The Anvil's Horn

A Publication of the Arizona Artist Blacksmith Association

Issue No. 163 July 2013



Stainless steel flower by Wade Smith

President's Message:

Now that summer is finally upon us those brisk winter days are just a fond memory. Don't despair. Relief is on the way, in about four months. Meanwhile we will have to get by with the brief respite of demos and events in some of our cooler locations.

Next up is the Demo in Flagstaff in mid- July. (see schedule on the next page) Cathi Borthwick has planned an interesting and fun day at the Historical Museum. While you are in the area be sure to check out the iron work on display at the Flagstaff Arboretum.

September marks our return to the somewhat cooler climate of Camp Verde. Karen & Bill Morris are again hosting this popular event. The featured demonstrator is Adrian Legge from England. He is one of the most talented and entertaining smiths you will ever see. The first time I saw him demonstrate was at Hanford California with Mark Aspery. I thought I'd stumbled into a live performance of Monty Python's Flying Circus.

By the time it finally cools down we will be headed to the Old Pueblo for the Mark Aspery & Gordon Williams show. Mark's latest book should be available for purchase at that time.

Meanwhile as you are dreaming of cooler times it is not too late to get started on your auction project. The quantity of items has slipped a bit so let's all step up and put some effort into making something that represents your best work. Just start early in the morning and think cool.

Safe and productive forging,

Doug Kluender

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Loving, Bill Morris, Peter Sevin, John Silvestre, Ira Weisenfeld, Gordon Williams

Demo: July 20 Pioneer History Museum, Flagstaff

2340 North Fort Valley Road, Flagstaff, Arizona

Cathi Borthwick & Denise Edwards: Botanical Forms

Saturday morning demo:

Cathi Borthwick: Simple 2-dimensional animals plus some leaves and flowers

Denise Edwards: Leaf and horse head in unique styles

Saturday afternoon:

Hands-on workshop. One forging station will be provided. We need other members to loan other forging stations and hand tools.

Sunday morning:

Opening reception for the AABA exhibit at the Arboretum in Flagstaff

Samples of pieces that will be demonstrated



Various animals by Cathi Borthwick



Horse and rider by Denise Edwards

- * Gates open at 8 am, demo starts at 9 am. Registration: \$10 for members,\$15 for non-members
- * Camping can be accomodated.
- * Lunch is on your own.
- * Tailgating is encouraged.
- * Bring something for show-and-tell.

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 don't need in your shop, a great book, t-shirt, hat ... something an AABA member would enjoy.

Directions to Arizona Historical Society Pioneer History Museum

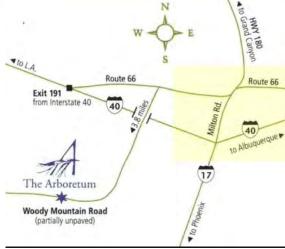
I-17 toward Flagstaff
Pass the I-40 interchange and merge onto South Milton Ave.
Just past the railroad underpass, turn left onto North Humphreys Street/ US 180, 0.6 mi.
Left on West Columbus/US 180
Follow North Fort Valley Road/US 180 1.5 mi. to 2340 North Fort Valley Road.

As always, safety glasses are required.

Reception Sunday morning at the Flagstaff Aboretum.

It will start at 10 am, there will be refreshments, a chance to see the ironwork, meet the artists, and tour the grounds





Pieh Tool 10th Anniversary Report

If you missed the 10th anniversary celebration at Pieh Tool in Camp Verde the weekned of May 11th and 12th, you missed one of the best blacksmithing events in ages. Over 110 of us didn't miss out. I was reminded of the atmosphere of the ABANA conference last summer in Rapid City, South Dakota. But this event was even better in some ways. The crowds weren't so large, and you had more opportunities to interact with the demonstrators.

Ok, you had many opportunities to interact with the demonstrators at the ABANA Conference, but the crowds were bigger and the interactions with the demonstrators were usually a bit more formal and limited. At Pieh Tool several of the demonstrators were set up in what could be best described as the midway of a blacksmithing fair. You could stroll along the midway and casually watch smiths demonstrating their skills, or you could stop for an indepth conversation with one of the demonstrators, and you might even get some hands-on experience. Amy Pieh and her staff put on a first-rate event.

The headliner was Tim Cisneros from San Francisco. (Tim, along with Brett Moten, did the rocking chair that was a highlight of the 2012 ABANA conference.)

Working in the shop at Pieh Tool, he demonstrated making various tools, mainly from H13 steel. Gordon Williams was his striker much of the weekend -- at least when he wasn't helping to support the event in a myriad other ways.

In addition to Tim Cisneros and Gordon Williams, the demonstrators included Ray Rybar, William Weatherby, Gary Smith, Fred Zweig, Valerie Ostenak, Erik LeBlanc, and Sarah Harms. Eric Wilson and Eric Chisamore provided a hands-on workshop Saturday evening on TIG welding.

One of the young smiths there, Zakary Marquez, was impressed enough to write up his experience and submit it. His report appears on page 7.

Bill Ganoe



Tim Cisneros and Gordon Williams (left)



The tools that Tim Cisneros forged during his demonstrations. He used H13 steel for most of these.



Amy Pieh (center) and her staff, Brandi Williams and Kris Howlett.



Sarah Harms, artist blacksmith and jewelry maker.



Demonstrations along the midway.



Fred Zweig, repousse and chasing coppersmith



Valery Ostenak (right), silversmith and coppersmith

Demo Report by Zakary Marquez

Since I was ten years old I have wanted to get into blacksmithing. I met Jay Griffin a couple of years ago at the Saguaro Ranch smithy and since then I have been learning a lot from him. A few months ago he encouraged me to go to Pieh Tool Co.'s 10th Anniversary, and I'm glad I listened to him.

That weekend was the first time I had ever been to Pieh Tool, and I was certainly impressed. When I walked through the door, I saw a wall covered with hammers, and behind the door was a shelf full of good books. In fact, throughout the store were many books I had never even heard of! Part of one wall was full of tongs and then there was another room filled with nothing but farrier supplies. For a beginning blacksmith like me, simply being in there was a lesson unto itself.

Except for Erik LeBlanc, who was set up out front, all the demonstrators were in back of Pieh Tool. At the main forge, Tim Cisneros showed how to make a top fuller and a hardy fuller and a very nice looking bottle opener. Gordon Williams, the Blacksmith on a Bike, was striker for Tim.

Farther back Fred Zweig showed how to hammer detailed faces and shapes on sheet copper and sheet silver using resin, processes called repousse and chasing. Valerie Ostenak, a very skilled jeweler, was letting all of us hammer copper jewelry, such as bracelets and rings. With her I made two different bracelets one made out of a copper rod, and one out of sheet copper. Talking with her, I found out that copper, a non-ferrous metal, gets harder when it's worked. To anneal copper is very different than annealing iron or steel; it is heated and then quenched in water. If that same process was used on steel it would harden it or even crack it.



Ray Rybar, master bladesmith, with Zakary Marquez (left)

Near the back was Ray Rybar, an American Bladesmith Society certified Master Bladesmith. For a couple of hours both days I talked with him and I wrote down a lot of notes. One thing I learned from him that was very important in making tools and knives is the fire; a reducing fire is more desirable than an oxidizing fire.

I learned that when forging high carbon steel oxygen is bad. It can ruin the steel and heating the metal with oxygen can make it oxidize quickly and burn it. A reducing fire is simply an oxygen starved environment. A fire in which the oxygen isn't [completely] burned is called an oxidizing fire, and a fire where the oxygen is burned and turned into carbon monoxide [and carbon dioxide, etc.] is called a reducing fire. When forging with coal, one of the most important parts of having a reducing fire is to make sure there is a thick layer of coke between the air flow and the metal. If that layer is thick enough all the oxygen will burn and be turned into carbon monoxide. To tell what type of fire you have, put a ½" by ½" bar into the fire, if it starts sparking after a while, you have an oxidizing fire. If the metal gets hot enough to forge weld, but won't burn, you have a reducing fire.

The food we had there was great too (very important for a teenager). Breakfast both days was donuts and coffee. The first day we had chicken and baked beans for lunch and for dinner we had great tasting pizza from the local pizzeria. On the second day, we had submarine sandwiches. All of it was filling and very good.

I learned a lot, met many very interesting people, and had a great time overall. I look forward to attending the next demo at Pieh Tool Co.



Erik LaBlanc, pioneer blacksmith. His wife, Cyrille, demonstrated her spinning wheel.

Changing of the Guard

With the May 2013 issue of The Anvil's Horn, Dan Jennings, the editor for the last 10 years, retired and turned the job over to Bill Ganoe. Here are some thoughts of both of these men at this time of change.

Dan Jennings, retiring editor



One of the best things about being editor is the newsletter exchange with many of the other ABANA affiliates. The affiliates have an agreement that any other affiliate newsletter can reprint any articles. It is

really fun and gratifying to see an article that appeared in the Anvil's Horn make the rounds. A few years ago Dale and Bonnie Harvey were creating some wonderful one page how-to drawings. They are still showing up in newsletters around the country.

I was really surprised to open the Tuyere (Illinois) and see the article "Dividing Circles" from a 2004 Anvil's Horn. Just last week I was having trouble remembering how to lay out a pentagon. If I had remembered this article it would have been simple. Funny thing is – the heading says "by Dan Jennings". In that same issue were articles by Doug Kluender and Michael Sobrado.

By reviewing all the newsletters from around the country it is easy to see how starved we are for new information, ideas and projects. Especially projects. When I put the Tips book together in 1998, AABA had an archive of affiliate newsletters dating back 15 years. I was able to get 291 pages of Tips, Projects, Ideas and Patterns from that steamer trunk of newsletters. I'm sure we couldn't get anywhere near that volume of new information from the last 15 years. Maybe folks aren't experimenting as much, maybe the second generation of new era blacksmiths isn't as creative, or maybe all the good stuff has already been figured out. At any rate, it's obvious that editors are finding it a more difficult to find new material to edit.

As the Anvil's Horn editor I got a lot more support from our members than other many editors get from their members. A couple times a year I receive a newsletter with multiple blank pages saying "Your article could have been here". I am grateful to all those who have contributed during the last ten years.

Editors are always looking to members for content. After all, it is supposed to be a NEWs letter. It should reflect what the members are doing with blacksmithing and what they have learned. It is easy to contribute.

Sending photos from an event is a big help. Sometimes I didn't use all the photos, but it was a great help having lots of photos to choose from. I was always looking for photos that would tell the story of what the demo was about and what we learned.

People love to see photos of your work. While we're often blown away by the work of the pros like Grizz, Brian Hughes, and Peter Sevin, I often think we're more inspired by the projects done by the novices. They create an "I could do that" kind of feeling. Send in photos of your work no matter what skill level.

Over the past several years I have attempted to create articles that explain my experience. The last one was with the single burner 12" diameter forge. I have not intended to set myself up as an expert, but just to relay my experience and hopefully create a discussion. You don't have to be an expert – just tell us your experience or add to the discussion.

I have benefitted greatly from my almost 10 years as your editor and I appreciate your support. I'll still be around and contributing to AABA.

Changeing of the Guard (continued)

Bill Ganoe, new editor



It may be trite, but the analogy is quite valid. Dan left some *big* shoes for anyone coming after him to fill, but I'm going to try to grow into those shoes. To do that I'll need the help of other AABA members in the form of ideas, articles,

photos, and suggestions. There will probably be some (many?) glitches along the way, so please bear with me.

My goals are pretty well aligned with Dan's. This is a newsletter, so the first priority is to include news of current AABA activities: demonstrations, open forges, shows, etc. Beyond that I want to show off our members' work, whether a small box, a large estate or community project, or anything in between. I also want to encourage beginners with tips, how-to articles, and examples of other novices' work.

I got hooked on this craft a few years ago when Ira Wiesenfeld let me swing a hammer at a piece of glowing steel, but I was extremely self-conscious about my technique and the simple, rough pieces that I produced. I probably wouldn't be in this spot today without having seen several examples of what other novices turned out.

As space permits and submissions come in, I would like to include material on the commercial aspects of the craft and the history and culture of blacksmithing.

If you make something that you would like to show off, take some pictures, write up a paragraph or two and send it in.

If you have some tips or techniques that you think might be of interest to other members, write it up and send it in.

Got a better way to manage a coal fire? Write it up and send it in.

Got a unique way to engage the audience during a demonstration? Write it up and send it in.

Got a better way to adjust your propane burner? Write it up and send it in.

Got a better way to organize your tools at the anvil to minimize time wasted grabbing the right tools? Write it up and send it in.

Got a better way to deal with problem clients? Write it up and send it in.

On the previous page, Dan wondered if "Maybe all the good stuff has already been figured out." Maybe it has, but if it was figured out several years ago, many of us newbies probably haven't seen those solutions. Reprinting, or rewriting, stuff from 10, 20 or more years ago might be just what a newcomer needs. If you figured out something several years ago, write it up again and send it in.

If you run into a case of writer's block or you're just not confident about your writing ability, send in a suggestion, and I'll try to work up the words and pictures to publish.

Articles, photos, drawings, suggestions, gripes? Send them by email to

editor@azblacksmiths.org

or send them by regular mail to

Bill Ganoe PO Box 40233 Tucson, AZ 85717

Thank you, Dan, for making the Anvil's Horn what it is today. I look forward to your support, expertise and advice, as a blacksmith and as a retired editor, in the future.

CALENDAR 2013

July 20 September 21 & 22 October 26 November 9

Demo Demo, Adrian Legg AABA Auction Demo, Mark Aspery AHS Pioneer History Museum Flagstaff Bill and Karen Morris Sahuaro Ranch Presidio San Agustin

Camp Verde Glendale Tucson

Coal Order

Harold Hilborn reported that "I have decided to postpone the coal order due to the lack of bulk purchases, overall interest and the cost of shipping. I have got some good prices as low as \$6.50 a 50 lb. back, but we need to buy 10 tons or half a truck and arrange for shipping. An average cost was \$4,500 to ship from Pennsylvania. It was West Virginia coal I was told. That's 40 50 lb. bags to a ton, or 400 bads for 10 tons. That would be \$11.25 a bag just for shipping and a total of \$17.75 a 50 lb. bag. Now Rob Gunter in New Mexico has high grad coal for \$12.50 a 50 lb. bag. The problem for some is that he grings his goal as he buys it in lump form. It ends up finger nail siae and fines which some people do not like. There is also the King Coal Hesperus Mine in Colorado. They will sell bulk at \$90 a ton. That would be \$3.50 for 50 lbs., but there might be rocks mixed in and it would be lump coal. They only sell October through April."

[Ed note: I could work with Rob Gunter's coal, but I have a puny little light pick up. Does anyone else have a serious truck, say an F350, that you would be willing to drive to Albuquerque for a few tons to be split between some of us? (Travel costs to be split between participants of course.) I'm in for at least a ton myself.]

Road Trip!

Follow Gordon Williams on his Blacksmith on a Bike & Mike tour from Alaska at www.blacksmithonabike.com

Just a Reminder!

If you are attending a 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.

Deadline: August 1

for the September issue of the Anvil's Horn.

Send stuff by email to: editor@azblacksmiths.org

or by regular mail to:

Bill Ganoe PO Box 40233 Tucson, AZ 85717

Welcome New Members

Cecilie Robinson, Herefordshire, UK Brad Lockhart, Pinetop, AZ

Blacksmith on a Bike

We published an article by Gordon Williams in the March 2013 issue of The Anvil's Horn about the Blacksmith on a Bike trip. Bill Heim, a reporter for the Camp Verde Bugle, dug up a lot more detail about the bicycle trip from Alaska that Gordon and his friend, Mike Allen, have begun. You can read this article at:

www.campverdebugleonline.com/main.asp?SectionID=74&SubSectionID=114&ArticleID=38340

AABA Website: www.az-blacksmiths.org

Open Forge: Tucson

Suspended until fall. Questions, comments or suggestions? Contact Harold Hilborn at Holy Hammer Ironworks, %Tuller School, 5870 E 14 St., Tucson 520-603-6723 or hhiborn@aol.com

Open Forge: Desert Rat Forge

Paul Diefenderfer will host an open forge on the second Sunday of each month (including summer months) from 9 am to noon, followed by lunch (You gotta' buy your own.) at the world famous Big Earls 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!

MCC Blacksmithing & Welding

The Mesa Comunity College blacksmithing program is on of the best deals around - over 60 hours of instruction for just under \$450 and that includes 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.

You can sign up for fall 2013 classes now. For more infor go to: www.mesacc.edu

If you try to register for any Welding Department classes on line, you might find all classes are closed (full). Contact Dan at danshammer@cox.net with the class number (time and days) of the class you'd like to take - I'll get an override number so you can sign up.

International Young Smiths

Workshop at Tannehill School of Blacksmithing at the Tannehill Ironworks State Park near Birmingham, AL, July 12 - 27, 2013.

The program includes "Tools to Make Tools", creation of a Crane sculpture, and teaching other students at the Tannehill School of Blacksmithing. If you are interested in attending or supporting this event or just getting more details, email Jay Griffin at jay@rtznj.com or call him at 623-349-1422.

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 (\$30)			Mail to: Terry Porter
Family membership (\$35)			2310 E. Melrose St.
			Gilbert, AZ 85297
Make Check Payable to AABA			

HOW TO GIVE AN EFFECTIVE BLACKSMITHING DEMONSTRATION

I may not be a particularly good blacksmith but, without sounding conceited, I do a pretty good job when demonstrating for the public. I'm no expert, but I generally draw pretty good crowds, relative to the number of people walking by, and they often stay for extended periods of time. A certain amount of that is just the natural lure of blacksmithing itself, of course, but a lot of it is due to some techniques I use to give a compelling demonstration. Since I've seen others who, in my opinion, are less effective at it, I thought I'd pass along some of the theories I've developed. Much like most of life lessons I've learned, however, they might only work for me, so be forewarned. The underlying principle behind my demonstrations is that you need to mix entertainment and education, roughly equally. Very few people, even fellow blacksmiths, will be interested in a completely dry dissertation of an arcane topic punctuated with long silences and a lot of waiting for something to heat back up. If you don't want an audience, you might as well just stay at home and avoid wasting everyone's time. Similarly, if all you do is entertain the crowd but you don't tell them anything informative about blacksmithing, then there's really not much point lugging all that heavy equipment there and back; puppets, for example, would be a lot easier on the back.

Tip #1: Vary the length of your talking points

To fall back to the somewhat unfortunate analogy of the comedy club, you'll notice that comedians don't immediately launch into a joke that takes 10 minutes to get to the punch-line, they start with short bits and oneliners. When the audience first connects with you, you need something to draw them in quickly. This might be a quick tidbit about how hot the fire is, how long it takes to boil water when you quench, how few blacksmiths there are now and how it almost disappeared altogether in the '70s, things like that, a few sentences at most. Once you have their attention, you can delve into longer, more detailed topics.

Tip #2: Have some prememorized stories

Going back to the time of Homer (not Simpson, the Greek guy who wrote the Iliad and the Odyssey), storytellers have relied on having memorized a series of short stories and lines. Doing so allows you to talk on auto-pilot while the majority of their attention is on another task, which is handy when that other task is complex or, say, capable of burning you badly. In terms of informational topics, my personal go-to set includes the principles of heattreating, the history of the North American blacksmith, the history of blacksmithing in general, layered steel, forge welding and how it compares to other forms of welding (arc, gas, solid state, V), the properties of iron, steel and various alloys, how to get started in blacksmithing, the difference between blacksmithing and farriers, why words like 'blacksmith' and 'wrought iron' came to be and what they mean, how blacksmithing changed in the 19th and 20th centuries. In terms of stories, my personal go-to set includes: why blacksmiths tap the anvil, why people hang horseshoes outside of buildings, King Arthur and the blacksmith, Mr. Huntsman and the case of industrial espionage. Your list will be different, of course, but try to know them well enough you can tell them without having to think too much about them.

Tip #3: Don't stop talking for long

I've alluded to this already, but very few people are going to find staring into the fire waiting for something to happen again to be interesting. Most demonstrations are held in places where people have an abundance of choices for things to see and do, so if you aren't holding their attention, they'll move on. You can rail all you want about the attention span of people in today's society or you can just accept it and work with it.

Tip #4: Tailor your talking points to the audience

There is no point trying to tell a 6-year old about the formation pearlite, austenite, ferrite, cementite, martensite and bainite, and telling a story about King Arthur's court to a grizzled 80-year old farmer will generally get an equally poor response. Try to know something about a variety of topics and, if in doubt, keep throwing out tidbits until you get a reaction that tells you which one your current audience finds interesting. Blacksmithing is inherently interesting to most people, odds are you'll find something.

Tip #5: Use humour

I really don't want to overemphasize this point, because the last thing you want to do is trivialize the information you are presenting, but there is almost no better way to engage an audience than to sprinkle in some humour. You aren't trying to make them laugh out loud, by any means, you just need chuckles. This should be pretty easy, they aren't expecting humour from someone holding a hammer, so you don't have to be particularly funny to get a good reaction. Trust me, or ask anyone who has had to demonstrate beside me, you can get a laugh from some pretty weak material.

Tip #6: Make something real

People want to see something impressive, not somebody repetitively doing something that looks easy. Making nails and Shooks is easy and fast, but it trivializes what we really do. Remember, there is no law saying that you have to start something new and finish it before the crowd in front of you moves on. Take a project you wanted to work on anyway and make a part of it. Ideally, bring the project with you, or at least a part of it, so that you can explain how the part you are making fits into it. This will give the audience a much more realistic idea of what your work is, how long it takes and how much effort and skill

goes into it. It helps to become a great blacksmith, which unfortunately I can't tell you how to do or I'd be one myself.

Tip #7: Do something flashy

Fair or not, making a square corner or a diagonal passthrough, or any one of a dozen difficult tasks that only other blacksmiths would appreciate, won't get you many points with most people. Making sparks fly in a forge weld, doing a twist in the vice, hitting large stock with a heavy hammer, quenching steel in water, making a knot out of steel, these things have a wow factor that will keep your audience interested. I'm not suggesting you spend your entire demonstration pandering, by any means, but sometimes you need a little sizzle with your steak.

Tip #8: Be real

Other than skill and humour, people are most engaged by sincerity. You clearly enjoy blacksmithing, as evidenced by the fact that you got up early in the morning, packed hundreds of pounds of equipment into a vehicle, drove to the site and then unpack it again, all for the privilege of demonstrating for a limited number of people and getting paid either nothing or very little. If you can convey even a part of how much you enjoy blacksmithing, your audience will connect with you. Above all, you want that connection, an audience that is rooting for you will find your jokes funny, your stories interesting, your information compelling and your prices reasonable.

Dave Brandow

Reprinted from new newsletter of the Ontario Artist Blacksmith Association, Summer 2012.

THE AMERICAN BLACKSMITH October 1902

Give a dog a bad name and hang him. If you expect poor work from the apprentice, he will probably not disappoint you. The way to bring out the best there is in a man is to show that you have high confidence in his ability.

Listen to the ideas of your apprentices. It encourages them. If they stumble on to a method of greater merit than the one you are following, do not let prejudice stand in the way of its being adopted.

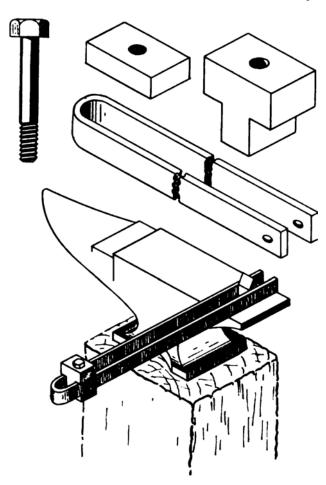
In behalf of the apprentice. blacksmith may be called the King of Mechanics, but is his attitude to the apprentice boy as favorable as the machinist or the engineer? Is there as much encouragement and as great an incentive to take up blacksmithing as other lines offer? Opinion seems to indicate otherwise. This should not be. The work may be made as attractive as other mechanical lines. The increase in the number of competent blacksmiths does not hold its own with the increase of mechanics in other lines, and we would like to see the necessary steps taken to bring about a change.



THE AMERICAN BLACKSMITH February 1921

ANVIL GAUGE

Where a blacksmith has any amount of rods or bars, etc., to cut off on the anvil hot chisel, some sort of an adjustable gauge will make the work easier. I recently



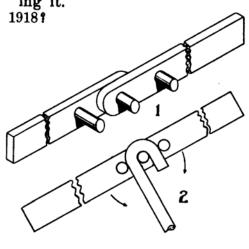
noted such a device and have made a few sketches of it which are shown here.

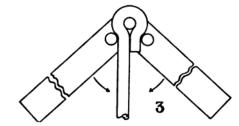
The chisel is of special height and construction and to it is attached the gauge track made of a piece of light band iron as shown. A stop with a bolt and strap complete the device.

EYE BENDING DEVICE

For making eyes in rods of small size, one can use such a home made tool as that shown in the self explanatory sketches to advantage. The tool is easy to make, being simply two lengths of flat bar stock with three suitable size pins. The size of the center or hinge pin will depend on the size the eye wanted and if desired there should be different size pins. One

can improve the idea when using it.





Gallery



Stainless steel flower by Wade Smith

The flower is shown on the cover of this issue. Here is the entire piece including the base.

Gallery



Dillon Lopez First semester class project in Dan Jennings' blacksmithing class at Mesa Comunity College.

COULD YOU EARN THE BOY SCOUT BLACKSMITHING MERIT BADGE IN 1940?

Boyd Holtan

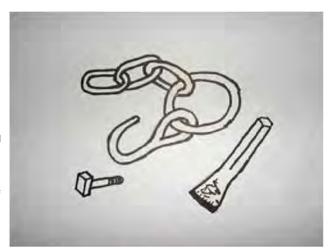
While looking through some of my books, I came across the Boy Scout Handbook* that I used in 1942. On page 414, I found the requirements to earn the Boy Scout Blacksmithing Merit Badge. I wondered how many of our current smiths could earn the badge. The requirements were listed as follows:



Blacksmithing—To obtain a Merit Badge for Blacksmithing, a Scout must:

- 1. Make an open link of 3/8 -inch stock.
- 2. Forge a chain hook out of $3/4 \times 1/2$ -inch soft steel or 3/4 -inch round iron.
- 3. Make a bolt of $\frac{1}{2}$ -inch stock.
- 4. Bend and weld three links and form them into a chain, these links to be fastened to the hook of requirement 2 by a ring, and links and ring to be made out of 3/8 -inch round iron.
- 5. Make a straight tap weld of $\frac{1}{4}$ x 1-inch stock.
- 6. Make a cold chisel out of 5/8 -inch hexagonal steel.
- 7. Temper a rock drill.
- 8. Explain how to harden and temper a cold chisel.

I didn't earn the badge, but I would be pleased with a smith who can do these requirements today. Currently. some of these skills have been incorporated into the metal working merit badge that Scouts can now work on.



*Handbook for Boys, Boy Scouts of America, Incorporated 1910, 31st Printing 1939, PP. 414-415.

Reprinted from Appalachian Blacksmith Association newsletter, September 2013

Classifieds

Classified ads are free to members and can be submitted by email to: editor@azblacksmiths.org

David Norrie Blacksmithing

School offers several different classes that focus on forging with intention, to beginners, novices, and professionals. We have a dedicated classroom space as well as 3,000 sq. ft. of shop area. Most classes are 2 1/2 day weekend workshops, and the intensive custom-designed classes are 1 week long.

We also offer simple accommoda-tions on my property for people traveling to take the classes.

David Norrie, 303-859-0770 www.forgewithintention.com

Post Vise (antique)

6" wide jaws mounted on a heavy flywheel stand \$350. T shape, blade anvil blank. 3" wide, 14" high, 24" long, AR500 (50 Rockwell), w/ stand \$250.

Dan Jennings, 480-510-3569

Will buy your unwanted blacksmith or horseshoeing tools and supplies.

Call Barry Denton, 928-442-3200 any day before 7:00 pm.

Wanted:

Hydraulic forging press. Tumbler, about the size of a 50 gallon drum.

Ira 520-742-5274 treeira@hotmail.com

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.

Contact AABA member: Terry Horne 500 E. 38th Ave. Apache Junction, AZ 857119 602-672-7085 www.arrowzonastoneworks.com

Sources

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. 690 E. 36th St., Tucson, 520-884-1554

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 website: www.barubar.com

A Copper Rose Metal Art

Chasing/Repousse Pitch Debra Montgomery www.chasers-pitch.com

MSC Industrial Supply Co.

A mail-order supplier of all kinds of industrial & metalworking tools and supplies. Get a 4500+ page catalog by calling 1-800-645-7270.

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 928-554-0700 www.piehtoolco.com

Scottsdale Farrier Supply

Mostly farrier supplies, but has hammers, tongs, and other blacksmith goodies.

NW corner of Power and Williamsfield Rd., Mesa. 480-838-4455

Full service supplier of steel, stainless, brass, aluminum, copper. 5150 S. 48th St., Phoenix 602-454-1500 3757 E. Columbia St., Tucson 520-441-5900

Brent Bailey.

A blacksmith in California specializing in custom tools and ornamental forgings for artisans. www.brentbaileyforge.com

Pacific Insulation Company

Supplier of high temp insulating matrials, bricks, Kaowool and other refractories. 215 S. 14th St., Phoenix. 602-276-1361

Blue Moon Press, Ltd.

Metalwork books, some of which are available only through them. Toll free: 1-866-627-6922 www.bluemoonpress.org

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 Address Service Requested

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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 \$30 for individuals; \$35 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



Forging a bearded viking axe from wrought iron during the May open forge at Harold Hilborn's shop in Tucson with Uhrs Chantel and Harold Hillborn.