



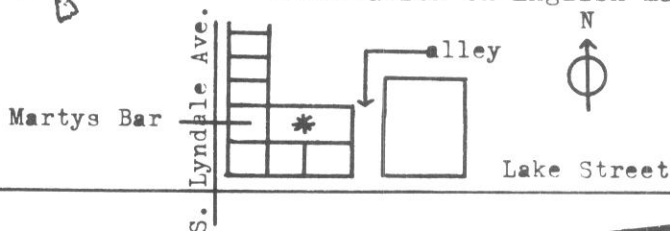
## "The luf so short - the craft so long to lerne"

A NEWSLETTER OF THE GUILD OF METALSMITHS: an organization to promote appreciation and study of the Metal Smiths' Art; serving Smiths in any form of metal smithing.



### Valentine's Day Potluck Dinner

Bring your favorite dish and your favorite Sweetheart on Wednesday evening, February 14th to the forge of Bob Walsh. We will meet at 6:30 and Burt Auger will offer information on English made forging tools.



\*We will be in a gray garage behind Marty's Bar with the numbers 2953 1/2 on the building.

Guildmembers,

I'd like to start this address by first extending a warm welcome to all the new faces that were at the (December) meeting. I hope to see all of you often.

Second, I'd like to tell you all that I feel very honored to be an active part of this organization, honored because I believe in quality craftsmanship and I don't think that anyone could be more aware of quality and craftsmanship than you, artists and craftspeople working to attain it in metal which has to be one of the hardest mediums to work with.

For those of you who weren't at the meeting, we passed a new set of by-laws which I feel will be very beneficial to the growth of the Guild as they contain more frequent meetings for better communication and a distribution of the work load to second year members or anyone that would like to volunteer.

It was also decided at the meeting that the Guild hold "The Guild of Metalsmiths First Annual Metalsmiths Roundup" which is described elsewhere in this newsletter.

People volunteered to be on the planning committee and I hope we have some preliminary poster layouts at the next meeting. If there is anyone that would like to be on this committee, give me a buzz at 825-2193 or if anyone would like to demonstrate at the Roundup, please let me know.

Bob George has volunteered to co-ordinate the Renaissance Festival and Mark Nichols has volunteered to co-ordinate the Rosefete' and see if he can put something together with the Minnesota Crafts Council for their fair. At all of these events I'd like to see the Guild banner fly high from sun-up to sundown. We have the banner but need someone to volunteer to make some poles and a rope arrangement so we can stick it in the ground at the fairs.

We also need to put our heads together on a Guild pamphlet explaining the functions of the Guild. Would anybody like to volunteer for this project? At the next meeting I'll bring up both of these issues so we can get something started.

Andy Lininger is going to bring to the next meeting a list of names of people that have asked him for demonstrations that I'm sure we're all anxious to see.

There will also be some excellent information at the next meeting on English made forging tools, made possible by Burt Auger; thank you, Burt.

Thank you all. If we all continue to pitch in just a little, I'm sure this year will be a lot of fun for everyone as well as a super growth year for the Guild!!

Sincerely, *Bob Walsh*  
President

AN OPEN LETTER....

Dear Guild,

At the December 13th Guild meeting, someone complained that the Guild's intentions for the future don't seem to offer much benefit for Silversmiths or indeed for any other metal workers outside of Blacksmiths. I think this complaint is well founded. In the several years since our formation, there has not been one activity or event to specifically benefit Silversmiths, Goldsmiths, Tinsmiths or anyone other than Blacksmiths. These other smiths have only benefitted coincidentally from the Blacksmith's activities.

At the Guild's very first meetings, the question of whether or no to support smiths other than Blacksmiths was thoroughly considered and much discussion was had. Our decision was to include all smiths. Yet, to date our track record is abysmal. Nothing has been done and nothing has been planned.

This is not the first time someone has complained. We always listen politely, agree with them and then do nothing.

NOW, at the December Guild meeting, someone called our attention to a national Guild of Goldsmiths. Our Guild secretary should be given an address for this Guild of Goldsmiths. Our secretary should then write to this Guild, asking how our Guild can gain membership. This is a good decision for us and no further discussion would seem necessary; for no matter what the nature of the Goldsmiths, our participation cannot help but strengthen them and, as members, their strength will be our gain.

Sincerely,

*Jock Spurgin*

SECRETARY'S NOTE:

*I have the address & have written the letter of inquiry. Will report on same.*

An epitaph in a churchyard at Sutton, England:



My sledge and hammer have declined;  
My bellows, too, have lost their wind;  
My fire extinct, my forge decayed,  
And in the dust my vise is laid;  
My coals are spent, my iron gone,  
My nails are drove, my work is done;  
My fire-dried corpse here lies at rest;  
My soul, smoke-like, soars to be blest.

From THE AMERICAN BLACKSMITH, August 1907  
Courtesy of Paul J. Hubler

A report for us from Jock Spurgin...

The new coal available from Great Lakes Coal and Dock Company is a marvelous product. It give off almost no smoke and leaves the iron work very clean in appearance. It does not seem to contaminate the iron chemically as thin sections can be heated many times without cracking and it works well for forge-welding.

When mixed with water and allowed to stand for 24 hours, it makes excellent cake for shaping the fire. With a little water sprinkled on now and then, this cake is long lasting. Using this product in this fashion, the fire can be controlled down to a tiny slit for specific heating, much more specific than is obtainable with ordinary coal.

On the other hand, this product can heat large sections. I have mixed this coal with a little koppers coke and forged scrolls from 3' slabs of 4" x  $\frac{1}{2}$ " flat bar.

To coke this new product, I have sprinkled it dry over the fire and left it undisturbed with the blower on for one or two minutes and then turned the resulting chunks with the poker and waited another minute and PRESTO! A fire full of fresh coke in less than 5 minutes!

To best use this new product, a smith must change his fire habits. I am as traditional as anyone, yet life should be a learning experience. And learning to use this new product will yield finer ironwork.

BY-LAWS OF THE GUILD OF METALSMITHS as adopted at a Board of Directors and General Membership Meeting on Wednesday evening, December 13, 1978 for enactment in 1979.

#### PURPOSE AND OBJECTIVE

The GUILD is organized solely for educational purposes, accomplished by: encouragement of training programs and conferences for higher standards of craftsmanship, disseminating information about sources of equipment, literature and material, exposing the smith art to the public through craft fairs, publications and advertising, acting as a clearing house for the smith industry to any and all inquiries.

#### MEMBERSHIP

Any person or organization interested in metal smithing and accepting the purposes and by-laws of this GUILD may become a member. During the second year of membership must be contributed A or B.

- A. Give a demonstration or presentation of information on anything that would be beneficial to your fellow smiths (example, smoke, safety, toolsteel, grinding wheels, work procedures, forge-welding techniques, etc.) It being the obligation of the people that pick A to see that there be at least one but not necessarily more than one demo or presentation per meeting.
- B. Contribute time on a project that will help the GUILD (example, GUILD I.D. plaques for display in shops, at art fairs, etc., GUILD banners or flags, pamphlet explaining GUILD functions, by-laws and how to join, newsletter, better exhaust system at Gibbs, etc.)

#### FISCAL YEAR

The fiscal year of the GUILD shall begin on the first day of January and end on the last day of December in each year.

#### DUES

The Board of Directors of the GUILD, with membership approval may determine from time to time the amount of the annual dues payable, in advance, on the first day of each fiscal year. Presently dues are \$10 yearly for a single membership; \$12 yearly for a family membership; \$6 yearly for a newsletter subscription only.

#### PROPERTY

The property of the GUILD is irrevocably dedicated to charitable purposes, no part of the net income or assets of this GUILD shall ever inure to the benefit of any director, officer or member thereof or to the benefit of any private persons. Upon the dissolution or winding up of the GUILD, its assets remaining after payment or provision for payment, or all debts and liabilities of this GUILD is organized exclusively for charitable purposes and which has established its tax status under section 501 (c) (3) of the Internal Revenue Code.

#### MEETINGS

There shall be a minimum of seven (7) meetings each year, location and dates to be determined by the Board of Directors with membership approval. Whenever practical an agenda shall be mailed to all members before a meeting to permit membership participation by attendance, letter or phone. For major issues, voting shall be by majority vote of the members present and by proxy.

- A. GUILD meetings are to be held seven (7) times per year, the second Wednesday evening of the months of June, July, August, then every other month, October, December, February and April, unless a holiday in which case one week later.
- B. The newsletter that precedes each meeting explains what the upcoming demonstration will be about.

## BOARD OF DIRECTORS

The Board of Directors of the GUILD shall consist of seven (7) members. The members of the Board shall upon election proceed with performance of their duties and continue in office for a period of two years. Successors shall assume their duties within thirty (30) days after the election. Official address of the GUILD shall be that of the Secretary/Treasurer.

## OFFICERS

The officers of the GUILD shall include a President, Vice-President and Secretary/Treasurer, who shall be elected by the members at their annual meeting from the seven (7) member Board.

## DUTIES OF OFFICERS

PRESIDENT shall preside at all meetings of the GUILD and the executive committee, is ex-officio member of all committees with vote, shall communicate to the executive committee and the GUILD members continually on promotion, effectiveness and welfare of the GUILD.

VICE-PRESIDENT will act in absence of the President.

SECRETARY/TREASURER shall maintain records of all GUILD meetings, have records available at meetings, be responsible for the newsletter (METALSMITH) sent to all members, handle all correspondence, maintain current GUILD roster, have custody of all monies deposited in bank, maintain financial records and provide annual report to the members or when requested by the Board of Directors.

## NOMINATING COMMITTEE

At least three (3) months before the end of the fiscal year the President shall appoint a nominating committee which shall prepare a list of nominations for the Board of Directors for a two (2) year term. The nominating committee may nominate more candidates than there are vacancies for the Board of Directors. The Secretary shall promptly notify the membership of the nominating committee personnel in the GUILD newsletter.

For this committee the President shall secure the services of three (3) members well acquainted with activities of the GUILD, thus competent to select persons qualified for Board membership. No incumbent Director shall be a member of the nominating committee.

One (1) month before the date of election the nominating committee shall report to the Secretary a list of director nominees for publication.

Any member may furnish additional names of qualified persons for directorship to the nominating committee for consideration at any time before the committee renders its report.

## ELECTION OF DIRECTORS

In the event more candidates are nominated for directors position than there are vacancies, the Secretary shall, not later than two (2) weeks before such annual meeting, mail to all members a ballot listing the names of nominees. The names shall be in alphabetical order. The Secretary shall specify the rules as to number to be voted for, validity of ballot, establishment of right to vote and similar matters. Ballots shall be held by the Secretary unopened until polls are closed. The ballots shall then be canvassed by the Secretary with a deputy of the GUILD. The results of the mail or ballots will be included and read at the annual meeting.

The 1979 Board of Directors election shall be three (3) persons for one (1) year term and four (4) persons for two (2) year terms. This process will overlap Board membership for continuity of administration.

## AMENDMENTS

These By-Laws may be amended, repealed or altered in all or in part by majority vote at duly organized meeting of the GUILD. The proposed changes shall be mailed to the last recorded address of each member at least fifteen (15) days before the time of the meeting to consider the change.

A report on NIELLO from John Moriarty

Niello is a method of metal decoration using a dark colored mixture of metals that, when fired, becomes fused to the substrate metal. The color ranges from a drab, almost black color, to a silvery blue. When used on silver it provides an appealing contrast to the color of the substrate. An old technique, it has been used by the Egyptians, Romans, Greeks et al and was very popular during the Middle Ages as a method of decoration on armor and arms. Possible metals on which it can be used are gold, silver, bronze and steel; although silver is probably the most notable because of the natural color contrasts.

PREPARATION Niello is made from a mixture of silver, copper, lead and sulfur. The clean metals are melted together starting with the metal of the highest melting point: silver. After the silver is molten, the copper is added followed by the lead. The mixture is stirred with a carbon rod to insure a complete mix. Next the sulfur is added with more stirring.

The melting can be done in any suitable refractory container with a torch. However, on the addition of sulfur, a considerable amount of SO<sub>2</sub> and other nasty and bad smelling gasses are liberated. These gasses are toxic so this step must be done with very adequate ventilation. Working outside is a must. A hood with an exhaust fan is best but lacking that, placing an ordinary household fan between you and the offending object would be extremely prudent.

After the molten metals are thoroughly mixed with the sulfur, pour the mixture on a lightly oiled steel surface. While still hot it can be hammered out to a thinner sheet or can be left in the "as poured" state. After cooling the material is a grey-blackish color and very brittle. It can be broken into small chunks with a hammer and then must be ground with a mortar and pestal or on a flat piece of steel using the flat of a hammer head held in the hand. The resulting powder must be washed with water by shaking in a jar with water and decanting the water. After drying, the powder should be passed through an 80 mesh screen and is now ready to use!

APPLICATION Niello is used as an inlay material, therefore the silver must have a depression or cavity in which to put the niello. The cavity can be formed in any way, ie, etching, stamping, grinding, engraving, etc. Also construction methods similar to cloisné can be employed to build small chambers. Depressions or chambers should not be more than 1/32" in depth to avoid bubbling.

The niello powder should be applied with a small spatula to the depressions and formed into a small mound. To fuse the niello a temp of about 1000 is required. A small kiln or a torch is adequate, however, if the torch is used prudent application of heat is advised as overheating can cause the lead to burn into the silver and cause severe pitting of the surface. After firing the object is allowed to cool without quenching. Then with a fine file, the surface is smoothed to bring out the design. When the surface is flush with the silver substrate, a scotch stone or a 400 grit emery paper is used and finally finished on the Tripoli wheel. Because of pits or bubbles it may be necessary to fire on additional layers of niello. The best approach is to keep designs simple and small and to be very diligent about not overheating when firing.

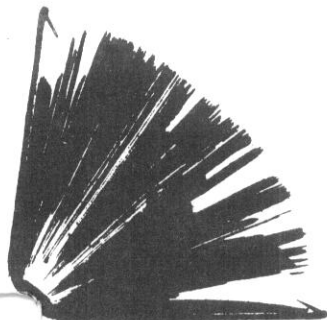
This sounds like a complicated process but for those interested in classical techniques, this one is very old. Results are pleasing and have a pleasing quiet quality with subtle colors. Preparation of the niello itself does not take as long as it sounds an once a batch is made up, it can be saved and used for some time.

#### NIELLO FORMULAS (Parts by weight)

Silver	8	2	1	1	2	1
Copper	18	5	6	2	1	2
Lead	13	7	10	4	0	3
Silver	96	24	36	5	3	12

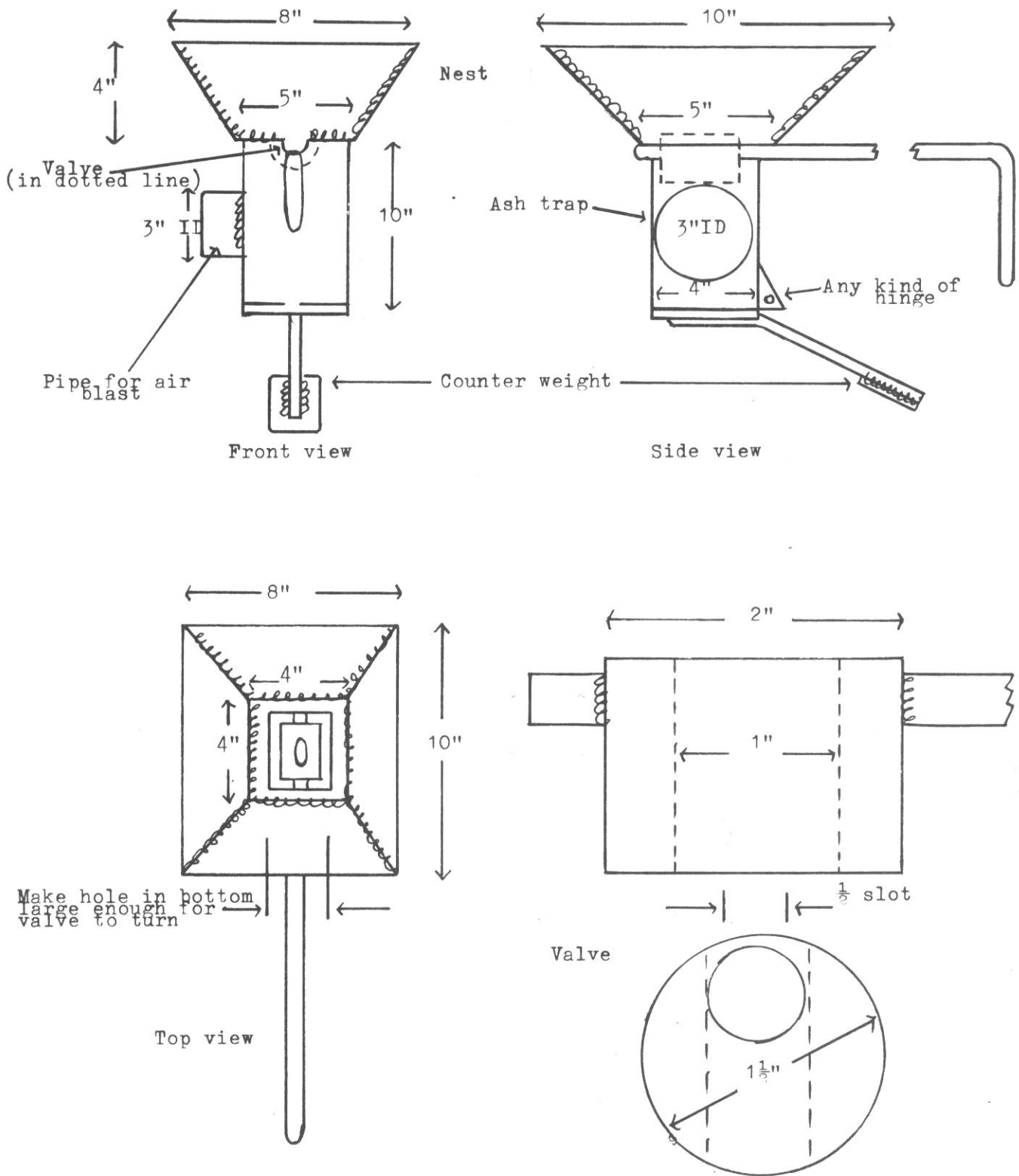
Generally, the higher the sulphur content, the blacker the resulting niello. For more information, see the following list:

METAL TECHNIQUES FOR CRAFTSMEN: Opi Untracht, pp. 186-191  
CREATIVE GOLD AND SILVERSMITHING: Sharr Choate, pp. 149-150  
Time-Life Books, METALSMITHS: article by Celleni



**Books**

From RICK REICHELT to all **you** folks out there who want to build fires and get after it, here is a homemade duck's nest design which works just fine. The nest is made of mild steel plate, pipe and solid bar and can be arc welded together after the parts are cut to shape with a cutting torch.



The nest itself should be made of  $\frac{1}{8}$ " plate; the ash trap of  $\frac{1}{4}$ " square tubular pipe; the door on the bottom of the ash trap is  $\frac{1}{4}$ " plate. The air blast pipe  $\frac{1}{4}$ " wall, 3" inside diameter. The valve is  $1\frac{1}{2}$ " solid bar stock welded to the handle on an eccentric. The counter weight can be a piece of heavy plate as bar stock.

This is a rough drawing, not to scale, so before you start cutting and welding make a pattern out of cardboard and tape. The dimensions can vary a little on the nest and ash trap; the depth of the nest and the valve are about right, however.

This outfit seems to work well with hand or power blowers and the eccentric valve keeps the fire clean. Happy forging and remember--never put cold work in a cold fire.

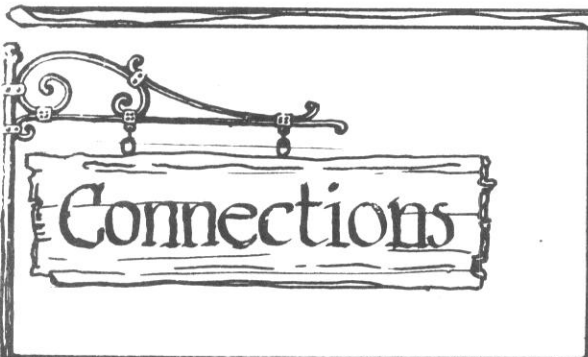
WASHINGTON (AP) - Four government agencies said Saturday they plan a joint attack on 24 toxic substances that pose health or environmental threats because of unsafe manufacture or handling.

Douglas Costle, Environmental Protection Agency administrator, said Saturday the joint effort will try to minimize the risk of the substances while not unduly restricting the beneficial uses.

Costle said dangers posed by the compounds include both immediate illness and such long-term effects as cancer, organ damage, sterility and birth defects.

The 24 substances are acrylonitrile, arsenic, asbestos, benzene, beryllium, cadmium, chlorinated solvents, chlorofluorocarbons, chromates, coke oven emissions, diethylstilbestrol (DES), dibromochloropropane (DBCP), ethylene dibromide, ethylene oxide, lead, mercury, nitrosamines, ozone, polybrominated biphenyls (PBBs), polychlorinated biphenyls (PCBs), radiation, sulphur dioxide, vinyl chloride and toxic waste disposals.

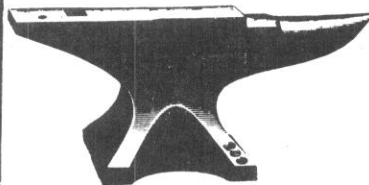
From a newspaper clipping sent to us by Andy Lininger



## Connections

### Wanted:

USED SWEDISH ANVIL (90-100 lb.)  
SWAG BLOCK, SPRING VICE  
Contact: Joanne Kaprelian  
P.O. Box 202  
Maple Plain, Mn. 55359  
479-2189 after 4



### Swaps:

TRADING ANVIL OR MONEY FOR  
GAS CUTTING & WELDING TORCH  
Contact: Daniel Delano  
507 Folsom Street  
Eau Claire, Wisc.  
54701



SWAG BLOCK, FORGE BLOWERS, ELECTRIC OR  
MANUAL FORGES, FIREPOTS, TONGS, HORSE  
SHOE VICES, TIRE ROLLER, TIRE SHRINKER,  
STATIONARY GAS ENGINE, Edwards #10 SHEAR  
& #5 SHEAR, ANVILS, LEG VICES, GRINDERS,  
MANDRALS, TOP & BOTTOM FULLERS, SWAGES  
OR ORNAMENTAL IRONWORK - FOR - HAND  
OPERATED ANGLE IRON ROLLER FOR  $1\frac{1}{2} \times 1\frac{1}{2}$   
ANGLE IRON (minimum)

Contact: Robert Olson  
507 North Shore Drive  
Forest Lake, Mn. 55025



COAL, STEEL, COKE.  
Contact: Pieter Maas  
Sunnyfield Road  
Mound, Mn. 55364  
472-1206

CASTING INVESTMENT  
BULK SILVER BUYING  
Contact: Mike Knott  
West Side Studio  
1523 W. Lake St.  
Mpls., Mn. 55408



### Co-op Buying

NEW swage blocks \$65  
60% steel  
The same composition  
as wrecking balls  
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Columbus, Ohio 43201

### KY MICHAELSON

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**CUSTOM MADE FORGES  
USING SPACE AGE  
TECHNOLOGY  
8337 PENN AVE. SO.  
BLOOMINGTON, MN 55431**

### WANTED

The recipe for that fabulous  
APPLE STRUDEL that was at the  
last meeting.

Hungry Tummy 825-2193

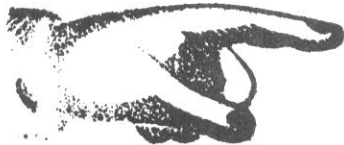
**ROCKET MAN ENT.**

We need each other,  
Not to sit beside our forge and talk of our past  
But to assist each other now and then  
With things we know of.

We need each other  
Not to censure one another, or to cut prices for gain  
But to aid each other on the road to opportunity.  
Our meeting was not a thing by chance,  
It was to organize - that's why we met,  
So we could both advance.  
Now we know how well  
In lots of things, like organization,  
We've bettered our condition.

We need each other,  
Not to take advantage for selfish end,  
But just because of finer things.  
We need each other's help, my blacksmith friend.

Charles H. Chism, Coshocton, Ohio



Just a reminder to all our readers that  
the METALSMITH should contain tips and  
how-to's. How about sending some in?

*The Village Blacksmith*    by    Henry Wadsworth Longfellow

UNDER a spreading chestnut-tree  
The village smithy stands;  
The smith, a mighty man is he,  
With large and sinewy hands;  
And the muscles of his brawny arms  
Are strong as iron bands.

His hair is crisp, and black, and long,  
His face is like the tan;  
His brow is wet with honest sweat,  
He earns what'er he can,  
And looks the whole world in the face,  
For he owes not any man.

Week in, week out, from morn till night,  
You can hear his bellows blow;  
You can hear him swing his heavy sledge,  
With measured beat and slow,  
Like a sexton ringing the village bell,  
When the evening sun is low.

And children coming home from school  
Look in at the open door;  
They love to see the flaming forge,  
And hear the bellows roar,  
And catch the burning sparks that fly  
Like chaff from a threshing-floor.

He goes on Sunday to the church,  
And sits among his boys;  
He hears the parson pray and preach,  
He hears his daughter's voice,  
Singing in the village choir,  
And it makes his heart rejoice.

It sounds to him like her mother's voice,  
Singing in Paradise!  
He needs must think of her once more,  
How in the grave she lies;  
And with his hard, rough hand he wipes  
A tear out of his eyes.

Toiling,—rejoicing,—sorrowing,  
Onward through life he goes;  
Each morning sees some task begin,  
Each evening sees it close;  
Something attempted, something done,  
Has earned a night's repose.

Thanks, thanks to thee, my worthy friend,  
For the lesson thou hast taught!  
Thus at the flaming forge of life  
Our fortunes must be wrought;  
Thus on its sounding anvil shaped  
Each burning deed and thought!



THE GUILD OF METALSMITHS  
11898 Knolls Path West  
Lakeville, Minnesota 55044

MINUTES December 13, 1978

On Wednesday evening, December 13, 1978, the Board and general membership met at Bob Walsh's forge in Minneapolis for a meeting and potluck dinner.

Pieter Maas, Chairman of the Board of Directors called the meeting to order and Bob George read the minutes of the previous meeting for the absent Secretary/Treasurer.

The proposed by-law changes were discussed in detail and approved with the change of the word "blacksmith" to "metalsmith". Due changes were also discussed, however, there were no changes made in the rates as listed in the final copy of the by-laws.

Elections were held and, with no additional nominees, the following persons were elected:

President Robert Walsh  
Vice-president Pieter Maas  
Secretary/Treasurer Maxine George  
Additional Board of Director members  
Jock Spurgin  
Michael Knott

Bob Sharp agreed to give the next demonstration on metal polishing and grinding at Bob Walsh's on Wednesday, February 14, 1979. At that time Pieter Maas will report on the upcoming blacksmithing conference at LaCrosse, Wisconsin. Newsletter articles, due in to the Secretary on 21 January were assigned to various members.

Bob Walsh reported on the book ORNAMENTAL IRONWORK. Bob also agreed to be available for information on swedge blocks.

Jock Spurgin and Andy Lininger reported on Great Lakes coal.

Objectives of the Guild were outlined and discussed in areas such as: size; organized committees; smooth functioning; application as regional chapter of ABANA; Spring blacksmith round-up with demonstrations, presentations, sales, competitions, lectures, etc.

A committee including Jock Spurgin, Bob Sharp, Ky Michaelson, Vicki Johnson, Burt Auger, Doug Johnson and Marcia McEhron was established. The following agreed to demonstrate in the event: Bob Walsh, Jock Spurgin, Paul Hubler, Pieter Maas, Bob George and Andy Lininger. The Gibbs Farm in the Spring were the suggested place and time.

The meeting was adjourned for the potluck after which Bob Walsh gave his demonstration on scroll jigs and fixtures for bending hot and cold metal.

