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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)

10:00 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 Moe Handy (317) 862-5647 for details.

IBA MEETING SCHEDULE

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

Dec 8 2012	CHAZ KAISER'S BATESVILLE (BOARD MEETING)
Jan 19 2013	FALL CREEK BLACKSMITH SHOP
Feb 16 2013	KEN DETTMER'S SHOP COLUMBUS
Mar 16 2013	BUSINESS MEETING



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Dates to Remember

Dec 8
Hammer In and
Board Meeting at
Chaz Kaiser's

Dec 25 Christmas

Editors Message

Here is the year end issue of the Forge Fire. We have quite a bit of good content here.

On page 4 you will see Jim Malone has brought his helve hammer back to running order. Helve hammers are wonderful pieces of machinery that hit hard. Good job, Jim. I hope to see it in action.

We have several project tips. The wedge or tension joint on pages 7-9 is a good technique for joining several pieces without welds, rivets or collars. Several years ago I was forming a large, heavy ring out of 1/4 x 2 stock for a bean pot trivet. Charlie Helton forged a wedge tool like the one shown on page 10. Cold forming allowed us to get a round hoop without risk of burns or fighting large tongs.

At the close is a sampling of the work that our December demonstrator, Doc Shertz. Be sure come out and see Doc in action at Chaz's.

POWER HAMMER AND COAL FOR SALE

I have a **power hammer** for sale. Tim Metz built it a few years ago. Kenny Dettmer has used it also before I bought it.

It's a 18lb head, spring arm style. I've added a full size treadle and adjustable linkage to it as well as beefing it up some.

I'm asking \$1000 obo.

I also have 3000lbs of **good blacksmithing coal** available for sale at \$18/50lb bag or .32/lb bulk, self-load. I've been using it for a while and it cokes up well, has little clinker and the coal size is about thumb sized and smaller.

Contact me at blacksmith@coolcreekforge.com or 812-240-1825 (cell) for either of the above items.

Thank you. John Steppe

Visit the IBA website at: www.indianablacksmithing.org

IBA Satellite Groups and News

Sutton-Terock Memorial Blacksmith Shop

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

Wabash Valley Blacksmith Shop

Meet: 2nd Saturday at 9 AM

Contacts: Doug Moreland (217) 284-3457

Max Hoopengarner (812) 249-8303

Maumee Valley Blacksmiths

Meet: 2nd and 4th Saturday Contact: Clint Casey (260) 627-6270 John Schamber (260) 579-7303

Rocky Forge Blacksmith Guild

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

Whitewater Valley Blacksmiths

Meet: 2nd Saturday

Contact: Keith Hicks (765) 914-6584

Bunkum Valley Metalsmiths

Meet: 1st Saturday

Contacts: Doug Neukam (812) 259-4430 Steve Stoll (812) 486-9668 Kathy Malone (812) 725-3310

Jennings County Historical Society Blacksmith Shop

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

Fall Creek Blacksmith Shop

Meet: 4th Saturday at 9 AM

Contacts: John Zile: (765) 533-4153 Larry Singer (765) 643-5953 Farrel Wells (765) 768-6235

St. Joe Valley Forgers

Meet: 4th Saturday at 9 AM

Contacts: Bill Convers (574) 277-8729 John Latowski (574) 344-1730

The Southern Indiana Meteorite Mashers

Contacts: Billy Merritt (812) 338-2876 Steve King (812) 797-0059 Jeff Reinhardt 812-949-7163

One Armed Blacksmith's Shop

Meet: 1st Saturday

Contact: Tim Metz (812) 447-2606

"Doc" Ramseyer Blacksmith Shop

Location: 6032W 550N, Sharpsville, IN 46060

Meet: 3rd Sunday at 2 PM Contacts: Mike Kelley

Charles Gruell (765) 513-5390

"Doc" Ramseyer Blacksmith Shop

Notes for September 16th and October 21st:

I had fired the forge up and was upsetting rod stock when Hal White from Galveston stopped in. Hal had been told of our meetings in the 3rd Sunday of the month and he wanted to learn more about blacksmithing (Thank you Ted for passing on the information).

Larry Whitesell has been making hasps for KHAM (the Museum), one in September and then two more in November, which have been installed. One on the blacksmith shop door and the other on the smaller log barn. The one from September was given to Michael Kelley for his placement. JJ has been sharing his work with porcelain. Items he shared are of iron and copper in different colors as well as shared the process using the forge.

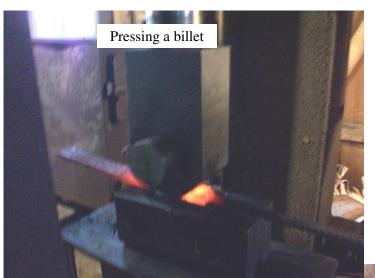
Adding the electric to the forge: The electric was brought in to a box by the blower motor. Then it was run to the South side of the forge chimney base, there outlets were connected and the AC was run to the electro stat. The voltage form this will be a variable and go the 3-way switch on the South above the AC receipt, then to a 3-way switch on the North side of the forge and now to the lead of the blower motor. The air input to the electric is the output of the crank blower thus all looks are the same except for tubing protecting the wiring.

H Charles Gruell

IBA Satellite Groups and News (continued)

Bunkum Valley Metalsmiths

The Bunkum Valley Metalsmiths met on November 3, 2012. We had a really good turnout of 28 people for this meeting even though it was a little chilly and rainy at times. I am proud to say that 4 of those who were here were ladies. I think that is great! We had some new folks here, Joe and Terri Byers, who won the cowboy grill that was raffled off at the White River Valley Antique Show. They learned how to do some blacksmithing and had a good time. Alan Brazzel was making a fleur de lis for a cross and Dakota Smith was helping him. Aaron Baker was working on some knives, using the press on one. He also was helping Terri Byers learn how to make an S-hook. Aaron's son Chris and his friend Garrison were here and were working on making some knives. William Pratt brought the beginnings of a braided corner post he is working on for the Fire & Anvil shop. I have included a picture of what he is working on. It is quite an intimidating piece. Jim Staley was making a slitting chisel. Jim Malone had done a lot of work the past couple weeks to get the helve hammer all in working order. He put on a demonstration of how it works using a 1 ½ inch piece of stock. I have included pictures of that also. It was another good day with good friends, new friends, good food and fun. And as I always say, "if you have too many irons in the fire, don't lose your temper." :D







IBA Satellite Groups and News (continued)

Sutton-Terock Memorial Blacksmith Shop

Kyle and Dustin Price and Levi Berkshire our three young lad spent their time making coat hooks. I told the boys that they would have to keep there coats hung up now. Their mother said that she would bet that that won't happen because their dad just throws his on the bed.

Rob Wolf and Scott Sroft made meat turners for their grills. Scott also made some S hooks.

Andy and Austin Williams came down and we had a short meeting as to what and how we were going to do the state project.

Kestrel Little, Nathaniel Iseton and James Byrns all worked on rail road knifes. Hammered In Friendship Fred Oden

The Southern Indiana Meteorite Mashers

The November meeting was held at Jeff Reinhardt's shop in Floyd Knobs Indiana. This meeting being right after Thanksgiving, was the "Smoked Turkey" hammer-in a tradition with the Meteorite Mashers now. Jeff hickory smoked a turkey and had it sliced and ready for sandwiches, to go with the many other dishes and potluck items. Jeff Demonstrated a new texture hammer, making a small split cross. Dave Kunkler demonstrated a very nice copper leaf using the same texture hammer. Louis Meyer demonstrated a copper curtain hold back. A new visitor, Dan, made a S-hook under Jeff's supervision. Jason Hardin had a 3" split cross that had been finished during the OctoberFest at Beck's Mill for a demo by the Brotherhood of Friendly Hammermen, and Jason and Jeff welded the 3" drop onto the bottom to extend the bottom leg. This had previously been welded with a small MIG and the weld failed when forged at the demo. The weld joint was properly beveled when Jason brought the cross and was welded up full penetration style with Jeff's Gas engine SA-200 welder. The bottom was heated and the BFH team went to work. It forged nicely this time, and Jason's Quality Control inspector, his wife Andrea approved of the end result. The shop was warm, good times and good food was had by all. Thanks to Ernie Hardin, Jason's Dad for tending the wood furnace, keeping it fed and all of us warm.

There will be no regular meeting in December due to the Holidays, the next meeting will be January 2013 at Steve King's shop in Paoli.

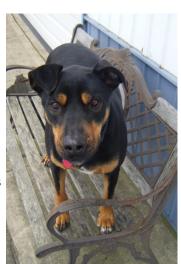
Merry Christmas to all.

IBA Satellite Groups and News (continued)

Fall Creek Blacksmith Shop

A report from Fall Creek Blacksmiths.

10 members showed up, plus two new prospective members a father and son. Dave Kline instructed a new member on basic blacksmithing making tongs. The tongs ended up becoming a Carumba knife. John Zile introduced the father and son, to blacksmithing in general. Eric Shotwell and Andrew Davis worked on making chisels to be used on the contest piece. The chisel stock came from a 4 lug tire wrench gotten from Joes Scrap Yard that morning. Eric ended up having to re harden and tempering the chisels. -------The show and tell face was done by Eric at the Art Museum during a cast iron pour. There was a nice iron-in-the hat, but for some reason we forgot to hold the iron-in-the hat. I guess everyone was having such a good time, we just forgot. For lunch Johns family served chili and ham sandwiches because the Iron Kettle was closed for the holidays. Marvelous chili.-------Pictured is John dog "Rufus" guarding the shop door. reported by Dave Wells











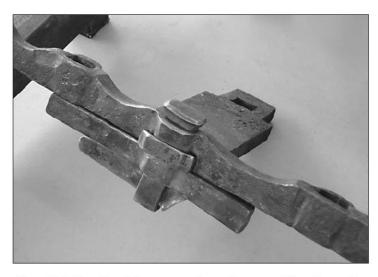


2012 CBA Spring Conference Tales

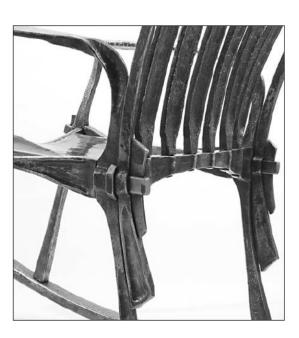
Hybrid Tension Joint

Brett Moten and Tim Cisneros joined forces in a brilliant demonstration of joinery at this year's conference.

In their words. The hybrid tension joint combines a mortise and tenon with a dovetail. The dovetail fits into an angled rabbet of a complementary degree, and when pressure is applied — by the wedge being driven into the slot in the tenon end — the two ramps act to pull the dovetail shoulder against the inside surface of the leg piece. The resulting bind is a progressively tightening mechanical union that cannot loosen.



Sample Joint. Combines a mortise and tenon with a dovetail.





photos by Paul Boulay, Brett Moten, Chad Gagnon & Bob Jensen

Editors Note: This 3-page article reprinted from the California Blacksmith Association



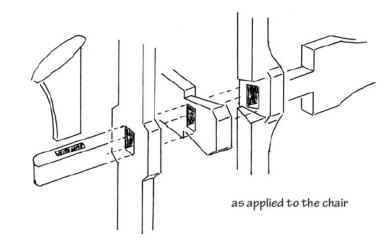
2012 CBA Spring Conference Tales

Hybrid Tension Joint - Construction

The first step is to cut the receiving rabbet into the leg piece before slitting and drifting. After determining the necessary angle, the leg is marked, saw cut into its side 1/6" narrow to allow for stretch, and filed to fit the angle of the dovetail. A thin butcher chisel made of H13 is struck at the required angle to remove the section of material to form the rabbet or notch.

This joint requires that one side of the slit/drift hole is flat. How to accomplish this is the first problem. The key is to restrict the movement of metal to one side using a die set that fits into the post vise. All slitting and drifting activities are done strictly in the vise so as to completely control material movement and reduce distortion, essentially drifting into a closed die. The workpiece is held as tightly as possible when forging.

The slitting process begins on the angled side of the cut leg so that the flat side provides





Tooling for offset slit/drift seen from above. The piece with the hole is a mild steel bolster plate.

support for the heavy blows of slitting and drifting, resulting in little distortion of the work piece and a clean, well-formed offset hole. The flat side is down for slitting until pierced, then flipped and opened again to accept the drift, and then back over to the flat side for drifting so as to protect the dado. The eye (hole) is cross-peened on the drift at each heat to maintain as much thickness in the offset area as possible.

Editors Note: This 3-page article reprinted from the California Blacksmith Association

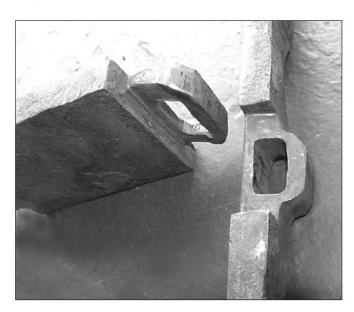


2012 CBA Spring Conference Tales

Hybrid Tension Joint - The Dovetail

The dovetail is a three-sided tenon that is forged at an angle on the mating side with the rabbeted notch. This forms a deep shoulder on the wide aspect with 1/8" vertical shoulders top and bottom to engage the inside of the leg. An angled side set was forged to perform this operation more easily and produce as clean a shoulder as possible. A window is then cut out of the base of the tenon to allow the tenon passage.

The tenon, drawn off the end of the side piece connecting the front and rear legs, is measured and then slit and drifted



to accept a 3/6" by 3/4" wedge. The end is left long for support during this process and trimmed to a more acceptable length later. The wedge and inside of the slot are filed for ease of installation with minimal galling. With a bit of graphite, the wedge is then driven in, binding the assembly together to stand the test of time. 👻



About the Authors

Brett Moten (right) operates Infinity Forge in Reno, and is the CBA Education-Reno chairman. He has always been driven by the desire to create, especially working metal in the plastic form. The ability to take a solid form and, through heat and forging, turn it into a work of art never ceases to fire his passion.

Tim Cisneros (left) operates Forgeworks in Alameda. Tim's distinctive style has developed slowly and steadily over decades. "My work has been shaped by the techniques and processes that I have learned from others over the years. The rocking chair was the culmination — putting it all together. At the same time, it was an experimental departure from what I've been doing over the last several years."

Editors Note: This 3-page article reprinted from the California Blacksmith Association

Reprint from VIBA News Letter May 2006

TIPS FROM APPLECROSS FORGE

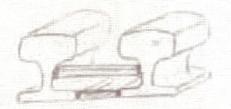
COLD BENDING

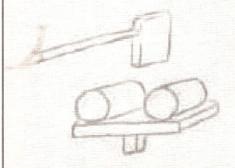
A lot of the time it is easier to bend an arc cold than it is to heat up a small section of your stock at a time. Here are a few tools that can help.



1. Make a hardy tool for your anyil by welding a shank onto a splitting wedge, old maul head or any triangular piece of metal.

2. Weld two short sections of railroad rail together. 6 to 7 inch spacing between the two rails is a good multipurpose bending tool. Wider spacing allows you to work heavier stock. Narrower spacing allows you to make a tighter radius.





3. For the treadle hammer. Weld two large pieces of round stock on a plate. Weld a handle to a piece of flat stock. The combination will allow you to create an arc by making controlled hits while moving the stock a half-inch or so at a time. This tool also creates a great U bend for pot-rack hooks

-Bill Robertzon-

Robb Gunter's Super Quench

5 gal water

5 lb salt

28 oz Dawn Ultra Blue dish washing detergent

8 oz Shaklee Basic I

Stir this mess and don't spill. The salt/soap makes a real mess.

Heat the metal to yellow (nonmagnetic) and quench. It is strongly suggested that Super Quench only be used on low carbon steel (below .4%). There are reports that higher carbon steels will fracture or even explode if quenched. (reprinted with permission from CD Blacksmith's Newsletter, 2003, Capital District, DC)

Clinker Breaker April 2003 - 7

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Our demo at Chaz Kaisers on the 8th of Dec will be Doc (Vicki) Schertz. Doc is an accomplished blacksmith and coppersmith. Her demo may include a stag horn hinge or maybe a hack saw handle. Below is a link to some photos and contact info.





Doc (Vicki) Schertz PO Box 37 Tiskilwa, II., 61368

email: docsblacksmith@comcast.net







Address Correction Requested If Undeliverable return to sender With original address legible

December 10 Hammer In & Board Meeting Chaz Kaiser's

16 Indiana Avenue, Batesville, IN 47006

It's a pitch-in lunch, please bring a dish to share.

Coming from central Indiana, take I 74 east towards Batesville. Exit at SR229 and turn South towards Batesville. Turn left onto IN 46 / Broadway St. and follow for about 1 mile. Turn right onto Pearl St. (by Batesville Casket) then follow Pearl St. to Indiana Ave. Chaz is located at 16 Indiana Ave.

Fall Creek Blacksmith Shop - January 21

3380 W 650 N, MIDDLETOWN, IN 47356

LUNCH WILL BE AT THE IRON KETTLE IN SULFUR SPRINGS.

SULFUR SPRINGS IS 3 MILES WEST OF IN. 3 ON US 36 AND APPROX. 12 MILES EAST OF PENDLETON ON US 36. GO NORTH AT THE FLASHING LIGHT (300W), TRAVEL NORTH FOR 1 1/2 MILES, TURN LEFT (WEST) ONTO 650 NORTH. JOHN'S HOUSE IS THE FIRST DRIVE.

CALL JOHN AT (765) 533-4153 IF YOU HAVE ANY QUESTIONS.

First Class Mail