

# Sofa Sounds

## Southern Ohio Forge Anvil

VOL 94-3 MAY/JUN 1994

MARK YOUR CALENDAR: Unless otherwise noted, all meetings will be held at the Studebaker Frontier Homestead on St. Rt. 202 about four miles north of I-70 and two miles south of the intersection of St. Rte 571 and 202. Please do not park in the grass or block access to a production area. Donations of items to support the newsletter are always welcome. Finger food and cold drinks provided on a break even, honor donation basis. The forges at the homestead are available before and after the meeting for individual projects. Bring and wear safety glasses.

Demonstrations are open to the public and are at no charge. Meetings start at 1: PM.

#### **Upcoming Events**

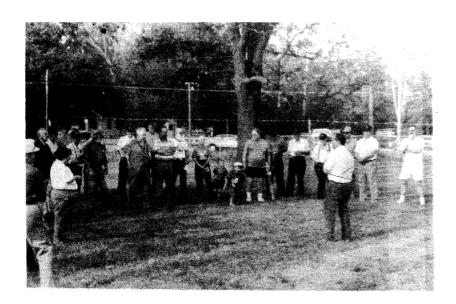
July 10, 1994 note date change due to the 4th of July weekend.	SOFA MEETING at the Studebaker Homestead. Steve Roth Tongs
Aug 6, 1994	SOFA MEETING at the Studebaker Homestead. Brian Thompson To be announced
QUAD-STATE 94, 23 & 24 Sept. 1994	Miami County Fairgrounds at The Blacksmiths' Shop

#### President's Note from Ron Thompson

Three cheers for the good guys, SOFA!!! The groundbreaking for SOFA's new meeting facility has come and gone! This auspices event occurred 24 May 1994. Since I wasn't able to be there, the ceremony was conducted by Steve Roth and organized by Hans Peot. I've been told Steve and Hans did an excellent job of getting this organized. There were about 40 people present including high ranking dignitaries from the fair board and city. Guests included Peter Jenkins, Mayor of Troy and Carl Shoup, Miami county fair board president. The building should go up quickly and will be ready for the Quad State. Now that the ABANA conference is over let me announce those who will be demonstrators for the conference:

Hank Steinmetz Greenville, OH Basic Blacksmithing
Walt Scadden Manchester, CT Railings and Gates
Scott Lankton Ann Arbor, MI Knives
Mike Saari Carbondale, IL Hardware

Your contact for registering is Richard Kern, P.O. Box 284, Xenia, OH 45385. Early registration ensures no waiting hassles when you come. We have covered area for workshops, enclosed buildings for tool sales and grass areas with restroom facilities for camping. Full and primitive RV hookups are available. Same motels as those used in previous years are available. Come and enjoy the work and friendly atmosphere.



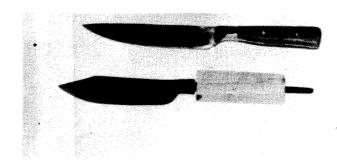


Bob Zeller and Emmert Studebaker planting the seeds for SOFA's future.

As you look at the photos, the building will be where the crowd is now. The rear is right up against the trees. The front of the building faces the parking lot and the lower grass at the rear is the flood plain and drain field for the septic system. The building is facing the covered areas and enclosed buildings. So there is plenty of parking and space available.

#### Club News





knite - Scott Murray

Twisted Stock hot twist, combinations of 1/2", 3/8". In the last newsletter, we announced a contest. The first person who 3/4" 5/8" rods and straps, by Hans Peot could supply the name of the blacksmith in Longfellow's famous poem, "The Village Blacksmith" would win a 1 year membership in SOFA. The winner is Tom Coleman of Portsmouth, New Hampshire. Tom lives about 1/2 mile from the actual blacksmith's house in the poem. He went to the blacksmith's house and asked the people there. The Blacksmiths name was Dexter Pratt. Amazingly enough, no one else got the name. Congratulations Tom! Tom is a blacksmith, who used to live in the Dayton area and became a member of SOFA. He says to be sure to tell all how much he misses the meetings and the fellowship. He is still active in smithing and is paid up for some time in SOFA so he put the membership on the raffle table at the next meeting. Chuck Sleppy was the recipient.

As mentioned last month, the famous "spreading chestnut tree" was cut down in 1876. The tree was actually a European Horse Chestnut which has the same leaf configuration as in Detelson's picture. The town fathers had a chair built for the poet Longfellow and this was mentioned in "From My Armchair" That poem is also reprinted for your enjoyment.

#### FROM MY ARMCHAIR

#### HENRY WADSWORTH LONGFELLOW

Am I a king, that I should call my own
This splendid ebon throne?

Or by what reason, or what right divine,
Can I proclaim it mine?

Only perhaps, by right divine of song,
It may to be belong;

Only because the spreading chestnut tree
Of old was sung by me.

There, by the blacksmith's forge, beside the street,
Its blossoms white and sweet

Enticed the bees, until it seemed alive,
And murmured like a hive.

And when the winds of autumn, with a shout,
Tossed its great arms about,

The shining chestnuts, bursting from the sheath,
Dropped to the ground beneath
And now some fragment of its branches bare,
Shaped as a stately chair,
Have by my hearthstone found a home at last,
And whisper of the past.
And thus, dear children, have ye made for me
This day a jubilee,
And to my more than threescore years and ten
Brought back my youth again
Only your love and your remembrance could
Give life to this dead wood,
And make these branches, leafless now so long,
Blossom again in song.

## May Featured Demonstrator

Invocation Keith Sommers, Steve Roth conducting

#### May Demonstration Scott Murray assisted by Ron Turpin --- Teakettle Hanger

Scott saw one of these in an antique shop and took measurements but didn't buy it as it was priced at \$350. This is an improved model with screws and a hinge that were not on the original. He making and selling these at \$125 and finds a good response. The whole thing hangs from a trammel over the fire and allows the pot to be turned and poured without handling it.



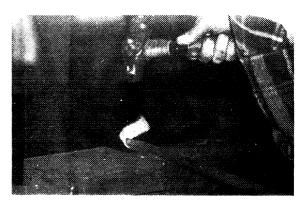
Scott Murray and the Teakettle Hanger

He starts with a 1/2" square rod, any low carbon steel, about 40" long and will cut it to length as we go along. First you upset the end and then draw out the rod just above the upset. No tongs are needed at this point, the heat is well away from you. The upset end allows various treatments such as animal heads, leaf, etc. Cool the upset and heat the other end.

Here we have the famous double strike team, it was duly noted that "the anvil keeps moving in 3/4 time".



Who's keeping time?



Putting the bend in the hook
The hooks are next. Fuller to spread the end for a flat hook and hammer to curved shape. Use the width of the anvil plus some (4+

inches) and hot cut this section. Scott is using a cutting plate on the anvil with the same chisel used in the split below. Do the same for a second hook



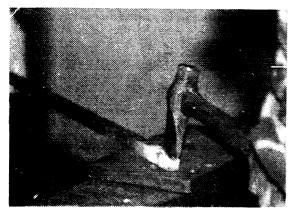
Finishing the split after starting it on the anvil

Reheat the end of the long bar and hot split. This will become the fork for the hinge. Flatten the end of the hanger and punch for a rivet. Here it was drilled and Scott generally drills his work. Drill holes for the tenon also.

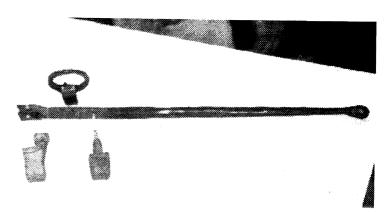
Form tenon for first hook and set aside.

Now the strap for the swivel. This is forge welded. Bring to heat and hit once to set weld.

hot tip--- This is the secret of forge welding - set with a soft blow and then reheat and several more light blows for further setting and then continue with forging blows.



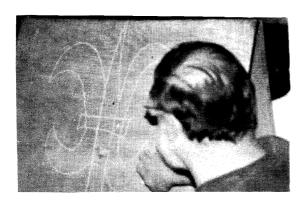
First split to form the hook



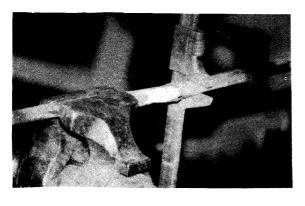
Finished Pieces ready for assembly and bending

## June Featured Demonstrator

#### Demonstrator - Ken Scharebok French Ornamental design, the Fleur-de-Lis

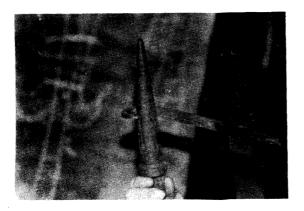


The smith himself, guess we only caught the backside

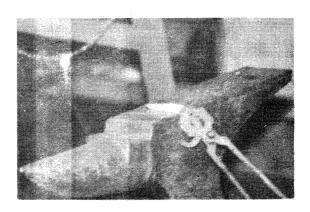


First twist before flattening

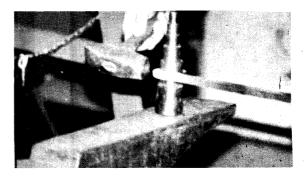
Ken pointed out several items to consider when laying out the design: The bottom curves are smaller than the top ones to give a pleasing balance. A clip will be used to join the curves to the main shaft and a twist will be put in the handle.



Measuring and laying out the curves



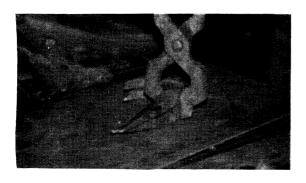
Drawing end for small curve



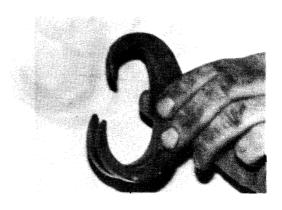
Forming large curve with hardy tool The main shaft will taper three inches, the top curves will be 3" curves and the bottom curves will be 2" ones. The key point here is that the tapering operation will double the starting length, so we

start with half the length of each. Start with the twist in the handle to calculate the space required for each element before the twist add the following lengths":

1 1/2" for the taper --- 2" space for the band (clip) --- 1 1/2" for the bottom taper --- 3" space before the twist --which gives a total of



Comparing drawn ends



Matched set of curves

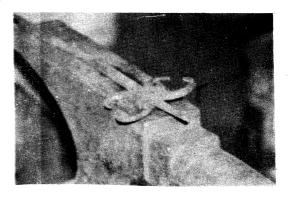
eight inches to where the twist starts Ken twisted two full turns, squared the stock and untwisted.

Now comes the tapering of the end. Mark 1 1/2" from the end. Draw and taper this section to the three inch length. Measure against a mark on the anvil, table or other convenient spot. Ken's preference is to do the large curve first and then the second. The real trick here and a true test of your skill is to see how close you can get the two sides to match their curves.

Cut a length of rod 4 1/2" long. Draw the first 1 1/2" to a taper like



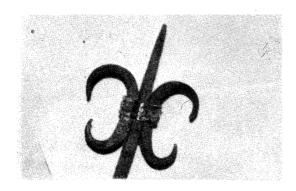
Three sections ready for a collar



First step in collaring

the main shaft. Form the loop on a found circle tool.

Do not use a cone mandrel here as it will put a bend in the curve. The cone also does not lend itself to repeat work as you can easily move the stock around on it. The solution is to use a stepped round cone. Ken made this one out of successive pipe diameters. Each piece extends to the next level, loose ones are welded in and the square for the hardy hole is welded on. Do this for two pieces of stock.



Finished Fleur-de-lis

Next step is to taper the small end. Mark a one inch section, take heat and draw out to two inches. Use a smaller diameter step on the circle tool. Do the second and get as close a match as you can on the sections.

In his shop, Ken will weld these three sections together. Use a high amp setting on the welder and go for deep penetration. Working on the back of the fluer-de-lis, hold the rod steady at each joint and sink the rod into the puddle. You are looking for minimum buildup here and a flat surface. Grind if necessary. For this demonstration, there was no welding and the pieces were loose when the banding started.

To figure the length of the band add the dimensions across the front, back and sides. We are using 1/2" stock. ! 1/2" + 1 1/2" + 1/2" + 1/2" = 4" plus allowance for the bend. The band or collar is 3/16" thick. The allowance is 1/2 the thickness times the number of corners:  $4 \times 1/2 \times 3/16 = 3/8$ ".

Ken's preference is to use a 45 degree scarf joint that touches rather than a butt joint when the collar is folded over. This looks better and gives a small allowance for error. Now cut the collar to length, mark the center point and 3/4" on each side of the center. Do this on the back of the collar.. This gives the 1 1/2" across the front.

Wave treatment for pointed end TIP rubbing across the marks when heated with the hammer pein will show the mark as a dark spot. The small dent holds some debris and is a different temperature.

Heat and bend in vise to get the U shape, heat again and bend hot over the three pieces to close the collar. Finish the end of the poker with a wave rather than a straight point. It's visually interesting and smoothly flows to completion.

#### ABANA message

Chapters who own forges will want to opt in manufacturers policy to protect the vendors ABANA members production operations.

Chapter or private shop questions at the Conference in St. Louis. materials, rates and someone to answer your be a table 7

interest to the ABANA Office for a waiting list and Janelle will send out the information materials to send ABANA Central ave the

Ask me, "What has ABANA done for

Thanks to all the ABANA Chapters who national office. newsletter editors whenever possible! Change of Officers? If you have a change of name and/or address for your President name and/or address for your President Editor, please drop us a postcard with the nformation so we can update our

Chapter Liaison Committee Chairman RD #5 Box 154, Greensburg, PA 15601 John Pollins III

anybody's medical expenses who is hurt at a Chapter event, whether it was anyone's faul Chapter event) and Medical Pay Chapter will

or not)

# CHAPTER LIAISON NEWSLETTER

ABANA Bi-Annual Conference in St. Louis in June through literally flood, famine and pestilence -and to the membership of the Missouri Chapter (BAM). This is a labor of of his life and livelihood to Chair the

Nearly every state has adopted 402A of the Restatement, Torts 2nd in one form or the "Guarantor" of the safety of your product and you will have to pay for any damages caused by a breakdown whether

the 1200 layers and sell their opinion to your blind ex-friend's lawyer that your barrel Example: You accept an order for a damascus muzzle loader barrel for a friend After the pistol he builds blows up blindin you were negligent in its forging or not

was dangerously defective.

You're "absolutely" liable! Worse certainly deny coverage because you sold the barrel and they don't cover business doesn't include "Products Liability

Seminar ABANA Check your insurance and don't sell Liability at the str St Plan to attend

12, 1994), the ABANA Board approved a package from AETNA Insurance Company for ABANA Chapters for ABANA members private shops ast night (May

# ABANA

Artist-Blacksmiths' Association of North America

P.O. Box 1181, Nashville, Indiana 47448
Executive Secretary, Janelle Gilbert Franklin

#### ABANA PRESIDENT'S MESSAGE May, 1994

Dear ABANA Chapters,

Most of you know that I am a big believer in April Fools Day. Last month, I apparently April Fooled myself! In last month's ABANA President's Message to the Chapters, I told you that the registration packets for the June 15-18 1994 ABANA Conference in St. Louis, Missouri would be mailed out in April, then said that if you didn't receive them by March 1 to call us! Obviously, I meant to say May 1! Sorry if that one caused you or your members any heartburn — our Conference people said they got a few calls over that one. In any event, I can now say with some certainty that the registration packets have been mailed out by now!

As has become tradition, we will be having a President's Meeting at the ABANA Conference. This meeting allows the Chapter Presidents the opportunity to compare notes, discuss common problems, and just get to know each other. All ABANA Chapter President's are encouraged to attend. Likewise, there will be a Chapter Editor's Meeting. The Chapter Editors won't want to miss this one — there are always lots of great ideas passed back and forth that can make the Editors life easier AND save the Chapter some money, too! Meeting times will be announced at the Conference.

In case you hadn't noticed it, details about the ABANA Scholarship Program have been included in the latest Anvil's Ring. The Scholarship Program has been expanded! Members of Chapters that have Scholarship Programs already in place may now apply for matching funds from the ABANA Scholarship Program. Other types of scholarships are also described in the Ring, so I won't go into great detail here. Suffice to say you now have more scholarship options than you had before.

Well, I started this message "telling on myself," and I will end it up that way: One of the many reasons I am adamant about fire extinguishers in the shop, keeping fire lanes open for fire trucks, and housekeeping to reduce fire hazards, is an experience I had about 10 years ago. I was doing some welding on a large structural iron project next to the large open door of my shop. I would use the grinder, spraying sparks in every direction, then go back to my welding. After an hour of that, I was pretty much focused on just getting the job done. I put my hood down again and soon smelled the unmistakable smell of burning dry grass. I had set the dry grass next to my wooden shop on fire. I ran about 50 feet to the nearest hose, turned it on, and ran back to the shop with the hose. The hose kinked. No water. I ran back to the kink, un-kinked it, and ran back to the shop. I won't keep you in suspense... I put the grass fire, and just a tad bit of my shop, out. I put that scenario on the long list of things I don't intend to repeat.

Warm Regards,

Clayton Carr ABANA President





rtist-Blacksmiths' Association of North Americ



P.O. Box 1181, Nashville, Indiana 47448
Executive Secretary, Janelle Gilbert Franklin

Office Hours: 9:00am - 5:00pm Phone: (812) 988-6919

#### ABANA PRESIDENT'S MESSAGE

lune, 1994

Dear ABANA Chapters,

How long have we all been waiting for an ABANA Insurance Program? Wait no more, because several days ago (as of the time of this writing) the ABANA Board approved a group insurance plan that has been seven months in the making! This plan will not cost the ABANA membership one red cent more in membership dues — those who want this cost effective coverage can pay for just exactly what they need. The plan, which will be available to both the Chapters as well as any individual in ABANA who owns a blacksmith or metalworking shop, will be unveiled at the June ABANA Conference. If you are not going to the conference, make sure that those who are going get all the particulars for your Chapter. Representatives from Aetna, who underwrote the program; and Industrial Coverage Corporation, who worked with us to come up with the plan; will be there. We are proud and excited to be able to provide this badly needed service to our Chapters and members. Certainly, this plan will also be a breath of fresh air to our professional members as well, who will benefit greatly from the low group rates.

So why is insurance for Chapters so important? It is simple to understand why the professional members require insurance — it is a matter of survival and protection. The same holds true for the Chapters, and perhaps to an even greater degree. There are more hobbyists and amateurs in the Chapters. There are a wider variety of situations that the Chapters find themselves in, and most of those situations involve exposing more people to hazards than a professional would; although that exposure is for shorter periods of time than a professional is exposed.

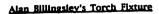
Our new ABANA Insurance Program is the latest in a series of moves designed to provide our membership with more of the services they need. We have upgraded our Scholarship Program. We added a second publication for our North American members, the Hammers Blow. We had our first-ever exhibition for ABANA members outside of a conference, at the National Ornamental Metals Museum, and are planning another. We started the National Endowment Trust for Artistic Blacksmithing, which may be used as a safe and effective method for those who wish to make donations or bequests to promote Blacksmithing in the future. Very shortly, we will announce some changes and additions to our ABANA Video Library that I'm sure you will appreciate. How are we doing so far? Let us know at the ABANA Conference, we want to hear it from you!

All this has been possible because ABANA is growing. We very much appreciate the confidence you have shown in your support of our organization. Spread the word! ABANA is already the largest blacksmithing organization on the planet; and with your help and support, you will be amazed at what we can accomplish together.

Insurance does provide you with protection. But our Chapters that are incorporated enjoy an extra measure of protection that those who are not incorporated cannot have. If your Chapter is sued, and you are not incorporated, the complainant can go after your officers, your members, and the family dog. If you are incorporated, they can only go after the assets of the corporation. Which spot would YOU rather be in? Board member Hans Peot will have information on Ohio incorporation at the Conference. Of course, all states are not the same, but it will give you an idea of what is involved. Please, consider incorporation for your Chapter. It is a small price to pay for peace of mind.

See you at the Conference!

Clayton Carr ABANA President



In responding to ABANA's challenge for ring submissions at the June Conference in St. Louis, Alân Billingsley, a member of this Chapter from Chattanooga, decided that a jig around which he Alian Billingstey, a member of this Chapter from Chattanooga, decided that a jig around which it could form his ring would be desireable as well as useful for future ring needs in his shop. To make this jig, it was necessary for him to make a fixture for his cutting torch in order to cut perfect circles out of heavy plate. This plate was then used as the jig to form his ring.

Presented below is the fixture he designed and submitted for publication in this newsletter. The fixture consists of three parts indicated in Figures 1-3 and assembled in Figure 4.

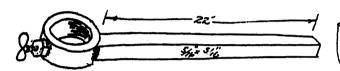


Figure 1
Radius Arm with Nozzle Holder Ring



Figure 2 Vertical Back Holder

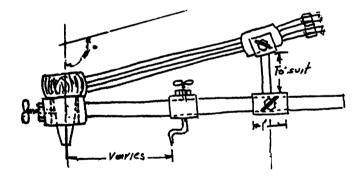
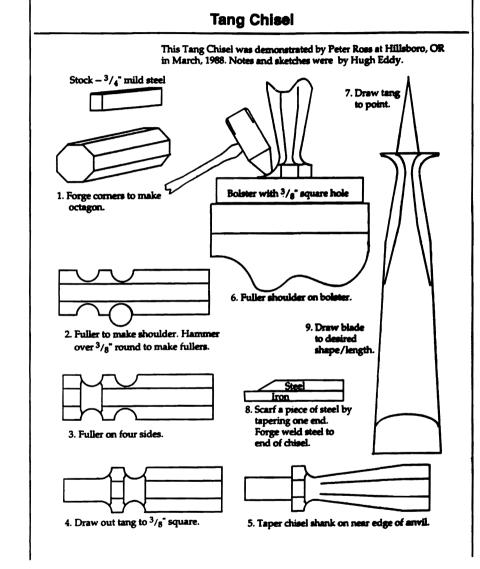


Figure 4
Assembled Fixture

aac

Figure 3 **Pivot Point** 

APPALACHIAN AREA CHAPTER



Bituminous Bits/Alabama Forge Council

#### Scroll Wrenches

by Paul Quyle

This little article is for the few masochists who exist in CBA. Scroll wrenches can be made so quick with an arc welder that almost everyone who needs one has a surplus. However, there are a few of us who have been seduced by the forged wrenches shown in the old books and in the COSIRA series. They look so simple that at first glance I thought there is nothing to making one of these; that was before I tried.

Some authorities suggest driving a rectangular bar down into the stock to form the fork tines of the wrench. See Figure 1. My results have always been imperfect. I found it very difficult to do a good job with this method. Bob Thomson found that only by driving down to the full depth with the bar before correcting for the upset could be keep the tines reasonably parallel. However, rounding them up becomes very difficult.

After playing with several different approaches, I've concluded that the following method works best for me. I found it convenient to make two tools first. See Figure 2. The first is a scrap piece of 4" x 4" angle iron about 3" long with the top edge slightly rounded and a 14" pad welded inside. This will fit into a post vise and give a square flat surface to work on. The second tool is just a piece of 14" x 3" flat bar with a stop welded on the back. This will stand vertically in a post vise.

Now for the wrench itself; think about what you want for size of etcols. We probably will never have exactly what we want to work with, so oversized is probably better than the real small. Fuller two notches into your stock. See Figure 3. Leave snough material on the

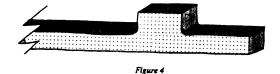
end to draw down to form the end tine, plus an allowance for the gap of the wrench as well as material to bend the tine up. If it is too long you can cut it off. You need enough material between the two notches to draw out into a tine later, not now. Again, be a little generous. If it finishes too long, you can cut it off. Leave this rectangular; it is going to be held in the vise shortly. Next, forge out the handle end of your wrench. This can be drawn to a nice tapered handle to suit your taste. You should have something like Figure 4.

Figure 5 shows the next step. Put the two tools into your vise and clamp your work piece in tight between them. Use a side set to start working the lump of iron down to shape. Draw down to form one tine. The two tools keep things in shape. You can do this without them; however, they do help.

Figure 6 shows the finished upright tine and the nose end drawn out and rounded up. Having everything open like this makes the shaping and rounding of the two tines very easy and straightforward. Figure 7 shows bending the end tine up straight, using a flat bar for a spacer. I would grind a slight radius on the bar to relieve the sharp edge against the bend.

Figure  $\delta$  is my attempt to show something that looks like the finished forged wrench. I find they are fun to do, and you can look down your nose at those practical functional welded wrenches, because yours now represents real effort and dedication.

Have fun, Paul Quyle 🗆



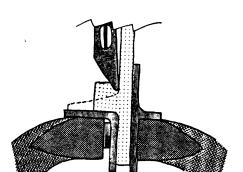
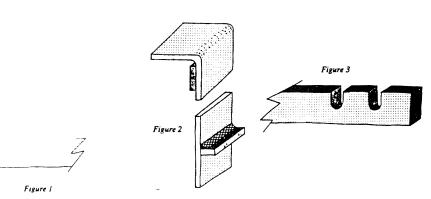


Figure 5



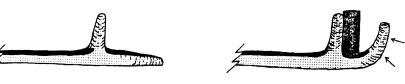


Figure 6

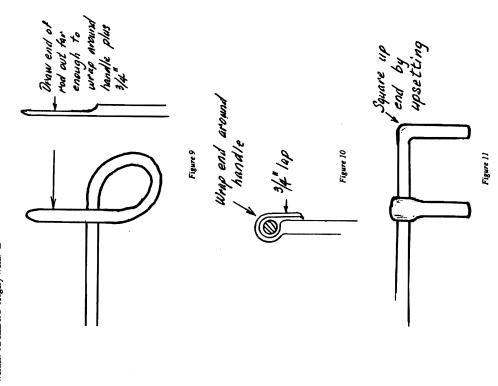
Figure 7



Figure 8

6 California Blacksmith

Editor's Note on Scroll Wrenches: Al Bart, Yreld, Chiffornia, lites Paul's method. He also feels that we should fire weld more and trust our weelds. He suggests COSIRA's The Biodomith's Creft, Leson 34, which uses a cleft weld to make a scroll whench. Still another method is to circle the end of the handle around and over itself. (For a small wrench he uses \$4° to \$4" anti-avay bars.) Figure 9 shows the end drawn out enough to wrap around the rod plus. \$4" for a lap weld. Figure 10 shows the wrap. (There should be little clearance under the wrap.) Weld the wrap, taking as many heats as necessary for a good weld. Cut, straighten the legs and dress to your satisfaction. Figure 11 shows the bend and upset of the earl making a square comer and a good wrench. Al goes along with Paul and the arc welder. A legie: A calie; it a "frozery weld."





You may post items for sale on the board, either things you make or have and want to change out. The only qualification is that the items must be related to blacksmithing somehow. This is an unabashed attempt to help you turn your stock and work. I would like to see a long listing of just about everything!!

**SOLD!** Anvil about 115 lbs mounted on wood stand. Call Jack at \*\*\*\*\*\*\*\*. Dayton OH.

FOR SALE: Mini Log Cabins, Size 8" x 5 1/2" x 12" all hand crafted and make from 100 year old wood. These are limited to 50 ea.. From \$25 to \$35. I also make them from soft pine and treat with wood conditioner and stain.

Dale Woodruff, 15000 Merand Rd., Anna OH 45302, 513-394-7274 current as of 4/14

SOLD!! -- 25 lb Little Giant power hammer, Scott Murray, Wapakoneta, OH 45895.

FOR SALE -- 100 lb. swage blocks for \$110. 65 lb. portable cones with tong groove for \$75. Shovel molds for \$30 Ron Thompson at (513) 492-2259 current as of 6/12

FOR SALE -- books: Little Giant Powerhammer, Building the Gas Forge & Foundry, More. Catalog free. Manuscripts solicited. H&K Publishing, P.O. Box 284, Xenia, O 45385 current as of 6/12

FOR SALE -- Atmospheric forges, Doug Fink at 513-898-2139. current as of 6/12

FOR SALE - roller conveyor sections, lengths of 5', 6', 8', & 10' and corners with legs @ \$6.00 per foot. Magnetic torch panagraph, floor model with torch \$1500, Enerpac tube/pipe bender - 1 1/4" to 2", \$350, misc. steel work benches. John , P.O. Box 396, Clinton, MI, 49236-0396 (517)-456-4494.

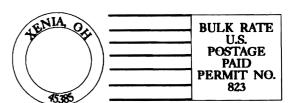
#### Registrations

Sofa Registration Your membership in SOFA is expiring. Since people, it would help if you would renew by m Send or bring this with you:	the newsletter editor, Secretary/Treasurer are different ail or at the monthly SOFA meeting.
NAME: TELEPHONE: ( ) ADDRESS:	(DUES ARE \$5.00 PER YEAR)  Make check payable to SOFA  and Send to
	SOFA REGISTRATION c/o HANS PEOT 6425 S. Scarff Rd., New Carlisle, OH 45344

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#### **SOFA SOUNDS**

C/O Richard Kern, editor P.O. Box 284 Xenia, OH 45385



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