

Newsletter

Volume 1, No. 4

December, 1996

December Membership Meeting

The December membership meeting will be held on Saturday, December 14, beginning at 10 am at the blacksmith shop of Historic Allaire Village, Allaire State Park, Monmouth Co., NJ. (Exit 98 of the Garden State Parkway, then exit 31B of Interstate 195). All ABANA members are invited.

We regret that we must charge \$15 to participate (see below). Please preregister by calling Bruce Freeman (908-922-8408) or Pete Engle (908-219-6560). Leave your name and phone number, and mention that you're preregistering for the mini hammer-in. There is no need to preregister or pay if you only wish to come and watch.

For insurance reasons, all participants who are not already members of the Allaire Village Blacksmith Guild, must preregister and pay a \$15 membership fee to Allaire Village Inc. in order to participate. (This \$15 fee is a tax-deductible donation and makes you a member of Allaire Village for a full year. No part of this fee goes to NJBA.) **PLEASE PRE-REGISTER BY CALLING AHEAD.** If you don't preregister, come anyway, but you may only be able to watch.

Calling All Beat-Up Anvils!

Due to the success of our basic welding workshop, and some independent research and development of anvil repair techniques, the NJBA is planning an anvil repair workshop, to be held at Marshall Bienstock's forge this spring. A good time will be had by all.

We will be repairing anvils in a production line setup with prep, preheating, welding, and grinding stages set up around the facility. The heart of the operation is Marshall's MIG welder (Marshall is doing the welding). We need volunteers to staff the various stages & training will be provided as necessary.

We also need anvils for repair. The most likely candidates are those with beat up edges & corners, but not needing significant metal added to the face. We are prepared to grind down faces slightly to remove minor "saddle-back" shapes. We do intend to charge for these repairs to cover the costs associated with the work. We expect the charge to be about \$50 for a 100-150 lb. anvil, but we will probably charge by the pound of material added. Please understand that we cannot accurately predict prices until the workshop. We will also probably be limited to 200 lb. max. for the anvils because some of us are wimps and can't lift any more than that.

Based on previous experience, we can probably do 4-5 anvils in a day. If we get enough interest, the workshop may be extended to two days. With an extra MIG welder (and skilled operator) we could double this rate. (Any volunteers with a truck mounted MIG setup?)

If you are interested in staffing the production line, or if you have an anvil in need of repair, please contact Pete Engle at (908) 219-6560 to let us know. We are taking anvil orders starting now, first come first served. More details will be provided as our plans are firmed up. Lets hear from you out there.

Calendar of Events

Sat., Dec. 14, 1996, NJBA "Mini-Hammer-In". (See column 1).

Sat., Dec. 14, 1996, Waukomis, OK. Saltfork Craftsmen. For further information, contact Mike George, 1227 4th St., Alva, OK 73717. Work phone 405-327-1122; Home phone: 405-327-2112. jmgeorge@cnbalva.com.

Sat., Dec. 14, 1996. Jones Co. Fairgrounds, Gray, GA. The Ocmulgee Blacksmith Guild Chapter of ABANA will hold it's 4th annual fund raising auction and monthly meeting

Sat. & Sun., Dec. 14 & 15, 1996. Noblesville, IN. The Indiana Blacksmithing Association will present blacksmith Richard Fout at it's end of year Mini-Conference. Richard Fout will forge a weathervane each day. For further information call Paul D. Moffett, President at 317-253-0843 from 9 am to 9 pm.

Thu.-Sun. Jan. 9-12, 1997. Arizona Winterfest. Demos January 9-10-11 at the Phoenix Forge, 130 E Taylor St., Phoenix, AZ 85004 Contact Bill Callaway at 602-253-3116

Registration Fee: \$150; Spouse/companion \$ 30; Double Occupancy Room at Ramada Inn across street, with 4 breakfast buffets and 1 banquet dinner \$191.50. Demonstrators: Dorothy Stiegler, Jerry Hoffman, Dmetri Gerakaris, Lou Mueller, and Corky Storer. Send 50% of fees for reservation or contact Bill for registration form.

Sat. & Sun., Jan. 11 & 12, 1997. Ocean View, DE. Bill Gichner's annual hammer-in, at Iron Age Antiques. Central Avenue, Ocean View, Delaware (Phone: 302-539-5344) Fees are \$20 if registration received by 26 December, 1996, or \$25 if received after 26 December 1996. Cost includes continental breakfast and lunch Saturday and Sunday. Register by sending name, address and \$20 per person (you can send a group check, make check payable to Bill Gichner) to Bill Gichner, P.O. Box 8, Bethany Beach, DE 19930 PLEASE bring something for Iron in the Hat Lodging - A block of rooms have been set aside for Friday and Saturday nights at the Sheraton Fontainebleau Hotel, 2100 101st Street, Ocean City, MD. Make your reservation directly with them: 1-800-638-2100. Room fees are \$55 for a double room with 2 people per room, \$15 for each additional person. Hospitality - A hospitality room will be open at the Sheraton Friday & Saturday evenings, with a special program planned for Saturday. Happenings - Plenty of demonstrations during the days. Gather your extra tools and such for some great tailgating! Bring something for a gallery display (work or pictures). A slide show is being planned for Saturday evening.

(Calendar continued on p. 3)

New Jersey Blacksmith Association

Into the 21st Century by Nol Putnam

Many years ago and practically on another planet, I was trained as an historian. Now with a little age on me, I have lived some of that history. I look out over this multitude and impressed by how far we in ABANA have come in less than three decades. I take great delight in saying to my students that I have learned this technique from Bud Oggier, or Francis Whitaker, or Bill Gichner. I have heard my students recite the same litany. It is in this manner that much knowledge, much history has been passed from generation to generation. I am reminded of the epic story of Alex Haley as he traced his family back and back, finally into West Africa where he found people who were the keepers of the history for his forbears. Contemporaneously they could recite back through the generations to the time his ancestors were taken as slaves and brought to this continent in chains. I would like our view to be at least as long and at least as broad as we strain to see past the vale into the 21st century.

As blacksmiths we have a wonderful and awesome heritage upon which to draw. Remember St. Elio, our Saint, and made one because he was able to save the horse of his lord by sewing the whole hind quarter back on the beast, and also, by contemporary accounts, a superb goldsmith. It was a smith who forged the magic blade 'Excaliber' for King Arthur. In West Africa, the blacksmiths alone of all the guilds, were allowed to compete for the hand of the king's daughter. In England, the smith was long considered a healer if not an alchemist. David Peterson of Wales is still asked by older folk for small bottles of water from his slack tub in the belief that rubbed on the skin it will heal a multitude of ailments. Throughout Central Asia, the shamans wore cloaks to which were sewn all manner of symbols made from iron to show their connection both to the earth and meteors from the heavens.

In earlier days we had a more direct connection with the earth, and yes with the stars as well. It is postulated that early iron work was sometimes fashioned from meteors from the sky. I think it was Tom Bredlow who brought just such a meteor to the Carbondale Conference in 1976. It had a wonderful ring, deep and rich, like a bass note on a great organ or perhaps a Tibetan chant. Some of the earliest mines dug on this planet are thought to have been in Tanzania. They were looking for a substance with which to decorate pottery, called variously ochre, red iron oxide, bloodstone or the blood of the earth. It is quite another subject to detail how important iron is in one form or another to art, to nature and to life itself.

Iron in ancient Egypt and among the Aztecs was considered more valuable than gold. In ancient Summeria we find the oldest word for iron made up of the pictographs for 'sky' and 'fire.' Greenland Eskimos made knives from meteors. When Cortez asked the Aztecs from whence their knives came, they pointed to the sky. Iron was known and used for a long time before humankind understood the science of smelting. Iron, very early in our world history then, was associated with the gods, with art, and most certainly with power and position. We are the bearers of an ancient, ancient lineage.

Smelting was discovered. Iron we learned to produce and then to smite and finally to work. Because smiths could fashion both swords and plowshares, they were rewarded with a

respect perhaps not always deserved. Though I trust that forging during the summer months in Virginia, to say nothing of Georgia, Alabama, Texas, or Phoenix, Arizona, should count for something beyond being merely foolhardy. In this country, we have been called upon to make a myriad of items: steamboats and iron clad vessels, nails, skyscrapers, parts for Conestoga wagons, all manner of tools, water wheels, plows, huge hooks and then cranes for the burgeoning Industrial Revolution, railroad engines, parts for cars no longer manufactured, grills, balustrades, balconies, and now forging parts for the space industry. As blacksmiths we have touched every part of our American history. The motto of the old English guild was never truer: "By hammer and hand, all arts do stand."

In the middle of this century, our profession, our love, ran into some tough times. First the Depression and then World War II did much to end the perceived need for smiths. They could still be found, indeed we count some of them in our midst today. But the need was no longer at the center of our collective life. Yet within the seeds sown by the War was the germ for our resurgence. I am sure that many of you benefited from the GI Bill. Thousands of men and women were able to return from the service in World War II and Korea and go to college.

While I studied history, many others turned to crafts, and thus was spawned the Second Arts and Crafts movement. At the tail end of which came a new interest in blacksmithing, the forming of ABANA, and the creation of numerous Chapters. There have been a few intrepid souls who have planned whole tours across the country depending upon the location of these Chapters. A new version of singing for your supper.

So here we are at the tail end of the millennium. ABANA has celebrated its twenty-fifth anniversary. We have 53 Chapters across the land and in Canada ~ the latest we welcome is the New Jersey Chapter. Early on we became international with members in Australia, Japan, Russia, France and with especially close ties to Germany and Great Britain. We have regional gatherings in Georgia, California, Colorado, Ohio, Virginia, Delaware and New England that are equal to or better than any of the early biennial gatherings. We have branched out into places unimagined twenty years ago. We have in our midst sculptors, jewelers, farriers, traditionalists, art smiths, re-enactors, book collectors, tool collectors, amateurs, professionals. People who use every modern device known to humankind; and others who scorn anything invented after 1875. People who use only welders and torches. Others insist the only correct fire is made from charcoal. Whether to subscribe on the Internet to 'Artmetal' or 'The Forge' or both. Because we are so diverse, we have the luxury of arguing about what is a true blacksmith and we become exclusive rather than inclusive. It reminds me of the medieval argument about the number of angels that could stand on the head of a pin. And it matters not a whit. The only thing that matters is that we are all smiths investigating iron and its complementary metals; pushing our boundaries; learning to grow in our profession, and I hope our lives. So what is left for us in the 21st century?

I have not alluded to any of the problems that face our society today ~ it is time to do so, for none of us live in isolation. Increasingly our nation is becoming a divided society ~ haves against the have-nots, non-white against white, Protestant versus

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Muslims, Jewish versus Catholic, Conservative versus Liberal. We hurl shibboleths and slogans. We become ever more shrill. We are no longer civil when we disagree. We resort to violence. Ultimately we imagine our problems too large to solve. We turn our backs hoping all will go away.

I do not believe Blacksmiths have ever felt this despair. If we had, we could never have become smiths. We thrive on problems, we solve them every day, then, and this is what sets us apart, we share our solutions.

I want us ~ I expect us, using our ancient powers and prestige ~ to become leaders for our society once again. To reach across divisions to heal, to encourage other groups to join us in reaching out to new populations. We may not forge an 'Excaliber' ~ perhaps instead we will forge a new unity among our people.

As I look out over this audience there are few non-white faces. I cannot tell your religion. But I know we are not reflective of the diversity of our society. In the last decade and more, the ranks of blacksmiths have been immeasurably improved by the entrance of women smiths. Dorothy Stiegler led us for years ~ magnificently and magnanimously. The ranks proudly opened, welcomed our new allies with open arms, and we went on stronger than before.

I challenge us to return to our chapters, our forges, and search out people who are different from us but who would love to join us. Find them in schools by opening your forge to rural or inner city school children or vocational schools. Find them in churches by joining them on feast days. Find them across town by becoming Big Brothers and Big Sisters. Why not offer crosses or door hinges for the current rash of Black and White church burnings. We need more people not like us yet united with us by a love of the fire. I would love to hear the lilt of Spanish, the softness of Thai, the street talk of South Bronx, the music of Mallayalam, all applied to iron. And too, we need more youth. As I look out across you again, I see more bifocals, more white hair. Do not mistake me, you look great, indeed, beautiful. But time is marching and we have much to share with the next generation and the next, our ranks then made up of all the peoples of our nation - all persuasions, all religions and all races. We live on, we all live on the great sacred hoop of the Sioux - whether from Boston or Baton Rouge, Dallas or Denver, Ocala or Oregon, Saskatoon or Sydney ~ we are on the hoop, the Great Circle, together, interrelated.

We come here to the conference to be recharged, to meet old and make new friends, to be dazzled by inventiveness, to be made humble by the sharing of new information. Five days of a Blacksmith Smorgasbord, something for everyone's taste. It fairly boggles the mind - if not yet then wait until Sunday evening ~ your mind will be boggled. You will find that you have once again been made part of the sacred circle, keepers of the fire. And you will say: "I am not my Brother nor my Sister's keeper. I am my Brother. I am my Sister." Arm in arm we shall walk into the sun, under the Rainbow, into the next century, proudly, and as blacksmiths following our lineage as leaders for all our people. Godspeed.

Keynote address, ABANA 1996 Conference, Alfred, New York, Wednesday, June 28, 1996. Nol Putnam, © 1996. (Reprinted with the permission of Nol Putnam.)

Calendar of Events, continued from p. 1

Sat., Jan. 18, 1997, Alva, OK. Saltfork Craftsmen Meeting. For further information, contact Mike George, 1227 4th St., Alva, OK 73717. Work phone 405-327-1122; Home phone: 405-327-2112, jmgeorge@cncbalva.com.

Sat., Feb. 15, 1997, Jet, OK. Saltfork Craftsmen Meeting. For further information, contact Mike George, 1227 4th St., Alva, OK 73717. Work phone 405-327-1122; Home phone: 405-327-2112, jmgeorge@cncbalva.com.

Sat., Mar. 15, 1997, Guthrie, OK. Saltfork Craftsmen Meeting. For further information, contact Mike George, 1227 4th St., Alva, OK 73717. Work phone 405-327-1122; Home phone: 405-327-2112, jmgeorge@cncbalva.com.

Sat., March 22, 1997 Furnace Town, Snow Hill, MD The **Furnace Town Blacksmiths Guild** is hosting the **annual joint meeting of BGCM, BGOP, MASA, and FTBG**. The demonstrator will be Bob Patrick from Everton, Arkansas who will be making several traditional pieces that involve forge welding in various ways. Details to follow, or drop an email to williams@color.wff.nasa.gov

Sat.-Sun., May 3-4, 1997. Potosi, MO. The Blacksmith Association of Missouri will once again host the Ozark Conference in Potosi Missouri May 3 and 4. Featured demonstrator will be Mike Boone plus several of BAM's finest. More details will follow but mark you calendar now.

Spring, 1997 (Date to be announced), Monmouth Co., NJ. The NJ Blacksmith Association will hold an anvil-repair workshop. For a yet-to-be-determined fee (maybe \$50?) you can bring your anvil and help with the work as we build up edges and corners of the steel plate to like-new condition. (Further information, including whom to contact, will be provided when the date is set.) The workshop will take place at the shop of Marshal Bienstock, Howell, NJ, who will perform or immediately supervise the actual welding. Participants will move anvils between workstations, clean (by grinding) the anvils for welding, preheat anvils over a fire, chip slag (if welding rod is used instead of MIG) and grind smooth the rewelded edges and faces. Come dressed for hard work!

Skipjack Press

Jack Andrews, author of the Edge of the Anvil and Samuel Yellin, Metalworker announces that orders for books from his publishing company, Skipjack Press, will now be processed by BookMasters Inc. You may now order by phone, by faxing, by e-mail, by regular mail and by the World Wide Web. Major credit cards are accepted. BookMasters, Inc., PO Box 388, Ashland, Ohio 44805, USA. Phone: 800-247-6553, FAX: 1-419-281-6883, Email: order@bookmaster.com, WWW: www.bookmasters.com/skipjack

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Highlights of the Nov. 15 Board Meeting

The meeting was attended by directors Pete Engle, Andy Vida-Szucs, David Macauley, Bruce Freeman and Marshall Bienstock. [Board meetings are open to the entire NJBA membership. Any member who wishes to attend future board meetings should contact Pete.]

Incorporation as a Non-Profit. Pete reported on his research on incorporation. After incorporation, one files for 501.c.3 status with the IRS. On receipt of this status, one files for non-profit status with the state. To qualify as a 501.c.3 corporation NJBA would have to qualify as an institution advancing education and/or promoting the arts. Not only do NJBA bylaws provide for both of these purposes, but our cooperation with Allaire Village and our LaTourette Mill project attest to our intention of acting on these purposes.

There was some discussion whether non-profit status was necessary or even desirable. There was some concern that it might interfere with the ability of NJBA to be involved in a business sense with commission work. Pete clarified that a non-profit corporation may run a for-profit business entity, providing that it does not become the major effort of the non-profit. He explained that most of our money must come from the public. Money from non-profit funds is also acceptable. Large donations from individuals can be a real problem, and could jeopardize non-profit status. For the time being, if we are supported by dues, admissions, and small donations, there should be no problem.

A major concern about non-profit status is the paperwork. Pete estimates it will take 100 hours of work to achieve this status, and that periodic reports must be filed to maintain it. It was generally agreed that further work on this issue should be done by committee, with reports at board meetings. There were no volunteers to handle this issue, and it was therefore tabled for now, pending an increase in active membership. [Any member who wishes to involve himself in incorporation efforts, please contact Pete Engle.]

Progress of the LaTourette Hardware Project. Bruce reported on the status of this project. A drawing was shown of the design of the nut which Walter Hollien of the Washington Township Land Trust has approved. Bruce has a preliminary quote from one machinist. Other questions were raised which will be directed to Walter before any work is contracted out.

Membership. Pete reported that he called the ABANA office and was sent a complete set of mailing labels for ABANA members in New Jersey and surrounding states. Bruce will prepare a postcard and send it to all ABANA members in New Jersey and nearby regions in neighboring states. It was pointed out that this will be a major expense, but that even a modest influx of new memberships would easily pay for it. Bruce agreed to send Pete a copy of the postcard before having them printed.

Division of Responsibilities. Responsibilities will remain as they have been this past interval: Chairman, Pete; Secretary, will remain a floating responsibility, with Bruce taking minutes for this meeting; Treasurer, Bill; Newsletter, Bruce; Membership, Bruce. Bruce requested assistance on the newsletter, and in handling any large influx of membership in response to the upcoming mailing. [Any member who wishes to help out with any of these activities should contact Pete or Bruce.]

Directors' Tenure. It was noted that two of our directors have not attended board meetings since June, and that, according to the bylaws, their tenure would expire if they did not attend a meeting in December. Pete said that he would attempt to contact both of them.

Anvil Workshop. David and Marshall will soon finish repairing the edges of Andy's anvil. They propose to take it to Allaire where it would be used and abused heavily for some time, as a test of the sturdiness of the new edges. Andy gave permission. David reported that such repairs could not be done on cast iron anvils. The board tabled decision of the details of this workshop. [Elsewhere in this issue is a progress report on this topic.]

New Living History Blacksmith Guilds. Bruce reported on progress establishing blacksmith guilds at Longstreet Farm and Hunterdon Historical Museum. Both facilities are interested. Longstreet has an established volunteers program, but want a guild chairman to handle ensure that volunteers are qualified. HHM, in contrast, has less need for support. Bill Ker has agreed to sit down and talk to each facility, to provide the benefit of his experience in setting up and running the Allaire guild. Pete has suggested that the apprentice training program at Allaire might form the basis for certifying competence of volunteer blacksmiths throughout the region. [Any member who wishes to become active at living history museums may contact Bruce.]

Diversity. Pete brought up the subject of Nol Putnam's address to the ABANA '96 conference in Alfred: Diversity. The board will consider outreach programs. [This address is published elsewhere in this newsletter. Any member wishing to initiate any outreach programs should contact Pete.]



How to Contact the NJBA Directors:

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|-------------------------------------|-----------------------------|
| Marshall Bienstock | (908) 780-0871 |
| Email: | mbienstock@worldnet.att.net |
| Pete Engle | (908) 219-6560 |
| Email | pgengle@aol.com |
| Bruce Freeman | (908) 922-8408 |
| 222 Laurel Place, Neptune, NJ 07753 | |
| Email, work: | freemanb@pt.cyanamid.com |
| Email, home: | freeman@monmouth.com |
| Bill Gerhauser | (609) 394-1817 |
| FAX: | (609) 394-7283 |
| Joe Lyons | (908) 238-9131 |
| David Macauley | (908) 206-1568 |
| Email: | drm@anchor.ho.att.com |
| Kevin Orangers | (212) 769-5038 |
| Email: | kevock@amnh.org |
| Andy Vida-Szucs | (908) 308-9039 |
| Email: | osan@netlabs.net |

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Blacksmith Schools by Marshall Bienstock

How is one to learn the trade of blacksmithing in late 20th century New Jersey? Long gone is the traditional apprentice-master method that once existed in every significant (and even insignificant) town throughout our country. The NJBA certainly represents a renewed interest in the resurrection and preservation of the Blacksmith's Art and Craft, and indeed one of its fundamental purposes is to act as a focal point to allow people with like interests to meet and exchange knowledge. And I certainly hope the NJBA does that and much more, but there are limitations.

Enter the blacksmith school. With the current resurgence of interest in Artist-Blacksmithing, many schools have sprung up offering a wide variety of hands-on training for a wide variety of skill levels, from total beginner to quite advanced techniques for smiths with intermediate to advanced skills. Following is my own personal view and experience of the two blacksmith schools I have attended: the J.C. Campbell Folk School in Brasstown, NC, and Peters Valley Craft School in Layton, NJ.

Since early 1994 I have taken four classes at the Folk School (and have signed for two more this January) and one class at Peters Valley this past July. Both schools offer a wide range of different kinds of classes, Campbell year-round, but Peters Valley only during the summer months.

The shop at the Folk School is basically one large room (with a small tool room at the back corner) which used to be a cow barn. It's about 25' by about 50' with twelve forges along the long walls (six on each side) with the thirteenth, teacher's, forge at the center, far end. The center aisle has two long steel-topped layout tables with a 50 lb. Little Giant at the near end and a 25 pounder at the far end of the tables. A treadle hammer or two floats around the room depending on the class. There are a couple of gas forges, acetylene torches, belt sanders and bench grinders, as well as a large assortment of hand tools and jigs, etc. It's a well equipped shop for up to twelve students. One small outbuilding contains an arc welder and the all important soda machine. Another contains a coal shed and the metal supply.

At Peters Valley, the shop is much smaller but also well equipped. It consists of two interconnected rooms. One room about 16' x 16' contains the layout table and a power hammer, an electric welder and gas forge. Along the walls are tool cabinets, steel racks, an abrasive cutoff saw, and I'm sure a host of other items (well, I was only there once, and my memory is failing!) as well.

My first class at the folk school was for beginners and I certainly was: I didn't even know how to start a coal fire, but with the instructor's guidance I learned how to start and maintain a fire, draw out iron, twist, upset and scroll iron, and heat treat tool steel. I can truly say that the excellent instructors and terrific social atmosphere have kept me going back regularly ever since.

For a fun blacksmith learning experience, I highly recommend going to either school (or better yet both). See ya there, y'all.

Practice for the Anvil Repair Workshop

by Bruce Freeman

As announced earlier in this issue, NJBA is planning to hold an anvil repair workshop in which we will be repairing the face and edges of anvils by adding metal where needed and grinding them square. NJBA members will be able to bring their anvil, pay a fee, help with the work, and go home with an anvil which is good as new.

To make this a productive day, Marshall Bienstock, David Macauley and I got together to practice. The anvil we were working on belongs to Andy Vida-Szucs. Marshall and David had already demonstrated the feasibility of doing the repair using welding rod, but that was too slow. Therefore Marshall got an appropriate MIG wire, and that's what he used this time.

The first step would be to take an angle grinder to the damaged areas to clean them thoroughly. Since Andy's anvil was already cleaned up, we went on to the next step, which is preheating the anvil to about 400 F.

David and I cleared a sandy patch of soil, and build a little fireplace of cement blocks. We then split some wood and started a good sized fire within the brick structure. Meanwhile, Marshall welded up a few pipes into an anvil-toter. Using this, we placed the anvil across the fire and let it come up to temperature. David used compressed air to hasten the burning of the wood, and this appeared to give us needed fire control, so I mounted Marshall's hand-crank blower on a stump, and we'll use that in our next practice session.

After about an hour of heating the anvil was hot enough for the welding step. While David and I looked on, Marshall added a good-sized bead of metal to the edges of the anvil's face. The MIG welder did a wonderful, quick job of this, and has the advantages of producing no slag, which would have to be cleaned off periodically, in a tedious extra step.

The welding finished, Marshall used an angle grinder to take off excess material. This proved to be a slow step, so we decided to try an "iterative" approach in the future: Marshall would build up a minimal welding bead -- his best guess of how much metal was needed. We'd then grind the edge square and determine whether more metal was needed. If necessary, we'd reheat the anvil and repeat the welding and grinding steps. With some care, two iterations should suffice for any anvil, without wasting much metal or prolonging the grinding step.

We worked until early evening, well past sunset, without finishing the grinding. David plans to finish the grinding as soon as possible. Once finished, he'll take the anvil to Allaire Village, where it will be tested under working conditions. If it suffers no damage to the repaired edges, we will have good confidence that the anvil repair workshop will come off without a hitch.



Anvil Antics by Vance Burns

I was looking for a second anvil and had exhausted every possibility I knew of, except putting one of those obnoxious, blinking portable billboards in my front yard, or signs on all the power poles in the area: "Cash Paid for Anvils, 555-1212". I had, in fact, found quite a few anvils, well below 100 lb., but I'd set my hopes on something near 200 pounds, and wasn't about to turn back.

I ran an add in the local version of the Thrifty Nickel, but since the city is so large, the publisher had partitioned the metropolitan area, which resulted in my advertising to, basically, yuppy-ville. It struck me that running adds in more rural areas might work (duh!), so I ran adds in 6 chunks of the pie.

I set up my mother-in-law's appropriated answering machine on my fax line, and lay in wait... Days passed, zero calls. I'd call the machine every few hours to make sure it was working. After I'd almost forgotten about it, I noticed the machine had a call! Immediately, I called the gentleman, and got his answering machine. Nervous seconds passed before I called him again, and again. Before long the cramping in my dialing fingers became bad enough that I had to relent, besides his machine was probably running out of tape. Three days later, he called again, apologizing as he was out of town.

I asked him about the anvil's vital statistics, to which he replied, he didn't know much about it, the anvil had been his dad's, and had been under that tree since before he was born. He thought it weighed 500 pounds (my heart went thump-thump). Skeptical, I resumed he was way off, but it was probably big since he couldn't move it by himself. I did ask what shape it was in, "great" was his reply (thump-thump-thump), and he said the top was perfectly flat (thump-thump-thump-thump), although he said he and his sibling had beat on it all through their formative years (thud). Hesitatingly, holding my breath, I asked what he might want for such an old worn-out piece of sputum. He said he'd take \$150 (thump-thump), and I asked when I could drop by and see it.

"It's at my late fathers house, when can you come" he said, "Oh.... how bout NOW!" I replied. "OK, here's the directions".

I vaguely recall scribbling some directions and dashed to the truck, my 9 year old son getting swept up in the vortex I generated whilst leaving the house. Nimble gliding the Chevy from lane to lane and the

occasional shoulder, I circumvented the typical Houston traffic, and was starting to draw the attention of the traffic helicopters.

I found his house, and he escorted me a short distance to his deceased father's place. It was what house buyers call a "distressed property". The entire place was overgrown, and the house was missing several key components, like, uh..., walls.

"Your father passed on some time ago?" "Nope". I let it go at that.

In the front yard, sans trailer, there was a very large power boat which clearly had undergone some radical new modifications, owing to the large hole in the stern. It was offered to me at no charge, should I be interested. The entrance to the property was blockaded by a large pile of tires which, according to my companion, had not been there the day before. There where piles of this and that on what proved to be a very deep lot, and my guide explained that his father had been in the recycling business forever.

Navigating through the dense bush, we rounded a particularly fertile patch of poison ivy, only to clap eyes on "her", a anvil of enormous proportions, yet svelte and poised, trim of waist, firm hips and plenty up top (wink-wink, nod-nod, know what I mean...). Daintily poised on a metal stand, ensconced under a brooding tree where it had been for generations, it was truly picturesque. The stand, to which it was bolted, had multiple layers of crumbling, rusty scale, but the anvil glowed a subtle ferrite rouge, no pits, and an awesomely flat top that was large enough to accommodate an intimate little dinner party. The horn was prodigious, exhibiting an almost masculine quality. The Hardy hole was sharp and well defined, and just small enough that I couldn't get all my fingers into it at once; I grimaced when I realized what that must look like and promptly withdrew my hand. I inspected the side and realized it was a FISHER anvil (thump-thump).

By this time I noticed my poor son had been discovered by the mosquitoes, and closely resembled a poppy seed muffin. While he tried to backtrack to the truck, the owner and I haggled on the price. As I lowered his expectations, he made a desperate ploy to bolster his position by producing a 2.5 foot anvil stake and a large block that had a hardy on it three inches square. I countered with the disparity in the block and the hardy hole size, and the negotiations canted lopsidedly in my favor, finalizing with \$75 as the price. We vainly attempted to move it towards the distant

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truck, realizing our folly. The gent went to get his truck, a vintage International stake-bed with dual rear tires. The truck attempted to negotiate the obstacle course but, seemingly on its own, turned the voyage into something more akin to an Olympic event. Actually it was airborne very little, and eventually came to earth near the anvil tree. Stake-beds, being what they are, presented an elevation problem we vainly tried to overcome. Eventually, the proprietor suggested he tow the anvil out to my truck, which at first gave me pause, but after contemplating leaving without it, seemed workable. We scrounged about for something to use when he produced the mountain climbing rope his deceased brother had owned; I didn't ask.

My first opportunity to examine this type of rope showed it to be quite impressive and we looped around the hitch, then wrapped it around the delicate waist of the soon-to-be-mine anvil. Cautioning him to take it easy, the Harvester eased the slack out of it's tractor beam. As the truck started to groan under the ballast, a fallen branch appeared to halt the mission in its tracks, but the driver slipped the clutch to roll back and get a running start. A mendacious loop snuck off the trailer hitch ball and effectively doubled the length of the tow rope as the land-tug gathered steam and sprung into action. As the rope paid out, I watched in amazement as the anvil sprung to its encore, poised like a ballerina, daintily in mid air, and deftly alighted behind the USS Nimble, all eight cylinders now raging in disappointment at the unexplainable lack of drag. Emboldened by it's success, the H.M.S. Ice Breaker plunged to its task with deliberation into the dense bush, now maneuvering unpredictably under the sway of an immense iron maiden.

With the house in direct alignment with the path of the entourage, the truck wisely began a wide arc to the side, only to have Newtonian luck move the anvil, and its gathering entrain, in the opposite direction. As fate would have it, there was a modestly large tree near the arching path and the anvil had clearly set its intent on a rendezvous. Like an a nervous parent spotting his child crossing a freeway, I anticipated the failure of progress at any moment. To my amazement the graceful bulk swung to the base, of what was soon to be cellulose, and urbanely, almost silently, sliced the tree in two. Heartened that the effort might actually succeed, I observed the anvil, out weighed by the Battle Ship Intractable, glide back towards alignment with the truck. With a flair for the theatrical, the anvil opted

to over swing and clearly set its gaze on an impressive collection of, three inch and up, PVC pipe. Obscured from view by the massive veil of entangled flora, the anvil compassed towards the pipe while leaving behind it a wake of barren earth. As it drew near the pipe, I noticed the rope slipping beneath a pallet, placing the anvil point of impact dead square with the apex of the pile. As I watched this almost choreographed dance unfold, the lusty anvil plunged headlong into the mountain of plastic. There was an instant response from the pipe clan, a dull gonging as the anvil moved thought the pile like a street dog plowing through a bunch of pigeons.

Seemingly undisturbed by the events, the truck swung back towards the front of the property. Now heady with success, the anvil emerged bent on one last reckless prank when it noticed the formidable pile of rubber tires.

The whole shebang was clearly making for the four lane highway in front of the property. I speculated, as I trippingly followed, that objective alignment with the back of my truck necessitated an over shoot of at least two lanes by the stake-bed version of the Titanic. Envisioning a multi-car pileup careening off with my anvil, I began to wave frantically to the truck, which served only to spur him on.

The anvil, oblivious to any danger, submerged silently into to the inky blackness, where, for brief moment, seemed to pause. I suspected the rope had finally given up the ghost, but it was still taut, in line with the bumper of the International. Eventually, things began to stir in the bowels of the pile, and orbs of rubber became distinct in the dusky light, pail silhouettes outlined against a silent sun.

The USS Here-Too-For wasted no time in navigating the narrow straits and launched a full scale assault on the street, scattering on imagined wave of traffic as it came to a halt.

Oh dear friend there's more, but we shall visit it another time. Tales of how it took a tractor to get the anvil and stand into my truck, motoring back home with the anvil and stand upright in the bed (I forgot to bring any rope), getting it out of my truck by hand and living to talk about it. But ... it's about 2:15 AM central time.

(Later)

... I really don't know [how much it weighs]. It has very legible markings, but a 3 inch tall "5" on the base is the only number. It certainly has all my respect. Whilst unloading it, running through my mine was all the

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things I must do should my jerry-rigging fail. As luck would have it, the anvil became impatient and decided to de-truck itself. After all the dust settled, I was surprised to find my person completely intact. The anvil resided in the exact spot were I had been standing moments before. Everything happened so fast, how it missed me I'll never know; there were certainly a lot of vertical things behind me that became horizontal. I honestly couldn't tell you how it happened. For a brief period, I could have been an adrenaline donor.

I plan to ensconce it atop a sand box "stump". I may need to rent an engine pulling crane. Situations involving mother-in-laws, moving, and sciatica can indisputably alter your perception of what is heavy.

(Later still)

This occurred in May of this year. I have a coworker/neighbor who lives five doors down. While risking life and limb unloading the anvil, they were throwing a wild bachelor party. I desperately needed help, but they had a real collective snoot full and, by all appearances, they were a calamity in search of a victim.

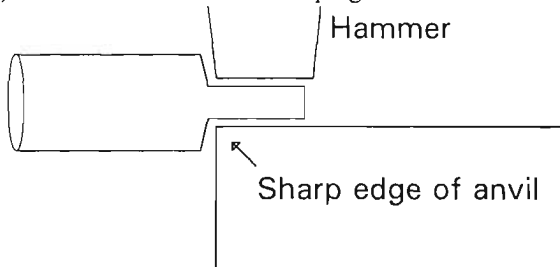
It was a bargain, I actually paid \$74 for it. I didn't have correct change. I forgot the stake and went back the next day, paid a dollar for that.

Making an Offset Rivet Backup Tool by Marshall Bienstock

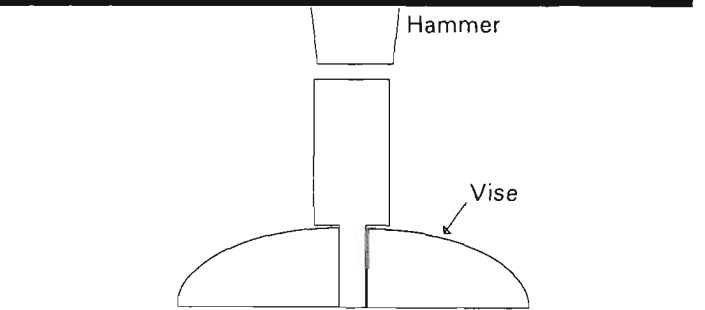
Here's how I made an offset rivet backup tool for doing scroll work:

Take about 4" of tool steel about 3/4" diameter (for small to medium-sized rivets). I used hexagonal medium-carbon steel, the type often used for cold chisels and crowbars.

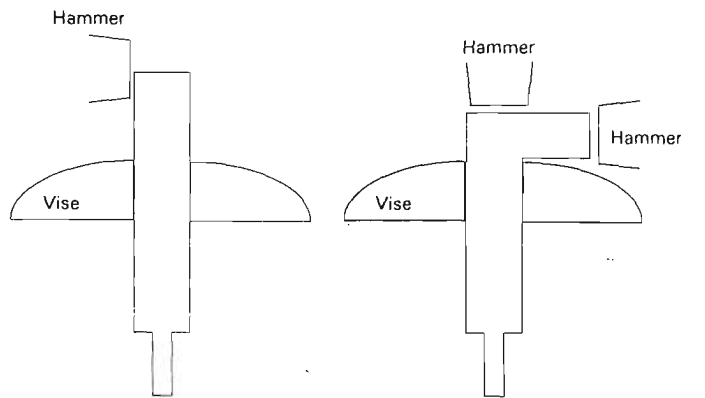
(1). Shoulder base end for clamping in vise.



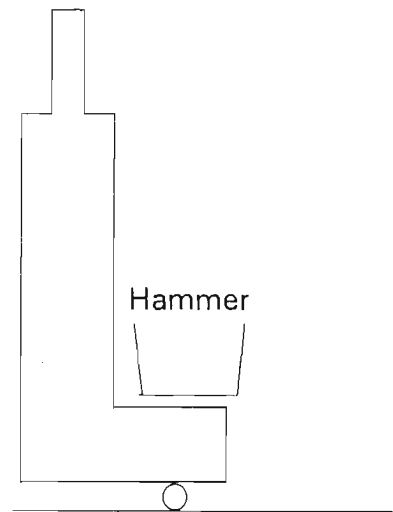
(2). Square shoulder in vise (preferably the vise you'll hold the tool in while riveting). Use quick, sharp blows with a medium hammer.



(3) Make an upset bend of the working end in the vise. Work the metal at orange heat.



(4) Use a rivet or (better, if you have the proper size) a steel ball bearing to make an indentation. Work at orange heat. Drive past halfway onto ball.



(5) Dress face with file, grinder or belt sander to obtain smooth face and proper depth. For small rivets, I don't think heat treating the tool is necessary.

HARDIES AND HAMMERS

by
Rick LaClair

Most blacksmiths have extensive knowledge of anvil and forge, but may not have an organized knowledge of hardies and hammers. For one reason these can number in the hundreds and maybe thousands of shapes and sizes. For another, they may have declined in use in the transition from more malleable iron to steels. At any rate, this column will be dedicated to understanding these traditional blacksmith tools, and you are invited to raise questions and contribute your understanding of these tools.

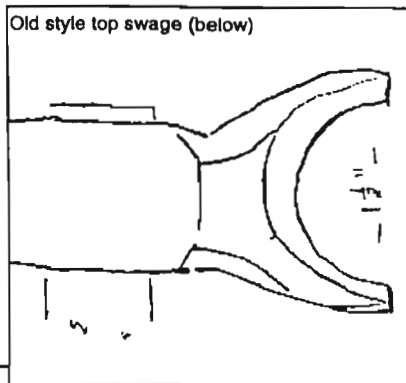
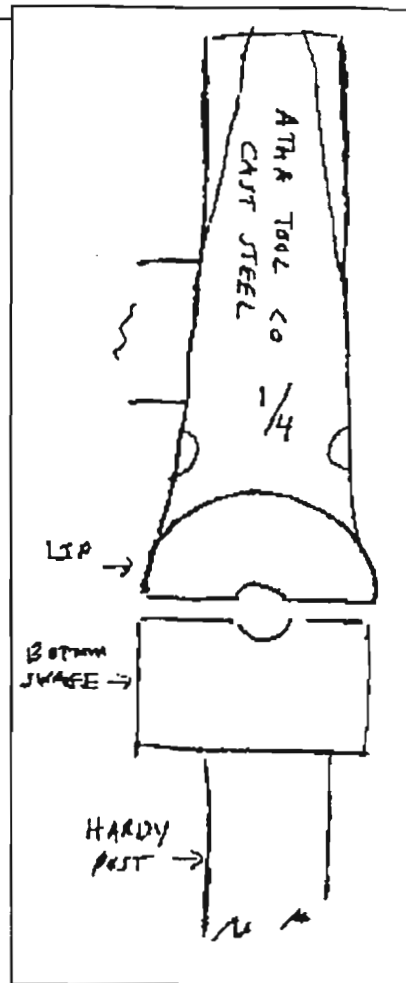
I have been interested in hardies for many years and have tried to find as many types and sizes as seemed to be historically available. Probably the first place to start talking about hardies and shaping hammers would be to discuss swages. A hardy is a shaping tool, usually made of iron or steel which has a bar post attached to the bottom which is of a size to fit into the square hardy hole in a particular anvil. Such a hole may range in size from 1/2 inch to 1 & 1/2 square, usually depending on the overall size and weight of an anvil. When a blacksmith has found a favorite anvil, then he can begin a search for hardies of the correct size or be ready to weld a bar of appropriate size to the bottom of the hardy. Shaping hammers are the handled upper counterpart of the bottom hardy and usually have a complementary shape to the hardy.

Swages are tools intended to form a round shape on an iron or steel object. "Swage" itself has come to mean shaping iron, but its technical meaning is limited to the round shape. M. T. Richardson, in *Practical Blacksmithing*, does an excellent job of visualizing typical hardies and hammers in a shop, seemingly showing collections of tools at individual shops he may have visited or known. On page 182, for example, he pictures a group of top and bottom swages which range from 5/16 to 2 inches in diameter of work to be shaped. In several of the illustrations, he points out that the bottom swages for 1/2 inch and smaller are often arranged in parallel form on one bottom tool. To sum up several of Richardson's shop studies, I have concluded that swages were generally available from 1/8 to 1 inch in increments of 1/16ths, while I have found that the 1/8 inch increments are more available than the 1/16ths. Above one inch, swages then increased in increments of 1/8 inch to 2 inches or 2 & 1/2 inches. Above 2 & 1/2 inches, increments changed to 1/4 inch, and supposedly went up to 6 inches in diameter, although I have only seen bottom swages up to 3 & 1/2 inches. I would like to know if you have seen any larger or unusual sizes of swages.

The parts of a top and bottom swages are illustrated above. The older type, probably handmade or prior to 1890 is pictured also. The older types had less body in the shaping jaws, and may suggest the greater ease in working with wrought iron.

With your help I would like to continue the Hardies and Hammers column. I ask your response and help in understanding these less considered blacksmith tools. I also ask your help in finding these items, as I have a continuing interest in acquiring and studying them. Such tools may also become inspiration for modern blacksmiths, as they contain the secrets of past craftsmen in tackling challenging problems in metal shaping.

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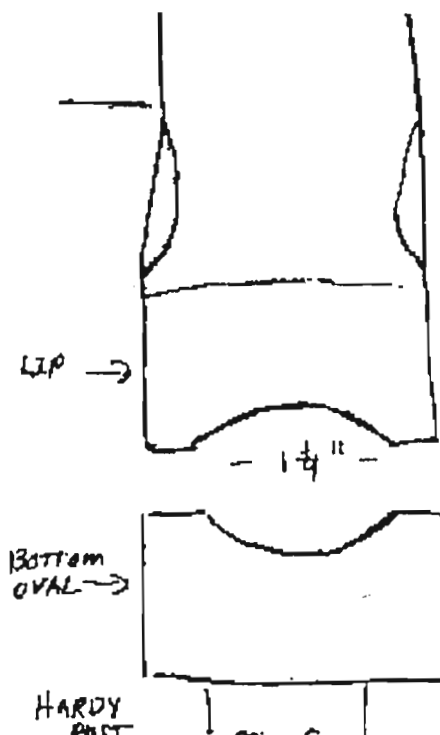
HARDIES AND HAMMERS

by
Rick LaClair

The last column dealt with top and bottom swages. Usually both top and bottom profiles are less than a full half circle; the reason being that either a full round could not be reached with thin stock, or thick stock would tend to squeeze out between the shaping tools. Another reason for the tools not reaching a full 360 degrees, would be that hitting the top hardy is a process of moving material into a round shape, with requires multiple blows as stock slowly moves from square to round. At the same time the smith would rotate the stock to continually take off the highest edges.

There is a another series of hardies with even less depth than swages have. These are called oval swages. An example is shown in the illustration on this page. These hardies would have been useful in shaping the decorative and structural iron on buggies and wagons. To keep the weight light on buggies, the smith could swage small bar stock into a half round, which stock could then be shaped to the buggy chassie to strengthen the thin wooden carcass and possibly perform other functions, such as mounting tops, lights, or other parts of buggy to chassis. In addition, one theory of buggy iron-work was that every piece of iron built into the buggy should act as part of the buggy springs—to provide as comfortable a ride as possible.

Oval swages seem to have come in a variety of sizes, much as the swages, but apparently not in as many sizes. I have seen only rare examples of these tools, and then only in quarter of an inch increments. With both top and bottom half round tools, a smith could create oval stock, which would also have been useful on wagons and buggies, as they would not have sharp edges, and would be decorative.

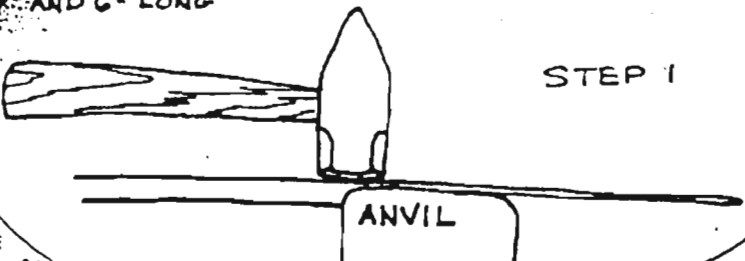


Top and bottom oval swages

The
BEGINNERS CORNER
OCMULGEE CHAPTER OF ABANA
OVER THE DOOR - WREATH HANGER

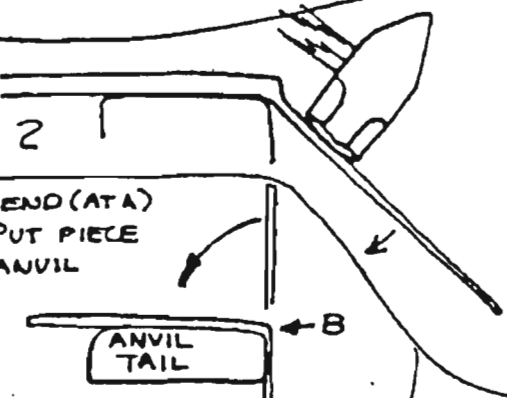
USING 20" OF $\frac{1}{4}$ " SQUARE OR ROUND STOCK, DRAW OUT 3" OF THE STOCK TILL ITS ABOUT $\frac{1}{16}$ " THICK AND $\frac{1}{2}$ " WIDE AND 6" LONG

STEP 1




FLIP THE PIECE OVER AND BEND IT AT THE STEP FORMED IN STEP 1 DOWN AGAINST THE SIDE OF THE ANVIL FORMING 90° BEND

STEP 2

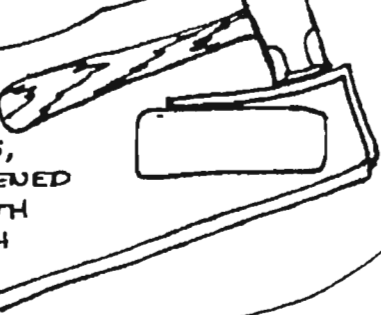


MEASURE FROM THE BEND (AT A) AND MARK (AT B) $1\frac{3}{4}$ ". PUT PIECE UNDER THE TAIL OF THE ANVIL WITH THE MARK AT THE EDGE OF THE TOP OF THE ANVIL AND BEND THE REMAINDER OF THE FLATTENED PART DOWN AGAINST THE ANVIL FACE.

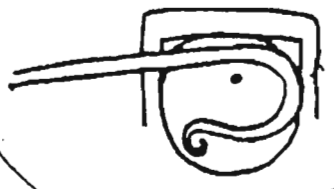
STEP 3



STEP 4
 RE-HEAT THEN COOL BOTH 90° BENDS, WITH TIP OF FLATTENED END IN CONTACT WITH ANVIL, LIFT END WITH BENDS AND STRIKE AS SHOWN TO FORM SLIGHT BEND



STEP 5
 DRAW OUT OPPOSITE END TO A POINT AND FORM A HOOK OVER THE HORN OF THE ANVIL



THESE ARE INTENDED TO HANG WREATHS OVER YOUR FRONT DOOR, BUT HAVE OTHER USES. MY WIFE USES ONE TO HANG THE IRONING ON. BEATS DRIVING NAILS IN YOUR DOORS AND SELLS FAIRLY WELL AT CRAFT SHOWS FOR 7-8 DUES.

BY D. FULWOOD

from The Ocmulgee Blacksmith Guild Newsletter

How to Join the NJBA

NJBA dues are \$15 per year. Please make out your check to William Gerhauser (NJBA Treasurer). You may note on the "memo" line that the check is for NJBA dues. **Please mail checks to Bruce Freemanm** (NJBA membership), **222 Laurel Place, Neptune, NJ 07753**, along with your completed membership form. You will receive a receipt for your membership dues within four weeks.

Required Information

(This information will be listed in a roster available to other members, unless you request otherwise.)

Name _____ Home Phone _____

Address, City, State, Zip _____

Optional Information

List any of additional information that you would like included in the membership roster (use a separate sheet if necessary.)

Other Phone , FAX , E- mail _____

Years of experience as a professional/amateur (circle one) blacksmith (not required for membership) _____

Your occupation and areas of knowledge and interest _____

What do you want to get from your membership in NJBA? _____

New Jersey Blacksmith Association

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