

Saltfork Craftsmen Artist-Blacksmith Association

February 2016



Forging with an Induction Heater
by Saltfork Member Eric Jergensen (Page 20)

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Editors notes...

You may notice a few small changes in the newsletter starting with this issue. Hopefully, they are useful improvements. That is the intent, at least.

I am going to start listing at least two months of meeting details for the regional meetings instead of just one. Hopefully, this will help provide more lead time for planning to attend, spreading the word, and working on trade items.

I am trying a new desktop publishing software since the previous one has been rendered very unstable and difficult to use with recent software "updates." Hopefully, any changes from the software change will only be improvements or otherwise not noticeable to readers.

You will also notice the new use of QR codes imbedded in various places to allow quicker access to online content by using smart phones and tablets that can scan the codes and automatically direct the browser to that site. (See page 11 for more information on QR codes if they are not familiar to you.)

Special thanks to Erice Jergensen and Bill Epps for two original articles this month.

Eric provides an excellent article on his new induction heater for forging - including a great companion video showing the heater in action. If you are interested in this technology, the video provides a lot of info that compliments the article.

Bill Epps provides a nice step by step how to article on producing a campfire tripod including an easily made jig to facilitate the process.

Thanks guys!

- Russell Bartling - Editor

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

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Visit our Saltfork Craftsmen Website:
www.saltforkcraftsmen.org



President's Notes:

Hello Smiths,

Once again we have absolute fantastic weather for forging!

You know you're a blacksmith when you are away from your shop on other business and you think, "Man, I could be forging something right now." It gets even better when you have a specific item in mind to forge.

Have you ever doodled a forge drawing on a napkin while eating out? Yep, you're a blacksmith.

Ever pick up a random piece of metal and start thinking what you could make from it? Yep, you're a blacksmith.

Ever look at a piece of metal and know it was bigger than you wanted to hand forge anything from? You know the one when you say "Ohhhhh Noooo I'm not taking that thang home. Give it to one of those strapping young smiths." You are an *experienced* blacksmith.

Now let me address something that has been a burr under my saddle the last several weeks. We have two of our members who have negatively affected my shop production that I'd like to warn you about. One is Doug Bliss and the other is Tony Cable.

Doug kept showing me flint strikers and telling me how he makes them, and then Tony came along and gave me a piece of chert and spring steel and told me how he makes them. Now to the specifics. For the last several weeks I've been making strikers from that spring, then went to files, and even took a special trip to hunt rocks and went around banging on them to see if they would make a spark. It has become soooo addictive that now I look around at rocks and think, "Hmmm will that make a spark?"

So, shop production is down from making those dad blamed strikers, searching for and beating on rocks. It is very addictive and also is the way I light my forge. There's a bucket of sparking rocks in the corner and plenty of uses for those old files. It's almost as bad as watching a camp fire, you keep hitting the rock just to watch the sparks fly.

After the forge has been lit from the striker the focus has been on jigs and practicing making nails, specialized cut-offs, and nail headers. I've never practiced before for the nail making competition at the picnic, just went in cold turkey and gave it a shot. Not this time, this time practicing is part of the warm up to the evening, soooo - I'll be bringing my "A" game.

I've even been able to make a few nails in one heat. Well, they were nail shaped objects, but I'm getting better.

That's it for now, take care and keep forging!

David



Division of (Volunteer) Labor

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

Name	Position	Address	Phone	Duties
David Seigrist	President	P.O. Box 163 Hollis, OK 73550 dseigrist2004@yahoo.com	580-381-0085	President BOD Meeting Chair Help Where I can
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Bill Kendall	Director Swage Blocks	1756 E. 59 th St Tulsa OK 74105 wwkendall@aol.com	918-691-2173	Swage Block Shipping Quotes Swage Block Shipping
Terry Jenkins	Director	222 N. Washington Blanchard, OK 73010	405-476-6091	
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Russell Bartling	Editor	70 N 160th W. Ave Sand Springs, OK 74063 rbartling@ionet.net	918-633-0234	Newsletter Editor Regional Meeting Coordinator
Dodie O'Bryan	Webmaster	Pawnee, OK scout@skally.net	—	Website Updates Web Calendar Updates

Workshop Schedule

Due to overwhelming demand and limitations on the maximum class size, the Beginning Blacksmith classes held Jan 30 in the NE and NW regions will be repeated to allow more students a chance to attend. These classes are already filling up with the overflow students so if you are interested, try register as soon as possible:

Feb 20 – Beginning Blacksmithing Workshop: to be held at the Route 66 Blacksmith Shop in Elk City. Lunch will be provided. Cost will be \$30. Class size is limited so it is encouraged to sign up as soon as possible. For insurance purposes, all attendees MUST be SCABA members or join during the class. Contact Mandell Greteman to register. 580-515-1292 or mandell01@windstream.net.

Feb 20 – Beginning Blacksmithing Workshop: to be held at Bill Kendall's workshop in Tulsa. Bill Kendall's shop is located at 5245 South Peoria, Tulsa OK 74105. (Located behind "Anna & June's Beauty Supplies" on S. Peoria. Instructors will be Doug Redden and Tracy Cowart. Lunch will be provided. Cost will be \$30. Class size is limited so it is encouraged to sign up as soon as possible. For insurance purposes, all attendees MUST be SCABA members or join during the class. Contact Doug Redden to register. 918-230-2960 or doug.redden2@att.net.

Feb 27 – Beginning Blacksmithing Workshop: to be held at Bill Kendall's workshop in Tulsa. Bill Kendall's shop is located at 5245 South Peoria, Tulsa OK 74105. (Located behind "Anna & June's Beauty Supplies" on S. Peoria. Instructors will be Doug Redden and Tracy Cowart. Lunch will be provided. Cost will be \$30. Class size is limited so it is encouraged to sign up as soon as possible. For insurance purposes, all attendees MUST be SCABA members or join during the class. Contact Doug Redden to register. 918-230-2960 or doug.redden2@att.net.

Several members asked for it so the Hammer Making Workshop in the NE region has been set:

April 30 - Hammer Making Workshop: to be held in the NE region at Gary Gloden's shop. 16606 S. 97th W Ave, Sapulpa OK. Class size is limited so it is encouraged to sign up as soon as possible. For insurance purposes, all attendees MUST be SCABA members or join during the class. To register, contact Doug Redden at 918-230-2960 or doug.redden2@att.net or contact Mandell Greteman at 580-515-1292 or mandell01@windstream.net.

**Mandell Greteman is the SCABA Workshop Coordinator.
Contact Mandell at 580-515-1292.
mandell01@windstream.net**

2016 REGIONAL MEETING SCHEDULE

SE Region (1 st Sat)	NE Region (2 nd Sat)	SC Region (3 rd Sat)	NW Region (4 th Sat)
Jan 2 nd (Open)	Jan 9 th (Open)	Jan 16 th (Open)	Jan 23 rd (Monte Smith)
Feb 6th (Open)	Feb 13th (Bill Kendall)	Feb 20th (Open)	Feb 27th (Bob Kennemer)
Mar 5 th (Ronnie Smith & Bill Phillips)	Mar 12 th (Doug Redden)	Mar 19 th (Bruce Willenberg)	Mar 26 th (Mandell Greteman)
Apr 2 nd (Open)	Apr 9 th (Open)	Apr 16 th (Open)	Apr 23 rd (Dorvan Ivy)
May 7 th (Open)	May 14 th (Open)	May 21 st (JJ McGill)	May 28 th (Don Garner)
Jun 4 th (Open)	Jun 11 th (Marshall Hager)	Jun 18 th (Ricky Vardell)	Jun 25 th (Terry Kauk)
Jul 2 nd (Open)	Jul 9 th (Open)	Jul 16 th (Open)	Jul 23 rd (Kelly Kilhoffer)
Aug 6 th (Open)	Aug 13 th (Open)	Aug 20 th (Open)	Aug 27 th (Don Garner)
Sep 3 rd (Open)	Sep 10 th (Open)	Sep 17 th (Jim Dyer)	Sep 24 th (Roy Bell)
Oct 1 st (Open)	Oct 8 th (Open)	Oct 15 th (Conference Weekend)	Oct 22 nd (Cheryl Overstreet)
Nov 5 th (Open)	Nov 12 th (Dan Cowart)	Nov 19 th (Anthony Griggs)	Nov 26 th (Cory Spieker)
Dec 3 rd (Open)	Dec 10 th (Open)	Dec 17 th (Open)	Dec 24 th (Merry Christmas)

Fifth Saturday Fun Day - Dec: 31st (Mandell Greteman)

The meeting hosting form can be found on the last page along with membership application form. Russell Bartling will now keep track of the monthly meetings. Regular monthly meetings are always open to anyone that wishes to attend.

If you want to host a meeting in your area please fill out one of the host forms 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. 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

Regional Meeting Details:

February

SE regional Meeting February 6th: Open.

NE Regional Meeting February 13th: Will be Hosted by Bill Kendall. The address for Bill's shop is 5245 South Peoria, Tulsa OK 74105. It is located behind "Anna & June's Beauty Supplies on South Peoria. The trade item is a secret. Bill will supply the material. Lunch will be provided but bring a side dish or desert to help out. Contact: Bill Kendall 918-691-2173.

SC Regional Meeting February 20th: Open.

NW Regional Meeting February 27th: Will be hosted by Bob Kennemer at the Route 66 Blacksmith Museum in Elk City. ***(Note that the address provided in the previous newsletter was different - the meeting will be held at the blacksmith museum, not the address provided in January.)*** The trade item is a Tomahawk. Lunch will be provided but bring a side dish or desert to help out. Contact: Bob Kennemer 405-225-1878.

March

SE Regional Meeting February March 5th: Will be hosted by Ronnie Smith and Bill Phillips. This will be a collaborative meeting with the Camp Hope Boys Ranch. The location is 1 mile west of the Indian Nation Turnpike on Hwy 270 at the Cattlemen's Association Building. The trade item is an S-Hook. Lunch will be provided but bring a side dish or desert to help out. There will be a lot of kids at this meeting and the hosts are requesting any demo smiths who would like to attend to educate and entertain the kids. Please note that all forges and equipment have to be brought to the site for this meeting. Contact: Ronnie Smith 918-916-3426 or Bill Phillips 918-200-4263.

NE Regional Meeting March 12th: Will be Hosted by Doug Redden at the Will Rogers Birth Place Ranch in Oologah. From the intersection of Hwy 88 and Hwy 169, go two miles north then turn east and go two miles to the park entrance. The trade item is anything from a railroad spike. Lunch will be provided (goulash) but bring a side dish or desert to help out. Contact: Doug Redden 918-230-2960. *(Reminder: This is the meeting with the RSC film crew attending. See Page 10.)*

SC Regional Meeting March 19th: Will be hosted by Bruce Willenberg at his shop at 12250 Nelson Lane, Norman, OK. (About 10 minutes east of Byron Doner's place.) Take Hwy 9 east of Norman to 120th St. Then go south on 120th 1.5 miles to Nelson Lane (Nelson Lane is an old country dirt road.) Then go east 200 yards to first drive on the south. Lunch will be provided but bring a side dish or desert to help out. The trade item is a Screwdriver. Contact: Bruce Willenberg 405-227-4547.

NW Regional Meeting March 26th: Will be hosted by Mandell Greteman at his shop in Foss, OK. Directions: Take Exit 53 off off I-40 and go north on Hwy 44 across the RR tracks one block, turn left, go two blocks to big gray building (or follow the signs). The trade item is a Nail Pulling Bar. Lunch will be provided but bring a side dish or desert to help out. Contact: Mandell Greteman 580-515-1292.

LEARN HOW TO MAKE YOUR LITTLE GIANT POWER HAMMER WORK HARDER THAN EVER!

Please join us for the 24TH annual Little Giant Rebuilding Seminar! Although we did pass ownership of Little Giant to our machinist Roger Rice in 2013, Sid Suedmeier will continue teaching the rebuilding class at his shop at 420 4th Corso in Nebraska City.

We carry on the tradition of our good friend Fred Caylor of teaching how to make Little Giants run well and hit hard.

The 2½ day class is a hands-on format. You will help transform a 25 LB Little Giant hammer from functional but sloppy condition into a well tuned, quiet, hard working hammer. Sid Suedmeier, former owner of Little Giant, will share all his knowledge and experience gained from working with Fred and from 24 years of repairing and rebuilding Little Giants.

An old style 25 LB Little Giant will be rebuilt during the class, and a new style machine will be on hand to demonstrate proper assembly and adjustment of both styles.

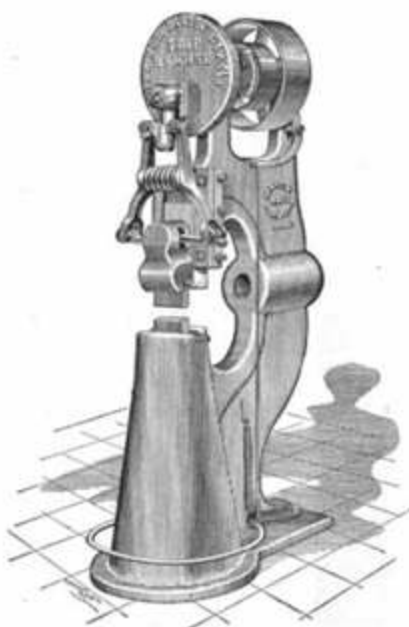
The class is held in Sid's shop in historical Nebraska City, Nebraska. The city has a wide variety of cafes, outlets (including Pendleton Woolen Mills), antique and gift shops, orchards, wineries and museums.

No experience is required to attend this class. Past classes have been comprised of students, retirees, artists, welders, doctors, farriers ...anyone who wants to learn will benefit from this class. We approach the rebuilding process using tools that can be found in the average home workshop.

If you are in the market to buy a power hammer, this class will make you an educated shopper. If you already own a Little Giant, or any other brand of power hammer, this class will teach you how to get the best performance possible.

The class costs \$95, refundable up to 7 days prior to the class; advance registration is required. We limit each class to 25 participants. The classes start at 9 AM sharp on Friday, and usually ends by Saturday evening. The schedule runs Sunday until noon in case we encounter any exceptional problems in rebuilding, and to answer remaining questions.

When we receive your registration, we will send you a city map, along with travel and hotel information. Airports are located in Omaha (45 miles north), Lincoln (50 miles west) and Kansas City (125 miles south).



AN ADDED BONUS THIS YEAR will be a discounted price on the Little Giant Rebuilding DVD set that we had filmed several years ago. Regular price is \$95; it will be offered to class members for \$50. One set per class member.

**IF YOU HAVE A LITTLE GIANT,
THIS CLASS IS FOR YOU!**

MARCH 11-13, 2016 REGISTRATION

NAME:
 BUSINESS NAME:
 STREET ADDRESS:
 CITY: STATE: ZIP:
 PHONE (Work): PHONE (Home):
 E-MAIL ADDRESS:

PAYMENT

☐ Check Enclosed ☐ Visa ☐ MasterCard ☐ Discover ☐ American Express

NUMBER: EXPIRATION DATE:

POWER HAMMER INFO

BRAND:

SIZE:

SERIAL #:

Please call or e-mail if you have any questions, or prefer to register by phone. You can reach us at 402-873-6605 or SidsShop@windstream.net.
 Suedmeier Enterprises, 420 4th Corso, Nebraska City, NE 68410.



Blacksmith Classes Offered by Indian Capital Technology Center:



STILWELL CAMPUS
918-696-3111 / 866-696-3111
Route 6 Box 3320 / Stilwell, OK 74960
STL

NEW! Intro to Blacksmithing 15 hrs/\$45+

Learn to forge tapers, make punches, punch holes with punches made. Students will learn how to safely and properly light and maintain a forge fire. Students will be trained in the safety of forging as they make and use punches, chisels and hole drifts.

01/25 – 02/22 M 6:00P-9:00P

STL

NEW! Blacksmith Scrolls & Collaring 6 hrs/\$25+

Learn and perform safety practices to forge tapers in mild steel and make scrolls with them. Students will learn to calculate stock length for collaring scrolls together and how to make collars.

02/29 – 03/07 M 6:00P-9:00P

STL

NEW! Forge a Fire Place Rake 18 hrs/\$55+

Learn and perform safety practices to forge a fireplace rake from 1/4" x 3/4" mild steel.

03/21 – 04/25 M 6:00P-9:00P

STL

NEW! Forge a Hot Cut Hardie & Hammer 24 hrs/\$65+

Learn and perform all safety practices to forge a Hot Cut Hardie for an anvil used to cut bar stock. Students will learn to forge a rounding hammer used for forging as well as learn to grind and heat treat the hammer. Students will make their own hammer handle, wooden wedge and steel wedge.

04/02 – 04/16 Sa 8:00A-4:30P

STL

NEW! Forge Welded Bundle 9 hrs/\$35+

05/02 – 05/16 M 6:00P-9:00P

STL

NEW! Forge a Patch Knife 6 hrs/\$25+

05/03 – 05/05 T/Th 6:00P-9:00P

STL

Doug Redden forwarded this information to me to include in the newsletter. This information is being repeated from the last newsletter to make sure everyone gets a chance to see it.

The Indian Capital Technology Center is offering new blacksmithing classes at their Stilwell campus.

Doug verified that the classes are to be taught by Ed and Brian Brazeal.

If you are interested, you can obtain their complete catalog online at:

www.ictctech.com



Or contact the Stilwell campus at the number included above. The contact person is Donna Ford. Donna.ford@ictctech.com.

-Editor

****Board of Directors Meeting****

There is a Board of Directors meeting scheduled for Sunday March 6th at 2:00 PM at Byron Doner's house in Norman.

All members are welcome to attend this meeting. If you have any ideas for improvements to the club or issues that need to be addressed, this would be a great venue to address the leadership.

In the interest of a more efficient meeting, if you do have any issues you would like to bring before the Board, it is a good idea to let a Board member know before hand. That way the Secretary can work it into the agenda before the meeting.

See the inside front cover for Byron's address if you want to attend.

Calling All Movie Stars From Doug Redden..

At the **March 12th NE Region meeting**, a film class from Rogers State College will attend to film blacksmiths for a class project. The class will shoot and edit the film and Saltfork will get a copy of the film for the library. It is not known at this time how many cameras will be used for filming.

So if you are interested in participating as a subject in the film or just watching the fun, this may be a meeting you will not want to miss...

- *Editor*



Around the State...

There were no regional meetings to report for the newsletter this month. Look for the January NW and February NE region meeting reports in the March newsletter...

Avoid the Dues Blues...

The annual SCABA membership dues will be expiring the end of March (next month!) if you are not already paid up for 2016 fiscal year. It is a good time to get your membership renewal in before they expire.

The membership renewal form is on the last page of the newsletter or you can go the Saltfork Craftsmen website (Under the membership application tab) to print the form.

The newsletter gets mailed out to the most current membership list each month so if the Secretary has to drop your name off the list because of expired dues, then you may miss some newsletters before you get back on the list.

QR Codes????

Occasionally, we have hyperlinks in the newsletter that open to e-mails, websites, videos, etc. I am going to be trying to do a better job of making sure the hyperlinks are active in the online copy so those who view the newsletter on their computer or tablet can more easily reach those sites by just clicking the links.

You might think that function would be automatic. But the desktop publishing software industry has found numerous creative ways to make seemingly simple tasks difficult while also providing some amazing tools that do just the opposite. Along that line, I am going to start including QR codes for some of those links to make it easier for readers with tablets or smart phones to access the links from the printed copy of the newsletter.

QR stands for “quick response” and they are the small funny looking blocks that you may have seen in magazines, on posters, on packages, etc. If you have a tablet or smart phone, you can obtain an app that will read these codes. Just look up “QR Code Reader” or similar. I got “QR Code Reader and Barcode Scanner” by MixerBox Inc. From the App Store on my Iphone and it works great. You just open the app and point your phone or tablet at the code as if you were going to take a photograph. Once it automatically scans the code, it will direct your browser to the corresponding site. If you give this a try, you should see just how easy it is to use. In the lower right corner is an example of one of these codes which is a link to the Saltfork Craftsmen website.

If you have never used these, give it a try when you get a chance and let me know what you think.

- Editor



Correction...

In the January 2016 newsletter, Jim Carothers submitted a detailed article on making heart wall hooks. The year number for the date listed in the title is “2105” but should have been “2015.” While we members of Saltfork may be ahead of our time, that is pretty far off. That typo was mine, not Jim’s. I tried to severely scold my proofreader but people just looked at me funny for talking to myself...

- Editor

2016 ABANA Conference

Register by Jan. 31st and get
an ABANA Salt Lake City 2016
miniature anvil paperweight
as a bonus!

Dear ABANA Members:

It's time to plan to attend the 2016 biennial conference of the Artist Blacksmiths Association of North America, to be held at the Utah State Fairpark in Salt Lake City. The site is a wonderful old fairground with many Victorian buildings and large grass area for the demonstrations. The marketplace and lectures will be inside air conditioned spaces. There is onsite space for camping and RV's. Salt Lake City recreated itself for the Olympics. Then Trax system runs from the airport to downtown, with the fairpark as one of the stops. There are many hotels an easy walk from any of the stops and world class restaurants downtown besides.

The theme for the conference is Education and we've designed a program to promote hands on learning. There are many classes with projects ranging from beginner to advanced. Projects such as Animal Heads, Tongs, Forge Welding, Damascus Billets, Repousse', Fold Forming, and Patination will all be presented as hands on classes. This year there is a dedicated Youth Tent, for the younger aspiring smiths to try their hand at a project, or many projects.

The railing workshop with John Barron will be installed at a handicap ramp of a historic building site on the grounds. The workshop will cover measuring the site, designing the railing, forging and assembling all the parts, and finally installation on Sunday morning. The railing design is based on the ring projects first initiated by Francis Whitaker. You have an opportunity to forge a 7" OD ring from 1/4 x 1 the easy way, and inset a motif of your choice, then bring it to the workshop to be part of the final project.

This year Delta-Mustad has sponsored a tent for farrier demonstrations. Some of the biggest names in the farrier world will be showing their stuff... and it's not horseshoes!!

The Gallery reception is planned for Friday night with hors-d'oeuvres, and a plated dinner for Saturday night preceding the fine art auction. You will have a chance to bid on projects that were constructed during the conference along with many other items donated by talented smiths.

Check out this issue and the next for many more details on the conference demonstrators and their planned demonstrations.

Also, don't forget to book your room now. Salt Lake is a popular place that time of year and rooms go fast. Even if you aren't sure, you can hold your reservation with a credit card and it won't cost anything if you cancel before the conference.

Regards,

Amy Pieh, John McLellan

The following is our demonstrator lineup for the 2016 ABANA Conference

Blacksmithing

- John Barron: Forging Workshop
- Monica Coyne: Forging Demo
- Roberto Giordani: Forging Workshop
- Jake James & 12 helpers: Forging Demo
The 12: Timothy Dale, Patrick Quinn, Matthew Christiano, Mackenzie Martin, Kyle Martin, Haely Woodward, Dennis Dusek, Daniel Widollf, Brett Moten, Ann Klicka, Andy Dohner, and Aaron Bushey
- Douglas Pryor: Repoussé on steel, Armor
- Fred Zweig: Repoussé workshop
- Heiner Zimmerman & Rick Smith: Forging Demo

Knifemaking

- Jim Austin: Viking Axe demo
- David Lisch & Andrea Lisch: Knife Finishing processes
- Ray Rybar: Damascus Billet workshop

Non-ferrous Forging and Metalworking

- Charles Lewton Brain: Foldforming workshop and demo
- Jack Klahm: Forging Bronze and Aluminum

Farrier Tent

- Dave Farley, Tom Willoughby, Roy Bloom: Forging various projects

Lectures/Workshops

- Pual Boulay & John Graham: Photography
- Jeff Jubenville (Paley Studio): Working in the Paley Studio
- Bill Hochella: Metallurgical discussions
- Sculpt Nouveau-Ron Young: Parina lecture and workshop
- Heiner Zimmerman, Rick Smith Delyth Done

Teaching Tents

- Adult Teaching Tent-Mark Aspery, John McLellan, Gerald Boggs, Gerald Franklin
- Evening Forging Competition

Youth Tent

- Jay Bernham-Kidwell, Jeff Dunkelberger

**The ABANA 2016 Conference is a FANTASTIC educational opportunity—
all events are on the grass or in air-conditioned buildings and will be fun!**

- Top Demonstrators
All Metal Trades
- NEW! Hands-on Demo
Tents
- Teaching Tent Expanded!
- Evening Forging
Competitions
- NEW! Farrier Forging Tent
- NEW! JUST FOR KIDS!
Youth Forging Tent
- Lectures & Workshops
- Portfolio Display &
Networking Area
- Evening Entertainment
area by the Gazebo!
Bring your instrument!
- Gourmet Food Trucks
Day & Night!
- Saturday Evening Dinner
will be Served!
No WAITING in LINE!
- Blacksmith Equipment &
Supply Vendors
- Tailgate Vendors
- Iron-in-the-Hat—
Every Day
- Gallery & Reception—
Open-to-the-Public
- Saturday Night Fine Art
Auction—Open-to-the-
Public
- Fine Art Shipper to help
you get your winnings
home!
- Family Programs
- Tons of Hotels Available
to choose from!
- DON'T RENT A CAR!
TRAX TRAIN runs
from Airport to Hotels
& Conference!
- Fairpark Parking Pass:
\$10 for Monday-Sunday;
\$12 for Thursday-Sunday;
or \$6 per day!

Registration information

Registration includes the Saturday night dinner. There will be a cash bar throughout the conference. Day passes are available for each day, passes are color-coded and may be obtained at the Registration office.

The Railing Install

The John Barron demo will create a railing to be installed on a ramp at the Fair Park at 9:00 AM. Book a later flight home on Sunday, July 17, so you can participate in the morning railing installation.

Camping

Dry and RV camping at the Utah State Fairpark must be reserved with Registration through the ABANA Central Office—space is limited. Portable Showers on site. If space permits, it is first-come-first-serve day of event. Additional camping is available next to the Conference grounds at the KOA Campground. 800-226-7752

Book Your Room & Spread the Word

We encourage you to reserve your hotel room NOW as it is City Wide Conference week in Salt Lake City during our event. Rooms will be filling up fast! If you stay near the green line, you will be able to use the early morning TRAX line on Sunday.

Our goal is to exceed past conference attendance. Help make this possible and tell your colleagues about the upcoming conference. The conference focus is on *Education*, giving you multiple opportunities to participate with all the featured metal crafts—*Blacksmithing, Damascus Billet, Farrier Forging, Repousse, Fold-Forming, Patination and Youth Forging*. Main demo tents will feature *Bladesmithing; Forging Steel-Bronze-Copper as well as Aluminum Sculpture*.

Tailgating Information

We consider a tailgater one who is selling primarily (over 50%) old or used merchandise. Tailgating is free to full conference registrants. Outside space is uncovered. Tailgaters MUST have a *Tailgater's Entry Pass* from Registration to enter the tailgating area. Tailgaters must collect Utah Sales Tax.

Indoor Vendor Information Registration

- 10 x 10 space: \$600 until March 31, 2016; after \$770. This includes two badges, two tables, two chairs, and 110v power.
- 20 x 20 is \$900 until March 31, 2016; after \$1155. This includes three badges, four tables, three chairs, and 110v power.

Additional tables/chairs: tables \$12, chairs \$2, as requested. Indoor space is air conditioned and located in the beautiful Grand Building at ground level. Gallery, dinner, and the auction are located upstairs. Vendor area is well-lit and next to all the action! Vendors must collect Utah Sales Tax.

Outdoor Vendor Information Registration

- 10 x 10 space: \$500 until March 31, 2016; after \$670. This includes two badges, one table, two chairs.
- 20 x 20 is \$700 until March 31, 2016; after \$955. This includes three badges, two tables, three chairs. Outdoor Vendor area is on the grass or pavement next to all the action!

Additional tables/chairs: tables \$12, chairs \$2, as requested. Vendors must collect Utah Sales Tax.

Cancellation Policy for Conference Registration and Vendor Fees

By registering for the ABANA Conference, you accept this cancellation policy and agree to be bound by its terms. Notification of cancellations for refunds must be submitted in writing to the ABANA Central Office postmarked or emailed by May 31, 2016. No cancellations will be accepted via phone.

A \$35 cancellation fee will be charged for cancellations prior to June 1, 2016.

There will be no refunds after that date!

Contact:

ABANA
259 Muddy Fork Road
Jonesborough, TN 37659 USA

Please pay by check drawn on a U.S. bank, U.S. money order, or credit card. You can also register by calling 423-913-1022, or fax this form to 423-913-1023, or scan and email this form to centraloffice@abana.org

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WINTER 2016 9

2016 ABANA Conference

Register by Jan. 31st and get an
ABANA Salt Lake City 2016
miniature anvil paperweight as a bonus!



Book your hotel rooms NOW!

We cannot stress the importance of this enough! It is city-wide conference week during the dates of our conference and space will fill up fast. Great rates are still available now! If you think you are coming but are not sure, we encourage you to book your room now, you can always cancel later. If you book directly with the hotel you will not be charged, nor obligated until your reserved date.



Scan the QR code for a Hotels.com search for hotels in Salt Lake City for July 13-17, 2016. The search will display the hotels on a map centered around the Utah State Fairpark. Then modify the search parameters to meet your travel plans and needs.



Register for your camping spaces NOW!

ABANA has a camping site reserved for our conference but it is limited in size too! If you want to camp, register for your space now! Make sure you have the space you need!



Visit the website:

**abana.org/2016SLC for
updates on demonstrators!**

Book your flight for Sunday afternoon so you won't miss the railing installation!

****Notice****

Doug Redden has obtained tickets for the Iron-In-The-Hat SUPER DRAWING at the ABANA Conference. (See facing page.) If you would like tickets, contact Doug. Tickets are \$1.00 each and you do not have to attend the conference to win the drawing.

Iron-In-The-Hat: SUPER DRAWING!

Exciting news for those local affiliate chapter members who will be attending the July 2016 Salt Lake City conference! In addition to the daily Iron-In-The-Hat drawings, there will be a Saturday night **SUPER DRAWING** that will consist of the following items:

- The MARK InLine Treadle Hammer by Meyer Machine Tool Company;
- BAM Box: filled with *Signature Tools* by Pat McCarty; and
- TFS Single Horn 100 lb anvil by Delta Mustad.

For those members who will be unable to attend the conference, tickets for Iron In The Hat will be available thru your local affiliate chapter. Each chapter will be receiving 100 tickets for sale. Ticket prices are \$1.00 each. Upon request additional sales tickets can be obtained thru the ABANA office.

Participants do not have to be present to win. At the winners' request, shipping arrangements (paid by winner) can be made.

As you are aware, all proceeds from the Iron-In-The-Hat are used by ABANA for Affiliate member scholarships.

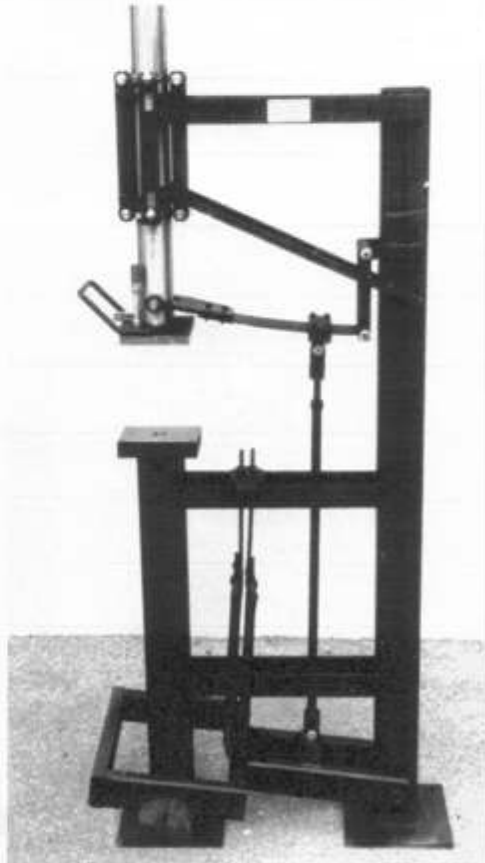
The Iron-In-The-Hat fundraiser is key to the success of our scholarship program. It provides the necessary funds to help educate and train scholarship participants and enhance blacksmithing. By

including all ABANA Affiliate members in our **SUPER DRAWING**, we can make our 2016 Conference the most successful scholarship program yet!

Please encourage your members to participate!

Thanks!

~Len Ledet



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CSMA Spring Demonstrator

The Central States Metal Artisans (CSMA) Spring Demonstrator will be Dorothy Stiegler on April 23-24, 2016. The event will be held at the CSMA club shop in Haysville, KS which is just south of Wichita. (See the attached map with the address of the Haysville club shop.)

Cost is \$50 for members and \$70 for non-members (which includes a membership with 12 issues of the CSMA newsletter).

The approximate schedule is 8 AM to about 5 PM Saturday and Sunday 8 AM to whenever she has to catch her flight back home sometime in the afternoon.

Dorothy will be doing some ornamental ironwork and some of the flowers she's known for. Registration and money can be sent to the CSMA treasurer:

Scott Sullivan
PO Box 2692
Wichita, KS 67201



BAM Conference

The Blacksmith Association of Missouri is holding its 25th Anniversary Ozark Blacksmith Conference April 28 - May 1, 2016 at the Missouri State Fairgrounds in Sedalia, Missouri. Demonstrators are:

Bob Alexander
Pat McCarty
Bernie Tappel
Audra Draper
Mike Draper
Elmer Roush
Lynda Metcalf

Contact BAM for more information.

www.bamsite.org



New Club Coal at Charlie McGee's

Charlie McGee has taken delivery of a brand new fresh pile of club coal at his place north of Sand Springs. If you need to get club coal from Charlie, see details in the Shop and Swap section at the end of the newsletter.

Craftsman's Legacy TV Series

From Jim Carothers:

The TV program "A Craftsman's Legacy" #109 featured blacksmith Lorelei Sims

<http://www.blacksmithchic.com/>

<http://craftsmanslegacy.com/user/login>



You have to create an account to view the program videos, but there is not a charge to join.

Program #108 was about a gun maker; program #110 was about a blade-smith.

There are a lot of other good programs archived and more on the way each week; the one I viewed this week was about making Windsor chairs by hand.

These programs are shown on OKC PBS Channel 13-3 (at least to me over the air) & are part of the Create TV Programing.

- Jim C.

BlacksmithHER.com to Offer Online Classes

Victoria Patti and BlacksmithHER Radio are offering online blacksmithing classes.

This cutting edge program is just getting started and future classes are still being developed.

The first class was on punching and drifting methods with Mark Aspery. I have casually discussed this program with Mark he is very supportive of this venue as a natural evolution of teaching blacksmithing skills and techniques. It provides a new level of affordable access to quality instruction.

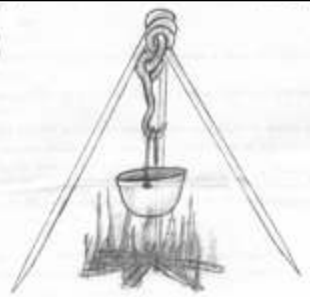
Classes are scheduled live and allow online interaction but if you can't make the class during the scheduled time, the recorded session can be viewed from an archive.

Check it out at:

URL: <http://www.blacksmithher.com/online-blacksmithing-classes/>

- Editor





Camp Tripod Project

Bill Epps

This camp tripod project was mailed in by Bill Epps. Drawings are by Marco Garcia.

Tools Needed:

Vice
Hammer
Anvil
Hot Cut or Saw
Welder (for the bending jig)

Materials:

1/2" Round x 20 Ft (Cut)
3/4" Round x 4"
2" x 3" Piece of 1/4" Flat Plate

First cut the 1/2" round bar into three pieces 60" long, one Piece 15" long, and one piece 12" long.

Take the 2" x 3" piece of 1/4" flat plate and cut a 1/2" x 1/2" square notch out of the corner. Take a piece of 3/4" round stock 4" long and weld to the plate to make the bending jig (Figure 1.)

Take a good heat on the end a 60" rod and and trap the heated end in the notch of the bending jig mounted in the vice. (Figure 2.)

Bend the bar around the jig to form an eye. (Figure 3-B.)

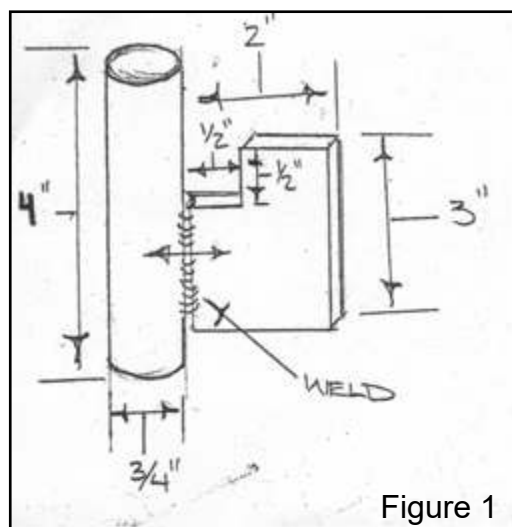


Figure 1

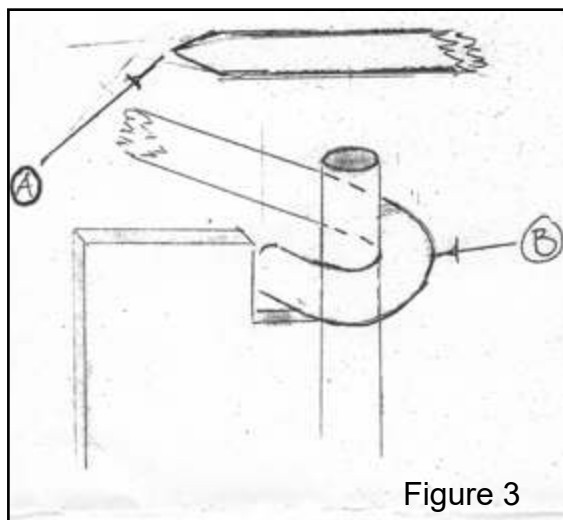


Figure 3

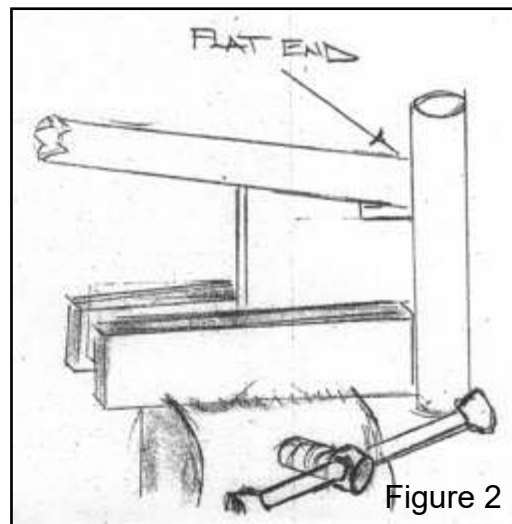


Figure 2

While hot, bend the eye backward to center on the bar over the anvil horn (Figure 4) then quench. Do this for all three 60" pieces.

On the opposite end of the bar from the eye, heat and draw to a point then quench. Do this for all three bars. (Figure 3-A.)

Heat the 15" bar and form a ring leaving a slight opening where the ends come together (Figure 5.)

Take the 12" bar and repeat steps 2 through 4 to create a short piece with an eye and a point (Figure 6-A and D.) While the point end is still hot, bend into a hook (Figure 6-C.) Offset backward with an S-curve to center the hook with the eye as per your preference (Figure 6-B.)

Heat the large ring and place all the eyes onto the ring, then close it up and quench (Figure 7.)

Setting up like the drawing, take the center leg and flip all the way over then spread the other two out. Anchor each leg into the ground. This should hold approximately 200 Lbs.

- Bill Epps

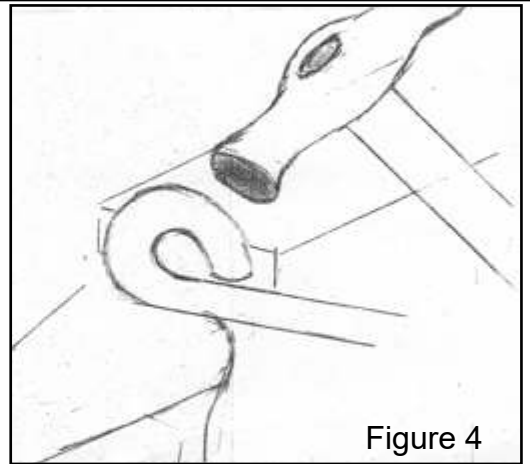


Figure 4

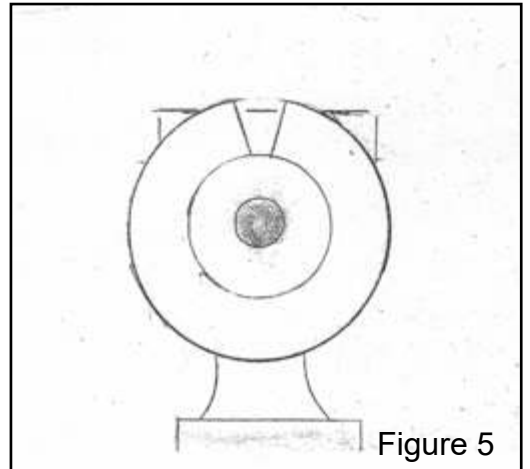


Figure 5

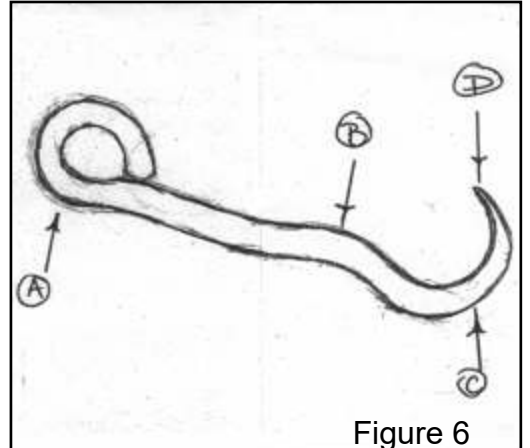


Figure 6

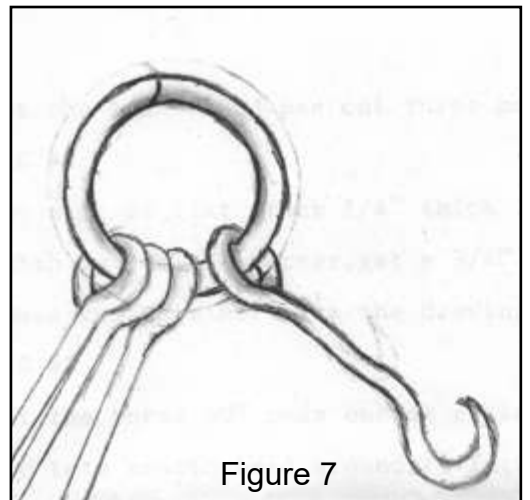
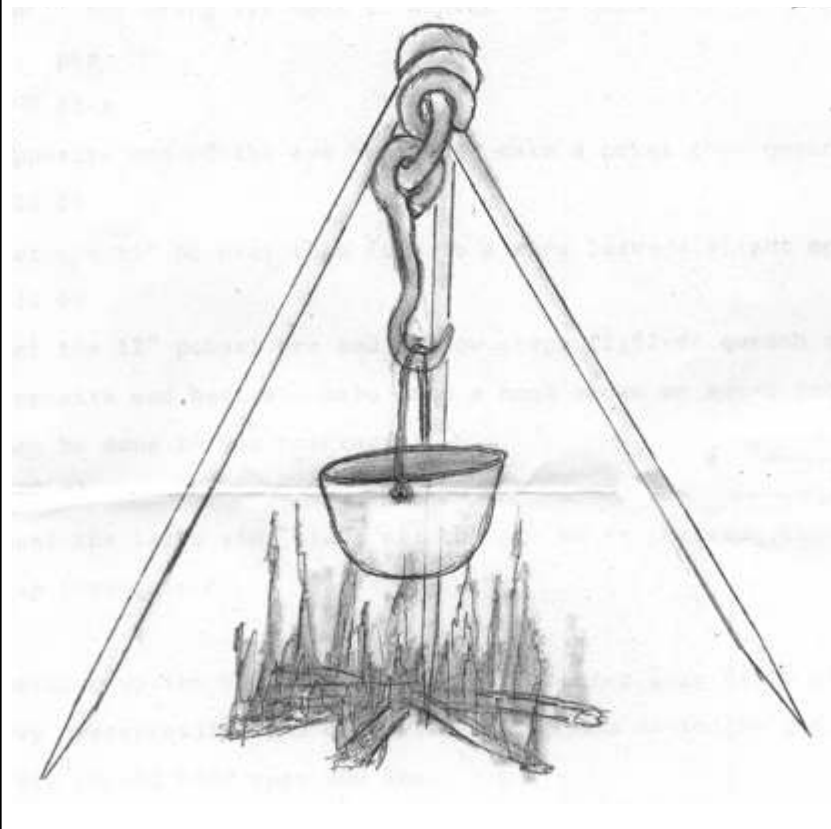


Figure 7





Induction Heater Forging

Eric Jergensen

Until now, summer weather always stopped my smithing. It's too warm to light a fire in my basement shop and just too much effort to take everything outside. If I got really inspired I would put my propane forge outside the window, but the hassle, delay and danger of climbing up and down a step-stool with hot metal was generally too much.

So, in May of 2015, I bought an induction heater on eBay. It never arrived and the vendor disappeared. eBay refunded the money and I tried another vendor. By late August, a well-built crate was on my doorstep with the long awaited induction heater. It didn't work!



Fig. 1: The Crate Arrives...

This second vendor was responsive, but not actually helpful. I did at least get permission to open the unit up. After several hours of tracing wiring and analyzing components, I

concluded there was a wiring problem in the logic power supply. I took the risk and changed the wiring. Success! (Whew!)

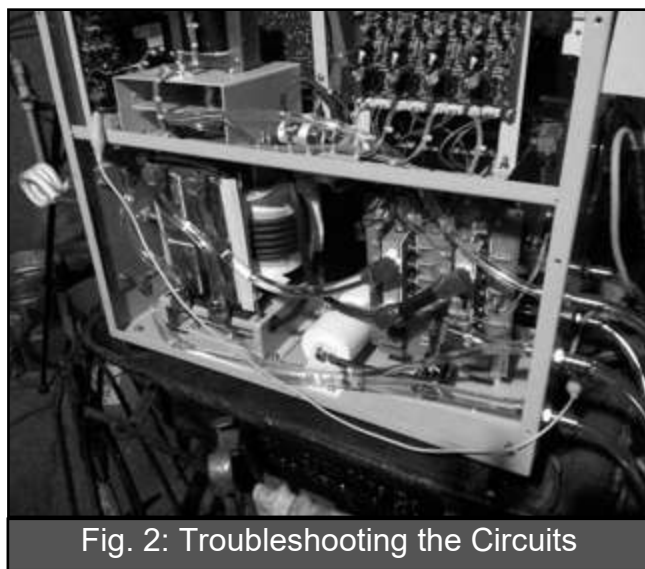


Fig. 2: Troubleshooting the Circuits

My next problem was cooling the unit. The heater requires water cooling. Typically, a TIG torch cooler is used. Having spent my budget on the heater, I resorted to making my own cooler. That was an adventure in its own right! It "only" took me three tries to get that right.

The final cooler is based on a refurbished Procon carbonator pump head with a $\frac{1}{3}$ HP motor. The pump head is adjusted down to 50 PSI. (That's very important. The typical 200 PSI setting would burst fittings.) The water is cooled by a Mopar heater core with airflow from a draft inducer scavenged from a retired house furnace.

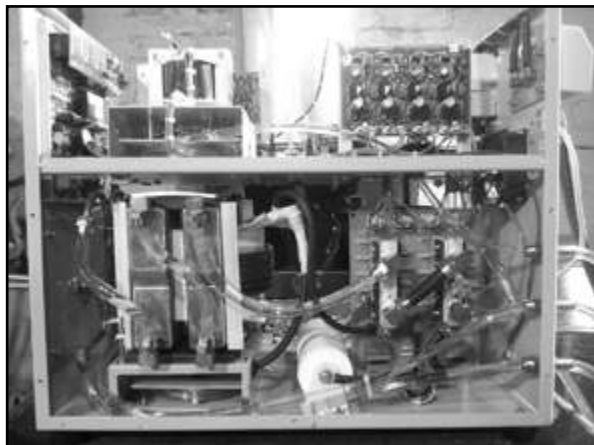


Fig. 3: Internal View Showing Electrical Components and Cooling Circuit

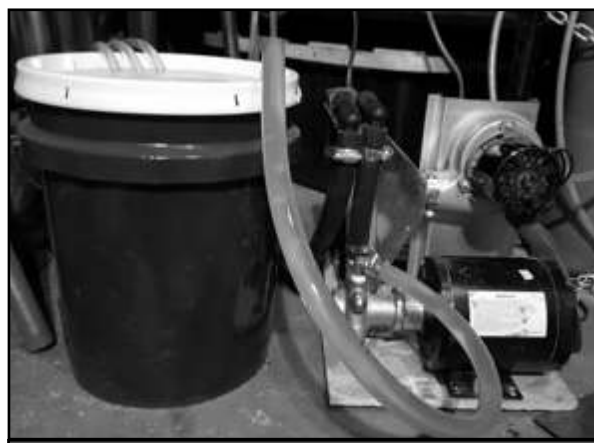


Fig. 4: The Shop Built Water Cooler



Fig. 5: Another View of the Water Cooler

By October, summer was over, but I was finally in business.

Was it worth it? Yes.

Convenience. Heat at the flip of a switch is amazing. I completely underestimated the value of the convenience. I do significantly more smithing. As a hobbyist, I don't often have large blocks of time. The overhead of setting up ventilation, getting a good fire (usually coal), and later putting it out and waiting for it to cool so I can close up takes about an hour. Now, I can finish a simple project like a leaf key ring before I would even have the coal fire ready.

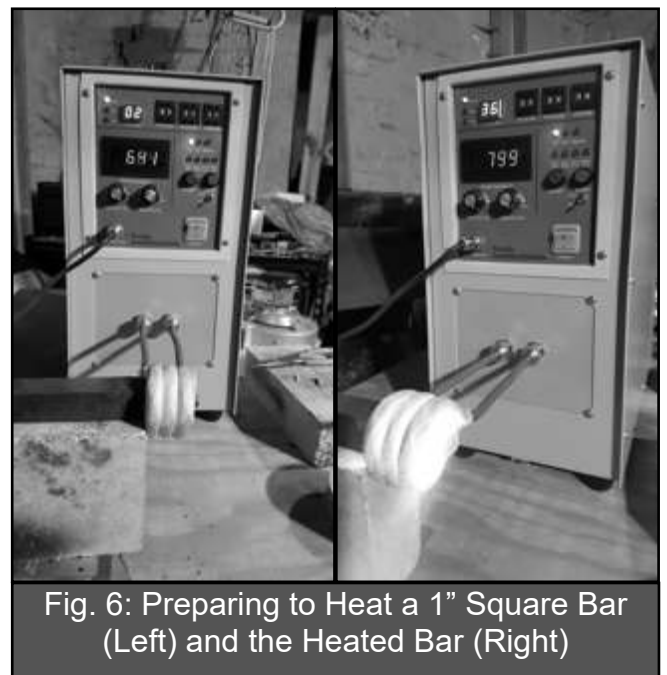


Fig. 6: Preparing to Heat a 1" Square Bar (Left) and the Heated Bar (Right)

After Tom Latané's fantastic hammer decoration at the Saltfork Craftsmen conference in November, my older daughter and I were inspired to try some chasing.

We got some W1 (Water Hardening) drill rod and went to work grinding and filing tools. Any time forging was appropriate we were only seconds away from glowing hot metal. In a couple of hours we had nearly two dozen tools.



Fig. 7: New Chasing Tools Quickly Made with the Induction Heater

Speed. It's fast. (This gets oversold sometimes based on the capabilities of larger units. It's not much faster than my coal forge.) I can heat 1" square bar to welding heat in 60 seconds.

Control. It's very easy to heat exactly where you want to the exact heat you want. With coal, I risk burning the metal. With propane I usually heat too much of the metal (and often my tongs). As a bonus, I can twist while heating.

Clean. No soot, no coal dust and no carbon monoxide risks.

Cool and efficient. Not only does it use essentially no energy when idle, it puts nearly all heating energy straight into the stock. I love to surprise and amaze visitors by touching the heating coil while in use! (Be careful, the stock is radiating significant heat.)

What's not to like?

Cost. I spent about US\$1,150 (including shipping) on just the heater itself, another \$30 or so to add a power cord and about \$200 on water cooling. That said, I don't regret it. (Note: as of January, 2016 the same unit is on eBay for under \$1,000 shipped.)

Flexibility. The heating coil I ordered will heat up to 1" square stock and struggles to

heat anything under 3/8". (The difficulty with the small stock is due to poor magnetic coupling. A small-diameter coil would do fine.) It's fantastic for making chisels, punches and similar linear objects. It works pretty well to make a Mark Aspery-style wizard-head bottle opener except for the last part where the loop is too big to fit in the coil. I found a trick for that that I will cover next month.

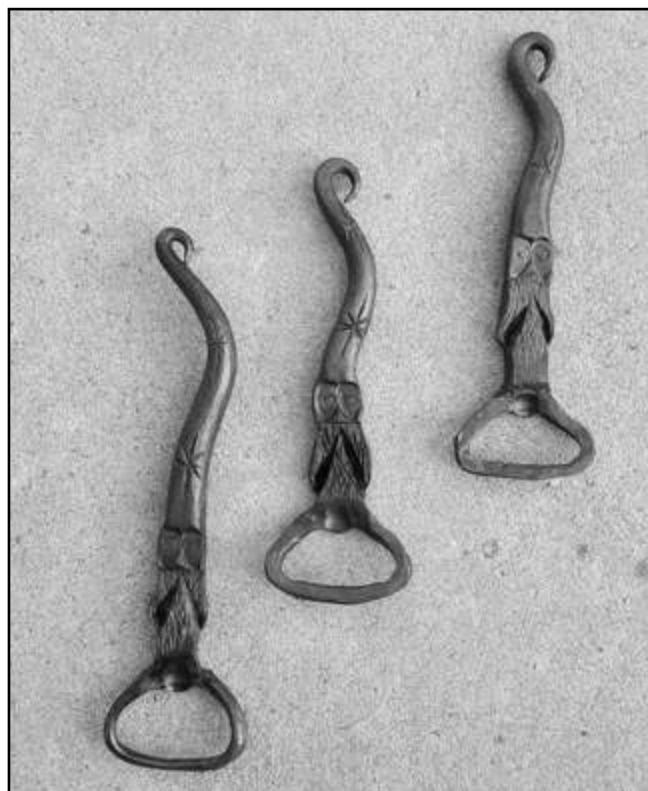


Fig. 8: Mark Aspery Style Wizard Bottle Openers Made with the Induction Heater

Even the pictured unfinished candle stand was possible. An axe head wouldn't be possible with that coil.

This style of induction heater is ideal for a light-industrial context where identical parts are heated over and over. A coil designed to heat a specific shape is very fast and effective. For general forging, the coil design is always a compromise. My next step is to experiment with other coil designs. To that end, I've ordered 8mm

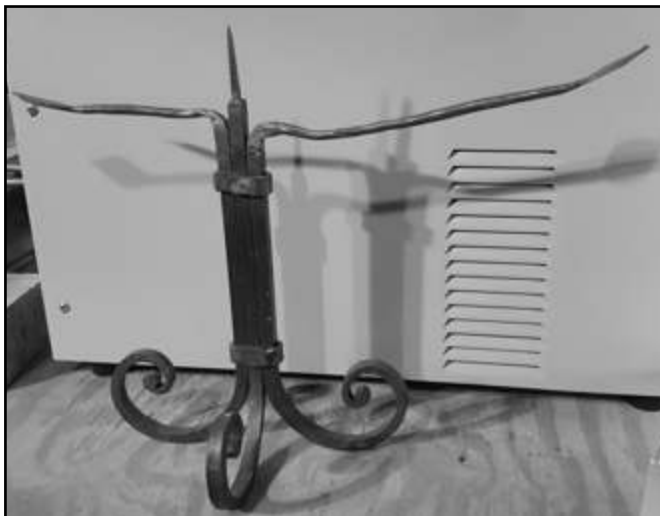


Fig. 9: Candle Holder (Unfinished) Made with the Induction Heater

tubing and matching flare fittings. I'll write an article once I've made a few coils.

I think LiHua will make coils to order, but I prefer to experiment myself.

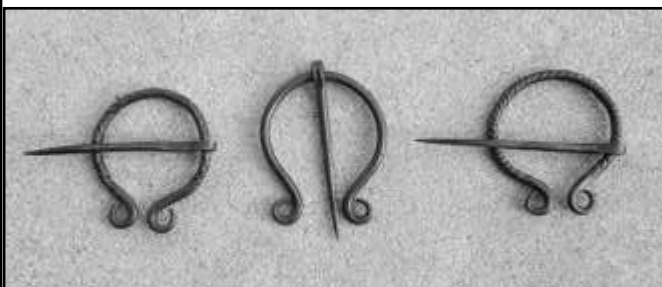


Fig. 10: Other Items Forged with the Induction Heater

The specs:

LH-15a made by LiHua Machinery:

<http://www.lh-induction.com/>

7.5 kW maximum

Horizontal coil (special request, vertical was standard)

Coil connected via 8mm flare fittings
USA electrical supply



Note on 7.5 kW: this exact unit is often mis-advertised as a 15 kW unit or, confusingly though accurately, as a 15 kVA unit. The 15 kVA rating is a reactive power specification which is all but irrelevant. Larger units with higher power are available but require three-phase industrial electrical supply.

Note on electrical supply: I was very specific about USA 220 Volt split-phase power when I ordered mine. That may be a factor in the mis-wiring. The design and construction seem first rate, but the manufacturing and support personnel appear to have no electronics expertise. It appears they put USA split-phase components in mine but wired it for European/Chinese single-phase 220V. I suspect that they would have done the right thing based on my USA address and the extra technical information confused the situation.

All in all, I'm pleased with the LH-15a but would warn caveat emptor due to my adventure getting a working unit. The best summary I can offer is this: I'm forging more than I ever did before and use the Induction heater 20 to 30 times more often than I use my coal forge.

Visit: <https://youtu.be/rNZkxVRb5Ys>

for a companion video that expands on the information in this article. - Eric



PENNY FOOT TRIVET

By Gary Kemp

It's all Lewis Rigglesman's fault. About 10 years ago, I was minding my own business, wandering through Cracker Country at the Florida State Fair. I was admiring the craftsmanship of the woodworkers, when I spotted this great looking hand-tied broom with what turned out to be a hand-forged snake handle. I chatted up Diane Rigglesman about tying brooms, all the while locked onto that cool handle.

When I asked about the handle, she introduced me to Lewis and he explained a little bit of how he forged the handle. As the discussion continued, he mentioned he taught classes at his shop. As luck would have it, he lives about 10 minutes from my home in Dade City.

I signed up for his 3-day class and I was hooked. In the subsequent years, I started to build up (hoard) tools until I was able to build a shop. Now retired, I am trying to spend more time honing my skill set. I submitted an application for one of the Scholarships and was fortunate enough to be selected. It was a no-brainer to contact Lewis about some one-on-one mentoring to work on my Journeyman skills.

The project I will highlight is a Penny Foot Trivet. I made one during my first class back in the day, and it was the item I selected to make and donate to the Conference Auction.

The piece consists of 4 pieces of $3/8"$ x $3/4"$ flat bar. You will need 3 pieces cut to 6" (for legs) and one cut to 20" (the ring). Some flat bar is rolled and some sheared. The parent piece I used was sheared so I started by chamfering the edges. This step can be done cold.

Once the chamfering is complete, you will need to draw a 3" taper on one end of each leg piece. It is important that each taper be equal to make assembly easier. On the opposite end of the legs, you will need to center punch two marks at $3/4"$ from the end of the leg pieces. That is the mark you will use to start your fuller. Using a fulling jig (thank you, Steve Bloom), fuller each leg to a thickness of about $1/4"$. The fulling will isolate what will become the penny foot from the parent stock. Next, draw a gentle taper from the fulling mark back toward the middle of the leg. Once the tapers are complete, round off the feet using the far edge of the anvil.

Now that all 3 legs are tapered and rounded, you will use half-on/half-off hammer blows to spread the feet to about $1 1/4"$. Put the legs aside (once you have measured each with the other to insure uniform pieces).



Now is the time to attach the trivet body. Begin by drawing a 1" or so taper on each end of the 20" bar. This is not a critical measurement as it will be overlapped for a forge weld later. Once the tapers are complete, you will need to start a rough circle. Depending on whether you are using a gas or coal forge, this step could move along quickly (gas) or take a number of heats (coal). If you have a favorite turning jig, now is the time to bust it out. The key here is to bring those two tapers together. Once they are roughly in alignment, give them a good stiff wire brushing and bring the ends up to red/dull orange. Pull them out of the heat and give them a good flux (I used 20 Mule Team Borax) and back into the fire. Once you see the slightest "sparkle" from the flux, pull out the piece and use light hammer blows to make the forge weld. In most cases you may want to brush/flux/reheat/hammer to insure the forge weld is solid.



(Gary demonstrated the Penny Foot Trivet for the SW Region.)



The trueing-up of the trivet body is your next step and is best accomplished using a cone mandrel. A cone mandrel is your friend. I have made multiple trivets and have always had access to a cone mandrel. Once again, it is possible to true up the ring in one heat if you are using a gas forge. You may need to return the ring to the anvil or treadle hammer to keep your ring flat.



The next exercise is to center punch a point in the middle of the ring (anywhere but the forge weld). Using that as your beginning point, you will need to mark 2 additional equal distance points around the ring where the legs will be attached. Again, if you have access to a jig (thank you, Lewis) now is the time to find it. If not, you can use a pencil and a good old fashion elementary school compass. Using those center punch marks drill three 3/16" holes in the ring as well as one hole in each leg. Remember when we spoke of making all three legs the same length? If you did, you can simply measure down from

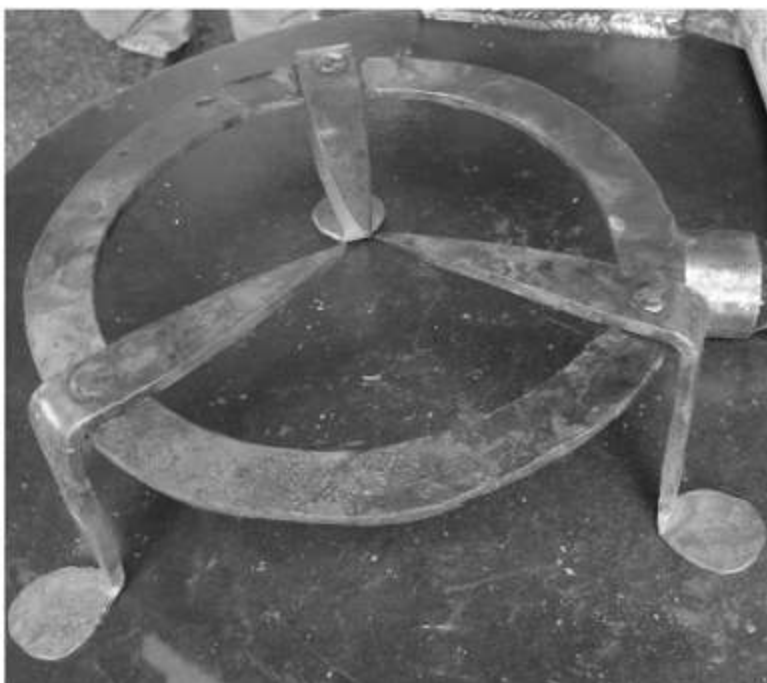
the tip an equal distance, center punch and drill a hole in the legs. You should have enough reveal on your rivets to equal 1.5 times the diameter of the rivet. Insert the rivet through the bottom of the ring and up through the leg. The rivets can be set by cold peening.



The final fine tuning is easily accomplished by isolating heat from a torch to where the leg crosses the ring. With the trivet ring in the vise, heat and bend each leg to a 90 degree bend. Lastly, using the torch, heat the shoulder on the penny foot and bend each of them to 90 degrees out from the leg.

Final fit and finish is accomplished using your favorite method. Mine were done with a solid wire brushing using an angle grinder fitted with a cup brush, a slight heat from the forge/torch and a generous coating of bee's wax.

In closing, I would encourage you to consider applying for a scholarship in the future. Much like me, you will never know until you try. Thank you to the Board, Scholarship Committee and all the smiths willing to offer me encouragement along the way.



(Eagle Dad Forge)

Adjustable Collar Tool

Dan Jennings

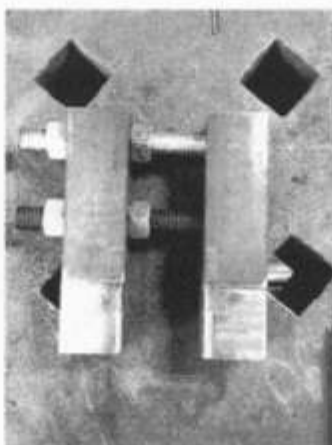
I recently had a scrolly project from 5/8" square stock that required collars. Well, not actually collars, just U's, because the grille sits directly on a translucent rock. At any rate, I needed 5 different width U's and didn't have tooling for any of them. I needed either 6 or 12 of each.

You Tube, as usual, provided an idea for an adjustable collar jig that you can find here:

<https://www.youtube.com/watch?v=4l5sQWG8X6M>

Of course I changed it a bit. I used 1 1/2" square for the blocks and 5/8" threaded rod. I milled a step to keep the stock straight, but one could just weld on tabs to create a shoulder. Then all I had to do was find or make some mandrels with the appropriate width. If they had been collars they would need to be the appropriate thickness was well. Using the collar material as spacers and adding a .05" shim the nuts are adjusted for the proper thickness.

I used a hydraulic press to bend them hot, but in the video he used it on his anvil with a hammer.





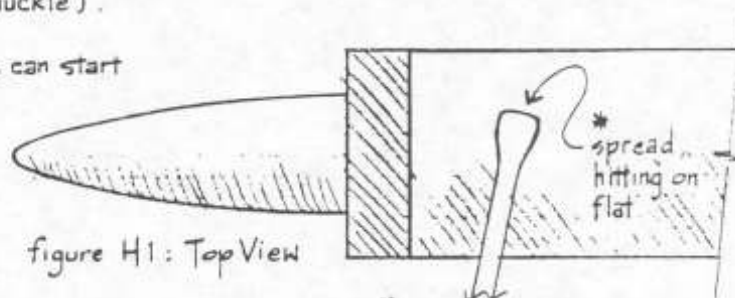
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♣ A Demonstration by Master Blacksmith Peter Ross ♣
from the note and sketch books of Frank Turley and James Baniecki

FIRM (FRICTION) JOINT DIVIDERS

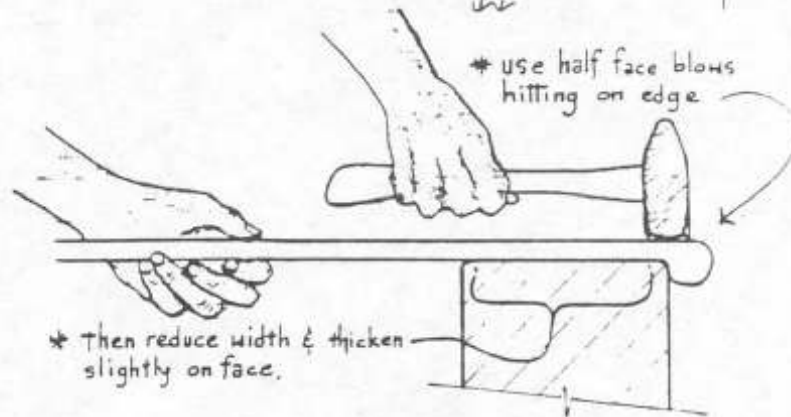
- Here is some truly precise work, a friction joint with five (5) knuckles involving drawing, shouldering, forge welding, fit forging with flatter & striker, filing, drilling and riveting with domed washers. With some prodding and one eye on the clock (there was a plane to catch!), Peter Ross roughed out this graceful tool, including all of the aforementioned processes except the domed rivet and washers, in just over one puny hour! Keep in mind, he used only the hand tools he'd brought in a small beat-up, salmon colored, samsonite carry on ... and ofcourse the tools & equipment courtesy of Robb Gunter.

- Forging the Friction Joint: The goal here is to forge the two pieces that when put together will operate as a fulcrum for the two legs of a pair of dividers. The first piece will have two knuckles (bi-knuckle) and the second piece will have three knuckles (fri-knuckle).

- THE BI-KNUCKLE PIECE one can start with $\frac{3}{16}'' \times \frac{1}{2}''$ flat bar. Flatten the end slightly as shown in fig. H1



- This accomplished, turn bar on edge (perpendicular to Anvil face) and shoulder over the far edge of Anvil as shown in figure H2

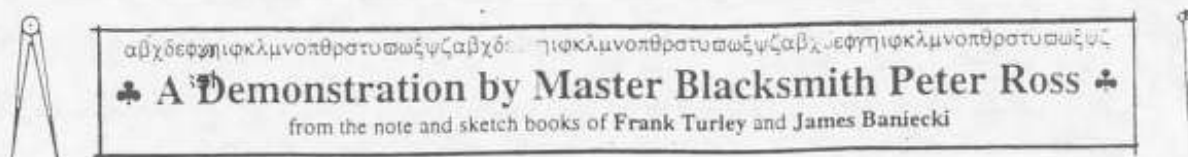


- While bar is still held in this way, reduce its cross-sectional width thickening it slightly. Refer to figure H2.

- Anticipate how much of bar material will be needed to make the 2nd knuckle and make "future" cut mark with a chisel. (See dashed line on figure H3).

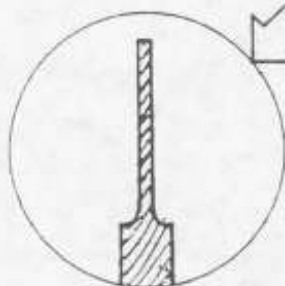
figure H2: Edge View, Shouldering

PR-6



FIRM (FRICTION) JOINT DIVIDERS *continued*

- Shoulder both faces of knuckle being sure to hold the piece at about a 45° angle to the Anvil. The profile/edge view should look something like the sketch below.



enlarged profile
not to scale

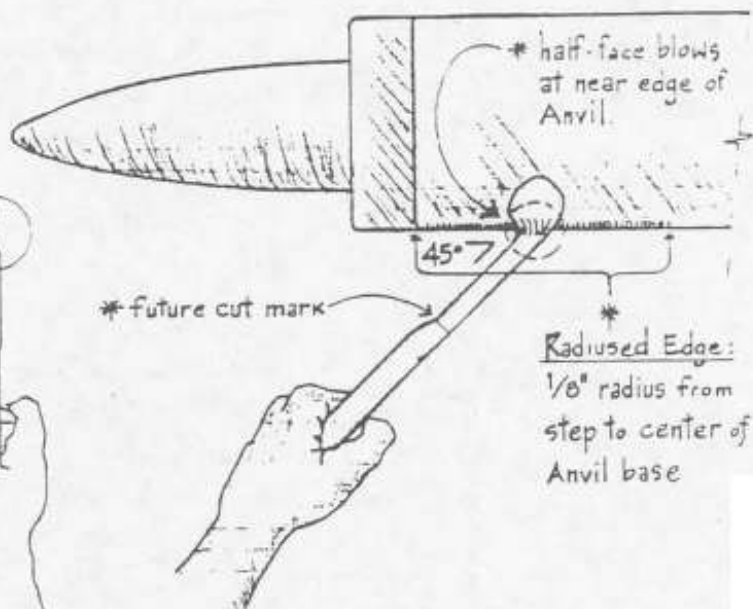


figure H3: Shouldering both sides of knuckle

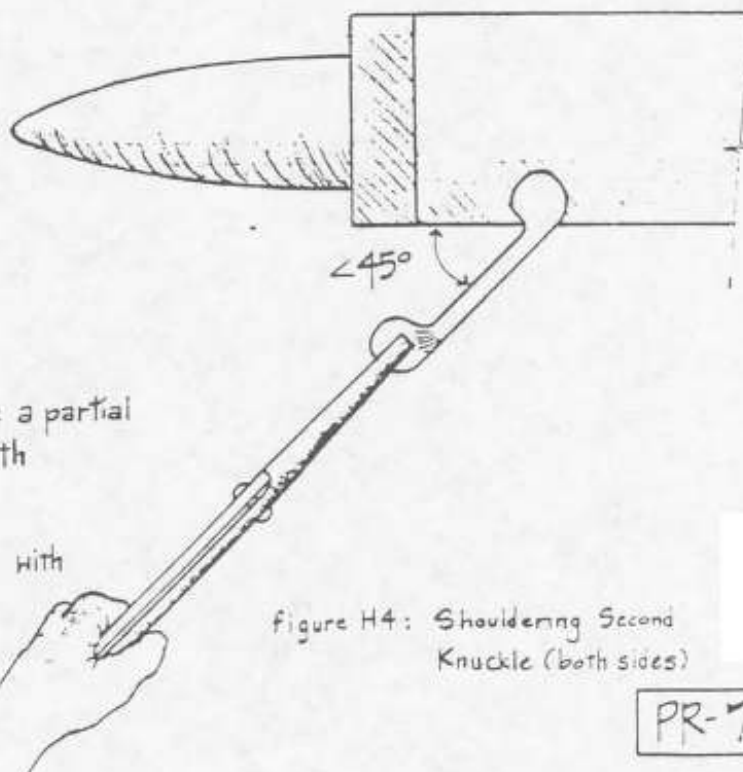
- Hardie cut stock at cut mark and repeat the steps H1 thru H3 plus H4 to achieve 'mirror image' second knuckle



- Estimate center and execute a partial hardie cut at center. Fold with cut outside of bend.



- Flux interfaces with borax before closing then forge weld.



PR-7



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♣ A Demonstration by Master Blacksmith Peter Ross ♣

from the note and sketch books of Frank Turley and James Baniecki

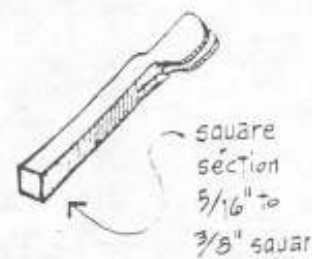


FIRM (FRICTION) JOINT DIVIDERS continued

- If, due to human error, one leg ends up shorter than the other, crosspeen the short leg at a red heat to lengthen it, like this. then close and forge weld as stated on preceding page.



- SCARF PREPARATION: After forge weld, draw out and square the section leaving it oversized on the end to obviate upsetting during scarf preparation.



- Forge a quick pyramidal blunt taper on anvil face. see fig. H5

- Place this blunt taper near the end of the anvil horn and "fuller" a point (scarf) (Peter Ross accomplished this with two or three quick blows) see sketch, fig. H6 & H7

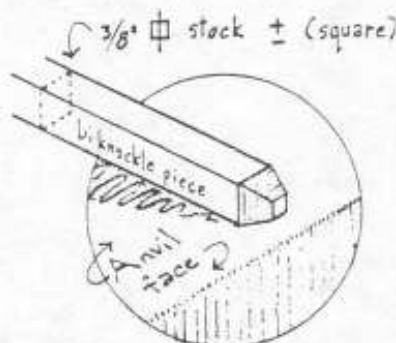


figure H5: forge blunt taper to prepare scarf

- There are two scarves required for the Lap-weld on each divider leg for a total of 4. They should all be prepared as shown on this page.

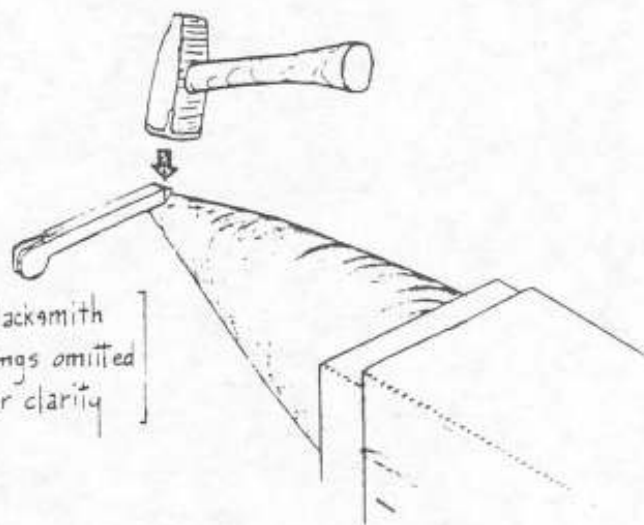


figure H6: Creating a scarf

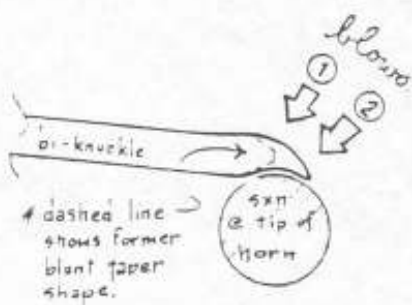


figure H7: Scarf

72-8



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♣ A Demonstration by Master Blacksmith Peter Ross ♣
 from the note and sketch books of Frank Turley and James Baniecki



FIRM (FRICTION) JOINT DIVIDERS continued

- THE TRI-KNUCKLE PIECE Forging the Tri-knuckle piece is a nearly identical process to that of the Bi-knuckle except that a single 'third' knuckle is made and then forge welded in between a folded bi-knuckle piece. Notice however, how the profile of this bi-knuckle is shouldered on ONE SIDE OF KNUCKLES ONLY! See figure H8, below.

- Flux interfaces, forge weld and prepare scarf as shown on pages PR-7 & PR-8

- A sketch of the finished 'Bi-' and 'Tri-' knuckle pieces are shown in figure H9.

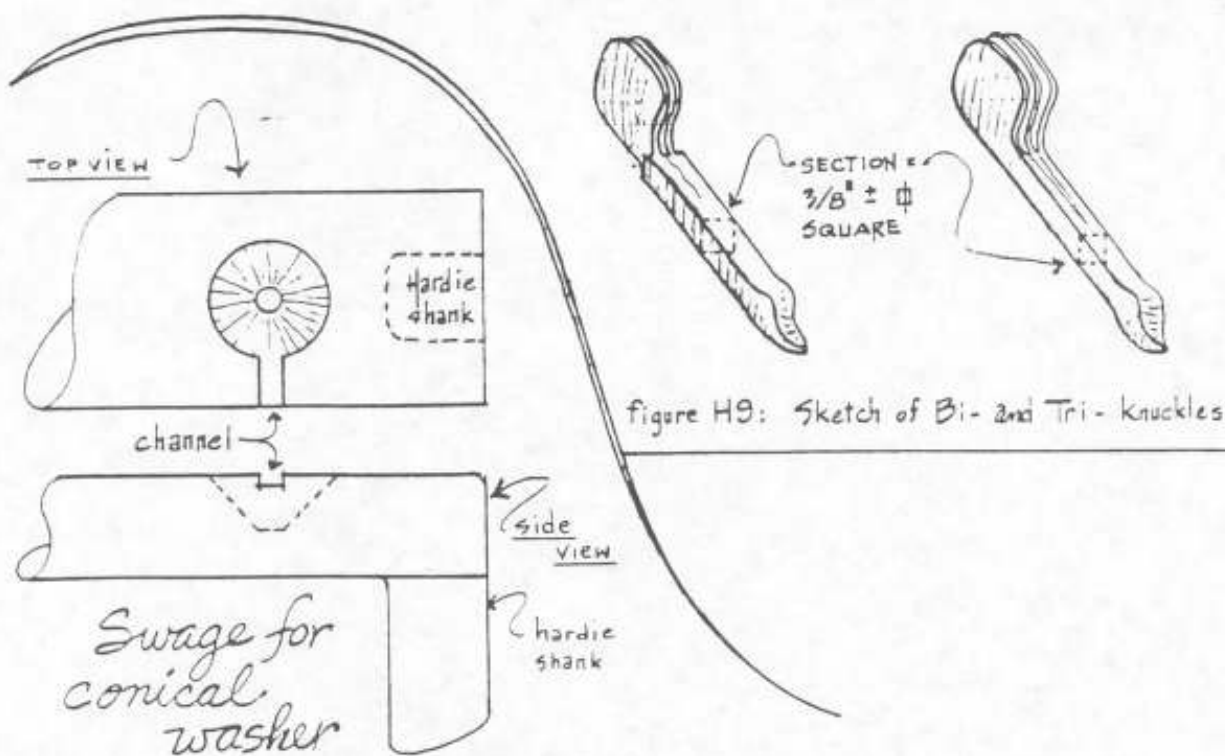
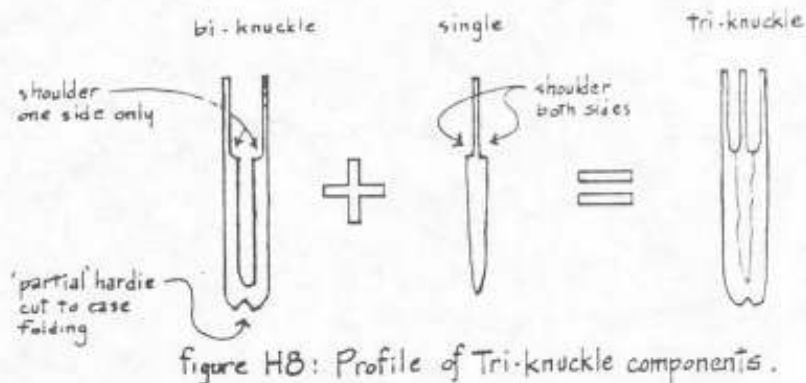


figure H16: Swage for conical (domed) washers
 (* note: this info. shown here out of sequence, see PR-12)

PR-9



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♣ A Demonstration by Master Blacksmith Peter Ross ♣
 from the note and sketch books of Frank Turley and James Baniecki

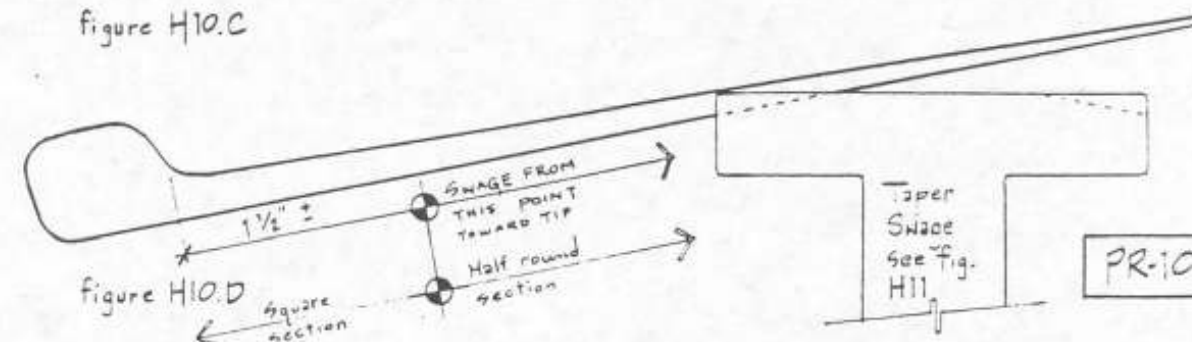
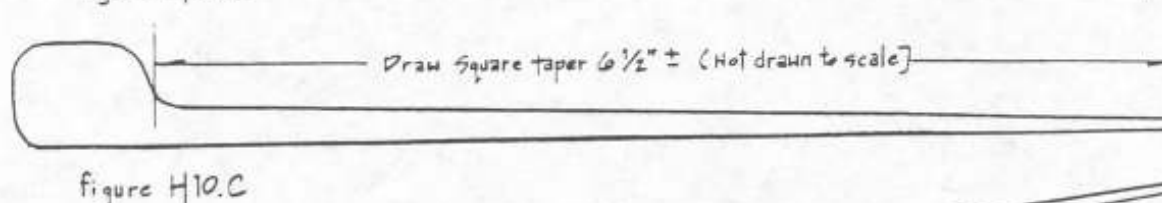
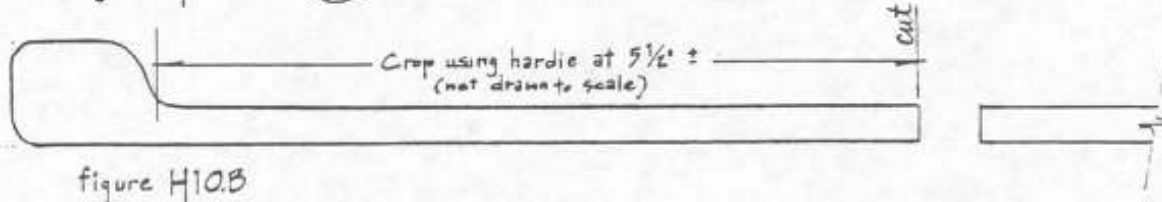
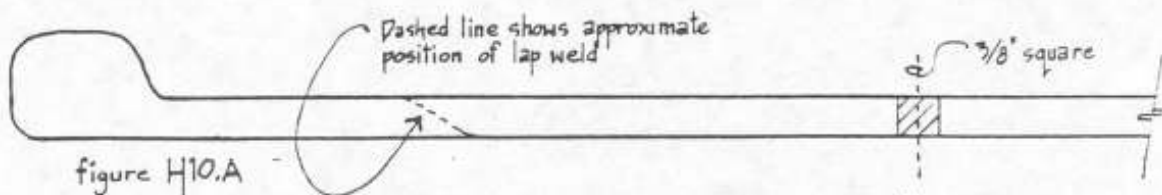


FIRM (FRICTION) JOINT DIVIDERS continued

□ Forging the DIVIDER LEGS

Using $\frac{3}{8}$ " Square steel rod, create a scarf at the end of this rod using the procedure described on pages PR-7 and PR-8. (Using a second $\frac{3}{8}$ " rod, repeat this step as you will need two divider legs.)

- Lap the scarves of the bi-knuckle piece and the $\frac{3}{8}$ " rod and forge weld together. (figure H10.A). Do the same with the tri-knuckle piece.
- Cut off $\frac{3}{8}$ " at about $5\frac{1}{2}$ " \pm (both legs) (see figure H10.B)
- Draw square sectioned taper to a point about $6\frac{1}{2}$ " (both legs) (figure H10.C)
- Now, run both legs through Taper-swage (see figures H10.D and H11) from a point about $1\frac{1}{2}$ " from base of knuckle to the Leg tip. This yields a tapered half round section. * Note. Plan your swaging carefully so that the flat side of half round faces the same direction as the knuckle flanges.





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FIRM (FRICTION) JOINT DIVIDERS - continued

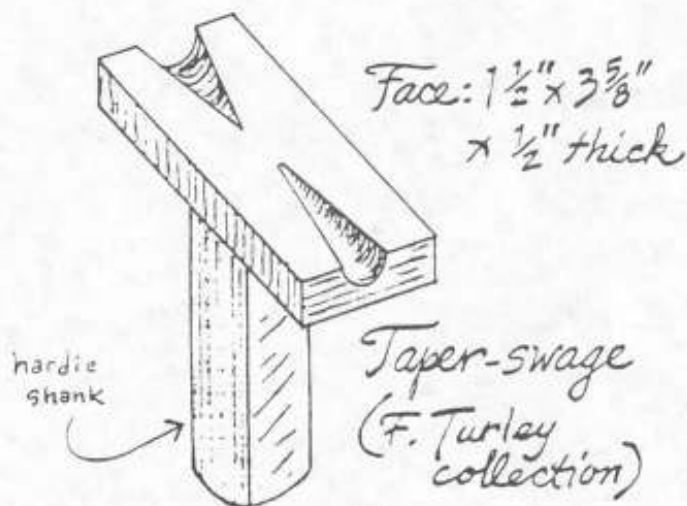
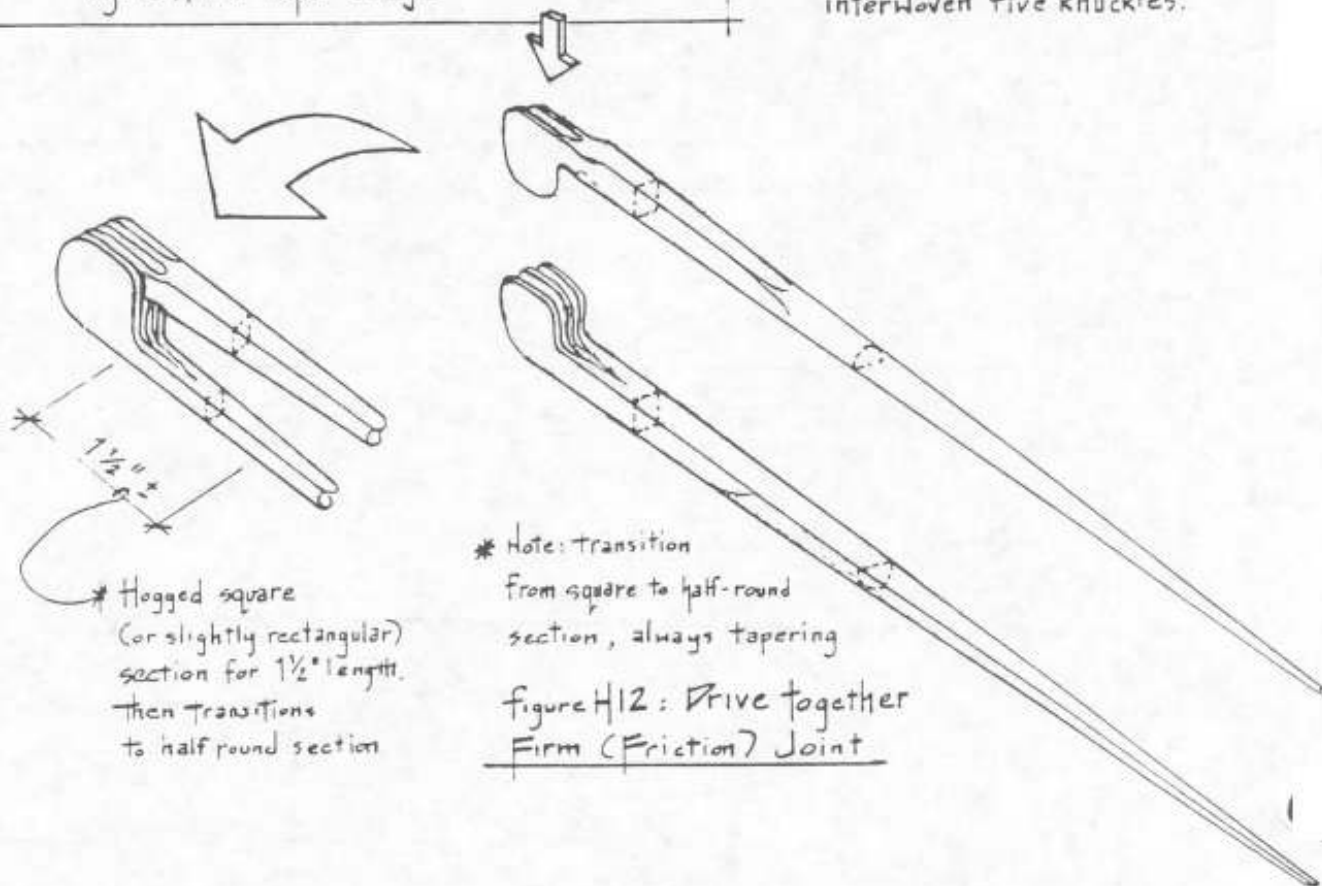
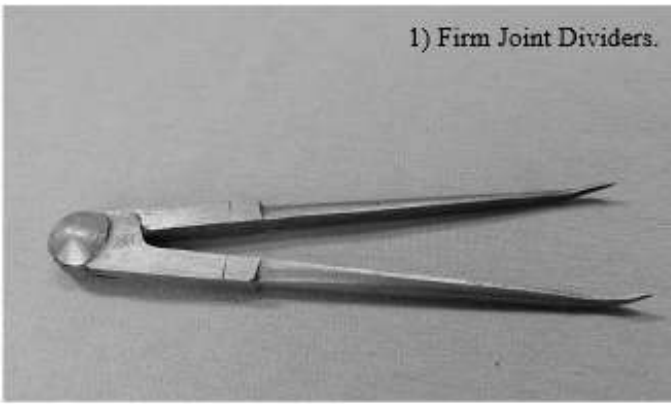


figure H11: Taper Swage

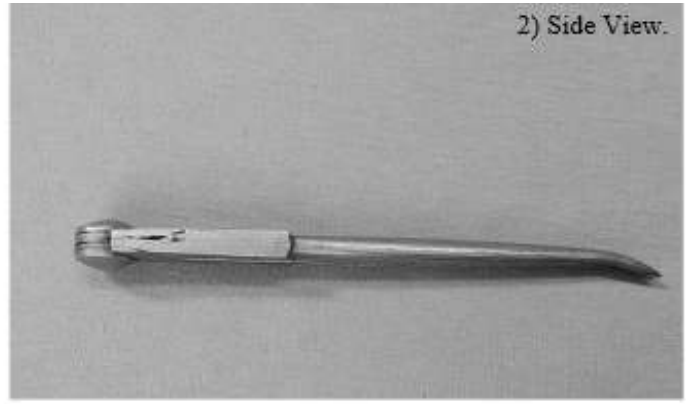
- Drive Bi-knuckle leg and Tri-knuckle leg together. Hot to "force-fit" the joint. (Refer to figures H12 & H13) Have tri-knuckle piece on the anvils face at a blood red \pm . Heat the bi-knuckle piece to a cherry red and drive down from the top. Do Not reverse the order or the outside knuckles will spread too much!
- Lightly hammer to align the interwoven five knuckles.



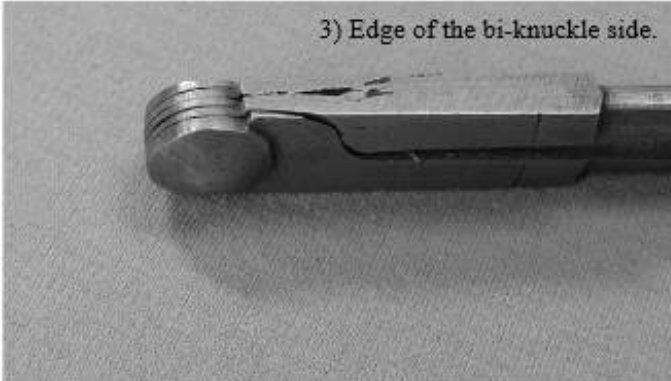
1) Firm Joint Dividers.



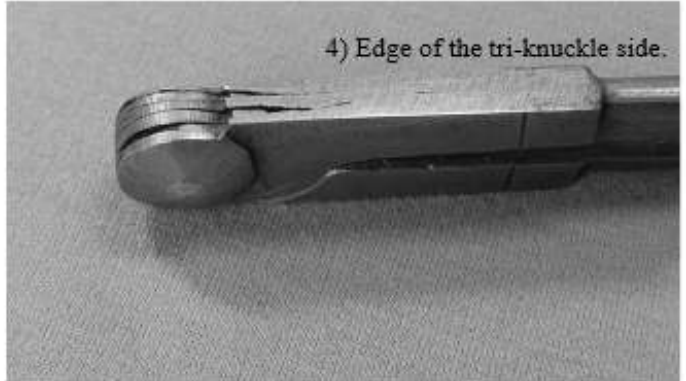
2) Side View.



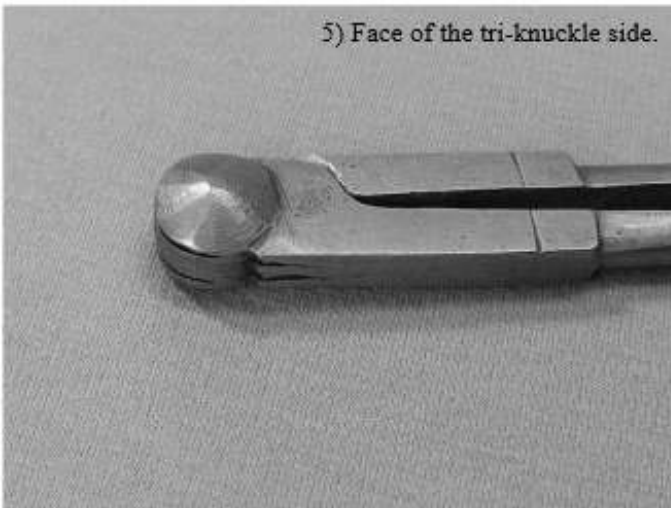
3) Edge of the bi-knuckle side.



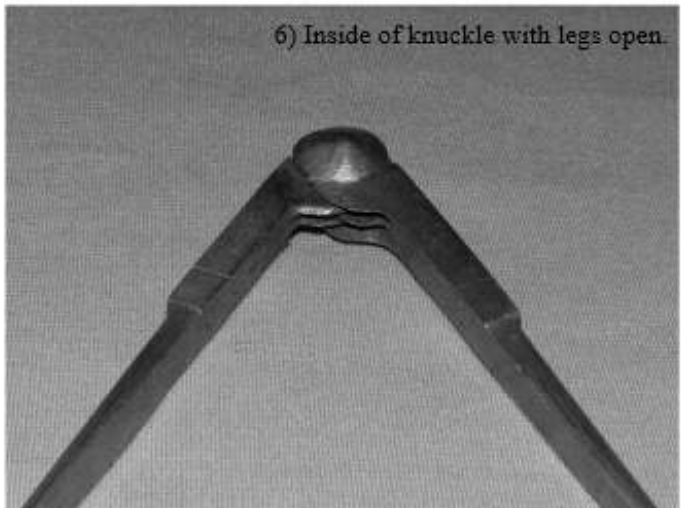
4) Edge of the tri-knuckle side.



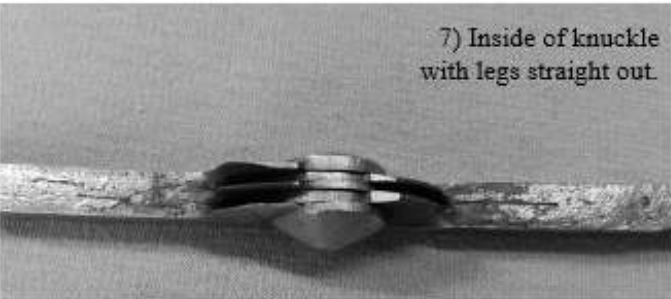
5) Face of the tri-knuckle side.



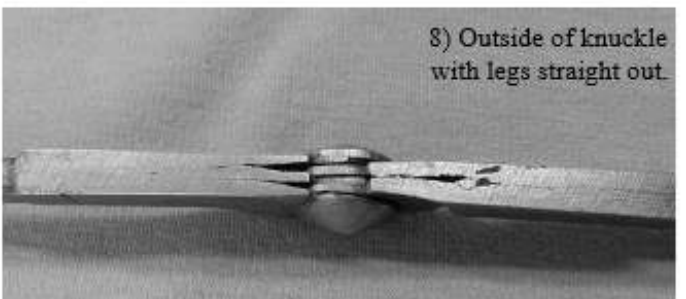
6) Inside of knuckle with legs open.



7) Inside of knuckle
with legs straight out.



8) Outside of knuckle
with legs straight out.



Photos By Steven Spoerre

These dividers were purchased from a local antique & junk dealer, barely movable because of rust in the knuckle.

A 24 hour soak in Evapo-Rust and some steel wool brought them back to the level of detail seen in the photos. The overall size and features are very similar to the Peter Ross write-up, with the exception of the simple file decoration and the 30 degree bend of the points.

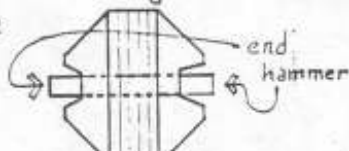


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♣ A Demonstration by Master Blacksmith Peter Ross ♣
 from the note and sketch books of Frank Turley and James Baniecki



FIRM JOINT DIVIDERS continued

- USE a "flatter" hammer with a striker's help to mush the knuckle sandwich together, see figure H13 below.
- Time to File: Place joined legs firmly into the Leg Vise & cold & custom file until all five knuckles have the same profile.
- Because Peter left to catch his plane, it is not known whether he used 2 washers ~ or 1 rivet head and 1 washer. By conjecture, we assume that he drilled holes rather than punched (for accuracy), counter sunk the conehead of each washer ~ used a round



H15

(Cont'd below)

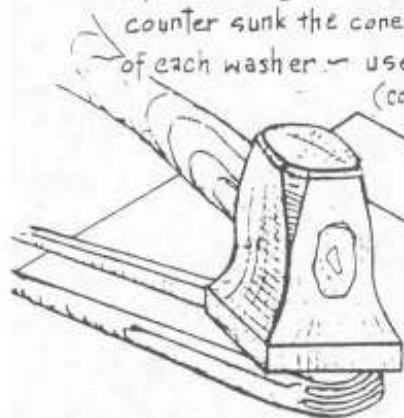
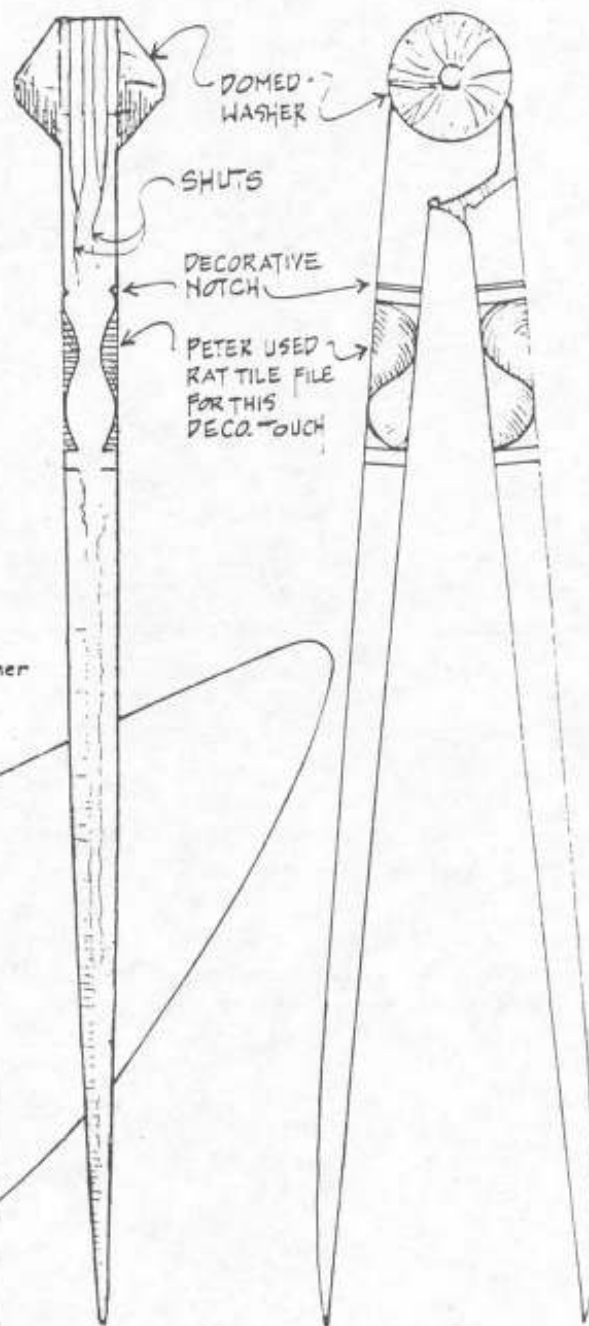


Figure H13

(Continued from above) ~ pin to brad flush. into the countersinks per figure H15 & H16 and file finished all.
 *NOTE: THE SWAGE USED to flush-out the pin is illustrated on figure H16 on page PR-9.
 W.B.
 Since Gus Nov 3-28-98



Profile

Face

Figure H14: The Finished (Master) Piece

PR-12

SCABA Shop and Swap

For Sale:

I have for sale several metal working tools and machining tooling.

Antique bellows \$425

Sheet metal roller \$175

Sheet metal shear \$175

2 hand crank grinders \$30 each

Little Giant tap and die set \$50

56 assorted chisels and punches. Price may vary depending on piece.

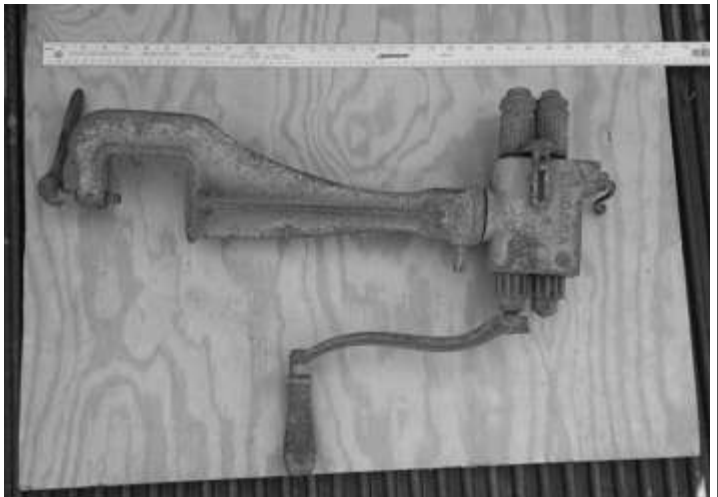
Assorted machining tooling. Price may vary depending on piece.

For pictures or questions contact Brendan Crotty by phone call, text, or email.

Phone number: 918-910-0384

E-mail: brendancrotty246@gmail.com

If calling please leave a message and I will call back.



SCABA Shop and Swap (Continued...)

SCABA Library DVD's Available:

This is a partial list of the DVD titles available to members from the SCABA Library. Contact the Librarian (Doug Redden) 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

For Sale:

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

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

Contact Diana Davis at
Diana.copperrose@gmail.com

SCABA Swage Blocks

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



SCABA Floor Cones

\$200.00 plus shipping.

(Same price to members and non-members.)

Contact Bill Kendall,
Byron Doner or Gerald
Franklin for more
information.



SCABA Shop and Swap (Continued...)

For Sale:

24"(wide) x 1"(thick) Ceramic fiber blanket (similar to Kao-wool) \$1.00 per inch of length. Twisted solid cable 1/2" diameter \$2.00 per ft.
Contact Larry Roderick at 940-237-2814

Wanted:

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

Club Coal:

Saltfork Craftsmen has coal for sale. Coal is in 1-2" size pieces The coal is \$140.00/ton or .07 /pound to members.

No sales to non-members.

NW Region coal pile is located in

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

NE Region coal location: Charlie McGee

has coal to sell. He lives in the Skiatook, Oklahoma area. His contact information is: (Home) 918-245-7279 or (Cell) 918-639-8779

Please text his cell phone number if you would like to make arrangements to get coal.

Charlie has recently taken delivery of a new fresh pile of coal at his place!

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

Show Your Pride in SCABA!

License plates - \$5.00 each.

Ball Caps - \$10.00 each.

We also have coffee cups.

We still have some of the old SCABA t-shirts available while the supplies last. They are a gray pocket "T" with the SCABA logo on the pocket. Contact Diana Davis for information.



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 Swap and Swap section (or items you are looking for), please send me your description, contact info, and any photos that you have

The SCABA Shirts

are now available with a bold new look...

The latest SCABA T-shirts are now available with a new custom design by a professional artist. We also have new long sleeve denim shirts now available with the same new design. Each shirt has the main design on the back with the SCABA logo on the front pocket. T-shirts are available in black and gray. Denim shirts are \$25 and T-shirts are \$15 (plus shipping if applicable.) If you would like to purchase shirts, contact Doug Redden (918) 230-2960:



SCABA Membership Application

January 1, 20 16 to March 31, 20 17

New Member _____

Membership Renewal _____

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 for the period ending March 31, 20 17

Signed: _____

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



Saltfork Craftsman Regional Meeting Hosting Form

Region _____ SE _____ NE _____ SC _____ NW

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

Name _____

Address _____

Phone/email _____

Trade item _____

Lunch provided ☐ yes ☐ no

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

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

Completed forms can be mailed or emailed.

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

A form must be filled out for each meeting.

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

An online form is also available on the website in the top banner of the Calendar Tab:

www.saltforkcraftsmen.org/Calendar.shtm

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