## **Rocky Forge News**

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## **Next Meeting: 4/8/2017**

Looks like we are finally going to get a nice day for blacksmithing next Saturday. We will have a "hammer-in" at Ted's shop on Saturday, April 8<sup>th</sup>. As usual coffee and doughnuts will be available starting about 8:30 AM. No meeting time, just blacksmithing. You can socialize till your heart is content or you can start right off pounding hot metal. I will have forges set up in the breezeway and at least one or more gas forge available. Power hammers will be available for the experienced smith. Make whatever your mind wants you to do, it will be a day of blacksmithing or metal-smithing whatever you want.

Lunch will be simple, Arni's Pizza. I have made arrangements for pizza and they will give us a 10% discount so if everyone can chip in around \$5.00 each we should have plenty of pizza. If you want pop, bring your own, if you want salad bring it too. Sorry no beer.

We will have an Iron-in-the-Hat drawing so bring items for the table. I think, if the weatherman is right we should have a good time.

The Illiana Antique Power Association has asked us to make life size outlines of Santa Claus, rain deer and bells or any other Christmas items. They want to tie Christmas lights around the edge of these critters and display them on the streets of the Illiana grounds during the "Christmas in the Village" show. They will help illuminate the grounds and add to the spirit of Christmas. They have a bundle of rebar that we can use for the outlines. So be thinking about how we can do this and if anyone wants to get a head start on the project I will get the rebar here for the meeting.

Also, for Illiana we have four steel wheels from a manure spreader to make an entry sign welcoming visitors to the show grounds. It would be located in the area of the windmill. I have a sketch of what could be done. My sketch is just a beginning so maybe some of us could improve on it.

We still have a lot of work to be done on the little

barn we recently acquired and moved to the show grounds. Volunteers are needed for some carpentry modifications to that little red barn. It will be used primarily to store machine shop tooling, yard tools, some coal, metal, etc.

Looking forward to a good time next Saturday.

Ted

### **Interesting Web Site**

David Edwards at Persimmon Forge: http://persimmonforge.blogspot.com

#### Last Chance:

## Rocky Forge Address Book

Rocky Forge putting together an address book of our members for our members. There is a web site for you to provide your contact information and it is at the following URL.

http://www.rockyforge.org/members.shtml

Please click on this link and give us your contact information. It takes less than 60 seconds.

#### Contacts

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Folded copper cross by Dominick Andrisani

# Using the Hydraulic Forging Press By David Edwards

Excerpted from his blog at Persimmon Forge (4/2/2011)



I'd say I'm still very much climbing the learning curve in testing and discovering it's potential and limitations. The first thing I would emphasize is, like most other aspects of blacksmithing and metalworking in general, there is inherent danger. This is a very powerful machine. I am happy with the closing and opening speed and my ability to control the pressing operation precisely. I suspect that happy result may be largely the result of good luck.

I have used the machine mostly for die making and pressing hot blanks into dies. The operation appears mechanically pretty safe as long as the work pieces are at a high forging heat but the die quickly sucks that heat away and the end of the ram travel will stop when the work piece temperature falls below forging heat so the ram direction should be reversed before that point.

Cold bending/straightening is done easily but, again, this is cold work and I do it very cautiously. Cutting stock to length cold has worked well but I have been conservative in what I will attempt. I don't plan to do this with stock more hefty than 1/4" x 1". In my experimenting I quickly learned that to sever stock the "scissor" edges should not be very sharp and should be designed so that the stock doesn't completely separate but a 1/32" bridge remains so it can be snapped off by hand rather than severing and shooting off somewhere.

I will not use the press for cutting or veining with handled tools. A single test with a squat S-7 treadle hammer chisel bent the blade as the tool was pressed through the work piece and the cutting saddle before I could stop it. There now. That's enough for me.

This was also a good illustration of the tradeoff between ram speed fast enough to avoid loss of forging heat and slow enough for fine control.

I built an "H" frame type but after some experience I can see there are times when the "C" frame design would be useful but, overall, for the work I do, the "H" is probably the more useful.

With practice I am able to decide which of my custom dies will work best with a power hammer and which with the hydraulic forging press.

There are lots of possibilities for making the top and bottom dies. I had two Little Giant flat dies so that is what I used. I fabricated sleeves, which fit over them and have set screws to lock them in place. They have faces, which are essentially disposable and protect the nice die faces. I have found this essential with cold work but advisable most of the time.

Probably my machine is overbuilt for what I need and I can see how I would change the design for "the next one" but that just won't happen any time soon. This dog will hunt and that's good enough.

#### **Reference:**

http://persimmonforge.blogspot.com/2011/04/usi ng-hydraulic-forging-press.html