

OFFICIAL PUBLICATION

of the

ISHPEMING ROCK AND MINERAL CLUB, INC.

Published Quarterly

OFFICERS

President - Roy Hansen, 1890 Prairie Avenue, Ishpeming, Michigan.

Vice-President - Glen Gregg, Gwinn, Michigan.

Secretary - Mary Mortagne, #3 Birch Grove Trailer Court, Marquette, Michigan. Treasurer - Richard Mortagne, #3 Birch Grove Trailer Court, Marquette, Michigan. Curator - Rufus Maynard, Route 1, Box 672, Marquette, Michigan. Librarians - Clem Newman, 730 Duncan Street, Ishpeming, Michigan;

Ronald Murray, 2115 Ludington Street, Escanaba, Michigan. Publicity - Elizabeth Rogers, 401 Vine Street, Ishpeming, Michigan. Editor - Carol Kokko, P. O. Box 324, Negaunee, Michigan.

Assistant Editors: Al Murray, Jr., 2115 Ludington Street, Escanaba, Michigan; Roy Hansen, 1890 Prairie Avenue, Ishpeming, Michigan.

To all recipients of the Jaspilite: Due to the failure of this year's elected editor to get out an issue, this <u>Jaspilite</u> represents both the first and second issues for this year. There will be only two more issues for thcoming.

Materials in this bulletin may be copies provided full credit is given to the author and bulletin.



A LETTER FROM THE PRESIDENT (C

Every year about this time, I wonder if we have accomplished everything during the past year that our members hoped we would. My next thought is, will we be able to satisfy all of these fine people during the coming year.

Just why does the average person join a club such as ours? I believe that first, he (or she) hopes to learn more about his chosen hobby and allied fields; second, he wants other people to learn about his hobby because he is proud to be a part of it, and honestly believes that there is no better hobby for anyone anywhere regardless of age (anywhere between 1 and 105 is ideal). Third, he expects his club to progress in its aims to educate both its members and everyone else who will listen. He also expects to have the work well blended with fun.

In addition, he wants to see certain programs promoted within the club for obvious reasons. I think accuracy of identification is one of these. Safety is certainly another. However, probably the most important program is expanding the knowledge of the Earth Sciences to as many people as possible...and this is the major aim for our 1964 club year.

To do this, we already have in operation a very active lapidary group which is not only adding to the knowledge of present club members, but is attracting new members through an interest in the lapidary. Our primary aim now is to reach the youth through (1) displays, demonstrations and lectures at schools, etc., and (2) the formation of a separate youth group within the IRMC with suitable programs and fieldtrips, and (3) an opportunity for youth, by age groups to display their exhibits at an annual show (such as the Harvest Festival) where appropriate recognition can be given for outstanding work.

This "three-prong mounting" for the youth of our communities will give the club a solid foundation for the future. All this will call for much effort by members in general and particularly the

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all-important Education Committee, and its junior counterpart, the Youth Education Committee, which is the developing nucleus of the projected youth group.

I would appreciate hearing from anyone who has experience with junior rock club groups regarding plans, programs or other pertinent information.

Let's give these young people a break! They are our hope for the future.

Good Prospecting. May all your claims be good ones.

Roy Hansen

QUOTES BY THE EDITOR

"The journey of a thousand miles begins with a single step." This old Chinese proverb can be applied to our everyday life. One example is the bulletin you are reading right now. It took quite awhile to get started on this issue; but once the first step was taken, it didn't take too long to finish the job.

This year we have many new members in our club, and we hope to get many more. These same people are taking offices, committees, and various other jobs to which they are not accustomed and know very little if anything about. This may be a most discouraging situation, but remember Horace's quotation, "He has half the deed done who has made a beginning." Always bear in mind that there are a lot of members in our club, and we are always willing to help you out. Just let us know when you need help. "When at first you don't succeed, try, try again," and "When there's a will, there's a way."

So, remember, when things aren't running smoothly, stiffle that impulse to complain and criticize. There may be more to the situation than you realize. "Any fool can criticize, condemn, and complain-and most fools do," is an appropriate quotation by Dale Carnegie.

To those members who are taking on the responsibilities of helping with the operation of the club, our hats are off to you. To those who have had these same responsibilities, our sincers thanks, and our hope that you will not be content to just sit on the sidelines and watch, but will take the first opportunity that comes along to take an active part once again: As for those new members who have not yet taken part in a committee or other job, the best way to learn to swim is to jump in and try.

Good luck!

Carol Kokko

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CONDENSED MINUTES OF MEETINGS

January 10, 1964.

A Board meeting of the Ishpeming Rock & Mineral Club, Inc., was held at the Ski Hall. Information was presented on a silver smithing class to be held at Northern Michigan University.

The Publicity Committee was asked to contact the local radio stations about publicizing our meetings.

The Nominating Committee presented the following slate of officers;

President Vice President Editor Ruth Lawson Ass't Editor Curator

Glenn Gregg Secretary Mary Mortagne Treasurer Richard Mortagne Al Murray, Jr. Rufus Maynard Publicity Betty Rogers Librarians Frank Bogetto and Ron Murray.

Roy Hansen

January 19, 1964.

A general meeting of the IRMC was held at the Chamber of Commerce Building in Marquette.

It was reported that we sent 100 lbs. of local rocks and minerals to the Muskegon Rock Club, and have received notice they have sent us 100 lbs. in exchange. When

they arrive, we will have an auction.

Articles voted best of the year in the Jaspilite for 1963 were: (1) Autobiography of an Agate by Al Murray, (2) Dust Swallowers by Taine Kokko, and (3) Strange Intruders by Domenica Carlyon.

Junior member winners were Jimmy Edwards and Glenn Kivela.

It was decided in the future that each junior member who contributes an article to the Jaspilite will receive a prize.

There was a discussion on re-organizing the Rock Identification Group. It is hoped that Bud Bamford will take charge.

January 31, 1964.

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A Board meeting was held. Curator reported his committee met and started cataloging the minerals in the show case.

Plans were started to organize a youth group.

The rehabilitation of the club's Des Moines display was discussed. There is some work in the electrical line that needs to be done.

It was reported there are more clubs interested in our 100 lb. exchange idea.

Bob Markert moved that we send a letter to the Ishpening Chamber of Commerce requesting the eleven oil paintings by the Lake Superior Arts & Crafts Society be maintained by the Ishpening Rock & Minera Club.

It was also brought up that the January election of officers should be held in Ishpeming instead of Marquette; and also that the Jaspilite Awards should be awarded at a separate meeting.

February 16, 1964.

At this regular meeting, the club received an answer from the Ishpeming Chamber of Commerce. They have relinquished all rights to the paintings. They are now the property and responsibility of the IRMC.

Elmer Jarvi has been appointed Chairman of the Finance Committee.

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CONDENSED MINUTES OF MEETINGS (Continued)

February 16, 1964 (Continued)

Roy Hansen announced that by the time our snow has gone, several field trips will be planned under the new Youth Group plan; separate field trips will be held for youngsters.

Door prizes for juniors, donated by Joe Collick, were won by Rebecca Wilder and Michael Marrisette.

March 15, 1964.

Glenn Gregg, at this regular meeting, re- display there. Then we ret ported on the progress made by the Science Ski Museum for our meeting. Fair Committee.

Glenn also gave a quick run-down of field trips coming up.

Joe Collick donated door prizes for juniors which were won by Connie Carlyon and Mark Sunblad. Adult door prizes, donated by Audubon Jenkins, were won by Paul Newcomb and Ed Carlyon.

It was announced that a new rock and mineral club was formed in Escanaba.

Two movies were shown after the meeting, "Our Changing Earth" and "Before the Glaciers and Petrified River."

April 3, 1964.

This Board meeting was held at the home of Mr. and Mrs. Rufus Maymard.

A motion was made and carried that supplies of paper, stencils, and covers be purchased to print the <u>Jaspilite</u> for the year.

The Curator reported on progress made with displays. They are now waiting for a labeling machine.

The Education Committee project was discussed. It was suggested that displays of minerals be placed in schools that have built-in display cases.

An announcement was made that Dr. Russell Hussey, Professor of Geology at the U of M., would give a talk with slides at the Ski Hall on April 7, 1964, at 7:30 p.m. The subject will be Pre-historic Michigan.

It was decided that we continue the 100 1b. rock swap with other clubs. In the future we will request that the material we receive be labelled and suitable for auctioning - no "junkite", please. We now have offers to swap from Colorado, Oklahoma, and California. Members will be asked to bring specimens to the next

April 19, 1964.

general meeting.

Before this regular meeting, we went to the Cleveland-Cliffs Iron Co. Offices to view the collection of Charles Hawes on display there. Then we returned to the Ski Museum for our meeting.

Glenn Gregg reported on the Science Fair. His committee had the publicity all in order, and turned it over to the University as requested, but nothing was forthcoming. Glenn and his Committee viewed all the displays at the Fair and decided none were pertaining to the Earth Sciences, possibly because of lack of publicity; that we would give awards in those categories; so no prizes were awarded this year.

A field trip to Minnesota is planned for June 13 and 14 - for agates.

First field trip for the year is scheduled for April 25 and 26, to the Copper Country to the Central and Delaware Mines.

May 1, 1964.

This Board meeting was held at the Ski Museum.

Mrs. Lawson has been unable to get out the <u>Jaspilite</u>, so Carol Kokko has taken it on again.

Reviewed list of old members to see if some could be brought back into the club by personal contact.

Elmer Jarvi came up with a good idea--that our club year start in September and end in May because those are the months when we meet consecutively indoors. It was thought more could be accomplished this way. From May to August there would be field trips with possibly a short meeting outdoors. More will be heard at a regular meeting on this subject.

June 15, 1964

1964 June 15.

(Editor's Note: This article was written for an earlier issue, so some of the dates mentioned in the article have already occured. Due to the delay in getting out this issue, we hope you'll overlook the discrepancies due to this, and enjoy Mr. Gregg's article.)

LET'S PLAN FIELD TRIPS

The weather is balmy outside; Spring is again close at hand. A few birds have arrived, a sunny hillside is bare. Last summer's stones have been sorted, displayed or cut. Thoughts go beyond the patches of snow to soft waves against gravel beaches, to hidden rock piles, to ridges studded with agates. Tis time to plan those field trips. It should be done by a group over coffee, specimens, and animated talk.

Where and when are not hard answers when there are many places to go and the urge is great to get going. How soon is paramount in many minds. Last year we had a snow storm on May 22, but much good weath-Do you have any ideas of where and when? er before that time. Even April, the latter part, should be the kick-off date.

Let's make the first trip the week-end of April 25 and 26. We are sure to find Past experience assures success in finding many specimens and much cutting material. It is a bit early for the Cliff Mine; snow may still prevent driving in and the back slopes may be buried deep. How about the Central, Delaware and Mandan? There are also new gravel pits to be explored. The local beaches should be bare with newly-turned windrows of beach stones to comb. It's a deal--place of meeting and time will be the club announcement, Set April 25 and 26 or either day aside.

A one-day trip to the Cliff Mine in mid-May would be about right. The 17th looks about the best. Can you make it? Of course you can go for two days if you wish. There will be others to join you, but the big day will be the 17th.

There is much talk about the agate beds east of Lake Nipigon in Canada, up near Jellicoe. There will be members going to that area, I am sure. President Roy

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Hansen is getting the dope. He reports they use agates as throwing stones to make the moose get off the trails. Hope the moose haven't been too thick. Roy will fill us in on this one at an early date.

Bob Markert has a Mid-West trip planned for the Memorial Day weekend, May 30 and 31. This will be a local collecting gem with talent for identification and guides. All members are invited to add to or round out their collections of local material.

One more trip is in the making. Have you an interest in fossils? Did you know of the fossil beds near Raber in the eastern edge of the U.P.? Let's go look and collect in June. It's mosquito time, but they make good repellants and the trip should be timely. We could visit the beautiful sand beaches at Detour State Park or go to Drummond Island. There is much to see in June -- a two-day trip will turn the trick.

We want to fulfill your wishes. Let's speak up.

(President's note: Since this was written. the April 25-26 trip was made by a few the rock piles bare in the Copper Country.hardy souls. This was the break-in trip to find what equipment was left at home along with the salt and the silverware. One even forgot his rock hammer!

> Next trip to the Cliff Mine is May 17 and 18. Then the Midwest sponsored field trip on May 30 and 31. On June 13 and 14 the club goes to Minnesota for agates. These are a few to keep us going.

> And remember this fall is the annual "special" trip which will go to the Thunde. Bay area north of Lake Superior for agates 6,000 square miles of gemstone collecting area!--anyone interested?)

> > Glen Gregg

Gems having American names are danburite, named after Danbury, Conn., where it was first found; and benitoite, named after San Benito County, California.

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LAPIDARY MEETINGS

Jaspilite

The Lapidary Unit of the Ishpeming Rock & Mineral Club held three sessions this past winter with approximately twelve members attending each of the first two meetings. One little oddity to occur was that each of these first two meetings was comprised of an entirely different group of people. This is fine, and, of course, means that there are at least 24 interested members taking an active part in the lapidary program set up by Past-President Glen Gregg.

These meetings were held at the work shop of Jarl Kivela, and although little work was accomplished with the equipment, many helpful ideas were exchanged.

During the second gathering, Dick Mortagne made his first attempt at fashioning a "cab" from rhodonite, and he was quite successful. It is hoped that more persons just starting in lapidary would attend so demonstrations and instructions could be given by the experienced lapidarists in the club.

A third and well-attended meeting took place on Wednesday, April 29, at the home of Bob and Marion Markert. Lapidarists, faceters, silversmiths, both amateur and novice alike, were plying their artistic abilities. Newcomer, Dave McGowan turned out his first bit of polished stone and how well the look of pride and joy showed on his face. Stick with it, Dave, and you'll soon be crowding the experts. Dick Mortagne is very quickly earning a respected spot among the lapidarists. Bob Schenk, the club's only faceter, has been doing some beautiful work.

Following the very active work session by approximately 25 members, an important business session was held for organizing and scheduling club members taking an active part in the workshop to be held in the afternoon at the U.P. Arts and Crafts Council Conference which was held May 2 at Northern Michigan University. This show is one of the highlights of the year, and presents a most favorable opportunity for the club and club members to exhibit lapidary art and silversmithing articles, and to demonstrate the procedures in each of the phases of lapidary and silver The body was in perfect condition.

work. Those of you who did not attend. missed a fine showing of the many exhibits displayed and the workshops in session.

For further information on lapidary meetings, contact Jarl at the next meeting or call him at GRanite 5-9288.

Jarl Kivela

IT HAPPENED IN PERU

The exact date of the event and the date of the discovery is not given.

The Peruvian Indian dug burrows into the mountain hundreds of feet long and just large enough to permit the Indian to crawl through. This was done for the purpose of getting copper and turquoise, highly prized by the Incas.

One day as an Indian was working in his burrow, he came onto a great lump of dull reddish copper. Elated at such a find, he pried and hammered at the protruding edge of the tough metal, soft and malleable, it could not be broken. Anxious to secure his prize, the Indian swung his stone maul with all his might. It was the last blow he ever struck. As the heavy stone hammer hit the mass of copper, there was a grinding crash and he was buried under countless tons of rocks.

Centuries passed. Then, one day white men came to the scene of the earlier tragedy. Thousands of tons of the mountainside came down as exploding dynamite tore great gaps.

As a mine boss examined a rich vein of ore, uncovered by the blast, he made a strange and gruesome discovery. There, protruding from the broken rock was a human leg, the foot covered by a rope soled sandal.

Carefully the rock was cleared away to disclose the body. Beside it was a sack half-filled with native copper and lumps of high grade ore. Still gripped in his dead fingers was the heavy stone hammer.

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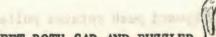
IT HAPPENED IN PERU (Continued)

Perfect, because it had turned to stone. Through the centuries that had passed, water seeping through the crevices or the ore had deposited the mineral contents in the skin and flesh of the corpse until the body had become a solid mass of copper!

Today, the strangely-preserved body rests in a glass case in the American Museum of Natural History in New York City, still wearing the loin cloth and holding the shaft of his stone hammer.

from Rock Lore via The Template, 5/64

(Editor's note: This is to prove to those club members to whom I told this story that it is really true and not just a fabrication. So, fellow rockhounds, when you go digging up in the Copper Country for those prehistoric stone hammers, watch out for a foot or something else!)





Jaspilite

LEFT BOTH SAD AND PUZZLED

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"Crown of the Andes Sold," read the headline of a short item in the <u>Treasure</u> <u>Chest</u>, Des Moines' January, 1964, publication. It told us about the Crown being sold to a diamond firm in Amsterdam, Holland, for \$154,000. That's quite a sum from the \$4,000,000 which we were told it was worth, but that's not the point we want to make. The Crown has now been taken to Holland, and there will be very little chance of its ever being brought back to this country. Therefore, those of us who saw it were very fortunate, and Des Moines was the last city it was displayed in this country.

Back in '61, the Midwest Federation was holding its annual convention at Des Moines, Iowa, and it had been stated that the Crown of the Andes was to be displayed at the show. My daughter Carol's interest being aroused, did much research on the history of this crown. And, as it all turned out to sound so interesting, we decided to attend this convention just to see the Crown, not even dreaming of the

\$26,000,000 worth of other gems and minerals that would be on display!

The story of the Crown begins with the founding of the City of Popayan in Peru, now Columbia, in 1536. Sixty-four years later, rumors of a severe plague reached them, and the residents prayed to the Blessed Mother of the Saviour. When they escaped the plague, they decided to show their gratitude to the Blessed Virgin by making this lavish crown for her statue.

More than 100 lbs of pure gold was donated by the population. Out of this solid block of gold was carved a most intricate design by 24 of the best goldsmiths in the New World. It weighed 22 lbs. when the carving was finished.

The patrician families opened their treasure chests and poured out all the hoarded precious emeralds. One family alone donated the massive pear-shaped emeralds which hang inside the Crown, 17 in number. A total of 453 precious emeralds, a combined weight of 1,521 carats, were selected, and were shaped and polished by expert lapidaries brought from Spain. After 6 years, it was completed. The great coronation was held December 8, 1599.

Pirates and wars were fought; many lives were lost. The South American Revolution is a part of its history. After much effort, Warren Piper of Chicago, finally managed to take possession of the Crown on June 6, 1936.

Thus we journeyed to Des Moines to see this famous Crown. And, how can I begin to describe the excitement of really seeing this lavish crown. The beauty and splendor of it, no mere words can describe It was placed high up on a slowly-revolving red velvet pedestal, roped off all the way around, with Brinks guards standing by it all times. It arrived and left on an armored car, guarded by numerous, nervous guards with their hands on their guns. I was thankful that the pirates and buccaneers of ye olden days don't exist any more, and that the stick-up men belong on television. After seeing the famous Crown of the Andes, and upon hearing that it has left our country, it leaves me sort of sad. And what puzzles me is how its value has dropped! Taine Kokko

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QUAKE JOLTS MILWAUKEE WELL

(by Ronald Kotulak, Chicago Tribune)

Seven minutes after a devastating earthquake struck Alaska on Good Friday, the water level in 400 foot deep well in Milwaukee began rising and falling and ended up fluctuating 12.5 feet by the time the worst of the quake was over. Among the sharp peaks and valleys on a graph being made by instruments attached to the water in the well were a characteristic series of lines which told Elmer E. Rexin that a tidal wave would follow the fierce earth shocks.

The tidal wave was only several inches high as it raced across the Pacific Ocean at 500 miles an hour, but when it reached shallow shore line areas, as in Cresent City, Calif., it rose into a wall of water that wroght severe damage.

"Not all quakes produce tidal waves," Rexin said. "After comparing charts from the well with tidal waves produced by earthquakes, I have been able to identify certain lines in the charts which are always present when a tidal wave occurs."

The well, which is located in the basement of the Nunn-Bush shoe factory, has been studied by 17 years by government geologists, seismologists, and Rexin, and has proved to be as reliable in recording earthquakes as the best mechanical seismographs.

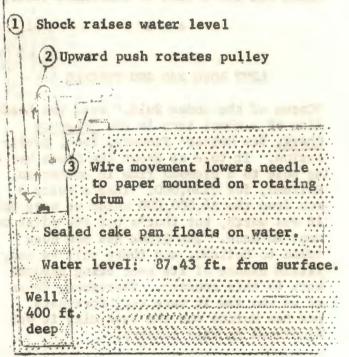
It has been long known that water levels in many wells fluctuate after an earthquake, but no other well has been found that rises or falls as greatly as the one in Milwaukee.

Shortly after the Alaskan quake, residents in Menominee Falls, Wisc., a suburb of Milwaukee, reported that the water levels in some of their wells rose so high the wells overflowed. Residents in Pewaukee Lake, 16 miles west, said that on the night of the quake they found mud and sand in their wells.

The 400 foot well in the basement of the factory was drilled in 1925 and abandoned in 1945. Rexin said he first became interested in the well in 1946 when the U.S. Geological Survey set up a mechanism to to measure the water table in the well. While watching the chart, Rexin noticed that the needle would make irregular markings from time to time. He theorized that since the well was so deep, the fluctuations in the water level might be caused by earthquakes around the world.

Rexin told his theory to the local representative of the U.S. geological survey at the time. He thought the theory was interesting and sent to Washington for official records on all the recent quakes. Rexin's theory was confirmed.

Rexin's seismograph consists of a sealed aluminum cake pan five inches in diameter floating on top of the water. Attached to this is a length of stainless steel wire which is looped over a pulley at the top of the well. The other end of the wire is weighted to counter-balance the pan. As the pan rises or falls, the pulley moves, recording the level of the water.



Efforts were made to make the well an official seismological reporting station, but the Seismological Society of America took the position that the unique hole would serve a better purpose as a research station.

"We receive a varied pattern of lines from the water fluctuations in the well," Rexin said. "We want to find out if

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QUAKE JOLTS MILWAUKEE WELL (Continued)

these variations will tell us more than the extent of the quake and whether tidal waves will follow."

A probable explanation of the sensitivity of the well to earthquakes is that the well connects with a fault from the 400 foot depth downward, he explained.

This fault (a weak line in the earth structure) may have been formed ages ago when the Porcupine Mountains of Northern Michigan were active volcanoes.

This fault may go down to a large cavern far below the surface of the earth which then would act as a resonance chamber and amplify the shock waves coming from a quake.

The largest earthquake previously recorded by the well seismograph was the quake which occured August 15, 1960, in Assam and Tibet, 12,000 miles from Milwaukee. This quake was one of the five greatest quakes ever recorded by seismologists and left hundreds of thousands of people homeless. The water level in the well fluctuated 11.9 feet at that time.

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Kona Dolomite and other cutting materials, rough from Upper Michigan for what have you?

> ROY HANSEN 1890 Prairie Ishpeming, Michigan 49049

CANDY MADE OF TALC GETS NOD

These were the headlines in <u>The Coopera-</u> <u>tive Builder</u> recently. "A House subcommittee moved quietly April 28, 1964, to let candy makers slip ingredients back into their products that have been barred for 58 years. The National Confectionary Association has sought for years to repeal a section of the food, drug, and cosmetics

act of 1906 that keeps candy makers from using 'non-nutritive ingredients' in their products.

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"The candy makers want to put talc in their products, even as they did in grandmother's day, without telling consumers what they're doing.

"Talc is the same material talcum powder is made from. It's a preservative,' an embalming fluid,' as one consumer spokesman suggested. It can be colored and flavored to taste like strawberry or chocolate or whatever. It's also cheap, what food men call an 'economic adulterant.' In seeking authority to use food additives that are non-nutritive, candy makers are simply trying to boost profits. If they can use talc, their products won't spoil; they can substitute a cheap inert ingredient for more expensive ones that have nutritional value. All without consumers knowing what happened."

If this is the case, guess I'll take a run over to the Champion and pick up a piece of talc to enjoy while I'm working with my rocks tonight. On second thought though I don't have time, so maybe I'll get a spoon and get a box of talcum powder from upstairs, mix in a little vanilla flavoring, and eat that. Wonder what it'll taste like? Personally, I think I'd prefer a little agate or datolite. They seem to taste better somehow. Maybe because they're harder to get; harder on the teeth too.

Carol Kokko

METAL STORAGE LOCKER Sale FOR BOXES Size: 14" high, 22" wide, 30" long. Ideal for storage of your extra cutting material. Drawers roll on ball-bearing rollers. Can be had in 2, 3, and 4 unit combinations, all in metal frames. Price: Only \$4.00 per drawer.

Contact: E. J. Jarvi, 116 B. Division Street, Ishpeming, Michigan. Telephone: HUdson 6-4692

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FIELD TRIP May 30-31	THE ISHPEMING ROCK & MINERAL CLUB, INC. invites all rockhounds to join them in collecting Iron Country minerals, cutting and mineral specimens. Will depart at 9 a.m. from the Tourist Infor- mation Booth, Ishpeming, Michigan (U.S.41).
ROCK SWAP June 6-7	THE STATE LINE GEM AND MINERAL SOCIETY happily announces a Rock Swap to be held at Frontier City, Onsted, Michigan. For details contact Mrs. Barbara Bruce, Sec., Route 2, Blissfield, Michigan.
CLUB SHOW June 6-7	THE GRANT GEOLOGICAL SOCIETY announces its second annual Rock Show and Swap which will be held in The 4H Fairgrounds Exhibit located east on Highway Ind. 18, Marion, Indiana. For details contact Mrs. Gail Alexander, Sec., 1113 West 4th St., Marion, Indiana.
CLUB SHOW June 6-7	THE KENOSHA GEM & MINERAL SOCIETY announces a gem show to be held in the Carthage College, 2001 Alford Drive, Kenosha, Wisconsin. For details contact Mrs. Alice Gascoigne, Sec., 7037 44th Ave., Kenosha, Wisconsin.
CLUB SHOW June 13-14	THE LINCOLN ORBIT EARTH SCIENCE SOCIETY proudly presents its 10th annual show which will be held in the Illinois Building at State Fairgrounds, Springfield, Illinois. For details contact Mr. Frank Albrecht, 1019 N. 12th St., Springfield, Illinois.
FIELD TRIP June 13	THE TRI STATE GEM & MINERAL SOCIETY invites all collectors to join them in an all-day field trip. Will depart 8 a.m. from Grandview Park, Dubuque, Iowa. Will collect agate, fossils and lead and zinc minerals. For details and reservations contact Mrs. Val Seipp, Sec., 1945 Carter Road, Dubuque, Iowa.
FIELD TRIP June 14	THE LAKE SUPERIOR GEM AND MINERAL CLUB invites Rockhounds to join them on this one-day field trip for agates. Will depart at 9 a.m. from 203 Superior St., Duluth, Minn. Will collect Lake Superior Agates; bring lunch. For details and reservations contact Mrs. Donald Nordstrom, Sec., 3406 W. 2nd St., Duluth, Minnesota.
CONVENTION July 23-26	THE MUSKEGON ROCKS AND MINERALS ASSOCIATION IS HOSTING THE MID- WEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES CONVEN- TION. OUTSTANDING EXHIBITS - SPACIOUS DISPLAY HALLS - LIVE LEC- TURES. WATCHWATCHWATCHFOR COMING ATTRACTIONS!
ROCK SWAP POT LUCK PICNIC August 16	THE CHARITON RIVER PEBBLE PICKERS CLUB invites all rockhounds to come and have fun at this rock swap and picnic (pot luck) taking place at 9 a.m. till 6 p.m. at Red Haw State Park east of Chariton Iowa on Highway 34. For details contact Mrs. Helen Stech, Sec., R. R. #2, Russell, Iowa.
FIELD TRIP ROCK SWAP August 29-30	THE SAC & FOX LAPIDARY CLUB AND THE MID IOWA ROCK CLUB invites all rockhounds to participate in the two days of fun, collecting, and rock swapping. Lake Keomah, Oskaloosa, Iowa. For details and re- servations contact Edgar R. Stitely, 1230 C Ave., East, Oskaloosa.
MIDWEST ROCKRAMA September 11, 12, and 13.	sponsored by THE VALLEY ROCK AND MINERAL CLUB. At Conway Hotel, Appleton, Wisconsin. For details contact Neal J. Bartosic, Pub-

1964 CALENDAR OF EVENTS (Continued)

CLUB SHOW September 12-13

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Sponsored by THE BLOOMINGTON MINERAL CLUB. Southdale Garden Ct., Ealina, Minnesota. Saturday, 9 a.m.-6 p.m.; Sunday, 1-6 p.m. Two swap sessions being planned. For details contact Mrs. Rex Webb, 2600 W. 87 1/2 Street, Bloomington, Minnesota.

CLUB SHOW

The association of clubs of the GREATER KANSAS CITY AREA will September 17, 18 hold their third annual show at the Kansas National Guard Armory, and 19. Intersection of Kansas Turnpike and 18th St. Expressway. Hours 17th, 2-10 p.m.; 13th, 10 a.m.-10 p.m.; 19th, 10a.m.-6 p.m. For details contact Charles Baker, 2838 N. Bethany, Kansas City, Kan.

FIELD TRIP October 3.4

THE DES PLAINES VALLEY GEOLOGICAL SOCIETY invites interested agate collectors to join them at 1 p.m. on October 3-4 at the Villa Louis, Prairie Du Chien, Wisconsin. This group will be limited to the first 30 persons registering. For details contact Mrs. Ruth Hoff, Secretary, Box 91, Des Flaines, Illinois.

CLUB SHOW

NEBRASKA MINERAL AND GEM CLUB, INC. announces their show will be October 10-11 held at the National Guard Armory, 6929 Mercy Rd. (formerly 70th & Old Center St.) in S. W. Omaha, Nebraska. Sat. Oct. 10, 9 a.m.-9 p.m.; Sun. Oct. 11, 9 a.m.-8p.m. Swap table will be set up. Fur further details contact Leon Gimler, 1202 S. 55th St., Omaha,

FIELD TRIP SWAP October 10-11

The Association of Rock Clubs of the GREATER KANSAS CITY AREA and the clubs of the St. Louise Area are sponsoring a joint field trip and Swap at Lincoln, Missouri. The object of the field trip will be Mozarkite. Every one is welcome. Meet at City Park in Lincoln at 1 p.m. on Saturday; swapping session at Shelter House in City Park from 9 a.m. to 12 p.m. on Sunday. Picnic lunch from 12 to 1 p.m. and more swapping or digging until dark. For information contact Marie Stingley, 8 E 54th, Kansas City, Missouri, or Olive Ellersick, 5449 Robert, St. Louis, Missouri.

CLUB SHOW November 20, 21, and 22.

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box mint bra Joy

THE ST. LOUIS MINERAL AND GEM SOCIETY announces their fifth annual show to be held at Riverroads Shopping Center, Jennings Station and Halls Ferry Roads. Fri. Nov. 20, 12 p.m. - 9 p.m.; Sat. Nov. 21 and Sun. Nov. 22, 9:30 a.m. -9:30 p.m. Exhibits. lectures, swapping sessions, demonstrations. For details contact Mrs. Donald Gault, 68 Marshall Pl., Webster Groves, Mo 63119

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Custom Slabbing and Tumbling U. P. Tumbling Stones Much more

YOU WILL BE GLAD THAT YOU LOOKED US UP!

Slab Material

Legislative Committee Report by Joe D. Hanna, Jr. March, 1964

I'm sure many of us feel life is complicated enough without locking horns with the government over what may seem to be an innocuous, recreational-type hobby. It's understandable therefore that many have asked, "Why a legislative committee for rockhounds?" Perhaps the basic answer lies in the fact that what we are engaged in, is not a mere hobby. The problems we face are compounded by the tremendous growth of this avocation from a slight handful of amateurs thirty years ago to millions of enthusiasts today ... many of whom have achieved a high degree of professional know-how.

With this increasing "array of diggers". going forth every spring, there is little wonder that our lawmakers have begun to take a serious look at these strange creatures apparently bent on rearranging the earth's crust. But the eyes of Congress didn't focus on the situation until we witnessed the advent of the "quickbuck artists." With bull-dozers, dynamite tion, the Lapidary Journal and Gems and and itinerant bean pickers they entered the known collecting areas for agate, petrified wood, rare crystals and junkite and picked them clean. Land owners' and leasers' rights were ignored and soon many desirable spots were closed to all comers. Since Public Lands were receiving the same going-over, it was inevitable can Federation representatives (who have that the Federal Government step in with both feet and introduce new laws restrict- establish a unified position) in order to ing mineral collecting.

Thus the legislative committee was established by the Federation's past-president, Bernice Rexin and continued by direction of President Russ Kemp. After receiving the assignment as chairman, I asked two of the best informed people I knew to serve with me...June Culp Zeitner of Mission, S.D., and Merton Young of Michigantown, Indiana. To me, their long experience in earth science research, and the conservative development of our natural resources was fundamental to the establishment of an effective working committee.

We first tackled the Wilderness Bill which would have made many areas inaccessible to all but the rugged and the rich. The lands would have been off-limits for the mineral collector and, with no roads, could not even be seen by most Americans. Though we exerted no influence in having that bill stymied in Committee, we were starting to make ourselves heard. When the Bureau of Land Management, Department of Interior gave birth to the so-called Petrified Wood Act, we were prepared. Since a stipulation of our non-profit organization prohibits our engaging in politics, we restricted our efforts to a presentation to the Bureau and members of Congress of the problems the proposed legislation created. For instance...the ten pound daily limit on collecting petrified wood is completely unrealistic ap-, proach and the yearly total limit is patently unenforeable outside a Police State. To place proper emphasis on the matter, however, we suggested that our members give voice to their individual. thoughts directly to the people who represent them in the House and Senate.

We were by no means alone. The other Federations including the American Federa-Minerals magazine were in the fight from the very beginning. Now we are coordinating our efforts to effect sensible solutions to our growing problems. Overwhelmed at first by the magnitude and unanimity of our membership, the Department of the Interior is currently working with Ameribeen advised of the Midwest's wishes to write a just and effective act. Much remains to be done, but I feel we're on the right track.

Occasionally I'm asked by a member of one of our mineral societies, "Why join (and pay dues to) a Federation? We just want to hunt rocks and enjoy this wonderful hobby."

I think this answers their question.

H.E.L.P. Eliminate Litter this Year! !!

June 15, 1964 MIDWEST FEDERATION'S LETTER-A-MONTH

An Invitation to Muskegon by Fred Andersen, President Muskegon County Rock & Mineral Ass'n April, 1964

Greetings from the Muskegon County Rock and Mineral Association!

We invite you to plan your vacation in our scenic water wonderland, and enjoy the 1964 Midwest Convention and Muskegon Rock and Gem Festival. Our show will be held at the Walker Arena in Muskegon, Michigan, on Thursday, Friday, Saturday, and Sunday, July 23, 24, 25, and 26, and will feature a display area 30 feet wide by over 900 feet long. Here you will see both club and individual exhibits of fossils, mineral specimens, lapidary art, faceting, jewelry, as well as the other phases of our hobby.

These exhibits will be competitive and non-competitive, using the American Federation rules. Here also you will see special displays such as the crosses made by Tolson Radloff that has gained much welldeserved fame.

We hope that you will wish to enter your display in your federation show also. On the main floor we will have booths for about 45 dealers coming from all over the United States and Canada.

We are planning continuous programs for your enjoyment and a host of special demonstrations. We will have a swap room set up that you may visit at any time, and scheduled auctions to delight you.

We have a wonderful speaker lined up for our banquet on Saturday night, as well as some delightful favors. We are blessed with many lakes and campgrounds or you may obtain a motel or room within walking distance.

Our club is determined to make your stay here, a happy and most memorable visit. Your inquiries may be directed to me, Fred Andersen, 297 Main Street, Coopersville, Michigan. We will see you in Muskegon in July.

Let's Have More Rockramas! by June Culp Zeitner

May, 1964

When a club which was getting ready to put on a big show was asked to make it a Rockrama, they declined. When asked why, I got an assortment of reasons beginning with, "We make enough money this way and with a Rockrama we'd have to share it with the Federation," and ending with "We've always done it this way."

Why sponsor a Rockrama? What are the advantages to your club?, to other hobbyists?, to the Federation if you make a local show a Rockrama?

First, people just naturally expect a Rockrama to be a little bigger and better, therefore, more people attend the show. The Midwest Federation lends its prestige and know-how, helps with advertising, plans special events such as meetings or Cracker Barrel sessions.

Successful, well-attended Rockramas help the Public Image of the hobby. People cannot help by being impressed by the distances traveled, the helpfulness of clubs from away, the enthusiasm of new rock hobbyists to whom a Rockrama is a very special event.

Some clubs which have put on their own show for many years get in a rut; somehow one begins to look like another. A Rockrama, by its very nature, injects a new challenge, a new reason to add the extra frills often talked of, but never undertaken.

It helps the host clubs prestige to puton a Rockrama; in fact it is the best training ground for Federation shows. The hardworking competent local officers and workers who sponsor a Rockrama come to the attention of Federation Officers in this way. Those who are willing and able to produce a Rockrama are the kind of new leaders we need to keep discovering.

The morale of a club which sponsors a Rockrama should be high. They are doing worthwhile, educational projects. They are serving the Federation to which they belong and, thereby, the hobby as a whole.

Page 14

Let's Have More Rockramas (Continued)

Now, as to the money angle. Why should your club share the money of its show with the Federation? The Federation, after all, only exists to help your club and the other clubs. Your club and the Federation are both non-profit organizations. Any money which goes to the Federation only helps enable it to serve you more efficiently. Extra money from a local show may be the source of argument and bickering and may never actually achieve much good. Extra money in the Federation treasury is spent carefully for the good of the Midwest as a whole by careful administrators who have put in year of selfless work for a hobby in which they are well trained and to which they are devoted. The Federation is what the member clubs make it. If your club helps the Federation by sponsoring these important sub-regional shows called Rockramas, you can be assured your club's benefits will be greater than you dream.

Do I hear some volunteers for Rockramas for next year? You and I need them! The Federation needs them! The hobby needs them! Who's next? Write to Mr. C. O. Mull, 5675 Winthrop Avenue, Indianapolis, Indiana, NOW!

* * *

Federation Membership Figures

As of December 31, 1963, the total membership of the Midwest Federation was 8,970. This was a gain of 342 individuals since the previous report. The MWF continues to grow not only in enthusiasm, but also in ideas and membership. The membership of our neighbor Federations is:

California	14,520
Eastern	6,216
Northwest	7,871
Rocky Mountain	5,223
Texas	2.191.

The total is now 45,404!

Visit and tent

* * *

"No one grows old by living--only by losing interest in life." Marie Ray..so be a rockhound.

A new club, the Bay de Noc Gem and Mineral Club, has been organized in Delta County. There are about thirty members so far from Escanaba, Gladstone, Rapid River, and the surrounding area.

At the third meeting, held on March 24, a constitution and bylaws were adopted and officers for the first year were elected. They are Tom Hughson, President; Albert E. Murray, Vice-president; Bernette Miller, secretary; and Tyne Kangas, Treasurer. At the next meeting, votes will be taken on joining the Midwest Federation and on incorporating.

Dues in the Bay de Noc Club are the same as in the Ishpeming Club except that there is no initiation fee. Membership is open to anyone interested in furthering the purposes of the club.

Albert Murray, Jr.

(Editor's Note: We are very glad to know that we are getting new neighbors. Just last year a club was organized in the Copper Country. We hope this new club starts off on a good footing and grows up with a big membership in a hurry. We'll give them every encouragement.)

Of interest to you may be the following list of items available from our Midwest Federation's Treasurer's Office.

* * *

AFMS Car Emblems	\$.50
AFMS Lapel Pins, Men or Women	.75
Midwest Directories	.50
Midwest Program Planner's Manual	1.15
Midwest Bola Ties (many colors)	1.00
Midwest Key Rings, red/white/blue	e .50
Mexico and Canada Reports	.25
AFMS H.E.L.P. Stickers	
Small for letters 1000 for	\$2.50
Large for car bumpers 50 for	2.50.

If you desire to order any of these items either contact our treasurer or send the order and your check to:

AT MHE MUSICIAN BU

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W. H. de Neui 6600 Cornelia Drive Minneapolis, Minnesota 55424

June 15, 1964

MIDWEST FEDERATION'S LETTER-A-MONTH (Continued)

Why Have State Rocks?

by June Culp Zeitner May, 1963

Judging from the number of letters I have received from all over since the subject of official state rocks was mentioned in the AFMS Bulletin, it seems likely that regardless of how we may feel about such measures, they are bound to be considered by most states in the near future. As an organized hobby in the earth science field we must be ready to use our influence to see that logical selections are made, that intra-club and intra-state difference are peacefully arbitrated, and that bills are accurately worded.

Since most states have official flowers, birds, and even trees, it is natural that in this rapidly mushrooming hobby, many people desire to see the mineral kingdom equally honored. We have a real opportunity to use this trend to further public knowledge of rocks and minerals, as well as to demonstrate that this hobby is fair, important, scientific, influential, and efficient, - truly America's number one hobby. We should consider the following points carefully.

1. The states will want a rock or mineral which may be used for publicity, official purposes, insignia, gifts to noted visitors, state museums, etc.

2. Scouts, 4H Clubs, science classes, and other groups, who have for years been bombarding museums, rock shops, and public officials, for samples of state rocks, will want showy specimens which are readily available and not too expensive.

3. Hobbyists will want a rock adaptable to jewelry, gem show exhibits, and other projects.

4. Field trippers will hope for state rocks they can have the pleasure of finding for themselves.

As varied as these points are, it will not be easy to choose a rock common enough to give or sell cheaply to children, beautiful enough for fine jewelry, and important enough for museum displays. The state rock should also be easily recognizable. It should be a rock or mineral unique to its state, most often associated with that state, discovered in the state, or named for a locality or resident of the state. In most cases, commercially mined minerals should be excluded, as what may be a big boost to one might prove unfair to the others. If commercial mine products are included, we could conceivably wind up with many duplicates. Alaska, California, and South Dakota would all have valid reasons to claim gold.

A bill to make rose quartz the official South Dakota rock was tabled half way through the State Legislature largely because of the inaccuracy of calling quartz a rock instead of a mineral, and partly because it caught by surprise most residents of the state interested in this subject either as professionals or hobbyists.

Obviously this whole thing could become very controversial. No matter how your club feels, they cannot stop this trend so it is best to give the matter some serious consideration at once. However, your group may feel that they would like to have a part in the selection of your state rock. If so, here is how to go about it. Refresh your knowledge of rocks and minerals of your state. Contact other clubs in the state as well as interested professional people. Choose a competent impartial group to poll the state clubs and others who should have a voice in the decision. In South Dakota. the State Geological Survey has volunteered to do this. Have a committee of qualified mineral and legal experts to double check the wording of your bill. Find an interested legislator to introduce your bills. Use the ensuing publicity to help your state and your hobby. Don't try to rush things. If it is worth doing at all, it is worth doing well.

To Members of Michigan Societies: May 5, 1964

At the Michigan Cracker Barrel Meeting of the MWF held in Detroit on 4/24/64,

*

June 15, 1964

Jaspilite

MIDWEST FEDERATION'S LETTER-A-MONTH (Continued)

Letter of May 5, 1964 (Continued)

A Second share and shares an

Page 16

it was suggested that a notice be sent to all mineral and lapidary societies in Michigan requesting each club to discuss and vote on a state rock for Michigan.

I am enclosing a copy of "Why Have State Rocks" (the previous Letter-A-Month which you just read). Please read carefully and discuss this article with your members.

You may list the names of rocks suggested by your members and the proportion of your membership in favor of each. Several have already been mentioned--datolite, chlorastrolite, kona dolomite, and petosky stone. So far, in my contacts, the petoskey stone is in the lead. Please keep in mind that the state rock should be unique and plentiful in Michigan.

A committee will then study the returns and a ballott will be sent to your society for a vote. The final results will be presented to a legislator who will introduce a bill to our state legislature.

Please send me your suggestions before June 5, 1964.

Sincerely, Marion R. Gingery Mich. State V.P. of Midwest Federation

* * *

The following are a few brief exerpts from the Minutes of the Michigan Cracker Barrel Sessions.

April 24, 1964, held in Detroit, Michigan. We were represented by Mr. and Mrs. Floyd Mortenson.

Regarding the 1964 Midwest Convention at Muskegon: There will be room for 100 trailers directly behind the Arena, with electricity; also an almost unlimited amount of trailer and camping space will be available at the Hile Junior High School about 6 miles from the Arena. The Committee urged that most visitors use the

school area, which will have water and electrical connections and facilities in the school.

Regarding the State Rock: An objection was raised to terms like Petoskey Stone, Greenstone, etc., because we should educate the public to the proper names of stones. Some sentiment expressed for Petoskey Stone and Datolite. E. Courter pointed out that a state rock should be unique and plentiful in the state.

December 7, 1963, at Flint, Michigan, represented this time also by the Mortensons.

Regarding Rock Swaps: Ishpeming could possibly sponsor a Michigan Field Trip instead of a rock swap. (How about it, fellow rockhounds?)

Again on the State Mineral or Rock: Petoskey stone seemed to be preferred over copper and chlorastrolite.

Federal Income Tax: Fred Anderson, the President of the Muskegon society, reported on the notice received from the U.S. Internal Revenue Department which stated that the Muskegon Club owed 30% of the profit made on the Muskegon Rockrama.

If a club makes money it is subject to a 30% tax. If you have any legal minds in your club, have them interpret law. Exemptions apply to clubs which are incorporated as social or educational organizations. Floyd Mortenson reported on an article on Federal Income Tax by Helen Rice of Portland, Oregon, pertinent to rock clubs.

(a) All clubs are obligated to file returns yearly. (b) Even though a club is affiliated with Regional or National organizations, it does not exempt local clubs. (c) Any organization, not holding a letter of exemption from Revenue Department is subject to pay tax on its profits. (d) To get such a letter you must fill in Form 1025, Social Group, or Form 1023, Education Group. (e) Your Articles of Incorporation must have everything spelled out. (f) Every club must have a constitution, incorporate as nonprofit, and file for exemption.

June 15, 1964 MIDWEST FEDERATION'S LETTER-A-MONTH (Continued)

Tips for Exhibitors

by Tolson Radloff June, 1964

Show time is here again, and those of you who plan to exhibit, especially at the Muskegon Midwest Convention, should be aware of the importance of knowing and using the Uniform Rules when readying your display. Mrs. Helen M. Rice, Secretary of the AFMS Rules and Northwest Federation Chairman, is currently compiling a booklet on tips for exhibitors -- some of her ideas may be of great help to you right now, so here are a few things to keep in mind;

Part I contains procedures which apply to every division of competition; you should know them well. Be sure you are entering the correct exhibitor group. Those who have never exhibited before will have a fair chance in the Novice Group, but only if Advanced and Master competitors are in their correct groups.

Part III contains more specific procedures but study the complete rules as you are bound to use the rules as they are written.

Be sure you enter the correct class as well as division--for example, don't enter a General Lapidary Class when you have only one type of work, such as cabachons.

The rules require accurate labeling--don't take for granted that a label from a commercial source is automatically correct, as it may be only a trade name, like Wonderstone. If it's not in your reference books, it may be incorrect.

Mineral specimens are required to be labeled with the "name of the mineral species, the name of variety of the species..." Since the name of a species can only be that name under which a mineral was first designated by authorities, the true name is the species names. The variety of a species is a mineral which has some slight variation from the species, such as color, form or composition, but has the same essential constituents

or formula. A good example of this is the species Quartz, which has a variety Amethyst, among others. The true mineral name is still Quartz, and should be labeled as such.

Some books go one step further and divide variety of species into "sub-varieties" which are usually only added descriptive terms. Example: the species is Quartz, variety is Agate, and sub-variety is "plume." Such terms are not essential or required, and if used must be in parentheses. Many minerals, however, have no varieties, and in such cases the name of the species is enough; but a variety is required on the label if it exists.

The rules for lapidary labels requires "the variety of the mineral species (only) or material ... ", but when no variety name exists, the species name is entirely correct. No label should bear a sub-variety name as being the name of the mineral--it may be used if desired, but only in parenthesis, and preferably on the line under the variety name.

The "material" referred to in lapidary labeling is when the object is composed or rock or organic materials rather than of one mineral. Most of these are not listed in authorized references, but examples such as these are permitted on labels in lapidary: obsidian, rhyolite, amber, petrified bone, petrified wood, granite, etc.

To be sure which is the species name and which is the variety name of the mineral, use your reference books; Dana's Textbook of Mineralogy has an "Index to species" in the back. All bold-type names listed here are species names; the lighter-type names are variety names.

Good luck, and remember that careful reading of the Rules will eliminate your losing many points or being disqualified on technicalities. If you have a specific interpretation of a rule question, I will certainly try to help you further. Write to our Rules Committee Secretary, Mrs. Cecilia Duluk, 6700 Amboy, Dearborn Heights, Michigan, and we will try to aid you.

Have a wonderful summer Everyone!

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BEAM BALANCE FOR THE DETERMINATION OF SPECIFIC GRAVITY

Specific gravity or relative density is the ratio of the weight of any substance to the weight of an equal volume of water. Weight of spec. in air

SG = Weight of spec. in air - Weight of specimen in water.

Materials:

```
base 3/4" x 5 1/2" x 18 1/2"
posts 3/4" x 1 1/4" x 7"
1 box paper clips
12" size E nylon thread
18" 1/8" solid wire solder
1 metric ruler
1 1/8" x 2" stove bolt
1 small screw eye.
```

Construction:

Nail or screw fulcrum post in place so that its front edge is 1/4" back of the centerline. Cut off half of the eye of the screw eye, file smooth, and screw in to post 1/4" from top. Make a stapleshaped piece from a paper clip 1" high with 1/2" prongs and drive into post 1/2" from top, leaving 1/8" between wire and post.

Saw ruler into half lengthwise and plane each part smooth. Notch out a 3/8" x 1"x 5" piece of wood 1" from end by 1/4" thick, leaving 1/8" at the back. Glue ruler halvesto 1/8" thick portion with metric scale half at the top with the scale facing to the rear. Glue a filler

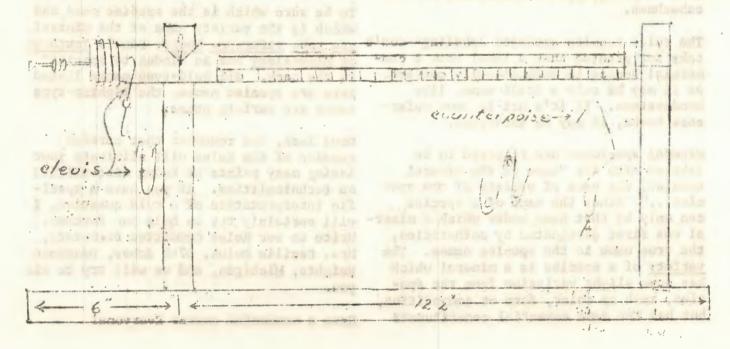
block on top of the ruler halves so that it is 3/8" thick. Glue a 1/8" x 3/8" strip to the back of the ruler tips, with a filler piece in front to total 3/8" thick. Make a 1 1/4" long staple from a paper clip and drive into the center of the tip of the beam. Cut a "V" shaped notch 1" long and 1/2" deep so that the bottom of the "V" is at zero scale. Fold a foot-long piece of size E nylon thread (available at your shoemaker shop) in two and tie an overhand knot to form a 3/4" loop. Place the knot in the notch with one end on each side of the beam, wrap each end 1 1/2 turns around, and tie at the bottom. Make sure that the loop is exactly at zero or the balance will

Drive a 1" piece of paper clip through the center of the beam 3" left of zero. Wrap 3 turns of 1/8" solder around the stove bolt, squeeze tight with pliers, and screw into a 7/64 hole drilled 1/2" deep into the center of the end of the beam. Reshape a paper clip into a clevis and hang on a pin. Hang "S" hook on clevis. Hang beam from half screw eye by thread loop, fold a 15" length of solder in two and drape over beam. Slide to balance point and wrap tightly around the beam. Adjust solder wrap on beam to balance while the lead nut is in the center of the bolt. Draw witness mark on post with the beam level.

Use:

not be accurate.

Adjust the balance of the beam with the



June 15, 1964 Ja BEAM BALANCE FOR THE DETERMINATION OF SPECIFIC GRAVITY (Continued)

solder nut while clevis and "S" hook are in place and counterpoise is off. Tie a fine thread around the specimen and suspend from the "S" hook.

Place counterpoise on the beam at the far end. Hang hook B on A and add weights to C to get approximate balance. Slide counterpoise to exact balance and mark down numbers N, estimate tenths for part spaces between M Ms. Bring up jar of water to completely immerse specimen, but not S hook. Adjust counterpoise to new balance and read second number N2. Subtract N2 from N1. Divide N1 by remainder = G. We do not use actual weights, but since specific gravity is a ratio, we can use numbers that are proportional to the weights.

Example:

A piece of quartz crystal was balanced to read 248.0 in air and 154.5 in water. 2480 = 1545 = 935, 2480 + 935 = 2.652.

* * *

Albert E. Murray

DID YOU KNOW LAKE SUPERIOR IS TILTING?

There is believed to have been three glacial time epochs, and one major advance of the continental glacier per epoch. During these three glacial advances, the water which formed all this ice was taken from the oceans of the Earth, thus lowering the sea level many hundreds of feet. The transfer of all this tremendous weight from the oceans to the continental glacier should upset some sort of balance because the Earth's crust is so comparatively thin, What kind of change resulted?

Well, let's take a well-known example. When you put a fairly heavy rock on the frozen surface of a lake and leave it there overnight, the ice in the immediate area will settle somewhat. The very same thing happened to the Earth's surface during the ice age.

Because of the colder climate of Canada, more snow fell and more ice formed. For the glacier to advance into the northern U.S., more ice had to form in Canada (proven by fluid mechanics). This extra ice, which was formed in Canada, caused Canada to settle more than the U.S.

The glaciers have, for the most part, disappeared. If we may return momentarily to our example; when you remove the rock that you put on the ice and return a day or so later, you will find that the level of the ice has returned to normal. This same adjustment (referred to as isostatic adjustment) is taking place on the Earth today.

Because of the tremendous differences in the glacial weights on Canada and the U.S., Canada has settled more, thus it has to rise more to return to its former level. As a result, Canada is rising faster than we are.

Because of the "tilting" of the land surface, Lake Superior is shifting slightly southward. Visual evidence of this can be seen by comparing the characteristics of rivers entering the lake. In Canada, the rivers all, with few exceptions, descend down a small series of rapids to the lake. Here, in Michigan, almost all the river outlets are backflooded. The Sand River and the AuTrain River are two good examples.

One comforting thought: Since the difference in this rising is only one inch or so every hundred years, we don't have to worry about any drastic change in the level of the Great Lakes for the next few thousand years or so. But geologically speaking, this is a relatively short time.

Dudley Markert

Mineral specimens and cutting materials from Great Lakes area. Prefer cutting material on trade. Write:

> Schenk's Rock Shop Route 1, Witch Lake Republic, Michigan

SELL OR TRADE

Jaspilite .



Spring finally found her way to the Northland; and with her came a host of possibilities for the collector and the lapidarist. Suddenly there isn't enough time for the things that need doing, and we have to be at our agile best to find the time for the expeditions that have to be made.

To add to the early spring schedule, ten members of the I.R.M.C. attended silversmithing classes at Northern Michigan University in Marquette for ten weeks. This took one night a week, plus much practice time, but was worth every minute. This same group has found the time to put on a demonstration and display at the annual Upper Peninsula Crafts Conference also held at the University. If nothing else, this was good practice and enjoyable because another group of IRMCites were putting on a lapidary demonstration and display right next door. Everyone enjoyed the opportunities to share their interests with others.

* * *

Glenn and Elsie Gregg missed the "goingson" at the Craft Show. They were on their way East on a trip which will take in the New York World's Fair. During the last week in May, Glenn will meet your writer up in the new Jellicoe (Thunder Bay territory) agate fields north of Lake Superior. This trip will serve to collect information to help plan the Annual IRMC Safari, which, this year, will be to Canada's biggest, newest agate and gemstone area. The date will be set later, after the black flies have completed their annual field trip to that area.

4 4 4

Bob Weekley, who was transferred to Sioux City, has received orders transferring him to the Phillipines. We miss Bob, MaryLee and the young ones; and will enjoy their company again during the June 13-14 field trip (agates) to Minnesota. Bring some swapping material, Bob.

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Speaking of field trips, Dick and Mary Mortagne, Ed Carlyon, and Terry Tresedder headed for the Central Mine in the Copper Country--along with yours truly. We spent the day alternately digging the rock piles at the Delaware, shoveling cars out of the snow, and enjoying the warm sun on Cat Harbor. Found a few agates and spent a lot of enjoyable hours.

On May 16-17, the mysteries of the old Cliff Mine (copper) will be studied by the IRMC in general. This will be an organized field trip, and for two whole days the search for the elusive native copper and silver, prehnite, epidote, datolite, possibly even chlorastrolite, will be the subject of the search. Since these are old piles and relatively difficult to get to, anything can come to light--and this thought is like sweet music to the ardent prospector.

* * *

Wedged in between the field trips and field trip planning have been some of the most memorable moments of the winter, the lapidary sessions. There was a wonderful group at Rufus Maynard's, another at Jarl Kivela's, and on April 29, one at Bob Markert's. All were interesting, informative, and educational. These classes have been so well received, that they will be a permanent program of the Club...Thanks to Jarl Kivela who spearheaded the effort and nursed it along to the great success it has been.

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June 15, 1964 ROCKIN' ARCUND (Continued)

Those who didn't attend the lecture on prehistoric Michigan by University of Michigan Geology Professor, Dr. Hussey-here was seen the reconstructed geography, biology, and zoology of prehistoric Michigan. This sort of knowledge gives an interesting background to what we have already gleaned from the geology of this portion of the Canadian Shield from Marquette west-and the ancient sea bottom to the east. Truly a paradise for the curious rockhound.

The annual Science Fair, with prizes sponsored by the Club, was a total failure Earth Science-wise. But, it is often said that there is some good in everything. In this case, the result was the formation of a Junior Educational Committee to check the possibility of holding a separate show for the youth of Marquette County. It appears that the winning displays by age groups will be entered at the Harvest Festival in October as evidence of the knowledge of the younger generation in the Earth Science field. We expect great things from our Youth Educational Committee, chaired by Leonard Lawson. Among these, and soon, we hope, the formation of a junior branch of the IRMC with their own programs, field trips, etc. Every member of the club is an ex-officio member of your group, Len. Put them to work, and watch out, because these youths might show us oldsters a thing or two.

* * *

Joe Collick, who has been responsible for many youngsters getting interested in the Earth Sciences, has been having his ups and downs--in and out of the hospital; but he always hurries back to that great collection of his. He recently acquired a collection that has been lost in storage in an old garage for many, many years. Joe finally talked the owner into parting with it, and became the proud possessor of many splendid specimens of the type which are no longer available. It couldn't happen to a better guy. We're hoping you'll be up and around soon, Joe. It's time to get out on the piles again.

* * *

We were saddened by the passing away of Clem Neuman's mother. Clem has our sincere sympathy. We respect Clem as one of our most sincere friends who does beautiful lapidary, silver, and copper work.

* * *

We were also stunned to learn of the death of a dear fellow member, Dr. G. O. Grain. Doc Grain was one of our most enthusiastic rockhounds. Last year, upon learning of a scheduled field trip to Copper Harbor, while he was in Florida -- the next thing we knew, he was on the way home with his wife (wrote from Detroit to get directions), and when we got to Copper Harbor, he and Mrs. Grain were there waiting for the day to start. What wonderful company they were on the datolite piles. Our sincerest sympathy to Mrs. Grain, Every . member of the club will treasure the memories of the hunts we enjoyed with "Doc". God Bless Him.

Another of our new members, Paul Newcombe, "visited" the hospital with a badly wrenched back. He is home now finishing recuperating. This may slow him down on the rock piles, but Dick Mortagne took him out for a trial run on the Presque Isle beach. We hope he will be in fine shape by the time we are in the real swing of collecting.

Joyce and Dick Miller send us a "Hi" from Duluth. They may be moving to New Jersey. They are going to try to make that Minnesota trip with us. Sure hope they can make it.

John Jacobson, one of our new members, is down in the Winthrop Harbor, Illinois, area. During his stay, he is giving lectures to school children. We are looking forward to this new member who may be a most valuable asset in our "pebble-pup" program.

* * *

Page 22 ROCKIN' AROUND (Continued)

We've mentioned the new-comers several times. Guess it's about time we list them all. They are Lloyd Buckmaster; Fred and Lois Fisher; Lucian F. Hunt; John and Hilda Jacobson; David, Judy, and three little McGowans; Paul and Jeannie Newcomb; Mrs. Genevieve Parker; Terry Tresedder; and William and Betty Wilson.

Our hearty welcome to these people and our sincere hope that they will be able to attend most, if not all, of our field trips, club meetings, and other activites.

Bernie Dooley, our Stambaugh member, paid some of our members a surprise visit a short time ago. While conversing, he mentioned that a small club has finally been formed in his area--there are six paid-up members. Bernie also has the honor (?) of holding all the offices in the club. How's everything going now, Bernie? Have you gotten any more members since then?

Charles Markham and the Eino Millers of the Copper Country came down from the frozen North to visit us at the U.P. Crafts Conference. We were very glad to see them. The Millers had a display of some of their lapidary and silversmithing there which we all admired.

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Wedding bells will be ringing in the Jarvi household. Ruth is getting married to John Stierna on June 13. We met the groomto-be on a certain "dust swallowers" trip to the Copper Country last summer. They're a pair of gems to whom we send our best wishes for many happy years ahead.

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The Maynards will be celebrating their Golden Wedding Anniversary this summer. Congratulations to this fine pair of rockhounds who were married fifty years ago this coming December 2. Maybe they can send some words of wisdom to the newlyweds.

* * *

Dick and Mary Mortagne have gone south to Detroit (?) for a month. We'll miss them and hope they'll hurry back to us before the month is up.

Another of our members who are traveling are Bill and Wilma Kelly. They're going to South American on a five or six week trip! How about a program on your trip for the club, folks?

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Two of our travelingest members are Bud and Lena Bamford. They've been up in Minnesota visiting their rockhound grandson so many times that we bet they know the road blindfolded already. We expect to see them on our Minnesota trip with Steve running halfway up the gravel piles before we even get a chance to get out of our cars!

Bob Markert recently underwent a minor surgery. When Russ Kemp wrote to him, Russ asked how Bob's variscite veins were coming along, and if there had been any good cutting material in them? What was your answer, Bob?

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The Kokkos spent a weekend in Milwaukee "just shopping." But, of course, they had to do something in the line of rockhounding, too; so, they visited the Rexins. They had a fascinating evening with these talented people. Besides seeing their great fossil collection, they saw the charts of the Alaskan earthquake, heard a tape recording of the same quake ("real weird"), and came home with some most interesting fossil casts made by Bernice.

Two of our members who spent their winter in Florida have returned to us. We wonder how much time the Christians spent looking for those agatized coral heads and other Florida specimens. How about an article, folks?

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June 15, 1964 ROCKIN' AROUND (Continued)

We hear that Charles Maynard recently purchased a faceting head. This is good news to us as it means our lapidary group will soon be branching out in a new direction. Good Luck, Charles! We expect to see some of your work in a few months.

* * *

Slow down your preconceptions of the Jellicoe area. A few rockhounds returning from there have expressed great disappointment in the finds. Apparently this is no agate paradise; but !-- this doesn't mean there aren't any to be found. You'll probably have to work for them the same as anywhere else. At any rate, we'll be getting a first-hand report from Roy and Glen when they find out for themselves (and us).

A recent find of an excellent specimen was the huge milky quartz crystal found by Champ Lemin. How about bringing it to one of our field trips for a "look-see"?

Bob Markert has made a new find of blue quartz. He hopes to find the time now to get some more. Be sure to see it when you stop at his place.

* * *

Ed Carlyon had a big surprise recently. Can you imagine his consternation when he had taken over 20 exposures on his camera, including pictures at Isle Royale, to find he had no film in it? Just make sure your rock bag is full of rocks.

* * *

Here's a reassuring bit of news picked up from the Saginaw News: "Ardent hobbyists sometimes impress us as being a bit balmy, but psychiatrists say no. They have found that well-balanced individuals are more likely to have hobbies than those who are either neurotic or psychotic

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