On the Anvil

Phili[

July 1, 2010

The last meeting for the Philip Simmons Blacksmith Artist Guild was held at Roger &Gail Marcengill's shop in Westminster on June 26, 2010. The meeting was hosted by Gail &Roger and Jerry & Bessie Fowler. I would like to thank them for all that they do. It was good to see every one again!

I thought Eddie Rainey did a very interesting demo on his fire screen knob. If there is someone you would like to see or have do demonstrations please let me know.

The Guild had another great iron in the hat; our scholarship fund gained a little over $700.00. Thanks to all members who contributed. For the August meeting, I would like to see more handmade things by the members. This is not a competition. Even if you make something you think you could perhaps make better, chances are someone else will love your handy work.

Mike DuBois is our new board member. I would thank him for stepping in. He will be taking Jimmy Suggs' place on the board. When Jimmy passed away back in May, the Guild lost a great member; he and Ann did so much for the Guild. I lost one of my closest friends.

I'm still working on getting another class for sometime in October or November. If you have any questions you can contact me by email at mike@tuckersforge.com or call me at 803 773-6853.

Adrian Parks is our new web-master, if have any photos of projects or pieces you have done, send him your images and information so the gallery can be updated. His contact information is glowmaster@gmail.com.

Keep Ann Suggs and Suggs family in your prayers.

Sincerely, Michael Tucker

Iron-in-the-Hat

Item	Donated By	Won By
Bag Chair	John Tanner	Barry Myers
Roll of copper wire	John Tanner	Johnny Marks
Roll of copper wire	John Tanner	Jeff Hatfield
Kentucky Belt Ax	Griz Hockwalt	Perry Thommason
Chain Saw Knife	Griz Hockwalt	Jody Durham
Hummingbird Bell	Roger and Gail Marcengill	Chris Herron
Gauntlett Gloves	Donald Shively	Barry Myers
Gauntlett Gloves	Donald Shively	Bill Creek
Horse Shoe Leaf Hooks	Barry Myers	Perry Thommason
Fork Truck Tine sections	Charles Meyer	John Tanner
Lawn Mower Blade Sections	Johnny Marks	Tammy Hatfield
Anchor Chain Links	Johnny Marks	John Tanner
Anchor Chain Links	Johnny Marks	Jesse Barfield
4140 3/4 x 6 Tool Blanks	Jesse Barfield	Barry Myers
RR Spikes	Jesse Barfield	Johnny Marks
His and Hers Leaf Bottle Openers	Jim Bausman	ML Tanner
Candle Holder and candles	Jeff Hatfield	Chris Herron
Set of 4 Repousse' Tools	Larry Wiles	Johnny Marks
Set of 4 Repousse' Tools	Larry Wiles	Bruce Hester
Silver Wire Wrap Damascus Pendant	Gail Marcengill	Jesse Barfield
Two Candle Colonial Hanging Lamp	Mike Tucker	Johnny Marks
Damascus Knife	Mike Tucker	Tammy Hatfield
SS Vent Hood	David Brooks	Jaime Stevens
SS Vent Hood	David Brooks	Griz Hockwald
SS Vent Hood	David Brooks	Rame Campbell
Scrap Iron	David Walker	Jerry Fowler
Scrap Iron	David Walker	Barry Myers
Scrap Iron	David Walker	Ray Pearre
Scrap Iron	David Walker	Griz Hockwald
12 pack RR Spikes	Ray Pearre	Rame Campbell
Channel Lock Plier Set	Rame Campbell	Perry Thommason
Lawn Mower Blades and Toyota Jack	Jamie Stevens	Perry Thommason
Necklace	Jamie Stevens	Bill Burgess
Bracelet	Jamie Stevens	Griz Hockwald
Stained Glass Cross	Danny Ard	Jaime Stevens
Jen's Pind Bracelet-Black Steel Chain	Bruce Hester	Chris Herron
Bituminous Bits	Bruce Hester	Charles Meyer
Rio Grande Catalog	Bruce Hester	Charles Meyer
King Metal Cloth Bag and Catelog	Bob Stukes	Ken Payne
Grinding Discs	Jerry Fowler	Bill Burgess
Red Hot Chilli Peppers	Jerry Fowler	Chris Herron
Small Demo Leaf	Eddie Rainey	ML Tanner
Drawer Pull Demo Piece	Eddie Rainey	David Walker
Large Leaf Demo Piece	Eddie Rainey	Rame Campbell
Craftsman Bench Grinder	Chris Herron	Jody Durham
Craftsman Bench Grinder	Chris Herron	Johnny Marks
4th of July Candles	Chris Herron	Angie Marcengill
4th of July Candles	Chris Herron	Gail Marcengill
Fire Wall Distributer Repair Kit and Cable	David Walker	Bill Creek

The big winners might be selected from the list above -- those who names are cited repeatedly, but the big winner is our scholarship fund. Through your generosity, the scholarship fund grew by over $700!!!

Guild News and Planning

Mike Tucker is hosting the Camden Meeting in August as no one else stepped up. Presidents do this sort of thing, when required.

If you wish to host a meeting, it isn't real tough. You need to decide where you want to hold the meeting. Make it somewhere that allows sufficient parking within reasonable walking distance. You may have to clean up your shop! Make sure that there is sufficient room for folks to gather around the forge to watch the demonstrator. Have the tools needed for the demonstrator or make sure she/he is bringing their own. Consider shelter from the elements.

Usually the host provides the main course and sides, drinks and desserts are provided by the attendees. A MONEY jar on the table should be made available for donations. You are not expected to go into your own pocket too deeply if you are going to the trouble to host.

The officers will assist with getting a demonstrator. Coordinate the selection of the demonstrator with the officers as payment of a demonstrator should not break the bank. We have long felt that paying a demonstrator is a worthy use of our funds. Many of us will never take a scholarship due to work and vacation schedules that don't permit, whatever the reason, so this is your scholarship – watching some outside blacksmith do something that we haven't seen or done. Then, we can go home and do it ourselves – that is the key to learning this craft.

As to the schedule for the next year, here is what I have so far:

Month	Location	Host	Demonstrator
August 14	Historic Camden	Mike Tucker	?
October 11	Spartanburg	Jeff Hatfield	?
December	Sumter	Mike Tucker	Jerry Darnell
February	Conway	Bob Hill	?
April	Magnolia Gardens	Bill and Linda Creek	?
June	Westminister	Roger. Gail, Jerry and Bessie	?

Mr. Donald Shively put in dibs on next October's (2011) but that is too far away to plan too much yet, Barry

Membership List

Not published in Online version

Consider Joining ABANA. We probably wouldn't be what we are today were it not for ABANA. You missed a great Conference if you weren't a member

For Sale

Bob King, Tipton Hill Community in Mitchell County, N C; at 8 Kellogg Farm Road, Green Mountain, NC. 828-688-9000. e-mail bsk4630@verizon.net.

- Treddle Hammer made by Clay Spencer, roller style, very good condition; 88" tall $1000
- Pole vice, 5 1/2 inch jaws $100
- Anvil, English forged steel, 97 lb., $200
  - Imprinted on base: "MH Armitage, Mouse hole forged; 0 3 13 "
  - Smooth 4" wide face with sharp edges; 22 " heel to toe
- Metal table 2 ft x 5 ft.
- Rack for holding metal; made of 3/4" galv. pipe
- Metal hood
- Metal stand for holding forge
- Electric blower for forge
- Lots of recycled metal

Tommy Lamm 919-528-4878 or 919-323-9858

- Sahinler air hammer, 5 1/2" ram, 10hp, 2003, lots of dies
- Makita chop saw, 10"
- Thermal Dynamics plasma cutter cut master 101
- small hand operated ring roller
- large ring roller 3 phase-240 volts 6" wheels
- Scotchman iron worker model 6509-24m lots of dies
- Miller 251 wire welder
- Jancy 2" belt sander
- Haberle 12" cold saw model#h350
- 2 burner gas forge
- Lots of hand tools and ornamental iron parts

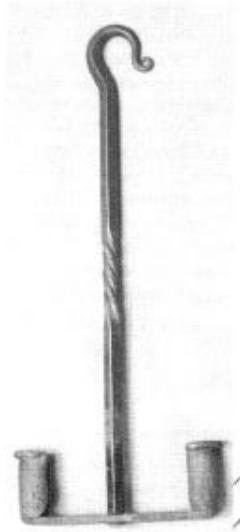
Barry Myers

- 127 pound Peter Wright Anvil Chip in face/side $325

Mike Tucker made a very nice little candleholder for the Iron-in-the-Hat at the Marcengill's. I found the instructions for a similar one and submit it here. It is a good exercise for any of us, employing forge welding, bending, twisting, drawing out, punching and riveting.

2-Candle Hanging Candle Holder

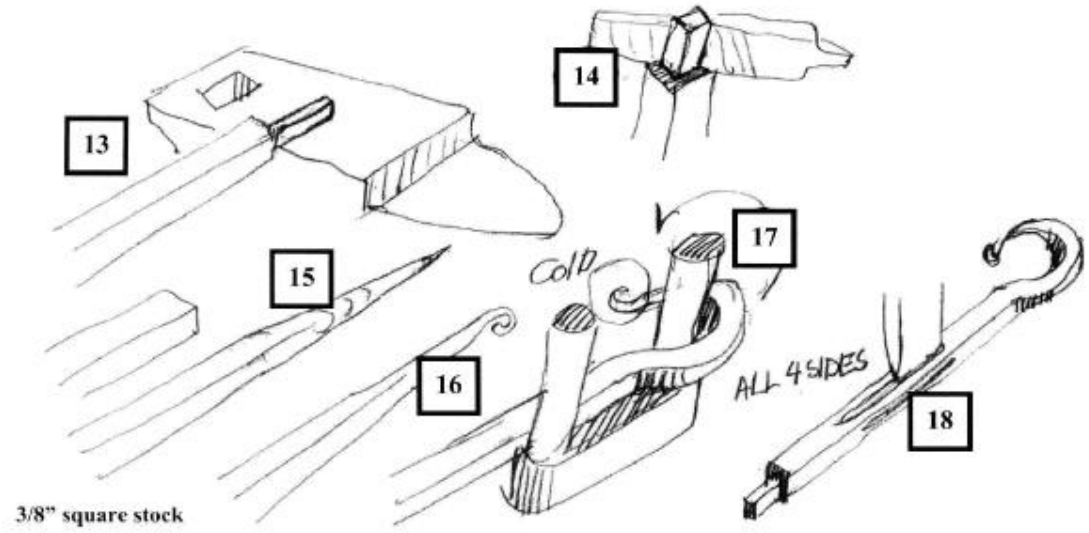
Demonstrated by Owen Creteau at the Manchester Historical Society Blacksmith Shop.
November 11, 2006
Drawings by Steve Alling Michigan Artist Blacksmiths, The Upset

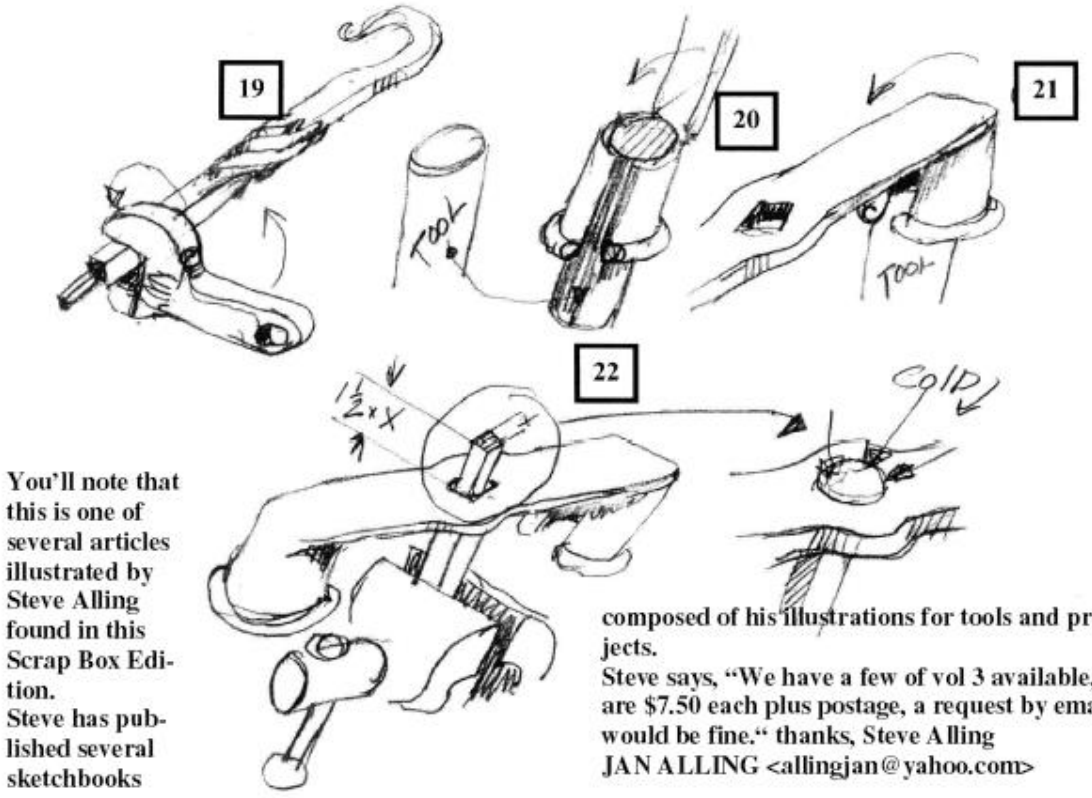


Overall finished Dimensions-

Hanger:
15" tall and 5-1/2" wide

Candle cup:
3/4" dia. and 2" tall





You'll note that this is one of several articles illustrated by Steve Alling found in this Scrap Box Edition.
Steve has published several sketchbooks composed of his illustrations for tools and projects.
Steve says, "We have a few of vol 3 available, they are $7.50 each plus postage, a request by email would be fine." thanks, Steve Alling
JAN ALLING <allingjan@yahoo.com>

Here is the url for the Top Blacksmithing Sites as listed by the Blacksmith's Journal: http://blacksmithing.toplisted.net/

You may ask why I add this url, our President, Mike Tucker's website is #5 in the top 50!

Congratulations, Mike.

With the recent spate of traditional joinery we have been doing at the meetings, I thought that it might be a good time to print something on some of the tools of joinery, Barry

Tenons, Monkey Tools & Clappers

By Brian Gilbert

With help from Clifton Ralph and Ray Spiller

I recently reprinted an article in the Appalachian Area ChapterNewsletter on tenon tools and how to make them by drilling. CliftonRalph gave me a call and helped me to realize that I didn't know as much as I thought I did about tenon tools. I decided to take a closerlook… here's what I found out–Editor

I never really thought that much about tenon tooling before Clifton Ralph set me straight. I usually used clapper dies in a treadle hammer. These are just two blocks of steel held together by a piece of 1/4" x 1 1/2" bar stock that forms both a spring and a handle. You can have any shape that you want on the inside surfaces of the steel blocks… acorns, round balls on a stem, even pre-forged shapes to speed leafmaking… but for tenons, all you need is a straight shaft of the correct size, like in Figure 1.

One way of making a die set for tenons is by drilling. You

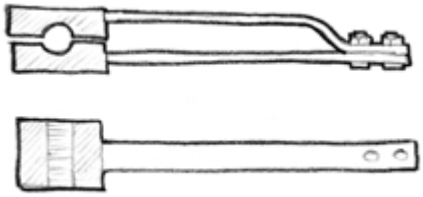


Figure 1- A typical clapper die set for forming tenons

Make the blank die set by welding two 1/2" x 1" x 3" blocks onto 1" wide mild-steel bars. Bend and align the blocks and clamp them together. Now drill the bolt holes through the "handles" and secure them with a pair of good size bolts with lock washers.

Next I would slip a business card or a few sheets of plain paper in between the dies. I'd even soak the paper with oil to lubricate the drilled hole… I thought I was pretty slick…and clamp the whole thing up again, drill the hole to the size of the tenon I'd need and (Ta-Da!) an instant tenon tool. This was the basic slant of the article I reprinted in the Appalachian Area Chapter newsletter.

They say that ignorance is bliss, and I suppose I had the ignorance part pretty well covered, but the bliss part will never come in using a tool made this way. Clifton Ralph enlightened me with a phone call not too long ago. "Nice article," he said, "except for one problem. It WON'T WORK!"

For those of you who don't know Clifton, he spent many years as an industrial smith in a steel mill. He's done a lot of work with these types of tools, often to very precise specifications under relatively large power hammers… the kind that if you don't use right, you can wind up with serious injuries or worse. (Clifton told me that a 1200 pound hammer was considered small.) As a result, Clifton learned to pay close attention to detail, and this was his objection to the article… the details. The steel, as it's being pressed between the clapper dies, must have room to expand on the sides. Holes through these types of die sets must be OVAL, not round, to give the steel room as it's forged. Otherwise, you can end up with what's known as "flash," thin flaps of excess steel that must be ground off. Figure Two illustrates this idea.

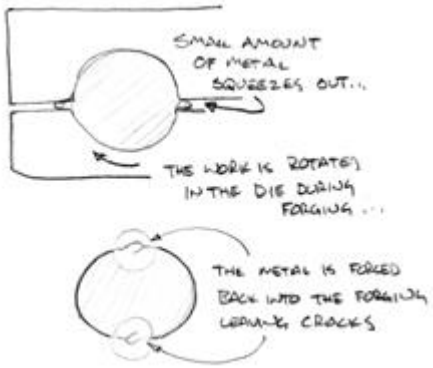


Figure 2–"flash" and the problems it can cause

If the tenon with flash on it is rotated and struck again, the flash becomes imbedded into the tenon, leaving a cold shut. Also, you need to have NO SHARP EDGES. Sharp edges will leave nicks and cuts all over the steel. (In fact, I'd go so far as to say that the only sharp edges in the blacksmith shop should be on chisels and hardies… tools that cut. Anything else, including butcher tools, set hammers, etc., should have some kind of radius on the edge, if only a slight one. Anything else will risk hot shuts and stress cracks.) Tools built this way need to be filed, sanded or ground until the sharp edges are gone, and the steel has room to be worked.

Yet a third problem with this method, Clifton told me, involved the use of my nifty oil-soaked business card. The tool built this way would leave a tenon that was undersized by the thickness of the business card. A 1/4" tenon should be 1/4", not something else. (Although I have heard the argument that it doesn't hurt to undersize your tenons slightly so they'll go smoothly into a hole. A business card is about 1/64" thick, which is a pretty slight difference. But I think Clifton is correct in saying that a 1/4" tenon tool should be 1/4", not 15/64". If you were shrinking a hot hole over a cold tenon, for example, this amount could make the difference between a tight fit and a wobbly one.)

Clifton forms these tools hot rather that by drilling. He makes a blank clapper die assembly, then heats the whole thing up and inserts a rod that is the correct size of the finished tenon and forges it down under a power hammer. This technique helps form an oval shape as the steel is forged. Clifton said he took two additional steps. He would relieve the corners by inserting a larger sized rod and lightly hitting the die. For example, on a 1/2" tenon, he would relieve the corners with a 3/4" rod. Then the would relieve

the end of the tool with a 1/2" rod held in the die at a 45 degree angle. Sometimes he would relieve one side of the die hot, and leave the other side somewhat sharper by grinding and filing.

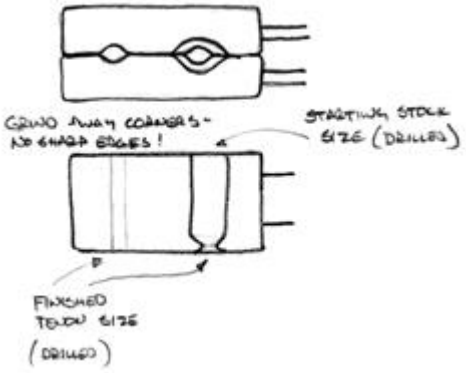


Figure 3–Ray Spiller's Tenon Tooling

Then I saw a demo by Ray Spiller. Ray uses a variation on these tools that leaves a "butcher tool" if you will. He assembles the whole thing and drills two holes, each 1/4" (for a 1/4" tenon tool). Then he goes back and drills one of the holes almost all the way through with a 1/2" drill bit. This leaves a little ridge of metal that's almost the right diameter for a tenon.

"The next step is the part left out of most articles," says Ray. "Grind away or relieve the edges of the tool. Relieving the sharp edges allows the steel somewhere to go as it is squeezed." Rounding the sharp edge will also help prevent cracks from forming at the base of the tenon. Figure Three illustrates Ray's tenon tooling.

Ray makes his tools from jackhammer bits that are forged down to about 3/4" x 1" x 3" long. "Mild steel will work, but it won't last as long," says Ray. "This tool is not hardened. It is struck with hardened tools."

There is one point I'd like to make about building these tools, and that's to pay particular attention to the welding of the blocks to the handle. Since this tool will be struck with a hammer, these welds will be taking a lot of punishment, so make them as carefully as you can. Grind a good 45 degree bevel in each of the parts to be welded. Tack weld the parts together, then preheat the whole assembly in the forge, then weld the parts together on all sides. I've even post-heated after welding to relieve the stress, but I'm not sure that's necessary. Preheating does leave a better weld, though.

Figure 4–Using Monkey Tools

A monkey tool is nothing more than a bar of steel with a hole drilled in its center. The hole is the same size as the tenon. It's used to square up the shoulders of a tenon, and to adjust the angle of the tenon if necessary. Hollow-core jackhammer bits make great monkey tools, because they already have a hole in the center and the steel they're made from is very tough. But as Clifton told me, there's more to a monkey tool than a choppedup jackhammer bit. The edges of the hole should be relieved just a little bit. Not too much, but you don't want a razor-sharp edge. You can blunt the edge with a larger-sized drill bit or a small file.

There are details to using a monkey tool, too. Most folks don't realize it, but when a monkey tool is used, the steel is being extruded to some degree. More obvious is the way the shoulders will be upset and flare out. As this happens, the bar with the tenon gets shorter, and you have to allow for this.

A common problem with tenons is at the base… there's often a ridge or bump where the tenon joins the parent stock, even after using a monkey tool. A bump here prevents the parent stock from seating firmly as it's being peened together.

You can get a really good fit by using the monkey tool until you get a slight flare, and then hammering the flare back down in a swedge. This leaves a slightly cup-shaped end where the tenon is. Now when the tenon is peened over, the outside edge of the steel comes into contact with the joined piece, resulting in a very tight fit without much gap.

So as usual, Clifton and Ray have shown me that the more I learn, the less I actually know. Now I can get into the shop and be less likely to reach for the electric superglue (AKA arc welder)!

Reprinted with permission from the **HAMMER'S BLOW**

It was announced at the Conference in Memphis that Brian Gilbert is leaving his job as the editor of the Hammer's Blow. He has done a great job and leaves big shoes to fill. He will be missed but those who have read the Hammer's Blow and tried his techniques and projects have gained from his expertise. Barry

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Membership Application
Dues: $15 per person/family, annually
New member: __/__/__ Renewal: __/__/__

Name:_____

Address:_____

City:_____State:_____Zip_____

Phone:_____E-mail_____

Please remit dues to: Ray Pearre, 4605 Durant Ave., N. Charleston, SC 29405

ACKNOWLEDGEMENT AND ASSUMPTION OF RISK

I acknowledge that blacksmithing and related activities are inherently dangerous and involve risks and dangers to participants and spectators that may result in serious injury or death. I have considered these risks and I knowingly assume them. I agree that I am responsible for my own safety during Guild events, including wearing appropriate clothing and protective gear and remaining a safe distance from all dangerous activities. I agree to hold Philip Simmons Artist Blacksmith Guild harmless from liability and expenses arising out of my actions or omissions.

August 14, 2010

Historic Camden

Come and watch someone forge something! No, demonstrator yet.

If you want everyone to watch you forge something, let Mike know.

Mike Tucker is hosting, probably with yard bird!

Bring a side or dessert and some nice forged item for Iron-in-the-Hat

We start at 10 AM.

Take I-20 to Exit 98, then North on 521 about 2-3 miles on Right