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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 Rob Hough, Membership Secretary (317) 517-0427.

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.

Jan 20	STEVE KING
2024	PAOLI, IN
Feb 17	KEN DETTMER
2024	COLUMBUS, IN
Mar 16	ANNUAL BUSINESS MEETING
2024	CARTERSBURG, IN
Apr 20	JOHN BENNETT
2024	ROCKVILLE, IN



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PGS 3-4 SATELLITE NEWS

> PGS 5-11 HA'PENNY SCROLLS

#### Dates to Remember

January 20 Hammer In at Steve King's

February 17 Hammer In at Ken Dettmer's

March 16 Annual Business Belleville Lodge, Cartersburg

May 31—June 2 IBA Conference Tipton Co. Fair Grounds

### **Editors Message**

For several months I have been publicizing that my contact information was changing. By January I will no longer have access to my old phone number or email account. Anyone wanting to contact me for questions or for submitting material for the Forge Fire should contact me by phone/text at 812-569-1209 or email at cmikendrick@gmail.com.

Most of you are aware the Forge Fire has been slower than usual in getting delivered the past few months. Most of the delays are due to time commitment issues on my side, which I believe will be rectified by January. We are also working through the transition of membership and treasury responsibilities that Farrel Wells had managed for many years. The process should be working better than ever in a month or two.

Steve King reminded me that two board of director positions will be up for balloting in March. Jeff Reinhardt and David Kunkler have both expressed a desire to step down at the end of their current term. Paul Kennedy and Phoebe Raper have expressed interested in serving. Others are welcome to run. If we have more than two candidates running, a ballot will be included in the February Forge Fire.

Here are some highlights from the December board of directors meeting :

- IBA Website
  - Rob Hough will be taking over the webmaster duties from Dominick Andrisani.
  - Coal Iron Works has offered to assist Rob with website development.
  - Rob is planning to add the ability to pay membership dues on line.
- 2024 IBA Conference
  - Daniel Sutton confirmed the Tipton County Fairgrounds are reserved to May 31—June 2.
  - Plans are underway for organizing volunteers to help with the conference.
- Membership
  - Discussed providing updated membership rosters to forge masters.
  - IBA will offer up to 10 scholarships per year with a limit of 3 scholarships per individual.

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: Paul Bray (812) 521-7177

#### 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

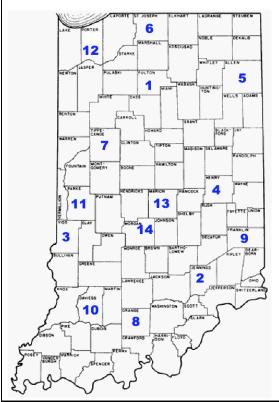
Contacts: Clint Casey (260) 627-6270 Mark Thomas (260) 758 2332

#### 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).

#### **Meteorite Mashers**

The November meeting was at Jeff Reinhardt's shop and was the now infamous "Smoked Turkey Hammer-in". Had great attendance. Had many beginners, had 3 beginners forges running, with at least 3 beginners per forge. The BFH crew was punching and drifting 1" square hardy holes in striking anvil tops (5 completed). Jeff smoked 2 turkeys (26# total), and the sliced turkey went fast! John Jones made a huge crock pot of chili and it too disappeared fast. The iron in the hat was large and lots of good items. It was a wonderful day weather wise for late November and we had much outside forging. A good time was had by all.

January meeting is at Steve King's shop in Paoli, and is on the Third Saturday as it is a State Meeting.

### IBA Satellite Groups and News (continued)

#### **Bunkum Valley Metalsmiths**

Bunkum Valley Metalsmiths met the first Saturday this month. We had a good group from young to old as you can see in the pictures. In addition to our usual business this month's meeting was our annual

Christmas ornament raffle. Everyone is invited to make or bring an ornament for the raffle after iron in the hat. We had some good ones this year. A big thank you was given to the smiths who donated an item to the **Daviess County** Friends for Kids charity auction. Over \$200 was raised by their generosity. The club also gifted our host and blacksmith with a custom made hammer by Steve King. We appreciate his hard work and commitment to our club. We have several experienced smiths who are available to teach and quide new smiths each month. Please come and visit us on the first Saturday each month. Merry Christmas and



















Mark Aspery The Ha'penny Scroll

The snub-ended scroll family consists of the Solid Snub end scroll and the Ha'penny (Half-Penny) snub end scroll. Both are somewhat similar in their method of construction.

Looking at the ha'penny scroll, made from flat bar, the ha'penny finial must be twisted through 90° from the parent bar, and then forged from a rough square shape to a final round shape.

All these moves require that you make the initial shoulder over a soft offside edge of the anvil to resist cracking during the twisting and shaping.

But, that extra material at the neck of the finial will present a problem later in the forging unless you take care of it.

Ultimately, we want a sharp transition from the scroll finial to the flat bar. We do not want the finial offset from the flat bar, and unless you take care of the stored material, that's what you will get, an offset scroll finial.

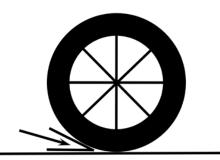
Think of a wheel rolling down a track - the point just in front of the contact patch between the wheel and the ground makes a sharp angle - our desired finial to flat bar outcome.

Now imagine a clump of hard dirt in front of the wheel. The wheel hits the dirt and crushes the clump - but the dirt does not go away, it might get crushed, but it does not go away.

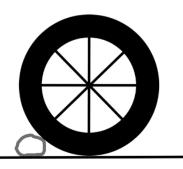
The wheel rides up on the dirt and is now offset from the ground - our not-desirable finial to flat bar outcome.

Go too far over the dirt, and the bottom of your tire doesn't contact anything - in blacksmithing terms, that's a cold-shut or crack.

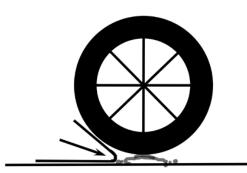
This article reprinted from the November/December 2023 edition of California Blacksmith the newsletter of the California Blacksmith Association



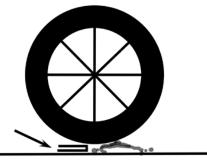
The tire makes a sharp transition to the ground as the Ha'penny scroll should make to the parent bar



A lump of hard dirt in front of the tire



The dirt is crushed, but it doesn't go away. The tire rides over the dirt and is raised above the ground



At some point the bottom of the tire no longer connects to the ground - that would be a crack or cold shut

## Mark Aspery

Unless you take steps to remove the soft shoulder from in front of the ha'penny finial, your finial will look like the wheel on the pile of dirt.

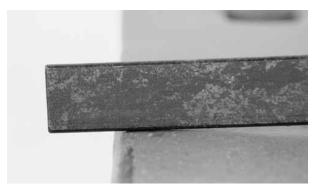
Now that we have some of the preliminaries out of the way, let's make a ha'penny scroll.

I find that working with a farrier's rounding hammer yields great results when putting on the final shape of the ha'penny.

A half-penny in "old" British money measures 1-inch in diameter, and you can duplicate that size by working with a \(^4\)-inch by \(^4\)-inch flat bar.

Over a soft offside edge, lay off as much as the bar is wide over the edge - in this case \(^3\)4-inch.

Hold the bar at a slight angle and create a soft shoulder. Do not dress the growth in width at this stage. Take the shoulder down until the neck cross-section is %-inch square. Extend the taper for approximately 3-inches in length and keep it centered on the parent bar.



Lay off from the offside edge as much as the bar is wide, in this case 3/4". Hold the bar at a slight angle



Shoulder in half the width of the bar. That should leave you with a 3/8" square neck

The taper to the parent bar will flow through the scroll finial eventually. More later.

To avoid damaging the "flag" of isolated material, work only from the back side as you take the square neck to a round(ish) cross section, with few corners or lines showing.

You need to make about %-inch or so round or close enough to round, as that's where the twist in the bar will be placed.



Turn the bar 45°, and work from the top and sides only so as not to damage the 'flag' of material



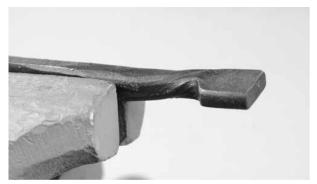
Take about 1" of the neck to a true octagon shape



Finally take the neck to a round cross section without destroying the look of the taper to the parent bar

Take another heat and twist the flag through 90° while working at the vise or use two pairs of tongs at the anvil.

Staying at the soft offside edge, forge the neck down to ¼-inch thick while dressing sides of the taper as you work. This is going to extend your 3-inch-long taper to something more suitable.



Twist at the vise using a pair of scrolling tongs



Return to the soft, offside edge and re-establish your taper to the parent bar

The degree of taper that you create now will also run through the ha'penny finial when the scroll is finished.

Take the time to chamfer the corners now, although you get to do this again a little later.



I like to bring the tip of the taper down to just under parent bar thickness, but this is not required



Chamfer at least the edges of the taper. I like to chamfer the whole bar as it aids in fitting the collars

The best round comes from the best square, and as you look at the flag, I'm betting that it is not square. The job now is to make the flag square.

Typically, the side attached to the parent bar is longest, decreasing as you work your way around the flag.

Staying at the soft edge, and keeping the bar flat on the anvil with the flag hard against the off-side edge, use a glancing blow and knock the long side corner down towards the end of the bar.

The move generally doesn't require a power blow, thus the glancing blow.

## Mark Aspery

Turn the bar over 180° and place the back of the flag on the face of the anvil.

Hold your hammer at a steep angle and pull in the second corner - again, somewhat of a glancing blow.

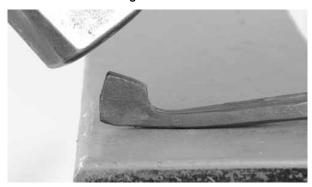
Dress the top of the flag so that it is parallel to the bottom.



Using a glancing blow, knock in the top corner of the Flag



The last move will have made the lower corner of the flag stand out



Angle your hammer as you pull in what was the lower corner . Drop the hammer angle as you work

Drop the flag over the edge of the anvil and dress the end of the flag by knocking it against the side of the anvil. Both these last moves require a bit more force as you are upsetting the material slightly.

Having the stored material (the dry clump of dirt) in front of the flag will prevent cracks from forming as you dress the flag.



Flatten the top surface until it is parallel with the surface of the anvil



Make sure that you take a good heat for this and the next move



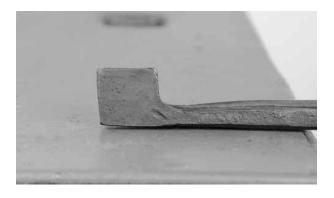
Upset the flag to form a square of material, holding your hammer vertically as you work

Finally, dress the thickness of the flag on the anvil to achieve parallel sides. You'll create the tapered end of the scroll later.

Repeat these moves until the flag is square and has a uniform thickness.



Work near the offside edge to prevent damage to the taper as you dress the now-square flag



You may have to repeat the last few steps before you have finished forging the square flag

To create the square (flag) to round (Ha'penny) transition, you are going to use the normal square, octagon, round regime - only you must complete these moves two corners at a time.

As this is going to upset the flag material, make sure that the bar is smoking hot.

Hold the flag at 45-degrees to the offside of your anvil and drive in the outside corner.



Hold the bar at a 45° angle to the anvil and drive in the outside corner.



Leave room under the taper as the bar will move closer to the anvil

In theory the corner resting on the offside of your anvil will be driven in equally - alas, not in my world (see above photo).

Put the corner that you just worked, on the face of the anvil. That leaves the corner that was resting on the offside edge uppermost.

Dress the upper side to match the lower.



Make sure that both flats are equal in size and shape

Your next moves are to set down the remaining corner and then take the area through octagon to round.

It must be noted that during this process you also treat the area opposite equally, which means not holding it in one spot on the anvil as you perform the moves on the remaining corner.

Lift up on the bar as you flatten the remaining corner. Lift or drop down on the bar as appropriate as you blend in the miner corners of the octagon.



Drive in the remaining corner rocking the bar back and forth as you do so, preventing a flat spot on the back

Once that looks good to you, turn the bar on its side, and using the ball face of the farrier's rounding hammer, spread the finial in much the same way as you did with the material for the flux spoon in book one, the black book.



Note how the taper from the parent bar extends through the scroll finial

If you're having difficulties getting the shape that you want, there is a bottom tool that can be made to assist you.

We know that the finial should be close to 1-inch in diameter. We also know that you are going to need some room to get your hammer into the area of the bottom tool - so the tool will need to be fairly tall.

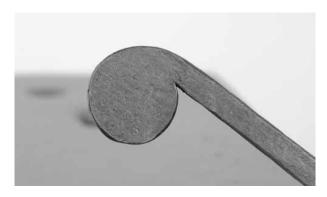
Lastly, the 1-inch half-round depression into tool needs to be against the top of the tool to allow the taper to the parent bar somewhere to go.

A curve to the top of the tool can also act as a scroll starter.

Important to note is that the transition from the finial to the taper is good as it is, and does not need to be altered. The bending for the scroll starts behind this transition, just into the taper to the parent bar.



A tool that can be used to dress the finial. This tool is optional and not required for a great ha'penny scroll



Here is my result, ready to be turned into a scroll

At this stage, you have started your octagon process on two corners. You are now going to finish those corners to round - or a ¼-round, anyway.

Return to your original position with the flag at 45° over the offside edge.

Rock the bar up a little and drive in the exposed minor corner - drop the bar and repeat for the other minor corner.



After creating the flats, knock of first one pair of corners by raising the barstock...



And then lower the barstock to remove the other corner. You should be left with a lemon shape

Come back to the face and do the same to the inside corner. This shouldn't take much work - rock the flag as you forge, to avoid flat spots.

I do not dress or correct the growth in thickness on the ha'penny, preferring to do this later when I have a bigger picture available to me as to what is required to make the finial round.

Your call!

Now is when we get rid of the dirt in front of the wheel as described earlier.

Over a sharp edge (sharp being something akin to bailing or tie-wire), hang the flag over the edge and pull back until the soft shoulder of the scroll rises over the edge, and the flag is hard against the offside edge.

Deliver a half-faced blow onto the neck of the scroll, and dress the sides of the taper only and chamfer the corners, do no work to the flag.

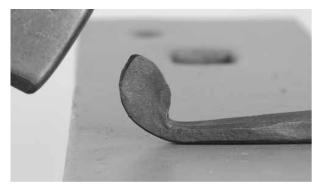


Remove the dirt in front of the finial by driving the neck over a sharp edge of the anvil

At this stage, you should have a teardrop shaped flag with a sharp transition to the start of the taper leading to the parent bar.

Now you need to roll the wheel slightly.

Take a heat, and resting the scroll on the flat of the taper, flag up, pull the flag towards you with your hammer, stopping before getting to 90°, or, as I like to say, leaving the flag open of 90°, just like an upset square corner.

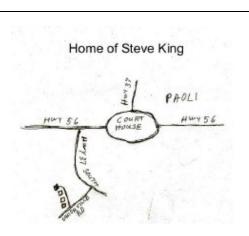


Stand the finial up to not-quite 90°



Address Correction Requested If Undeliverable return to sender

January 20 Hammer In Steve King's Shop 1155 S. Paoli Unionville Rd. Paoli, IN 47454



### February 17 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.

First Class Mail