

BOARD OF DIRECTORS

Gary Phillips '18 President:
14800 N SR 167 N
Albany, IN 47320
(765) 789-8316
behere@netdirect.net

Steve King '18
1155 S. Paoli Unionville Rd
Paoli, IN 47454
(812) 797-0059
kingknives@live.com

Bill Conyers '19 Vice Pres
50964 Lilac Rd,
South Bend, IN
(574) 277-8729
billconyerssr@yahoo.com

Bill Newman '19
4655 Williams Rd
Martinsville, IN 46151
(317) 690-2455
ruralsmiths1@yahoo.com

Dominick Andrisani '16
3608 Capilano Drive
West Lafayette, IN 47906-8869
(765) 463-4975
andrisan@purdue.edu

Ted Stout '16
8525 W 700 S
West Point, IN 47992-9258
(765) 572-2467
stout8525@tds.net

James Johnston '17
Education Chairman:
806 Twyckingham Lane
Kokomo, IN 46901-1885
(765) 452-8165
kokomoblacksmith@comcast.net

Keith Hicks '17 Secretary:
5184 State Road 252
Brookville, IN 47012
(765) 914-6584
keithhicks2011@gmail.com

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

Editor:
Bill Kendrick
1280 N 900 W
Seymour, IN 47274
(812) 445-3009
bill.d.kendrick@cummins.com

Treasurer and membership secretary:
Farrel Wells
8235 E 499 S
Dunkirk, IN 47336-8807
(765) 768-6235
fwells@frontier.com

Awards Chairman:
Charlie Helton
2703 South Water Plant Road
Westport, IN 47283
(812) 591-3119
heltoncs@frontier.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.

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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.

Nov 21 2015	OPEN
Dec 12 2015	DON REITZEL SHOP STILESVILLE
Jan 16 2016	TBD
Feb 20 2016	KEN DETTMER'S SHOP COLUMBUS



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HINGES

Dates to Remember

Dec 12
Hammer In at Don Reitzel's Shop

Feb 20, 2016
Hammer In at Ken Dettmer's Shop

Editors Message

I do not have much news to share. I have been traveling out of the state lately and lost contact with local hammer ins and news.

I do know the IBA December hammer in will be at Don Reitzel's Shop. Don has a big spacious shop with multiple forging stations. In addition to the shop, Don relocated a log cabin onto his property. The cabin is filled inside and out with hand forged items made by Don and other smiths. Be sure to take the time to look things over in detail. Remember the December hammer in will be on the 2nd Saturday (Dec 12).

We are also planning to be back at Ken Dettmer's in February. The Jennings County group is planning a working meeting in December as Ken rebuilds the shop that was destroyed by fire.

I recently received an email from the Metal Museum in Memphis, TN. The museum opened in 1979 on a 3.2 acre parcel of an old service hospital. The museum includes working smithy and foundry as well as exhibits. The museum would be a good destination for a short excursion trip to Memphis. Check out their website: <http://www.metalmuseum.org/>

As we begin to cozy in for the winter months, now is good time to start thinking about next years contest project. The project a wall hanging in a frame, either wood or metal frame. As usual the project definition is wide open, so let the creative juices flow. It may be debated as to whether this fits the definition of having a frame, but here is a photo of a wall hanging created by Bob Becker for IBA in 2007. Perhaps this will generate some thoughts about design alternatives.



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: Jim Malone (812) 725-3311
 Terry Byers (812) 275-7150
 Kathy Malone (812) 725-3310

Satellite 13

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

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 Conyers (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

The Southern Indiana Meteorite Mashers

Our October meeting was held October 24th in conjunction with the Beck's Mill Oktoberfest. We met in the new blacksmith shop on the mill grounds and had a nice turnout. Much forging in the one forge and on the one anvil with sometimes 3 smiths competing for the anvil. Jason Hardin who is on the Beck's Mill board cooked a huge kettle of bean soup and that was lunch for the members and visitors and was \$5.00 for lunch as a fund raiser for the Mill. A great time was had by all.

Our next meeting is the infamous "Smoked Turkey Hammerin' at Jeff Reinhardt's shop in Floyds Knobs. It will be the Saturday after Thanksgiving. Jeff's shop has heat, so all are encouraged to attend. If you are not a regular attendee, please e-mail Jeff at ptreeforge@aol.com to advise so he can have enough smoked turkey.



IBA Satellite Groups and News (continued)

Fall Creek Blacksmith Shop

We had 11 members show up. Two new members Jacob and Joe Mc Donald that lives near by and a visitor from Indy. Jim Selby tagged along with



Eric and I, first stopping at our favorite scrap yard. when arriving we seen Wesley already looking for goodies. The meeting started out with Eric presenting a task on learning how much length is gained when different tapers are done (round, flat, etc.). This task will be used on our next IBA project. Andy talked to the new members about starting a fire (saving coke, feeding, etc.) and different materials used. Wesley Hale and Andy Davis started and finished the task on tapers. Well done. I started helping Jacob with basic blacksmithing, (drawing a taper on round stock and end up making a s hook). Charlie helped Jacobs father doing the basics also. No iron-in-the-hat held. Eric demonstrated another leaf form that he likes to do,



(no chiseling, just free forming with the hammer. A good time had by all.

Report from Dave Wells.

Bunkum Valley Metalsmiths

Bunkum Valley Metalsmiths met on September 10, 2015 through September 13th. We all met at Elnora .

We had a wonderful time.



Some one got a new tattoo...

Not naming any names..

Aaron make a remarkable apron...



IBA Satellite Groups and News (continued)

Jennings County Historical Society Blacksmith Shop

The Jennings County Historical Society Blacksmiths began with Ray Sease warming up the forge with a "S" hook. Cooper Hon, Alex Spellman, Matt Jones, Brad Weaver, Dave McNulty, and Jake Lewis made leaves. Alex made a large leaf and a cross from a spike. Jack Neukam made an off-the-wall heart hook. There were 21 in attendance. December Hammer-in is planed to be at Kenny Dettmer's. This will be a pitch-in (or a visit to The Brick). Bring your work clothes, tools, etc. as this is a working meeting. I hope we can help Kenny put some of his shop in order. January meeting is at Paul Bray's, March at Kevin Welsh. February meeting is to be announced.

One-Armed Blacksmith's Shop

The One-Armed Blacksmith Shop held its normal first-Saturday meeting on November 7th at its smithy located on the grounds of the Bartholomew County Historical Society's Henry Breeding farm. Present were Ken Dettmer, Jim Jessee, Tim Metz, John McDaniel, Jason Striegel, Joseph Striegel, Jared Walter, Nick Walter, and Jack. Jack's last name is missing because this reporter's old eyes can't decipher Jack's signature.... (smile)!



Members mounted the recently constructed smithy attic access ladder, forging a retaining clasp to hold the ladder in its stored position. Attic access was necessary to allow repair of a vandalized attic window glass.

Tim Metz demonstrated forging/forge-welding of a general purpose double twist handle.

Following general discussion, attendees enjoyed a noon meal of bean soup (courtesy of Tim Metz) and cornbread (courtesy of Jim Jessee and John McDaniel).

After lunch, an interesting Iron-in-the-Hat generated much needed funds for the pending coal purchase. Don't forget to bring ferrous objects for next month's Iron-in-the-Hat.

See everyone on December 5th.

John McDaniel – OABS Reporter

(Photo by J. McDaniel)

Mason Jar Mug

Inspired by Steve Anderson & The California Blacksmiths

3/16" x 3/4" x 7"

Split 2" on one end

Spread and draw square,
each to 2-3/4" From center

Form to 2-5/8"
Dia.
semicircle

Scroll end and Shape handle
Make final adjustments so it
"snaps" securely on your jar



Brentwood North, Feb. 23rd 2013

Fred Mikkelsen

Angle Iron Feather

Design and text by Rod Pickett
Photos by Julie Pickett

I recently did a job that called for feathers that were a little more refined than those that we have forged in the past, so I developed this process which takes a little more time, but gave me the desired look.

For this feather I used 1" x 1" x 1/8" angle. For wider feathers you may choose to use 1 1/2" to 2" angle. Stay with the 1/8" thickness.

1. Cut the angle approximately 24" long to give you a handle.
2. Heat about 10" of angle to an orange heat.
3. Lightly hammer the web, driving the flanges out, flattening the angle. Take care to not overly flatten the web as this will become your quill and shaft (see fig. 1). This may be done on a power hammer or by hand.
4. Taking care not to damage the shaft, smooth out both edges (see fig. 2).
5. Heat the end of the bar and taper the shaft to flat for about 1 1/2" (see fig. 3).
6. Using as few heats as necessary and working over the edge of the anvil, draw out the flanges to a blunt knife edge (see fig. 4).
7. When it's cool, use a soap stone or silver pencil to sketch the rough feather shape on your blank. Using a notcher, band saw, or hot cutting with a chisel, rough cut the feather shape leaving about 2" of quill on the bottom end (see fig. 5).
8. Rough grind the profile and use your grinder to refine the feather edges. I use an angle grinder with a stone wheel, but this could be done by forging with a flatter if you want to use a lot of heats.
9. I then use a sanding disc (60 grit) on my angle grinder and refine the feather, removing hammer and grinder marks and giving the shaft a radius profile (see fig. 6). At this point I blunt the edges and clean the back. For my purposes, this is a single faced ornament. If you are going to show both sides, you'll need to refine the back side as well.



Fig. 1

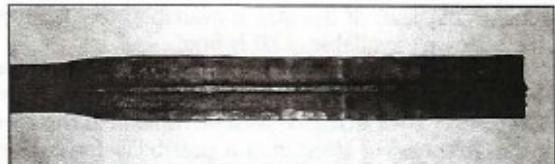


Fig. 2

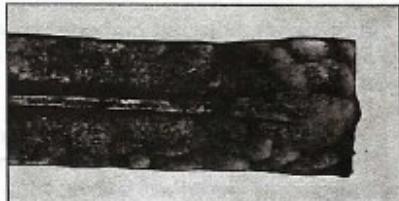


Fig. 3



Fig. 4



Fig. 5

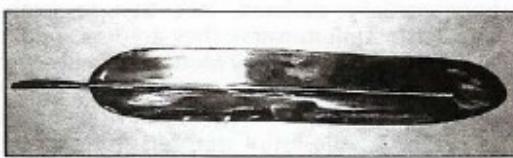


Fig. 6

10. Use a sharpie and mark the feather details. Some will be cut and some will be carved. It's my opinion when designing that odd numbers look more natural, so I tend to use an odd number of cuts on the feather. Avoid too balanced of symmetry.

11. I used the band saw to rough cut the splits between the feather barbs (see fig. 7).

12. Using the angle grinder with a sanding disc (approx. 60 grit), clean the edges of the band saw cuts and start carving some of the feather barb details (see fig. 8 & 9). Again, if you would rather, these last two steps could be done with a hot cut chisel.

13. Using a very sharp-edged sanding disc, continue to carve more feather barb details (see fig. 10).

14. Either use a worn disc or a finer grit to polish out sanding marks and smooth the shaft/quill. Take care not to sand out the carved details.

15. Using small files, remove burrs and refine the carved details (see fig. 11).

16. Using a scotch-brite disc or fine sandpaper, polish the surface.

17. Clean your hands and the feather to remove any oils in preparation for a heat patina. If you haven't heat patinaed metal before, I recommend that you practice on a piece of scrap first to save yourself from having to repolish your feather.

18. You'll need a pair of tongs to handle the feather and WD40 or a can of oil to quench it in. With a large welding tip on your oxygen/acetylene torch, gently heat the feather along the shaft, avoiding the edges and the ends. Heat the feather until a straw tempering color just starts. Gently spread this as evenly as possible over most of the length (sometimes it's helpful to decrease the flame). It goes very fast from straw to purple to blue to black.

Use your torch to gently paint the colors to your preference. Too much heat will take you past temper colors to a dull gray and then you'll need to polish the feather and start over. Fingerprints, oil and dirt will cause the colors to flake off. When you have the desired colors, spray the feather with WD40 or quench in oil.

After it's completely cool, gently buff the surface to remove excess oil. At this point I use a file and very fine paper to add bright highlights. Seal the feather with wax or your choice of clear finish. I use Mop-n-Glo.

Fig. 7

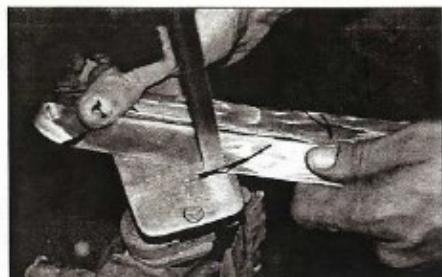


Fig. 8

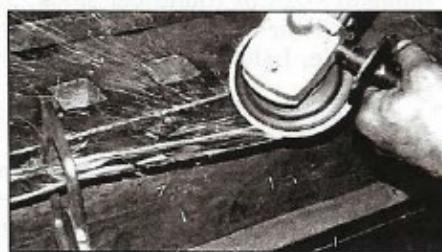


Fig. 9

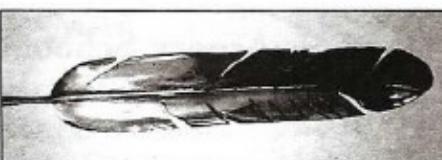


Fig. 10

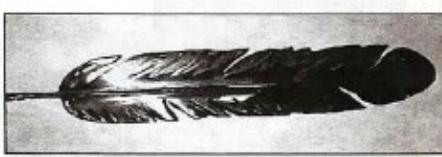


Fig. 11



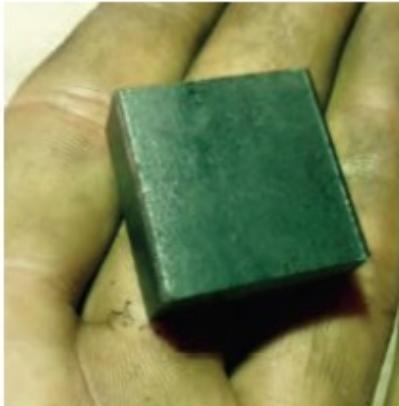
Philip Simmons Artist Blacksmith Guild

November December 2015

A picture is worth a thousand words

This dogwood blossom was created by Lance Zeigler of Burnt Whisker Forge in Ellijay Georgia

www.burntwhiskerforge.com and is shared here with his permission

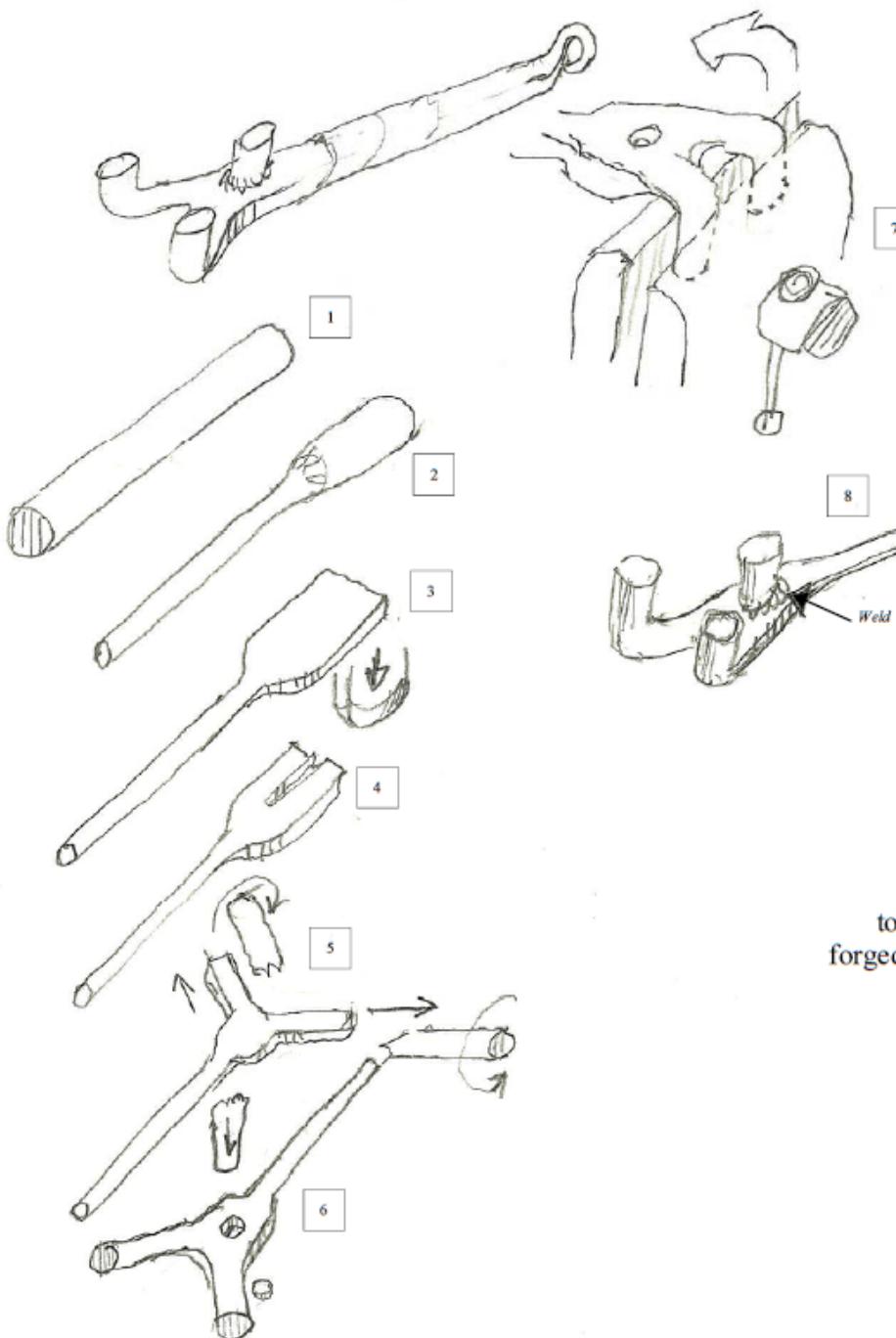


Okay, eight pictures should be worth at least a thousand words. This could be done with a treadle hammer, press or maybe a friend with a sledge hammer. I saw this first in the New England Blacksmith newsletter from this Summer's edition. Barry

2015 S.O.F.A. Conference-
Paul Garrett, J.C. Campbell Folk School
Write up and drawings
by Steve Alling, a MABA member.

Three Legged Bending Fork:

A note: Paul uses Nascar axles to make this tool and they are some whoop tee doo exotic steel that he gets and sells because he was once part of one of the teams, so I suspect you could substitute any decent tool steel for this project.



- The diameter and length of the starting steel will determine the size of the bending fork.
- Draw out the material for the handle leaving unforged the end that will become the bending fork. Flatten the end.
- Slit the end.
- Bend at a little more than 45 degrees and round up the two tines.

- Punch a hole and swage to the same size of the two tines of the fork.

- Place the tines in the vice and bend to exactly 90 degrees being careful that they are parallel and at 90 degrees to the body of the tool.

- Insert a pin of the same size as the tines in your punched hole and electric weld it.

Note: With the steel he used no further hardening and tempering was necessary. You may need to, although I think good quality tool steel will be strong enough as forged.

2015 S.O.F.A. Conference-

Dick Sergent, Adirondack Folk School

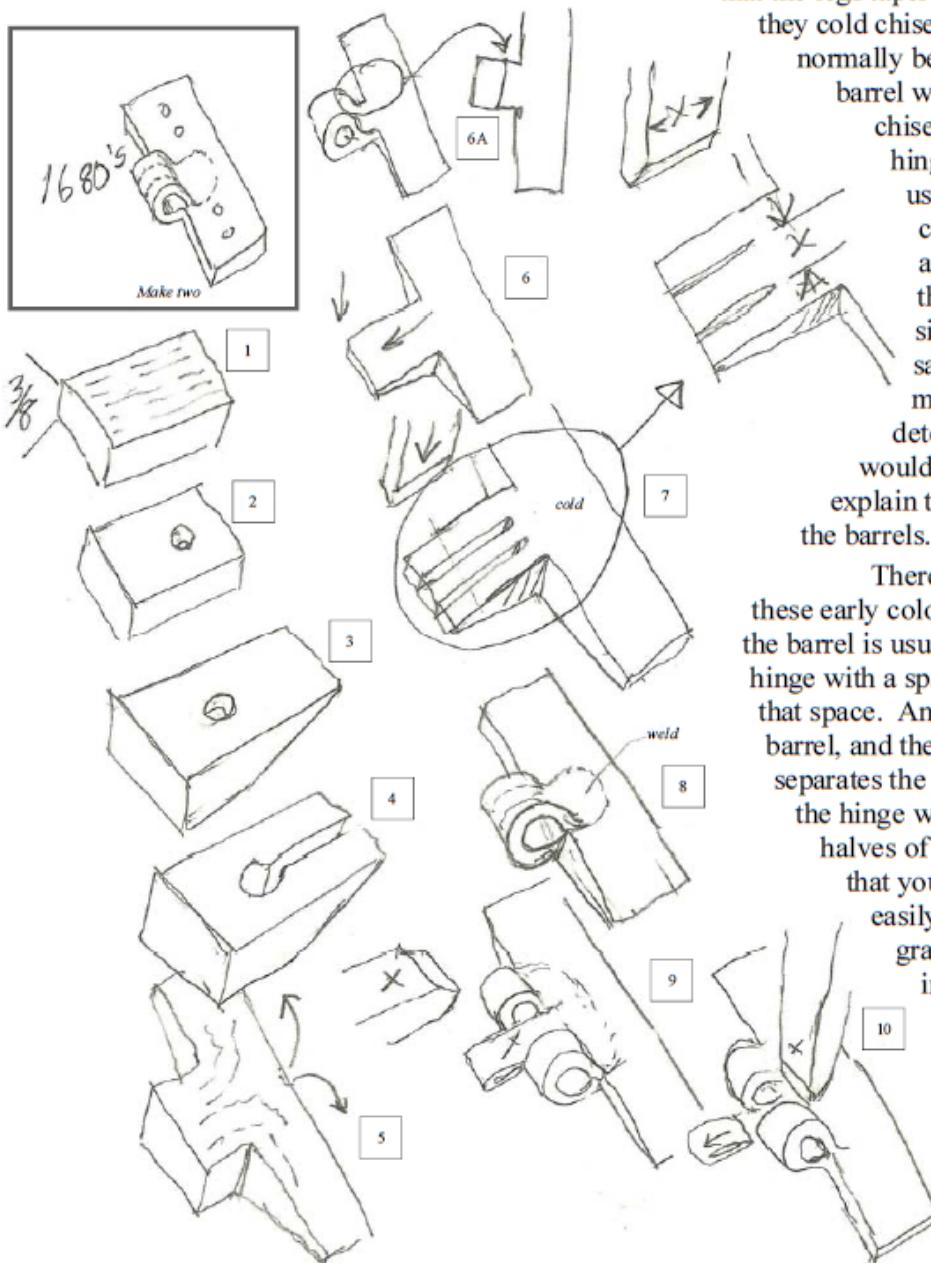
Write up and Drawings

by Steve Alling, a MABA member.

Traditional Hinges:

Dick Sergent discussed the way hinges were made in the Sam Adams house that he restored. Although he didn't completely demonstrate this hinge he did fully discuss it and here's my take on his research.

These hinges were made of wrought iron which has a very distinct grain and can't be treated the



same as mild steel. As he worked on the very worn hinges from the Adam's house he noticed something interesting on the parts of the hinge that were not bearing the weight and were therefore not completely worn away. There was a chamfer inside the barrel of the hinges. The chamfer would have been impossible to put there in the manner we now build hinges with mild steel, where we roll the barrel up and forge weld it to the body of the hinge.

So he suspects they started with a rather substantial piece of wrought iron and made the legs of the H hinge by drawing out and bending the legs at 90 degrees to the material that will become the barrel and then drawing the barrel out. This gives you a hinge that the legs taper towards the ends. Then he thinks they cold chiseled in where the barrel would normally be cut with a hacksaw before the barrel was rolled and welded. He used a chisel the width of the part of the female hinge that will be removed so he could use the chisel on its side as a tool to crush the center part of the barrel and then use the chisel to remove that part of the barrel on the female side of the hinges. Of course the same process would be done for the male side but the critical size would determine where those cold chisel cuts would be made. This process would explain the bevels he found on the inside of the barrels.

There is another thing to note about these early colonial hinges, as in the drawing 6A, the barrel is usually separated from the leaf of the hinge with a space. The colonial hinges don't have that space. And because of the tightness of the barrel, and the angle of the cold chisel that separates the parts of the barrel from the body of the hinge when the hinge is closed, the two halves of the hinge pin together make a joint that you cannot see through. So you can easily see in the drawing the way the grain would have run in the wrought iron and why it would have been important to forge it the way they did. The hole that is first punched at the end of the split is very important to stop the wrought iron from continuing to split as you draw out the legs of the hinge.



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Newsletter of the
Indiana Blacksmithing Association, Inc.

Farrel Wells *Membership Secretary*
8235 E 499 S
Dunkirk, IN 47336-8807

First Class Mail

Address Correction Requested
If Undeliverable return to
sender

December 12 Hammer In

Don Reitzel's Shop, 4113 W County Road 900 S, Stilesville, IN 46180

Directions: Take I-70 west of Indianapolis to exit 59 (SR 39). North on SR 39 for 1 mile. Turn left on County Road 900. Shop is about 6 miles on left.