#### **BOARD OF DIRECTORS**

Gary Phillips '22 President:

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

Steve King '22 Vice President: 1155 S. Paoli Unionville Rd Paoli, IN 47454 (812) 797-0059 kingstephen228@gmail.com

### 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) 768-6235 flwells2647@gmail.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.

Jan 15 2022	OLD TOWN WAVERLY BLACK- SMITHS
Feb 19 2022	KEN DETTMER'S SHOP
Mar 19 2022	TBD—ANNUAL BUSINESS MEETING
Apr 16 2022	TBD—CONTACT STEVE KING IF YOU WOULD LIKE TO HOST



## **INDEX**

PGS 3-5 SATELLITE NEWS

PGS 6-7 ERGONOMICS 2

> PG 8 SMITHING MAGICIAN

PG 9 POWERHAMMER TOOLS

> PG 10 WORKHORSE

PG 11 ADDITIONAL HOLDING OPTIONS

# Dates to Remember

March 19 Annual Business Meeting location TBD

June 3-5 IBA Conference

# **Editors Message**

Late notice: The January IBA hammer in will be hosted by the Old Town Waverly Blacksmiths. I have not been to this shop, so I do not have good driving directions. The Old Town Waverly Park is just off I-69/SR37 in Martins-ville. Map searches indicate some road construction around I-69 and IN-144. If you have questions or need directions I suggest contacting Mike Lyvers (317-728-5771), Kenny Hale (765-318-3390), or Mike Jackson (317-509-9115).

The February hammer in will be at Ken Dettmer's shop in Columbus. February at Ken's has been a regular event for many years. We always have a big turn out and good demonstrations.

We are still working on a location for the March business meeting. As usual we have two board of director terms expiring. If you are interested in serving on the board, please contact Steve King.

As noted last month, I am looking for someone to take over the Forge Fire editing responsibilities. I feel some excitement in the direction the IBA is going as we pull out of the COVID induced slow down. I think a new perspective in the newsletter will build on that excitement. The job is not particularly difficult or time consuming. The editor position is appointed, so any interested party can contact a board member.

The article on page 11 (Additional Holding Options) is reprinted from the Sept-Oct 2015 edition of The Upsetter, the newsletter of the Michigan Artist Blacksmith Association

# **ABANA News**

ABANA's 2022 Conference registration is now open. Please join us for what will be an outstanding event May 11 – 14 2022 in Denton Texas! Please register here <a href="https://conference.abana.org">https://conference.abana.org</a>

# Business of Blacksmithing digital class taught by Jerry Coe

This class is geared towards the professional smith, new or old small or large all business minded smiths are encouraged to attend. Course instructor Jerry Coe will discuss topics such as networking for business success, developing a product line, and working with distributors. Each class will consist of a 45 minute lecture followed by question and answer.

- 1. Business 1: January 22 nd 8pm Eastern, 5pm Pacific
- 2. Business 2: January 23 rd 8pm Eastern, 5pm Pacific

Member price: \$100 for both classes

Non-Member price: \$165, for both classes and a 1 year ABANA membership

Registration can be coordinated through ABANA Home office or the following link: https://abana.org/business-of-blacksmithing/#!event-register/2022/1/22/business-of-blacksmithing-class-with-jerry-coe

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

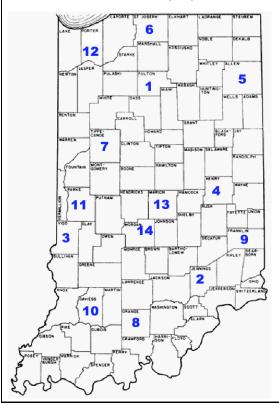
### 6) St. Joe Valley Forgers

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 at the forge of John Cummings, with Gary Johnson demonstrating one way of making a steak fork. Alex Spellman also demonstrated his method of making a fork. Nathan Pelvor took a piece of 3/8 round stock, bent the end over and forge welded it. He then dished it out into a spoon. The rest is to be completed later, along with a humming bird demo by Jim Watts.

January meeting will be on the 8th at the forge of Dave Good, 603 South Chestnut Street, Seymour IN 47274.

Feb. meeting at Kenny Dettmer ,15721 S 250W Columbus IN.

March at Kevin Welsh, 25619 Gill Rd., Nabb, IN.

All these meetings will be a pitch in ,as was John's, I assure you that no one left hungry!

Scrounge up some good stuff for iron in the hat. As usual , bring your wallet! Paul Bray

# IBA Satellite Groups and News (continued)

# **Bunkum Valley Metalsmiths**

Bunkum Valley Metalsmiths met Saturday January 1st. We had 25 in attendance which included 3 new adults and 2 youth. In the pictures you can see them learning and doing. We are pretty sure a bath was in their future! It is so great to see kids interested and doing. We are so thankful for our regulars that are so welcoming and extremely valuable in teaching and guiding. It rained all day but it didn't dampen spirits or appetites. Corned beef/cabbage and black eyed peas were served along with other good food.

We meet the first Saturday of each month every one is welcome!

Happy New Year 2022!













# IBA Satellite Groups and News (continued)













# **Ergonomics at the Smithy** Patrick Beck, Pori, Finland

This is the second Part of a three part series of articles. The previous article was about ergonomics at the anvil. The follow-up article will be about exercises for the blacksmith to be able to stay in good working condition. Even though the article has been written together with a physiotherapist, don't apply it to your workshop without questioning. Your body, age and overall condition might require a different approach. Talk to your local physiotherapist or other specialist to find tailored solutions to your situation. Your body will thank vou.

As stated in the first article the smiths and metalworkers most important tool is his or body. Most often it is not possible to reverse the damage done, which makes it even more important to prevent as much as possible.

# Standing or sitting is up to personal preference. At best interchange them frequently

Differing from the mainstream opinion, sitting as such is not a big issue. The issue is sitting too much and therefore staying too long in the same position. Another factor is that chairs come with a back support, which easily leads to bad posture.

As stated in the first article it is very important to change the working position often. Changing between standing, moving and sitting is a good idea. It might be helpful to plan the workshop such that some machines are supposed to be used in sitting position. In my opinion a bench grinder and a power hammer are good options for working in sitting position. Working on a bench grinder is relatively static work and the body is more stable when grinding seated. Having a seat which is hanging from a spring at the power hammer serves in two ways. First it is easier to use the foot pedal if one is not standing on one leg only. Second the spring can take some momentum out of the shock, if the angle between power hammer and work piece goes off. Seats used with old water hammers can provide inspiration for this type of seat.

This article re-printed from the January/February 2022 edition of California Blacksmith Online, the online newsletter of the California Blacksmith Association

A stool in a height that enables sitting without going much lower than standing position is very useful. With such a stool one can conduct most work in standing height, but can alternate to a seated position. For example at the machine brush and the drill press. Also, for texturing pieces or when doing chisel work at the anvil. A stool with adjustable height and without back support is a good alternative.



Stool for switching to a seated position. This one is adjustable in height and does not have a back support.

#### Shoulders have to be relaxed

Whenever standing or sitting, the working height should be the such that the shoulders can be relaxed. Most of the time, the lower arms should be in an angle between 90°-100°. Of course this will change depending on the work. Also depending on the size of the work piece, filing and welding will lead to different working heights.



Shoulders should be relaxed.

# **Ergonomics 2**

## **Assembly Table - Height**

Probably the most frequently used workspace is the assembly or welding table. Therefore, it is very important to have it in a suitable height. There are tables which allow adjusting the height of the table. These are really practical if one has different sizes of workpieces or different people work on the same table. Tables which are adjustable are as expensive as they are practical. Probably for most blacksmiths and metalworkers it makes more sense to have a suitable fixed table height. Whenever another height is needed for the working surface, it is improvised. For example with stands, working on the workshop floor or elevating the workpiece with a vise or a box at a suitable height.

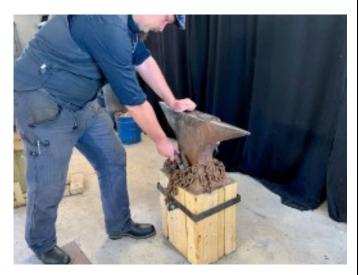
The following setup works well. The main work-table is set up for standing height. On top sits a middle-sized vice which is not attached to the table. So it is possible to move it to where it is needed. If it needs to be fixed is impermanently fixed with clamps. In addition, there is a pair of stands which either takes a wooden pallet (which is also useful for a striker or children) or a piece of sheet metal. In addition, all workplaces should have a block which allows you to change your standing position (see previous article).



Middle-sized vice to be moved around the welding table where it is needed.

# When bending over support the back with the arms

Often one bends over to pick something from a box or a lower surface. When bending over it is advisable to support the movement with the arm which is not grabbing. This eases the load on the back and spreads it more evenly to the body. Especially when one has already had issues with the back.



Support your back when lifting things with the other arm.

#### Use rolls and mechanical cranes when possible

A general guideline in the smithy is the heavier, the better. The materials in use are heavy too. Therefore, it can be very helpful to have a cart or a wagon jack in the workshop. A table with rolls to hold material and tools needed for the recent process can be very helpful too. For example moving several pieces from grinding, to drilling, to welding to wherever else gets a lot easier with this kind of table.

Another good addition is a crane. Either mounted to the ceiling or as a moveable a-frame model. The a-frame can easily be fabricated from rectangular tubing with a stick welder.

# **Journeyman's Notebook**

## By David Sandlin

This article re-printed from the January 2022 edition of Clinker Breaker, the newsletter of the Florida Artist Blacksmith Association

## I hear and I forget. I see and I remember. I do and I understand. — Confucius

Guillotine tools are great things to have in the shop, especially for the smith who has to work alone. For those of you who've never seen one, a guillotine tool is simply a frame that holds a bar of tooling that slides up and down. Jerry Hoffman's Smithing Magician is a good example. But at \$150 for the frame and another \$70-\$90 per set of dies, buying one is a bit pricy [see Smithing Magician (blacksmithsupply.com)].

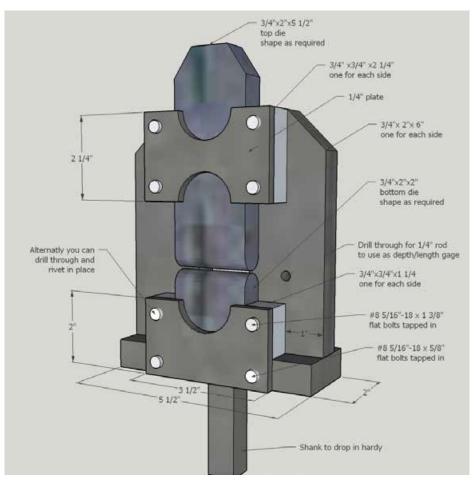
Of course you can make one, and there are several plans on the Internet.

For example, I drew this in sketch up (right). However the level of complexity and the time required for the build might put you off. Perhaps welding and rivets are better than bolts?

Bill Epps offers a variation on the guillotine tool that is much simpler to build. It can be made from regular old mild steel, but that would not last as long as a good lawn mower blade or leaf spring.

If you do use mild steel be sure your work is at least red HOT and then keep a spray bottle of water handy to spritz the tool between uses.

Below are two variations of the Bill Epps Style guillotine tool. Having the top bar a bit long (bottom left picture) allows you to lift the top with your hammer as you put the work in with the other hand.





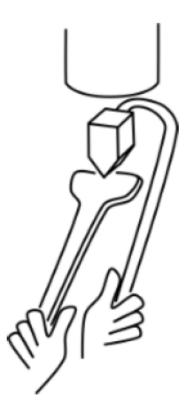


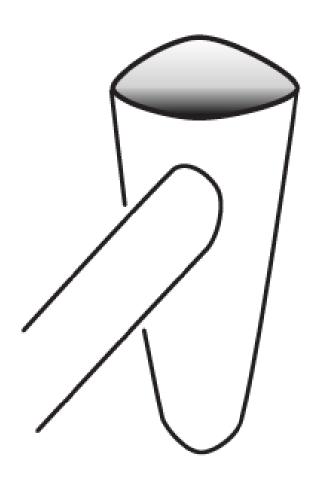
# Tooling: Design for Visibility Erin Simmons From His Demonstration at Hard Rock Hammer-In 2018

To improve visibility of tooling for use with a power hammer, Erin described how he has re-designed the handle. It loops around the tool, so that he has full visibility of the working area of the tool. Tooling: Dome the Top Erin Simmons From His Demonstration at Hard Rock Hammer-In 2018

Round, or dome, the top of tooling. With a domed top, you can tilt the tool to help correct offposition or off-axis errors.







These articles re-printed from the January/February 2022 edition of California Blacksmith Online, the online newsletter of the California Blacksmith Association

# WORKHORSE by Bruce Manson





How many times have you wanted to clamp something horizontally in your vise to position it for grinding, welding, drilling, sharpening,...or whatever? Do you need a sturdy surface to beat against or one that's a little bigger than your anvil face? How about a firm edge to clamp something to hold it for bending, torch cutting, or sawing? Having seen a display of knife making equipment and tools at Smokey Mountain Knife Works in Tennessee, with a little imagination, some scrap materials, and a bit of time, here's what you can do....

The inspiration came from a trip to Smokey Mountain Knife Works. A knife making display there includes a post vice mounted horizontally on a bench to allow the jaws to clamp a knife blade for shaping and sharpening. This might also be useful for saw sharpening.

The vise I used is a wagon tongue vise I acquired from Anthony Seniunas. I replaced the wagon tongue mounting bracket with a plate for horizontal mounting. If you have or can find a post vise with a broken post, here is a perfect way to salvage the vice's usefulness. I welded legs to a piece of 6" H-beam I found at the scrap yard (length is optional, mine is 32" long). The top of the beam is about 32" high, which is a comfortable working height for me and matches the height of my workbench. This makes a very sturdy surface for hammering on, clamping, laying tools, or a small work/assembly platform. It is portable (though somewhat heavy – about 80-90 lbs), so it can be moved to the worksite. It is handy to move outdoors and clamp metal onto it to hold for torch cutting.

Just wanted to share an idea that might also spark your imagination....



This article re-printed from the February 2014 edition of Irons in the Fire, the newsletter of Central Virginia Blacksmith Guild

# Some Additional Holding Options -

Photos and write up by Steven Spoerre

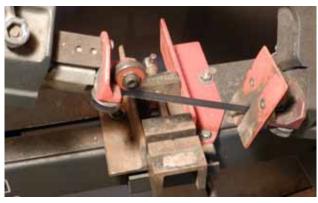


Needing something to securely hold work horizontally while filing and grinding, a wagon tongue vise (with mounting bracket and spring removed) is clamped into a bench mounted post vise.



A saw filing vise with an adjustable ball joint can hold sheet metal blanks (acanthus leaves, calyx, rosettes...) at a variety of convenient angles while cleaning up the edges after being chiseled out. Dan Nauman mentioned this vise during his ABANA

demonstration in 2010, and this one was found in an Ohio antiques mall on the trip back to Michigan, from SOFA.



This is a picture of a small, flat sided, machine vise clamped into the stock vise of a 4 x 6 metal band saw. The machine vise hold's the stock parallel to the saw blade for a safer, more precise cut. The machine vise screw handle only has a ball on one end so the machine vise can be opened and closed while still clamped in the saw's stock vise.



The machine vise clamped into a 4 x 6 metal band saw with the blade tilted up.



An adjustable angle machine vise clamped into a 4 x 6 metal band saw with the blade tilted up.



Address Correction Requested If Undeliverable return to sender

First Class Mail

# January 15 Hammer In Old Town Waverly Blacksmiths

Old State Road 37 & Waverly Road Martinsville, IN



# February 19 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.