

# ROCKY FORGE NEWS

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## NEXT MEETING:

January 11, 9:00 A.M. at Delta Welding in Attica, IN. Directions are as follows: Go to downtown Attica at the stoplight which is the corner of Perry St. and state highways 28 and 41. From that light go south until the next 4-way stop (about 1/2 mile). Turn right (west) on Sycamore St. Delta Welding is the first business on the left. Their phone is 765-762-9353. Rex and Holli Oteham are the owners of Delta Welding. He is assisted by his father Bob who has worked in the industry for many years. They have a large room with many different welding toys and a plasma cutter set up. We will be instructed on the use of these various machines and given a chance to try each one out. Factory representatives will be on hand to demonstrate and answer questions. There will also be demonstrations on equipment other than just the welding and cutting. I'm especially looking forward to making some pattern cutouts with a plasma cutter. They sell a lot of different welding supplies and steel for the blacksmiths. Rex even has 1/4 inch square stock, a hard item to find. Rex said he will offer a discount to us for 30 days on any equipment we may want to purchase. Also, he will contribute **1% of any sales** on the day of the meeting to our treasury. This will be an opportunity for us and a chance to make our treasury grow, hope you can all attend. The Illiana Steam and Power group is also invited, which if they spend money will also help our treasury. Lunch will be cold meat sandwiches and a pot of soup. Don't forget something for **iron-in-the-hat**. I'll bet Rex and the vendors will even toss something in for the drawing.

## THE WEIGHTS OF ANVILS

American made anvils like Haybuden, Peter Wright, Fisher, Arm & Hammer, Trenton and Vulcan were often stamped with their weight in pounds.

English anvils were stamped with the "hundred weight" (cwt) which is derived from the "stone" weight. The "stone" is 14 pounds, 8 stones is 112 pounds which is the hundred weight (cwt). When you see 3 numbers stamped on the base of an anvil from England it is probably the cwt. The first number represents 112#, the second number is 1/4 of 112 or 28# and the 3rd number is actual pounds or any value less than 28#. An example is 1 2 5, which is a total pound weight of  $112 + 56 + 5 = 173$  pounds. In reality the anvil could be 173# plus or minus 10%. There is a good discussion of anvil weights in Richard Postman's book "Anvils of America".

## FORGE REPAIR

If you have a cracked forge firepot or even a small piece missing, do not despair. Very often the bolt flanges holding the tuyere on the bottom of the firepot are broken. A simple repair is to wrap a wire around the tuyere three or four times. The bolts can be run through those wires and drawn down slightly. Before assembly add a bead of furnace cement. Once assembled add a layer of cement over the bolts and the wires to make a good seal. Should be as good as new. If you have a cast iron forge body that has a crack, that is okay. It means the casting is no longer under stress. A simple repair is drill holes on either side of the crack and using stove bolts add a piece of 1/8" to 1/4" thick strap. A layer of furnace cement will make it like new.

## **JUST HOW HEAVY AND CUMBERSOME WAS A SUIT OF ARMOR?**

You've probably seen movies in which a knight in armor was lifted by a wench onto his horse, so heavy was his protective covering. Or maybe you've seen the scene where Sir Somebody is knocked from his horse and can't get up without assistance.

"Poppycock," as we used to say in medieval England. Those suits of armor weighed no more than about 50 pounds and were flexible enough to permit Sir Laughalot to walk around. You wouldn't want to play squash in one, but they were not much more constricting than the armor worn by today's corporate warriors, the business suit. The armor was just a little heavier.

## **COLOR BLIND**

Can a color blind blacksmith tell when the metal is hot? Can they temper metal? This questions occurred to me so I tried to find and answer. There are some documented cases of color blind blacksmiths, but the information is limited. Some of you computer nerds (I mean experts) would probably have better luck than I did on that search.

## **ROCKY FORGE PRINTING**

Thanks to George Kerner, he has been doing the printing needed for this group. That has saved a lot of our treasury and made it a whole lot easier for me, since he only lives around the corner. I'm glad to have George in our group and hope that he can get the time to do blacksmithing. He and his wife, among other things, operate a large stable where numerous horses are boarded which keeps George very busy.

## **SAFETY NOTICE**

Now that we have been introduced to the gas forge through Hunter Spoon and Jim Keith, please remember when using gas or coal in the confines of your shop provide for adequate ventilation. There have been reported cases of carbon monoxide poisoning from forges. For your safety a carbon monoxide detector would be a good item to install.

## **NEWS ARTICLE AS APPEARED IN THE "FORGE FIRE" NEWSLETTER OF THE IBA**

### **ROCKY FORGE BLACKSMITH GUILD NEWS**

The Rocky Forge group met December 14th at **Ted Stout's**. The turnout was excellent with a total of 37 blacksmiths, 3 wives and 3 young smith's making a total of 43 in attendance. Our speaker and demonstrator for the day was **Hunter Spoon**, a metallurgist. He gave an informative and captivating discussion of the very things we as blacksmiths wanted to learn about metals. Hunter broke it down to basically five alloys the blacksmith would most likely use. Then he discussed normalizing, annealing, hardening and tempering. Hunter manufacturers a small gas forge that he used to demonstrate the different processes of heat treatment. In the afternoon, with Hunters help, some members tried their luck at heat-treating their own creations, mostly knives. We all thank Hunter for spending the day with us and were pleased that he has joined our group. We hope to see him at many of our future meetings. **Jim Keith**, a professional farrier, donated a new pair of tongs to Hunter for appreciation of his program.

Our thanks to **Carol Stout** for preparing a turkey, dressing, ham and ice tea for the noon meal. Also, we thank **Margie Michael** and **Star Deaton** for their help in preparation and serving the food. All the covered dishes that were carried in made such a spread it looked like "Ryan's Buffet". We thank these ladies for such a wonderful meal. A good noon meal makes for happy blacksmiths.

Our next meeting, January 11<sup>th</sup>, will be at Delta Welding located in Attica, IN. At that meeting we will learn about the various types of welding and cutting equipment. Manufacturers representatives will be on hand to answer questions and demonstrate the equipment. Other shop equipment will also be shown and demonstrated. Then we will have the opportunity to test drive whatever we desire. See you at Delta Welding.

## **SWAGE BLOCKS**

We are getting closer to ordering the swage blocks. As of now we have 10 to order. Please send me or give me your check at the January meeting , \$140, and I will make the order after the meeting.

## SOME NOTES FROM HUNTER SPOONS PRESENTATION

- A file will slide over metal at about 60 Rockwell Hardness (RC).
  - Mild steel is around 1025 to 1035.
  - Use H-13 for making splitters and H-1 for punches. The H-series can be hot worked, but do not quench, just air cool and they are hardened.
  - Drifts and knives are good made from spring steel which is usually 1085 or 1095.
  - Truck axles are usually around 4141 and make good hammers and swages.
  - Heat treatment
    - H-series, air hardened
    - W-series water quench
    - O-series oil quench
    - S-series air hardened
  - Hot or cold rolled steel is about 1018.
  - Pure iron is usually about 1008.
- If anyone wants to add to this information list I will be happy to publish it in the next newsletter. There was so much info that day I had trouble getting it all down on paper, let alone commit it to memory.
- I bought one of Hunter's little forges and am very happy with it. It's fun forging in the basement.

## COMING EVENTS

- February 1st** Rural Smiths meet at Conner Prairie  
(I can take guests if anyone is interested.)
- March 1st** Rural Smiths at Roy Westcotts in Greenfield (Doug Merkel is the demonstrator, he is an instructor at John Cambell Folk School in Brasstown, N.C., very good demonstrator).

## ROCKY FORGE FEBRUARY MEETING

Start planning now for the February 8th meeting at Nucor Steel. Dan Michael, our host for the day, is lining up a very interesting tour. Please call Dan or Ted for reservations so Dan can line up the tour guides.

Unfortunately, there are going to be some restrictions. No one under 16 will be allowed, anyone who cannot walk long distances (2 miles) or go up 200 steps cannot attend, anyone with a pacemaker cannot attend. We regret these restrictions, but it is just part of the tour.

Dan is working on lunch, which will probably be in the Nucor cafeteria.

## BLACKSMITHING ORGANIZATIONS

ABANA, IBA, RSMA, SOFA, Illiana Steam, Rocky Forge. Do all these names and acronyms confuse you? They can be confusing so let us separate them out and try to clarify their meaning.

**ABANA** stands for "Artist Blacksmiths Association of North America". This is the international organization started in 1973 as the result of a meeting in North Carolina between several noted blacksmiths. One of those was Alex Weygers, famous author and blacksmith. ABANA puts on a huge show every two years. The next show may be in eastern Kentucky. The "Anvils Ring" and "Hammers Blow" are two very fine magazines published by ABANA on a quarterly basis.

**IBA** stands for "Indiana Blacksmith Association" and is the Indiana chapter of ABANA. IBA meets on the 3rd Saturday of every month at various sites throughout Indiana. A monthly newsletter, "The Forge Fire" describes activities and gives a lot of ideas and sources of information. IBA is further divided into satellite groups, the "**Rocky Forge Blacksmith Guild**" is a satellite group of the IBA, that is us. We meet on the 2nd Saturday of every month.

"**Illiana Steam and Power Association**" is a group dedicated to preserving our rural heritage. This group has an annual event to showcase their interests. At that show you will find antique power equipment on display and in operation. You will also find blacksmiths demonstrating their trade. The group meets the 3rd Monday of every month at their Club House on Show Grounds near Rainsville, IN. It is at that site the Rocky Forge group plans to build a permanent blacksmith shop.

The Big Pine and Little Pine creeks run near the show grounds and it is on the Big Pine creek that a place called "Rocky Ford" was located. The name of our group was named after the Rocky Ford. It still exists on some Indiana maps and if you like to see where it is ask Dick Fontaine to direct you.

**RSMA** is the "Rural Smiths of Mid\_America" an organization that meets the first Saturday of the month at various places in Indiana. They published a very nice book of "how to do it" projects every quarter.