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# 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.

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**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.

July 16 2016	TBD
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Aug 20 2016	TBD
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Sep 17 2016	TBD
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Oct 15 2016	TBD
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## Dates to Remember

Aug 5-21  
Indiana State Fair

Sept 23-25  
Quad State SOFA

## Editors Message

For those who have not heard, Ted Stout suffered a major heart attack earlier this month. Ted was very active throughout the Conference, but was in the hospital a day later. The good news is that Ted is home and recovering. Be sure to let Ted know you are thinking of him.

Jeff Reinhart hosted the May hammer in. The day's feature was an array of portable/towable forging stations used for festivals and other outdoor events. The stations had some interesting features, one included a small jib crane to load and unload anvil+stand without back injury. Take a look on page 4 for more details and photos.

At this time I do not have any information about upcoming IBA hammer ins. If you are interested in hosting a hammer in, please contact Gary Phillips (ph: 260-251-4670, email: behere@netdirect.net).

This year's Conference was quite a success! The weather was reasonably agreeable with moderate temperatures and monsoon rainfall only during the afternoon demonstrations.

- The unofficial attendance was 180 people.
- The demonstrations were superb. The first demo was Friday evening with Charlie Helton and Brad Weaver forging two very different horseshoes. Saturday morning I was migrating from demonstration to demonstration. As usual it was difficult to select which demo to be at. Fortunately Larry Whitesell asked me to video tape Kim Thomas. What a relief to focus on one great demo without the inner conflict of wondering what I was missing. All of the demonstration areas were well attended.
- Page 5 includes a list of this year's award winners. Congratulations to John Bennett and Alex Spellman, our 2016 Blacksmith of the year and Rookie of the Year winners. Well deserved.
- We had a special occurrence at the auction. John Cummins donated a beautiful Damascus knife with all proceeds going to Billy Merritt's funeral expenses. The knife was purchased and returned to the auction (twice) by the same bidder. A very touching act of generosity.

Beck's Mill (<http://becksmill.org/>) in Salem, IN is looking for blacksmiths to demonstrate in their forge. Anyone interested should contact Jason Hardin at 812-620-0105

## IBA Satellite Groups and News

### **1) Sutton-Terock Memorial Blacksmith Shop**

Meet: 2nd Saturday at 9 AM  
 Contacts: Fred Oden (574) 223-3508  
 Dennis Todd (574) 542-4886

### **3) Wabash Valley Blacksmith Shop**

Meet: 2nd Saturday at 9 AM  
 Contacts: Doug Moreland (217) 284-3457  
 Max Hoopengarner (812) 249-8303

### **5) Maumee Valley Blacksmiths**

Meet: 2nd and 4th Saturday  
 Contact: Clint Casey (260) 627-6270  
 Bruce Teegarden (260) 226-1722

### **7) Rocky Forge Blacksmith Guild**

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

### **9) Whitewater Valley Blacksmiths**

Meet: 2nd Saturday  
 Contact: Keith Hicks (765) 914-6584

### **11) Bunkum Valley Metalsmiths**

Meet: 1st Saturday  
 Contacts: Jim Malone (812) 725-3311  
 Terry Byers (812) 275-7150  
 Kathy Malone (812) 725-3310

### **13) Satellite 13**

Meet: 4th Saturday  
 Contact: Bill Newman (317) 690-2455

### **2) Jennings County Historical Society Blacksmith Shop**

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

### **4) Fall Creek Blacksmith Shop**

Meet: 4th Saturday at 9 AM  
 Contacts: Gary Phillips (260) 251-4670  
 Dave Kline (765) 620-9351

### **6) St. Joe Valley Forgers**

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

### **8) The Southern Indiana Meteorite Mashers**

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

### **10) One-Armed Blacksmith Shop**

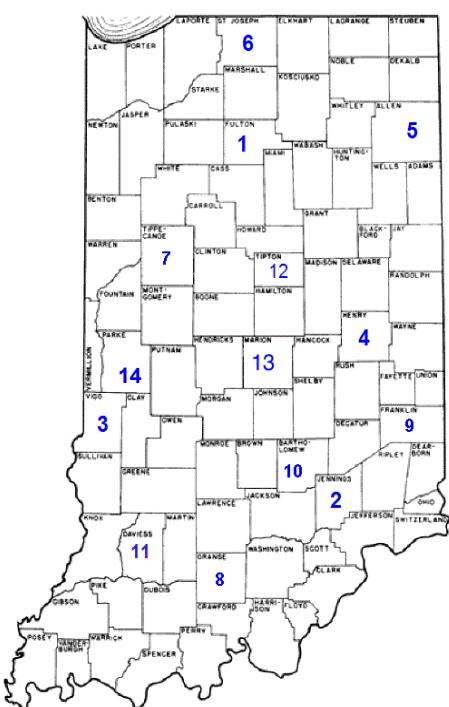
Meet: 1st Saturday  
 Contact: Tim Metz (812) 447-2606

### **12) "Doc" Ramseyer Blacksmith Shop**

Location: 6032W 550N, Sharpsville, IN 46060  
 Meet: 3rd Sunday at 2 PM  
 Contacts: Charles Gruell (765) 513-5390

### **14) Covered Bridge Blacksmith Guild**

Meet: 1st Saturday  
 Contacts: John Bennett (812) 877-7274



### **Jennings County Historical Society Blacksmith Shop**

The Jennings County Historical Society Blacksmith Shop was opened at approx. 7:30 am with many members bringing their contributions to our "wall Hanger" for the conference. I will not go into who made what because this was a group project, however, much is attributed to our resident designer, Pam Welsh, who is also a great motivator. We had a really good iron-in-the-hat. A decision to add another working aid to the shop was made. The hanger will not be viewed in it's completed state until the conference, which is very close. Hope to see everyone there! Paul Bray

#### **Forge welding tip from Nathan Allen's demonstration:**

Scale will not form at welding temperature. If you see scale, it is not hot enough to weld.

## IBA Satellite Groups and News (continued)

### Fall Creek Blacksmith Shop

7 members showed up. Andy brought the copper tree he made, I brought copper rivets. We worked on the surface before installing the copper. A circle was formed for the copper to be fastened to. Chuck Dave and Bill rolled a circle out of flat stock doing it the hard way (edge bend). Andy installed the copper tree of life. Eric took the piece home to add a coating to the hanging. No iron in the hat was held.



---The conference went good except for the rain we received Saturday.

reported by Dave Wells

### The Southern Indiana Meteorite Mashers

The meeting this month was held in conjunction with the IBA monthly hammer-in at Jeff Reinhardt's shop in Floyds Knobs. The day started out rainy/misty and cool and heat from the wood furnace was nice. Soon warmed and cleared and by mid morning the shop doors were open and demonstration rigs were being set up. We had 4 different traveling demonstration rigs to check out and that was the demonstration of the day. Had 2 trailer based shops and 2 quick set up shops and had 3 of them in use for beginners lessons. The inside forge at Jeff's shop was also in use. Lunch was very nice with all the items brought. A good Iron in the hat was held and we look to gain 4 or 5 new IBA members. One new member bought \$20 worth of tickets and Gary had to count several times to figure how many tickets that was. The writer offered his fingers

for extra fingers so Gary would have enough to count that high but was politely declined. Butch Sparks brought some large forklift tines and one was carefully cut up to make striking anvils. John Bennett demonstrated a very nice S hook for the beginners and helped Mike Mills and Butch Sparks with instructing the many beginners we had.



The next meeting will be at Beck's Mill on Beck's mill road near Salem.





## Bartholomew County 4-H Blacksmith Shop Update from Tim Metz



Hello All, We have come a long way.

Last Tuesday night (May 17) we had 7 kids working with 2 forges.

Clearly our capacity has been raised to the point we would not have to limit the size of the blacksmith project.  
Thank you for all your help along the way.



## 2016 Indiana Blacksmithing Association Annual Conference Winners

### **Early Registration Prize Winners:**

**Robert Wagner: 2016 IBA Membership**

**Dave Wells: 2017 IBA Conference Fees**

### **Blacksmith of the Year:**

**John Bennet**

### **Rookie of the Year:**

**Alex Spellman**

### **Group Project (Wall Hanging)**

**Dave Wells**

**Fall Creek**

**Vernon Group**

### **Made at Home (Meat Fork)**

**John Cummins**

**Larry Whitesell**

**Michael Kusuda**

### **Display Only**

**Brad Weaver**

**Charlie Helton**

**Michael Priddy**

## IBA 2016 Conference Photos





## The State Fair is August 5 - 21

Aug 5,6,7	Rural Smiths
8,9	Rocky Forge Blacksmith Guild / Keith Hicks
10,11,12	Vernon Group
13,14	Bunkum Valley Metalsmiths
15,16	John Bennett / Fred Ripberger / Wayne Ripberger
18,19	Jim Jesse
20,21,22	Fall Creek / Satellite 13

If you have any questions call or e-mail Bill Newman

Ph: 317 690-2455 email: [ruralsmiths1@yahoo.com](mailto:ruralsmiths1@yahoo.com)

## 2016 IBA Blacksmith of the Year

**John Bennett**

Congratulations!





**Fig. 1 - Two sets of tooling for Joggle bends.**

### Simple Joggle Bender Jim Carothers

A simple joggle or offset bend can be made at the blacksmith's vise using two spacers. The thickness of the spacers equals the height of the desired offset. *Fig. 1* shows two sets of joggle bend tooling that I made. These are basically compression dies. One produces a  $1/4"$  offset; the other a  $3/8"$  offset. The spacer bars as shown are about  $3/4"$  wide; wider material can be used as well. These tools are made from ordinary mild steel bar (A-36). I use them as is – no hardening.

On top of the bars used for the spacing and bending, I welded two more little pieces of bar to provide support and counter weight at the top of the vise. These support parts are angled

to match the top of the vise jaws.

*Fig. 2* shows the spacing and bending bars in the vise with a piece of cold stock. I do the actual bending hot. I usually set the distance between the inside edges of the spacer bending bars to about 1.25 to 1.5 times the offset height. So for a  $1/4"$  offset, I'd set the spacing at  $5/16"$  to  $3/8"$ . For a more gentle bend, you can grind a small radius on the contact edges of the spacer material and or use a larger spacing between the tools.

*Fig. 3* shows a bar with a  $1/4"$  height offset bend.



**Fig. 3 -  $1/4"$  offset Bend.**



**Fig. 2 - spacing and bending bars in the vise with a piece of cold stock.**



## Nail Blacksmithing Proficiency!

### PHIL LAUDENSLAGER.

We all have a desire to improve our blacksmithing skills and proficiency. There are many ways of doing so. Of course, the old adage "practice makes perfect", strikes the nail right on the head. But what kind of practice should one practice? There are so many techniques in the blacksmith trade to master. My advice to the novice, intermediate, and even more advanced smith is to keep it simple. Forge a nail! Forging nails as a warm up exercise is as important and useful to the blacksmith as batting practice is to a major league baseball player. Quite simply, it gets you in the swing of things. It can also make you better at swinging your hammer more proficiently!

Ironically, I didn't forge my first nail until I had already swung a cross peen hammer thousands of times. Had I known then what I know now, a nail should have been one of the first items I ever made. Now I strive to make at least 10 ten nails as a warm up each and every time I light the forge. And for the record, having produced thousands of like items, I have yet to make the perfect nail.

Nail making serves as a wonderful exercise for any level of smith. Doing so on a regular basis helps improve swing mechanics, hammer

control, strength, and efficiency. For the weekend hobbyist, you may also find that it helps keeps the skills from getting rusty! If you strive to strike steel where you aim, then keep reading. With practice you will!

There are four steps involved in making a nail- Taper, Shoulder, Cut, Head. That's it! I recommend using a  $\frac{1}{4}$ " nail header to start with. You can buy them typically for under \$30 from a supplier, or you can forge one yourself



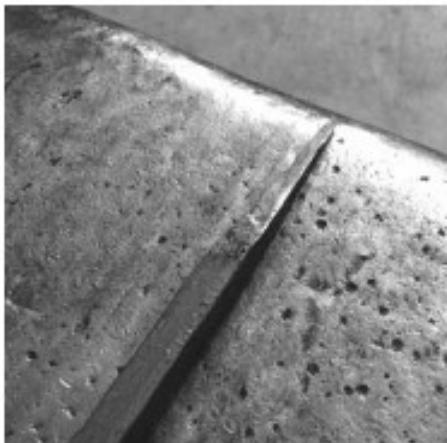
**FIG. 1 - HAND FORGED AND COMMERCIALLY FORGED EXAMPLES OF NAIL HEADERS.**

relatively easily by faggot welding the end of a piece of stock  $1"$  by  $\frac{1}{2}"$ , then punching a  $\frac{3}{16}"$  tapered square hole through it. Dome the top to allow angled hammer blows when forming the head. As far as hammer size goes, that's up to you. For this exercise however, bigger is not necessarily better!

Start by heating the end of  $\frac{1}{4}$ " bar stock nice and hot the last two inches or so. I prefer to forge these at almost welding heat, as

it provides more time to work the material. I also prefer using a coal fire when making nails. Coal allows for a more concentrated heat. I do not like to use a propane forge for this exercise. Propane forges tend to heat too great of an area of stock, making it difficult to work with when making nails. However, if that's all you have, use it. You can make do! When I have large orders of nails to produce I will sometimes use propane, as it enables me to heat multiple pieces of bar stock at once. Otherwise, go with coal all the way!

Once a nice yellow heat is achieved pull the rod out and bring it to the anvil. Position the tip of the bar at about a 10-15 degree angle on the far edge of the anvil and let the fun begin! It's time to swing! Rule of thumb- stay controlled and concentrate on swing mechanics. The first swings should be the hardest, therefore the hammer should travel the furthest. You should swing with your full arm and shoulder for the first couple of swings. The hammer head should also strike the end of the material at roughly the same angle. Rotate the stock 90 degrees every one or two strikes. The idea is to make a nice and sharp, tapered point on the end. I will concentrate on striking only the last inch of the bar until this is accomplished. If you are missing where you are aim-

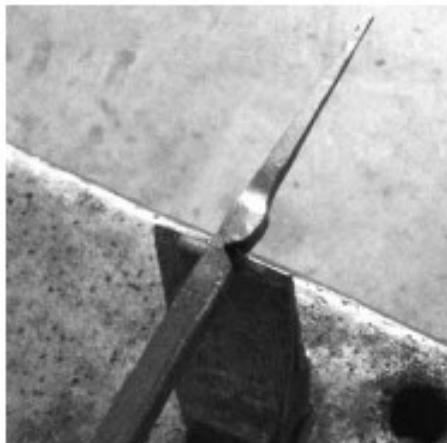


**FIG. 2 - TAPER OUT THE END OF YOUR MATERIAL TO A NICE SHARP TAPERED SQUARE POINT.**

ing, you are swinging too hard, too fast, and out of control! Concentrate at directing precise hammer blows where they count. Reduce your swing as the tip is forged out and becomes more defined. Use small swings from your elbow to achieve a nice tip on the nail. Ensure that the taper remains square.

Now it is time to reduce the thickness of the nail shank. Bring the stock to the near edge of the anvil to shoulder it. This is also when nail length is determined! For a 2" nail, leave about  $\frac{1}{8}$ " on the anvil. Use half-on half-off heavy hammer blows to create a well-defined shoulder on two sides of the parent stock by rotating 90 degrees back and forth. At this point, the body of the nail should be tapered enough to fit snug into the nail header up to the location where it is shouldered. You may wish to test the fit in the nail header before proceeding to Step 3. This is also the best time to reheat the piece if all color is lost.

Place the hot cutter in the anvil hardy once shouldering is complete. Position the stock on the hot cut about  $\frac{1}{4}$ " to  $\frac{3}{16}$ " from the shoulder. Strike a medium blow to cut half way thru,



**FIG. 4 - CUT HALFWAY THROUGH THE STOCK ON TWO SIDES, ABOUT 1/4" TO 5/16" FROM THE SHOULDER.**

then rotate 90 degrees and do the same on the other side. The soon-to-be nail should still be attached to the parent stock, albeit not by much. If it went flying off, then oops, you got over-zealous. Start from the beginning! If still attached, proceed to Step 4!

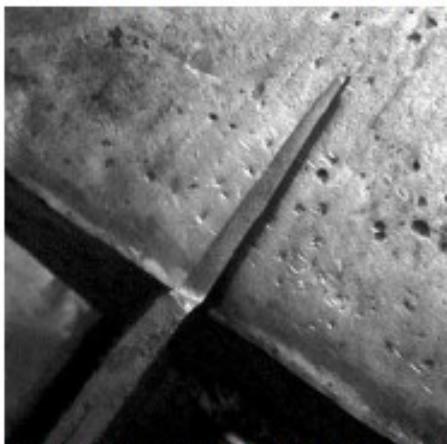
Grab your nail header and insert the end of the nail into the header until it is seated at the shoulder. Twist the stock to break it off and return the rod to the fire then position the nail header over the anvil hardy. Strike the nail head with heavy enough blows to mushroom the nail head flat and symmetrical. You now have a nail. Well, almost! To make it a truly hand forged work of art, give it some character. You know! More Clout! In nail terminology, clout is nothing more than the number of individual hammer blows on the nail head. How many clouts is up to you. I prefer 4-5. For a 4 clout nail, strike an angled blow to each side of



**FIG. 5 - WITH THE SHOULDER RESTING ON THE TOP OF THE HEADER, TWIST FROM THE PARENT STOCK.**

the head. Done correctly, the head should look symmetrical. Extract the nail and observe the finished product.

If you are just starting out, it may take several minutes and multiple heats to create a suitable nail. Quality always wins over quantity! However, with regular practice, nails can easily be forged in under 30 seconds with only one heat! In the meantime, spend a little time each week trying your hand at forging nails. You may find that doing so helps improve your skills. Don't kid yourself though, if you think you have mastered the art of nail making, 200 years ago, teenaged nail makers were individually forging out thousands of them per day!



**FIG. 3 - ON THE NEAR EDGE OF THE ANVIL, SHOULDER THE MATERIAL ON TWO SIDES.**



**FIG. 6 - A 4 CLOUT HEADED NAIL.**



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sender

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## Beck's Mill Blacksmith

Beck's Mill (<http://becksmill.org/>) in Salem, IN is looking for blacksmiths to demonstrate in their forge. Anyone interested should contact Jason Hardin at 812-620-0105