Balcones Forge Dispatch

President's Corner

May 2013

Wow, we are in the month of May and here I am in South Texas with temperatures in the 40s. Looks like a good time to light a fire. It is easy to keep warm between the anvil and the forge. We had a really nice get together in Boerne last month. Joe Travieso and his crew forged a knife from a damascus billet and from there progressed into a demonstration on how to heat treat your new blade. Being the workaholics that they are, for those that missed it last year, they fired up the Chile Forge and the hydraulic press and made another Damascus billet. Another great demo.

Tom Lupton was unable to attend due to the death of his mother. Balcones Forge would like to offer our deepest sympathy and condolences.

Jerry Achterberg is always overflowing with tricks of the trade. He did not disappoint. He is sometimes short of shop space as many of us are. He has a bender but does not have the room to permanently mount it in his shop. He attached it to some square tube and it mounts into his receiver hitch on his truck. It has all of the support that it needs and can easily be put away when you are done. He had another piece of square tube for the receiver hitch. This one had a square eye on the end made from 1in round. He could easily straighten bent sucker rod by using the eye.

Our trade item was a nut cracker. The turnout for the trade item was not great but there was some really good work to be seen. The trade item is our opportunity to show off our skills to the group. We are looking for ways to encourage more participation and are asking for suggestions.

Meeting Date is May 18

President's message continued on page 2

President's message continued from page 1

We will be getting together early in May. On the 18th we will be meeting again in San Marcos at the Texas Natural and Western Swing Festival. We meet in the square around the courthouse. They do provide us with cover and a couple of tables. They allow us to display and sell at this event. Bring your forge, anvil and tools and show us and the public what you can do. The "Trade item" is a repousse item in the style of Mark Aspery. Don't forget your lawn chair.

You will want to mark June 29th on your calendar. This meeting will take us to the shop of James Helm (Stormcrow on Iforgeiron.com). His shop is in the Elmendorf area southeast of San Antonio. He will be using his power hammer and hydraulic press to make a hammer. The trade item for this meeting will again be a competition for the best hammer / handled tool. Rumor has it that they will be serving barbeque at this event. If anyone is interested in bringing a side dish, let me know.

Keep yourself well hydrated as the weather warms up and always be aware that anytime that we light a fire, there is the possibility of carbon monoxide being in the air. It does not take a lot of carbon monoxide to cause us problems. Carbon monoxide binds with the hemoglobin 210 times more readily than oxygen does. What does this mean? Even small amounts of carbon monoxide over a long period of time can cause us problems.

Stay safe out there and we look forward to seeing you in San Marcos on the 18th.

Jerry Whitley
President, Balcones Forge

P.S. Don't forget to like Balcones Forge on Facebook. We use it to help keep you informed.

Upcoming Balcones Events

May 18- Texas Natural and Country Swing Music Festival – San Marcos, Texas
We are allowed to sell at this event. Dress up if you have the clothes. Trade Item – Repousse leaf or object, Mark Aspery style.

June 29- James Helm – Elmendorf, Texas
We will get you more details.

July & August -Too hot to forge!
Suggestion -M.O. Ranch in Hunt, Texas
See the work of Eric Riesel, 1930s Blacksmith.

September- Date will be October 5th in Oldenburg, Texas. This is another event where we will work with HABA and North Texas Blacksmiths.The cupolas will be built and the charcoal made. We will have an iron smelt and each group should return home with 10 t0 20 pounds or wrought iron from the bloom. This will be one that you do not want to miss.

October 26- Whitley's in Devine, Texas
I know it is far for many. We have room for those that may want to bring an RV or tent. It is okay to show up on Friday (might get some extra forge time in) and if the after party goes too long and strong, stay until Sunday. We are planning to barbeque again and maybe even take a field trip to Stroud's Blacksmith Shop in Devine.

November and December are still in the works.

Apron Envy

Sue Murray got the skinny on where Mark Aspery got his cool apron with the top strap and buckles. It was made by Diana Scherf and her website is:
www.bootjackfineleather.com
She has several styles of smithing aprons to choose from.

Texas Natural and Western Swing Fest

Courthouse Square, San Marcos, Texas

May 18 - 9:30

This is always a fun event each year. Bring your forge and anvil, or at least your hammer to participate in the open forging. Bring your wares to sell and bring the entire family. There is food, great music, entertainment, chuckwagons, big shade trees, and a fun time for all! Don't miss it!

There is even a map on the next page!

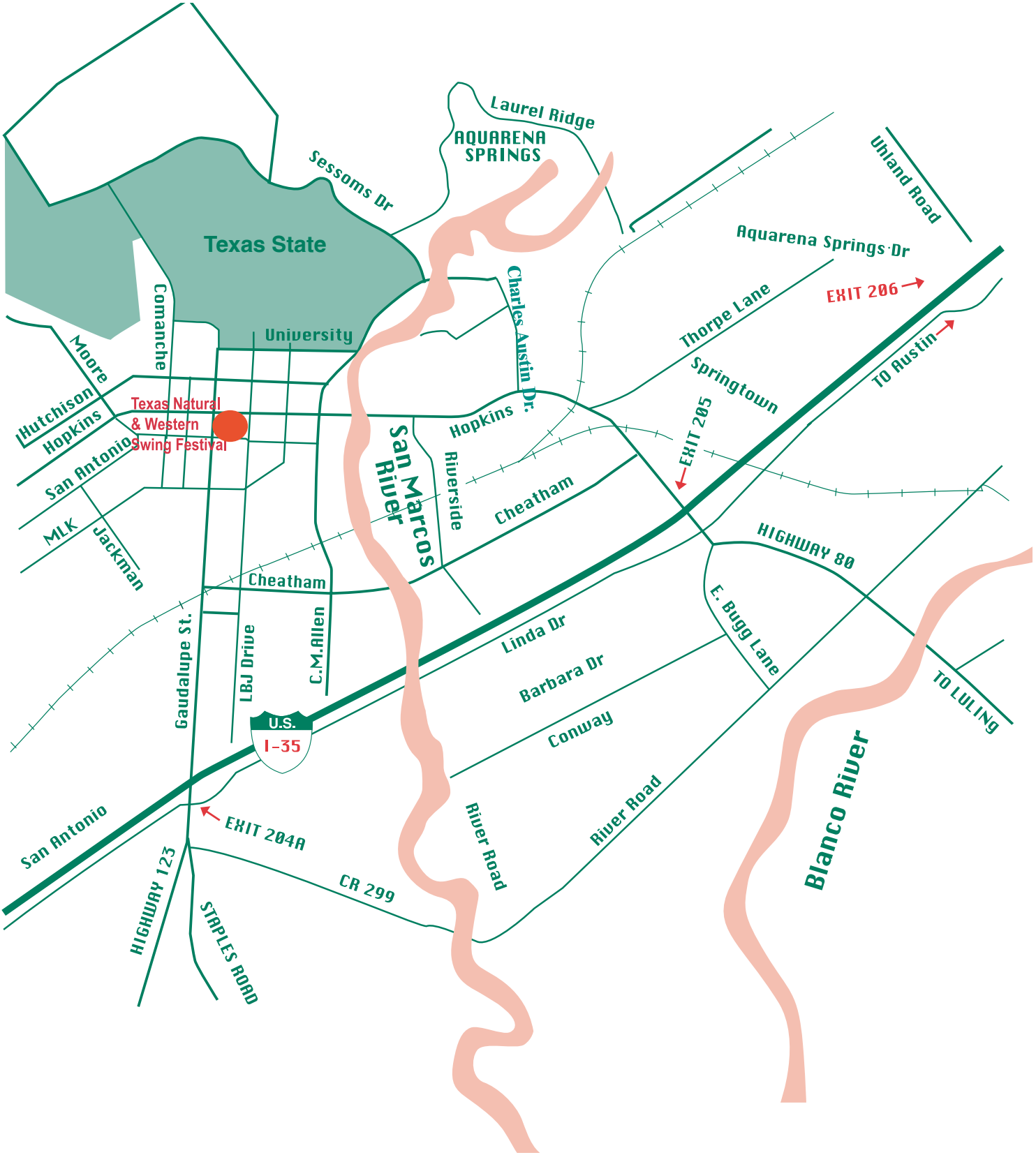
Balcones Forge Board of Directors

Jerry Achterberg
Rudy Billings, Treasurer
Matt Czosnek, Vice President
John Crouchet
Jim Elliot
George Graham
Vince Herod, Editor
Tom Lupton
Jerry Whitley, President
Laurie Wicker, Secretary

Time to Pay

Your dues, that is!

$20 per year if you want to get the newsletter electronically. For five dollars more, you can get print editions in the mail; your choice.



Map to site of the May meeting

WWW.BALCONESFORGE.ORG

Long-time Balcones Forge member Tom “the-blacksmith-from-Wimberley” Leining once again entertained and educated the folks attending the 2013 Sherwood Forest Faire in Paige.

photo by Vince Herod

HOME-BUILT TUMBLER -- Hollis Wooldridge, San Antonio.

I recently built a tumbler to clean ironwork that might be of interest. It uses 55-gallon drums that turn on two parallel shafts: one drives the drum and the other is an idler. A double set of pulleys serves as a speed reducer. The basic bill of materials is as follows:

1 3/4-1 HP capacitor-start motor
6 3/4" pillow blocks
1 12" O.D. pulleys with 3/4" bore
2 2" O.D. pulleys (1 to fit motor, 1 with 3/4" bore)
8 3/4" I.D. shaft collars with set screws
4 10" O.D. rubber-tired wheels with 3/4" bore
1 Rear idler wheel
At least 90" of 3/4" cold rolled shafting

The above pulleys will yield approx. 15-20 RPM on the barrel with a 1750 motor; speed will be different if any variable is changed. A variable pitch sheave on the motor will allow some adjustment, but it is easy to get too much speed.

I have omitted any reference to a frame, since each individual will probably have different sizes of material. I used a combination of 1" x 3/8" flat and 3/4" round, but I would have used angle iron if it had been immediately available. Suffice it to say that the frame should be rigid and high enough to sling the motor assembly underneath.

All shafts should be parallel, and some mechanism added to tension the two V-belts required to drive this contraption. The back of the unit should be 5° - 10° below the front so the work and tumbling media will tend to stay in the back of the barrel. The tilt also requires an idler wheel on the back to prevent the barrel from "walking" away. A cover is not required if the barrel is tilted in this manner. If a lid is used the whole thing could probably be brought down to horizontal, but I have not tried this so I don't know if it would clean as well.

One shaft collar is welded to each wheel so the wheels may be positioned and locked anywhere on the shafts. The other 4 collars are used to lock the shafts between the pillow blocks.

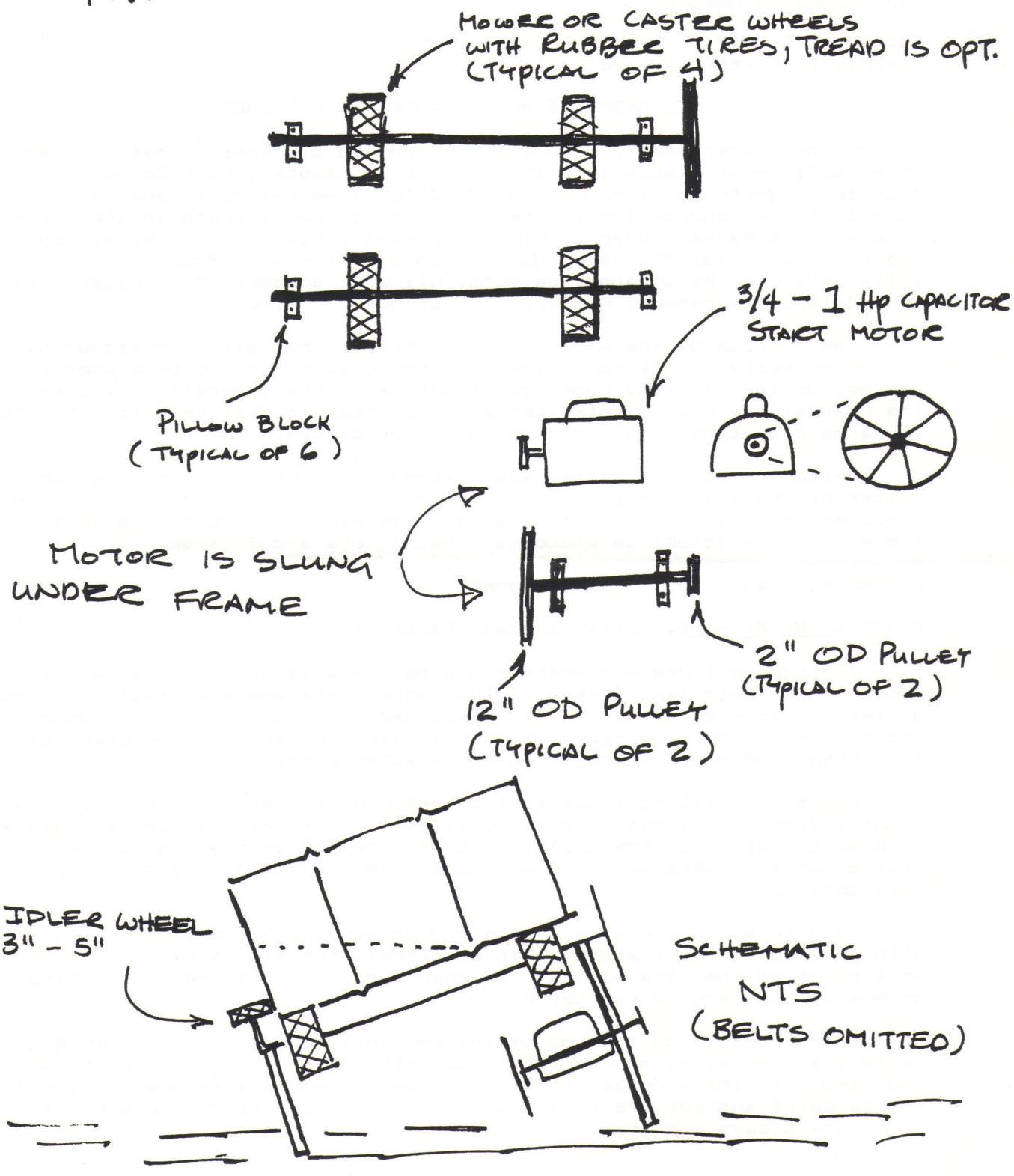
I cut the top out of a standard 55 gallon drum and bolted three 2x4s on edge 120° apart inside the barrel to act as paddles. If this is not done, the work will not be agitated enough to be cleaned. I use coarse blasting sand as a media and tumble 1-2 hours.

If this spiel is not vague enough, anyone who is interested can contact me for further confusion. Hollis Wooldridge

Reprinted from "The Texas Forge Review," October 1991

As you can see from this re-print, there has been alot of good black-smithing info in Central Texas for quite a long time.

FRAME OMITTED FOR CLARITY
NTS



President's Message
Spring 2013

ABANA: 40 Years Young

The seeds for ABANA were planted at Westville, Georgia in March 1973. Looking back by reading some of the first Anvils Ring's, you can get a feel for where we started from and how far we have come. There were 22 paid members that weekend with four more sending their money in the following week. By September 1973, before the first Anvil's Ring was printed, there were 47 members. By January 1974, we had added 45 more for a total of 92 members. By October 1974, we had almost 300 members. We owe these early members a big THANK YOU.

In the first Anvil's Ring, Alex Bealer listed some some things that ABANA'S purpose might be. A couple of them were to provide communication between artist blacksmiths both professional and amateur. To encourage more and better training facilities in all parts of the country. Information and books were in such short supply that ABANA xeroxed 100 copies of Practical Blacksmithing by M. T. Richardson and had sold them all by October 1974 with orders for 50 more.

Things have changed a lot and yet still remain the same. Today, there are lots of books, information, schools, and local affiliates to help with education. The need for communication among smiths still exists and nothing beats a face-to-face meeting for this. I think that is one of the vital roles for the ABANA Conference. Our next Conference is in Harrington Delaware August 13-16, 2014. Come Make Connections there.

I think ABANA's mission statement is as relevant today as it was 40 years ago:

"We understand that a blacksmith is one who shapes and forges iron with hammer and anvil. The artist-blacksmith does this so as to unite the functional with the aesthetic, realizing that the two are inseparable. We, the members of the Artist-Blacksmiths' Association of North America do join in our resolve to perpetuate the noble art of blacksmithing. With hammer and anvil, we will forge for mankind a richer life. We will preserve a meaningful bond with the past. We will serve the needs of the present, and we will forge a bridge to the future. Function and creativity is our purpose. Our task is great and so is our joy. Looking forward to the next 40 years."

Sincerely,

David Hutchison

Join blacksmiths from around the world for Forge300, an international blacksmithing event held in the reconstructed 17th century French Fortress of Louisbourg, located on the stunning island of Cape Breton in Nova Scotia, Canada.

2013 marks the 300th anniversary of the Fortress of Louisbourg; the largest historical reconstruction project in North America. Louisbourg300, is a grand fête celebrating the founding of Ile Royale-modern day Cape Breton Island-with Louisbourg as its capital.

The Cape Breton Blacksmiths Association is partnering with the Fortress of Louisbourg Association and Louisbourg300 to host Forge300, Cape Breton's first international blacksmithing event.

Held within the awesome Fortress of Louisbourg, from July 4-7, 2013, Forge300 will bring together top professional blacksmiths from around the world to celebrate the craft and culture of traditional and contemporary blacksmithing during the Louisbourg300 celebration. Blacksmiths from near and far will be travelling to Cape Breton to participate and some of the demonstrating smiths include: Lorelei Sims, Michael Budd, Peer Meerding and John Mason.

Already being toted as "the place to visit in Canada in 2013" by vacay.ca, Louisbourg300 is going to be a grand celebration where "vibrant cultures meet diverse heritage and awe-inspiring vistas in a celebration of sea and stories, music and military, community and cuisine".

To register for the event or to obtain more information please visit www.cbblacksmiths.com or contact the Cape Breton Blacksmiths Association at 902 756 4766 or info@cbblacksmiths.com

A Short History of Nails

Humans have been making and using nails for a long time, at least 5000 years and maybe longer. Along with forging of weapons and knives, nails were one of the first metal items made in volume from copper and then iron. Copper and bronze nails continued to be used in shipbuilding as iron came into wide use in other construction. Iron nails from the Romans have been found in Britain. All of these nails were hand forged one at a time. For centuries, the stock for nails would be hand slit into square cross section from iron that had been pounded out. The "sheet" was most likely made with waterpower helve hammers. Then in 1606, a major improvement was made with the invention of the slitting mill by Englishman Bevis Bulmer. This slitting mill could cold shear a series of square sections from a thin bar of wrought iron. Bundles of these nail rods were loaned to local folks who would make nails often using the home hearth as their forge. They would then be paid by weight of good nails returned less some allowance for waste. Most of this work took place on British farms, and everyone made nails from kids to grandparents. The pay was very low.

Nail making in America followed a similar pattern with most of the nail stock coming from England. Nail stock has been found at Jamestown so local forging of nails took place from the very start in the USA. Between the 1790s and the early 1800s, various machines were invented for making nails from bars of iron. The earliest machines chopped nails off the iron bar like a guillotine, wiggling the bar from side to side with every stroke to produce a tapered shank. These are known as type A cut nails. At first, the heads were often made by hand, but soon machines were developed to pound a head on the end. This type of nail was made until the 1830s. By the 1820s, however, an effective design for a nail making machine was developed: it flipped the iron bar over after each stroke. With the cutter set at an angle, every nail was chopped to a taper. Nails made by this method are known as type B nails.

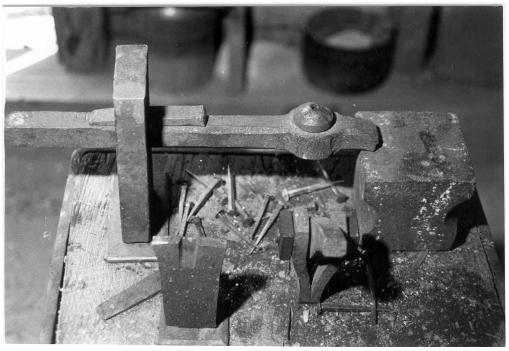
Type B cut nails continued to be the most common through most of the greater part of the nineteenth century. With the rapid development of the Bessemer process for producing inexpensive soft steel during the 1880s, however, the popularity of using iron for nail making quickly waned. By 1886, 10 percent of the nails produced in the United States were made of soft steel wire. Within six years, more steel-wire nails were being produced than iron-cut nails. By 1913, 90 percent were wire nails. Cut nails are still made today, however, with the type B method. These are commonly used for fastening hardwood flooring.

Nails provide one of the best clues to help determine the age of historic buildings, especially those constructed during the nineteenth century, when nail-making technology advanced rapidly. Until the last decade of the 1700s and the early 1800s, hand-wrought nails typically fastened the sheathing and roof boards on building frames. These nails were made one by one by a blacksmith or nailor from square iron rod. After heating the rod in a forge, the nailor would hammer all four sides of the softened end to form a point. The pointed nail rod was reheated and cut off. Then the nail maker would insert the hot nail into a hole in a nail header or anvil and form a head with several glancing blows of the hammer. The most common shape was the rosehead; however, broad "butterfly" heads and narrow L-heads also were crafted. L-head nails were popular for finish work, trim boards, and flooring.

Cutting the nails leaves a small burr along the edge as the metal is torn apart. By carefully examining the edges for evidence of these burrs, it is possible to distinguish between the earlier type A nails and the later type B nails. Type A nails have burrs on the diagonally opposite edges, while the type B nails have both burrs on the same side. This kind of evidence can be used to establish the approximate period of construction or alteration of a building.

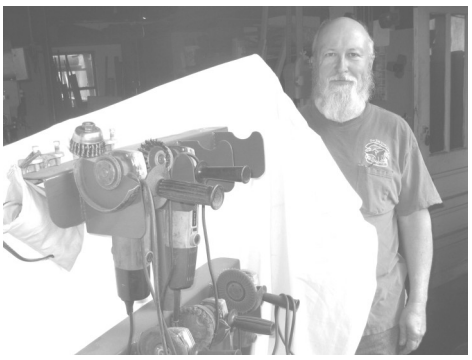
Type “A” Nail

Type “B” Nail



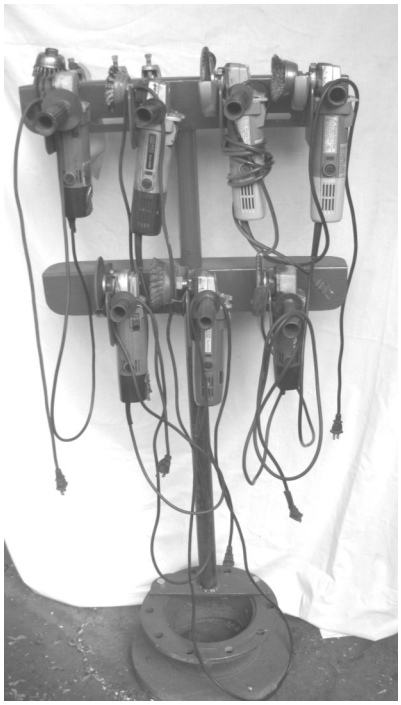
Colonial Williamsburg Nail Making Station

Nailer’s Anvil



Phil Says "Hang it Up!"

By Phil Travis



Scrap...I mean "repurposed" materials make this hanging grinder tree. Instead of fighting entwined cords, make yourself a rack that will hold all your grinders and cutting wheels. Make your tree so that the grinder holders are staggered to permit the cords to hang between the next row. You can also add hooks on the ends to hold your welding hood and jacket. The pipe is schedule 40, the base is a disc brake off a fire truck, and Phil used 16 gauge metal for the tabs. The height of this grinder tree is approximately 4 foot tall.

Get A "Round" To It! By Phil Travis

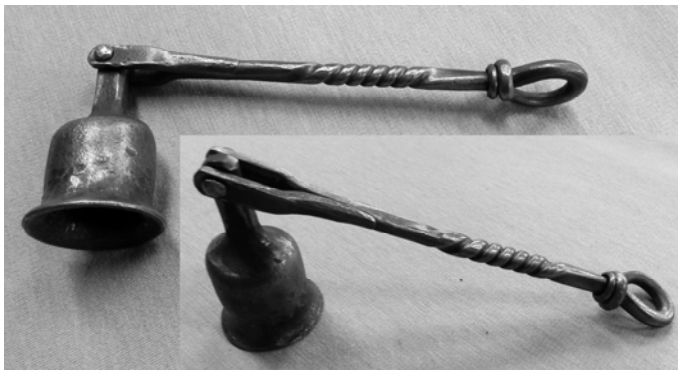
This 36" tall staging table can help you keep organized. It keeps your tools off the floor. The three "trays" are press wheels off a John Deer planter. The advantage of the press wheels is they have a lip to keep tools secure. Phil suggests keeping it near your anvil to have tooling at the ready.

A Little Help Here! By John Steel

First aid in the shop is an important element to keep everything running smoothly and let's face it, small annoyances can effect your productivity. Metal splinters can be removed by using fine emory cloth drawn across the surface with the splinter. One of the initial problems is finding the splinter. With the help of a small halogen flashlight shown through the finger, location of that bad boy becomes visible! Now, you at least know where the annoyance is hiding!

Blacksmithing + Raw Onions = Relief! By John Steel

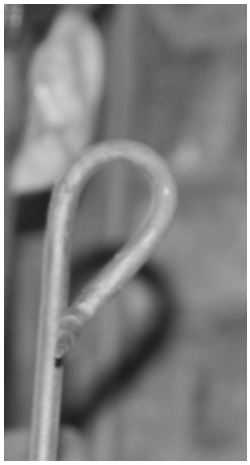
Burns and blacksmithing are part of the trade. When you find you are out of first aid ointment or demonstrating and are without a first aid kit (not a good idea!), look in your lunch pail! Apply cold compresses (never ice, may aid in blistering.) Apply a slice of raw onion for about 15 minutes, then apply a fresh slice for 15 more minutes. Relief will be on its way!



Pivoting Candle Snuffer

By Derrick Bliss, a MABA & NOB member

Using 1/4 inch round, a 1-1/2 inch long taper is put on one end - the taper is first forged to square, then octagon, then round. Around 2 inches from the point, the stock is bent at 90 degrees and will become the handles wrap.



Depending on the type and shape of the end of the handle, the needed amount of stock is bent around the tine of an anvil mounted bending fork until the 90 degree bend touches the main stock.

The pointed end is facing the camera.

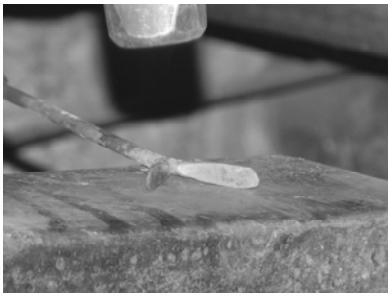
The pointed end is heated, the loop is held in the vise and then the pointed end is wrapped around the parent stock.

The wrap is packed and tightened around the stock, the handle end is shaped as desired, the handle is wire brushed, then left to cool.

On the other end of the handle, a short “screw driver” taper is created and the side that will lay against the parent stock is peened. The end is looped back on itself in preparation for welding.

The loop is welded twice and then centered along the line of the handle.

The loop is cut in half on a hardie cut off tool.

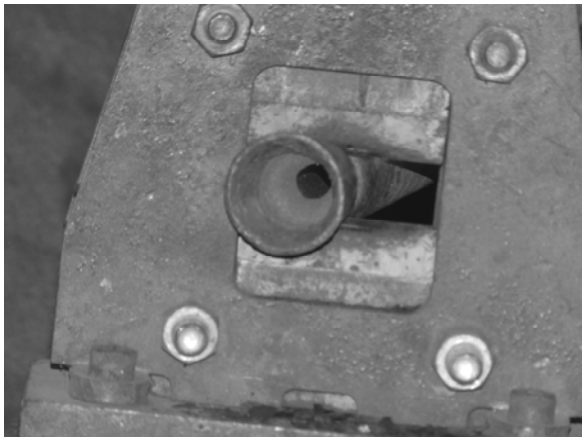


The 2 tines are straightened, spread apart to about 90 degrees, then flattened – allowing them to swell.

The tines are forged back closer together, a piece of 1/4 inch flat stock is placed between them and they’re clamped in the vise. Doing this gets a consistent spacing between the tines and holds them in place while they are tweaked to get them centered with the handle.

The center of the handle is flattened and a decorative twist is put between the two ends, then straightened between the jaws of the vise. The handle was then wire brushed and set aside.

The end of a length of black pipe is heated and flared. SAFETY NOTES – Do not use galvanized pipe because of the toxic fumes produced by the zinc coating being burned off; and place some newspaper or a rag in the end of the pipe you're holding, to stop heat and steam from traveling up it, like a chimney, and burning your hand. Starting the flare along a consistent line from the end of the pipe, on the horn of the anvil, gives the best look.



Neck down the pipe in a fullering tool
(a guillotine style fuller was used at the demonstration), use light taps and continually rotate the pipe. When the pipe is almost completely closed, it is wire brushed, cooled and cut from the parent stock.

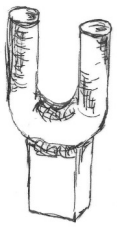
In an anvil mounted, half round, bottom tool, the trimmed end of the snuffer cup is forged down to a stem.

The stem is squared up and sized to fit between the tines of the handle. To determine the location of the pivot pin, you want the cup of the snuffer to contact the tines of the handle, not the stem of the snuffer – the reason for this is the stem can get stuck between the tines. Mark and drill a hole through one tine, then assemble and mark the hole position in the stem of the snuffer, and finally, use both holes as a guide to drill the hole in the other tine. Slip a slotted piece of shim stock between a tine and the stem and rivet the two pieces together. Remove the shim stock and check that the snuffer swings freely. Finish as desired.

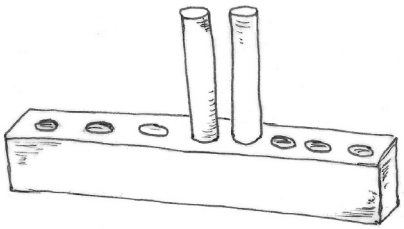
Steve Alling mentioned, towards the end of the demonstration, that a pivoting snuffer was much more practical that a fixed handle snuffer. The snuffer can approach a candle from any height and angle and also be dropped down into enclosures like glass chimneys and lanterns. Below is a fixed snuffer Steve made to accompany a holly candle holder – it compliments the candle holder nicely, but the straight handle limits the approach angle to the candle.

Another Bending Jig

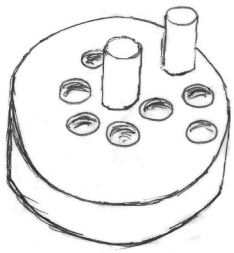
By Carl Davison
Northeast Blacksmiths Association

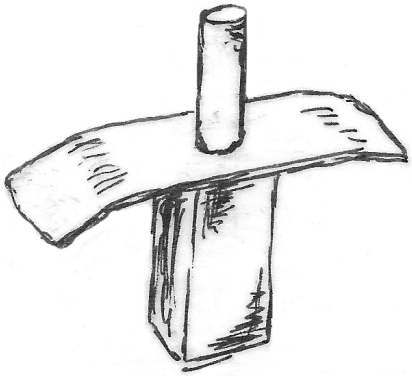


A basic bending jig, like the one on the left, that fits in the anvil hardy hole or in a vise is common to us all and extremely useful. Variations like the one pictured are many.



For years I have used a simple bar with holes spaced at different intervals like the one on the right. I liked that it provided some adjustability in the pin spacing unlike the basic jig. There are circular jigs that use pins and have a hole pattern that also gives a number of spacing options . I've seen one of these sold commercially and also someone is making them for sale on E-Bay.





Recently I wanted to be able to easily adjust the pins to accommodate different sized cylinders. By making a pair of movable vise pin holders as pictured you are able to easily adjust the pins to meet your needs.

Materials

2 pcs. 2" x 1" square stock
2 pcs. $3\frac{1}{2}$" x 1" x $\frac{1}{8}$" flat stock
2 pcs. $2\frac{3}{4}$" x $\frac{3}{8}$" pin

Braze or weld the square stock to the middle of the 1" flat stock. Mark & drill a $\frac{3}{8}$" hole so when it passes through the flat stock it will be centered in the 1" square stock. Drill $\frac{3}{4}$" deep. Place the vise pin holder in your vise and hammer the flat tabs to conform to the jaws. In a vise the pair of pin holders can be easily moved and secured in the position you need.

Safety tip for May

Always wear safety glasses, hearing protection and.....

Vincent Herod
Spotted Dog Forge
166 Granite Road
Paige, TX 78659-4922

Return Service Requested