



Balcones Forge Dispatch

President's Corner

October 2011



Greetings!

As of today (10/08), things are a little wetter and a little cooler, but the burn bans are still in effect. Not a good time for an open fire. Many areas have even banned barbeque fires. Vince can attest. He's lucky to have his home and property in tact after

narrowly escaping the Bastrop fires. Please be careful.

If you haven't heard by now, Larry Crawford is selling everything in his shop in Marble Falls and moving to California. Larry has amassed quite a collection of tools, many are excellent shop made. Almost all will be sold at auction on October 29th at his shop.

The sale at Larry's shop will be the October meeting. It's a chance to get a great deal on tools and machinery and to help out a fellow Balcones Forge member. Larry has been with us from the beginning days of TABA, hosted many meetings and demos, and once he even made horseshoes from bar stock and hot shoed a horse in well under an hour. Quite a show!

Larry will need some help on Friday before the auction to help with moving things around in the shop, and tagging the lots. Be sure to show up if you can and help out. Let's also get the word out to as many folks as possible and be ready to drop a little cash for a good cause.

The September meeting was a big hit and thank you Jim Schmidt for hosting and demonstrating. And thanks to Tom Leining for bringing your shop made jigs and showing us how to use them (after I called him late Friday night and asked for help).

continued on page 2

Meeting date is October 29



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President's Corner continued

Elections!! We will have a rather short meeting before the auction on Saturday. If we accomplish nothing else, we need to elect new board members. This is very important so give it some thought beforehand and have your nominations ready.

Hope to see you all in Marble Falls (bring a bag chair, seating will be limited)

Jerry Achterberg

Balcones Forge President

WORK DAY FRI OCT 28

If you can help with the workday before the meeting please let Larry Crawford know you are coming. His number is 830-613-7404.

NEW E-MAIL ADDRESS

Here are a couple of new e-mail addresses of members.

Jim Elliot: oldjimelliott@gmail.com

Ruth Carter: rmc.scranch@gmail.com

Please keep your contact info up to date so you will never miss out on Balcones Forge news and information!

NOVEMBER MEETING INFO

Gary Hilton will host the November meeting at his place in Hunt, Tx on the 19th. Details in the next newsletter.

DECEMBER MEETING INFO

The December meeting will take place at Vince Herod's Spotted Dog Forge just east of Bastrop. The date is December 17.

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LEG VISE

Balcones Forge is on the look out for a leg vise to donate to the Waldorf School. Does anyone out there have an extra that could go to a good cause?

Please let one of the officers know if you do.

MARK YOUR CALENDARS!

The Bluebonnet Demo for 2012 will feature Elizabeth Brim. Check out the ABANA website for a gallery entry showing off her award winning talent. Once the date is set, you all will be the first to know.

TRADE ITEM

No trade item at the October meeting. Keep working on your knife for November!

PICTURES FROM THE SEPTEMBER MEETING

This issue is so full of news that pictures from the September meeting will have to wait til next month.

ELECTIONS THIS MONTH

This group is all volunteer so it is up to YOU to make it what you want.

Show up and vote!!!!!!

Blacksmith Shop Auction

Marble Falls, Texas - Oct. 29, 2011

Hammerfest Forge - Larry Crawford, Owner

Larry Crawford has been a renowned blacksmith for many years. He started as a farrier in 1974, and has operated Hammerfest Forge for 16 years. Larry has built a great business and a matching shop with a huge inventory of excellent equipment. Now he would like to retire and have some different fun. This is a great opportunity for you to acquire some of those hard-to-find blacksmith tools and equipment. Everything is top quality and well maintained -- **all must go!**

Partial list of items for sale:

Side Draft Coal/Coke Forge with Champion Blower
Large 4-Burner Propane Forge
Inline Treadle Hammer
Tong Rack with Tongs and Assorted Tools
Sayha Pneumatic Hammer - 110 lb Ram with Extra Dies
Tooling for Power Hammer with assorted Dies and Fixtures
Edwards Fly Press with Tooling
5 HP Air Compressor
Startrite Wet Cut Cold Saw (Mitters both ways)
Roller Conveyor for Cold Saw -- handles 20' lengths
Combination Mill/Drill Press - 2hp motor
Smithy Brand Lathe/Mill Combo with Table & Tooling
Lincoln Idealarc SP200 MIG Welder
Hobart Tigwave 250 AC/DC Welder -- Stick and TIG
70 Ton Hydraulic Press
Vertical Metal Cutting Band Saw -- 3/4" blade
Metal Finishing Tumbler -- a real timesaver
3'x8' Platen Tables - 2 each - 4,000 lbs each
125 lb Trenton Anvil
175 lb Heybudden Anvil
Gantry Hoist - 1100 lb capacity, 8' Lift



and much, much more! Something for everybody!

Hammerfest Forge

2401 Commerce Street
Marble Falls, TX 78654-3916
(830) 693-1391

Registration & Preview - 8:00 AM
Auction - 9:30
Lunch - 12:00-1:00
Auction - 1:00-3:00

Lunch and Refreshments provided on-site

Cash, Cashier's Check, VISA, Mastercard, American Express accepted

Payment in full time of sale -- Removal day of sale or by arrangement

Auction sponsored by Balcones Forge - Central Texas Blacksmiths * www.Balcones Forge.org

Plan now to attend this outstanding event!

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

Larry Crawford Closes Hammerfest Forge!

Balcones Blacksmiths to Auction Entire Shop!

Long-time Texas blacksmith, Larry Crawford, has decided to finally close Hammerfest Forge in Marble Falls and head west to California. A founding member of the original Texas Artist Blacksmiths Association, Larry helped build blacksmithing in Texas into what it is today.

Known as an exacting teacher and craftsman, Larry worked mightily to keep alive the high standards of traditional fine craftsmanship in ironwork. His professional work over the decades is enduring evidence of this dedication. The gates, railings, racks, grates, doors, and hardware that came out of Hammerfest Forge over the years were built solidly and well with an eye toward both artistry and function and professional architects and high-end builders in Central Texas came to rely on consistent, excellent ironwork from Larry and his crews.

At the same time, Larry has always done what he could to pass on the skills of blacksmithing to others, through formal teaching, apprenticeships, and long term involvement in the Artist Blacksmiths Association of North America and it's affiliate, the Texas Artist Blacksmiths Association (TABA) and its successor, Balcones Forge. We wish him well on his future adventures in California and hope to see him from time to time on a visit back to Texas.

Balcones Forge has volunteered to handle the auction of Larry's equipment at our regular meeting on Saturday, October 29. Many Texas blacksmiths are already very familiar with the shop and Larry's extensive inventory of professional equipment from years of blacksmith meetings and major demonstrations held there.

The meeting will begin with registration and a preview of the equipment from 8:00 until the actual auction starts at 9:30. Barbeque lunch will be provided from noon until 1:00 when the auction will resume. The auction is planned to move quickly and is expected to be finished by 3:00pm.

This auction will feature all the equipment of a large, professional blacksmith shop. The fine-drawing side draft coal forge used at major demos by Robb Gunter, Dorothy Stiegler, and George Dixon will be sold, along with it's Champion blower. An in-line (vertical) treadle hammer

(Clay Spencer style) will be auctioned. Large gas forges (Johnson trench forge) and large and small Hay-Budden and Trenton anvils are included.

For the power hammer enthusiast, Larry's 110 pound ram Sayha self-contained pneumatic power hammer will be sold, along with its entire complement of tooling and extra dies.

Two four thousand pound platen tables, with clamps and platen bases will be auctioned individually. These industrial-duty welding surfaces are 3' in width and 8' in length.

Extensive welding equipment will include a Mig machine (Lincoln Idealarc SP200), and a Tig welder (Hobart Tigwave 250 AC/DC –Tig and stick).

For sculptors, bladesmiths, and blacksmiths with a lust for big power, there will be a 70 ton hydraulic press, with tooling. To move the big iron in and out, we will also auction a 1100 lb. capacity lift gantry hoist!

An Edwards flypress will be sold, along with its tooling and stand. A five horsepower horizontal air compressor and a metal finishing tumbler will be sold.

Saws include a vertical band saw, and Startrite cold saw with roller conveyer.

A Smithy Lathe/Mill with table and tooling and a separate 2 hp Mill/ Drill Press will interest the machining minded.

Finally, Larry's giant tong rack will be sold, along with tongs and assorted tooling.

Come to this auction and buy yourself a piece of true Texas blacksmithing history! This is a terrific opportunity to help a fellow blacksmith and at the same time upgrade your equipment or grab that tool you always wanted!

See you at the auction, October 29th in beautiful Marble Falls!

*Submitted by:
John Crouchet*

A Blacksmith's Folder

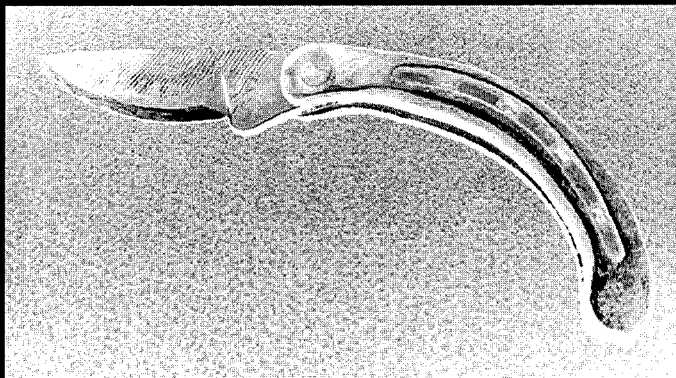
By Bill Clemens

Blacksmith's Guild of Central Maryland

When I first saw the instructions for the "Doug Newell Knife" reprinted in the New England Blacksmith's newsletter it sparked the idea to make a folding knife with a horseshoe handle. I had been looking for something to make out of the horseshoes my nephew's father-in-law had given me when I visited with them in Missouri on the way back from the ABANA Conference in Seattle in 2006. I had a cable damascus knife with me and he also gave me some old cable he had. I promised that I would make him something in return for his generosity. I knew when he gave me the cable that he was hoping for a cable damascus knife, and I wanted to incorporate one of the horseshoes he had given to me. So a folder with a cable damascus blade and a horseshoe handle would be just perfect.

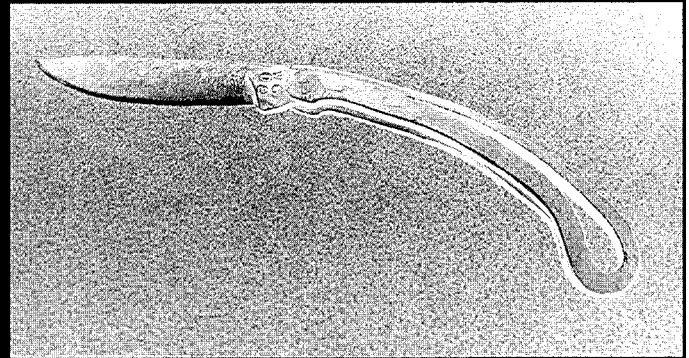
First I folded the horseshoe in half, leaving a gap for the blade. I then forged a spring that I inserted into the back edge of the folded horseshoe, forge welding it in place at the folded end. All seemed to be going well, but rather than go straight to a cable damascus blade, I decided to make the first one with a blade forged from an old file.

As I fitted the blade to the handle using a bolt in place of the rivet, all seemed well. With the blade finished and hardened, I riveted it into the handle only to discover that when open, the blade was not held in place but flopped up and down, the tip moving almost 1/2 inch. After reviewing the article and doing some additional research on the Internet, I understood the reasons for the floppy blade. Unfortunately, I had used a rather large rivet and couldn't file the back of the knife blade to correct the problem. After some careful thought, I fixed the blade in an open position by hammering the rivet tight and closing the edges of the handle that protruded below the blade. I call this knife a "fixed position folder prototype."



Using the lessons I learned from this attempt, I made a folder that was more like the one in the article with the handle formed by splitting a piece of steel, then drawing the end out and fold-

ing it back to form the spring. Here is a picture of that knife, which I currently carry as my pocket knife.



The one significant difference between this knife and the one as originally published in the Vancouver Island Blacksmiths Association newsletter is the curve of the handle. I curved the handle to match that curve of a folded horseshoe just to make sure that the curve didn't cause any unforeseen problems.

Here's a picture of the knife in the closed position:



What follows are instructions for forging a folding knife similar to the one above, but with a straight handle. Following that are instructions for forging a folded horseshoe handle with an inserted and forge-welded back spring.

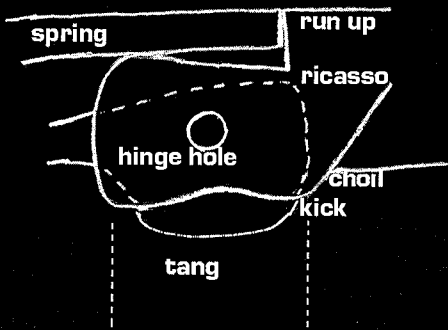
Here is a drawing of the simple slip joint folder with a forged one-piece handle.



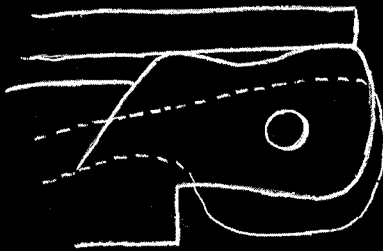


Here's the knife shown in the folded position. Note that the blade does not rest against the back spring but is held off by a bump, called a kick, on the bottom edge of the tang.

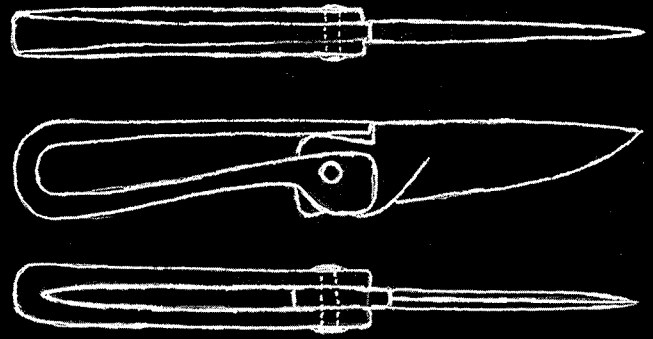
Before proceeding further, let me show some terms associated with knives in general and some specific to folders. In the following drawing, which is an expanded version of the area where the blade and handle are joined from the first drawing, you can see the terms that apply to specific parts of this joint.



The key to making a folder that works is this joint. In the open position shown above, note that the spring touches the blade in two places; the square end of the spring is seated tightly against the run-up, and the top back end of the tang is resting against the spring. Note that the spring does not touch the tang anywhere else. The pressure of the spring pushing down on the back edge of the tang holds the run-up tightly against the end of the spring, keeping the blade open.



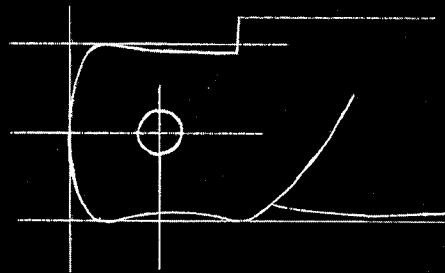
In the closed position shown above, the spring also touches the blade in two places, the bottom back of the tang and the kick. Pressure is applied to the blade on the back edge of the tang, forcing the blade closed until the kick comes to rest against the spring. The kick keeps the blade from touching the back spring.



Here, along with the side view drawing of the folder, are top and bottom view to assist you in forging the handle.

Forge the handle in the shape shown and in the correct size for the blade you are making. The original article says that you can use mild steel for the handle/spring, but I used spring steel for the horseshoe folder and made both the handle and blade of the other folder out of a round file. While I hardened and tempered the blade, I left the handle/spring in the as-forged state. I did heat it one last time when I finished forging it and laid it aside to normalize it to relieve any stress introduced in forging.

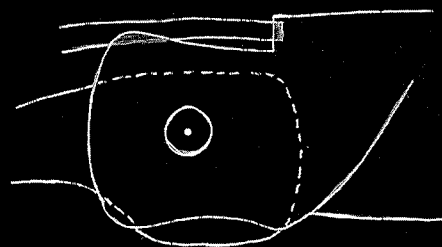
I forged the blade first and made the handle to match, but I had made a drawing first— which I would recommend so you can see the relationship and relative size of the two parts. In the case of the horseshoe handle knife, the handle was made first, as the blade is dependent on the size of the shoe that I used.



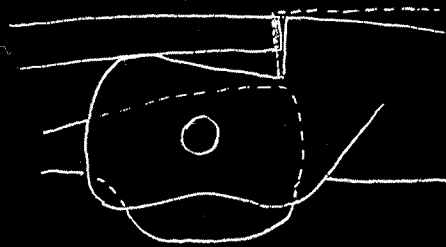
One important note— in the drawings, the depth of the run-up has been exaggerated to emphasize the importance of the tang only touching the back spring at the end of the tang.

Similarly, the dip between the bottom back of the tang and the kick has also been exaggerated. The important point is that the points of contact must be the only points of contact for the joint to work properly.

Once you have both pieces forged, you are ready to begin the final fitting and assembly.

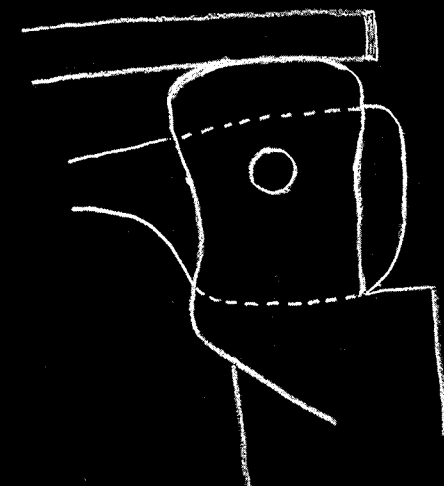


The position of the hinge hole in the tang of the blade is important and should be drilled first. The hole should be centered on the three

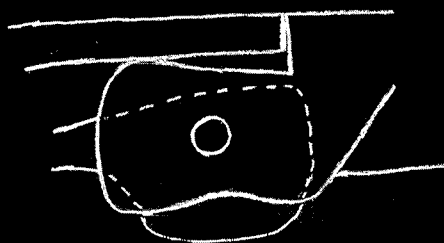


points shown here. This will ensure proper operation of the knife and equal pressure from the spring to hold the knife open and closed and also in the half-open position.

To drill the hole in the handle lay the blade on top of the handle. This is so you can position the blade with the spring a little



longer than it needs to be to allow adjustment for a perfect fit when assembled. Also position the tang, overlapping the spring slightly to insure that when assembled, the spring will apply pressure to the tang. Use a spacer the same thickness as the tang between the two halves of the handle and drill the hinge hole.

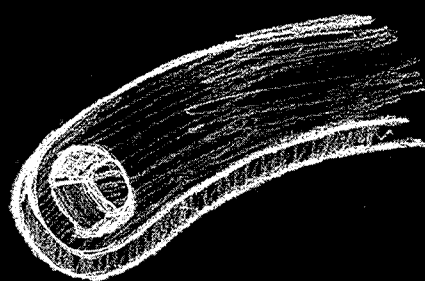


Assemble the knife using a bolt through the hinge hole. Since the spring is too long, the knife will not completely open

as shown here. You should also check the blade in the closed and half-open positions. You can adjust the length of the spring, but don't adjust it completely until you rivet the part together.

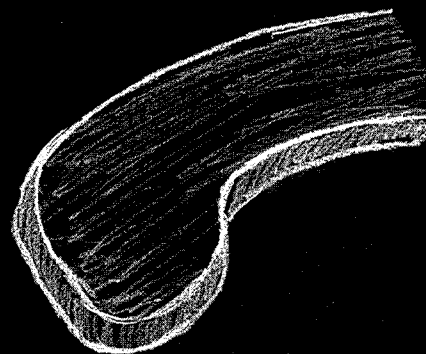
Once you're satisfied with the fit, replace the bolt with a rivet. Use a paper spacer when riveting them together. I use a piece of 110 lb. card stock. After the knife is riveted, burn the paper out with a propane torch, being careful not to overheat the blade and making sure the blade moves freely. Make the final adjustment to the spring. You can file the spring by putting the blade in the half-open position.

Work slowly, checking the fit frequently until the blade opens completely and is held there by the spring pressure on the end of the tang.

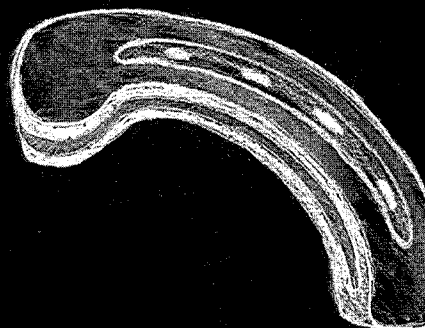


To make the horseshoe handle folder, I started with a shoe with heel caulks:

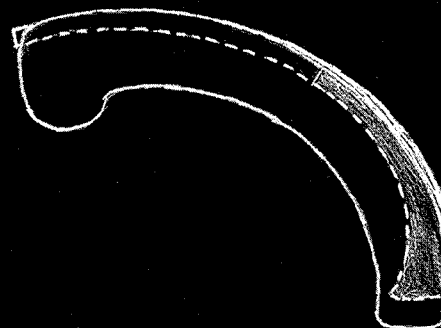
The heel caulks provide the necessary material to forge the hinge ends of the handle.



You probably could use a shoe without heel caulks by bending and upsetting the ends of the shoe to form this area.



Next, fold the shoe in half, lining up the heel ends and using a spacer the thickness of the blade you'll be making.

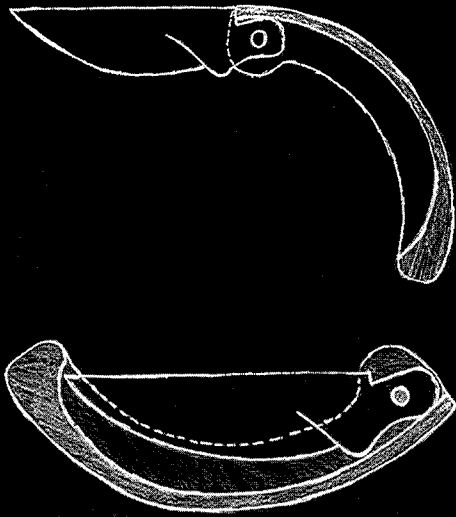


Now forge a spring to fit into the back of the handle as shown. The shaded area is the portion that will be forge-welded and should protrude slightly above the back edge of the handle to allow for finishing this weld.

Once the handle is welded, forge a blade to fit the handle as shown here. I actually drew and cut out a card stock paper blade to check the fit in both the open and closed positions.

The shape of the handle must be taken in to account when designing the blade so that it will fit into the slot in the handle and protect the edge of the blade when closed.

ADVANCED BLACKSMITH



Final fitting and assembly should proceed as for the basic folder above. The final adjustment of the spring length will take a bit more patience and care, as the spring is seated between the sides of the handle.

Thanks to Doug Newell, Don Startin and the newsletter of the Vancouver Island Blacksmiths Association for the original instructions on which this article is based, and to the New England Blacksmiths for reprinting the article.

This article is typical of the fantastic information you will find in the ABANA publications. If you are not a member, you should be!



Folding knife by Jerry Achterberg

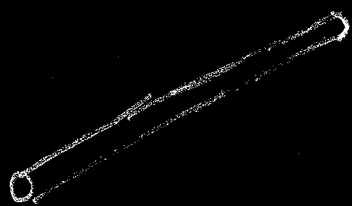
DRIVE HOOK BY BILL EPPS

- #1. Start with a piece of ¼" round stock approximately 6" long.
- #2. Draw one end down to a sharp point about 1-1/2" long. Remember to draw down to a square taper by rotating back and forth 90 degrees, then round the taper.
- #3. One the far edge of the anvil, bend down at the end of the taper.
- #4. Lay tapered section back on to un-tapered stock.
- #5. Line up taper and round section. Form head by bending over the far edge of the anvil at the point shown in the drawing.
- #6. Finish forming the head. Be sure the taper is now 90 degrees from the shank. Quench when done.
- #7. Draw out opposite end to a smooth taper.
- #8. Lay over point of taper on far edge of anvil. Use portion of edge that is rounded to get a smooth bend.
- #9. Finish curl on end of the taper.
- #10. Form the hook by bending over the horn of the anvil. Make certain the whole piece is lined up straight and then quench.

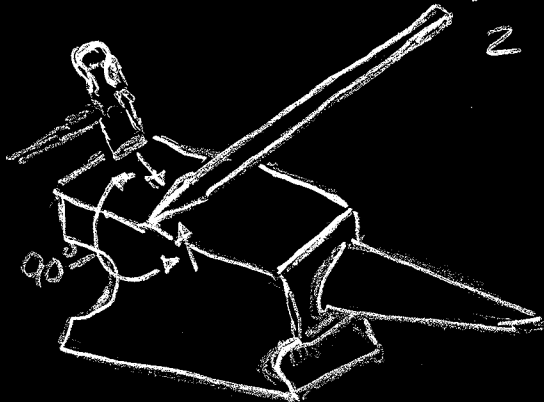
Now you have a hook that has it's own nail head that can be nailed into a wall, post & etc. without being bent out of shape.



#1



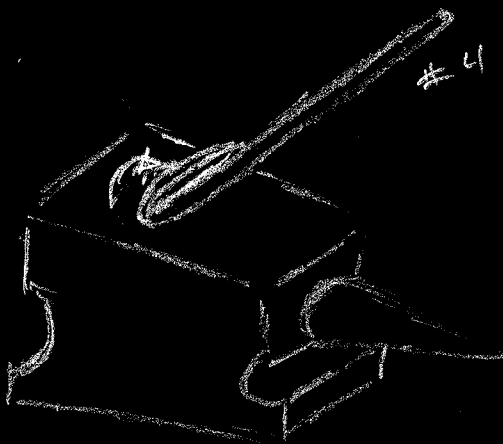
#2



#3



#4



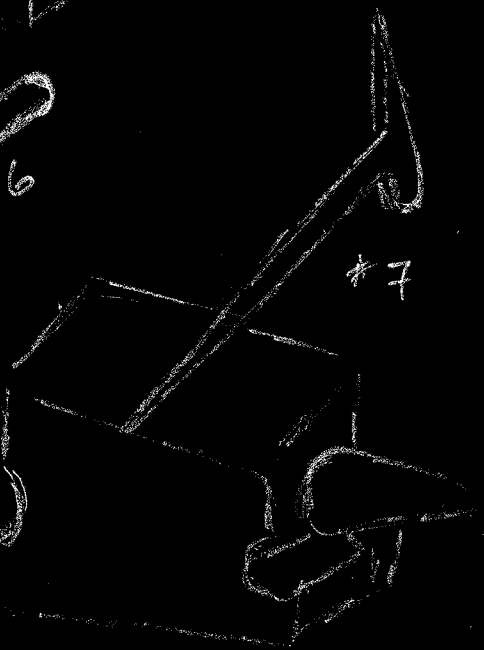
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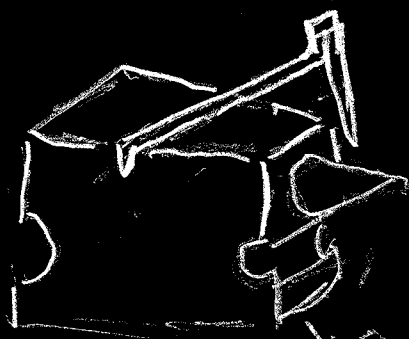
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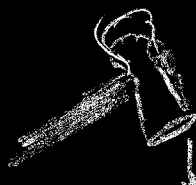
#7



#8



#10

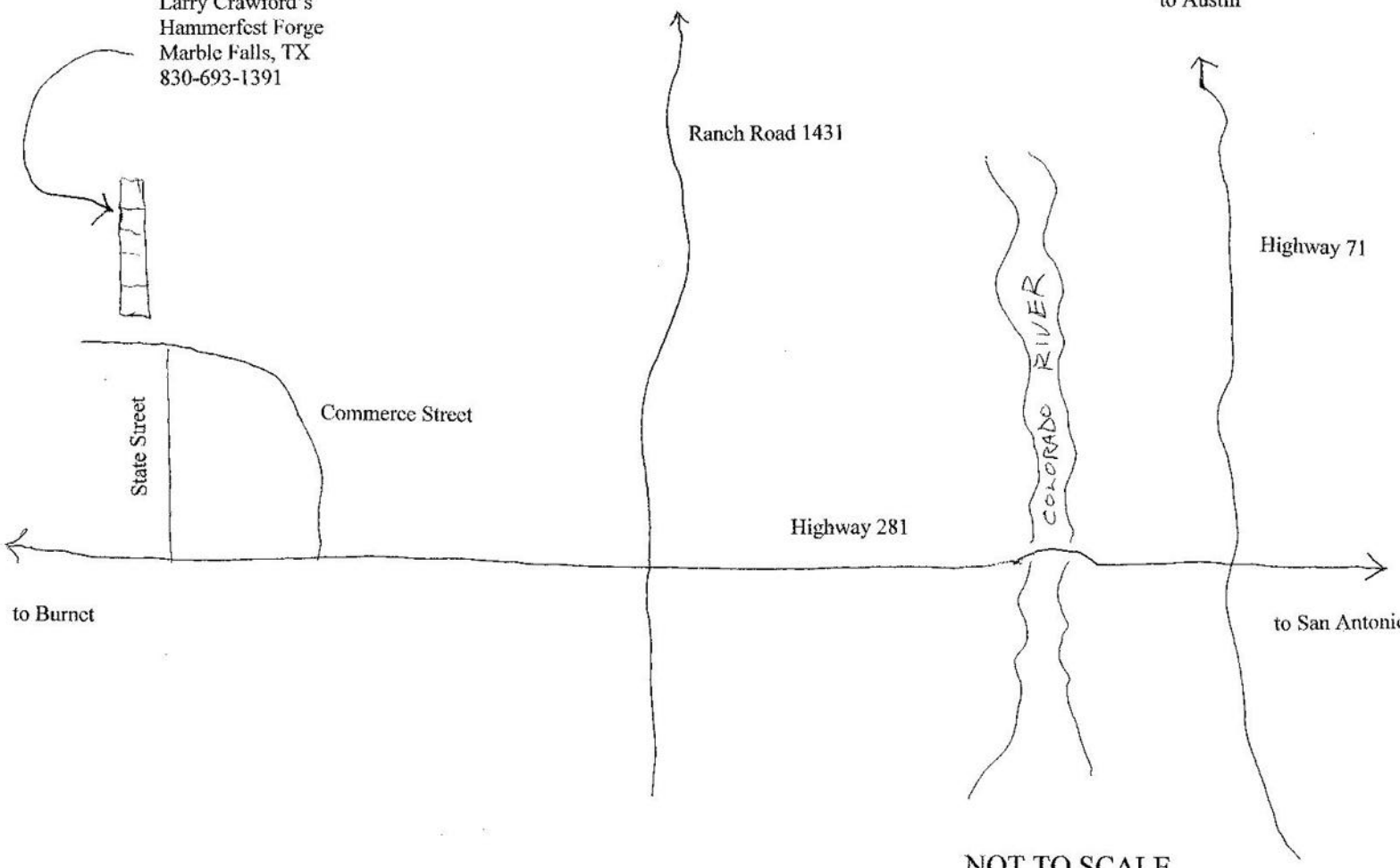


#9



Complete

Larry Crawford's
Hammerfest Forge
Marble Falls, TX
830-693-1391



Return Service Requested