The Anvil's Horn

A Publication of the Arizona Artist Blacksmith Association

Issue No. 209 March 2021



Douglas Pryor, one of our demonstrators at Winterfest III, January 25, 2020, Winterfest IV is coiming next winter.

President's Message

Hi Everyone!

2

I hope everyone is doing well! It's now been over a year since many of us have seen each other. What have you been up to during this time? Have you been able to tackle any big projects? Have you improved on a specific technique that you wanted to learn? If you have, let us know. Send me or Bill Ganoe some photos or a short description of what you've done. I'd love to hear about it.

If you haven't, don't stress over it. Get started today! Don't let this year pass you by. Make the time to improve your abilities or maybe improve your workspace in some way. It doesn't have to be huge or drastic. Take a small step. Mark Twain said "The secret of getting ahead is getting started." You'll find that once you do one thing, you'll probably find that you want to do a little more. Maybe you haven't even lit the forge in a few months. Start by firing it up and forge some tapers. Maybe those tapers become some simple hooks and then maybe that leads to a new key or coat rack. Just start.

I also want to put an offer out. Please let me know if there is anything I can help you with. You can email me or call but the best way to get a hold of me is by text. Shoot me a message at 602-717-1459. Let me know what's on your mind or even if you have ideas for the association. I'd love to hear them

Talk to you soon!

Jason LaBrash

	Contents							
3	March (virtual) demo announcement	9	Fundamentals of Blacksmithing - Upsetting					
4	Meet our March demonstrators	10-11	AABA Calendar and Announcements					
4	Interesting Web Links - Advent Candle Holder	12-14	Peacock Project Tooling, part II					
5	January demo report - delayed	15-16	The Swing Hook Project - Enhancing Basic Skills					
5	Winterfest IV information	17	ABANA information					
5	Interesting Web Links - Maing Charcoal	18	Members' ads					
6-7	Botanical Blacksmiths - announcement and form	18	Benefits of AABA Membership					
8	CBA Spring Conference - canceled	19	Sources for tools and materials					
8	ABANA - Iron to Art Festival	19	AABA Membership Form					
8	150mm Challenge		•					

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Demonstration: March 2021

A virtual demonstration

A link will be posted in the May issue of *The Anvil's Horn* and on the AABA website.

Steel and Stone: How to Incorporate Stone into Your Ironwork Demonstrators: Cathi Borthwick, David Bridenbaugh, Liz Carlier, and Steve Miller

Cathi Borthwick will show various treasures she has found at the Tucson Gem and Mineral Show, how she put them to use, and some techniques for doing so.

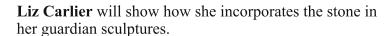








David Bridenbaugh will talk about the different kinds of rocks he uses, the tools he uses to shape them, and the finishes he applies to them.











Steve Miller will talk about how to drill holes in various types of rock, how to secure steel into rock, and various methods for making the combination look good and finishing the stone.

Our Demonstrators' Background

Cathi Borthwick runs Flag Forge, a modern blacksmithing shop in Flagstaff. She creates functional art pieces for the home using traditional and modern blacksmithing methods for working hot steel.

For Cathi, steel is a magical medium to work with. When it is at a working heat, it is the consistency of modeling clay and can be worked into all kinds of wonderful, flowing forms. When it cools, it returns to its rigid state and leaves you to wonder just how it could get into the shape it's in. The final product can be both beautiful and durable, a work of functional art. Ironwork is enjoying a renaissance both in the public eye and in the number of individuals interested in working the metal. Therefore, there is quite a bit of creative energy flowing in our medium, a challenge and stimulation to create new work.

Cathi has concentrated on showing her work for the last 27 years at juried art shows throughout the United States. Shows have included the Beverly Hills Affaire in the Gardens, the Contemporary Crafts Market, the Scottsdale Arts Festival, the Park City Kimball Art Show, the Southwest Arts Fair, the Sun Valley Arts Fair, the Wells St. Arts Fair, and the Bayou City Arts Fair as well as being an invited artist at the Pittsburgh Three Rivers Arts Festival and the Columbus (OH) Arts festival. She has won numerous awards in the metal category from various shows including the Scottsdale Arts Festival, the Indio Southwest Arts Festival, the Sedona Arts Festival, and the Mountain Artists Rendezvous in Jackson Hole.

She has also shown her work in various gallery settings throughout the years including the Columbus Art Museum, Shemer Art Center, Prescott College Art Museum, the ABANA Conference galleries in Flagstaff and La Crosse WI, and in various shows at the Coconino Center for the Arts.

Cathi has been a demonstrator at the 1986, 1996, and 1998 ABANA (Artist Blacksmith Association of North America) conference (a three day biennial international conference for blacksmiths.) She is a past president of the Arizona Artist Blacksmith Association and was awarded the 2014 Bill Callaway Award for Outstanding Member Contributions for her efforts on behalf of the blacksmithing community.

David Bridenbaugh has been using steel to express his artistic talents since 2011. His work has appeared in publications for Artist Blacksmith Association of North America, Arizona Artist Blacksmith Association and Saltfork Craftsmen. Many items have been donated for fundraising events for animal welfare and other nonprofit organizations. Now retired from the aerospace industry he is free to pursue his interests in blacksmithing, animal welfare and enjoying the great outdoors.

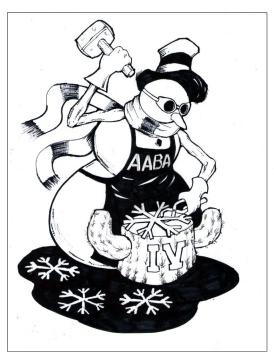
For Liz Carlier, her work is a meditation on life, communicating her experiences through the forging and fabricating of metal. She loves the juxtaposition of copper and steel in a sculpture! As a former rock climber, she has always been fascinated with stones and minerals. Incorporating mixed media affords a fuller expression and depth to her work. She is a longstanding member of the Arizona Artist Blacksmith Association. She feels that the organization provides a dynamic opportunity to enhance skills and pursue personal challenges allowing her to continually evolve as a metal artist.

Steve Miller's interest in blacksmithing began in 2008 after reading Charles McRaven's book, *The Black-Smiths's Craft*. He purchased a used anvil from a local supplier and using a propane torch for heat, he made a camp gadget to pour coffee from a large pot positioned over a campfire. It proved to be most useful. He subsequently took several local blacksmithing classes and continues his learning through workshops and networking with fellow smiths in the Arizona Artist Blacksmith Association . He has served the organizationas a member of the board of directors, 2nd Vice President, and is now as 1st Vice President. Steve enjoys all aspects of blacksmithing and is constantly looking for new and exciting ways to shape metal.

November Demo Report Bill Ganoe

Recording Dan Smith's demonstration planned for mid-January was seriously impacted by pandemic restrictions including temporary shop closures. Dan Smith's demo will be recorded and posted online at a later date.

Winterfest IV is coming in 2022!



Winterfest IV was planned for January 2021, but has been postponed until January 2022 because of the continuing COVID-19 pandemic. Detailed planning and organizing will begin in February 2021. Standby until then for volunteer opportunities. Some great surprises planned.

Interesting Web Links

Making Charcoal

https://whitloxforge.com/making-charcoal/

approx. 3 min.

How to make charcoal — quickly and easily, and without smoking out all of your neighbors.

The Whitlox people plan to sell a barrel cart as shown in the video, but you can get along just fine by leaning the barrel up against, say, a truck tire rim. You will need tongs to move the barrel around. It gets



HOT! I have made a couple of barrels of good charcoal with very little smoke, but if you put the top on the barrel too early (before almost all of the green wood has been charred) you will get a LOT of smoke.

-Bill Ganoe



The Anvil's Horn 5 March 2021

CALL FOR ENTRIES

Botanical Blacksmiths and Friends 2021: Ironwork at the Arboretum The Arboretum at Flagstaff May 9 – October 3, 2021

Wow -10 years! Let's make this the best exhibit yet.

The Arboretum of Flagstaff is looking forward to hosting the 10th iteration of this outdoor ironwork exhibit in Flagstaff. As in the past, there are no restrictions on design or size, just that the work needs to be suitable for family viewing, be made for outdoor use, and fit in a garden setting. You can show work that has been at The Arboretum before but are encouraged to bring new pieces as people do remember! Work should not be so large that it can't be manually transported to its exhibit spot.

We can all agree that 2020 was a challenging year. The Arboretum managed by just having the grounds open to visitors. They also created an online gift shop that featured the pieces in the Botanical Blacksmiths exhibit. All pieces had to be purchased through the website and then arrangements made to pick up the work. In spite of these limitations, work sold well and we had a good year.

This year they are planning on having the Visitor Center/Gift Shop open as well as featuring the exhibit pieces in the online store on their website. So, in addition to the work in the gardens, participants are invited to put smaller pieces on consignment in the gift shop.

Work may be offered for sale and the Arboretum takes a 30% commission on all sales. When a piece sells, the buyer is offered the opportunity to take it with them rather than waiting until the show closes to take possession of the piece. Most buyers choose to take the piece with them. If they do take one of your pieces, you are invited to bring in a replacement piece to keep the show looking robust. Participating artists are also invited to put work in the Arboretum Gift Shop. Smaller pieces priced at \$100 or less sell best there.

While this show is a non-juried exhibit, you are asked to send in the application and photos/details about your work to aid in planning the layout of the show (also, good photos of the work submitted are much appreciated for use in advertising of the show). Please have the paperwork to Cathi by April 17. The work can be delivered starting May 1 and needs to be in place by May 8. Please coordinate with The Arboretum staff to make sure they know you are coming up. It is best if you can plan on coming on a Tuesday or before 9 to not overlap when they are open to the public.

Please send all the application information to Cathi Borthwick at info@flagforge.com. If you have questions please contact Cathi via email or at 928-890-9609. If it's easier to mail the application, please send it to Cathi at 118 Sherwood Ln. Flagstaff, AZ 86001

Calendar

April 17 - Deadline letting Cathi know you intend to participate and submit paperwork May 1 - May 8 – Delivery of artwork October 3 – Exhibit closes October 4 - Oct 31 – Pick up work

Important Information

- *Artist is responsible for delivery, installation, and pick up of artwork. Don't count on help from the Arboretum staff although they have been helpful in the past.
- *Artwork will be displayed in an outdoor setting. It must be able to withstand exposure to the elements and to the public.
- *Artwork should be suitable for family viewing and be appropriate for a garden setting.
- *Limited security is provided by The Arboretum at Flagstaff. The Arboretum assumes no liability for loss or damage to artwork.

*Commission on artwork sold is 30%

Application for Botanical Blacksmiths 2021

Please complete and return by April 17, 2021 to: Cathi Borthwick 118 Sherwood Ln Flagstaff, AZ 86001

or email it to: info@flagforge.com		
Artist Name		
Address		
City, State, Zip		
Daytime phone	Evening phone	<u> </u>
Email		
Artwork Submitted (Images of work are not requ	uired but would be helpful if available)	
1.Title		
Dimensions		
Weight		
Description		
Price OR Insurance value if I	NFS \$	
Will work be offered for sale	? Y N	
2.Title		
Dimensions		
Weight		
Description		
Price OR Insurance value if I	NFS \$	
Will work be offered for sale	? Y N	
3.Title		
Dimensions		_
Weight		
Price OR Insurance value if I	NFS \$	
Will work be offered for sale	? Y N	

Other Events of Interest

The 2021 CBA Spring Conference that was scheduled for April 18 - 21, 2021, has been canceled due to continuing COVID concerns and restrictions.

More information at: https://www.calsmith.org/



This event has been rescheduled to October 14 - 16, 2021 More information at: https://abana.org/abanas-iron-to-art-festival-2021



#150mmchallenge

Curated and Produced by Delyth Done, Project Concept Ambrose Burne, Hereford College of Arts, UK. Toured in the USA by ABANA - Artist-Blacksmith's Association of North America

How creative are you? What can you make from a piece of steel about 3/4" x 3/4" x 6"? See what other blacksmiths have created at the 150mm Challenge.

For more information on this exhibit, go to:

https://abana.org/donation-to-the-150mm-challenge-exhibition/

Touring Schedule March 2021 - September 2021

Mar 27 – Jul 3, 2021: Metal Museum – Memphis, Tennessee. https://www.metalmuseum.org/

Late Jul – Sep 2021: ABANA Gallery – Johnstown, Pennsylvania. Sponsored by the Johnstown Area Heritage Association.

https://www.abana.org

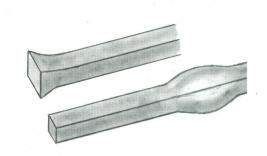
Fundamentals of Blacksmithing

Upsetting

Of all basic processes, upsetting requires more heat than any except forge welding. Upsetting is compressing a section of a bar to increase its mass in a specific area. With practice and control you can upset any part of a bar, from its end to its middle.

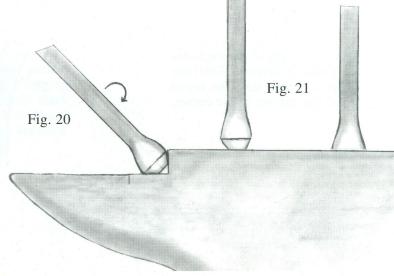
To upset the end of a bar, take a high heat (yellow/white) and keep it as short as possible. If too much of the bar gets into the forging range it will be more apt to bend than to upset. Quench behind the heat to localize it if necessary.

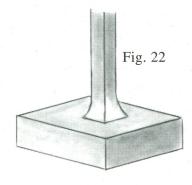
Upsetting with repeated blows that are moderate in force is easier to control. When possible, rotate the bar a quarter turn with each hammer blow to even out the force you are putting into the bar. Try to move around the bar if it is upright in a vise as you hammer to get the same effect as rotating the bar. Using a light-weight hammer can also improve both control and the effect.



To upset a bar at some point along its length, take a localized heat where you want to increase the cross section. Control the heat zone with a sprinkler can as needed and either drive the bar onto a steel block or hammer the end while it is set on an anvil. As always, rotate the bar as you work. It is also important to straighten the bar between heats and sometimes during a heat. The energy needed to upset will quickly distort a bar if it begins to bend.

A quick upset on a small to medium bar can be worked into the step of the anvil (Fig 20). Again, rotate the bar a quarter turn with each hammer blow. When the end is close to the required mass, move to the surface of the anvil and drive the faceted end down (Fig 21).





Larger bars can be upset with their own weight by driving them down onto a block of steel set on the floor (Fig 22).

14 _____ THE HAMMERS' BLOW - SPRING 1996 _____

Reprinted from the Hammer's Blow published by the Artist Blacksmith Association of North America.

AABA Calendar 2021

Mar. 2021 Demo Cathi Borthwick Online May 2021 Demo Jodie Bliss TBD

Your dues for 2021 are due now!

Many of us renew in person at a demonstration early in the year. But those opportunities are limited this year. Please mail your renewal now using the form on page 19 or renew with PayPal on our website.

MCC Blacksmithing & Welding

The Mesa Community College blacksmithing program is an excellent deal - over 60 hours of instruction including material and propane! Classes are on Wednesday during the day with instructor Richard Rozinski, Tuesday and Thursday evenings with instructor Dan Jennings, and on Saturdays with instructor Robert Ratliff. Blacksmithing is listed as WLD103 in the class schedule.

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 may be available. For more information go to: www.mesacc.edu

Sahuaro Ranch News

After being destroyed by fire on September 25, 2017, the reconstruction of the blacksmith shop at Sahuaro Ranch in Glendale is essentially complete. Jay Griffin and Ronald Wicklund were forging at the blacksmith shop on February 8, 2020. Watch The Anvil's Horn for upcoming events at the Sahuaro Ranch blacksmith shop.

Deadline for the May 2021 issue

April 1, 2021 is the deadline submitting photos and articles for the May 2021 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

Welcome New Members

Amanda Blunt Scottsdale, AZ
Jack Crane Oracle, AZ
Eric Drake Fountain Hills, AZ

Clint Bondall Mass. AZ

Clint Randall Mesa, AZ Noah Sygrove Phoenix, AZ

Classes at Pieh Tool

Beginning/Intermediate Blacksmithing

• Beginning/Intermediate blacksmithing classes with Dylan Cook:

Mar. 12-14, 2021 Apr. 30-May 2, 2021 Registration is \$570.

Students will make several simple projects to take home.

• Knifemaking class with Master Bladesmith, Ray Rybar:

Apr. 16-18, 2021 Registration is \$570. Students will make one knife.

For more details call 888-743-4866 or browse to **www.piehtoolco.com**.

Workshops in Tucson

Sam Rivera is in the early stages of planning a couple of workshops at his shop in Tucson.

• Refacing old anvils

Sam is definately going to run the anvil reapair workshop. He's just working on the scheduling.

• Building a Ron Kinyon vise.

Sam is looking for people who would be interested in building a vise designed by Ron Kinyon. (see The Anvil's Horn, March 2012.)

Sam hasn't worked out schedules or prices yet, but if you are interested in either or both, text Sam at: **520-591-4700**.

AABA Website: www.azblacksmiths.org

Open Forge: Tucson

We don't have a definite date to resume open forges in Tucson, but there may be some pick-up events now and then before we get back on a regular schedule Check http://www.desertmetalcraft.org, for upcoming events at Desert Metal Craft. If you are on the email list for southern Arizona, you will get notices about any last-minute AABA open forges. If you aren't on that email list, send a request to editor@azblacksmiths.org.

Open Forge: Grizzly Iron

Don't have a power hammer? Use one at Grizzly Iron, 1329 W. Lincoln St., Phoenix, Wednesdays from 5:00 PM to 8:00 PM, more or less, . Pre-registration is required. There may be changes in dates, times, and restrictions, and those changes may be made on short notice during the COVID-19 pandemic. Keep checking the website:

http://grizzlyiron.com/classes-and-workshops or the Grizzly Iron Open Forge and Workshops group on Facebook for current details.

Open Forge: Desert Rat Forge (Phoenix area)

Paul Diefenderfer will host an open forge at Desert Rat Forge on Saturday, March 6, and Saturday, April 3, 2021, from 9 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: 7645 E. Highland Rd., Cave Creek. 602-509-1543 or dief@phoenixrockgym.com.

Directions: From the center of Cave Creek – 4-way stop at Cave Creek Rd & School House Rd. Head north on School House 1.2 miles to Highland Rd (if you get to the 4-way stop at Fleming Springs you've gone a tad too far). Turn right (east) on Highland After about 1 mile the pavement ends. Please drive slow to avoid kicking up dust. As the gravel road makes a turn to the left there will be a single lane gravel road on the right with a sign for 7645. Drive down this road for bit until you see the big anvil. You are there! Park in the pullout if there is room – please do not park on top of any vegetation! If no room, return to main dirt road, park along the north edge, and walk the 700ft back to property.

If You Are Attending An Open Forge...

These open forges are part of AABA educational activities, but AABA does not provide funds for these events. 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 put something in the donation box to help our hosts with their expenses. Thank you! From all of your open forge hosts. **You will need to wear safety glasses. Hearing protection is recommended.**

AABA Membership: The AABA membership form has been moved to page 19.

Classes and Events at AABA Members' Shops

Desert Metal Craft

544 E. 24th St., Tucson, AZ

"Desert Metal Craft is the only school in the southwest dedicated to teaching blacksmithing, bladesmithing and fabrication together with the modern science behind the craft of metalworking."

- Rich Greenwood

The schedule at Desert Metal Craft features a wide range of classes and workshops. Check the website: **http://www.desertmetalcraft.org,** for on-line events, details of specific events, and to register for each class or workshop

Grizzly Iron

1329 W. Lincoln St., Phoenix, AZ

The schedule at Grizzly Iron features a wide range of classes, open forges, and workshops. For the current schedule, prices, and registration check the website: http://grizzlyiron.com/classes-and-workshops, or the Grizzly Iron Open Forge and Workshops group on Facebook for current details.

Peacock Project - Part 2

Jaime Escobedo

(Part 1 appeared in the November 2020 issue of *The Anvil's Horn*.)

In this part we'll take a look at some of the stake repousse tooling I used to complete the project. I primarily used dedicated stakes and stake hammers of different configurations (embossing, lining, and planishing) to complete this project, but these can be easily substituted with tools most blacksmiths have in the shop. We'll take a look at those substitutions as we go along.

I traced the body feathers, wings, and tail feather train with a Sharpie. I made two chisels that I ground a small walking radius on and dulled to a very small fuller shape with a belt grinder. Although one has a slightly larger profile than the other, they both have a similar line weight (thickness). I used these to chase a shallow line to delineate the individual tail feathers – the larger one for the broader curves, and the smaller one for the tighter curves. I placed the sheet metal onto a 1"x4" piece of pine to help absorb some of the impact so I wouldn't risk cutting the sheet metal too thin. These lines would be used to guide the piece on the stake for embossing the quilted feather pattern from behind the piece. The stake, which can be the same chisel you used to incise the piece, is clamped into the vice with the piece placed onto it in the incised line. Each quilted tail feather is now embossed from behind with the stake supporting it. On the body feathers I used the same techniques but with much thicker line weight chisels and stakes as these feathers are intended to appear a bit coarser.





Lining chisels

Embossing adds volume to the piece. I used specific embossing hammers I made for my stake repousse pieces. But, because this piece is shallow and is formed on one plane, you can easily use a small ball pein hammer with a well-rounded ball end in the 8 to 12 ounce range. Some ball pein hammers have a kind of pointed end, so either find some that are rounded or grind the "points" to smooth round ends. On this particular piece there a several increasing and decreasing radiuses within each feather, so a variety of radiuses will be helpful. I also used a soft lead block to aid in sinking the general embossed shape of each feather and then refined using the stake and embossing hammer. Lead is toxic, so follow the appropriate safety protocols for this material if you should decide to use it.

Peacock Project - Part 2 (Continued)

Jaime Escobedo





Embossing hammers

Planishing smooths out the unevenness of each feather and is conducted on the front side of the piece over a ball stake. I used several different size ball stakes in the vice along with planishing hammers across the entire piece including the neck and head area. Again, you don't need specific ball stakes and planishing hammers for this operation. You can easily clamp the flat end of your ball pein hammer in the vice and use a lightweight flat faced hammer to complete the planishing with the same results.







Planishing hammers

The next two photos show the result of the work thus far. The raised ridges on the back side are the result of the lining on the front side and embossing on the back. The front side photo shows the result of planishing.

Peacock Project - Part 2 (Continued)

Jaime Escobedo





Back side of tail feathers (before sanding linseed oil)

Front side showing incised lines and planishing

The neck and head area were also embossed and planished smooth. I used a small lining hammer to texture the neck to suggest the appearance of fine feathering. These hammers are nothing more than very small well-dressed cross peins in different line weights. The texturing took place over a small ball stake. The peacock's eye was formed over lead with a very simple eye punch I made from a small yard sale chisel. I just used a belt grinder to grind the football shape to what I thought was proportional and then softened the corners with emery cloth. A copper sub-crown was also silver soldered on to enhance the main crown.







Head and neck detail

Lining hammers

Eye punch

That's pretty much how this piece was completed along with caramelizing burnt linseed oil and sanding to expose the highs and lows of the naturally occurring surface texture. Now, on to completing the design of the wine rack and additional tropical birds since I've put it off for so long.

The Swing Hook Project: Enhancing Basic Skills

Len Ledet

Several years ago Mo Hamburger received a commission to construct several "swinging hooks". It was a good project that encompassed the applying of many of the basic skills of blacksmithing. This included joinery skills thru the construction of tenons, heading of tenons, and collars as well as heating, drawing out, bending, upsetting, and piercing. With Mo's blessing I decided to re-create the project. It was a fun project and great to practice and enhance basic skills.



Hook Components:

Scroll: 1/2" round 14 inches long; Tenon Bracket: 1/2" x 1 1/4" x cut length 2"; Hook: 1/2" x 1/2" x 17" long; Swing Bar: 1/2" x 1/2" x 15"; Mounting Bar: 2" x 3/16" x 22" long; Collar Material: 3/16" x 1"



Swing bar with ai "Slit and Drift" hole and tenon. See Mark Aspery "Mastering The Fundamentals Of Traditional Joinery". Excellent book.



Tenon bracket, Cut both ends 2 inches long.



Tenon bracket and collars ready for assembly



Tenon bracket ready for welding



Tenon in countersunk hole.

The Swing Hook Project: Enhancing Basic Skills (continued)



Tenon Joinery



Ready to head the tenon



Heating and forging the tenon head



The complete joint



Collars forged and ready to be applied



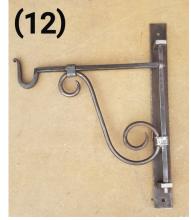
Collar applied



Slip the swinging assembly into the top tenon bracket.



Slip the swinging assembly into the bottom tenon bracket and weld that bracket to the mounting bar.



Finished



Artist-Blacksmith Association of North America

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

ABANA has moved its headquarters from Jonesborough, Tennessee. to Johnstown, Pennsylvania. Blacksmithing and the steel industry have played an important part in the history of Johnstown since the mid-19th Century. That makes it a fitting place for ABANA to call home. ABANA's new home is in the historic Pennsylvania RR depot where it will have offices, a gallery, a retail shop and a library. The Center for Metal Art is located in other historically singnificant facilities in Johnstown.



ABANA'S Education Committee announces the National Curriculum

A model cirriculum that provides a structured program of study to learn blacksmithing.

"We have some exciting news from the Education Committee; ABANA has fully adopted the National Curriculum (NC), based on the curriculum of the CBA (California Blacksmith Association). As our core mission is to perpetuate the noble art of blacksmithing, we recognize it's incumbent as a national blacksmithing organization, to share a successful and practical working curriculum with members, affiliates, and the blacksmithing world at large. What is the National Curriculum? The NC is a departure point for those that seek a structured program of study that can be used at schools, conferences, meetings, and individual shops through one on one, small groups and self-guided study. We present the curriculum as one way to learn blacksmithing, but certainly not the only way. From this set of goals, lessons, and benchmarks, smiths at any skill level can pick this up and continue their education. The curriculum provides the framework for the student to progress through increasingly challenging projects that focus on the skills expected of a journeyman smith, culminating with the [CBA] Level III Grille."

-- ABANA Affiliates Newsletter

Controlled Hand Forging

This was a series of lessons covering forging fundamentals that was published in the *Hammer's Blow* from Fall 2002 to Winter 2010. The series starts out with the a discussion of safety consideration and vary basic terminology, then moves on the basic techniques including hammering, scrolling, punching and drifting, forging tongs, and forge welding.

All 28 lessons are now available at https://abana.org/education/controlled-hand-forging/ (Scroll down almost to the bottom of the page.)

Classifieds

Will buy your unwanted

blacksmith or horseshoeing tools and supplies.

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

Bituminous Coal from the King Coal Mine in Colorado.

Burns great! \$30 for 50 pounds Pick up near Tanque Verde and Houghton in Tucson. Casey Abbs, 520-869-8778

Basic blacksmithing and metal forming workshops

Richard Rozinski is offering basic Blacksmithing and metal shaping work shops in his studio in Gilbert Arizona. Class sizes and complexity vary. Class topics range from basic blacksmithing, copper vessel raising, pewter construction and abstract sculpture fabrication.

For details text or call 602-803-7255

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.

Picture Rock

Arizona Sierra Banded Sandstone

makes the perfect base for all your forged iron pieces. Awards, plaques, memorials, water features, furniture or anything you can imagine.

Mined in northeastern Arizona, cut and shaped to your specifications.

Terry Horne 52196 W. Quail Run Rd. Maricopa, AZ 85139 602-672-7085 www.arrowzonastoneworks.com

Gas Forge Building Workshop Richard Rozinski is offering gas forge building workshops in his shop in Gilbert. Two person minimum. Call Rich for scheduling pricies. 602-803-7255



For Sale

Titanium Tongs - All sizes and they last. \$100 per pair.

shapes, 50 pairs. Get them while Bernhard Heer, 715-205-8786

For Sale

Downsizing my shop of 25 years, too much to list. Blacksmithing and steel fabrication tools, and steel If interested contact Ken Webb at 520 488-6831 or kenwebb@quietbesrart.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. You need to establish an account at IMS. It's free. No credit approval is needed. You can pay with cash. Give the staff your account name whenever you buy something, then request the education discount as an AABA member. If questioned, inform the clerk that they should have an AABA member list behind the counter.

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

The Anvil's Horn 18 March 2021

Sources

AZ Tool Steel

520 S. 52nd Street #201 Tempe, Arizona 85281 Phone: 480-784-1600 Toll Free: 877-795-1600

Bar U Bar Supply

Several 65 lb. & 85 lb. swage blocks for sale. Your source for anvils, post vises, and other new & used blacksmith tools. Barry Denton. ph 928-442-3290 email: barubarranch@gmail www.barubar.com

IMS

Full service supplier of steel, stainless, brass, aluminum, copper. Discounts for AABA members. (See details on pg. 18.) 5150 S. 48th St., Phoenix 602-454-1500 3757 E. Columbia St., Tucson 520-441-5900

Interstate Steel and Salvage

Specializing in Steel, Aluminum, Stainless Steel, Brass, Copper and some alloyed metals of all types, sizes and shapes. Cutting, Shearing and advanced Flow water jet cutting for all your project needs. Valley wide delivery. Let us quote your next large or small job! 12129 W Peoria Ave, El Mirage 602-944-2000

Old Globe Reclaimed Wood Co.

Wrought iron.

PO Box 42101, Plymough, MN 55442 715-718-4410 or 952-463-8392 (c)

http://www.oldglobewood.com Discounts for ABANA members.

Pieh Tool Company, Inc.

Blacksmith Supplies, Blacksmith Classes with Gordon Williams, Milwaukee, Wilton & JET Tools,. Air Hammers, Hand Hammers, Tongs, Books, Coal and Coke.

661 Howards Road, Suite J, Camp Verde, AZ, 928-554-0700 and 28255 N Tatum Blvd. Suite 1 Cave Creek, AZ, 480-626-0924 www.piehtoolco.com

Say-Mak Power Hammers

Helmut Hillenkamp 2873A Industrial Rd. Santa Fe, NM 87507 www.saymakhammers.com

Southern Arizona Farrier Supply

1603 S. Eastside Loop ,#205 Tucson, AZ 85710 520-751-1443

www.southernarizonafarriersupply.com

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.

Superior Steel Stamp Co.

Precision engraved, industrial grade stamping and marking products for any application. Brass dies for Hot Stamping Wood or Leather. Hardened Tool Steel Stamps made for marking stainless steel, forged knives/blades much more. 3200 Lakeside Ave E, Cleveland, OH 44114 216-431-6460 Industrial marking

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Makers

www.stampyours.com

For either, contact

Sales@superiorsteelstamp.com

Tire Hammer Plans by Clay Spencer. Send \$30US (PayPal) to clay@tirehammer.com. Or send check/money to Clay Spancer 73 Penniston Pvt. Dr.,

Tucson Iron and Metal

I can mail a copy or email PDFs.

Somerville, AL 35670.

Steel, aluminum, stainless, copper and brass for sale by the pound. Open Monday - Friday 8 - 4:30. Also 1st and 3rd Saturdays 6:30 - 8 am. specifically for metal artists. 690 E. 36th St., Tucson 520-884-1554

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 Membership Form: New Member 🗌 or Renewal 🗌									
Name	<u>-</u>								
Address						Do not publish			
City		State_	Zi	p					
Phone (home)		(mobile)				Do not publish			
Email						_			
Professional blacksmith Hobby		Farrier	Blade sn	nith					
Your main blacksmithing interest									
Occupation or skill									
Please check one:		Mail to: Terry Porter							
Regular membership (\$35)			2310 E. Melrose St.						
Family membership (\$40)		Gilbert, AZ 85297							
Make Check Payable to AABA									

Arizona Artist Blacksmith Association Attn: Bill Ganoe P.O. Box 40233

Tucson, AZ 85717 Address Service Requested U.S. POSTAGE PAID TUCSON, AZ PERMIT NO. 271

NONPROFIT ORGANIZATION

The Anvil's Horn is the official newsletter of the Arizona Artist Blacksmith Association. Published every other month preceding the bimonthly meetings of the Association, the newsletter is oriented toward anyone interested in blacksmithing and related forms of metal work. Membership is available at the rate of \$35 for individuals; \$40 for families and includes a subscription to the The Anvil's Horn for one year. Every attempt has been made to ensure accuracy of information appearing here, but no liability is assumed by the Association, its officers or editor for errors, damages, or injuries resulting from any design, use, construction or application of said information. Uncopyrighted material may be used freely by other similar organization provided proper credit is given. Any copyrighted articles appearing herein should not be reproduced without permission of the author. Matters relating to newsletter submissions, corrections, etc. should be addressed to the editor: Bill Ganoe, P.O. Box 40233, Tucson, AZ 85717, Tel: 520-326-5478, or editor@azblacksmiths.org.

For membership information or address change, contact:

Terry Porter, 2310 E. Melrose St., Gilbert, AZ 85297, 480-988-2070, trp555@prodigy.net

Your dues for 2021 are due now!

Dues for 2021 are due January 1. I sent out an invoice. DON'T HESITATE. Please mail in your renewal or renew via PayPal. You don't want to lose out on getting the best newsletter around, *The Anvil's Horn*.

- Terry Porter, AABA Secretary