

SOFA SOUNDS



SOF&A
SOUTHERN OHIO FORGE & ANVIL

Artist-Blacksmiths Association of North America

OCTOBER/NOVEMBER 1986

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Ken Scharabok (513-252-3001)

MARK YOUR CALENDAR: Unless otherwise indicated, all meetings will be held at the Studebaker Homestead on Rt. 202, four miles north of I-70. Guests and the public are welcome. Bring items and tools you have made for display. Donation of items for the newsletter support raffle are always welcome. Please don't park on the grass, there is ample parking around the production buildings, but please don't block driveways or interfere with plant operations.

September 27th & 28th	1986 Quad-State Blacksmithing Round-Up.
October	(No meeting this month)
November 1st, 1 PM	BUSINESS MEETING followed by a demonstration by Duane Wegley. Project to be announced.
December 6th, 1 PM	BUSINESS MEETING followed by a demonstration to be announced.

1986 QUAD-STATE BLACKSMITHING ROUND-UP:

This year's regional conference should be a good one. Excellent demonstrators have been arranged and should be on site Friday evening. Volunteers are still needed for the conference, particularly on Friday to set it up, and Monday to clean up the homestead. Volunteers will receive a rebate on their conference fees.

In preparing the deposit for the first batch of registration checks, I did not see many from local members. Please register by mail in advance as it will make the registration process go much easier.

Two notes on the demonstrators. If we can find the parts they need, Terry Carson and Darryl Nelson will use a homemade LP gas forge for their demonstrations. At one time they were probably the biggest users of blacksmithing coal in the Pacific Northwest but have now switched almost entirely to a gas forge operation due to its many benefits over coal. Beau Hickory will not be demonstrating putting letters, names, etc. in Damascus pattern forging. This was a mistake when the brochure was put together. However, he will be glad to discuss the process, we just don't have the equipment he needs to do it.

Anyway, register by mail as soon as possible, provide what help you can, and enjoy yourself.

Creative & Friendly

MEETING NOTES:

At the August 2nd group business meeting two items were discussed:

- The group now has a liability insurance policy to cover non-members. It does not cover members since they would be essentially suing themselves. For the insurance the group received two quotes, one for \$2,600 and one for \$100 - which illustrates the state the insurance industry is in. This policy in no way eases our need to be safety conscious.

- Ron Thompson has brought up the possibility of a lifetime membership option, say 20 times current dues. This money would be put into a special account to let interest appreciation essentially earn dues for the period past the 20 years. This will be discussed at a future Board of Directors/Officers meeting so let us know if you would be interested in this individual option.

Although not discussed at the group business meeting, the Board of Directors/Officers voted to sponsor a month in the 1987 ABANA Calendar. The photo subject will be the homestead gate as soon as the top scroll work is installed. This will cost the group initially \$200, however, in return, we will receive 50 free calendars for local resale to recoup our costs. In this manner, national has up-front funds to pay for printing of the calendars.

The raffle brought in an additional \$34.00 to support the newsletter. Sidney member Charles Staley won a short-handled, 6 lb machinist hammer donated by Spring Valley member Bill Fleckenstein. Huber Heights member Ray Montgomery won a nice fireplace poker out of 3/8" rod donated by Troy member Thomas Ziegler. Greenville member Ron Van Vickle won a piece of "horsehide" cloth for making an apron donated by Perrysberg member Don Witzler and a pair of tongs out of the SOFA supply for this purpose. Fairborn member Dave Hartman won two old files donated, I believe, by Bill Fleckenstein. Kettering member Ham Hammond won a length of 1/4" brass rod donated by Bill Fleckenstein, Tipp City member Emmert Studebaker won a chisel donated by Ham Hammond and Cleveland Heights member Art Wolfe won a piece of soapstone also donated by Ham. Troy member Robert Cruiksank won a can of miscellaneous bolts donated by Bill Fleckenstein and Bill himself won a cold drink can holder donated by Dayton member Owen Vance. Thanks goes out to everyone who donated items to the raffle but my pot is running short of future items. Please consider making an item for the raffle or donating some of your blacksmithing-related trash to become someone else's treasure.

Following the meeting, Ron Thompson lead the group in a workshop to make a beaver trap similar to the one shown elsewhere in the newsletter. Ron highlighted the history, construction techniques, and use of these traps and highly recommends the book, The Steel Trap in North America by Richard Gerstell (Stackhouse Books, about \$50.00). The trap we were trying to duplicate was from the 1812 era. Ron commented that most westward exploration in the U.S. was for the purpose of expanding the fur trade into new territory and that most Mountainmen only carried three of these beavertraps since they were both expensive and heavy to carry. However, the Mountainman might have to walk many miles daily to ckeck these three traps.

The group broke into four groups using three forges to make the component parts. We produced about half the required parts.

Emmert Studebaker commented that this type of demonstration program was particularly good in that it was an opportunity to involve the group members in hands-on work. If you have an idea for a future project of this nature, please contact one of the group officials.

* * * * *

Since I was at EXPO '86 in Vancouver, B.C. Canada at the time, I missed the September 6th meeting. However, I understand Hans Peot gave an excellent demonstration on how to put on tenons and Dick Franklin demonstrated some basic blacksmithing.

The raffle brought in an additional \$18.00 to support the newsletter. Winners were: Owen Vance (Dayton), Steven Fleckenstein (Quincy), Wade Hoffer (Spring Valley), Charles Staley (Sidney), Steve Roth (Englewood), Bill Fleckenstein (Spring Valley), Ron Van Vickle (Greenville), Lynn Spallinger (Pandora), Ben Wunder (Covington) and Ron Thompson (Sidney).

THE AUGUST 1986 ABANA PRESIDENT'S MESSAGE (By Stan Stickland, Past President):

"Well, I do believe that I will survive the jet lag resulting from my trip to Flagstaff, Arizona. I must report the 1986 ABANA Conference was a huge success in every way, with over 725 attending."

"Congratulations to Bill Callaway and the many troupes who were responsible for the Conference. They did yeomans duty, day and night, to see that we have a good time. Demonstrations were excellent and many, causing one to have mixed thoughts of where to be for the most information. That really made no difference, as no matter where you were, blacksmithing was presented as well."

"The Winter issue of The Anvil's Ring will be dedicated to Conference coverage, so I will hush for now and let those who attended, and those who could not attend, wait in great anticipation for the photos and editorials in The Anvil's Ring." (And so will I. - ks).

"This is my last President's Message, as after 27 months, the reign has been passed to Jim Batson of Huntsville, Alabama. Jim is also President of the Alabama Forge Council, and is an excellent choice as President of ABANA. Jim's occupation is with the rocket program, so we look to see ABANA reach higher and higher in the preservation and promotion of blacksmithing."

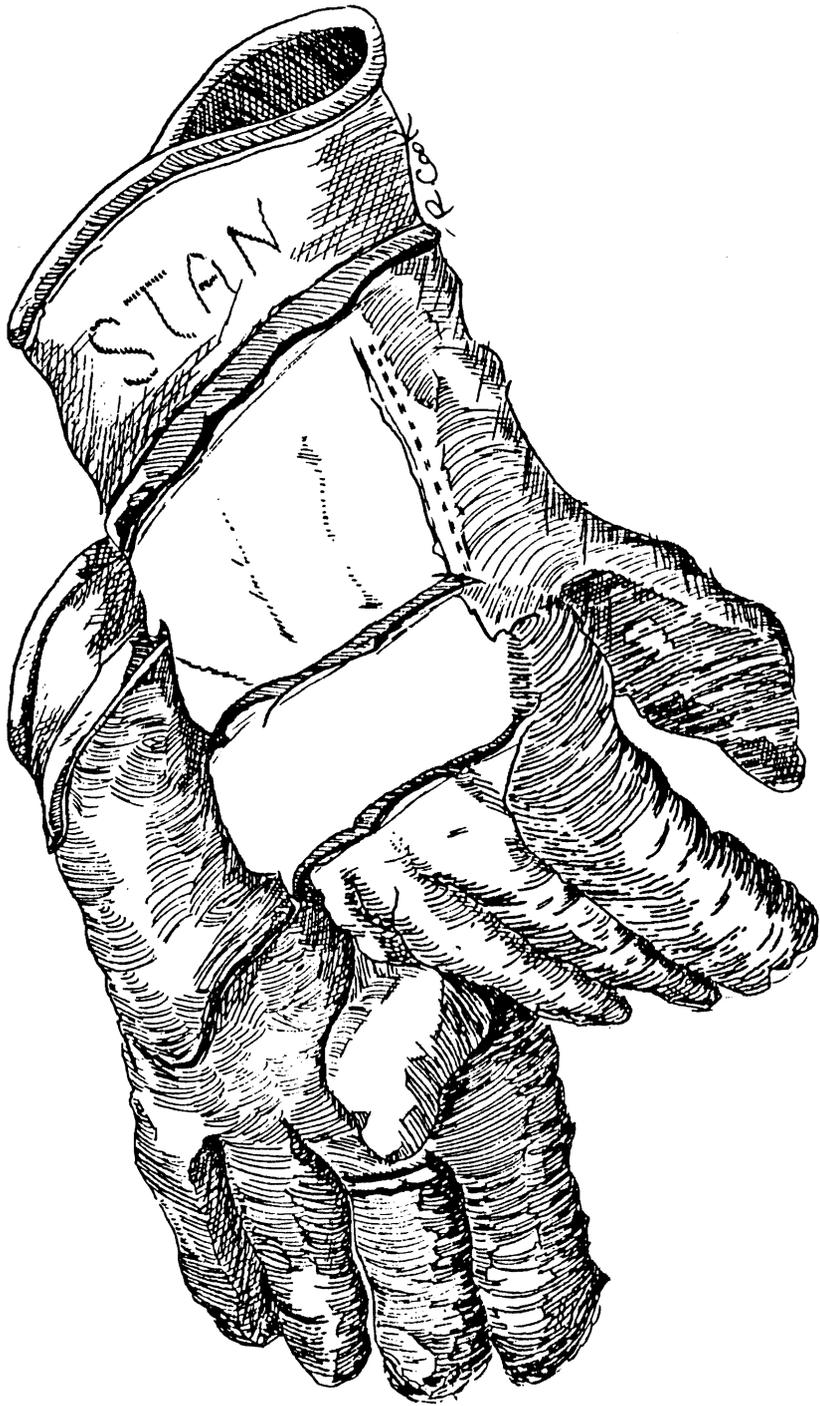
"I would like to share my thoughts of 27 months as ABANA President, as it has been the greatest privilege extended to me in my life. Let's go back to the beginning when this "Georgia Cracker" was elected to run the largest blacksmithing organization in the world."

"One could say I was nervous but that would be an understatement, terrified was more like it! As smiths go, I may be competent, but to be President of ABANA, who was kidding who? After the terror and fear passed, (ABANA only allowed 30 minutes for that before work began) I realized that I had been granted the opportunity to do something for ABANA in repayment for all it had done for me. I was fortunate to have a great Board of Directors, and together we set out to do our best for ABANA."

"Let's compare this period to a very difficult forge weld. We had the material (members), we had the forge (ABANA), we had the coal (enthusiasm), we had the anvil (dedication), we had the hammer (a will to improve ourselves), all we lacked was the program to put all this together."

"Ruth Cook had been hired as Executive Secretary and inherited a glorious mess of records. She applied her magic to this mess, and glory be, she helped apply order to the preparation of a very difficult forge weld."

"It was evident early on that many people would be required to accomplish the task at hand. This was no problem, as the ABANA Board came forward and cleaned the clinkers from the fire. Several other members came forward to handle the blower. We were moving forward to forge welding the idea in everyones mind that blacksmithing was here to stay."



Day of me "This man saves iron."

"We checked our material (members), not quite enough for the massive project at hand. Several people went out and got more members, and provided enough material to keep ABANA moving forward."

"The coal (enthusiasm) was piled high, and into the fire went our hopes and dreams. Much fussing here and there as to when it was ready to pull from the fire and get our weld. We thought it was ready a year ago, so we pulled it out and went to the anvil (dedication) and applied the hammers (our will to improve ourselves), we got a weld, but the feathers were not down, and the weld was weak. We ask ourselves what to do, as this was not working as planned. When we looked up there were 10 new Chapters coming to help. They joined the other 18 Chapters in furnishing more hammers (the will to improve ourselves), and also brought generous quantities of flux in the form of friendship."

"We went back to the forge, cleaned out the clinkers, applied heat to our ideas, soon the sparks were evident, and to the anvil we go. Sparks fly everywhere as all involved apply a spirit of dedication not matched anywhere."

"The slag is removed and the feathers go down under the constant hammering of people who care. We watch as the iron ideas of ABANA were joined as one. It is a beautiful sight, seen by so few. We all stand back and admire our work, but all know this is only one small accomplishment in time. Continuing to keep blacksmithing in front of the public is a constant and long-term project, so this must be done again and again. We know the resources are available, all that is required is the determination that blacksmithing will live forever."

"I am proud to have had the opportunity to be part of this great movement. To all of you I express my deep appreciation for your help, this was not and never will be a one-man job, the credit for success goes to you. Thanks to all of you....I will never forget."

HEAR YE! HEAR YE! YEAR YE!:



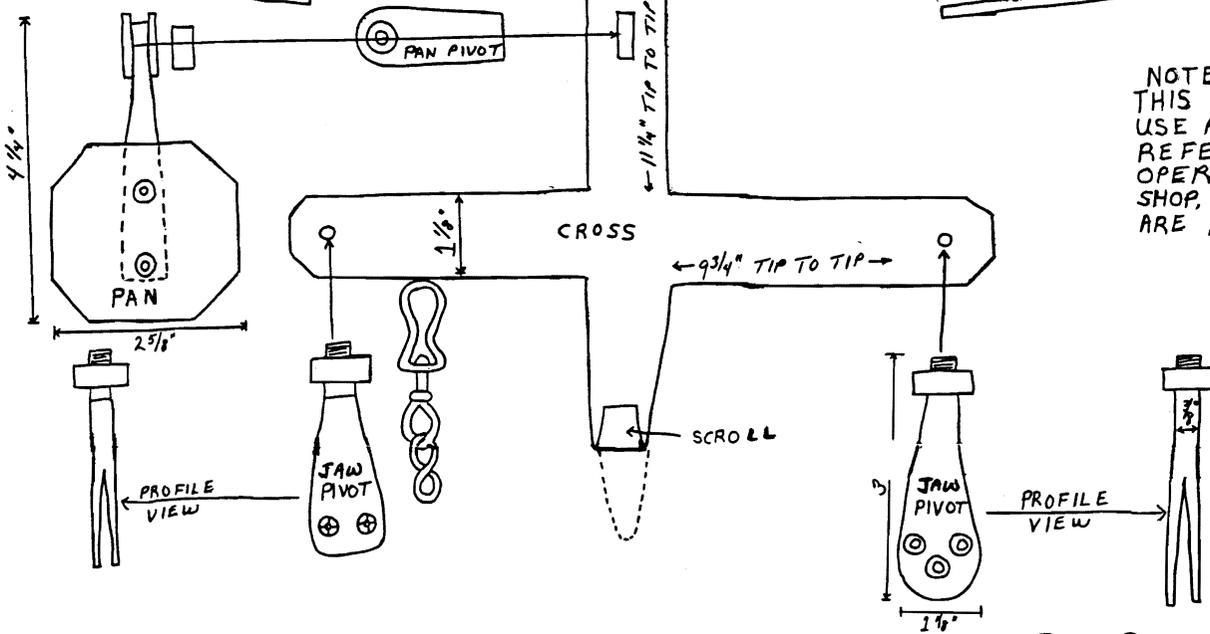
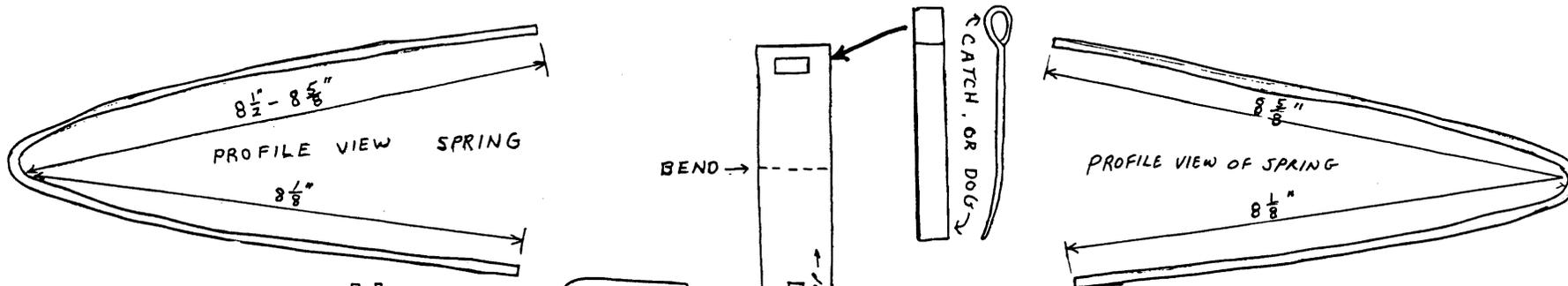
C. A. "Spike" Miller is apparently the Bill Gishner of the West Coast. His ad says he has all types of old blacksmithing tools available. For further info. contact him at 12117 Ramsey Dr., Whittier, CA 90605 - 213-944-2756.

Uncle Burley's (P.O. Box 1327, Edinburg, TX 78540) has several styles of broom heads for fireplace tools available, from \$5.50 to \$16.50.

BLACKSMITH WANTED: Liberty Forge (Architectural Ornamental Metalwork). Contact Nick Brumder at 40128 Industrial Park North, Georgetown, TX 78626 - 512-869-2830.

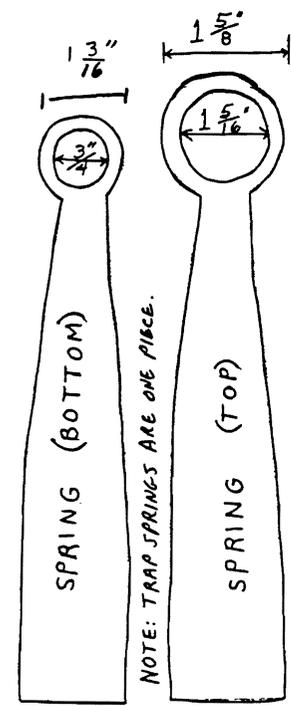
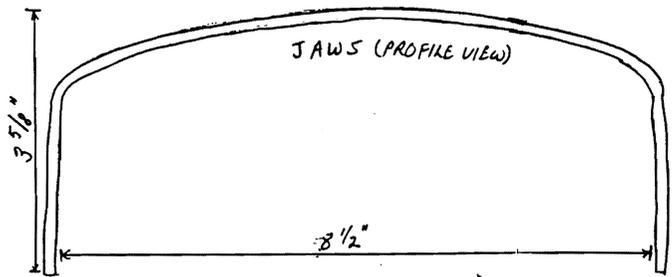
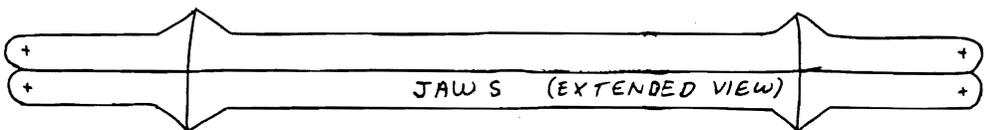
BLACKSMITH WANTED: Partnership in a fully equipped working shop located between Austin and San Antonio, TX near I-35. Contact Davey Jacks at 512-343-6494 or Paul Rickardson at 512-268-0501.

Interested in studying blacksmithing under one of Europe's leading blacksmiths, Manfred Bredohl of Aachen, West Germany? ABANA and Mr. Bredohl have organized a work study program as follows: Features: work-study for a three month duration; two ABANA members can attend at the same time; apartment is provided and located next to the shop; workday lunch is provided; access to all tools in a new, modern shop producing a wide range of work; accident insurance provided while at work (you should have your own health insurance); English is spoken in shop; and students from other



NOTE:
THIS SKETCH WAS INTENDED FOR
USE AS A WORKING DRAWING FOR
REFERENCE DURING FORGING
OPERATIONS IN THE BLACKSMITH
SHOP, ALL PROPORTIONS AND DIMENSIONS
ARE APPROXIMATE.

HAND-FORGED BEAVER TRAP



Scale:
1" = approx. 2 3/4"

Provided by:
Don Witzler

Hudson's Bay Co. Type
Beaver Trap
Copied from original in
Clark Co. Museum
Vancouver Washington

(9)

ountries also attend. Requirements: Current ABANA membership; any ABANA member may apply; you pay own airfare to Brussels, Belgium and train fare to Aachen; you pay incidental living expenses; have the ability to learn and adapt; provide an application containing a letter of intent, photographs of work, personal resume and at least two letters of recommendation. Sounds like an excellent opportunity. For further info. contact David Court, Aachen Work-Study Program, Bay Hill Road, Northfield, NH 03276.

The ABANA brochures are the top recruiter of new ABANA members. If you know of a place to give out brochures, a supply can be requested from ABANA, Box 303, Cedarburg, WI 53012 - 414-375-0278.

The next Birmingham Blacksmithing Festival will be October 26 - November 1. Manfred Bredohl of Aachen, West German will be demonstrating. The project is to design and construct a gate for the main entrance of Sloss Furnaces National Historic Landmark. A juried exhibition will open October 26 - January 31, 1987. Cash awards. For further info. contact Paige McWilliams, P.O. Box 1781, Birmingham, AL 35202. Ask Dick Franklin for further info. as he attended the last festival.

Reminder that Francis Whitaker will be instructing in Advanced Blacksmithing from November 2-15 at the Campbell Folk School in Brasstown, NC - 707-837-2775.

BLACKSMITH JOURNEYMAN PROGRAM: The Appalachian Blacksmiths Ass'n announced completion of a journeyman plan which has received acceptance and registry with the Bureau of Apprenticeship and Training, U.S. Dept. of Labor. The plan is unique among smith clubs and ABANA Chapters in offering a chance to become a journeyman blacksmith recognized by the Federal Government as such. For further info. contact Bob Askren, 130 Beacon Rd., Renfrew, PA 16053.

Reminder that a listing of arts and craft festivals or exhibits which feature juried exhibits (some with cash awards) is available from the Editor for a 22¢ stamp. The calendar update is provided monthly by ABANA headquarters, an example of a service provided by your membership fee.

The second annual POWER HAMMER WORKSHOP given in conjunction with the Appalachian School of Crafts will be held at the school facilities in Smithville, TN on October 31st - November 2nd. This will be a complete, hands on, total rebuild power hammer workshop. For further details, contact Alf Ward, Appalachian School of Crafts, Rt 3, Box 347-A1, Smithville, TN 37166 - 615-597-6801. Attendance is limited.

For you ornamental gate makers, I have available a list of 49 supplies of rolled steel cap, flanges, baluster ornamental ornaments, castings, pressed steel ornaments, locks, brackets, etc., and machinery, tools and equipment for the ornamental iron trade. It is from the newsletter of the California Blacksmith Ass'n. Send 22¢ stamp.

There is an excellent article on "Welded Damascus Steels and a New Breed of Laminated Composites" by Jeffrey Wadsworth, Dong Wha Kum, and Oleg Sherby in the June 1986 issue of Metal Progress Magazine. Other related articles are "Ultrahigh Carbon Steel" by O.D. Sherby, T. Oyama, D.W. Kum, B. Walser and J. Wadsworth in Vol. 11, No. 6, 1985 of the Journal of Metals, "The Impact Properties of Laminated Composites Containing Ultrahigh Carbon (UHC) Steels" by D. W. Kum, T. Oyama, J. Wadsworth and O.D. Sherby in Vol. 31, Nr. 2, 1983 of the Journal of Mechanics and Physics of Solids, "On the Bulat - Damascus Steels Revisited" by J. Wadsworth and O.D. Sherby in Vol. 25, Nr. 1, 1980 of the Progress in Materials Science Magazine, and "Damascus Steels" by O.D. Sherby and J. Wadsworth in Vol. 252, Nr. 2, 1985 of Scientific American Magazine.

The exhibit: CAST IRON: ART AND INDUSTRY is sponsored by Lawler Machine and Foundry, Birmingham, AL at the National Ornamental Metal Museum, 374 W. California Ave., Memphis, TN 38016 - 901-774-6380. The exhibition traces the developments in technology and aesthetics of the cast iron industry and continues through November 9th. Pouring demonstrations on September 14 and October 12.

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Dorothy Steigler's book, "THE BLACKSMITH'S HELPER: A GUIDE TO FOOD SMITHING" is now available through ABANA (P.O. Box 303, Cedarburg, WI 53012) for \$4.50 postpaid. This book provides recipes with a blacksmithing faire and is dedicated to everyone who likes to eat and especially to those who fall under the title of a crazy, wacky, food-loving blacksmith - and there is no shortage of them.

The Arrowmont School of Arts and Crafts (Box 567, Gatlinburg, TN 37738 - 615-436-5860) has announced that several assistanceships will be available next spring. For further information contact the school.

Francis Whitaker's long awaited book has now been published and is available for \$30.00 from Jim Fleming Publications, Box 1211, Vail, CO 81658 (copies may be available at Quad-State). Proceeds go into a trust fund which will be used for blacksmithing scholarships. Title is: "The Blacksmith's Cookbook: Recipes in Iron". This is a fine book and should be on your shelf or in your shop whether you are a part-time or full-time smith. I understand Mr. Whitaker is working on a second volume.

SHOP TIPS AND TECHNIQUES: (When a shop tip or technique from one newsletter has been repeated in another newsletter (and I picked it up from there), the original newsletter is cited as the source. In most cases, these tips or techniques have been paraphrased from the original write-up or illustrations for consistency of format. While the information presented in this section (and elsewhere in the newsletter) is believed to be accurate, S.O.F.A. and A.B.A.N.A. bear no responsibility for injuries or other adverse actions which may result.)

- CARBON CONTENT MADE EASY (By George Tiure from the newsletter of the California Blacksmith Ass'n) - There are several easy tests which give a fair idea of carbon content on steel:

-- Water Quench: Forge a test piece to 1/8" thick, heat to 1,800°F (orangish yellow) and water quench. Set steel across the anvil with about 1" hanging over the edge. Strike it a sharp blow. If the end breaks without bending it is approximately C-1050-1055. The break will be coarse and dark. The higher the carbon content, the easier the steel will break and the darker in color the break will be.

-- Cold Bend: Forge a test piece to 1/8" thick and let cool (normalize). Bend it over double. If no break shows, it is soft or C-1015. If a crack shows, it is C-1025. C-1035 will bend to 90° without cracking, but C-1045 will crack at this angle. C-1055 will bend to say 20° while C-1070 will spring back using the same pressure.

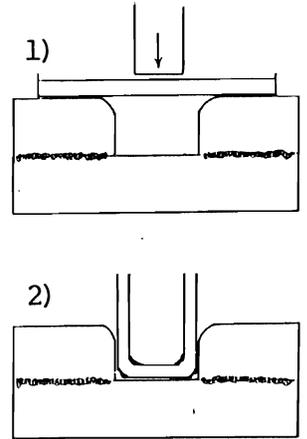
-- Heat Test: Heat the test piece to a white color (about 2,200°F or forge welding temperature). C-1095 will crumble with a light hammer blow while C-1075-1080 will not.

When you know what the steel is, color code it. This is the best way to remember the carbon content of particular pieces or batches.

- To reset a loose handle on a knife, pack the tang receptacle with a plastic baggie, heat the tang and insert it into the baggie lined opening. As the baggie melts and cools, the bond between metal and wood or bone forms an unbreakable weld. (From a demonstration by Sing Cha, a Loasian blacksmith, during a demonstration to the Upper Midwest Blacksmith Ass'n).

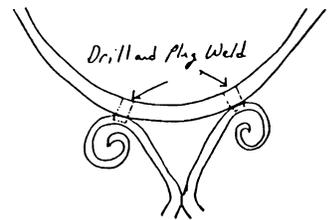
- A trick I picked up while working on some very work-hardenable stainless steel was to grind a center punch to a point with four flat sides (like you draw out something) rather than like a round pencil. The result is a punched square rather than a dot. Now place your bit in the hole with the drill turned off, then pull the trigger. The bit won't turn more than 1/4rds turn before catching on one edge of the hole, resulting in an immediate cut. (From the newsletter of the Minnesota Metalsmiths).

MAKING COLLARS: The Studebaker Homestead gate required 38 collars in the bottom ring sections. To make the collars, Hans Peot made forming jibs which appear to be much easier than the Whitaker method contained in the 6/86 SOFA SOUNDS. The jig in Illustration 1 was made by welding two short pieces on a longer bottom piece (about 1" x 1" square was used). The distance between them was the thickness of the rings (2 x 1/2") plus the thickness of the banding material (2 x 3/8") for a space just a bit wider than 1 3/4". A top handheld top die as made to just under the ring thickness. The banding material was then cut to the proper length, heated, set on the jig and the die used to form it into a "U" shape. The jig was also used to put on the collars. The jig was placed on the anvil top, the collar heated, set in the jig, the rings inserted and the top legs bent over. Each leg was bent over until they met and then both were flattened at once. We had previously put in a groove in the banding material and this groove was trued using the peen of a crosspeen hammer as a fuller. Due to the tooling, the collars were fairly easy to make and put on and several of the collar clips could be heated at once.



- A tip to those who use an arc welder. Plastic lenses will not attract the welding splatter (BB's) and leave spots as happens with glass lenses. Do not wipe plastic lenses when dirty and dusty - spray with window cleaner and rinse under faucet before drying. They will last a lot longer. (By Stan Strickland from the March 86 ABANA President's Message to the chapters).

- On the Studebaker Homestead Gate, we were faced with an interesting problem, how to attach the fishtail scrolls to the ovals (which will include cut out scenes depicting events out of the Studebaker family history). Riveting would have been preferred but that would entail reopening the fishtails and we were afraid to broach the subject with Dick Franklin and Larry Gindlesberger after they spent many hours in making twelve matching scrolls. Besides, the rivet heads in the scrolled area wouldn't have looked right and may have been in the way on the inside of the ovals for the scene attachment points. Hans Peot and Emmert Studebaker came up with the answer - plug welding! The fishtail scrolls over and under the ovals were laid out on a 2"x6" board for alignment and to center the oval frame in the fishtail section. Where the fishtail and ovals met it was marked and 1/2" holes drilled through the 3/8" oval material. After the pieces were clamped to the board, Hans "plug welded" the ovals to the fishtail scrolls. He used a hot setting and filled about one-half of the hole with weld, being sure to weld deep into the fishtail scroll without burning through. The second weld (at a reduced setting) filled the hole, leaving a small button of weld above the inside surface of the oval. This was ground off to where you have to look very closely to see the plug and it should be completely hidden when the scenes are included and the gate is painted.



- When I go to the park for a demo, I take a mechanics vise along rather than a post vise. I made a 3/16" thick plate which fits the bottom of the vise with a shaft which fits the hardy hole. Juts out far enough over the anvil for easy use. (By Jim Ryan from the newsletter of the Upper Mid-West Blacksmith's Ass'n).



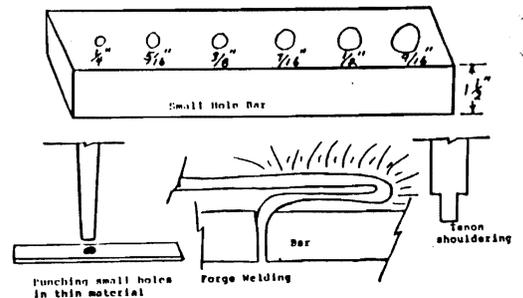
- Automobile engine valves make nearly indestructable rod stock for special punches or screwdrivers, or smooth burnishers for scraper edges. (By Robert Vaughn from the newsletter of the Minnesota Metalsmiths).

- If you use a wire wheel for any purpose, you know how soon the bristles bend over and loose effectiveness. Reversing the wheel helps, but just before you do this, run the wheel against a coarse grindstone. This put a chisel edge on the wires which really cuts fast. (By Mark Latour from the newsletter of the Minnesota Metalsmiths).

- PHOTO TIPS: If you want good pictures of iron, you have to have a good photographer to do it. For those who wish to take your own pictures, the following tips might be helpful: 1) Always use a tripod. A lens hood is mandatory and a timer on the camera eliminates shutter shudder; 2) Use your blue jeans to get a light meter reading. They're just about the same as ironwork; 3) A sheet of drywall, gray side out, is good for a background; 4) Set the piece of iron as far from the background as possible to eliminate shadows. Hold light to one side; 5) A wide open lens adds depth to ironwork and helps to eliminate unwanted background; 6) Adjust a 400 speed film in an automatic camera to 320 and fool the camera. This makes for better highlights. Remember, if you can see the detail in iron, you should be able to get it on film; 7) In using a flash, don't try to take big pictures. Take small sections of a big piece, one at a time; and 8) Drug store (or grocery store) development is almost a guarantee of bad prints! (By John O'Brien from the newsletter of the Upper Midwest Blacksmith's Ass'n).

- SAFETY TIPS: During the last few years, I've been in several blacksmith shops around the area and seen several unsafe conditions and unsafe people. Not everyone mind you, but a few. Here are but a few of the conditions I have seen. Let's keep blacksmithing safe and clean up our act: 1) Don't wear leather or leather palmed gloves. Leather shrinks once hot and you can't get them off. Wear loose cotton gloves; 2) Wear safety glasses or goggles; 3) Ground all electrical equipment and wire properly; 4) Wear a leather apron; 5) Wear leather shoes. No sneaks or rubber boots (ask Ron Porter about it); 6) Have proper lighting in shop; 7) Keep excess debris off the floor and clean work area; 8) If you wear boots, don't tuck pants into tops; 9) Repair mushroomed hammers and tools; and 10) Don't store flammables in shop area. These are but a few of the conditions which could exist in your shop so look around and BE SAFE! (By Danny O'Brien from the newsletter of the Indiana Blacksmithing Ass'n).

- When punching small holes in thin material, sometimes the material is forced into the punching hole. Using this block and the right size hole prevents this from happening. For forming square shoulders on tenons, this tool is used much like a monkey tool. It can also be used for forge welding right angle offsets (e.g., for hinge pins), where the material is folded back leaving the right angle. (By Bill Callaway from the newsletter of the Arizona Artist-Blacksmith Ass'n).



SOFA SOUNDS is the bi-monthly newsletter of the Southern Ohio Forge and Anvil (SOFA) Chapter of the Artist-Blacksmith Ass'n of North America (ABANA). Other ABANA Chapters may reprint non-copyrighted material as long as proper credit is given to the original source. Unless otherwise indicated, the material herein was provided by the Editor. Membership in SOFA is \$5.00 per year payable to S.O.F.A. in care of the Editor.

SOFA SOUNDS
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NOTE: Your SOFA membership expires 6/87.

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