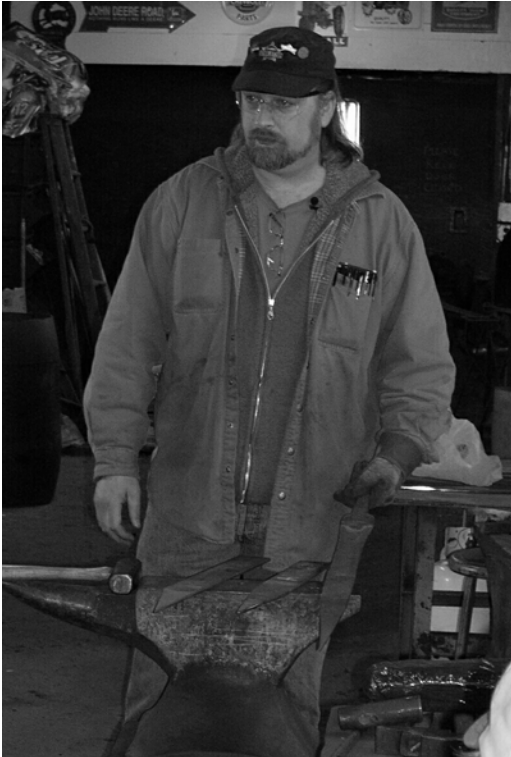


New Jersey Blacksmiths Newsletter

Mark Morrows
Demonstration at
Marshall Farm
on February 23th
<http://www.swordsmith.net/>



Mark started by talking about the development of the Roman sword and the weapons of their advisors such as a long Persian blade that he had brought a blank for as a sample. Mark then started with a tool steel stock that he had cut diagonally giving the sword point from each blank a start. He

Mark Morrow demonstrated the making of a roman gladiators sword for NJBA on February 23rd at Marshall Shop.

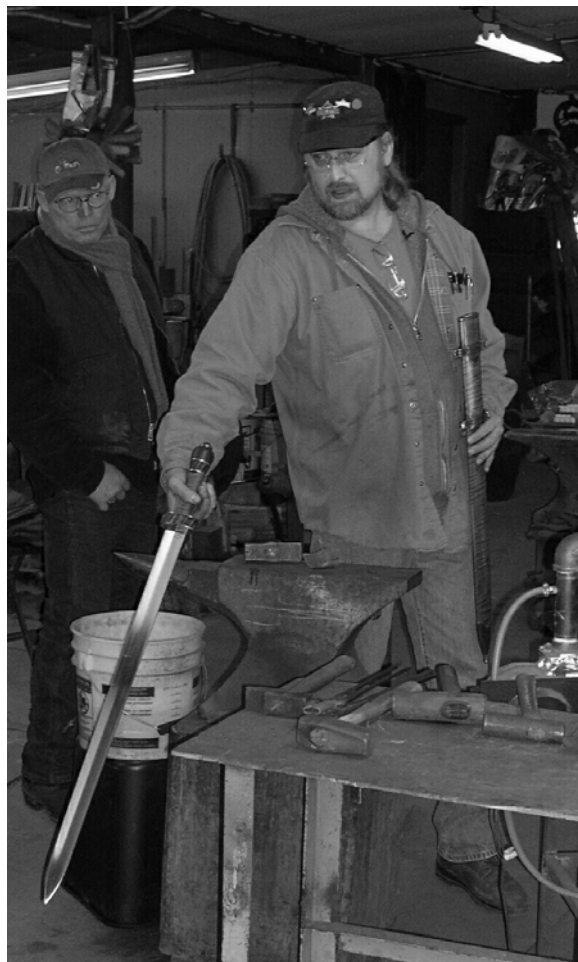


New Jersey Blacksmiths Newsletter



draws out the tang on a power hammer and then starts forging the blade by working from the tip back to the tang. He works the stock evenly from both sides and straightens as he does. He uses a gas forge for his forging heat source. Mark also discussed different types of materials used for the hilts and scabbards. Mark brought several styles of blades in various stages of completion to show the process used to create the blade and the scabbard. Mark was a very enjoyable and knowledge able demonstrator and if we can get him to demo for us again be sure not to miss the opportunity to see him.

Had a more detailed write up but it died in the computer, this is where the help from others at events such as sending me copies of your notes can assist greatly. LB



Sad News

We recently received news of the passing of Rich Laporta of Piscataway who has been a long time member of NJBA.

Rich died on Friday 2/22/2008 of a heart attack. It all ended very quickly. In a message from his wife Lori she said Rich enjoyed going to the demos and talking Black Smithing with the people associated with NJBA. He will be missed by his family and those of us who knew him



New Jersey Blacksmiths Newsletter



A Great Demo at SICA"

May 10, 2008 - Long Branch, NJ

NJBA took a bold step and did its 1st demo at a Sculpture Show. "Sculpt" held by SICA (Shore Institute for Contemporary Arts), was an opening day event for their summer long outdoor "Sculpture" 2008 sculpture show in Long Branch, NJ. The grassy Demo area next to the Oceanside boardwalk was the center for woodcarving, pottery making, glass blowing, modern dancing, and BLACKSMITHING. Mid day, the Car Music Project, (a jazzy band playing instruments they made from a CAR) fired up the music and really got things going. Meanwhile Dave's family disappeared for hours on the beach after borrowing a few small tools. Sometime around mid afternoon his daughter reappeared with a prize she had won in the Sandcastle making contest down on the beach.

Our Project, Originally called the "Blacksmithed Beast", was renamed "Rust the Magic Dragon" as this seemed a bit more in the spirit of the day's event, and it will also of course "live by the Sea". We had 2 forges running with one forging out pieces for the Dragon and the other busily pumping out rebar stakes to hold the beast down. The public couldn't have been better. Many people showed up to watch, ask questions, and a few even stepped up and took a few swings at the hot stuff. "The Boss" Bruce Springsteen even stopped by to see the smiths in action, but we were all too busy to notice. The Beast was made from 2"x 1/4" stock and 1 1/2" x 1/4"

New Jersey Blacksmiths Newsletter

stock and stands about 8+' tall, by 10+' long, by 7+' wide. We'd like to thank all the NJBA members (Marshal's Monday Night Crew) and also Larry Brown who helped pre form much of the beast in the weeks before this event. And also a special thanks to Dave and Tom who were defiantly the day's demo crowd pleasers.

After a solid day of Demo & Creation we carried the Beast through the streets (with some public help) and set her in her spot among the other sculptures on the traffic island between the North and Southbound lanes of Ocean Blvd.

Many thanks to : Eric Von Arx ; evonarx@hotmail.com for coordinating and working so hard on this project that hekps get the name of NJBA and the idea of blacksmithing out to new members of the public. From me, Larry Brown the editor, Eric thanks many times for this article. Pictures of the show can be seen here; <http://www.suburbanartists.com/sica2008>



————ABANA Discount Program At Graingers————

For Njba members who are also members of ABANA, You NEED To Check The ABANA Web Site! There is a minimum of 10% on all orders done this way. Some discounts are as high as 50%. Standard shipping is included also. The information is available on their home page or <http://www.abana.org/resources/grainger-program.shtml>. There are other 5% discounts from other vendors; http://www.abana.org/resources/discount_program.shtml

New Jersey Blacksmiths Newsletter

Sad News From Europe

April 28, 2008

In memorium: Prof. Alfred Haberman

The artist blacksmith with the most influence on his craft in central Europe, Alfred Habermann, recently died on 28th of April in the hospital of Waidhofen, Ybbs, in Austria only a few days before his 78th birthday.

The "pope of artist blacksmiths", the "master", as Habermann was called by almost all of his colleagues, apprentices and friends, he was a "globetrotter" of the artist blacksmith's trade. Nearly on every continent he held lessons and workshops in which he has lightened the fire of metal forging with modern patterns.

Until his last days he was working in his chosen "Heimat" Ybbsitz in Austria. During the last years he had found his place to be in the restored "Welser-Schmiede", together with his daughter Christine, who is supposed to be one of his successors in the different ways of creating. Always behind Alfred Habermann there was his wife Maria. She supported him in every single way, on every single place.

With his Oeuvre Habermann created the future within the present. His visions were understood by his colleagues only years after Habermann made them come true.

He was the founder of a young, hungry generation of artist blacksmiths in Europe. Now it is up to them to show what they have learnt. This generation as sure as his master-colleagues and friends will be on the way to Ybbsitz on Friday, 2nd May, to say goodbye to one of the fixed stars of the international blacksmith's family. The funeral will start at 12 a.m.

(This message was created by Peter Elgaß and Tobias Schumacher - HEPHAISTOS publishing house. Please excuse the bad English. But we supposed this message to be very urgent in order to make possible to every blacksmith around the world to take part at the funeral.)

From The Forge List

Many springs are 5160, others maybe 1095 or other alloys. New auto springs are "who knows what" but since you seem to be talking about older springs -- assume they are 5160.

5160 is a chrome steel with 60 points of carbon or 6 tens of 1 percent carbon. 5160 is oil hardening. If hardened it should be tempered -- and I would do that in a oven at 400 F for 1 hour.

BUT -- for most uses as blacksmithing tools you do not need to heat treat this steel. Just forge your tool and let it air cool. Dan Tull has been doing this for years and he is older than dirt. Some of his tools maybe older than dirt too.

The reason to anneal is only if you need to drill or machine this steel, otherwise let it air cool and use. If you do anneal this steel, then you will need to heat treat it, if you want to use it as a spring. Heat to critical, quench in oil and then temper. For springs you may want to temper higher than the 400 F I gave above.

If I have an unknown spring steel that I want to use for a "cutting edge tool" (woodworking or cold chisel) then I first try using an oil quench and if that doesn't give the results I want I move to a water quench.

Everyone who does heat treating will have cracking sometimes -- GOD says so. But the biggest reason blacksmiths have cracking is that they overheat above critical for a given steel. Quench from too high a temperature with a steel like W1 (1095) or O1 and the chance of a crack is near 100 percent. The history of use of old springs -- is another major factor in cracking of the steel in heat treating. No much you can do about this except to hold your mouth the right way when quenching. (POSTER; I'musing harrow and hay rake springs)

Now you tell us. Most harrow, and hay rake springs are 1095, the same basic steel as W1.

W1 is very brittle unless you temper it if you have quenched this steel -- so don't quench it, just let it air cool. The working end will still be hard enough, and the spring will still be springy enough.

I make most of my spring swages using 1/4 x 1 and 1/2 hot roll (A36) -- no heat treat, no quench.

Dave Smucker

<davesmucker@hotmail.com>

New Jersey Blacksmiths Newsletter

Calculating the Weight

Story & illustrations by Eden Sanders, San Andreas, California

Reprinted from the California Blacksmiths Association Newsletter

By the way - if you finished your hat rack, mirror frame or end table and want to know about how much it will cost to ship, you will need to know how much it weighs - below are some simple calculations you can make to obtain approximate weight. You know how much stock you had to begin the project, and you know how much scrap was left over, right? For each dimension used, subtract the scrap length from the original length to get the number of linear feet used.

Steel weighs about 490 pounds per cubic foot, or about .284 pounds per cubic inch. The formal math for computing the weight would be to calculate the area of the cross section of the stock, multiply it by 12" to get the number of cubic inches per linear foot and then multiply that by .284 to get the number of pounds per linear foot. However, that calculation can be simplified into those shown below for rectangular, round and square (a special case of rectangular) stock. So now you can do the math.

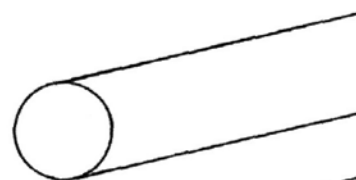
1" x 1/4" bar

Multiply the width times the height: $1 \times 1/4 = .25$
Add a zero (multiply by 10): 2.50
Divide by 3: $2.50 / 3 = .8331b.$
1 linear foot = approximately 5/6 lb.



1/2" diameter round bar

Multiply diameter by 4: $.5 \times 4 = 2$
Square the result: $2 \times 2 = 4$
Divide by 6: $4 / 6 = .667 lb.$
1 linear foot = approximately 2/3 lb.



1/2" x 1/2" square bar

Square the size: $.5 \times .5 = .25$
Add a zero (multiply by 10): 2.50
Divide by 3: $2.50 / 3 = .833 lb.$
1 linear foot = approximately 5/6 lb.



What Should I Know About Hydraulic Forging Press Safety?

by Dave Smucker,

Appalachian Area Chapter of Blacksmiths Newsletter, July/August, 2005

Let's start this discussion by quoting the back cover of Jim Batson's book, *How to Build Your Own Hydraulic Forging Press* (see References in Paul Boulay's article, *Whitney Potter & His Amazing Squishing Machine*, on page 9):

"Warning. The improper manufacture or use of this tool may cause serious injury or death! Do not place hand or fingers under the ram or between the dies!

"Flying Objects. The use of hand held tools between the dies is not recommended. The large force of 50,000 pounds can impart a side force to a tool or piece of metal that can become a lethal missile!

"Fire Hazard. Hydraulic fluid is flammable. The flash point of Rando Oil HD 68 is 435°F. It will burn your shop down! Hydraulic fluid sprayed from a leak or hole in the high-pressure line is an eye hazard and may become a flamethrower when ignited!"

The last warning that Jim makes is the one that I worry about the most with blacksmiths and hot metal. It is what industrial safety experts call a low occurrence, very high impact accident. I know of industrial accidents in which a cloud of hydraulic oil mist has been ignited by hot metal and resulted in the loss of life. My personal experience includes a number of very serious mill fires where hydraulic oil and hot metal combined for major damage to equipment and buildings.

What Can I Do?

- To start with, use the best hydraulic hose and fittings you can buy.
- Next, make sure that you use the right fitting in the right place. This is not the area for just getting by or jury-rigging.
- Every day before you use your press, inspect the hoses and fittings for damage or signs of leakage. If there are any, fix or replace before using - don't delay. Don't say, "I'll do that tomorrow."
- Seriously consider shielding that will prevent leakage or spray going directly on you or the hot metal. Make sure that shielding doesn't prevent you from inspecting the hoses and fittings.
- I prefer designs that put the pump, motor, valve and cylinder below the hot metal. There have been very good presses built that operate through either a push-up or a pull-down mode with the cylinder mounted below the working area.

The other risk area I would comment on is what Jim calls flying objects. One major advantage of a hydraulic system of this type is that there is not a great deal of stored energy in the hydraulic system, but there can be a lot of stored energy in the press frame, dies and guides. Repeated loading may cause welds to fail or parts to fail, releasing stored energy in a microsecond. Pay attention to your design and welds. How are parts going to be loaded? How are they going to be deformed and what will happen if they fail?

The above thoughts are the opinions of the author and not the position of the Appalachian Area Chapter of Blacksmiths. Remember, you are the one responsible for your safety, and the comments recorded here are intended for you to think about ways in which you can limit your risk and exposure to the hazards associated with the craft of blacksmithing.

New Jersey Blacksmiths Newsletter

Stainless steel,
Laser cut protractor
that comes in
three sizes, 6, 12,
and 24 - inch.
Wolfgang asks if
you can define the
use of the humps
in the cross arms.

3 Cool Tools

Wolfgang Rotbart, who runs Wolfgang Forge in Vernonia, Oregon, found himself in the same dilemma that every blacksmith has faced at one time, looking for just the right tool.

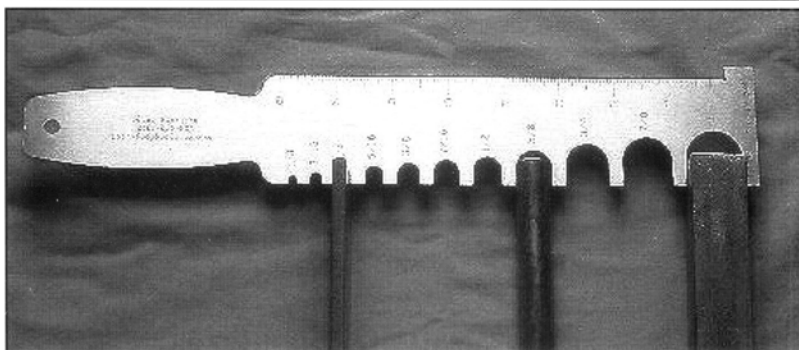
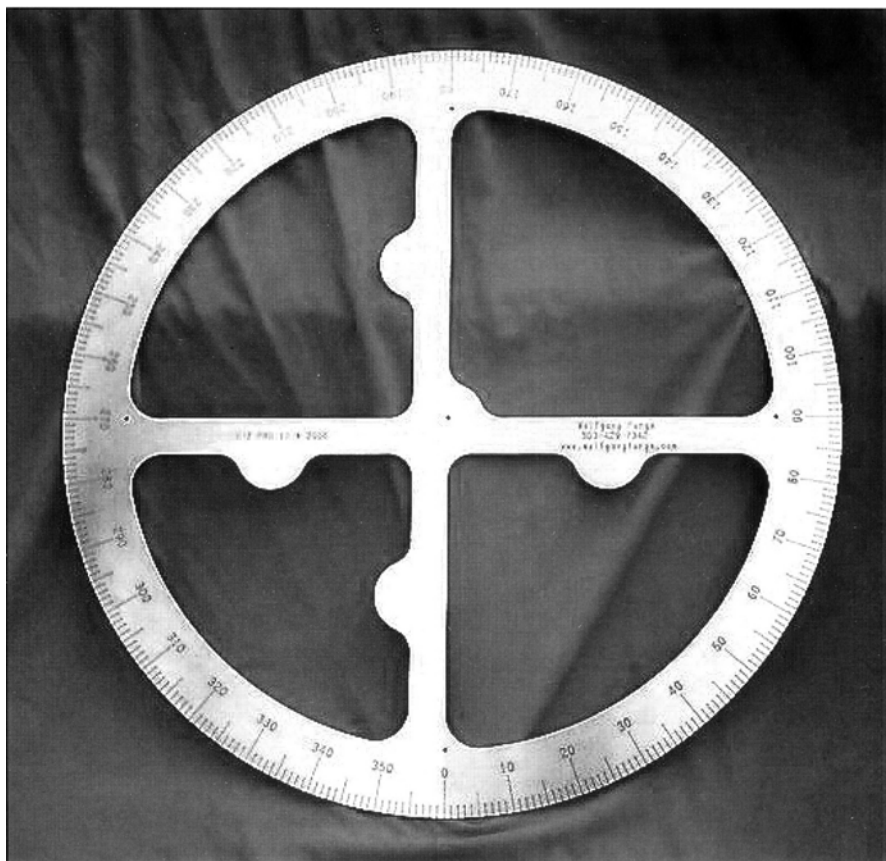
His answer was also one that many smiths resort to, make your own.

Two of the devices he

came up with - not necessarily new ideas, just improvements on what already exists - are a gauge hook and rule and a protractor.

He developed the gauge to quickly determine stock sizes

without the hassle of a tape measure. The slots are used to determine the diameter of round stock, the size of square stock and the thickness of flat bar. The other side is used to determine the width of flat bar.



E-Z Gauge II Hook Rule. Etched numbers and lines resist ever wearing away.

"I have my hook rule hung by the stock rack where it is quite handy," Wolfgang says.

The hook rules are made of 14 gauge, 304 stainless steel suc-

New Jersey Blacksmiths Newsletter

cessfully resist rust even in this damp Northwest climate. All numbers and lines are actually laser-etched into the tool and will hold up to use much better than the painted lines and numbers and found on most tools.

Wolfgang said that he developed his series of protractors to simplify laying out the legs for floor lamps and then found it to be very useful in many other situations, including railing and

handrail layout. He credits it for being very accurate when laying out angles for fabrication, blacksmithing, and woodworking.

"The large diameter makes it easy to lay out angles accurately with 1/4-inch increments," he said.

"Cool Tools"

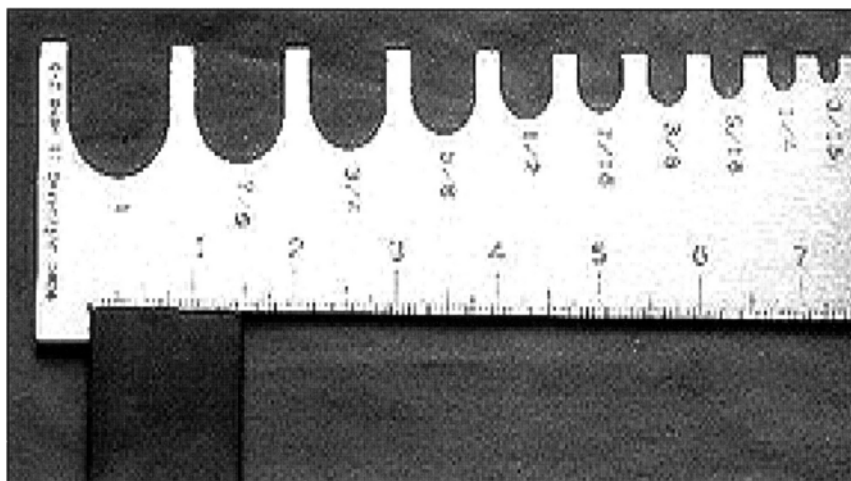
(<http://www.wolfgangforge.com/Cool-Tools.html>) is a new section of my website devoted to those of us who work in blacksmithing and other crafts," Wolfgang said.

He will be adding new Cool Tools (© 2006) from time to time, so check back occasionally.

Some of the tools in the works are: a single-person, manual rail bender/straightener and a less expensive, more versatile roller/ bender that can be easily fabricated using off-the-shelf parts and a few that are laser cut.

Back side of the hook and rule gauge. Used to measure flat stock, it is also ideal for scratching those hard-to-reach places. extra.

I encourage readers to let me a know if there is a specific tool that they would like to have developed.

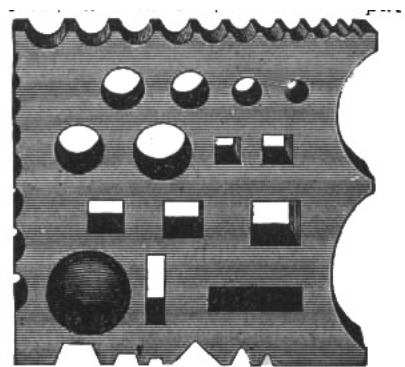


Back side of the hook and rule gauge. Used to measure flat stock, it is also ideal for scratching those hard to reach places.

The E-Z II Gage is \$15.00 each plus shipping.

The protractor comes in three sizes to meet most needs: E-Z Pro II - 24" diameter (\$75), the Jr - 12" diameter (\$35) & the Mini - 6" diameter (\$15). Shipping is extra. Shipped orders will include a sheet listing the features of this unique and tremendously useful tool.

So far nearly 50 protractors have been sold and Wolfgang said he has had a 100% positive feedback. Reach Wolfgang Forge at the web address listed above or by calling 503-429-7342.



New Jersey Blacksmiths Newsletter

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
Carroll 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 an 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

Please show them our support

John Choborda, 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 ericcuper@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 Choborda

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 _____
 STATE/PRO V. _____
 COUNTRY _____
 ZIP (+4)/POSTAL CODE _____
 PHONE # _____
 EMAIL _____



ABANA

___ Regular Member \$55.00
 ___ Senior Citizen (Age 65+) \$50.00
 ___ Full Time Student \$45.00
 ___ Foreign Member \$65.00
 ___ Public Library-USA \$45.00
 ___ Contributory \$100.00
 MASTERCARD OR VISA ACCOUNT NUMBER

**Order Online, Mail, Call or Fax your Check
 or Credit Card Payment to:**

ABANA

P.O. Box 3425

Knoxville, TN

37927-3425 USA

865-546-7733 VOICE Website; WWW.ABANA.ORG Email; ABANA@ABANA.ORG

EXPIRATION DATE _____

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 bunk-
 house 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; <<http://nba.abana-chapter.com/>>

Join The Pennsylvania Blacksmiths Association!

Name _____

Address _____

City, State, Zip code _____

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?

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Professional

Membership paid by ___ Cash ___ Check # _____

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 Jan. 1 — Dec. 31

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



Index For NJBA
Volume 13, #1
05/21/08
Meets and Reports
Pages 1–13;
Calculations 14;
Press Safety 15;
Cool Tools 16 –17
Information and
Ads 18

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 _____