New Jersey Blacksmiths Association
"EAGLE"

N.J.B.A. Newsletter

NJBA Volume 6, Issue 3 November 2001

Fall is Back!

I hope you are all going to take advantage of the cooler weather and get to the fire and make something, try a new project or use a new technique. Hopefully one you learned here!

Editors Soapbox

These last few weeks have been hard on me, personally having lost one person who was a neighbor, friend, firefighter and another who was a co worker I hadn't seen in a few years and was now a policeman.

September 11th changed a lot of things for us all. Our sense of security was violated, our loved ones taken a way, our economy shaken and our pride bruised.

I have seen the prejudice against people who have come here from that section of the world, to live the American dream for themselves, away from the tyranny of their homelands. I try not to judge but it is hard. I have to remind myself that although I grew up in NYC, I have citizenship papers also, I just look like I'm from here.

We are now angry and hurt and have sent our troops to war, hopefully the outcome is a more peaceful world. May God and the world bless their efforts.

I would like to thank all the rescue workers who came from all over the country to NYC to help. We appreciate all their efforts and the time away from their families more than we can express. If you are one of them thanks, if you know someone or their families please pass this thanks along. I find beating hot steel therapeutic sometimes, I'm going to go forge something. Thanks for listening,
L Brown, Editor

Upcoming events for 2001 and 2002

Remember most of our meets have a "Iron in the Hat" drawing, be sure to bring something.
November 18th, Sunday 10 am; Peters Valley, details on this page.
December 9th; Sunday 2 pm, Holiday Party! Marshall and Jan have once again invited us to their home. Details on page 2.
February 9, with rain dates of the 10th, 16th and 17th at 10am; Meet at **Alex Parubchenko's** shop in Trenton, NJ. Details and directions on page 3.

November Meet at Peters Valley Craft Center

Peters Valley is hosting our meet this month with the resident smith Maegan Crowley kicking the morning off with a demonstration on working metal sheet by hand and with dies. The after lunch demonstration is to be announced.

Directions: Peters Valley Craft Education Center is located at 19 Kuhn Road. in Layton (Sussex Co.). NJ 07851. (Phone: 20I-948-5200).
From Interstate Rt. 80: Take Exit 34B to NJ Rt. 15 North. to US Rt. 206 North. Left onto NJ Rt. 560 West. through the blinking light in the center of Layton. onto NJ Rt. 640: go about 2 miles and turn right onto NJ Rt. 615. Go approximately one mile.
From US Rt. 209 (on the west bank of the Delaware River in Pennsylvania): Take PA Rt. 739 South across the Dingmans Ferry Bridge. Take the first right at sign to Peters Valley. Go two miles.

December Holiday Meet!

Marshall Bienstock and his wife Jan have once again graciously offered to host the **December Holiday Party on December 9th.** Marshall and Jan will be hosting the **party and pot-luck** in their home located at **301 Casino Drive, Howell, N.J.** The party will be starting at **2 pm** (ph# 732-938-6577). Please bring a covered dish (enough for 6-8 servings) and a drink. This meeting we will skip the "Iron in the Hat". Attendees are encouraged to bring a portfolio or examples of their work, especially examples with a holiday theme.

In conjunction with this, the preceding four Monday nights (Nov. 12, 19, and 26 and Dec. 3) we're encouraging attendees of Marshall's open-forge meeting to bring and share ideas for holiday-related forging projects.

Directions; Take any N-S route to Rte. I-195 or Rt. 33 and from there to Rt. 9. Go North from I-195 or South from Rt. 33 to Casino Dr. Travel about 3 Miles to #301.

Remember to send in your renewals!
If you did not get one contact
Bruce Freeman, Membership Chairman

The NJBA Web Site!

The NJBA Web Site is up and running at:
`http://njba.abana-chapter.com/`
Bruces' links to the ABANA site;
http://www.monmouth.com/~freeman/NJBA/abanawebsite.htm

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February Meet at Alex Parubchenko's Shop In Trenton

On Feb. 9th with a rain dates of the 10th, 16th and the 17th. This is because the demo is out side and cannot be done in the rain. Alex Parubchenko, the Blacksmith of Trenton, will demonstrate melting steel in a cupola furnace (a continuous melting furnace). He'll do a pour, and, with luck, we'll have a chance to see the result.

Marshall Bienstock will be showing the products of his latest classes (in January) at J.C. Campbell Folk School, and may demonstrate some of the techniques involved. A lunch will be provided by NJBA. Tailgating is permitted, but the shop is NOT in a good area, so you might want to keep things locked up. Attendees are requested to bring a contribution to the IITH.

Directions; To Alex Parubchenko's shop in Trenton, NJ

Directions: You can get to 334 N. Olden Ave., Trenton, from US Route 1 (Trenton Freeway) or from Interstate Route 295 or via Arena Drive from Interstate Route 195. From US 1, go SE about 1/2 mile to the shop. From I 295, go NW about 2 miles to the shop. From I 295 go NW about 2 miles, where Arena joins Olden, and then about 2 miles NW on Olden to the shop. The shop is at 334 N. Olden Ave. There is a vacant lot next door where you can park. (Phone: 609-396-9583)

Report on the October 13, Meet at Mike Walker's forge in Elkton, Md.

Report by Josh Kavett

This meet was one of the best events in my NJBA tenure. I think that all who attended would agree. The day started out around 8:30 with coffee and donuts socializing while roaming around Mike's fantastic shop. About 15 NJBA members were there, and about 15 others from the Delaware, Md., and Pa area. This was the first time he ever opened his shop for a demo making it a treat for all who attended.

It has to be one of the most organized and complete welding and forging shop most of us have ever been in. Mike has accumulated just about everything one could need for any project, and had it organized in a way that he can find everything.

Mike demonstrated his techniques for cutting and forging leaf forms. He began by plasma cutting a blank, then marking his name and leaf type on the back. Hot chiseling the veins, then thinning out the edges and shaping followed, giving the leaf "life". He discussed various tools he uses to give the leaf forms character. It was a most informative demonstration.

After lunch break and IITH, Mike gave a short tour of his house renovation. A most fantastic job. One really must see it to appreciate what he has done in "residing" his house. Fifteen years, and untold hundreds of tons of local stone later, he has his own almost completed castle.

After the tour, we all settled back in the shop for a demonstration by Kerry Rhodes. He demonstrated forging and shaping three inch common copper pipe. It was an interesting demonstration of an aspect of forging most of us do not consider. He then forged out a wizard head from 1" square steel bar. He demonstrated hot splitting, hot chiseling, and hand and power hammer drawing of the stock. A most interesting demonstration. He also spoke about a large commission he did building furniture and various fitting for the local Harley-Davidson dealership. Very impressive work.

The day ended around 3:30 with a cleanup, and everybody heading home. It was a great day...perfect weather and host.

A large Thank-You from NJBA to Mike for his demonstration and use of his shop, and Eva Walker for her help with lunch and other details that helped the day go smoothly, and Kerry Rhodes for his demonstration.

Peters Valley Pig Roast and Fund Raiser

Two reports on the Peters Valley Meet Sept. 1, 2001

Report by **Bruce Ringier**

On Saturday, September 1, 2001 a fundraiser was held at Peters Valley Blacksmith shop about 110 people attended at one time or another during the day . John Rais demoed, as did Jim Wycoff, his leaf making and flower demo was packed. John's demo was early and not as full. The band was tight and played for lunch and after the auction. All reports were positive on the music. The pig was great not a meated bone was left although there were complaints that the food was not ready soon enough {about a 1/2 hour late] salads were plentiful and there were cookies in the shape of anvils. The beer was readily consumed 2+1/2 kegs gone, a bud, black and tan and a lager (ying ling). PV ceramics studio made and sold PV blacksmithing pig roast mugs and steins "little anvils stamped on them". The party lasted until about 830 pm a few diehards stayed until morning myself included J.D Smith showed up about 630 pm He came from Boston. Many states were represented, VT, NJ, NY, MASS, FLA, NW MX, PA and I am sure others that I missed. The auction was a great success raising about $1700, there all totaled about 3500.00 after expenses. Enough to do some real good. Meagan and I wish to Thank the NJBA for their support. I knew some but not all, Tim S., Bruce F., Josh K .The money is awaiting to be used for improvements to the shop. Thanks again
Bruce Ringier

Report by **Doug Learn**

On 01 September over 100 ardent supporters of the Peters Valley Craft Education Center blacksmith program gathered at the blacksmith shop to show their support and enjoy good fellowship. Spearheaded by NJBA board member and PV Board member Bruce Ringier and assisted by NJBA members, the pig roast and fund-raising party was held under perfect blue skies and cool temperatures. Resident smith Maegen Crowley (and 2002 ABANA Conference demonstrator) hid her nervousness well as the attendees mingled amidst the food, drink, music, merchandise, auction items, and demonstrations in the smithy. Jim Wyckoff, John Rais, and others demonstrated for the attendees. The highlight of the event was the auction, where smiths and organizations from across the blacksmithing community donated their talents, objects and services for the cause. A substantial sum was raised to be used for the improvement of the smithy. Thanks to all who attended, helped out, and in the end showed that the blacksmith program at PV has helped many to sharpen their skills, but just as importantly, has contributed to the fellowship of blacksmithing in New Jersey and beyond.

Report on the Dover Conference

Sept. 7-9, 2001

Report by **Bruce Freeman**

Anton Holstrom and I headed down to Dover about 2 PM, to beat the traffic.
We arrived before 6, checked into our motel, then set up chairs in the shade outside the Delaware Agricultural Museum and read blacksmithing books.
After a little while other folks started arriving and we shot the bull.

When the museum opened for the reception, we all filed in and wandered over to the room in which the show was set up. The work on display was all quite good and some of it was exquisite. There was more of Chris Ray's work present than I had ever seen assembled before in one place -- weird pieces of art, but wonderfully rendered. Naturally, we also spent a good deal of time swapping lies over the refreshments,

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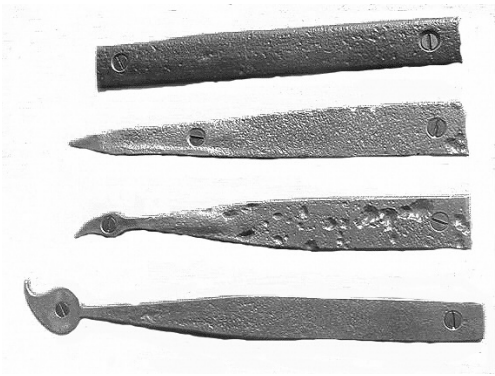
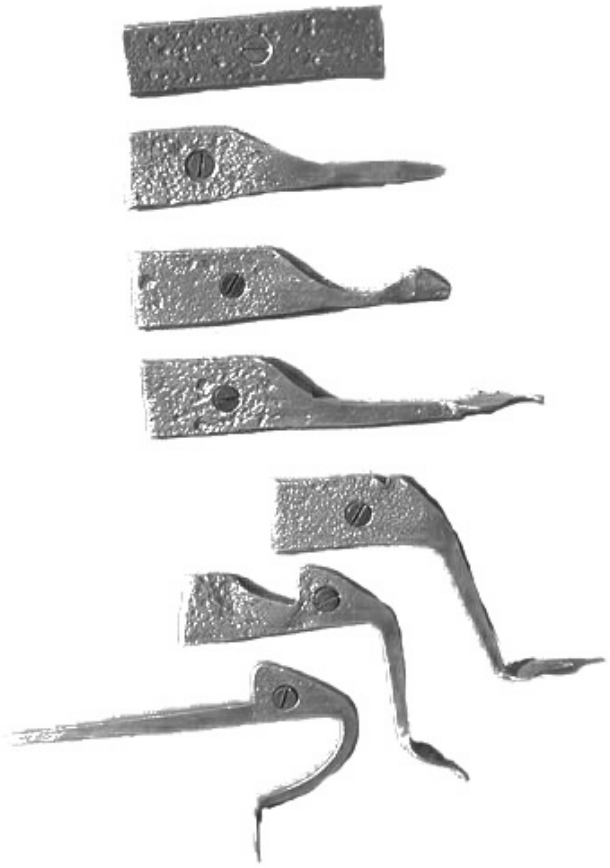
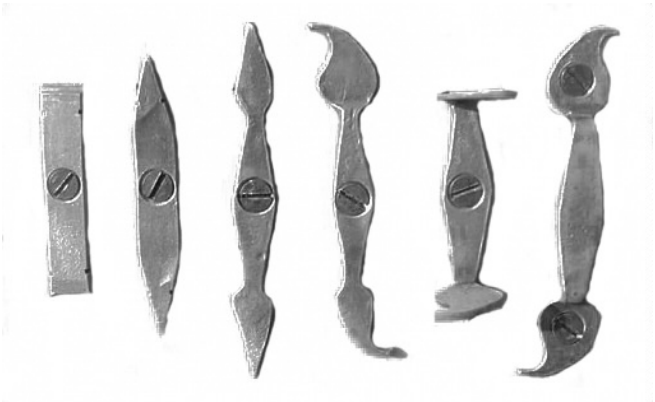


The next morning things got going early. Anton and I met both demonstrators, Doug Hendrickson (and his wife) from Missouri, and David Court from New Hampshire over the complimentary breakfast at the hotel. We then headed over to the museum and arrived in time to watch the others finish setting up. I set up to tailgate books, made my contributions to the iron-in-the-hat, and put my example copy of the Grasshopper Treadle Hammer plans on display on the "contest" table.



Things got rolling with David Court demonstrating the making of a modified traditional latch. David pointed out that iron was expensive in colonial days, so ironwork was made thin. He prefers to make ironwork thick, and thus departs from tradition. He had put together a "storyboard" of the steps to making a latch, but didn't adhere to them absolutely.

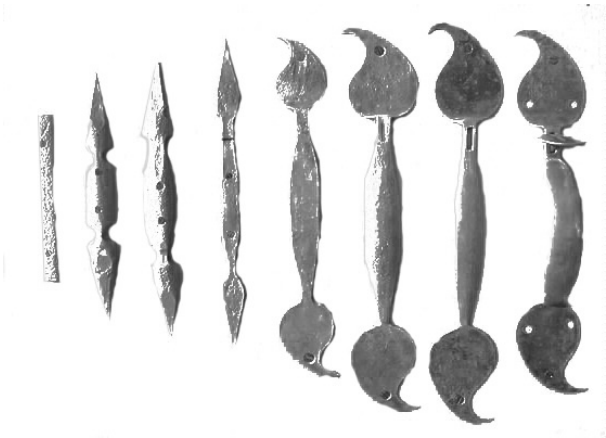


The lunch break gave me some time to look over the tailgate sales. It was a fair representation of blacksmithing tools, including anvils, vises, tongs, hammers and other hand tools, cone mandrels, swage blocks, at least one forge, plus a drill press, an incomplete lathe, a small horizontal bandsaw (which Bill Gichner snapped up) and even a flypress. Anyone looking for blacksmithing equipment would do well to attend such sales.

After the lunch break, Doug Hendrixson took over and showed us miscellaneous forging, including forging of aluminum. The trick with aluminum, as has been pointed out before, is that forging temperature is well below the incandescent. Use a wood splint or the hammer handle as a "crayon" on the hot aluminum. When it writes like a wax crayon, leaving a black streak, then the aluminum is at forging temperature. Any hotter and it will just break up under the hammer.

The day concluded with the auction, the IITH, a catered dinner and a slide show by the demonstrators. David showed us some repair work he'd done on some weathervanes from old buildings in New Hampshire. Doug showed some of the art work he creates, and spoke of how he displays pieces to representatives of major retailers.

Sunday, David again started things off, this time demonstrating how to mount traditional hardware on a modern door and doorframe. David was emphatic that the blacksmith should install his own hardware. Since his hinges are mounted on traditional pintles, he has to drive them into the doorframe.



Unfortunately, there's often an air space exactly where he needs to drive his pintle. If new construction, you can holler at the carpenters who were suppose to put wood there. On existing construction, you can drive the pintle at a slight angle (away from the doorway) to hit the wood, or you can fill the gap with Bondo! He does not simply drive the pintle because the lightweight wood used nowadays would simply split. Instead he drills a pilot hole that matches the taper of his pintle. He makes these drills himself, tapering flat stock and then making steps in the taper. A little sharpening, and he's got a drill bit. David also demonstrated the mounting of a latch. He clamps a jig onto the edge of the door. This jig has a slot corresponding to the shaft of the thumb latch. He uses the jig to guide his drilling 1/4" holes, then uses the same drill to clean out between. Very quick!

After lunch, Doug took over and demonstrated the forging of an ornamental doorknocker. He used a stone as the knocker, and had drilled two holes opposite each other in the stone to receive the iron. He forged the individual pieces of the knocker and passed them around. It seemed to me that the knocker would be very flimsy when assembled, but Doug simply welded where I had though he would be heading over tenons. The result was a sturdy, if nontraditional, piece of hardware.

HHM Tool Swap & NJBA Sept. Membership Meeting

Sept. 15, 2001

Report by **Bruce Freeman**

We held our September meeting at the Tool Swap at Hunterdon Historical Museum, in Clinton, NJ. Adam Howard, the blacksmith at the museum, had arranged this tool swap. Thanks to the publicity Adam had got, the event drew from beyond the membership of NJBA. Several folks tailgated items, including books, forges, anvils, hammers and other hand tools, a treadle hammer somewhat worse for coming through a shop fire, even blacksmithing hats and T-shirts.

Adam recently completed renovations to the blacksmith shop at the museum, and he showed us the shop. The shop has an excellent forge, and the usual complement of tools, including a 25-lb Little Giant power hammer, recently refurbished. There were a few demonstrations given across the day. NJBA member Luke Gasior gave a demo on making a hardy. I missed most of the rest of the demos, so someone else will have to report on them.

I had a local pizza place deliver a bunch of pizzas, soft drinks, plates and cups, and NJBA provided a well-received lunch with plenty of food and drink for attendees and museum workers. NJBA also held an iron-in-the-hat. Since many attendees were not familiar with this tradition, we had only one table of contributions, but ticket sales were good, and we cleared the cost of the lunch.

Josh Kavett and John Chobrda took a walk through the Red Mill, a famous landmark and principal structure of the museum. Josh was impressed with the building itself and all the line shafts which ran the machinery. John thought the best thing in the place was an "ice-cycle" -- a construction like a bicycle, with one steerable skate up front and two long skates in the rear, straddling a spiked wheel. The front skate was equipped with a heal brake actuated by pressing down on the handle bars. The shaft of the spiked wheel was mounted on springs so it would press against the ice. Pedals up front were connected to the rear wheel by means of two leather belts. The whole thing was of hand-forged wrought iron. Quite a project.

How to Start a Coal Fire

by Pete Stanaitis
from the Guild of Metalsmiths, March 2000

In our training sessions, getting a good fire started (and keeping it well maintained) is almost always an issue. This year we have beefed-up the fire control portion of the basic workshops in order to minimize this widespread problem. But we have a concern as to how to get this info to the rest of the organization. Well, luckily, just recently, as I was checking one of the three metalworking-related groups to which I subscribe, I saw this rather specific request for help. Below is my answer to that person. I hope these concepts can be of help to our own folks.

The Question

kyblacksmith@my-deja.com wrote:

I am fairly new to blacksmithing, been doing it for about a year now and have a basic question. Does anyone start a fire with a single piece of newspaper wadded up tightly? I have tried to do this and it never works. The only way I can start my forge is by building a small wood fire over my air grate. If you can do it with a single piece of paper, please let me know how. Thanks.

The Answer

I'm not sure that I could start a fire with only one sheet of newspaper. We teach a lot of basic blacksmithing in the Minnesota / western Wisconsin area and we teach fire starting with three or four sheets of newspaper. It works every time, once you learn to do things right.

If my life depended upon starting a fire with just one sheet, here's how I'd go about it:

1. I'd have a forge with a deep firepot, deep enough so that the balled-up paper would, once placed over the clinker breaker, all fit below the top of the firepot.
2. I'd have available at least two gallons of a five-gallon pail full of coke that I made in yesterday's fire, very dry. I would have it piled on the forge table right by the firepot, so that I could quickly use it to cover the paper. None of the pieces of coke would be any bigger than about 1" in diameter, and some almost dust-size stuff is okay.
3. I'd have the capability to run or crank my blower very slowly.
4. I'd have another bucket of dry coal to add to the coke.
5. I'd find a newspaper with the biggest sheets of paper you can find. Out in the country where I live, the sheets are only 17" X 22', but one big town paper has sheets that are 22' X 27', 60% more fuel value! Remember, my life depends on it, so every little bit of fuel counts.
6. Then, I'd have a five-gallon pail of wet coal ready to add to the fire once it got going, because that's the way to keep a mature fire under control and to be assured of making enough coke to start it again tomorrow.

Okay, so now we are ready to go.

1. Make a tight ball out of the paper. Make it tight enough so that when you let go of it, it doesn't open up much. The object is to make the ball so tight that it won't burn very quickly. You want every bit of energy in that paper to go into coke, heating it to the point where it starts fire, too.
2. Hold the ball by the top and light the very bottom of the ball, in two or three places. Immediately lower the gently burning ball in the firepot.
3. Very gently give it some air. Just a little! At this point all you want to do is to keep the fire in the paper from going out.
4. Quickly start covering the paper with the coke. Your goal is to get the paper covered completely ASAP so that all the energy in the burning paper is used to heat the coke. Remember to keep the blower going very slowly. If you blow too fast, all that happens at this critical point is that you blow the heat right past the coke into the air above the firepot.
5. Still blowing very slowly, gently, with your bare finger, push a little coke down into the area where the paper has burned away. This step keeps the coke a little closer to the burning paper. If your finger gets too hot, you are blowing too fast.
6. Look for any areas where you can see fire and gently place pieces of coke over them to again help to contain all the heat.
7. When is it started? As you repeat steps 5 and 6, you

should look down into the heart of the fire to see if any of the pieces of coke have begun to glow on their own. When it is clear that is the case, you have a fire! Don't ruin it — keep blowing slowly.
8. All the above actions take place in a matter of three or four minutes. If you run out of coke before a healthy fire is going, add a little dry dusty green coal to the top of the fire. It will smoke yellow or green, but it will add easy-to-start fuel to the fire.
9. Once the fire is going enough so that you can clearly see that the coke is glowing and that flames are starting to shoot through the coke, you can begin to mound wet coal around the fire.

Finally, if my life didn't depend on it, I'd use three sheets of big city newspaper or four sheets of the small town stuff, but I'd do the rest in exactly the same way.

CBA Editor's Note:

I like Pete's method. It's easy and it works. I might add that, years ago, I stopped using newspaper wit/i colored inks. Some of these inks gave off colored flames, and that didn't look desirable. One of CBA's favored smiths, the late Al Bart, would never use anything but wood shavings — his way of controlling contamination. One member who came by my shop started his fire with paper and green coal (or dry coal, as Pete calls it). He laid out a sheet of newspaper, covered it lightly with coal (small stuff and fines) and balled it up. Then he set that ball on another sheet of paper and coal and made a larger ball. We thought that was interesting. One day I went to a school to demonstrate and was shocked to find I forgot my coke! Needless to say, a ball of paper/coal saved the day.

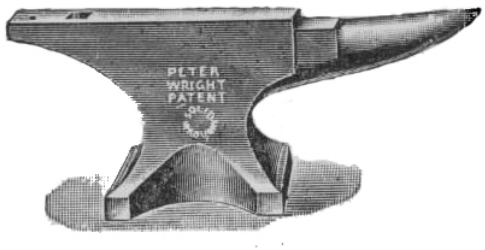
What else works? An oxygen-acetylene torch, a weed burner, diesel fuel — Charlie Sutton, who now lives in Canada, starts his fire with kerosene and a rag. (He started his apprenticeship in England in 1940 at age 14.)

Look, you just need heat and oxygen.

Several years ago at a conference, a member started his fire early on a Sunday morning. (Saturday had been his first coal fire.) He had a good fire going when our lead demonstrator from Scotland, Edward Martin, came over with a shovel in his hand and asked for some fire. Our tyro smith was overjoyed to say, "Yes."

The NJBA Trailer Update

We are getting quite a set up!
We would like to thank John Chobrda for the donation of a lightweight 4" leg vise. It will find a home in the trailer after a spring is made for it.
We are looking to purchase an anvil or two, something in the 100 pound range at a reasonable price. If you are interested in selling one contact one of the directors (Page 2). Other hand tools and accessories are also needed, contact Bruce Freeman or David Macauley about specific donations.

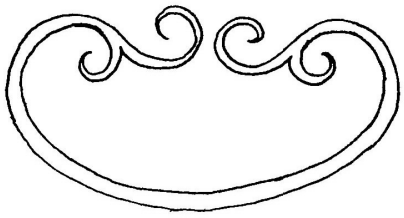


Steve Williamson on Scrollwork

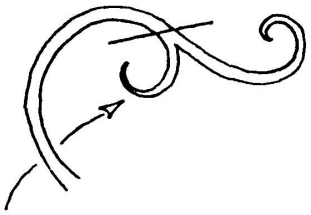
I recently applied for and got the Francis Whitaker Scholarship at John C Campbell Folk School for the two week class taught by Clay Spencer. In this class you must make a drawing of your project and submit it to Clay. Well, I wanted some practice making scrolls... and boy, did I get it!

The following is some of the things I learned about making branching scrolls. But before we get into that... for those of you who hesitate to take this class because it says "advanced" and "you have to make a drawing", don't cheat yourself. Making the drawing and building the project from it teaches what can and cannot be done easily. Also the advanced part should not scare you because Clay is an excellent teacher and is more than willing to explain any question you might have.

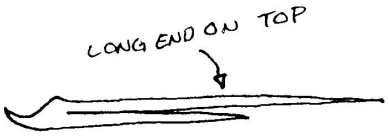
In this article Steve describes the various processes and procedures required to make a C scroll with branching ends.



Start with a full sized drawing of what the finished scroll will look like. You will have to determine the lengths of stock required for each element. This can be done using a piece of solder laid on the centerline of the scroll drawing. Clay showed me his way of determining which way each piece gets scarfed. He takes his drawing of the scroll and draws a line where the scarf will be.



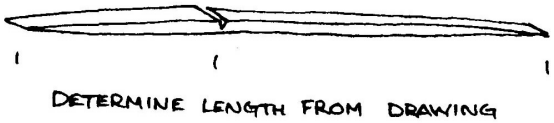
If this branch is shorter, the piece will look like this:

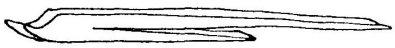


You have to remember this when making the scarf for the other end of the scroll or you may end up with the short piece up on one end and down on the other.

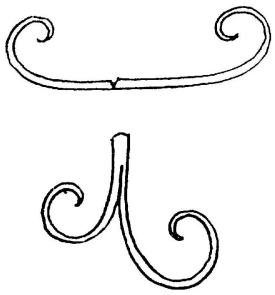
When making your scarfs, make the tip paper thin and turned up. This helps the two pieces stick together. By turning the tip up in the fire, it keeps the tip from burning and also from cooling too quickly when placed on the anvil.

Once you have determined the length of stock required, you can make the branching part of the scrolls. You can either scroll the pieces first and then weld, or you can taper the ends, weld, and then scroll.



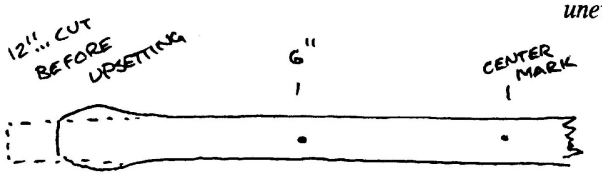


Taper the ends, cut halfway through and fold over. Apply flux and forge weld together.
Or scroll the ends, then forge weld. Make the weld about an inch long.

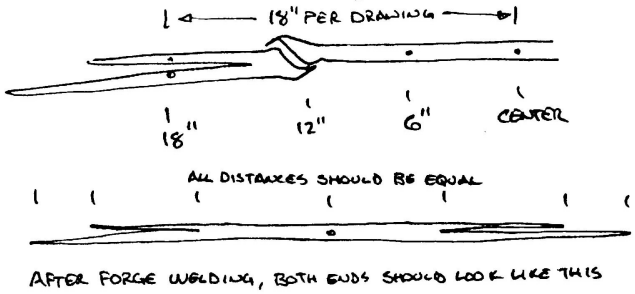


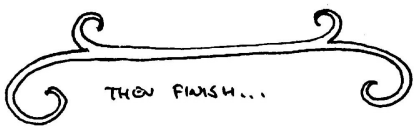
Now work on the c-shaped part of the element. Determine the length as before, using solder laid on the centerline of your drawing. After the length is determined, upset the stock to two times the original stock thickness (upset 3/4" on 3/8" stock, etc.)

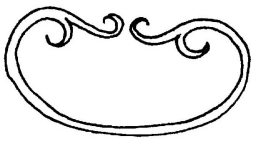
Make a test piece to determine what length of stock you'll need for this piece. *It's difficult to calculate the stock length without a test piece, because the steel will compress when you upset it, then stretch a bit as you weld. The answer here is to use "witness marks". These are small centerpunch marks placed at some convenient distance along the length of the stock. In this case, we marked at 6" and 18" on the drawing. The 18" marks will be placed on the branching scrolls, and the other marks, center and 6" on the stock for the C shaped end.* The stock for the main C was cut at 12".



Upset the end two times the thickness of the original stock. More is better than not enough. Forge a scarf for welding, and measure your work. If you're good, the distance between the witness marks will be 18". If you're like the rest of us, it won't. Not to worry... if you've left a little extra length at the other end of the bar, you can trim it to the length required.







One of the things that can really mess you up is overhammering the weld. This will at least leave an abrupt transition into the branching scroll, and at worst result in a thin spot, causing the scroll to bend unevenly.