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THUMBNAİL SKETCH OF
JOSEPH W. ZALUSKY
(Our Treasurer)

THE BULLETIN BOARD

CROSSWORD PUZZLE

THE GEOLOGIC COLUMN

ARTICLE OF THE MONTH
SYNTHETIC SAPPHIRES
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GEOLOGICAL SOCIETY OF MINNESOTA

831 SECOND AVE. SO.
MINNEAPOLIS, MINN.

The Geological Society of Minnesota is devoted to the study of geology and mineralogy for their cultural value.

OFFICERS

Charles H. Preston, President	Mabel Williams, Director
Charles B. Howard, Vice President	Leone Patricia Knox, Director
Loretta E. Koppen, Secretary	Alger R. Syme, Director
Joseph W. Zalusky, Treasurer	Edward P. Burch, Counselor

PAST PRESIDENTS

Edward P. Burch
Junior F. Hayden
Alger R. Syme

Our Society meets every Monday evening, not a holiday, in the large auditorium in the Museum, on the 4th floor of the Public Library at Hennepin Avenue and 10th Street, Minneapolis, Minnesota, at 7:30 P. M., from October to May. From May until October, we endeavor to have a field trip each week (when gasoline rationing doesn't interfere). Visitors are very welcome. Dues for those residing in Hennepin and Ramsey Counties are \$3.00 annually, and \$1.00 additional for your wife or husband, or dependent family members, and for those residing elsewhere are \$1.00 per person.

We will all no doubt agree that one of the most colorful characters in our Society is our faithful and very genial Treasurer, JOSEPH W. ZALUSKY, familiarly known to many of us as, and affectionately called, "Joe". Although he is so well known to us that a "Thumbnail Sketch" of him seems almost superfluous, we will try to tell you some things about him you didn't know before.

He was born and has resided all his life in Minneapolis, with the exception of brief periods hereafter mentioned. He says he was born "when very, very young". He attended grade school in Minneapolis and graduated from South High School, where he distinguished himself in athletics, principally football and baseball. He was coach and manager of the baseball team and throughout his life, has maintained his interest in sports in general, but particularly in baseball. After graduating from high school, he attended Knox College at Galesburg, Illinois, where he again played on both the football and baseball teams. In 1902, his team, playing against Notre Dame won the Western College Championship. His prowess was further exemplified by his making the longest run ever made on a football field. This occurred at Northwestern University at Evanston, Illinois, when Joe carried the ball for 103 yards. At that time, football fields were 110 yards long.

Athletics still beckoned him to come their way, and he left Knox College to do professional coaching. He coached the Penn College football team at Oskaloosa, Iowa, for 4 years, and had a very successful record. During the summers, he played baseball and managed baseball teams throughout Iowa and Nebraska.

For some unaccountable reason, he then took up a Government claim at Lemmon, South Dakota, finally proved upon the claim and still owns the land. While at Lemmon, he accepted employment with the Engineering Department of the Milwaukee Railroad Company, and worked for them for a period of 6 years, during which time he made hundreds of maps and plats, besides playing a great deal of baseball.

While living in South Dakota, he met Mrs. Zalusky, who was a native of Yankton, South Dakota. Mrs. Zalusky attended Yankton College, and taught school at Standing Rock Indian Reservation, which reservation is famous as the home of Sitting Bull, who was born, lived and died on this reservation. Mrs. Zalusky also filed on a Government Homestead, and proved it up. The Zaluskys were married in 1912, and lived happily ever afterwards. Mrs. Zalusky, as we all know, is an accomplished pianist, and she, with Joe is also interested in geology. The Zaluskys have two children, a daughter, Ruth, who is married. She and a grandchild live with the Zaluskys while her husband is in the Army. Their son, Jim Zalusky, is a Sergeant in the Signal Corps, and is stationed at Ft. Dix, Trenton, New Jersey. Both children graduated from Washburn High School, and attended the University of Minnesota.

Joe was a professional baseball umpire for more than 12 years, and was one of the originators of the Northwest Umpires Association. He was also President for 12 consecutive years of the Old-Time Baseball Players' Association, affectionately called "The Old Guards of the Diamond". He is a Director and one of the founders of the Hennepin County Historical Society, and has been very active in their work. He is also a Director of the Pioneer Cemetery Association, which association rehabilitated the old cemetery at Lake Street and Cedar. He helped raise the necessary funds to carry on the work and to preserve the cemetery.

He says that in spite of his interest in Geology, his principal interest is in history. But history, strangely enough, lead him into Geology, because as he inquired into the history of people and places and became familiar with them, he began to wonder somewhat about what might be under the surface, as well as on the surface, and started the study of Geology to find out. He credits Mr. Burch with first getting him actively interested.

Joe left South Dakota and returned to Minneapolis in 1913, and for 7 years was employed in the Drafting Department of the Flour City Ornamental Works. When he left their employ, he was Assistant Superintendent of their plant. He then took Civil Service Examinations, and was rewarded by a position with the City Planning Commission, by whom he has been employed for the last 21 years. Their work has been principally to lay out streets, prescribe zoning areas, locate city buildings. Currently, they have been very busy working on Post War Problems.

We cannot close this sketch without paying tribute to Joe's exceptional artistic ability and skill in making maps and charts. In connection with Geology and Mineralogy, he has made some of the most comprehensive and beautiful charts and maps imaginable. His large map depicting Earth History throughout its ages is a masterpiece, and we are still hoping that he will make it available to our members. His time clock arrangement for mineral identification is likewise unusual, and one which will command your attention. In addition to these original productions, he has very frequently assisted other members in making maps for use in their lectures. He has a special room in the basement, which is completely filled, principally with books on history, but overcrowded in fact with some on the subject of Geology, and not a few rock and fossil specimens. Joe, incidentally, has many unusual and rare books and manuscripts bearing upon local history, and is an authority on the subject.

Both Mr. & Mrs. Zalusky are extremely friendly and exceptionally pleasant. To know them is to like them, and we all do appreciate them very much.

AES

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BULLETIN BOARD

APRIL 3rd: Rock Identification, Geology Building, University of Minnesota, preceded by a short talk by Professor Gruner.

APRIL 10th: Rock Identification, Geology Building, University of Minnesota, preceded by a short talk by Professor Schwartz.

APRIL 17th: Rock Identification, usual place in Library.

APRIL 24th: Mr. Burch on Mexico. Last lecture of the season.

APRIL 30th: Field Trip, St. Paul Brickyard. Details to be announced later.

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Q U A R T Z

PROFESSOR, observing student in Mineralogy, looking wistfully out of window. "Mr. Dummkopf, of what is quartz composed?"

DUMMKOPF, coming suddenly back to realities, "Fints, Sir."

Horizontal

1. Human race
10. Time
12. Ice
13. Precipice
16. An element
17. Large body of water
19. A human
21. To look
22. Gold mine equipment
24. Girl's nickname
25. Behold
26. A division of Tertiary time
28. One having a certain contagious disease - obsolete
29. Crystal form of water
31. At a distance
32. Chemical symbol for Nitrogen
33. Prefix
34. Conjunction
35. Name of a star
36. A prescribed path
38. On account of (abbrev.)
40. A preposition
41. Abbrev. for protozoa
42. Chemical symbol for Carbon
43. New Mexico (abbrev.)
44. A form of ice
46. Chemical symbol for most widely distributed element
47. Small fragment of rock
49. A substance enveloping earth
51. An exclamation
52. Name of a glacial drift
55. Goddess of the watery deep
57. Form of verb to be
58. Tardy
59. A conjunction
60. Chemical symbol for Tellurium
62. Chemical symbol for Fluorine
63. Combustion
64. An island in the Mediterranean
66. River (Spanish)
68. Adverb
69. Chemical symbol for Hydrogen
70. A division of measurement
71. Prefix meaning recent

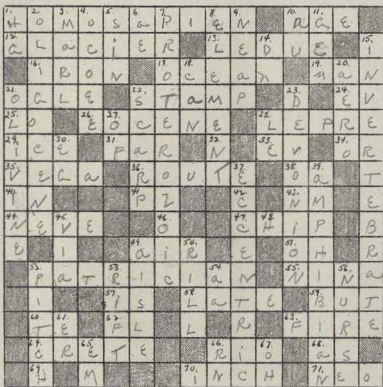
Vertical

1. Abbreviation for heliogram
2. A Tertiary period
3. A form of calcium carbonate
4. A thick series of sedimentary rocks in the southern Appalachians
5. To err
6. Abbreviation for Latin word meaning aged
7. A period of geologic time
8. A variety of matter
9. Low tide
10. Chemical symbol for Silver
11. A jewel
14. Abbreviation for Dr. of Neurology
15. Animal having no backbone
18. A container
20. Prefix meaning air
21. A mineral
22. Face of a steep slope
23. A geologic period
27. Preposition
28. French definite article
30. For example (abbrev.)
37. Peculiar
39. Animal living on land and in water
45. By way of
48. Chemical symbol for Hydrogen
49. Passageway in a church
50. A brook or stream
52. To plunge
53. To cleve or split, a fault
54. College degree
56. One who looks after sick or injured
61. Comparative ending
65. Type measure
66. Registered Nurse
67. Exclamation

SOMETHING

new!

MORE THAN TWO-THIRDS OF THE WORDS IN THIS CROSSWORD PUZZLE HAVE A DIRECT OR INDIRECT GEOLOGICAL SIGNIFICANCE. ANSWERS WILL BE PUBLISHED IN THE NEXT ISSUE.



NOTE: THIS CROSSWORD PUZZLE WAS MADE ESPECIALLY FOR THIS ISSUE OF THE BULLETIN BY MISS BID PETERSEN OF THE ADVERTISING DEPARTMENT OF THE MONTANA-DAKOTA UTILITIES CO. OUR THANKS TO HER!

IF YOU WISH TO HAVE THE ANSWERS TO THIS CROSSWORD PUZZLE BEFORE THE NEXT ISSUE OF THE BULLETIN, YOU MAY HAVE THE SAME UPON REQUEST.

We have columns of many sorts,--Ionic, Doric, Corinthian,--health columns, political columns, columns on domestic relations, and of course, our own columns by Cedric Adams and Brenda Ueland,--so why not a "Geologic Column? So as not to imitate Cedric too exactly, let us begin with "thoughts while lying awake at night".

Wonder why a person can walk and ride over the surface of the Earth so long and not become interested in the why and wherefore--,"Physical History" to you.

Although we understand the processes of erosion and how they work, we have difficulty comprehending its accumulated effects. For instance, we can hardly imagine how thousands of feet of hard granite can be worn away. Perhaps the following will help us to visualize it: When Cutzon Borglum was informed by the Geologists, that the Harney Peak Granite of the Black Hills was being eroded at the rate of 1/16th of an inch in 100 years, he immediately ordered the indentations of his figures on Mt. Rushmore increased by one inch, thus adding 1600 years to their life. The elevation of Harney Peak, highest point in the Black Hills, is approximately 7200 feet above sea level, (Mt. Rushmore is 6200 feet) and approximately 3500 feet above the level of the surrounding country. At that rate, the top of Harney Peak would be reduced to the level of the present plane of the surrounding country in 67,000,000 years, or much less than the life span of most Geologic Periods, and about equivalent to the duration of the Tertiary Period, which was rather a short period. Kind of startling, isn't it?--The same applies to the counterpart of erosion, i.e., deposition. Think of accumulating sediments to a vertical depth of 50,000 feet. Geology offers a challenge, even to our imaginations. Another thing we could never quite comprehend, no matter how much we study it, is why a given mineral will actually grow into a certain set pattern.--It's wonderful, isn't it?!

One remarkable thing about our Society is that we have never known anybody to refuse to do anything for the good of the Society. This, no doubt, accounts for our vigor, and, shall we say, healthy condition. Also, we often muse on what a fine representative group we have,--they represent so many varied interests, yet associate together in complete harmony--and then, too, isn't it remarkable how many husbands and wives are both interested in it.

Next time you take a train trip, try to see how much Geology you can read from the passing landscape. Recently, while traveling from Detroit to Cincinnati, we spent several hours trying to find the Southern Shoreline of Glacial Lake Maumee. We noticed every little ripple and fold in the land, expecting it to break into the hills, but can't say that we could identify any shoreline--. On the other hand, the Western Shoreline of Glacial Lake Agassiz, West of Fargo, is easily discernible from the car window of any Northern Pacific Train.

Have tried to implant an interest in Geology in each of our children, but am not so sure we have succeeded entirely--. Dr. Thiel gave us a thought the other day, --why don't science teachers in the secondary schools emphasize Geology as much as other nature subjects, such as birds and flowers?--Why hasn't our boy Jim sent us some coral sand from New Guinea?--No doubt he is too busy fighting the War.--Believe we could have an average attendance of 200 at our meetings.--Just a matter of advertising and organization. How nice it would be to be able to have a real field trip again, say to Baraboo, Wisconsin. Surely enjoyed that one.

The ancients found fossils on the tops of the hills and mountains and recognized them as such, but thought the Flood had left them there.--Did you know that the science of Geology is not much over 100 years old?--Why not have a "Question Box"? Who'll start it off?

Hope Mr. and Mrs. Burch are having a "Bang-up" time in Mexico. Also, members Frank Reese and wife. All expect to see "Paricutin".

Dr. Thiel has talked an average of 75 minutes for each of 18 lectures, a grand total of 22½ hours. At the rate of 150 words per minute, a fair rate for public speakers, he has given us 202,500 words. WOW! Next time they have a filibuster in Washington, they should send for him.

Elmer Brown ought to be cited for valor, or something, for so faithfully looking after the operation of the lantern during the year,--a job well done.

BANG! WHAM! What was that noise? Oh, just daybreak--Didn't know I'd fallen asleep.--Just dreaming, I guess.

ARS.

"WATER, WATER, EVERYWHERE - - "

Water, including snow and ice, is one of the oxides, and is one of the most common substances.

Above 0° C., water is a liquid, hence, amorphous, that is, without crystal form. It is almost colorless, but, in large quantities and when pure, it has a bluish tinge. Specific gravity, when pure, at 4 C. and 760 mm. barometric pressure is 1; that of ocean water may be as high as 1.028. When pure, it is without taste or odor.

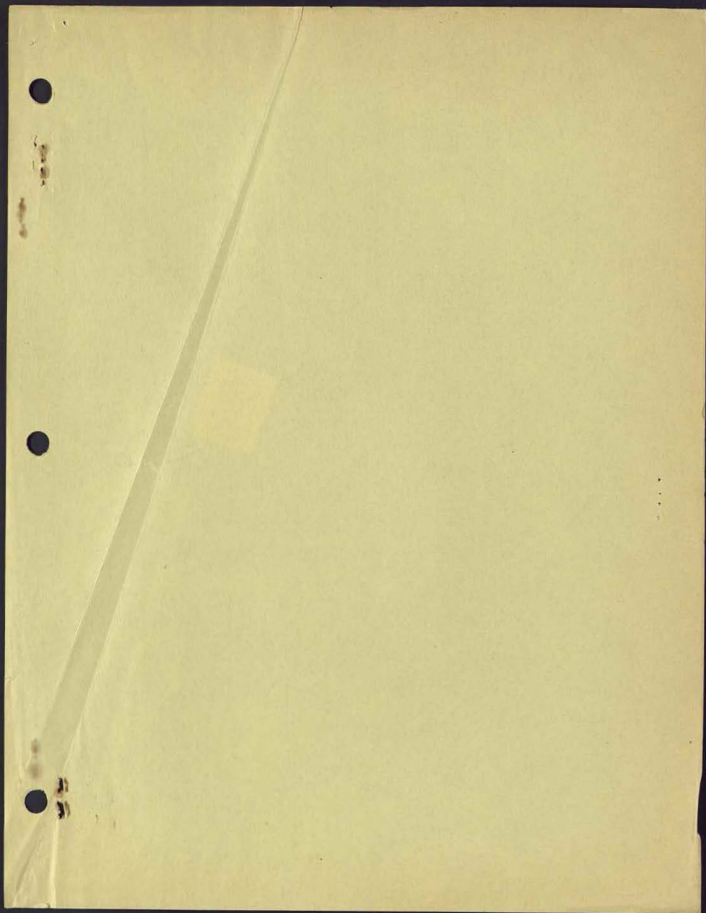
Water occurs very widely distributed in nature and is an important agency in the disintegration, decomposition, transportation, and formation of minerals. Nearly all minerals are more or less soluble in water, especially if it contains carbon dioxide, humus acid, hydrochloric acid, or oxygen in solution. The ocean water contains about 3.4 per cent of solid matter in solution. Over 30 elements are found in ocean water, and hence, water is frequently called the universal solvent. When water freezes, it expands, the increase in volume being about 9 to 10 per cent and the pressure exerted about 138 tons per square foot. Due to this enormous pressure, freezing water is a most important geological agency, causing the widening of cracks and crevices, thereby extending the zone of activity of water and oxygen and hastening weathering and disintegration.

Upon freezing, water forms snow or ice. Snow crystals are often very beautiful. They are tabular and hexagonal in outline and show great diversity in development. Lake or stream ice consists of crystals arranged in a definite manner, the c axes being perpendicular to the extent of the sheet of ice. In glacier ice, however, the ice particles do not possess a definite orientation.

From "Mineralogy" by Kraus,
Bunt, and Ramsdell.

APPRECIATION

LINDE AIR PRODUCTS COMPANY very generously furnished the printed "Article of the Month" in this issue. Many thanks to "Linde".



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