

The Anvil's Horn

A Publication of the Arizona Artist Blacksmith Association

Issue No. 188 September 2017



Pat Downing demonstrating copper fold forming and patinas at the AABA demonstration July 22, 2017.

President's Message

Just in case you didn't get the memo it is summer here in Arizona. That means the air temperature is only slightly lower than your forge. It hard to stay hydrated even if you are constantly guzzling water. Our hot dry weather also does a number on our hammers. The wood dries out and the heads loosen up. Swinging a hammer with a loose head is a recipe for a trip to the ER. I treat my hammers every summer with a 50/50 mixture of linseed oil and turpentine. Get a pipe (plastic or iron) and cap one end. Stand the pipe up in a bucket (to catch overflow) and fill the pipe with the linseed/turpentine mixture. Insert the hammer into the pipe. The pipe should be long enough so the hammer head is resting on the pipe. The linseed mixture will wick up into the head but I like to pour some of the mix on to the head to soak down into the handle. Let the hammer soak for a day. Pull the hammer out letting the excess mix drip back into pipe. Wipe with a rag and let dry for a day before using. Keeping your hammers and your body hydrated is easy - just gotta take a little time out to do it.

Happy Hammering!

Paul Dief

PS: I've heard of some folks using anti-freeze. I don't like this as it is sweet smelling, very poisonous and attracts critters.

PSS: Our librarian, David Bridenbaugh, recently resigned. If you are interested in serving as the AABA librarian, please let me know.

Editor's notes

This issue lists a lot of activities and shows in the Tucson area. Yes, we list a lot of open forges, classes and workshops around the state, but we don't have much on shows, galleries, and fairs around the state. I can't keep up with everything myself. You are in best position to know about opportunities near you. Call me or send me email about whatever you know.

Bill Ganoe

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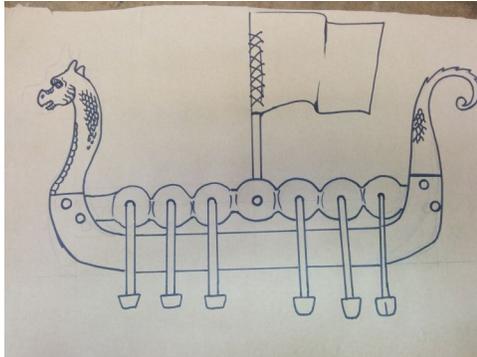
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Demonstration: Steel and Bronze
Saturday, September 16, 2017
Bill and Karen Morris' home
195 West Fort McDowell Place, Camp Verde, AZ

Demonstrator

Celeste Flores

Celeste will create a coat rack in the shape of a Viking ship in steel and bronze. Her demonstration will include carving the head and the tail in bronze.



- Registration begins at 8:00 AM, the demonstration starts at 9:00 AM.
- Registration fee:
 - \$15 for members
 - \$20 for non-members,
- Tailgating is encouraged.
- Bring things for Iron-In-the-Hat and Show-and-Tell.
 - Don't forget to put your name on anything you bring for Show-and-Tell.
- Lunch is on your own. There are several good restaurants in the Camp Verde area.
- Saturday night BBQ will be hosted by Bill and Karen Morris. Bring your own meat/fish/veggie burger and adult beverage. Tossed salad, beans, dessert, coffee, soda, water, and music will be provided.
- Plenty of space is available for tent camping and limited space for dry RV camping.
- If you aren't planning on camping, the annual Thunder Valley Motorcycle Rally will be held in Cottonwood on September 15 - 17, so nearby hotel/motel rooms will be scarce or non-existent. You might try Flagstaff, Prescott, Payson, or Sedona.
- Tailgaters, please consider donating to Iron in the Hat.

Remember Iron in the Hat

Thanks to all of you who have participated in Iron in the Hat. By purchasing tickets and donating items, you help support AABA events and projects. Items for donation can be a tool, piece of art, something you made specifically for iron in the hat, something you don't need in your shop, a great book, a t-shirt, a hat ... something an AABA member would enjoy.

Directions to the Morris' place

195 W. Ft. McDowell Pl., Camp Verde, AZ

- I-17 to General Crook Trail, Exit 285
- Turn right at the stop sign.
- At the next stop sign turn right onto AZ 260.
- Turn right on Quarterhorse Lane (first right east of the bridge, about 1/2 mi.)
- Turn right on Fort Apache Rd.
- Turn left on Fort McDowell (first street on the left) to 195 which is the the white house with maroon trim on the left after the road curves.

As always, safety glasses are required.

Our September Demonstrator

Celeste Flores

Celeste has always sought to express herself through art. She began her journey many years ago. She studied drawing and painting as best she could growing up. She attended The Academy of Art University in San Francisco, CA, because of their dedication to teaching craft. While studying sculpture she was introduced to a hammer and an anvil. She was hooked and eventually began interning at The Crucible in Oakland as a way of continuing her education. She has taught blacksmithing for four years and makes a full time living creating architectural and ornamental ironwork. She also works at Coe Studios in Berkeley, a shop that forges exclusively in bronze. She demonstrates regularly and was the recipient of the Bedayn-Thompson Grant from the California Blacksmith Association to demonstrate in Argentina.



Photos: Jon Kennedy



Coming Attractions

December 3, 2017, Sunday

AABA Annual Auction
Sahuaro Ranch, Glendale, AZ

February 3 - 4, 2018, Saturday and Sunday

Pima County Fairgrounds, Tucson, AZ

Join us for a festival of iron with some of the top names in the blacksmithing community.

Arizona Artists Blacksmiths Association is proud to announce Winterfest 2018. Reserve the date and watch *The Anvil's Horn* and the AABA website, www.azblacksmiths.org, for details as they develop.

July Demo Report

Bill Ganoe

(Photos: Bill Ganoe)

Around 40 members and guests came to the Sculpture Studio at the Northern Arizona University in Flagstaff for the AABA demo on Saturday, July 22, 2017. While it wasn't cold, many of us found it a comfortable escape from forges a long way south of Flagstaff.

Pat Downing was our demonstrator. He creates hand-forged sculptures using traditional blacksmithing and contemporary techniques in his studio in San Diego, CA. For our demonstration Pat focused on fold-forming techniques and the use of patinas. He went into a lot of detail in his demonstration. I'll try to cover a few of the highlights here. If you feel like you're missing useful details, you should try to come to future demos.

He started off by pointing out that people, potential customers and clients, see color until they get close enough to notice details. Color is what sells the piece, workmanship is what people notice up close.

Pat's approach to finishes is to apply color then a clear coat and finally wax. Then people can play with the piece. Color can include a light application of things like fairy dust (women's makeup) as well as fingernail polish.

Pat pointed out that there is a world of formulas for home-made patinas and other coatings, but the results can be inconsistent. When he's doing a job for a big client, he will use things like Sculpt

Nouveau products instead of "kitchen patinas." to ensure quality and consistency.

Patinas need to be applied over really clean surfaces. For cleaning up scale, Pat usually uses an acid like pH Down (or white vinegar for steel). He usually uses a stack of Scotch Brite wheels on a grinder as the next step. Acetone used to be the thing for getting the last bits of oil, etc., but the formula for acetone has changed recently (for pollution issues?), and it now leaves a residue on the surface. Pat's solution is to use denatured alcohol.

People often ask if it is better to use a paint or a patina. Pat's answer was: if you want a car, use paint or powder coat, if you want a piece of art, use patinas.

As the day progressed, Pat demonstrated several fold-forming techniques including some tips for annealing copper. He generally fills a metal tray with lava rocks or broken up soft fire bricks and sets the copper on the rocks. He uses a propane torch to heat the copper. He pointed out that when you use a propane torch, you can see the surface as it is heated, so you can judge the color. If you lay the copper down on a coal fire, you can't see the surface as it heats up. He also demonstrated the application of various patinas.

Of course, we had the usual lively Iron-in-the-Hat drawing run by Len Ledet. And several people took advantage of the opportunities to try out some of Pat's techniques for themselves at the end of the day.



Before the demo actually started, Cathi Borchart talked about the Botanical Blacksmiths show just down the road at The Arboretum at Flagstaff.



A portion of the crowd watching Pat's demo.

July Demo Report (cont.)



Pat applies a patina.



Examples that Pat brought from his shop.



More examples



*More examples
Yes, you can make a paper airplane out of copper.*



Trying some of the demonstrated techniques with Pat coming around to answer questions.



Len Ledet ran the Iron in the Hat drawing.

July Demo Report (cont.)



*Show and Tell
Mo Hamberger*



*Show and Tell
Ryan Bishop*



*Show and Tell
Ryan Bishop*



*Show and Tell
Chris Contos*



*Show and Tell
Wade Smith*



*Show and Tell
Wade Smith*

Botanical Blacksmiths 2017

Photos: Bill Ganoe

The Botanical Blacksmiths show at The Arboretum at Flagstaff opened in June and will run into September. This is the 6th year that The Arboretum has hosted this show. Thanks to the efforts of the staff at the Arboretum, Cathi Borthwick, and the individual artists, many of whom are AABA members, this is a very impressive show. Cathi reported that 1/3 of the pieces had been sold two months before the end of the show.

The photos below are just a sample of the many pieces in the show. Look over the pictures and see if they can spur your own creativity and help you develop a piece for next year's show - and maybe some of the other shows around Arizona that are coming up in the next few months.

Note: We need a coordinator for the 2018 show at The Arboretum at Flagstaff. Cathi Borthwick is stepping aside after 2017 show. If you are interested in coordinating this show next year, please contact Cathi at 928-778-1791 or flag_forge@earthlink.net.



Nest Bowl
Ira Wiesenfeld



Guardian #25
Liz Carlier & Josh States



Garden Bench
Cathi Borthwick

Guide to 2017 Botanical Blacksmiths Map	
1.	Ira Wiesenfeld: Parrot Fish Cage - \$250
2.	Cathi Borthwick: Wonderland Flowers- \$175 each
3.	Cathi Borthwick: Fire Weed - \$270
4.	John Behrman: Proverbial Plow - NFS
5.	Brian Painter: Hoe, Hoe, Hoe - \$2000
6.	Ira Wiesenfeld: Nestbowl with Trumpet Flowers - \$150
7.	Ira Wiesenfeld: Nestbowl with Wrought Iron - \$175
8.	Joel Richards: Tulips - \$375
9.	Ryan Bishop: Tree - \$500
10.	Sonja London-Hall: No Name - \$975
11.	David Bridenbaugh: Martinez Agave - NFS
12.	Cathi Borthwick: Tree Birdbath - \$425
13.	Denise Edwards: Dragon Lilies - \$149 each (available in the gift shop)
14.	Steve Miller: Marble Garden - \$875
15.	Liz Carlier & Josh States: Le Fogle - \$1025
16.	Denise Edwards: Fairy and Toadstool Stakes - \$75 each (available in the gift shop)
17.	Liz Carlier & Josh States: Guardian #25 - \$400
18.	Liz Carlier & Josh States: Guardian #20 - \$350
19.	Brian Painter: The Pony Repair Project - \$2000
20.	Denise Edwards: Butterfly Arbor - \$1300
21.	Joel Richards: Flowers - \$625
22.	Denise Edwards: Butterfly Plant Stand - \$145
23.	Jim Dunning: Ocotillo & Friends #1- \$285
24.	Jim Dunning: Ocotillo & Friends #2- \$285
25.	Cathi Borthwick: Arizona Garden- \$535
26.	Ira Wiesenfeld: Hanging Pond - \$175
27.	Liz Carlier & Josh States: Native Sun 2 - \$950
28.	Denise Edwards: Crow and Owl Medicine Shield - \$135
29.	Cathi Borthwick: Blue Grass and Sky- \$450
30.	Rachel Wilson and Steve Wilson: Waterbug - \$2800
31.	Cathi Borthwick: Garden Bench - \$825
32.	Ira Wiesenfeld: Stanchion Pond- \$650

30% of all sales benefit The Arboretum at Flagstaff

Botanical Blacksmiths 2017 (cont.)



*Marble Garden
Steve Miller*



*Arizona Garden
Cathi Borthwick*



*Ocotillo & Friends
Jim Dunning*



*Flowers
Joel Richards*



*Crow and Owl Medicine Shield
Denise Edwards*

Calendar 2016 - 2017

August 12, 2017	Open Forge	Desert Rat Forge	Cave Creek
September 9, 2017	Open Forge	Desert Rat Forge	Cave Creek
September 16, 2017	Demo - Celeste Flores	Bill & Karen Morris' home	Camp Verde
October 7, 2017	Open Forge	Holy Hammer Iron Works	Tucson
October 14, 2017	Open Forge	Desert Rat Forge	Cave Creek
November 4, 2017	Open Forge	TBA	Tucson
December 3, 2017	AABA Annual Banquet & Auction	Sahuaro Ranch	Glendale

Welcome New Members

Bryant Herrera Maricopa, AZ
Gene Brooks Prescott, AZ

Sahuaro Ranch in Glendale

More things, such as open forges and demonstrations for school children, are being planned at Sahuaro Ranch. Watch for more details and announcements.

Ride Sharing

Interested in sharing a ride to a far off blacksmithing event to save on expenses or wear and tear on the old truck? Or would you like some company going to an AABA event just up the road? AABA VP Steve Miller is organizing a ride sharing exchange for AABA members. Email your requests or suggestions to stevemiller.az@cox.net

Submit Your Touchmark

Submit a JPEG of your touchmark(s) to Steve Miller, stevemiller.az@gmail.com, so it can be included in our AABA touchmark registry which will appear on our website soon.

Deadline for the November 2017 issue

September 30 is the deadline submitting photos and articles for the January issue of the Anvil's Horn.

Send articles, pictures, etc. by email to:

editor@azblacksmiths.org

or by regular mail to:

Bill Ganoe, PO Box 40233, Tucson, AZ 85717

Classes at Pieh Tool

Beginning/Intermediate Blacksmithing

- Beginning/Intermediate blacksmithing classes with Dylan Cook

November 17 - 19, 2017

December 1 - 3, 2017

Registration is \$550.

Students will make several simple projects to take home.

- Damascus classes with Master Bladesmith, Ray Rybar

October 20 - 22, 2017

December 8 - 10, 2017

Registration is \$550.00.

This is a basic class. Students will make one damascus billet - material will be supplied for one billet.

- Knifemaking class with Master Bladesmith, Ray Rybar

September 22 - 24, 2017

November 10 - 12, 2017

Registration is \$550.00.

Students will make one knife.

For more details call 928-554-0700 or browse to www.piehtoolco.com.

MCC Blacksmithing & Welding

The Mesa Community College blacksmithing program is an excellent deal - over 60 hours of instruction including material and propane!

Saturday (Jaime Escobedo instructor) and evening classes (Dan Jennings instructor) are available.

Blacksmithing is WLD 103.

TIG, MIG, Arc, Gas, and Art classes are all available, as is certification in any of those welding methods at Mesa Community College, Southern and Dobson in Mesa.

Classes fill up early, but waiting lists are available. For more information go to: www.mesacc.edu

AABA Website: www.azblacksmiths.org

Open Forge: Tucson

Harold Hilborn will host the next Open Forge on Saturday, October 7, 2017, from 9 AM to noon at his shop, Holy Hammer Iron Works, 5870 E. 14th St., Tucson. If you have any questions or suggestions, contact Harold at 520-603-6723 or hhiborn@aol.com.

Open Forge: Grizzly Iron

Don't have a power hammer? Use one at Grizzly Iron, 1329 W. Lincoln St., Phoenix, 4:30 PM to 8:30 PM every other Wednesday starting September 6. \$20 each night. Contact Rodger "Grizz" LaBrash at 602-716-9660 or grizz@grizzlyiron.com if you have any questions. Also, check out classes at Grizzly Iron on page 16.

If You Are Attending An Open Forge...

You might not be aware but this, but these events are not funded by the AABA . They are hosted by our members for all of our benefit. So if you participate in forging ,welding, use shop materials, or accidentally damaged something. Please offer do donate to help out or help with the cost of replacing a item. Thank you! From all of your open forge hosts. **You will need to wear safety glasses. Hearing protection is recommended.**

Open Forge: Desert Rat Forge (Phoenix area)

Paul Diefenderfer will host an open forge on Saturday, September 9, 2017; Saturday, October 14, 2017; and Saturday, November 11, 2017, from 9 am to noon, followed by lunch (You gotta' buy your own.) at the world famous Big Earl's Greasy Eats in Cave Creek. Desert Rat Forge is at: 40218 N. 78th St. Cave Creek. 602-509-1543 or dief@phoenixrockgym.com

Directions: From the center of Cave Creek (the 4-way stop at Cave Creek Rd & School House Rd.) head north on School House 1.5 miles to Highland Rd. (If you get to the 4-way stop at Fleming Springs you have gone a tad too far.) Turn right (east) on Highland. After about 1 mile the pavement ends. Keep going on the gravel road until the pavement starts up again. Turn right through the stone walls down a paved driveway. You are there!

(Dief will be working some temporary jobs in Florida on and off for the next few months. This will involve travel on Sundays, so he has rescheduled the next several open shops on Saturdays.)

AABA Membership

Benefits for members include:

- Member discounts at vendors around the state: See page 18 of this issue for more details.
- Reduced registration fees at demonstrations and workshops
- A one year subscription to the bi-monthly newsletter, *The Anvil's Horn*
- Connection to members throughout the state who can answer questions and give advice
- Free classified ads in the *Anvil's Horn* and on the AABA web site.
- eMail notices when event details change or new events are scheduled on short notice.

AABA New Member and Membership Renewal Form

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____ Email _____
Professional blacksmith _____ Hobbyist _____ Farrier _____ Blade smith _____
Your main blacksmithing interest _____
Occupation or skill _____
Please check one:
Regular membership (\$35) _____
Family membership (\$40) _____

Mail to: Terry Porter
2310 E. Melrose St.
Gilbert, AZ 85297

Make Check Payable to AABA

Need an Outrageous Beer Opener? Here's A Lobster Tail Opener

Chris Contos



I have a lobsterman friend south of Boston who got a surprise this summer! We have shared many a beer and lobster over the years.

I decided to document my process of making a repousse' copper and forged steel beer opener. I took a photograph of after each step with the tools I used.

This format assumes some basic metalworking skills to fill in the gaps.

I added a few descriptive details alongside each photo to help explain processes.

Create a pattern of your lobster tail.
I cut the 18 gage copper sheet with a jeweler's saw.
The piece was then annealed.



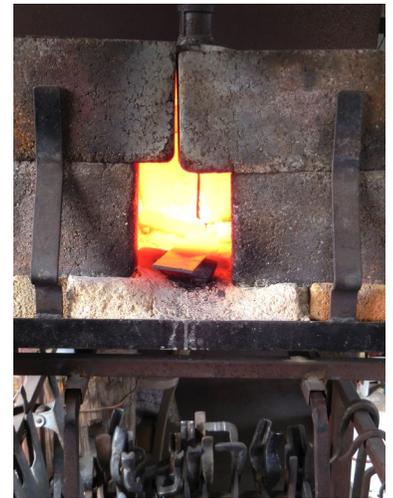
Repousse process with pitch.
The copper is placed into pitch.
The forming tools are hit with a steel hammer to form the tail.
I also use forming hammers directly into the copper.
This took three annealing cycles to create these tails.
I am making two openers.

>>

Need an Outrageous Beer Opener? Here's A Lobster Tail Opener (cont.)



I refined the forms with a small hammer over a forming stake.
This direct process quickly rolled the edges into shape.
I cleaned the copper in sodium bisulfate pickle to remove oxides from annealing heats.



Time to hit some hot steel !



I used $\frac{1}{4}$ x 1 inch flat stock to form the bottle opener.

The stock was punched and later drifted into shape. A punch was used to create the lip to catch the bottle lid.

The final forms are ready!



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Need an Outrageous Beer Opener? Here's A Lobster Tail Opener (cont.)



Check the forms for fit and function.

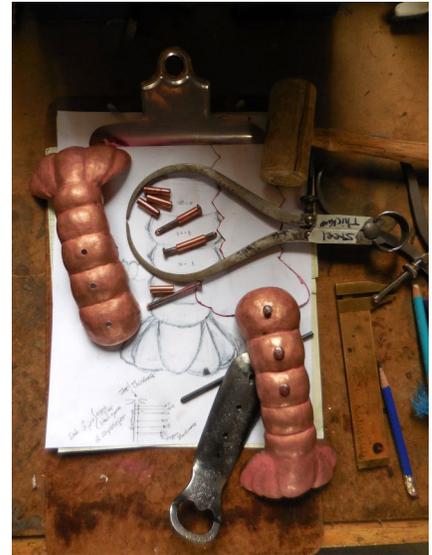
Yup, time for a beer !

Time to slow down and think.

The two forms will be riveted together with 5/32 copper electrical wire. The rivets are very long wire. So to have more control while heading them I used copper tubing spacers.

Both the steel and copper forms were drilled. Rivets were held in place until final peening with masking tape.

The rivets were pre-headed, annealed, cut to length, beveled, then peened.



Close-up of rivets, spacers, and measurements made for these openers.

Do not forget to allow for both metal thicknesses when making measurements.



Jumping ahead to a couple of cold ones !

The copper and steel were each colored using chemical patinas then coated with a clear acrylic spray.

I decided these lobster tails should be enjoyed even when not in use. So I forged and twisted a couple of horseshoes into counter top stands. I really looked forward to making this delivery!
Of course I used mine while I waited.



- 30 -

Call to Artists

Petroglyphs Gallery
October 21, 2017, 12:00 - 4:00
228 S. Park Ave.
Tucson, AZ

Petroglyphs Gallery, in Tucson's Lost Barrio, will be hosting a Blacksmith Jamboree on October 21, 2017 from noon to 4 pm. Ira Wiesenfeld will be demonstrating, and he has invited other interested blacksmiths to join him. Demonstrators can sell items, but the sales have to go through the gallery which gets half of all sales. Note that the gallery owner is looking for new artists, so this could be a good opportunity to get acquainted. Contact Ira Wiesenfeld if you have questions or want to discuss details. Ira is at 520-780-9076 or treeira@hotmail.com

The Tucson Botanical Gardens Spring 2018

Ira Wiesenfeld has arranged for a Botanical Blacksmith Show at the Tucson Botanical Gardens for next spring. The show is set to open on April 7, 2018 and close on May 31, 2018. The theme of the show is sculptures using botanical forms. The Tucson Botanical Gardens (TBG) is looking for large, good quality sculptures. The size should be comparable to the larger pieces in the Botanical Blacksmith Show at the Arboretum at Flagstaff. (Example photos can be found the September issues of the Anvil's Horn for the past three or four years.) Proposals, if not photos of finished works, need to be sent to Ira, so he can submit the list to TBG by March 1, 2018. All pieces will be offered for sale to the general public. TBG will get 30% of the selling price. For more details call Ira at 520-780-9076 or treeira@hotmail.com.

This 1/2 page article reprinted from The Prairie Blacksmith Association December 2000

Upsetting Bolster

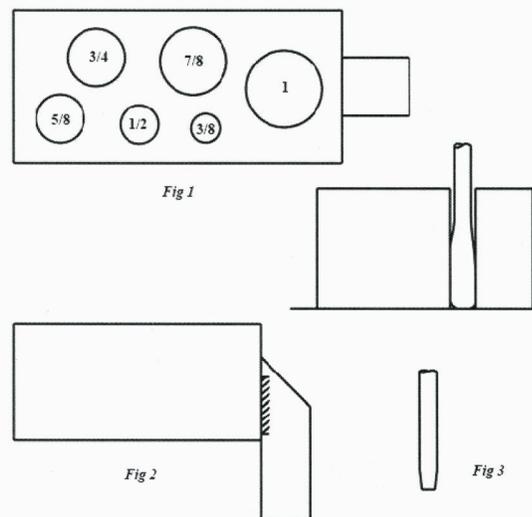
by Jr. Strasil

Upsetting can be a time consuming and frustrating task to perform. With a simple bolster or upsetting bar it can be quick and easy.

Start with a piece of 2" square hot rolled bar about 5" long and drill 6 holes in it as per drawing in figure 1. Hole sizes are 1" - 7/8" - 3/4" - 5/8" - 1/2" - 3/8". All holes should be 1/64 to 1/32" oversize and very lightly chamfered on both sides. Remove burrs from the cut ends and weld on a square shank to fit your hardy hole at the end with the hole, see figure 2.

To use, take a yellow heat on 1-1/2 to 2" of the end of the piece to be upset and taper slightly as in figure 3. Stick the end in the upsetting bar, using a hole about 1/8" larger than the material. Hammer the end of the material. Remove from the block and realign the upset end of the rod with light blows, so you don't undo the upsetting. If a longer or larger upset is needed, taper the end before heating and repeat the procedure.

Upset only 1/8" at a time to control cold shuts and bending of the end. If it sticks in the hole, wait a little while and it will cool and shrink and then slip out easily.



Reprinted from the Forge Fire Newsletter (Indiana), October 2015

Classes at AABA Members' Shops

Grizzly Iron

1340 W. Lincoln St., Phoenix, AZ, 602-716-9660

grizz@grizzlyiron.com, or Grizzly Iron Open Forge page on Facebook

Friday, October 6

Basic Heat Treating by Clayton Cowart \$25

Friday, October 20

Friday Night Damascus Workshop \$125

Learn the very basics of forging a simple Damascus billet. The workshop will run from 5 - 9 pm. The billets will be preassembled, so we'll be able to dive right into forging. Materials are included. Each class is limited to 6 students.

Friday-Sunday, November 10-12

Belt Grinder Workshop \$1450

Build your own 2" x 72" belt grinder. The grinder will have a 2 hp motor with variable speed control. It will have a built-in stand, and it will have the ability to rotate horizontally. This workshop includes all parts, materials, and flat platen. The class has a minimum of 6 participants. 50% down payment must be received 45 days prior to the workshop (this event only).

\$100 or 50% down payment will hold your spot in each class. Downpayment is required 30 days before the class and the balance is due at the start of the class. We cannot guarantee your spot in a workshop without a down payment.

Hessen Iron Works

3230 S. Dodge Blvd, Unit #6, Tucson, AZ 85713, hesseniron@gmail.com

Friday - Sunday, November 10-12

Raising and Chasing Workshop with Douglas Pryor \$550

2 lessen styles to choose from this time, raising a copper bowl/cup that we intend to chase in a following course in the spring, and low-high relief chasing on copper or mild steel.

To register or get more details, go to <http://www.hesseniron.com/douglas-pryor.html>



One of the propane forges built at Dief's forge building workshop last April.

Watch for more workshops coming up.

Mark your calendars for ABANA 2018



The ABANA 2018 Conference
will held in
Richmond, Virginia
at the
Meadow Event Park

Wed Jun 27 - Sat 30 Jun, 2018



Artist-Blacksmith Association of North America

ABANA is widely recognized as the preeminent organization of blacksmithing in the world. Visit us online at www.abana.org and like us on Facebook and Twitter. Join or renew your membership at: www.abana.org/membership

Blacksmithing, the cornerstone of all crafts for centuries, has come back to life. Once rendered nearly obsolete by the Industrial Revolution and 20th Century technology, this ancient craft has undergone a contemporary renaissance. A new appreciation of the honest, enduring qualities of forged metal has developed.

At the heart of this revival has been the Artist-Blacksmith's Association of North America, Inc., a non-profit educational association dedicated to the dissemination of knowledge about the art and craft. Started by a handful of isolated blacksmiths in Georgia in 1973, ABANA now serves nearly 4,000 members.

As part of your Membership Benefits you will receive 4 issues of the Anvil's Ring and 4 issues of the Hammer's Blow Magazine each year you are a member. These magazines can not be subscribed separately but are only received by our members. We have recently added a youth membership at a reduced rate, this membership available to those 18 or under includes a subscription to only the Hammer's Blow magazine.

The Arizona Artist Blacksmith Association is an affiliate of the Artist-Blacksmith Association of North America.

Classifieds

Classified ads are free to members and can be submitted by email to: editor@azblacksmiths.org. Ads will run for 3 issues. You can renew your ad if you need to run it after the third issue. Please let the editor know when you no longer need to run the ad.

Will buy your unwanted
blacksmith or horseshoeing tools
and supplies.

Barry Denton, 928-442-3290 any
day before 7:00 pm.

For sale

Propane forge, 2-burner, made in
one of Doug Kluender's forge
workshops.
Miller Dialarc 250, power source
for TIG or stick with cables,
remote foot control, argon bottle
and regulator
100 lb. anvil
Hand shear

Jack Friehe, 623-466-9889

Wanted to Buy: Acorn Table

I am looking for an acorn table. I
would prefer a 5' x 5' but I am
flexible. Please email
dhallikainen@gmail.com if you
have one available. I am located in
Phoenix, but willing to drive.

Coal for Sale

Dragonforge Ironworks has bulk
coal for sale. \$25 per 50lbs.
Minimum order \$100. Small orders
can be filled at our shop in Mesa.
Larger quantities available up to 1
ton but are located at the
Superstition Mountain Museum in
Apache Junction.

Really great forging coal from the
King Coal Mine in Colorado. Bulk
only, chunk sizes vary from pool
ball to bowling ball. Bring your
own 5 gallon pails, 3 pails equals
about 100 lbs.

Call Michael at 480.529.0206.

Marketing Assistance

Blacksmith's Wife Marketing provides
marketing and promotional services, in
both digital and print, to the metal
working community. Also providing
website design and consulting services.
Contact April Witzke at
(575) 535-4766 or visit
www.blacksmithswifemarketing.com

Advantages of AABA Membership

IMS has offered AABA members two great opportunities. Thanks to members Doug Kluender and Wade Smith for the idea and contacts with IMS.

1) IMS has space for member metal work to be put on display in a glass case and on top of the cut metal rack inside the store. Contact Steve Miller, stevemiller.az@cox.net, to get your items on display. These items may be for show only or they may be offered for sale. Artists are responsible for any financial exchange. IMS will make a nice card to identify the piece, the artist, and the cost.

2) IMS is offering a 10% discount to AABA members. The discount is available at the Phoenix and Tucson stores. At the time of purchase tell the clerk you would like the AABA discount and provide your name and address. They will verify your membership with the list AABA supplies.

Don't forget that AABA members get discount pricing at the Vern Lewis Welding Supply stores in the Phoenix area.

Classifieds

Classified ads are free to members and can be submitted by email to: editor@azblacksmiths.org. Ads will run for 3 issues. You can renew your ad if you need to run it after the third issue.

Please let the editor know when you no longer need to run the ad.

For Sale

Bridgeport M Head Vertical Mill with cherrying attachment for chisel shaping. Original vise, Van Norman Rotary Table 32 X 9 with autofeed x-axis. Three phase with VFD or 110/220 single phase . Multiple attachments: 90 degree quill adjustable, quill master MNT M2 tapered collets, end mill adapters, hold down set and lamp included . Weighs approx. 2000 lbs. \$3000.

HancockShopSale@gmail.com

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Phone: 480-784-1600
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IMS

Full service supplier of steel, stainless, brass, aluminum, copper. Discounts for AABA members.

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28255 N Tatum Blvd. Suite 1

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www.piehtoolco.com

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Helmut Hillenkamp

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520-884-1554

Vern Lewis Welding Supply

Discount pricing for AABA members.

Various locations in the Phoenix area.

602-252-0341

Dan, 602-316-4140, for tech support.

Arizona Artist Blacksmith Association

Attn: Bill Ganoe
P.O. Box 40233
Tucson, AZ 85717
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