

Rocky Forge News

Volume 12, Issue 5 – May, 2013

Next Meeting (5/11/13)

The next meeting of the Rocky Forge group will be in the blacksmith shop at the Illiana Show Grounds in Rainsville on May 11. We will have a business meeting, will clean up the building in preparation for “History Day” on Monday, May 13th, and we should also have some time to do some blacksmithing. We will be part of the Illiana Antique Power Association’s annual “History Day” to teach as many as 400 fourth graders about early rural life in this region.

Bring some treasurers for Iron-In-The-Hat and help us raise funds to complete our shop at the Illiana Show Grounds. Bring a brown bag lunch for the day and be prepared to discuss our strategy for what we will make during the kids’ visit to “History Day”. Also, bring some coal and your set up to do some blacksmithing. Coffee and doughnuts will be available at 8:30.

Ted Stout



Making knives at our last meeting

Last Meeting (4/20/13)

The Rocky Forge was host to the Indiana Blacksmith Association (IBA) on April 20th, with the theme of making Norwegian sheath knives. K. J. Groven gave a nice demonstration of the process. Ted had made up 42 blanks of 1075 steel sandwiched between two layers of mild steel and welded to a handle for convenience when forge welding. We had 38 smiths in attendance and a

large part of them took their turn at forge welding the blanks into a knife billet. At least 7 forges were going for the project. Many members took home a forge-welded knife blank and a few had ground them to the proper profile for attaching a handle. Several took handle blanks in the hope of completing the knife at home. We had good time that day. The pitch in meal gave us enough food for everyone to overindulge, and many of us did.



Ted and IBA pres., Gary Phillips, at last meeting.

IBA Conference (4/31-1/2)

The Indiana Blacksmithing Association will hold its annual conference at the Tipton County Fairgrounds on May 31-June 2. Demonstrators include Bob Patrick, John Bennett, Michael Wollowski, Dick Fisher, and the Brotherhood of the Friendly Hammermen. The conference brochure is at <http://www.indianablacksmithing.org/2013IBAConference.pdf>

IBA Conference Gallery

We will feature a gallery of blacksmith items, hand made items, antique tools and trade related items. Please bring pieces from your collection for others to view.



KJ Groven Demonstrates Forging Norwegian Knives



KJ is a great speaker.



After welding, get primary shape.



Tang needs lengthening.



Draw out the tang on the anvil horn.



Finish the blade shaping.



A finished knife with handle.

Dates to Remember

May 31-June 2, 2013: **IBA Conference:** Tipton, IN.

June 14-16, 2013: Rural Smiths of Mid-America (RSMA) Meeting and Demo, Johnson County Park

September 20 – 22, 2013: SOFA QUADSTATE Conference, Troy, Ohio.

September 20 – 22, 2013: Potawatomi Festival, Attica, IN.

October 5 - 6, 2013: Feast of the Hunters' Moon, Fort Ouiatenon, West Lafayette, IN.

October 11-20, 2013: Parke County Covered Bridge Festival, Parke County, IN.

August 13-16, 2014: ABANA 2014 Conference, Harrington, Delaware.

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Web Site: <http://www.rockyforge.org/> (previous newsletters can be found here).

Congratulations Zachary Cheetwood

On May 1 at the Seeger High School Awards Program Rocky Forge blacksmith, Zachary Cheetwood received numerous awards including a scholarship. Congratulations Zachary!

The Versatile Blacksmith

Tool Making Book Review

By Roger E. Davis

Last month we looked at online resources for tool making, and we move ahead this month with a quick review of a number of print books. Some of these books are available from the Tippecanoe County Library (marked *), some from the IBA Library (†), and all are available from Amazon and other online vendors. Don't forget to check out the used books on Amazon; I have saved a great deal of money by buying used. Pick highly rated sellers, and read all the fine print. My only surprises doing this have been pleasant!

The ultimate resource for "guerilla blacksmithing" is **The Complete Modern Blacksmith** from Alex Weygers. This is actually the combined text of three books published in the 1970's. It covers the making and use of all manner of blacksmith and shop tools, making of woodworking and woodcarving tools, and the making of stone carving tools. His talent as an artist shines through the hand-drawn illustrations, and one suspects that the products drawn are simply too ambitious and too well finished to be real. A short *Fine Woodworking* article from January, 1984 reviewed the last class he gave (at age 83). The author noted that Weygers' shop was filled with "the marvelous products of this man's skill," and that the tools were, in fact, quite real. Virtually every aspect of blacksmithing is covered in the book (with the notable exception of welding). The emphasis is on recycled materials and shop-made tools throughout. The book is full of good ideas, and his approach may surprise you with what very simple tools can do.

Another notable book emphasizing tool making is Bergland's **The Art of Traditional Blacksmithing**, partially translated by our own K.J. Groven and available from both him and Blue Moon Press. Bergland's approach is more traditional than Weygers' and emphasizes the use of standard blacksmith tools. Besides providing an excellent general introduction to blacksmithing, Bergland shows the construction and use of a wide range of "auxiliary tools." In hand forging, many of

these tools eliminate the need for a striker. Auxiliary tools for use with the power hammer aid production runs and allow more complex forging with flat dies.

The chapter on making woodworking tools provides a level of detail rarely seen in blacksmithing books. Axes, adzes, scorpis, gimlets, knives, gouges and hook tools for turning are all given careful treatment, with coverage of the axe being most extensive. Bergland emphasizes the use of laminated blades for many applications, and is not averse to using an arc welder when the weld will not "appear as a foreign element or be visible after forging." Complete instructions guide the smith from initial steps through finish forging, heat treatment and final dressing. This is a very engaging book, and later chapters deal with traditional hardware, locks, etc.

Tool Making for Woodworkers by Ray Larsen provides a different look at some of the same tools covered by Bergland. About two-thirds of the book is a general introduction to blacksmithing, but the last third consists of tool projects. Adzes, axes, chisels, hook tools, gouges, inshaves and drawknives are among the projects. The scale of these tools is generally smaller than Bergland's, and only four tools are given in complete detail, but I think the level of information is quite useful. No laminated blades for Larsen, though!

The other references listed all include sections on tool making, but most cover the same ground of hardy tooling, tongs, punches and chisels, scroll jigs, bending forks, etc. In many cases, the level of detail is less than the online references given last month. Streeter's book, **Professional Smithing**, is cited here to let you know that there is virtually NO tool making in it except for some production fixtures (it sounds like there should be more). Hoffman's book is primarily decorative ironwork and hardware, but does include two versions of the Smithin' Magician "guillotine tool." Blandford's book shows quite a few projects, but lacks detail. His other book, **Blacksmithing Projects**, has virtually no tool making. **Basic Blacksmithing** from Harries & Heer includes a unique project. Written for development workers in

less developed countries, it includes a number of blacksmith, woodworking and agricultural tool projects from scrap metal (more guerilla smithing). The *piece de resistance* has to be the goatskin bellows project which includes directions for skinning the goat!

An addendum to last month's online resources: if you make your own hammers or top tools, it would be good to make them use standard hammer handles. This PDF, <http://www.dancingfrogforge.com/ForgedToolsDocument.pdf>, is a government document detailing standard (overall) sizes for forged tools, and includes two pages of tool eye drawings. Sizes for many tools are given, and the appropriate eye sizes are given by numbered reference to the drawings. I don't know if these were ever accepted as an actual standard, but at least a couple of the biggest handle manufacturers use these sizes. See sketches below.

References

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Bergland, Havard, **The Art of Traditional Blacksmithing: A Norwegian Perspective**, Blue Moon Press, 2011.

Blandford, Percy W., **Practical Blacksmithing and Metalworking** (2nd ed.), TAB Books, 1988. [*]

Harries, David and Bernhard Heer, **Basic Blacksmithing**, Practical Action, 1993-2012. [†]

Hoffmann, Jerry, **Shop Drawings for Blacksmiths**, Hoffmann Publications, Inc., 2005.

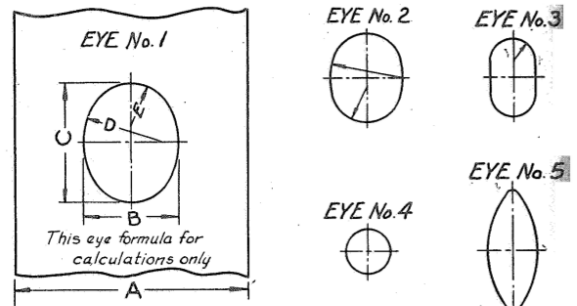
Larsen, Ray, **Tool Making for Woodworkers**, Cambium Press, 1997.

McDaniel, Randy, **A Blacksmithing Primer**, Dragonfly Enterprises, 1998.

Sims, Lorelei, **The Backyard Blacksmith**, Quarry Books, 2006.

Streeter, Donald, **Professional Smithing**, Astragal Press, 1995. [†]

Weygers, Alexander G., **The Complete Modern Blacksmith**, Ten Speed Press, 1997. [*†]



Eye formula:
 A = Size of stock.
 B = 40 percent of A.
 C = 125 percent of B (approximate).
 D = 5/6 of B.
 E = To suit dimensions B, C, and D.
 Note.—Manufacturers have a tolerance limit of 1/16 in. above and 1/32 in. under all eyes to allow for punch wear.

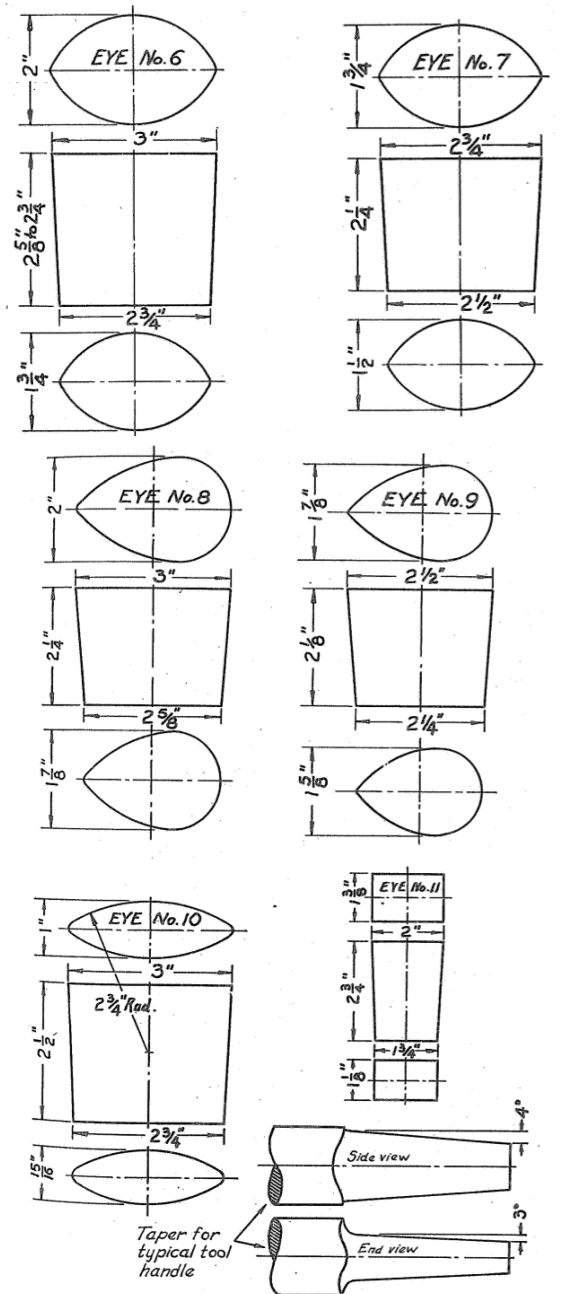
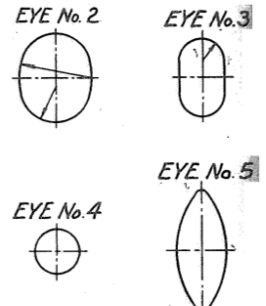


FIGURE 2.