BOARD OF DIRECTORS

Steve King '26 President: 1155 S. Paoli Unionville Rd Paoli, IN 47454 (812) 797-0059 kingstephen228@gmail.com

Gary Phillips '26 Vice President:

14800 N SR 167 N Albany, IN 47320 (260) 251-4670 behere@netdirect.net

Bill Corey '23

Secretary: 3398S CR 225E, Danville, IN 46122 (317) 919-1047 bc65925@gmail.com

Aaron Baker '23

3553 State Road 54 W Springville, IN 47462 (317) 701-0484 Aaron_baker@live.com

Jeff Reinhardt '24

2810 W. Riley Floyd's Knobs, IN (812) 949-7163 ptreeforge@aol.com

Dave Kunkler '24

20749 Lancaster Rd. Branchville, IN 47514 (270) 945-6222 dwkunkler@yahoo.com

Daniel Sutton '25

Education Chairman: 504 Owen St. Lafayette, IN 47905 (765) 586-1376 daniel@suttonindustrialarts.com

Bob Hunley '25

258N CR 800E Sullivan, IN 47882 (812) 239-4767 roberthunley@yahoo.com

Librarian: Larry Rosentrader 8715 E. 375 N Churubusco, IN 46723-9501 260-693-3267 Irosentrader@gmail.com

Editor: Bill Kendrick 1280 N 900 W Seymour, IN 47274 (812) 344-1021 bill.d.kendrick@cummins.com

Treasurer and membership secretary: Farrel Wells 8235 E 499 S Dunkirk, IN 47336-8807 (765) 209-4198 flwells@frontier.com

Awards Chairman: Brad Weaver 2703 South Water Plant Road Westport, IN 47283 (812) 371-8674 bweaverhlw@yahoo.com

THE FORGE FIRE

The Newsletter of the Indiana Blacksmithing Association, Inc.

An Affiliate Of The Artists-Blacksmiths' Association of North America, Inc.

IBA is a Not For Profit Indiana Corporation recognized by the IRS under section 501(c)(3)

9:30 AM is the regular meeting time for IBA Hammer-Ins with beginner training available at 9:00 AM. PLEASE MAKE SURE TO ASK FOR HELP!

If you would like an IBA membership application form, please contact Farrel Wells, Membership Secretary (765) 768-6235.

BULK LOTS ARE AVAILABLE TO DEMONSTRATORS, SHOPS, SHOWS AND OTHERS WILLING TO MAKE THEM AVAILABLE. WE APPRECIATE YOUR HELP.

The Indiana Blacksmithing Association, Inc., its staff, officers, directors, members, and hosts and the *Forge Fire*, specifically disclaim any responsibility or liability for damages or injuries as a result of any construction, design, use, manufacture or other activity undertaken as a result of the use, or application of, information contained in any articles in the Forge Fire. The Indiana Blacksmithing Association, Inc. And the *Forge Fire* assumes no responsibility or liability for the accuracy, fitness, proper design, safety, or safe use of any information contained in the *Forge Fire*.

The Forge Fire is the newsletter of the Indiana Blacksmithing Association Inc. (IBA) IBA is an affiliate of the Artist-Blacksmiths Association of North America Inc. Permission is granted to other similar non-profit organizations to reproduce uncopyrighted articles originally appearing in The Forge Fire provided credit is given the original source.

More nearby resources and organizations for blacksmiths:

Rural Smiths of Mid-America:

Meetings are on the first Saturday of each month
Call Ron Gill
317-374-8323 for details

IBA MEETING SCHEDULE

Check the latest *Forge Fire* for monthly **IBA** revisions.

| Feb 18 | KEN DETTMER SHOP |
|----------------|--------------------------|
| 2023 | COLUMBUS, IN |
| Mar 18 | ANNUAL BUSINESS MEETING |
| 2023 | CARTERBURG MASONIC LODGE |
| Apr 15 | BOB HUNLEY'S SHOP |
| 2023 | SULLIVAN, IN |
| May 20 2023 | TBD |



INDEX

PGS 3&4 SATELLITE NEWS

PG 4 ABANA STORE

PGS 5-8 **CHANDELIER AND** WALL SCONCE

PG 9 **BOARD OF** DIRECTOR BALLOT

PG 11 CENTER PUNCH **VARIANTS**

Dates to Remember

March 18 Annual **Business Meeting** at Cartersburg Masonic Lodge

June 2-4 **IBA Conference** Tipton Fairgrounds

Editors Message

The January IBA hammer in at Steve King's shop was very well attended. This was my first visit since the shop was enlarged. The added space was appreciated. Chase Smothers was the demonstrator. Chase made good use of forge, anvil, power hammer and press. His first creation was a nice hammer that went into iron-in-the-hat. I am not sure what to call the second creation. It had the appearance of an anvil bick, but not exactly. Chase started with about 30" of 2" x 2" stock. Using the press Chase and helper pulled a taper on one end. Then they punched and drifted a 3/4" or 1" hole through the center.

This month we will be meeting at Ken Dettmer's shop in Columbus. I believe Josh Sampson will be the featured demonstrator.

In March we will have the annual business meeting at the Masonic Lodge in Cartersburg, IN. My search engine seems to have problems with Cartersburg. It tells me the lodge is officially Belleville Lodge on Cartersburg Rd in Plainfield, IN. I hope the directions on the back page are sufficient to find your way. If you are interested in the annual meeting, but cannot make the drive, please notify Steve King. A teleconference link may be set up.

One of the key business meeting items is the filling of board of director positions. Every year two positions come up for election. This year Aaron Baker and Bill Corey terms are expiring. Bill Corey, Rob Hough and Josh Sampson have expressed interest in serving on the board. Page 9 contains this year's ballot. Mark your ballot and return to Steve King by March 17.

IBA Annual Conference

June 2, 3, 4 Dates:

Location: Tipton County 4-H Fairgrounds

Featured Demonstrators:

Ellen Durkan: Artistic works in fashion, jewelry and interior pieces.

Website: https://www.ellendurkan.com/home.html

Andrew Larson: Blacksmith and toolmaker.

Website: https://www.andrewlarsonblacksmith.com/

IBA website: www.indianablacksmithing.org IBA Facebook page: www.facebook.com/groups/IndianaBlacksmithingAssociation/

IBA Satellite Groups and News

1) Sutton-Terock Memorial Blacksmith Shop

Meet: 2nd Saturday at 9 AM Contacts: Fred Oden (574) 223-3508 Tim Pearson (574) 298-8595

2) Jennings County Historical Society Blacksmith Shop

Meet: 2nd Saturday at 9 AM Contact: Ray Sease (812) 522-7722

3) Wabash Valley Blacksmith Shop

Meet: 3rd Saturday at 9 AM Contacts: Bill Cochran (812) 241-8447 Max Hoopengarner (812) 249-8303

4) Fall Creek Blacksmith Shop

Meet: 4th Saturday at 9 AM

Contacts: Gary Phillips (260) 251-4670

5) Maumee Valley Blacksmiths

Meet: 2nd Saturday

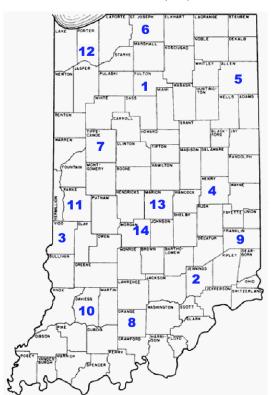
Contacts: Clint Casey (260) 627-6270 Mark Thomas (260) 758 2332

6) St. Joe Valley Forgers

Meet: 4th Saturday at 9 AM Contacts: Bill Conyers (574) 277-8729 John Latowski (574) 344-1730

7) Rocky Forge Blacksmith Guild

Meet: 2nd Saturday at 9 AM Contacts: Ted Stout (765) 572-2467



8) Meteorite Mashers

Contacts: Mike Mills (812) 633-4273 Steve King (812) 797-0059 Jeff Reinhardt 812-949-7163

9) Whitewater Valley Blacksmiths

Meet: 2nd Saturday

Contact: Keith Hicks (765) 914-6584

10) Bunkum Valley Metalsmiths

Meet: 1st Saturday

Contacts: Jim Malone (812) 725-3311 Terry Byers (812) 275-7150 Carol Baker (317) 809-0314

11) Covered Bridge Blacksmith Guild

Meet: 1st Saturday

Contact: John Bennett (812) 877-7274

12) Snake Road Forge

Meet: 1st Saturday

Contact: Rod Marvel (219) 241-0628

13) Satellite 13

Meet: 4th Saturday

Contact: Darrin Burch (317) 607-3170 Doug Wilson (317) 439-7684

14) Old Town Waverly Blacksmiths

Meet: 2nd Saturday

Contacts: Mike Lyvers (317-728-5771), Kenny Hale (765-318-3390), Mike Jackson (317-509-9115).

Jennings County Historical Society Blacksmith Shop

The Vernon blacksmiths met January 14 at the forge of Dave Good. Dave built a coal fire and drew out a die guide post for a knife and started on a 90 degree top swage . Bill Newman made several awning stakes and, using his own tomahawk swage, made a tomahawk from a horseshoe rasp. A visitor from Greensburg drew out a Damascus billet "down to 3/16" and drew out several bars on both ends. He seemed to be right at home with a power hammer. Sorry, I didn't get his name. It would help if I had help with who did what. The next hammer in will be at Kenny Dettmer's forge at 15721 S 250W Columbus, IN. March meeting will be at Kevin Welsh's , 25619 Gill Rd., Nab,IN The State Hammer in will also be at Kenny Dettmer's on the third weekend. As usual, bring iron in the hat!

IBA Satellite Groups and News (continued)

Meteorite Mashers

We met this month on the third Saturday of the month because this was also a State IBA meeting. We met at Steve King's very nice shop. in Paoli. We had lots of folks from all over the State and one from Ohio. Chase Smothers demonstrated and did a great job. Steve had pulled smoked pork for the lunch entree and it was very nice. The Iron in the hat was large and fun. Had a number of beginners as well.



Check out the ABANA website

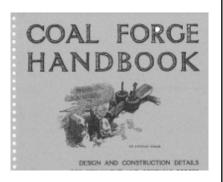
ABANA – 50 Years of Forging Ahead

Two items from the ABANA Store link

Coal Forge Handbook (\$15)

You will spend just as much time and money building a crappy forge as it would take to build an excellent one that you could use for the rest of your life." - Bob Patrick, from the *Coal Forge Handbook*.

The *Coal Forge Handbook* was compiled by Stephen McGehee to cover the design and construction of coal forges and accessories.



Clifton Ralph Powerhammer Video (\$100)

Two-DVD set of Clifton Ralph, 1993 Bealer Award Recipient, demonstrating power hammer forging. Approximately 12 hours of instruction including: why a tool is made the way it is and how it is used; how a power hammer is set up to operate effectively; and safety tips that can save you from serious injury. The camera brings you closer with greater detail than live demonstrations usually permit. Dozens of tools are discussed and many are demonstrated.

In color, includes Outline of Content, Clifton's white paper on power hammer brakes (100# & 250# Murray Brakes), and 2 pages of formulas



Keep it Simple, *Make it Elegant*, Part II Variations on a Theme

James A. (Jymm) Hoffman

This 2-page article reprinted from the December 2016 edition of Saltfork Craftsmen newsletter

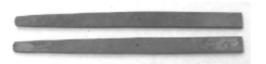


This four candle chandelier was influenced by a chandelier in a museum that has more complicated candle holders forged out of the arms without any sort of cups to catch wax and a more complicated chain. Changes were made to protect the innocent and this has simpler elements to make. This will work well in a two candle version.

Materials: 2 pieces 1/4" X 3/4" X 10"

- 1 piece of 3/8" square X 18"
- 8 pieces of 1/4" round X 6"
- 4 pieces of 16 gauge sheet, @ 21/2" X 23/8"
- 4 16 gauge sheet discs @ 31/4" diameter
- 4 Rivets 3/16" to 1/4" diameter by 1/2" long

I started with the arms of the chandelier, first putting a center punch mark in the center of the flat side. Then I forged a taper on one arm from about an inch away from the center punch out to the end. Once I was satisfied with the taper, I set it off to the side of my anvil as a gauge for the other arm. I forged a similar taper on the other arm.





Now it is time to punch a hole in the center of each arm, then shoulder, round finials with the rivet holes on the ends of the arms. Set these aside to air cool. The next step was to turn the one arm around and repeat the taper to get both ends tapered the same from the center punch. Next is to take the first bar and repeat the taper.





The next part I like to make is the vertical bar. First step is to scarf one end of the bar. About 1/2" from the scarf, round about 5 inches of the bar that will become the eye loop. Put two bends in the bar in the same direction. One bend is just past the scarf, the other where the rounding of the square bar stops. To make an eye loop on the end of a bar in which the center of the loop is to be in line with the center of the shaft, put the bend in before making the loop. This makes a much nicer looking eye then trying to bend it after making the loop. Line up the two bends and forge weld together.

Once the forge weld is completed and dressed up, twist about 5 inches of the bar about 5 inches from the loop. I like to straighten twists by gently squeezing them in a vise. Then forge a tennon on the end of the shaft.

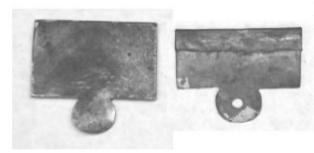


Next is the chain. In this case I made a chain of 7 loops made from 1/4 inch round stock 6 inches long. Make two links, joining with a third. Make another set of three and join with another link. This is what I refer to kids at demonstrations as chain math. 1+1=3, 3+3=7.



The chain is attached to the chandelier shaft with a ring made from the remaining 1/4 inch round by 6 inch long piece and is not welded. The ends are butted together.





Moving right along to the candle holders and wax catchers, I used the 2 1/2" X 2 3/8" 16 gauge sheet for these. The bottom of the holder is approximately 3/4" round on center. Once cut out, drill the hole for the rivet. I formed the candle cups by first bending over about 1/2" of the top edge to give a smoother and re-enforced the cup. Then form the rest of the cup in a pair of tongs I modified similar to Phil Travis' candle cup pliers shown on the PAABA web site: http://www.paaba.net/, click on the projects tab.

The wax catcher disks are first dished out as you would a ladle then flattened. A trick I learned making flat bottom frying pans. I used a 2 2/4" bar to dress up the flat, but it can be done simple on the anvil if you don't happen to have a bar the right size.

Once all the parts are made, it is time to do the final assembly. I like to use a 3/4" bar in the vise, long enough to sit on the screw, to rivet the candle holder, wax catcher and arms together. Putting the rivet on the bar and peening over from what will be the under side.









With candle holders are attached to the arms, the tennon on the vertical shaft is heated up and peened over while hot.



Below are some variations of vertical bars that would also look nice for this project. When increasing from 3/8" to 1/2" for the vertical, I recommend also increasing the size of the arms 1/4" X 1" X 12" and the wax catcher cups to 4" disks.



Left two, 3/8" square, right two, 1/2" square and round.



Two candle version.

Heart Wall Sconce - by Jymm Hoffman

This 2-page article reprinted from the December 2016 edition of Saltfork Craftsmen newsletter

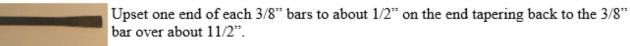
Materials: 3/8" Hot Rolled Square X 18" long

16-18 gauge sheet, 5" X 4

2 1/2" long rivets (3/16" diameter or smaller)

Since many people know much of my works are historical reproductions, I feel it is important to include a disclaimer. This is <u>not</u> a copy of an historical item. It is an item that Mark Bokenkamp of Loudonville, Ohio, showed me in the early 1980's. The original creator is unknown but believed to have been alive in the 1980's.

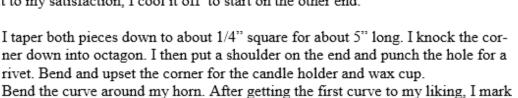
I normally make a pair of these at a time and they have sold more often as a pair than singles. Therefore, I normally start working on both at the same time, heart shapes first. I have found trying to match every step along the way is easier than completing one sconce then trying to match the completed one. The following dimensions are approximate, the key is making both alike. Some have heard me answer questions about how long or how thick by saying, "about that much."



the horn with soap stone as a guide for the second.

Start spreading to form an approximate outline of the sides of the heart shape. I use my cross peen to fuller out most of this, finishing with the face of my hammer to take out the marks and smooth it up. Some tricks in this

process include working both sides as I spread it out. Also, a trick I learned from Peter Ross, Master Blacksmith at Colonial Williamsburg, is to flatten the peen on my hammer. Rounded and very narrow peens end up cutting the metal as it gets thinner. One of the first things I do to a factory made peen is flatten most of it, leaving a radius so there are not sharp edges. Also, another important trick is to focus the blows at the center and work out. Leave the edges thicker than the center until you are close to finishing spreading out the metal. Once I have the width of the heart to my satisfaction, I cool it off to start on the other end.



Twist both pieces. I normally mark my vise with soap stone where the end of the

first sconce was held. For the other end I will either set a pair of dividers as a guide for the distance of the twisting wrench or simply keep the other sconce near by. Once the twist is nice and even, I bend the pieces so that they lay flat on the wall from the top of the heart through the twist to the start of the curve away from the wall. Let these parts air cool.



I start on the wax cups. I use my divider to strike two 4" circles, with a deep center punch mark in the sheet. I then trace my candle holder patterns and also put a deep center punch mark in the center.



Cut out the circles and candle holders with a shear. Clean off all burs and clean up the center of the candle holder with a 1/2 round file.

Sink the wax cups (technically raise them down) into my wedge block. I start at the outside edge and spiral down to the center. Take out any wrinkles as soon as you see them.

Peen the veins into the candle holders with a chipping hammer, cup them in the step of my anvil. Curl the ends, then finish forming them around a 3/4" diameter rod. Let

air cool.

Back to the heart shape at the top of the sconces. I use a half round file to finish the outside shape as well as cut the V into the top of the heart. Then I hot punch the nail holes. Let these air cool.

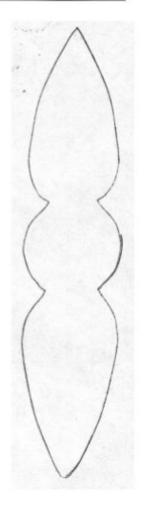
Drill or cold punch the holes in the candle holders and wax cups. Assemble the candle holders and wax cups to the wall part. Put the rivet on the 3/4" bar that is still in the vice on the screw. Put the pieces on over the rivet. You can then get things to line up relatively well as you peen down the rivet.

Finish options: Cold application of tongue oil; a mix of equal parts of linseed oil, turpentine, and white vinegar; paste wax, or some kind of clear spray.



These always look best when mounted with hand forged nails.

Template for Candle Cups (Actual Size)



Ballot IBA Board of Directors Vote for 2 Only

| | · | | |
|----------------------------|--------------|--|--|
| | Bill Corey | | |
| | Rob Hough | | |
| | Josh Sampson | | |
| | | | |
| Write in. | | | |
| (Must be willing to serve) | | | |
| O 11 11 | | | |
| Send ballot to: | | | |

Steve King 1155 S. Paoli Unionville Rd Paoli, IN 47454

Mark the word 'Ballot' on envelope so it will not be opened until the business meeting in March.

Ballots may be cast at the business meeting.

Mailed ballots must be received by March 17th.

Ballot Gary Phillips 14800 N SR 167 N Albany, IN 47320

> Steve King 1155 S. Paoli Unionville Rd Paoli, IN 47454

Center Punch Variants

By **Steve Bloom**, Ironflower Forge

Since we all have had more time in our forges lately, you might like a shop project.



My first center punch was part of a file - I could not resist considering the 'Flat Bastard' markings. While this has served for 35 years, it has limitations in terms of grip and point sharpening.



Some while back, I acquired a mill and -as a result- a collection of broken end-mills. A 5" scrap piece of 5/8" diameter bar can be drilled to accept 3/8" end-mills. Drill and tap a 10-32 set screw and you are good to go. If you have a knife grinder or a bench grinder and a hand drill, putting a point on is easy.



The next variant came about due to ageing eyes and glasses. I needed a punch that I could position on the work with a bit more precision. The handle is a scrap of 7/8" square tubing (from a NordicTrack if I remember correctly) with a slug of 3/4" square stock welded on. The slug was drilled to accept 3/8" end mills, was slit from the end to the hole and a 1/4" hole with bolt was added to squeeze the slit and lock the end mill in place.

> From the 1st Quarter 2021 Northwest Blacksmith Assn's Hot Iron News

I found that for some projects, I needed more precision and a third hand. What I came up with consists of a base (6" x 3.75"), a curved arm (5.5" x 1/4"), a piece of pipe (3/4" Sch 40) and a scaled-up version (7/8" x 6") of the end-mill holder.



After using this unit for awhile, I found it really help-ful to add a mount for a small flashlight. Not only does this help when punching, it means I can find a flashlight when I need one. Occasionally I need to drill round stock, so welding up some scrap angle iron as shown here is worth the time. All of these various dimensions were not planned - they just happened to be what I found in the scrap pile.

Thanks to my wonderful wife - Kimmy for proofreading this and many other write-ups.

Our grateful thank you to Steve Bloom, Ironflower Forge for sharing his work with our readers. Steve served as the Editor of Florida's "Clinker Breaker" for many years.



Address Correction Requested If Undeliverable return to sender

February 18 Hammer In Kenny Dettmer's Shop

15721 S 250W Columbus, IN

From the North: take I 65 S to Ogilville / Walesboro (exit 64) turn. right. Go to the 1st crossroads (300 W). Turn left. Approx 1 mile to the "T". Turn left (600s). Go to 250W. Approx. 4 miles to a brick house on your left.

From the South: I 65N to Jonesville exit 55 turn. right, go to road 950 (in Jonesville). Turn left. Go to 250W turn. right. Kenny's house is approx 1/2 mile on your right.

Please bring a dish to share.

March 18 Annual Business Meeting Belleville Masonic Lodge

4252 Cartersburg Rd, Plainfield, IN 46168

From Indianapolis: take I-465 exit #12 (Washington St/US-40 West). Follow US-40 about 10 miles through Plainfield. Turn right Cartersburg Rd. Masonic Lodge is about 1 mile on left.

Pitch in lunch

First Class Mail