

# Saltfork Craftsmen Artist-Blacksmith Association

June 2009



Horse shoe with cross and anvil made by Ron Lehenbauer. Ron donated one of these for the door prize at the Picnic and it was one of the first items to go.

**Saltfork Craftsmen  
Artist-Blacksmith Association  
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The Saltfork Craftsmen Artist-Blacksmith Association, a non-profit organization of amateur and professional artist and craftsmen, publishes this newsletter monthly. 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](http://www.saltforkcraftsmen.org)

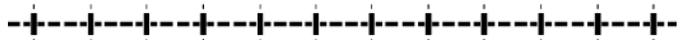
**Trading Post**

**For Sale:**

ANVILS: **400#** Arm & Hammer serial # 34008. Face has some torch mark damage on the heel, but is repairable. \$2000. **100#** Kohlswa Excellent condition. \$500. **100#** Cast anvil with a tool steel face. (I think it's a Vulcan, but there are no marks on it. ) \$200 LEG VICES; Good screws and good condition overall. \$75 and up. HAND CRANK GRINDERS; Several different sizes. Most have stones. Great for demos. \$25 and up. Buffalo rivet forge; Sheet metal pan and blower. Good demo size Ready to go \$225. Two ;hand crank Champion blowers-one with stand. \$100 and \$125.  
Call 580-862-7691 (before 9:00 P.M. Please)



Army surplus round nosed pliers that make good scroll pliers for small items. They are 6" long \$5.00 each plus shipping. I also tie brooms on your handle or mine. \$20.00 plus shipping. Diana Davis 580-549-6824 or lazyassforge@tds.net



Due to health problems, I have decided not to rebuild any more Little Giant hammers. I have for sale: One decent used 100# hammer (\$3,500), one completely rebuilt 50# hammer (\$4,500). One early style rebuildable 50# hammer (\$1750), and one transition style rebuildable 50# hammer (\$2,250). I have some miscellaneous parts, dies, babbitt mandrels, and etc. for sale. Contact Mike George at 580-327-5235 (home), 580-829-1968 (cell) or Mike-marideth@sbcglobal.net



**Wanted:**

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

## Club Coal

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

### **NW Region coal location:**

Bring your own containers. Contact Tom Nelson at 1-580-862-7691 to make arrangements to pick up a load. **DO NOT CALL AFTER 9 P.M.** If you make arrangement well in advance, Tom can load your truck or trailer with his skid steer loader. Otherwise you will need to bring a shovel. The coal can be weighed out at the Douglas Coop Elevator scales.

**S/C Region coal location:** Coal is in 1-2" size pieces. Bring your own container. The coal is at Max Scrudder's place in Mountain View. Contact Max for load out instructions. Max Scrudder can be contacted at (405) 226-9951

**NE Region coal location:** Dan Cowart also has coal to sell. He can be contacted at dacowart@dishmail.net or Cowart-Pat@gmail.com

New shipment of swage blocks now in.  
\$80. plus shipping to members.  
\$100.00 plus shipping to non-members  
Contact Bill Kendall for more information

Send your ads to the Editor by the 20th of each month. Ads will run for 60 days unless requested.

## MEETING SCHEDULE

### June

**S/C Regional meeting (June 20)** Hosted by Kent and Anelia Hadick at their home in Oklahoma City. Lunch is provided but bring a side dish to help out. The trade items is a functional decorative bird feeder. .Directions: East on I- 40 to Post road, North on Post Rd. to SE 29th, east on SE 29th to S. Westminster Rd., then South on S. Westminster to Newey. Address is 10818 Newey Ave.

**SE Regional meeting (June 6th)** Hosted by Mark Hamell. *Unable to confirm.* (580)317-3700

**NE Regional meeting. (June 13)** Meeting is open at this printing.

**NW Regional meeting (June 27th)** Open at this printing.

**We need members to step forward and agree to host meeting in the NE, SE and NW regions.**

## President's Notes

Gerald Franklin

By the time you read this, the spring demo season will be just about over with. In reading about the various demos around the state, it appears that it has been a very busy season for many of us. Public demonstrations are good vehicles for Saltfork members to use to help spread the word about smithing, but remember that demonstration time can also be viewed as "free" practice time. Even though you are spending hours forging mindless little projects like S-hooks or nails at a demo, you are building muscle memory and sharpening your "smithing eye" which can be called upon later for more serious projects.

On May 16<sup>th</sup>, we held our second annual statewide meeting and picnic at the Cleveland County Fairgrounds in Norman. If you missed it, you can be assured that you missed a good one. Byron and Carol Doner arranged for the building. Mark Vaughn who, in addition to being a Saltfork member, also owns and operates Vaughn Foods in OKC. I mention this because Mark provided all of the side dishes that were served with the excellent barbecue items arranged by Byron Doner. These guys did a great job in feeding the crowd. Various members provided desserts and there was certainly a wide variety of excellent sweets to top off the fine meal.

We were treated to demonstrations by Bill Kendall and Brahk Hadick who used this gathering to fulfill one of their scholarship requirements. David Seigrist set up and conducted another fine forging contest with an excellent book as the prize. There is a lot of work involved in pulling a meeting like this off and this one was truly a group effort. My thanks go out to all who worked to support the picnic and to all who took the time to come by and take part.

A representative from the Oklahoma State Fair made a presentation at the picnic asking that Saltfork support the fair by participating in the "Centennial Frontier Experience" in September. We received enough response at the picnic to be able to commit to demonstrate during the entire eleven day fair. There will be more about this effort elsewhere in this newsletter and in future newsletters as well so if you didn't get signed up for a demo slot, there will be ample opportunity to do so. I think this will be an excellent opportunity for us to promote the club, pick up new members, and expose the public to our individual work so set some time aside in September to come to the fair and demo.

## Elementary School Demo at Fort Sill

By Gerald Franklin

On Thursday, May 6<sup>th</sup>, I responded to an invitation to demonstrate at the Geronimo Road Elementary School's Western Encampment Day. A Geronimo Road teacher, Mr. Dan Wilmore, really went all out to put together a great program for the students and teachers. There were gunfighters, stagecoaches, storytellers, chuck wagons, and of course, a blacksmith. In all, there were 33 stations on the diagram of the area. Elementary Schools from all over the Comanche County area sent students to the event.

I was set up within a few feet of the chuck wagon. They really put on a good feed and it's always smart to stay close to the chow.



After set up, I got the forge going and began to forge a few warm up items for the chuck wagon cooks. Then the press showed up. After a little mugging for the newspaper guys and the TV reporters, it was down to work for the first of many separate demos for the day. As with most school demos, the item of choice was a nail. All in all it was a good demo with lots of interested students and teachers and lots of good chuck wagon food. By the way, SCABA was invited back for next year's event, so I may be hitting some of you up to go with me so that we can lay out an even larger smithing array.

## Demo at the "Taste of the West" Chuck Wagon Cook-off

Gerald Franklin

I was asked to come to Healdton, OK on May 16<sup>th</sup> to demo for the Taste of the West Chuck wagon Cook-off. Boy, what a day. I got there about 7:30 AM to the smell of breakfast cooking over chuck wagon fires. All the wagons weren't cooking yet, just the one's detailed to cook for the "hired help", like me. After getting unloaded and set up, I had a bite to eat and then stole some fire from a chuck wagon. I was ready to face the day.

About 9AM the public began to arrive. I had a good steady crowd of folks around the forge literally all day. For some reason, Russian Roses and hoof picks of any kind were hot items and I couldn't keep them on the sale table.

This year's attendance was down from earlier years, probably due to the cool, wet weather. Despite the lower turnout this is a good place to demo with lots of interest and good sales. I'll stay in touch with these folks and see if we can get more smiths for their event next year.

## Fourth Graders in Duncan

On May 7<sup>th</sup>, 2009, I did a demo for the Stephens County Natural Resources Conservation Service in Duncan, OK. They were hosting this event for all Fourth Grade classes in Duncan Public Schools. The event was originally set up to be held at the Halliburton Recreation Facility, but the (much-needed) wet weather drove us inside the Stephens County Fairgrounds buildings.

I don't know how many elementary schools there are in Duncan, and I for sure don't know how many 4<sup>th</sup> Grade classes there are, but I can tell you, there are about a ba-zillion kids in those classes. Including my smithing demo, there were fourteen exhibits set up. I didn't get to see all of them but the ones that I did see were pretty good. The most interesting one that I saw was set up by some Halliburton chemists who were demonstrating some of the chemical aspects associated with cementing oil wells.

I had demonstrated nail making for the Museum of the Great Plains Encampment a week before. Since many of the Duncan kids were at that demo, I made an S-Hooks for this one. A school-kid demo is not complete without at least one S-Hook demo. This was a good event, well organized and well supervised. This was the second time that NRCS set up an event like this. I hope that they can continue to do it in the future.

Gerald Franklin



## Too late to classify

Jim Dickey has some equipment that he wish to sell. Below is a brief list:

35 pound Kerrihard hammer (fair condition,) \$600

50 pound little giant (disassembled but complete with extra parts) \$500

Also several post vices, post drills, firepots, blowers and many pair of tongs.

Call Jim for more information: home # 580-871-2324 or Cell # 580-334-5011

### **For Sale:**

Uncle Al Press for sale. Asking \$1500.00. for more information contact John Kellogg from Yukon, Ok. 405-990-8790

# Cowboy Sunday

I did a small demo at the Ray of Hope Church, Comanche, Ok. On 5-17-09 for their Cowboy Sunday. It was short notice and I did not have much time to prepare but I have not been able to wave the club flag at all this year so I decided to just go for it. They had major rain the day before so it was a little muddy but that did not stop the crowd for this event and you could not park another car. I had a good crowd for about 2 hours and hooked a couple of new members, possibly three. I told them not to breath the coal smoke. Sales were good for this small event and I picked up some small work too.



## Smithing opportunity

The Woolaroc Museum in Bartlesville will be holding the annual Kid's Fest on June 27-28th. CJ Ward, an old time farriers from Bartlesville area will be demonstrating hot shoeing techniques. Contact CJ Ward at 918-742-6194

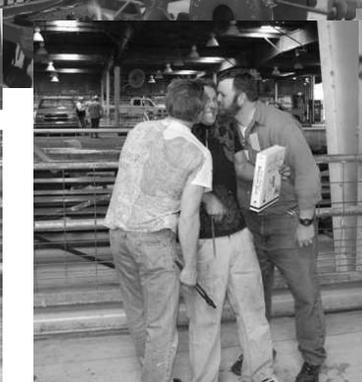
## 2009 Picnic

Saltfork members gather at the Fair ground in Norman for our second annual Picnic. Everyone started arriving about 8:30 on Saturday morning. We quickly got thing unloaded and some even got their forges going. They were also having the farmers market so we had some of the general public coming by to see what we were doing. Some had never seen blacksmithing before. Activities during the day were a forging contest and a class on wire wrapping. There was also lots of food for lunch. The club provided the meat and the veg. etc were donated by Mark Vaughan of Vaughan foods. Members brought plenty of deserts to finish up the meal. There

were about 50 members present for this event. We also had a door prize drawing. Everyone that could brought something for the drawing. Look forward to doing it again next year.



Brahk Hadick won the forging contest by making the best leaf in one heat.



## Teaching trailer update

The teaching trailer has been inventoried and the equipment is being modified to make it easier and safer to load and unload. The tools and other supplies are being organized and placed in the trailer in an effort to make the trailer better balanced in its weight distribution and safer to tow. There is some excess equipment that will not be needed for the four teaching stations.



A place for the tongs and punches has been placed  
On each of the two back doors



Anvils and forges loaded. Rack for metal has been  
moved to the upper portion of wall above the forges.



Anvils stands have been modified so  
that the anvils remain on the stands  
and the arm on the two wheel dolly  
fit into special pipes so that during  
loading and unloading the anvil can  
not fall over.



Two new vice/swage block stands ready to  
paint.

The swage block/vice stand has the same loading/unloading safety feature. And uses the same two wheel dolly. Straps (not shown) are mounted to the wall to help stabilize the anvils during travel.

The blowers for the forges still need to be checked. Some need to be repaired or replaced because they have worn out bearings or bushings. New box for coal has been mounted on the tongue to save room inside the trailer. Purchased 2 shovel blanks to complete the two sets of fire tending tools. Two complete sets (rake, poker, shovel, and water can) and two partial (rake and poker) sets were included in the inventory.



# Upcoming SCABA Workshops

Title:	Date:	Instructor:	Location:	Status:	Cost:
2D Animal Heads	27 Jun 09	Bill Davis	Elk City, OK	Open seats	\$25
Project Design	29 Aug 09	Max Scrudder	Mt View, OK	Open seats	\$25
Power Hammer Use and Tooling	14 Nov 09	Richard Dyer	Tulsa, OK	Open seats	\$ To be determined
Repousse	TBD – 4 day workshop	Mark and Mindy Gardner	TBD	Open seats	The more students the lower the cost.

## **2D Animal Heads:**

Bill Davis will show us how to make 2D animal heads from flat bar and the tooling you'll need.

## **Project Design:**

Max Scrudder will show us how as a professional blacksmith he does project design and various factors he must take into consideration when putting together a project. He said we'd even have enough time to put together a small project at the end of his lecture. It's mostly paperwork with a little bit of forge work, which sounds just about right for August.

## **Power Hammer Use and Tooling:**

Richard Dyer from his many years of experience as a professional blacksmith will show us some of the tooling and techniques he uses in commercial production of forged items with the use of a Little Giant power hammer.

To sign up, call or email and then send a check to me.

## **Repousse/Chasing Workshop – Anyone else interested?**

We have 5 folks interested so far. I called Mark and he said we only pay the actual cost of fuel. With 5 people signed up the cost would be about \$390 per person plus your meals and lodging. The more we get signed up the less it will cost. If 12 sign up, the cost would be about \$165 per person, plus meals and lodging. That's a very good price!

To do a proper workshop would require 3 – 4 days. The first day would be tool making and the next three are repousse work. Mark said he makes special treadle hammers that are very helpful with this kind of work, he would bring down enough for 12 students. The treadle hammers would be for sale at \$1,350 each after the workshop. Buying a treadle hammer isn't required, he brings them for the students and if you want to purchase one he'll sell it.

Their fee is \$250/day plus travel, hotel, and eats. Their website is [www.floodplainforge.com](http://www.floodplainforge.com). Let me know if you would like to attend.

If we have	6 students it would cost about	\$ 325	9	\$ 217	12	\$ 165
	7	\$ 278	10	\$ 195		
	8	\$ 244	11	\$ 177		
	Plus meals and lodging					

David Seigrist  
P.O. Box 163  
Hollis, OK 73550  
(580) 381-0085  
dseigrist2004@yahoo.com

## SCABA TOOL BOX AND TOOLS for 2009

Tool/Item	Maker/Buyer	Cost/Value
Box	JC Banks	
Hardware for toolbox	Mike George	
Cross peen hammer	Clay Reamy	
Straight peen hammer	Clay Reamy	
Rounding hammer	Clay Reamy	
Tongs:		
1/4 v-bit	Clay Reamy	
3/8 v-bit	Clay Reamy	
1/2 v-bit	Clay Reamy	
3/4 v-bit		
1/4 flat	Clay Reamy	
3/8 flat	Clay Reamy	
1/2 flat	Clay Reamy	
3/4 flat		
Scrolling		
Side grip	Reamy	
Pick up tongs	Reamy	
Fire tools (Shovel, rake, poker)	Reamy shovel and poker	
Hot cut hardie		
Cold cut hardie		
Twisting wrench		
Treadle/Hand Hammer Tooling	JC Banks	
Set of punches and holder		
Center punch		
Chisel, large		
Chisel, small		
Chisel, hot slit		
Slitting chisel		
Hold Down		
Flat wire brush w/handle		
File, flat bastard cut w/handle		
File, half round w/handle		
Set of monkey tools		
Rivet backing tool		
Rivet setting tool		
Hacksaw		
Bolster plate		
Square		
Dividers/Compass		
Scribe		
Bending forks		
Spring swage (necking down)		
Flux spoon	Reamy	
Metal folding ruler 24" or 72"		
Soapstone		
Ball tool (round blunt nose punch)		
Hook Ruler		
Iron Mountain Flux		
Finishing Wax		
Nail Header		
Dual Caliper		
Total value to date:		

## **Opportunity to Demo at OKC State Fair**

The Saltfork Craftsmen have been given a great opportunity to let the public know about our club and why we do public demonstrations.

Melinda Parsons, Senior Manager of Attractions and Entertainment came to the Picnic this year to explain about the fair and how they would like us to participate.

Three years ago the State Fair of Oklahoma created an area that they called the “Centennial Frontier Experience.” This is a 50,000 sq. ft. outdoor educational attraction that promotes, celebrates and educates the public about our great state of Oklahoma.(\*). We have been invited to add to the experience of this area with our demonstrations of blacksmithing. They are willing (because of our show of interest) to build us a shaded area . We have discussed using the forges from the teaching trailer so you would only need to bring in with you your favorite hammer, etc, Metal for the demonstrations could be place in the teaching trailer prior to it being parked inside the state fair park (near the demo site). Other supplies could also be place inside the trailer (water, snack, etc.)

On the following page you will find a schedule for the demonstrations. The names listed are those (that were present at the picnic) that have agreed to demo on a particular day. If you would like to help demo please contact one of the coordinators and we will get your name on the list.

Those that demo will get free park admission and use of a private parking lot on the days that they demo. Because of this we need to know who will be demonstrating and on what days so we can request enough park passes. There are also other concessions that they fair has agreed to that we will let you know if and when you sign up.

There has to be someone in the demo site during the hours posted. It would be nice to have three on duty each day. This will allow for rest/bathroom periods. It is hot during the fair so we will all need to be careful and watch each other for heat exhaustion. And not over do.

Even if a day that you could demo is already booked please let us know because we may need substitutes if someone has to withdraw from the schedule. We will start a standby list. Already on this list is Byron Donor.

Coordinators;

Diana Davis 1-580-549-6824

Anelia Hadick 405-406-3705

\* Info from PR flyer printed by the Oklahoma State Fair Inc.

# Oklahoma State Fair Demo Schedule

<b>Thur. Oct. 17</b>	<b>1:00-6:30</b>	<b>Mark Carter Gerald Franklin Jim Carothers</b>
<b>Fri. Oct. 18</b>	<b>1:00-6:30</b>	<b>Brahk Hadick Tony Cable ???????</b>
<b>Sat. Oct. 19</b>	<b>11:30-6:30</b>	<b>Brahk Hadick Kent Hadick Tony Cable</b>
<b>Sun. Oct. 20</b>	<b>11:30-6:30</b>	<b>Brahk Hadick Tony Cable Jim Carothers</b>
<b>Mon. Oct. 21(School tour)</b>	<b>9:00-6:30</b>	<b>Kent Hadick Mandell Greteman ? ???????</b>
<b>Tue. Oct. 22 (School tour)</b>	<b>9:00-6:30</b>	<b>Mark Carter Gerald Franklin ???????</b>
<b>Wed. Oct. 23</b>	<b>1:00-6:30</b>	<b>David Seigrist Doug Bliss ???????</b>
<b>Thur. Oct. 24 (School tour)</b>	<b>9:00-6:30</b>	<b>David Seigrist ????? ???????</b>
<b>Fri. Oct. 25 (School tour)</b>	<b>9:00-6:30</b>	<b>Brahk Hadick David Seigrist ???????</b>
<b>Sat. Oct 26</b>	<b>11:30-6:30</b>	<b>Brahk Hadick Kent Hadick Mark Carter</b>
<b>Sun. Oct 27</b>	<b>11:30-6:30</b>	<b>Brahk Hadick Kent Hadick ?????????????</b>

## NORTH EAST REGIONAL MEETING DATES

January 10, 2009  
Host: Gary Gloden

February 14, 2009  
Host: Bill Kendall

March 14, 2009  
Host: Dan Cowart

April 11, 2009  
Host: Open Easter Weekend  
Phone #:

May 16, 2009  
Host: *State meeting*  
Phone #:

June 13, 2009  
Host:  
Phone #:  
Trade item:

July 11, 2009  
Host:  
Phone #:

August 8, 2009  
Host:  
Phone#

Sept. 12, 2009  
Host: Dan Cowart  
Phone #:  
Trade item

October 17-18, 2009  
SCABA Conference

November 7, 2009  
Host:  
Phone #:  
Trade item

December 12, 2009  
Host:  
Phone #:

## NORTH WEST REGIONAL MEETING DATES

January 24, 2009  
Host:

February 28, 2009  
Host: Ron Lehenbauer

March 28, 2009  
Host: Bob Kennemar  
Phone #:

April 25, 2009  
Host: Mike George  
Phone #:

May 16, 2009  
Host: State meeting –No regional meetings  
Phone #:

June 27, 2009  
Host:  
Phone #:

July 25, 2009  
Host:  
Phone #:

August 22, 2009  
Host:  
Phone #:

Sept. 26, 2009  
Host: Gary Seigrist (Elk city)  
Phone #:

October 17-18, 2009  
SCABA Conference

November 28, 2009  
Host: Mandell Greteman  
Phone #: 580-515-1292

December 26, 2009  
Host:  
Phone #:

## SOUTH CENTRAL REGIONAL MEETING DATES

January 17, 2009

Host: JC Banks

Phone #

February 21, 2009

Host: Gerald Franklin

Phone #:

March 21, 2009

Host: Terry Jenkins

Phone #

April 18, 2009

Host: Bob Kennemar

Phone #

May 16, 2009

Host: State picnic at Norman

No regional meetings

June 20, 2009

Host: Anelia Hadick

Phone #: 1-405-406-3705

July 18, 2009

Host: Max Scrudder

Phone #: 1-405-226-9951

August 15, 2009

Host: Richard Simpson

Phone #: 1-405-344-7413

Sept. 19, 2009

Host: Dorvan Ivy (Elk City Museum)

Phone #: 1-580-473-2761

October 17-18, 2009

Host: : SCABA Conference Perry, Okla.

November 21, 2009

Host: Bill and Diana Davis

Phone #: 580-549-6824

December 19, 2009

Host: Anelia Hadick

Phone #: 1-405-406-3705

## SOUTH EAST REGIONAL MEETING DATES

January 3, 2009

Host: Howard Bost

Phone #:1-903-785-0864

February 7, 2009

Host: Howard Bost

Phone #: 1-903-785-0864

March 7, 2009

Host: James Allcorn

Phone #:

April 4, 2009

Host: Howard Bost

Phone #: 1-903-785-0864

May 16, 2009

Host: State meeting in Norman Ok

June 6, 2009

Host: Mark Hammell

Phone #:

July 4, 2009

Host:

Phone #:

August 1, 2009

Host:

Phone #:

Sept. 5, 2009

Host:

Phone

October 3 2009

Host:

Phone #:

November 7, 2009

Host:

Phone #:

December 5, 2009

Host:

Phone #

# Forging a Shoulder

by Bob Fredell

Illustrations by Tom Latané

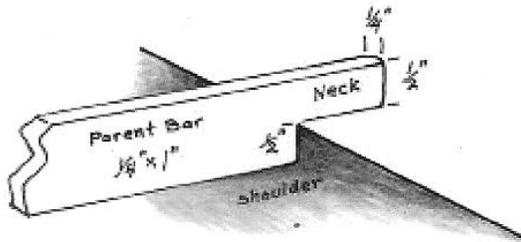
## Lesson #12- Forging a Shoulder

**Definition:** A shoulder is the abrupt change in width and/or thickness of a bar. A shoulder is normally made by decreasing a dimension by drawing down, although it may be formed by upsetting.

**Intent:** To learn how to forge two different shoulders using a minimum of tools. The use of few tools emphasizes the hand-forging processes, which with practice, allows one to more readily master the procedures.

### Near-side Shoulder

**Definition:** A near-side shoulder is formed on the near edge of the anvil with the neck extending from the end of the bar.



Near-side shoulder.

Tools: Anvil, hammer and center punch.

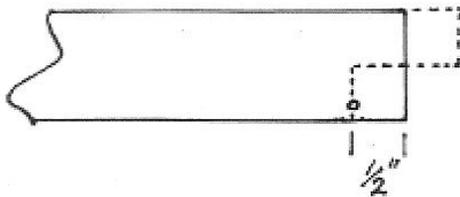
Materials- Mild steel 1/4"x1"x 24".

**Intent:** To forge a near-side shoulder on one side of a bar using the near edge of the anvil.

*Note- See Drawing under Definition, above,*

### Step One

Place a center punch mark on the wide side of the bar next to the edge, and 1/2" from the end. This measurement will make a 1/4" x 1/2" x 1" neck.



Bar marked with punch.

### Step Two

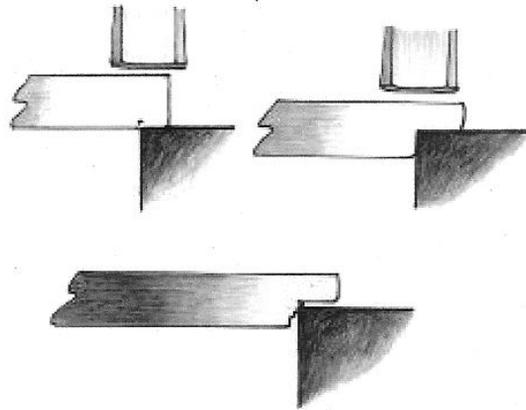
Heat two inches of the end of the bar to a light yellow. Place the punch mark at the near edge of the anvil with the 1/4" side of the bar flat on the face of the anvil (the bar is to be horizontal at all times to make the shoulder as close to 90° as possible.) Strike one or two light blows to establish this location on the bar. Be sure that (1) the face of the hammer is half on and half off the edge of the anvil and (2) the face of the hammer is parallel to the upper edge of the bar.

Continue forging until the shoulder is almost halfway through the bar.

### Hint:

—Be sure to maintain a steady and gentle pressure on the bar to keep the now-forming shoulder tight to the edge of the anvil. Failure to do this will result in a ragged shoulder.

—Should a specific project call for an angled shoulder, the bar must be placed at an angle to the face of the anvil.

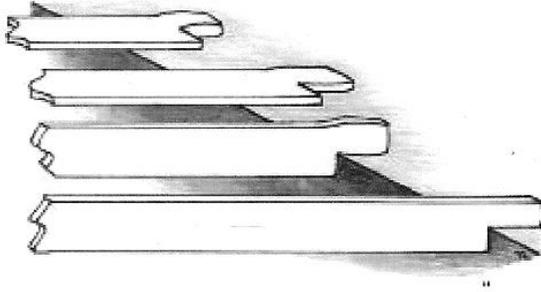


Shouldering on the near edge of the anvil with hammer blow half over anvil and half off. In the third example, steps and cold shuts formed when the bar bounces because it is not held firmly against the anvil.

### Step Three

At this point, the bar has become thicker. Place the wide side of the bar on the anvil and forge it back to the original 1/4". Rotate the bar 90° and return it to the edge of the anvil with the shoulder facing down. Continue forging as in Step #2 and Step #3 until the shoulder is halfway through the bar (the neck will be 1/4" x 1/2" x 1").

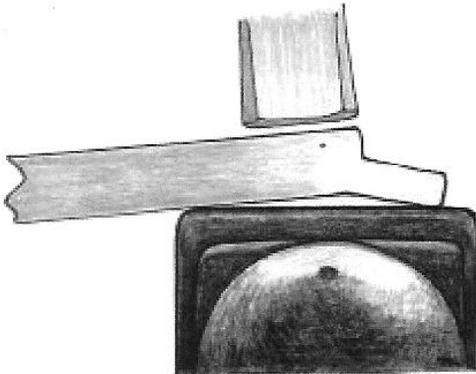
## CONTROLLED HAND FORGING



*Forging the thickness of the bar back to 1/4" and returning the shoulder to the edge of the anvil to reduce the width of the neck to 1/2".*

### Step Four

Depending on the effectiveness of Step three, the bar may be misaligned. The most common misalignment is a bend in the neck, away from the shoulder, caused by holding the end of the bar too high. This can be corrected by placing the bar on edge, shoulder up and striking the parent bar.



*Correcting a bend.*

### Targets:

The neck is to be 1" long and 1/2" wide; the thickness remains 1/4".

To emphasize craftsmanship and accurate forging, the finished shoulder and neck should be within 1/16" of the required dimensions.

It is to be straight according to the eye, although a beginner may need to use a straightedge.

The angle of the shoulder may be slightly more than 90°.

Note that the outside corner will not be 90° using this method.

The material at the corner will be pulled down by the forging action.

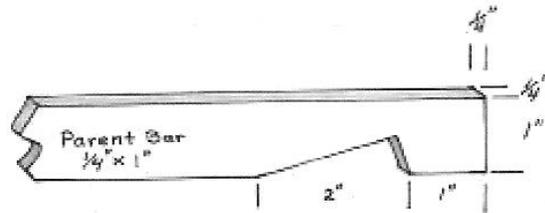
Practice this lesson until you can complete it in one heat.

*Note.* An alternative to using a center punch to mark where the shoulder is to be placed on the bar is to place the face of the anvil with soapstone, chalk, or a felt tip marker. Mark the 1/2" length with a line on the face of the anvil, 1/2" in from the new side of the anvil. When the bar has reached forging temperature, place the end of the bar even with this line. Apply downward pressure to ensure that the bar does not move. Proceed to forge the shoulder as in Step two.

Soapstone and chalk marks are easily erased from the anvil's face. The felt tip marker will provide a line that lasts longer if you need to make several shoulders.

### Part Two- Far-side Shoulder

**Definition:** A far-side shoulder is formed on the far edge of the anvil and will result in a taper from the full width of the 1" bar to the 1/2" inside shoulder.



*Far-side shoulder.*

**Tools:** Anvil, hammer and centerpunch.

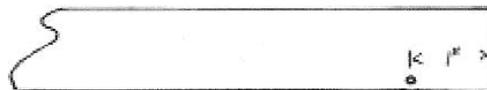
**Material:** Mild steel, 1/4" x 1" x 24".

**Intent-** To forge a far-side shoulder on one side of a bar using the far edge of the anvil.

**Note:** See drawing under Definition above.

### Step One

Place a center punch mark on the wide side of the bar next to the edge, and 1" from the end.



*Bar marked with a punch.*

## CONTROLLED HAND FORGING

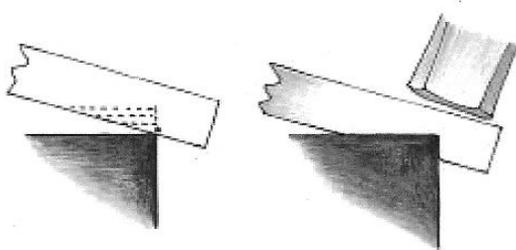
### Step Two

Heat three inches of the end of the bar to a light yellow. Align the punch mark on the far edge of the anvil. The angle of the bar to the anvil face should approximate the angle of the finished 2" taper. Strike *one or two light blows* to establish this location on the bar.

Be sure that (1) the face of the hammer is half on and half off the edge of the anvil and (2) the face of the hammer is parallel to the upper edge of the bar.

Continue forging until the shoulder is not quite halfway through the bar and the hammer remains half on and half off the anvil.

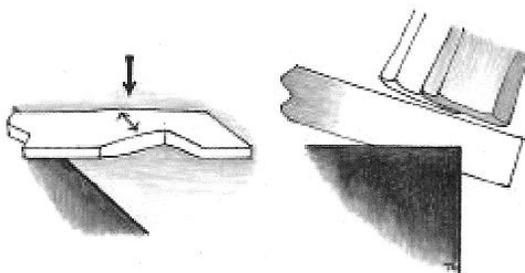
*Hint:* Be sure to maintain a steady and gentle pressure on the bar to keep the now-forming shoulder tight to the edge of the anvil. Failure to do this will result in a ragged shoulder.



*Shouldering on the far edge of the anvil— matching the hammer angle to the angle of the bar.*

### Step Three

At this point the taper has become thicker. Place the wide side of the bar on the anvil and forge it back to the original 1/4". Rotate the bar 90° and return it to the edge of the anvil with the shoulder facing down. Continue forging as in Step two and Step three until the shoulder is halfway through the bar (the taper will be 2" long and 1/4" thick).



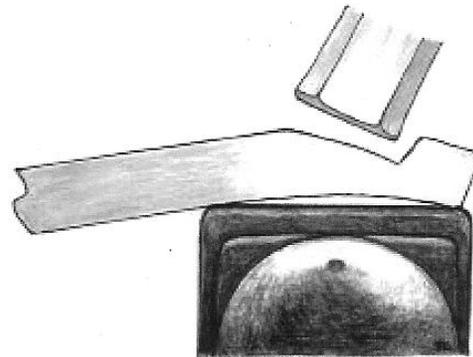
*Forging the thickness of the bar back to 1/4", then dressing the tapered neck.*

### Step Four

The bar may have a tendency to form an arc. Straighten the bar by placing it on the anvil with the concave side of the arc down, making sure the two ends of the arc are touching the anvil. The taper is now facing up. Strike the taper with one or two decisive blows until the bottom edge of the bar is flat to the anvil.

*Note:* You may find (through forging dynamics) that from the initial downward blows to shape the shoulder, a thick mass is created in the neck, and when forging the neck back down to the original thickness of 1/4", this arched shape is eliminated during this part of the procedure.

*Hint:* To avoid nicking the taper with the edge of the hammer, be sure to match the face of the hammer with the taper.



*Correcting a bend.*

*Note:* An alternative to using a centerpunch to mark the bar where the shoulder is to be placed is to mark the face of the anvil with soapstone, chalk or a felt-tipped marker. Since the end of the bar will be placed off the far side of the anvil, (and you cannot draw a line in space), you must draw your line measuring 1" in from the far edge of the anvil on the anvil's face.

When the bar has reached forging temperature, place the end of the bar even with the far edge of the anvil. Next, take your hammer and press the edge of the hammer's face to the bar at the 1" line. Slide the bar and the hammer beyond the far-side edge of the anvil until the hammer edge meets the edge of the anvil and stop. Apply downward pressure to insure that the bar does not move. Proceed as in Step two.

Soapstone and chalk are easily erased from the anvil's face. The felt tip marker will provide a line that lasts longer if you need to make several shoulders.

## CONTROLLED HAND FORGING

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### **Targets:**

The shoulder is to be 1" from the end of the bar. Halfway through the bar, the thickness remains 1/4" and the length of the taper is 2".

The finished shoulder is to be within 1/16" of the required dimensions.

It is to be straight according to the eye. However, a beginner may need to use a straightedge.

The angle of the inside corner will be slightly more than 90°.

Note that the outside corner will not be a 90° angle using this method because the material at the corner will be pulled down by the forging action.

Practice the lesson until you can complete it in two heats.

*Alternate method:* In Step two, we say "The angle of the bar to the anvil face should approximate the angle of the two-inch taper." It must be said that a far-side shoulder can be created with the edge of the bar laying flat on the anvil face. You may note when using this method that a longer taper is created, and a greater area must be forged back down to the original 1/4" thickness.

*Other notes:* You may desire to form sharper corners. To accomplish this, take a yellow heat and place the inside of the shoulder over the far-side edge of the anvil. Pull the bar towards you so it meets the far vertical side of the anvil. Proceed to upset the end of the bar by lightly hitting the end of the bar into the far vertical side of the anvil. Hitting the bar too hard may cause the bar to fold, and this error must be corrected by lightly hitting the width of the bar.

Note that this procedure will somewhat reduce the length of the end of the bar, and increase the thickness and the width of the bar. Forge the bar back to the 1/4" thickness, and the 1" width of the bar (Similar to Step three).

If a precise measurement is desired at the end of the bar, you may want to use a test bar to determine how much length (if any) is lost by this procedure.

### **SCABA 2009 Conference**

You should be getting a conference preview brochure in the mail any day. Read through it and see what we have planned. It has everything you need to know about the conference except the family classes. We are still working on getting the details ironed out on them. If you don't plan to take any of the family classes and want to register early, use the registration form that can be found on-line at [www.saltforkcraftsmen.org](http://www.saltforkcraftsmen.org) or by calling J.C. Banks at (580)482-3209

***The most important thing you need to do right now if you plan to attend is get a hotel room. Rumor has it that the new Holiday Inn is already full but check anyway. There is a list of hotels in the flyer. Call ASAP to make sure you have a room.***

### **Other SCABA news**

Don't forget that SCABA offers at least 2 scholarships each year for members to attend classes and workshops. Requirements and forms are available online at [www.saltforkcraftsmen.org](http://www.saltforkcraftsmen.org).

# Saltfork Craftsmen

Artist-Blacksmith Association  
Membership Application  
April 2009 thru March 2010

Please accept my application

Date: \_\_\_\_\_

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Married?  Yes  No Spouses Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Home Phone (\_\_\_\_) \_\_\_\_\_ Work Phone (\_\_\_\_) \_\_\_\_\_

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

I have enclosed \$20.00 for dues to March 30, 2010

Signed \_\_\_\_\_

Return to: Saltfork Craftsmen, 1227 Fourth St. Alva, Ok 73717



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## TYPE OF MEMBERSHIP:

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