

January 28th, 1904.

Mr. Abraham Bowers,
Sheridan, Indiana.

My dear Mr. Bowers:-

I have been considering your letter of recent date regarding your desire to come back to the University, and have been trying to think of some work which you might do at the University. But I am very sorry we have nothing which seems to present itself to my mind. We should be very glad indeed to have you come back and finish your college course. Could not you do this by the aid of student service in some of the ways suggested in the little circular which I enclose.

Regretting my inability to write more encouragingly to you, I remain

Yours truly,

W. R. Harper

January 28th, 1904.

Mr. Abraham Bowers,
Sheridan, Indiana.

My dear Mr. Bowers:-

I have been considering your letter of recent date regarding your desire to come back to the University, and have been trying to think of some work which you might do at the University. But I am very sorry we have nothing which seems to present itself to my mind. We should be very glad indeed to have you come back and finish your college course. Could not you do this by the aid of student service in some of the ways suggested in the little circular which I enclose.

Regretting my inability to write more encouragingly to you, I remain

Yours truly,

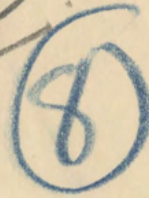
W. R. Harper

The University of Chicago
Founded by John D. Rockefeller
Office of the President

JAN 28 1904

Answered _____
Francis W. Shepardson.
Secretary to the President.

Abram Bowers



Chicago, January 22nd, 1904.

Mr. M. H. MacLean,
University of Chicago.

My dear Mr. MacLean:-

I am sending you some material from
Abram Bowers. Please look it over and see if you can suggest
any way in which we can help him during his residence at
the University.

Yours truly,

Francis W. Shepardson

Secretary to the President.

Mr. Shepardson,

*Mr. Bowers worked for
me for a year in the old Express office.
I could not possibly use him in any of my
work. I will talk with you about him.*

M. V. M.

JAN 28 1904

The University of Chicago
Presented by John H. Woodbridge
Office of the President

Answered

Francis W. Shepardson

Secretary to the President

Chicago, January 22nd, 1904.

Chicago University

Mr. M. H. Maclean,

University of Chicago.

My dear Mr. Maclean:-

I am sending you some material from
Abram Bowers. Please look it over and see if you can suggest
any way in which we can help him during his residence at

the University.

Yours truly,

Francis W. Shepardson

Secretary to the President

Mr. Shepardson,

Mr. Bowers was here for a year in the old office. I have not forgotten him in any way of my work. I will look over what you have sent.

M.H.M.

-OFFICE OF-
CITY SCHOOLS.

ABRAHAM BOWERS,
SUPERINTENDENT.

M. H. Mc

SHERIDAN, IND.,

Jan. 12 1904

Prof. F. W. Shepardsan
University of Chicago

Dear Friend and Professor

Enclosed find a letter which I shall be glad to have you file with the letter I wrote you January 1. It is taken up with President Harper. Prof. W. S. King, a district supervisor in the Indianapolis schools was to have sent a letter to President Harper for me but if it did not reach him, it may have gone to your Teachers Bureau.

Hoping you may do the best thing possible for me, I am,

Yours respectfully,
Abraham Bowers.

Mr. J. W. W.

SHERIDAN, IND. Jan 12 1902

Dear Sir,
I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the proposed new school building at the corner of 1st and 2nd streets, and in reply to inform you that the same has been referred to the Board of Education for their consideration. I am, Sir, very respectfully,
Yours truly,
Abraham Bowers,
Superintendent of Schools.

January 4th, 1904.

Mr. Abraham Bowers,
Sheridan, Indiana.

Dear Sir:-

I beg to acknowledge your letter of recent date. It will be given due consideration soon.

Yours truly,

W. R. Harper

January 4th, 1904.

Mr. Abraham Bowers,
Sheridan, Indiana.

Dear Sir:-

I beg to acknowledge your letter of recent
date. It will be given due consideration soon.
Yours truly,

W. R. Harper

Board of Education.

J. M. FRANCIS, President.
N. W. COWGILL, Secretary.
DR. H. E. DAVENPORT, Treasurer.
ABRAHAM BOWERS, Superintendent.
GEO. W. SCOTT, Supervisor of Music and High School.

Sheridan Public Schools.

W. B. SHOEMAKER, Principal High School
W. H. HILL, Assistant Principal.
MISS KATHERINE HOFFMAN, Second Assistant.
T. L. HARRIS, Lecturer in American History.
JESSE L. HARVEY, Principal First Ward.
MISS DAISY TIPTON, Principal Second Ward.

Bowers

(5)

Answered JAN 4 1904
Francis W. Shepardson,
Secretary to the President.

SHERIDAN, IND., January 1 1904. 190.....

President W. R. Harper,
University of Chicago,
Chicago.

Dear Sir and Friend:-

I wish very much to complete the work for an A. ^B Degree at the University of Chicago and now I wish to make this brief report of my work since coming to Indiana: I began teaching in a country or district school at Kirkpatrick three years ago this last fall, I enlarged it in a few weeks to a two room town school doing some high school work; next year was promoted to an assistantship in the high school at New Market Ind. I taught the mathematics, and four ^{years} latin from your texts. The next year, or last year, I was superintendent at Colfax where I made it a state commissioned high school in one year. From the reputation I had at those places I was called here this year, a position of fifteen teachers and of one hundred thirty eight pupils in the high school. That enrollment was raised from 87 last year (page ten of the directory enclosed). I did these things ⁹ in a locality where the sentiment is almost entirely for the State University, where envy and jealousy of the University of Chicago is almost rabid.

Now you perhaps remember when in the winter term of '97 you called me into your office and asked me as to the fact that I was the first student to take up residence at the University and that I told

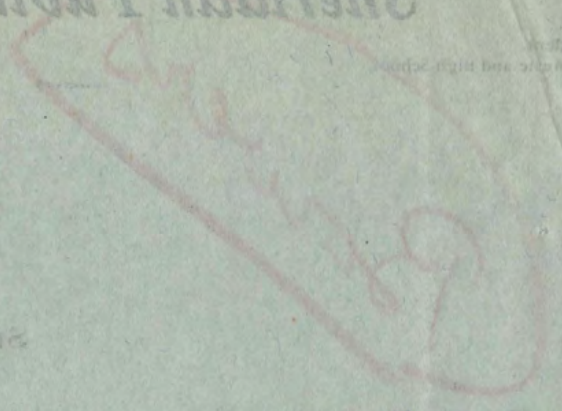
Board of Education
J. M. BRADY, President
J. W. COOPER, Secretary
DR. H. L. DAYTON, Treasurer
ABRAHAM BOWEN, Superintendent
J. C. KOTT, Superintendent of Music and High School

Sheridan Public Schools.

W. B. SHODANAKER, Principal High School
W. H. HILL, Assistant Principal
MISS KATHERINE HOFMAN, Second Assistant
T. L. HARRIS, Lecturer in American History
JESSE L. HARVEY, Principal First Ward
MISS DAISY TITTON, Principal Second Ward

Answered JAN 4 1904

Francis W. Chapman



Sheridan Ind. January 1 1904. 100

President W. R. Harper,
University of Chicago,
Chicago.

Dear Sir and Friend:-

I wish very much to complete the work for an A. B. Degree at the University of Chicago and now I wish to make this brief report of my work since coming to Indiana: I began teaching in a country or district school at Kirkpatrick three years ago this last fall, I entered it in a few weeks to a two room town school doing some high school work; next year was promoted to an assistantship in the high school at New Market Ind. I taught the mathematics, and four Latin from your texts. The next year, or last year, I was superintendent at Colfax where I made it a state commissioned high school in one year. From the reputation I had at those places I was called here this year, a position of fifteen teachers and of one hundred thirty eight pupils in the high school. That enrollment was raised from 87 last year (page ten of the directory enclosed). I did these things in a locality where the sentiment is almost entirely for the State University, where envy and jealousy of the University of Chicago is almost rabid. Now you perhaps remember when in the winter term of '97 you came into your office and asked me as to the fact that I was the agent to take up residence at the University and that I told

Board of Education.

J. M. FRANCIS, President.
N. W. COWGILL, Secretary.
DR. H. E. DAVENPORT, Treasurer.
ABRAHAM BOWERS, Superintendent.
GEO. W. SCOTT, Supervisor of Music and High School.

Sheridan Public Schools.

W. B. SHOEMAKER, Principal High School
W. H. HILL, Assistant Principal.
MISS KATHERINE HOFFMAN, Second Assistant.
T. L. HARRIS, Lecturer in American History.
JESSE L. HARVEY, Principal First Ward.
MISS DAISY TIPTON, Principal Second Ward.

SHERIDAN, IND.,.....190.....

(2)

you that I was and had made an affidavit to that effect, certified to by T.M. Hammond and Geo. R. Robertson, and consented to by Prof. C.R. Henderson and that he had taken it to paste it in the University Records and that you went further and told me to go ahead and try to distinguish myself and that I distinctly understood you to intimate that you would try to do something for me. The time has now come when you can do something for me and although humble in its nature it will be very important and profitable to me. If you shall see fit to grant it I shall never ask you for anything else until I very justly deserve it, It is,,that I may have some teaching position about the University of Chicago High School, or some other position which will be of advantage to my profession by which I may draw salary sufficient to maintain myself and family just one year(a time long enough in which to finish the work for my degree). I am probably as high as I can get in my profession without such a degree and there are other good positions here and elsewhere which I feel sure that I can get with such a degree. I have been doing summer and spring college work at Wabash until I can easily finish in one year at the University of Chicago. I think too that I was one of those pioneers who deserved a good position by which to have finished my work but never had it. You will find in looking up my credits that my work under Shepardson

Board of Education
J. A. PRATT, President
V. W. COWLEY, Secretary
DR. H. L. DAVENPORT, Treasurer
AND MANY OTHERS, Representatives
OF THE BOARD OF SCHOOLS OF CHICAGO AND HIGH SCHOOLS

Sheridan Public Schools

W. A. SHORWATER, Principal High School
W. H. MILL, Assistant Principal
MISS KATHERINE CHAPMAN, Second Assistant
T. L. HARRIS, Lecturer, American History
JESSE L. HARTLEY, Principal First Ward
MISS DAISY TITTON, Principal Second Ward

(2)

You that I was and had made an affidavit to that effect, certified to by T.M. Hammond and Geo. R. Robertson, and consented to by Prof. C.R. Henderson and that he had taken it to paste it in the University Records and that you went further and told me to go ahead and try to disabuse myself and that I distinctly understood you to intimate that you would try to do something for me. The time has now come when you can do something for me and although humble in its nature it will be very important and profitable to me. If you shall see fit to grant it I shall never ask you for anything else until I very justly deserve it. It is, that I may have some teaching position about the University of Chicago High School, or some other position which will be of advantage to my profession by which I may draw salary sufficient to maintain myself and family just one year, a time long enough in which to finish the work for my degree. I am probably as high as I can get in my profession without such a degree and there are other good positions here and elsewhere which I feel sure that I can get with such a degree. I have been doing summer and spring college work at Washburn until I can easily finish in one year at the University of Chicago. I think too that I was one of those pioneers who deserve a good position by which to have finished my work but never had it. You will find in looking up my credits that my work under Sheridan

Board of Education.

J. M. FRANCIS, President.
N. W. COWGILL, Secretary.
DR. H. E. DAVENPORT, Treasurer.
ABRAHAM BOWERS, Superintendent.
GEO. W. SCOTT, Supervisor of Music and High School.

Sheridan Public Schools.

W. B. SHOEMAKER, Principal High School
W. H. HILL, Assistant Principal.
MISS KATHERINE HOFFMAN, Second Assistant.
T. L. HARRIS, Lecturer in American History.
JESSE L. HARVEY, Principal First Ward.
MISS DAISY TIPTON, Principal Second Ward.

SHERIDAN, IND.,.....190.....

(3)

Butler, Saulisbury, Cuttingand others was for a part of the time the best in my classes and that when it was not it was because I could not possibly find the time in which to do it right.

Now if you will give me the one chance, I shall do my best to honor it. I have been trying very hard to do something by correspondence but as it has been my duty to build up schools everywhere I have been I have not found it possible to do much in addition to keeping up my daily school room work. Dr. Goodspeed knows of my work here and I wish very much that you would talk with him about it. His son Charles can tell you that I have settled up all of my affairs in Chicago fairly and fully and should speak good words for me in addition. Mr. W.A. Payne knows of my work as well as many others about the University. I wish to send you the originals of a number of recommendations and compliments paid me since coming here three years and a half ago. If you should wish to write to any one concerning me I refer you to Milo H. Stuart of the Manual Training High School of Indianapolis, formerly of the University of Chicago, and also at one time Superintendent here. Supt. Millis of Crawfordville, State Supt. Cotton, President Kane of Wabash college.

All these things I say that you may feel that I am worthy of what I thought you intimated that you would do for me sometime. I hope this

Board of Education.

J. M. FRANCIS, President.
N. W. COWGILL, Secretary.
DR. H. E. DAVENPORT, Treasurer.
ABRAHAM BOWERS, Superintendent.
GEO. W. SCOTT, Supervisor of Music and High School.

Sheridan Public Schools.

W. B. SHOEMAKER, Principal High School
W. H. HILL, Assistant Principal.
MISS KATHERINE HOFFMAN, Second Assistant.
T. L. HARRIS, Lecturer in American History.
JESSE L. HARVEY, Principal First Ward.
MISS DAISY TIPTON, Principal Second Ward.

(4)

SHERIDAN, IND.,190.....

letter may reach you among your many labors and that you may find time to read it all and that although my request is humble you may find it possible to grant it.

My strongest line of work now is mathematics and of that your Mr. Bussy can certify under whom I took trigonometry last summer at the University of Chicago. I completed college algebra at Wabash last spring and have been teaching algebra and geometry for three years. I have written a course of study in arithmetic for graded schools and assisted in reading proof for a Scott, Foresman course of books in that subject. My school board here and at Colfax Ind., will be glad to give you any further information you may desire.

Hoping to hear from you soon and believing that you will answer me favorably, I am,

Yours very respectfully,

Abraham Bowers

P.S. If for any reason this letter does not reach President Harper or that he does not get to read it, I wish it returned to me by the stamp enclosed.

Respectfully,

Abraham Bowers

Board of Education
J. M. FRANKS, President
A. W. COWLEY, Secretary
DR. R. E. DAYTON, Treasurer
ABRAHAM BOWEN, Superintendent
GEORGE SCOTT, Supervisor of Music and High School

Sheridan Public Schools.

W. B. SMITH, Principal
W. H. HILL, Assistant Principal
MISS KATHLEEN HOFFMAN, Second Assistant
T. E. HARRIS, Lecturer, American History
JESSE T. HARVEY, Principal, First Ward
MISS DAISY TITTON, Principal, Second Ward

(4)

SHERIDAN, IND. 190

letter may reach you among your many labors and that you may find
time to read it all and that although my request is humble you may
find it possible to grant it.

My strongest line of work now is mathematics and of that your
Mr. Busby can certify under whom I took trigonometry last summer at
the University of Chicago. I completed college algebra at Washburn
last spring and have been teaching algebra and geometry for three
years. I have written a course of study in arithmetic for grade
schools and assisted in reading proof for a Scott, Foresman course
of books in that subject. My school board here and at Colfax Ind.
will be glad to give you any further information you may desire.
Hoping to hear from you soon and believing that you will answer

me favorably, I am,

Yours very respectfully,

William Busby

P.S. If for any reason this letter does not reach President Harper
or that he does not get to read it, I wish it returned to me by the
stamp enclosed.

Respectfully,

William Busby

5357 University Ave., Indianapolis, Ind. 1/16 '04.
President William R. Harper,
University of Chicago.

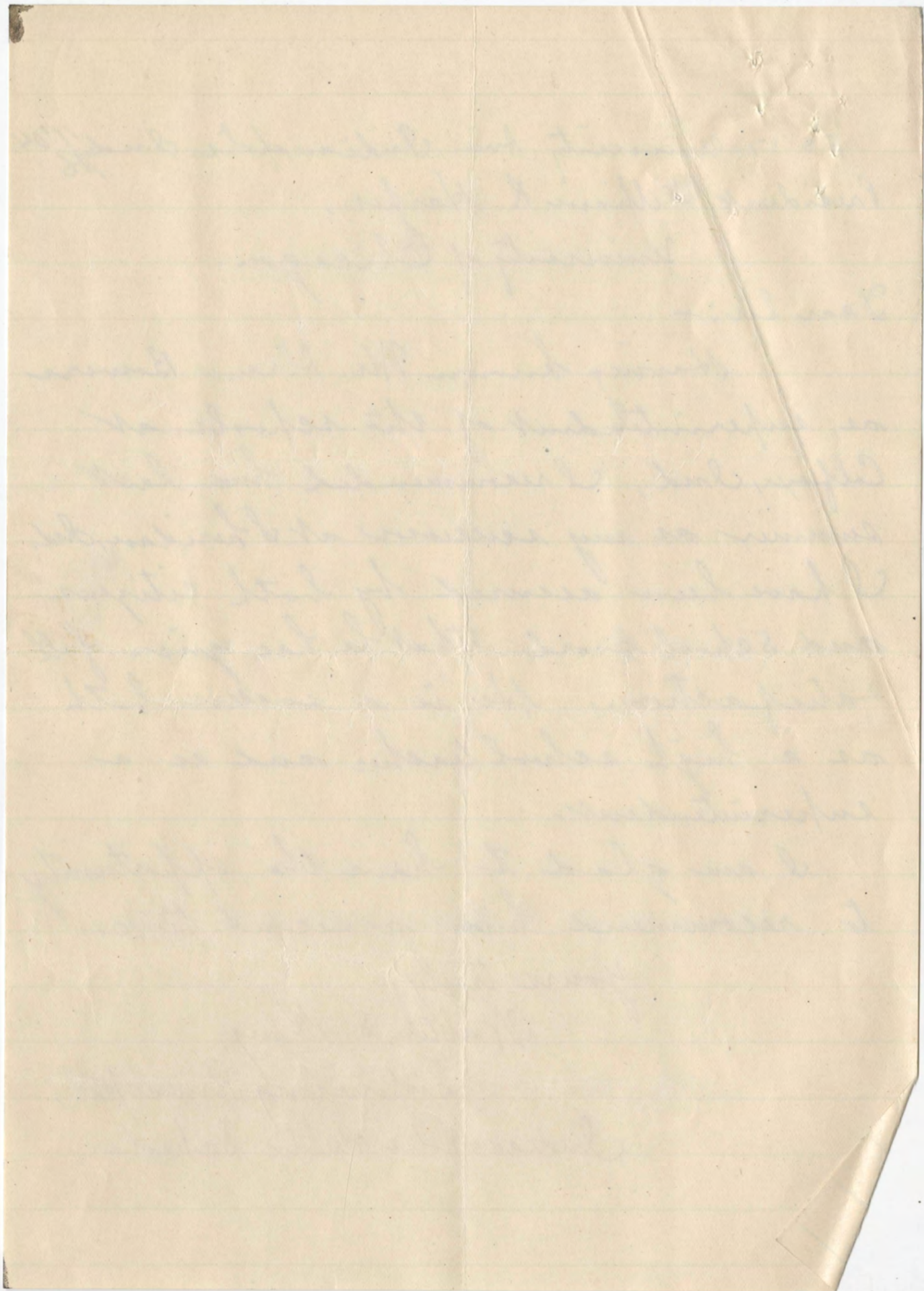
Dear Sir:—

Having known Mr. Abram Bowers as superintendent of the schools at Calfax, Ind., I recommended him last summer as my successor at Sheridan, Ind. I have been assured by both citizens and School Board that he has given full satisfaction... He is a success both as a high school teacher and as a superintendent.

I am glad to have the opportunity to recommend him a second time.

Yours truly,

Walter S. King,
Supervising Principal,
Indianapolis Public Schools.



Board of Education

J. M. FRANCIS, President
N. W. COWGILL, Secretary
DR. H. E. DAVENPORT, Treasurer
ABRAHAM BOWERS, Superintendent
GEO. W. SCOTT, Supervisor of Music and High School

Sheridan Public Schools

W. B. SHOEMAKER, Principal High School
W. H. HILL, Assistant Principal
MISS KATHERINE HOFFMAN, Second Assistant
T. L. HARRIS, Lecturer in American History
JESSE L. HARVEY, Principal First Ward
MISS DAISY TIPTON, Principal Second Ward

SHERIDAN, IND.,

Jan. 18. 1904

President W. R. Harper,
University of Chicago,
Chicago Ill.

Dear Sir and Friend;

I made a full application to you
some time ago, which Prof. Shepardson wrote
me later that he would take up with you soon.
I hope he has not forgotten the matter and
that I may hear from you soon.

To a testimonial from one of our best
educated citizens which I mailed you last
week I wish to add the following or accompa-
nying letter from one of the district supervisors
in the Indianapolis schools, W. S. King.

Mr. King received the degree of Master of Arts
from the University of Chicago last September.
He is well known to the members of your
department of pedagogy.

Hoping to hear from you soon and that you
will answer me favorably, I am,

Respectfully yours,
Abraham Bowers

W. A. SHEPARD, Principal
J. W. COOPER, Assistant
MISS KATHLEEN HOLT, Main School Assistant
T. J. HARRIS, Section in American History
JESSE L. HENRY, Main School Assistant
MISS ELLY, Section in Reading Second & Third

Sheridan Public Schools

Board of Education
J. W. COOPER, President
W. A. SHEPARD, Vice President
MISS KATHLEEN HOLT, Secretary
T. J. HARRIS, Treasurer
JESSE L. HENRY, Member
MISS ELLY, Member

SHERIDAN, IDAHO, 1900

[Faint, illegible handwriting covering the majority of the page, likely bleed-through from the reverse side.]

March 5th, 1906.

Mr. Julius Rosenwald,

C/o Sears, Roebuck & Co., Chicago.

My dear Sir:-

Mr. Abraham Bowers informs me that he is an applicant for a position to teach in the night school being started by Sears, Roebuck & Co., and wished me to write to you as to his qualifications. Mr. Bowers began in the colleges in the University in 1892. He has earned his way along by doing all manner of honest work and finally by a very successful record in teaching. He has been superintendent of schools in an Indiana town and made an excellent impression on the people there. Finally he has come back here to complete his work with us and to take his college degree this year. He is a man of energy, ability and of endless perseverance. For the work which he would be called on to do he would be eminently qualified.

Very truly yours,

H. P. Judson

March 5th, 1906.

Mr. Julius Rosenwald,

500 Sears, Roebuck & Co., Chicago.

My dear Sir:-

Mr. Abraham Bowers informs me that he is an applicant for a position to teach in the night school being started by Sears, Roebuck & Co., and wished me to write to you as to his qualifications. Mr. Bowers began in the colleges in the University in 1892. He has earned his way along by doing all manner of honest work and finally by a very successful record in teaching. He has been superintendent of schools in an Indiana town and made an excellent impression on the people there. Finally he has come back here to complete his work with us and to take his college degree this year. He is a man of energy, ability and of endless perseverance. For the work which he would be called on to do he would be eminently qualified.

Very truly yours,

H. P. Judson

THE COLLEGE OF EDUCATION
OFFICE OF THE DEAN

The University of Chicago

FOUNDED BY JOHN D. ROCKEFELLER

The School of Education

146

March 23, 1909

March 20, 1909.

My dear Dr. Goodspeed:

Dear Mr. Bowers:

I think it is only fair for me to write to you expressing the great satisfaction which we at the College of Education have in the way in which Mr. Abraham Bowers is conducting his Department of the University activities. I suppose that no department of the University is in position to be inconvenienced by poor service in this respect than are we. Our geographical relation to the rest of the University makes us a little hard to serve and I think I am entirely within the limits of the facts when I say that since I have been connected with the College of Education we have never had such efficient and cheerfully rendered service. My own experience is that nobody has had charge of that department who has put into it more good ideas or carried them out any better than Mr. Bowers and I feel sure that anything that can be done to give him a freer hand will be pretty likely to prove to be wise.

of course you know Bowers quite as well as I do, but I thought you would like to know how we are impressed by his actual services.

Sincerely yours,

Nathaniel Butler

*First Student
to enter classes*

The University of Chicago
The School of Education

THE COLLEGE OF EDUCATION
OFFICE OF THE DEAN

March 20, 1909.

My dear Dr. Goodspeed:

I think it is only fair for me to write to you expressing the great satisfaction which we at the College of Education have in the way in which Mr. Abraham Bowers is conducting his Department of the University activities. I suppose that no department of the University is in position to be inconvenienced by poor service in this respect than are we. Our geographical relation to the rest of the University makes us a little hard to serve and I think I am entirely within the limits of the facts when I say that since I have been connected with the College of Education we have never had such efficient and cheerfully rendered service. My own experience is that nobody has had charge of that department who has put into it more good ideas or carried them out any better than Mr. Bowers and I feel sure that anything that can be done to give him a freer hand will be pretty likely to prove to be wise. Of course you know Bowers quite as well as I do, but I thought you would like to know how we are impressed by his actual services.

Sincerely yours,

William B. Ewing

The School of Education

March 20, 1909.

Dear Mr. Butler:-

received. I am glad to know that things are moving well in his

Bowers is conducting his Department of the University activities
bureau.

to be inconvenienced by poor service in this respect than

are we. our geographical relation to the rest of the

H. P. Judson

University makes us a little hard to serve and I think I am entirely within the limits of the facts when I say that since

I have been connected with the College of Education we have never had such efficient and cheerfully rendered service.

My own experience is that nobody has had charge of that department who has put into it more good ideas or carried them out any better than Mr. Bowers and I feel sure that anything that can be done to give him a freer hand will be pretty likely to prove to be wise.

Mr. Nathaniel Butler,
The University of Chicago.

but I thought you would like to know how we are impressed by his actual services.

Sincerely yours,

The University of Chicago
The School of Education

March 23, 1909

March 20, 1909

Dear Mr. Butler:-

I think it is only fair for me to write

to you express Yours of the 20th inst. relating to Mr. Bowers

received. I am glad to know that things are moving well in his

business. I am conducting his Department of the University activities

I suppose that no department is in position

to be inconvenienced by poor service. I am sure that

are we. Our geographical relation to the rest of the

University makes us a little hard to give and I think I am

entirely within the limits of the facts when I say that since

I have been connected with the College of Education we have

never had such efficient and cheerfully rendered service.

My own experience is that nobody has had charge of that depart-

ment who has put into it more good than or excited than our

any better than Mr. Bowers and I feel sure that anything that

can be done to give him a free hand will be greatly appreciated.

Yours very truly,

Mr. Nathaniel Butler,
The University of Chicago.

and I thought you would like to know that we are interested in

his actual service.

Sincerely yours,

H. P. Judson

Bowers

87

5620 Kimbark Ave.,
June 15, 1916

Mr. Harry Pratt Judson,
President, The University of Chicago.
My dear Mr. Judson:

Inasmuch as you have probably encouraged the past season's scholarship for my son, I am offering this manuscript as some indication of the work he is doing. He is seventeen years and seven months of age on June 19, and seems to be carrying four majors this quarter rather easily, -three in the University and one in the University College, and besides taking part in athletics and other student activities.

Trusting you may find this of interest, I am,
Very truly yours,

Abraham Bowers

5630 Kimbark Ave.,
June 15, 1916

Mr. Harry Pratt Judson,
President, The University of Chicago.
My dear Mr. Judson:

Inasmuch as you have probably en-
couraged the past season's scholarship for my son, I
am offering this manuscript as some indication of
the work he is doing. He is seventeen years and
seven months of age on June 15, and seems to be en-
joying four majors this quarter rather easily, - three
in the University and one in the University College,
and besides taking part in athletics and other stu-
dent activities.

Trusting you may find this of interest, I am,
Very truly yours,

Charles D. Judson

A Field Trip to
STARVED ROCK, ILLINOIS

Walter A. Bowers

June 3, 1916.

GEOLOGIC HISTORY

To really open a discussion of such a region one might well start with a review of its geologic history. The rock with which the region is determined is known as the St. Peters Sandstone, the local representative of the Ordovician period. In geologic history, this represents an uplist and subsequent erosion of the continent and then the deposition of the eroded material upon the bottom of the sea as sandstone. Gradually, as the erosive powers of this period were weakening, the processes of weathering by decay, decomposition, and solution by underground water became more prominent. Then the Trenton limestone, or shale was deposited largely through the precipitation of minerals, such as lime on the bottom of the sea. With this period of quiet came an abundance of sea life, - animals whose shells and skeletons were composed most largely of lime taken from the water, and by whose death this deposit was made upon the bottom of the sea. It was the result of this action also that the Niagara limestone was formed. Above this, other periods laid down their deposits until the land was much higher relatively than it is now. Meanwhile, erosion began again and the glacial

A Field Trip to
STARVED ROCK, ILLINOIS
Walter A. Bowers

June 3, 1916.

GEOLOGIC HISTORY

To really open a discussion of such a region one might well start with a review of its geologic history. The rock with which the region is determined is known as the St. Peters Sandstone, the local representative of the Ordovician period. In geologic history, this represents an uplift and subsequent erosion of the continent and then the deposition of the eroded material upon the bottom of the sea as sandstone. Gradually, as the erosive powers of this period were weakening, the processes of weathering by decay, decomposition, and solution by underground water became more prominent. Then the Trenton limestone, or shale was deposited largely through the precipitation of minerals, such as lime on the bottom of the sea. With this period of quiet came an abundance of sea life, - animals whose shells and skeletons were composed most largely of lime taken from the water, and by whose death this deposit was made upon the bottom of the sea. It was the result of this action also that the Niagara limestone was formed. Above this, other periods laid down their deposits until the land was much higher relatively than it is now. Meanwhile, erosion began again and the glacial

periods came and wore off a great amount of the rock down to what we see at Stony Island and elsewhere around Chicago, as the Niagara limestone. Farther down in Illinois near Starved Rock the shifting of the earth's strata formed an anti-cline, through which erosion wore, thus exposing the St. Peters sandstone and the lower Magnesian limestone.

STARVED ROCK

While the glaciers were carrying on this great work, the streams of this region had been cutting their channels through the rock and it was through one of these channels that the overflow from Lake Chicago found its outlet. This swift flowing outflow cut channels, deep and wide, through the rock and by various detours made curious structures here and there in the sides of its channel. One of these was a large mass of bed rock left standing alone by the river of today. This is Starved Rock. The change in course of Lake Chicago outlet left a broad valley with only a relatively small stream of flow through it. Tributary streams have cut through the valley walls and with the help of the high gradient and the great aid of the ground water in the processes of slumping and decaying, have cut canyon-like channels into the valley of the Illinois.

PLANT ASSOCIATIONS

From a present day point of view, the Starved Rock region as a discussion of plant associations, brings out a phase which cannot be found in the immediate vicinity of Chicago. The only com-

periods came and wore off a great amount of the rock down to what we see at Stony Island and elsewhere around Chicago, as the Niagara limestone. Farther down in Illinois near Starved Rock the shifting of the earth's strata formed an anti-cline, through which erosion wore, thus exposing the St. Peters sandstone and the lower Magnesian limestone.

STARVED ROCK

While the glaciers were carrying on this great work, the streams of this region had been cutting their channels through the rock and it was through one of these channels that the overflow from Lake Chicago found its outlet. This swift flowing outflow cut channels, deep and wide, through the rock and by various detours made curious structures here and there in the sides of its channel. One of these was a large mass of bed rock left standing alone by the river of today. This is Starved Rock. The change in course of Lake Chicago outlet left a broad valley with only a relatively small stream of flow through it. Tributary streams have cut through the valley walls and with the help of the high gradient and the great aid of the ground water in the processes of slumping and decaying, have cut canyon-like channels into the valley of the Illinois.

PLANT ASSOCIATIONS

From a present day point of view, the Starved Rock region as a discussion of plant associations, brings out a phase which cannot be found in the immediate vicinity of Chicago. The only com-

parison which might be suggested is that of the ravine plant society at Braeside. The changes at Braeside are much more rapid. Nevertheless, for the sake of comparison, the same essential facts are true, - the steep sided gully at the head of the ravine and the broad flood-plain-like mouth at its foot. Conditions are primarily different from any other regions in that the walls of such ravines, cut through solid rock, are almost vertical. While for this reason it is harder for any plant life to make a stand upon so nearly a perpendicular slope, yet its permanence and the moisture which is continually oozing out aids what little plant growth may exist.

"WALL" PLANTS

Considerable mention has been made of the fact that the plant growth on either side of these ravines is dependent on the exposure of that to the sunlight. On the more exposed north walls of the ravine, the more mesophytic conditions existed with all stages represented from the mosses and lichens on the more rocky points, to the shrubs, bushes, and trees on the more mesophytic slopes. On the southern or more shady side of the ravine only those plants which were more accustomed to live in the shade were able to thrive. On the former wall liverworts, ferns, lichens, lion's foot, small flowered buttercups, pines, sweet cicely, goat's bread, trillium, may apple, wild hydrangia, and bishop's cap, all were found in something of abundance while on the more shade sides of the canyon where water oozed out, more hydrophytic conditions

parison which might be suggested is that of the ravine plant
society at Bresside. The changes at Bresside are much more
rapid. Nevertheless, for the sake of comparison, the same essen-
tial facts are true, - the steep sided gully at the head of the
ravine and the broad flood-plain-like mouth at its foot. Con-
ditions are primarily different from any other regions in that
the walls of such ravines, cut through solid rock, are almost
vertical. While for this reason it is harder for any plant life
to make a stand upon so nearly a perpendicular slope, yet its per-
manence and the moisture which is continually oozing out side
what little plant growth may exist.

"WALL" PLANTS

Considerable mention has been made of the fact that the
plant growth on either side of these ravines is dependent on the
exposure of that to the sunlight. On the more exposed north walls
of the ravine, the more mesophytic conditions existed with all
stages represented from the mosses and lichens on the more rocky
points, to the shrubs, bushes, and trees on the more mesophytic
slopes. On the southern or more shady side of the ravine only
those plants which were more accustomed to live in the shade were
able to thrive. On the former wall liverworts, ferns, lichens,
lion's foot, small flowered buttercups, pines, sweet cicely, goat's
weed, trillium, may apple, wild hydrangea, and bishop's cap, all
were found in something of abundance while on the more shade sides
of the canyon where water oozed out, more hydrophytic conditions

existed with such shade loving plants as lichens, mosses, liverworts, ferns, purple cliff brake, rock cress, and the jewel weed.

UNDERCUTTING AND DECOMPOSURE

So far as I understood, the nature of the vegetation of either side of the canyon was due to a considerable extent to its exposure and the abundance of life which was able to exist there as a result. For myself, I believe as to the slopes on either side of the ravine and the amount of the debris on either side of the stream, channels were largely a matter of weathering and erosion. While rock decomposing plants play an important part, I believe that undercutting and the decomposure of the rock structure by the removal of lime and iron by ground water (this was suggested) caused the fall of one side of the ravine. The fall of this material caused a temporary blocking of the stream and then the stream sought a channel around the debris on the opposite side of the ravine where there was less of resistance. In making such detour the stream will probably begin to cut into the opposite wall of the ravine and after undercutting and weathering have gone on for some time that side will fall in and the stream will again be diverted back to its initial side. Therefore, I believe that the angle of slope of either side of the ravine depends, primarily, on decay and erosion, and secondarily, the permanence of this slope depends on the amount of vegetation which fastens itself thereon.

MESOPHYTIC CONDITIONS

existed with such shade loving plants as lichens, mosses, liver-
worts, ferns, purple cliff brake, rock cress, and the jewel weed.

UNDERCUTTING AND DECOMPOSITION

So far as I understand, the nature of the vegetation of
either side of the canyon was due to a considerable extent to its
exposure and the abundance of life which was able to exist there
as a result. For myself, I believe as to the slopes on either
side of the ravine and the amount of the debris on either side
of the stream, channels were largely a matter of weathering and
erosion. While rock decomposing plants play an important part,
I believe that undercutting and the decomposition of the rock
structure by the removal of lime and iron by ground water (this
was suggested) caused the fall of one side of the ravine. The
fall of this material caused a temporary blocking of the stream
and then the stream sought a channel around the debris on the
opposite side of the ravine where there was less of resistance.
In making such a detour the stream will probably begin to cut into
the opposite wall of the ravine and after undercutting and weather-
ing have gone on for some time that side will fall in and the stream
will again be diverted back to its initial side. Therefore, I be-
lieve that the angle of slope of either side of the ravine depends
primarily, on decay and erosion, and secondarily, the permanence
of this slope depends on the amount of vegetation which fastens
itself thereon.

MESOPHYTIC CONDITIONS

As one advances more and more toward the mouth of the ravine, the valley flat, between the rocky walls, assumes greater and greater proportions. On this, almost mesophytic conditions existed, especially on that which existed at the mouth of the Horse-shoe Canyon. Here we found the linden, red oak, white oak, crab, hickory, red cedar, hard maple, white walnut, mulberry, paw-paw, water beech, and the elm trees, besides numerous shrubs, herbs and grasses, characteristic of mesophytic conditions.

DEER PARK

Another place in which mesophytic plants were observed, was on the slopes at the top of either side of the canyon at Deer Park. Here the ironwood, elm, white oak, hard maple, shag-bark hickory, red oak, service berry, ash seedlings, false Solomon's seal, lion's foot, water beech, may apple, hypatia, sweet cicely, and the red elm, were found growing under the same conditions. At the bottom of this same canyon was an enormous hackberry tree, which was worthy of note because it was a living demonstration of the slow erosion and decay of the channel of the stream. Another feature of this same ravine was the growth of small shrubs and bushes upon ledges where strata of softer rock had decayed. And lastly another intensive feature of the region was, that back from the canyons the general character of the country was that of a mesophytic meadow. Such land was being used largely for cultivation and grazing.

NUMEROUS ISLANDS

As one advances more and more toward the mouth of the ravine, the valley flat, between the rocky walls, assumes greater and greater proportions. On this, almost mesophytic conditions existed, especially on that which existed at the mouth of the Horse-shoe Canyon. Here we found the linden, red oak, white oak, crab, hickory, red cedar, hard maple, white walnut, mulberry, paw-paw, water beech, and the elm trees, besides numerous shrubs, herbs and grasses, characteristic of mesophytic conditions.

DEER PARK

Another place in which mesophytic plants were observed, was on the slopes at the top of either side of the canyon at Deer Park. Here the ironwood, elm, white oak, hard maple, shag-bark hickory, red oak, service berry, ash seedlings, false Solomon's seal, lion's foot, water beech, may apple, yucca, sweet cicely, and the red elm, were found growing under the same conditions. At the bottom of this same canyon was an enormous hackberry tree, which was worthy of note because it was a living demonstration of the slow erosion and decay of the channel of the stream. Another feature of this same ravine was the growth of small shrubs and bushes upon ledges where strata of softer rock had decayed. And lastly another intensive feature of the region was, that back from the canyons the general character of the country was that of a mesophytic meadow, such land being used largely for cultivation and grazing.

NUMEROUS ISLANDS

Aside from its rock and canyons, the valley of the Illinois river was worthy of attention on account of the numerous islands in its river bed. These all seemed to be of depositional origin, because of their small height above the surface of the stream and because of their great fertility, characteristic of flood plain alluvial deposits. As some one has suggested, these islands seem to be moving down stream, and the north ends of the islands appear the older. While deposition was the major factor in the past, the drainage canal additions have increased the carrying power of the stream and it is eroding material from the north ends of these islands and is depositing it on sand-bar like structures at the southern ends of the islands. It is this continual erosion of the north ends and the building up of the south ends which makes the north ends, especially of the smaller islands, the older portions. These various features of such neverending interest combine to make this comparatively small area one of the important geologic regions of Illinois.

Aside from its rock and canyons, the valley of the Illinois river was worthy of attention on account of the numerous islands in its river bed. These all seemed to be of deposition-
al origin, because of their small height above the surface of the stream and because of their great fertility, characteristic of flood plain alluvial deposits. As some one has suggested, these islands seem to be moving down stream, and the north ends of the islands appear the older. While deposition was the major factor in the past, the drainage canal additions have increased the carrying power of the stream and it is eroding material from the north ends of these islands and is depositing it on sand-bar like structures at the southern ends of the islands. It is this continual erosion of the north ends and the building up of the south ends which makes the north ends, especially of the smaller islands, the older portions. These various features of such neverending interest combine to make this comparatively small area one of the important geologic regions of Illinois.

Chicago, June 15, 1916

Dear Mr. Bowers:-

Thanks for your note enclosing the boy's paper. I have looked it over with interest, and am glad to know that he is doing so well.

Very truly yours,

H.P.J. - L.

Mr. Abraham Bowers,
5620 Kimbark Ave., Chicago.

Chicago, June 18, 1916

Dear Mr. Bowers:-

Thanks for your note enclosing the
boy's paper. I have looked it over with interest, and
am glad to know that he is doing so well.
Very truly yours,

H.P.J. - L.

Mr. Abraham Bowers, wife the undersigned,
5620 Kimbark Ave., Chicago.

The University of Chicago

Office of the Counsel and Business Manager

ROOM 1204, 134 SOUTH LA SALLE ST.
TELEPHONE FRANKLIN 214

January 12, 1917.

**President Harry Pratt Judson,
The University of Chicago.**

My dear President:

**For your information I am sending a report
in the Mathew Bowers accident matter.**

Very truly yours,

Enc.

W. H. Eckman

The University of Chicago

Office of the Deans and Business Manager

ROOM 1201, THE SOUTH LATHAM BLDG.
UNIVERSITY CHICAGO, ILL.

January 18, 1917.

Mr. [Name]

President Harry Pratt Judson,
The University of Chicago.

My dear President:

For your information I am sending a report
in the Mathew Rogers accident matter.

Very truly yours,

Enc.

Jan. 6, 1917.

Mr. Heckman:

Re: Mathew Bowers Accident.

Mrs. Abraham Bowers and her son Mathew Bowers called this morning. Mathew explained that he was assisting the instructor, together with another student named Olson (Alden Theodore Olson, 6200 Evans Ave.) in pulling down a gas tank so as to expell the air and gas mixture; that as the tank reached its lowerst point the pressure was largely overcme and the outside air rushing in through the gas cocks, which were then burning, pulled the flame in igniting the interior gas and air mixtures, causing the tank to fly up, break the upper framing and strike the ceiling. He is not positive as to the instructor's requesting him to assist in the experiment, but says that he was helping the instructor and that later the instructor asked Olson to come up and assist Bowers in forcing the tank farther down than Bowers and the instructor were able to do alone. Mathew also says that he believes the instructor was not familiar with the apparatus in that the printed instructions were apparently not followed, since the instructions required that the gas tank be entirely filled with water before the gas is introduced into it, thereby eliminating the possibility of there being any air mixture, that the instructor had apparently attempted to start the experiment, but finding that the tank contained air, he was forcing the entire content out into the room preparatory to starting the experiment over again.

Mathews' forehead is cut in a horn shaped line over the

Jan. 6, 1917.

Mr. H. H.

Mr. Heckman:

Re: Mathew Bowers Accident.

Mrs. Abraham Bowers and her son Mathew Bowers called this morning. Mathew explained that he was assisting the instructor, together with another student named Olson (Alden Theodore Olson, 8200 Evans Ave.), in pulling down a gas tank so as to expell the air and gas mixture; that as the tank reached the lowest point the pressure was largely overcome and the outside air rushing in through the gas cocks, which were then burning, pulled the flame in lighting the interior gas and air mixture, causing the tank to fly up, break the upper framing and strike the ceiling. He is not positive as to the instructor's requesting him to assist in the experiment, but says that he was helping the instructor and that later the instructor asked Olson to come up and assist Bowers in forcing the tank farther down than Bowers and the instructor were able to do alone. Mathew also says that he believes the instructor was not familiar with the apparatus in that the printed instructions were apparently not followed, since the instructions required that the gas tank be entirely filled with water before the gas is introduced into it, thereby eliminating the possibility of there being any air mixture, that the instructor had apparently attempted to start the experiment, but finding that the tank contained air, he was forcing the entire content out into the room preparatory to starting the experiment over again. Mathews' forehead is cut in a horn shaped line over the

Mr. H. #2.

bridge of his nose and each eye and the eye brows are badly swollen and each night swell shut.

I conferred with Rockwell and Cleary, Managers of the Prudential Casualty Co., which carry the insurance and at their suggestion, directed Mrs. Bowers and her son to the Prudential Casualty Company's office, where they were to see the claim department and the physician of the company.

No claim was discussed by either party.

Respectfully submitted,

G.O.F. (Signed)

COPY

Mr. H. H.

bridge of his nose and each eye and the eye brows are badly swollen and each night swell shut.

I conferred with Rockwell and Cleary, Managers of the Prudential Casualty Co., which carry the insurance and at their suggestion, directed Mrs. Howers and her son to the Prudential Casualty Company's office, where they were to see the claim department and the physician of the company. No claim was discussed by either party.

Respectfully submitted,

G.O.V. (Signed)

COPY

The Young Mens Christian Association of Chicago

Nineteen South La Salle Street

135

January

18

1923

Dr. E. D. Burton,
President, University of Chicago,
Chicago.

Dear Sir :

Please allow me to add another to your numerous congratulations, and please include your wife and daughter.

To a hard working alumnus like myself, it was surely a great surprise that you were the choice of the Board of Trustees, and I am one of those who thinks that they chose the best.

I am willing for a short time to lay aside all high ideals for research and other noble purposes in education for the accomplishment of just the one thing most needed at this time in all higher education, and that is, the gigantic effort necessary to revive the great philanthropy which produced the period of growth in buildings and endowments from 1890 to 1910.

The demand by the young people for higher education will certainly increase at as rapid a ratio for the next thirty years as it has during the past thirty.

But from what great inspiration and from what sources can such enormous sums of money be provided? Surely, the State Legislatures are responding quite well (but not nearly fast enough) to demand from the State Universities, but the private institutions are not nearing even the possibility of keeping up with the demand for either buildings or endowments.

We have no young, passionate Dr. T. W. Goodspeeds now who will carry around the vision, hope and discouragement for two or three years and finally, bring us as he did, the enormous sums needed now.

May your greatest energies and your greatest success be in the line of stimulating your Trustees to that bigger necessity of securing immediately the elaborate endowments and other resources which will supply the great demand of our Baptist and all other American young people; and then the needs for research and all other types of graduate work in proportion to their importance.

Very truly yours,

Abraham Bonney

P. S. --- I am thinking partly from the field of the young men and boys of foreign parentage, who are so rapidly rising to the ranks of the University men.

*My dear Mr. Bonney, I think you are wonderful & you are
going to mean a complete change in the
youth.*

The Young Men's Christian Association of Chicago

Thirteen South La Salle Street

January
1913

132

Dr. H. D. Burton,
President, University of Chicago,
Chicago.

Dear Sir:

Please allow me to add another to your numerous contributions, and please include your wife and daughter.

To a hard working alumnus like myself, it was surely a great surprise that you were the choice of the Board of Trustees, and I am one of those who think that they chose the best.

I am willing for a short time to lay aside all high ideals for research and other noble purposes in education for the accomplishment of just the one thing most needed at this time in all higher education, and that is, the gigantic effort necessary to revive the great philanthropy which produced the period of growth in buildings and endowments from 1890 to 1910.

The demand by the young people for higher education will certainly increase at as rapid a ratio for the next thirty years as it has during the past thirty.

But from what great inspiration and from what sources can such enormous sums of money be procured? Surely, the State Legislatures are responding quite well (but not nearly fast enough) to demand from the State Universities, but the private institutions are not meeting even the possibility of keeping up with the demand for either buildings or endowments.

We have no young, passionate Dr. W. Woodbridge now who will carry around the vision, hope and encouragement for two or three years and finally, bring us as in old, the enormous sums needed now.

May your greatest energies and your greatest success be in the line of stimulating your Trustees to that higher necessity of securing immediately the private endowments and other resources which will supply the great demand of our Baptist and all other American young people; and then the need for research and all other types of graduate work in proportion to their importance.

Very truly yours,

P. S. --- I am thinking partly from the field of the young men and boys of foreign parentage, who are so rapidly rising to the ranks of the University men.

January 25, 1923.

My dear Mr. Bowers:

I thank you
for your letter of January 18th
and its suggestive questions.
They will receive careful con-
sideration.

Very sincerely yours,

Mr. Abraham Bowers,
The Young Mens Christian Association
of Chicago,
Chicago, Illinois.

January 26, 1933.

My dear Mr. Bowers:

I thank you

for your letter of January 18th

and its suggestive questions.

They will receive careful con-

sideration.

Very sincerely yours,

Mr. Abraham Bowers,
The Young Men's Christian Association
of Chicago,
Chicago, Illinois.