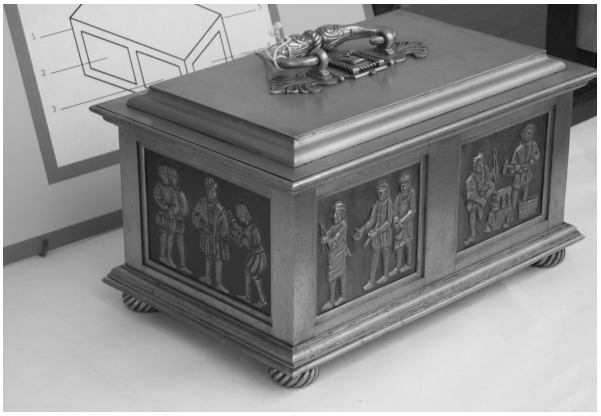
Dragon Firedog by Willem Yonkers

structed a grill in the shape of an anvil with the letters ABANA on the top side and Kentucky 2004 on the bottom. They continued on this grill Thursday night and Friday morning.

Grill By Czech Smiths
Photo from Roger Degner, UMBA

On Thursday afternoon Albert Paley presented a slide show of pictures of historical ironwork. These were slides he has taken while traveling, mostly in Europe, over the years. He had arranged the slides in what might be chronological order and they were very good quality. I found the slide show very informative.



Chest with Repousse panels

The "Patient Order of Meticulous Metalsmiths" were composed of Tina Chisena, Carl Close, Tom Latane, Michael McCarthy and Paul Spaulding. They were led by Peter Renzetti. This group of smiths completed a chest with repousse panels. The site was a continuous bustle of activity the whole length of the conference.

Peter Ross was at the teaching station Thursday. I watched part of his talk and demonstration on layout, hammer control and how to check the accuracy of your work.

Peter Ross
Photo by David Macauley

Doug Wilson started his demonstration with a discussion

on design. He had the spectators divide into groups for free form drawing. They then selected small sections of the drawings and made the pieces out of clay. I wasn't there for most of this at this point, but then he asked for volunteers to help come up and try to forge the elements that were in the clay designs. During this part I joined in with a smith named Jeff from Wisconsin as a striker and then worked on the piece for a while by myself.

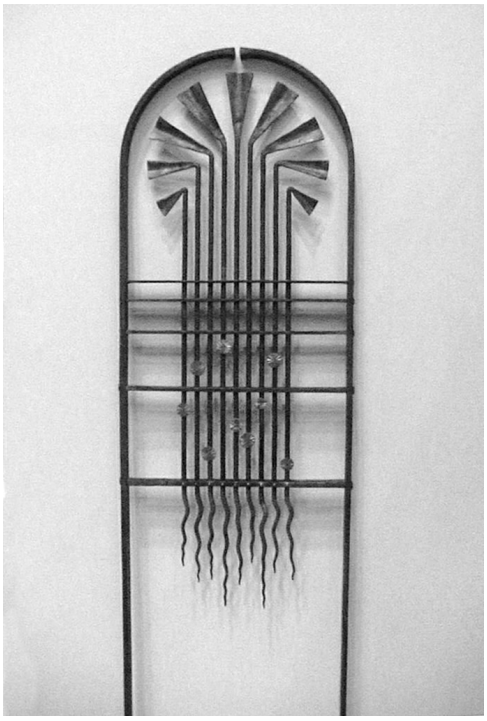
Doug Wilson

Friday afternoon Juko Nieminen of Finland fabricated a wall hanging of a traditional Finnish design. He punched 3 holes in one bar and one hole in another. On the bar with the single hole he formed a tight square scroll and then tapered it down forming a pyramid shape. The three hole bar was then bent into a "U" shape, with the holes towards each other The bar with the single hole went through the center hole so that the hole lined up with the side holes and then a piece of stock was cut to go through the three holes now in the top. Afterwards he discussed variations on what could be don to the piece to finish it from there. I never got to se the finished piece as I was off again to another demonstration. The next day he formed a free form piece from 4" channel iron under the power hammer.

Juko Nieminen

Tom Clark from the Ozark School of Blacksmithing had a station set up that had a project building a gate and other demonstrations, was selling tools and the Say-Mak Turkish power hammer he is the dealer for. There was some excellent blacksmithing being done under the tent. Behind tom Clark was Christine Habermann of Austria who was demonstrating copper repousse on a large, about 36" piece of sheet copper. The pattern looked to be a "Central American" design and she worked on the piece quite intently the whole time.

Christine Habermann



Parkinson Clark Workshop Gate
Photo from Roger Degner, UMBA

Peter Parkinson and Terry Clark of England started with an indoor workshop on design which moved out side to the forging area the next day. They then worked to fabricate the gate that was designed in the workshop. I didn't participate in the design workshop but I watched some of the fabrication and assembly of the gate.

Irish Smiths
I believe this is father and daughter in picture

A group of Irish smiths had come to the conference and they gave an impromptu demonstration on forging horseshoes. I had a great time and look forward to another conference that I can attend. Larry Brown

Blacksmithing Tapes and DVD's!

http://www.umbaonline.org/

UMBA online has videos of about 100 meets and local conferences. From what I see in the ones I bought, these are a video tape of the demo, just like you would have made! People walk in front of the camera, you can't hear it well sometimes and the camera angle is not always the best. Sounds horrible right? These videos are available on VHS tape or DVD-R for only $7 for the first one and $5 for each additional one. The shortest one is three hours. There is an enormous wealth of information in each of these videos and I feel that if you keep the price in mind they are worth every penny. I plan on ordering more soon. The whole list is on the web site under library or write for a list of what's available.
Mailing Address:
"UMBA Library"
Roger Degner, Librarian
PO Box 27
Franklin, MN. 55333
http://www.umbaonline.org/

Items for sale:

Anvils for Sale
2 Sawmakers anvils;
1. Fisher 1918, 371 lbs $1,200
2. Goldie 1849, 1.0.4. $400

2 Peter Wright Anvils
1. 1.0.11 $300
2. 1.2.10 $400

Please Contact:
Robert Arnold
27 Condor Rd.
Rocky Point, NY 11778
Call At: 631-744-1650

Metal Lathe
Old Craftsman (atlas) metal lathe for sale. 12"
Call for information and details. Best offer
Larry Brown
90 William Ave
Staten Island, NY 10308
718 – 967- 4776

Knife Handle Class with Rob Hudson

Article by Bill Futer.

Here are a few notes on the handle class I attended this weekend.

We all gathered around 8:30 and made introductions and signed the usual waiver forms and had a short discussion on what we were going to try to accomplish that day.

The first thing we did was to trace a pattern of our knives on paper so we could have a picture of how we hoped the finished knife would turn out and also this would assist us in forming the handle. We wrapped our blades in 2 paper towels to protect our hands from cuts and the blade from scratches.

We were using ¼ in brass stock so we drew a ¼ space where the handle would meet the end of the blade. We then drew our handles on the paper to get things rolling.

We measured the tang first to make sure that it tapered properly to allow the finished guard to slide to the back end of the blade. (not sure of proper name). If the taper is not correct some quick filing is needed to remedy this. Then measure the top of the blade and also the edge area to determine space needed to cut out in your guard. Rob had all his brass stock coated in a blue dye of sorts so you could see your scribe lines easily. We used a center punch close to one corner of the slot and used a 1/16 drill to make a starter hole. We then used a jewelers saw to cut out in the lines on an angle so when you filed to fit you would have less metal to remove. Rob says to try to cut the line half so the hole wont be too big. Rob wants a snug fit; it seemed like 1/8 above the back side of the blade was good. To assemble the guard to the blade we used silver solder. In order for the solder to 'take' well all traces of oil should be removed, which we did with lacquer thinner. Wipe the tang and clean the guard hole well. We then wrapped the blade in 2 pieces of leather and firmly clamped in a vise, hammered on a pipe that pressed the guard home.

Next step is soldering. Rob used a small wrap of sheet metal that was perforated and a small spring as a jig. The tang is inserted into the 'wrap' which rests under the guard. The spring goes under the wrap and around the tang. The tang clamped in the vise so the spring holds the wrap and guard snug. During heating the guard could possibly enlarge and drop down! Flux the joint well, and cut lengths of solder that will make the joint. If you hold the solder like you do for electrical work you will probably use too much and waste it by it dripping out and onto the floor. You also should get low temp solder so you don't destroy your temper on your blade. Rob kept handy a small heavy gauge wire as a solder cleaner. As the solder flowed he would push the puddle where it needed it or if there was too much, kinda fling it off. After the joint is made don't be in a rush to move the blade, let it cool for a while in case the solder is not cool enough.

Next starts the wood part of the project. All of us had full tang blades that we peened an end cap on, so our blades had a small round section for that. Cut out the drawing you made of the handle. Place this on your wood for a pattern, this also gives you center lines for where you will drill for your tang. Measure the area behind the guard and mark off where it lands according to the centerlines. Also measure round and mark that on the other side. This was the first scary part. Who was going to drill off center and out the handle? If you change your view from top to side frequently you can get fairly straight. Use a drill the size or a hair bigger than your round. Drill halfway and do it again from the other side. Now using the bit as a router gouge out the material need to get the tang through. Snug is better than loose since this helps in later stages. Once the wood touches the guard, it will of course need to be adjusted to have no gaps. To adjust the handle we had sandpaper approx 100 grit on top of firm plastic mats to assure the paper was flat. We held the handle with the hole up, paper on the table, and whatever side was wrong you 'leaned' on that when you sanded. It was more accurate to sand in one direction. Once there are no more gaps of light between the wood and the guard you can now start on the butt cap.

Again the material is ¼ brass. At first I thought this was a bit thick until all the filing and polishing took most

of it away. I drew a pattern of sorts and transferred it to the stock. I cut it out using a vertical bandsaw with a quick clean up on one of the three belt sanders. Also be aware brass heats up quickly so quench it or wear gloves. For safety we re-measured the round drilled hole in the butt cap. Be careful when drilling brass as it tends to 'fetch up' easily, clamp down well and take your time. On the side of the cap that gets glued, make a large chamfer. We did this by letting the chamfer bit chatter a bit. We then made some anchor 'dents', small shallow drillings that grab the epoxy that will be used later. The only problem is I made a few of mine to low and now can be seen after all the filing I did. Rob said that you could probably get away with not using them. Next with a small triangle file cut into the main hole for the round to get peened into. If you cut these too deep they will be seen also, but if you are really good, it could be a nice decorative touch. I made 8 cuts; any more would have made the 'teeth' weak. Again some wood fitting is needed to assure no gaps in the butt plate. Adjust using the same technique as the other end. Now is the time to adjust the amount of round used for the peened end. Rob recommends the material be the thickness of a dime to stick out of the butt cap. I had a little extra which just meant I had to file more later.

Next step is to epoxy the handle on the blade. First degrease all parts involved with lacquer thinner. (hand guard, tang, butt cap). Next we mixed up some marine (as in boats, sorry didn't get the name) grade epoxy and applied a liberal coating to the tang, guard, and filled the hole of the handle. Of course as you slide the handle onto the tang, excess epoxy will ooze out, be ready to take care of the situation. Lastly is the butt cap is placed a good pile of epoxy. Wrap the blade in at least 2 layers of leather, clamp firmly in a vise and peen the end down. Start by hitting the center and after a while the buttcap will be locked in place. Now you can start hitting the sides and try to make it dig into the brass for a secure fit. That was the end of day 1.

Day 2 was much less complicated, but in many ways harder. Everything now is complete with no going back. Our first task was to use the belt grinders to rough out the handles to the guards and buttcaps. I was using one of Robs pre-shaped handles and had high spots nearly ½ inch. Of course wood disappears faster than metal so a good bit of care is needed not to take away to much. After roughing we used some kind of very rough emery board to remove the grinding marks. As you worked the wood, also do the brass so both wood and metal are at the same grit. To speed things up sand one way and then go against those lines to remove more material. I put a tapered edge on my buttcap which it seemed to go haywire with each file pass; so always remember to look more times than you use the file. After the wood looks smooth and all the previous grinds are gone, and I mean gone, with a damp towel wash the wood a bit and this will bring up small whisker like somethings. Let the wood dry and do another pass with 400 grit. Now if all your brass and wood have no grind lines anywhere, use 600 grit and have all your sanding lines in the same direction. For the wood finish we used Tung oil. Rob said to push the oil into the wood and to put it into the 'hotbox' to dry. The hotbox is just an old tin milk box with a 25 watt bulb in it. After the oil dried a bit, I wrapped the wood in masking tape to protect it from the buffing wheel.

We buffed the brass in 2 stages. One wheel had a hard rouge on it to cut any remaining sanding lines. The second wheel was standard polishing medium. Extra care must be taken when buffing as many stories were told of knives being thrown into doors, ceilings and people. After all is polished, the knife is completely unwrapped of all paper, tape, etc. A quick clean with WD40 is done to remove any rouge or tape glue. Rob then puts a *very* sharp edge on the blade.

I hope I have most of the information in a coherent manner.

Bill Futer

To contact Rob Hudson about knives and or classes:

HUDSON KNIVES
Rob Hudson
22280 Frazier Road
Rock Hall, MD 21661
(410) 639-7273

Blacksmithing Workshops and Classes:

Peters Valley Craft Education Center
19 Kuhn Rd., Layton, NJ 07851 (973)948-5200
pv@warwick.net www.pvcrafts.org

Academy of Traditional Arts
Carrol County Farm Museum
500 South Center St. Westminster, MD 21157
(410)848-7775 (410)876-2667

Touchstone Center for Crafts
R.D.#1, Box 60, Farmington, PA 15437
(724)329-1370 Fax: (724)329-1371

John C Campbell Folk School
One Folk School Rd.
Brasstown, NC 28902
1-800-365-5724 www.folkschool.com

Red Mill Forge
Contact Adam Howard about workshops and per diem use of the shop (908)735-4573

BLACKSMITH TOOLS FOR SALE!
John Chobrda

Has a large selection of tools for sale.
Anvils – Forges - Leg Vices—Blowers
Tongs – Hammers
Will also repair and/or resurface Anvils
Call John for prices and availability
Evening (609) 443-3106

Wanted: Donations for the NJBA Trailer
We need hand tools, files,
Tongs (Old, new and repairable),
Safety Glasses and assorted rivets.
Look around and see what you have to donate.
Contact; Dave Macauley, Directors list, Page 2

Business Members

We would like to thank those who joined with our new Business Membership category
Please show them our support

Ginty's Welding Service, Inc
2 Lee Mack Ave.,Danbury, Conn, 06810
Timothy Miller, Artist Blacksmith,
Bayport, Long Island, NY (631)419-1185
Marshall Bienstock
663 Casino Dr., Howell, NJ 07731
(732) 938– 6577, (732) 780-0871
Lincoln Wolfe
11 Overlook Terrace, Bloomfield, NJ 7003
(973) 338-3913
John Chobrda, Pine Barrens Forge
231 Morrison Ave., Hightstown, NJ 08520
609-443-3106

Open Forges

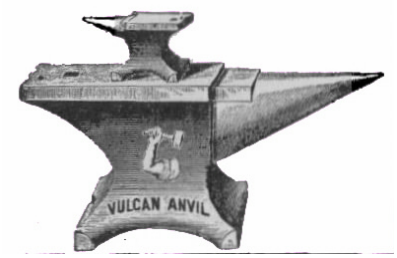
We are looking for members who are interested in opening their forges up to members as a open forge. This does not have to be a weekly forge as is Marshall's the others can meet once or twice a month. Please contact, Larry Brown, Editor.
We want to encourage all to join us at:

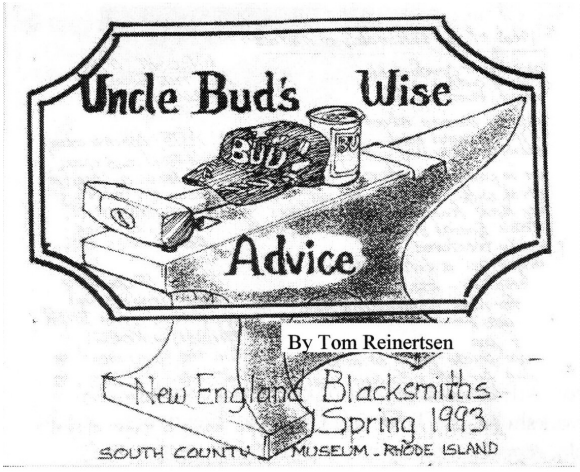
Monday Night Open Forge in N.J.

Marshall Bienstock is hosting an open forge in his shop at 7 pm almost every Monday night (Please call ahead on holidays to make sure , (732)780-0871)

Open Forge in Long Island

Sunday from 10:00 am to 6pm.
Starting the 1st Sunday in November until the end of April. Please call ahead to confirm and get directions.
Ron Grabowski, 110 Burlington Blvd. Smithtown, NY
(631) 265-1564
Ronsforge@aol.com





Uncle Bud's view of the personality of steels

Notes taken by Tom Reinertson at SCM in 1993
New England Blacksmiths

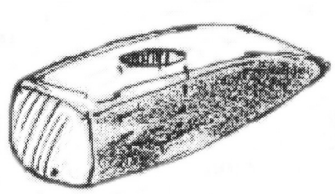
(These tips are gleaned from some of Bud Oggier's many teaching classes in which he gladly shared information, with younger less experienced smiths, which he had learned doing a life time of challenging work.)

Steel

(From the mill) Relaxed and comfortable, atoms have gotten used to their room mates.
(Start heating them up) They start moving about, running around and mingling - a social get together.
(Quench) Frozen in place- Stop the music! You're stuck with those around you, even if you don't know them- a very uncomfortable situation. Hard, brittle, tense (easily fractured)
(Draw temper) Let people get a little relaxed, some conversation- less tense.
(Heat increases) Allows for more socializing and movement into more relaxed or comfortable positions.
(Stop) Halt at appropriate point of mixing by not allowing heat to rise- chill where it is. Wrought iron has all the same personality.

Chisels

To re-forge a water hardening chisel- heat it past its critical temp. (light orange) and set near the fire to cool down slowly.
Steel loses magnetism between 1350-1365 F.
To assure you pass critical temp, go 50-70 deg. past. Hold a magnet near to see if it has lost attraction. When magnet says OK put it back in the fire for 10 seconds more- it's ready.
After cooled down put back in the fire and raise heat slowly. So inside is same temp. as out side, get heat all the way through.
Put end approx. 1-1/2 in. in water & move slowly up and down. Brighten the end and watch for color to run to blue- 625-640 F. it will be tough and resilient. Wood working tools- plane blades- draw to straw color- start of brown.



Anvil faces should be drawn to light blue and water quench.

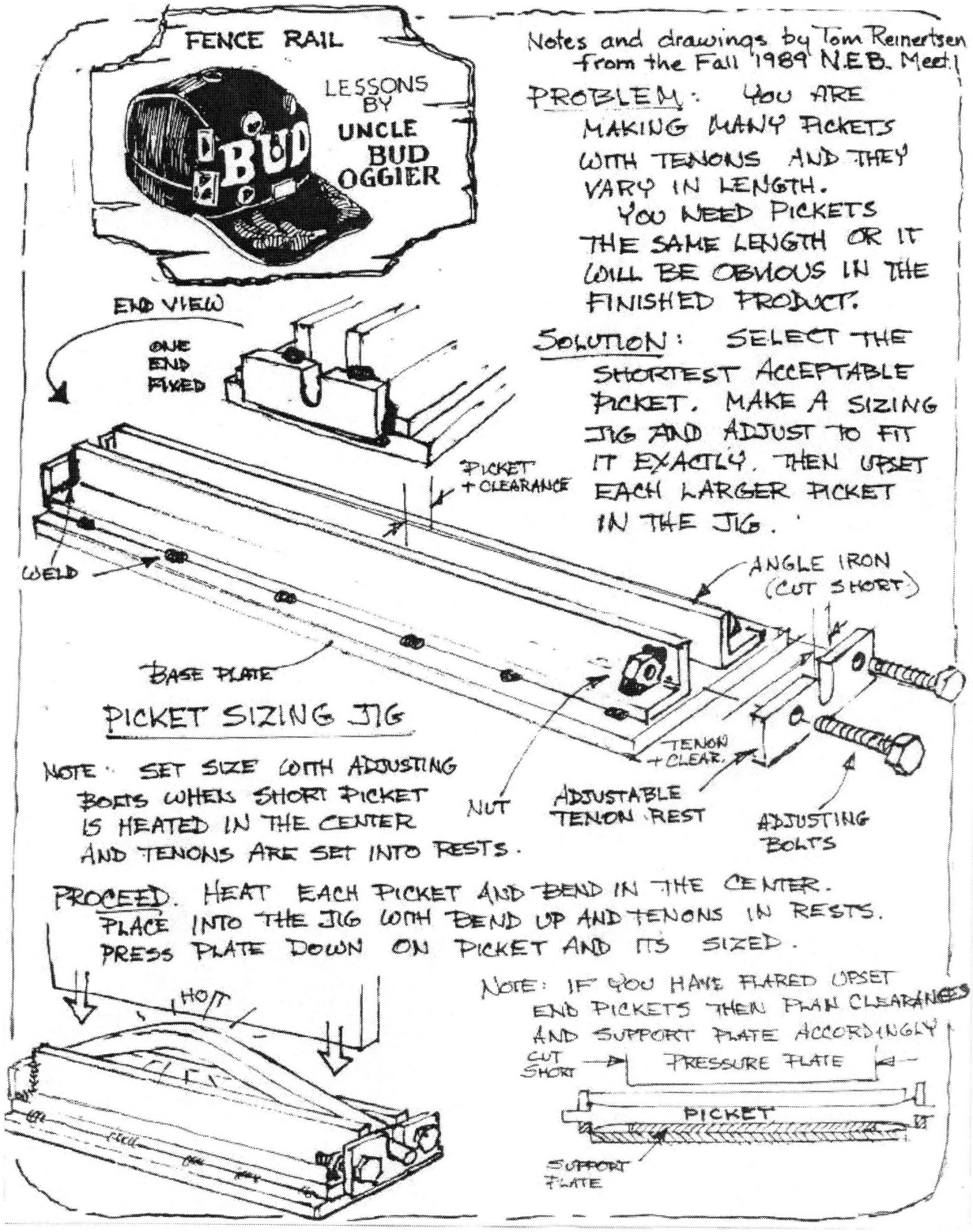
Hammer Material
4340 = GREAT
TRUCK AXLE = GOOD
TORSION ROD = FAIR

When working mild steel and you don't have a specific reason to quench it DON"T QUENCH IT or it may later ruin saw blades etc.

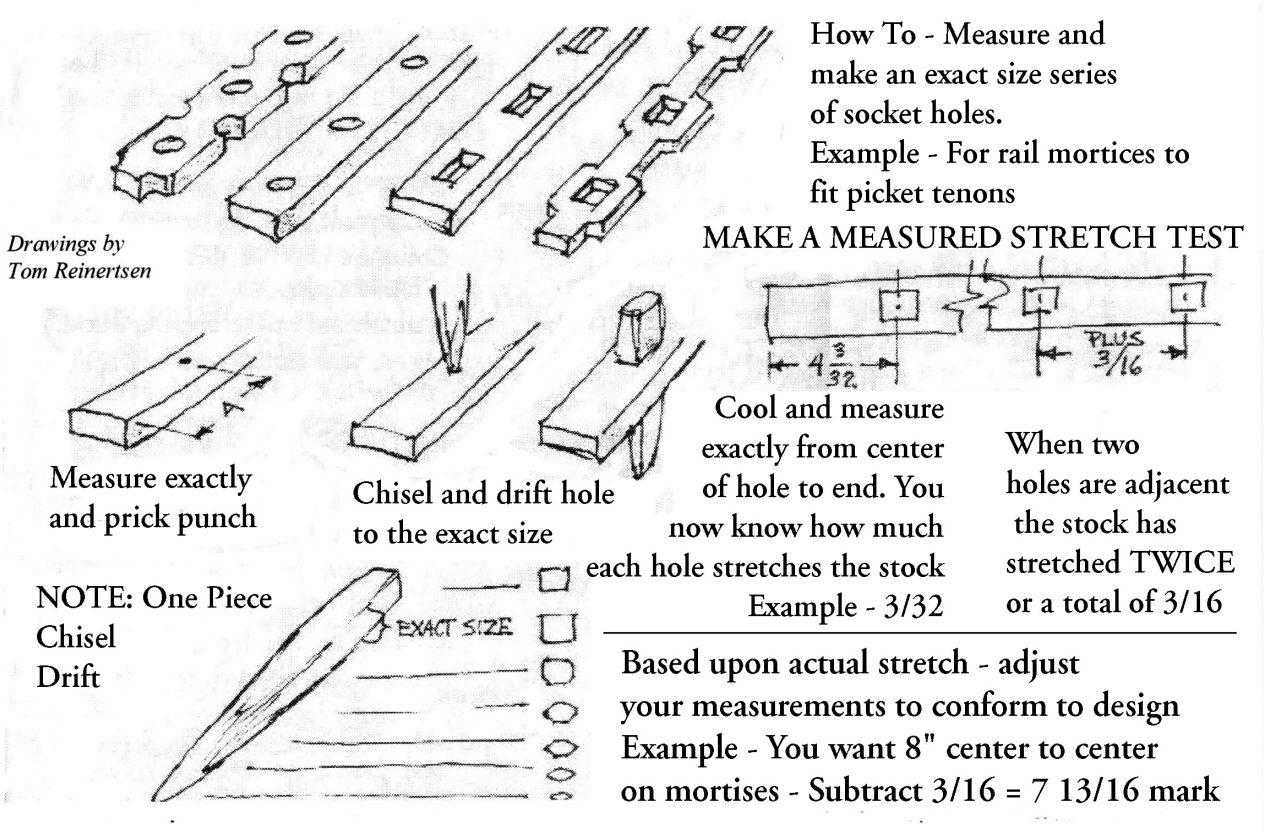
If you have a piece of steel and don't know whether it's oil or water hardening- heat it & stick the end in oil then run a file across it. If the file cuts-you know it's water hardening.

HOT COLLARING
When applying hot shrunk on collars- Only heat the collar to a BLACK heat (700-800F.) (causes soft pine stick to smoke) then put collar on- it will shrink and not stretch.
INFO. Steel expands .0000 19 th of an inch per degree of temp. per inch of square stock.

Brazing make a borax soup (borax and water)
Put the two pieces together. Paint borax soup on the area to be brazed. Put a piece of brass wire in the area, tie pieces together with iron wire. Heat till the brass melts and remove from the fire.


FENCE RAIL
LESSONS BY UNCLE BUD OGGIER
Notes and drawings by Tom Reinertsen from the Fall 1989 N.E.B. Meet
PROBLEM: YOU ARE MAKING MANY PICKETS WITH TENONS AND THEY VARY IN LENGTH. YOU NEED PICKETS THE SAME LENGTH OR IT WILL BE OBVIOUS IN THE FINISHED PRODUCT.
SOLUTION: SELECT THE SHORTEST ACCEPTABLE PICKET. MAKE A SIZING JIG AND ADJUST TO FIT IT EXACTLY. THEN UPSET EACH LARGER PICKET IN THE JIG.
END VIEW
ONE END FIXED
PICKET + CLEARANCE
WELD
ANGLE IRON (CUT SHORT)
BASE PLATE
PICKET SIZING JIG
TENON + CLEAR.
NOTE: SET SIZE WITH ADJUSTING BOLTS WHEN SHORT PICKET IS HEATED IN THE CENTER AND TENONS ARE SET INTO RESTS.
NUT
ADJUSTABLE TENON REST
ADJUSTING BOLTS
PROCEED. HEAT EACH PICKET AND BEND IN THE CENTER. PLACE INTO THE JIG WITH BEND UP AND TENONS IN RESTS. PRESS PLATE DOWN ON PICKET AND ITS SIZED.
HOT
NOTE: IF YOU HAVE FLARED UPSET END PICKETS THEN PLAN CLEARANCES AND SUPPORT PLATE ACCORDINGLY
CUT SHORT
PRESSURE PLATE
PICKET
SUPPORT PLATE

Bud's lesson on even spacing of pickets to go with the Picket jig.



Some quotes from Bud's first lesson with Jean

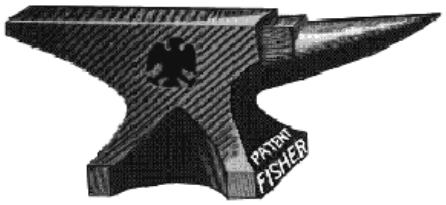
"In order to do any serious forging, you need at least four tools: something to heat with, a forge; something to hold the iron, tongs; something to hit on, the anvil; and something to hit with, the hammer."

"Each day, when I'm done here at the forge, I separate the green coal from the coke, put the coke over here at the side of the forge, and clean out the firepot completely. I like to start out the day with a new fire that I know has no ash or cold clinker in it. To start a fire I use three full sheets of newsprint wrapped up in a ball, light the tag end, hold it in the chimney hole for a few seconds to start the draft, drop it in the firepot, add some small coke from my reserve pile, and turn on the blower enough to make it burn briskly. Put on more coke as soon as the fire is burning well. Build up a pile about three or four inches above the firepot. Now,
add green coal to both the sides and back. Don't be stingy. You don't burn coal in the fire but convert it to coke by heating it on the sides of the fire and driving the gasses out of it. Coke burns much hotter than coal. Coke is what you burn."
Uncle Bud, we will keep the forge fire burning.

Late Fall 2002
New England Blacksmiths

New Jersey
Blacksmiths Association
90 William Avenue
Staten Island, New York 10308
Attn: Larry Brown, Editor

New Jersey Blacksmiths Association



"EAGLE"
FISHER & NORRIS, Trenton, N. J.

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NJBA Dues are $18 per year (as of July 1, 2001).
Please make your check out to: "NJBA"
Please mail checks to:
NJBA, P.O. Box 761, Mt. Laurel, NJ 08054

Please include payment with the information listed below. You will receive a postcard confirmation of your membership, and will receive a newsletter within a month. NJBA's "year" runs from June to June. If you join mid-year, the postcard will offer a prorated dues option which will then allow you to extend your membership till the following June. The following information will be listed in a roster available to other members.

Name _____ Home Phone_____
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