

July 2021

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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.

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*.

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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 23-
24 2021

**REGIONAL CONFERENCE
BUNKUM VALLEY METALSMITHS**

Jul 30 -
Aug 22

INDIANA STATE FAIR

Sep 3-5
2021

**REGIONAL CONFERENCE
COVERED BRIDGE SHOP**

Sep 24-
26 2021

QUAD STATE (SOFA)



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Dates to Remember

July 23-24
Regional
Conference
Bunkum Valley

Sept 3-5
Regional
Conference
Parke County

Editors Message

Regional Conference July 23-24 Bunkum Valley Metalsmiths.

Camping with electric hookups etc is available in Odon City park, phone # 812-636-4099. Primitive camping and those with generators can camp on site for free.

Friday night demo starts at 7:00 pm and is Jeff Reinhardt demonstrating wizard heads. Saturday demo is Benton Frisse and will start at 9:00am

A food truck is scheduled for Saturday lunch with chicken dinners and pulled pork.

Tailgating is allowed and encouraged.

An Iron in the Hat will be held. High class items please. Cups for tickets will in place, drawing at Lunch time Saturday, and winners will be posted.

Admission is free to IBA members, membership can be paid for on site. Please bring the \$35 in exact change or a check to ease the burden on the dues takers. Come enjoy a nice conference. Do some catching up with those not seen since the pandemic started. do a little trading or buying and selling and have a great time.

News from ABANA

ABANA is creating a touchmark registry

ABANA is creating a comprehensive registry of touchmarks. To submit your touchmark, please check the ABANA webpage and follow the instructions.
<https://abana.org/touchmark-registry/>

Discount Providers

There are several vendors that value us as customers and offer discounts to ABANA Members. The ABANA website has a list of those vendors that we can support while saving a few dollars. There is a new offer, a grinder discount, for ABANA members from Beaumont Metals. See the ABANA site for more details. Please visit www.abana.org to find discounts under the marketplace / vendor page.

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: 2nd Saturday at 9 AM
 Contacts: Doug Moreland (217) 284-3457
 Max Hoopengartner (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

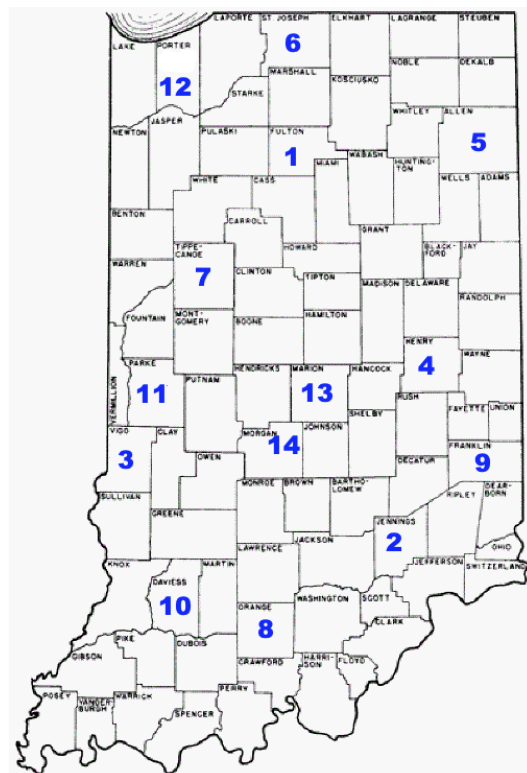
Meet: 1st Saturday
 Contact: Rod Marvel (219) 241-0628

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 Jennings County Historical Society Blacksmiths opened with the pledge of allegiance. Drew Davis made two bands to hold a motor from round stock by flattening the middle of each. Dave Good instructed a beginner. Chelsea and Josh Samson twisted material to form a bottle opener. Dave Good got a piece of hardened steel really hot, cut off a big chunk of it, and formed a large cone hardy. Josh forge welded a basket handle and made a coal rake. Hope to see you next Month. Bring iron in the hat annnd--MONEY! Paul Bray

IBA Satellite Groups and News (continued)

St. Joe Valley Forgers

On Saturday, June 26th the St. Joe Valley Forgers held their first official post-COVID Hammer-in.

In the morning John Latowski demonstrated how to create basket twists using both square and round stock. We were honored to have Ben from the Kankakee, Illinois area join us. Ben is a young man who wants to learn blacksmithing and convinced his mother to drive him a couple of hours to spend the day with us. John Latowski taught Ben how to make an S-hook.

Please come see us for the July Hammer-in

The St. Joe Valley Forgers are implementing a new post COVID format for our meetings. During our meetings on the fourth Saturday of the month, there will be a presentation in the morning. Following our communal lunch, we will host open forge time where blacksmiths can work on individual projects with assistance from experienced blacksmiths if needed.

To provide additional availability to work on projects that require more time than the Saturday afternoon during a Hammer-in, the St. Joe Valley Forgers will have an open shop on Tuesday evenings from 5 – 9 pm. The cost is \$10 per IBA member to cover the cost of expendables. Please contact John Latowski to schedule a Tuesday evening time slot. The shop will only be open to work in during the monthly hammer-ins and on Tuesday evenings.

Mark Hohulin Reporting

Meteorite Mashers

The Mashers met at Steve King's freshly added on to shop. All agreed it is very nice. Some forging done in the hot work shop, with Steve demonstrating bottle cap lifters and Darren making the punch set to do those cap lifters. A very nice Iron in the hat was held with proceeds to a smith in need. For once, the writer did not feel like a stood up date and had the first ticket pulled. The writer in fact made out like a bandit LOL. A fantastic time was had by all. The next meeting of the Mashers will be at the regional conference at ODON in July.

Anvil For Sale

142# Brooks of England cast steel anvil near mint condition.

Asking \$ 700.

Call Jeff Blue at 812-343-3789 for more information.

Columbus, IN area.

Hammer Eye Tongs

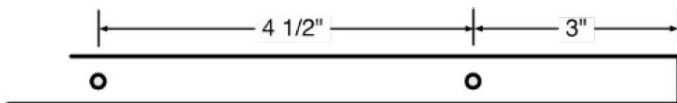
Mike Mumford, Ridgecrest

We covered tongs in the May-June 2021 Tong Edition – this article will focus on making the bits (jaws). See the Tong Edition for several ways to complete the pivot and reins.

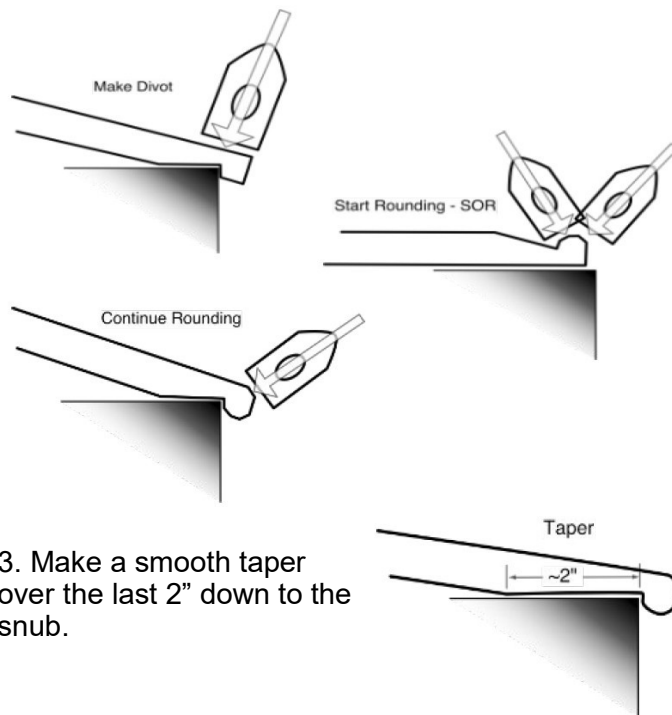
Stock: 24" of 9/16" round mild steel.



1. Punch-mark at 3" and 7 1/2" from the end.

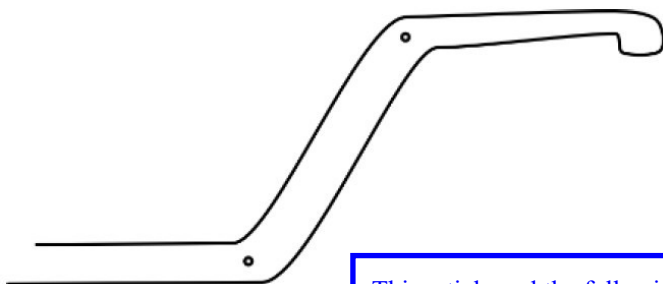


2. Make a snub end, about 1/2" - 5/8" diameter by 5/16" thick.

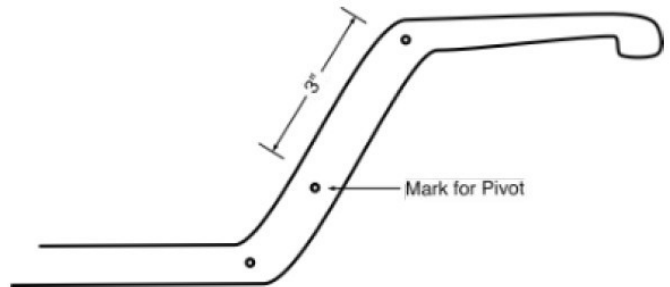


3. Make a smooth taper over the last 2" down to the snub.

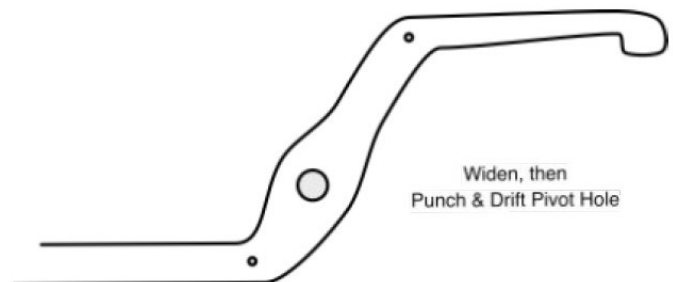
4. Using a bending fork and bending wrench, make a zig-zag at the punchmarks.



Make a punchmark for the pivot, 3" from the upper bend.



5. Draw (widen) the pivot area to give about 3/4" wide by 5/16" thick at the pivot.



6. Punch and drift the pivot.

7. Insert and head the rivet.

8. Align everything, making a smooth swoop to the jaws, and set the jaw spacing to your desired hammer head size.

For my size hands, I align the reins so that they are 1.5" apart and parallel, when holding the intended size of stock.

9. Trim the reins - I make these 18" from the pivot, longer than my usual,

10. Clean, then go make that hammer!

This article and the following 3 pages are reprinted from July/August 2021 edition of California Blacksmith Online a publication the California Blacksmith Association

Hammer Eye Drift

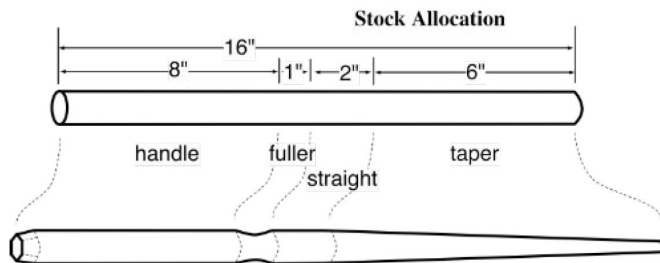
John Williams, Elk Grove

Demonstrated at Wayne's World 2018

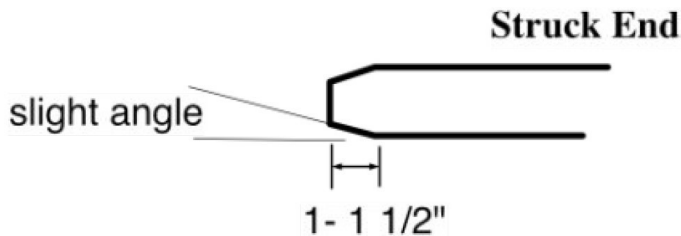
Material: 1" diameter x 16" 4140

Drift ended up 19.5"

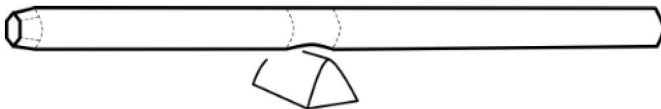
Stock Allocation:



1. Struck End - make a hexagonal taper, at a slight angle.



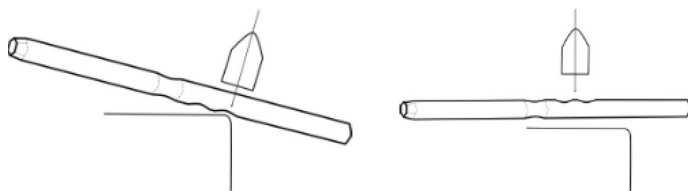
2. Fuller - 7" from the struck end, both sides of drift.



3. Add touchmark on this end.

4. Make the taper: Ideal is about a 7° taper. Move to the other end, you want the drift to taper down to about 1/2" diameter.

Start at the fuller mark, then work towards the tip. Using the rounding side of the hammer, with half-on/half-off hits, make little lumps/divots. Flip over, then the lump becomes your target.



Roll the drift 90° and repeat. Then move forward, take another bite, about 1 1/2" further.

Once you've hammered down to the tip, then go ~1/4" up from the start point and repeat. Keep re-starting, moving towards the tip.

This should give you a square taper.

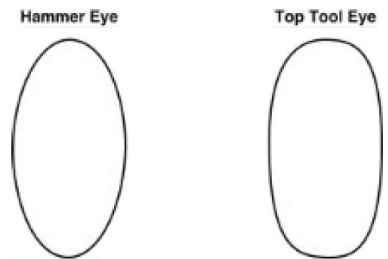
Using a smaller hammer, make the drift round, using the square-octagonal-round process. Get it nicely planished out. I will first make it round, then oval later.

Now use a striker & set hammer to avoid chatter marks. Start at the fat end of the drift, flatten one side then the other, working towards the tip.

Maintain the same aimpoint for the striker: move the work under the set hammer.

With your smaller hammer, smooth to rounded, and planish the drift.

Note: hammer eyes are ovalish, top tool eyes have flatter sides.



Typical Eye Sizes

2 lb hammer	1" x 5/8"
Bigger hammer	1 1/8" x 11/16"
Top tool	3/4" x 3/8"



Editor's Note: when I made a drift following this workshop, I didn't have a striker. I did the work with my standard 3-lb hand hammer, then ground and polished.

Ball-Pein → Fuller

Mike Mumford, Ridgecrest

Some of you may yearn to make the exquisite handled punches and fullers like those made by Mark Aspery, John Williams, or Steve Taylor. But, some of you are antsy to go jump into hammer-making.

So, here's a quick-and-dirty approach to making a handled fuller. I learned this many years ago at a class at the John C Campbell Folk School.

Tools: Have your hammer eye tongs ready, and also your hammer eye drift in case you collapse the eye.

Material: Start with a cheap (i.e. Harbor Freight) ball pein, in the 24-oz size. From a spark test, it looks like decent high-carbon steel.

Control your heated zone – my gas forge tends to create a large hot zone. You mainly want the working end hot, with the eye and ball not too hot.

Avoid Fish-lips!

(more about avoiding fishlips on the next page)

To avoid fishlips: start by tapering across the end, making sort of a point, then go to the sides to draw them in. Do this alternatingly, repeating the end-side sequence (many repeats).

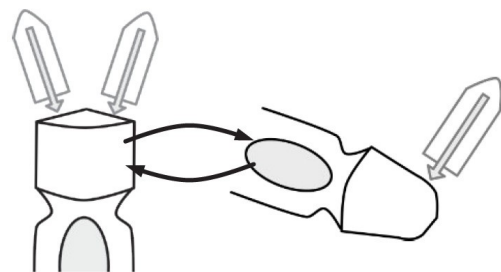
Start with the ball pein vertical in the vise, being careful not to squeeze the eye.

Hammer across the end, to make sort of a point, using a lighter hammer and rapid blows.



Then switch to a heavier hammer for the sides.

You should expect to do at least two heats on the end to every one heat on the sides.

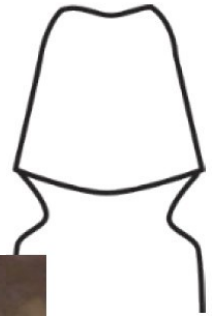


Be sure to keep everything even!

I count blows, trying to make the same number of blows on each side. If it gets offside, stop and correct.

You will likely get bulges trying to build up - stop hammering on the side, go back to the end.

You should get a faceted end, roughly curved.



At some point, I could no longer get a good grab in the vise, so I did the rest holding with the eye tongs.

Once you have it shaped, follow John Williams' advice to continue smoothing/planishing blows as the work cools towards a black heat. Including smoothing out all those facets and lines. This should result in a fuller face that doesn't need much grinding.

If the vise left burrs on the sides, hammer off or plan to grind off later.

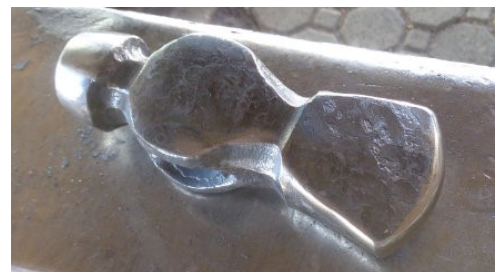
The end of this ball-pein started at 1 1/4" diameter, I had the fuller end down to a fat 3/8" in 45 minutes.

Once it cooled, I used a cutting disk to slice off the top of the ball, then grind it into a slightly domed shape.

You can heat-treat in oil if desired. I omitted this step - the fuller is fairly massive, the steel is reasonably tough, and in use I quench often.

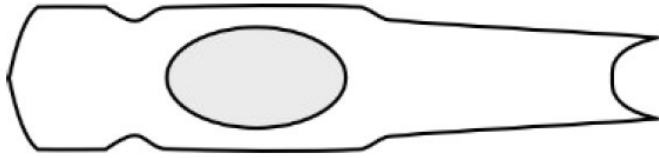
Clean and polish, add the handle.

Now, go make that hammer!



No-Fishlips Drawing Out

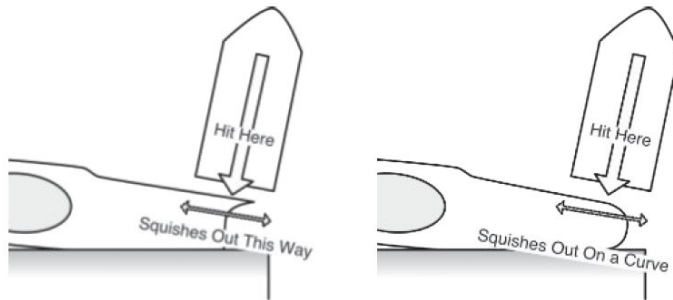
When you're drawing out the fuller, it's easy to get fishlips building up. Beginning blacksmiths often are puzzled: how do I avoid these?



Here's an introduction to one process to avoid fishlips.

Why Am I Getting Fishlips?

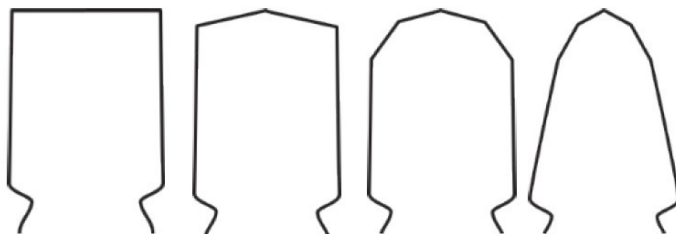
Fishlips come from the natural response of the metal, flowing out under your hammer blows.



So, How Do I Avoid These?

The idea is to round the end first, so that as it squishes out, it remains a rounded end.

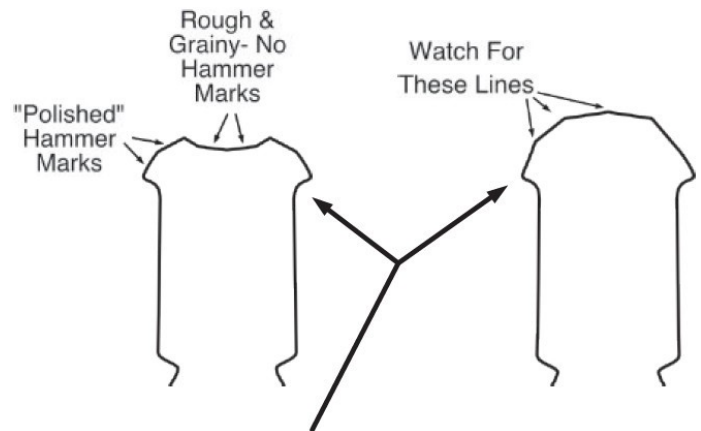
First, make sort of a point on the end, then hit this to round it, similar to doing a Square-Octagonal-Round process.



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What to Watch For

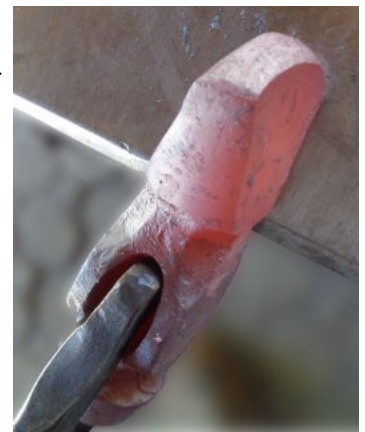
Look for the creation of polished lines or facets



along the to-be-rounded face. When you start hammering, the unhammered area will be rough, scaly, and grainy from the forge. Where you've hit will build up smooth hammer marks. So, hammer on the unhammered areas.

It may want to flare out - watch and hammer these flare-outs down - but, after you get the end pointy.

As your eye gets educated, you'll see where to hit next. Then, follow John Williams' advice to continue smoothing/planishing blows as the work cools towards a black heat.



Hammer Control

with Kelly Kring

One thing I've learned over the years is how important it is to learn how to hold and use a hammer to do the work properly. It's too easy to learn bad habits and nearly impossible to unlearn them!

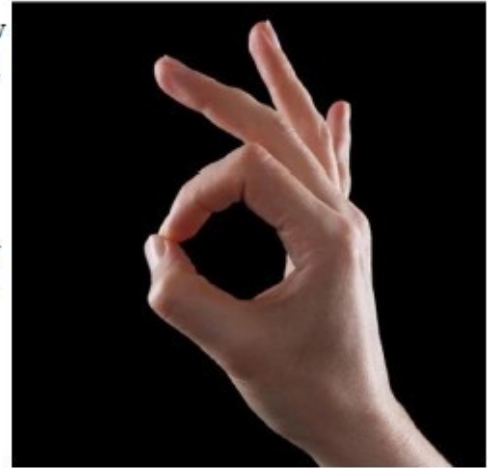
I teach my students the following:

1-Make the "O.K." hand sign with your hammer hand. The thumb and fore finger are what control the pitch, angle, and balance of the hammer head. When you grip your hammer, it should slide loosely in these two fingers making a circle. You should be able to twirl your hammer around and have the hammer rotate 180° with a little rotation of the wrist so the hammer can move from facing forward to having the peen facing forward.

2-Those three remaining fingers are your "power!" They control how hard you strike and determine if you strike fast (top edge of the face first), flat (full face flat on the surface), or slow, the lower edge of the face hits first. This is done by how tight or loose you grip the hammer handle with the middle, ring and pinky fingers. Tighter the faster; looser the slower the strike on the steel. But... these three fingers also control the "snap" or force you strike with. You can snap the hammer with an amazing amount of force by merely gripping the handle tight as your in the down swing. There is no need to raise your hammer higher or put more shoulder into the swing to hit harder. (Not yet)

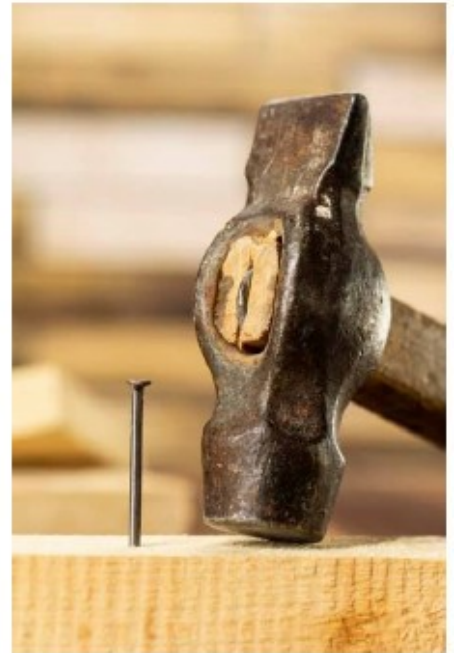
3-When you are gripping the hammer, your thumb stays on the side, always! Never let your thumb ride on top of the handle!!! This can do some serious damage to the tendons in your wrist!

4-Never wear a glove on your hammer hand. Gloves prevents you from feeling the control of your hammer position.



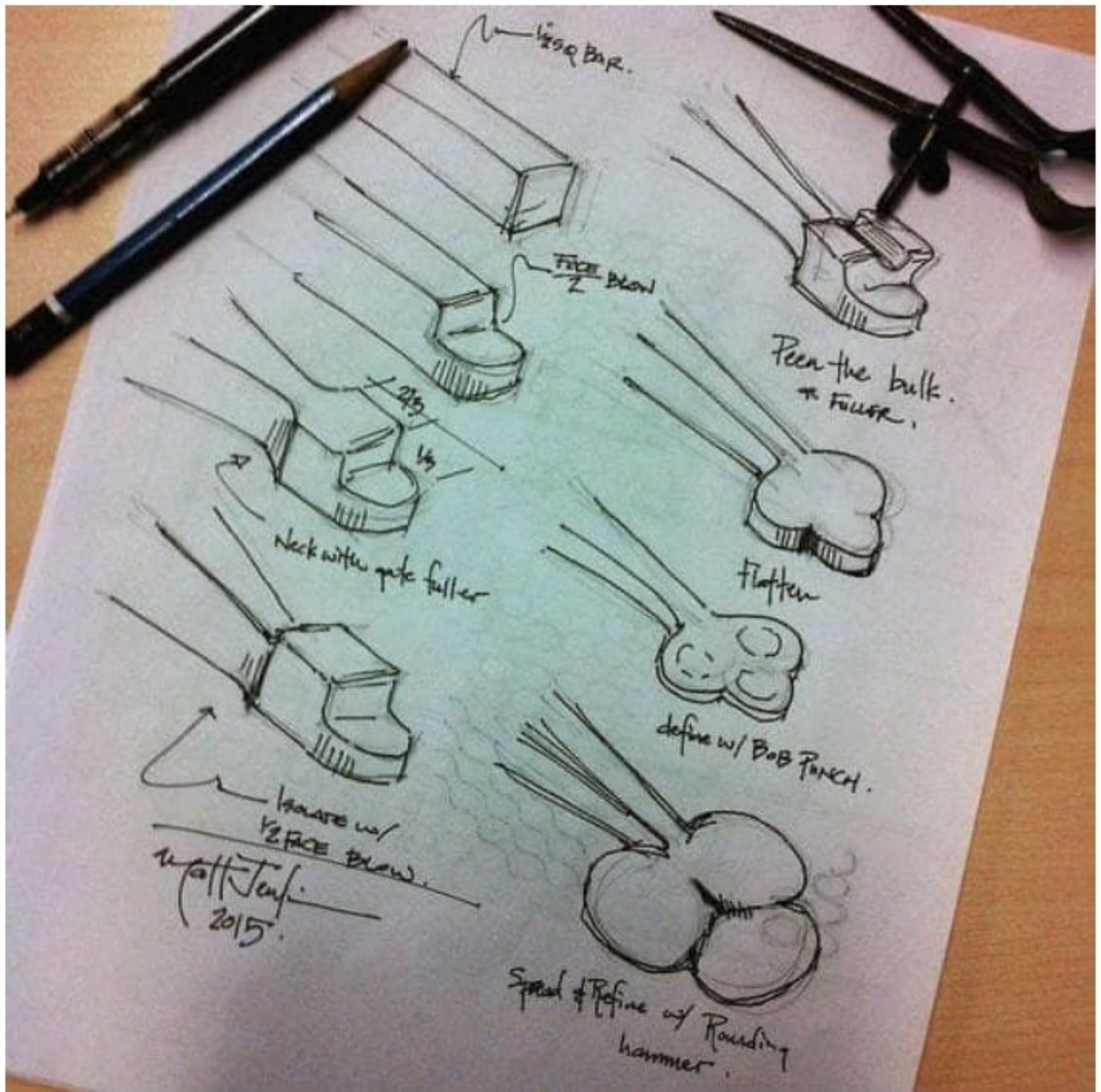
5-Get some common lumber nails (4" long) and a 2X4. Drive the nails all the way down to the head, through the board. If the nail bends, chase it with the hammer and try all you can not to let the nail fold over! Once you have about a dozen in the board, flip it over and use the face of the hammer to drive them nail back through the hole! Keep working on this practice using the same nails. As they get weaker, they'll be harder to control, which helps you to get better at your hammer control!

6-Once you get really comfortable with the nails, start doing the same thing with the ball on a ball peen or the cross peen. Yes! Drive the nails in and back out again with the back end of your hammer.



7-Now, start putting what you've learned to use and try making this clover project at the end of the photos!

8-No matter what, HAVE FUN!!!



This 3-page article reprinted from the July edition of THE VIRGINIA Blacksmith, the newsletter of the Central Virginia Blacksmith Guild

Originally posted by Kelly in the Blacksmithing for Beginners Facebook group. Reprinted here by permission.

Kelly indicates that the clover project comes from the Saltfork Craftsmen.



The *FORGE FIRE*
Newsletter of the
Indiana Blacksmithing Association, Inc.

Farrel Wells *Membership Secretary*
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Dunkirk, IN 47336-8807

First Class Mail

Address Correction Requested
If Undeliverable return to
sender

July 23-24 Regional Conference Bunkum Valley Metalsmiths

14586 North CR 1100 East, Odon IN

Directions: Take US 231 south and then SR 58 towards Odon. After the turn-off from US 231, go for 2 miles, and then turn right so as to head north on CR 1100. After another 2 miles, Jim's place is on the right.

Forge Master: Jim Malone ph: (812) 725-3311

September 3-5 Regional Conference Covered Bridge Blacksmith Guild

Parke County Fairgrounds

Directions: Located on US-41 about 2 miles north of US-36.

Forge Master: John Bennett ph: (812) 877-7274