

July 78

THE



J A S P I L I T E

Affiliated with the Midwest Federation  
of Mineralogical and Geological Societies

# Midwest Federations NEWSLETTER



Published monthly except July and August as a service to members clubs.  
All news, articles, subscription orders and requests for information concerning publication  
should be sent to the Editor, Haydon Peterson, Parrot Printing, 2125 Forest Ave., Des Moines, Iowa 50311

June 1978 - Issue No. 186

## *Time growing short to make Cedar Rapids show plans*

If you have not already made plans to attend the Midwest Federation's 1978 show and convention in Cedar Rapids, Iowa, August 10-13, better do so immediately.

Time is growing short and Norman Brown, Show Chairman, suggests you make reservations as soon as possible for motel, hotel or camping accommodations as well as for the other activities. The show is being hosted by the Cedar Valley Rocks and Minerals Society and will be held at Hawkeye Downs on South Highway US218. There is ample parking space as Hawkeye Downs is the site of the annual All Iowa Fair. And it is only a short distance from downtown Cedar Rapids and other business areas.

The show committee will have working displays in addition to programs by nationally and state known speakers. An Editor's Breakfast, a banquet, and meetings of the Midwest Executive Committee and delegates meetings have been scheduled.

The popular "Hall of States" feature, inaugurated in Dayton, Ohio last year will be a feature of the 1978 show and convention in Cedar Rapids.

For additional information and complete show schedules, write to Show Chairman, Norman Brown, 360 Tonga Drive, Hiawatha, Iowa 52233

### PROGRAM CORRECTIONS

In our April issue we reported a new program, "Alpena County Fossils" and we misspelled the author's name. The program is by Bob and Pat Rutkowski, Taylor, Mich. Also the area referred to in the program is in the northern part of the Lower Peninsula of Michigan.

In the same issue a program titled "Close-up Photography" is by Norm Hanschu.

### FRUITFUL SPRING MEETING

A very interesting and fruitful spring Executive Committee meeting was held on Saturday, April 29 in Highland, Indiana. President Paul Good reports much was accomplished and complete reports of the meeting will be sent to all member clubs by the Secretary as soon as possible.

### 1978 DIRECTORIES READY

The 1978 Midwest Directories have been delivered by the printer and copies are being sent to all clubs and individuals on the official mailing list. If you do not receive your copies, or wish additional copies, write to the Midwest Director of Supplies and Information, Clinton Heckert, 725 Stewart Ave., Elgin, Ill. 60120

*PLEASE.... DON'T BE A LITTER BUG!*

### WILMA BONAR

The Midwest Federation is sorry to hear of the death of Mrs. Henry (Wilma) Bonar, Odessa, Florida. Wilma died on May 3 in Odessa after a lengthy illness. Services were held at the Keystone United Methodist Church near Odessa.

She was a Past President of the Eastern Federation, a Past Editor of the American Federation Newsletter, and was active in numerous organizations and in the rock and mineral hobby. She was instrumental in starting the Eastern Federation yearly workshop at Wildacres.

Wilma is survived by her husband Henry who is a Regional Vice President of the American Federation, five children and 12 grandchildren.

### CB CHANNELS

Here is a list of CB channels that Woodall's RV Travel Magazine has listed as in use for various groups.

Channel 9, Emergency; channel 10, First Aid; channel 11, Contact; channel 12, RV to Rv, RV to campground. channel 14, RV Rally Control; channel 19, Eighteen Wheelers, Primary Channel; channel 21, Eighteen Wheelers.

It must be remembered that the FCC does not assign or recognize any channels for CB with the exception of channel 9, the emergency channel.

# Scholarship Honorary Award Winner



Another excellent group of Earth Scientists has been selected by the Regional Federations as Honorary Award Winners for 1978. These Honorees will be choosing the schools and students who will receive grants from the Foundation for the next two years as they pursue their advanced degrees in Earth Science. The grants will again be for \$1000.00 yearly for each student in this, the fourteenth year the Foundation has provided grants.

The Midwest has selected Prof. Donald R. Peacor, Professor of Geology & Mineralogy, University of Michigan, Ann Arbor, Michigan.

A native of Somerville, Mass., Dr. Peacor received his B.S. from Tufts and his M.S. and Ph.D. in Crystallography from M.I.T. He has been at the Univ. of Michigan since 1962, and Professor since 1971. Special interests include structural crystallography, especially crystal structure at high temperatures; silicate crystal chemistry; and high temperature X-ray diffraction. Affiliations include the Mineral Society of America and American Crystallography Association. Dr. Peacor is on the Mineralogical Record staff and will be organizing the Mineral-

## MINERALOGICAL SOCIETY OF ARIZONA MEMBER WRITING PAPER ON HAZARDOUS MINERALS

We have often read where Malachite is highly poisonous. One should never lick it and should use great caution when working and polishing malachite as the dust is hazardous. We have been given methods of being able to tell that you are inhaling the material when, if you smoke, you begin to have a sweet taste in your mouth, "because the copper oxide dust mixes with the moisture in your mouth. The combination reacts on the tar of the tobacco, turning it into saccharin". But, in a brief study of the mineral, we cannot find in the chemical composition of malachite that it would be poisonous. This is not to say that you should disregard any action. as caution should be taken when working on handling any minerals, but still we wonder why the reasoning on this.

One of our members is at present preparing a paper on "Minerals which can be hazardous to your health". If anyone has any information that would be helpful, we would appreciate your writing us. Address, Mineralogical Society of Arizona, P.O. Box 902, Phoenix, Ariz. 85018

### LAST ISSUE UNTIL SEPTEMBER

This June issue is the last issue of the Newsletter until September. We will be on our summer recess. If you have anything you think our readers would like to know, send it to your editors for fall publication.

## Gems and Minerals plans special issue

To give its readers something extra, Gems and Minerals magazine is planning a big special September issue. One of the extras of this issue will be a full year of show dates in the Coming Events section that will include show dates in September 1978 through September 1979.

Normally only four months of such show dates are carried in any one issue. Many readers, however, start planning their vacation a year ahead of time, and this should help them in checking on the coming shows that might be along their route.

Clubs having confirmed show dates should send the particulars to Gems and Minerals no later than July 15 for publication in the Coming Events section of this special issue.

Address your letters to Gems and Minerals, P. O. Box 687, Menton, California 92359.

## New items hot in gem fashion

The hottest new item in gem fashions is the revival of the old time stick pin. Used clusters on jackets, dresses, and scarves, the pins now replace tie-tacks and tie-bars for their traditional use as "tie pins". They are set with stones, and designed with contemporary and antique looks.

In better jewelry, pearls are the most popular fashion accessory. Although they have risen greatly in price over the last few years, the beautiful cultured pearls from Japan are popular accents for the more elegant look of today's styles.

Other gems in high favor now are peridots, tourmaline, and aquamarine. Brazilian opal is being hailed in the opal market. Rubies and emeralds still lead the other gems in prices, and diamonds have risen so much that Tiffany's took out an ad stating that they were overpriced. However, stones of a carat and up of gem quality are rare, and are still popular for investors. The unknown factor is that many new diamond pipes have been discovered in Russia.

In metals, yellow gold is more popular than others, and gold chains are still very much "in". Low carat gold is often used for medium priced gold jewelry, and although it is higher in price than gold-filled, it has been widely accepted.

Agate and petrified wood and other gem clocks, long popular in the hobby, are now jewelry store items.

Among synthetics, the newest diamond look-alike, cubic zirconium, heads the list of the most admired. Still in great demand are the Gilson and Chatham emeralds, and other well known synthetics such as star sapphires.

# Midwest Federations NEWSLETTER



Published monthly except July and August as a service to members clubs.  
All news, articles, subscription orders and requests for information concerning publication  
should be sent to the Editor, Haydon Peterson, Parrot Printing, 2125 Forest Ave., Des Moines, Iowa 50311

May 1978 - Issue No. 185

## *More new programs available to clubs*

More good news about program additions to the Midwest Film Library from Donald Stinnett, Film Library Chairman.

The two prize-winning programs in the American Federation contest last year are now available to Midwest clubs.

"Making Constructed Silver Jewelry" by Marge Collins of Plymouth, Mich. She is a teacher of this subject and the program slides show four projects her students are taught. This is an exceptionally interesting and informative program for beginning silversmith or study groups.

"More Rare Than Diamonds - History of a Fossil Location" is by the Oregon Agate and Mineral Society of Portland, Oregon. It tells a very interesting story by a paleobotanist and an area called Clarno Fossil Location, a very unique area.

Don and the Northwest Federation program chairman are very pleased with a new program swap arrangement they have worked out that will enhance the pro-

gram library in the coming months. First of these programs, "One Hundred Miles of Agate", a tour of the Oregon coast has already been received and will be ready for club use about May 15.

The Midwest is anxious to have clubs participate in supplying programs for the library and clubs wishing to supply programs or have more information about their participation should write to the Film Library Chairman, Donald Stinnett,

All of the programs described above are available to Midwest clubs for immediate booking. Send your request for them to Donald Stinnett, Midwest Film Library, 29462 Aspin Drive, Flat Rock, Mich. 48124. Be sure to include the name and address of the person to whom the program is to be shipped, the exact date it is to be used, and name of your club. And don't forget to include the \$2.00 fee for each program you request. Always give an alternate date and program choice so you will not be disappointed.

## *Annual educational seminar dates set*

The Michigan Geology and Gemcraft Society's Fourth Annual Educational Seminar, hosted by Mid-Michigan Community College in Harrison, Mich. will be held on Saturday, June 24 and Sunday, June 25.

The seminar will involve illustrated lectures and working demonstrations on a full range of topics concerning geology and the lapidary arts. The areas include jewelry design, silver casting, wirecraft, filigree, Paleontology, Archaeology, mineral photography, faceting, basic and advanced lapidary, mineral identification, uniform rules of judging, carving, and much more. Seminar '77 had 46 different lecturers, presenting 52 different programs, with each program presented several times during the weekend. It is important to note that each year MGAGS strives to offer many new lectures and demonstrations, so that even for those individuals who have attended in the past few years, there is always some-

thing new and exciting to see and to learn.

The seminar will also help to answer questions like how can I improve my exhibit, what does this rule mean, what are the qualifications for becoming a judge, could I clerk for a judging group at a show, where can I find materials for my case, why did I get this comment the last time my case was judged, and can I include this specimen. This portion of the seminar will be conducted under the guidance of Calvin George, past chairman of the Midwest Uniform Rules Committee and present member of the AFMS Uniform Rules Committee.

For further information write Lee Kirby, Chairman MGAGS '78 Seminar, 3660 Embarcadero, Drayton Plains, Michigan 48020

## *Paleontology society formed*

The Mid-America Paleontology Society is the name selected by a newly formed fossil club. At their March 4 organizational meeting held at Augustana College, Rock Island, Ill. with 38 fossil collectors from three states and ten clubs attending Dick Johannesen, Davenport, Iowa was named President; Gil Norris, Rock Island, Ill., Vice-President; Alberta Cray, Cedar Rapids, Iowa, Secretary,

and JoAnn Good, Aledo, Ill., Treasurer.

Johannesen says the club is strictly a fossil club and no rocks, minerals, crystals or lapidary arts will be discussed. They plan to apply for membership in the Midwest Federation. Present membership includes three Assistant State Directors of the Midwest, the Midwest

*Continued on back page....*

## WELCOME NEW MEMBER

The Midwest Federation welcomes into membership Ute Bernhardt, 1157 S. Elmwood Avenue, Oak Park, Illinois 60304.

*Continued from front page...*

Paleontology chairman, five bulletin editors, the Director Emeritus of the F. M. Fryxell Geology Museum at Augustana and a Consultant in Paleontology from the same museum. Ages of those attending the organizational meeting were from 8 to 78.

"MAPS" is open to anyone, anywhere who is sincerely interested in fossils. Interested persons may attend a meeting in person or write to Dick Johansen, 1508 W. 38th St., Davenport, Ia. 52806.

## Park passports

The National Park Service now has available 1978 Golden Eagle Passports.

This passport costs \$10 for one year and will permit the owner and everyone with him in his vehicle to enter many federal parks and recreation areas where entrance fees are charged.

Golden Age passports, which are lifetime entrance permits to federal park areas, are also available. These passes are available free to persons aged 62 and older.

A brochure listing the areas where the passports are valid and telling how and where to obtain them is now available without charge by writing to the Heritage Conservation and Recreation Service, Department of Interior - South, Washington, D. C. 20204. Ask for pamphlet "1978 Federal Recreation Fee Program. Golden Eagle-Golden Age Passports".



**MIDWEST SHOW AND CONVENTION**



**CEDAR RAPIDS, IOWA**

**AUGUST 10-13**

## *Safety manuals proving popular*

A report from Dr. Elwood T. Rees, the AFMS Treasurer, says the first 1000 Safety Manuals have gone out to fill orders. He is having a second 1000 printed to fill existing orders.

This 44-page booklet is an excellent manual covering three major safety areas, Field Trip and Camping, Lapidary and First Aid.

The booklet is available from the Federation Supply Officer in your club who can secure his supply from Robert H. Hopwood, 1869 N. 71st St., Milwaukee, Wis. 53212. Individual members are requested not to order directly Mr. Hopwood as he is not in a position to ship such orders.

## *Six summer workshops scheduled*

Six Workshops in Native American Technology will be held starting July 17 and continuing through August 25. The workshops have been developed by the Northwestern University Archeological Program and will be held at the University in Evanston, Ill. Each workshop will be one week long and will enable participants to study North American Indian culture by making and using many items commonly found in the artifact assemblages of both prehistoric and historic Indian groups. An ecological perspective will be emphasized, with Workshop participants gathering a wide range of raw material from the environment and processing these into useful containers, tools, clothing, etc. Pottery and stone tool-making, weaving, woodworking, and collecting and processing native foods will be featured.

Workshops will be lead by John White, Director of the Native American Studies Program at the Kampsville Archeological Center; Greg Thomas, one of America's foremost flint-knappers; and Ele White, an expert in Native American weaving techniques.

Additional information on the workshops can be secured by writing Paul Shanks, Workshop Coordinator, Northwestern Archeological Program, 2000 Sheridan Road, Evanston, Ill. 60201

## *Top prizes*

What probably is the most expensive group of prizes ever offered by a host club of a combined Regional and National show are being assembled for lucky winning show goers at the National Show in Pleasanton, Calif., July 27-30.

Carmen Cavaliere of the Castro Valley Mineral and Gem Society, the host club, says tickets and in-

formation regarding the drawing on Sunday afternoon, final day of the show, will be available at the show.

First prize is a Caribbean trip for two for eight days. Departure will be by air from the West Coast and the luxury cruise ship is to be boarded in Florida. Six ports of call can be included and total value of the prize is approximately \$2,000.

Mexico is the destination of

the second place winner and is valued at \$1,400. Winner will have a choice of three colorful areas in Mexico which is for two and covers an eight day period. Departure is from the West Coast.

A microwave oven with a \$500 value will be the third prize. In addition to the top three prizes there will be seven auxiliary prizes each with a value of approximately \$100.

OFFICIAL PUBLICATION

of the  
ISHPEMING ROCK AND MINERAL CLUB, INC.  
Published Quarterly

OFFICERS AND COMMITTEE CHAIRMEN - 1978

President	Robert Phillips, 405 S. Rose	Ishpeming
First Vice President	Olive Sain, 818 W. Kaye	Marquette
Second Vice President	Charles Waters, 970 Main	Ishpeming
Secretary	Laurence Sain, 818 W. Kaye	Marquette
Treasurer	Arnold Mulzer, 322 Rock	Marquette
Publicity	Dorothy Bowns	Negaunee
Finance	R. R. Anderson	Marquette
Field Trip	Joseph LaChance	Marquette
Safety	Leonard Bartelli	Marquette
Curator	C. R. Markert	Ishpeming
Scholarship	Marian Markert	Ishpeming
Hostesses	Ingrid Bartelli and Olive Sain	Marquette
Librarian	Ernie Johnson	Marquette
JASPILITE Editor	Sandra Phillips	Ishpeming
Publishers	Laurence & Olive Sain	Marquette
Liaison Officer	Carlton Gutman	Marquette

Deadlines: January 1, April 1, July 1, and October 1

Meetings: Business meeting: 1st Friday of the month, 7:30 p.m.  
at Bothwell Middle School, Marquette  
Program & activity meeting: 3rd Sunday of the month at  
2:00 p.m., Bothwell Middle School, October-April.  
Field trips during the summer months.

Membership: The Ishpeming Rock and Mineral Club, Inc. is open to anyone interested in the Earth Sciences.

- Initiation fee . . . . . \$1.50
- Husband and wife annual dues . 3.00
- Adult annual dues . . . . . 2.00
- Junior annual dues . . . . . 1.00

Material in this bulletin may be copied provided full credit is given to the author and the bulletin.

OUR PURPOSE

To enjoy, to learn, to teach and to conserve  
The rocks, the gems, the fossils and ores.  
To collect, to admire, to brag and to show.  
The material we've found, we'll trade for yours.  
. . . . . Bob and Marian Markert

CONTENTS

Secretary's Minutes . . . . . 2	Fall Programs . . . . . 9
Bits and Pieces . . . . . 3	Exploring . . . . . 10
Gem Stone Polishing . . . . . 4	Michigan Calendar of Events . 12
Club Tour and Picnic . . . . . 5	Carving Gypsum . . . . . 13
Republic! . . . . . 6	Jewelry Project . . . . . 14
Calendar of IRMC Meetings . . 7	Multicolored Jades . . . . . 15
Shorts' Site at Home Site . . 8	World History of Gold . . . . 16

A WORD FROM YOUR EDITOR--HELP

It has become increasingly difficult to obtain articles from the IRMC membership to be used in the JASPILITE. I find myself relying on the same faithful contributors month after month. If the JASPILITE is to continue in its present form, more input must be received from our members. All of you have had interesting experiences which would make excellent articles. The articles needn't be long or elaborate--just everyday correspondence.

The deadline for the next issue of the JASPILITE is October 1. Please start now and let's come up with some items to share with the Club.

Sandra Phillips

NOTES FROM THE SECRETARY'S MINUTES

By L. W. Sain

Business meeting, April 7, 1978

Program chairman reported all in readiness for the April 16 meeting, a slide program and lapidary demonstration, also the visitation meeting on May 21. Places to be visited to view displays include CCI, Ishpeming Chamber of Commerce, and the Methodist Church. Adjourn to Markerts for bag lunches and coffee.

New members elected: Donald and Nancy Wodek and William, LaVern, and Pat Mager.

Swappers column suggested for the JASPILITE which might be contagious to other bulletins.

Swap plans for August 5 are going forward.

Program meeting, April 16, 1978

The film "Gem Fun and You" was shown.

Charles Waters was installed as Second Vice President.

Gift presented to Fred Rydholm for past services.

Numerous displays on the bragging table. Over 70 people attended.

Business meeting, May 5, 1978

Reservations requested for May 21 meeting.

Suggestions made for a membership drive.

Flaming Brands to be purchased for library.

Cost of JASPILITE mailing discussed.

Summer meetings will be on Thursday evenings.

Safety chairman reported that oxygen equipment had been purchased and that a C.P.R. class would be held May 8 and 9. (Note: Eight of our Club members successfully passed the course.)

Treasurer was instructed to send \$1 per member to the Midwest Scholarship fund.

Program meeting, Sunday, May 21

Forty-four persons attended various parts of the meeting. They visited the Methodist Church to view the altar, plus exhibits at CCI and the Chamber of Commerce offices, Lake Angeline Mine site, and Jasper Knob. A social hour was held at Markerts where bag lunches were consumed and also the goodies from Markerts. They also furnished door prizes.

Field trip of May 27 thru 29, 1978

A big success. Several visiting couples and numerous Club members were there. Everyone reported an enjoyable and profitable time. Thanks, Tony!

Business meeting, June 1, 1978

Communication from M.T.U. nominating Donna Kuusisto of Covington as a scholarship recipient. It will be presented at the Swap in August.

Sources of funds for scholarships were discussed. Recommendations to be published in the JASPILITE and reactions at the first meeting thereafter.

New candidates requesting applications: Mrs. Mildred Krieg and her grandson and William and Shirley McCarthy.

Arnold Mulzer was elected to serve as our delegate to the MWF Convention.

Leonard Bartelli displayed and demonstrated the oxygen equipment.

A trip to the quarry for Kona Dolomite will be included in the Swap field trips. There will be a charge for collecting.

Olive Sain requested assistance and suggestions for programs for the fall meetings.

#### Field trip, June 17, 1978

A very successful and enjoyable trip was enjoyed by the bus load of Club members who attended the Republic Mine trip. Orchids to the Mine personnel and Bob Phillips, our leader.

#### BITS AND PIECES

By Arnold Mulzer

I don't know how this article is going to end or what information you'll get from it, but here goes. As some of you may know, I retired from the LS & I Railroad after 39 years and can say that I enjoyed every bit of it including the usual ups and downs. My biggest down was my failure to join up or become interested in rock hounding in my early years. Valuable rocks and specimens were available just by picking them up. As I look back, I just wish I had half of the rocks that I kicked aside during my work along the tracks and around the iron ore mines.

I can recall an incident at the Cliffs Shaft Mine where I found a large yellow rock. I knew it wasn't iron ore, so I asked one of the surface miners what it was and he said, "Oh, that's that 'blankety blank' jasper that dulls all the drills when they make the blast holes." I have plenty of red jasper but have never come across any yellow from this area since I joined the Club.

I joined the IRMC just before our 1972 Midwest Convention and the older members got me involved with the work of running the affair. I was assigned to be a guide on bus 4 of tour 4. Here I was with about 35 rock hounds and about all I knew was that you had to wear a hard hat on the field trips. When any questions were asked, I would refer to the other guides, Laurence Sain, Ray Anderson, or Frazier Tubbs. They sure kept me off the hook. But when it came to crossing railroad tracks or passing an iron ore mine or dump, that is where my employment of over 30 years on the rails came in handy. I knew them all and had worked around most of them or heard about them from the old timers that had put in as many years at that time as I have today.

It may be of interest to many of you that I worked on train crews that hauled steel and material for mines that were being built in the 1940's, Mather A and Mather B, Tracey, and the rebuilt Cliffs Shaft (which was designed in Sweden) In my time (and I don't want to feel that old) I have seen the following underground mines close: Blueberry, Morris, Lloyd, Cliffs Shaft, Maas, Athens, Bunkerhill, Tracey, Mather A, Mary Charlotte, Mackinaw and Princeton. Only the Mather B is producing and is scheduled to shut down in 1979.



I also worked around the mines in the Gwinn district and was on train crews that took the last ore out of the Mackinaw, Stephenson and Princeton.

I guess we as rock hounds should be thankful that we have an area so close to us where we can enjoy our trade digging on the old mine dumps looking for that perfect specimen. We may not find it but we still get great enjoyment looking for it. By this article you can see I know more about railroading than rocks, but I am still learning and love every moment of it.

#### "GEM" STONE POLISHING DEMONSTRATIONS

Sunday, April 16, was the last indoor program meeting of the Club before everyone broke for the rocky hills and shores after a long winter's wait. According to attendance and numerous comments and reports, it was about the greatest showing of talent in action that we have had in a long time as seven of our Club members demonstrated polishing techniques on their own lapidary equipment.

Preceding the demonstrations, a movie entitled "Gem Fun and You" from an equipment company was shown. Although the movie leaned heavily towards equipment, there were some excellent segments on polishing, collecting and safety. (The film was free but the shipping and insurance was much higher than film from the Midwest Federation Film Library.)

For those people who do not wish to invest in polishing machines, Elizabeth Water's demonstration on polishing Petoskey stone with grinding and polishing powders

used on flat surfaces covered by different kinds of pads was excellent. In fact, for some shapes a flat surface wasn't needed.

If you have admired the finely polished crosses of agate and other material in rock shops and jewelry stores and wished you could duplicate them on your polishing wheels, Amos Bell showed the viewers time and again exactly how to preserve those 90° angles. The grinding wheels must be true in order to make these crosses. He stressed several safety precautions in the process.

Not all rock polishing need be relegated to the basement, garage or outdoors according to Joe Dunham and Arnold Mulzer who demonstrated sanding and polishing cabochons on maple wheels with diamond powders. A roll of tissue at hand was all that they needed to clean the 'cab' between wheels. Joe often keeps his set of wheels on a table near his bed and if he can't get to sleep or has a wakeful period during the night, he may turn to the wheels to do a little polishing.

George Bell worked on vertical grinding wheels and Charles Waters used various laps in a horizontal or "pot" unit; in each case they used various grades of silicon. Laurence Sain worked on diamond impregnated wheels and did his final polishing on flexodiscs.

These seven people were kept busy for most of the afternoon demonstrating and answering questions. Around seventy people were at the meeting.

Special thanks go to the demonstrators for doing a splendid job during the afternoon and for all the work that went into preparing for the demonstrations and all the

hauling of equipment and supplies. Our thanks also go to Ingrid Bartelli and those assisting her with refreshments, to Elmer and Mamie Jarvi for providing door prizes, to those who donated items for the mini-auction and those setting up special displays.

The display which George Bell had put in one of the school cases in the meeting room was certainly eye catching and drew everyone's attention to the innumerable varieties of pictures in our local Kono dolomite. In addition to the pages of polished cabochons, George had many other fine items from his polishing wheels on display. Thank you, George, for sharing.

Another display that bears repeating and elaborating on is the case brought in by Pat Bemis. He had made knives and fashioned the handles of polished Kono and other gem-quality material. They were unique and a special trademark of Pat who is noted for his innovative ways. Thanks, Pat.

#### SOURCES OF FUNDS FOR OUR LOCAL SCHOLARSHIP FUND

It was suggested at our June 1 meeting that the secretary provide the JASPILITE editor with a list of recommended sources of income for our local scholarship fund. This was the result of the secretary searching the past minutes for guidance. As no definite provisions had been recorded, it was decided to make this recommended list and let the membership decide at the first meeting after publication just what they want to do.

Suggested sources:

1. Fifty percent (50%) of the proceeds from the March Silent Auction.

2. All of the proceeds from the mini-auctions at each program meeting.

3. All of the interest from our Golden Passbook account.

4. Interest that the Scholarship Fund accumulates.

The Club members are urged to give this serious thought as most of us feel that this is a worthwhile program and brings our assistance closer to home. We hope that you will make suggestions to this list or perhaps have many better ways of increasing our fund in order that we may make it more worthwhile on the local level.

#### CLUB TOUR AND PICNIC

By Olive Sain

The sun always shines on rock hounds and so it did Sunday, May 21, when members met at the Ishpeming Armory to begin a tour of an extraordinary piece of lapidary work, some beautiful rock and mineral displays, and a large chunk of nature's handiwork.

Our first stop was at the Methodist Church where we viewed the communion table made by the C. "Bob" Markert family just prior to the last Midwest field trip and Convention hosted by our Club. Bob was there to tell us about the love and labor that went into choosing the most beautifully patterned and colorful Kono dolomite for the mosaic sections to fashion the table top and drop section. The focal point of the table was a cross of tumbled Brazilian amethyst of the richest purple. The grouting between the sections of Kono was the purest white; and still is, which attests to the excellent care of this table. Awesome, inspirational, reverent, humble, and thankful are some of the words expressing one's feeling during this stop.

Because we had a sizable group, we divided into two groups, alternating between the Ishpeming Chamber of Commerce, where our Club exhibit is enhanced with many fine specimens from the Smithsonian, and the Cleveland Cliffs exhibits in their offices on Spruce Street, where excellent specimens in well-lighted cases reemphasized that there are beautiful minerals to collect in 'iron range' areas. Special thanks to Mamie and Elmer Jarvi who picked up the key at the Chamber office and had the building open for the two groups and then closed it again; also to Bob Phillips who firmed up the CCI tour.

An extra bonus was provided by Charles Waters who directed us to the site of the mine that had been next to Lake Angeline. According to Audobon Jenkins, Club member and former miner familiar with most of the old mines in the area, the water in the swampy area was pumped out and the ore taken out and then the water was allowed to come back in forming Lake Angeline. Charles also pointed out the large slag pile at the residential end of the lake. We also viewed the handiwork of the bricklayers as sections of a structure were still standing.

Believe it or not, many of our members had never climbed Jasper Knob! A truly rewarding climb, everyone agreed they should have taken their cameras as visibility was excellent. As one looked at the swirls, convolutions, and marble cake patterns of the jasper and hematite one could just about envision Mother Nature with a pond full of the two mineral 'batters' and a gigantic spoon just stirring up a dandy in a moments respite from more serious work.

Now that the planned tour ended, everyone turned their cars north for the finale--a picnic lunch at the Markert's home on Dead River Basin. Our gracious host and hostess had arranged for all of us to have our picnic indoors out of range of biting insects; this was greatly appreciated by all. Getting together like this was the highlight of the day as we could visit and talk about all the wonderful things we had seen during the afternoon. Bob and Marian took care of everyone's needs--coffee, tea, cold tea, anyone?, bars or cookies?, dishes?, silver? You name it and presto you had it.

The view from the windows of their home overlooking the river was beautiful; such a restful sight. A few of Marian's pets obliged by showing up on the porch for everyone to see.

Bob took us on a tour of the work he is doing in his basement. He has done a great deal and still has a long way to go. He also had a surprise for us--draw prizes. Sharon Spike, Ruth Symons and Olive Sain were lucky winners. Hope I haven't forgotten anyone.

Thank you everyone for helping to make this a happy day. A total of 44 people took part in some part of the afternoon's planned stops.

### REPUBLIC!

By Bob Phillips

Again this year the Club was fortunate to be the guests of Republic Mine on June 17. The Club gathered at Koski Korner's at 9:00 a.m. The basic trip schedule was disclosed along with a few words concerning safety. A suit of Republic specimens was shown especially for new members to aid them in collecting later in the day.

The caravan proceeded to the Mine parking lot where everyone prepared their gear. The Mine supplied a bus for transportation to avoid the problem of private cars in the pit. Since the Mine operates seven days a week and large trucks and other mobile equipment are in operation all the time, driving in the pit is prohibited for guests.

The first stop was the viewing stand at the crest of the pit, a good place for pictures and a look at the whole mine. We proceeded to a location where I had found some good quartz, pyrite, and hematite a few days earlier. At this spot the group spent an hour hammering, chiseling, and wrapping. Other locations which in past years had yielded good pyrite and other minerals were barren, so the bus proceeded to the crusher portal and high wall area at the north end of the pit for a chance to see a manmade "Grand Canyon!"

Back up for lunch, then we went to the rock dumps. The south dump was checked first. While some members located some interesting piles, others did not. Meanwhile, a small but superb pile of specimen ore was located on the north dump, so the group was again moved to this location. After 45 minutes of collecting under the threat of rain, we called it a day and returned to the cars. Another success at Republic Mine.

Many thanks to the Mine personnel who made the very accommodating arrangements and to the Club members who observed safe conduct and avoided accidents.

Get ready for next year. There's always room in our packs for good Republic Mine specimens.

### CALENDAR OF IRMC MEETINGS

- July 22 (Saturday)--Field trip to Silver Lake Basin, meet at the Ishpeming Armory at 9:00 a.m.
- August 3 (Thursday)--Business meeting, 7:30 p.m.
- August 5-6 (Saturday and Sunday)--Rock SWAP and Field Trips Marquette Tourist Park, Saturday Swap 9:00 a.m.-6:00 p.m. Cracker Barrel Session Saturday evening, location to be posted at the Swap. Sunday field trips start at 12:00 noon.
- September 7 (Thursday)--Business meeting, 7:30 p.m.
- September 2-4 (Saturday through Monday, Labor Day Weekend)--Field trip in Ontonagon, headquarters at the Township Park.
- October 5 (Thursday)--Business meeting, 7:30 p.m.
- October 7 (Saturday)--Scenic tour to Daniels Gold Mine and Yellow Dog Plains, meet at Tourist Park at 9:00 a.m.

### MORE ON THE FIELD TRIPS

By Tony LaChance

#### July

On July 22, Saturday, Bruce Spike will lead us to the Silver Lake Basin. Everyone meet at the Ishpeming Armory at 9:00 a.m. Bring a sack lunch and plenty of water because it will be a three-mile walk round trip. You will also need a rock hammer and someone should bring a metal detector.

#### August

The August 5 and 6 Rock Swap at the Marquette Tourist Park will replace a field trip.

September

This will be Labor Day Weekend, September 2, 3, and 4. The Bartelli's and Sains will be your co-leaders for field trips in the Ontonagon area. The headquarters will be the Township Park. Be sure and bring your hard hats and safety glasses.

October

This will be primarily a scenic tour led by Bruce Spike. Meet at the Marquette Tourist Park at 9:00 a.m. Bruce will take us into the Daniels Gold Mine; it is about a one-mile walk. After this we will tour the Yellow Dog Plains area and do some rock collecting. Bring a camera because the Bartelli's are going to show us some beautiful pine trees and the other trees should be in full color. Bring a picnic lunch also and we will eat at Bart and Ingrid's camp.

Please call the leaders if you plan on going on any of these field trips. It is nice to know how many to expect a few days ahead of time. The members telephone numbers are all listed in the April JASPILITE Membership List.

SHORTS' SITE AT HOME SITE

By Marion Short

With the Pow-Wow over, the residents of Quartzsite could breathe easier. We stayed a few days longer to enjoy the leisurely pace. We could drive around without having to wait to cross the intersection. We didn't even have to stand in line to use the telephone.

We spent a few days on the desert hunting agates and jaspers. We had been told that when you see

a storm coming you take to high ground, which we did. We reached the highway north of Quartzsite well ahead of the storm and decided to eat our lunch and wait for the storm to pass. When the storm was over and we headed for Quartzsite, we had to cross several washes (which were normally dry) with about a foot of water in them. In fact, at one I let a truck go ahead to see how deep it really was. Nelson wanted to see if there was water in the Tyson wash. Sure enough, this is a wide wash and it was full, this being about an hour after the storm. The next morning it was almost dry, but we could see that it had been 2½ to 3 feet deep.

Our friends from Colorado were spending the winter at Desert Hot Springs and wanted us to visit them. They took us through Joshua Tree National Park. At one lookout we could see the Salton Sea, the San Andreas Fault, Mexico, Bob Hope's home and several cities. We spent a day at the Date Festival in Indio. They had a very nice display of gems and minerals as well as dates and citrus fruit.

We went swimming in the park's outdoor thermal pool and then in a cooler one (Feb. 21)--very refreshing.

On February 22 we spent the day touring Palm Springs. That day the record high in the nation was there--81°--and the low was Marquette with -14°.

Back in Quartzsite, we went to the Planet Mine near Parker. It rained so we could not stay long, but with rain the side of the mountain was beautiful with a thin layer of chrysocolla.

On March 2 we started for the Phoenix show, but after traveling

50 miles we turned around and went back to Quartzsite. They had a flood and the dry desert was covered with water. On TV that night the channels canceled all regular programs to carry flood news. Saturday morning we tried again. This time we had no problem, but we could see where water had washed across roads. The Phoenix show was very good. They do a lot of gold and silversmithing and had fabulous jewelry. There was a large display of faceted quartz by Jerry Muchna. Some of his work was shown in The Arizona Hiways, January, 1976. The turquoise rose and necklace which appeared on the February, 1978, issue of The Lapidary Journal, and the musician which appeared on the November, 1974, issue of The Lapidary Journal, were also his work.

We met Jim and Dorothy Bowns of Negaunee, Michigan, at the Phoenix show and camped with them near Apache Junction. After leaving Phoenix we heard a section of the roof at the Colosseum had fallen in. The Gem & Mineral Show was on the lower level and there was a packed house on the top floor for a basketball game. How very lucky no one was hurt.

We spent one day hunting Apache tears. We had to try three different ways to get to the pretty black gems. Two ways the washes were too high to go through. The third way was the better way, thanks to a kind gentleman where we purchased bottled gas who checked it out for us.

We were advised not to go on to Globe because of the rains. Jim and Dorothy had their headquarters in Tuscon so we saw a better view than ever before. Tonight they took us on a Sky-Drive which looked down on

the city. No power shortage there. Lights as far as we could see. Beautiful! The next day we went to Saffard where we hunted fire agate. Nelson hasn't had time to put a window on any yet, but we hope we have a couple nice ones.

A sight I shall never forget if I live to be 100. There were mountains about one-half mile away, and we were hunting fire agate when it misted a bit. A few minutes later there was the most beautiful complete rainbow I had ever seen. The one end came down in front of the mountain and one was almost sure you could walk over and get that pot of gold. No one had time to get a camera to get a picture. You see there are other things as pretty as rocks if we will take the time to view Our Master's handiwork.

On Sunday we started for home. We arrived back in Michigan March 18. We had a wonderful 7,073 mile trip. Thanks to all the friends we met along the way. Nelson went to work in Lansing so we will be living in Howell this year. Come and see us.

#### CLUB PROGRAMS FOR THE FALL

By Olive Sain, Program Chairman

I need your help. Be it by offering to do a program or part of one, suggesting programs of interest to you and other Club members, submitting names of people in the area who have talents which they may consent to share with us on a Sunday afternoon, telling me what you would like and, I think, what you wouldn't like to have for a program, and, in some way helping me to arrange for some well-rounded program meetings.

A couple of years ago we had a fine check list for members to use in

identifying what they were interested in, what they liked to do with their collections and what skills and knowledge they had related to our hobby. Sad to say, very few checked and handed in the survey. Comments such as these were overheard: "I'm just a beginner and don't know enough to talk to the group."; "I like everything so whatever the program is I'll like it, and if I don't think I will I just won't go to the meeting."; "It's too much work to get ready to put on a program."; "If they don't already know what I can do, I won't tell them."; "Some people like to show off that they know so much."; etc. In other words, the idea of the check sheet was fine but the results were disappointing. Having learned from that experience, I'm not using a check list!

My telephone number is 226-7325 and if you have a telephone, call me this summer and let's talk about program ideas. Or write. I hesitate to say this as I haven't seen your name attached to a 'squib' or article in our JASPILITE, but I will anyway as a 'sleeper' may be aroused or incensed and surprise me with a letter on suggestions about one thing or another!

Earlier I mentioned well-rounded programs. I believe it adds greatly if displays and literature appropriate to the topic of the afternoon can be provided. This also means that programs need to be planned well in advance so that the membership can be canvassed for this additional information. Since our Club bulletin is mailed quarterly, programs should ideally be included in the next issue (October) for the rest of 1978. I double doubt this is possible but perhaps

my successor next year is getting things lined up and will be on target!

Publicity is a problem as those who have tried it for the Club in the past have realized. So, again, the more we can get together for a particular Sunday about the topic, the speaker's background, and related items for an interesting and educational meeting, the more likely we'll be to get the article included in the local papers.

Keep in mind, this is your Club and your programs--whether you speak up or keep silent. We have had a nice attendance from the public and fair from our membership.

To all of you who have helped so far in 1978, "Thank you, you are the greatest!" I have faith that more of you will give me the help I need in the coming months.

### EXPLORING

By L. W. Sain

One of the most interesting areas of rock hounding is that of exploration. To rediscover one of the old townsites or mines gives one quite a thrill. To be able to stand on a spot and realize that here thousands of years ago ancient men toiled with crude, handmade tools to extract copper in the U.P. and pipestone in Minnesota, gives one an unimaginable thrill. Evidences of their labors can be found by diligently searching the area. One can also find many mines and exploratory excavations which were worked and developed within the last hundred and fifty years. Many of them will amaze the viewer as to the accomplishments of the early miners with the crude hand tools used then as compared with those developed in our modern technological, industrial society.

(This writer recently found one of the shoes of a mule in the poor rock pile as proof of how the ore and poor rock were moved.) Many of these rock piles are far off the beaten paths of our modern highways and are often overgrown and obliterated by heavy vegetation, and as a result are often bypassed for more well-known spots.

How does one go about discovering these often forgotten and often bypassed areas? First you need some good maps and books for information. Also local old-timers are a good source of information.

The U.S. Geological Survey Maps are excellent and can be obtained from the U.S. Government for a fee. Some local maps found in the area are also good. Plat books of each county can also be obtained at County Extension Offices for a fee and are also excellent to determine from whom you can request permission. Several sets of books are very valuable to the explorer also.

After obtaining such material, then it takes diligent study of the maps, plat books, and books to locate the areas. Many times you will find that the only access is by old railroad grades, old logging or mining roads, or just paths and now snowmobile trails. It's good to travel in pairs and to even have a 4-wheel drive as the going gets tough at times.

The Bartellis and Olive and I recently made a trip to the Copper Country and did mainly exploration. We had fun and also found some nice specimens. We discovered many mines that we had never seen before and collected a lot of specimens. Perhaps our biggest thrill was to imagine the

old explorers working these mines over 100 years ago when the area was only a virgin forest country. Although we found many flies and mosquitoes, we had modern technology to help protect us. Imagine the hardships the early settlers and miners endured.

In the past we have discovered and visited some of the old cemeteries that are located near these mines. It is our hope that others will reverently visit these resting places. Some of them are still used. When visiting the Norwich cemetery, we found that a World War II soldier had recently been buried there.

We hope you will have fun exploring but remember this is the history of these areas. Please, help to preserve it rather than destroy. If we all diligently work at this we will not be denied permission to explore and collect specimens.

#### ADDITIONS TO OUR MEMBERSHIP LIST

Ida and Wayne Wilson  
1910 Granite Street)  
Marquette, Michigan) summer address  
Telephone 225-1860

Nancy and Don Wodek  
1202 Albion  
Marquette, Michigan 49855  
Telephone 228-8516

Rev. Eskil and Inez Bostrom  
1618 Kimber  
Marquette, Michigan 49855  
Telephone 226-8002

#### A BABY RATTLE

A baby rattle once belonging to King Farouk had a jade handle topped by a diamond-encrusted crown. The pebbles that made it rattle were rubies.



MICHIGAN CALENDAR OF EVENTS

- August 5-6            SWAP    Ishpeming Rock and Mineral Club Annual Swap, Marquette City Tourist Park, Marquette, Michigan.
- September 8-10      SHOW    Grand Traverse Area Rock and Mineral Club, Northwestern Michigan College Physical Education Building, Wenonah Street, Traverse City, Michigan.
- September 9-10      SWAP    Muskegon County Rock and Mineral Association 11th Annual Swap and Sell, Pioneer Park, 1563 North Scenic Drive, Muskegon, Michigan.
- September 22-23     SHOW    Tulip City Gem and Mineral Club, Holland Civic Center, 150 West 8th Street, Holland, Michigan.
- September 23-24     SHOW    Livingston Gem and Mineral Society, Howell Recreation Center, 925 West Grand River Avenue, Howell, Michigan.
- September 23-24     SHOW    Jack Pine Rock and Gem Club, Mio Au Sable School, M 72, Mio, Michigan.
- September 23-24     SHOW    The Sycamore Valley Lapidary and Mineral Society of Macon, V.F.W. Hall, 2108 North Cedar Street, Holt, Michigan.
- October 13-15        SHOW    Michigan Mineralogical Society, Detroit Lightguard Armory, 4400 E. Eight Mile, Detroit, Michigan.
- October 27-29        SHOW    Central Michigan Lapidary and Mineral Society, Michigan National Guard Armory, 2500 South Washington, Lansing, Michigan.
- November 4-5         SHOW    Tri-County Rocks and Minerals Society, Bay County Community Center, Bay City, Michigan.

\* \* \* \* \*

August 10-13        SHOW    MIDWEST FEDERATION SHOW AND CONVENTION, CONVENTION    hosted by Cedar Valley Rocks and Minerals Society, Hawkeye Downs Fairgrounds, Cedar Rapids, Iowa.

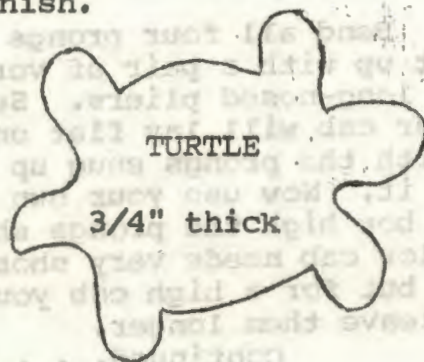
COMING IN THE NEXT JASPILITE: THE SWAPPING CORNER--Anyone interested in swapping rocks with other rock hounds may list their inventory in The Swapping Corner. This is open to any interested rock hound, not just IRMC members. No selling. Mail all information to Sandra Phillips 405 South Rose Street, Ishpeming, Michigan 49849.

CARVING GYPSUM

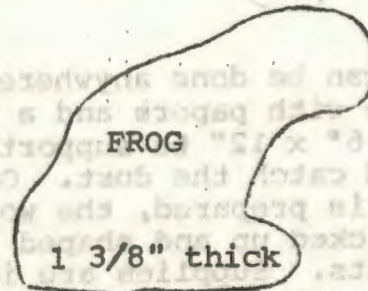
By Lloyd Conklin, Rockhound  
News

In all the years we have been going to the Grand Rapids gypsum mine for material, I have wanted to try my hand at carving it. So last spring I got up the nerve to try. On a club field trip I selected some gypsum especially for carving and started in. I have carved all animals and am now doing some fish in relief for bolo ties. My display and demonstration at the club show last fall drew much attention from people of all ages. The only tools I used to carve at first were three jack knives, an old Scout knife which worked very well for heavy shaping, and smaller blades for fine work. Later I found other tools that were helpful. Here is a suggested list of supplies:

1. Saw--may be a lapidary diamond saw, hacksaw (tungsten blade), small Stanley hacksaw, coping saw (for openings).
2. Knives with a variety of blades.
3. Soft brush for cleaning surface.
4. Rasps--may be large flat ones from hardware store, special ones for carving, all sizes and shapes from art supply store.
5. Small woodcarving chisels and gouges.
6. Picks or awls of various sizes.
7. Sealer--Krylon, clear lacquer or varnish.



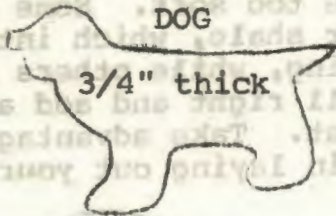
In choosing gypsum (from Grand Rapids) that is suited to carving, look for pieces that are really solid and fine grained. Avoid pencil gypsum. Some sugary pieces can be worked up successfully but others are too soft. Some streaks are mud or shale, which interfere with carving, while others may work up all right and add a touch of contrast. Take advantage of coloring in laying out your design.



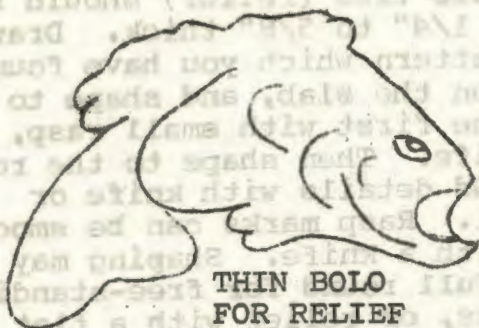
To begin, saw a slab of material large enough to draw an outline of the design you want to make on the flat surface, and thick enough to make it in proportion with your figure. Slabs may run from  $\frac{1}{2}$ " thick to 3" for most animals. Most are between  $1\frac{1}{2}$ " and  $1\frac{3}{4}$ ". Slabs for bolo ties (relief) should be about  $\frac{1}{4}$ " to  $\frac{5}{8}$ " thick. Draw the pattern which you have found or made on the slab, and shape to this outline first with small rasp, saw or knife. Then shape to the round and add details with knife or chisel. Rasp marks can be smoothed out with a knife. Shaping may be to a full round for free-standing objects, or relief with a flat back. Some people use fine sandpaper for finishing. I prefer a knife. The piece should be coated with a sealer when finished to avoid deterioration.

Patterns may be obtained from books on carving, or you may make your own from magazines or books showing pictures of the figure you want to make. I find wildlife and outdoor sports magazines a good source for

the figures I use. Some children's coloring books have simple outlines which can be used. Small figures you already have may be copied. And you may make your own from nature.



Carving can be done anywhere in the house with papers and a board at least 6" x 12" to support the stone and catch the dust. Once the slab is prepared, the work can be picked up and shaped in odd moments. Supplies are inexpensive; probably you can find blades and picks to use already in your home. Once you have gotten the feel of carving there is no limit to what you can do--whatever you take a notion to try. The people who have tried carving find it creative, relaxing, and satisfying.



From Rockhound News, via The Conglomerate

**HOW TO DO JEWELRY PROJECT--PENDANT WITH SET CAB WITHOUT SOLDERING**

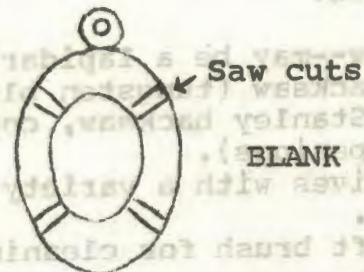
By Harry Peterson, The Opal

This project will show you how to set a cab even if you don't know anything about soldering.

**Step 1.** Transfer design to a piece of 20 ga. silver. Airplane glue is very good for this as it dries fast.

**Step 2.** Center punch, then drill a 3/32 hole for bail. Saw out the entire blank with a jeweler's saw. Nos. 01 or 1 are good for this thickness of metal. File and emery all edges. Be careful not to scratch or mark the surfaces of the blank, as this would create a problem in finishing the item.

**Step 3.** This drawing was made for an 18 x 13 oval cab, but as home-made cabs might vary slightly in size, it might be a good idea to put your selected cab in the center of the blank and draw a fine pencil line around it. This line now becomes the stopping point when you make the saw cuts for the prongs, which is next on the program.

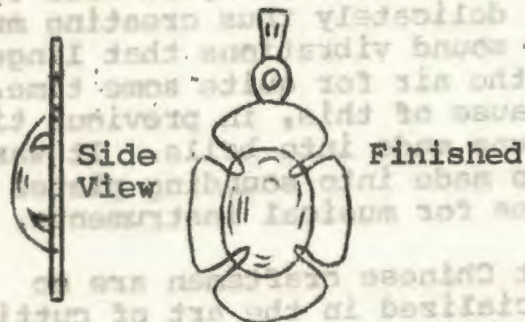


**Step 4.** After making saw cuts, remove paper from blank, then buff on both sides. Then place blank on smooth steel block and chase a fine line with a slightly curved chasing tool across the top to separate the loop. This is done on the front side only.

**Step 5.** Bend all four prongs straight up with a pair of very narrow, long-nosed pliers. See that your cab will lay flat on blank with the prongs snug up against it. Now use your own judgment on how high the prongs should be. A low cab needs very short prongs, but for a high cab you should leave them longer.

continued. . . . .

Round off the tops of the prongs with a smooth file. Also the sharp corners on the blank should be rounded and smoothed with emery cloth. Then carefully buff around prongs. After washing the finished blank, set cab by bending prongs gradually to lay close to the stone with a steel burnisher. Now attach bail and give a final finish.



This method will also work very well with round or free-form slabs. Simply place the cab on a piece of 20 ga. silver and draw a line around it. Then add a border of about 3/16 wide, add loop on top, and as many prongs as necessary. Usually four are enough.

Example of free-form using same method



set consists of six colors which features one piece each of jade usually of the following colors: red, yellow, green, white, black and lavender.

We know jade as a substance smooth in texture and tough in quality. Generally we think of jade as being green in color, but we should consider that jade comes in various colors which range from nearly white to dark green. Many times the dark green is such a dark-green color that it appears black in color. There is also jade that is genuinely black in color. There is jade that is light blue, amber to yellow in color, red, brown, lavender, and, of course, the green jades which can be classed into the following color categories: Imperial green, very deep and bright, so named because the jade dealers in China submitted their finest jade to the Imperial Court for consideration and designates quality; the emerald green jade is fine jade that is brilliant and of a color similar to a fine emerald; the apple green jade is real green and, as its name states, the color of apple green; the dark green jade is not a pure green and sometimes it is so dark that it borders toward a blackish coloring; the leaf green jade is jade that is not so vivid and has more of a bluish tinge to its coloring; and the pale green jade is light or pale in color. We also have jade that is called "mutton dat" and this is the jade that ranges in color from translucent white to yellow-white. The color of jade, if chemically pure, would be white.

THE MULTICOLORED JADES

see on the market quite a number of pieces, namely: necklaces, rings, earrings made of sets of jade. The usual

Jade is a stone which is composed of several minerals; most generally it refers to the two minerals jadeite or nephrite. Jadeite is a silicate of aluminum and sodium. It also contains some iron, calcium

se  
ty.

and magnesium. Nephrite is a silicate of magnesium and calcium with some iron in a ferrous state. The presence of chromium gives jadeite its green color whereas the presence of iron gives the green color to nephrite. Chloromelanite, which is a jadeite containing considerable amounts of iron oxide, is dark green to black.

Jade should be translucent, never transparent, although there is a glass-like jade that is highly regarded; but this type of jade is very rare. Jade has a dull luster and seems wax-like before polishing. After polishing, the jadeite has more of a glossy type luster and the nephrite has an oily luster. Clearness, evenness and purity are the main essentials considered by the real jade connoisseurs.

As for the "pink jade" that has been found in Precambrian formations in the Wyoming jade area, I believe that the scientific report revealed that the material is probably albite of the anorthite series including one or more minerals from the amfiphene group which includes jadeite. The extra minerals are probably from the amphirole group which includes actinolite and tremolite which can become nephrite under proper conditions of temperature and pressure. Nephrite is "partly jade" and we use this definition loosely, so it would probably not be misleading to call the pink material partly nephrite as it is "partly jade" although it may be a very small part.

How can you tell if an object is actually jade or glass? For those not gemologically trained, an indication of its identity can be obtained by a scratch test if a

rough surface is available. Jade cannot be scratched with a sharp, pointed steel instrument. Also, if you place a drop of water very carefully upon a smooth jade surface, it will stand like a bead whereas on a glass surface it will usually begin to spread at once.

Jade even has a musical quality. When jade is struck, it will tinkle delicately thus creating musical sound vibrations that linger in the air for quite some time. Because of this, in previous times it was made into bells. It was also made into sounding plates and tubes for musical instruments.

Most Chinese craftsmen are so specialized in the art of cutting jade that they seldom make two pieces alike unless they are requested to do so. The artist first studies the rough piece of jade, then he designs an art object or work of art that fits the individual piece of jade thus resulting in a minimum loss of stone.

For jewelry pieces, the cabochon type cutting of the stone is much preferred to any other type.

Parts taken from the Lapidary Journal, Vol. 31, May, 1977, No. 2, via "The Multicolored Jades," by Margaret A. Howard, Via The Michigan Gem News

#### WORLD HISTORY OF GOLD PART 2 (Part 1 appeared in the January JASPILITE)

Ghana has long had an exceedingly developed civilization. Since the founding of the Ashanti dynasty in the 1670's the kings had been crowned on a chair of solid gold, said to house the soul of the nation, and gold objects figure largely in the Ashanti religion. The famed "gold figures" of Ghana

were actually precise bronze weights used for the weighing of gold dust in commerce. If too heavy, they could be filed down. If too light, bits of pelleted bronze were added to bring them up to the precise weight. Formed into statues and groups representing scenes of everyday life, of religious significance or mathematical designs, they are fine examples of native art and were used long before the influence of Western civilization. The empty of the gold figures of Ghana gave to that country its former European name, the Gold Coast.

New Guinea is the second largest island in the world, measuring 1,500 miles long by 400 miles at its widest point. It is divided in two, with the eastern portion (Papua, New Guinea; capital: Port Moresby) administered by Australia and the western half (West Irian; capital: Djajapura) administered by Indonesia. A rich and fertile land, New Guinea is the world's sixth largest gold producer.

Egypt was the first nation to accumulate great gold wealth as far back as 4,000 B.C.; and by 3,000 B.C. they were the first to develop underground mining as well as the smelting of gold, a technique which permitted much finer workmanship than the former method of beating gold into shape.

The Egyptians connected gold with the sun and thus with life, so they applied it to tips of obelisks to attract the sun's rays. Owners of 4/5 of all the known gold at the time, the Egyptians used it in enormous quantities for statues and funerary articles to accompany the dead into the afterlife. The tomb of the boy-king, Tutankhamen, who died in

the 14th century B.C., was opened in 1922. Among the fabulous riches within was the pharaoh's mummy case cover, which was 6'2" and made of solid gold!

Spain was a fabulously rich gold-bearing area in the ancient world. After its seizure from Carthage, it became the chief source of the Roman Empire for the precious metal, thus enabling the Romans to expand their conquests and vastly improve their standard of living. Upon the fall of the Roman Empire, the supply of gold in Europe went into a continued decline. When it recovered, however, it was due to Spain once more. For the discovery and exploitation of gold by the Conquistadores in the Western Hemisphere resulted in a river of riches for the Spanish crown and consequently world dominance. It was the hope that he would discover gold that impelled Ferdinand and Isabella of Spain to finance Columbus' voyages of discovery. Needless to say, the country was repaid millions of times over.

Brazil was the largest producer of gold during the 17th and 18th centuries. Its total gold equalled that of all Spanish America. Brazil's wealth served vastly to enrich the mother country, Portugal, and to finance the expansion of the Portuguese empire around the world.

As they were by the Incas in Peru, the Conquistadores of Spain were welcomed with open arms and rivers of gold by the Aztecs. Taking the invading Cortes for a deity, Montezuma presented him with a solid gold plate weighing 200 lbs. When Cortes then stretched out his helmet and asked Montezuma to fill it up, the King did so--with gold dust. After conquering the Aztecs, the Spaniards did such a complete

job of seizing and smelting down their hordes of gold objects that almost no examples of Aztec gold exist today.

India was a rich source of the precious metal in the ancient world, and gold is still traditionally regarded as a status symbol and source of economic security. Virtually no Indian feels at ease unless he can convert his savings into gold, and even the poorest family tries to put a little gold aside for a rainy day. The wealthy castes decorate themselves heavily with gold jewelry on their wedding day and collect it avidly throughout their lives. Certain castes even insist that their jewelry be in 24K gold which is so soft that they have it reworked into new designs every five years. Traditional Hindu doctrines also prescribe gold as a cure for a variety of ills. Because of the great desire of Indians for gold and the high import duties their government levies on it, the price of gold in India is sometimes double that on the world market. This has led on occasion to vast smuggling operations from Hong Kong and certain ports in the Middle East.

Iran, formerly called Persia, traces its monarchy back 2,500 years to the first Persian empire founded by Cyrus the Great. Birthplace of a rich and fabled civilization, Persia had rich gold deposits of its own, as well as military and political control over the combined wealth of Egypt, Lydia, and other nations. As possessors of the world's richest gold horde, Persia held sway from the time of the decline of Egypt in 1,000 B.C. until its own conquest in 333 B.C. by Alexander the Great. Today, Iran is known for its vast deposits of "black gold" - oil!

Great Britain has played a key role in the history of gold down through the centuries. In 1577, Sir Francis Drake set sail for his famed voyage around the world. Along the way he intercepted 20 to 30 tons of Spanish gold, which he brought back to Queen Elizabeth I to be made into English coins. Later, after a series of battles and blockades, England defeated the Spanish Armada in 1588 and thus acquired domination of the seas. Gold soon began pouring into the treasury from the New World, until finally it was so abundant that England became the first country to go on the gold standard -- first, when Master of the Mint Sir Isaac Newton, established a fixed price for gold in 1777, and officially in 1818. Today London is still a major gold market where the price of gold is fixed (agreed upon) twice a day by major gold firms as a basis for all transactions world wide.

No other people in the world seem to be so gold conscious as the French, perhaps because they have seen so much economic turmoil in their time. For, while the French treasury ranks third in its official gold holdings, behind only the U.S. and West Germany, the citizens of France privately hold nearly twice that much again -- more than most central banks in the world. The French have even given their name to the scale of weights by which gold is measured: troy ounces, named for the town of Troyes, France. A troy ounce equals 1.097 regular (avoirdupois) ounces.

For over 2,000 years the various peoples of the Italian peninsula have been fascinated by gold. The ancient Romans defeated Carthage in 261 B.C. in order to gain the rich Spanish mines and thus finance the expansion of their empire. During the Renaissance, Italian

artists, sculptors and architects adorned their splendid frescoes, palaces and statues with the additional richness of gold. And, of course, as a symbol of the divine, it was widely used in religious art. The medieval papal golden roses are an example, as are the spiral Bernini columns in the Sistine Chapel of the Vatican. Probably the most famous article of its kind, Cellini's famous solid gold salt cellar, was said to have elicited a gasp of amazement when it was presented to Emperor Francis I of France. Even today Italy is the world's largest user of gold for jewelry. Goldsmiths there periodically rip up the wooden floorboards of their shops and burn them to recover the flakes of the metal that have settled in them.

The currency of Switzerland is perhaps the most solid in the world, backed by a higher percentage of gold in the treasury than any other. Its largest city, Zurich, is the world's No. 1 gold market today. Yet most of the gold never leaves the town. It just gets shifted from vault to vault in the banks as title changes hand. Switzerland's stringent bank secrecy laws have made of the country a financial haven for the world, where gold, currency, and all forms of negotiable wealth are accepted, no questions asked. Although a relatively tiny country, its treasury ranks fifth in gold holdings among all the nations of the world.

After the fall of Rome, gold became the exclusive property of royalty. Crowns, brooches, and other particularly beautiful articles of adornment were in use among the nobles of several Germanic tribes. Today, due in large part to postwar financial assistance

by the U.S., modern-day West Germany is the economic giant of Western Europe. Its gold holdings are second only to those of the United States itself, standing at 20.9 billion dollars.

The Philippines are among the seven most important gold countries of the world, mining nearly 100 million dollars worth of the metal last year. The islands of the archipelago are rich indeed, producing as much gold as vast Australia from an area only 1/25 the size.

The Japanese, like many Oriental peoples, greatly admire gold. For many long centuries they have used it to create exquisitely fine and elaborately worked objects of personal adornment. Gold has also figured widely in articles for religious use. Japan ranks among the Big Ten in world gold productions and thirteenth in treasury holdings.

Traditionally a large gold exporter, Rhodesia is the eighth largest gold producing nation, mining 15 metric tons annually with a value of \$85 million. Most of Rhodesia is situated on a large, rolling plateau from 3,000 to 5,000 feet above sea level and thus has a climate which the first European settlers found comfortable. It was claimed for colonization in the 19th century by Cecil Rhodes, for whom the country is named. Formerly a member of the British Commonwealth, in 1970 Rhodesia declared itself a republic.

During the 17th century, the Dutch built a vast overseas empire that, by the dawn of the 18th century, saw this tiny country become the world's greatest maritime and commercial power. Gold and riches of all kinds poured into the coffers of the prosperous burghers of the country and even today Amsterdam is a renowned center for jewelry and



diamonds. The Netherlands is currently the world's seventh largest gold-holding country, with reserves of \$9,700,000,000.

By Richard William, Calhoun's Collectors Society, Inc., via Alaska Pebble Patter and the Flint Rock and Gem Club Newsletter.

THIRD CLASS

Return Postage Guaranteed

July, 1978

THE JASPILITE

Ishpeming Rock and Mineral Club, Inc.

Sandra Phillips, Editor  
405 South Rose Street  
Ishpeming, Michigan 49849

Mr. & Mrs. R. Markert

P.O. Box 69

Ishpeming, MI 49849

artists, sculptors and architects...  
gold coins are an example, as  
the spiral column in  
the Sistine Chapel of the Vatican.  
Probably the most famous article  
of its kind, Cellini's famous  
solid gold salt cellar, was said  
to have elicited a gasp of amazement when it was presented to  
Emperor Francis I of France.  
Even today Italy is the world's  
largest user of gold for jewelry.  
Goldsmiths there periodically rip  
up the wooden floors of their  
shops and burn them to re-  
cover the flakes of the metal  
that have settled in them.

The currency of Switzerland is  
perhaps the most solid in the  
world, backed by a higher percent-  
age of gold in the treasury than  
any other country.  
The largest city,  
Zurich, is the world's No. 1  
banking center. Yet most of  
the population lives in the  
countryside. The town  
of Lucerne is famous for its  
bridge and its castle.  
Switzerland's  
banking sector has been  
one of the country's  
mainstays for the world,  
and all its  
stable wealth is  
relatively tiny compared  
to other nations.  
The nation of the  
world.



After the fall of Rome, gold be-  
came the exclusive property of  
royalty, clergy, nobles, and  
other particularly powerful indi-  
viduals. Gold and silver  
were used in the coins of  
the Roman Empire and in the  
trading of goods in the  
Mediterranean.  
Today, due in large part  
to postwar financial instability

During the 17th century, the Dutch  
built a vast overseas empire that  
by the dawn of the 18th century,  
was this tiny country became the  
world's greatest maritime and com-  
mercial power. Gold and silver  
all kinds poured into the coffers  
of the prosperous burghers of the  
country and even today Amsterdam is  
a renowned center for jewelry and