

Capital District Blacksmiths' Newsletter

February, 2007

Volume 6 Number 1

Age of Iron 2007

The organizers of Age of Iron 2007 have decided upon a new date for the event. This year, AoI will move from early summer (specifically Father's Day weekend) to August 18th & 19th.

Since 2003 CDBA has been hosting the Green Coal area at Age of Iron. However, this year's date could potentially jeopardize that arrangement.

With one-half to two-thirds of the Green Coal supplies typically coming from CDBA President Sarah's personal equipment, that leaves Green Coal heavily dependant on her availability. Unfortunately, the date chosen for AoI 2007 directly conflicts with the Altamont Fair; a key event for Sarah.

This means CDBA members, officers and the core group will need to decide if they wish to host Green Coal at AoI in 2007, and if so make other arrangements for equipment. Alternatively, CDBA could merely set up a booth or even choose not to participate as an organization. Additional duties that Sarah performed at AoI included organizing and cooking the Saturday evening dinner.

CDBA will need to decide if they wish to continue any of these functions for AoI 2007 and stay in close contact with the AoI founders and planners, Berkshire Blacksmiths.

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Next CDBA Meeting February 25th Bladesmithing with Rick Gross

The next CDBA meeting will be on February 25th at Oak & Acorn Ancient Metalcrafts in Valley Falls, NY. The demo will run from noon to 4pm.

The demonstrator, Rick Gross, is a recent CDBA member and resident of the Capital region. He has been a regular demonstrator at Age of Iron since 2001.

For this February's meeting Rick will be demonstrating the basics of bladesmithing with high carbon steel.



Anyone interested in attending the demonstration should RSVP any of 4 ways:

- mail the form included in this issue
- call 518-429-5270 (ask for Dan),
- email "contact@cdblacksmiths.org"
- or print and mail the form from the CDBA website



The meeting venue is located at:
35A State St.
Valley Falls, NY 12185

- * Use your best route to Rte 7 East & the Collar City Bridge in Troy.
- * From the base of the bridge get in the leftmost lane. Go to the the next light and turn Left onto Rte 40 North (Oakwood Ave).

* Follow Rte 40 North out of Troy and to Schaghticoke (approx 7-9 miles). Some landmarks on the way will be in order of passing: dual Cemeteries [one on either side of the road], Rte40 Takes a dogleg [quick Right, then quick Left], Speigeltown hamlet, Grant Hollow hamlet, Melrose hamlet, Hoosic Valley Rescue Squad.

* Just outside of Schaghticoke Rte 67 merges with Rte 40. Follow 67&40 through Schaghticoke until 67 breaks away and heads East.

* Turn Right onto Rte 67 East. Follow 1 mile until you cross a bridge. At the end of the bridge Rte 67 turns Right GO STRAIGHT.

* This is State St. Valley Falls. We are #35, on the Right hand side. It's a big tan & brown house with a matching barn set behind. Parking in the driveway and out front are fine. Depending on the amount of snow at the time, additional parking may need to be sought on the side streets on the Left. There are no parking restrictions on any of these streets; simply find a spot.



All knives shown on this page are examples of Rick's work. They were originally displayed as part of his demo at the 2005 Age of Iron.

Tools & Tips

Monkey Tool for Making Tenons

Article originally appeared in "California Blacksmith" January/February 2006. Reprinted here with permission under the ABANA newsletter exchange agreement.

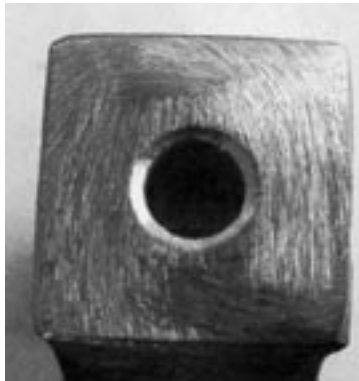
A five-day workshop on making connections was taught by Mark Aspery at the Weaverville Historical Museum. All the tools used in the class were first demonstrated by Mark and then duplicated by the students. They included punches, drifts and a slitting chisel, all used to make a monkey tool and a small grill with various connections. The monkey tool was used to form tenons for the center portion of a small grill (see "Lap Joint Methods," by Audrey King, in the March/April 2006 issue of California Blacksmith). After shaping, each tool was normalized by setting it in the forge beside the fire to cool slowly. The tools were then heat-treated.



Tools and progression for monkey tool. Photo by Tom Laman

The first step in making the monkey tool is to form a slot in 1" square stock using the slotting punch. The slotting punch is driven through the heated stock until solid resistance is felt and a different sound is noticed. While still hot, the stock is turned over and a dark area, the same shape as the slotting punch, should be visible. The slotting punch is aligned with this dark area and again driven into the square stock, hopefully aligning with the slit made on the opposite side. A small rag (or slug or biscuit) in the shape of the end of the punch and about 1/8" thick will be left.

Next the rectangular drift is driven through the slotted hole to form the holding eye. With the drift left in the tool, the final shape of the tool is refined.



The end drilled and chamfered. Photo by Mark Aspery

Finally, the end of the stock is center-punched and a hole is drilled to the size of the tenon desired. I drilled a 5/16" hole. The surface is chamfered away from the hole to give the tenon a sharp shoulder.

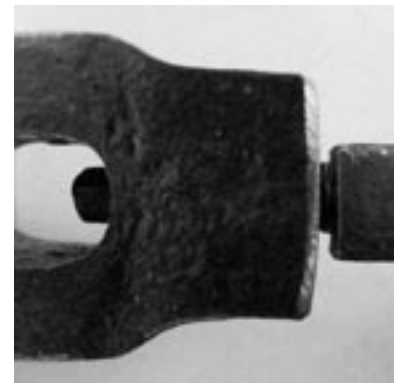
We also performed another operation that modern technology cannot duplicate: punching a 1/2" hole through a 1/2" rod. Assembly of the grill was very involved, but the class demonstrated that several joints can be accomplished with a minimum of easily made tools.



Water Street Books

26 Water St
Williamstown, MA 01267-2846
Phone: (413)458-8072
Fax: (413)-458-0249
Ask for: Richard Simpson
Richard.D.Simpson@williams.edu

**Your Blacksmith Reference
Source**



Using the tenon tool to form a tenon. Photo by Mark Aspery

Letter from the President

Happy New Year to all. I know New Year's was awhile ago, but this is the first newsletter of the new year.

I think this is going to be a great year for CDDBA. We already have two events scheduled. Both, I believe, will be great (see calendar for details).

I have to thank Jim Moran for all his hard work in getting these events set. Jim came on as "Events Coordinator" in October and has done a fantastic job so far. We are trying to give you the demos you want, so let us know if you know someone who might like to do a demonstration. Or a topic and we'll find someone to do the demo. This group is *your* group not Dan's nor mine. We are here to serve *your* needs so tell us what they are.

This year we have some challenges to overcome. The first of these challenges is two of our annual events fall on days when the people who do them are otherwise engaged. "Age of Iron" is scheduled for August 18th & 19th. This date may be a boon for Berkshire Blacksmiths, but it coincides with the Altamont Fair so Dan and I will not be able to attend. Now, for those of you who may say, "so what?". The issue is: I run the "Green Coal" area as well as provide the Dinner on Saturday night. As a group we must decide what we want to do. If anyone would like to take over the "Green Coal" area Dan and I

will offer what support we can. I am not sure how much that would be as our equipment will also be tied up at the fair. The other scheduling issue is the Albany Rural Cemetery annual Civil War Encampment scheduled for the last weekend in September. I have another Civil War encampment the same weekend. Last year Andy VanSchoick, Ron Bakerian, and Jim Moran did this event with great success. I would like to see others get involved with this event. Albany Rural Cemetery has expressed an interest in having CDBA refit the old Blacksmith Shop on their grounds as a home base.

The second challenge is we lost our Treasurer some time ago. We have not heard for this person in nearly a year despite numerous attempts to contact him. Some of you may have noticed the checks you have given us for dues have not been cashed (and will not be as they are old and could cause banking issues for all concerned). Those who donated cash (or paid dues in cash) please rest assured that it went to pay for the events were it was donated and has been the only support for the group. The reason for this is I have not wanted to add more money to an account the group has no access to. Also, I have been living in the false hope the treasurer would return. I have rejoined reality and will be working to rectify this situation. If you might be interested in the position please contact myself or Dan.

In spite of these challenges we look forward to great growth in this new year and many fun and educational demonstrations. I am also going to restart core group meetings; dates to be announced. Anyone is *encouraged* to attend together we can "Hammer" this group to greatness.

See you all very soon.

Sincerely

Sarah M. Ritchie-Crowther

President



Stainless Steel Burner Flares for:
Reil, Side arm, Mongo & T-Rex
**Propane - Hoses, Regulators, &
Fittings**
Durablanket - Ceramic blankets
Plistx 900F - Refractory cement

Zoeller Forge
4312 Lahna Dr
Louisville, KY 40216
502-361-0706
zman59@earthlink.net
www.geocities.com/zoellerforge

Nearby Events

Northeast Blacksmiths Meets

Spring 2007 - May 4th, 5th & 6th

Ashokan Field campus, Olivebridge,
N. Y.

**Fall 2007 - September 28th,
29th, & 30th.** Ashokan Field campus
Olivebridge, N.Y.

No further information is available
at this time.

New England Blacksmiths

Spring 2007 - June 1st, 2nd & 3rd

at Historic Chase Farm Park &
Wm. Hannaway Blacksmith Shop in
Lincoln, RI.



◆ **Computer controlled
plasma cutting**
◆ **Hand forging**
◆ **Light fabrication**
◆ **Welding**
◆ **Railing and gate repair**
◆ **Custom design services**

Andrew VanSchoick
Serving VT, NY & MA
802-375-9031 Voice
518-466-0040 Voice
andrewv@evolutionironworks.com

Classes

Creative Art Time Studio

135 Adams Street
Delmar, NY 12054
(518)475-9472

www.catsartstudio.com

Weekly evening and monthly daytime
blacksmithing classes available.

Oak & Acorn Ancient Metalcrafts

35A State Street
Valley Falls, NY 12185
518-665-8308

smiths@oakandacorn.com

Blacksmithing classes are offered in a
tutored format, allowing the student to
progress over a variety of projects set to
their own pace and schedule. Similar
classes in silver wire jewelry, and mail
armour are also available. Rate: \$30/hr

New England School of Metalwork

7 Albiston Way

Auburn, Maine 04210

207-777-6211 Toll Free 888-753-7502

www.newenglandschoolofmetalwork.com
(Full classes not listed)

Botanical Forms	Feb 9-12
Basic Bladesmithing	Mar 2-4

Peters Valley Craft Education Center

19 Kuhn Rd.

Layton, NJ 07581

(973) 948-5200

www.pvcrafts.org

Blacksmithing Intro	May 19-20
Techniques for Sculpture	Jun 1-5
Forging for Hearth	Jun 8-12
Steel Furniture	Jun 15-19
Feeding the Fire & Smith	Jun 22-26
Bladesmithing	Jun 29-Jul 3
Early US Door Hardware	Jul 6-10
Natural Designs	Aug 3-7
Vessels	Aug 17-21
Forging for Fun & Profit	Aug 24-28
Foundations of Damascus	Sep 1-3
Open Studio	Sept 8-10

Confessions of a Bladesmith: 'Secrets' Revealed! - Part 5

by Kevin R. Cashen



This article originally appeared January, 2003 as a 'thread' on Sword Forum International.

Attention Newsletter Exchange Editors: Please contact Kevin R. Cashen c/o Sword Forum International (<http://www.swordforum.com>) for permission before reprinting this series.

Series Recap - Mr. Cashen had just finished describing the processes he uses to grind the blade to shape. Additionally, he covered some issues unique to grinding this particular blade because of its "leaf" shape.

I start out polishing in the same manor as grinding only using finer belts. From the initial 36X Zirconia, I switch to a 220X aluminum oxide belt. Many makers do not make such a large jump in grit sizes but I have adapted this method and used it for many years now for a few reasons. It cuts down on the number of belts that I have to keep track of and store. It is very important that you get rid of all of the previous scratches before moving on to the next grit or you will have to drop back and start all over again in order to get them and this will only waste the time and abrasives spent on the polishing in the meantime. Often it can be hard to see if all of the previous scratches are indeed gone. By making the larger jump from 36X to 220X the previous scratches are very plain to see. I also dip the blade in ferric chloride in order to make the scratches show up dark against the new polish. I will not be showing any pics of the blade after this dip since it also reveals the pattern somewhat until it is polished off and I don't want to spoil the surprise for you all .

Folks without salt baths for heat-treating will probably want to stop at 220X on the polish and not get the edge too thin until after the heat treat. Since I can enjoy the full benefits of that technology, I can finish my blades out to near final polish before the heat treat. This doesn't sound like too much at first but when you think of polishing fully annealed O1/L6 versus trying



"Polishing Chair" rigged so that the blade is firmly affixed and polishing is "as short and as comfortable as possible."

to polish hardened O1/L6 (coming out of the quench at 65.5HRC), you will understand my enthusiasm for the salt baths. Without the salts there is the problem of oxidation, discoloration and decarburization, as well as possible ribboning of a thin edge.

I repeat all of the grinding steps with the finer belts, minus any of the shaping. I am just removing scratches. From 220X I go to 400X and then often finish up with a 600X belt. Now it is time for the handwork.

Hand polishing is something that I used to hate doing so much that I found ways to make it as short and as comfortable as possible. I have found that if a person has done their job right on the grinder, hand polishing should take no more than 2 hours on a large sword and no more than 20 minutes on a knife. Now I find that I rather enjoy the polishing. I made a special polishing chair to hold the work piece and give me some comfort. I just kick back and have a glass of single malt or a beer and rub my cares away with some talk radio in the background. I have found Bowmore Legend to be an excellent polishing drink, and often keep half a bottle in the shop.

An assortment of polishing sticks, smooth on one side and a strip of leather glued to the other. I make the sticks out of Osage orange. The sticks with rounds in the center are for polishing fullers.



Various wooden polishing blocks. With sandpaper attached these wooden polishing closely form to the curves of a blade.

1" wide abrasive strips. I used to use shop rolls but only found one that cut the way I wanted it to. Those rolls were made in Korea and had a heavier backing that made them more aggressive. The supply of theses dried up and I cannot find them any more so I have tried others but the only ones that came close are very expensive. Then one day I was in a bind to get some



Reusing the belt grinder belts for the polishing sticks.

polishing done and had nothing to do it with so out of desperation I grabbed an old worn out 400X belt and tore it into strips. To my surprise it worked quite well. It worked really well! The thick backing on the belts



Polishing chair in use with the polishing stick. Working by hand 90deg from the machine grind yields clear results.

make them really aggressive in hand polishing and even after they are dead for grinder use they will cut real well in hand rubbing. So I now have an endless supply of hand polishing abrasives at no cost at all, none above the price I already have to pay for the belts.

Now I go to work. I like to drop from a 600X machine finish back to a 400X hand polish because they almost even out. Machine finishes are always much coarser than equivalent grit hand finishes. The nice part is that all of the machine finishes run 90 degrees to the lengthwise hand finishing so it is easy to see your progress.

Most of my homogeneous steel blades are finished to 400X hand finish and my pattern-welded blades are no different. Just because it is etched doesn't mean you can leave scratches. The etchant will make scratches of less than 400X larger instead of erasing them. Sometimes a quick 600X rub may be necessary.

As the polish progresses I have to be a little more careful since the edges will now be sharp enough to cut me if I don't watch it.

I still have to polish the tang area and spiffy things up a bit but since there will be a few weeks time until I can work on it again I would not want it to corrode on a finely polished surface so that I have to do it all over again when I return. So I will coat the surface with oil.



Completely polished blade waiting for final heat treatment.

Not-So 'Nearby' Events

Furnace Town Blacksmith's Guild

March 24th & 25th, 2007

Joint Meeting & Workshop

Mike Linn is the Demonstrator

Mike is a proficient blacksmith from Alabama.

His demo is aimed at the beginning and intermediate smith. Saturday will be many short projects, while Sunday will have fewer but longer projects. Saturday includes, coffee and doughnuts in the morning, all-day demo, lunch (both days), Iron in the Hat, please bring something.

Auction and the flashy wit of Ray Noble and David Hutchison. The demonstration continues into the afternoon. The Saturday evening dinner will be at the Eby's house which is on Rt 12 near Millville Road in Snow Hill. (maps will be available)

We will have a table of Norm Larson's books for sale. Tailgate sales are encouraged.

Send money and registrations to:

Mark Williams

114 W. Federal St.,

Snow Hill, MD 21863

williamsiron@comcast.net

410-632-0914

Make the check out to: Furnace Town Blacksmiths Guild.

January							February						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28			
March							April						
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4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
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May							June						
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6	7	8	9	10	11	12	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28	29	30
July							August						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4
8	9	10	11	12	13	14	5	6	7	8	9	10	11
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22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31					26	27	28	29	30	31	
September							October						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
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30													
November							December						
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4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30		23	24	25	26	27	28	29
							30						

February 25th - Finalized

Bladesmithing Demonstration by Rick Gross
 at Oak & Acorn Ancient Metalcrafts
 Valley Falls, NY

August 18th & 19th - Pending Member Volunteers

Green Coal at Age of Iron
 Hancock Shaker Village, Hancock, MA

September 29th - Pending Member Volunteers

Albany Rural Cemetery, public demonstration
 Loundonville, NY

Local Resources

Coal

Garnsey Coal & Trucking
952 Route 4 South
Schuylerville, NY 12871
518-695-3346.

Greene County Horseshoe Supply
Route 32 P.O. Box 176
Greenville, NY 12083
1-866-966-5549
gchs@mail.albany.net

Morrell Metalsmiths
C. Leigh Morrell
207 Greenfield Rd
Colrain, MA 01340
1-800-371-1146
<http://www.morrellmetalsmiths.com>

Safety Products

North River Supply
John Earl
412 Cedar Lane
Greenville, NY 12083
jwkearl@cs.com

Steel

Albany Steel
566 Broadway
Menands, NY 12204
518-436-4851

Kivort Steel
380 Hudson River Rd.
Waterford, NY 12188
518-590-7233
<http://www.kivortsteel.com>

Metal Supermarket
88 Railroad Ave
Albany, NY 12205
518-435-0024
<http://www.lebanonvalley.com/03Press/metal%20supermarket.htm>

Welding & Abrasives

Black Magic Forge Welding Flux
Canal Forge
496 Towpath
High Falls, NY 12440

845-687-7130
jonned@hvc.rr.com

Northeast Gas Technologies
84 Karner Rd
Albany, NY 12205
1-800-248-1215
<http://www.newelders.com/>

Local Shaklee Distributer

Rooney Health Associates
Clifton Park, NY 12065
518-371-6453
(Source of "Basic-I" used in "Super Quench")

Other Publications

ANVIL Magazine

Rob Edwards
P.O. Box 1810
Georgetown CA 95634
<http://www.anvilmag.com>

Anvil's Ring & Hammer's Blow

ABANA CENTRAL OFFICE
PO Box 816
Farmington, GA 30638-0816
<http://www.abana.org>

Blacksmith's Gazette

P. O. Box 2168
Snohomish, WA 98291-2168
<http://www.fholder.com/blacksmithing/default.htm>

Blacksmith's Journal

PO Box 1699
Washington, MO 63090 USA
<http://www.blacksmithsjournal.com>

Irony

Stephen McGehee
PO Box 925
Corydon IN 47112
irony@epowerc.net

The Traditional Metalsmith

George Dixon
1229 Bee Tree Lake Road
Swannanoa NC 28778
<http://www.artist-blacksmith.org>

Like Minds - Other Organizations of Interest

ABANA - Artist-Blacksmith's Association of North America

ABANA CENTRAL OFFICE
PO Box 816
Farmington, GA 30638-0816
<http://www.abana.org>

New York State Designer- Blacksmiths

Pres: Bill Banker
P.O. Box 174
Almond, NY 14804-0174
607-276-6956
<http://www.nysdb.abana-chapter.com/>

Northeast Blacksmiths Association

Pres: Jonathan Nedbor
496 Tow Path
High Falls, NY 12440
845-687-7130
jonned@hvc.rr.com

Berkshire Blacksmiths Association

Nick Unquhart
126 Staples Rd.
Stephentown, NY 12168
518-733-5647

Contact Us

You can get in touch with us for submissions, requests and information by a variety of means:

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