

SOFA SOUNDS



SOF&A
SOUTHERN OHIO FORGE & ANVIL

Artist-Blacksmiths Association of North America

JUNE/JULY 1989

BOARD OF DIRECTORS:

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*Larry Gindlesperger, Vice President**
Dick Franklin, Secretary/Treasurer

NEWSLETTER EDITOR:

Bud Rupe (299-3378 after 4pm)
**ABANA Board Member*

MARK YOUR CALENDARS: Unless otherwise noted, all meetings will be held at the Studebaker Frontier Homestead on Rt. 202, about 4 miles north of I-70 near Tipp City. Please don't park on the grass, or block access to the production buildings. Donations of items for the newsletter support raffle are always welcome. Please bring your work or tooling for display. The public and guests are welcome. Finger food and cold drinks to be provided on a break-even donation plate basis. The forges at the homestead are available before or after meetings for individual projects.

- June 3rd, 1 pm BUSINESS MEETING followed by the annual workshop to help members make hardy tools from used jack-hammer bits. Cut out hardy hole size in thin metal in advance for hot sizing. OPEN FORGES BEFORE AND AFTER THE MEETING.
- July 1st, 1 pm BUSINESS MEETING followed by a demonstration by Dick Franklin on working with brass and copper. OPEN FORGES BEFORE AND AFTER THE MEETING.
- August 5th, 1 pm BUSINESS MEETING followed by a presentation by Ham Hammond on the basic principles of welding. Bring a welding hood if possible. Eye lenses will be for sale at \$1.25 each, for those who need them. OPEN FORGES BEFORE AND AFTER THE MEETING.
- September 9th, 1 pm BUSINESS MEETING followed by a tentative demonstration by Larry Gindlesperger and Emmert Studebaker on making Clayton Knots. OPEN FORGES BEFORE AND AFTER THE MEETING. *SECOND SATURDAY MEETING DUE TO LABOR DAY WEEKEND.*
- September 23rd-24th 1989 QUAD-STATE BLACKSMITHING CONFERENCE.
- October 7th We will hold a meeting in October if a demonstrator volunteers. Otherwise the forges will be available for individual projects with help from the group officers, as arranged in advance.

Chapter of ABANA

Hi!,

I'm Bud Rupe, your new Editor for the SOFA SOUNDS. It is my wish to maintain the high standards set by my predecessor, Ken Scharabok. Please feel free to contact me with information and/or concerns through the mail or by phone. Please bear with me as I adjust to this new task over the next few issues.

Respectfully Yours,

Bud Rupe
Bud Rupe

MEETING NOTES: APRIL

David Clouse brought in a new brake assembly that G.M. is developing for the 1990 model year. The new style is provided with one piece of 1075 oil tempered spring steel to replace the old type spring mechanism. The assembly looks much simpler in design and function. If all goes well, to replace the mechanism, only one simple tool will be needed to repair the shoes.

Ken Scharabok, our recently retired editor who finally escaped the clutches of his typewriter, made mention of a new pin which was produced for himself. It is in the shape of a horseshoe inside a red circle and with a line going thru it to impress the fact that Blacksmiths are not farriers. Ken calls these pins ANTI-HORSESHOE PINS. They are for sale for \$4.00 each at meetings or call Ken at (513-429-3967). I'm sure he will be able to get a pin to you.

Ken also stated he has not received any information about his application for becoming the editor for the ANVILS RING.

VISITORS AND GUESTS: APRIL

Kenny Crawford and his daughter, Jennifer, from Leetonia, Ohio, located south of Youngstown. Harold Hooper from Pleasant Hill, Ohio. Bill Ballis from Columbus, Ohio. Bill stated he was not a blacksmith, but enjoys reading and learning about history. He was kind enough to loan us his copy of a video called the Hammerman of Williamsberg. It is a 30 to 35 minute tape with John Allgood, past master blacksmith at Williamsberg, showing blacksmith techniques and lifestyles of 18th century America.

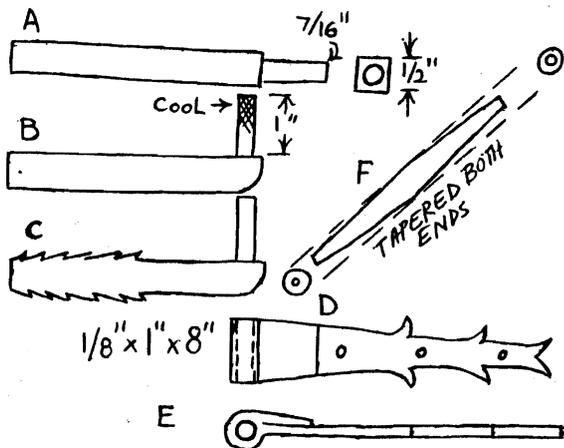
Due to the large shift of paperwork from Ken to myself, I misplaced the newsletter support raffle sheet with donations and winners names. SOFA would like to thank all those who donated and congratulations to those who won prizes.

DEMONSTRATION: APRIL

Following the business meeting segment, Hans Peot took Dick Franklin's spot as demonstrator and gave us a lesson on hinge making. Hans said a lot of the tricks he used were of Dick's design. ALL tools used were handmade.

MAKING A PINTLE

- (A) Start with a $\frac{1}{2}$ " rod drawn down to $\frac{7}{16}$ " to 1" long. Hans uses his spring fuller on the power hammer to save time. Once the tip has been formed into shape, cool the end of the pintle before bending the 90° angle. (B) This will keep the point from becoming bent or deformed. Hot cut to provide proper length, minimum of 4" long depending on the timber you are placing the pintle into. (C) A TRICK FROM JACK BRUBAKER FROM INDIANA: With a hot chisel, cut nicks into the pintle every $\frac{1}{4}$ " to $\frac{3}{8}$ " on the corners angling



toward the hinge to produce a self locking hold on the timber. When placing it into the timber, drill a $\frac{1}{2}$ " hole and put the pintle in at an angle so nicks hold into the vertical grain of the wood. Hans guarentees this will hold.

HINGE TO GO OVER THE PINTLE

(D) Approximate size $\frac{1}{8}$ " x 1" x 8" or longer. 1st draw the metal back. Taper 2" back from tip $\frac{1}{4}$ " x 1". Give yourself enough stock to work with so you don't have to use tongs. You must have $1\frac{1}{2}$ " stock beyond taper to take the pintle. The hinge will be placed around a $\frac{7}{16}$ " pin so the

welded area is not in the hinge. Use π x D or π x $\frac{3}{8}$ " to obtain proper distance. (E) Bend the hinge around the pintle placed in a vice and bend around proper size pin and overlap. Add flux, and reverse weld to help reduce the chance of damage to the eye area. * Could use brass grindings to weld. (F) Using a tapered drift true up the hole. Drift all the way through the hole to produce a true cylinder to fit over the pintle. Hot cut the hinge to the desired length. * Always use a cut off plate to save your anvil face. Form the end to your favorite shape of the day and punch screw holes.

MAKING A CONVENTIONAL HINGE

Using approximately 16 gauge plate, you decide the width of the hinge. * When working with sheet metal or Damascus, keep a red hot piece of stock on your anvil to help keep the anvil hot so your sheet will not loose heat so fast. Bend the heated end of the hinge over the edge of the anvil to provide the hole for the hinge pin. True up using a proper size rod that will match the hinge pin. Cut center of hinge areas with hacksaw and remove waste material with vise grips. True up with a file. Produce a duplicate hinge to match the 1st section. * Remember to true up with a proper size pin. Remove the two outside areas of the hinge. To produce the pintle, form an eye to hold the pintle on the edge of the anvil. Place the proper size pintle and forge weld using borax. * Don't burn the pintle. * Don't use excessive force when welding. This tends to deform the metal. Taper the pintle to a semi point. This taper will hold the pin in the timber.

After the demo, Hans said he had read a book written about 1776 fracture mechanics. The book stated that when filing a large circular saw don't nick the gullet of the blade because a crack will form. Hans shared with us a story about modern application to the above statement. Today in building aircraft out of aluminum and titanium, we polish all holes perfectly smooth to reduce the chance of cracking, before the pins go into place. On an aircraft you need large grain structure not small grain structure to obtain better fatigue life. While extruding the wing spars on the B1 bomber, the spars 3' dia. x 6' long, had nice long grain structure except where the cold plunger was hitting the end of it, which produced fine grain structure. The airplane has to be designed with the fine grain end out toward the wing and the large grain structure next to the airplane. People want more strength often go with fine grain structure but end up with less fatigue life.

When making an ax, the old timers got super strength by breaking up the grain structure. How? When the metal cools from orange/red to red, hammer on the edge

of the blade. This will produce a fine structure with super strength. There are new findings. The reason the old Damascus blades were so tough was that they used charcoal fires that didn't get hot enough to get the metal bright yellow orange. They worked at the dull red color and obtained super strong steel. There is now a movement in today's technology at Stanford University to make gears for transmissions and related items, working the steel at a dull red heat and producing the super strong materials. When developing their research Stanford made damascus blades and experimented. They found the strength obtained in damascus was in the heating temperature, not in the layering of the metal. The result: Very high carbon steels work at these low temps. with great properties. Just think it took all these years to solve this problem. The old timers sure knew their stuff! Fact: If you take 1½% carbon, heat it above orange heat, take it out and hit it over the anvil edge, the metal will fatigue. This is typical of a file. You heat much over an orange heat, hit it with a hammer it will crumble the file. Keep it at a dull red, work the metal, you will get this fine grain structure and super strength.

MEETING NOTES: MAY

Hans Peot and Dick Franklin were elected to the board of Directors. Hans was also reelected for President, Larry Gindlesperger was elected for Vice President and Dick Franklin was elected for Secretary/Treasurer.

Larry Gindlesperger brought in a unique pin set that he made for a friend. It had a spiral holder for the pin along with a paper cutter that was supported on the other end of the set.

Bill Ballis donated two cans of welding rods to be raffled off in the months to come.

VISITORS AND GUESTS: MAY

Jim Witt of Springfield and Dick Kehl of Centerville.

RAFFLE: MAY

Brian Thompson won a pair of safety glasses donated by Emmert Studebaker. Ed Rhoades won a can of WD40 donated by John Jacobs. Jim Leistner won a leather apron donated by Doug Fink. Richard Kern and Bill Heileman won rasps donated by Bill Fleckenstin. John Baker won a small pair of tongs donated by Emmert Studebaker. Harold Hooper won some bees wax donated by Brian Thompson. Ken Scharabok won welding rods donated by Bill Ballis. Jim Leistner won 5 pieces 1050 stainless steel flat stock donated by David Clouse. Charles Staley won a large bolt caliper donated by Larry Woods. Ron Van Vickie won welding glasses and Bob Buchner won plastic hammer faces donated by Doug Fink. Bud Ralston won large bolt calipers donated by Larry Woods. Monty Thompson won a flatting hammer and Art Holz won files and Doug Fink won a hardy tool donated by Hans Peot. David Clouse and John Jacobs won layout fluid donated by John Baker. Monty Thompson won 3/8" stainless donated by Jim Leistner. John Baker won ¼" brass rod donated by Wade Hoffer. Barb Connie won a forge hood and Bill Ballis won some rail road spikes donated by Ken Scharabok. Doug Fink won a pint of oil donated by an unknown supporter.

DEMONSTRATION:

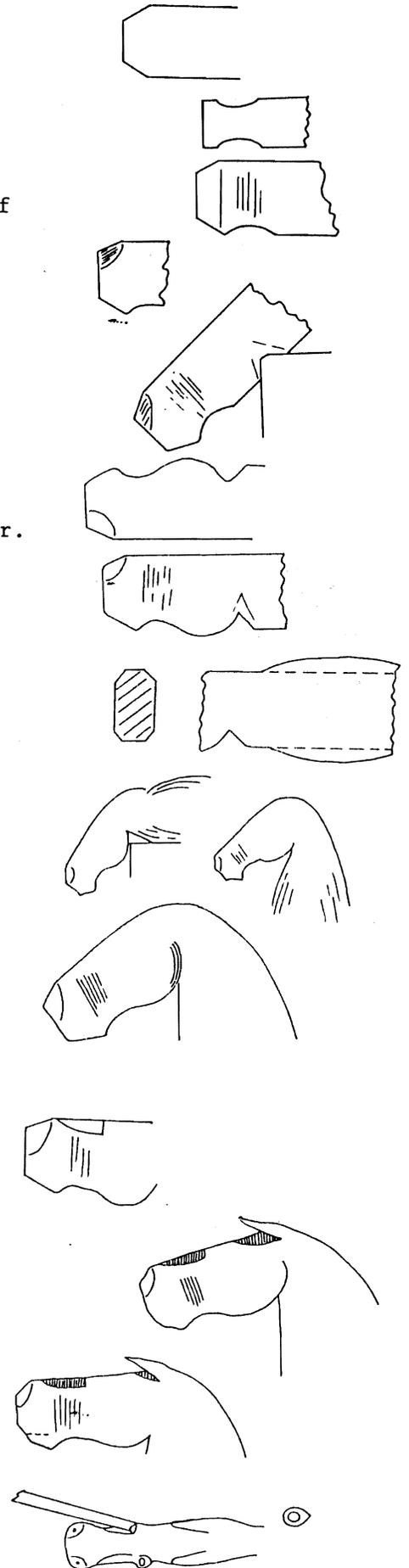
After the raffle, Doug Fink gave a demonstration on making a Jim Butson style Horsehead Poker handle. To make my efforts a bit easier I used the directions from the June 1988 Bituminous Bits, The Journal of the Alabama Forge

Council. The original demonstration was by Jim Batson and notes by Clay Spencer. I have added information that Doug mentioned to make his demo more personalized. An * will be used to describe Doug's information.

MAKING A HORSEHEAD POKER HANDLE

* Material: $\frac{1}{2}$ " x 1" stock for the head.

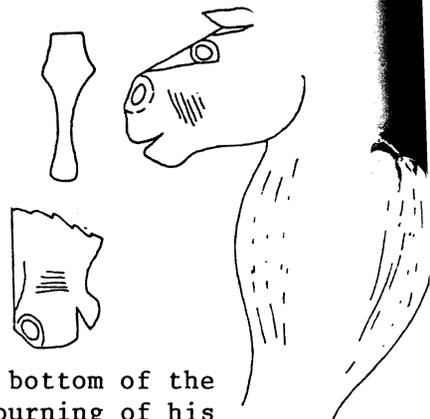
- 1) Make a very blunt taper top and bottom of the end of the wrought iron for the start of the nose.
- 2) *Using a guillotine or spring fuller, nick in the sides of the nose. Start $\frac{1}{8}$ " from the end of the nose and go back about $\frac{3}{8}$ ". Don't make the nose too long.
- 3) Hammer the sides of the nose flat over the anvil.
- 4) Fuller the depression between chin and front of cheek over the horn. *The jaw should be proportional. Upset the nose if needed. Try to shape the sides of the jaws as well.
- 5) Make flat for each nostril on upper side of the nose and this will be punched later.
- 6) Over the edge of the anvil fuller under the neck behind the jaws, then rotate 45° each side also.
- 7) *Fuller the two jaws apart to make the jaws appear larger.
- 8) *Use a V-shape chisel, then a rounded chisel. Push jaws away from each other. This ends up being somewhat thin. Use glancing blows.
- 9) At this point you have the option to bend the neck or finish the eyes, ears, nostrils, and mouth. Doug bent the neck.
- 10) Bend head toward neck about 120° over the edge of the anvil or in the vise. Heat neck. *Cool the nose before hammering. May need to straighten in the vise as you go. This process may take two heats.
- 11) Use large curved chisel to accent behind the jaws on both sides. Carve out a little metal with the chisel and file if needed. Here and on the other facial features, you will usually do a better job if you switch back and forth from left to right, every three or four hammer strokes to keep sides even with each other.
- 12) Use small curved chisel to chisel off flats on the upper corners from behind the end of the nose to where the eyes will be started. Stop chisel cut well before you get to where the eyes will be and break off the metal you cut out to leave a shoulder to start punching eye back. File if needed.
- 13) Cut out ears starting just behind where the eyes will be. Use a small curved chisel to dig out metal. Ears should be positioned just above the jaw line. Be careful not to burn or break ears off. Ears can be drawn out over a bick if desired. Bend ears back to parallel to sides of head. *Doug used a concave fuller to gather up the material from behind to form the ears. Using a gouge shaped chisel, cut ears from the front. Tap using the same tool to lift the ears in to shape. The ears could be cut from behind to have layed-back ears. *Using a round punch, placed in the earsockets, tap on the back of the ears,



while leaving the punch. Form the ears into the final shape.
 14) Punch eyes starting a short distance in front of the final position. Driving the punch into the head. Eyes are round in triangular lids. * Lids can also be teardrop shaped. Drive hollow punch back, skimming up metal to form eyelids, make full eyeballs and make eyes stick out from the head. Use hollow punch with teardrop outside shape.

15) Mark nostril and mouth carefully, while cold. Heat and use ball punch or blunt center punch to punch nostrils.

16) Cut mouth with thin hot cut about $\frac{1}{4}$ of the way up from the bottom of the chin to top of the nose. *Doug used a cotton glove to prevent burning of his hand while sculpting of the horsehead.



After the demo, with Bill Ballis providing the tape, and Emmert Studebaker providing the T.V. and VCR; showed the club the first $\frac{1}{2}$ of the Hammerman of Williamsberg. This is the tape mentioned in the April meeting. It was a treat to be able to watch this film in Emmert's blacksmiths shop. Hats off to these two men.

HEAR YE! HEAR YE! HEAR YE!

FOR SALE: 15' x 17' log cabin disassembled and numbered for \$250.00- What a deal! This could make a great shop. Contact Pat McCarty Route 1 Box 2474, Washington, Mo. 63090

FOR SALE: Helium arc stick welding machine with bottle tanks for \$1150.00. Located east of Fairborn, Ohio. For information call 513-878-7084.

FOR SALE: 50 lb. Little Giant in good working order. 220 volt, single phase, 1 or $1\frac{1}{2}$ hp motor. \$1200.00 Delivered. Now located out west. Contact Richard Kern 513-372-9100 in Xenia, Ohio.

FOR SALE: 3-50 lb. Trip Hammers Little Giant. \$600.00 each. Contact: Ingeborg Carlson 10442 N. Wavuatasa Rd. Mequan, Wis. 53092 414-242-3150.

FOR SALE: Treadle power hammer, 50 lb. drop weight with hardy hole. \$150.00. 429-3967.



JOB: Farriers in the group may be interested in contacting the City of Dayton about shoeing their 12 police horses. According to an article in the 5/10/89 Dayton Daily News, each horse requires shoeing 16 times a year at the current cost of \$64.00 per shoeing. That is \$12,388.00 per year.

JOB: Career opportunities in established ornamental iron shop for an individual with hand and power forging and MIG welding experience. Full time position with medical, paid vacation, and holidays. Must be self-starter and able to manage projects on both architectural and retail ironwork. 6000 sq. ft. shop with gas and coal forges, power hammers, hydraulic and mechanical presses, plasma cutter, paint room, etc. Must be able to read and interpret prints and solve problems for all aspects of ironwork.

For interview, contact: Hawk Mountain Ironworks
 P.O. Box 517
 Springfield, Vt. 05106
 (802) 886-8585

JOB: BLACKSMITHING APPRENTICESHIP, one year, general, all round blacksmith shop makes gates, handrails, furniture, work in iron and bronze. Handforming, power hammer and modern metal working techniques. Contact Craig Kaviar at Kaviar Forge, 147 Stevenson Ave., Louisville, Ky. 40206. Telephone (502)-561-0377.

SHOWS/FESTIVALS/HAMMER INS/CLASSES:

ANTIQUÉ/SPRING FESTIVAL: June 10 & 11, 1989. The Historic Clifton Mill, 75 Water St., Clifton, Ohio 45316. Exhibitors will be required to show authentic antique merchandise. **No reproductions or flea market merchandise will be permitted.** Set up will be June 9th at your convenience. Electricity supplied and manpower for unloading available. Parking for trailers or vehicles provided. For more info. call Tony Scitariano, 767-3431.

OHIO STATE FAIR: Members interested in demonstrating and SELLING their wares at the Ohio State Fair, should contact Tom Zeigler, 510 Ohio Ave., Troy, Ohio 45373. Forge, anvil, and post vise will be available at the site.

BLACKSMITH DEMOS: At the Kansas Museum of History, Topeka Kansas, on June 25, 1989 from 1-4:00 p.m., and August 20, 1989. For information contact Rick Plough (316)-667-2323. P.O. Box 382, Mount Hope, Ks. 67108.

HARTWICK PINES STATE PARK: Would like to invite Blacksmiths to participate in BLACK IRON DAYS in August 26-27, 1989. Interested blacksmiths should contact the park by August 1st to make reservations for space. Hartwick Pines State Park, I-75 exit 259 M-93 north route 3. Box 3840, Graylight Michigan 49738 (517)-348-7068.

WESTERN STATES CONFERENCE: The Colorado Rocky Mountain School will host the Western States Conference. Starting at 8:00 a.m. on June 5th and June 7th, 1989. Contact CRMS, 1493 County Road 106, Carbondale, Colorado 81623, (303)-963-2562.

HAMMER IN: The Appalachian Blacksmith Ass'n and Pittsburg Area Artist-Blacksmith Ass'n hammer in at Ashley Forge, 505 Rhodes St., Elizabeth, PA. 15037, on June 24th, 1989. Hosted by Hugh and Joyce Bartrug. Hugh is a master-knifemaker.

CLASSES: Blacksmithing classes will be offered this summer by Touchstone (Pioneer Craft's Council) P.O. Box 2141 Uniontown, P.A. 15401.

FORGE AND FURNACE EXHIBITION: A competitive regional exhibition of metalwork, including sculpture sponsored by the Pennsylvania Artist-Blacksmith Ass'n, and Marywood College Art Galleries in cooperation with the Historic Scranton Iron Furnaces. Dates: July 15- August 15, 1989. Location: The Contemporary Gallery, Marywood College, Scranton, P.A. Awards of Excellence will be given by the judges for outstanding works. For info, write Metalsmith Exhibition Marywood College Art Galleries, Visual Arts Center, Scranton, P.A. 18509, contact Shirley Tramontana (717)-348-6211 ext. 526.

RESOURCE MATERIAL: The Guild, A reference and resource publication for the advertisement of arts and crafts. Providing the opportunity for artisans to advertise their work and skills. For more details and info on how to obtain a discount before June 15, 1989, contact Bud Rupe, (513)-299-3378 after 4:00 p.m.

CONCERNS:

Ken Scharabok stated an anti-borax Co., Easy Weld, made some bad batches of Easy Weld. Sinter Forge bought them out and are now trying to reproduce the flux. There seems to be no way of telling the difference between good and bad flux.

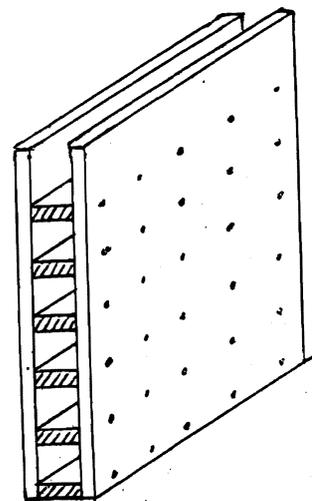
Do not use the power horizontal band saw in Emmert's blacksmiths shop on any hardened steel. They cost about \$30.00 each to replace the blades.
When in doubt, please don't use it.

ABANA sent a letter to Ken Scharabok from Nol Putnum, stating memberships now stand at 2850 members. He gives his thanks to Ken for his help in this endeavor.

SHOP HINTS:

Source for steel cable blades. Dills Supply Co. 242 Leo St., Dayton (513)-228-3201.

Keeping and storing a stand with stock, usually 4'-5' long in my shop, in some kind of order is always a chore. However, a 4' x 8' sheet of $\frac{1}{2}$ " plywood and some 2" x 4" boards help solve the problem. I cut the 4' x 8' sheet of plywood in half. The two 4' x 4' sheets nailed with 4' long 2" x 4" between them at about 6" intervals. The finished product provides a nice storage space. I have one for square, round, and flat stock. I have clamped the three together for a more stable storage rack. Store stock smallest to largest from top to bottom. This will give the unit more stability. No big deal, but it works nicely in my shop. Thomas Cole.



TEXTILE TIP: from Mike Borosic.

A fabric called SILICA TEXTILE from Singer Safety will withstand heat up to 2000° F., and withstands ordinary propane torch. This is a good material to wrap hot metal in to guard from vise grip marks and scoring, etc., while working. I'm sure there would be other uses. The material sells at a cost of about \$5.00 a square foot. It is for sale at John T. Crouch Co. 415 Warren Street, Dayton. (513)-223-8801.

SHOP TIPS AND TECHNIQUES: While the information provided in this section, and elsewhere in this newsletter, is believed accurate and safe, neither S.O.F.A. or A.B.A.N.A. bear any responsibility for any adverse results which may occur.

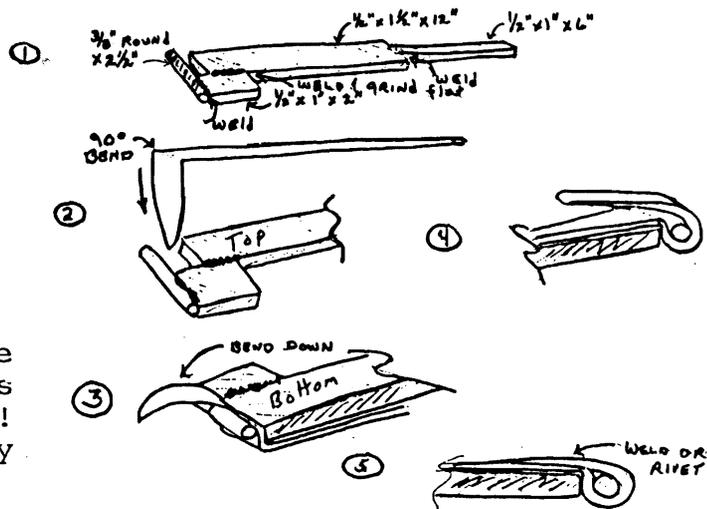
** THE FOLLOWING MATERIAL WAS DONATED TO YOUR NEW EDITOR BY KEN SCHARABOK. I WOULD LIKE TO THANK KEN FOR THIS INFORMATION. THIS HAS HELPED TAKE THE PRESSURE OFF MY NEW JOB AS EDITOR. BUD RUPE

** Tips from a meeting of the New York State Designer Blacksmiths as reported in their newsletter.

— Mike McGuinn gave us an excellent demonstration of forging a flower from standard black iron pipe. He started with $\frac{3}{4}$ " diameter pipe and used a spring fuller 1"-1 $\frac{1}{2}$ " from the end to reduce the diameter on the inside to $\frac{5}{16}$ ". He then cut this off with a hacksaw and forge welded the piece onto a length of $\frac{5}{16}$ " round stock. The open end was then drawn out over the edge of the anvil into a broad, flat round shape with a shallow neck in the center showing the end of the rod. This end was decorated with a center punch creating a seed pod while the petal area was shaped and decorated with a blunt chisel to create veins and fold lines. ((It would seem like the seed pod could be made on the end of the $\frac{5}{16}$ " rod before it was inserted into the petal area for more control over the area. - ks)).

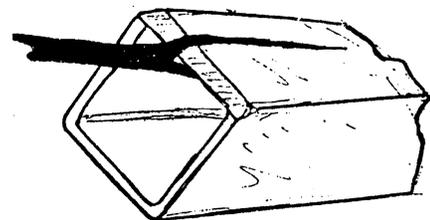
-- Ken Thomas demonstrated a method of forging a leaf from $\frac{1}{2}$ " square stock. He started by forging a four-sided point on one end, then used a spring fuller $\frac{1}{4}$ " to $\frac{3}{8}$ " back from the shoulder to the point. This fullered area was the start of the stem which would be drawn to a smaller diameter after the leaf was forged to its final shape. The flat head of the hammer was used to flatten and shape the leaf instead of a ball peen or cross peen. Finally, chasing chisels were used to decorate the leaf.

- STRAY HINGE EYE BENDING JIG: A recent order for 46 strap hinges, 18" long, 1 1/2" wide, and 1/8" ticks, with a full taper to the "ball" end, and a 3/8" pintel eye, necessitated the fabrication of a jig to assure staying within allowance for +/- fudge factor, plus the pintels were already in place and out of state! The results of a trip to my scrap pile produced the jig shown in figure 1. The size of the jig is determined by the size of the hinge needed - make yours to suit you needs as assembly time is less than five minutes! I suggest making the jig as heavy or sturdy as practical, as you will be hammering the eye around the pin also, in finishing the back taper the unit will be on the anvil



while the hinge "tail" is hammered down to its final taper. To use the jig, first bend the hinge 90° at the proper place to give the overall hinge length you need, then place the hinge into the jig as shown in figure 2 (work quickly). The hinge eye will be aligned at right angles to the hinge by quick pressure on the hand holding the jig and the strap together (you don't even have to look, since this alignment can be felt by the holding hand). Once the hinge is in the jig, place the whole set up over the edge of the anvil with the tail pointing down, a couple of quick hammer blows will set the hinge flat onto the jib and assure a good 90° bend. Quickly turn the jib over and hammer the tail around the pin while it is still hot - figures 3 and 4. Hammer on the end of the hinge to roll the tail tightly around the pin and onto the back of the hinge until the tail lies flat on the back of the hinge - figure 5. By this time most of the heat will be gone from the hinge, so remove the hinge from the jig, reheat (up to welding temperature is required), place the hinge back on the job, and finish tapering the tail down to where you want it. Raise the hinge off the jig slightly, turn the jig and tap the jib on the edge of the anvil and your hinge will fall off! This simple jig will help you insure your hinges are of the correct length and will produce a perfect "eye" each time exactly where you want it. After doing two or three, you will find you can complete a hinge eye in less than a minute! Lots better than the old way of guessing where to bend, how much stock is needed for the eye, much hammering, drifting, curssing, and difficulty in making any two alike - try it on your next hinge project. (By Stan Strickland from the newsletter of the Tullie Smith House Blacksmith Guild).

- A HANDY JIG FOR TIGHT CORNERS OF SPLIT WORK: Most of us have trouble working the inside corners of split work, such as found on forks, etc. This jig makes it much easier to do things like taper the tines of a fork for one thing. The jig itself can be mounted in the hardy hole by welding on a square piece of stock or in the vise by welding on a rectangular piece of stock. To make the jig, use a length of square tubing 3 to 4" long and at least 1/4" wall thickness. Next, sharpen one end of the tubing as in the drawing. Use the jig as illustrated in the drawing. (By Stan Strickland from the newsletter of the Tullie Smith House Blacksmith Guild).



- JOINING JIG: To make one long piece out of two short ones, here's what to do. First take a piece of angle iron 8" long and cut a hole in the center about 1" or so. The pieces to be joined are then placed end to end over the cut out hole. The angle iron serves to align the centers (of stock the same diameter), then all you have left to do is either braze or weld the two pieces together through the hole. This technique works great for extending drill bits - just watch the heat. (By Paul Armbruster from the newsletter of the Tullie Smith House B-S Guild).

- A NEW BUT OLD FINISH: While at the 1987 BABA Conference, I saw a number of works which had a graphite shine. After talking with several British smiths I found that indeed this is a graphite finish and very similar to the stove polish many of us have used. They apply the graphite with a brush over fresh wet paint. The particles of graphite adhere to the wet paint and when the paint dries they rub briskly with a soft cloth which brings out a nice shine. (By Bill Callaway from the newsletter of the Arizona Artist-Blacksmith Ass'n).

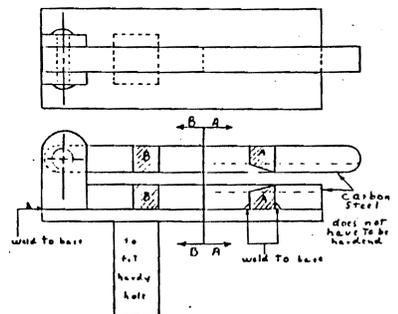
- FULLER GAUGES: If you are making your own fullers, roundness gauges can be made by cutting in half washers with the correct inside diameter hole. (By Pete Stanaitis from the newsletter of the Guild of Metalsmiths).

- MEASURING IRREGULAR OBJECTS: Use masking tape. Wrap it around the area you want to measure, mark it and cut it off. Pull the tape off and measure it. (By Ollie Juaire from the newsletter of the Guild of Metalsmiths).

- BEESWAX FINISH: Take a piece of 100% wool cloth and soak it in melted beeswax. Use the cloth to rub beeswax onto your piece which is between 350-400°F until the piece is cool. (By Ben Staib from the newsletter of the Michigan Artist-Blacksmith Ass'n).

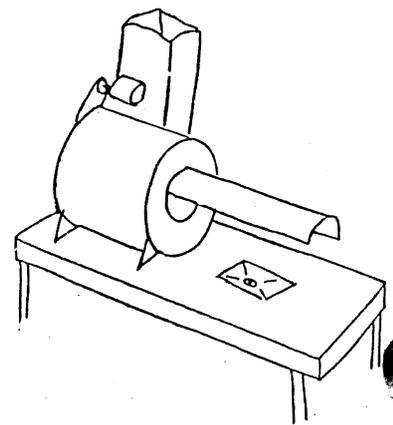
- WELDING SHIELD: For those who need a quick and simple welding shield, take a piece of heavy cardboard large enough to cover the face and cut a hole slightly smaller than your lens at eye level. Use duct tape to secure lens to cardboard. (By Ron Porter from the newsletter the the Indiana Blacksmithing Ass'n).

- TENON TOOL: This tenon tool was used by Peter Happny at the 1987 Quad-State Round-Up. The left side (Side B) is square. The right side (Side A) is shaped like a straight-cut hardy. The tenon is shouldered on side A and finished on side B. (By Gary Ameling from the newsletter of the Northwest Ohio Blacksmiths).



- PIERCING HOLES TO SIZE: When piercing a hole which needs to be pretty close to an exact size, such as a rivet hole in a pair of tongs, take a piece of round stock the same diameter as the rivet, taper both ends, leaving a minimum of 1/2" in the middle the original diameter. Punch your stock leaving the hole under size. Use the double-ended drift to open the hole to the exact size. By having both ends tapered, the drift will drive straight through even if the end gets mushroomed. (From the newsletter of the Northwest Ohio Blacksmiths). ((After the initial piercing, the hole can also be drilled to the size desired. A problem with using an "exact" same size drift is difficulty in getting the rivet in, particular if it is expanded due to heating. A size slightly larger may be more desirable. - ed)).

- FORGE EXHAUST SYSTEM: The illustration to the right is a forge exhaust system used in the facilities support shop at Conner Prairie Settlement. They have used squirrel cage blowers which are 15 1/2" in diameter and 14" long, driven by a 1/3 hp motor mounted on the top. Inside mounted motors burn out too quickly. The hood is about 24" long and covers the top half of the intake hole. The fire pot is 12" from the blower to the near edge of the pot. They have a 2 1/2" pulley on the motor and an 8" one on the blower. This exhausts the smoke right into the chimney and keep the place smoke free. And with three coal forges going at once, that sometimes can be a job. They tried one smaller squirrel cage and it did not move enough air. You can probably get a used one at a furnace dealer. (From the newsletter of the Upper Midwest Blacksmiths Ass'n).



ABANA

Artist-Blacksmiths' Association of North America



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

Office Hours: 7:30-11:30am & 1:30-4:30pm
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PRESIDENT'S MESSAGE TO THE CHAPTERS APRIL 1989

I don't know about all of you, but winter is hanging on around here. I think we're going to go straight to summer and skip spring altogether!

Chairman Joe Harris of the Finance Committee reports that both the annual total revenue and annual total operating expenses for 1988 reflect the fact that it was a conference year. The net profit for the year directly reflects the profit of the conference. Without the conference, ABANA would have had a break-even year. If the numbers for 1988 hold true, he reports that it was not a bad year at all. The board is keeping stringent controls of every penny and it is our goal to see that ABANA never again finds itself in the financial crisis that was experienced in the past.

The Anvil's Ring Committee has chosen a new publishing house for the magazine.. As soon as the final bugs are out of the contract and it has been finalized, I will fill you in. The selection committee gave a great deal of thought to the selection and we feel that the new publishers will be able to stay well within the ABANA budget and give you the same quality magazine that you have become familiar with.

The new editor has not as yet been selected but the Anvil's Ring Committee is going over applications. The geographical location of the editor is not important. There are several very well qualified candidates and the committee will make its selection very carefully. All applicants will be kept on file for future reference as well. The board was very pleased with the caliber of applicants and I can assure you the selection will NOT be a political selection. We are very insistent on keeping your best interest in mind and politics have no business in the selection.

The Cardiff Wales tour plans are being finalized by Leonard Masters. He is in the process of sending the most detailed update to you. If you wish to receive a copy, please contact the ABANA Office if you have not already done so. At this time we have 95 inquiries showing an interest.

The ABANA board is in the process of selecting a person to fill the seat of Robert Owings as he is retiring in the fall from the Alex Bealer Award Committee. The candidate will come from the western states to keep geographical continuity and will serve the term of six years. He or she will have a good working knowledge of the people and history of blacksmithing for the past ten years. The existing committee has chosen Peter Hapnev as their chairman for 1989.

There is a new book available for sale in the United States on Italian blacksmithing. It is considered by the Italians to be their bible of ironwork and I can assure you that it is a show-stopper! It has over 400 pages of absolutely beautiful ironwork. There are many drawings and layout patterns, as well as hundreds of finished pieces in color and in black and white. If you are interested, write to: The Courier, Italian Books & Journals, via L.A. DeBoise 2527, P.O. Box 67-50145, Firenze, Italy. The selling terms - prepayment of \$130 by check direct to the Courier in US funds. This price includes the cost of shipment, surface mail. Expect a couple months for shipment.

Looking forward to Spring!

Dorothy Stiegler
Dorothy Stiegler
ABANA President

DES/jrg

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PRESIDENT'S MESSAGE TO THE CHAPTERS MAY 1989

Dear Fellow Blacksmiths,

This last quarter has certainly been an interesting one for ABANA. We're getting ready for the board of director elections coming up this fall. I would urge you all to get your candidate's name into the ABANA Office as soon as possible. Please be sure to include a picture so that we can remember to put a face with a name.

Charlie Orlando and Walt Scadden have been working overtime assembling information and data concerning the upcoming 1990 ABANA Conference to be held in upstate New York. It is an extremely difficult and time consuming job and it becomes more increasingly so with each succeeding conference. The ABANA Board is working with Charlie to set up a procedures manual concerning every minute detail of the conference and hopefully this will be a great help to any group that will be hosting future conferences. At this point in time we have a pretty fair procedures manual but it is by no means complete. The conference committee is at this time making selections of demonstrators and lecturers. They will very soon be making specific arrangements for areas such as food, lodging and other important details. I will keep you posted as we go along.

The Cardiff Wales-ABANA Tour has been nailed down and information is now available through Leonard Masters, P.O. Box 343, Crompond, New York, 10517 or through the ABANA Office. If you are at all interested, please get a post card off immediately and we will get the information to you.

Treasurer Bill Callaway has given us the End of March Bank Statements on the Bloomington National Bank Master Account. The bank account reflects more cash on hand and more monthly income in the history of ABANA. Janelle Gilbert reports that membership is approaching 3,000. This increase in membership and balanced banking account reflects the hard work that the board is doing for all of you. I want to personally thank you all for voting such a fine team into office as we are hoping that we'll be welcoming new and hard working board members onto the team in the fall.

The ABANA Board has selected a new publisher for the Anvil's Ring. Those of you who are ABANA members will notice the new format in the upcoming Anvil's Ring issue. We are hoping that you will be pleased with the efforts of the board and the publishing company to maintain the quality and integrity of the Anvil's Ring in the style that you are familiar with. The board will have a conference call coming at the end of April to review the editor applications to date and start narrowing down the field.

I love working with all of you and promoting the original philosophies of ABANA which was started in the early 1970's with the men from Lumpkin.

Warm Regards,

Dorothy Stiegler
Dorothy Stiegler
ABANA President

DES/jrg

