

# N.J.B.A. Newsletter

NJBA Volume 13, Issue 4 01/25/09

http://njba.abana-chapter.com

## **Editors Soapbox**

Hi, We are working on some great events for this year and we are looking forward to seeing you there. If you have an idea for an event or workshop talk to one of the editors and we'll see if it can be arranged. As editor I would appreciate some help in writing up events for the newsletter. You don't have to be a gifted writer just send me something about the event as I can't make all of them or remember everything. Larry Brown, Editor

# Upcoming events for 2008–09

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 <u>"Iron in the Hat"</u> drawing, so be sure to bring something. Meet information starts on this page and continues on page 3

January 31— 9am NJBA/PABA Meet at Eric Cupers Information on this page and page3.

March 14th Berkshire Blacksmiths Meet
At Greg Phillips. More information on page 4.

May 2nd - NJ History Fare in Washington Crossing NJ State Park - not confirmed but we have received a request for a demonstration. More information in next newsletter.

May 17— Two events! Hammer inn at Speedwell Village in Morristown NJ and a demonstration at Tuckerton seaport. More information in next newsletter.

**June ? -** Hammer in at Historic Cold Spring Village. More information in next newsletter.



**August** - Middlesex County Fair and we will again have demonstrations all week. More information in next newsletter.

Check the website for updates on meets!!

# Blacksmithing Demonstration Eric Cuper and Daniel O'Sullivan at Cuper Studios Saturday, January 31, starting at 9am.

Eric and Dan are teaming up again to present a scintillating demonstration for NJBA, PABA, and others. All are welcome! As always, there will be an Iron In The Hat, tailgating is welcome (try to leave parking spaces in front of the garage doors for tailgaters), and maybe I'll turn the heat all the way up to 60 (don't tell my employees). Coffee and Donuts will arrive at 8:45ish, demos starts at 9ish, lunch and IITH at 12ish, more demos from1 until 4. We usually order out for lunch and request contributions. I only have a few chairs so if you want to sit, you might want to bring a chair. (Continued on page 3)

# Help Peters Valley! See page 11

#### **Notice**

Recently NJBA member Jeff Morelli passed away. Any donations NJBA members are able to make to an educational fund for the benefit of Jeffrey's children would be appreciated. Donations should be written to "Morelli Children Fund" and sent to Mark Cubberley, 282 Main Street, Groveville, NJ 08620.

# The NJBA Web Site!

The NJBA Web Site is up

and running at:

http://njba.abana-chapter.com/

The Newsletter is at:

http://

members.bellatlantic.net/
~vze25jcc/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 is now being posted
on the NJBA web site.
If you cannot access it there, contact me
and I will send you copies.
ABANA is communicating again so
check it out

#### NJBA Board of Directors

Directors list is not available on line					

#### The Demonstrators

Eric Cuper, an NJBA Board member, began blacksmithing at Peters Valley Craft Center in 1996 (which is where he first heard of NJBA). 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 house jewelry. Check out

www.cuperstudiosllc.com for some of Eric's work.



**Daniel O'Sullivan** received a BFA from Parsons School of Design, completed a traditional Ornamental Ironworker Apprenticeship followed by Stage Forge at the International School of French Wrought Ironwork in Muizon, France. He taught blacksmithing in County Mayo, Ireland, and worked for an exclusive European metalworking company. Daniel is now proud to be a Local 483 Union Ironworker and is on the Board of the NJBA.



Eric and Dan are currently planning a team demo to produce a finished piece suitable for auction. A good time should be had by all, hope to see you there.

## **Directions to Cuper Studios**

Shop address is 1301 Lynn Street, Easton, PA 18042. Phone 610-438-8694. Email: www.ericuper@msn.com

From NJ: Take 22 West into PA. After you leave the toll booth, stay in the right lane. Take the first exit immediately off the bridge. Keep right on the exit, going under 22, to a stop sign. Turn left at stop onto Larry Holmes Drive. Take Larry Holmes Drives thru 2 lights and turn left onto Lehigh Drive (immediately following Wawa strip mall). Lynn Street will be your first right and my building is the first big beige building with maroon trim on the right.

**From PA:** Take Route 22 East towards Easton. Take the 248/25<sup>th</sup> Street Exit. At the end of the exit turn right onto and follow 25<sup>th</sup> Street heading South. Turn right onto Lehigh Drive. After the intersection with a stop sign and the bridge for the park, Lynn Street will be the 4<sup>th</sup> left.

# Berkshire Blacksmiths Meet At Greg Phillips

#### The Meet is on Sat. March 14th.

We will have a few demonstrators each showing what they have been doing with sheet / plate cut from the plasma table.

I have a standing offer to anyone that would like to do a short demo. I will provide the kits free of charge and of course in advance of the meet. The "kit" could be the rose pattern we all know, or anything else one can think of. Anyone interested can contact me with what they would like cut out, I will cut enough "kits" out to make a progression from flat to finished. What I would like to end up with is some teaching aids.

Many years ago Larry Brown demoed how to forge a leaf, which he did, but while he was doing the demo he passed around what looked like a big key-ring. Instead of keys there were 8-10 leaves starting with blank stock progressing to a finished leaf. I thought it was really neat how the demonstrator could be forming a piece of metal red hot on the anvil and the student could be holding in his hand a piece right at the same point in progress.

Those who are interested in demonstrating, please contact Greg with your plans and needs

For my part I would provide as many "kits' that would be required no charge.

Greg Phillips

937 State Route 17k

Montgomery, NY 12549

cell- 845-590-5254 gphillips@hvc.rr.com

#### **Directions to Greg Phillips Shop**

From NJ: Take the Garden State Parkway north into New York State. Pick up the NYS Thruway (Route 87), and take it north to exit 17 (Newburgh- Stewart Airport) after exiting and the toll booth DO NOT bear right onto Route 84, continue straight to traffic light at Route 17k. Turn right (west) onto Route 17k proceed about 9 mi to 937 Rt. 17k (Greg's house) it will be on the left, there is a sign in front of the house " A Sure Sign". The building behind the house has the second floor painted with rainbow colors. (For anyone that has been to the Orange County Farmers Museum the house is less than a mile past the sign for the museum.)

#### Looking for 30 Gallon Steel Drums!

These are a little smaller than 55 Gallon drums. If you have any or know where to get a few contact Larry Brown or Mark Morrow on the directors page.

# New Jersey Museum of Transportation Pine Creek Railroad

Well it was the weekend after Thanksgiving and the weather was lousy. But we set up inside and had a gas forge going and a coal forge that is in the shop. A few members came out, about 6? but every one got a little forge time if they wanted it. I had a good time poking around the museum and talking to two Boilermakers who were doing welding on a boiler for a steam engine that is being rebuilt. If you haven't been to the museum try to make the next meet that gets scheduled there and get a look at all the equipment and trains that are hiding in the buildings. Larry Brown

#### NJBA Holiday Party

Marshall and Jan hosted the NJBA Holiday Party at their home in Howell, NJ on December 7th. I was able to attend this year and had a very good time. There were about 20 people there and the food was brought by those attending and provided by Marshall and Jan which made a very nice selection of delicious food to try. This has been a yearly event for NJBA and Marshall has opened his home to us for as long as I remember and I'm sure I speak for the group when I say that their hospitality is appreciated by all.

# T—Shirts!!!

NJBA has a new batch of T Shirts which are black with white lettering. We are still holding the price at \$15 so get yours soon. They are currently at Marshalls Farm

# Bethlehem Steel Tour

As I was working on the NJBA Newsletter I received an e-mail for Caleb and Doug Learn about the tour of the old Bethlehem Steel Mill. I responded immediately to get my name on the list and put it in the newsletter which I was about to send out and got the newsletter on it way ASAP. The tour was open to NJBA and PABA members. Most of the tour participants were PABA members.



Tubs for charging furnaces

We started at the building by the parking lot that will house the start of the museum complex. We were then allowed to drive into the mill area and started with the building that was used for tool steel storage for some of the machine shops and is now their uncontrolled climate storage area which had machinery, pat-





Patterns stored in the first shop, look at the last picture for scale, as that piece it in the foreground here!

terns, the tubs that were used to charge the iron in the furnaces with other needed elements, a fire engine from their fire department and many other items.

We then proceeded to one of the buildings the workers used to change their clothes and wash up in. There are still the locking chains with hooks and baskets they used to put their belongings in and on and pull them up toward the ceiling and lock the chain in a tube below. We then went to the building that housed the blowing engines.



Partial view with three furnaces



Employee belonging and changing room



Flywheels for the blowing engines

The blowing engines ran on carbon monoxide that was a byproduct of the furnace and were used to compress the air that was fed to the pre-heaters and the blast furnaces. There were two men who were working on rebuilding one of the blowing engines who gave a very good description of how they worked and showed us the parts that were around to help with the explanation.

The two men accompanied us as we left and walked along the outside of part of what was once the worlds largest machine shop. We weren't allowed in due to the condition of the building but could see a small amount of machinery that was stored there including the machine that used the charging tubs in the first building to add materials to the furnaces and a very long gun barrel made for the battleship Missouri in the early 1900's.

We went from there to the blast furnace, where the troughs are still in the floor from where they tap the slag and the metal and control the molten metal as it runs by a series of gates into huge crucibles which are then taken to where the iron would be poured into molds. The two guys from the blowing engines were still with us and described the operation of the



Special rail cars used to move materials for the furnaces

furnace and the preheating ovens that heat the air going into the furnaces.

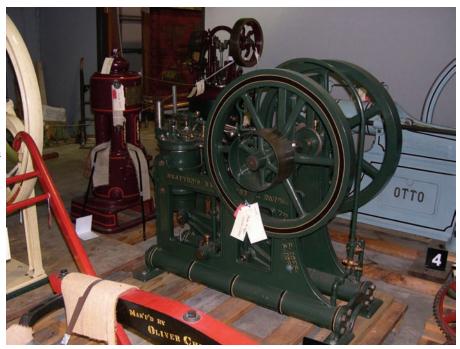
We then went back outside and onto the tracks where the raw materials were brought in from other parts of the yard to fire the furnace on a special wide gauge track. The cars emptied out the bottom and a scoop came down the side of the furnace and picked up the materials and brought them to the top to be added into the furnace.

We broke for lunch and then went to the climate controlled storage area outside of Allentown and got to view a lot of the old machinery that is being saved for the museum where it has been set up as a temporary display. A great trip, many thanks to Caleb and Doug learn for getting involved there and setting up the tour.

It was rather dark there for my camera, but I will put more of the pictures on the web site soon, L Brown, Editor.



Small Engine in the controlled storage area



One of many stationary engines in the controlled storage area

2008 1-12 Blacksmith Leaves \$3.5 Million To the University Of Nebraska. Man Never Went To College

OMAHA, Neb. A blacksmith from the tiny town of Gresham, Neb., who never went to college but yet loved to learn, died in January and left his multimillion dollar estate to the University of Nebraska.

Walter Schmitt left \$3.5 million to the University of Nebraska Foundation, the sole beneficiary of his estate. He died at the age of 94, according to his friend, Cindi Heiden, of York. It's one of the largest estate gifts the foundation has ever received for scholarships.

Heiden said Schmitt read constantly and paid close attention to the political world, agriculture, history and finances. He often read Smithsonian Magazine and National Geographic, she said. "He told me he chose the University of Nebraska Foundation as his beneficiary because of his passion for education," Heiden said.

Schmitt amassed his wealth through his years as a blacksmith, a line of work he began after taking over his father's business. Heiden said



his parents taught him at a young age the importance of personal finance decisions. "He was a man who lived by needs, and not so much by wants," she said.

`Schmitt's gift will benefit students at all four campuses in the university system. He requested that the gift be permanently endowed, meaning the \$3.5 million will be invested and the net income available each year for scholarships.

It's estimated that about \$170,000 will be available each year to student at the four campuses. Schmitt was a lifelong resident of Gresham. He was never married and his closest living relatives are in Germany. Schmitt requested that his body be donated to science.

#### Little Giant Rebuilding Seminar

Please join us March 20-22, 2009 for our annual Little Giant Rebuilding Seminar! An old style 25 LB Little Giant will be rebuilt during the class, and a new style machine will be on hand to demonstrate proper assembly and adjustment of both styles. The class costs \$95, refundable up to 7 days prior to the class; advance registration is required. We limit the class to 25 participants. The class starts at 9 AM sharp on Friday, and usually ends by Saturday evening. The schedule runs Sunday until noon in case we encounter any exceptional problems in rebuilding, and to answer remaining questions. Please call or email if you have any questions, or prefer to register by phone. You can reach us at 402.873.6603 or id@LittleGiantHammer.com Little Giant is located at 420 4th Corso, Nebraska City, NE 68410.

New England School of Metalwork 2009 Summer Session Instructor Workshop dates

Don Fogg – Mastering the Hamon May 1 -4 Clay Spencer – Forging Spike Novelties May 29 June 1

Elizabeth Brim – Sculptural Inflation June 5-8 Zack Noble – Hinged Outlook June 19-23 Rick Smith – Iron on the Wall July 10-14 James Batson – Forging Bell Dirks & Woodhead Bowies July 24-28

Peter Ross – Thinking Inside the Box August 7 – 11

Mark Asprey – Mastering the Fundamentals of Blacksmithing August 28 – September 1

Charley Orlando – Effective Forging Techniques September 11 – 14

 $\label{eq:measurements} \begin{tabular}{ll} Meagan \ Crowley-Foundations \ of \ Form \ September \ 25-28 \end{tabular}$ 

Jonathan Nedbor – From Soup to Nuts October 9 – 13

It's estimated that about \$170,000 will be availabed each year to student at the four campuses.

mitt was a lifelong resident of Gresham. He

Josh Dow & Lauren Holmgren – Cast Iron
Sculpture October 23-26
Inquiries to

dglaser@newenglandschoolofmetalwork.com 1-888-753-7502

This is Posted by David Macauley BSA Merit badge in Va

Subject: 2010 NSJ - Recruiting Metalwork MB Staff

Date: Wed, 30 Jul 2008 16:06:16 +0000

Hi, everyone!

Well, it's time to start beating the recruiting drum again. I would like all of you to join me at Fort AP Hill for the 2010 National Scout Jamboree and the 100th anniversary of Scouting in America. Won't you please sign up for another two weeks of metalworking under a big tent?

Please reserve the 22nd of July 2010 through the 4th of August 2010 on your planning calendar. Like last time, this is a 14-day commitment. Recently, Steve Bowen (MB Midway Chairman) and Carey Miller (MB Midway Director) sent Booth Coordinators invitations to reprise their roles. Naturally, I accepted.

Of particular interest to us, they included in the packet a Staff Roster so that Booth Coordinators can list all of our staff members so that Steve and Carey can make sure that none of our people get reassigned to another Jamboree position. That was great news!

Here is what I know about Staff Registration:

- + \$795 for Staff (aka people over 25). \$395 for interested Youth Staff.
- + Register on-line. You have to create an account to access the BSA Web server. http://www.bsajamboree.org/staff.html
- + Once you have an account, you can access the Jamboree Staff Application form.
- + Here are my suggestions for filling out the Staff Application:
- \* When you reach the section where you're asked to tick off all of your applicable hobbies, please just tick the MERIT BADGE MIDWAY box. Please hide any other skills you have - don't give a Regional Planner a chance to grab you.
- \* When you get to the part where you Indicate the four staff positions that you'd like to have, please just select MERIT BADGE MIDWAY. All four times. Same reason why.
- \* Special Skills, Certifications, Qualifications or Trainings: 2005 METALWORK MB STAFF (and earlier Jamborees, as appropriate)

- \* Aquatics, Band, Camp School, Merit Badge Qualifications: METALWORK MB **COUNSELOR**
- \* Hobbies and Skills, please just tick the MERIT BADGE MIDWAY box
- + When you've completed the form you will be asked to give your credit card info. You will make a \$100 payment at that time. If you change your mind and withdraw your application you can get \$50 back. The next payments will be made by logging onto the BSA server and doing the credit card thing.

How are we going to operate this time?

- + We will be wearing our blue jeans, old-time shirts, and red suspenders while on duty.
- + We won't be teaching the fundamentals, such as the properties of metals, work-hardening, annealing, soldering, and riveting so that we can have more time for making things with the Scouts. The Scouts can learn about these things as you work with them.
- + We will be teaching the Scouts how to temper a center punch.
- + We will offer the Blacksmithing, Tinsmithing, and Foundry Options to the Scouts.
- + We will have a miniature lathe and vertical mill set up in a Machine Shop Area for use by any

Scouts.

+ Credible rumor has it that MB Midway HQ will issue each booth at least one laptop computer that will have a card-reader attached that can read the Jamboree Scouts' 'smart tags.' I'm assuming that we'll be able to record each Scout's daily progress with these computers. I'd like to have eight or ten Administrative Assistants working on this 'opportunity to excel.' With four or five AAs on a shift that should make it possible for the AAs to keep up with the near-real-time data entry and populate the next 50-minute session.

Please let me know if you are planning to come and help me with the Metalwork Booth.

When you respond, please tell me if your street address or any of your telephone numbers (Work, Home and Cell) has changed.

Please recruit more people!

I want to have 32 Counselors and 10 AAs this time. That's five Counselors in each Area per shift, one Counselor in the Machine Shop per shift, and five AAs on the Gate Area per shift. This means we need about 20 more people.

Please help me find them.

Youth Staff is a good thing, so if any of you have Scout-aged children who are willing to work then sign them up! And if you know of any suitable Scouts from your Troop or District, then sign them up as well. If we have electricity on Day One then we can run an OJT program for these new Counselors, just as soon as we get the booth set up. You know the way we do things in the Booth, so if you feel that your child or friend will fit in with us then I'm happy to accept them as members of our team. Orrin Banner, Doug Learn, and Charlie Dubay: Is there any possibility that your son will join us again?

Since I have to place these new peoples' names on the Metalwork MB Staff Roster I also need to know the name, street address, email address, and telephone numbers for anyone whom you have recruited.

So far the following people have expressed an interest in working as AAs:

- 1. Don Leeger
- 2. Clarence Terry
- 3. Mrs. Larry Burkholder
- 4. Mrs. Ed Jackson

The following people have asked to work in the Foundry:

1. Joe Dellapenta (no email address)

I need two machinists to supervise the Machine Shop Area, one each day. Larry Leonard and Kim Ankeny: Are you willing?

I've spoken with these Scouts and they are likely prospects for serving as Youth Staff:

- 1. Will Schaffer
- 2. Raymond Graves
- 3. Joeseph Slavin, Troop 6
- 4. Nicholas Mobley, Troop 6

I guess I've run out of things to avalanche you with. I'm eagerly looking forward to hearing from you! Fondly, Drew

PS I have a new home email address: ddhage-mann@verizon.net.

# **Iron: Twenty Ten**

International Juried Exhibition

Call for Entries

The last significant international contemporary blacksmithing exhibition to tour the United States was Towards A New Iron Age in 1984. Since that time, many artists have entered the field with unique perspectives on blacksmithing as an art form. New developments and approaches in the United States and abroad warrant a fresh look at how blacksmiths are using traditional and innovative techniques in their work. With an eye toward the future of this vital art form, Iron: Twenty Ten will offer a survey of the finest contemporary blacksmithing from around the world. Work will be selected by a jury of prominent blacksmiths and scholars, including Anna Fariello, Tom Joyce, Richard Quinnell and James Wallace. **Exhibit Dates** 

May 29 - July 19, 2010

The exhibition is timed to coincide with the 2010 ABANA conference in Memphis. After the initial exhibition, the show will travel for up to two years to other venues, which are currently being secured. Opening Venue

National Ornamental Metal Museum

374 Metal Museum Drive

Memphis, TN 38106 USA

Deadline

All submissions must be received by 4 pm, April 22, 2009. There will be no extension of the deadline.

For more information

http://www.abana.org

Email: iron2010@metalmuseum.org

Phone: 901.774.6380

http://www.metalmuseum.org/irontwentyten.html

# Peters Valley Financial Appeal

January 2009

#### Dear Friend's

Your generous support has been critical in helping Peters Valley continue to provide outstanding craft education programs. Peters Valley plays a unique role in the education, promotion and preservation of American craft. Through our educational and outreach programs we provide thousands of people the opportunity to experience the expression of creativity through ideas, materials, and process. We are very proud of what we have accomplished with your help in 2008:

#### **Core Educational Programs**

Peters Valley adult summer workshops are among the largest in the Mid-Atlantic region. We ran over 110 adult workshops this year, with over 725 participants, including more than 100 scholarship students. Our Beginner's Weekend was a huge success, introducing first time students to the possibilities of art.

#### Community Outreach

Spring: Over 1200 PV members, neighbors and visitors joined us for our annual Open House. Each of our seven studios was on the tour with demonstrations in each craft. Summer/Fall: Thousands of visitors learned about craft from more than 50 artists' demonstrations at Peters Valley's booth at the Sussex County Fair and at Peters Valley's own Craft Fair.

#### Artists Residency

This program provided 22 professional artists with time, space and support for the development and refinement of skills and the creation of new work.

#### **Special Programs**

In March, Steve Butler, head of our Woodworking Department, established "Watergap Woodturners", a local chapter of The American Association of Woodturners. Bruce Dehnert, head of Ceramics, hosted eight special kiln firings at our Ceramics Studios. We are particularly delighted to have had more than 70 local high school and junior high school students participate in these firings. Dick Sargent, head of Blacksmithing, hosted our annual Pig Iron Fest.

#### Youth Programs

Our summer Youth Program enjoyed its second successful year, with a full month of workshops designed especially for youth. The children produced work in ceramics, fibers, fine metals and more.

The children's activity booth at the Craft Fair was busy all weekend as more than 100 children tried their hands at a variety of crafts.

2008 has been a year of challenges as well. Cuts in New Jersey State Arts funding hit hard at Peters Valley. We are extremely grateful to the over 200 supporters of Peters Valley who contributed to our emergency appeal this summer for our educational and outreach programs. These donations helped keep our doors open and our programs running.

Continued on next page

Looking ahead to 2009 we see a year of immense opportunity but also serious challenges. We have plans to invest in our facilities, add to our innovative educational programs and expand our outreach. But with further cuts in state funding on the horizon, Peters Valley will be hard pressed to simply maintain basic programming.

We are profoundly aware of the current financial crisis. In tough economic times, arts organizations bear a disproportionate share of the burden. But we firmly believe in the importance of continuing to make and experience art, especially at times like these. Art enriches and empowers the maker and the observer. It brings beauty to our lives and creates hope and a feeling of possibility.

Individual donors account for 75% of philanthropy in the United States. Here at Peters Valley we are fortunate that our individual supporters are dedicated, generous and determined to see that we survive through this trying period. We hope that you choose to continue to support Peters Valley's educational and outreach programs and will include Peters Valley as you consider your year-end giving. The need for your support has never been greater. Your tax deductible contribution will make it possible for Peters Valley to continue to offer an enriching and creative experience of fine American craft.

On behalf of the Staff and Board of Peters Valley, please accept my sincere thanks for your generosity and best wishes for a happy and healthy 2009. Sincerely,

Maleyne M. Syracuse

President, Board of Directors

Marnelly

Bruce Ringier

1<sup>st</sup> Vice President

On April 22nd of 2009 **Blossom International** will host our first fundraising event of 2009 at the Spring Lake Manor in Spring Lake, NJ entitled "The Art of Goodness".

Our non-profit organization focuses on empowering children and families because we recognize that they are very capable, but often overlooked as volunteers. The children we work with so very much want to create a better world and they are willing to work hard to do so.

We are asking local artists that are interested, to donate an original piece of artwork in any medium that will be auctioned off at the silent auction on April 22nd. Artwork must be received by March 31,2009.

You can read more about our organization and this event at www.blossominternational.org but if you have any other questions or need more info on anything please don't hesitate to contact me directly. We be honored if you would consider donating work to our auction in April if it is at all possible for

you.

Thank you for your time.

Regards, Allison Sullivan President

Blossom International Inc.

PO Box 421

Manasquan, NJ 08736 Phone: 732-722-7240

Email: asullivan@blossominternational.org Web: www.blossominternational.org

# Lewis and Clark War Axes By Eddie Rainey

The Lewis and Clark expedition was the first federally funded scientific expedition in the United States. Prior to their departure in 1804 Lewis and Clark spent almost one full year planning and gathering supplies for their journey across America. They had to be sure they had extra supplies and gifts to trade with the Indians they expected to encounter.

The first leg of the journey took them north to Bismarck, North Dakota. They reached the fort just in time to prepare for the worst winter on record. The fort was equipped with a black-smith shop where the first trade axes were made to trade with the Mandan Indians. Because of a late run of the Buffalo the Core of Discovery found that trading with the Indians was their best source for food. The Mandan Indians were experienced farmers and were willing to trade food for metal objects. The Mandan village was located just outside the fort along the river and was the hub of trading activity. The population was the same as Washington, D.C.

These trade axes became the status symbol for Indian chiefs. Almost all photographs of Indian Chiefs shows the trade axe or tomahawk held across the chest. Below is the details of the construction of an authentic Lewis and Clark trade axe.

- The length of the axe is 9"
- The cutting edge is 6"
- The eye for the handle has a diameter of 1" 1 '/4"

—Start with 3/16" plate 9" in length and 6" in height tapered to 1 1/4"
The eye is made from 1/4" x 1" flat bar 5 3/4" in length. First find the center of the bar and measure 2" from center both directions and mark with a center punch. This gives you 4" for the eye and approximately 3/4" for the scarf.

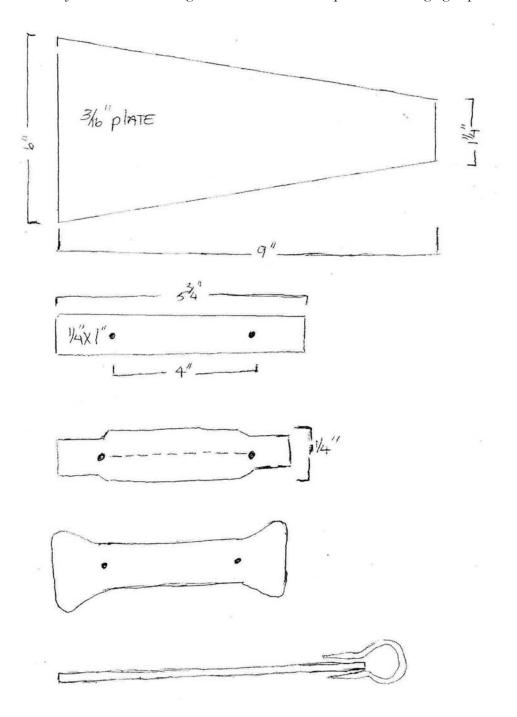
From the center of the bar forge the bar to 11/4" in width. As you widen the bar to 11/4" leave a ridge line in the center between the center punch marks.

Now form the scarf by forging the ends into a fish tail. Your piece should now resemble a bow tie. Heat and bend over the horn until your scarfed ends almost meet. Insert the 3/16" plate between the scarfs and line the plate up with the center punch marks. Now forge weld the 2 pieces together. Now you are ready to drift the eye. You want an hour glass shape to the eye. You should drift the eye round using a drift with a diameter of 11/4"

You may have some clean up around the eye to do from the forge weld.. Hammer dress the edges and the taper to the eye making a smooth transition from eye to the body of the axe. Use borax to clean by heating until dull red and wire brushing. Forge the cutting edge to 1/2 inch taper. You can decorate the axe by punching round holes into the body of the axe. Some had weeping hearts which was a favorite for some tribes.

Apply a good coat of wax and your authentic reproduction of a Lewis and Clark trade axe is ready for a handle. *The* handle can be decorated as well, Good forging a let your creativity soar

Thanks to The OBG for sponsoring the scholarship that made this learning experience possible. Thanks to Jim Batson who taught the class on this unique and fun forging experience.



#### A BLACKSMITH'S GROCERY LIST

by: Tommy Ward

When grocery shopping with my wife I sometimes amuse myself by searching for common household substances that might be useful in metalworking. Here's what I have come up with. If you have a favorite blacksmith's "recipe" using materials found in a supermarket let use know and we'll publish it in a future issue.

<u>Aluminum foil</u> - Melts at about 1220 F. Thickness of household brands is around .0007" or less. In addition to its obvious insulating and reflective properties, aluminum foil can be used in mechanical work as a shim stock for adjusting the clearance of bearing or mating surfaces.

<u>Ammonia</u> - A general household cleaner that can also be mixed with various other materials to alter the color of copper and steel.

<u>Baking soda</u> - (sodium bicarbonate) Can be used to neutralize acids. Mix with water to form a paste, or add to water to make a dilute solution. Don't confuse with baking powder, which combines sodium bicarbonate with other additives.

<u>Beer</u> - Useful both in and outside the shop to improve or alter the disposition of the metalworker. Most any brand can be effective.

<u>Beeswax</u> - Used as a "finish" on ironwork. Usually rubbed on the metal while hot. Also makes a good dry lubricant for drill bits and saw blades.

Borax - "Twenty Mule Team" brand borax is widely used as a flux for forge welding.

<u>Camphor</u> - When placed in tool chests the vapors emitted by camphor blocks help to prevent rusting of fine tools. May not be available in grocery, but better pharmacies should have it.

 $\underline{\text{Catsup}}$  - "Gentle" cleaner for brass. Mix 50/50 with water and immerse small items from two hours to overnight. Leaves a soft, matte finish. To avoid damage, don't leave items in the solution for long periods, as acid in the catsup will attack the zinc in the brass.

<u>Cheesecloth</u> - A lint free open weave fabric. Fold into a small pad, load with an appropriate solvent, and wipe surfaces for a lint free preparation to finishing. A small pad is ideal for the lint free application of stains to surfaces. Also use to strain paint or other liquids. Use to make a "tack rag" for wiping dust from surfaces prior to painting (dip a piece about 12" square into clean water and squeeze dry. Mix 3 tbsp. varnish with some paint thinner and sprinkle onto material. Knead the cloth until it's saturated with the mixture. Don't overdo it. A tack rag should be tacky enough to pick up dust but not stick to surfaces).

<u>Citric acid</u> - A mild acid present in many fruits, vegetables, and carbonated beverages (the highest concentration is in lemons and limes). May also be found in concentrated form in the baking or canning sections of the grocery. Can be used to remove rust from tools. Mix with a little alcohol (rubbing alcohol is fine) and a dab of detergent and apply to rusted surfaces. Heavy rust may require immersion overnight. Rinse and scrub off with a fine Scotch-Brite pad. Surfaces should be clean of oil before applying the solution.

<u>Club soda</u> - To improve their performance, substitute club soda for water when mixing soluble oil type cutting fluids used in drilling or machining.

Coco butter soap - Can be used as a lubricant in metal spinning.

<u>Dishwashing liquid</u> - ("Dawn Blue" preferred). An ingredient used in making Robb Gunter's "Super Quench" formula for hardening mild steel. For details go to: http://www.cvbg.org/tips/superquench.PDF

<u>Eggs</u> - Use to test a brine quench for proper salinity - toss a couple of uncooked eggs into the water as salt is added. Eggs will float when proper salt level is reached.

hand soap - A bar of soap makes a good lubricant. Dry rubbing some on sliding surfaces will improve the operation of threaded fasteners, nails, saw blades, drawer and window slides, etc.

<u>Hydrogen peroxide</u> - Commonly available in a diluted solution of about 2.5% to 3%. It is a weak acid and strong oxidizer. Primarily used as a disinfectant but also can be used to remove certain stains and to bleach certain materials. Used in metalworking to color some metals and to remove rust from iron. Several formulas for its use can be found on the Internet.

<u>Kitty litter</u> - Can be used in place of "oil dry" to absorb liquid spills.

lard - An effective cutting lubricant for drilling and machining - particularly with "tougher" metals. Use straight or mix with 30 wt. nondetergent motor oil.

<u>Lye</u> - Also known as sodium hydroxide or caustic soda. Makes a very effective paint and "grunge" remover when restoring machinery. Lye is getting hard to find due to concerns over its use in making illegal drugs. However it can sometimes be found in stores packaged as "Roebuck Heavy Duty Crystal Drain Opener" which is 100% lye, or "Drano Kitchen Crystals" which contains about 54% lye. Mix one can of Drano Crystals with 3-5 gallons of water and immerse parts in the solution. The Roebic product may require less due to its higher concentration of lye. Rinse parts thoroughly immediately after removal from the solution. For ferrous metals only - don't use on aluminum or brass. Lye is reactive and dangerous, so appropriate caution is advised.

<u>Mothballs</u> - Can be used in a toolbox to prevent rust - see camphor. oil soap - Can be used as a lubricant in metal spinning.

<u>Paraffin</u> - Use to make a lubricant for metal spinning. Heat (carefully - use a double boiler) and mix together 3 parts beeswax, 1 part paraffin, and one part toilet bowl sealing wax. When cooled, a paste is formed that can be applied to the work face of objects in the metal spinning process. Also can be used as an "indoor" finish on iron. Apply alone or mix with other substances to create a finish. Makes a decent lubricant for drill bits. Use melted paraffin to coat fine tools and prevent rust during long-term storage,

<u>Peanut oil</u> - Has the highest flash point of the commonly available vegetable oils. Sometimes used as a quench for oil hardening steels. Also useful as a "gentler" method of heating parts when shrink fits are called for in mechanical work. Be advised that vegetable oils will eventually become rancid, while mineral oils will not.

<u>Petroleum jelly</u> - A highly refined light weight lubricant. Insoluble in water, but can be dissolved by some solvents. Commonly used as a topical dressing for scrapes, burns, and chapped or dry skin. Rubbing some into the hands before beginning dirty tasks will make cleanup easier upon completion of the work. Coat fine tools with petroleum jelly to prevent rusting.

Pine sol - "Friendly" and effective grease remover and cleanser for machinery and other surfaces.

<u>Potato</u> - Use to test a brine quench for proper salinity. Toss a few uncooked potato chunks into the mix as salt is added and the potatoes will float when proper salt level is reached.

<u>Rubbing alcohol</u> - Rubbing alcohol contains a concentration of 70% - 90% isopropyl alcohol mixed with water (some brands may use ethyl alcohol). Primary use is for first aid (alcohol should not be used on open wounds, but to clean areas around the wound - use hydrogen peroxide on the open wound). Also effective as a cleanser or degreaser for metal. Good for a painting prep since it evaporates quickly and leaves no film on treated surfaces.

<u>Salt</u> - Mix with water to improve its quenching ability. The backyard rule of thumb is between 5% and 12% salt in water. Also can be added to vinegar to make a brass, copper, or iron cleaner.

Swimming pool pH balancer - (sodium bisulfate) Use to make a dip for cleaning copper after working, soldering, or brazing. Usually available in stores in 5 lb. containers labeled "pH reducer or pH negative". Mix one to two pounds of chemical with eight gallons of water in a plastic container such as a trashcan. Submerge items in the solution for thirty minutes to an hour then rinse thoroughly with water. The solution can also be used to clean steel, but use a separate container - don't contaminate the copper bath with other materials.

<u>Toothpaste</u> - Use an old style paste type for a very fine polishing compound. Thin with water if needed.

<u>Vinegar</u> - Common vinegar is about 5% acid and can be used to remove rust from steel and to clean oxidation from copper and brass. Adding some salt improves its effectiveness. Will attack the zinc in brass, so to avoid damage don't leave brass items in vinegar too long. A number of formulas for its use in metalworking can be found on the Internet.

<u>Washing soda</u> - (sodium carbonate) Available in some stores as "Arm & Hammer Super Washing Soda". Mildly caustic. Used to prepare the electrolyte for an electrolysis rust removal process. See following the link for details on the electrolysis technique:

http://www.rowand.net/Shop/Tools/Electrolysis.htm

Note: As concerns for liability increase and consumers demand "easier to use" products, some of the listed substances may no longer be available in your grocery. However they should be stocked in better pharmacies and home improvement stores. Some of these materials can be toxic, cause skin damage, or create toxic fumes; particularly when mixed with other ingredients. The author and the MFC claim no expertise in the use of chemicals and strongly encourage users to familiarize themselves with proper handling techniques and the potential hazards that may be associated with these materials. Always provide adequate ventilation and wear appropriate safety gear when handling chemicals.

MISSISSIPPI FORGE COUNCIL THE UPSET SEPTEMBER 2007

# Blacksmithing Workshops and Classes:

**Peters Valley Craft Education Center** 

19 Kuhn Rd., Layton, NJ 07851 (973)948-5200 pv@warwick.net www.pvcrafts.org

#### Academy of Traditional Arts Carrol County Farm Museum

500 South Center St. Westminster, MD 21157 (410)848-7775 (410)876-2667

#### **Touchstone Center for Crafts**

R.D.#1, Box 60, Farmington, PA 15437 (724)329-1370 Fax: (724)329-1371

#### John C Campbell Folk School

One Folk School Rd.
Brasstown, NC 28902
1-800-365-5724 www.folkschool.com

#### **Brookfield Craft Center**

286 Whisconier Road P. O. Box 122 Brookfield, CT 06804-0122 203.775.4526

# **Open Forges**

We are looking for members who are interested in opening their forges up to members as a open forge. This does not have to be a weekly forge as is Marshall's the others can meet once or twice a month. Please contact, Larry Brown, Editor.

We want to encourage all to join us at:

## Monday Night Open Forge in N.J.

Marshall Bienstock is hosting an open forge in his shop at 7 pm almost every Monday night ( Please call ahead on holidays to make sure , (732)780-0871 )

## **Open Forge in Long Island**

Sunday from 10:00 am to 6pm. Starting the 1st Sunday in November until the end of April. Please call ahead to confirm and get directions. Ron Grabowski, 110 Burlington Blvd. Smithtown, NY (631) 265-1564 Ronsforge@aol.com If any members have a forge at home and work in the evenings or weekends and want to open it up to help a few local guys, let me know, Larry Brown, editor, as we get requests from members who have a hard time traveling to some of the open forge locations.

#### **Business Members**

We would like to thank those who joined with our new Business Membership category.

Business dues are \$40

Dusiness dues are φ+0

Please show them our support

John Chobrda, Pine Barrens Forge

231 Morrison Ave., Hightstown, NJ 08520

609-443-3106 JChob@earthlink.net

**Grant Clark, GWC Forge** 

PO Box 158 Perrineville NJ 08535

732 446-2638, 732 446-2638

**Eric Cuper Artist Blacksmith** 

109 Lehman Lane, Neshanic Station, NJ 08853

908 642-6420 ericuper@msn.com

Bruce Hay, Jr.

50 Pine St., Lincroft, NJ 07738

Jayesh Shah, Architectural Iron Design

950 S. 2nd St., Plainfield, NJ 07063

jay@archirondesign.com

Louise Pezzi, Blacksmith

1241 Carpenter St

Philadelphia, PA 19147

215 336 6023 pezziandjr@gmail.com

#### Search

I am looking for a #250 fisher anvil in good shape. If you have one for sale or run across one, contact me; Larry Brown, NJBA Editor. (718) 967-4776

#### **BLACKSMITH TOOLS FOR SALE!**

#### John Chobrda

Has a large selection of tools for sale.

Anvils – Forges - Leg Vices—Blowers

Tongs – Hammers

and/or resurfaced Anvils

Call John for prices and availability

Evening 609-610-3501

NAME		
ADDRESS		
CITY	ABA	NA
STATE/PRO V		
COUNTRY	Regular Member	\$55.00
71D ( 4)/DOCTAL CODE	Senior Citizen (Age 65+)	\$50.00
ZIP (+4)/POSTAL CODE	Full Time Student	\$45.00
PHONE #	Foreign Member	\$65.00
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# Join ABANA or Check out other area chapters!

#### Northeast Blacksmiths Association

Northeast Blacksmiths holds its meets twice a year at the Ashokan Field Campus in New York State.

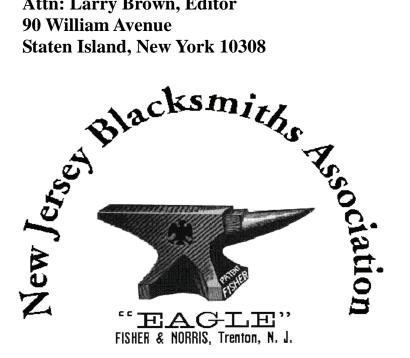
The Ashokan campus is located in Olivebridge, N.Y., several miles west of Kingston, N.Y. The meets are held the first weekend in May and in the first weekend in October every year. The main demonstration is in the blacksmith shop and there is a "Hands On" workshop for beginners. A main demonstrator is brought in for each meet, food and bunkhouse style lodging are provided as part of the cost of the weekend long meet.

Contact: Tim Neu
to register for hammer-ins
or subscribe to the newsletter;
Tim Neu, Ashokan Field Campus,
447 Beaverkill Rd.
Olivebridge, N.Y. 12461 [914]657-8333
For more information check out the web
site; <a href="http://nba.abana-chapter.com/">http://nba.abana-chapter.com/</a>

Join The Pennsylvania Blacksmiths Association!				
-				
Name				
Address				
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Home / work Phone # E-mail (optional)				
New Member Renewal				
Do you have any particular skills (welder, accountant, carpenter, doctor) that may be helpful to the group or membership?				
Suggestions for PABA demonstrations				
What is your skill level?				
O Beginner O Intermediate O Advanced O Professional				
Membership paid byCashCheck #				
Send your completed application with \$ 20 (one year dues) to;				
PABA Treasurer, Buzz Glahn				
1667 Wyomissing Rd. Mohnton, PA 19540				
(make Checks payable to PABA)				
PABA Membership Application				

Membership is from <u>Jan. 1 — Dec. 31</u>

**New Jersey Blacksmiths Association** Attn: Larry Brown, Editor 90 William Avenue Staten Island, New York 10308



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# How to Join or Renew your Membership in NJBA:

NJBA Dues are \$20 per year.

NJBA Business Dues are \$40 per year Please make your check out to: "NJBA" Please mail checks to:

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

Please include payment with the information listed below. You will receive a postcard confirmation of your membership, and will receive a newsletter within a month. NJBA's "year" runs from June to June. If you join mid-year, the postcard will offer a prorated dues option which will then allow you to extend your membership till the following June. The following information will be listed in a roster available to other members.

Name	Home Phone
Address	Day Phone
City	
State	Zip
E-Mail	Skill Level (optional)
Comments	