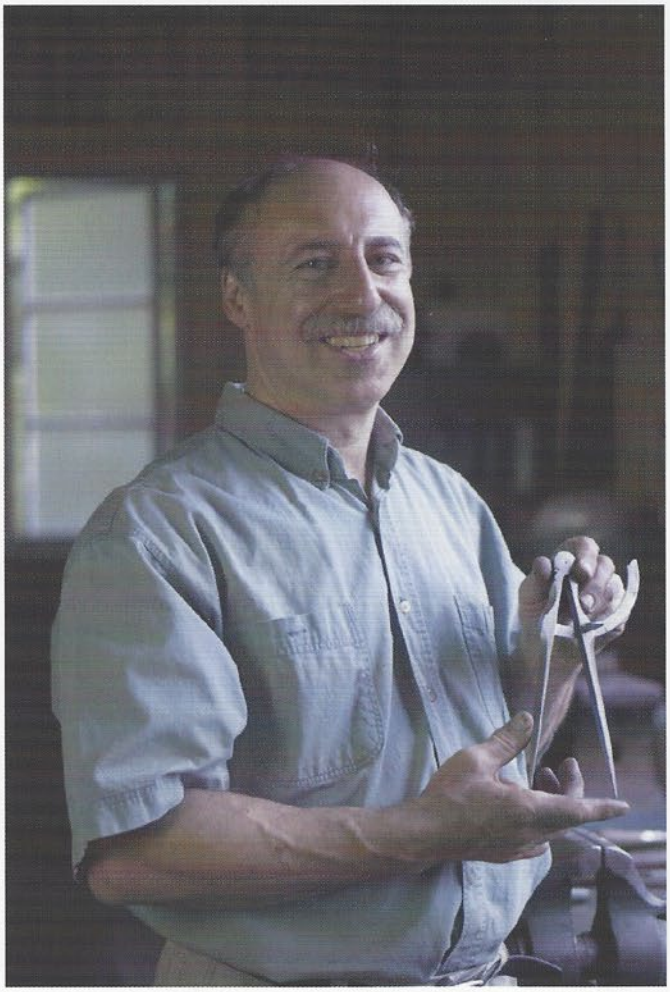
Traditional practice and historic practice are two different things. I often have discussions with modern smiths who are so accustomed to generations of precedent that they cannot envision what came before. This was often the case when bringing formally trained masters from Europe or Great Britain to work at Colonial Williamsburg. They were a direct link with 18th-century hand skills and had learned through the age-old apprenticeship system from real practicing masters, but they did not come to us with 18th-century skills or tools. They came with 1950's skills, a blend of old and new, and they found it difficult or unimportant to differentiate which was which.

This applies to basic tools as well. Bottom blast forges and water-cooled side blast forges have been so common for the last 140 years that any idea of what preceded them is gone from modern concept. What's worse, even the idea that these were new developments in 1880 is missing.

Transition from wrought iron to mild steel also allowed many changes in forging methods. In architectural work, snub end scrolls changed from rolled-up to solid-forged construction. That happened several generations ago and the idea that solid snub scrolls are not a historic method is hard to believe for modern smiths, even those who served formal apprenticeships.

Food for Thought

The opportunity to learn about a completely different way of thinking has been fascinating, much like visiting another country. I was able to study a period in history when hand skills and products were at their pinnacle of development. Insight into those methods invariably turns up incredibly quick and straightforward approaches, and hints at the culture's values. Good modern work is also worthy of study, and much of it has wonderful qualities. New work offers the same insights into our present culture as historic work does to theirs and reveals some of what makes us want to be smiths. It takes years of study to understand the symbolism found in historic work, but that seems simple compared to figuring out our future. ■

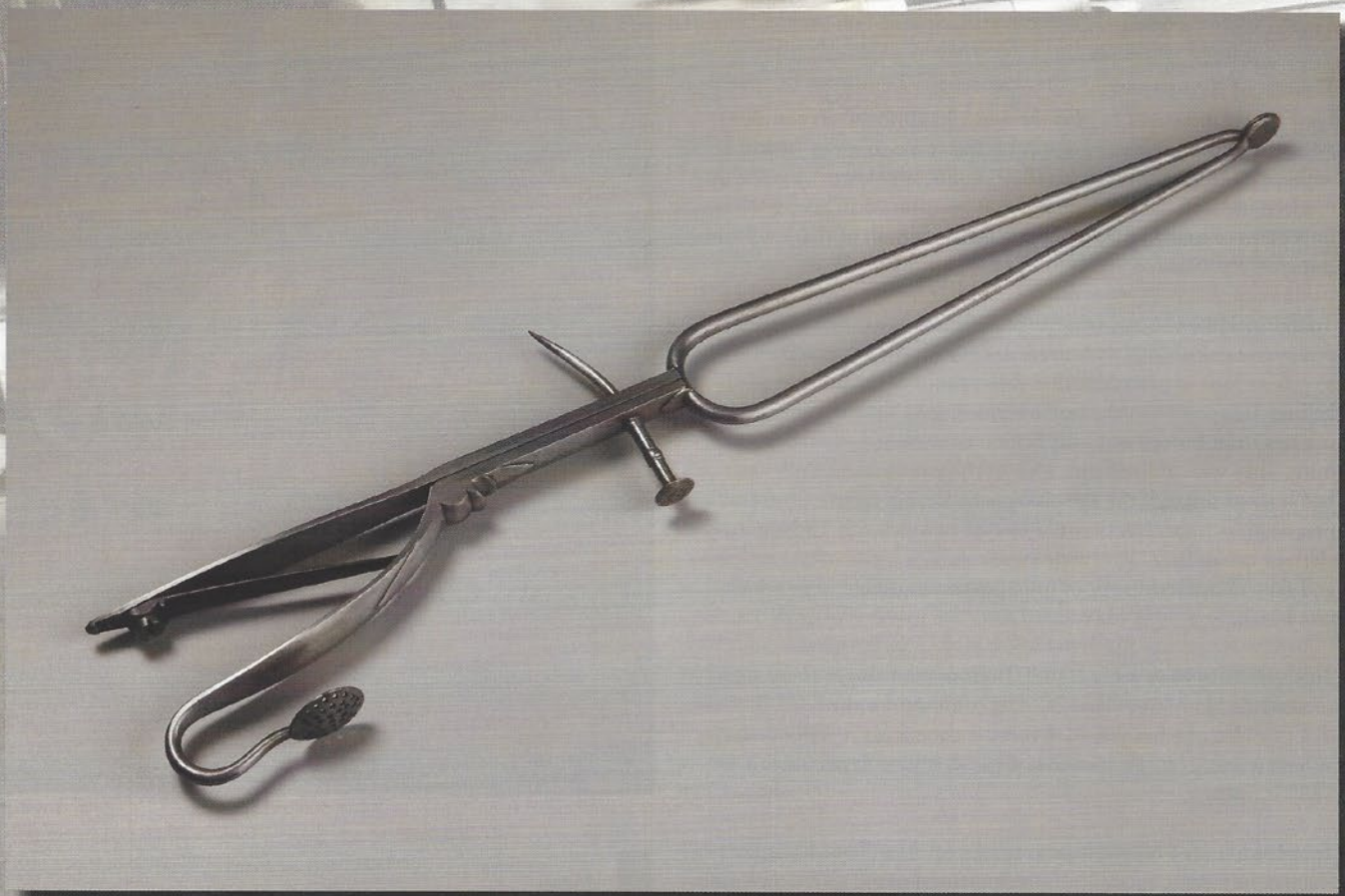


Above:
Peter Ross at his shop in North Carolina.

Gallery of Works

by

Peter Ross



Right:
Candlestand.
Wrought iron, brass.
Forged, filed, cast, turned.
Height: 60"
1976

Opposite page:
Pipe tongs.
Wrought iron, steel
forged, filed
Length:17"
2001

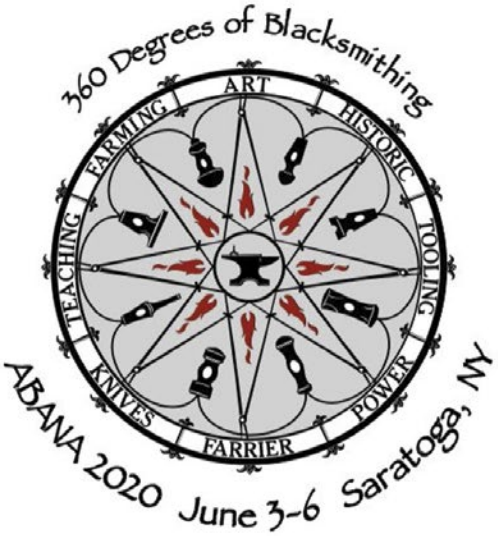
Opposite Page:
Casement windows. Forged and filed wrought iron. 16" x 40"
2016

Right:
Casement window latch detail. Forged and filed wrought iron
2016

Below: Fire tools. Height: 27". Wrought iron, brass.
Forged, filed, cast, and turned.
2010

Below right:
Cock's head hinge. Forged and filed wrought iron. Height: 8"
1975

ABANA 2020 Conference



ABANA 2020 Conference

Washington County Fairgrounds
392 Old Schuylerville Rd.
Greenwich, NY

Information Available at

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abana2020 on facebook
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423-913-1022

We will be featuring 8 disciplines of Smithing with at least three talented Smiths in each.

ART: with Daniel Miller, Zeevick Gotleib, & Ellen Durkan

Historic: with Peter Ross, Dick Sargent, & Bob Valentine

TOOLS: with Patrick Quinn, Jeffery Funk, & Eric Schatzel

KNIVES: with Matt Parkinson, Lin Rhea, & Jeff Helm

POWER: with Bruce Jarrell, Steve Parker, & Randy McDaniel

FARRIERS: with Dave Farley, Roy Bloom, Tom Willoughby

TEACHING: with Mark Aspery, Gerald Boggs, & Randy Augsburger

FARM: with Joel Tripp, Judson Yaggy, Derick Glaser, & Lucian Avery

The Patient Order of Meticulous Metalsmiths with Tom Latane, Peter Renzetti, Carl Close & other exceptional craftsmen.

The lecture series will be featuring such notables such as Albert Paley, Howard Schechter, Doug Wilson, Bill Hochella, Leigh Morrell & members of the demonstrator staff.

There will be a youth teaching venue and family programs for the non blacksmiths.

The raffle will include a BAM box donated by Pat McCarty and a Big Blue power hammer.

The Iron in the Hat is pleased to announce the return of Len Ledet with his special blend of entertainment and wackiness.

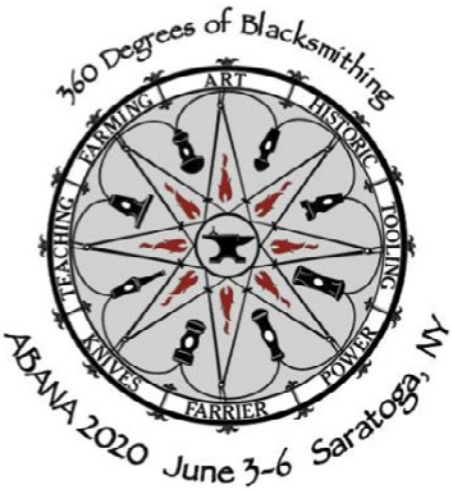
The Saturday evening banquet is back with a New England style BBQ.

We will have a beer tent serving a local micro brew and a local distiller will be pouring our own signature Slack Tub bourbon. Collectable laser inscribed 2 liter wood casks can be purchased filled with our special label. See the website for information on the cask which can only be pre ordered and can only be picked up at the conference.

Early registration is now open at :

abana2020.com

Follow us on facebook:
ABANA 2020 Conference



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Scheduled Activities

Demonstrations all day every day at our 8 demo sites. There will be a riveting lecture series featuring such notables such as Albert Paley, Howard Schechter, Douglas Wilson, Bill Hochella, Leigh Morrell, and others

Join the party at the Blacksmith Arms Pub serving local micro brews. We are proud to announce our own private label Slacktub Bourbon. Available by the glass, bottle or collectable 2 liter wooden cask. See the website for information on pre ordering the laser inscribed cask. These must be pre-ordered.

Breakfast, Lunch, Dinner will be available onsite from a variety of food vendors and food trucks.

There will be extensive tailgating, most under roofs. The northeast is the epicenter of the largest accumulation of blacksmithing equipment in the country. If you can dream of it, it will likely be at this conference

We are inviting all the vendors we have come to expect at an ABANA conference.

There will be nightly competitions organized by Mark Aspery to be held at the Teaching site

Of course there will be Iron in the Hat hosted by Len Ledet. We also will be having a large item raffle featuring a Big Blu power hammer and Pat McCarty is donating a BAM box once again for this event. An added bonus will be it is going to be filled with handmade tools from some of the finest blacksmiths in the country.

We are hoping for a strong outpouring of support for the curated gallery exhibition and hope to have items donated to the live auction of art & craft scheduled for Saturday night.

For this conference the banquet will be revived with a Saturday night BBQ northeast style, included with registration.

Come and enjoy the warmth and fellowship of blacksmiths from around the world. This will be a party the likes of which has not been enjoyed at an ABANA conference in some time.

Don't miss what is sure to be an event that will be talked about for years.

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50# Little Giant Power Hammer $3495.00

Serial # indicates it is a 1929 model. Equipped w[illegible] s[illegible] block, brake, 2HP 220- single phase, running at 1720 RPM (the speed it w[illegible]s des[illegible]d to operate at) it also has a tool/ spring swage holder. I have it tuned to [illegible]e[illegible] single blow or multi-blows slow or fast. This machine is ready to work. No re[illegible]irs, re-building or adjustments necessary. Comes with flat dies, drawing dies, 1 s[illegible] swage, extra new clutch blocks, etc. Come try it before you buy it. Located at my sh[illegible] in Muskogee, OK.

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gerald.brostek@sbcglobal.net phone # 918-687-1927

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****** NEW ******

175 Lb Hay Budden Anvil

Good Condition.

$700.00

Contact:

Mark Carter 405-613-5215

SCABA Shop and Swap

For Sale: 25 Lb Little Giant Power Hammer:

****** PRICE REDUCED! ******

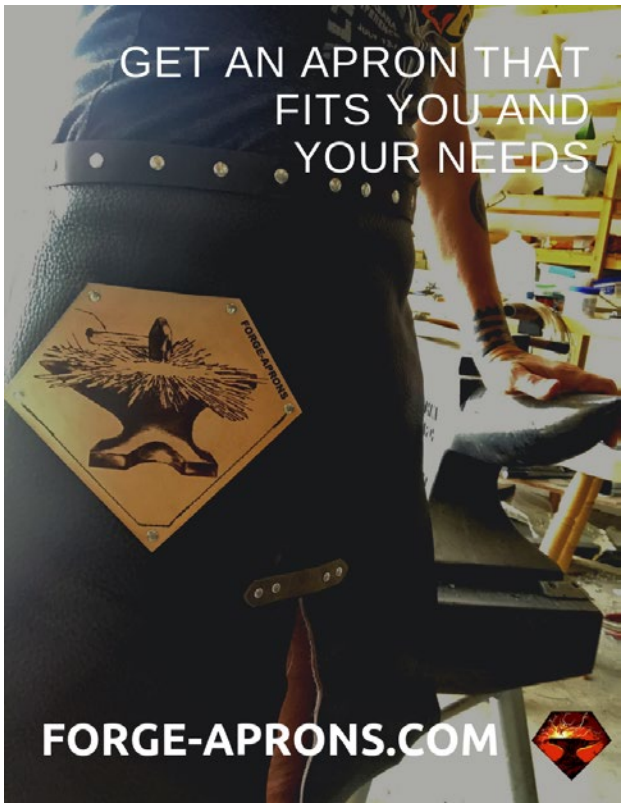
1948 new style 25lb Little Giant, new dies, new motor, working condition, asking $2,500. Terlton area.

Contact: Curt Mullin - 918-640-9396.

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)
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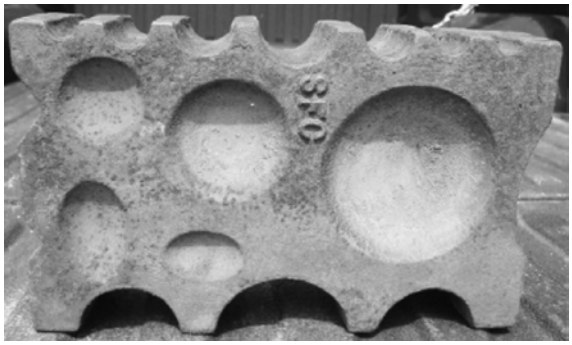
Have an Item for Sale? Item Wanted?

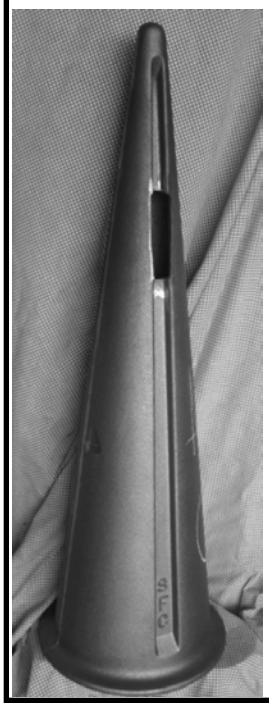
If you have any items that are appropriate for Blacksmiths that you would like to list in the Shop and Swap section (or items you are looking for), please send me your description, contact info, and any photos that you have.

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: Charlie McGee has coal to sell. He lives in the Skiatook, Oklahoma area. His contact information is: (Home) 918-245-7279 or (Cell) 918-639-8779
Please text his cell phone number if you would like to make arrangements to get coal.

S/C region coal location: Club coal is now available at Norman at Byron 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.

SCABA Membership Application

For Annual Membership
(Please Print Clearly!) Date _____

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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, P.O. Box 18389, Oklahoma City, OK 73154
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.

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Region: _____NE _____SE _____SW _____NW

Date: Month _____ Day _____ Year _____

Name: _____

Meeting Address: _____

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

Host e-mail _____

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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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