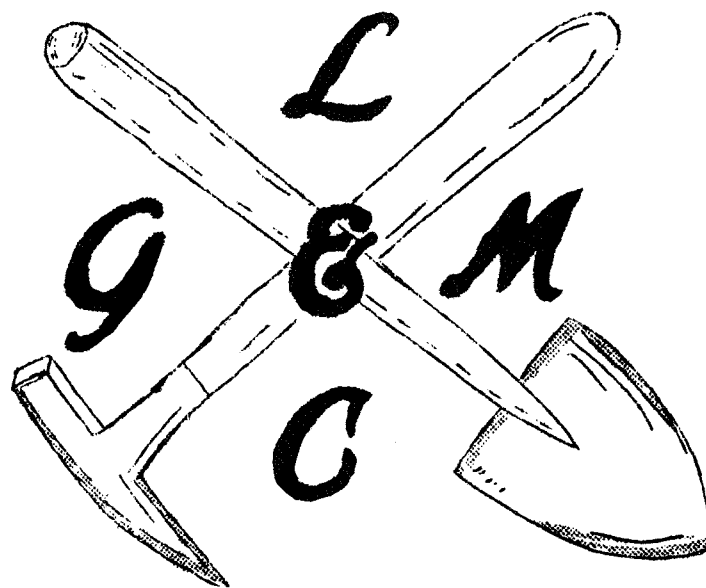


April 1964

THE PICK & SHOVEL



MONTHLY BULLETIN OF THE

LINCOLN GEM AND MINERAL CLUB, INC.

LINCOLN, NEBRASKA

LINCOLN GEM AND MINERAL CLUB, INC.

OFFICERS AND APPOINTMENTS

President Thomas Simmons
2970 South Street

First Vice-President Everett Weber
5310 Colby Street

Second Vice-President Bruce Simon
3922 South 20th St.

Recording Secretary Mrs. Phyllis Parks
3510 Everett Street

Treasurer James Parks
3510 Everett Street

Corresponding Secretary Mrs. Dorothy Engelhart
4130 Witherbee Blvd.

Historian Mrs. Maurice Tracy
3601 South Street

Librarian Mrs. Dorothy Engelhart
4130 Witherbee Blvd.



Affiliated with:

Midwest Federation of Mineralogical and Geological Societies

American Federation of Mineralogical Societies

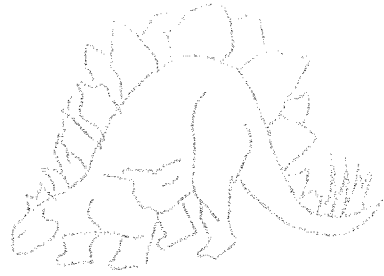


BULLETIN EDITORS - Mrs. Velma Bloyd
2818 North Cotner Blvd.
Lincoln, Nebraska 68507

Telephone 434-4781



Articles published in THE PICK AND SHOVEL may be reprinted with no alteration, provided that full credit is given and that a copy of the publication, in which the reprinted article appears, is mailed to the Editor of THE PICK AND SHOVEL.



Wishful Thinkin'

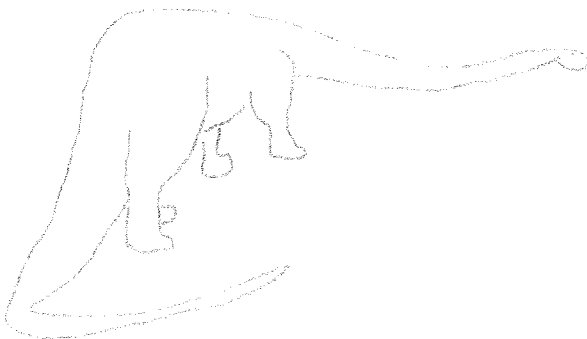
Long ago in ages past
When earth was not so old
There roamed across this land of ours,
Dinosaurs, I'm told.

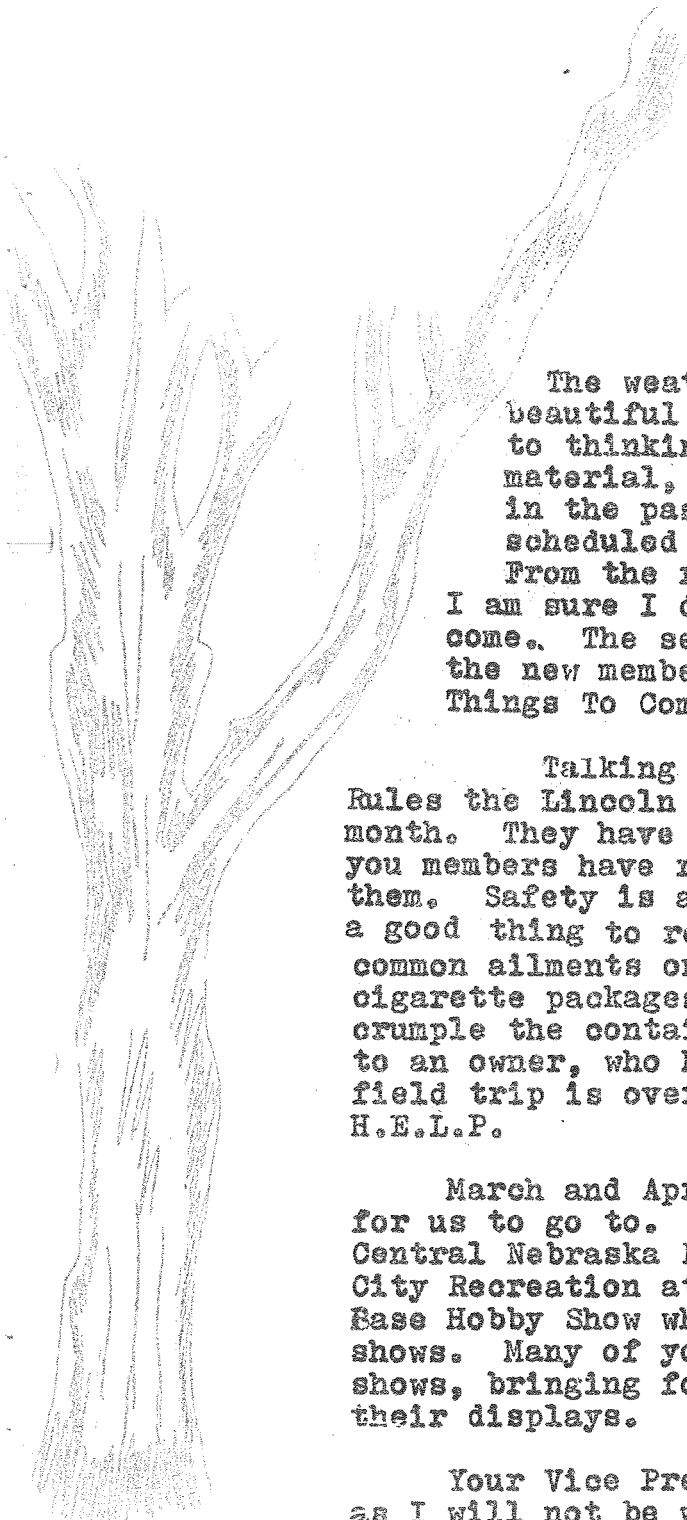
That chicken out there in the yard
They're related so they say
But chick, you sure don't look like him
Nope, not a single way

Too bad you aren't a little bit
Like ancient Grampe Dinny,
Just beside just his picture
You sorta look real skinny.

When I stop and think what might have been
It sorta makes me sick
I could feed my whole darn brood a month
On just one 'dinosaur drumstick'.

Gene Eno



THE PRESIDENT'S PAGE

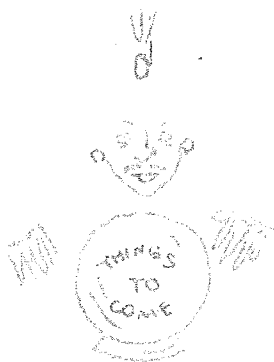
The weather man is starting to give us those beautiful warm spring days that makes us all start to thinking of trips in the field for cutting material, minerals and of course the sign of life in the past, fossils. The club has its first scheduled field trip on May 3rd at Fullerton, Nebr. From the response we had last year for this trip, I am sure I do not need to encourage you members to come. The set up will be as it was last year but for the new members who have never been there check your Things To Come page in this month's bulletin.

Talking about field trips brings to mind the Safety Rules the Lincoln Gem and Mineral Club, Inc. adopted last month. They have been printed in this month's bulletin as you members have requested. Read them and please abide by them. Safety is a must in the field as you all know. It's a good thing to remember H.E.L.P. also. One of the most common ailments on field trips in this line is the empty cigarette packages. I realize it has become a habit to crumple the container and discard it but it is an eyesore to an owner, who has allowed us on his property, when the field trip is over and everyone has gone home. Remember H.E.L.P.

March and April brought forth many neighboring shows for us to go to. There were The Showcase, at Perry Iowa, Central Nebraska Rock Show at Hastings, Lincoln Hobby and City Recreation at the fairgrounds and The Lincoln Air Base Hobby Show which all seemed to have success in their shows. Many of you club members participated in these shows, bringing forth your personal collections to add to their displays.

Your Vice President will conduct your coming meeting, as I will not be with you. You will have an interesting program. Everyone has wished sometime in his life to visit Hawaii and this is the next best thing to it.

Thomas Simmons
President



SATURDAY - APRIL 25, 1964

Regular meeting - 7:30 p.m.

Program - Dr. and Mrs. F. S. Lange will be the guest speakers for the evening. They will speak and show slides on their trip to Hawaii.

Study - Fluorite. (See following page for details)

Roberts Dairy Party Room
211 South 20th Street

* * *

REFRESHMENT COMMITTEE

Mirian Forbes

Mr. & Mrs. Jay Hockensmith

Mr. & Mrs. Virgil Carveth

Dr. & Mrs F. S. Lange

* * *

FIELD TRIP #1

Fullerton, Nebr. - May 3rd, 1964 - Gravel Pit - Pit opens 9 a.m. to 4:30 p.m. Meet at the pit. You will need to bring drinking water and sack lunch. Also needed is a pail to wash your rocks in. Mr. Cecil Drew is owner of the pit and the turn off to pit is 100 feet this side of the Loup River. Do not cross the Loup River unless you wish to go into the town of Fullerton. Look for the signs marked "ROCK HUNT".

FIELD TRIP # 2

HOLMSVILLE, NEBR. - May 24th, 1964 - Quarry - Pit will be open at 10:00 a.m. to 4 p.m. Details for the trip in next months bulletin.

* * *

PEBBLE PUPS

How did your crystals grow? Will they be ready to bring to the May meeting? There will be a case for you to display them in with your name. If you have been having any problems please check with Mr. Gene Eno. We feel sure he can solve your problem for you or at least he will try.

MINERAL OF THE MONTH
STUDY AID FEATURE

It is not the intention of the staff that any of us qualify as experts. We simply want to talk and learn more about our hobby by discussing and sharing views on the various minerals of interest. We feel that we can increase our knowledge by seeing what others do and know. This outline is simply to stimulate your thoughts and remind you to bring whatever you have to share with the rest of us.

In fact, we would appreciate helpful suggestions to improve this feature. Please contact your assistant editor Phyllis Parks.

This month we have picked:

"FLUORITE"

Characteristics:

1. Calcium Fluoride (CaF_2)
2. #4 on Mohs' scale
3. Most commonly in cubes, sometimes octohedrons
4. Colorless, black, white, brown but most commonly violet, light green, yellow or pink
5. Brittle, transparent to translucent, often fluorescent
6. Melts at low temperature

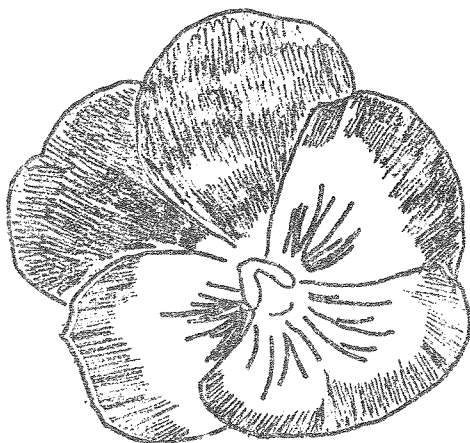
Uses:

1. Source of fluorine for hydrofluoric acid
2. As a flux in steel industry
3. In refining aluminum
4. In making high test gasoline-Freon
5. As a beautiful specimen by mineral collectors

Interesting facts:

Again we hope you will see how many you can find and bring to the meeting.

* * *



USED MOTORS

LAPIDARY EQUIPMENT AND SUPPLIES

CHOICE SLABS

CABOCHONS

ROUGH CUTTING MATERIAL

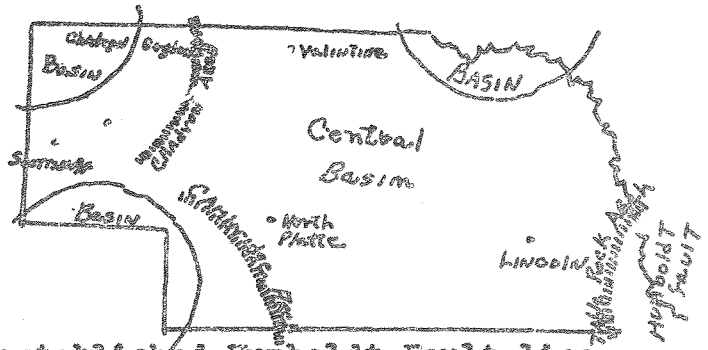
C L Y D E B E N H A M

1711 Harwood St.

423-4163

Mother Nature, being a true feminine and capricious dame, apparently shook up northwestern Nebraskans last month with an earth tremor.

This was most unusual, as the most likely spot in the state for citizens to be bounced about and terrorized by shivering earth is Nebraska's southeast corner. For it is there, angled pretty much in a north-south line, that the well-established Humboldt Fault lies.



State Geologist Eugene Reed describes the fault line as running just east of the Table Rock Arch, a subterranean structure topped by the communities of Table Rock, Pawnee City and Tecumseh. On the west side of the fault, granite--the earth's basement rock--comes within 500 feet of land surface, Reed reports. On the other side, you can drill 2,500 to 3,000 feet before granite is encountered.

Whether this fault extends to the Platte River Valley is speculative. Reed believes it might cross the Platte River in the vicinity of La Platte. Geologically, Nebraska's mid-section, from Kansas to South Dakota, lies in a great basin. Western boundaries of this mighty depression are the Chadron Arch (north) and Cambridge Arch (south). Beyond the Chadron Arch, geologists say rocks are highly fragmented. "There is no fault of any great magnitude that we have any knowledge of," says Reed.

If you are thinking about earthquakes, thoughts automatically turn to fault lines--or should. Being lines of weakness in the earth's crust, faults are most susceptible to movement in times of internal earth stress. This lesson, unknown to the wisest of men in centuries past, today is grade school material.

The western Nebraska tremor was reported on a rough line from Valentine, through Alliance, to the Scottsbluff vicinity. This would slice across the Central Nebraska Basin, under the Chadron Arch and into the northern reaches of the Denver-Julesburg Basin. Asked to explain such an occurrence, Reed said: "The possibility of tremors could be due to an adjustment in the deeper parts of the earth, but they are unusual and rare."

For that matter, the interior of the North American continent, even with its fault lines, isn't much disturbed by earthquakes. Reed suggests Nebraska is "fairly stable country." This doesn't mean the state geologist isn't intrigued about what western Nebraskans say transpired in the darkness of an early Saturday morning. "We are interested to see if we can make some geologic sense of it."

For some time local rockhounds have been familiar with the diamond shaped barite crystals found washed out of the clay banks west of Odell, Nebraska. The interesting thing about these "Odell Diamonds", as they have come to be called, is the fact that they were only found in a very limited area in one section, even though similar clay banks occur all over the area.

Barite in other forms has been found in Nebraska. Golden crystals occur in feathery clumps in limestone vugs in several quarries near Holmesville, Nebraska in Gage County. The Lisco, Nebraska area has a blue bladed variety and a white seedy variety occurs in limestone east of Bennet, Nebraska. But nowhere were found the diamond shaped crystals similar to those from Odell until recently.

Recently Dr. Warren F. Murdock, Chemistry professor from Union College, along with several of his rockhound students discovered similar crystals right under our noses. Not right in town but just a few miles south, the Schwark lime quarry north of Roca, Nebraska, to be exact. These crystals were found in cavities in the limestone walls of the quarry. The cavities were wholly or partially filled with clay. The crystals were found in this clay.

These crystals are generally smaller than those found at Odell. All of them I saw were $\frac{1}{4}$ inch or smaller. They are usually not as sharp but consist of at least two terminations on the edge. This gives the appearance of a notch completely around the edge of the flat diamond. There seem to be a larger number which are penetration twinned than at Odell.

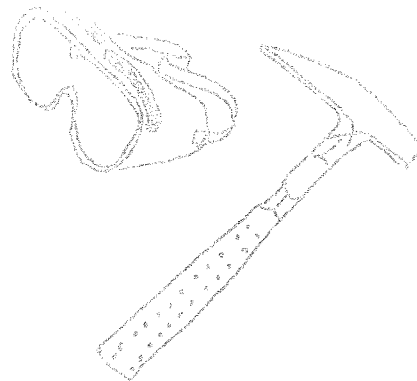
Incidentally this renews the hope several of us have of finding red celestite at Roca. Such a find was described in an article published in 1903 written by the late Dr. Erwin H. Barbour of the University of Nebraska. Substitute Strontium for Barium and you change barite to celestite.

Don't everyone rush to Roca for diamonds. Dr. Murdock says they obtained several jars full but a subsequent trip disclosed the fact that their collecting spot had disappeared into the crusher and out on some road or farmers field.

Well maybe they'll open up another spot at Roca, or sometime, someplace else, someone will discover an "Odell Diamond" not from Odell.

Gene Eno
Reporter

HAMMERS --Forged one piece head handle of the finest tool steel. Tempered. The head won't loosen or come off. Ideal for breaking rocks, cracking specimens, driving picks and wedges and any heavy pounding.



SAFETY GOGGLES-- New safety goggles are now in stock. Protect your eyes from flying chips and fragments in the field or in your workshop.

CHCOXENITE from BRAZIL

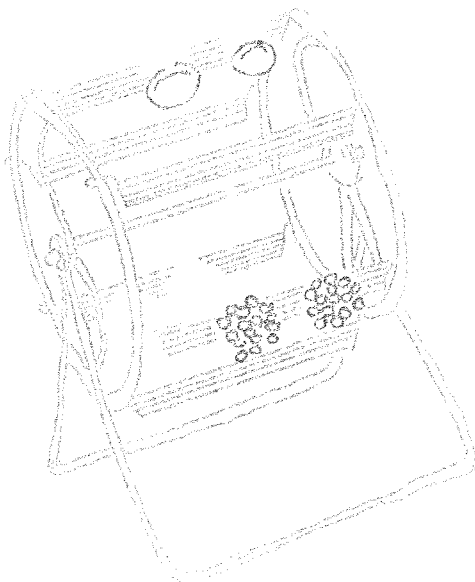
Mineral lovers will like some of this material for their collections. Citrine yellow, amethyst purple. Some of the purple has golden colored rutile in it. For Cabochons, there is multicolored variety. Try some for some unusual cabochons.

LAPIS LAZULI

In small pieces of rough. Excellent for small cabochons. This is what your looking for.

SPECIAL # 1

To the first 30 people to purchase at my shop. They may obtain a baroque bracelet mounting for only 25¢



SPECIAL # 2

Rotates like a ferris wheel and will hold up to 24 pairs of your earrings. No more searching for the other earring that matches the one you have in your hand and adds a decorative touch to those pieces you treasure. I am running it as a special. \$1.00 for each holder for a limited time only.

LINCOLN, GEM AND MINERAL CLUB, INC.FIELD TRIP RULES

1. Always obtain permission by writing or visiting intended field trip area.
2. Make use of the Golden Rule while on field trips.
3. Members on field trips are responsible to your field trip chairman and executive board.
4. Parents shall accompany and be responsible for their children on field trips.
5. Field trip chairman shall appoint necessary assistants when on collecting trips.
6. Any member guilty of misconduct may be requested to leave the collecting area by the Field Trip Chairman and shall appear before the executive board to answer charges.
7. All collecting will begin at a set time for the entire group.
8. Leave all gates as found.
9. Put out all fires and clean up area, leave no litter.
10. Destroy no property.
11. Stay away from machinery.
12. Avoid any unnecessary risks.
13. Safety glasses and proper shoes should be worn.
14. Watch out for each other while collecting--look above and below.
15. Drive safely to and from. We've never had a serious accident yet; don't break our record.

These rules were adopted by the members of Lincoln Gem and Mineral Club, Inc. at the March 28th, 1964 meeting.

* * *

MUSEUM PUBLICATION AVAILABLE

Those who wish may get their name on the permanent mailing list to receive the Museum Notes published by the University of Nebraska Museum. All you have to do is to mail them your name and address requesting your name be added to the list.

I was told a new dinosaur had been assembled at Morrill Hall and as I climbed the stairway, I had no idea of the huge structure and fierce past my date had.

Standing there with this 18 foot high and 34 foot long dinosaur skeleton grinning at me hungrily with jaws like a crocodile, full of sharp teeth, I could not help remarking to Dr. Lloyd Tanner, Vertebrate Paleontologist of the University of Nebraska, "I am sure glad I wasn't living 140 million years ago when this thing was roaming around looking for his dinner."



We were looking at one of the new displays at Morrill Hall made possible by funds provided by Mr. & Mrs. Walter Behlen of Columbus, Nebraska. It is the only complete skeleton of an ALLOSAURUS, a fierce meat-eating dinosaur that lived between Chicago and the West Coast.

Allosaurus fed on other giant dinosaurs. Because of his great size he could not stand too much exertion but when he came bounding across the green land looking for his dinner none of the other dinosaurs were safe. He ran on strong, heavy hind legs and balanced himself on his tail. Two small arms had heavy, armored claws for hands and his head was very impressive as his jaws were full of big sharp teeth.

Collecting and mounting the allosaurus was quite a job. He was found in a very hard gray matrix and it was painstaking labor to remove each bone so it could be fitted together and mounted. The University of Nebraska hopes that someday they can remove him from his present home on the second floor Gallery "A" into a hall of dinosaurs. This is their plan when funds become available in the future.

As Dr. Tanner closed the door and put the key in the lock, the past was closed behind us. ALLOSAURUS doesn't seem so big looking back through the door as he does when you're standing beside him.

Next time you are near Morrill Hall, drop in to see Allosaurus. He has his own special room on the floor above Elephant Hall where you can look through the door and view him in all his fierceness.

Velma Bloyd.

ROCKY NUGGETS

Mr. & Mrs. Wm. Holdorf and their children spent the spring vacation hunting the elusive fortification agate, Fairburn. They found several small ones and viewed large ones in a local filling station. After seeing the small Fairburns they found, I'd say they had some beauties.

Dick Hornung has not been rock hunting but has been busy building a rock buggy to hunt in those hard to travel areas. He will have a trial run in a week.

Tod Ashmun spent his spring vacation at Reed, Missouri with his grandfather who has a quarry which at one time produced Galena. Todd looked but did not find any Galena.

Fred Gudtner was in Florida. On his way home he stopped at Mt. Ida, Arkansas. Those lovely Quartz crystals at our last meeting were some of the materials he brought back with him.

The Clarys visited Glenn Hawkins at Marysville, Kansas. Since Mr. Clarey started cutting spheres after moving to Lincoln last fall, he really enjoyed seeing the different kinds of material which Mr. Hawkins used in his spheres.

Floyd Olson and Art Bloyd took off one afternoon and fossil hunted at Weeping Water, Nebr. They brought back a lot of horn coral and some small fossils that sent them to their research books.

Dorothy Engelhart
Reporter

For new and exciting cutting pleasure, try
Opals. They are easy to cut and offer never
ending varieties of colors and patterns. You will be fascinated
by these wonderful gems. Bought direct from the mines. Andamooka
and coober pedy opals. Cut small to large cabochons out of these
flashy pieces. Order some now. We have on hand \$1200 worth of
opal. Buy before the price goes up as the next order will be higher

IN STOCK

GEMCO and SLIK TUMBLERS

MACHINERY

ASSORTED SLABS

COMPLETE STOCK OF COMMERCIAL MOUNTINGS

Phone 466-6204

2941 North 65 St.

SATISFIED CUSTOMERS ARE OUR BEST ADVERTISEMENT



Cabochon Clamps

The four bear that really work for you, are made of light weight aluminum. They will securely hold your cabochons from 8 to 40 millimeters without the aid of screws, thumb nuts or tightners of any kind. They are used by the professionals and are now available for the first time to the rock hobbist. BEAR HUG clamps make your cabochon cutting easy. They will hold ovals, squares, tear drop or free forms while you grind, sand and buff. Get some today while we still have them in stock.

CONETO PICTURE AGATE -- A marvelous agate in nodule form. They cut and polish into marvelous beauty. Many of them cut into pictures of scenic extravaganzas. All nodules will cut into beautiful agate of various colors and design. It will take a glass like polish.

AZTEC MIRACLE STONE -- It is hard and decidedly colorful and it will take a high glass like polish with ease. It is not an agate, but the material that the Aztecs used to make their idols from thousands of years ago.

DURANGO PAISLEY AGATE
GONETO RED & GOLD MOSS
DURANGO CURLY QUE
GONENTO BLUE DENTRITE

These materials are of a new discovery location. All are top grade material and of good cutting size. They are fine Mexican agate in beautiful colors.

HOURS:

Open every day till 10:00 p. m.

1964 MIDWEST FEDERATION CONVENTION
and ROCK & GEM FESTIVAL

LOCATION -- L. C. Walker Sports Arena, at the corner of Western Avenue and Fourth St., in downtown Muskegon, Michigan.

PARKING -- Unlimited parking next to Arena.

ACCOMODATIONS -- Within a few miles of the convention site, there are 43 motel units, 373 hotel units, 510 trailer spaces in Muskegon State Park and Pioneer Park, plus six other parks nearby with space.

EATING FACILITIES -- Light lunches available at show area, and many fine restaurants within walking distance. Our accomodation chairman will be glad to help you.

FIELD TRIPS -- There will be no scheduled field trips, but maps will be available showing all field trip locations in the state of Michigan. Septaria may be found at Glenn, to the south of us, Petoskeystones in the Traverse Bay area, north of us, fossil locations at Grand Ledge, to our east, and a variety of materials at nearby gravel pits.

ADMISSION AND REGISTRATION -- Show admission is 75¢ per day, with children under 12 admitted for 25¢. The \$3.00 registration includes a 4-day pass, program book and badge, while the \$2.00 is for 2 days and the \$1.00 for one day, plus program book and identification badge. Tickets and advance registration may be obtained from:
Mr. Gerald Colburn, 3534 Sternberg Rd., Fruitport, Michigan.

SHOW HOURS -- Ribbon ceremonies for grand opening at 10:00 A.M. Thursday, July 23. Daily hours on Thursday, Friday and Saturday will be from 10:00 A.M. to 10:00 P.M., and will open at 10:00 A.M. Sunday, with the final closing at 6:00 P.M. Sunday evening.

BUSINESS MEETINGS -- Official directors meeting will open with a breakfast at the YWCA on Friday, July 24, 1964 at 8:00 A.M.

DEALERS BREAKFAST -- Buffet style at Masonic Temple, Friday, July 24th at 7:30 A.M. A trophy will be awarded for the best dealers booth. Cost of breakfast, \$1.30.

ROCKHOUNDS PERCH DINNER -- Friday, July 24, 6:00 P.M., Shurfine Auditorium. \$2.25 per ticket.

EDITORS BREAKFAST -- Saturday, July 25, 7:30 A.M. Trophy awarded. Panel show. Price \$1.30.

MIDWEST COUNCIL MEETING -- Saturday, July 25, at 9:00 A.M. at YWCA.

MIDWEST BANQUET -- A fine dinner, family style, a souvenir that you won't want to miss, a delightful master of ceremonies, awarding of trophies, and a fine speaker. Reserve your ticket early, as the 500 will go fast. This is a bargain at \$3.25.

1964 MIDWEST FEDERATION CONVENTION
(continued)

COMPETITIVE DISPLAYS -- American Federation rules will be used and trophies will be awarded in major divisions as well as three ribbons. A trophy will also be given in the Junior division. Ribbons will be given to all who display, whether competitive or not. We hope you will furnish your own case if you can, but we will have 150 24" x 48" cases, 4" deep in front and 7" deep in back, on a first come basis. Write for application to Russell Greer, 1554 Pine St., Muskegon, Michigan. Deadline for entrees is June 15, 1964.

NON-COMPETITIVE DISPLAYS -- Non-competitive displays, Club and individual. For information and plans write:
Mrs. Elinor Bragg, 2471 Miner, Muskegon, Michigan.

SPECIAL AND CLUB DISPLAYS -- We welcome and encourage all displays. Please contact: Mrs. Ted Sowers, 5174 Onsikamme St., Montague, Michigan.

OLD TIMERS MEETING -- To be announced at show.

ROLLING ROCK CLUB MEETING -- To be announced at show.

SILENT AUCTION -- These will be held each day of the show. We will be grateful for all contributions for this event.

SWAPPING -- Continuous swapping in a controlled area inside building will be held. No selling by individuals other than dealers will be allowed in building or on grounds, and any person caught will be barred from the show. Bring your swapping material and have fun.

DEMONSTRATIONS -- Faceting by top Midwest craftsmen, micromount displays, sawing, cabochon making and a host of other demonstrations.

SEE YOU AT THE SHOW, JULY 23-26, 1964

* * *

ADDITIONS FOR WHO'S WHO:

*KENNETH EVERETT
2515 No. Cotner
466 6194

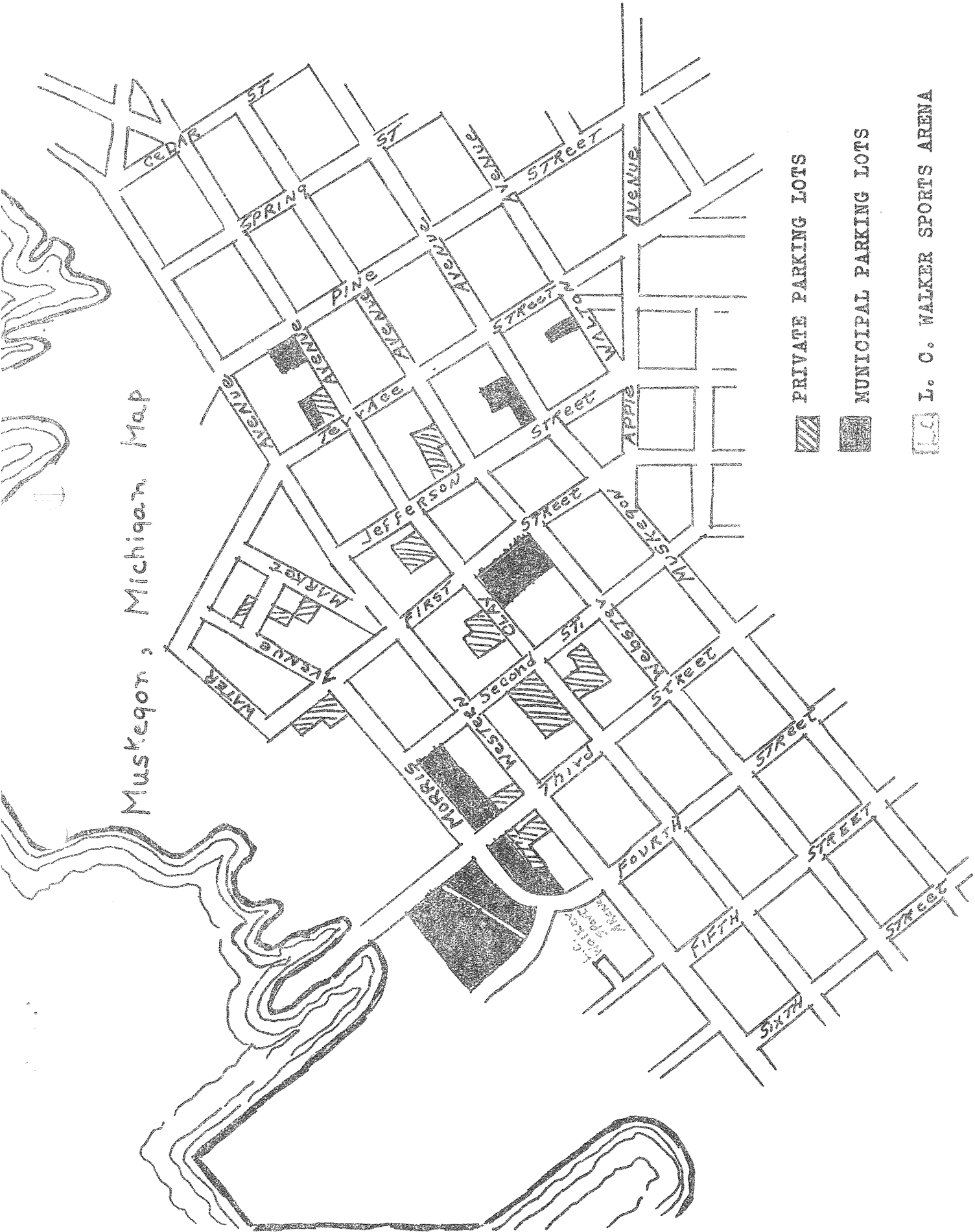
CHARLES L. MESSENGER
3730 Normal Blvd.
488 5918

JAMES HOSIC
1515 No. 11th St.

CORRECTION:

Jay Hockenamith's adress to 6810 Morrill

Muskegon, Michigan Map



PRIVATE PARKING LOTS

MUNICIPAL PARKING LOTS

L.C. WALKER SPORTS ARENA

THE " LETTER-A-MONTH"

-by Fred Andersen

MIDWEST FEDERATION CONVENTION

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 23-24-25-26, 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 specimen, lapidary art, faceting, jewelry, as well as the other phases of our hobby.

Their 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 well deserved 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 can 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!

Fred Andersen, President
Muskegon County Rock and
Mineral Association.

How about using Petrified Angle worms to catch a fossil fish ?

FOSSILS AT FULLERTON

After last month's meeting, Dr. Lloyd Tanner, in a discussion with several members of the club, stated that Rockhounds can be of service to him and his colleagues at the University. There are several parts of the state where they would like to secure more data concerning fossils found. Any fossil bone found is of interest to him if the location of the find is known. If possible its location in the strata of rock or earth is desirable.

Many of us pay little attention to bone fragments unless they look like cutting material. Even if it is a keeper Dr. Tanner states they would like to examine it and make note of it for his records, then you may have it back for your collection.

The Fullerton area where we are taking our first field trip is an area of particular interest. Seems the Museum has very little information about fossils in this area. Those going on the trip keep your eyes open.

Gene Eno
Reporter

* * *

ANNUAL MICHIGAN ROCK SWAP

Word has come that the State Line Gem and Mineral Society will sponsor their annual Michigan Rock Swap on June 6th and 7th at Frontier City, Onsted, Michigan.

There will be an auction, entertainment...square dance, bonfire, crackerbarrel session, choral group...and plenty of things to keep the young busy...rides, slides, etc. at Frontier City.

More than 650 rockhounds attended the 1963 session and it is hoped more will avail themselves of this event in 1964.

American Federation
Bulletin

* * *

MINERAL EXCHANGE BULLETIN

You are reminded that the Midwest Exchange Bulletin is published by Mr. R. K. Lampe, 1175 Glen Oak Street, Dubuque, Iowa.

This is a Midwest function and if you would like to subscribe to this publication, write to Mr. Lampe.

American Federation
Bulletin