N.J.B.A. Newsletter

NJBA Volume 17, Issue 4 7/02/13
http://njba.abana-chapter.com

Editors Soapbox

It's hot again so lets all be careful working in the heat. Stay hydrated and rest a bit to help get through the day.

News letter is late, so I apologize , I need to get myself back on the old schedule.

We have some good meets set up with opportunities to learn, forge or teach others what you know. Come out and chat or get your hands dirty! Let's boost the attendance at the upcoming meets. If you are interested in helping please contact one of the board members listed on page 2.
Larry Brown, Editor

Upcoming events for 2013

Get you calendars out and mark these events down. Please bookmark our web site and check for updated meet information. Remember most of our meets have an "Iron in the Hat" drawing, so be sure to bring something. Meet information starts on this page and continues on page 3.

July 20th—Delaware City Day, info this page.
August 5th – 11th Middlesex County Fair, demonstration meet, info starting this page.
August 25th & 26th Seafarers Weekend, Historic Cold Spring Village, info page 3
September 15th, 10:00—4:00 Hammer In at the Red Mill Museum Village info page 3
September 20th– 22nd Days of the Past Engine Show, Titusville Info on page 3
October 6th, 10:00—5:00 Walnford Day, demonstration meet, info page 3
November? Any ideas for a workshop?

Delaware City Day

John Chobrda and Kerry Rhodes are inviting NJBA members down to Kerry's shop for Delaware City Day, July 20th. The town has a parade that runs down the block in front of the shop with food vendors and family stuff in the park down the block (Check out the railing in the park with forged bars donated by many different smiths). Please bring a covered dish to the shop and check out the many examples of Kerry's work that are on display in the shop. Info on the town's event; http://www.delawarecityday.com

Middlesex County Fair

August 5th through the 11th (first full week of August), 4H grounds East Brunswick Description: Public paid demo – good money maker for NJBA we provide 3 paid demos and then have the facility open for blacksmiths while the fair runs. Wonderful family activity. The fair hours are 5 -11 PM Monday through Friday, 11 AM - 11PM on Saturday and 11AM - 7PM on Sunday.
We will have the NJBA trailer at the site for the entire time and we will probably have additional forging stations. We will be under a tent with other crafters. The site has easy access to water and power and we will have tables to display our forged items. All smiths are encouraged to attend. This is a wonderful fair to attend and is great opportunity for the entire family.
Directions on page 3.

Renewals, Now is the time!
If you have not renewed, this is probably your last newsletter!
Send in the renewal soon!

The NJBA Web Site!

The NJBA Web Site is:
http://njba.abana-chapter.com/

The Newsletter is at:
http://www.lightningforge.com/njba/index.htm

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

Official NJBA Address

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

Rather than use room in the newsletter, All correspondence between ABANA and NJBA can be found on the ABANA web site. If you cannot access it there, contact me and I will send you copies.

NJBA Board of Directors

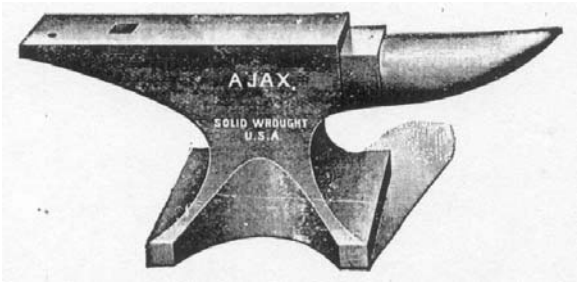
Directors are not listed on line

Driving instructions:
The Middlesex County Fair is located on Cranbury Rd. where it intersects Fern Roads in East Brunswick.
Take Route 18 into East Brunswick, follow the directions for Cranbury onto Cranbury Road (Rt. 535 South), pass East Brunswick High School on the left, keep left at the fork, and continue on Cranbury Road for about three miles to the fair. 655 Cranbury Road.
FROM OLD BRIDGE-Take Route 18 north toward New Brunswick, pass the Colonial Diner and head toward Cranbury over the Route 18 overpass and proceed past the high school and bear left at the fork, as above.
Route from north county (this is the least congested route), take Exit 8A on the New Jersey Turnpike. Turn right on Route 535 North directly to fairgrounds (5 miles).
For information please contact David Macauley, drmacauley@att.net 732-206-1568

Seafarer's Weekend
Historic Cold Spring Village

August 25th – 26th,
Setup 9AM finish 5PM each day

David Macauley will again have two forging stations. There are some great displays of boats made in the bay area of Cape May county. Some darn realistic pirates with accurate and authentic weapons. Again great family event. this is the middle of the Macauley Family vacation. Please come and enjoy the blacksmithing and the beach. This is a particularly great location to have people experience blacksmithing first hand. Here is the URL: http://www.hcsv.org/
For information please contact David Macauley, drmacauley@att.net 732-206-1568



Hammer In
Red Mill Museum Village

Sunday, September 15th from 10am-4pm
Red Mill Museum Village
56 Main Street, Clinton, New Jersey 08809
www.theredmill.org

The Red Mill Museum Village will host the annual Hammer-In on Sunday, September 15th from 10am-4pm.

The Red Mill Museum Village resident blacksmiths Robert Bozzay and Dave Ennis will host the event. The day's activities will center at the Museum's Blacksmith Shop where local blacksmiths and the New Jersey Blacksmiths Association (NJBA), dedicated to the promotion of the art and craft of blacksmithing, will have members on hand to demonstrate and sell their work.

Tool dealers and collectors are invited to tailgate, sell and swap their smithing tools and accessories. Among the items to be found will be anvils, blowers, forges, vises, hammers, and tongs. Visitors who have "what is it?" objects cluttering up the garage can bring them along and members of NJBA will be glad to identify them.

Admission for the day's activities is $9 for adults, $7 for seniors, active military and veterans, and $5 for children (6-12). Free for children under 6, Museum members and for NJBA members. Included in the price is admission to the Museum's historic buildings and exhibits. For more information, or to register contact, Amy Boyce, Curator of Public Programming, at (908) 735-4101 x 102 or email programs@theredmill.org.

Walnford Day

October 6th,
10AM set up, event runs 11AM to 5PM
Location: Walnford Park
Description: Public demo – it's a tradition
We will be demonstrating and holding a general membership meeting at Walnford Park. Walnford is also known as Crosswicks Creek Park and is in Upper Freehold, N.J. We will keep the meeting

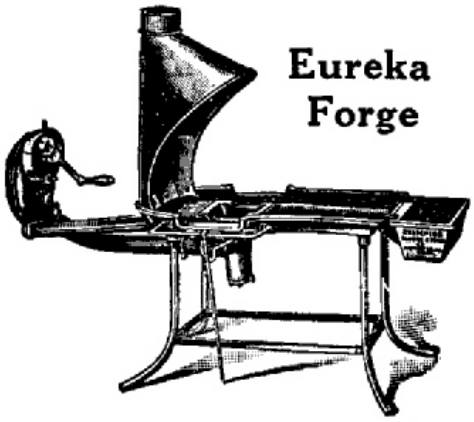
extremely short. Please come out especially with your family to enjoy a day at the hidden jewel of he Monmouth County Park system - Walnford park. NJBA will have the trailer with three forges at the demo. We will be immediately across from the working gristmill. There are many activities for children so this is another great family event. Coordinator David Macauley, drmauley@att.net , 732-310-1300

Directions:

Please note: If you choose 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.



Report on the Anvil Repair Workshop

by David Macauley

NJBA conducted another successful Anvil Repair Workshop. On March 23rd 2013 at Marshall Bienstock's farm. We repaired a total 6 anvils including one for Marshall. We had two sway back repairs and 4 simple repair of corners. This workshop was a little easier than previous workshops. All of the anvils were under 200lbs which made it easier to move around. In addition the weather was quite pleasant In addition to paid participants we had help from Marshall Bienstock, Larry Brown and Bruce Hay as welders. Tom Majewski, and Bruce Freeman provided help tending the fire, moving anvils, etc. Big thanks to Bruce and Tom for cutting and stacking the wood fuel and building the fire pit. This all had to be done in advance of the workshop. Many hands made lighter work. The organization earned $459 for the day – not bad.

Report on the Spring Meet at Peters Valley

On April 13th Peters Valley opened it's Blacksmith Shop to a meet sponsored by NJBA . The meet was open to all NJBA, NBA, PABA , Berkshire Blacksmiths and other interested people.

Demonstrations were provided by Andy Dohner and Dick Sargent. The grill was manned by Jose Torres. We had a good turnout, lots of tailgaters, demos, lunch and Iron in the hat. We charged $2 admission to help cover the cost of the food (CHEAP). We raised $126 after expenses and donated it to the Blacksmith shop.

Last years donation enabled them to purchase the parts necessary to repair one of the power hammers. If we can arrange the meet again for next year, come out and enjoy a great day at Peters Valley. Check out the Blacksmithing courses offered there this Summer at; http://www.petersvalley.org

Tuckerton Seaport

Unfortunately Tuckerton Seaport day was rained out.

Report on the June Meeting at Eric Cuper's Shop

by Bruce Freeman

This meeting was a combined meet of NJBA, PABA and NOMMA, and there was an excellent turn-out. The morning session was a demonstration of patination of steel by Philippe Fiers. The afternoon session was a demonstration of forging of aluminum by Eric Cuper.

* * * * *

Philippe Fiers apprenticed with the renowned guild of Les Compagnons du Devoir, during which time he was amongst those craftsmen chosen to build the new torch for the statue of liberty in 1985. He has now been living in the US since 1993, and for the past 6 years, has been running the small shop of Armadillo Metalworks in Passaic NJ, fabricating unique pieces for extraordinary residential projects within the tri state area.

Philippe's demonstration was of a patination technique that produces a grey-to-black finish, very handsome in appearance, and which in no way obscures the intrinsic beauty of the rolled or forged steel as does, for example, powder-coating. This process is essentially controlled oxidation of the steel surface, resulting in various combinations of iron oxides, ranging from brown to black in color.

Philippe recommends Birchwood Technologies (formerly called Birchwood Casey) products (www.birchwoodtechnologies.com), and demonstrated the use of their M24 brush-on formulation. (He also mentioned the use of their M20 immersion formulation. See Note 1.) At $150/gallon, this is an expensive formulation, but it should be used at a dilution of 3:1 to 5:1, not full strength. (See Note 2.)

These products are marketed for use on copper, bronze or brass, but Philippe reports, and demonstrated, excellent results on steel. Patination formulations are available as liquids or gels, the latter having the advantage of not flowing off vertical or sloping surfaces, and the disadvantage of less contact of the chemicals with the surface of the metal, due to lower mobility of the chemicals within the gel. Philippe prefers the liquid formulations.

For best results, the piece must be sandblasted. Sandblasting is done with aluminum oxide grit of 24 to 60 mesh, using a broad blasting pattern. Once sandblasted, the metal must not be touched with the bare hands, as skin oils inhibit the patination, so one should wear chemical-resistant gloves (e.g., "nitrile") to protect the work from skin oils and to protect the hands from the chemicals.

Philippe records the exact procedure, materials and conditions of application that he uses for each piece, enabling him to get repeatable results. Ideally, the patination should be done on a day of low humidity, and at "room temperature." High humidity, in particular, can interfere with the process. High temperature is likely to increase the oxidation rate, which is not desirable as it can lead to a qualitative difference in the surface finish.

The diluted M24 is applied as a coarse spray across the entire surface of the piece, using a common, hand-operated spray bottle. It is then "scrubbed" onto the steel surface using a stiff nylon -bristled brush, of the sort illustrated in Figure 1. The scrubbing serves to bring fresh solution into contact with the steel surface, and should *not* be done with an abrasive like Scotch-Brite™. During this application step, the steel surface must never be allowed to dry out. The spent liquid should never be returned to the bottle, as it carries particles of iron rust, which will degrade the clean formulation.

After a thorough application of the formulation, the piece is rinsed with a spray of sodium bicarbonate (baking soda) solution, 1 tsp per gallon. Excess liquid is blown off with clean compressed air, and the piece dried under the air stream.

The dry piece will be more or less gray or black in color, and the final, lacquered color may be anticipated by application of wax- and grease-removing solvent, one which dries completely at room temperature, without leaving a residue. (Such solvents are used in the car-painting business, and should be available in auto parts stores. See Note 3.) Philippe says that acetone should not be used for this purpose, as it results in streaks. As it cleans the blackened steel, this cleaner wets the surface shows what the final appearance will be like. If the color is not dark enough, or if spots have been missed, additional applications of the M24 may be made, using the same procedure, until the desired tone is achieved.

Figure 1. Nylon Brushes. (Harbor Freight P/N 2905)

Once the color is as desired, it can be important to treat the piece with a water-displacing, rust-inhibiting penetrating oil. Philippe recommended Birchwood Technologies RB1 which is described as "An effective water-displacer that forms a slightly oily protective film with excellent rust protection and lubricity. Its thin-bodied consistency allows the liquid to quickly penetrate blind holes and recessed areas to remove water and form a protective barrier film. The light oil protective film enhances lubricity to aid in assembly and is compatible with all lubricants & greases." (www.birchwoodtechnologies.com/rust/index.html) After application of this oil, the piece should be heated (e.g., with a torch) until the oil just smokes. Then the excess oil should be wiped off with a dry rag or paper towel.

Prior to finishing the piece, Scotch-Brite or another mild abrasive may be used to remove some of the black finish to bring out the highlights or texture.

Finishing may be done with acrylic lacquer or waxes. A natural wax such as beeswax may be used, but may yellow over time. Philippe highly recommended Renaissance Wax, a man-made microcrystalline wax with excellent long-term properties. It is rather expensive, but is available in small quantities, and is used in small amounts. Philippe does not like polyurethane varnish as a finish coat because it is too thick, and it is too difficult to get anything but a gloss finish from it.

Notes

1. Commercial formulations such as this are used by professionals because their effects are well understood, and repeatable. It is entirely possible to make one's own formulations for patination of steel, but then the onus is on you to acquire the individual chemicals needed for the formulation, and to achieve the results you desire.
www.birchwoodtechnologies.com/store/antiquing.html

2. Philippe says that M24 can be diluted with tap water. As a chemist, I cringe at that thought. Tap water contains unknown amounts of calcium, magnesium, iron, sulfate, chloride, carbonate, chlorine and/or chloramine, and other things that might affect the chemistry of the expensive patination formulation. USP distilled water is available at any drugstore for only $1 per gallon, which strikes me as well worth the price for use with these expensive commercial formulations.

3. Philippe used a product by the name of "Gavco 9601." This product, described as a wax and grease remover, contains xylene, mineral spirit, VM&P Naphta, acetone, and may be purchased for $20/gallon, only at Gavin's Auto Body Supplies 27 E 33rd St., Paterson, NJ, 07514, (862) 267-0298.

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Eric Cuper, an NJBA Board member, began blacksmithing at Peters Valley Craft Center in 1996). From there he attended Southern Illinois University at Carbondale to receive his BFA and MFA degrees specializing in blacksmithing. While at SIUC, Eric's forged sculptures were shown nationally and won several prestigious awards. His work can also be found in several books on forge work.

Since 2004, Eric has been operating Cuper Studios LLC in Easton, PA. Cuper Studios is an architectural metalsmithing company currently producing railings, lighting, gates, furniture, fireplace accessories, sheet metal work, sculpture, and other architectural jewelry. Check out www.cuperstudiosllc.com for some of Eric's work.

In recent years, Eric has been making architectural metalwork of aluminum, which has the advantages of resistance to corrosion and light weight. Eric began by demonstrating how to deter-

mine that the aluminum is at a forging temperature -- which is well below incandescent. He heated the bar of the metal in a gas forge, and tested it from time to time with a soft-wood stick, such as pine. When the stick writes on the bar like a black crayon, the aluminum is at forging temperature. Eric says the wood is superior to other indicators, like Tempil crayons, because it gives a broader range of indication: A brown or black mark that stays is good; a black mark that vanishes means that the piece is too hot.

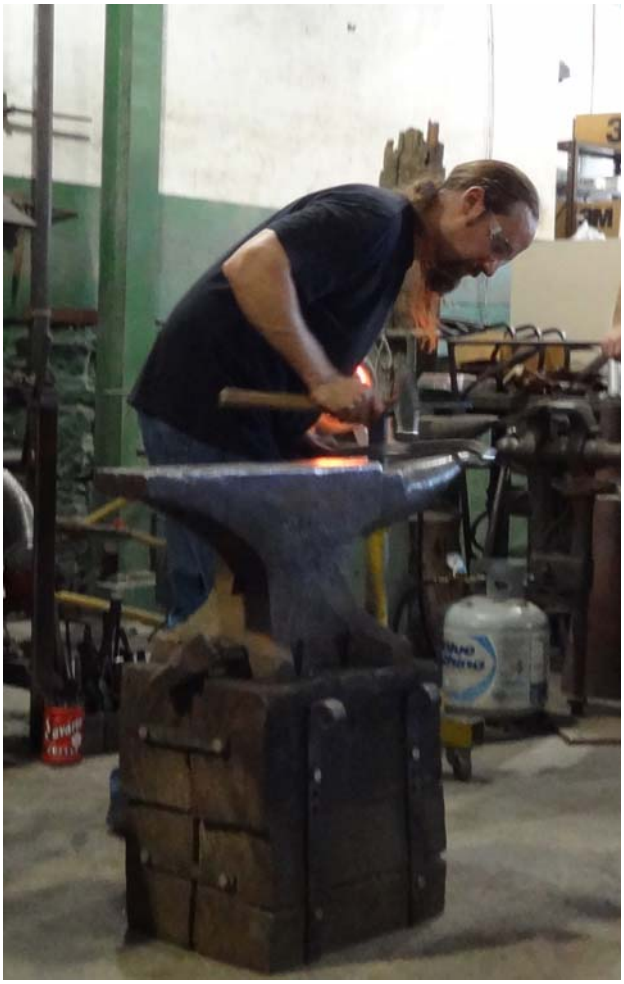
Eric had been told that many traditional blacksmithing techniques, such as slitting and drifting and punching, were not possible in aluminum, which was "too sticky." Eric demonstrated that these statements are not completely correct. He slit and drifted a bar of aluminum, both hot and cold (annealed). In the latter case he took advantage of the fact that aluminum remains annealed after heating and quenching (but work-hadens!). Next he punched a piece, both hot and cold.

He next demonstrated forging aluminum under a power hammer by using a "spring swage" cut-off tool to create a blunt taper, and a "spring swage" texture tool to add texture.

Finally, he created an decorative element, emulating one by Samuel Yellin, from an annealed aluminum bar by hand-forging with a fuller and a 6 or 8 pound hammer, then splitting the corners with a chisel, all without re-annealing.

Eric has also tried making a right-angle bend (with upsetting for a square corner) on an aluminum bar, and reports failure. This upsetting operation requires localized heat, and the highly thermal-conductive aluminum does not allow localization of the heat like steel does.

The points Eric made with his demonstration was that it is possible to achieve some traditional forged techniques in both hot and annealed aluminum, and that, as a learning tool, working *cold, annealed* aluminum allow you to get a feel for the motions and steps, without concern of working fast so as not to lose the heat.



Jack Andrews

Many of us had met Jack at Furnacetown or ABANA conferences, his obituary;

John Charles "Jack" Andrews, 81, of Willow Valley Retirement Communities, Lancaster, PA, and formerly of Paoli, PA and Ocean Pines, MD, died suddenly of heart failure on Saturday, February 9, 2013.

Jack was born October 24, 1931, in Crisfield, Maryland. He was the son of the late John M. and Evelyn (Briddell) Andrews. He was the beloved husband of Betty Jean (Mitchell) Andrews since 1956, and father to Robin Andrews of Sedona, AZ and Rod Andrews of Malvern, PA and grandfather to Madison and Ellis, the children of Rod and his wife Christine Sinclair. He was preceded in death by a son, Jon M., who died in 1982.

He served as weather observer in U.S. Air Force during the Korean War. Jack graduated from Pratt Institute, Brooklyn, NY, in 1959, with a BS in Industrial Design. He worked as designer on GM's exhibit for the World's Fair of 1964, as a member of the product development department at General Motors, Detroit, MI. Jack was recruited to establish the Industrial Design program at Detroit's Society of Arts and Crafts (now the Center for Creative Studies), where he began his career in higher education.

Jack later moved to Paoli, PA, where he worked as the chairman of the Industrial Design Department at The University of the Arts, Philadelphia, PA. He wrote and published five books on the Craft of Blacksmithing through his company SkipJack Press.

Jack and Betty retired to Ocean Pines, MD, in 1995. They relocated to Willow Valley Retirement Communities in 2011. A Memorial Service will be held on Saturday, February 16, 2013 at 11:00am at the Orr Auditorium at Willow Valley Manor, 211 Willow Valley Square, Lancaster, PA 17602. Please omit flowers. Kindly consider sending a contribution in memory of John C. Andrews to the Alzheimer's Association, 3544 N. Progress Avenue, Ste. 205, Harrisburg, PA 17110

.Don't Breathe A Word Of This!

NOB (Northwest Ohio Blacksmiths) association member, Rob Lange, suggests looking into the product Resp-O-Rator for working in the shop. The designer of this product is a diver and applied the general principles to this invention. Instead of a respirator covering your nose and mouth with more conventional de-signs, this apparatus has a mouthpiece and the hepa filters are located behind your neck. The big advantage is that it can be taken off with ease and put on in seconds. For instance, if the phone rings, if you want a sip of coffee, or you want to talk to someone, it is as easy as dropping the mouth piece from your mouth and reinserting it when ready to begin work again. This ingenious design is simple and effective. To learn more check out www.duxterity.com. As their ad says, "Made by a Craftsman for a Craftsman." Rob says he wished he knew of this product 30 years ago and finds it super easy to use once you adjust to it after using conventional and cumbersome respirators.
From PAABA

Les Metalliers Champenois Corp

Les Metalliers Champenois Corp. a custom high end metal shop based in Paterson NJ. We are actively recruiting metalsmiths and/or CAD drafter having knowledge of stair railings.

LES METALLIERS CHAMPENOIS CORP.
FINE ARCHITECTURAL METALWORK
77 SECOND AVENUE PATERSON, NJ 07514
TEL 973.279.3573 / FAX 973.881.0235

Demonstration Opportunity

I am looking for a blacksmith to set up a booth at a town fair in Maywood NJ (Bergen County) October 6,2013. Please email me or call me back
Chuck Parodi 201-843-6966

Change of Hands at Little Giant

Little Giant is changing ownership, effective immediately. In order to perpetuate the line of replacement parts, repair services and information, Little Giant will now be in the extremely capable hands of our machinist, Roger Rice. He will be assisted by our friend David Sloan, who has a great understanding of the mechanical operation of Little Giants.

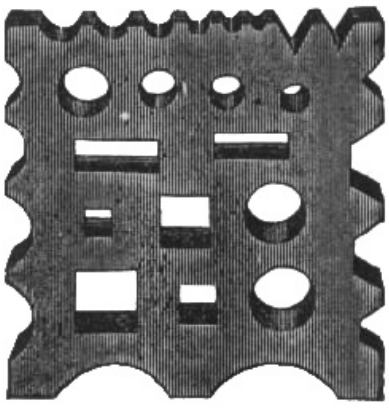
We will be assisting Roger and Dave during the initial transition, and Sid will continue teaching the annual Little Giant rebuilding class. The same telephone number (402-873-6603) and email address (lgiant@windstream.net) will move to the new location at Midwest Machine, 6414 King Road, Nebraska City, Nebraska 68410.

It has been a great 22 years, and we are profoundly grateful to have been a part of the blacksmithing community. We have often said we have the best customers in the world, and we do mean it. It has been an honor to not only help keep these venerable machines in operation, but to have made so many good friends in the process.

With sincere appreciation,
Sid Suedmeier and Keri Hincker

———-

It has come to our attention that people are concerned about Sid's health---he is fine! The only thing that prompted the decision to sell Little Giant was the desire to change priorities without affecting service, and to ensure the perpetuation of the Little Giant business. Keri



I Thought Everybody Knew This "The Fastest Shortcut of All"

"An apprentice once asked a wise old master goldsmith, What is the fastest shortcut you know? The grey- bearded master craftsman thought for a while, contemplating the hundreds of techniques and thousands of tricks he had learned. He thought and he thought, and then his eyes lit up as he settled on the ultimate way to save time at work. Slowly, almost haltingly, he responded: The fastest way to do anything is to do it right the first time.

"Jewelry work requires great patience, in addition to an unyielding commitment to precision. Think of precision and patience as your partners, helping you to stay focused on achieving your goal of excellence, no matter how long it takes. Building jewelry should not be a race against time, but a journey toward quality: In the long run, your work will be judged not by how fast you completed it, but by how well you completed it. And this requires a dedication to doing your best at every step, so that you do not have to waste time reworking or undoing needless mistakes.

"So slow down, check your work right from the start and all along the way, and remember: What is most important is that every piece you make represents your very best effort."

Alan Revere, www.revereacademy.com,
Student Guide, Bench Tips
California Blacksmith www.calsmith.org
November/December 2012

Working with Mica

Article by Jim Kennady
Photos by Jim Kennady and Doug Wilson

In February, I attended Paul Garrett's Arts and Crafts Ironwork class at the Folk School. This class taught various techniques to make several items based on work from Greene & Greene, Stickley, Roycroft and others. The class also gave me my first experience working with lampshade mica sheets. The mica style lampshades are common to many arts and crafts style lighting. I made a simple sconce style lamp frame and then proceeded to mould the mica sheet to fit the frame. This was quite a learning experience and I thought I would share this with those who might be interested.

Lampshade mica sheets contain natural mica flakes bonded with shellac or epoxy and is a wonderfully unique material to use for decorative panels in lampshades, wall sconces cabinets and candle shields. The sheets were purchased from the Asheville Mica Company and they have instructions that you can request when buying lampshade mica sheets.

Cutting

The sheet can be cut like roofing tin. I have found that a pair of EMT scissors works very well. The material should be gently cut and supported on both sides to reduce the possibility flaking. Once cut to shape it is ready to be moulded.

Moulding

When the sheets are warmed they become pliable, when they cool the shape is retained. The sheets could be warmed in an oven. It is best not to use the kitchen oven as the sheet does put out a resin odor when heated. We used an industrial heat gun on high heat to mould the sheet to fit the frame. This allows you to gently mould the sheet over a longer time. I think this worked better than heating the sheets in an oven. The sheet can rapidly cool and can be difficult to fully mould the sheet in one heat. Heat a small area of the sheet carefully while applying light pressure to begin forming the shape

you want. It will be most helpful if you have three or four hands for this. Also helpful are pair of 'clean' kevlar gloves and a wooden spoon. The sheet will develop a light sheen when heated and you can feel the sheet get soft. The sheet will not slump much under only it's own weight and you will need to form with your hands , spoons or other tools while continuing to apply heat. Once you have the desired shape, continue to apply light pressure, remove the heat and allow to cool for ~30 seconds. The sheet can be formed over and over again. Use of molds or forms to help shape the mica to the curvatures desired is recommended.

Sheets are a moldable product bonded resin. While the material needs be heated to a flexible state of approximately 250-300 °F, too much heat will burn, discolor and embrittle the material. Additional heating will re-soften the plate, thus allowing more forming and fitting to the shape desired, as long as the sheet is not overheated.

DO NOT HEAT OVER 300 °F.

Surface Preparation for Gluing

The sheet as supplied is normally milled (sanded) to reduce thickness variations. After this process the product is surface coated with the appropriate bonding agent. If applying a varnish, light sanding to the surface as preparation for this coating is recommended. If gluing the plate to another surface, such as a metal or wood frame, a two-part epoxy adhesive is recommended. Final Surface Coatings For most indoor applications additional coatings are not needed. For sun exposures, care should be taken to use varnishes which are UV light stabilized to prevent yellowing. Exterior use requires careful selection of a waterproof finish. Also, a heavy "bead" coating on the cut edge is required to seal the edges and avoid capillary moisture absorption.

Asheville-Schoonmaker Mica Co.
Mica and Mica Products
900 Jefferson Avenue
PO Box 318 Newport News, VA
23607-6120
PH 757-244-7311
FX 757-245-5236 http://

decorative.ashevillemica.com/
decorative.html

Dating Antique Items Made by Blacksmiths

By Gary Scasbrick

Reprinted from Tuyere, Newsletter of the Illinois Valley Blacksmith Association, January / February 2009

Close dating of blacksmith made items, especially some hand tools is impossible without maker's marks or documentation. Some styles of tools have been made the same for 200 years. Some styles or types came into use and went out of use in certain periods. Here are some clues to come up the approximate date of some hand-forge items:

1. Dome Head factory made rivets were common after 1845. Items with factory rivets should date later than 1845.
2. Tools from England were stamped "Made in England" after 1891.
3. Tools stamped with "Cast Steel" were made after 1760.
4. Pritchel Holes in anvils appeared about 1830 in English Anvils.
5. Earliest Factory made hatchet approx. 1845.
6. Double bit axes first became popular abound 1850.
7. On any edged tool, steel bit forge welded to iron body, look for a line where the steel was forge welded to the iron body. These steel bits were generally added after approx. 1744 and quit approx. 1870.
8. Pre-Civil War handles for axes were straight, not curved.
9, No Poll on Axes in the 1600's. First hint of a poll about 1715. Fully developed polls by 1750. Round polls continued to be made until about 1800 and square polls are still made.
10. Threads on bolts were hand filed and rounded before 1830 — where sharp and crisp later. (I have English threads lathe cut and rounded, American a sharp V thread after 1830 — Dave.)
11. First practical steel production furnace in America was 1730. Edged tools were scarce before this time.
12. 1840 First adze eye hammer (long or deep eye) same as on modern hammers.
13. Nail pulling slots in bottom edge of blade in shingling hatchets became popular in early 1800's.
14. 1815 First cut nails with a square head were made by a machine, these had flat sides and forge nail had four tapered sides. (I have this date about 25 years earlier — Dave.)

Patina items stamped with a date, items with a maker's mark, and items with original wood handles mean "everything" when trying to put a value on any antique hand forged item!

An Old-time Quench Recipe for Tempering Iron

Reprinted from Appalachian Blacksmiths Association Newsletter; September, 2008

Old Quench Recipe

Use at your own risk, lye can be nasty!

First appeared in the December 2003 issue

You may recall Amasa Kittle from the Dec. 2002 issue. He was the local blacksmith in Philippi when the covered bridge was built in 1852. The article is at the ABA website if you do not have the newsletter.

Jeanne Russell, a descendant of Mr. Kittle, read that article and sent in a most unusual tidbit. It turns out that her grandfather, Holt Swecker, was also a farmer and blacksmith at Huttonsville, WV. Before he died, Holt Swecker wrote down his recipe for a tempering quench and passed it along to his son, Carroll. And this recipe is what Ms. Russell sent in.

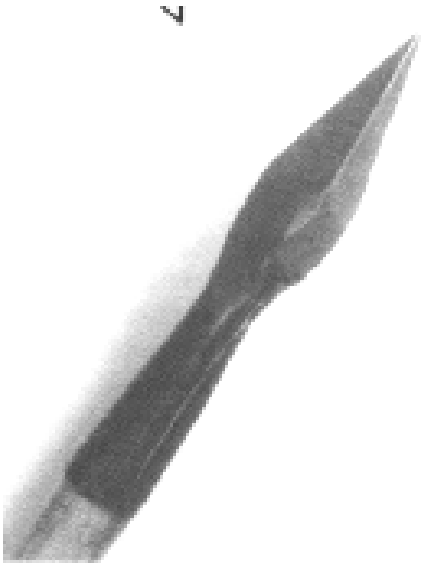
Holt Samuel Swecker was born in 1881 at Valley Head, WV and died in 1974.

Quench Recipe — Tempering

+ 2 spoons Soda
+ 2 Tablespoons full of salt, heaped
+ 2 Tablespoons full of Borax
• 1 Tablespoon of Red Seal Lye
+ Add ingredients to a gallon of water and 1/2 gallon of used motor oil
+ Heat [iron} to light cherry red
+ Air once or twice while cooling

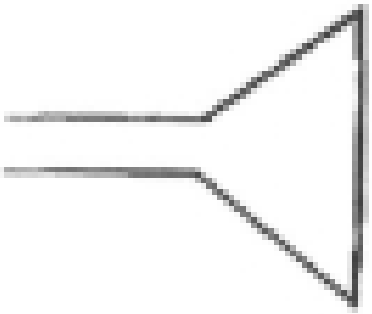
ABA , Volume 33, No. 1, March 2009

Forged Arrow Head



John Murray demo Making a Bodkin arrow head (armor piercing)
By Bob Ehrenberger

Starting with 1/2" sq. stock, section off about an inch of material using the near edge of the anvil.
Spread with a cross pein hammer. You can't get it too thin, push it as far as you can.
Trim into a fan shape with the shear. You could also cut with chisel, file, or grind to get the shape.



Start the socket on the step of the anvil, finish over a tapered mandrel the size of the arrow shaft.

Cut off on the hardy leaving about an inch of material to forge into the tip.
Make sure that the tip is lined up with the shaft. The tip can be case hardened in casinite powder, which will leave it hard enough to pierce armor.

NOVEMBER-DECEMBER 2008
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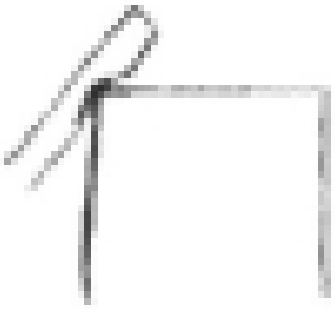
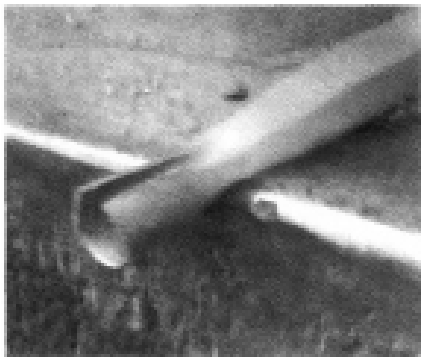
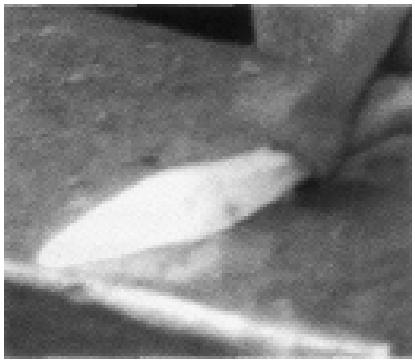
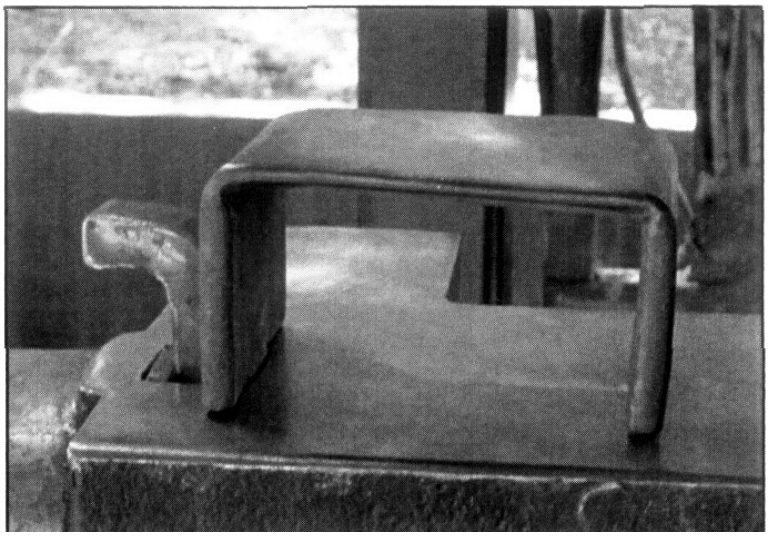






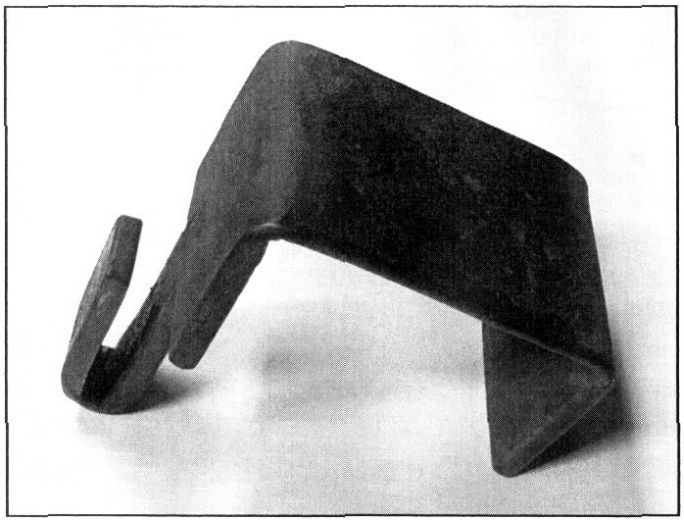
Anvil Bridge

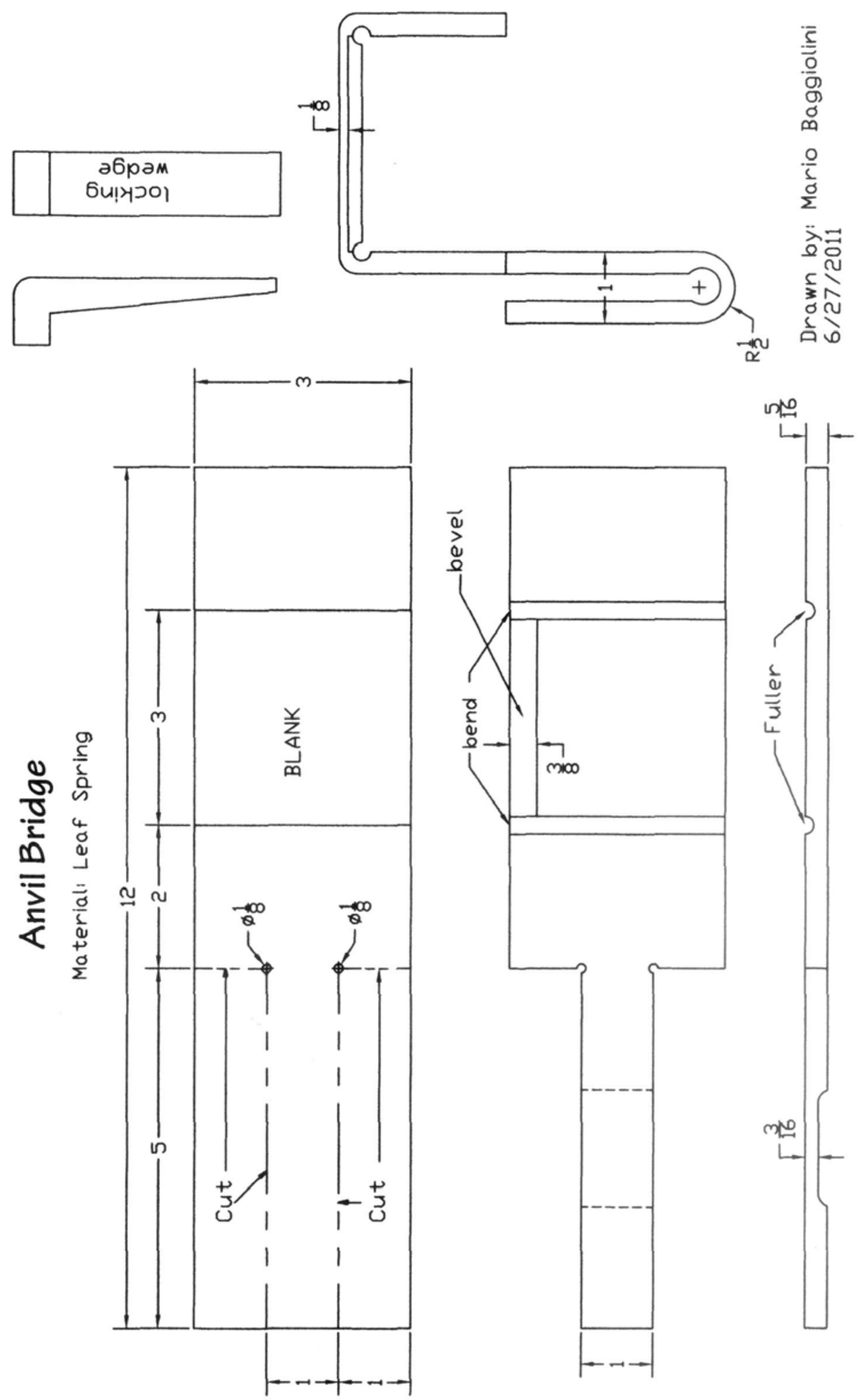
By Mario Baggiolini, Sonora, CA



This anvil bridge is a tool for making forks or working on split or forge welded branches. I got the idea from an article I read on an old antique anvil bridge — I can't remember where, in a magazine or on the Internet. It sounded good, so I decided to make one. In the article they said it was made from 4" x 1/2" thick leaf spring, way too heavy to work . But, having a piece of leaf spring 3" x 5/16", I was off to the forge. Other bridges I've made with square tubing just get beat up because they are soft and don't hold up to pounding. I began by laying out the cut lines. Then I drilled two 1/8" diameter holes at the intersections of the cut lines to prevent stress cracks. With a helper striking, we hot cut away the scrap. Then I fullered in two places where the bends would go about 3/16" wide and 1/16" deep; it makes bending easy. I also fullered and drew out an area at the middle of the tang which goes into my hardy hole, to give it a bit of spring. I then folded up everything and fitted it to my anvil and made a wedge to drive in to lock it in place. I also ground a bevel on one side so that a fork can be driven all the way in. The dimensions can be altered to fit anyone's anvil. Mine has a 1" square hardy hole. Lastly, I annealed the whole thing — important. The spring steel is tough enough without heat-treating, and by annealing it, it won't crack.

California Blacksmith Nov-Dec 2011




Anvil Bridge
Material: Leaf Spring
BLANK
Cut
Cut
bevel
bend
Fuller
locking wedge
Drawn by: Mario Baggiolini
6/27/2011

TEAR THIS PAGE OFF!!!

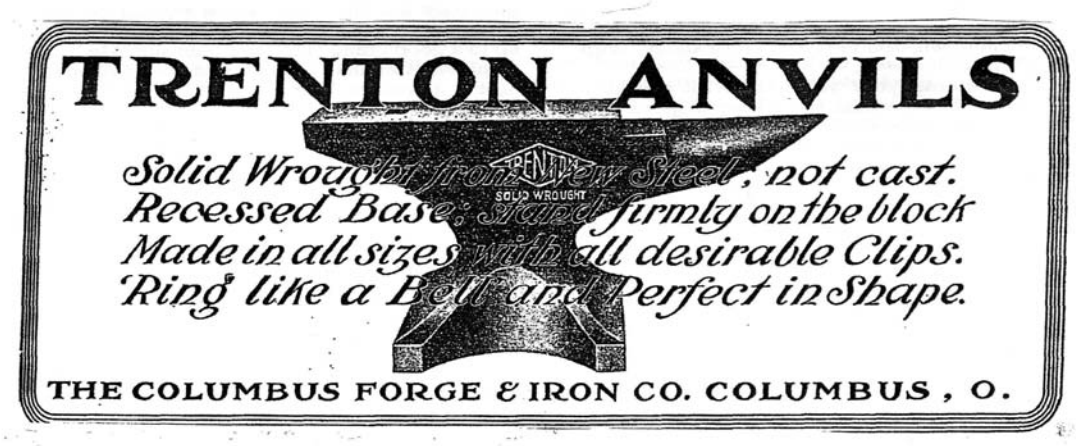
NJBA Board of Directors Election and Membership Renewal Page

The NJBA bylaws were recently amended to provide for a mail-in ballot for electing NJBA directors. On the other side of this page, you will find your ballot and renewal notice. Please fill out your ballot and return it with your 2013-2014 membership dues. (Note that NJBA elections are not, nor ever have been, by secret vote. Your name is on your ballot so the board can confirm you are a member in good standing and that your vote should be counted – which you can insure by returning your ballot with your dues.) Ballots will be counted 30 days after this newsletter is mailed, so please be prompt in your response.

The NJBA Renewal and Board of Directors Ballot is on the next page. Please fill this out and send in as soon as you can.

The date of your last renewal is on the mailing label!!!

If your date is **2012** or older this is your last newsletter!!!



NJBA Ballot and Renewal

Renewal

Name_____

Address_____

City, State, Zip

_____

Phone Number (s)

Home_____ Cell _____

Email address _____

[ ] My check is enclosed for **$20** (membership) or **$40** (business membership).

Ballot

Please check a box for each nominee.
You should vote on all nominees.

Nominee	For	Against	Nominee	For	Against
Marshall Bienstock	[ ]	[ ]	David Macauley	[ ]	[ ]
Larry Brown	[ ]	[ ]	Tom Majewski	[ ]	[ ]
Eric Cuper	[ ]	[ ]	Mark Morrow	[ ]	[ ]
Dave Ennis	[ ]	[ ]	Dan O'Sullivan	[ ]	[ ]
Bruce Freeman	[ ]	[ ]	Bruce Ringier	[ ]	[ ]
Bruce Hay	[ ]	[ ]	Eric Von Arx	[ ]	[ ]

Send To:

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