



N.J.B.A.

NJBA Volume 27, Issue 1 04/18/24

<http://www.njblacksmiths.org>

Upcoming Events

Walnford day - Information this page

Editor change

I have decided to start doing the newsletter again. I did it for many years and had to stop a few years ago for family reasons. I am hoping to get four issues out a year as we used to. So far this is the first for this year, oh well.

NJBA future

In the past I was acting chairman and editor. I have dropped the chairman position. **We need someone to step up and take this position.**

It is not a lot of work, but I don't want or think I should have to do all both jobs. Bruce Freeman is acting as treasurer and membership, our agent to the State and the insurance companies and has been for years. Marshall runs open forge meets nearly weekly (with help from Tom Santomauro and Mark Morrow) and has opened his shop to run numerous events since the beginning of NJBA, and in addition ran the recent Princeton University open forge meet. So basically at this point there are three of us holding the organization together, and none of us are spring chickens.

We need to have members step up if we want NJBA to continue. Just because others have been doing it doesn't mean that they have the jobs for life. When NJBA started there more people wanting to be involved and the work load was much lighter. A few mem-

bers stepping up to help can keep NJBA here. It cannot always be expected that someone else will do it or that everything should be free. Sometimes you have to work to make thing happen. Years ago we held more meets and workshops because people were involved in making the events happen.

Being involved can be rewarding!

**Missing Chairman!
This could be you**

Time To Renew Your Membership!

Vote For Directors!

The last page of this issue has the renewal form and the nominations for director.

Please fill them in and return with your check to the address on the form and help keep NJBA operating.

Continued on page 3

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NJBA's Website:

<http://www.njblacksmiths.org>

NJBA's Facebook Page:

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

Open Forge Meets

Anyone 18 years or older is welcome to try their hand one time at our open forge meets. NJBA members may participate any time the forge is open. (The application form is on the last page of this newsletter)

Monday Night Open Forge, Howell, NJ
NJBA Director Marshall Bienstock hosts an open forge meet every Monday evening at 7 PM, except major holidays. (Please call ahead on holidays to make sure the forge will be open.) 732-221-3015

Participation in Hands-On Events

Participation in NJBA-sponsored hands-on events is limited to adults (i.e., 18 years or older).

This rule was effected as of December 2016, when NJBA was having problems with its insurance coverage (which has since replaced). This policy applies to workshops, open forge meets, demonstrations, etc.

This policy does not apply to open forge meets and similar events that are sponsored by youth-oriented organizations such as scouts or schools with the aid of NJBA equipment and members.

NJBA Newsletter:

njblacksmiths.org/archive/index.htm

or use the link on the NJBA web site for the current newsletter.

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Meet at Walnford Park

May 19th, 2024, 11:00-5:00

We will be demonstrating and holding a membership meeting at Walnford Park on May 21st. We have decided to bring one forge though if more interest is shown we may bring more. This is a meet at a nice location and with a forge setup members should be able to swing a hammer and do some forging.

Walnford is also known as Crosswicks Creek Park and is in Upper Freehold, N.J. Please come out especially with your family to enjoy a day at the hidden jewel of the Monmouth County Park system - Walnford park. We are usually immediately across from the working gristmill. There are many activities for children so this is another great family event.

Historic Walnford is the 36 acre Historic District at the heart of Crosswick Creek Park. This country estate and former mill village provides a window to view more than a century of social, technological, and environmental history in Western Monmouth County. The site includes a large home built for the Waln Family in 1774, an 1879 Carriage House, and assorted outbuildings and farm structures. Much of the site's interpretation is connected to the newly restored and operating late 19th century Gristmill.

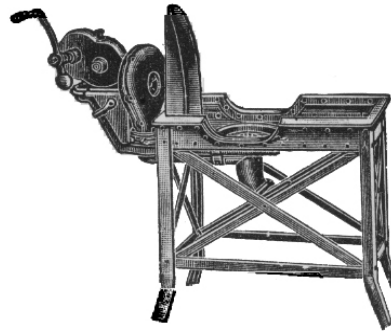
Directions

Directions: Please note: If you choose to do an internet search for directions to this address, be aware that the parking lot on site is not accessible from the Walnford Rd/Hill Rd intersection.

Directions below.

From the East Via I-195: Take Exit 11 (Imlaystown/Cox's Corner) and turn left onto Rt.43 (Imlaystown/Hightstown Rd). At the first intersection, turn right onto Rt. 526/Red Valley Rd. At the first light, turn left onto Sharon

Station Rd and follow approximately 2 miles. Turn right onto Rt. 539 North. Travel a short distance and turn left onto Holmes Mills Rd. Make first right onto Walnford Road which leads directly into the park. From the West: Follow I-195 to Exit 8 (Allentown), Rt. 524/539. Turn right and follow Rt. 539 through Allentown. Turn right onto Holmes Mills Rd and then right onto Walnford Rd, which leads directly into the park. From the North: Take Rt. 9, 79, or 34S to 537W to Rt. 539 in Upper Freehold. Turn right onto Rt. 539 (Forked River Rd), then left onto Burlington Path Rd. Turn right onto Holmes Mills Rd and then left onto Walnford Rd, which leads directly into the park.



Princeton University

Once again we're being asked to hold an open forge meet at Princeton, proposed dated Saturday, Oct. 5.

To carry this off we need at least a couple people to meet at Marshalls farm sometime on the Friday to help load our portable equipment about six smiths to help set up the equipment in Princeton, and work the fires on the Saturday (about 10 am - 5 pm). Then to help load the equipment for the return to Marshall's farm, and at least a couple to help unload the van and put away the equipment.

We need volunteers to step up for us to do this event. Contact Bruce Freeman or Marshall.

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David Bridenbaugh

AABA, Anvil's horn

I learned about these bolt flowers from the July 2018 newsletter for the Saltfork Craftsmen Artist Blacksmith Association in Oklahoma. These are made with 5/8 bolts but any size will work. A 5/8 bolt will not fit in a 5/8 pritchel hole since it expands when it is hot. I used a thick plate with a 3/4 hole over the hardy hole. Start with a chisel and cut from the middle of each flat side, through the center to the opposite side. The center should be a shallow cut and the ends almost all the way down. The points will be for the petals. Use a center punch first then work up through larger sizes of ball punches. If you start with a large ball punch it will be easy to get off center. Clean it with a wire brush on a bench grinder and finish it with linseed oil, Rust Oleum clear or whatever your favorite coating might be.



Black Cold Wax Finish

By Steve Alling, a MABA Member

I have been using this finish for 40 years. It is a nice way to get the kind of finish you get with hot wax. In that finish you apply a wax to your very hot iron causing it to darken. When it cools you use a fine grit sandpaper to bring out the highlights by sanding down to the bare metal then you apply a protective coat of wax cold.

In this finish I take Johnson's Paste Floor Wax or similar floor wax melt it and add carbon black. I bought my carbon black years ago and I am sure that source is out of business, but I looked on the internet and there are many sources to purchase it. Carbon black is a black powder the consistency of talcum powder. A little bit goes a long way. It has been so long since I made my last batch I don't recall how much I added to the can. You will have to experiment.

So how it works is bring your work up to a bright finish by vinegar or wire brushing or both, applying the blackened paste wax with a brush. The brush I have used all these years is a one inch round stiff bristle brush meant for cleaning auto parts. Wear rubber gloves.

After the wax is applied wait for the solvents to evaporate and then with a rag buff the surface up. It gives a very nice contrast finish that is good for indoor projects.

When melting these waxes, they have a flammable solvent so you need to be careful. It is best done in a pan of water. Keep the lid handy and if it does catch fire, you can pop the lid on and put it out. Over time the solvent may leak out of your can, but it can be rejuvenated with oil base paint thinner.

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Discussion on Picket Tenons

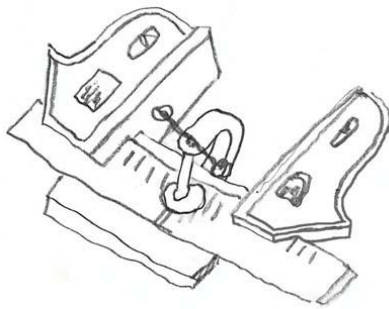
By Steve Alling, a MABA member for 46 years!

The other evening one of the new smiths was asking about pickets and tenons because he was going to build his first railing. So, I thought maybe we would go over a few points. We have had this in the newsletter years ago but here it is for the new guys. (Using the newsletter archive, please see the November-December 2016 Upsetter for a Picket Gauge article.)

In Francis Whitaker's *The Blacksmith's Cookbook*, he suggests using a picket gauge and of course Francis being Francis he made his out of a solid bar by flattening the ends, bending them up 90 degrees so that between the flats was the length of his picket. He then notched each end to accept the tenon.

Steve being Steve, I thought, I wonder if a couple of adjustable squares clamped together would work as well. Francis is probably turning over in his grave. But it did work fine.

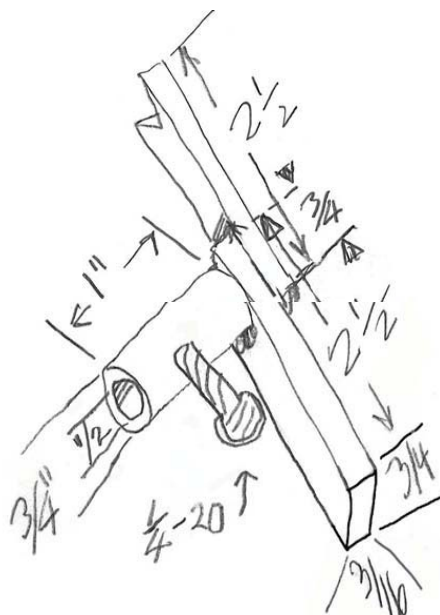
And this system worked fine for years until I made a design for a little garden fence and gate with radial pickets and a semi-circular top and bottom rails. I could not get the curvature on the rails to be symmetrical. So, this meant of course all the pickets on one side would naturally be a different length but also now on the far side too. I laid my square tenon tool on top of the two rails and flushed the faces of the squares with the inside of the rails. I thought if I had some tabs on the faces, I could be assured they were



flush. And then I said to myself this is just getting too Mickey mousey and I went ahead and made the parts you see in the drawing.

The barrels in the tenon tool are bushings from the tractor supply store but they are not stocked in the hardware section but are in the area where the plow and cultivator replacement blades are. The stop for the pipe comes from the tractor store too, but it is stocked where the pulleys and pillow blocks are. One thing to remember when welding this up is the two arms need to be straight and 90 degrees to the barrel.

The problem I ran into with the adjustable square set up was on the second shoulder. I had a terrible time getting it started in the right spot. The marks were hard to see when the metal was hot and it was hard to line up and get a few blows in to get the shoulder started. I needed a positive stop. So as you can see in the drawing this worked wonderfully. You place the one already finished shoulder against one end of the picket gauge with the stop and the piece of pipe already in place. Slide it up tight against the other side, remove the pipe, heat the area of the tenon, replace the pipe and push it into the tenon tool. A few blows to establish the shoulder, remove the picket, let the pipe

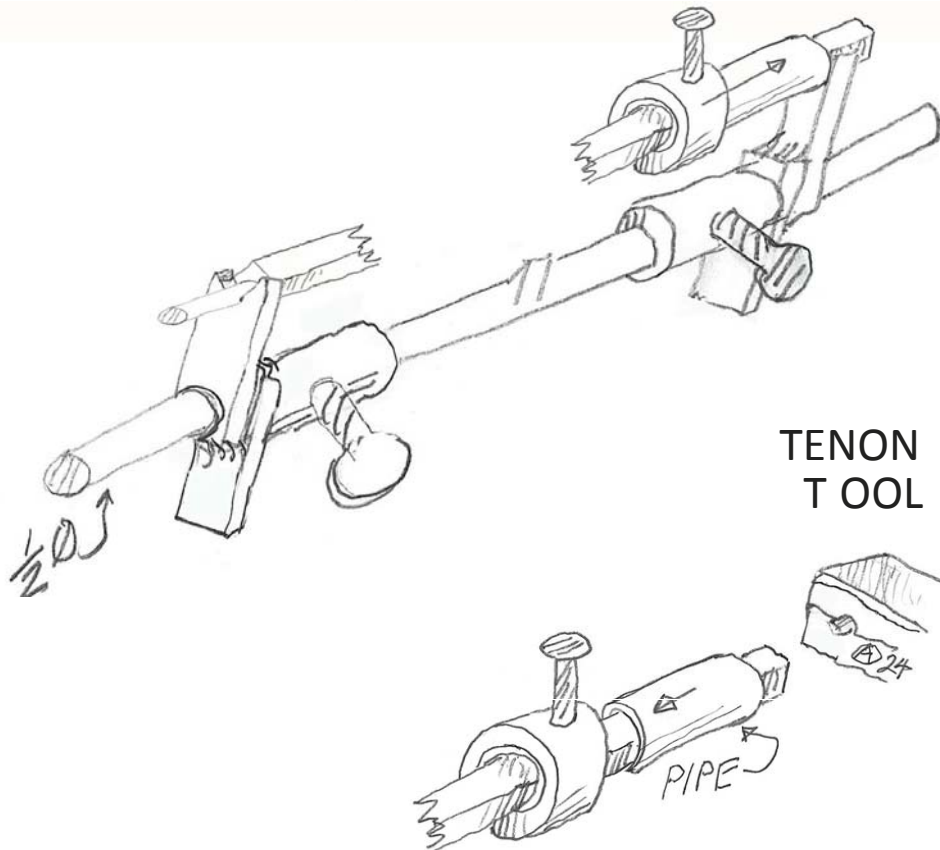
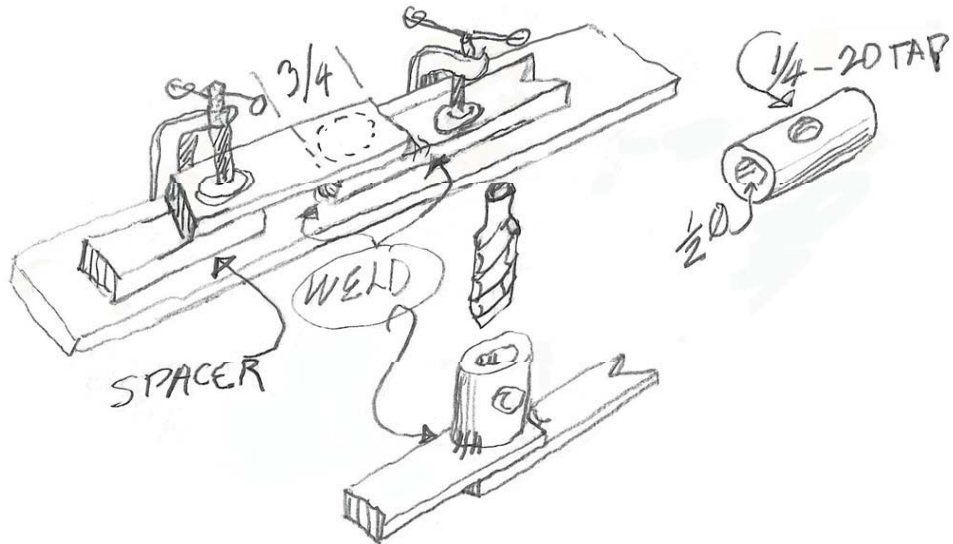


which is now hot, slide off on to the floor. Because you have a shoulder already established now you can go ahead with your tenon. I find this method leaves

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the picket a tiny bit long which is perfect because you will be monkey-tooling the shoulders square.

BLACKSMITH ASSOCIATION
MARCH-APRIL 2024



THE UPSETTER NEWSLETTER OF THE MICHIGAN
ARTIST

MENTORING CENTER DEMONSTRATION: **Mark Manley: Forging Processes with a Treadle Hammer**



Photography by Dan Bowyer

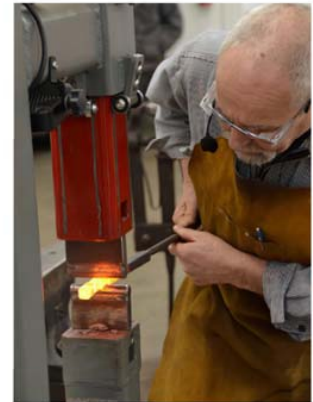
Curious about a Treadle Hammer and whether or not it is worth the investment? NWBA was fortunate to have Mark Manley join us as January's Mentoring Center Demonstrator to address that very question. Mark is a highly respected blacksmith and instructor who owns "Manley Metal Works" located in Bandon, OR.

Mark has built several Treadle Hammers and brought along one of the hammers to use during his demonstration titled "Forging Processes with a Treadle Hammer." The treadle hammer featured a 75lb head which Mark indicated worked well for his projects.

Clearly, each piece of shop equipment has its place and it depends on the work you wish to accomplish and personal work preference. Mark often works alone in his shop and has found that the treadle hammer does a lot of work that normally would be done by a striker. In essence, the treadle hammer is his second set of hands freeing him to use one hand for holding tools with ease while the other is managing the hot metal.

Mark appreciates the versatility of the treadle hammer and uses it for detail work such as punching, cutting, repoussé or chase as well as general project work.

As an example, Mark had found punching holes using an anvil to be problematic for him and found that he has better control and results with the treadle hammer.



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MARK MANLEY



During the Mentoring Center Demo several types of top and bottom dies were shown which can be switched out pending the task to allow greater versatility of the hammer.

The treadle hammer is operated with foot action which may take a tad of practice. As a safety reminder, NEVER use a hand to hold a tool under the hammer. Mark generally uses vice grips to hold his tools.

be posted on the NWBA YouTube Channel at a later date.

Monthly Mentoring Sessions are generally the third Saturday of each month starting at 9:00 a.m. followed by Open Forge time from 1:00-4:00 p.m. The NWBA Mentoring Center is located at the Cowlitz County Expo Center/Fairgrounds; 1900 7th Avenue, Longview, WA. The events are open to all current NWBA members. A \$20 admission fee is charged to assist with program expenses. Watch our NWBA website for upcoming sessions and plan to attend a future session. Generally, the demonstrations are also livestreamed for those unable to attend in person.



Throughout the demonstration Mark shared tips and techniques for forging processes with the treadle hammer. He also emphasized the value of the treadle hammer including:

- Saves physical energy
- Saves time
- Assists in efficiency of each heat
- Leads to accuracy /better control as both hands are free to hold/manipulate the metal being worked
- Provides controlled heavy blows
- Provides greater versatility.

Thank you Mark for most informative demonstration. A copy of the demonstration will



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NICHOLAS DOWNING

Making a Pipe Tomahawk, Traditional Techniques



"Few other implements have ever combined so many different functions: tool, weapon, scepter, symbol and smoking pipe. In this one instrument is collected the lore of handicraft, warfare, prestige, ceremony and personal comfort."

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I love axes - it borders on the obsessive. North, South, East or West, miniscule or massive, there is just something uniquely appealing about this ubiquitous cutting implement. Among my favorites is the American pipe tomahawk. The evolution of the tomahawk is worthy of an article in itself, but seeing as this is written for blacksmiths more than history buffs, I will restrain myself (mostly).

It is lost to the annals of history who or where the first blacksmith wed an iron pipe bowl to a small trade axe, but the design became immensely popular with whites and natives alike. Highly ornate examples were sometimes presented to powerful chiefs as diplomatic gifts. The symbolism inherent in these "Presentation Tomahawks" certainly wouldn't have been lost on their recipients. When deciding how to handle the onslaught of European colonists, the original inhabitants of this land could choose the 'pipe of peace' or the 'axe of war'.

Perhaps Harold L. Peterson summed it up best in his book *The American Indian Tomahawk*: "The metal trade tomahawk has long been an object of fascination for both the amateur collector and the ethnologist. Few other implements have ever combined so many different functions: tool, weapon, scepter, symbol and smoking pipe. In this one instrument is collected the lore of handicraft, warfare, prestige, ceremony and personal comfort."

As far as making a pipe tomahawk, there are nearly as many ways to put one together as there are styles. Some of the finest examples were probably made by the highly skilled gunsmiths of the day so it comes as no surprise that the starting stock was a cast off piece of heavy walled tube cut from a disused rifle barrel. In his Fall 2023 'Hammer's Blow' Article Todd Elder describes using a piece of schedule 80 Pipe as the starting material for a pipe 'hawk.

My own first attempt a decade or so ago was made from a railroad spike. I was reasonably happy with it at the time, but it didn't quite scratch the itch.

First off, it was very small- the scant $\frac{3}{4}$ " spike

yielded a bowl about the size of a sewing thimble and the eye was only about $\frac{5}{8}$ " wide across the cheek. But even more than that, the experimental archeologist in me really wanted to use the material available to the colonial blacksmith- wrought iron.

I assume most of us know the properties of wrought iron well enough that I need not delve into them too deeply here. I will say however that not all wrought iron is suitable for this intricate of a forging. While folding and re-welding can often help, some wrought will just not cooperate no matter how much one attempts to refine it. (Guess how I know?!)

While one-piece 'hawks with a punched and drifted eye were made, (like the gun-barrel example given above), I believe it was as, if not more, common for colonial era smiths to start with a skelp (flat bar) of wrought doubled back on itself and forge-welded to form the eye and blade, and then the pipe bowl was attached by some other means. This method has the advantage in my opinion, because one doesn't end up with short grain on the back of the eye. Also in my experience it is easier to end up with a taller eye, which is advantageous from a purely functional standpoint: taller eye means more metal-to-wood contact and thus a stronger connection of head to haft. For more about that see Russell Pope's great article on old claw hammers in the Winter 2023 issue of the NEB newsletter.

Naturally the first part of making a pipe hawk with an applied bowl is to make the axehead itself. After some trial (and plenty of error), not to mention an auspicious conversation with Jay Close of Colonial Williamsburg, I have two methods for forming a wrought iron tomahawk eye by the wrap-and-weld-method that is free (or nearly so) of cold shuts (the bane of any smith whose every tried to make a wrapped and welded axe).

The first method involves making a small shoulder on both sides of the preform such that when the two sides come together to form the blade there's a little more 'meat' to press together to insure a good bond. This method works better

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still if you pre-bend and upset the shoulders so that even before you've taken your first welding heat the pre-form has a nice teardrop shaped eye and the seam is flat and flush from edge to eye. This method can be used in both a symmetrical (think forming a butterfly hinge) and an asymmetrical situation (think forming a strap hinge).

The second method is to insert a wedge shaped



piece of iron at the front of the eye, the wide end of the wedge faces the eye and the narrow end towards the edge. Again, the idea is that there is a little more meat to squash in pursuit of thorough and tight weld. This wedge can be very thin, if you want a teardrop shaped eye, or somewhat thicker if you want an oval eye. It is also helpful to fuller

the iron wedge at its wide end prior to insertion, if it is an oval eye you are after.

With either method it is helpful to hot rasp, bright file, or grind down to bare metal all the mating surfaces prior to welding, and much care should be taken to have a deep, clean fire. Heat the workpiece slowly so that both sides come up to temperature evenly. When you deem the piece is ready, remove it from the fire and quickly deliver several light quick blows as close to the front of the eye as possible. Reheat and repeat.

A quick note about steeling: Many tomahawks were not steeled. The spear pointed "spoon" 'hawks, and the "Missouri War axe" types were almost never steeled, (the latter generally weren't even sharpened!). Many if not most of the later western types were also rarely steeled. If you are planning on adding a hardenable steel bit to your 'hawk, it can be handy to make a steep scarf on the inside of both edges prior to wrapping (this is assuming you're doing the symmetrical wrap). Once the blade is welded there remains a cleft into which you can inlay your bit steel, no chiseling required.

Now, onto the bowl! You could of course turn one on a lathe or drill out a short piece of round iron, in period no doubt some were made this way. Personally, those methods didn't square well with my, albeit, idealistic frontier fantasy. I wanted to see if I could make the whole thing with only the most basic of tools- those I deemed widely available to colonial era smiths. So I forged my bowl as close to the finished shape as possible, hole included. To accomplish this, start with a high quality piece of wrought iron or refining some (by folding and re-welding a couple/few times) and then hammer out a bar about 3/16-1/4" thick, 2-3" wide and at least 3" long.

Next, steeply chamfer the edges so they are a little over 90°. (You're making a cross section like a short, wide trapezoid rather than a rectangle.)

This will mitigate against the iron's tendency to deflect when rolled into a tube. The inside of the tube will necessarily compress and the outside will stretch. Pre-chamfering the mating surfaces will

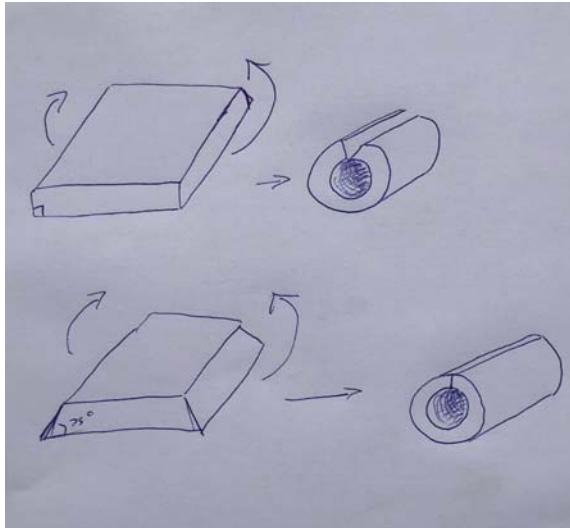
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At this point, you're ready to start thinking about how to attach the bowl to the axe. The two methods I've used most, and had great success with, are the dovetail method and the "saddle" method.



make them come together parallel. If this step is neglected, the mating surfaces will form a 'v' where they meet and will almost certainly leave some evidence of a seam on the finished forging. I find a swage about the size of the finished tube very helpful to butt weld the two edges. As before the fire should be deep and clean. deliver lots of light fast blows while rotating the iron back and



forth in the swage. [06pipehawk.jpg Repeating the operation a few times will help make the weld high invisible. If you're careful, you shouldn't need a mandrel to prevent the bore from collapsing. Near welding temperature, fuller a groove perpendicularly into the tube all the way around a spring fuller is very helpful for this operation. The groove will become the pedestal of the pipe bowl.

Many smiths who've made pipe tomahawks will simply form a tenon on the base of the pedestal and thread it into a hole drilled into the poll of the axe. There is definitely historical precedence for this method. Screw plates and taps were certainly widely known in the 18th century. Some tomahawks even had interchangeable pipe bowls, hammer polls and spikes! My only criticism of this method is that one either has to make the pedestal of the bowl fairly narrow, or make a flat on the poll of the axe. Otherwise there will likely be gaps where the pedestal meets the poll. Since aesthetically I prefer my pedestal to be somewhat waisted (hourglass shaped) and my axe poll to be curved I favor one of the two methods below.

The dovetail method: By cutting your pipe bowl off

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the parent tube just past the fullered groove it is a short step to file the male part of the dovetail. To make the corresponding slot (female part of the dovetail) in the poll of the axe, find and mark the center of the back of the poll. Next, use a pair of dividers to scribe out the top and bottom of the slot- a little narrower than the male portion of the dovetail. **Err on the side of caution, you can always file more material away.** I remove the bulk of the waste with a hacksaw by making a series of parallel cuts, then crossing those diagonally in both directions, from there it's only a few minutes work with a file to remove what is left- a safe-edge file (one with no teeth on its edges) will prevent you from inadvertently making the slot wider. Next, undercut the top and bottom of the slot with a three square (triangular) file. It can also be handy to raise the edges of the slot a little (by chasing). Adjust the slot and the pedestal until it is just possible to begin to slide the bowl into position, work slowly here, as it is all too easy to overshoot the mark .

Once they are getting close you may be able to tap the bowl into position with a light hammer, It may take a few tries, look for shiny spots that indicate the metal is binding and file them away with a few judicious strokes. Once the bowl is in place,



check to make sure it is centered and straight. It may take a little fiddling to get this right. I use a chasing tool and light hammer to lock the bowl into position. At this point it is ready to be brazed, either in the forge, or with an oxy acetylene torch.

The saddle method is a good choice if you want prominent chevrons on the cheeks of your tomahawk. This is a common decorative feature on many original 'hawks and requires considerable elbow grease if done only with files. Before anything else, take a few minutes to clean up the poll of the axe. grind/file down to bare metal and make sure everything is smooth and consistent. To form the saddle there are two options: one can split and flatten some of the iron tube below the fullered pedestal into 'ears' when sufficiently thin and wide, trim the ears into triangles and proceed to conform them to the poll of the axe. The disadvantage of this method is that it asks a lot of the iron- the butt weld or any seams can easily split and ruin the effect. I prefer to make my saddle from a separate piece. Cut or forge a piece of iron into a diamond shape- consider the height of the poll and the length of the chevrons. Punch a hole through the center and bend the piece so that its

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middle conforms to the poll of the axe. Don't worry about the wings at this point as they will get in the way if they are too closed up. Lastly, countersink the hole on the inside. Put the saddle aside and, forge/file a tenon below the pedestal of the pipe bowl and fit it to the hole in the boss of the saddle. Take your time here and try to get everything to fit as snugly as possible. Finally rivet the tenon through the hole in the boss of the saddle and braze

Finish forming the wings so that they embrace the



poll of the axe, again it takes a fair bit of fiddling to make the saddle fit tightly to the poll- ideally you shouldn't be able to see any light between the mating surfaces. To hold the saddle tight to the axe

while brazing I put a short section of rod with a groove (like an arrow nock) into the pipe bowl and secure it with stout binding wire. If you happen to be making a spontoon hawk or including a pierced 'bleeding heart' in the blade these styles have built in anchors for the wire.

A few last thoughts on cleaning up and embellishing your tomahawk: I personally like to harden and temper my hawks prior to filing any decorative moldings- I clean up the profile and thin the edge to about 15 thousands (roughly the thickness of a dime) before hardening and tempering. The wrought iron won't er, shouldn't* harden and is a joy to file... if you like filing...and there will be a lot of filing. Soaking the head in distilled white vinegar overnight will remove much of the scale and borax residue and save a lot of wear and tear on your files.

If you should decide to try and make yourself a frontier 'hawk drop me a line at downingarts@gmail.com. I'm happy to answer any questions you might have, and I would love to see what you come up with.

Reprinted from the: New England Blacksmiths Winter 2024

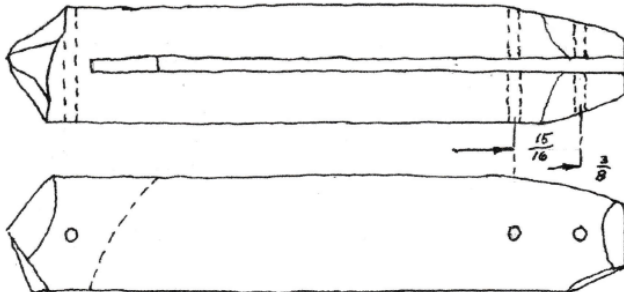
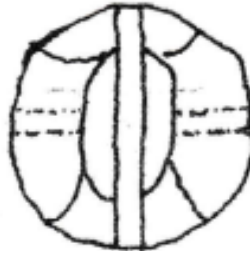


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FRED MIKKELSEN

VIKING 2 BLADE KNIFE FROM THE 8TH CENTURY

Make the handle first. A small grained but dry hardwood tree branch, about 1" in dia.



The length is about 5-1/2" The holes must be at right angles to the slot which is cut 1/16" wider than the blade thickness. (1/8" in this example.) (grain direction)

The holes were drilled with a 1/8" drilled (because 8 penny nails will be used as rivet stock) and care should be exercised that they are accurately positioned or blade alignment will suffer. The last one, in the end, is just to help prevent splitting of the handle but the pivot and lock holes are critical.

Temporarily assemble with a couple of nails and check for operation. Now come the "fine tuning," that is filing the lock slots, so the blade being used is near centered in the handle and the unused blade is nestled inside the handle.

Take your time, with the final fitting. When you are satisfied, with the fit, you're ready to rivet together. You can reduce the nail heads with a file, if you want. Cut the pivot, lock and heel nails so they protrude 3/16"



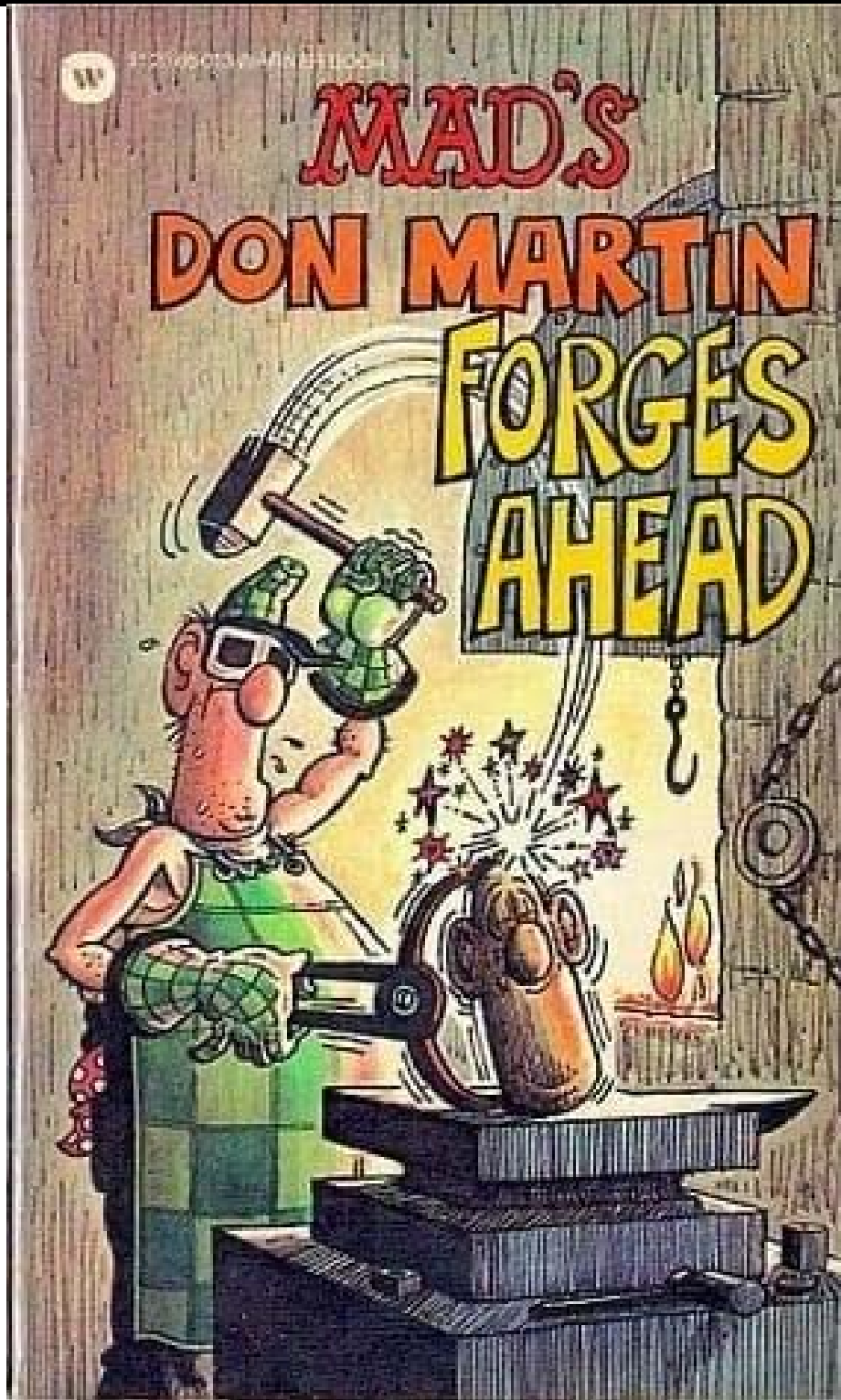
The blade is formed from 1/8" x 3/4" steel. In our case, ms, but a 1040 might be equal to what the vikings had. The blade profile, shown, is typical with the short blade sharpened around the point and the long blade along one edge. Do the basic sharpening and shape as shown.

The pivot hole must be centered in the blade width. The "lock" holes are drilled a little further from the blade edge as this allows for adjustment (by filing) later on. The slots are sawn and need to have some "lead" toward the pivot pin (see above).

The orientation of the blade and handle are as pictured above.

beyond the handle. Set the heel nail first to get a feel for the riveting process. Light rapid blows will head the nail/rivet and not bend it somewhere along its length, you don't want that. You can begin to spread with a center punch and finish with ball pein. Shim the blade with something the thickness of a thin dime and then rivet over the ends of the pivot and lock rivets. Remove the shim and check for action. Now you can do the finish sharpening and wipe with an oil finish (boiled linseed suggested).

Viking Iron Class, J.C. Campbell Folk School Fred Mikkelsen



Shamelessly stolen, to honor Don Martin.
I think he shows an understanding of blacksmithing in this drawing

New Jersey Blacksmiths Newsletter

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Pittsburgh Area Artist - Blacksmiths Association

December 2023

Think Outside the Fox! By Don Pfaff

One of our favorite contributors, Don Pfaff, has come up with yet another ingenious idea that can be an embellishment for another project or special on its own. A few simple tools, symmetry, and a little patience can look sly to your eye! You can adjust these features to create other woodland animals with a change in tooling and placement. Give it a try!

Materials: 1 1/2" X 3/16" flat bar

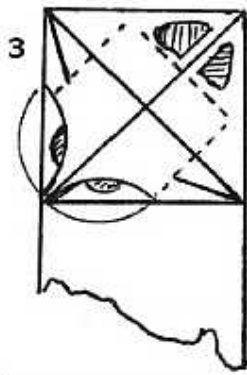
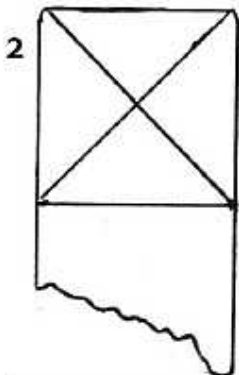
Tooling: Fuller, chisels including a sheeting chisel, football eye punch, special fuller for cheeks. (1 1/8" bar with handle for cheek areas).

Tip: Don't cut off the square of material immediately, work with it on the bar for a few steps before cutting off.



How to:

1. Pencil mark bar 1 1/2" down to form a square on the end of the bar.
2. Mark corner to corner and side cuts.
3. Cold chisel in ear split and side cuts
4. Hot cut ears and side tufts to dotted line, now cut free form from bar.
5. Spread ears. For direction of tufts, move one up and two down.
6. Fuller inside and between ears. (Separate the ears with a large space using a fuller).
7. For face, use a 1 1/8" round bar partially on flat bar to form face and allow for nose.
8. Punch eyes using a "football" shape punch.
9. To make face more streamline, grind a slight curve for jaw.



1. Finished Fox! 2. Marking material. 3. Layout of face.
4. Eye punch is shaped like a football. Note: Cheeks are ground slightly to give personality to fox. 5. Layout cuts on bar. Easier to work with bar attached, then cut off when necessary. 6. Tool made for creating cheek depressions.

Interesting Web Link I Was Wrong About Damascus

<https://www.youtube.com/watch?v=9cjnEay944E>

Celeste Flores interviews Dr. Ann Feuerback - about 31 min.

Dr. Feuerback is an archaeological scientist who did her PhD dissertation on crucible steel.

From The Anvil's Horn
AABA 3/24

New Jersey Blacksmiths Newsletter

New Jersey Blacksmith Association
P.O. Box 224,
Farmingdale, NJ 07727-9998

NJBA Membership Renewal, Ballot, and Volunteers' List

(Please check your mailing label for the year your membership expires. If "2018" or less, your dues are due immediately, and must be paid for your vote to count. If "2019" or greater, you may vote without making any additional payment.)

Mail completed renewal form and ballot, along with check for dues, to:

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

Name _____

Address _____

City, State, Zip _____

Phone Numbers: Day _____ Eve. _____ Cell _____

Email address _____

My check is enclosed: \$20 (regular membership dues), or \$40 (business membership dues)

Ballot for Board member election

The following board members are up for reelection, please print and return this page if you wish to choose individual directors or send their names in as an email.

If you want to re-elect all of them please check all and return the page or email "All" to; brownln@icloud.com. Mail to; NJBA, P.O. Box 224, Farmingdale, NJ 07727-9998

NJBA Volunteers List

Nominee

All

Billy Barrett

Marshall Bienstock

Bob Bozzay

Larry Brown

Nominee

Eric Cuper

Dave Ennis

Bruce Freeman

Daniel Lapidow

Mark Morrow

Nominee

Bruce Ringier

Thomas Santomauro

Ben Suhaka

Dan Yale

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

Availability: Saturdays Sundays Weekdays

Interests: Demonstrating Coaching Novices Assisting at Workshops

Experience: Novice Intermediate Experienced Professional