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Balcones Forge Dispatch

President's Corner

September 2012



Greetings!

Sad news! Longtime Balcones member and good friend Larry Stevens passed away on Tuesday, September 4th in Ventura, California.

Larry moved to California to spend his final months near his daughters and

to spend a few months visiting Dorothy Steigler and Jake. Dorothy said he was very passionate about Balcones Forge and often spoke of what a wonderful group it is. We feel the same way about Larry. A few years ago, Balcones helped send Larry to a CBA conference in California. Last year Larry donated a vast collection of books and a rather large sum of money to Balcones and said this was "payback" for time spent on him.

I believe Larry was the most "been there, done that" kind of guy I have ever known and after seeing him ride up to a forge meeting on his new, bright, shiny red Honda Goldwing in his mid-eighties, he must have been very close to the end of his bucket list. Larry finished his breakfast on Tuesday and "just went to sleep". We will miss him dearly.

September will take us back to Conservation Plaza in New Braunfels at the old Stahl Blacksmith shop. This shop was once located in downtown New Braunfuls near the "round about" in the center of town. Hollis Wooldridge took on the restoration project at the current site and has continued to demonstrate at many of the events in years past. The smithy, the restored houses and Forke's General Store will take you to the 1800's. Be sure to pull up Hollis' site and have a look.

www.comalforge.com

Don Tuff is our host and the trade item will be: A fork. See ya'll there!
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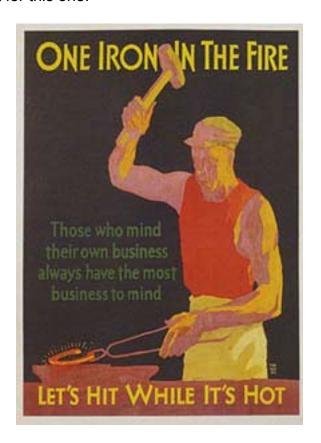
SEPTEMBER 2012 MEETING INFO

The meeting date is Saturday the 29th. Start time is 9:30 am.

Tom Leining will be doing a short demo on wood. Types of wood, finishing, dangers......
If you have any wood & steel projects or some unusual or exotic wood, please bring them for show-n-tell.

We will have a few kind words an anvil ringing for Larry Stevens. Dorothy Steigler asked for some kind of recording of this event weather it be a sound bite or a video. Jerry A. will bring his tripod and camera if he can find them or we can probably do it with a nice I-phone.

The trade item is a fork. Lets have a good turn out for this one!



EDITOR'S SOAPBOX

Have you noticed that we still do not have a Secretary for our group? Well guess what, election time is just around the corner.

ELECTIONS for the Board of Directors will be coming up in OCTOBER. I ask that all our members seriously consider what they want to see out of the group. Do you want any change or do you like what you see? Do you expect things to keep going all by itself?

If more folks come forward to do just a little bit, then it all gets done so much better. Send an article. Send a picture. Send an idea. PARTCIPATE.

By the way, the bulk of the Secretary gig is going to meetings and writing up an article for the newsletter. Sounds like fun.........

LIKE US

Just a note to let everyone know that someone, I am sure it is Rudy, has set up a Facebook account.

In an effort to help keep everyone informed, there are several of us that post on it regularly. If you have a Facebook account, go to Balcones Forge and "Like" it. This way you will get all of the information that is posted. If you don't have a Facebook account, they are easy to set up.

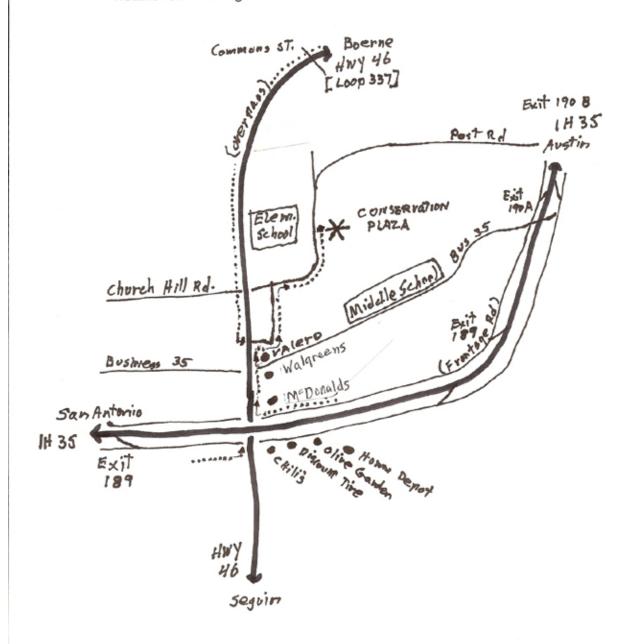
Our next "Judged Trade Item" is a Goffering Iron. This is for our November meeting.

Jerry Whitley, Vice President

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CONSERVATION PLAZA, NEW BRAUNFELS

Watch carefully for the abrupt right turn on the side of the Sac-N-Pac/Valero station (Business 35 & Hwy 46 (Lp337)). You must be in the far right lane in front of Valero to make the turn. Proceed to the stop sign at Church Hill Rd. Turn right, go around the corner and then enter the Conservation Plaza on the right at the two stone pillars. For inclement weather our meeting will be indoors at the Plaza's Forke Store.



Rust Removal

I have tried this process and it is well worth the effort to set it up. I cleaned a number of old tools this way and they came out much nicer that using acid or wire brushing. The best part is that this is a passive process, set it up, turn it on and check it every day or two. It does not perform magic but pretty close. I gleaned the info from the internet. **Jonathan Nedbor**

Electrolysis – Rust Removal

Equipment

A large non-conductive container tub, plastic is recommended.

A battery charger - 12V DC power.

Sacrificial steel electrodes: the electrode should be large, if possible, larger than the object being cleaned. Set up will be: Sacrificial Electrodes to POSITIVE (red) terminal, OBJECT to be cleaned to NEGATIVE (black).

Sodium Carbonate, sold as Arm & Hammer Laundry Soda, washing soda, DuPont Pool Care pH Increaser or similar product (100% sodium carbonate). Pretty cheap.

Steel wire or chains to suspend the part in the solution: **<u>DO NOT USE: copper, stainless or other dissimilar metals in the bath.</u>**

Hard to reach areas: suspend an electrode in a cavity of an object; use a sponge or rags soaked in the electrolyte with an electrode to clean spots on large objects or things that shouldn't be submerged (wood handles, etc.).

The Process

Use a large enough tub to hold the piece, plus some room to spare for the electrodes - they must not touch.

Fill the container with water and add 1/3 to 1/2 cup sodium carbonate (washing soda) per every 5 gallons of water. Mix thoroughly.

Position the sacrificial electrodes around the edge of the container and clamp them in place, allow at least 4" of electrode above the water to connect to (above the sludge and bubbles that will form). There is essentially a "line of sight" flow of the current between the part and the electrodes.

Wire all of the electrodes together. Make sure all connections are on clean metal and sufficiently tight to work.

Suspend the piece in the solution using the wire/chains. It should not touch the bottom or the electrodes.

Attach the battery charger **NEGATIVE** (black) lead to the work and the **POSITIVE** (red) lead to the electrodes - the positive electrodes are sacrificial and will erode over time.

Double check everything - plug in charger, turn it on.

Within seconds you should see a large volume of tiny bubbles in the solution - bubbles of oxygen and hydrogen. The rust and gunk form a nasty sludge and bubble layer at the top. More sludge will form on the

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electrodes - they will need to be cleaned and/or replaced over time.

The process is self-limiting - no more rust, the reaction stops. This is handy because you don't have to monitor it. Large parts, which cannot be totally submerged, do half at a time. There should be no "line" from the bath surface when fully cleaned.

The part should immediately be cleaned and painted – the new clean surface is very susceptible to rust. There will be a fine layer of black oxide on the part, easy to remove with a scotchbrite pad or wire brush.

Safety Precautions

This is serious stuff, so stay safe. It's not rocket science, so if you're new to this, be careful - follow these precautions.

This process produces highly flammable, explosive hydrogen gas, do it outside or in a well ventilated area. Hydrogen is lighter than air, it will collect near the ceiling - *not* sink to the floor.

No open flames or sparks near this.

The wastewater resulting from this process is iron-rich - it's perfectly safe to pour onto the grass. Your lawn will love it (beware some ornamental shrubs don't like iron and the rusty sludge residue).

Make sure the battery charger stays dry. Follow the usual precautions when using an electrical device in a wet environment.

The solution is electrically "live". Avoid shocks by turning off the power before making adjustments or sticking your hands into the solution.

The solution is fairly alkaline and will irritate your skin and eyes. Use gloves and eye protection. Immediately wash off any part of your body the solution comes into contact with plenty of fresh water.

Do not use stainless steel for the electrodes. The results are **toxic** and illegal to dump out.

Don't use copper for the electrodes - the results are messy.

Wear the rubber gloves while working with the electrolyte.

Use plastic clamps to hold things in place.

Clean electrodes when covered with sludge.

Electrolysis will also strip paint, body filler etc., but not grease.

Make your own washing soda: spread baking soda onto a cookie sheet and bake in an oven at just over 300° degrees for an hour. This releases water and CO2 converting it to washing soda.

At temperatures above 300° Fahrenheit baking soda breaks down into sodium carbonate, water, and carbon dioxide.

 $2NaHCO_3 -> Na_2Co_3 + H_2O + CO_2$

This article and the one following are courtesy of the Northeast Blacksmiths Association

Monkey Wrench Collar Tool

By Carl Davison

Wooden handled monkey wrenches, given a second handle in some fashion or other, have long been used by blacksmiths for twisting wrenches. The jaws are also sometimes rounded to be used as an adjustable bending fork. Below is another use for this old, too often cast away antique marvel.





Open the jaws to the thickness of what you plan to collar plus 2 times the thickness of the collar material.

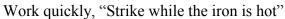


With the registration stop set so your collar material is centered over the jaw opening, put the heated collar stock in place.



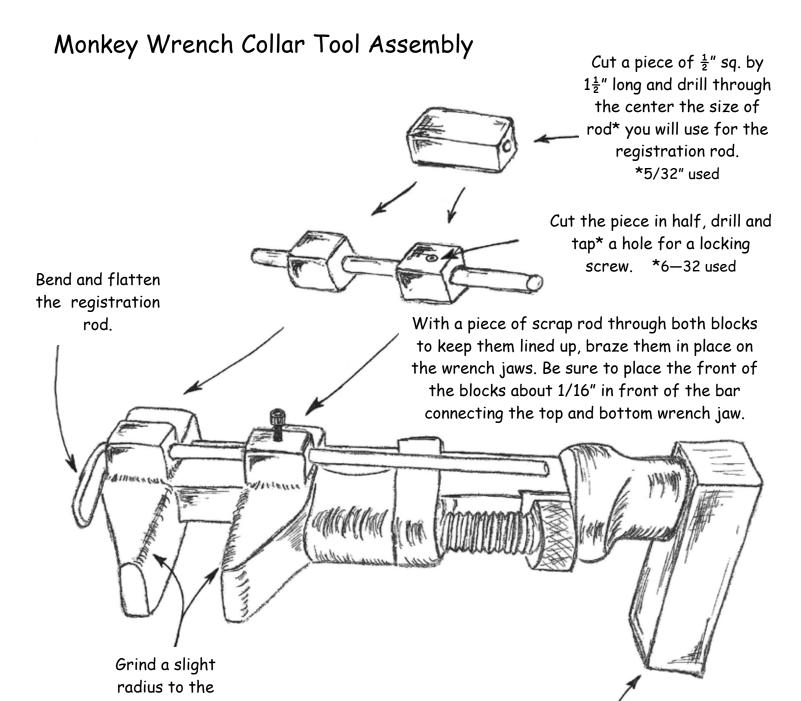
The squared punch must be the same width as your pieces to be collared.













top of each jaw.

Shaft type handle wrench with wood removed

Some wrenches have a shaft that runs through the wooden handle. Unscrew or cut the bottom lock nut from the handle removing the wood to expose the shaft. To attach the hardy stock drill a hole through the top of the stock the size of the wrench shaft. Cut the wrench handle shaft leaving enough protruding through the hole in the hardy stem to be peened over like a rivet.

For wrenches that have a knife handle remove the wood from the handle. Weld the hardy stem onto the wrench and cut off the excess handle metal.

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Dating Antique Items Made by Blacksmiths

by Gary Scasbrick

Close dating of blacksmith made items, especially some hand tools is impossible without makers marks or documentation. Some styles of tools have been made the same for 200 years. Some styles or types came into use and went out of use in certain periods. Here are some clues to come up the approximate date of some hand forge items.

- 1.) Dome Head factory made rivets were common after 1845. Items with factory rivets should date later than 1845.
 - 2.) Tools from England were Stamped "Made in England" after 1891
 - 3.) Tools stamped with "Cast Steel" were made after 1760
 - 4.) Pritchel Holes in anvils appeared about 1830 in English Anvils.
 - 5.) Earliest Factory made hatchet approx. 1845
 - 6.) Double bit axes first became popular abound 1850
- 7.) On any edged tool, steel bit forge welded to iron body, look for a line where the steel was forge welded to the iron body. These steel bits were generally added after approx 1744 and guit approx. 1870
 - 8.) Pre Civil War handles for axes were straight not curved.
- 9.) No Poll on Axes in the 1600's, First hint of a poll about 1715, Fully developed polls by 1750, Round polls continued to be made until about 1800 and square polls are still made.
- 10.) Threads on bolts were hand filed and rounded before 1830 where sharp and crisp later. (I have English threads lathe cut and rounded, American a sharp V thread after 1830 Dave.)
- 11.) First practical steel production furnace in America was 1730. Edged tools were scarce before this time.
- 12.) 1840 First adze eye hammer (long or deep eye) same as on modern hammers
- 13.) Nail pulling slots in bottom edge of blade in shingling hatchets became popular in early 1800's.
- 14.) 1815 First cut nails with a square head were made by a machine, these had flat sides a had forge nail had four tapered sides.

HOW DISAGREEMNTS ESCALATE

This is the actual radio conversation of a US naval ship with Canadian authorities off the coast of Newfoundland in October 1995. Radio conversation released by the chief of naval operations, 10-10-95.

CANADIANS: Please divert your course 15 degrees to the south to avoid a collision.

AMERICANS: Recommend you divert your course 15 degrees to the north to avoid a collision.

CANADIANS: Negative. You will have to divert your course 15 degrees to the south to avoid a collision.

AMERICANS: This is the captain of a US Navy ship. I say again, divert YOUR course.

CANADIANS: No, I say again, you divert YOUR course.

AMERICANS: This is the Aircraft Carrier US LINCOLN, the second largest ship in the United States Atlantic Fleet. We are accompanied with three Destroyers, three Cruisers and numerous support vessels. I DEMAND that you change your course 15 degrees north. I say again, that's one-five degrees north, or counter-measures will be undertaken to ensure the safety of this ship.

CANADIANS: This is a lighthouse. Your call.

W W W . B A L C O N E S F O R G E . ORG



Balcones Forge Meeting October 27, 2012 9:00am until ?????



Rustyk Forge Jerry & Marsha Whitley's 295 CR 663 Devine, Texas 78016

We are looking forward to serving a Barbeque Brisket Dinner with all of the trimmings. Iced Tea and Water will be provided.

If we need any vegetarian plates, please let me know we would be happy to accommodate.

Our Trade Item and Demonstration is a "Bottle Opener"

We are working on a Special Demonstrator!
Word is, he will be forging
a hammer.

Bring items for "Iron In The Hat" to help cover dinner expenses!

WE HAVE 3 FORGES BUT WILL NEED ANVILS

All are welcome to stick around after the meeting.

Dave is taking charge of the music.

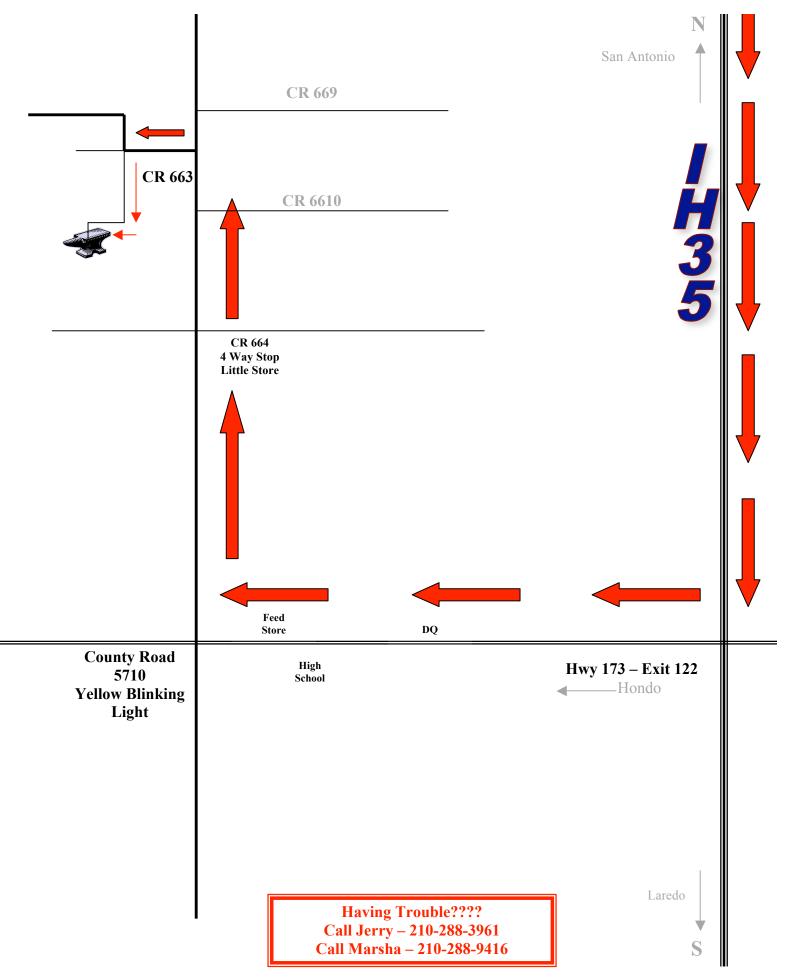
We can fire up the pit and scrounge up something to put on it. If you prefer something other than Jack Rabbit, bring it and we will throw it on there too.

Bring you lawn chairs and adult beverages and stick around and we will give the Bottle Openers a work out.

Our sticker crop has been exceptional this year. You may want to consider sticker friendly footwear.

Please RSVP to jerry.whitley@ymail.com. It would be nice to know who and how many.

W W W . B A L C O N E S F O R G E . ORG



Here is a good photo of an easy way to build a set of ADJUSTABLE turning forks.

