

N.J.B.A. Newsletter

NJBA Volume 24, Issue 2 November, 2020

Editorial

The NJBA Board has reluctantly decided that NJBA will remain inactive at least until the next Board meeting, in January. However, the Board *also* decided to allow individual members to hold NJBA meets at their own discretion, now that the governor has lifted some of the limits on assemblies. The distinction is that the Board will not be in charge of such meets, its role being mainly to provide publicity.

If you'd like to host an NJBA event, please let us know and we'll help you as best as we can. Any NJBA member who wishes to hold an NJBA meeting *must* inform this editor -- it's not an NJBA meet unless it's publicized by NJBA. Publicity *through this newsletter* won't be possible before January (for February and beyond), but announcements may be posted (with Ryan Amos's approval) on our Reddit or Facebook sites, or, if warranted, by direct email to NJBA members. In the announcement, some statement should be included as to how the host plans to comply with the governor's executive orders -- assembly size, mask and social distancing requirement, etc.

We have not, as yet, scheduled such a meet. One Director gave it serious thought but opted not to, largely because some of the rest of us simply would not attend before we could be vaccinated against COVID-19. We're optimistic about the prospect of

hosting an event before the end of 2021.

I encourage you to stay connected with other NJBA members at [Reddit.com/r/NJBA](https://www.reddit.com/r/NJBA).

Blacksmithing Demo at Vanderveer House

Bedminster's Historic Jacobus Vanderveer House & Museum will hold its Annual Colonial Christmas Celebration on Saturday, December 5, 2020. NJBA Director Billy Barrett will be the blacksmith demonstrator. See the full-page announcement later in this issue.

Upcoming NJBA Meets

Please Check our Facebook Page or our Subreddit for Meeting Announcements. NJBA will be using these social media sites for any meetings scheduled after this newsletter is issued. (See Editorial.)

Open Forge Meets

All NJBA-sponsored open forge meets have been suspended until further notice due to the pandemic.

In normal times we would be holding open forge meets in Howell, NJ, every Monday evening, in Lambertville, NJ, every Sunday from May through October, and in Smithtown, LI, NY, Sundays on request from November through April.

Let's hope things get back to normal soon....

On-Line Blacksmith Videos

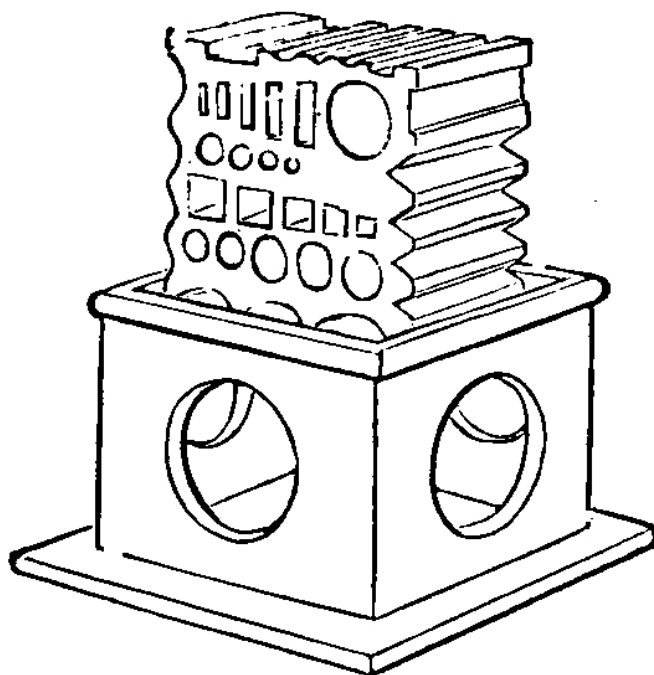
Your editor has come across a list of blacksmith-related videos to entertain and educate you during the upcoming winter months. I have not viewed many of these, for lack of time, so please let me know of any you'd recommend. You can type in or cut and paste the following URL, or simply go to [Reddit.com/r/njba](https://www.reddit.com/r/njba) and look for my "Blacksmithing Videos" posting and click on the link there.

https://docs.google.com/spreadsheets/d/1FYC0dbJlaWk6wIddDK_WIx4-gSwggoun93LLfeVnX_g/pubhtml?widget=false&chrome=false

New Jersey Blacksmiths Newsletter

NJBA Board of Directors

Ryan Amos
William Barrett
Marshall Bienstock
Larry Brown
Eric Cuper
David Ennis
Bruce Freeman
Mark Morrow
Bruce Ringier
Thomas Santomauro
Ben Suhaka
Dan Yale



We like to thank those who joined NJBA as Business Members:
Marshall Bienstock



Blacksmith Coal and Coke Available to NJBA Members

NJBA purchased ten tons of “nut” coal of good analysis. In addition to our using it for our demonstrations, this coal will be available for purchase by NJBA members at 20¢ per pound, on a bring-your-own-bag and bag-it-yourself, honor-system basis. The coal is located across the drive from the larger door to Marshall’s pole barn, formerly the site of the coke pile. We still have some coke available at the same price, *behind* this same bin. (Walk around by the path to the left of the bin, but watch for poison ivy.) Plastic bags of at least 3-mil thickness are recommended. (A spring balance, *not legal for trade*, has been mounted beside the bin for your convenience in *estimating only*.) Please inquire of Marshall Bienstock for more information and to make payment.

NJBA’s Official Address

NJBA, P.O. Box 224
Farmingdale, NJ 07727-9998

NJBA’s Website:

<http://www.njblacksmiths.org>

NJBA Newsletter:

Will be found on our website (above). Look for “Current Newsletter” and/or “Newsletter Archive.”

NJBA’s Facebook Page:

<https://www.facebook.com/njblacksmiths/>

NJBA’s IForgeIron subforum:

Scroll down at <https://www.iforgeiron.com/>.

NJBA’s subreddit:

[Reddit.com/r/NJBA](https://www.reddit.com/r/NJBA)

You can get a free Reddit account and post questions, links, pictures or whatever here.

New Jersey Blacksmiths Newsletter

Report on the October 12 Virtual Board Meeting

In attendance, by telephone, were NJBA Directors Ben Suhaka, Bruce Freeman, Bruce Ringier, Larry Brown, Marshall Bienstock, Ryan Amos, Tom Santomauro, and Dan Yale

Forging Stations. The Board discussed NJBA's six lightweight forging stations. Bruce Freeman reiterated that we still need to decide how these toolboxes are to be used, specifically whether each toolbox should have duplicate tools for multiple smiths at open forge meets, or a variety of tools for demonstrators. He reported we still need three more lightweight blowers and at least one decent file (aside from the farriers' rasps) in each toolbox, and to replace one missing chisel.

Rail Anvils. Larry has made progress on the rough cutting the heavy rails for anvils:



Gas Forge Workshop. Bruce Freeman reported that he was still awaiting photos of Mark's prototype gas forge before he could update the plans. He also reported his thoughts about holding a workshop to build the forge designed by David Hammer instead. He has made no real progress on his "bean can forge" using a Bunsen burner. He pointed out that he will not be attending any in-person events before the availability of a vaccine.

Social Media. Ryan reported no progress on updating the website with an information & interactive site. The website remains informational only. The newsletter index still link needs to be updated. He doesn't think deleting the original Facebook page is a good idea — people contact us through there. The Facebook group is growing in size. (up to 36 now). The NJBA subreddit has seen a little activity.

The next board meeting was set for Jan 11, 2021.

Election Results. There were very few ballots submitted. All Directors were reelected.

Upcoming Events. All upcoming events have been cancelled. Bruce Ringier expressed interested in running an open forge this year, but ultimately decided against doing so, at least until the spring. The proposed Sept. 2020 EJOT Picnic And Tailgate Sale (in lieu of the former Red Mill event) was cancelled by EJOT, and no Director has volunteered to run the event in 2021, so the matter was tabled.

Reopening NJBA. Ryan does not think we are ready to reopen yet, as the virus is still not under control and winter may worsen the pandemic. However, a motion to remove the prohibition on NJBA events (events to be held at the discretion of the event handler for legal compliance and safety) was passed.



Rules for Participation in NJBA Hands-On Events

These rules apply to workshops, open forge meets, demonstrations with hands-on components, etc.

1. Participation in NJBA-sponsored hands-on events is limited to adults (i.e., 18 years or older). This rule was effected as of December 4, 2016.

(Note: This policy **does not apply** to open forge meets and similar events *that are sponsored or co-sponsored* by youth-oriented organizations such as scouts, 4H groups, schools or other venues, including the Holcombe-Jimison Blacksmith Shop.)

2. Workshops are open only to NJBA members, but nonmembers may join by paying dues when they register.
3. All workshop fees are due upon registering. Any materials fee is not refundable. A workshop fee is refundable only if your place in the workshop is filled by another person.
4. If you only want to watch the workshop, the fee is half the listed workshop fee.
5. Workshops are intended for the purpose of teaching certain skills and/or completing certain projects, and are subject to the authority of the workshop leader or instructor. Accordingly (as per a vote of the NJBA Board on Jan. 28, 2018.):

- ♦ The participant shall work *only* on the project at hand and not on any other projects, *without exception*. (Note: Any NJBA member may attend an NJBA open forge meeting to work on his own project.)
- ♦ Every participant will be required to follow the instructions of the workshop leader, especially any instructions pertaining to safety, or he may be ejected.
- ♦ A person who has a history of failure to follow instructions may be refused admission to any workshop, at the sole discretion of the workshop leader.

New Jersey Blacksmiths Newsletter



The Mastermyr Find Reproductions - *Rediscovered!*

Many of you may remember the Mastermyr Find Project, the brainchild of former NJBA Director Andy Vida-Szucs (who now resides in WV). The "Mastermyr Find" is a Viking-age tool chest that was found in Mastermyr on the island of Gotland, Sweden, in 1936. More than 200 objects were found in and around it. Most are tools that were used by blacksmiths and carpenters, and are described in detail in the book, *The Mastermyr Find: A Viking Age Tool Chest from Gotland*.

Many years ago, a discussion of these tools on the ABANA user group, theForge, led to the suggestion that the artifacts be duplicated by modern blacksmiths -- and this feat was pulled off! NJBA Director Larry Brown was one of several contributors of artifacts. The Mastermyr Find reproductions were displayed

many years ago at an NJBA meet (<https://www.njblacksmiths.org/textmeets/myr04.htm>), and have since been displayed at various ABANA meets around the country.

However, after the ABANA Conference of 2018, in Virginia, the collection "disappeared." Daniel Kretchmar of East Bethel, Minnesota, a participant of theForge got concerned and inquired of the group where the collection might be. Rob Fertner, of Wichita, KS, responded to the inquiry, contacted ABANA President Leigh Morell, ultimately leading to the collections being located in the ABANA trailer at the new Johnstown ABANA site. The collection is reportedly intact, safe, and undamaged and ABANA is developing a plan to exhibit it again. Rob suggested an exhibition tour around the country while waiting for gallery space to be completed at the new ABANA headquarters. An Exhibition Committee is working on it.

**Bedminster's Historic
Jacobus Vanderveer House & Museum**



**Join Us for Our Annual
Colonial Christmas
Celebration!**

Saturday, December 5, 2020

Colonial Christmas Market

12:00 PM – 4:00 PM

Holiday Fare, Festive Music, Santa Photos, Colonial Market,
Historic Demonstrations, Virtual Tour of the Jacobus Vanderveer House

Admission: \$20 per family, \$10 per individual

To purchase tickets and to learn more about our
virtual and in person programming visit

www.jvanderveerhouse.org or scan our QR Code.

Liberty Tree Lighting

4:00 PM – 5:30 PM

Holiday Refreshments, Holiday Music

Tree Lighting at 5:00 PM

“What the Holidays Mean to Me” Contest Winner Presentation

Free to the community beginning at 4:00 PM.



All events will be COVID compliant. Show off your festive holiday mask!

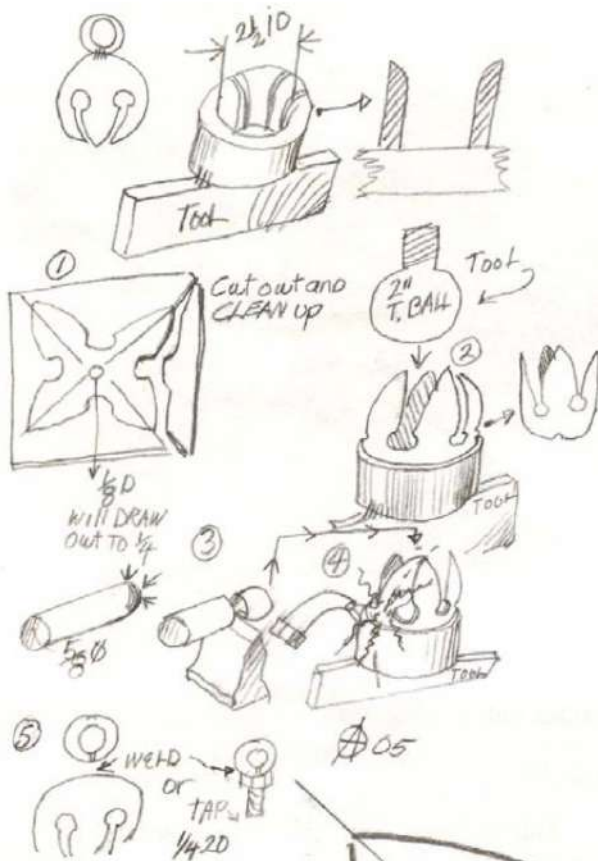
For more information please visit www.jvanderveerhouse.org.

P.O. Box 723 • 3055 River Road, Bedminster, NJ 07921 • (908) 396-6053 • www.jvanderveerhouse.org

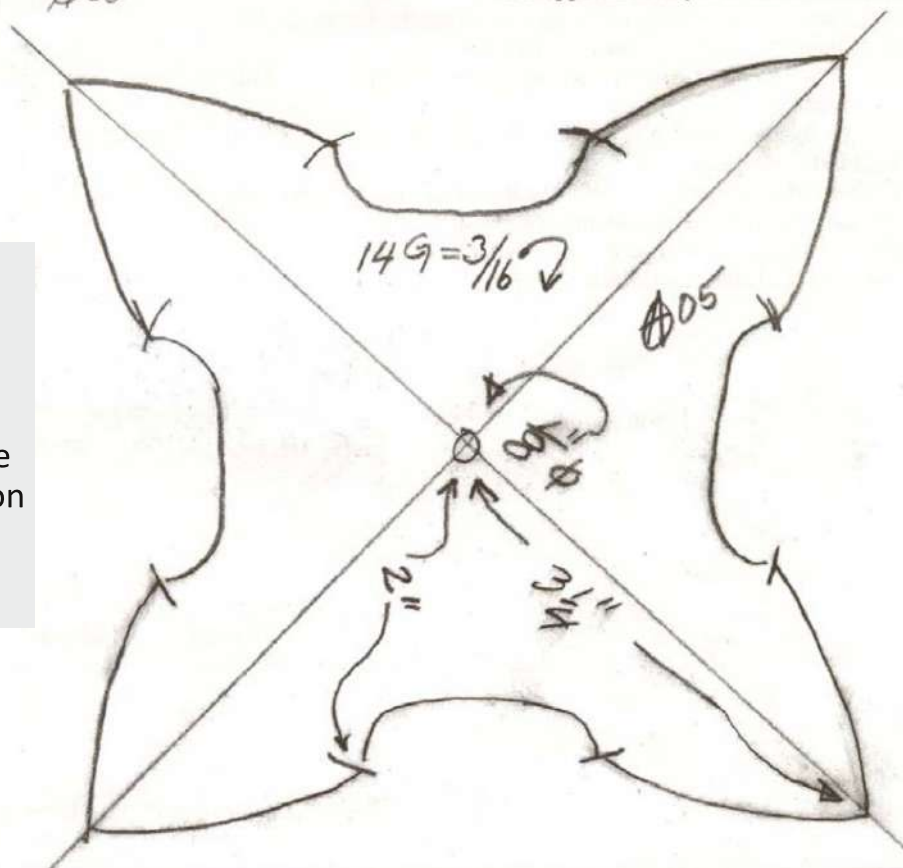
Projects

Jingle Bells, Jingle Bells, Jingle all the way...

by Steve Alling



Full size pattern
for approximately a 2" diameter bell.



Editors note:
Precut blanks are
available from
Stoney Point forge

and Black Bear Forge
has a good tutorial on
YouTube

THE UPSETTER

NEWSLETTER OF THE MICHIGAN ARTIST BLACKSMITH'S ASSOCIATION

NOV-DEC 2005

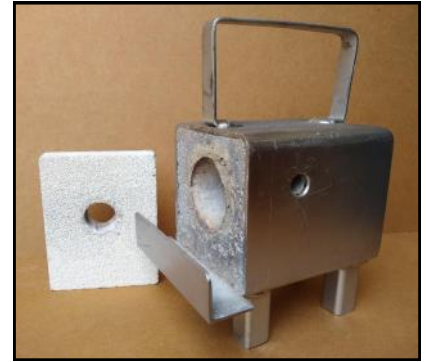
11

Reprinted from The Upsetter, Newsletter of the Michigan Artist Blacksmith's Association,
Nov 2005

Small but Mighty by Randy Palluch



Randy came up with an idea to design a compact forge because he was making small items and wanted a faster and more efficient way to heat parts. He was originally using just a propane torch which worked, but it took longer and there was a lot of heat loss. Randy used this forge to heat the rivets for the Greene County Poor House cemetery cross project and it worked perfectly! Randy uses a Bernzomatic 8000 torch with this forge, which fits perfectly.



General Fabrication:

To start with, he used a 5 1/2" by 3/16" walled steel tubing about 6" long. The back plate on the forge was made out of 1/8" plate welded to the back. He added four 1" X 1/8" X 2" long legs. To secure the forge to a surface, he placed two 1/2" square nuts press fitted into the front tubing feet which is more than adequate. The burner hole is a round 5/8" hole, 13/16" above center, 1 7/8" back from front of the tubing. This is to create a turbulent swirl flow pattern. These are **critical**

measurements. The door holder is 1 1/4" X 1 1/4" X 1/8" angle for the door support. (Make sure you attach this door angle **AFTER** you pour the refractory!) Handle is 3/4" X 1/8" bent to shape.

Photo Right: Note angle and placement of 5/8" pin, important location.

Preparation for casting refractory material:

Take a piece of 2" plastic PVC pipe which is 2 3/8" OD, about 12" long so you can handle it comfortably. Close one end with a 2 1/4" ball bearing or a rubber ball of similar size secured to pipe with epoxy. Place forge on its back and put a 1" shim on the bottom. Take a 1 1/8" shim and place on the side where the feet are (true bottom of forge). Set pipe with ball in forge vertically and push to wall. Clamp pipe to side with the burner hole making sure it is against the 1 1/8" bottom shim. Drill the 5/8" hole using the burner hole as a guide halfway through the pipe. Remove shims, clean inside of forge box thoroughly and place a 5/8" pin through burner pole to secure pipe. Randy recommends using Vaseline on the pipe and pin to keep refractory material for sticking to facilitate removal.

Contact Randy for information
call or text 412-200-0952
dograndy@comcast.net

How to cast:

Randy used a powdered high temperature refractory material and mixed it according to directions. Amazon is a good supply source. After mixing, add the refractory, pour slowly and tap on the sides of the forge to prevent voids such as bubbles. Let set, remove pin and pipe, then allow to cure according to directions. The process may take several days.



Fabricate the door using light weight insulation brick approximately 1 1/8" thick, cut from a bigger block. Randy made his door 4 1/2" X 5 1/2" with the 1 1/8" hole 3 1/8" from the bottom of the 5 1/2" side and centered on the 4 1/2" side. That puts the hole at the very top of the opening. You can cut the brick on a band saw. This configuration site of the hole allows for placement of the opening to use various areas of the forge.

Add an Interior Ceramic Coating:

Cera Materials is one supplier Randy used. The purpose of the coating is it reflects infrared heat, forge performs efficiently, and it is good to 2300°. Apply to forge and door according to directions. After curing the recommended allotted time, make sure you break in the furnace gradually by placing a 150 watt incandescent bulb in the forge for several hours.



Above photo shows how the PVC pipe, attached ball and 5/8" pin sit inside forge for casting step.

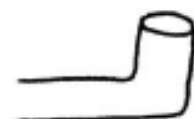
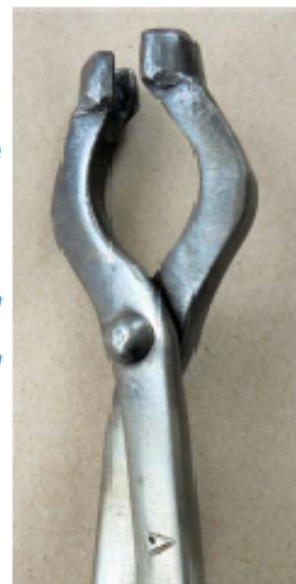
My Favorite Tongs

By Steve Anderson, a MABA member

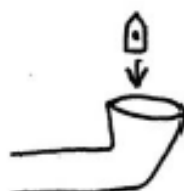
My Favorite Tongs are a unique design which allows forging a larger bit with less work to draw out the reins. They are extremely versatile and their light weight makes them feel like an extension of your hand.

Stock Size	Stock Length (2X*)	Rivet Size	Bit Drill Size
3/8" round	11" (22")	3/16"	3/16" or 1/4"
7/16" round	12" (24")	1/4"	3/8"
1/2" round	13" (26")	1/4"	7/16" or 1/2"

*cut the stock twice as long and forge bits on both ends, then cut in center to avoid having to use tongs.



Bend the stock up 90 degrees. Bending 3/4" of an inch for 3/8" stock and 1 inch for other dimensions.

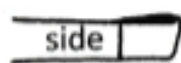


Upset.

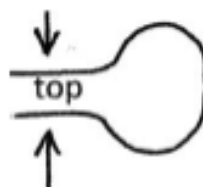


Square up bit ends.

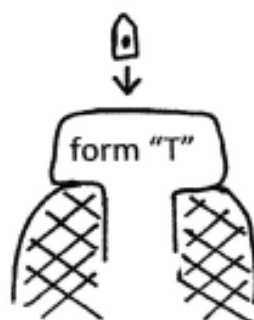
Repeat upset and square steps to drive bit end further down to almost as thick as stock, keeping it square.



Forge upset down to stock thickness at welding heat.

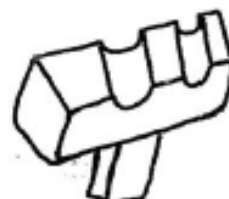


Slightly flatten sides.



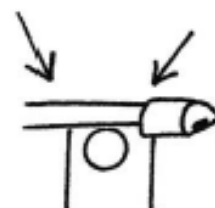
form "T"

Form "T" in post vise, then square ends on anvil.



Round the bits in a swage.

Drive a 1/4" rod into the ends to form a groove.



Form an arch by hitting alternately on both sides of the horn NOT on top.



Spread pivot point with ball pein, and then re-flatten.



Draw out reins to length and align as shown above.

Slit and drift rivet holes and drill to size.

Assemble with a temporary bolt and set bits, offsetting them as shown.



Grind bits to match, and then hold in vise just behind the pivot with a thin spacer. Hold bits together with vise grips and drill hole for bit size from chart.

File groove in bits to taper back and soften edges.



Reset bits if necessary, finish with a file, and rivet.

Hold odd shapes easily and function as pass through tongs.



Hold any shape of stock firmly.



Works well as bolt tongs.



Excellent for forging rings and chain making.



Two pair can be used as bending forks.



COVID-19 for the Saltfork Gate Project

By Russell Bartling



The Finished COVID-19 Project

This project was kind of a spur of the moment attempt at making an entry for the Saltfork Gate Project. Given the current focus of the entire world on the COVID-19 pandemic, it seems to be a relevant subject. I doubt that the actual virus looks anything like what I made here but I tried to stay true to the first image that I remember which seemed to be everywhere when the pandemic concerns were mainstream news. I guess this is my interpretation of an artist's interpretation of the real virus.

This isn't really the type of project I am normally drawn to, so it was a little different approach overall for me. I started out with only a general idea and not too much planning (other than it had to fit in the standard 10" diameter gate ring.)

I started with the ball, or body, of the virus. I wanted it to be a little heavier than it probably needed to be, and I found the material I had on hand was either too thin or too thick to satisfy me. I found a scrap of 3" pipe that was perfect for the purpose with a little more than 3/16" wall. It was even better since the inside of the pipe was heavily pitted and corroded. I thought that texture would be nice for the outside surface and save me a lot of work trying to artificial-

ly create that texture. I knew I would lose a lot of it during dishing, but I hoped with careful heat and hammering, I could keep a lot of it.

I marked the pipe for cutting to length and then cutting in half to get two equal squares after flattening. They turned out to be 4 3/4" square. The two



The Scrap Pipe Used for the Virus Body

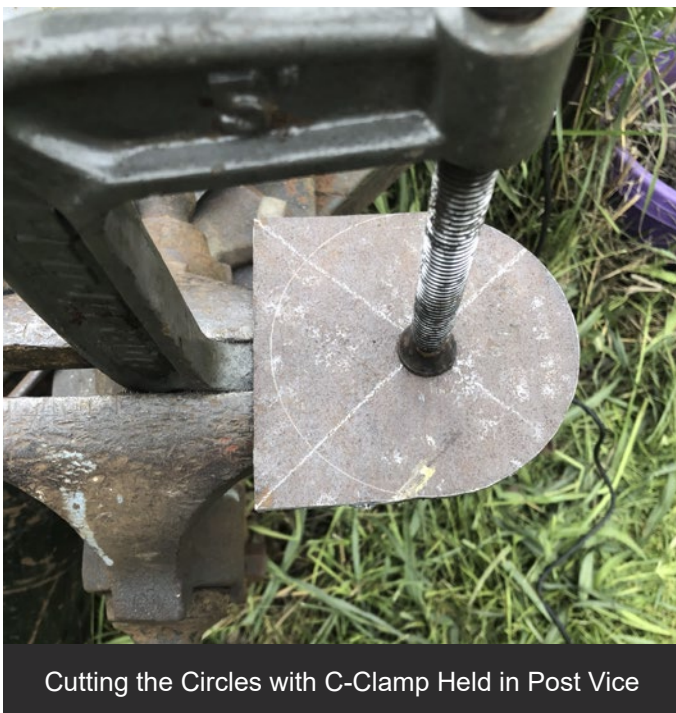


The Pipe Cut in Half for Flattening

cut halves were no problem to flatten cold. After flattening, I marked out the circumference on each one and cut. I did all the cutting with a 4 1/2" angle grinder which worked very well. I was careful to keep both circles as close to the same dimensions as practical since I wanted to minimize any variations that could come back to haunt me later when joining both halves.



Flattening the Pipe Halves to Make Material for Dishing



Cutting the Circles with C-Clamp Held in Post Vice

I used a C-clamp held in an outside post vice to hold the material for cutting the circles. Then I



The Circles Ready for Dishing - Outside Face Up

made a quick first pass at dishing cold just to get a start. The Saltfork Swage Block was a tremendous asset for this dishing process. I found that two dish forms in the block worked perfectly for the size I was after. I used a regular ball pein hammer to start the dishing process.



First Pass of Dishing with the Saltfork Swage Block

On the following passes of dishing, I heated the halves in the coal forge and started sinking in the larger form on the Swage block. I started hammering from the center of the dish and worked outward in a spiral pattern until I could feel the dish start to bottom out in the large form. Then I switched to the

smaller form which was a closer match to the final radius of the ball. It took about three passes working hot from the center out until I got the two halves dished deep enough to make a true sphere. I used more than one heat in some cases and tried to true up any irregularities at the end of each pass to keep as much order as I could.

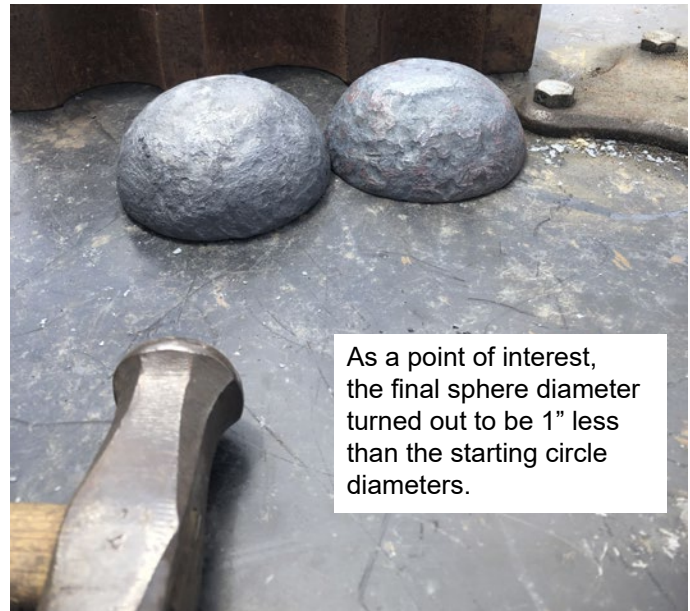


First Pass of Dishing with Heat



Second Pass of Dishing with Heat

As the dishes got deeper, I used a deeper rounding hammer to get into the center and I matched each half to make the diameters line up. By keeping symmetry all along the process, it only took minor adjustments to get a good match at the end.



As a point of interest, the final sphere diameter turned out to be 1" less than the starting circle diameters.

Final Pass on the Left, Right Half Needs More Dishing

The next process was to make the "spikes" for the virus. I used 3/8" rod and forged a small head structure with a rounded neck. Everything was done by eye and I tried very hard not to over think it. I specifically tried to remind myself not to overdo it on the finish. I wanted to make each one a little rough and keep some hammer marks. I wanted to keep and organic feel and show enough imperfections to make it look right.

I wasn't sure how many spikes I would need and estimated around 24 should be close. I forged 26 to have a couple of extras (actually 27 if you count the one that fell into some kind of space-time vortex in the coal fire and was never seen again.)



The Forged "Spikes"

I started to forge small tenons on the base of the spikes so they could be riveted to the sphere but I ended up grinding them later.

For placing the spikes, I again tried to keep it somewhat random and tried to avoid too much regularity. Although the underlying placement was based on a fairly regular spacing. I ended up using 11 spikes on each half. I marked the locations by eye and drilled the mounting holes on the drill press.



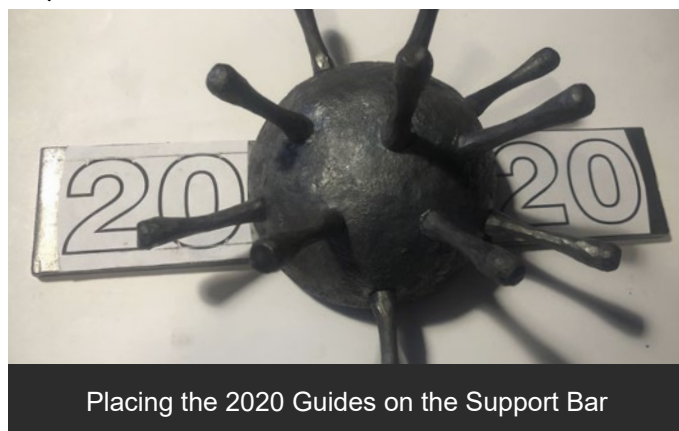
I riveted the first few spikes as planned but quickly realized that it was very hard to keep them placed while riveting. Due to the irregularities (which I wanted) it made each spike sit better in a specific orientation. I ended up changing my approach and just oxy-acetylene welding the spike bases inside the spheres with a torch instead of peining with a hammer. That approach worked much better and really seemed to be just as fast. The first two or three welds looked terrible and then they started looking just a little better. Or maybe it was just that I had on clear safety glasses and forgot to grab the tinted welding goggles. I welded all of the spikes in place prior to moving on to the support bar that secures the virus body to the gate project ring.



In hindsight, I wish I had given a little more attention to seating the spikes a little tighter against the spheres. A few of the spikes have a small gap which I really should have addressed.

In making the support bar, I wanted to have the year, 2020 included. That is so that many years from now anyone who has no clue what this thing is will hopefully connect the 2020 to the pandemic and maybe figure it out.

I used 1/4"x2" flat bar for the material. Again, I knew I was making more work for myself than was probably necessary but I wanted it to be sturdy in the ring. I started by finding a good font that I thought would lend itself to cutting around and printing two "20's" to place on the bar. I secured them with common rubber cement (a trick from Ernie Dorrell) which holds well, dries fast, but is fairly easy to remove when done.



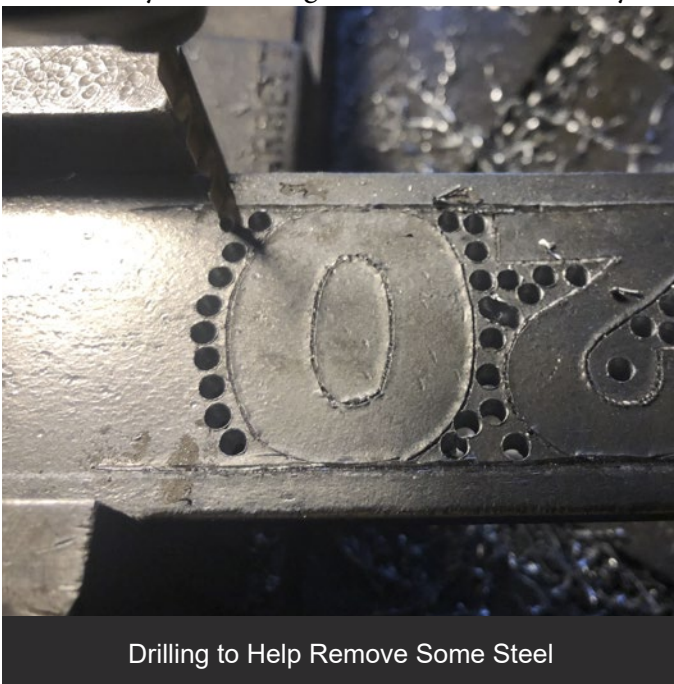
With the 2020 in place, I chiseled a guide mark around each number and removed the paper guides. That is when the real work of this part actually started.



The 2020 Marked and Ready for Cutting

I started by drilling around the numbers to remove as much material as I could by drilling and chiseling. I used a small drill bit (I think it was about 3/32") for most of it and used a larger drill bit for the inside curves where could. After drilling, it was fairly easy to chisel out the webbing between drilled holes and remove large sections of the bar.

Choosing the drill bit size is a compromise. The smaller the drill, the closer you can get to the work and deeper into inside corners. But you have to drill more holes. Drilling seems tedious but machinists say that drilling is the most efficient way to



Drilling to Help Remove Some Steel

remove material. So get a sharp bit and don't think about it too much. Just "drill baby drill!" I also made a couple of cuts on each end with the angle grinder. Then started chiseling. Once the material was removed, the final step here was to use various files to smooth everything up.



The Drilling Done and a Couple of Cuts on Each End



Most of the Waste Material Chiseled Out of the Way



The Support Bar After Filing

I cut notches in to the inside edge of each sphere half to sandwich around the support bar and then made adjustments until everything mated up well.



The Support Bar Resting in the Notches

Before welding the halves together, I used a slightly domed support from the hammer end of a large drift pin and placed my touchmark on one of the sphere halves (heating the spot with the torch.) I chose to torch weld the sphere halves together because the torch was already out and ready to go and I thought it would also make a better blend with the other textures. I clamped the halves together with a C-clamp and used bailing wire for the filler rod.



The Two Halves Welded Together

Since I didn't want the weld to show up, I wanted to make it match the rough texture of the sphere as closely as I could. I heated the completed weld with the torch up to just below welding heat and lightly peined all over with a small ball pein hammer.



The Weld After Peining (To Hide It)

The final step was to weld the support bar to the standard ring provided for the gate project. This was also done with the torch.



The Support Bar Torch Welded to the Gate Ring

I held off applying a finish for now since the project will be welded to the gate assembly.

I hope you find something helpful in this write up. (Maybe what NOT to do?) Or I at least hope you were entertained. - Russell

Forging the Ball Nail

A Habermann Architectural Element

Justin Buonanoma, Reno

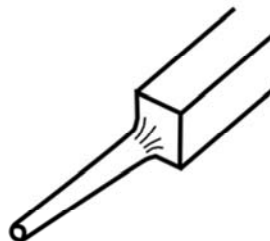
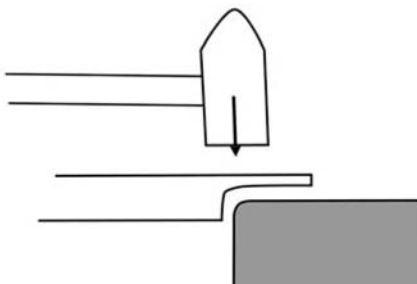
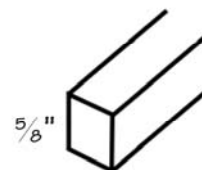
Last year I was awarded a CBA grant to study in the Czech Republic and Italy. For the CBA magazine I would like to share a small element that I learned to forge with Josef Habermann and his apprentice/co-worker Lukas Zadrazil.

Forged balls are a signature element that the Habermanns incorporate often in their work as a decorative spacer or, in this case, as a fastener. Small forged elements like this can really take a project to the next level.

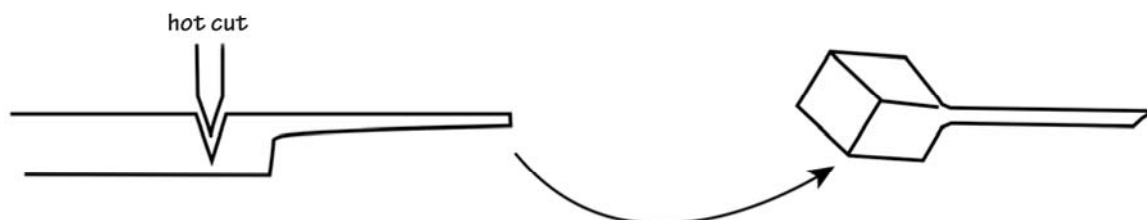


Clearly the blacksmith can forge these to a size of choice. These instructions are given to illustrate a ball nail that has about a $\frac{3}{4}$ " diameter ball with a spike 2" to 2 $\frac{1}{2}$ " long, $\frac{3}{16}$ " diameter.

1. Start with $\frac{5}{8}$ " square stock. Choose larger or smaller square stock as desired.

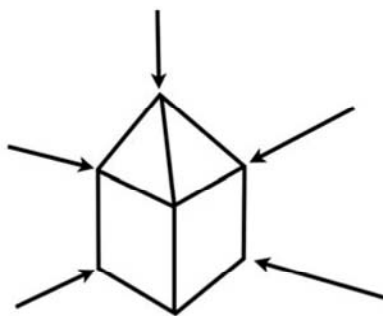


2. Draw off approximately $\frac{1}{2}$ " of the material for the nail portion utilizing half-face blows on the edge of the anvil and a hit-turn technique to keep the spike even.
3. You may choose to leave the nail shank square or forge it round.



Forging the Ball Nail

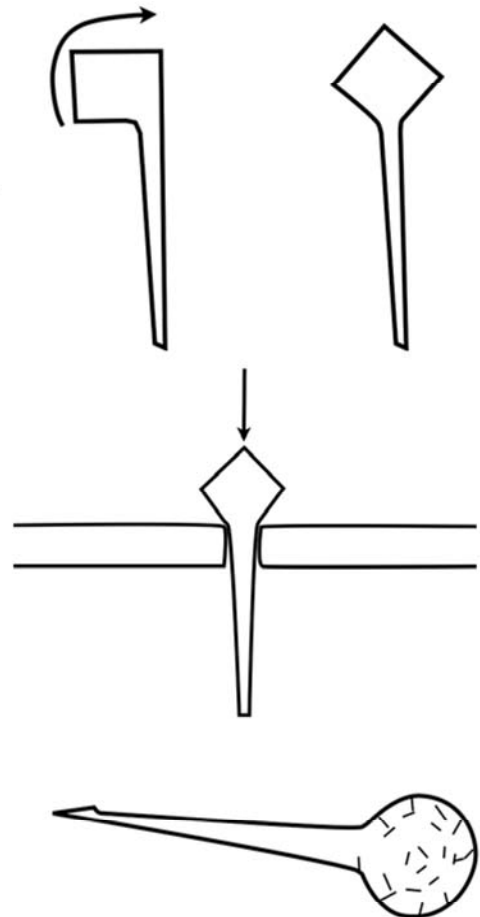
4. Measure $\frac{5}{8}$ " back from the shoulder that you have created and hot cut toward the corner opposite of where the nail end is attached.
5. Rotate the mass for the ball so that it is in line with the shank.
6. Begin forging the square mass into a ball by knocking down the corners and creating smaller and smaller facets. Square, Octagon, Round.



S-O-R

Utilize a bolster plate to help support the ball head and to create a sharp transition between the ball and shank.

7. You may also choose to leave the ball heavily faceted or smooth. Hot cut the spike to the desired length.



Use the ball nail as a decorative fastener for hooks, brackets, railings and beyond. To use, drive in like a nail with a pre-drilled hole, or peen the end over like a rivet.

I want to thank the California Blacksmith Association, Dennis Dusek and Beth Holmberg for the grant. It was an excellent learning opportunity. This article describes only one of a number of techniques that I learned while visiting in the Czech Republic.

I demonstrated this technique at the CBA Spring Conference in Placerville.



Combined Form

Subscription Renewal (\$10/year)

Membership (\$20/year for New Members Only*),

Volunteering

Mail completed form, along with check for any amount due, to the above address.

Name _____

Address _____

City, State, Zip _____

Phone Number(s): _____

Email address _____

Your correct Email address is *essential* if you don't care to pay \$10 extra for a mailed Newsletter! Please Print Clearly!

***Note: Current members owe no dues for the 2020-2021 dues year.**

My check is enclosed: ☐ \$20 (*new* regular membership dues), or

☐ \$40 (*new* business membership dues)

For printed Newsletters: ☐ **\$10 subscription fee** (for paper copies of Newsletter)

NJBA Volunteers List

"Please put my name on the list of potential volunteers:" **(Circle all that apply.)**

Availability:

Saturdays

Sundays

Weekdays

Blacksmithing Experience:

Novice

Intermediate

Experienced

Professional

Interests:

Demonstrating

Coaching Novices

Assisting at Workshops

Reporting on Events

Photographing Events

Video Recording Events

Contributing Material to the Newsletter

Contributing Material to the Social Media

Moderating Social Media

Managing Website

Other: _____

Other Experience:

Welder

Fabricator

Other Metalwork Writer

Editor

Photographer

Videographer

Facebook Contributor

IForgeIron Contributor

Website Manager

Other: _____