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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 15 2017	ST JOE VALLEY FORGERS BILL CONYERS
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Aug 4-20	INDIANA STATE FAIR
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Aug 19 2017	RIDE TO PROVIDE (MARKLE PARK) HUNTINGTON
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Sept 16 2017	TBD
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<u>INDEX</u>
PGS 3-4
SATELLITE NEWS
PG 5
IBA CONFERENCE SUMMARY
PGS 6&7
IBA CONFERENCE PHOTOS
PGS 8&9
THE LONGRIFLE
PGS 10&11
RIVETING TOOL

Editors Message

This year's IBA Conference was such a hit that it got a full page write up in the Michigan Artist-Blacksmith Association newsletter. Ken Glowski of MABA provided a wonderful summary of the Conference events. I have reprinted that article on page 5. Additionally Jamie Johnston provided the photographs shown on pages 6 & 7.

As you read Ken's article you will notice that Allison Bohorfoush is editing the videos taken of Gordon Williams' and Robert Taylor's demonstrations. The DVD's will be available later this year. Allison recorded Gordon's demonstration. She was using some more advanced equipment that provides improved picture and sound quality. The IBA board has asked Allison to come back next year with equipment to cover both main demonstrators.

I know JJ is already thinking about next year's conference. Be sure to let him know how much you enjoyed this year's event, and more importantly let him know you are willing to help next year.

This month's hammer in will be hosted by the St Joe Valley Forgers. Hope to see you there. We will not have a hammer in in August. Many of us will be demonstrating at the Indiana State Fair.



12TH ANNUAL RIDE 2 PROVIDE

All proceeds to benefit Mark Thomas

DONATIONS MAY BE SENT TO: RIDE TO PROVIDE
3398 E MARKLE ROAD, HUNTINGTON, IN 46750
OR CONTACT LESA ASHER (260)758-3437

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

Dates to Remember

Aug 4-20
State Fair
Aug 19
Ride 2 Provide
Sept ??
SOFA
Oct 13-14
UMRBC

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

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
 Carol Baker (317) 809-0314

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) Meteorite Mashers

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

10) One-Armed Blacksmith Shop

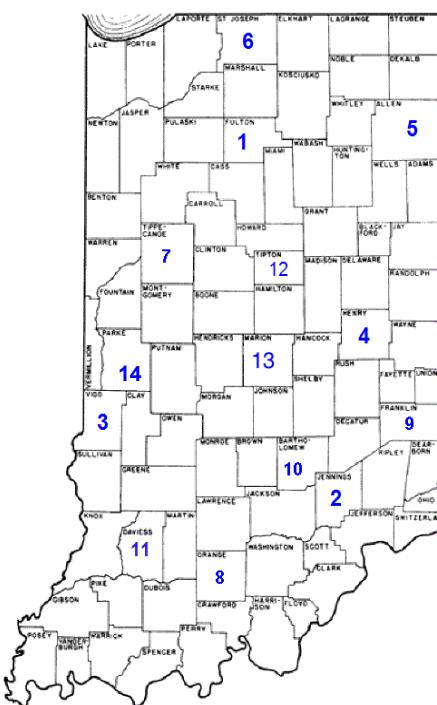
Meet: 1st Saturday
 Contact: Tim Metz (812) 447-2606

12) "Doc" Ramseyer Blacksmith Shop

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

14) Covered Bridge Blacksmith Guild

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



Meteorite Mashers

June's meeting was held at Butch Spark's shop in English for a Mashers first time. The previous few days had been very hot, humid and with heavy rains but Saturday arrived with mostly clear sky, greatly reduced humidity and reasonable temps. Beginners class was held using Jeff Reinhardt's demo trailer forge set up, and butch had the Mashers anvil and tools set up at a second station. The gas forge inside Butch's shop was in use for much of the day. Pete Riddle reworked a set of log tongs to be stone lifting tongs for his Dad. Butch demonstrated his Viking style oil lamps, and although a little small iron in the hat was very nice, with Joseph Gehl donating a very nice fire rack. The rack was won by our youngest and newest member on his first time out. Butch's Nieces made Lasagna and garlic bread and there were several near foundering's, including this writer! The next meeting of the Mashers will be at Jeff Reinhardt's shop in Floyds Knobs.

IBA Satellite Groups and News (continued)

Bunkum Valley Metalsmiths



The Bunkum Valley Blacksmiths met Saturday July 1st with 32 in attendance. It was hot day but plenty of blacksmithing was done. Some newer members were able to learn some new things, one of our youth (16) is pictured working on a project and always glad when the more experienced are so willing to help each other and teach anyone who asks! We also had 2 very nice items donated for raffle, a drink holder/fishing pole holder and a small cross necklace.



This is a great group of people and we have some excellent cooks so come visit! Always meet the 1st Saturday from 8:30 until?



Jennings County Historical Society Blacksmith shop

Ray Sease made coffee for The Jennings County Historical Society Blacksmiths. This may seem trivial, but very necessary. Don't do it, and you will know why! Alex Spellman, Brad Weaver, and Kevin Welsh, worked on making tongs, with the assistance from Kenny Dettmer. Alex also twisted a handle for a small coal rake. Charlie Helton, Bill Kendrick, and Kenny Dettmer spent some time working on the power hammer. One Armed Blacksmiths Have invited us to help at the Blacksmith shop at The Bartholomew County Fair grounds. For those who can't make it there, the shop in Vernon will be; business as usual. Contact Tim Metz if you intend to demonstrate. Both sets of tongs are intended to be door prizes at future events. Paul Bray

Indiana Blacksmithing Association 37th Annual Conference

Write up and pictures by Ken Glowski

The Indiana Blacksmithing Association has been sending MABA invitations to their annual conference. The invitations have always been available to the membership. This year my calendar was clear, so I decided to go. Put it on your bucket list. The Tipton County Fairgrounds is a 40-acre site within the City of Tipton, with 150 campsites with electrical hookups, showers and a food service area. There are 9 large buildings that can accommodate many demonstrators and visitors. There is more than enough space for tailgate sales and there was a good number of people selling. The City of Tipton is a rural community with a population of about 17,500. They have a beautiful park within walking distance of the Fairgrounds.

Registration began at 1pm Friday and close to 200 enthusiastic people attended. The BFH, "Brotherhood of Friendly Hammermen", sponsored a pizza dinner Friday evening. Then they had a demonstration. They specialize in "group striking on large forgings", interspersed with no small amount of humor. It was very entertaining.

The first of the two main demonstrators was Gordon Williams from Zion, Utah. Gordon is full of energy and his demos are nonstop motion. You can get tired just watching him, but he doesn't wear out. Some of the many things Gordon made were, a flower with glass marble slumped in the center, textured and repoussé oak tree trunk, hummingbird, dragonfly, Russian rose, mule head dinner bell, raised leaves, cowboy, horse head hook, lizard, bird wind chimes, candle holder, whisker tenon and much more. Gordon's mantra is: "If you're not able to be a good example, at least be a horrible warning".

The second main demonstrator was Robert Taylor from Birmingham, Alabama. He is a Roycroft Master Artisan. He is one of only five Master Coppersmiths in the country. Robert had on display several of the copper chests that he made and he exhibited how different elements of each were made. He is a firm believer in proper tooling for the task at hand, so he is an expert at designing and crafting unique tools and jigs.

He showed how to make hinges, rosettes, hollow-bodied weather vane, vases and candle holders. During these lessons,

Robert shared valuable, practical sources for metal, tooling, patina and anything else needed for copper projects. We also learned how to etch and color copper.

John Bennett at a third demo, exhibited forge welding with a gas forge and a split basket twist. John won "Best of Show" in the "At Home" category and he and Phoebe Ann Graham won the forging competition.

There was a beginners' class with 6 forges with instructors present. It looks like the forges were busy all weekend.

Connie Retter ran a "Spouse's Program". She gave instructions for making baskets. Everyone who participated took a finished product home. The class size was limited, in order to insure adequate attention, but there were quite a few sessions available.

Allison Bohorfoush is producing CD'S of both demonstrations. She had some brand new, high-end audio and video equipment, so you can expect an excellent CD. You can contact her at allison@swirlgirl.com for information about obtaining a copy.

All in all, it was a great weekend and a wonderful event filled with fun ,food, and fellowship. Mark your calendar for the first weekend in June, 2018. That is the anticipated date of the next Indiana Blacksmithing Association Annual Conference. I'll keep you posted.

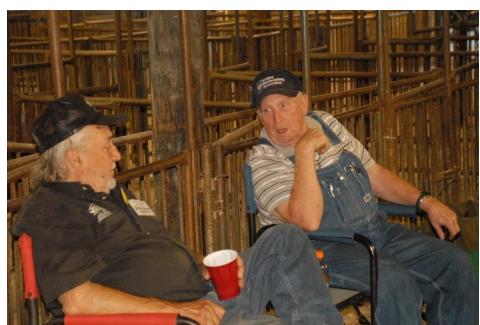
Visit The IBA website: iananablacksmithing.org



This article reprinted from The Upsetter Newsletter of the Michigan Artist Blacksmith Association July-August 2017

IBA Conference Photos Courtesy of Jamie Johnston





The Longrifle by Doug Plance

Early in the seventeenth century, the English, French, Spanish, and Dutch were busy trying to colonize the east coast of what soon would become America. They brought with them a firearm with a smooth bore. In civilian use these firearms were called fowlers, and military guns were called muskets. In 1681, England's King Charles provided William Penn with a land grant in the new world. Penn was interested in establishing a colony where religious freedom could be practiced. This colony would become what we know as Pennsylvania today, and he invited both Germans and Swiss to escape the religious, social, and economic oppression that was occurring in Europe. These German and Swiss immigrants entered the new colony through the port of Philadelphia and quickly headed inland to the fertile farm lands of Lancaster and Reading. A second wave of immigration brought German and Swiss Moravians, and they settled more to the north in the Bethlehem and Christian Springs area.

The Moravians were prolific gun makers, and they brought with them a firearm known as the Jaeger Rifle. The Jaeger was a very short firearm with a very large caliber RIFLED barrel. The key to this technology is the rifling of the barrel, which is the process of cutting lands and grooves in the barrel to stabilize the round ball in flight, much like the strings on a football impart a spin on the ball and stabilizes its flight. The Jaeger was not practical for the needs of the new settlers, especially the large caliber which consumed a lot of lead and black powder, both of which were always at a premium. As time went on the German settlers refined the Jaeger rifle by lengthening the barrel and decreasing the caliber. The increased barrel length gave a better sight picture when aiming the gun, and the longer barrel gave the black powder a better burn time and helped increase velocity. The smaller caliber help conserve the precious lead and powder. These guns were both rifled and smooth bore, shooting patched round balls, buckshot and ball combination, and shot. The guns evolved into functional art forms and many were highly decorated and had very ornately carved stocks.

In time, the Moravians started to search for new lands and in their quest to Christianize the Native Americans, they started to migrate south from Pennsylvania down the Great Wagon Road. The Great Wagon Road today would be State Route 11 or Interstate 81 heading south through the Shenandoah Valley. Some headed west through Maryland, West Virginia, and back into western Pennsylvania. Others traveled farther south through Virginia, North and South Carolina, and Georgia. And others headed for Kentucky and Tennessee. In each of these areas a certain style or "school" of rifle design was developed.

As mentioned earlier, black powder and lead have always been a premium. Most of these supplies were imported. During the Revolutionary War, our ports were blockaded and that made securing powder and lead more difficult. In central Pennsylvania, Fort Roberdeau was established to mine and smelt lead ore. It was cast in ingots and put on pack horses that took it to the Juniata River, where it was shipped east. Powder can be made by combining potassium nitrate, charcoal, sulphur and stale urine. Charcoal is made by burning wood in a controlled atmosphere, sulphur is a naturally occurring element, and potassium nitrate can be leached from bat droppings (guano). Patching material was often discarded linen material, which is a product of the flax plant. In preparing the flax plant fibers for spinning into thread, a byproduct called "towe" is produced. The towe is used to clean the fouled black powder from the rifle barrels, and then is reused as an aid in fire starting.



Above: Rifling machine.
Below: Hammer welding a barrel



In the 1700's, the longrifles were completely hand made. The barrels were hand forged and reamed and rifled by hand. The locks were forged and filed by hand. The brass and iron hardware were cast and forged by hand. The stocks were carved by hand. All the early guns used flintlock ignition. That is to say a piece of flint strikes a hardened frizzen sending a shower of sparks into the priming pan in turn igniting the powder charge in the barrel. By the end of the 1700's there were smiths specializing in barrel, lock, and hardware manufacturing. During this period, a gun could be assembled from components losing much of the art form of the earlier guns. By the 1820's the percussion lock had been perfected. This lock used a foil cap with fulminate of mercury to ignite the charge in the barrel.

Pittsburgh was a stopping off point for people heading west. There were a great many rifle makers in the western Pennsylvania area and there were rifle factories being developed as well. Technology was changing rapidly and the day of the muzzle loading longrifle was being replaced by the breechloading and repeating firearms of the Civil War.

If you would like to read more about longrifles, the following list of books and reference material is from the Kentucky Longrifle Association web site. Check it out for more information!

- The Longrifles of Western Pennsylvania : Allegheny and Westmoreland Counties; by Richard F. Rosenberger, et al
- Recreating the American Longrifle; by Buchele, Schumway, Alexander; Paperback
- Guns and Gunmaking Tools of Southern Appalachia : The Story of the Kentucky Rifle; by John Rice Irwin; Paperback
- Black Powder Hobby Gunsmithing ; by Sam Fadala, Dale Storey; Paperback
- Thoughts on the Kentucky Rifle in Its Golden Age; by Joe, Jr. Kindig; Hardcover
- The Bedford County rifle and its makers; by Calvin Hetrick
- The Kentucky rifle; by Merrill Lindsay
- The Long Rifle; by Robert Lagemann and Albert C. Manucy
- Longrifles of note; by George Shumway
- The Pennsylvania rifle; by Samuel E. Dyke
- Recreating the Kentucky rifle; by William Buchele
- Rifles of Colonial America; by George Shumway



Above: Flint Lock and Percussion Lock
Below: Pittsburgh Rifles- a David Pollock and a Great Western Gun Works Group

This article reprinted from July 2017 newsletter of Pittsburgh Area Artist—Blacksmiths Association



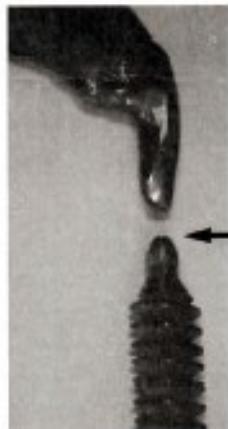
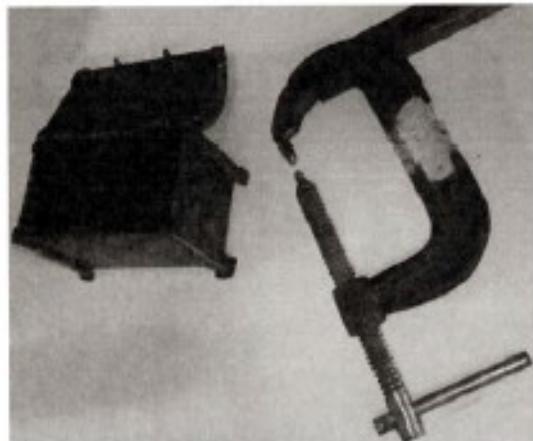


Riveting Tool

By Carl Davison

At the ABANA conference Allan Kress introduced me to a tool that Clay Spencer innovated. When riveting in some tight areas where it would be difficult to hammer accurately with enough force and not chance spoiling your work this tool is the answer. The box at left that Clay made is an example of where such a tool is ideal.

Allan altered a "C" clamp (below) as his version of the tool that Clay made.

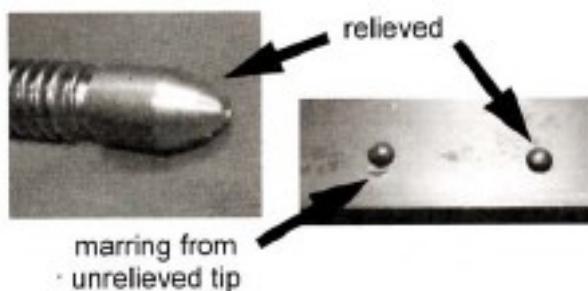


I modified a "C" clamp a little differently than Allan's. It has replaceable tips that can accommodate rivets that are a different size or have an alternate head style. It is important to relieve the area around the depression for the rivet head so there is no marring of the metal surface around the rivet head.



This 2 page article reprinted from the Northeast Blacksmiths Association, Fire & Iron, Spring 2015

The insert for the rivet head on the screw side swivels freely. The other insert screws on and is stationary.



Allan described the original tool that Clay made to rivet the box he made. I made a rough sketch from Allan's description and from that sketch made the tool below. The stock I used is $\frac{3}{4}$ " sq. x 10" long. The distance between the "U" is 1 $\frac{1}{8}$ ". The $\frac{3}{8}$ " coarse thread bolt has a depression to accept the rivet head and is relieved so as not leave any marks around the rivet head. I tapped the hole for the bolt however a $\frac{3}{8}$ " nut could be brazed or welded on the inside if you don't have a tap.

I'm not sure what the limits are on these two tools. I tested out the "C" clamp tool with the removable inserts with some round head $1/16$ " brass rivets and it worked well. It also worked with a $1/8$ " copper rivet. The forged tool at right worked well with the $1/16$ " brass rivet but I didn't test it any further.

The average temperature in the shop has been below 20° so any more testing and the box I would like to make will have to wait.





The **FORGE FIRE**

Newsletter of the
Indiana Blacksmithing Association, Inc.

Farrel Wells *Membership Secretary*
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First Class Mail

Address Correction Requested
If Undeliverable return to
sender

July 15 Hammer In

Bill Conyer's Shop: 50964 Lilac Rd, South Bend, IN

From the south: Go through South Bend on US 933 to Auten Rd. Turn left or west, cross the river, the first road is Lilac turn right (north), look for yellow house on right

From the toll road: Get off at exit # 77 this will put you on US 933. Go north to Auten Rd. Turn left or west, cross the river, the first road is Lilac turn right (north), look for yellow house on right

August 4—20 Indiana State Fair Pioneer Village

Contact Bill Newman if you are interested in demonstrating

**Ph: (317) 690-2455
Email: ruralsmiths1@yahoo.com**