

The Anvil's Horn

A Publication of the Arizona Artist Blacksmith Association

Issue No. 210 May 2021



*Candle Holders by Cathi Borthwick
Steel frames with geode slabs illustrating the theme of our March 2021
demonstration: Steel and Stone.*

President's Message

Hey Everyone!

I hope this finds you well and safe. It's hard to believe that May is already here! It really has been a long journey through the trials of this last year, and it seems that we are starting to finally see the light. I think most of you will be happy to hear that it looks like we're starting to put together an in person demo in September. It will be great to see all of your faces and to finally be together again! Keep an ear out for more news in the coming months. Until then, I don't have much more to say.

Stay Safe! Keep the forges lit and the hammers swinging!

Jason LaBrash

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Material submitted for publication in the Anvil's Horn may be edited or rejected by the editor. Material submitted must be your own work, not plagiarized. By submitting material, you agree to allow AABA to edit, print, or post on the AABA website. You also give permission for the material to be reprinted by other blacksmith publications (i.e. publications of ABANA and of ABANA affiliates). **Copyright.** The creator may retain copyright for the work. If we publish a copyrighted item, consent of the copyright holder will be obtained before publication. **Graphics.** High-contrast, high-resolution digital picture files and original drawings are preferred, but we can work with lower-contrast, lower-resolution graphics.

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Demonstration: May 2021

A virtual demonstration

The video link will be posted in the July issue of *The Anvil's Horn* and on the AABA website at www.azblacksmiths.org

Demonstrator: Jodie Bliss

Jodie Bliss works primarily in hand-forged metals, from mild steel to copper, brass, bronze, and stainless. Her focus is on creating beautiful and compelling artwork through research and development of an idea or concept, design, and finally execution. She creates everything from fine art sculpture to custom sculpture, artful security doors, gates, signage, railings, fences, home decor, furniture & more made to specification.

For more on Jodie Bliss, her studio, and her art, check out <http://www.forgeyourbliss.com/>



For our May demonstration Jodie will show how she creates pieces like this:

March Demo Report

Our March demo covered three videos:

Part 1: <https://youtu.be/v8nxl56dIEs> - about 1:15

Part 2: <https://youtu.be/vwgipLtbaCQ> - about 2:45

Part 3: <https://youtu.be/yEGVxNkKBOI> - about 0:54

Since we aren't meeting in person for these demonstrations during the COVID pandemic, please continue to support AABA as you would at the in-person demonstrations by donating through

<http://azblacksmiths.org/plans/> (via PayPal) or sending a check, made out to AABA, to our treasurer, Ali Merriman, at her address on page 2. We still have to pay our demonstrators for their time and materials.

Part 1 includes presentations by Cathi Borthwick and David Bridenbaugh. Cathi started out discussing sources for the stones that she uses. She has found many good pieces at the Tucson Gem and Mineral Show which occurs every February. She showed several things she has made including candle holders and end tables. She proceeds to demonstrate forging, from beginning to end, of a small flower to hold a small geode. Her demonstration includes some tips to successfully forge weld in a gas forge. David Bridenbaugh then discussed the techniques he uses to successfully incorporate stones in his work including the finishes he uses on the stones.

Part 2 includes presentations by Liz Carlier and Steve Miller. Liz showed the process, and the problems, of mounting stones on one of her guardian sculptures. Steve discussed some of the stones he uses including marble and Arizona sierra banded sandstone, and how he handles these relatively fragile materials. This sandstone is particularly interesting in that it shows a vibrant pattern of color and texture, in layers ranging from a pale tan to red.

Part 3 is a demo by Steve Miller following up on a demonstration by Brett Moden at the 2014 ABANA Conference in which Brett used a piece of copper tubing in steel to hold a stone. This is an interesting exercise in fitting an irregularly shaped stone into a nice round collar of copper tubing.



Steel and Stone Demo Notes

Coordinated by Cathi Borthwick

The March virtual demo, Steel and Stone, is actually 4 mini-demos with Cathi Borthwick, David Bridenbaugh, Liz Carlier, and Steve Miller explaining how and why they incorporate stone into their ironwork. Watching the demo is always the best way to learn the techniques, but in case you don't have the time or aren't the best note taker, here is some information gleaned from each of the demos. Included in this article is also a bonus section as Fred Borchert, a master at combining steel and stone, shared some of his tips and insights. I hope these tips will inspire you to experiment with adding stone to your ironwork.

Cathi Borthwick's demo notes

1. Use Starbond EM-600 Instant Adhesive to attach geode slices to metal (she gets it at the Tucson Gem and Mineral show but can also be found online). This is a strong and nearly instantaneous bond.
2. Use 511 Impregnator Sealer to seal porous stone from moisture (available at Home Depot)
3. Use JB Weld Steel Stick or Epoxy Putty Stick from Harbor Freight to attach larger stones to metal.
4. To make table lamp with geode slice insert, use ½" OD steel tubing with 3/8" ID. You can hammer this metal into curved shapes without it kinking, lamp fittings can be tapped into place in the opening and tubing allows for wiring.

David Bridenbaugh's demo notes

1. The number one concern is safety – wear eye and ear protection but especially wear a good mask to protect from breathing in the rock dust which may contain crystalline silica dust which very bad for your lungs. This can cause silicosis which is not something we want to experience.
2. For flattening stone – use a Norton diamond disk (goes on hand held grinder), a ceramic flap disk, or can use a woodworking sander on sandstone.
3. For drilling holes in most rocks a hammer drill with a masonry bit will work fine. Harder stones like granite may crack so use abrasive bits made for drilling tile, stone and glass such as Milwaukee Tile and Natural Stone Bit, Milwaukee Diamond Plus Bit, or Bosch Natural Stone Tile Bit. You can use one of these bits, a masonry bit or even a regular twist drill bit in a drill press or hand drill for drilling into sandstone.
4. Finishes – Clear Guard Protective Lacquer by Sculpt Nouveau (satin finish) or Advantage Universal Urethane Clear Coat #550 and 553 (activator). This is an automotive paint that gives a gloss finish. Mix a small amount at a time and watch for bubbles when applying. A heat gun or hair dryer may expand air bubbles so they pop on their own. Otherwise poke them with a paint brush or it will dry with the bubbles in place. Apply 3 coats about 15 minutes apart. It really soaks into the sandstone so 3 coats are necessary.
5. Use epoxy to fasten metal to stone such as West System 105 epoxy resin and 206 slow hardener. Other brands of epoxy or JB Weld will also work. David uses the West System for other projects so he usually has it on hand.
6. If the rock will be part of an indoor sculpture, glue padding, such as leather, on the bottom to avoid scratching a hardwood floor or tabletop.

Liz Carlier's demo notes

1. Uses stones as heads in Guardian Series figures.
2. The shape of the stone will influence design of the piece to help give stability to stone. Design will help hold the rock in place and also hide the epoxy putty used to anchor the stone.
3. The stone may need some shaping with a diamond grinding wheel to help get it in place. Try not to grind anywhere it will be seen as that creates a scar.
4. Coat rock with Clear Guard Protective Lacquer by Sculpt Nouveau before installing in ironwork.
5. To hold rock in place, use J-B Weld Steel Stick around side and on the bottom of the rock. Try not to make it visible.
6. To oxidize copper used on pieces apply mixture of Miracle Gro mixed half and half with water. Finish by having copper warm and applying 5 light coats of clear coat and 3-4 coats of wax.
7. To rust the steel paint muriatic acid on metal then heat it to about 200° (there should be no change in color from the heat) and then spray with peroxide.

Notes from conversation with Fred Borchert

1. Uses Thompson Water Seal to seal the stone. Finish needs to be refreshed annually if it is an outdoor piece, finish will last indefinitely indoors.
2. Heat rock by putting in the sun or carefully applying heat before applying finish to drive out any moisture in rock and get finish to adhere better.
3. Use a diamond core drill bit to drill holes. Residual stone left in the center can be tapped out with a chisel. ALWAYS use water when using diamond bits. Otherwise diamonds heat up and break.
4. If drilling a hole all the way through the stone, make sure to firmly back up the stone with something like a piece of wood. This will help prevent stone from chipping off as drill bit exits stone.
5. If stone needs to be flattened, rub chalk on a flat floor tile, flat piece of steel, etc. and then rub this on bottom of stone. Grind off areas that have chalk on them. Repeat until stone sits flat.
6. If you grind on a stone surface that will be seen, you can treat that stone surface so it blends with rest of the stone. Techniques to do this include sandblasting, using a bushing tool (a hammer that looks like a meat tenderizer), or spalling the stone by wetting it and using a rose bud to apply heat with an oxidizing flame. Be very careful with this last technique as you could break off more than you want to if you apply too much heat.
7. Trowel and Holden is a good resource for stone working tools. You can also make your own chisels, etc. by purchasing used hammer drill bits from a place such as Kent's Tools and then grinding them into the desired shapes.

Continued on page 6

Steel and Stone Demo Notes (continued)

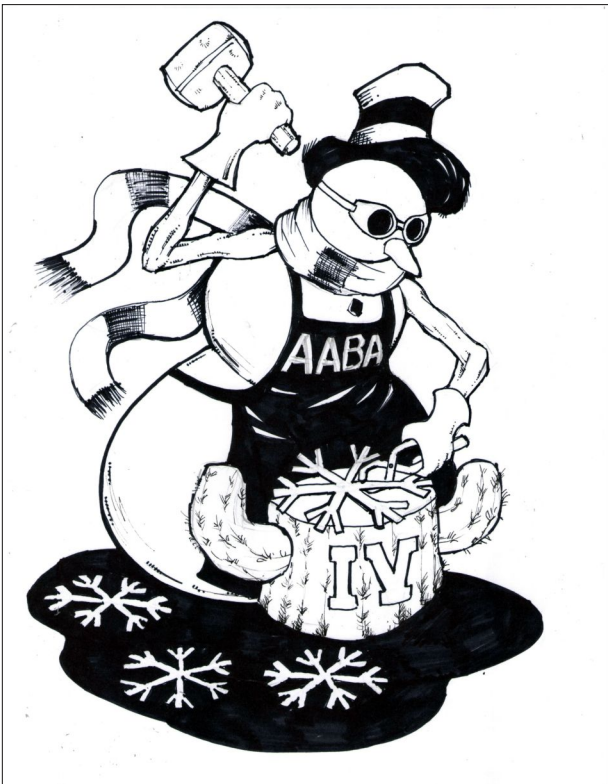
8. To attach steel to stone there are a variety of commercial anchors available. Be careful with any anchor that expands in the hole as pressure could cause stone to crack. A handmade option is to drill a hole 2" deep into the stone. Then, in the end of the steel piece, drill a small hole (i.e. 1/4" in a 3/4" bar) about 1 1/2" deep. Use a hack saw to cut wings into the end of the steel. Make a cone shaped wedge to fit into hole in stone. Put in place and then drive steel onto the wedge in the hole. This will cause the wings to open and grip sides of hole. You can put some quick setting cement in the hole before driving the steel in to help hold everything. You might need to be creative to figure out how to do this as the steel is your nice forged element.

9. It is okay to use epoxy if it will not be seen. Otherwise Fred prefers to use quick setting cement to anchor the steel in the stone. You can use mortar color to dye the cement to match the stone and it is easier to clean up any excess cement while it is still wet (epoxy has a tendency to soak into the stone and is harder to remove). You can cut some grooves into the steel before inserting in hole to help anchor it better.



Coming Attractions

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 is underway. Standby for volunteer opportunities. Some great surprises planned.

Members' Projects

Building an Old-Fashioned Hacksaw

Eric Thing



Recently, the editors of our newsletter called for articles on projects we have been working on in our home shops during the long, lonely COVID months. Here is my contribution: an old-timey hacksaw.

I do demos portraying an 18th century blacksmith, and I sometimes need to cut cold iron. Hacksaws were well-known back then, but my modern hacksaw's stamped-steel frame and plastic pistol grip sort of clash with the period surroundings. So, I decided to attempt my own, in an older European style. The pictures below show the result.

A brief summary of the construction process:

1. I cut about 14" of 1 1/4" x 1/4" mild steel bar. I hot-slitted a 10" cut down the middle, leaving about 1" uncut on the "nose" end, and 3" uncut on "tail" end. I then cut one side of the split material at 5" and pried the two resulting "legs" out to about 90 degrees. Sort of like making an iron Greek letter Pi. I forged out the 3" end longer and thinner, to about 4", to make a full-size tang for the handle.
2. I fussed with the two legs until a 10" hacksaw blade fit between them. I decided to make the front leg hold its blade end with a simple split and removable pin, and have an adjustable bolt and wingnut hold the other blade end.
3. I upset the end of the front leg slightly, to about 3/8" thick, to make it easier to start the split with a hacksaw (sigh, need a hacksaw to make a hacksaw). I split it about 1/2" deep, then drilled a 1/8" pinhole through. I made the pin from a finish nail; nails nowadays are cold-drawn and pretty hard, so they make excellent pins.
4. I cold-fabbed the bracket for the tension bolt from 14 gauge cold-rolled sheet, bending it in a vise around some 3/8" stock. I riveted it on the back leg, leaving a 3/8" square socket. I then took about 2" of 3/8" square bar, cut and filed an L-shaped retention pin on one end, and carefully filed about 7/8" of the other end to 3/8" round. I then put threads on the round end with a die.
5. I made the wing nut (maybe a bit much, but a modern galvanized stamped nut just did not look right) from 1" x 1/4" bar. I drilled and tapped the hole, then hacksawed out and bent the wings with a torch in a vise. I forged out the ends of the wings just a little, to thin and flare them, with the torch on a small shop anvil.

Continued on page 8

Building an Old-Fashioned Hacksaw (continued)


6. The handle is two thin slabs of walnut, which I cut from a small scrap block I had lying around the shop. I glued the slabs on the handle plate with epoxy, drilled two holes for 1/8" metal pins, then filed and sanded everything round and smooth. I finished with tung oil.

Verdict: I was rather proud of myself for making an old-style tool from scratch, but I think I will try again later this year. This saw works, but it has a couple of issues. First, the frame is not quite stiff enough. The spine of the frame starts to bend ever so slightly when I tighten up the wingnut, making the blade bind a bit during cutting. I will try 3/8" thick stock next time. Second, this is not how "they" did it! The split and recurved front end would (I think) be weak and prone to break if made of wrought iron, which they would have used. Next time, I will just bend the front end from a longer piece of stock.

Google "Lancashire pattern hacksaw", as I should have done before starting this project, and you'll see what I mean. The 18th-century smiths split the back leg, and bent the front leg. The bolt socket was also always wrapped and welded, as far as I can see, not fabbed and riveted on. Well, one more challenge for next time!



Other Events of Interest



ABANA *Festival*
IRON TO ART
2021
JOHNSTOWN, PA

*For 47 years, ABANA has not had a place to call home.
In 2020, the Board of Directors voted to give ABANA a permanent home in Johnstown, PA.
Johnstown has a rich historical presence in the Steel and Iron industry.
You don't want to miss this!*

Demonstrators:

The Patient Order of Meticulous Metalsmiths	<i>Ellen Durkan</i>	The Teaching Tent:
<ul style="list-style-type: none">• Tom Latane• Peter Renzetti• Kevin Clancy• Tina Chisena• Carl Close	<i>Bruce Jarrell</i>	<ul style="list-style-type: none">• Jeff Dunkelberger• Steve Hotz
	<i>Jennifer Petrila</i>	
	<i>Patrick Quinn</i>	
	<i>Peter Ross</i>	
	<i>Bob Valentine</i>	

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

Are You Tired of Those Broken Bucket Handles?

Bill Ganoe

Those plastic buckets you can get at your local hardware store or big box DIY store can be pretty useful and not too expensive. You can carry tools, water, coal, sand, short pieces of steel - almost anything that isn't hot enough to melt the plastic. I even use them on occasion for slack tubs for short-term traveling demos. (I've been careful enough that I haven't melted a hole in one - yet.)

Of course, those buckets don't last long - maybe a few years. But the handles on those buckets usually last a matter of weeks, maybe a couple of months if you're lucky. I'm not a fan of carrying heavy loads in those buckets with just the wire bail digging into my hand, so here is my solution for handles that may actually outlive the bucket itself.

I got a length of 3/4" PVC pipe, used a hacksaw to cut off some 3" pieces and then to cut a slit along the length of each piece, then I used a screwdriver to wedge the slit open wide enough to slip over the wire bail. There's enough tension in the PVC pipe that it will snap around the bail and stay closed in use. It doesn't take long, and it even feels a lot better than original handle, especially with a heavy load in the bucket.



AABA Calendar 2021

May 2021	Demo	Jodie Bliss	On line
July 2021	Demo	Jaime Escobedo	On line
September 19, 2021	Demo (in person we hope)	Mark Aspery	Location 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 July 2021 issue

June 1, 2021 is the deadline submitting photos and articles for the July 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

Ariel Diamondstone-Cruz	Phoenix, AZ
Tim Galloway	Mesa, AZ
Tomas Taylor	Gilbert, AZ
Jeremiah Tollar	Glendale, AZ
Chris Young	Phoenix, AZ
Joan Waters	Chandler, AZ

Classes at Pieh Tool Beginning/Intermediate Blacksmithing

• Beginning/Intermediate blacksmithing classes with Dylan Cook:

Check the Pieh Tool website for new dates. Registration is \$570.

Students will make several simple projects to take home.

• Knifemaking class with Master Bladesmith, Ray Rybar:

Check the Pieh Tool website for new dates. 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 definitely going to run the anvil repair 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, May 1, and Saturday, June 5, 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.”

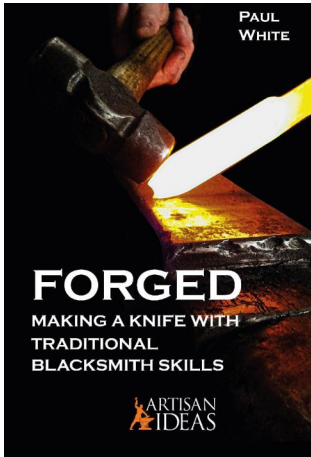
- Rich Greenwood

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.



FORGED: Making a Knife with Traditional Blacksmith Skills

by Paul White

Hardcover, 132 pages, full color; 2020. \$29.95

Available from Artisan Ideas, www.artisanideas.com

ISBN: 9781733325028

Reviewed by Ira Wiesenfeld

In *Forged*, Paul White sets out to teach the beginner bladesmith how to forge a basic working knife, which he calls a frontier knife. He uses a low tech, by-hand method that he was taught by his mentors. He's organized and explains well in plain English how to accomplish this 12-15 hour project.

Paul recommends using new steel, 1080, for this knife, but also discusses recycled steels that can be used. The book starts with basic metallurgy, anatomy and geometry of a knife, hammer selection (rounding hammer recommended), and using the vise to straighten the handle and blade (heat and lock technique). Then we get to the heart of *Forged*, which is making the counter bend, using a simple fixture, and beveling the edge. Here I'm a bit confused; Paul states that he has students with only a few hours or days experience forge these knives, he later says that the edge beveling technique is advanced forging. I can't see a novice, with tired arms, doing very well at this.

Another minor criticism is that the author gives the option of using vise grips, if no tongs are available. My experience with vise grip tongs is that they snap open at the worst moments; make, or buy, the tongs and other tools first!

There's a good section on the types of mistakes students make and how to fix them - including how he deals with the fishmouth seen in the cover photo. *Forged* ends with instructions on heat treating, riveting a wood scale handle, polishing and sharpening. I think that the heat treating chapter is the best part of the book; explaining a confusing topic (to a beginner) in an organized, common sense way. There's information on annealing, normalizing, hardening, edge quenching, and several tempering techniques.

Forged fills a niche; the beginner or intermediate smith who wants to get beyond stock removal and make forged knives using only hand tools. If you're in this category, read *Forged*.

Food for Thought

Bill Ganoe

Jerry Achterberg, President of Balcones Forge (Central Texas Blacksmiths) wrote in his description of an upcoming demonstration focusing on welding techniques, "This will be a great opportunity for you to figure out what you have been doing wrong and why your welds don't look quite right."

This concept can apply to almost anything that you learn from videos when you just can't seem to make your work look like the video. Of course, you have to be motivated to want to do a really good job rather than just settling for something that looks kind of like what the person in the video did. But when you want to do the best job you can, AABA meetings, open forges, and informal get-togethers with other skilled blacksmiths provide great opportunities to up your game - or opportunities for you to help someone else up their game.

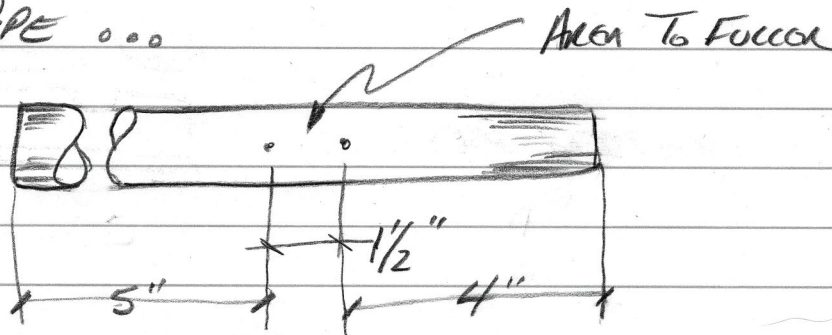
BELL CONSTRUCTION

NOTES BY LEN LEDET
DENO BY PETER SEVIN
ARIZONA 9/00

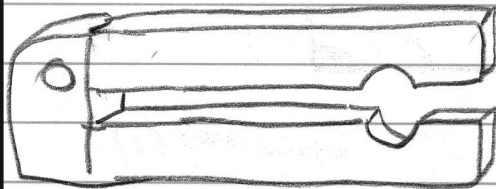
1 1/4 DIAM PIPE
SCHEDULE 40

USE 1" OR 2" OR ?
DIAM

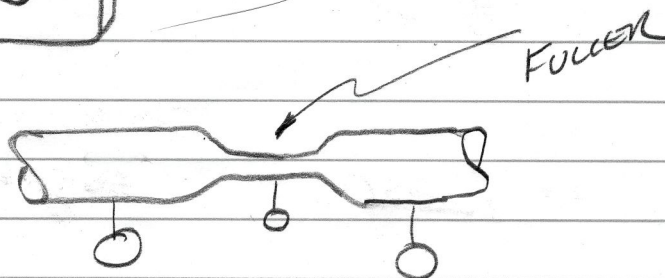
10" LONG PIPE ...



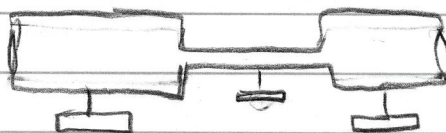
USE FULLER TOOL



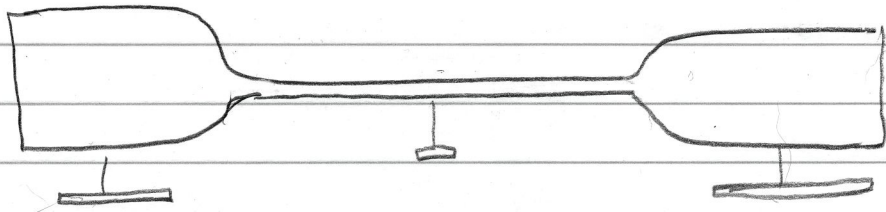
USE RED/HEAT



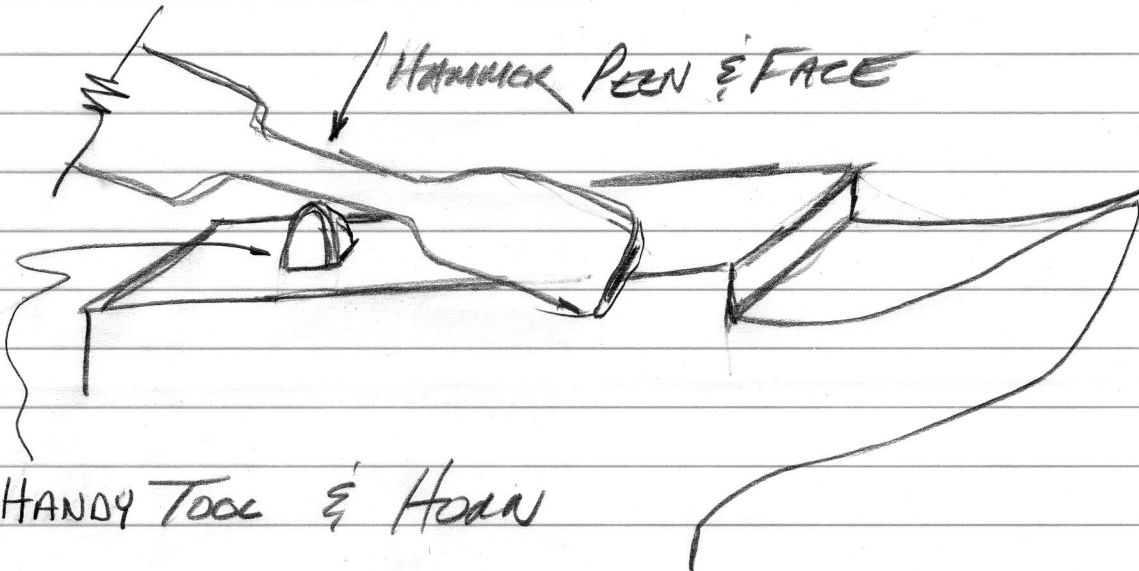
FLATTEN ENDS & DRAW MIDDLE



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To DRAW MIDDLE

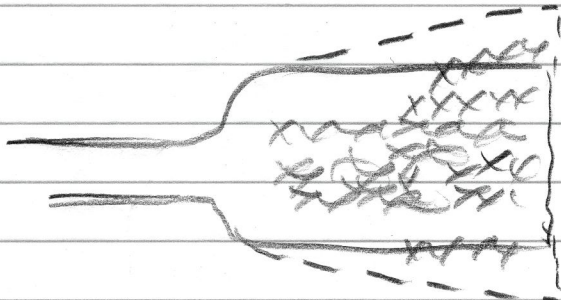


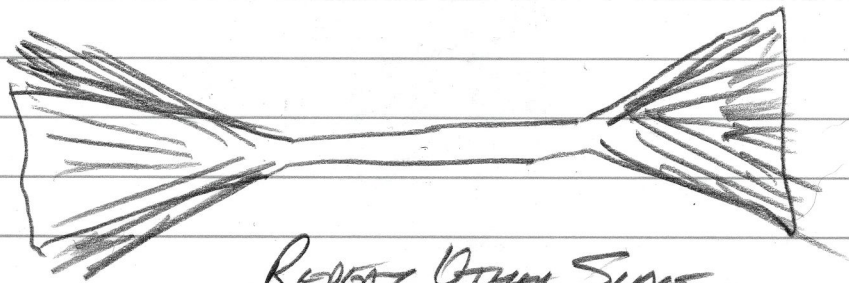
FORGE BELL ENDS

PEEN BELL AREA TO CENTER & ENDS

TO SHAPE

TO BELL





REPEAT OTHER SIDE

ALTERNATE
PEENING
EACH SIDE

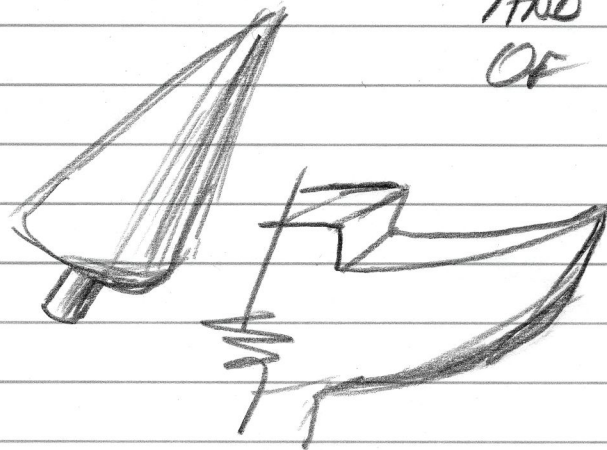
USE CUTTING CHISEL TO OPEN BELL
ENDS

IN VISE



USE CONE TO SHAPE BELL

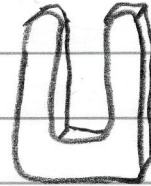
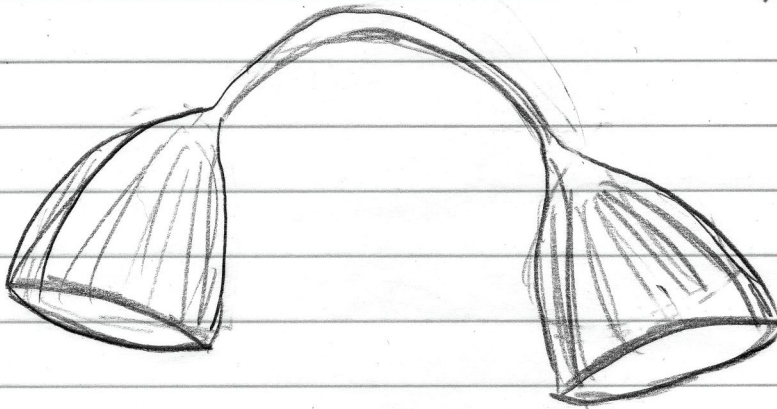
AND FRONT
OF ANVIL HEAD...



Continued on page 16.

BEND BEELS TOGETHER

USE BENDING FORKES
IN VISE





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.

The Arizona Artist Blacksmith Association is an affiliate of ABANA.

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 significant facilities in Johnstown.



ABANA'S Education Committee announces the National Curriculum

A model curriculum 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 a discussion of safety consideration and very 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

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.

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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.

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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.

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.com
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

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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!
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Discount pricing for AABA members. Various locations in the Phoenix area.
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Dan, 602-316-4140, for tech support.

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clay@tirehammer.com.
Or send check/money to
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I can mail a copy or email PDFs.

Tucson Iron and Metal
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.
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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 _____
Address _____ Do not publish
City _____ State _____ Zip _____
Phone (home) _____ (mobile) _____ Do not publish
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

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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!

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.