

The Anvil's Horn

A Publication of: The Arizona Artist Blacksmith Association

Issue No. 143

March 2010



Passion Flowers by Grizz

President's Message:

Well a month has gone by with no major disasters!!

The Caleb Kullman demo went off without a hitch, a good time was had by all, and Caleb showed some great stuff.

We ended up having Nine participants in the Joinery Class with Caleb. I observed and it sure looked like everyone was having a great time and some spectacular forging was done not only by Caleb but our students too. And we were so lucky the rain cooperated with us the whole time.

The next Demo is going to be held at Oracle, Mary Ann is working hard with Michael Sobrado and John Kruger to do demos there. Also get your reservations in for the cabins at the triangle L ranch, great place to stay and near the demo too!

The April Demo just a bit outside Wilcox (OK about an hour plus) at Fred Borcherdts Ranch is going to be exciting with Lorelie Simms Demonstrating and Art Jones doing a bit of large Power hammer work and don't forget Fred, he's got something up his sleeve also!

One last note thanks to all of you who have come to the open forge at my shop, it's been some great times. March 6th we will move it to Saguaro Ranch for Agri Days. On April 3 we will be back at Grizzly Iron again, so come join us on both days.

Keep the fires hot, the hammer blows accurate and don't forget your safety glasses!

Grizz

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March Demo: March 20 and 21

Demonstrators: Michael Sobrado and John Kruger

At the Triangle L Guest Ranch In Oracle: There are rooms to rent, and camping is available for \$10.00, check out the website:

TriangleLRanch.com

Registration 9:00 am. Doors open at 8:00

Michael Sobrado (Saturday) Michael has been a blacksmith for the past 15 years and is the owner of Dragonforge Ironworks. The Dragonforge focuses on forged ornamental and structural ironwork. They specialize in furniture, fireplace accessories, and wrought iron art. He has been teaching blacksmithing for the past five years at the Mesa Arts Center and has recently opened a blacksmithing school at his shop. He also conducts demonstrations at numerous venues throughout the year including the American Heritage Festival and the Mesa Old West Days. *(See page 14 for Michael's bell article.)*



John Kruger (Sunday) is going to be teaching the correct ways to get the most out of your oxy-acetylene torch. He will be showing how to cut with precision and hold your hands and elbows to actually feel the torch and become more efficient with cutting and burning. Plus he is going to cover welding with oxyacetylene, and will share how to weld 16 gauge metal for a air tight seam to make 2 sided items to blow up.

- Lunch is on your own, there are restaurants nearby.
- Saturday evening BBQ, (bring your own meat and beverage)
- Sunday breakfast: a headcount will be taken on Saturday of who will be staying, and for \$10.00, Sharon, the owner of Triangle L will treat us to breakfast.
- Tailgating, Iron in the Hat, and Show and Tell, BRING YOUR STUFF!!!
- Bring chairs to sit on
- Bring your hammers

Ira Wiesenfeld has offered his place to anyone who would like to stay or camp there. 520-742-5274 or treeira@hotmail.com

See page 10 for more info about this event.

Directions to Triangle L Guest Ranch

From Phoenix:

US 60 East 35 miles from loop 101
Exit 221 to AZ-79 toward Florence. 58 miles
Left onto Rockcliff Bvd. 1 mile
Right onto W. Oracle Ranch Rd. 2 miles
Left onto N. Triangle L Ranch Rd.

From Tucson:

North on Oracle Rd toward Oracle Junction
AZ 77 toward Oracle.
Left on Rockcliff Rd.
Right onto W. Oracle Rd. 2 miles
Left onto N. Triangle L Rd.

January Demo Report: Caleb Kullman

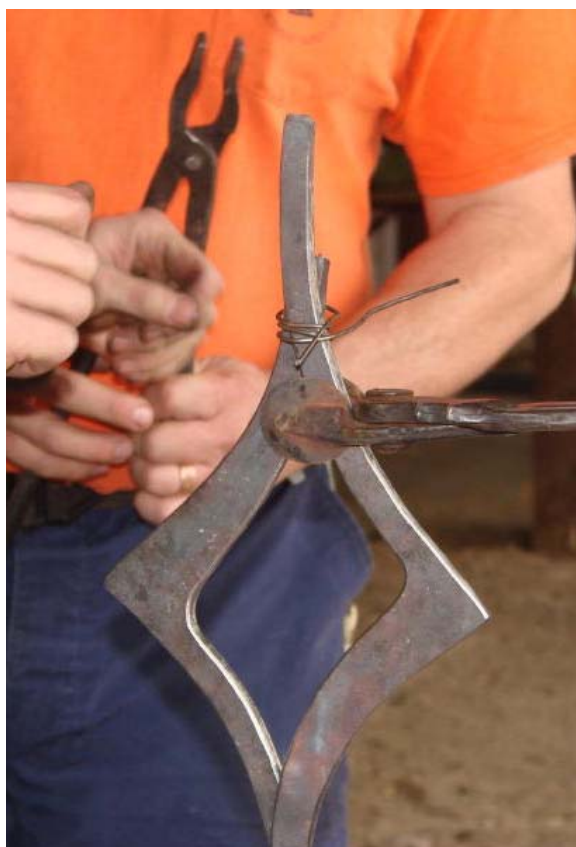
Those who attended Caleb's demo left with several new ideas to fill their bag of tricks. Many of which were so simple, we all thought, how come I haven't thought of that myself?

Throughout the weekend, it became obvious that Caleb's attention to detail is what makes him such an outstanding artist. He got each detail perfect before moving on.

Below: Clark and James spent the day expertly tending the fire for Caleb



photo by d.w. harvey



Above: Progression of the elements that make the detail.

Left: Prepping for the forge weld.

Photos by Dale Harvey and Dan Jennings



Throughout the day there was a lot of double striking going on. Here Jim Pepperyl helps Caleb



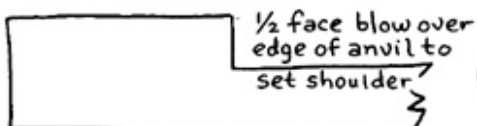
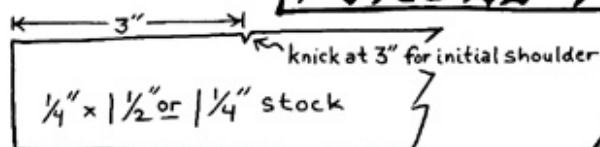
Above: Caleb forge welded some random shapes to 12 ga. sheet. Left: He selected a portion that he thought would be most interesting, centered it on the tool, and tack welded it in place. Heating with a torch, he hammered it into the form.
Below: The finished pull after masking and applying patina.

Below: Dale Harvey hard at work drawing





FORGED PICKETT

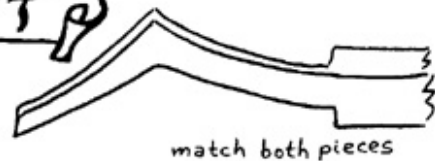
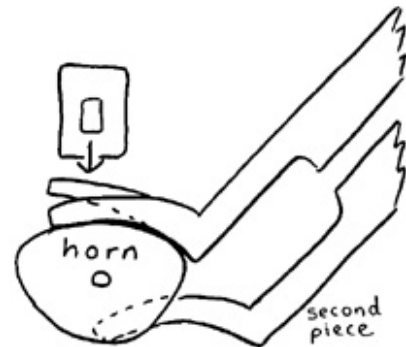
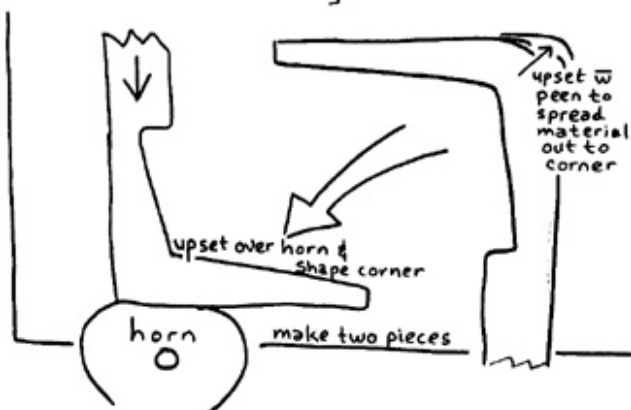


break all corners (chamfer) on all work... it looks better to have facets

draw out the material with the edge of the hammer

finishing heat (black range) with light overlapping blows to refine the grain structure of the metal for a smooth finish

bend in vise w bending fork



tack weld or wire both parts

file edges flat, then break edges (chamfer the corners)

then forge weld end



3 sided taper... scarf on 3 sides

TOP: helps to blend the metal when forging

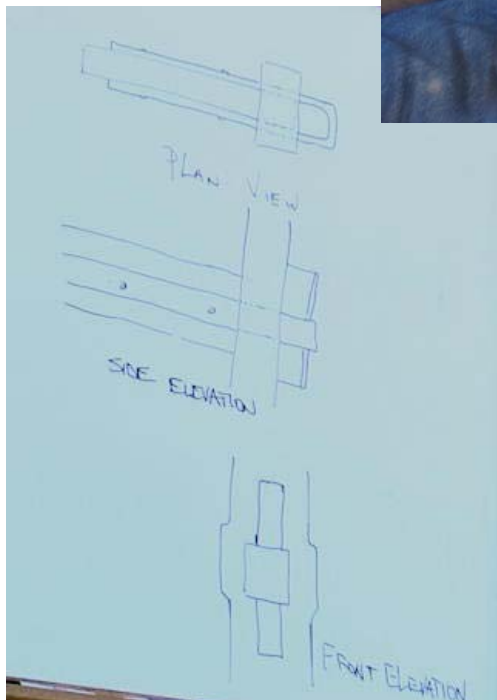
scarf and weld to 1/2" to 5/8" bar stock

illustrations by d.w. harvey
digital translation by b.m.k harvey

Caleb's 3 day workshop

Most, if not all, of us found this class challenging. We upset the center of a 1" diameter bar to make a slit and drift that did not pinch in at the drift. We practiced our forge welding techniques and learned some new ones. Most of us made a wedged tenon similar to the one in the photo. In all, it was an enjoyable 3 days spent working at the forge with a great group of classmates.

Thanks goes to Grizz who set up the workshop, supplied material and tools, and spent the 3 days making sure everything went smoothly.



Blacksmith Business Tip: Avoid Regulations

By Barry Denton

Is there anything better than getting up in the morning, going out to the shop, and not having to pay anyone a licensing fee or worrying about updating a certificate of some sort by a certain date? Think about it for a moment. If you are a carpenter, roofer, bricklayer, or contractor the state wants you to pay them a fee every year for the privilege to be self employed. Here you are the artist blacksmith and you don't have to pay any of those fees. When I look for a carpenter I look hard for one that is not licensed as they normally do better work because they don't have that license fee hanging over their head. Don't you already waste enough money on the federal, state, and local taxes? Why would you want to pay more for a useless certificate to hang on the wall? Lately I have heard some rumblings about blacksmithing associations getting involved with state legislators and talking about regulating our industry. When have state legislators ever done you any favors and what would they know about blacksmithing? Don't fall for the old baloney of, if you get a certificate from the state you will get more work or it will make you better. Just remember doctors have certificates from the state and so do real estate agents. Anyone know any bad doctors or real estate agents?

In the farrier associations they tried to feed us this legislation crap for years. The only farriers that seemed to want to be regulated by a state association were the ones that couldn't seem to make a go of it on their own. They tried to tell us that if we had a certificate or license from the state we would have more credibility with the public and could therefore increase our rates. Well, like everything else in a free market system the marketplace determines your rates. For instance, if you shoe horses in a backyard in Skull Valley, AZ you are not going to make as much as the farrier working in a professional barn in West Palm Beach, Florida. Some thought we should have a level playing field and all make the same. How un-American is that concept? Sounds like communism to me. Case in point is the teachers union. What a complete sham that is. So far, the farriers' associations have avoided these pitfalls and I hate to even see them being brought up by independent blacksmiths.

I see nothing wrong with certificates for complet-

ing courses at a school or clinic. Everyone needs rewards for achievement as long as it is voluntary and not required. I can never understand why so many are willing to give up their personal freedoms to a government. Just remember every time a new law or rule is enacted it erodes your freedom. Oh and don't forget to stand in line for your bailout money!



Barry and Laurel at The National Horseshoeing Museum & Hall of Fame in Sulphur, Oklahoma. "If you haven't been it is well worth the trip. My name is even on one of the anvils in the cross. The museum is a personal mission of my friend Lee Liles. You have never seen so many blacksmith tools in your life. Lee is quite the historian and knowledgeable about anything to do with blacksmithing & horseshoeing.

Just a side note, but Laurel and I are probably the only couple you know that were married by a blacksmith in Scotland." Barry Denton

Editorial Policy

by Dan Jennings

There seems to be some confusion about the content of the Anvil's Horn. I 'd like to set the record straight.

1. **Advertising.** We don't accept advertising. Full page, 1/2 page, or even 1/4 page ads are not allowed, by AABA BOD directive.
2. **Classified ads.** We do have classified ads for items our members would typically be interested in. Classified ads are free, we will accept non-member ads for legitimate blacksmithing tools. Please notify us when the item sells.
3. **Classes.** When space allows, we try to list the educational opportunities we think our members might be interested in. Some schools never send us info, some usually do. If you're wondering why Pima CC or MCC are not listed, it is because they don't send us a schedule. We are under no obligation to print every class schedule for any facility.
4. **Sources.** We list Sources for things unique to blacksmithing that we think our members might be interested in. If you know of a company you think should be included, let us know.
5. **Editing.** We edit articles for grammar, spelling, and clarity. Some writers appreciate the edit; some are offended. If you are one of the second group, let me know and I'll check with you before we change anything.
6. **Verification.** At times, we will verify the technical facts and may contact the writer with questions. I often go out to the shop and try the technique or project, to be sure I understand the article or drawing. In spite of my efforts, we sometimes don't get everything correct. Use your own judgment before you risk your life or well-being.
7. **Content.** Our mission is to educate, to support and notify the members of AABA activities, to report on AABA business. We like to provide motivation, inspiration and recognition. We like the Anvil's Horn to represent the efforts of AABA members as much as possible. Our education priorities are blacksmithing, "fabrismithing", metal and metal working. Low on the list: joke stories that make you groan, food recipes, and shop dog photos. We love tools, techniques and photos of your work.

8. **Errors and Omissions.** We do as much as we can, as well as we can. Sometimes we make mistakes and sometimes we don't get the information in a timely manner. If we make a mistake please let us know. We'll try to make a correction in the next issue.

Sometimes we loose things. If your article or photo(s) don't get printed, let us know that, also.

Safe Grinding Part 2

From Ron Unger

Reading Dan Jennings's article "Safer Grinding" in the "The Anvil's Horn", January 2010, started me thinking.

When I've done metal grinding, I've tried using a dust mask, plus a separate, clear plastic shield over eyeglasses in combination, but the result is condensation inside the shield limiting my vision. As a result I've had to make the choice of risking lungs or fingers. I opted for being able to see where my fingers and hands are and wore the shield without a mask. Choke, gasp,..., well you get the point.

With a planned shopping trip to Phoenix, we live in Overgaard, I emailed a bunch of questions to Dan. He answered right back. I was definitely interested in a full face respirator. Check out Grainger for best fit and check on line for other competitive deals was his advice. Get the P100 filter for grinding, he said. I ended up buying the Ov/P100 filter, which works for organic vapor as well as grinding.

CALENDAR 2010

March 6	Agri Days	Sahouro Ranch	Glendale
March 20 & 21	Demo	Triangle L Ranch	Oracle
April 3	Open Forge	Grizzly Iron	Phoenix
April 23, 24, 25	Demo Lorelei Simms	Fred Borchardt's Ranch	Wilcox
June 2-5	ABANA Conference	Agricenter International	Memphis, TN
July 17	Demo	Pioneer History Museum	Flagstaff

March Demo Mary Ann RaLoche

Folks, I want to tell you this is going to be a fun get together...Not only is Saturday going to be hands on, but so is Sunday. On each day, both Michael and John are going to take the time afterwards to let you try a hand at what you have seen. There will be plenty of work stations.

On Sunday, after we watch and learn from John, and then spend some time trying out the techniques ourselves, we are going on a field trip to an artist show just up the road, where Ken Webb is showing his work, and have a chance to see other metal artists and different medias...at: **Saddle-Brooke Mtn. View C. C.** (Tucson).

On Sunday afternoon, the ranch will be exhibiting artisans who will be showing Encaustic Painting. Also known as hot wax painting, it involves using heated medium to which coloured raw pigments are added. The molten liquid is applied to a surface. Metal tools and brushes can be used to shape the paint before it cools, or heated metal tools can be used to manipulate the wax once it has cooled onto the surface. Tools such as heat guns, and other methods of applying heat allow artists to extend the time they have to work with the material. Because wax is used as the pigment binder, encaustics can be sculpted as well as painted. Other materials can be encased or collaged into the surface, or layered, using the encaustic to adhere it to the surface.

The wax surface of an encaustic painting is a protective finish, nothing needs to be added to preserve the paintings; they will not deteriorate, or discolour. This technique can be used on metal as a finish/design.

Welcome New Members

Marty Russo	Dana Flanders
Harlan Winckler	Dante Fierros
Terrance M. McCann	Peter & Jesse Drake

Open Forge March 6

Open Forge on March 6 will be at Sahuaro Ranch to coincide with The 30th Annual Arizona Agriculture Day. See page 12 for details.

Grizzly Iron will host Open Forge On April 3. This will be a time to share ideas, bring new jigs, create something new or just shoot the bull. Come join us!

Grizzly Iron Inc. 1329 W Lincoln St. Phoenix, AZ 85007 602-716-9660 shop 602-717-1458 cell

Deadline: April 3 for the May issue of the Anvil's Horn. Earlier would be greatly appreciated. Articles, photos, notices, and ads can be emailed to: Danshammer@cox.net or mailed to AABA 2522 W. Loughlin Dr. Chandler, AZ 85224

Dues

Terry reported that we got wonderful response from the invoices we sent out. Well over half of the membership is paid up and current. This really helps make running AABA easier. To those of you who responded by sending in your dues—Thank you very much.

If you haven't sent them in, now would be a great time to do so.

AABA Website: AZ-blacksmiths.org

Starving Artist Workshop

Vern Lewis is hosting a Starving Artist Metal Class Friday March 5 8:30 am —12:00.

Learn to: Color Metal
Weld Dissimilar Metals
Plasma Cut
And more

Class size is limited, so register now
Call Chris at 602-319-7693
Class Fee \$75.00
742 E. Main St Avondale, AZ 85323

Vern Lewis Welding AABA Discount

"Vern Lewis Welding supply, inc. is happy to extend discount pricing to all members of the Arizona Artist Blacksmith Association. Discount applies to all industrial gases, welding supplies, safety equipment, and more. Vern Lewis Welding Supply, Inc has 5 locations: Phoenix, Avondale, Mesa, Wickenburg, and Prescott Valley. Delivery is available at the low price of \$8.00 per order.

For more information on Vern Lewis Welding Supply, Inc, visit us online at: www.vernlewis.com or contact Chris Perella @ 602-319-7693"

Examples of Discount pricing
Oxygen - \$12.30 (LG Cylinder)
75/25- \$39.38 " "

Pieh Tool Educational Opportunities

**Beginner/Intermediate Blacksmithing
Classes with Gordon Williams**

Mar. 19-21, 2010

Apr. 16-18, 2010

\$455 per 30 hour class. All materials and equipment are provided.

Bill Pieh Resource for Metalwork at Pieh Tool in Camp Verde, Arizona.

Contact: 928-554-0700 or

www.piehtoolco.com

Corrections:

From page 6 of the January issue:. Mary Ann would like to be sure we know that Paul Dief made the Callaway award without her assistance. Thanks to Paul.

In the January 2010 issue the caption for this photo should have read: "*First place winner in the intermediate division by John Doss and Dale Harvey.*"



AABA New Member and Membership Renewal Form

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____ Email _____
Professional blacksmith _____ Hobbyist _____ Farrier _____ Blades smith _____
Your main blacksmithing interest _____
Occupation or skill _____
Please check one:
Regular membership (\$30) _____
Family membership (\$35) _____

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

Make Check Payable to AABA

Coming Events

April 23, 24, 25

Lorelei Simms will be demonstrating at Fred Borchardt's Buckskin Ranch near Wilcox. Lorelei is the author of The Backyard Blacksmith

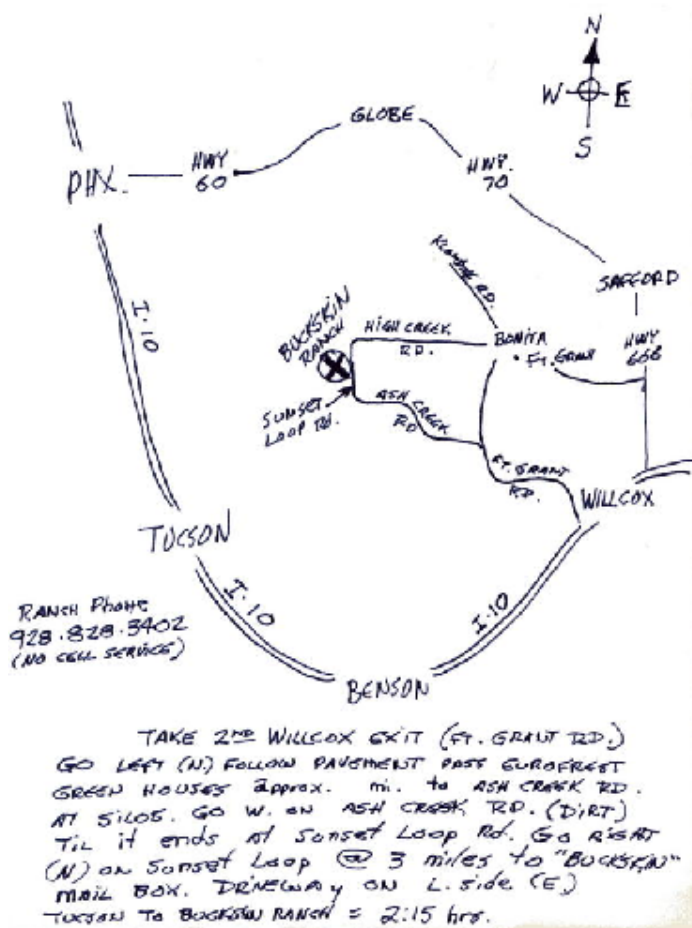
Demonstrations will start at 9:00 on Saturday, April 24, but you're welcome to come on Friday so you won't miss anything Saturday am.

Art Jones and Fred will share some of their vast knowledge also.

Camping suggested!
Accommodations are available in Wilcox.

Directions to Buckskin Ranch

"Where all the girls are pretty and all the men know how to fix stuff!"



March 6

Sahuauro Ranch 30th Annual Arizona Agriculture Day

Meet at the blacksmith shop at 9:00 am. Bring your tools and a project to demonstrate to visitors.

This is a great opportunity get some hands on experience, learn and teach.

Details about the event can be found at <http://azagday.com>

Directions to Sahauro Ranch:

From the South, West, and East:
I-10 to I-17 North (Toward Flagstaff)
Exit Dunlap. Go west to 59th Ave.
North on 59th Ave to Brown
West on Brown
Turn into the Last Library drive
make a quick right through the gate.

From the North:

I-17 to Dunlap
Same as above

April 10

Jamborama. Grizz needs 8 smiths to demonstrate and teach the metalworking merit badge metal for the Boy Scout Jamborama. The event will be at the Tumbleweed Park in Chandler on April 10 from 10 am to 9 pm.

If you would like to help out Contact Grizz . 602-716-9660 or email: grizz@grizzlyiron.com

June 2-5

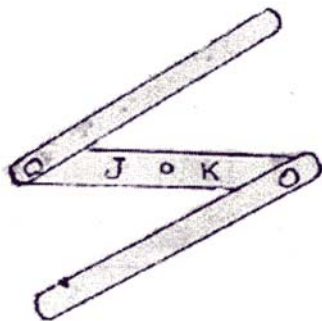
ABANA Conference Memphis, TN

Workshops, demonstrations, vendors, tailgating and fellowship with smiths from around the world.

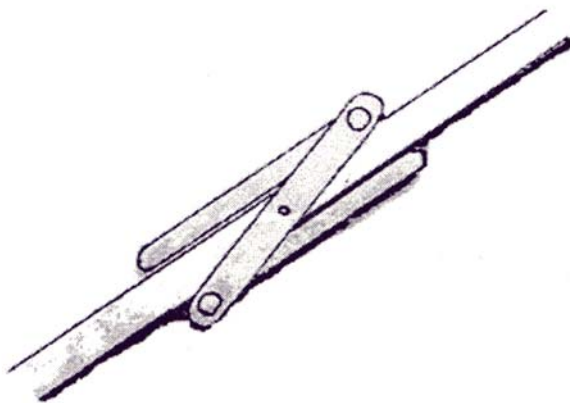
www.ABANA.org for all the information

* For your toolbox

Here is an interesting and useful tool I found in Gray Smith's shop.



What is it? It is a tool for quickly finding the center of bar stock. To use, you place the "legs" of the Z on each side of the bar and scribe, or center punch through the hole in the center section. Here it is on a length of $1/2 \times 1/2$ bar stock.



How do you make one? The two "legs" are $1/4 \times 1/4$ cold rolled stock and the "center" bar is $1/8 \times 3/8$ stock. Other sizes would work too. The parts are all about 3 inch long, but this isn't critical. Careful layout of your holes is required and I would recommend drilling on a drill press. Where do you put the holes? Well the three holes in the center section need to be on the centerline and equal distance from the center hole. The hole in each of the legs also needs to be dead center on the bar. Each of the holes is counter sunk on one side for a flat head rivet. I think the rivets are $1/8$ dia.

The rivets need to be almost tight. How do you do that? Here a trick I learned from Vance Baker. Put a piece of thin paper (cigarette paper, but any thin paper will work) between each of the pieces being riveted (cold) and complete your riveting. Then take a torch, or use the forge (over kill) and burn out the paper. This will give you just enough clearance for the parts to pivot but not be loose.

Now clean up your new tool with a file and some emery cloth. Put a light coat of paste wax on and it is ready for your toolbox. Or better yet put it to work.

Got a useful tool like this? Why not send me some information on it for a little article like this? Dave

Reprinted from The Prairie Blacksmith's Association Newsletter September 2002

Forged Bells

By Michael Sobrado

I had the good fortune to meet Ron Kinyon 6 years ago. What began with the purchase of my first power hammer (a cranky 50 Lb. Little Giant) has evolved into a great friendship. I have since sold the Little Giant to pay for my Kinyon Air Hammer that I had him build for me. We trade work and blacksmith techniques and I always learn something whenever I get to visit him at his shop.

When I was picking up material from him one day this past October I happened to see two beautiful hand-forged bells he had purchased while on a trip to Czechoslovakia. I was captivated by their sound and the elegance of their design. I was looking for some new items to add to my inventory for the 4 art shows I demonstrate at each year. I felt that the bells were a perfect addition to my collection. Little did I realize they were quite a bit of work not only in the making but in the fabrication of the tooling.

After seeing the bells and getting some insight from the “master” on how he thought they were constructed I began to reverse engineer them in my head. Ron had them out on his table because he was going to try to make some of them for himself. I called him a few days later with several more questions about them and I think he could tell that bell mania had overtaken me.

Tools and material required to make the Forged Bells:

- Power Hammer (mine is around 50 pounds of falling weight with some oomph added by the air cylinder).
- Spring Fuller for the hammer
- Anvil Die tool for the hammer
- 5/8” Spring ball-swage for the hammer
- Hand drill (for drilling holes in the tops of the bell blanks and the clappers)
- 1” pipe (bell blanks)
- 5/8” round hot rolled bar (bell clapper)
- 5/16” or 3/8” round (basic bell handle, these can be pretty much anything)

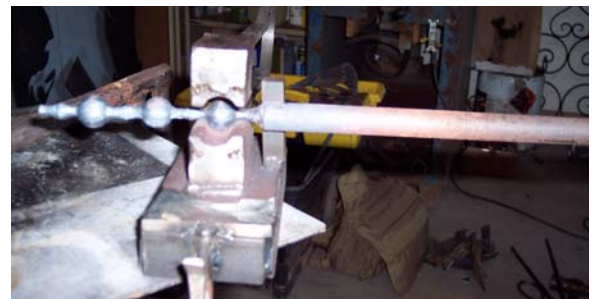
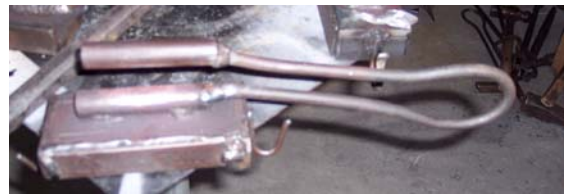
The basic process is as follows.

1. Use spring fuller to neck down pipe about 3” from end to around 1/2” in diameter.
2. Forge Bell Blanks from 1” ID pipe (1 1/4”

by .120 mechanical tube will work but some cracked open on me)

3. Forge 5/8” round solid into bell clappers with about 3/4” of material between each ball.
4. Forge 3/8” or 5/16” into handles for bell with the ends drawn down to 1/8” round by 2” long

Ron gave me the tiny tool steel anvil I needed for my power hammer in order to make my bells. It was made from a piece of high carbon steel car axle and all I needed to do was polish it, heat treat it, and attach it to a die plate for my hammer. It is made from 1 1/2” round bar, 5 3/4” long, tapers to about 1/2” round over 3 1/2”. The size of this tool will determine the maximum size of your bell. My largest bells are around 3” in diameter and a little over 3” tall.



Michael is a demonstrator at this month's demo in Oracle.



Mary Ann LaRoche

Mary Ann recently completed a several month long sculpture project for a client. Like most of Mary Ann's art, this piece is not limited to iron work. She has also incorporated ceramic, glass, jewelry, patinas, lapidary and even masonry. To see this project in more detail go to AZ-blacksmiths.org and look for the link to Mary Ann's Sculpture Project.



Member's Gallery



Sculpture by Eric Wilson



Ron Kinyon



Sarah Harms



Peter Jonasson

Anvil Stand by Doug Kluender *(Reprinted from The Anvil's Horn January 2004)*

The 3-leg anvil stand described in this article is by no means an original. There are numerous variations of this basic design. The main advantage of this design is the ample foot room below the stand that allows the Smith to approach from any side as may be required for the operation being performed. It is low cost, portable and easily fabricated; provides a solid forging platform that will find a stable position on most surfaces. Footpads provide a means of permanent mounting..

Step 1: Establish Working height. There are many theories that describe the correct working height for an anvil. For beginners, we advocate that the top of the anvil be at the height of the wrist joint.

Step 2: Anvil dimensions. Measure your anvil to determine the height and footprint. The height will be used to establish the height of the anvil stand. Footprint dimensions will determine the size of the base plate required.

Step 3: Base Plate. Obtain a 5/8" – 1" thick plate at least about 2 inches larger than the anvil base in both length and width. Many steel yards sell plates cut to standard size, i.e.: 12" x 12", 12" x 16". They are usually less expensive than having something cut to an exact size.

Step 4: Foot plates. The feet should be of sufficient surface area and thickness to prevent deformation under use. Larger feet work well on dirt or gravel surfaces. Smaller ones will suffice for concrete. They can be fitted with holes should attachment to the floor be desired.

Step 5: Legs. Use square or rectangular tube measuring at least 1-1/2 inches square. It is important to use tube with at least 3/16" (.1875") wall thickness. Pipe or round tube of appropriate wall thickness may also be used but it is more difficult to cut the angles accurately.

Step 6: Leg Layout. The legs for this anvil stand are placed at an angle of 75 degrees to vertical. The first step is to determine the length of the legs. Secure a flat drawing surface approximately 2x4 feet. This can be your workbench, layout table, shop floor, driveway or a piece of cardboard. Draw an "L" with a framing square. Extend the lines about 24 and 40 inches respectively. The short line represents the floor or ground level. The long line represents the face of the anvil above the floor. Mark the desired working height dimension on this axis and draw a line perpendicular about 18 inches long. Below this dimension line, draw a line to represent the height of the anvil and the thickness of the base plate. Draw the foot plates in at floor level. Finally, draw a line at a 75-degree angle between the bottom of the base plate and the top of the foot plate. This is the pattern for the length and angle of the legs. Cut 3 legs to match.

Step 7: Leg placement. One leg is placed under the horn on the longitudinal axis of the anvil. The remaining legs are placed under the heel of the anvil at an angle of 45 degrees to the central axis. Draw a line on the base plate representing the central axis of the anvil. Select a perpendicular edge and draw a line at 45 degrees from each corner to intersect the central axis. Center legs on these lines and weld securely. Invert, place on a flat surface and weld foot pads to the bottom of the legs.

Step 8: Secure the anvil. Place anvil atop the stand. Align and center. Cut 4 pieces of 1-1/2 x 1-1/2 x 1/4 inch angle iron. Place at each corner of the anvil base and weld to the plate (not the anvil) to keep anvil in place. Additional hold down straps or chains may be added as desired.

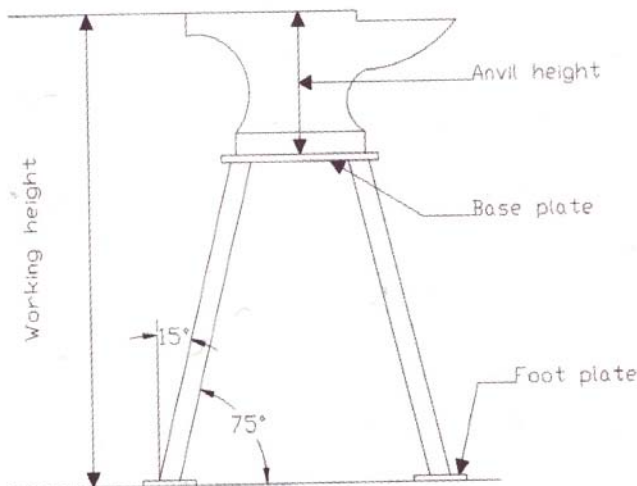
Bill of Materials:

10 feet 1-1/2 or larger square tubing. 3/16" (.1875 wall) min.

1 each base plate. 5/8 X 12 X 12 plate or other size

3 each foot plates. 3/8 X 4" diameter or other size

4 each locating tabs. 1-1/2 X 1-1/2 X 1/4 inch angle iron cut 1" long.



Classifieds

Classified ads are free to members and can be submitted by email to: danshammer@cox.net

Shop coal forge w/electric blower w/reastat plus coal. 36" x 28" \$150
Anvil, 120 lb on banded stump w/tool holder \$400
Dayton floor drill press \$50
Champion No. 400 free standing hand forge blower \$100
Champion electric forge blower \$80
Ray Brown 480-221-5373

L Brand Coke For Sale
\$22 for 50 lb Bag
S5 Tool Steel for Sale
1", 1 1/4" and 2" Round Available
12-14" Lengths. \$3 per pound
Call 602-716-9660

If anyone is interested in a side draft coal forge, but don't have the time to build your own, I would love to build one for you. Parts and labor cost will vary. Call Clark Martinek for details 602 323 4114.

35 ton C frame mechanical press. Frame only. Would make a great hydraulic forging press. \$100.00 OBO
Harold Hilborn 520-603-6723

New style Kinyon air Hammer "Mark 2". 30 Lb head weight, total hammer weighs 565 Lbs. This hammer was made to be portable, short and light weight It will run on a 3 Hp compressor. \$2900
Ron Kinyon @ 602-568-8276

Kinyon Simple Air Hammer, 75#. \$1500 OBO.
Call Peter Sevin: 602-320-2384

Sources

Rocky Mountain Smiths have videos available of their conference demonstrators. Most of these are high quality edited, multi-camera videos. For more info go to:
www.rockymountainsmiths.org

Bar U Bar Supply

The source for anvils, post vises, and other new & used blacksmith tools. Barry Denton ph 928-442-3290
email: barubarranch@gmail.com
website: www.barubar.com

IMS (formerly Capitol Metals). Full service supplier of Steel, Stainless, Brass, Aluminum, Copper. 5150 S. 48 ST. PHX. 602-454-1500

Pieh Tool Company Inc.
Blacksmith Supplies, Coal, coke, & Kasenit #1 in 1# cans,
661 Howards Road Suite J
Camp Verde, AZ 86322
888-743-4866, www.piehtoolco.com

Scottsdale Farrier Supply

Mostly farrier supplies, but has hammers, tongs and other blacksmith goodies. Ph. 480-838-4455
863 E. Baseline Rd. Tempe 85283

MSC Industrial Supply Co. is a mail-order supplier of all kinds of industrial & metalworking supplies. You can get a 4500+ page catalog by calling 1-800-645-7270.

Norm Larson Books

Sells hard to get blacksmithing and knife making books. 800-743-4766 email: larbooks@impulse.net

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 materials. Bricks, Kaowool and other refractories. 215 S. 14 St. Phoenix. 602-276-1361

Blue Moon Press, Ltd.

Metalwork books, some of which are only available through them.
Bluemoonpress.org
Toll free ph. 866-627-6922.

Vern Lewis Welding Supply,

Discount pricing for AABA members. Contact: Chris Perella @ 602-319-7693
Examples: Oxygen - \$12.30 (LG Cylinder) 75/25- \$39.38

Arizona Artist Blacksmith Association
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2522 W. Loughlin Dr.
Chandler, AZ 85224
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*Forged Bells
By Michael Sobrado.*

*Michael will be the
Demonstrator for the
March demo in Ora-
cle.*

*See page 3 for more
information about the
demo and page 14 for
more on how the bells
are made.*