

Correspondence - N. 1929-1958

Thwaites, F. T. (Fredrik Turville), 1883-1961 [s.l.]: [s.n.], 1929-1958

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Nov. 20, 1935

Mr. Joe A. Mbert, Norwalk, "isconsin

Dear Sir:

Reply to yours of Nov. 1 to the Experiment Station was delayed while the lotter was being sent to me.

I made as careful an and ysis of the sample which you sent as my apparatus will permit. So far as I could determine the rock consists of about 25 percent calcium carbonate. The chip seems to be fairly pure calcium carbonate or limestone. The fine material seems to be fine quartz silt.

Having no information on the location of the well I can only surmise that it is on one of the ridges and that the rock is from the so-called "micaceous shale" although I could find no mica.

I would like to know more about the well and just what you want to know about the natorial and with that end an enclosing a stamped and addressed envelope. If you can give me more information please tell me the location so I can look it up on the map.

Very truly yours,

F. T. Tiwaites, in charge of well records, Wisconsin Goological Survey

Nellsvule. The JERRY DONOHUE ENGINEERING CO. .606-608-610. CONSULTING & SUPERVISING SHEBOYGAN ENGINEERS N.EIGHTH-ST. September 13, 1935 Mr. F. T. Thwaites Department of Geology University of Wisconsin Niellsville Water Supply Madison. Wisconsin re: Dear Mr. Thwaites: Your letter of September 10th at hand. Thank you for the information as it is just what I wanted to know. If, after our preliminary investigation, we believe it desirable to go into the ground water supply, we will take the matter up with Mr. Bean as you suggest. Very truly yours, JERRY DONOHUE ENGINEERING CO. JD:GD

Northwestern Savings Building & Loan Association

GROUND FLOOR, WASHINGTON BUILDING

PHONE: BADGER 5241

MADISON, WISCONSIN

ACCOUNTS ARE NOW INSURED UP TO \$5,000.00 PER PERSON IN THE

FEDERAL SAVINGS & LOAN INSURANCE CORPORATION

ALBERT G. MICHELSON PRESIDENT J. EDWARD USHER VICE-PRESIDENT MATTHEW J. ESSER TREASURER ALBERT G. MICHELSON ATTORNEY

JOHN W. HALEY SECRETAR HARRY B. HALEY ASSISTANT SECRETARY

June 28, 1935

DIRECTORS

REGINA E. GROVES LEO T. CROWLEY VOLNEY G. BARNES MATTHEW J. ESSER L. E. A. KELSO J. EDWARD USHER ALBERT G. MICHELSON DR. JAMES P. DEAN HARRY B. HALEY

Dear Shareholder:

This is to advise you that the Northwestern has declared a dividend on monthly savings, as of June 30, 1935, at the annual rate of 5%. This is the 90th consecutive semi-annual dividend declared, and is the second increase in the last two years. We also wish to remind you that your account up \$5,000.00 is insured in the Federal Savings & Loan Insurance Corporation. Washington, D. C.

Investors' funds are invested only in first mortgages on Madison homes, in accordance with the strict laws of the State Banking Department. Speculative securities have no place in our investments. The Northwestern has never been allowed to invest in stocks of any kind. Your certificate, therefore, represents the best and safest investment one can make.

All deposits made in the Northwestern Savings Building & Loan Association are legal investment for Trust funds in the State of Wisconsin.

Your officers and directors feel that the return to normalcy is well on the way, our total footings showing more than a ten per cent increase in the last four months.

Will you mail or bring in your book so that we can credit your account with the proper dividends?

Sincerely yours,

NORTHWESTERN SAVINGS BUILDING & LOAN ASSOC.

Mr. F. H. Rosebush, Nekossa-Edwards Peper Co., Port Edwards, Wisconsin

Deer Sirt

I expect to bring my goology class to visit the rock exposures at the south and of your Nekoosa dam on Saturday, Oct. 14 and would greatly approxiate renewal of your kind permission of last year to make this visit.

It is understood that all of the party enter your property at their own risk.

Very truly yours,

P. T. Threites, Lecturer in Goology

PORTEDWARDS, WISCONSIN,

October 17, 1932

Mr. F. T. Thwaites, Lecturer in Geology University of Wisconsin Madison, Wisconsin

Dear Sir:

We have your letter of October 14th asking permission to inspect the rock exposures at the south end of the dam opposite the plant.

we should be perfectly willing to give you the privilege under the circumstances expressed in your letter.

Yours very truly,

MEKOOSA EDWARDS PAPER COMPANY

F. H. Rosebush

Department of Industrial Relations

FHR: MW

Deer Miss Nunns:

put into my mothers house before she returns. We think it would be unsafe for her to try to live in a house which has not been dried out by furnace heat before she returns. The old furnace is entirely rusted out. There are big holes through which they were getting flue gas all the time. I have a very low price on a new furnace and Peake is waiting to install it at a very reasonable figure. We understand they intend to put in oil but if times pick up at all fuel oil will seen be cut of the question. It is a true depression froduct and so much would be diverted to make gasoline that the price could very quickly become prohibitive. Knowing this, an oil burner at the present time is a risky thing to spend money on and the furnace must be large enough to heat the house with coal. Most important of all IT MUST BE GAS TIGHT for oil funes are very bad to breathe.

They have also forbidden us to have the house cleaned.

We will greatly appreciate anything you can do to conteract these dangerous plans.

Hope you are hiving a pleasant trip home.

Congress of the United States

House of Representatives

Washington, D. C.

January 23, 1932

Mr. F. T. Thwaites R. 4 Madison, Wis.

Dear Sir:

Permit me to acknowledge the receipt of your letter of recent date requesting two governmental publications.

Under separate cover, I take great pleasure in sending you one copy of Geological Survey - Water-Supply, also a copy of Public Health Service Hygienic Laboratory Bulletin, which you have requested.

Very truly yours,

John Walson

R. F. D. 4, Madison, Wis., Jan. 27, 1933

Hon. John M. Nelson, Mombor of Congress, House Office Bldg., Washington, D. C.

Dear Sir:

I wish to thank you for publications recently sent me.

However, there was an error in respect to the U. S. Geological Survey Water Supply Paper 640. I am returning herewith Paper 644 which was sent by mistake. Can you kindly make the exchange?

Very truly yours,

F. T. Thwaites

Jam. 18, 1933

R. F. D. 4, Madison, Wis., , noeled .M mlet names vgsod Jan. 18, 1933bling oblide canch

Dosr Mir:

Hon. John M. Nelson,
Member of Congress, level gainvalled and misde of all blow I
House Office Bldg.,
Washington, D. C. 6060 reget vloque-reteW, vevrue Levigoloeb . 8.

U. S. Public Health Service Hygienic Laboratory Bulleting TSpear Sirpleting TSpear

Could you please obtain for me the following Government publications:

U. S. Geological Survey Water-Supply Paper 640

U. S. Public Health Service Hygienic Laboratory Bulletin 147 (1927)

Very truly yours,

F. T. Thwaites

R. F. D. 4, Madison, Wis., Jan. 18, 1933

Congressman John M. Nelson, House Office Building; 81 .nst. Washington, D. C.

Dear Sir:

I would like to obtain the following Government publications; U. S. Geological Survey, Water-Supply Paper 640.0 .d .nodgaldasw

U. S. Public Health Service Hygienic Laboratory Bulletin 147, 1927

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U. S. Geological Survey Water-Supply Paper 640

U. S. Public Health Servicestigualist. Toracory Balletin 147 (1927)

Very truly yours,

T. T. Thwaites

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

PHILIP SCHUMACHER ANN ARBOR

HARRY H. WHITELEY DOWAGIAC

W. H. NEWETT

M. J. FOX IRON MOUNTAIN

PHILIP K. FLETCHER

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



LANSING

GEORGE R. HOGARTH, DIRECTOR December 7, 1932

DEPARTMENT OF CONSERVATION

FIELD ADMINISTRATION GENEVIEVE MCCANN CHIEF CLERK P. J. HOFFMASTER MARCUS SCHAAF FORESTER R. A. SMITH GEOLOGICAL SURVEY S. G. FONTANNA LANDS FRED A. WESTERMAN FISH & FISHERIES P. S. LOVEJOY GAME L. R. SCHOENMANN
LAND ECONOMIC SURVEY EDWARD A. HYER EDUCATION

H. R. SAYRE

Mr. F. T. Thwaites University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

Your letter of December 5th came yesterday and it was mighty kind of you to send us the complete blueprinted graphic log of the Menominee Light and Traction Company well and the Newaygo Oil and Gas Company - Bates #1.

In the past year we have tried to adopt, as uniformly as possible, what you suggest in the order of naming the kind of rocks, etc., when we prepared the records of recent wells. The samples have come in and we are glad to have them to complete our files for this well. We would very much appreciate having the samples from the Menominee well when you have the opportunity to send them. We shall be mighty glad to pay the express for this privilege.

It is interesting to learn that an oil test is underway in your vicinity and it seems like some of these operators will never learn, as long as funds can be procured for drilling. Here in Michigan, we have had more drilling this year than the year previous and the production of oil will go nearly two million barrels over the output for last year. A considerable amount of wildcatting is underway and a new discovery south of Mount Pleasant Pool will aid as an additional impetus for wells in that vicinity.

We are in about the same situation as you are and are awaiting with fear and trembling to see what the new administration will do to us. Meanwhile, we are continuing in an effort to give the right kind of geological service to the people of the State.

With kindest personal wishes, I am

Yours very truly R.B. Newcombe

GEOLOGICAL SURVEY DIVISION

Petroleum Geologist

Mr. R. B. Newcombe, State Geological Survey, Lansing, Hichigan

Dear Mr. Newcombe:

Enclosed please find blueprint log of No. 1 Bates, Newaygo Oil and Gas Go., also typewritten sample descriptions. You will note that the blueprint follows your log as far as it goes correcting my confusion of gypsum and anhydrite. In some samples we did not agree on color. I made insoluble residues of many samples and included this data. I shood some of the samples and the log to Prof. Schrok who is familiar with the Indiana Niagara and he thought that possibly I had placed the top too high. I am open to convicion on this point. I also changed the form of description to put the nouns first, a style that I like better. I try always to follow a definite rule in order of phenomena described, that is kind of rock, grain, color, other materials, hardness, stc. There may be some variations in places but I have found that such a habit saves unintentional ommissions.

I had the samples from 3900 to total depth shipped to you express collect as our funds are low. With them I included a few from above which were missing in your set. Please let me know if these arrive safely.

I just now recalled that I did not split samples from the Meneminee Light and Traction Co. well and also forget to send you a copy of the sample descriptions. I am sure, however, that you must have had a copy of the blueprint log although I cannot lay my hand on the copy of the letter which went with it. I rushed this log through last spring so as to be ready for them to use when shooting the well. To make sure am enclosing another copy for I found a pencih note by Mrs. Thwaites that she could not find the print after I left for New York. She had to send out the prints them as well as take care of Master Tommy who was then only 10 months old, so you can see that a slip might occur. If you desire a cut from these samples please advise me. Shooting increased the yield of this well nearly 50 percent.

I still seem to get a lot of samples in spite of the wellknown Depression. The last is an oil test only 10 miles north of this wellexplored spot! What long chances people will take!

We do not know just how badly the new administration will treat us but probably badly enough. Meantime we are trying to "carry on" and protend that we don't notice:

With best regards,

Sincerely,

Hon. John M. Nelson, Member of Congress, House Office Bldg., Washington, D. C.

Dear Sirt

I wish to thank you for the publications recently sent.

Could you kindly send me the following publications of the U. S. Geological Survey:

Professional Paper 166

173

11 174

Bulletin 835

Water Supply Paper 638

n 659-3

Very truly yours,

F. T. Thweites,

R. D. 4,

Medison, Wisconsin

Congress of the United States House of Representatives

Washington, D. C.

November 22, 1932

Mr. F. T. Thwaites, R. D. \$, Madison, Wisconsin.

My dear Mr. Thwaites;

This is to acknowledge receipt of your letter of November 14 in which you request certain Papers and Bulletins of the U; S. Geological Survey. Mr. Nelson takes pleasure in forwarding these to you under separate cover.

Luquica X Januadus.

Congress of the United States House of Representatives

Washington, D. C.

October 29, 1932

Mr. F. T. Thwaites, R. F.D. #4, Madison, Wisconsin.

My dear Mr. Thwaites:

In accordance with your recent request, Mr. Nelson takes pleasure in forwarding to you under separate cover Bulletin 798 and Professional Paper 162 of the U. S. Geological Survey.

The Congressman is always glad to be of assistance whenever possible.

Very truly yours, January.

Madison, Wis., 9ct. 27, 1932

Congressmen John M. Nelson, House Office Eldg., Washington, D. C.

Dear Siri

Gould you please precure for me the following publications of the United States Geological Survey?

Bulletin 798
Professional Paper 162
Sincerely,

F. T. Thwaites,

R. D. 4,

Madison, Wisconsin

Nekoosa, Wisconsin

Gentlemen:

On Saturday, Oct. 22 I desire to take my cleas to see the rock exposures at the south end of your dem opposite the plant. When I last passed that way I noted that this vicinity was posted with No Irrespassing signs. Hey we have permission to visit the locality with the understanding that we do so at our own risk? The place is of great interest to geologists.

Very truly yours,

F. T. Thraites, Lecturer in Geology

August 8, 1932

Nowton County Stone Co., Kontland, Indiana

Gentlemen:

Unfortunately I lost the card which was given me when at the quarry on June 28 to take the enclosed photographs. However, I trust the above address is enough.

the photographs can be identified from the enclosed lists. The letters and figuresrefer to exposure, filter, etc. and will not mean anything to you. Unfortunately I found afterward that the small camera had developed a light leak in the bellows which caused the light streak on the sides of some of the pictures. However, many are free from this and are, I think, very satisfactory. It was hard toget general views because of the smoke from the steam shovel. This seems to affect even the photo taken with the camera which was free from light leaks.

Please let me know if you receive the photographs.

I wish to thank you for your courtesy to me when at the quarry.

Very truly yours,

F. T. Thwaites

Newton County Stone Company

[UNINCORPORATED]

QUALITY FIRST



SERVICE ALWAYS

GEORGE H. HART, TREAS.. GEN. MGR. C. O. RIGGS, SUPERINTENDENT RUSSELL D. VIRGIN, SECRETARY

Crushed Stone
Agricultural Limestone
KENTLAND, INDIANA

Aug 10, 1932.

S, INDIANA

QUARRY THREE MILES
EAST OF KENTLAND ON THE
PENNSYLVANIA RAILROAD

Mr. F. T. Thwaites, School of Natural History, Quaker Bridge, N. Y.

Dear Mr. Thwaites;

We are in receipt of your letter with photos enclosed and wish to most sincerely thank you for your kindness in sending them to us. After going over them carefully, we pronounce them extra good. They will be placed in our files as records.

Again assuring you of our appreciation and trusting we may again see you here in the near future, we are

Very truly yours,

NEWTON COUNTY STONE CO

George H. Hart, Treas gen mgr.,

GHH-r

NEW MEXICO SCHOOL OF MINES

SOCORRO. N. M.

DEPARTMENT OF GEOLOGY STERLING B. TALMAGE CLAUDE E. NEEDHAM EVAN JUST

August 27, 1932

Prof. F. T. Thwaites Dept. of Geology University of Wisconsin Madison, Wis.

Dear Professor Thwaites:

Permit me to thank you for the blue print log of the city well at New Richmond, Wisconsin. I am very glad to have this additional information on the Cambrian and Ordovician rocks of the region.

Very truly yours,

C.E. Needham Assistant Professor. Mr. C. E. Needham, Socone, New Mexico.

Doar Sirt

I am inclosing a blue print log of the city well at New Richmond, Wisconsin and wish to thank you for the separate on the New Richmond sandstone which you recently sent me.

Yours very truly,

Geologist in charge of well records Wisconsin Geological Survey

AME

City of NEW RICHMOND

to

F. T. Thwaites, Dr. July 25, 1932

Preparation of tube of samples from city well\$10.0	0
Deduction for samples	5_
Balance	\$2.05

Transphryology, Apr.

Mr. Melvin Halvorson, Superintendent, Electric Light & Water Works Department, New Richmond, Wisconsin.

Dear Sir:

I am inclosing a blue print log of your new city well. The tube is being sent to you express collect.

Yours very truly,

Geologist in charge of well records Wisconsin Geological Survey

AMT

February 19, 1951.

Mr. R. B. Newcombe, State Geological Survey, Ann Arbor, Michigan.

Dear Mr. Newcombe:

I am inclosing the following:

Escanaba and Lake Superior Railroad well....Detailed record Escanaba and Lake Superior Railroad well....Blue print log Solvay Process Company, well No. 36......Detailed record Solvay Process Company, well No. 36......Blue print log Newago Gas and Oil Company - Bates #1.....Detailed record

Some of the correlations of the Wells well differ from those in your log.

I have never seen any more samples from Bates #1 of the Newago Gas and Oil Company.

Yours very truly,

FTT-T

Geologist in charge of well records

NATIONAL RESEARCH COUNCIL

Established in 1916 by the National Academy of Sciences under its Congressional Charter and organized with the cooperation of the National Scientific and Technical Societies of the United States

B & 21st Streets, Washington, D. C.

May 12, 1930

MEMORANDUM TO THOSE INTERESTED IN SEDIMENTATION

After many unexpected delays in printing and proof-reading, the 1928-1929 report of the COMMITTEE ON SEDIMENTATION of this Division is now ready for distribution. To pay for the cost of printing the report, it will be sold at \$1.00 per copy. For many years the mimeographed reports of this Committee have been sent gratis to those who have had some share in contributing information for the reports and to others believed to be interested in the subject, a total of nearly five hundred. The printed report is preferable in many respects to the mimeographed report, but it will not be possible for the Division to continue having the report published in printed form unless those interested in it are willing to purchase the report. A postal card is enclosed for your convenience in ordering, and it will be appreciated if you will pass this information along to others who might be glad to know of the issuance of the report. The subject is certainly one of growing interest throughout the world for the first edition of the Treatise on Sedimentation is exhausted, and, at the insistent demand of the printers. Professor Twenhofel and members of the Committee are at work preparing a revised edition of the Treatise which will probably be ready within a year or two.

The annual report of the Committee for 1928-1929, consisting of 19 separate reports totalling 122 pages, contains records of valuable original research by various investigators, and includes several useful bibliographic lists. Following is the table of contents:

(1) Introduction, W. H. Twenhofel; (2) The intertidal zone of the Wash, England, E. M. Kindle; (3) Research on sediments by British geologists for the year 1928, Henry B. Milner; (4) Bibliography of research on sediments by European geologists in 1927 and in part in 1928, Edouard Paréjas; (5) Silt studies on American rivers, Kirk Bryan; (6) Studies on marine bottom deposits at the Scripps Institution of Oceanography, T. Wayland Vaughan; (7) Research marine bacteriology, A. H. Gee; (8) Calcium carbonate in sea water, A. H. Gee and E. G. Moberg; (9) Research on marine sediments conducted by the American Petroleum Institute, Parker D. Trask; (10) Studies on sedimentation at the Jacques Loeb Laboratory, Stanford University, L. B. Becking; (11) Recent publications on chert, flint, concretions, cone-in-cone and stylolites, W. A. Tarr: (12) Varved sediments, Ernst Antevs; (13) Sedimentational research on the Pacific Coast, R. D. Reed: (14) Micropaleontology in the Mid-Continent Region, Dollie Radler: (15) Heavy mineral work in the Mid-Continent Region, Fannie Carter Edson; (16) Lake deposits in the Basin and Range Province, Eliot Blackwelder; (17) Bibliography on Chemical studies which bear on sedimentation, George Steiger: (18) Studies of glacial sediments in 1928, M. M. Leighton; (19) Investigations of fluvial deposits, A. C. Trowbridge.

AK: J Enclosure Arthur Keith, Chairman, Division of Geology and Geography WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

PHILIP SCHUMACHER ANN ARBOR

HARRY H. WHITELEY DOWAGIAC

W. H. NEWETT

M. J. FOX IRON MOUNTAIN

PHILIP K. FLETCHER

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR

March 5, 1932

FRED A. WESTERMAN P. S. LOVEJOY GAME L. R. SCHOENMANN
LAND ECONOMIC SURVEY EDWARD A. HYER

H. R. SAYRE

R. A. SMITH

FIELD ADMINISTRATION

GENEVIEVE MCCANN

P. J. HOFFMASTER PARKS

MARCUS SCHAAF

GEOLOGIST S. G. FONTANNA

Mr. F. T. Thwaites The University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

Your letter of March 2nd has been received and I am pleased to know that the log and reprint reached you.

We shall certainly be anxious to secure the samples from the Menominee well when you find time to send them to us. Your interpretation of the cuttings of this well would also be appreciated.

I can well understand the difficulty that you are experiencing in obtaining publication of your text on glacial geology. We are working on the new generalized report but there is still considerable uncertainty when it will be out.

It is good news to know that you have secured a job for the summer because many are not so fortunate.

With kindest wishes, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION Petroleum Geologist

RANIWambe

RBN:M

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS

PHILIP SCHUMACHER

HARRY H. WHITELEY

W. H. NEWETT

M. J. FOX IRON MOUNTAIN

PHILIP K. FLETCHER ALPENA

RAY E. COTTON

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR February 27, 1932

Mr. F. T. Thwaites The University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

I have your letter of February 24th and was pleased to hear from you.

The log about which you speak is being sent you and we feel that this is a pretty fair record as the samples were accurately saved. I have tried to work into this record some of the new classification of the Clinton as used by Ehlers.

Your comments about the new well at Menominee, Michigan. are very interesting and we shall be very anxious to receive a copy of this log when the operations are finished.

Our Well Driller's Convention convenes next month and they have arranged a rather interesting program. I saw your cross section when in Tulsa in December at the time of the G.S.A. Convention and was very much interested in it. The scale is exaggerated somewhat but not withstanding it is very useful in obtaining the raw interpretation of the structure along the line of section.

I am glad to know that you have not yet suffered salary cuts. We were not quite so fortunate in this regard.

With kindest wishes, I am

Yours very sincerely BNewcombe

GEOLOGICAL SURVEY DIVISION Petroleum Geologist

RBN:M Enc.1

GENEVIEVE MCCANN CHIEF CLERK P. J. HOFFMASTER PARKS MARCUS SCHAAF R. A. SMITH GEOLOGIST S. G. FONTANNA FRED A. WESTERMAN P. S. LOVEJOY GAME L. R. SCHOENMANN LAND ECONOMIC SURVEY

EDWARD A. HYER

H. R. SAYRE
FIELD ADMINISTRATION

Mr. R. B. Newcombe, Geological Survey, Lensing, Michigen

Dear Mr. Newsombe:

I wish to thank you for yours of the 27th with enclosed log of Heintz No. 5, at Muskegon also the separate of your recent paper.

The financial situation looks bad here for the phliticians simply have to make a gesture at economy before election. I have held up publication of the new text on glacial geology on account of the uncertainty of the situation. Fortunately I have job for the summer which will help a little.

I have duppicate samples from Manominee if you desire them.

With best regards,

Sincerely,

Feb. 24, 1932

Hr. R. B. Newcombe, State Geological Survey, Lancing, Michigan

Dear Mr. Newcombe:

Would it be possible for you to sond me the detailed log of Muskegon Ohl Corporation H. Heits No. 5 which was in part published by you in the last Bulletin of the A. A. P. G.? I would greatly appreciate this for comparison with sections coross the lake in Wisconsin.

I have just recieved samples from Menominee and Marinotter Light and Traction Co. well at Menominee, Michigan. It is 655 feet tool dopth and about 2 feet into granite. Below a few feet in the rock the hole was almost entirely dry. I am still advising about shooting.

Monday I wont down to the well drillers convention in Miweukee and took along the cross section of the United States. Intended to bring it back but they liked it so well I had to leave it for the rest of the convention. Think I sold some sepies. It mot with nittle but criticism at Medison on account of the enaggerated scale.

We are still without salery cuts but live in fear and trembling at the loud voiced threats we hear. So far my telephone has been cut off end that's all. My mapping class in larger thanever, other classes somewhat smaller than usual.

With best regards,

Very truly yours,

STATE OF IOWA

IOWA GEOLOGICAL SURVEY

DES MOINES

GEORGE F. KAY, DIRECTOR

W. H. NORTON, GEOLOGIST

UNDERGROUND WATERS

MOUNT VERNON, Jan. 121. 1192

Dr. F. T. Thwaites, Nadison. Wise.

Dear Dector Thwaites: --

Some months ago pr. Lees sent me a copy of your log of the Fulton 711. deep well. As I am now getting my data together for an brief additional report on our Iowa wells it would be a special favor if you could give me also any further data which you may have at hand as to this well. Isuppose they found their main flow at or near the bottom, the horizon at which Chinton well, waterworks no. 6, found its phenomenal flow in the yourt Sinon.

I note with interest that you discriminate the Tronton and as 7 have some new wells and quite a number of old does which go deep into the Cambrian, the latter including several like the Chinton wells described before the Lines were drawn as now in the cambrian formations, I wonder if you could conveningly share with me your samples, for our state collection of course a very little of each will do. Alf you can do so I will send our collecting bags for the purpose.

Thanking you heartily for any help you may be able to give me,

Yours very truly

WHE norton

Congress of the United States

House of Representatives

Washington, D. C.

February 8

Mr. F. T. Thwaites R. 4 Madison, Wisconsin

My dear Mr. Thwaites:

Your letter of February 5 received, requesting several Geological Survey Bulletins. I have today requested that these publications be sent to you.

If you do not receive same in due time, kindly let me know. Always glad to be of service.

Very truly yours,

John West on

Dr. W. H. Norton, Mt. Vernon, Iowe.

Dear Dr. Norton:

In reply to yours of the 21st the blueprint log of No. 3, Gity of Fulton, Illinois is enclosed. I have no information about where the flow was obtained but think from the grain of the sandstone that you are correct. It is possible that more information could be obtained from the driller, Mr. Jos. Egerce, 100 Washington Circle, Milwaukee, Wisconsin or from the Illinois State Water Survey, Urbana, Illinois. I note in the last number of the Illinois Well Driller that Mr. S. E. Ekblow has been assigned to the State Water Survey in order to correlate their work with that of the State Geological Survey.

In regard to samples all those from this well were shipped to Mr. L. E. Workman, State Geological Survey, Urbana, Illinois. We do not keep out of state samples unless near to our line or in the case that the local State Survey has no well-organized filing system. I am sure that they will be glad to divide samples with you.

If there is anything else I can do to help you please feel free to call on mo.

I had my copy of the cross section of the central United States on the bulletin board for some time. I received many favorable comments from students but inly knocks from the faculty. "Too much exaggeration of the dip" was all they seemed able to see! Br. Leith was an exception to the general rule, however.

Very truly yours,

Coologist in charge of well records

COMMITTEES:

INVALID PENSIONS, CHAIRMAN REVISION OF THE LAWS ROADS

Congress of the United States House of Representatives

Mashington, D. C. November 12, 1931

Mr. F. D. Thwaites, R. F. D. #4, Madison, Wisconsin.

My dear Mr. Thwaites:

In accordance with your request of November 9 Mr. Nelson is forwarding to you under separate cover professional Paper 164, U. S. Geological Survey.

Please be assured that the Congressman is always glad to be of service.

Very truly yours,

Secretary.

VHS

R. F. D. 4, Madison, Risconsin, November 9, 1931.

Congressman John M. Nelson, House of Representatives Office Building, Washington, D. C.

Dear Sirt

Please send me a copy of Professional

Paper 164, The Kaiparowitz region, a geographic

and geologic recommaissance of parts of Utah and

Arizona, by H. E. Gregory and R. C. Moore.

Thanking you for this favor, I am

Yours very truly,

FTT-T

F. T. Thwaites

NEW YORK OFFICE THE ENGINEERING FOUNDATION 29 WEST THIRTY-NINTH STREET

NATIONAL RESEARCH COUNCIL

Established in 1916 by the National Academy of Sciences under its Congressional Charter and organized with the cooperation of the National Scientific and Technical Societies of the United States

B & 21st Streets, Washington, D. C.

July 29, 1931

Dr. Fredrik T. Thwaites, Science Hall, Madison. Wisconsin.

My dear Dr. Thwaites:

May we expect your aid in a plan recently developed in this Division for systematic cooperation between geologists, paleontologists and archaeologists, on the one hand, and engineering and excavating concerns on the other? The primary object of the plan is to secure evidence, if it exists, of the presence of man in America during, and near the close of, the Pleistocene. Of the first importance is the immediate presence of a competent geologist at the site of reported fossil or cultural remains in order to date the deposit. The occasion for possible discoveries of this sort is constantly supplied by contractors and engineers in disturbing sand, gravel, stone and earth for highway and railway construction and in the removal of building and other materials.

There is enclosed a program of our recent conference in Chicago, where we first proposed the plan and interested railway and highway engineers and also the national excavating associations in carrying it out. Already requests are coming to the Council for the names and addresses of geologists, paleontologists and archaeologists who can be depended upon to vist places in their vicinity when vestiges of early human occupation are credibly reported.

This Division of the Council has offered to serve as a clearing house for supplying communication and information in carrying out the plan. It has at its disposal a very small initial fund for the necessary expense of a preliminary investigation where the most promising discoveries are reported. Since this initial fund is very small, it will be necessary for the nearest available man to respond. Moreover, it is our hope that the universities and the state geological and archaeological surveys, as well as interested individuals, will augment the slender resources already provided.

The Associated Press, Science Service, and other new-gathering agencies have volunteered their help in securing and reporting reliable information upon the presence and the character of very early man in America. A large part of our accurate knowledge of Pleistocene man in Europe, Asia, and Africa has come from the sort of cooperative investigation now proposed for our own country and already carried out for our Indian cultures.

If you are willing to help us in this undertaking, I shall be very glad to add your name to our list and to refer to you inquiries which come from your region. A printed account of the conference and of the plan of cooperation has been prepared. Within a few days we shall place a copy of it in your hands. We should then welcome your suggestions for distribution of the pamphlet in your locality and elsewhere throughout the country.

Faithfully yours,

Madison Bentley, Chairman, Committee on the Search for Pleistocene Man, Division of Anthropology and Psychology

Dr. Madison Bentley, Division of Anthropology and Phychology, National Research Council, B and 21st Sts., Washington, D. C.

Door Sir:

Your circular letter of July 29 a copy of which was sent to me has been on my table for a long time. I had forgother that you expected an answer until I came to file what had accumulated during the summer.

I will be glad to help in the project to the best of my ability. However, extensive experience with the Plaistocene in this and adjacent states including detailed study of interglacial deposits has thus far failed to show any sign of man prior to late postglacial times. It seems unlikely, therefore, that anything of that sort will come up. He such thing has ever been reported to the State Historical Society to my knowledge. I am convinced that man was a late comer in these parts.

Yery truly yours,

F. T. Thwaites, Lectuer in Goolegy

CONFERENCE ON

DISCOVERY AND PRESERVATION OF PLEISTOCENE MAN

Hotel Stevens, Chicago, April 10, 1931

Held under the Auspices of

Division of Anthropology and Psychology
Division of Geology and Geography
Division of States Relations
Division of Engineering and Industrial Research

NATIONAL RESEARCH COUNCIL

PROGRAM

Afternoon Session, 2:30 o'clock

Address of Welcome, Mr. Rufus C. Dawes
Response for the National Research Council, Mr. Arthur Keith
The Importance of the Conference for the Study of Early Man,
Mr. John C. Merriam
Early Man in North America, Mr. Fay-Cooper Cole
The Great Ice Sheets of the Middle West, Mr. W. C. Alden
Glacial Man in Europe, Mr. George Grant MacCurdy
Pleistocene Man in Asia, Mr. William K. Gregory
Cooperation of the Railroads in Preservation of Indian Cultures in
the Southwest, Mr. W. B. Storey
Present Evidences of Pleistocene Man in America, Mr. Ralph Linton
Prospects for Discovery: A Suggested Procedure for Cooperation,
Mr. M. M. Leighton

Dinner, 7 o'clock

An Engineer's View of the Cooperative Task, Mr. C. N. Conner Primitive Man in the Field Museum, Mr. Paul S. Martin Preservation of Indian Cultures in the Middle West, Mr. Carl E. Guthe Mammalian Deposits in the Northwest, Mr. Samuel H. Cady The Interest of the Smithsonian Institution in the Discovery of Pleistocene Man, Mr. M. W . Stirling

John C. Merriam, Honorary Chairman
Madison Bentley, Presiding

MEMBERS AND INVITED GUESTS

V. P. Ahearn, Secretary, National Sand and Gravel Association, Washington, D.C.

W. C. Alden, Geologist in Charge, Section of Glacial Geology, U. S. Geological Survey, Department of the Interior, Washington, D. C.

John Rice Ball, Department of Geology and Paleontology, Northwestern University.

E. S. Bastin, Chairman of the Department of Geology, University of Chicago.

S. F. Beatty, President, Austin Western Road Machine Association; Vice-President, American Roadbuilders Association; Chicago.

Madison Bentley, Chairman, Division of Anthropology and Psychology, National Research Council, Washington, D. C.

J. E. Buckbee, President, Northern Gravel Company; Member Executive Committee, National Sand and Gravel Association; Chicago.

Ralph Budd, President, Great Northern Railway, St. Paul.

H. A. Buehler, State Geologist, Missouri Bureau of Geology and Mines, Rolla, Missouri.

Samuel H. Cady, General Solicitor, Chicago and Northwestern Railway Company, Chicago.

Col. O. P. Chamberlain, President, Dolese & Shepard Company, Member Exec. Committee, Nat. Sand and Gravel Association; Chicago.

R. T. Chamberlain, Professor of Geology, University of Chicago.

H. G. Clark, Chief Engineer, Chicago, Rock Island and Pacific Railway, Chicago.

C. N. Conner, Engineer-Executive, American Roadbuilders Association, Washington.

Fay-Cooper Cole, Chairman of the Department of Anthropology, University of Chicago.

Rufus C. Dawes, President, the Chicago World's Fair Centennial Celebration. Oliver C. Farrington, Curator of Geology, Field Museum, Chicago.

E. H. Fritch, Secretary, Association of American Railway Engineers, Chicago.

U. S. Grant, Head of the Department of Geology, Northwestern University, Evanston, Ill.

W. K. Gregory, Curator of Physical Anthropology, American Museum of Natural History, New York.

C. E. Guthe, Director, Museum of Anthropology, University of Michigan, Ann Arbor; Chairman, Committee on State Archaeological Surveys, National Research Council.

C. M. Hathaway, Illinois State Highway Engineer, Springfield.

R. M. Hutchins, President, the University of Chicago.

Dugald C. Jackson, Chairman, Division of Engineering and Industrial Research, National Research Council.

G. F. Kay, Head of the Department of Geology, University of Iowa, Iowa City. Arthur Keith, Chairman, Division of Geology and Geography, National Research Council.

A. R. Kelly, Professor of Anthropology, University of Illinois, Urbana, Ill.

F. P. Keppel, President, Carnegie Corporation of New York.

M. M. Leighton, Chief, Illinois State Geological Survey, Urbana.

Ralph Linton, Professor of Anthropology, University of Wisconsin, Madison.

George Grant MacCurdy, Curator of Archaeology, Peabody Museum. Yale University; Director, American School of Prehistoric Research In Europe, New Haven, Conn.

Paul S. Martin, Curator of North American Archaeology, Field Museum, Chicago. John C. Merriam, President, Carnegie Institution of Washington.

W. K. Moorehead, Director, Museum of Phillips Academy, Andover, Mass.

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W. B. Storey, President, Atchison, Topeka and Santa Fe Railway, Chicago. Lieut.-Col. C. W. Weeks, District Engineer, U. S. Army, Chicago.

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May 27, 1931

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EDUCATION

HOMER S. MURPHY

Mr. F. T. Thwaites University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

Your letter of May 25th, was received this morning and I am glad that the well records sent you will be of some assistance in the compilation of your material for the Kansas Geological Society field conference. I will certainly be glad to obtain a print of this section.

It is good news to learn that the well record work in Wisconsin will not be entirely abandoned because of the elimination of the Survey organization. Fortunately business conditions have been such that extra work could be carried on and that well records could be whipped into shape for publication. This has been an important factor in the completion of my thesis, although some of the details in the assimilation of current records has been neglected in the last few months. I hope to get this work straightened around before long.

I will be glad to hear from you anytime that you find occasion to use the services of this Department.

With kindest personal regards, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION

Petroleum Geologist

PGB Newcombe

RBN:M



may 15, 1931

Prof. 7. T. Thwaites Rept. of Seology University of Mes consin madein, luis.

questionis.

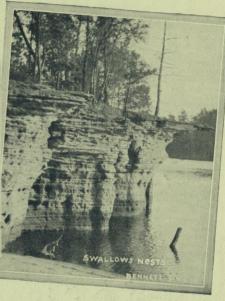
Dear Prof. Shwaiter: Sr. J. R. Ball and & have been spending some time examining sections of the Cambrian and Ordanician along the Wescersin River The were anxious to see of the stuff Ulion calls Mendata but in the quarries we writed around mades in we were not successful in fending any I monder if you would be kind enough to tell me just where such exposures could be found. The hope to try it again next week end. The should also like to see some genning Madison Have you seen the extrain along the north side of the highway a few miles week of Middleton? The Oresta vests on a sandstone; the contact is marked by a few winches of shale. The lower surface of the meata is very engula and has every appearance of being unconformable on the earlstone I am wondering how you would interpret this. Mean Wanteha, wie, it seemed to me that the Madian vested unconformably on the Jordan and that the Madison graded upward conformably ruto the Onesta. I shall appricate any information on the above

very sincerely yours CE. needham

Northwestern University, Evanston, SCP







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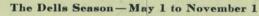
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Genial hospitality, courtesy and helpful direction is our spirit and purpose, that all visitors may fully enjoy the beauties of The Dells and their sojourn among us.

Mr. C. E. Needam, Dept. Geology, Northwestern University, Evenston, Illinois

Dear Mr. Needham:

In reply to yours of May 15 most of the localities where the Mendota was studied are described in Vol. 2, Geology of Wisconsin, pp. 605-606. However, some of these places cannot now be seen. What is probably the best exposure is on Farwells Point, Lake Mendota. You can now drive close to this by following the road to the soldiers hospital. Both bottom and top can be seen here. The highest beds are probably what Ulrich calls Lodi shale. Overlying formations can be seen in the railroad cut at Mendota about a mile to the northeast on Wis. 113. Here a disconformity between what Ulrich called Jordan and the true fossiliferous Madison is well exposed. At that time Ulrich said that there is no Mendota beneath the cut but a well put down later just west of the cut showed the same section as on the lake shore.

Second in importance is Maple Bluff where the section could be examined the last time I was there from some stairs leading down to the beach. This area is now settled up and collecting is therefore difficult.

Near the old quarries west of Madison the Mendota is no longer very well exposed. It can be seen in a cut on the G. M. St.P. and P. R. R. in NWINW! Sec. 21, T. 7 N., R. 9 E on Wis. 13-U. S. 12 just where the highway passes over a rise and leaves the tracks in going west. A cut near the University barns about a mile and a half east of this place was recently widened and is reported to show some Mendota.

The Mendota may also be seen on the shores of Lake Monona in SELSEL Sec. 25, T. 7 N., R. 9 E., and in SELSEL Sec. 8, T. 7 N., R. 10 E. There are other exposures farther south and west but I think these will be enough. One which you might like to see, if still open, is in center Sec. 1, T. 7 N., R. 8 E. on road leading north from Pheasant Branch. Here admitted Lodi shales overlie the delomite bed.

A few years ago the excavation for the new Congregational church on University Ave. gave a good section. Mr. Gilbert Raasch, new Curator of our museum, collected fossils which convinced him that my old contention was correct, namely that the Mendota is equavalent to the Black Earth or St. Lawrence dolomite of Ulrich.

I have driven by the outcrop on Wis. 11 which you mention many times but since it is so hard to park on Wisconsin paved highways have never stopped to examine it. A few years ago a good section of the beds above the Mendota which are concealed at most places, was seen in old quarries in NEISW Sec. 28, T. 7 N., R. 9 E. This locality is now settled up and I know nothing of the present conditions.

Since 1924 my work has been confined to wells and I have avoided the arguments which work on outcrops seemed to lead to. If you come up I will be glad to show you around or possibly Mr. Raasch, who has had extensive experience in collecting from these formations, would show you the localities. Both of us will be glad to help you in any way we can.

WM. H. LOUTIT
GRAND HAVEN, CHAIRMAN

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george R. Hogarth, Director March 16, 1931 HUGH E. GREEN
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Mr. F. T. Thwaites Geological & Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

Upon returning to the office this morning I found your kind letters of March 6th and 7th, and also the manuscript. I am certainly very grateful to you for the pains you have taken in writing me at length on the correlation of the Cambrian and Lower Ordovician of Wisconsin. The large blueprint map will be very usable and I will be more than glad to keep it for our files if it is agreeable with you for us to have the print.

My article is slowly rounding into shape and I hope to have it ready for presentation at the University for my Doctor's dissertation on the 15th of April. After that time I hope to revise the text in briefer form for publication in the Bulletin of the American Association of Petroleum Geologists. Of course, I will be mighty pleased to send you a reprint when it is available.

Assuring you that I very much appreciate hearing from you from time to time, I am with sincerest regards,

Yours very truly

RBNewcombe

GEOLOGICAL SURVEY DIVISION
Petroleum Geologist

RBN:M

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Mr.F.T.Thwaites Department of Geology University of Wisconsin Madison, Wisconsin.

Dear Mr. Thwaites:

Thank you for your fine comment on Fenneman's PHYSIOGRAPHY OF THE WESTERN UNITED STATES. We are also appreciative of the suggested corrections and shall give them due consideration.

We are, of course, pleased to learn that you will use this book as the official text next year. I hope it yields excellent teaching results for you.

Yours very truly,

Charles S. Wyand

McGRAW-HILL BOOK COMPANY, Inc.,

JMM:GEN:3-19

Charles S. Wyand, College Department.

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Professor F.T. Thwaites University of Wisconsin Madison, Wisconsin.

Dear Professor Thwaites:

At the suggestion of Professor Lobeck of Columbia University, we are glad to send you a complimentary desk copy of Fenneman's PHYSIOGRAPHY OF WESTERN UNITED STATES.

This text has been used in manuscript form by the author for ten years in advanced classes in physiography at the University of Cincinnati. During this time, the material has been constantly revised to produce a textbook that is both scientifically and pedagogically sound. The list price is \$5.00.

We shall of course be interested in having your comment on this book.

Yours very truly,

McGRAW-HILL BOOK COMPANY, Inc.,

JMM:GEN: 2-27

J. M. Mellinger, College Department. Mr. J. M. Mellinger,
McGraw-Hill Book Co., Inc.,
370 Seventh Ave.,

New York City

Dear Sir:

In reply to yours of the second I wish to thank you for the complementary desk copy of Fenneman's Physiography of the western United States.

I did not make this book the official text for the second semester in my course on Physiography of the United States for it did not come out until after some students who had entered for the second semester had purchased the eld text. In spite of this fact nine out of 13 students in the course have voluntarily purchased copies to use as a substitute for the old text. Next year this book will be the official text if I remain on the job. All have found it an immense improvement over the book we used before.

Although I am greatly pleased with the work as a whole I feel the lack of diagramatic cross sections illustrating the relation of geology and topography. I was also surprised to note that some of the half tones have a very coarse mesh as though intended for newpaper printing. I hope that these minor defects can be corrected in the forthcoming volume on the eastern United States.

Vory truly yours,

F. T. Thweites, Lecturer in Geology

Waunakee, Wisconsin, October 14, 1930.

Mrs. F. T. Thwaites, R. F. D. 4, / Madison, Wisconsin.

Dear Mrs. Thwaites:

I am inclosing check for \$4.80 to cover the interest which was due on September 24, 1929. You may clip the coupons and deduct the 1930 interest.

Yours very truly,

remained by the star

R. F. D. 4, Madison, Wisconsin, October 13, 1930.

Mr. Charles McWatty, Waunakee, Wisconsin.

Dear Mr. McWatty:

To date the interest which was due on <u>September</u>
24, 1929 has not been received.

With your permission I will clip the 1929 and 1930 coupons and deduct the interest which was due on September 24, 1930.

I am inclosing a return envelope for your convenience.

Yours very truly,

Amy M. Thwaites

R. F. D. 4, Madison, Wisconsin, April 2, 1930.

Mr. Charles McWatty; Waunakee, Wisconsin.

Dear Mr. McWatty:

A statement of your account as requested from father can best be given by quoting my letter to you under date of December 4, 1922:

"Interest on your/for \$80.00 was due on September 24, 1929. An early remittance will be appreciated."

If you approve, I will clip the 1929 and 1930 coupons next September and deduct the interest (\$4.80). By keeping the \$3.20 balance with your bond, it will carry itself for at least four years, if a coupon is clipped each September and \$0.80 deducted from the cash balance.

Yours very truly,

Amy M. Thwaites

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STATE OF MISSOURI

BUREAU OF GEOLOGY AND MINES

ROLLA, MO.

August 4, 1931.

Dr. F. T. Thwaites, Department of Geology, University of Wisconsin, Madison, Wisconsin.

Dear Dr. Thwaites:

The publications requested in your letter of recent date were sent during my absence from the office.

Volume XX, "Water Resources of Missouri", was not included in as much as it covers surface waters only and consists, in the main, of stream flow data.

McQ/DS

Very fruit 300 Freen

R. F. D. 4, Madison, Wisconsin, March 14, 1931.

Congressman John M. Nelson, Washington, D. C.

Dear Sir:

I wish to thank you for your assistance in securing a copy of Bulletin 823 of the United States Geological Survey.

Yours very truly,

FTT-T

F. T. Thwaites

WM. H. LOUTIT
GRAND HAVEN, CHAIRMAN

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LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION HOMER S. MURPHY POLLUTION

Mr. F. T. Thwaites Geological & Natural History Survey Madison, Wisconsin

Dear Mr . Thwaites:

This will acknowledge receipt of your letter of March 6th, enclosing a copy of your paper and blueprint map, which have been received during Mr. Newcombe's absence from the office.

Yours very truly

GEOLOGICAL SURVEY DIVISION

Petroleum Engineer

FRF:M

R. F. D. 4, Madison, Wisconsin, March 3, 1931.

Congressman John M. Nelson, Washington, Di C.

Dear Sir:

On February 21, 1931 I wrote the Superintendent of Documents for one copy of <u>U.S. Geological Survey</u>

Bulletin 823, Bibliography of North American Geology,

1919-1928. Today I am informed that it has not been printed. Inasmuch as I have seen a copy of said bulletin,
I am asking you to help me secure a copy.

Thanking you in advance for whatever you can do to help me, I am

Yours very truly,

PTT-T

F. T. Thwaites

Hon. John M. Nelson, Member of Congress, Washington, D. C.

Door Sir:

I will be greatly obliged if you can procure for me the following publications:

U. S. Geological Survey Professional Paper 165

U. S. Goological Survey Professional Paper 170-A
Fory truly years,

F. T. Thwaites,

R. D. 4, Hadison, Wisconsin

INVALID PENSIONS, CHAIRMAN REVISION OF THE LAWS ROADS

Congress of the United States House of Representatives

Washington, D. C.

March 7, 1931

Mr. F. T. Thwaites, R. F. D. #4, Madison, Wisconsin.

My dear Mr. Thwaites:

Pursuant to your request Mr. Nelson is forwarding to you under separate cover U. S. Geological Bulletin No 823.

Please be assured that the Congressman is glad to be of service.

Very truly yours,

Secretary.

WM. H. LOUTIT
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STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

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December 10, 1930

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EDUCATION

HOMER S. MURPHY

Mr. F. T. Thwaites Geologist in charge of Well Records Geological and Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

The samples from the Solvay Process Company have been received. As soon as our record has been prepared we will send you a copy which you can have for comparison with the one you have made. We always encounter difficulty in sub-dividing the divisions of the Detroit River Series or Upper Monroe. Usually no effort is made to do this in deep wells drilled unless the well is close enough to the type of locality to be directly comparable.

The top of the Salina is a very arbitrary division and it has always been considered the top of the first salt bed encountered below the base of the Sylvania. We have thought for some time that the Monroe group and Salina should be included in one formation and called the Monroe-Salina. The reason for this is that very similar depositional and climatic conditions must have existed through the entire time which these beds were deposited. We find in the north central part of the state that salt beds persist well up to the bottom of the Sylvania and even in the Upper Monroe. This condition would be expected in view of the vast quantity of anhydrite which is found all through the Monroe Series. I am enclosing a reprint of the paper presented at the Michigan Academy of Science two years ago which will give you some idea on the subject.

Your comments concerning the correlation of the deep well drilled on the Moe farm in Chester township, Ottawa county, are extremely interesting and I have shown your letter to Mr. Poindexter who has been examining our samples for the past year. It appears that the correlation of formations below the Trenton in the central part of the Michigan Basin is going to be a very difficult task and we will probably want to enlist your aid on frequent occasions in the future.

Trusting that this finds you in good health and with sincerest wishes for the Holiday Season, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION
Petroleum Geologist

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

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STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR September 26, 1930 HUGH E. GREEN CHIEF CONSERVATION OFFICER GENEVIEVE MCCANN CHIEF CLERK P. J. HOFFMASTER MARCUS SCHAAF FORESTER R. A. SMITH H. R. SAYRE FOREST FIRE S. G. FONTANNA FRED A. WESTERMAN P. S. LOVEJOY GAME L. R. SCHOENMANN LAND ECONOMIC SURVEY EDWARD A. HYER EDUCATION

HOMER S. MURPHY

POLLUTION

Mr. F. T. Thwaites Geological and Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

Your letter of September 23rd, threw an interesting light on our correlation of the cuttings from the Chester township, Ottawa county, Moe #1 well. Mr. Poindexter has carried on all the examination of samples and your letter will be brought to his attention when he returns from the field.

We will go into the study of the oolites more thoroughly as you suggest. I certainly agree with you that it is a mighty tough proposition to correlate samples from any one given well, especially when the section is not exposed anywhere in the immediate vicinity. A great deal can happen to the section in the Cambrian and Lower Ordovician rocks of the central part of the Michigan Basin.

We have plenty of sample material in addition to that which was sent you and so you may keep the cuttings for your own record. We most thoroughly appreciate your counsel and advice in the correlation of our deep wells and if we can in any way reciprocate these favors, please do not hesitate in calling upon us.

With sincerest regards, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION Petroleum Geologist

RBNewcombe

RBN: M

Sept. 30, 1930

Mr. R. B. Newcombe,

Geological Survey Division,

Dept. of Genservation,

Lansing, Michigan

Dear Mr. Newcombe:

I wish to acknowledge your letter of the 26th and the one last week enclosing the log of the Wells well. As you have a duplicate set of samples I have had mine bettled and will look them over soon. On looking over your interpretation I am struck with the possibility that there may be no real St. Peter sandstone but that what is called St. Peter is really a sandstone in the Lower Magnesian. I have made this correction in some other records in that region. However, I will not be sure until I have looked at the samples.

I sent you a sample of the colitic chert and delemite from the Madison quarries which I thought might be of value in the study of the Chester log. I will add that the delemite is much more like that of the known Eau Claire than the known Lower Magnesian. It is rare in the latter to get so much sand through so great a thickness.

I am very glad to be able to help you at any time.

Classes are getting started and soon field trips will be on and last until snew flies.

Very truly yours.

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

PHILIP SCHUMACHER

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STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

November 8, 1930

GEORGE R. HOGARTH, DIRECTOR

Mr. F. T. Thwaites University of Wisconsin Geological & Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

We are forwarding under separate cover a print of the Howell Structure, Livingston County, and a report which accompanies it.

Yours very truly

RB Newcombe

GEOLOGICAL SURVEY DIVISION Geologist

RBN:M

HUGH E. GREEN
CHIEF CONSERVATION OFFICER GENEVIEVE MCCANN CHIEF CLERK

P. J. HOFFMASTER PARKS

MARCUS SCHAAF FORESTER

R. A. SMITH GEOLOGIST H. R. SAYRE FOREST FIRE

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LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION

HOMER S. MURPHY

Mr. R. B. Newcombe,

State Geological Survey Division,

Dept. of Conservation,

Lansing, Michigan

Dear Mr. Newcombe:

Samples from Solvay Process Go. No. 36, Zug Island, Detroit, Michigan were sent you by express a few days ago. The set is not complete and many lables could not be read with certainty. However, I think I have all but one of the samples arranged in correct order. Description and blue print log will be sent in a short time. I have the casing log. For correlation I followed the record of the salt shaft near Detroit. I had difficulty in subdividing the strata above the Sylvania and in fixing ghe top of the Salina. Any suggestions which you can make will be greatly appreciated.

Sizzecwriting you in September I found soft polities in the samples from the railroad well at Wells. These certainly came from the Lower agnesian and weaken my doubts about the similar ones in the deep oil test. As a consequence I feetl more in favor of your revised log sent me in September.

With best regards,

Very truly yours,

Geologist in charge of well records

Thank you for the report on the Howell Structure.

Mr. R. B. Newcombe,

Geological Survey Division,

Dept. of Conservation,

Lensing, Michigan

Dear Mr. Newcombe:

Your letter of June 20 and another package of sampeles were awaiting me on my return from work in Illinois. I take it that these are from the same test well and will return them at an early date. The Detroit samples will be sent you as soon as I can examine them for the drillers and make my report. I am promised more samples from the White Cloud oil test but to date have seen nothing of them. Also found a letter saying that sampeles had been sent me from Wells, Michigan but have not seen them. If they came my assistant who carried on during my absence, did not mention them. Log of this well was also enclosed.

I had a good summer in Illinois although the weather was far from pleasant much of the time. Located some possible structures which will have to be checked before publication.

Very truly yours,

Goologist in charge of well records

Hart fewerste

6-24-30

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RAY E. COTTON SECRETARY

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR June 20, 1930

HUGH E. GREEN
CHIEF CONSERVATION OFFICER

GENEVIEVE MCCANN CHIEF CLERK

P. J. HOFFMASTER PARKS MARCUS SCHAAF

FORESTE R. A. SMITH GEOLOGIST

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EDWARD A. HYER EDUCATION HOMER S. MURPHY

POLLUTION

Mr. F. T. Thwaites Geological and Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

I certainly appreciate your long letter of June 14th, and I am glad to know that you had a chance to look over the samples before leaving for your summer's work in the field. It is unfortunate that they reached you in bad condition. There must have been some slip here in the office. The boy who prepares our samples for examination was asked to pack them with the utmost care.

The samples from Ohio are certainly very interesting. I had occasion to stop at the Pure Oil office in Chicago at about the same time that I was in Madison last fall. It is very complete. The graphitic limestones are extremely interesting.

Your suggestions concerning the marking of samples and the difficulties to be encountered in the use of gum labels are very timely. . I think that a great deal depends upon the nature of the filing space where the samples are kept. We use steel cases which are practically moisture free and they also eliminate the damaging effects of light.

We will be very glad to obtain the samples for the Solvay Process well in Detpoit. Our contacts with the salt companies are very remote and unfortunately we have very few good records when one considers the large number of salt wells drilled in the state. Our law relating to drilling operations does not affect the salt industries. These people had a strong lobby at the time the legislation was inaugurated and, therefore, they obtained all the protection and none of the obligations. Now that the oil industry is becoming an important factor in the state, drilling operations for salt may come ultimately under the same regulations as for oil and gas. I most sincerely hope so as it is only fair.

With best wishes for a very excellent summer, I am

Very sincerely

RB Newcombe

GEOLOGICAL SURVEY DIVISION Petroleum Geologist

March 1, 1930

Mr. R. B. Newcombe,

Geological Survey,

Lansing, Michigan

Dear Mr. Newcombe: I have received a set of samples from well No 1, Kewago Gas an Oil Go., White Claud, Michigan. The well was drilled by the Gray Well Drilling Go. of Milwaukee. I would like to know if you have a set of samples from this hole and if so if it would be possible for me to have a copy of your log. I will have to make a reort on the log to the drillers for their records and any information you can furnish will be of much help to me. I have to do this out-of-state work to keep in with the Wisconsin drillers. I will add that any information of this class is placed in our confidential files. If you send anything which is not to be communicated to the drillers please so advise.

Since you were here my old hernia broke out again and I have just returned from a two weeks visit to the hospital. I certainly hope the surgeon did a better job this time.

Very truly yours,

F. T. T.

F. T. Thwaites, Geologist

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN HAROLD TITUS

TRAVERSE CITY

PHILIP SCHUMACHER

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HARRY H. WHITELEY

E. C. VOGHT

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR October 23, 1929 HUGH E. GREEN
CHIEF CONSERVATION OFFICER
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CHIEF CLERK
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LANDS
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GEOLOGIST
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FISH & FISHERIES

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L. R. SCHOENMANN
LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION HOMER S. MURPHY POLLUTION

Mr. F. T. Thwaites Wisconsin Geological Survey Madison, Wisconsin

Dear Mr. Thwaites:

I have just returned from my trip and believe that it has proved every bit as interesting as expected.

I met Dr. Graham, formerly at the University of Minnesota and University of Iowa, who is now teaching at Ohio State. I had a long talk with him concerning some of the Lower Ordovicien and Cambrian members on which you have done so much work.

I hope that sometime you may be able to get into Michigan and that I may be able to reciprocate the very courteous treatment and splendid time which I had with you.

With sincerest wishes, I am,

Yours very truly

GEOLOGICAL SURVEY DIVISION

Geologist

RB Newcombe

RBN:g

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

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STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

September 19, 1930

HUGH E. GREEN
CHIEF CONSERVATION OFFICER
GENEVIEVE MCCANN
CHIEF CLERK

P. J. HOFFMASTER

MARCUS SCHAAF FORESTER

R. A. SMITH GEOLOGIST

H. R. SAYRE FOREST FIRE S. G. FONTANNA LANDS

FRED A. WESTERMAN FISH & FISHERIES

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L. R. SCHOENMANN LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION

HOMER S. MURPHY

Mr. F. T. Thwaites Geological and Natural History Survey Madison, Wisconsin

Dear Mr. Thwaites:

Your letter of September 15th, reached me before I had been able to send out a letter in explanation of the samples which were mailed you. This letter has no doubt reached you by this time.

It is gratifying to know that you had a most successful summer in Illinois. I guess we all felt the ill effects of the dry weather this year.

We have received the samples for the well drilled for the Escanaba and Lake Shore Railroad at Wells, Michigan, and in case you do not receive a consignment of the cuttings we will be glad to furnish them to you. I note that you mention you were able to obtain a driller's log of this well. We would certainly appreciate receiving a copy of this driller's record so as to more accurately complete our file. I am enclosing the record as prepared from samples by Mr. Poindexter.

With kindest wishes, I am

Yours very truly

RBMewsombe.

GEOLOGICAL SURVEY DIVISION
Petroleum Geologist

RBN:M Enc.1 Mr. R. B. Hewcombe,
state Geological survey,
Lansing, Michigan
Dear Mr. Newcombe:

I had no sooner mailed my letter of yesterday than I discovered two errors in it. First I forgot to thank you for the separate of your recent paper on the Devenian. Second, I followed that in making the reference to Pohl on the Devenian of Wisconsin as Bulletin 2 (II) whereas it should be 11. This came about from the common use of the archaic Roman numerals which it seems to me should be relegated to the discard.

If you do not care to keep the large map please return that but the manuscript is to be thrown away when you have finished with it.

Of course I will send you a copy of the final paper. It has passed Dr. Lane but not the editor of the Geological *ociety.

Very truly yours,

Geologist in charge of well records

Mr. R. B. Newcombe, State Geological Survey, Lansing, Michigan

Dear Mr. Newcombe:

Racine.

In reply to yours of Feb. 22, Feb. 26, and March 3 I am sending herewith rough copy of my paper which was presented at Toronto together with a blueprint map. You do not need to return this copy. I am sorry that I dare not send you the carbon of the final draft but as I have only one such it seems unwise to lend it as I might need it at any time to compare with any changes the editor may make. Last time they cut up a carefully edited paper so that it made no sense whatever, doubtless with the best intentions!

The delay in sending the well logs was due to an error in address made by my assistant who sent them to Ann Arbor where the postal clerks had never heard of a State Geological Survey:

In regard to Bates No. 1 I have no interest in the log except as requested by the Gray Well Drilling Company who sent me some samples. If they send no more I will drop the matter with a clear conscience.

Thank you for the logs of deep wells along the Lake Michigan I am awaiting the log of the Muskegon deep test with interest.

I am giving below the literature on the formations near Milwaukee. Nothing has yet been published on the Mississippian age of the Kenwood. Edwards, Ira, and Raasch, Gilbert, Notes on the ocurrence of Upper Devenian strata in Wisconsin: Milwaukee Pub. Mus, Year Book, vol. 1, pp. 88-93, 1922
Pohl, E. R., The Devonian of Wisconsin, Part 1: Milwaukee Pub. Mus., Bull., vbl. 21, no. 1, 1929 Pohl, E. R., Middle Devonian pelecypods of Wisconsin and their bearing on correlation: Washington Acad. Sci., Jour., vol. 19, pp. 53-59, 1929 Raasch gives me the following section at Milwaukee.

Kenwood formation, shale now recognized as Mississippian and found only under the lake 55 feet
Nilwaukke formation, shale and shaly dolomite (perpent rock) 81 feet
Thiensville formation, dolomite shaly dolomite (perpent rock) 81 feet Lake Church formation, dolomite, present in Ozaukee Co. 35 feet. He tells me that the Waubakee is nowhere found between the Devonian and the

Now this literature is far from satisfactory on the newer developedants but I think that some at least may be new to you. I have had no copies of these reports but hope to get some.

In regard to the lists I wish to make some suggestions. (1) The name Maquoketa is used only in western Wisconsin and should for the present at least be considered a synonym for Richmond. This is also the case in northern Illinois. (2) The name Galena-Black River Group includes the Decorah and Platteville as well as the now discredited term Beloit which I am sure is being left out of new geologic column. (3) The term Lower Magnesian Group included both the Shakopee and the Oneota; the name New Richmond is now discredited and will probably be dropped entirely. (4) The name Jordan is being dropped in Wisconsin for there is no definite line to divide it from the underlying Trempealeau formation. (5) The names Lodi and St. Lawrence are mamber and not formation names; substitute Trempealeau. (6) The Upper Greensand and Yellow Sandstone of Tweehofel and Thwaites, 1919 are now recognized as Mazomanie. There is no reason to divide the Mazomanie and Franconia for the discrimination of the azomanie as a separate formation was premature. Mazomanie is simply a change in lithology of the old Franconia as first defined. The term Lower Greensand should be omitted. (7) It is now recongnized that the Mendota is a phase or local facies of the basal Trempealeau and all but Ulrich agree on this as a result of new fossil discoveries by Raasch. (8) It is now known that the Devils Lake is upper Mazomanie and this name should be dropped.

The correlation of the Munising as Jordan and Madison is, I think, premature. Ulrich has spent several vacations with Hotchkiss in the northern Peninsula and has some data on this matter. I would ask Hotchkiss as Ulrich does not seem to have time to answer letters, at least he tells me this. Although I (and everyone else who has studied the question seriously) disagree with hime about the Mendota, Mazomanie, and Devils Lake, I would not hesitate to accept his conclusions in northern Michigan as the best available so far as I know. I take it that I can keep the correlations as I notice they are carbons.

If I can help you at any time please feel free to call on me.

ery truly yours,

Geologist in charge of well records

WM. H. LOUTIT
GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

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W. H. NEWETT

LEE J. SMITS

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E. C. VOGHT ESCANABA

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR March 3, 1931 CHIEF CONSERVATION OFFICER
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FORESTER

R. A. SMITH GEOLOGIST H. R. SAYRE FOREST FIRE

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LAND ECONOMIC SURVEY
EDWARD A. HYER
EDUCATION

HOMER S. MURPHY

Mr. F. T. Thwaites Department of Geology University of Wisconsin Madison, Wisconsin

Dear Mr. Thwaites:

I was mighty pleased to receive your letter of February 19th, enclosing detailed records and blueprint logs of the Escanaba Solvay Process and Newaygo Gas and Oil Company wells. Complete samples are being saved from the Newaygo Gas and Oil Company - Bates #1, and I am quite sure that they will be accessible to you in the future. The County Surveyor of Newaygo county is looking after this matter and he is on the job most of the time.

With kindest regards, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION
Geologist

R. Mercombe

RBN:M

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

PHILIP SCHUMACHER ANN ARBOR

W. H. NEWETT ISHPEMING

LEE J. SMITS

HARRY H. WHITELEY DOWAGIAC

E. C. VOGHT ESCANABA

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH. DIRECTOR February 26. 1931

HUGH E. GREEN
CHIEF CONSERVATION OFFICER

GENEVIEVE MCCANN CHIEF CLERK

P. J. HOFFMASTER PARKS

MARCUS SCHAAF FORESTER

R. A. SMITH GEOLOGIST H. R. SAYRE

FOREST FIRE S. G. FONTANNA

FRED A. WESTERMAN

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L. R. SCHOENMANN LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION HOMER S. MURPHY

POLLUTION

Mr. F. T. Thwaites University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

I have just recently gone over the abstract of your paper before the Geological Society of America on the "Buried Pre-Cambrian of Wisconsin". This study has a very important bearing on the structural conditions which underlie the Michigan synclinal basin and I am most anxious to know where it will be published.

At the present time I am preparing a paper which I hope to present this spring at the University for my Doctor's dissertation. The title of this paper will be "The Depositional and Structural Features of the Michigan Synclinal Basin", and will treat largely of a study compiled from our records. Contour maps showing lines of equal thickness for various paleozoic formations reveal a great deal concerning configuration of the "basin" at various periods. These also indicate the axes of tilting and many other important structural features.

If you have an extra copy of your manuscript I would be very much pleased if you would desire to loan it to me. Possibly some of your discoveries would add a great deal to the accuracy of the interpretation of Michigan conditions.

With sincerest regards, I am

Yours very truly RANewcombe

GEOLOGICAL SURVEY DIVISION

Geologist

RBN: M

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

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RAY E. COTTON

STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR

February 24, 1931

HUGH E. GREEN
CHIEF CONSERVATION OFFICER
GENEVIEVE MCCANN
CHIEF CLERK

P. J. HOFFMASTER

MARCUS SCHAAF

R. A. SMITH GEOLOGIST

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LAND ECONOMIC SURVEY

EDWARD A. HYER EDUCATION

HOMER S. MURPHY

Mr. F. T. Thwaites University of Wisconsin Department of Geology Madison, Wisconsin

Dear Mr. Thwaites:

We will certainly be mighty glad to send you the detailed record of the deep test well at Muskegon when our sample determinations have been completed. At the present time the samples are in our Muskegon field office and the detailed record has not yet been prepared.

In view of the fact that you are interested particularly in correlating formations beneath the lake copies of records of all the deep wells in the west side of the state are being enclosed.

In discussing the Devonian and Mississippian rocks for a current paper I am making an effort to establish regional correlations. Recently I learned from some source or other that a fauna found in material from the intake tunnel in Milwaukee showed the existence of Mississippian rocks. It seems to me that the name used for this formation was "Kenwood". I would appreciate very much if you could direct me to any published data which would establish more definitely the nature of this proposed formational unit.

Lists of my Cambrian and Ordovician correlations are also being enclosed for your comments. Much of this data has been culled from publications of your own and I am primarily anxious to learn if you would suggest any new changes in the light of present facts.

With sincerest wishes, I am

Yours very truly

GEOLOGICAL SURVEY DIVISION

Geologist

RBNewcombe

RBN:M Encs.

TABLE I

	Michiga Lane -		Northern Illinois Thwaites - 1927	Wisconsin Thwaites - 1923	Indiana Logan - 1926
St. Oroixan		Munising	Jordan	Madison Mendota, Devils Lake Fordan	Jordan
	Lake Superior	Jacobsville	Trempealeau	Trempealeau	Lodi St. Lawrence
			Mazomanie Franconia	Mazomanio Franconia	Upper Greendands Franconia Middle Lime; Shales Lymer Greensands
			Dresbach	Dreabach	Dresbach
			Eau Claire	· Eau Claire	Eau Claire
			Mt. Simon	Mt. Simon	Mt. Simon

	Michigan	Ontario	Ohio	Indiana	N. Illinois	Wisconsin
	Cincinnatian Group Big Hill Richmond Stonington Bill's Creek	Richmond	Richmond	Richmond Group	Richmond Group Maquoketa	Richmond Group Maquoketa
UPPER	Lorraine Eden	Dundas	Lorraine Maysville Eden	Oswego Lorraine Maysville Eden		
	Utica Collingwood	Utica Collingwood	Utica	Utica		
MIDDLE	Trenton Limestones	Trenton	Trenton	Trenton		
	Galena Black River	Black River		Black River	Galena.	Galena- Black River Groups Galena
	Lowville Stones River				Decorah Platteville	Decorah Platteville - Beloit
LOVER	St. Peter Sendstone		St. Peter	St. Peterm	St. Peter	St. Peter
CANADIAN of (E.O.Ul- rich)	Prairie Hermansville du Chien (Calciferous	Chezy Beekmantown	Sandy Dolomite (Unnamed)	Prairie du Chien Shakopee	Prairie du Chien Group Shakopee	Lower Mag- nesian Group Shakopee
				New Richmond	"New Rich- mond"	
OZARKIAN				Oneota	Oneota	Oneota

E.O.Ulrich

Mr. R. B. Newcombe,

State Geological Survey.

Dopt. of Conservation,

Lansing, Michigan

Dear Mr. Newcombe:

I wish to thank you for the separate of your paper on the Middle
Devonian Unconformity in Michigan. I examined samples from the deep test hole
drilled at Muskegon before the discovery well. In that I could find no Berea.

I am interested to note that the red shely limestone which I suggested at the
time as a key horizon is really so persistant. I do not find Pahldsreport
in my files and must get a copy.

I would appreciate a log of the last deep test at Muskegon when it is finished as it will furnish interesting data on the dip under the Lake as well as on changes in thickness of formations and formations which must reach the surface under the lake.

With best regards,

Very truly yours,

STATE OF IOWA
IOWA GEOLOGICAL SURVEY
DES MOINES
GEORGE F. KAY, DIRECTOR

W. H. NORTON, GEOLOGIST
UNDERGROUND WATERS

MOUNT VERNON. March 14, 1930

Dr. F. T. Thwaites Madison, Wisc.

Dear Doctor Thwaites: --

I am very sorry if I failed to give due credit on the Sioux City well. You certainly sent me samples, and while, as I recall, I used my own determinations on them, I should have given credit at least for the samples. I hope that I gave you a general acknowledgement for your Cambrian classifications as well as particular credits for the wells. They were very helpful.

I am sorry to learn of the discontinuance of the field work, but if that leaves you more time for the work on wells it may be a blessing in disguise. The more I have to do with cuttings the more I am convinced of their essential value. Of course when reightly interpreted. Of some of my wells I am not so sure, as lanson and Olden, for example, where I may not have allowed enough for cave.

Yours very truly

Menoston

March 8, 1930

Prof. W. H. Norton, Cornell College, Mt. Vernon, Iowa Dear Dr. Morton:

I wish to thank you very much for the copy of your recent report on wells in Iowa which I have placed in my provate library. I appreciated your mentioning the work I had done on some of the records; the only one where this was forgotten was the well at Sioux City. Possibly I did not send you this information, however. I was the more pleased in that a recent report by another state survey failed not only to mention my publications but even to give any thanks for records and samples which I had sent.

I am continuing my work on well records although my failure to agree with Ulrich on all points has led to my retirement from work on outcrops. This is now being carried on by Edwards and Rasch of the Milwaukee Public Museum.

Very truly yours,

F. T. Thwaites, Geologist

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable sign above or preceding the address.

WESTERN UNION

SIGNS

DL = Day Letter

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The filing time as shown in the date line on full-rate telegrams and day letters, and the time of receipt at destination as shown on all messages, is STANDARDEME.

Received at 21 West Main Street, Madison, Wis. Telephone Badger 4321

1029 OCT 4

C286 20 NM=LANSING MICH 4

F T THWAITES=

WISCONSIN GEOLOGICAL SURVEY MADISON WIS=

TO BE ABLE TO SEE YOU AT YOUR OFFICE=

Feb. 18, 1930

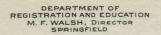
Miss E. J. Nyberg, Chief Clerk,
State Geological Survey,
Urbana, Illinois
Dear Miss Nyberg:

Reply to yours of the 3rd was delayed by the fact that I have been recovering from a serious operation and just had a setback in the form of a bad sore throat. I am enclosing the expense accounts signed. I thought the oil had been charged for on separate receipts and that this was included in accounts which went through last summer. The grease and labor, however, were not. There was also a slight bill at Centralia for work on the shock absorbers but if you do not find it never mind. My auto record would show what it was.

Very truly yours,

F. T. T.

Geologist



BOARD OF NATURAL RESOURCES AND CONSERVATION

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STATE GEOLOGICAL SURVEY DIVISION

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305 CERAMICS BUILDING UNIVERSITY OF ILLINOIS CAMPUS

February 3, 1930

URBANA

Mr. F. T. Thwaites Wisconsin Geological Survey Madison, Wisconsin

Dear Mr. Thwaites:

I am inclosing herewith three expense blanks which I shall appreciate your signing. The company, from whom we purchased the car you used this summer, does not seem disposed to pay this charge and the Survey will, therefore, take care of it for you. It will probably be another month or six weeks before you are reimbursed.

Yours very truly,

E. J. Mykery

Chief Clerk

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W. H. NEWETT

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DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR

June 26, 1929

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EDWARD A. HYER
EDUCATION

EDUCATION
HOMER S. MURPHY
POLLUTION

Mr. F. T. Thwaites, Geologist Geological and Natural History Survey State of Wisconsin Madison, Wisconsin

Dear Sir:

Your letter of June 21st addressed to Mr. Osgood, has been referred to me. I was very much interested in your comments concerning formations encountered at Escanaba and Seul Choix Point. Your experience with the rocks of northern and northeastern Wisconsin would certainly be of very much value to us in our attempted correlations of any deep well drilling in the Northern Peninsula of Michigan. I thoroughly appreciate your cooperation and trust that we will be able to reciprocate it at various times.

Yours very truly

GEOLOGICAL SURVEY DIVISION

R. B. Newcombe

RB Newcombe

Geologist

RBN:M

Mr. R. B. Newcombe,
State Geological Survey,
Lansing, Michigan
Dear Mr. Newcombe:

I wish to thank you for the separate on your paper on "Interpretation of recent discoveries in the salt-bearing rocks of Michigan".

I have not yet had a chance to look over the samples from the deep oil test in Michgan. If they go deeper than yours I will send you those you do not have. In any case I will send you a copy of my blue-print log.

Very tryly yours,

F. T. Thwaites, Geologist

Dr. R. B. Newcombe, Geological Survey, Lansing, Michigan

Dear Dr. Newcombe:

Inclosed please find blueprint log of the Powers well.

I wish to thank you very much for the five foot samples without which the

10 foot samples from the Company would not have safficed to find the

base of the Beckmantown which is marked by colitic chert.

I spent the summer in Marinette, forest, and Florence Counties just across the line from your state. We discovered a serious error in our maps, namely the false correlation of the ledge at Grand Rapids as Platteville. It is really Beekmantown as found by the older geologists on your side of the river.

Sincerely,

F. T. Thwaites, In charge of well records, Wisconsin Geological Survey

WM. H. LOUTIT

HAROLD TITUS

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STATE OF MICHIGAN



DEPARTMENT OF CONSERVATION

LANSING

GEORGE R. HOGARTH, DIRECTOR

October 15, 1934

Prof. F. T. Thwaites, in charge of well records Wisconsin Geological Survey Madison, Wisconsin

Dear Prof. Thwaites:

This will acknowledge your letter of October 12th to Dr. Newcombe.

Dr. Newcombe will be away from the office for about two weeks on his vacation and your letter will be called to his attention when he returns.

Yours wery truly

GEOLOGICAL SURVEY DIVISION
Per The Many

M

H. R. SAYRE
FIELD ADMINISTRATION
GENEVIEVE MCCANN
CHIEF CLERK

P. J. HOFFMASTER

MARCUS SCHAAF FORESTRY

R. A. SMITH GEOLOGY

S. G. FONTANNA

FRED A. WESTERMAN

H. D. RUHL

C. A. PAQUIN

P. S. LOVEJOY LAND USE PLANNING October 17, 1934

Nekoosa-Edwards Paper Company
Port Edwards, Wisconsin
Attention: F. H. Rosebush.
Dear Sir:

I wish to bring my class to visit the rock exposures at the south end of the Nekoosa dam on Saturday, October 27. A renewal of your kind permission to make this visit at our own risk will be greatly appreciated.

Very truly yours.

FTT:N

F. T. Thwaites



PORTEDWARDS, WISCONSIN, October 9th, 1933.

Mr. F. T. Thwaites Lecturer in Geology University of Wisconsin Madison, Wisconsin

Dear Sir:

We have your letter of October 14th asking permission to inspect the rock exposures at the south end of the dam opposite the Nekoosa plant.

We shall be very glad to extend this privilege to you under the circumstances expressed in your letter.

Very truly yours,

NEKOOSA EDWARDS PAPER COMPANY

F. H. Rosebush 3mk.

Department of Industrial Relations

FHR:GK

Nekoosa-Kdwards Paper Company.



PORTEDWARDS, WISCONSIN, October 19th, 1934

Mr. F. T. Thwaites
Department of Geology
University of Wisconsin
Madison, Wisconsin

Dear Sir:

We shall be glad to allow you permission to bring your class to visit the rock exposures at the south end of the Nekoosa dam on Saturday, October 27th. You may procure a permit from the Nekoosa Clockhouse on that day.

Yours very truly,

NEKOOSA EDWARDS PAPER COMPANY

J. H. Rosebush

Department of Industrial Relations

FHR: GK
cc Frank Boles
Nek. Clockhouse

STATE OF WISCONSIN

CONSERVATION DEPARTMENT

Rhinelander, Wis. September 27,1934.

Mr. F.T.Thwaites

Dept. of Geology

University of Wisconsin

Madison, Wisconsin.

Dear Mr. Thwaites:

Can you inform me where you have the long soil augers such as you use in the field work in Glacial Geology made up? Also what the cost of a 20 foot auger would be?

Address reply in my name, Conservation Commission, Madison. I shall appreciate your efforts in this matter.

Very truly yours,

G.T.Owen

WM. H. LOUTIT GRAND HAVEN, CHAIRMAN

HAROLD TITUS TRAVERSE CITY

PHILIP SCHUMACHER

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GEORGE C. FOWLER MANISTIQUE

RAY E. COTTON SECRETARY

STATE OF MICHIGAN



LANSING

GEORGE R. HOGARTH. DIRECTOR

April 3, 1934

DEPARTMENT OF CONSERVATION

Prof. F. T. Thwaites University of Wisconsin Madison, - Wisconsin

Dear Prof. Thwaites:

Your reprint of the article on "Well Logs in the Northern Peninsula of Michigan showing the Cambrian Section," printed by the Michigan Academy of Science last year, was received sometime ago. I very much appreciate your remembering me with a copy of this paper which throws considerable light on some of our correlation problems in northern Michigan.

Yours very truly

Brewsonk GEOLOGICAL SURVEY DIVISION

Petroleum Geologist

H. R. SAYRE

CHIEF CLERK

MARCUS SCHAAF FORESTER

R. A. SMITH GEOLOGICAL SURVEY S. G. FONTANNA

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FIELD ADMINISTRATION GENEVIEVE MCCANN

RBN:M

Mr. C. F. Mainke, Editor, National Well Drillers' Digest, Moose Lake, Minnesota

Deer Siri

Yours of Feb. 12 to the Department of Geology was turned over to me for reply.

I think that your idea of filing of logs of wells is an excellent idea. A few drillers may object that they are revealing information which they want to keep from competitors. However, the way I handle this is to keep confidential all records of private wells unless the owner or driller specifically permits their distribution to other drillers than the one who made the well. Records of publicly owned wells are given out to all drillers who ask for them; Of course, circumstances have to govern each case. Only general information such as elevation of rock surface, etc. is published.

Many drillers already have systems of keeping their own logs. The best one I have seen is about as follows:

Kind of material

Color Thickness, feet Depth, feet

A separate table below resords kind, size, and length of pipeused, depth to water, and the results of any tests for capacity.

he above system is adequate for shallow wells either in drift or in rock but does not cover the needs for deep rock wells. We encourage the saving of samples from them and send out bags and tags for that purpose. In the days of prosperity we paid drillers 5 cents a sample if they sent in reasonably complete sets in good order. Meny drillers now feel that the benifit they got from the detailed logs thus made out offset many times the cost of saving samples so this has now been discontinued. After examination of the samples I make up a blueprint log on scale of one inch to 80 feet which includes information on pipe, water level, and capacity. Every now and then I make up geological cross sections which put together the results of several wells. Some printed reports have also been prepared but these contain no detailed logs of individual wells, only general information.

I have not sought for samples from shallow wells or wells in drift only but have so far not organized any system for collecting logs. It was hoped that the filing of logs with the State Board of Health would be required under a well drillers' license law but as such has not yet been passed the matter still rests.

If we can cooperate with you in any way will be glad to do so.

Very truly yours,

F. T. Thweites, in charge of well records, Wisconsin Geological Survey

NATIONAL RESEARCH COUNCIL

National Research Fellowships
in the
Biological Sciences
Confidential Report on Candidate for Fellowship

Name of Candidate: Leonard R. Wilson

Report requested of: Prof. F. T. Thwaites, Dept. of Geology, Univ. of Wisconsin

Your name has been given as a reference for the above name applicant for a National Research Fellowship in the Biological Sciences.

The Fellowship Board desires information concerning, <u>inter alia</u>, the character and personality of the applicant, the applicant's scholarship and capacity for independent research, the probability of the candidate becoming in due time a constructive and creative leader in his special field and the merits of the proposed program, a brief statement of which is enclosed. The Board wishes to appoint only young men and women who show <u>unusual</u> promise of becoming leaders in research in their fields. We would appreciate a full and frank statement from you on the applicant.

May I say that the Board feels that in making these awards of Fellowships it is administering a public trust and you can be of assistance to the Board in the discharge of this public duty only if you make your reply in the same spirit.

Any reply will be held in the strictest confidence.

William J. Robbins Chairman

Report

Please return to the Secretary, Board of Mational Research Fellowships in the Biological Sciences, 2101 Constitution Avenue, Washington, D. C.

WATTOWAL RESEARCH COUNCIL

Netional Research Fellowships
in the
Etological Sciences
Confidential Report on Candidate for Fellowship

Name of Candidate: Leonard R. Wilson

Report requested of: Prof. F. T. Thwaites, Dept. of Geology, Univ. of Wisconsin

Your name has been given as a reference for the above name applidant for a Mational Research Fellowship in the Biological Sciences.

The Fellowship Board desires information concerning, inter alia. the character and personality of the applicant, the applicant's acholarship and capacity for independent research, the probability of the candidate becoming in due time a constructive and creative leader in his special field and the merits of the proposed program, a brief statement of which is enclosed. The Board wishes to appoint only young men and women who show unusual promise of becoming leaders in research in their fields. We would appreciate a full and fram statement from you on the applicant.

May I say that the Board feels that in making these awards of Fellowships it is administering a public trust and you can be of assistance to the Board in the discharge of this public duty only if you make your reply in the same spirit.

Any reply will be held in the strictest confidence.

thilliam of Reference

drogen

Signed		
Position	received otherwise have a distribute of the constraint of the cons	
Address		

Please return to the Secretary, Board of National Research Fellowships in the Biological Sciences, 2101 Constitution Avenue, Washington, D. C.

PROPOSED RESEARCH

Since the results of the investigation of the Two Creeks
Forest Bed were published (1932), considerable material has been
collected on several trips to the forest bed. This material has been
stored in hope that at some future date it might be thoroughly examined. In the spring of 1933 an examination was made of the cliffs
north of Two Creeks, Wisconsin, in hope that other exposures would
be found of the same forest bed. A new exposure was discovered
and found to contain a greater variety of paleoecological conditions
than the exposure already studied. Considerable peat and wood material was collected at that time and brought to Madison for storage.
Another trip to this exposure is planned for May 1934 with a glacial
geology class under the supervision of F. T. Thwaites. At that time
more material will be collected and the exposure will be mapped and
s tudied stratigraphically.

The usual paleoecological methods will be used in studying the peat (Science 73: 399-401. 1931); the logs will be sectioned and studied for age and ring growth, the fossils requiring attention from specialists will be submitted to the proper scientists, and the geological questions considered in cooperation with recognized authorities on Pleistocene geology.

Dr. William J. Robbins, Board of Fellowships in the Biological Sciences, National Research Council, Washington, D. G.

Door Sir:

In reply to your question about Mr. L. R. Wilson who has applied for a fellowship I can say that his investigation of the organic remains of the Forest Bed between the Mankato and Cary tills of the Wisconsin stage of glaciation was undertaken at my suggestion. His results make this occurrence one of the very few in North America which have received adequate study. Last summer the locality was visited by Excursion C-3 of the International Geological Congress with Mr. Wilson as guide. It was my impression that all the members of the excursion were most favorably impressed by the work of Mr. Wilson and would be glad to see it continued over a wider field. I might add that the excursion included several of the best known students of the Pleistocene such as M. M. Leighton and Ernst Antevs. I think that everyone was confident of the ability of Mr. Wilson to carry the work on. Unfortunately, there seems little immediate prospect of detailed explorations which might uncover other exposures of the seme formation but Mr. Wilson has found at least one other locality which differs in many respects from that first studied. The results should throw much more light on the climatic conditions which prevailed during an interval between substages of glaciation as compared to conditions during intervals between stages. Mr. Wilson has also studied all the organic remains that we could secure from the Pleistocene of Wisconsin and Illinois.

I am confident of the ability of Mr. Wilson to carry on the investigation and feel no hesitation in recommending him for a fellowship.

Very truly yours,

F. T. Thwaites, Lecturer in Geology

NATIONAL WELL DRILLERS' DIGEST

The Monthly Publication of the Minnesota Well Drilling Engineers

MOOSE LAKE, MINNESOTA

March fifth 1934.

3

Devoted
to the
best interests
of
well drillers
in all
sections of the
nation.

Non-partisan in all respects.

Our sole object being to assist well drillers in better management and organization, thereby increasing the efficiency of their business.

3

Department of Geology, University of Wisconsin, Manison. Wis.

Att: Mr. Thwaites.

Dear Sir:

Thanks for yours of the lst.

Will you department supply us with articles on the water situation of your state and an article on the geology of your state for our magazine.

We will be glad to publish it and I

know it would be of interest to our readers.
Will write you further about the well

drilling log.

If you can supply us with an article for our March issue would appreciate it very much. Any time up to the 25th., will be soon enough.

Yours very truly

C. F. Mahnke, Editor.

OFFICERS

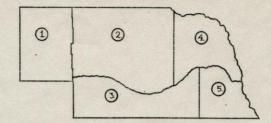
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DIRECTOR OF STATE GEOLOGICAL SURVEY

Rebraska Well Drillers' Association



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No. 2. L. A. MCLEAN, BROKEN BOW

No. 3. J. E. TAYLOR, MINDEN

No. 4. A. A. HORN, PAPILLION No 5. S. C. MOOK, WALTON

Members and Friends of Nebraska Well Drillers Association:

Spring is just around the corner — time for the Annual Convention of the Nebraska Well Driller's Association. March 11 and 12 have been selected as the dates; the place is Nebraska Hall, University of Nebraska, Lincoln. The crowd, we hope, will include all of our members and all others who are interested in our activities.

A program has been arranged which will be in keeping with the demands of the times. Well irrigation will be featured. The chemical nature of the groundwater will be discussed. New bulletins of interest to well drillers will be distributed. There will be an opportunity to bring your own problems before the meeting. These are only a few of the high lights of the program.

The latest drilling machinery and well equipment will be on display. There will be the usual excellent Dutch Lunch, through the courtesy of the Jobbers. Our Governor, Robert LeRoy Cochran, will be with us again as well as a number of our State Senators.

Our Secretary, Mr. Herbert Waite, is out of the state at the present time and Dr. Condra has asked me to act as your secretary until the next election.

President Gole and Dr. Gondra join me in extending a hearty invitation to be present on March 11 and 12. Pass the invitation on to those who have not been with us before.

We are enclosing a return postcard for your convenience. Let us know that you have received our letter and that you expect to be with us. If you can't make it let us hear from you anyway.

Remember March 11 and 12111

All set for a good, profitable time!

Sincerely.

E. C. Reed Acting Secretary Webraska Well Drillers Assoc.

NETHERLAND PLAZA

CINCINNATI, OHIO

December 7, 1936



HOTELS
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CONGRESS CHICAGO Mr. F. T. Thwaites, R. F. D. 4, Madison, Wis.

Dear Mr. Thwaites:-

We are in receipt of your letter of the 5th and wish to advise that due to the tremendous demand for minimum rate single rooms our supply has exhausted during the Geological Convention. The next best rate we can offer you is \$4.00 per day for single rooms.

We have taken the liberty of setting aside one of our single rooms rated \$4.00 per day for your arrival, December 28th.

Looking forward with pleasure of having you with us, we are

Yours very truly,

Harry Nolan

Executive Asst. Manager



Notherland Plaza Hotel, Gincinnati, Ohio

Gentlemen:

In reply to yours of the 8th the reservation of a room at \$4.00 per day is satisfactory. I expect to arrive during the evening of December 38.

Very truly yours,

December 5, 1936

Notherland Plaza Hotel, Fifth and Race Sts., Cincinneti, Ohio

Gentlemen:

I expect to attend the meetings of the Geological Society of America erriving the evening of December 28. I wish you to reserve a room for me at the rate of \$3.00 per day. Enclosed is stemped envelope for reply.

Very truly yours,

Northwestern Savings Building & Loan Association

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GROUND FLOOR, WASHINGTON BUILDING
MADISON, WISCONSIN



June 30, 1936

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Dear Shareholder:

This is to advise you that the Northwestern has declared a dividend on monthly savings, as of June 30, 1936, at the annual rate of 5%. This is the 92nd consecutive semi-annual dividend declared. We also wish to remind you that your account up to \$5000.00 is insured in the Federal Savings & Loan Insurance Corporation, Washington, D. C.

Investors' funds are invested only in first mortgages on Madison homes, in accordance with the strict laws of the State Banking Department. Speculative securities have no place in our investments. The Northwestern has never been allowed to invest in stocks of any kind. Your certificate, therefore, represents the best and safest investment one can make.

All deposits made in the Northwestern Savings Building & Loan Association are legal investments for Trust funds in the State of Wisconsin.

Since insuring our accounts, the assets have risen to the highest figure in the history of the Association, showing conclusively the public's interest in insured deposits.

Will you mail or bring in your book so that we can credit your account with the proper dividends.

Sincerely yours,

NORTHWESTERN SAVINGS BUILDING & LOAN ASSN.

The New York Times

TIMES SQUARE, NEW YORK, N. Y. LACKAWANNA 4-1000

CIRCULATION DEPARTMENT

March 10th, 1939.

Mr · F · T · Thwaites 41 Roby Road Madison, Wisconsin ·

Dear Mr. Thwaites:

We are in receipt of your post card of March 8th and regret that you received a torn copy of the World's Fair Supplement of March 5th.

Another copy of this supplement is being mailed today and we trust that it will reach you satisfactorily.

Yours very truly,

W. B. Schleigh Circulation Manager

WBS/RO

Dept. of Geology University of Chicago May 2, 1939

Dear Dr. Thwaites:

At the suggestion of Dr. J Harlen Bretz I am writing you for advice on a glacio-physiographic problem which has recently held my interest.

Basically, the problem is the explanation of the irregular topography of the Lake Michigan basin, as contoured from soundings of the Lake Survey charts. My present topographic interpretation suggests many sharp breaks in slope, and several long valley-like features. It seems unlikely that all these features are attributable to erratic glacial deposition; perhaps submerged escarpments and incompletely obliterated stream valleys are present. With the assumption that glaciation accentuated pre-existent valleys, but did not reverse their slopes, I examined the geological publications of Lake-bordering States for data on the preglacial surface. The most recent data found for Indiana and the southern peninsula of Michigan was published in 1931. Nothing was found which dealt with the drift thicknesses of the northern peninsula. For Wisconsin my only specific reference is Alden's Professional Paper of 1918. There must be much subsequent information available. I would greatly appreciate any suggestions you can make concerning the most feasible manner of obtaining such data, with a minimum of imposition upon the sources.

During this first year of graduate study I have read rather extensively on glacial geology. After "wallowing" thru many disjointed portrayals of glaciated areas, I was pleased to find all of them so conveniently synthesized in the map in your Outline.

Very sincerely yours,

Saul W. hetterstrom

Mr. Paul W. Nottorstrom, Dopt. of Goolegy, Rosenweld Hall, University of Chicago, Chicago, Illinois

Dear Mr. Hetterstrom:

In reply to yours of May 2 I am new working on the problem of the physiography of the bottoms of the upper Great Lakes. I have drawn 100 foot contours on the besis of the latest general charts applemented in places by detailed charts which show more soundings. My cross sections based on logs of Michigan oil tests indicate very clearly that the lake bottom is dominantly controlled by bed rock and not by drift deposition. I can trace the overlap of the Traverse across the lake to Sheboygan. I think one minor scarp east of that line may be due to a limestone in the Coldwater. You probably know that the Antrim has been discovered at Milwaukee.

I have not found any features which rescable river valleys except that I independently discovered the submerged river valley recently described by Stanley in the Straite of Mackines. The deep spot is Lake Michigan is ale wrly on the Saline-Monroe outers as long ago suggested by one of the Michigan geologists. The twin oscarpments of the Dundee and Traverse are easily distinguished in the northern part of Lake Michigan.

With regard to topography of bod rock surface we have never made any map north of Alden's. We have a let of scattering data but not enough for a map. It is now so difficult to get reliable information on old wells that such an undertaking seems hopeless. I have nowhere found much over 200 feet of drift along the lakeshore. The Sturgeon Bay valley was test drilled for the bridge and they found considerably less than 100 feet of drift. It would be quite a job to assemble all the records we have and I doubt that they would help much. I am now confident that the very deep drift localities at Forest Junction Black Greek, and Gillett are actual heles due to glacial crosion.

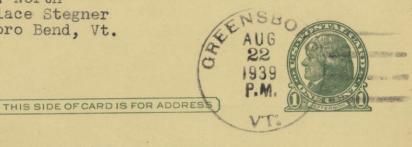
I am also convinced that much of the depth of the Great Lake basins is due to the same process which went farthest where salt and gypsum accurs in the bed rock.

Data for northern Michigan is much less than in Wisconsin. A few year ago I got all the Michigan Survey logs and they were very few.

I am glad you like the Outline. If there is anything else I can do please advise no.

Very truly yours,

Earle W. North c/o Wallace Stegner Greensboro Bend, Vt.



Mr. F. T. Thwaites

Route 4

Madison, Wisconsin

Dear Mr. Thwaites.

I'm planning to be back in Madison by the 15th of September and will get started on that report as soon as I've seen you. If you've thought of something during the summer on which you'd rather have me work than the California Coast Ranges, I'll be glad to take the new assignment.

Had a very interesting trip here traveling through the upper Ohio Valley, Blue Ridge, Hudson River, Coastal Province in Mass. and Maine, then the White Mts. Have been without radio, telephone, electricity, newspapers all summer. The woods are even better than I expected. But there was a killing frost (locally) on July 12, and spring has merged with fall——no summer. With best wishes to you and your family, I am Casincer My, North



The National Geographic Society

Ebrough the Board of Erustees at a meeting beld in Washington District of Columbia in the United States of America bas elected

F. T. THWAITES MADISON. WISCONSIN a member of that Society

In Witness Whereof, this certificate has been signed and presented Karge Uffetchim Secretary

JUNE 14, 1939

Privileges and Duties of Members of the National Geographic Society

YOUR election to the National Geographic Society, attested in your Certificate of Membership, admits you to the greatest scientific and educational organization in the world. The sole objects of The Society are to increase geographic knowledge and to diffuse it in popular form among the people.

The Society has a membership of intelligent, progressive men and women who with their families profit greatly from the delightful and valuable information it diffuses in text and picture.

Instead of an organization supported by a few philanthropically inclined millionaires, it is a matter of pride that its work is supported by the small annual dues of hundreds of thousands of people, eager to take part in such an educational project. It has no political or other entanglements, does not request donations, and is responsible solely to its membership.

The individual annual dues of its members, small sums in themselves but important in the aggregate, finance The Society's activities for the increase of geographic knowledge and its diffusion among the people. Each member, therefore, has an equal share and pride in The Society's remarkable achievements.

To familiarize yourself with The Society's more important accomplishments, you are requested to read carefully the résumé published on the inside cover of the NATIONAL GEOGRAPHIC MAGAZINE.

Origin The National Geographic Society was formed in 1888 by a small group of technical geographers, who, to exchange their carefully compiled and scientifically valu-

able information, inaugurated a learned journal which was intended for the technician and consequently was unintelligible to laymen.

Discovering, later on, the deep and well-nigh universal interest of mankind in humanized geography, the founders determined to admit, on nomination of members, or upon invitation by the Membership Committee, men and women of good standing in their communities for whose interest in geography the nominator could youch.

The highly technical journal of The Society, thereupon, was completely transformed, through publication of popular articles and wealth of photographs, full-color plates and maps, into what has become the most sought-after of illustrated publications for young and old and a treasured educational agency in many discriminating homes and progressive schools.

As a result of this wise reconsideration of values, The Society within 51 years has grown from a handful to an enlightened membership covering every nation and region of the world. Among them will be found many men and women distinguished for local and national service to science, industry, education, and civic welfare.

The Society has never deviated from its original altruistic purposes and educational policies. With growth of membership, however, it has been enabled, without soliciting donations, greatly to extend its research and educational activities and to make the NATIONAL GEOGRAPHIC MAGAZINE one of the noteworthy publications of modern times.

The National Geographic Society An is wholly altruistic. No individual Altruistic Organization or group has any financial interest whatever in its income, whether from dues, sales of publications, or other sources. Every dollar is invested in supporting The Society's explorations and research work, in improving The Magazine and The Society's other publications, and in maintaining its vast educational extension activities through the schools and the press. All income is administered in the interest of the membership by a Board of Trustees of international reputation. The names of these twenty-four trustees and of The Society's officers and principal executives are given The NATIONAL GEOGRAPHIC MAGGeographic AZINE is The Society's chief agency Magazine for the diffusion of its information among its members. The Society makes no effort to extend its sales on news stands or otherwise to casual readers. It endeavors to restrict copies to those who will appreciate and benefit from the material, and who will make its information available to members of their households, friends, business associates, local schools, clubs, and other organizations.

The twelve copies of The Magazine are supplied each year to each member without additional charge. To defray the cost of producing the member's personal copies and to meet the postal laws, a percentage of each annual membership fee is designated as a subscription fee to The Magazine. The remainder of the dues is devoted to the general educational purposes of The Society.

Membership, therefore, is in no sense to be confused with subscription to a commercially published periodical.

Those who wish The Magazine, but who are not members of The Society, are permitted to obtain the publication. Such subscribers, however, pay for The Magazine more than the annual membership fee.

Other The Society also publishes and makes Publications available, only through its headquarters, valuable and richly illustrated volumes: "Book of Birds," "Hunting Wild Life with Camera and Flashlight," "Our Insect Friends and Foes and Spiders," "Book of Wild Flowers," "Book of Fishes," "Wild Animals of North America," "Horses of the World," "Cattle of the World," "Book of Dogs," "Katmai-the Valley of Ten Thousand Smokes," and its unique Pictorial Geography. In addition, it issues many thoroughly modern maps and a series of exquisite geographic scenes and nature subjects suitable for mural decoration. All income from these publications is reinvested in The Society's projects.

Because first cost of plates and material is borne by The Magazine, these *de luxe* publications, above described, are made available at a low price to members who can purchase them for their own use or as

gifts to friends, schools, clubs, etc. These publications are obtainable only from the Washington headquarters. Descriptive illustrated circulars are supplied on request of members.

Annual Dues— The annual dues of The Society
How Determined are fixed at the lowest possible figure which will enable The Society to produce the member's own copies of The Magazine and leave a balance necessary to support

its scientific and educational activities.

The dues of the members, supplemented by all other income from The Magazine and from sales of books and maps, have, by careful business management, enabled The Society to support its ever-growing activities without appeal for donations.

Membership Dues— Membership fees in The When Payable Society cover the calendar year from January 1 to December 31. All membership fees, therefore, are due and payable in advance for the following year on January 1.

For example, members paying their dues and entering The Society, say, in June, 1939, would be recorded as 1939 members. They would receive at once the six back numbers of the GEOGRAPHIC MAGAZINE for 1939 and then would receive, as issued, the remaining six numbers of that year. Their dues for the second year, or 1940, would become payable on January 1, 1940. Dues should be paid direct to the Treasurer of The Society, who alone is authorized to collect them. Dues transmitted through subscription agents cannot be accepted.

The Society and its Magazine employ no solicitors or representatives at large. No one is authorized to collect membership fees or contributions. When a member of the Editorial Staff is sent out he is equipped with credentials making specific requests for the data desired.

As is the practice in all such organizations, members who do not resign are considered as desiring to maintain their membership for the next year. The Society, therefore, after notification that dues are payable, continues, in default of their instructions to the contrary, to retain them on the rolls for a marginal

on the cover of The Magazine.

period. Those made members through gift of friends are, of course, regular members. Resignations, as well as changes of address, should be sent direct to The Society and not through any other agency.

Members who, after notice, fail to remit their dues, are first suspended and, finally, after special notice, are dropped from the rolls of The Society and recorded as being in arrears to the organization.

Members who delay resigning until they have received several extra copies of The Magazine are naturally expected to restore their names to good standing by payment of dues or, at least, to clear their financial record with The Society by payment for the additional magazines they have received.

Inasmuch as a member's failure to remit dues promptly involves additional cost for correspondence, which must be taken from the sums available for The Society's educational work, all members are urged to give prompt attention to such notices.

A Life Membership may be secured upon payment of \$100.

To Change As the hundreds of thousands of magazine wrappers for each issue of Your THE GEOGRAPHIC must be addressed Address thirty days in advance, The Society must have a full month's notice of change of address, giving both the old and the new address. For example, a request to change the address of the May number must be received by April 1. Members changing address on shorter notice are requested to notify The Society and also to leave with their local postmasters postage for forwarding the coming number of The Magazine, as otherwise the post office will not forward it. The Society cannot undertake to replace copies that go astray where members fail to give ample notice to The Society and neglect to make forwarding arrangements with their postmasters.

Your Right As The Society has no endowment to Nominate and does not solicit gifts or financial donations, it depends for support and extension of its activities wholly upon maintenance of and growth in membership.

As it employs no solicitors and does not advertise to the public for members, The Society relies for expansion upon the co-operation of members in nominating worthy and interested friends and in encouraging them to enter The Society.

You, as a member in good standing, are privileged, of course, to nominate as many desirable friends as you wish. You may use either the regular nomination blanks or transmit your nominations by letters to the Secretary of the National Geographic Society, 16th and M Streets, N. W., Washington, D. C.

On receipt of such nominations, the Membership Committee passes upon them. The Secretary of The Society then apprises your nominees of your courtesy, informs them of the purposes of The Society and the advantages of membership, and invites them to apply for election.

Nomination imposes no financial responsibility upon the nominator. All nominations are carefully checked against membership records to prevent duplication.

Those making a gift of membership are notified if the recipient is already receiving The Magazine. The fee is then returned or applied as the sender directs.

Brief inquiry will establish that many of your associates desire membership, but hesitate to ask you directly to nominate them. Many members present memberships to friends as valuable and graceful gifts, which are gratefully accepted and appreciated.

GILBERT GROSVENOR,

President.

NATIONAL GEOGRAPHIC SOCIETY Administration Building

16th and M Sts., N. W., Washington, D. C.

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National Geographic Society

It is my pleasant duty to notify you that the Board of Trustees, upon recommendation of the Membership Committee, has approved your application for admission to the National Geographic Society, as attested by the enclosed Certificate of Membership.

Your membership, as the extracts from the By-Laws explain, will date from January 1, 1939, and will run for the calendar year, bringing to you all twelve issues of The NATIONAL GEOGRAPHIC MAGAZINE for 1939. The remittance received, therefore, has paid your dues in full through December 31, 1939.

May I suggest a careful reading of the enclosure, which explains your right to nominate others for membership and makes clear your other privileges as a member? Permit me, also, to express the hope and belief that your connection with The Society will prove a source of great benefit and unalloyed pleasure for all in your household.

GEORGE W. HUTCHISON, Secretary.

xxxxxxx 41 Roby Road,

Dec. 13, 1939

Hotel Nicellet, Minneapolis, Minnesota

Attention Mr. Morgan Nichols

Gentlemen:

May I change my reservation of Oct. 16
for a room during the meetings of the Geological Society
of America to begin on the evening of December 27
instead of Dec. 26 as I find it best to come up on a
daylight train? If you cannot arrange this please advise
me.

Vory truly yours,

April 4,1940.

Dear Professor Thwaites.

Many Hanks for the bratch

ontwast" and "Field Photography for geologists"

are both well known to me. The glaces paper is made
by my students in physic graphy.

Kind regards

Suicedly yours Robert. Nichels



IT'S SIMPLE TO INSTALL NOR'AIR THIS EASY WAY

1st - Remove filters B and D from metal covers A and E.

2nd - Open out fiber casing unit C as shown above keeping triangular window seal and label on top.

3rd - Insert filter D in opening of casing nearest metal sealing channels (be sure that fiber flanges lap over edge of casing).

4th - Lock filter in place by placing metal louvred grille over filter (see that metal flanges fit outside of fiber casing and louvres face down).

5th - Place unit in sill of open window with louvred grille facing out, fill in both sides with flat fiber sheets fitting them into metal slots on unit and to window casing. In wide windows allow sheets to over-lap fastening lapped section with metal clips at top and bottom of each lap. For narrow windows fiber sheets may be cut to size by scoring with a sharp knife and breaking.

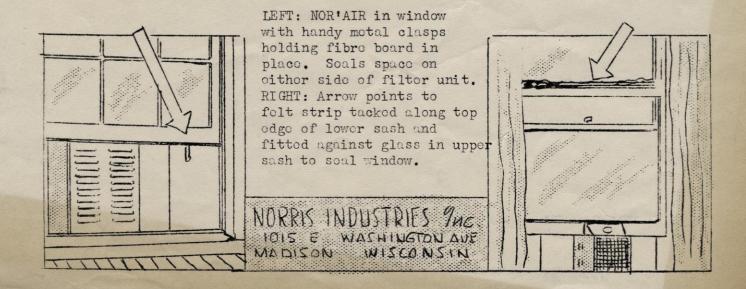
6th - Close window tightly against top of fiber board and outside the triang ular seal on the unit.

7th - Place 10" household electric fan in the unit. Fan must face the room (a smaller fan may be used but less filtered air will be supplied).

8th - Be sure that fan operates and does not oscillate. Run cord out of holes in casing side.

9th - Insert filter B in the easing C in front of fan and lock in p lace with metal grille A.

10th- Seal the opening between the top of the raised window and the glass of the upper window with the felt strip provided. This may be tucked in or tacked in place.



Aug. 20, 1940

The New York Times, Circulation Dept., Times Square, New York, New York

Contlemen:

Exclosed please find shock for \$3.00 for which please send the Sunday edition for cir months to

Corl F. Muoller,

State Hospital,

Mondota, Wisconsin

Very truly yours,

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL RESOURCES PLANNING BOARD

NATIONAL ROSTER OF SCIENTIFIC AND SPECIALIZED PERSONNEL

WASHINGTON, D. C.

ADMINISTERED BY
National Resources Planning Board
United States Civil Service Commission

Leonard Carmichael, Director James C. O'Brien, Executive Officer COOPERATING AGENCIES
American Council on Education
American Council of Learned Societies
National Research Council
Social Science Research Council

Dear Sir or Madam:

The United States Government is engaged in developing a Roster of Scientific and Specialized Personnel for the purpose of providing a comprehensive list of highly trained Americans possessing special abilities in their respective fields.

The information necessary for this purpose will be secured from returns to questionnaires similar to the one enclosed. The Roster is jointly administered by the National Resources Planning Board and the United States Civil Service Commission. Representatives of the National Research Council, the Social Science Research Council, the American Council of Learned Societies, the American Council on Education, and other national societies are members of its advisory committee. The Executive Officer of the project is Mr. James C. O'Brien of the staff of the United States Civil Service Commission.

Therefore, will you please fill out the enclosed questionnaire as completely as possible and return it <u>at once</u> to the office of the National Roster of Scientific and Specialized Personnel, Washington, D. C. An addressed return envelope requiring no postage is provided.

The filling in and mailing of this questionnaire is, of course, not to be considered as an application for a position. If, for any reason, the Technical Check List does not seem to apply to you, it will be appreciated if you will return it together with a note indicating the general field in which you are competent. It is possible that some individuals may receive more than one questionnaire. If this is true in your case, please return the unnecessary copies with a notation to the effect that they are duplicates. It is requested that the special directions for the completion of the questionnaire be read with care.

Yours very truly,

Leonard Carmichael, Director.

L'Eonard Carmichael

MINUTES

REGULAR UNIVERSITY FACULTY MEETING, MONDAY, JANUARY 12, 1942

ROOM 101 - LAW BUILDING

Meeting called to order at 4:30 o'clock by President Dykstra.

56 present.

The President expressed his belief in the readiness and willingness of the members of the Faculty to make an all-out effort to meet the new tasks created by the war emergency. He said that with new courses, and the possibility of loss of faculty and students, we must avoid waste, and simplify the teaching processes - not permitting, however, short time responsibility to interfere with long time plans. Education must not be sacrificed to win the war - and University committees must go on with their studies. He spoke of the proposed summer quarter, and the possibility of the schedule for next year being on the quarter basis. He asked the faculty to be as saving as possible of the time of the students. We must keep our own business in shape, attuned to the great social changes which are pending.

The Library makes the following announcement:

Due to the shortening of the period between semesters, lists of books to be reserved for the Second Semester should reach the Library very soon so that as much work as possible may be done in advance. The prompt and early receipt of lists will help the library materially in being ready to serve students at the opening of the semester.

A special committee consisting of Professor G. H. Doane, Chairman, Professor Eloise Gerry, and Dean G. C. Sellery presented a memorial resolution on the death of Anna A. Nunns, Assistant Superintendent of the State Historical Society. The resolution was read by Professor Doane, and was unanimously adopted by a rising vote, as follows:

ANNIE AMELIA NUNNS (1868-1942)

Annie Amelia Nunns, daughter of Henry and Mary (Ennever) Nunns, was born on Long Island, September 3, 1868; she died in Madison, January 5, 1942.

When a child of nine her parents settled in Madison, where she was to spend her life and find her life-work. She attended the University of Wisconsin and graduated Bachelor of Arts in 1889. In October of that year the officials of the Wisconsin State Historical Society, then housed in the Capitol, decided that they must add another member to its small staff in order that the library, which had been built up under Dr.

Lyman Draper, should be open longer hours and especially Saturday afternoons for the faculty and students of the University. Annie Nunns, fresh from a brilliant course in college, was selected as the new Library Attendant, and began her work on October 28, 1889, little realizing that she would spend over half a century in the service of the Society and its patrons, a career which was to be terminated only by her death.

Reuben Gold Thwaites, able publicist and editor, was then superintendent of the Society. He quickly recognized the ability of his new assistant, and soon Miss Nunns was assisting him in his editorial work. She spent long hours over the great set of the JESUIT RELATIONS (73 vols., 1896-1901) and worked with him on his edition of EARLY WESTERN TRAVELS (32 vols., 1904-1907) as well as many of the publications and proceedings of the Society. Many a night the lights in the Society's rooms burned late while the editor and his assistant labored to perfect their work. And when the task was finished the entire staff would gather for a party to celebrate the event and make merry over its accomplishment. Annie Nunn's keen wit often found expression in the repartee which sparkled on those happy and hilarious occasions.

Later Miss Nunns became executive assistant to Dr. Thwaites and, upon his death in 1913, was named Assistant Superintendent, an office which she held under each of his successors, Dr. Quaife, Dr. Schafer and Dr. Alexander. She proved to be an able administrator and frequently carried, without the title, the responsibility of the superintendency itself. Having known Dr. Draper, the first Secretary of the Society, and served in a confidential capacity under each of his successors, she carried in her retentive memory, more than any other person, a great deal of the unwritten history of the Society and its development; and with her death much of its intimate detail is forever lost. However, she lived to pass on to the new superintendent, Dr. Alexander, much of the accumulated wisdom of the superintendency, and many of her intimate friends are morally certain that she stoutly held off the assaults of death, man's ancient enemy, until she could accomplish that last deed of loyalty to the Society.

Next to the welfare of the Society, Annie Nunns counted the welfare of the University, for she knew it well from 1885, when she first came to the Campus as a student, until her final illness, late in 1941. She always attended its functions, and rarely missed her class reunion. She was closest, naturally, to the History Department by the faculty and students of which she was frequently ealled upon for assistance. They profited by both her editorial and bibliographical experience as well as her extensive knowledge of the location of historical research material in other institutions.

In Memorium:

Annie Nunns, 1868-1942

The State Journal:

Nunns had the distinction of 52 years service to the Wisconsin State Historical society. When she began her work in the autumn of 1889 her title was library attendant. During the years when Reuben Gold Thwaites was superintendent, Miss Nunns gave valuable assistance in the vast research in preparation for the publication of "Jesuit Relations in North America." As assistant superintendent of the society, and, at intervals as acting superintendent Miss Nunns gave described as a superintendent with a superintendent of the society. voted service. As a matter of course the state historical society itself will pay its own tribute to Miss Nunns.

Miss Nunns had outstanding ability in her work and was a strong character. Strong characters often put people off, but as notable as her service to the historical society was her capacity for friendship. She enjoyed people and she was certainly good company herself.

Miss Nunns was baptized in infancy in Port Henry, N. Y. The parish records, here in Madison, show that she was confirmed April 29, 1917. She was a natural leader in G. Salsman he reminded me of Miss Nunns' effective words in the parish meeting in the little chapel of St. Andrew's in Stockton ct.

in 1926 when the decision was made to move and build a new St. Andrew's church. There was an understandable hesitancy There was an understandable hesitancy about such a venture. Those of us who knew Miss Nunns know that she had about her that sort of character that I, personally, associate in my mind with St. Athanasius contra munda." She spoke, and the people took courage from her and went ahead. Miss Nunns was a brilliant woman and a loyal churchwoman. She received her communion on Christmas day and was ready and interested in the change in her life which she knew was soon to come. With St. Paul she would say, "As we have borne the image of the earthly we shall also bear the image of the heavenly." heavenly."

Because Miss Nunns had spoken with emphatic approval of a quotation used in a serphatic approval of a quotation used in a sermon during the summer of 1940 I conclude with these words which she liked. They are taken from an essay by John Crowe Ransom entitled "Honey and Gall" in the Southern Review for the summer of 1940. (This was an essay dealing with the writings of Thomas Hardy.)

"Text pathing is commonent knowledge than

"For nothing is commoner knowledge than that we, each of us, shall, for example, die and revert to dust; before that time bear sickness, hurt, disappointment, and unkindness. And lyric need not spend itself on this topie however ingenius its imagination of evil may

Nature was for him an insoluble ambiguity From the philosopher in him it exacted the not-so-distinguished tribute of indignation and reiterated defiant 'exposure'. From the poet it usually got faithful perception and love."

Rest eternal grant unto her, O Lord. And may light perpetual shine for her. May she rest in peace. Amen.

Francis J. Bloodgood Rector, St. Andrew's church. Always interested in the professional advancement of her own sex, Miss Nunns took an active interest in both the Business and Professional Woman's Club and Altrusa, and served both organizations in a national, as well as local, capacity.

Annie Nunns was a brilliant woman, with a keen mind which the truth rarely eluded. Her ready tongue was quick to give expression to her wit as well as to her salty irony, for she knew well the use of both weapons. The individual who tried to put something over on her rarely succeeded, but he who went to her frankly and openly found that she was always ready to do anything in her power to help. Both within the Society and the University and outside of them she had a host of friends, for she was one who attracted people and was always good company. Widely travelled, she found much to amuse as well as interest her both in Europe and America, just as she did in the daily round of her office. In a word, her's was a zestful life and she enjoyed it to the uppermost. She has deserved well of the Society and the University.

The minutes of the regular meeting of December 1 and of the special meeting of December 24, 1941, were approved.

Professor A. T. Weaver, Chairman of the <u>Faculty Club</u> 638 Committee, in presenting its informational report called attention to Table I, stating that the asterisk following the figure "9,122.40" at the bottom of the <u>Dues</u> column should be eliminated, and commas should be inserted after the words "indebtedness" and "equipment" in the starred note at the bottom of the Table. Dr. Paul Clark also stated that a note should be added explaining the apparent large increase in profits during the years 1937-38 and 1938-39, as follows:

\$2500 less. In these years there was a moratorium on capital indebtedness payments of approximately \$2500.

Professor Weaver then moved the acceptance of the report with the changes in Table I as noted above. Motion carried.

The following nominations for the Nominating Committee were made: R. A. Brown, F. Daniels, J. L. Hicks, O. A. Hougen, G. M. Hyde, M. R. Irwin, and R. J. Roark.

Adjournment at 5:00 o'clock.

C. A. SMITH, Secretary of the Faculty

307-308

Minutes - Jan. 12, 1942.

BOOKS FOR SOLDIERS

Books by the hundreds. Books by the thousands. Books by the millions are needed for the men in service.

The Victory Book Campaign is now under way and the faculty and student body of the University is requested to take part. Good books of many kinds are needed: Fiction, with emphasis on adventure, mystery stories, humor and historical novels; recent technical books, especially aviation and radio; current affairs, government; history and biography; poems, plays, essays; and timely reference books. In short, exactly the kind of books most of us like to own and read ourselves. Magazines are not desired at present.

This Victory Book Campaign is sponsored by the American Library Association, the American Red Cross and the United Service Organizations for National Defense, Inc. who emphasize both the real value and need of books as a distinct contribution to national defense.

Gifts and donations of books may be left in receptacles provided near the charging desks of the University and Historical libraries, and departmental libraries of the University. Receptacles will also be provided in the Union, the University Club, and the Library School, or books may be given to any Library School student.

May I respectfully urge your assistance in publicizing this campaign among faculty and students.

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Respectfully yours,

GEORGE C. ALLEZ Director, Library School

NATIONAL ROSTER OF SCIENTIFIC AND SPECIALIZED PERSONNEL WASHINGTON, D. C.

ADMINISTERED BY

National Resources Planning Board United States Civil Service Commission

Leonard Carmichael, Director

James C. O'Brien, Executive Officer

COOPERATING AGENCIES
American Council on Education
American Council of Learned Societies

National Research Council Social Science Research Council

CONFIDENTIAL INQUIRY

February 7, 1942

Dear Sir (or Madam):

We have asked Henry F. Nelson
Middleton, Wisconsin

to give us the names of three persons who have the most complete knowledge of his character and experience, and especially of his technical skills. Your name was one of those submitted by him. Since he is registered with the National Roster of Scientific and Specialized Personnel and is also of an age which makes him subject to call for training and service under the provisions of the Selective Training and Service Act of 1940, we should like to have your answers to the enclosed questionnaire.

As your answers and those of other persons will help to determine whether or not this man is recommended to the National Headquarters of the Selective Service System as "an individual who possesses certain special qualifications by reason of which he may now or later become a necessary man in civilian occupation," please answer these questions as candidly and objectively as possible. The information you furnish will be treated as confidential, and is only for the inspection of consultants of the National Roster of Scientific and Specialized Personnel.

It should be clearly understood, of course, that the classification of this man under Selective Service is within the jurisdiction of his Local Board. However, the National Roster of Scientific and Specialized Personnel may transmit appropriate information about him to the office of the National Headquarters of the Selective Service System in Washington, D. C., and that office in turn may send a letter about him to his Local Board in order to assist in the determination of his proper classification.

Therefore, it will be appreciated if the enclosed questionnaire is filled out <u>immediately</u>. A return envelope, requiring no postage, is enclosed.

Yours very truly,

Steuart Henderson Britt

Stewer Henderson Britt

Consultant

Enclosure

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL RESOURCES PLANNING BOARD

NATIONAL ROSTER OF SCIENTIFIC AND SPECIALIZED PERSONNEL

WASHINGTON, D. C.

ADMINISTERED BY
National Resources Planning Board
United States Civil Service Commission

Leonard Carmichael, Director James C. O'Brien, Executive Officer COOPERATING AGENCIES
American Council on Education
American Council of Learned Societies
National Research Council
Social Science Research Council

Dear Sir or Madam:

Approximately one year ago you filled in a questionnaire and technical check list for the National Roster of Scientific and Specialized Personnel. Recognizing the fact that the value of this material depends solely upon its current nature, we are again inviting your cooperation in the matter of providing additional data which would reflect any change in your general situation during this past year.

In order that demands upon your time may be kept at a minimum, every effort has been made to construct the enclosed questionnaire in a brief form. If no important change has occurred in your field of activity since the earlier circularization, merely complete items 1 and 2 and check the square to indicate that this is the case. We shall appreciate it if you will return this supplemental questionnaire in the self-addressed envelope provided. This envelope requires no postage.

I think you will be interested to know that questionnaires have been sent to more than 300,000 highly trained Americans, and the information concerning these individuals which has been brought together in the Roster files has made it possible for the Government to meet hundreds of specific demands for expert personnel in a rapid and accurate manner.

Assuring you of our appreciation for your continued willingness to cooperate with us in this program, I remain

Sincerely yours,

Leonard Carmichael,

Director.

U.S. NAVAL PHOTOGRAPHIC INTELLIGENCE CENTER Receiving Station, Washington 25, D.C.

13 May 1946

From: Officer-in-Charge.

To: All Holders of P.I.C. Publications.

Subject: Lowering of Classification of Certain Photographic Intelligence Center Publications.

1. The classification of the following publications of the Photographic Intelligence Center has been lowered from Confidential to Restricted.

Photo Industrial Studies - Jointly with AC/AS Intelligence

No. 6 The Explosives Industry. Dec 44

No. 7 The Shipbuilding Industry. April 45

P.I. Handbook Supplements

No. 3 Japanese Electronics. Mar 45

No. 6 The Coke, Iron & Steel Industries. May 45

No.10 The Shipbuilding Industry. June 45

Special Studies

No. 1 Japanese Electronics. Jan 45.

No. 3 Japanese AA & CD Guns. Feb 45

Special Studies - now out of print

Japanese Radio Radar. Jan 44

- 2. The P.I.C. Publication, "Landforms and Vegetation of the Pacific", is removed from classification.
- 3. Holders of these titles are requested to reclassify them accordingly.

CHARLES H. COX

Lieutenant Colonel, USMCR

Mrs. C. R. Mutt, 521 Western Ave., Plymouth, Wiscensin

Dear Loftie:

We are planning on coming up next Wednesday. The only thing which might prevent us is if the raspberries from Bayfield come. I do not think that they will as we had the strawberries only a few days ago.

Sunday we go up to see the boys at Green Lake. They seem to be having a good time although Rail wants his own tent so as to get away from the roughhouse nights. We do not favor the idea. He ought to fight it out with the others it would seem. We are going on to Berlin and hope to see Eller there.

Fred wants to visit some of the Kettle Moraine State Forest on the way back. He thought he saw a lockout tower southwest of Plymouth and wondered if it should be included in future glacial trips. Maybe it is not one. Possibly you know about it.

Sincerely,

Dear Lofty:

Last week the roomer wrote that he and his wife would be here from August 1-6. but before I could get a letter off to you I received one from him that he would not be here at all but would store some clothes in the room. No received an invitation to occupy Miss Bascom's apartment while she is absent from the city. I imagine he will occupy the room white continuously after september 1 until he can move into the house he has purchased on Center Avenue.

> I made the current jelly Thursday might and it is a beautiful color and is very stiff. It also has a pleasant flavor. Thank you again. I gave Emma four glasses made from the currents I had bought at the store.

Tom and I expect to leave for Houghton August 22. If Bile In is able to find something for the whole family, we may all leave then.

We'll be glad to see you and the doctor thenever you can come.

Sincerely.

I was going along morrlly when I found that the new sugar stamp is not due until September 1. Guess I shall have to can some frozen peaches as they have the sugar added.

As Annabel returns to school on September 3 and they have had to get new help in Berlin. I guess Ella Du's mother will return to Noughton just about the time we were to be there. If we can secure reservations. Tom and I are going to Colorado. Pollenfree air during the period of greatest coffantration in Madison seems to permit Tom to withstand the gradual decline upon our return.

I hope that you had last Wednesday's rain without the disastrous results apparent at fower Hill State Park.

Sincerely,

Hon has so much to do the lad year * weeks That Dis slow at getting Christmas mail in its may. Had a letter from Mis. Fobeck and one from Elmia Vecenely. Elmie Rod Dr. and Mrs. L. and Merriel with he It he apr in Fronkington for Hautsging, The aus aunth, grie * how are afor and I trey had len for deines. Mercies is in pahal ni Philaderphia. io planning me being a bockridogist. His mother Days he' working plealy herd now - he want to arthrow

Mit us this year. So usie hopping for good during conditions. a few years ago! I think I didn't unte you Orice us bot two lot- (50' Me Lya yair Larring a Kry Happy Christino and each) just tus dono wish in Western an. as a sile for over new home, Then us bot all That 1847 mel be god b of the hillside (and event to) from our oschoolyund to the The Nutto Cety limits and back g/te Clx, - 72 acres with price. Now no me can opil our ocenouy! to spend Christina Day

Dear Lofty:

Just received your letter in the morning mail and we shall be glad to have you stay with us the 16th and 11th of May. Largely on account of the fear of getting into trouble with the O.P.A. we have never reuted the green room.

We both have an invitation to the banquet and have not answered it. I shall not be able to attend and I am urging Fred to send in his reservation.

Mrs. Lobeck is to visit Mrs. Adkins in May.

Now I must get at my cleaning. We shall be very happy to have you stay with us.

Sincerely,



ins Die probably Dear amy: Fin glad to here a I thought I's playe Traven at The Thevailes my my - Howis home when I go dom next Salviday. Leen there is years-Il be seeing you au looking formen to some time in the Deing Florice Whitbech_ Stell mely be in Medion afternom. Oue y the two morning dering down Matil Salviday /Len mit me so to be at do always he sister's and that is one in one of the Light. outures west of lime

ARS SACRA
CONTRICHT 1946
CONTRICHT 1946

muc. R. met

Mrs. Charles R. Nutt 521 Western Avenue Plymouth, Wis. Salunday All. Den any: I had a my satisfactory morning last Monday and still made Eslumnes at 100 P.M. I mich you comed see the little Daggette. They are such attraction youngsters. Lown has changed most orince I paw him Is him for he comed neither mach nor tack they. He's use greatly that they there men shy than therew. I dopped in Fit's to see The old friend who is living at The hospilat There. Such a blook situation - in a room mit three The old lidies Which, naturally, isn't a key cheerpe environment. His such a

piliful condition and I can't under horning the tespitality of the Theraited Lome when I go to Mostion. There how been so many The had a really nice day yester. changes orince I less modione day but most of the week, has that it make it all The nice been disagreeably cold. This to be in contact mit the morning we planted some friends I still has there But I early puret com which we Think my call at Serence Hall tope vill not get discorraged Salurday possibly ends my intend by the cold. there It just dirait appeal to me to I suppose Helen is Lome again by this time. In going to go there any mon - too many changes and to many diangers ask Bevlah Pist, to Beep me to be of any interest to me. informed about her conditions for I know it's not easy for her the looking formand to seeing you early in the ourner - the days any time to do it. are long Then Do you can how a late they than you did last fall. It was certainly a My Palistying and most enjoyable muss end mit many tranto to you for you part in a levely users and and mit quelings to the family - frit less - topy for me and I suely appreciale

Mrs. Charles R. Nutt 521 Western Avenue Plymouth, Wis. Sunday P.M. april 20 -Dear amy: Di been Lopsing for serval neets to manage to drive to modison some day but never got aund to settling on any specific date. But this past with I received a letter from Mr. Frich writing me to the Whitbeck Memorial dinner on may 101th, about which you un. doubletly brigu. or uniter to accept the invitation and now die uniting to you to ask is it moved be confirment for you to O" to be me in" from Salurday antil Monday morning - I don't care to dient home Actuday PM. because Dernday Koppie is so teny this oping. If it isn't entirely con.

the former geography stop newbers vencent for you, any, don't bestate mes certainly be included. In to day ou for I can make other looking formard to seeing therence - the arrangements is it is. I thought do frist time or turner years - harris will you faist because Id peen le ouve me maniages. preger daying mit you follow of How been brog all miles but it's hard to resolven der what began me it is consumed for you a friend Who has a sister living in the may all the time. March mas pully wel taken one by the army med outures y modion mel duin down what me and I thought Hed Curs drin for funds for which I nas responsible. It probably didni actually take ouch a lot y time Is wile you first. author friend too is going mut me me she mill day mit some me of the one I never jelt I was leadly free amais zou Les grota. Mocenni Oruchilagy Soc. peggle, the condition. Homis Leard for serval Miss but the last them I had Omittology gamp contentia and field trip is That wish end and no my good - that she appears The and I had tentatingly planned to really be recovering. to go down any way. Then this The volume for me y one friends terz Whiltech deine desliped and is quite different. She died right That definitely decided me. began lest after a jew year of pour tealth letruinating in many I assume that you and Tred miss of my greet outering, and get are being asked to attend since

per the has cause and romes not nem. Horrit Lears from the Solvers orice Christmas but its my lum to wite and so I can't expect to hear. Hope you all machered the mile milest any huntle ferm flu such as many people had It doesn't feel right now as is the winder the winder the winder the winder the took about 4" y onow hiel look formand to occuring you in May but he one to till me is lit ion't can review to how me day mit you There is ouch lack of grantes in medicar this year That I realize you may have I unedis de consumer. greetings to you all -

Mrs. S. Sury

June 5. 1947

Dear Lofty:

If it is convenient for you to have us, we shall come up on Saturday, June 28. Tom and Bill go to Camp Tichora on June 22 and return . on June 29. As Bob starts summer school on June 25. so shall have to come on Saturday.

Shall try to go over to see Melen some time during the webk so that I can give you a report of her condition.

Seedless to say, we are enjoying the fruit. We pour off the juice, add sugar, and warm until the sugar to melted. We then put the juice on the fruit again and let the mixture stand in the refrigerator a few hours. I certainly appreciate all the work of canning the fruit.

Parhaps I was a little too ambitious. for the guest room is without curtins until some are returned from the obtaners

Come down whenever you can get away!

Sincerely,

Dear Lofty:

The flowers withstood the trip perfectly. On our return to Medison we went directly to Helen's. I did not intend to go in but Ruth ineisted. Helen was resting and was delighted with the peonies and especially the ross. She held one in her hand and admired it. She said it was just like you to de something like that.

Though we turned down County Trunk AA and kept a constant search for the five tower, we missed it. When we turned west, we spetted it some distance north. Aparently it must be reached from "U" instead of "AA". We had a delightful trip home, but noticed a very ominous western sky just as we went down Monroe Street. It materialized in a short time.

We enjoyed the day in Plymouth just as we always do.

We hope you will be able to come to Madison in the near future.

Sincerely,

Rev. Eyron C. Welson, Erinity Lutheran Church, Spooner, Wisconsin

Dear Per. Melnon:

Yours of July 6 and the copy of "Before Abraham" have been at hand for some time. I read the book with ruch interest. Although I do not follow all of the argument I think it an excellent advance in method of appreach to a most difficult subject quark you for sending it to me.

We were very glad to hear from you and hope you find your new location satisfactory. We made a trip to the Yellowstone just after school. How any fears that she may have to have another operation and that is keeping everything uncertain.

With best regards.

Simerely yours,

TRINITY LUTHERAN CHURCH

BYRON C. NELSON, Pastor SPOONER, WISCONSIN

July 6, 1948

Prof. F.T. Thwaites Geology Dept. University of Wisconsin

Dear Prof. Thwaites,

I am having my church publishing house, which has printed a number of my books, send you a copy of one which has just come off the press which was about completed when I was studying with you. I believe there are a number of things with which you will not agree, but I would like to have your opinion of the book anyway. You will note that you have been depended on in some matters.

I am writing for the church rather than secular folks, being one of those who think the statements of the Bible are worthy of a lot more respect than scientistigenerally are willing to give them. it. The issues are too great to be guided in one's thinking only by the best that men can figure out. in the face of the testimony of a book as remarkable as is the Bible.

I had to leave out many interesting things I would have liked to include, in order the keep the book simple and readable by ordinary people, and at the same time keep it in the price range where a lot of people would buy it.

You will be interested to know that all the drawings are mine. A few of the appendicies I wish I had kept in the main body of the text where they were originally . I also wish I had separated some of the illustrations to makethem larger.

Very sincerely yours

Please give my regards to Amy.

PS. If there not prymound have gone all out for teledowne dions. But they are not estential in an argument of the brind I make here.

Byron C. Kelon

Code 106
REFER TO FILE NO.

NAVY DEPARTMENT

BUREAU OF SHIPS WASHINGTON 25, D. C.



4 June 1948

Professor F. T. Thwaites Department of Geology, University of Wisconsin Madison 6, Wisconsin

Dear Professor Thwaites:

I am at present engaged in writing a book for the Bureau of Ships of the Navy Department about the resistance, propulsion, and motions of ships, for which I need information concerning the surface slopes of rivers and channels in which currents are running.

My friend, Dr. Kenneth J. Bertrand, has informed me the he thinks you can give me this information, or at least can lead me to it, so to speak.

As you will understand, when a boat or a ship travels upstreach in a river or canacl in which there is a current, and in which there is a corresponding slope in the water surface, the boat must not only push itself through the water but it must lift itself uphill, as if the sloping water surface were an inclined plane. This feature has been largely neglected in books of the past, with the result that there are little or no data available to the naval architect concerning the amount of slope involved.

The only information I have at the moment, from an unremembered source, is that water will flow if there is an inclination in the water surface of one-eighth of an inch per mile.

If there are any published data on this subject to which you can refer me, I shall greatly appreciate your assistance in the matter.

Very truly yours,

M. E. Saunders
Captain, USN

Captain H. E. Saunders, Bureau of Ships, Navy Department, Washington 25, D. C.,

Dear Capt. Saunders:

Yours of 4 June is at hand but pressure of final examinations has delayed my answer.

The best general references on stream slopes in this country is U. S. Cecl. Survey Water Samply Paper 4 Although old I think this will tell what you want to kn. My feeling is that in streams which can be navigated by large vessels of conventional design (not speed box slope is a very minor factor in power requirements. You probably recall Manning's formulator velocity of streams shows that size of stream is more important than slope for it occurs with a larger expenent.

the Massissippi River Experiment Station of the Army Engineers at Vectorium, Mas. has put out many papers in mimographed form which deal with the physic of rivers. Unfortunately, our library here has few of these. However, I think they could refer you to much more up-te-date information than I have.

Very truly yours.

Mrs. C. R. Mutt, 521 Western Ave., Plymouth, Wisconsin:

Dear Lofty:

Miss Plood called us Friday to say that the Doctor passed away the day before. Please accept our sympathy. It was out of the question for either of us to get up to the funeral. Billy was sick in bed with a sinus infection and it was a long time before we could get a doctor to come. Also I had classes all the time with no one to take my place. There are 91 taking Mapping and they work at all hours of the day. Bill is better today but now from has an inflamed eye. Parlier in the week Bob had a running ear. So you can tell how things were.

wies Stillman called to eay that she has found Helen's photos of the Alaska trip of 1926. She would like you to tell her about them when you come down here.

Sincerely yours.

Mrs. Charles R. Nutt 521 Western Avenue Plymouth, Wis. ma. au Dear amy: The elipping about the Daggetto and the church organ cause yesterday and, just in case Desorby donail pend one on to the Senior Daggetts, In going to mail This one to Dois. Dais had told me something about the venture so I mas par. triularly interested in reading The neuspaper article. I thought surely I would manage to go to Madison This month Int there are so many things I have to do that its time for plipped by and I herrit gotten there upt. I don't like to go derm and back the same day unless it's necessary and so I think Ill wait until I can go for a comple of days! Just

now sin starting to settle the matter of installation of an oil burnes in the furnace and so to day In going to Helmygan to try to locate the dealer for the type Isi decides I mans It mes be a conversion burner nut a complete oil fumace so work near too smuch tearing up in The Basement to there are a few changes to be made in the pipes. In undering if you can't all come to Plymont for a day before ochore starts - or on a Sollerday afternaids if that you about it began pauty de cause I thought dis see you un Modion began now and partly because, in the carlies part of the occurrer, I didn't Form whether you were homes from your molein Tujo, & youl

Mrs. Charles R. Nutt 521 Western Avenue Plymouth, Wis. just let me tonow other you can come do Ill be some to be as Teme - I know I don't need to Day That for you always do. I thought of it because In made so many day and tay day tripo this cumes that it seems as is I had been away a lot. This last week end I speed mit the Mis Lee at home to take care ? The pup who is too lively to god length of time. Daggetto are starting a three messo trips to Colifornia just began Fator Day and Donis manted me They left. Ruit probably told you that the

tras Leve briefly for a comple of Times This purmmer, on her may to and fun Son County. Drie umdering ig Benesh Post, Mr. Keartie aus Miss Hargren nort som be coming back from Enope. They left Medisin The latter part of March aus have been haring a groud trip. Trill be Loping to Lear that you can come to Phymenth, enter right analy is if That isn't possible later this fall.

Mit len-

THE NEW YORK ACADEMY OF SCIENCES

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CENTRAL PARK WEST AT SEVENTY-NINTH STREET

NEW YORK 24, N. Y.

15 July, 1949

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HANS PANOFSKY, Oceanography and Meteorology
FREDERICK REISS, Division of Mycology

EXECUTIVE DIRECTOR

Doctor F. T. Thwaites 41 North Roby Road Madison 5, Wisconsin

Dear Doctor Thwaites:

Thank you for your letter acknowledging our invitation to you. We are most appreciative of the attention which you have given the matter of membership in The New York Academy of Sciences.

Should you, at any time in the future, desire to become affiliated with us, please be assured that your request for such membership will be sincerely welcomed.

Very truly yours,

Head, Membership Division

GS/hej

Dear Lofty:

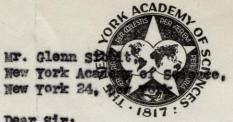
Secial service Department, but I want to take time to invite you down for a visit next week. Pred leaves for camp Friday afternoon and I shall have to drive him up. Monday from and Bill start on a three day bike hike and I may have to drive sob up to damp wichorn for a three-day stay. Saturday for and fill go to Manitowoo and I shall have to so up after Fred. Thus you see I shall be alone a good part of the week.

Come if you can!

THE NEW YORK ACADEMY OF SCIENCES

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Dear Sir:

CENTRAL PARK WEST AT SEVENTY-NINTH STREET

EUNICE THOMAS MINER In reviyorke yours of 30 June I wish to thank you

30 June, 1949

but I am in no way interested in the New York Academy.

Very truly yours.

Doctor Fredrik T. Thwaites Science Hall University of Wisconsin Madison 6, Wisconsin

Dear Doctor Thwaites:

On June 7, 1949, we sent you an invitation to membership in The New York Academy of Sciences. We have had no reply from you to date and are, therefore, interested in learning what your decision has been.

May I hear from you regarding this matter? If you have decided to become a member of the Academy, I shall be glad to present your name to the Council at its next meeting.

Very truly yours,

Head. Membership Division

GS/hej

Jamuary 23, 1950

Dean of Graduate Studies
California Institute of Technology
Pasadena 4, California

Dear Sir:

In regard to the application of James Ronald Novotny
to enter your institution as a graduate student he has been in
my classes for the past year. His record for scholarship has
been among the top 10 percent of the class. The class last year

In regard to the application of James Ronald Novotny to enter your institution as a graduate student he has been in my classes for the past year. His record for scholarship has been among the top 10 percent of the class. The class last year was in Mapping and his record in the field was also excellent.

However, the class was so large that I was unable to get to know all of the students as well as I used to with smaller groups. So far as I can tell his personality and character are good. I recommend him without other reservation than that above.

Very truly yours,

F. T. Thwaites

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

HOUGHTON, MICHIGAN

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September 29, 1955

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Mrs. C. R. Nutt 521 Western Avenue Plymouth, Wisconsin

Dear Mrs. Nutt:

Miss Wood has asked me to write and tell you her Mother passed on Monday night. She had another very slight stroke and then peacefully slept away.

Dear little Ella took the remains home to Berlin yesterday. The funeral is this afternoon.

Ella carried on all these years like a little general. She was the most devoted, attentive daughter I have ever known. Her mother was a wonderful patient. Never was out of sorts nor demanding. Ella surely needs a good rest but suppose she will return here and start working.

Very sincerely,

Vivien Z. Lawrence Secretary to Miss Wood

Varing-Laurence

N

Prof. Bredford Willard, Head, Dept. of Geology, Lenigh University, Bethlehem, pennsylvania

Dear prof. willard:

stove we recong was my assistant in manping in the spring of 1953. This involved a week in the field at Baraboo where we had a large class working in the woods under true field conditions. His work in this was satisfactory and he got along all right with the boys. Since I have retired since Nordang worked with me I now do not have any class books recording his schelastic work in my classes. I talked with others in the Pepartment this morning including Dr. Cline under whom W rient did his doctors thesis and they told me that he was a good student. I feel that you would find him a good instructor.

Sincerely wours.

LEHIGH UNIVERSITY BETHLEHEM, PENNSYLVANIA

DEPARTMENT OF GEOLOGY

Nov. 27, 1956

BRADFORD WILLARD
LAWRENCE WHITCOMB H. R. GAULT G. R. JENKINS J. D. RYAN

VIA AIR MAIL

Prof. F. T. Thwaites Dept. of Geology University of Wisconsin Madison 6, Wisconsin

Dear Professor Thwaites:

I have received recently a letter from Dr. Stephan C. Nordeng, who is interested in an opening here at Lehigh. We are looking for a man to teach elementary geology, elementary engineering geology and such advanced courses as his training and experience may warrant. Dr. Nordeng has given your name as a reference. If you wish to write me confidentially as to his qualifications as a teacher and as a colleague, I shall be indebted to you for the information.

Very truly yours,

Bradford WILLARD, Head

Department of Geology

BW/LT

pr. Robert L. Broeden, ational Geographic Magazine, Illustrations staff, Washington 6, D. C.

Dear Sir:

Yours of the 28th is at hand. I have studied the Two Creeks Forest Bed ever since 1922 and have had others work on it. All this work is summarized in my reent paper on "Pleistocene geology of the Door Peninsula, Wisconsin a copy of which is being sent you under sepate The illustrations in that are the best selected over this length of time but are half tones which are hard to reproduce. I have the original prints from which these were made and can lend them to you. also have other black and white prints which I made for a studio in les Angeles which, however, never used them. They specified that they wanted only prints with no persons in them. I sent them both matte and glossy prints but would have to have a little time to look them out of storage. I have the negatives of the pictures used by Wilson. I did not take many color shots for most publications refuse the expense of reporduction.

beginning of June, 1956. As my chart of lake levels shows, the level of Lake Michigan is now in a low cycle. When it will rise again is anybodys guess. Pending this future event exposures of the buried vegetation are very poer. I could get no satisfactory color photos in 1956 althouth I tried twice.

Sincerely yours.

Dr. Henry Melson, Research coolegist, pield Research Laboratory. Dellas 21, Texas

Deer Henry:

In realy to yours of the 13th I no longer have my class books or other records having turned them over to the Geology office where they have changed secretaries since I retired. However, I do not think this material would help much. I remember nothing favorable or unfavoreble about Jack Horachien. So far as his history goes I called Botany and found most of those who knew him best are now on leave. Hence I could discover little. It did come out that he had been at oregon, then came here and last went besk to gregon. This accounts for three of the five collages we thought. I discovered nothing against him in his record in Botany. of course the changes do not look well but since you loose credits with every change it would seem as if they were mavoidable. . I have noted, . he sper, that these who chance schools often are aut to change jobs often too but this does not always hold true. I know nothing of his ability in pollon study.

Thank you again for the radiocarbon tests. The last is that my report may so ach the press mafter april".

Sincerely yous.

MAGNOLIA PETROLEUM COMPANY

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ASSISTANT TO MANAGER SUPERVISOR GENERAL SERVICES

T. A. POLLARD ASSISTANT TO MANAGER

February 12, 1957

Professor F. T. Thwaites Department of Geology University of Wisconsin Madison, Wisconsin

Dear Professor Thwaites:

I am writing to obtain some information about a student who took a course under you during the second semester, 1954-55. The course he took was Geology-143. His name is Mr. Jack McLachlan and he now gives his address as the Botany Department, Oregon State College, where he is obtaining his doctors degree in Botany. If you remember this student could you give me your opinion of him inasmuch as he is applying for a job as a palynologist with us? We are particularly concerned, because his record shows that he has been inrolled in 5 different colleges. We do not know the reason why he has enrolled in so many. Some of them he attended for only a very short period of time.

Any opinion you may give will be greatly appreciated.

Henry F. Nelson

Research Geologist

HFN/ms

Oregon has - Oregon aft for Nat Res. C. rewlands

National Geographic Magazine

WASHINGTON 6, D. C.

ILLUSTRATIONS STAFF

January 28, 1958

Dr. F. T. Thwaites 41 North Robey Road Madison, Wisconsin

Dear Dr. Thwaites:

We are gathering material for a proposed article on methods of dating the past, with emphasis on carbon-14 dating.

Since spruce wood from the peat layer at Two Creeks, Wisconsin, is so important, especially to the carbon-14 process, we are interested in getting photographs of the Two Creeks area as part of our illustrations for the article.

Because of your interest in the subject, we thought perhaps you might have photographs made in the region. If you do, we certainly would appreciate considering them for publication. Do you also know of other possible sources for pictures?

We are especially interested in seeing photographs showing scientists or students examining tree trunks protruding from the peat layer, if such pictures are available.

We have had conflicting reports on the site as it appears today. Some indicate the peat layer has been buried under sand, making picture taking impossible now. Could you tell us if this actually is the situation?

Your help in supplying this information and any pictures you may have certainly will be appreciated.

Sincerely yours,

Robert L. Breeden