New Jersey Blacksmith Association

Newsletter

Volume 2, No. 5 Mar., 1998

Our interim website (such as it is) is:
http://www.monmouth.com/~freeman/NJBA/index.html

March Membership Meeting

Saturday, March 21, 1998. Our original, tentative plans for the March meeting have come to naught, so we are going to hold an informal meeting at Marshall Bienstock's forge. Marshall has opened his shop frequent evenings to persons interested in coming out to work. (Call Marshall for further information, if you're interested in joining us.) Therefore, one objective of this meeting will be to install a second coal forge in Marshall's shop. This will be a direct benefit to those of us who make use of his shop. We may also do a dry-run of some of the work we'll be doing at the propane forge-building workshop in April.

Please **bring lunch** and an **item to contribute** to our **Iron-in-the-Hat** raffle (and bring some money to buy tickets). Feel free to bring all your surplus tools, books, iron scrap or other junk to sell at our monthly **tailgate sale.** Please bring an item to show, inspire the rest of us, something you've made or something you've collected.

The meeting will be held at Marshall's Farm, **663 Casino Dr., Howell (Monmouth Co.) at 10 am** (Ph: 732-780-0871). Casino Drive is just of Rt. 9, about 3.5 miles north of Interstate Rt. 195 (exit 28), and about 4 miles south of Rt. 33. On Rt. 9 northbound, make a right onto Casino Dr.; southbound, take the jug handle to make a left onto Casino. **Marshall's Farm** (morning events) is about a block east of Rt. 9. Marshall and Jan's home (party and potluck dinner) is about 3 miles further east on the same road.

April Membership Meeting -- Gas Forge-Building Workshop

Sunday, April 19, 1998. Marshall Bienstock will host a workshop at his shop in Howell (Monmouth Co.), NJ. For a fee of **about $100**, participants will help build their own propane-fired "pipe forge." ***Preregistration required.*** Contact Bruce Freeman (732-922-8408, eves.) for details and exact fees. Participation is limited to NJBA members, but you may join when you preregister. For your fee and your labor, you will go home with a complete, working propane forge, including,

- Pipe forge insulated with ceramic wool,
- Removable back, insulated with ceramic wool, and
- Propane burner.

We are even looking into including a regulator in the deal, but that is not definite as of this writing. All profits from this workshop go to the NJBA treasury, so if you just want the know-how, come and donate your labor (no charge, of course) and learn how to build one on your own. Plan to spend the day.

There will be **no Iron-in-the-Hat** at this meeting, but please feel free to bring stuff for our monthly **tailgate sale.** (But be sure to leave room in your vehicle to carry home your new propane forge!)

For directions, see the announcement of the March meeting, above.

May Membership Meeting

Saturday, May 16, 1998. ***[Note the change from the previously announced date! - ed.]*** The New Sweden Farmstead Museum in Bridgeton (Cumberland Co.), NJ, has invited NJBA members to attend and participate in a 17th-century muster. The inner stockade of this reconstructed village is staffed by costumed interpreters, including our own Steven Rhoades, blacksmith. Steven says they're expecting a blacksmith from Jamestown to attend the muster. Five or six other NJBA members will be working coal forges in the outer ring (not in costume). If you would like to be one of those working a forge and selling your work to the public, contact Bruce Freeman as soon as possible at 732-922-8408. Due to the public location of this meeting, there will be **no Iron-in-the-Hat** and **no tailgate sale** at this meeting.

This is our elections meeting, so be sure to show up and vote. Our meeting will get started at about 10 am. You're on your own for lunch, but this location is very near downtown Bridgeton, so there may be vendors nearby.

Southbound on NJ turnpike get off at exit 2. Take Rt. 322 east to Mullica Hill. Take Rte. 77 south to the 5-point intersection with Rte. 56 (Landmarks: State Police HQ & MacDonald's) and make a right turn. Go (past the Acme shopping center) to the second traffic light and turn left. At the next light make a right. Go down the hill to the lake and make a left. Go straight past the zoo and make a left at New Sweden Farmstead Museum. (The AAA travel guide lists the street as Mayor Aitken Dr., but Steven says it's called "Cohanzick," which is the name of the zoo.)

Future NJBA Meetings

The NJBA board has been a bit remiss in not actually setting dates for the rest of the 1998 meetings. The editor suggests you hold open the following dates as the probable dates for the NJBA meetings.

Sunday, June 28*,
Sunday, August 16,
Saturday, September 19,
Sunday, October 17,
Saturday, November 14,† and
Sunday, December 13.†

* Later in the month than usual due to the ABANA conference

† Earlier in the month than usual, due to holidays

Editorial

The NJBA elections meeting in May will mark the second anniversary of our chapter. Looking back over our accomplishments, I feel we have much to be proud of. As you know, within our first year we achieved ABANA Chapter status, incorporated under New Jersey law as a nonprofit organization, and obtained liability insurance. We started to make ourselves known in New Jersey, by making contact with the Hunterdon Historical Museum, the Washington Township Land Trust (restorers of the La Tourette Mill, for whom we have been forging hardware for the millstone crane), and the Monmouth County Park system (which graciously allowed some of us to tour Walnford Mill, undergoing restoration, to assist in our crane hardware project.) We held six membership meetings in our first year. I published five newsletters across the year, and included our full bylaws and roster in the last of these. We got some attention by holding our May, 1997, meeting at the blacksmith shop of the Peters Valley Craft Education Center (which included an excellent demonstraton from resident artist-blacksmith, Dan Radven), after sending postcard invitations all local ABANA members. We significantly increased our membership.

By our second year we had begun holding meetings monthly. These included an anvil-repair workshop (at which we repaired one of the anvils from Peters Valley) and a meeting at John Graney's architectural iron shop. We initiated tailgate sales at membership meetings. We initiated contacts with Longstree Farm, Washington Crossing Park (PA) and New Sweden Farmstead Museum, in hope of supporting blacksmith guilds or activities there.) We have made good progress toward completing the LaTourette millstone crane hardware. Most recently, working with Historic Allaire Village, we have made progress toward the goal of bringing one of the Williamsburg blacksmiths to New Jersey to give a workshop and demonstration. We have also made our presence known on the Internet, both by participation in ABANA's user group "theForge", and by posting our own web page. Again, the members received five newsletters across the year. (Some of these contained photographs, but I stopped including these when it became apparent that the xerographic technology couldn't match my laserjet printer.)

Despite all these accomplishments, there is considerable room for improvement. Our growth has pretty much stalled at about fifty members, and we really need to attract more. (Some of the older ABANA chapters report "new members" lists longer than our entire roster, and some of these lists are published quarterly or more!) We also need to get more of our members participating more actively in chapter activities, events, projects and planning. Our directors have committed themselves to networking with Longstreet Farm, Washington Crossing State Park and Historic Allaire Village; to running additional anvil repair workshops and possibly a gas forge-building workshop; and to many other activities necessary to the continued existence of NJBA. Director Marshall Bienstock has gone so far as to open his shop an evening each week to members who want to come out and hammer iron.

Speaking for myself, as the NJBA director dealing with membership issues I plan to conduct another postcard mailing, inviting local ABANA members to join NJBA. I have revised the NJBA publicity brochure and printed up a thousand copies for distribution wherever we think it will attract new members. As the NJBA director charged with networking with other groups, I intend to pursue contacts with a broader range of groups, and to increase the interactions we have with these groups. As your newsletter editor, I intend to maintain the quality of the NJBA Newsletter, and if possible to reintroduce photographs into its pages, with better clarity this time. In addition, as one of the few directors with the know-how to do so, I hope to continue to enhance the NJBA website (which I have moved to a "corner" of my own site.).

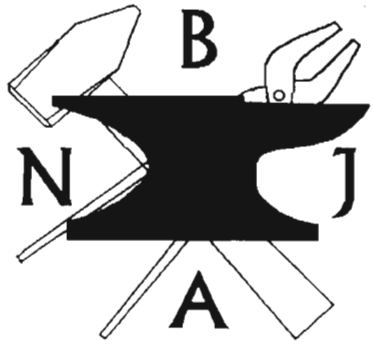
I think you'll agree that these are ambitious goals. In fact, some of them have been postponed because other demands on my time made me put them on hold for two or three months. During that time I scarcely even did any blacksmithing! (The January meeting at my forge was a good excuse to clean out my smithy and get it operational again.) I am only one person. The board has only nine directors. We each can do only so much. Laast year we indefinitely postponed a plan to hold an Art Metal Show and Sale when we realized we just didn't have enough manpower to carry it off. With more membership participation we could accomplish much more.

The directors are already working for NJBA. Now I would like to exhort each of you to help out a little so that we can set our goals higher still. Here is your chance to help steer NJBA in a direction you'd like it to go. I want each of you to select one of the following rough ideas and adapt it to your interests and abilities. This does not need to be difficult or onerous: Choose a task you can enjoy, that will help NJBA, and do it. It doesn't have to be any big thing. If all fifty members do a little, then a lot will get done. Be sure to let me know what you've chosen to do, and what you accomplish, so that I can report on it to encourage others.

- Renew your Membership. **If you do nothing else, do this**, preferably in or before June. You'll get four to six newsletters a year, reassurance you are not crazy for wanting to hammer iron (or at least that you're not the only crazy one), and the opportunity (that you can take or leave) to participate in NJBA events. Your support is what keeps NJBA going.
- Encourage Friends to Join NJBA. 'Nuff said.
- Spread the Word. Contact me for some NJBA brochures to distribute, then put them where they'll be picked up by blacksmiths, farriers, metalworkers, artists, people interested in historical reconstruction, or people who just enjoy working with tools.
- Network. Tour the New Jersey area, and wherever you find people who share any common interests with NJBA (e.g., metalworking, metal arts, historical restoration or reenactment), let them know you're a NJBA member and tell

them about us, or give them our brochure if you have it, or my phone number if you don't. Get a program, brochure or business card from them, with their name and address. Get the name of a contact person, preferably a person you have talked to. I've done this on a few occasions, and it's always fun.

- Contribute to the Newsletter. Write up and send me an article, a shop tip, a description of your favorite demonstration, a diagram of a tool, an upcoming event announcement, a schedule of blacksmithing classes, your impression of a recent NJBA meeting, a report on an event you attended (doesn't need to be recent), a blacksmithing school you attended, a course you took, or anecdotes about blacksmiths or blacksmithing. ("Electronic" copy is appreciated.) Don't worry if your spelling and grammar stink. That's what they invented editors for. I promise that all the errors that make it to print will be mine, not yours.
- "Clip" Other Chapters' Newsletters. (What with xerography, actual clipping is not needed.) This is a job I've hardly been able to pawn off on anyone, and it really eats into my time as editor. The deal: I send you some newsletters from other chapters; you read them, xerox pages that contain material of interest, organize these pages a little bit, and get them back to me. (Eventually you return the newsletters so the rest of the membership can benefit from them. If you like, you can take full charge and mount them in binders for perusal at membership meetings.) Give me a call if this interests you.
- Pass us Information. Know of some tools for sale? Know a great scrap yard that lets you wander around? Let us all know about it. Announce it at a meeting, or send it in for the newsletter.
- Proofread. (This one takes e-mail, unless you happen to live *very* near me.) I really hate turning out bad copy, but by the time I finish a newsletter, postcard, brochure, or whatever, I generally can't spot my own mistakes. Grammar- and spell-checkers help, but there's nothing like a critical human being to spot the real blunders. Let me know if this is your ticket.
- Improve upon our Logo. Come up with something original to replace this one:



- Contribute an Illustrated Demonstration. Have you (ever?) taken illustrated notes at a blacksmithing demonstration? Such notes make fine additions to a newsletter. Copy them and send them in. If you can't draw, I'll have them redrawn.
- Write a Letter to the Editor. Send us your thoughts and ideas about what NJBA should be and what it should do. Tell us what you want to get out of NJBA.
- Help out with our Web Site. Do you know HTML? Do you have e-mail and Internet access? Then you can help revise and expand our web site. Contact me for details.
- Host a Membership Meeting. We need twelve "venues" per year. We don't *always* want to meet in Monmouth County. If you host the meeting at your forge, you pretty much get to call the shots as to what sort of meeting it will be. (Reimbursement is available for reasonable expenses incurred.)
- Demonstrate at a Meeting. You don't have to be great to teach someone something new. I recently met a blacksmith of only a few years' experience who related that, after giving a demonstration on making a leaf, was politely given a number of pointers from a professional blacksmith. The pro then asked for another demonstration of leaf-making, as that was something he had never done.
- Participate in our Membership Meetings. Show up. Talk to people. Tell us what you've done and what you're doing. Ask questions. Bring money for the auction or iron-in-the-hat.
- Inspire us. Have you made something in iron? Bring it to a meeting. Perhaps you've bought some iron work, antique or modern, that you'd like to show. Bring it along too. Let us all have a look at it.
- Donate to our Auctions and Iron-in-the-Hats. We could use an increase in our treasury. Contribute iron work, iron, tools, supplies, books, or what have you. I even saw wall plaques with relevant (?) mottoes or sayings at the Iron-in-the-Hat raffle at Gichner's hammer-in.
- Become a Director. Read the bylaws to see what it entails, then put your name in nomination at the election meeting for election by the membership. If that's too brash for you, then just participate until the board elects (read "drafts") you to its ranks.

New Book: *A Blacksmithing Primer*

by Randy McDaniel

A course in basic and intermediate blacksmithing. Step-by-step illustrations and text.. Setting up a shop. Forging and heat-treating tools. A full-color tempering chart. Forge welding. Forging scrolls. Leaves and heads. Plans to fabricate your own coal forge and anvil. How to build a working chimney. More than 20 projects and over 400 drawings. 174 pages. 8.5" x 10". Spiral bound for easy use in the shop. "One of the most unique and truly useful books I have seen in a long time... Virtually every task a beginning blacksmith must master is well defined in this book... The book is to be highly recommended to anyone swing a hammer to shape hot metal." Don Plummer - author/blacksmith

$20 + $3 shipping (+6% tax in PA), Check, money order. Visa or Mastercard accepted. Dragonfly Enterprises, 3300G Kingston Drive, Dept. 44, Sinking Spring, PA, 19608

Other Events, In and Out of NJ

Saturday, March 28. Furnace Town Blacksmith Guild. (Note: Three of the NJBA directors are already planning to attend this meeting. Call Bruce Freeman if you'd like to carpool down.) **Annual Joint Meeting at Furnace Town** 1998. **Clay Spencer** will demonstrate the versatility of the treadle hammer. **Cost: $10**, including includes coffee and doughnuts, and lunch. **Send your check to Mark Williams**, 114 W. Federal St., Snow Hill, MD 21863, or bring it with you on the 28th. There will be a tailgate sales area. **Should you have items for sale, please let Ray Noble (1-800-220-3015) know**. Bring something, anything, for Iron-in-the-Hat and/or for the auction. **Jack Andrews has donated a Yellin original copper and wrought iron lamp to be in the auction.**

A dinner will be held at the Snow Hill Inn at 7 p.m. **Don Plummer** will present a talk with slides on the James Sorber hardware collection. Your check for the dinner **($15, made out to "Furnace Town")** is due by March 20 by Andrea Pierson, 8007 Stagg Rd., Snow Hill, MD 21863 (Ph: 410-632-2011). Indicate your choice of entree: London broil with scampi, or chicken marsala.

Driving directions from New Jersey: After crossing the Delaware Memorial Bridge take US Rt. 13 south, through Delaware. Continue on US 13 around Salisbury, MD: do *not* take the business route through town. Take the second exit, Snow Hill Road, Rt. 12. At the end of the ramp, turn left (south). Continue on Rt. 12 about twelve miles to Old Furnace Road. There will be signs for Furnace Town. Turn right and go about 1 mile. Furnace Town will be on your left. Go just past FT to the Special Events parking lot which is across Millville road from FT. The blacksmith shop is between the church and the furnace near the back of the FT property.

April 15 - 18, 1998 Third International Conference on Contemporary Cast Iron Art, Hosted by Johnson Atelier and Grounds for Sculpture, **Johnson Atelier, Mercerville, New Jersey**. Registration: Student $50, Non-student $100. Juried Exhibition: To be held at the Grounds For Sculpture during the conference: Mimi Weinberg, Juror $20 for three works, two slides of each work. Slide deadline: March 1st. **Features of the Conference:** Exhibitions: "Cast In Iron" Invitational exhibition at the Grounds for Sculpture. "Ferris Opus" Juried exhibition of cast Iron Art, Grounds for Sculpture. Lectures and Panels on: Metallurgy, Ferrous Patinas, Furnace Construction, Large Scale casting, Various Molding techniques, Mold building, International programs, History of Cast Iron Art. Demonstrations on: , Furnace building, Ferrous Patinas, Sand Molding, Japanese Iron Casting, New Molding processes. Events and Displays: Opening Night WELCOME, World's Smallest Cupola Contest II, Manufacturer's Representatives, Book displays, Saturday Night Party. Demonstration Cupolas: 1000# Furnace, Induction Furnace, Bellows Fired Cupola, Fiber Cupolette, Traditional cupolas, Diesel Fired Cupola, And more! **For information**: Kenneth Payne [716] 878-6427, Diane Cox [607] 871-2425, email fcox@bigvax.alfred.edu

April 18-19, 1998 Blacksmiths' Guild of the Potomac presents the **Sixth Annual Spring Fling** near Warrenton, VA. Demonstrators include Larry Wood of Huber Heights, OH; the Colonial Williamsburg Smiths; Colonial Williamsburg Gunsmiths; and Bill Wojcik of The Plains, VA; John Dittmeier of Alexandria, VA; and David Pimentel of Tempe, AZ (raising copper vessels). New this year is a forging contest: bring a candleholder made of 20 inches of half inch square stock. Prizes for the three best, as judged by our guest demonstrators. Also tailgating galore, an Iron-in-the-hat raffle and an auction each day. -- Contact Tom Coker, 301-942-8573, E-mail: tacoker@erols.

June 17th through 20th, Asheville, NC. The 1998 ABANA Conference will be held at the University of North Carolina, Asheville. (If you're an ABANA member you'll already have received your registration form. If not, contact one of the NJBA directors for information, or visit the ABANA website: www.ABANA.org.)

Report on the January Meeting

David Macauley arrived early and helped Bruce Freeman set up for the meeting. Andy Vida-Szucs and Tim Suter showed up shortly later, and it started to look like a board meeting. When new member Nate Pettengill and his son Eli showed up, we recessed to the basement to watch a video that Tim had brought along, showing an old blacksmith shop somewhere in Czeckoslovakia. The narration had not been translated, so we could only watch the action, but it was impressive nonetheless.

After the screening, we moved out to the garage, and Bruce fired up his gas forge. The roof fan was on and a door was kept open all the time to keep the carbon monoxide level down. Bruce started demonstrating some simple techniques. Art Monson, Steven Rhoades and Pete Bazakas and his wife showed up. Art brought with him an iron rose he'd made under the tutelage of Dorothy Steigler (complete with her trick of rose scent). Eventually, Bruce yielded the forge to Nate, who made a couple S-hooks for his wife's pot rack. After a second showing of Tim's video, the crowd started to disperse. A satisfactory, if completely unorganized, meeting.

Report on the February Meeting

The February membership meeting was held at the forge of Dan Cruzan near Bridgeton, NJ. This was our first meeting in south Jersey, and was well attended by our southern cohort. This was also our first meeting with a formal agenda, and it came off very well. We plan to hold perhaps three more such events this year, if we can get suitable venues. Dan's forge was excellent for the purpose. Most of his equipment, including his power hammer, is movable, so his shop can be used in a variety of ways. There is ample space for an audience, and a large table for displaying work. Among other things, Marshall made a

"loom light," a candle-holder of a type used by weavers in colonial America.

An Iron-in-the-Hat raffle was held, and $117 was raised for the NJBA treasury. Thank you one and all:

Item	Contributor	Won by
50# coal	Dan Cruzan	Hector Giumetti
50# coal	Dan Cruzan	Steven Rhoades
files	Marshall Bienstock	Hector Giumett
loom light	Marshall Bienstock	Steven Rhoades
De Re Metallica	Tim Suter	Dan Cruzan
smith tips	Tim Suter	Marshall Bienstock
spray gun	Tim Suter	Marshall Bienstock
welder's sleeves	Tim Suter	Steven Rhoades
welder's gloves	Tim Suter	Marshall Bienstock
cutting tips	Tim Suter	Marshall Bienstock
cutting torch	Tim Suter	Steven Rhoades*
cutting torch	Tim Suter	Steven Rhoades*
torch handle	Tim Suter	Larry B(?)
welder cable	Tim Suter	Steven Rhoades*
3 sledge heads	Tim Suter	Larry Brown
grinding wheels	Tim Suter	Larry B(?)
Museum of Early Am Tools	Bruce Freeman	Steven Rhoades
work gloves	Bruce Freeman	Dan Cruzan

*Steven re-contributed these three items for the next IITH.

Announcing:

The Ozark School of Blacksmithing

The Ozark School of Blacksmithing will open its doors May 11, 1998, for four weeks with Uri Hofi teaching beginning and advanced classes. Additional classes with Uri and other teachers will be announced at a later date. The school is located west of Potosi, MO, on Highway 8. Call or write for information:

Tom Clark,
Ozark School of Blacksmithing,
HC 87 Box 5780, Potosi, MO 63664
Ph: 573-438-4725 Fax: 573-438-8483

Many people wonder why there is a need for yet another blacksmithing school in the United States. There are several individuals running blacksmithing schools and several crafts schools and universities which offer blacksmithing courses. This is Tom Clark's explanation of how he got into blacksmithing and why he is opening a school.

"Some twenty-seven years ago I became interested in blacksmithing, bought all the tools from a closed blacksmith shop (owner deceased). This started the most enjoyable and frustrating time of my life. How to build a coal fire, how to get the metal hot, and how to get it into any controllable shape once I got it hot?

"I bought this new book, *The Art of Blacksmithing* by Alex Bealer, and that helped. However, having not seen anyone actually doing the work, it was difficult. I joined ABANA and the articles in the *Anvils Ring* helped.

"In my travels I looked for old blacksmiths and found a few, all retired. They were of some help, but all seemed to do different things and do them in different ways.

"I made a small horseshoe and stamped the person's name on it. For the next twenty plus years ninety-five percent or more of my forging time was spent in making 'little horseshoes'. A few years ago I realized that I did not understand the basic fundamentals of forging.

"In watching others demonstrate, I saw most people doing the same type of work in different ways. It was confusing, so I set out to develop a program that explained the ABC's of blacksmithing. A study guide for beginners and advanced as well. Having no drafting skills and not much understanding what was the best method myself, I did not make much headway. More frustration.

"In 1994, at the ABANA Conference in St. Louis, I saw the last ten minutes of Uri Hofi's demo. I was amazed. Here was a man with a crazy looking hammer moving metal with the greatest of ease. I made small talk with him later and when I heard that he would be a demonstrator in 1996 at Alfred, NY, I promised myself that I would see his complete demo.

"At Alfred, Uri had three helpers with him from his shop (school) in Israel. It was great. In that short demo, everyone was working on different products, yet they were all working together. They kept two anvils, an air hammer, and a swedge block busy. When someone needed a striker, a striker was automatically there; if two or more strikers were needed, they were there. They made hammers, tongs, scrolls, leaves, a coffee table, and other things. All completed and donated to the auction.

"In talking with Uri later, he offered to teach me his skills. I was flattered, to say the least, but said I couldn't come to Israel right away, if ever. He said, 'That's OK, I'll come to you." I couldn't believe what I was hearing. He gave me all the tools from the demo; I put them all in the auction and iron-in-the-hat, except for one hammer (a weak moment).

"While I had no idea what was really going to happen, I felt something more was needed than for him to spend all of that time with me alone (five weeks). So I put together a program that included one week of teaching, four teachers and three one-week classes with ten students each. I asked him what he thought and his reply was, 'Do it.'

"I contacted Bob Patrick, Stan Winkler and Rob Gunter, and they all agreed to come and take the course as well as spend one week each with one of the following three classes. Thinking that this would b a one-time program, I set out to get people from as wide a geographic area as possible. The end result was thirty-four smiths from twenty states.

"By the end of the second week I knew I had found at least a starting place for my learning the 'ABC's.' By the time the fifth week had passed, I knew this was the thing I wanted to do. So I set out to build a school where I could have the best teachers in the world come and teach process.

"With the help of Bob Alexander, Pat McCarty, and my new-found friend, Tsur Sadan, the school is completely finished. Tsur came from Israel, spent ten weeks working with us. He built the eleven forges, tool racks, vise stands,

and much more. Without these people's help it could never have happened, and I will be eternally grateful to them."

- Tom Clark

NJBA Directors

Marshall Bienstock (director until June 1999)
663 Casino Dr., Howell, NJ 07731
H: 908-780-0871

Grant Clark (director until June 1999)
P.O. Box 158 (Millstone Rd), Perrineville, NJ 08535
H: 908-446-2638

Pete Engle (director until June 1998)
47 Center St., Rumson, NJ 07760
H: 908-219-6560; pgengle@aol.com

Bruce Freeman (director until June 1998)
222 Laurel Place, Neptune, NJ 07753
H: 908-922-8408; W: 609-716-2827
freeman@monmouth.com, freemanb@pt.cyanamid.com

Bill Gerhauser (director until June 1998)
415 Hutchinson St., Hamilton, NJ 08610
H: 609-394-1817 FAX: 609-394-7283

Bill Ker (director until June 1999)
Box 14, Allenwood, NJ 08720
H: 908-223-4188

David Macauley (director until June 1998)
4 Patricia Ct., Howell, NJ 07731
H: 908-206-1568; W: 908-949-8422
drm@anchor.ho.att.com

Tim Suter (Director until spring 1998)
1112 Ladner Ave. Gibbstown NJ 08027
609-423-4417

Andy Vida-Szucs (director until June 1999)
13 Old Monmouth Rd., Freehold, NJ 07728
H: 908-308-9039; osan@netlabs.net

A Wrought-Iron Tooth

The following is excerpted from *Chemical and Engineering News*, Jan. 19, 1998, p. 96: "In a burial site in Essonne, France, Eric Crubézy of the University of Toulouse and his colleagues have found the remains of a man who died around the end of the 1st century harboring a wrought iron dental implant, or false tooth [Nature, 391, 29, (1998)]. The man was more than 30 years old at death.... The implant and socket fit perfectly together and appear to be osseointegrated -- that is, the implant was anchored by body tissue that formed around it after it was 'probably set by impaction' (that is, hammered into place).

"The implant is in the spot normally occupied by the right second upper premolar.... ...the ersatz tooth was inserted more than a year before the patient died. ... the implant [is] 'iron or nonalloy steel.' ... it may have been shaped by hot-hammering and folding. The osseointegration implies that the artisan modeled the implant after the original tooth.

"Iron ... 'is surely not the ideal metal for dental implants, [but] its rugged surface must have provided satisfactory adhesion to the bone.' The implant, moreover, sheds intriguing light on the state of medicine and anatomy in the 1st or 2nd century."

The Scrap Corner

by Tim Suter

I'm going to tell you about my favorite candy store. Not jelly beans, gum drops and peppermint sticks, but more solid stuff.

The place is Fazzio's Contractor Supply and Equipment. Here you can browse to your heart's content on somewhere near ten acres of warehouse and yard area. They carry used, surplus, salvaged and new merchandise at mostly very reasonable prices. They have the most astounding selection of nuts, bolts, screws and washers that you will ever see, priced at $1 a pound. They also have a good assortment of brass and stainless fasteners, appropriately priced.

For the machinist, there is a large selection of good used machine tools at ridiculously low cost compared to new. If you are looking for material to make smithing tools, there's a large selection of used and surplus pneumatic tools, bull points, drill rod, chisels, etc., to select from. They have carpentry, plumbing and electrical supplies.

In the metals area you can find brass, copper, aluminum and stainless material. The steel warehouse has plate from gauge thickness to, maybe, one inch, floor plate and expanded metal. Shear drops are sold at 30¢/lb. In most cases you can find a drop to satisfy your needs and save by not paying a premium price for a sheared-to-order piece.

Hot-rolled bar stock can be found in most any size or shape, flat, angle, channel, square or round. There is no charge to cut full lengths in half to fit in your truck. They also have a good selection of cold-rolled, pipe, tube, square tube, large diameter shafting and structural shapes.

Congenial, helpful employees, and the privilege to browse unrestricted make this an enjoyable place to shop. The stock is always changing and you will shop there a number of times before you feel that you have explored all the nooks and crannies. Every trip there is like an adventure.

Fazzio's is east of Glassboro, NJ, on Cross Keys Road, about midway between Route 47 and Co. Rt. 555. Don't mistake Fazzio's Machine for Fazzio's Contractor Supply.

For Trade:

Two hand cranked blowers one Buffalo Forge Co. the other Champion Blower & Forge Co., approximate value $50 each, want to trade for items related to turning metal on a lathe, or other trade, many possibilities, please call Paul at 973-316-8807.

Making Engraving Tools From Nails

by William L. Howard, Stoughton, Wisconsin

Reprinted from the newsletter of
Upper Midwest Blacksmith Association

My name is William L. Howard – Bill for short, and I have made my living as a metalsmith for the last 30 years. I am considered a master goldsmith by those who care about such things and I also engrave, sculpt, mint, cast, forge, make prototypes, teach, consult, appraise, drink scotch and whatever else might be available, weld, do seminars and most anything else which is legal, fun, informative and earns fair wages. I live with my wife, Kathy, and our kids, Aaron and Missy, in Stoughton, Wisconsin, where we operate our business and do all the usual stuff.

I've had to do some pretty weird things with metal in the course of making custom orders and one of the most useful skills I ever learned was how to make those special tools you couldn't buy if you wanted to, but really make the job happen faster. The following constitutes the lecture part of a demo I presented for the blacksmiths at the '95 Quad State Roundup in Ohio. It was well received, and I wish to thank my hosts who treated me *very* well.

Not everyone has vast resources of cash or tools so I have presented this information based on a low-tech, low-cost approach. You will need some concrete nails, a belt sander or grinder, a heat source, hammer, striking surface, a can of water, a vise and about 20 minutes.

Nail Tools: Making an Engraving Chisel

1. Heat the heads of several concrete nails (bigger is better) and let them air cool to anneal (or soften) the striking surface to avoid chips, etc. Heat only about ¼" to red/orange or until it's nonmagnetic. If you overheat the steel will emit sparks – which means you are losing carbon content, which you don't want to do.
2. Heat the pointed end to red/orange and forge flat as shown in *Figure 1*. If you're quick, you can hold this with your fingers. During the same heat, hammer a slight bend near the tip as shown in *Figure 3*. This will save you some grinding later.
3. There are three basic parts to an engraving tool: face, heel and shaft.
   a. You sharpen the face.
   b. You shape the heel for the cut shape you want.
   c. You hold or mount the shaft.

   The **cutting edge** is where the face and the bottom of the heel meet. The profile of the face is a cross section which has been ground off the tip above the heel at an angle. This will put different shaped grooves into your work. It is best to start with the half round.
4. Grind the heel **slowly** with the point up to make the bottom edge half round. If you rotate it back and forth too fast, you will get a pointed shape instead of rounded. When you're happy, smooth it off with a little wet or dry sandpaper, as this will make a smoother cut.
5. Next, grind the angle you want for your face. Eyeballing is good enough. Grind with the heel up if you can, as this will reduce burrs and try to get the **plane** of the face ground perpendicular to the shaft. If it's off to the right or left, it won't cut straight *(see large figure)*.
6. So far you have been working with annealed or softened tool steel which you will now harden by heating the business end to red/orange or nonmagnetic, and **quenching vertically** in water. Don't stir, swirl or move it.
7. Your tool is now hardened and ready to sharpen. Use a light touch and avoid overheating by quenching frequently in a can of water. If you can, keep the face flat and true to the original angle. If it cuts your fingernail, it will cut mild steel or annealed tool steel.
8. To **cut steel**, hold at a steep angle and **enter the metal** with one tap. Continue tapping with a light hammer while lowering the other end until the face starts to cut through the metal.
9. To **cut continuous lines**, hold your tool at a constant angle. Too high and it dives into the metal and too low causes it to surface. With a little practice, you can cut a straight line at even depth.
10. To **cut curved lines**, you must either rotate your vise or move around the work piece as you tap the tool through the metal.

Is it Right?

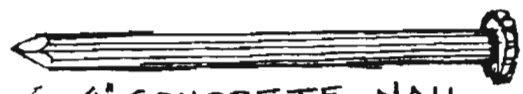
If your tool has developed a mushroomed tip and won't cut, it is too soft. If the tip has chipped or fractured, it is too hard. Anneal and re-harden. The nail will stand this a good number of times as long as you don't overheat and burn out the carbon (emitting sparks during a heat).

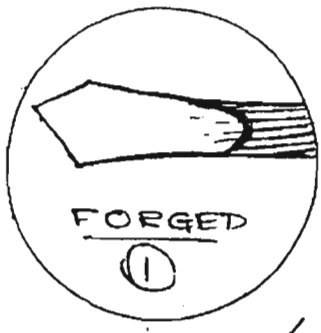
Spark Testing Tool Steel

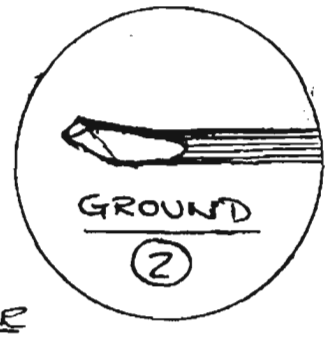
Take the suspect stock and grind it hard enough to create a shower of sparks. If the sparks are straight and

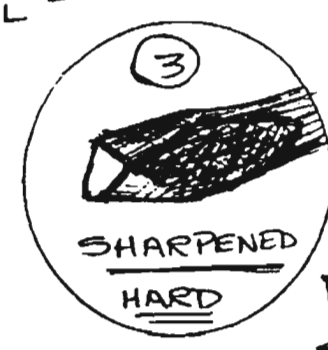
NAIL TOOLS

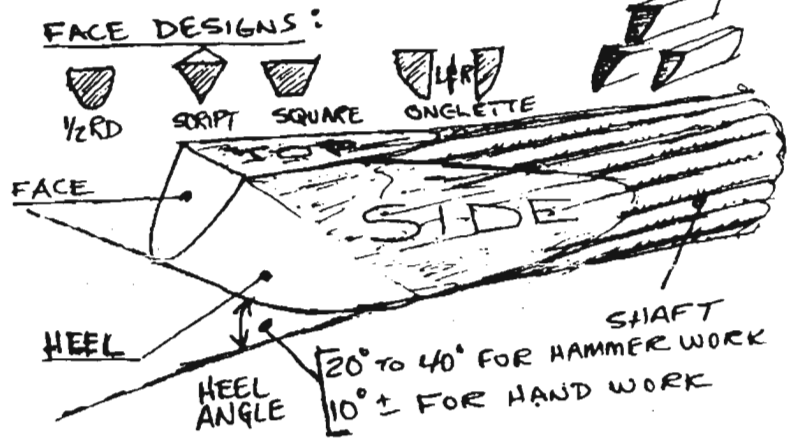
The Work of
William L. Howard









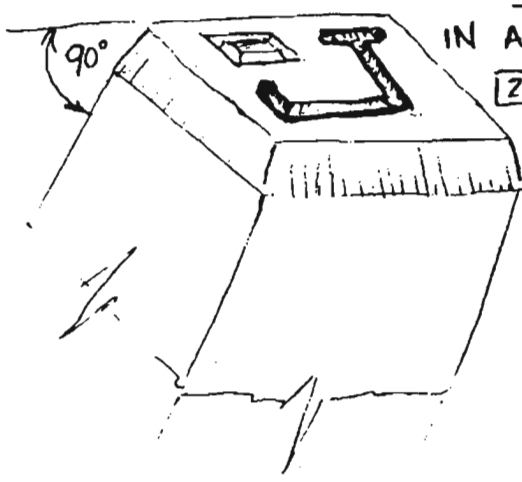


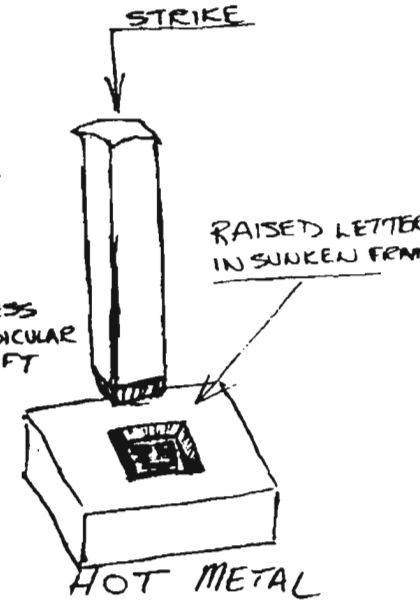
PUNCH

1 CUT LETTERS ETC. REVERSED IN ANNEALED STOCK

2 HARDEN AND TEMPER PUNCH

3 SHAPE AND DRESS FACE PERPENDICULAR TO PUNCH SHAFT





not too bright, you have a non-tool steel or iron. If the sparks fork and fan out in a bright pattern, you have tool steel. Use a wood nail and an old drill bit for comparison. Compare a wood nail (bends) and a concrete nail (breaks) for spark patterns. This is a scrounger's test and will not provide an alloy number or hardening information but can lead to results with a little trial and error experimentation. Junk is cheap; high-tech tool steel *ain't!*

If You Can Draw It, You Can Engrave It

Can't draw? Use this **Xerox trick:**

1. Draw or trace your pattern on paper.
2. Xerox it bigger or smaller as you wish.
3. Clean your metal with acetone or lacquer thinner.
4. Tape your Xerox face down on the work surface.
5. Rub the back of the Xerox design with a rag which is damp with acetone so that the paper looks translucent and you can see the pattern through it.
6. Before it dries or gets moved, press down with the dry end of your rag on the design until it is dry (60 seconds max).
7. Peel the paper, which will stick a little where the toner transferred, away from your work piece and see if the design is all there.
8. This produces a durable pattern which you can spray with clear lacquer for longevity of complicated designs. It will not rub off easily and can be transferred to anything the solvent won't eat.
9. **NOTE:** Your pattern is a **mirror image** of the original! You may want to trace the back of your design and Xerox that to allow the lettering to transfer as readable. It works great for making stamp or die patterns which must be reversed, anyway.
10. If you want to do it over, just clean the metal with acetone and repeat.

Safety Tips

For those of you who have lawyers, please observe the following advice:

- **You** are responsible for your own safety and work habits.
- Use safety glasses when using grinders, torches, hammers and all potentially dangerous (especially rotary) power equipment and tools.
- Avoid burns. If it gets hot, let go! Remember that black heat (not glowing red) can burn you.
- You can hold work with your hands while forging but if you're not a quick worker be prepared to let go quick. Enough said about the obvious.

Helpful Tips

- If your Xerox transfer smears, you either got it too wet or your copy moved during the rubbing procedure. This transfer will not resist heat like soapstone lines will for cutting purposes.
- Once you have a good pattern, you only have to follow the lines until you have cut them all to your satisfaction. Beware brushing off your work surface with your hand as the burrs you have raised at the end of your cuts will cut lines in your hand until they are removed with an exit cut.
  This is designed to get rid of them and save your hide.
- While cutting, your graver acts like a plow or a wing according to the angle of attack. Steep angles cut deep and vice versa. The more taps per inch of line cut, the smoother your cut will appear. Many light taps will work better than heavy blows for delicate line work.
- If you find that the shank of your graver is bending, it is because it got too hot during forging or some other part of the process and didn't get hardened later. Heat the center and quench to try and remedy this. Take care to keep the ends cold or you will have to fix them.
- Engraving and penmanship have much in common. Everyone has a different style, so experiment with face shapes and angles as well as heel angles. Use the bottom and **sides** to create compound or beveled cuts and tapered lines, etc.
- These tools can be hammered (which is the usual method for cutting steel) or they can be mounted in handles for cutting softer metals and fine work in steel by hand. The plates for printing our money are hand cut in steel, for example. This is highly advanced work not recommended for beginners or amateur counterfeiters. A clever combination can be had by mounting your shaft in a handle you can use, and including a short steel striker of smaller diameter that contacts the shaft through the other end of the handle. This combination allows you to cut by hand or hammer cut with the same tool.
- Handle shapes are usually shaped like a mushroom cut in half from cap to stem. The shaft is mounted in the stem end with the heel and the flat part of the handle on the down side.

- Stamps, dies and trademarks can be made with your new skills. Coining dies, embossing dies for shaping thin metal and a multitude of other techniques are now available to you. You can also do decorative gun engraving, inlay work and a variety of other things which I highly recommend you practice before you cobble up a valuable shotgun, etc.
- Steel is hard, and mistakes you make are hard to erase. Try planning your cuts, working some from two directions. This works well with curves. Most cuts work well if you cut from right to left (southpaws may ignore) and you don't have to make a cut all at once. It can be segmented and cut from different angles and directions as with lettering.
- Last but not least, use finesse. Most novice engravers try to make a deep cut all at once when a better and more controllable approach is to shave it down in stages. A power slip can spoil hours of work or require the removal of a sharp tool from some part of your body. I know, I've done both. Try to plan your mistakes with the "what if?" game.

Stock for Making a Stamp or Touchmark

If you want to avoid the trial-and-error method of finding junk to make a stamp and you can spare a few bucks, call your local tool and die or machine shop. Ask for W1 or W2, water hardening tool steel. It is adequate for our needs here and comes in a variety of shapes. I recommend round or square about ½" to ¾" for stamps. It depends on what size your finished mark is to be. Water hardening is simple and easy. For those of you with the right stuff, there are steels with oil- and air-hardening properties which are useful but more high tech. Size and cut your stock to a length which is appropriate to the use. Don't hit a stamp 3" x 3/16" with a sledge; use a tap hammer. Old chisels and punches are a good source for heavier-duty stamps. Drill bits will work fine for light work, but tend to be brittle unless tempered for heavy use.

Making a Stamp or Patterned Punch

1. Heat red/orange and forge work end to shape desired. Soften striking end. I recommend forging a short taper towards the work end – approximately one-third the total length or as required to shape and size the tip.
2. Heat and air cool to anneal and normalize (even out hardness of forged portion) the working end of your stamp.
3. Trim off the end of your stock so that the face of your stamp is perpendicular to the shaft and as flat as possible (90°). If it will stand on the face on a flat, level surface, you got it right.
4. Engrave or punch design into the end of the stamp. Letters and numbers must appear backwards like a mirror image if the mark from the stamp is to come out right. Don't cut or punch too deep, as 1/32" is usually adequate to produce a legible mark. Keep your cuts neat and to an even depth so that the resulting mark will have an even height. Use modeling clay, wax or lead for test strikes and to check your progress.
5. Grind or file an even bevel all around the edge. This will make a nice frame around your maker's mark.
6. Clean up the face and make sure all burrs are neatly removed. Double check your work. A good stamp will make thousands of impressions for you and if there is a flaw, it will multiply.
7. Harden by heating to red/orange or non-magnetic heat and quenching vertically in water. Just hold it still until it quits steaming and is cool to the touch.
8. Clean up with a fine steel brush and test strike in lead or soft metal.
9. If you are going to mark iron work, stamp the work while at least cherry red or hotter. Non-ferrous metals such as copper, brass, bronze and gold can be stamped cold. If you worked it hot, stamp it hot.
10. Quench your stamp after using it on hot iron or you will eventually ruin it through gradually softening the face. Air-hardening steel eliminates this problem, but water-hardening steel is just fine and a bit easier to work for your first stamp.

Need Help? or Did it Work First Try?

Send me a sample of your work and I'll provide a constructive critique of your engraving or maker's mark, etc., if you send a SASE. NO charge, but donations are gleefully accepted.

Howard Academy for Metal Arts
William L. Howard
P.O. Box 472
Stoughton, WI 53589
800/843-9603
E-mai: wmlhoward@aol.com ♣

WHY JOIN ABANA?

by Ken Zastrow

Local group members often ask this question. While we can speak to the overall value of having a large, nationally known association of blacksmiths, ultimately the question comes to, "What's in it for me?"

First of all, are the quarterly ABANA publications: *The Anvil's Ring* and *The Hammer's Blow*. *The Anvil's Ring* is a glossy magazine featuring articles on blacksmiths and smithing related topics, as well as photos of recent work by members and reviews of smithing related books. It's a good way to learn what talented smiths across the country are doing, and the ads are a good collection of sources for blacksmithing supplies and equipment. *The Hammer's Blow* is particularly helpful to those of us who are still learning the skills of forging. It describes specific techniques, projects and tooling required to do the work. Both publications give notice of regional blacksmithing events and blacksmithing courses.

Finally we come to the every-other-year ABANA Conference. It is the major opportunity to meet other smiths, observe skilled demonstrators on a broad range of metalworking techniques, and attend illustrated lectures on the business, aesthetics and history of the craft. Incidentally, you get to see different parts of the country, usually with a tour of a local ironwork site - all of this in four days.

Bottom line: ABANA is a window on the larger world of blacksmithing. It's up to you to look at what's there.

At Last! A Book about Anvils

The history, manufacture, identification and much, much more about anvils made in America and anvils imported for resale or brought to America by smiths from 1600-1997. 564 pages of text and graphics. Seven chapters, extensive appendices, glossary, and bibliography, plus an index of anvils and a general index. A limited first edition of 1000 books, numbered, dated and signed. $60 plus $5 shipping and handling per copy (+ tax on Michigan orders). The book will be available in March or April, 1998. Order from Richard Postman, 10 Fisher Ct., Berrien Springs, MI 49103, Ph: (616) 471-5426

An Anvil Obscene, to be Believed

In the November-December, 1977, issue of the Newsletter of the Blacksmith Association of Missouri, editor Jim McCarty reports, "I briefly owned a 650-pound Peter Wright [anvil] before my wife kindly suggested we pay a few bills and the anvil quickly parted company. An anvil that big is obscene anyway."

Well, it was our own Andy Vida-Szucs who bought that anvil. I don't know whether the anvil was obscene, but the price he paid sounded obscene -- at least before having a chance to see the anvil. It was a bit of a let-down to learn that the anvil was really only 417 pounds. (Jim, and honest fellow, will be making up the difference in the form of a 200-pound swage block.)

ABANA Membership Application

(Please note: ABANA membership does *not* include NJBA membership. Please join NJBA using the separate application form provided on the mailing cover of this newsletter.)

Name _____

Address _____

_____

_____

Daytime Phone _____

E-mail: _____

ABANA MEMBERSHIPS	DUES
Regular Member	$45
Senior Member - Over 65	$40
Full-time Student Member	$35
Overseas Member /Air Mail	$80
Overseas Member /Surface Mail	$60
Public Library Rate (U.S.)	$35
Contributory Member	$100

Prices reflect 1 year rates and include subscription to the *Hammer's Blow* and *Anvil's Ring* publications. More than one year may be paid by simply multiplying the amount by the number of years paying in advance (sorry, no discount).

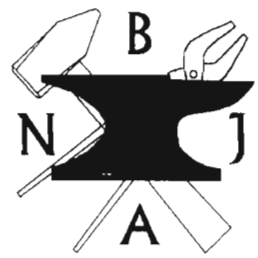
Type of Payment Enclosed:

____ Check
____ Money Order
____ MasterCard
____ Visa

MasterCard or Visa # _____

Expires: Mo / Yr _____

Signature _____



How to Join the NJBA

NJBA dues are $15 per year. Please make out your check to "New Jersey Blacksmiths Association." Please mail checks to Bruce Freeman (NJBA membership), **222 Laurel Place, Neptune, NJ 07753**, along with the following information. You will receive the most recent newsletter as an acknowledgement of your membership. Annual dues are due on June 1. Persons joining after April 1 will not owe renewal dues for fourteen months.

(This information will be listed in a roster available to other members.)

Name_____ Home Phone_____

Address, City, State, Zip_____

New Jersey Blacksmith Association

Newsletter

222 Laurel Place
Neptune, NJ 07753