

A16

January 25, 1929

My dear Mr. Steere:

Enclosed is the original
report of the Committee on Symbolism for the
Mathematics Building, which I have approved.

Yours cordially

FREDERIC WOODWARD

Acting President

Mr. L. R. Steere
City Office

Original sent to Mr. Steere
Copy retained in President's Office

January 28, 1929

My dear Mr. Stearns:

Enclosed is the original
report of the Committee on Symbolism for the
Mathematics Building, which I have approved.
Yours cordially

FREDERIC WOODWARD

Acting President

Mr. L. R. Stearns
City Office

Original sent to Mr. Stearns
Copy retained in President's Office

The University of Chicago

Department of Mathematics

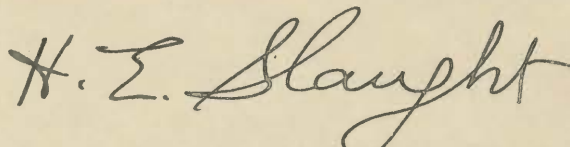
January 21, 1929

President F. C. Woodward
Faculty Exchange

My dear President Woodward:

I hand you herewith the original and one copy of the report of the Committee on Symbolism for the new Mathematics Building. We desire any further suggestions from the Architect or from yourself and the Trustees. We wish to cooperate in every way possible.

Yours very truly,

A handwritten signature in cursive script, reading "H. E. Slaught". The signature is written in dark ink and is positioned above the typed name of the signatory.

H. E. Slaught, Chairman

HES:K

The University of Chicago

Department of Mathematics

January 31, 1937

President P. C. Woodward
Faculty Exchange

My dear President Woodward:

I have just received the
original and one copy of the report of the Committee
on Symbolism for the new Mathematics Bulletin. We
desire any further suggestions from the Architect or
from yourself and the Trustees. We wish to cooperate
in every way possible.

Yours very truly,

H. E. Stanley

H. E. Stanley, Chairman

REB:K

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALMERN C. HOWARD
JOHN A. MacMAHON HERBERT C. WISE
ELLERY K. TAYLOR

October 31, 1928

Re: Bernard A. Eckhart Hall

Mr. H. E. Slaughter
Department of Mathematics
University of Chicago
Chicago, Illinois

Dear Sir:

Your letter of October 29th received asking that the inscriptions over certain doorways be changed to allow for several words in each. These changes are all satisfactory to us and we await your suggested designs and more specific instructions.

Yours very truly,

Charles Z. Klauder
per DOS

DOS:F
CC D. Rm.

CHAS. E. KILPATRICK, JR.
1000 N. LAUREL ST.
CHICAGO, ILL.
OCTOBER 21, 1928

October 21, 1928

Re: Herbert A. Eckhardt Hall

Mr. H. E. Eckhardt
Department of Mathematics
University of Chicago
Chicago, Illinois

Dear Sir:

Your letter of October 21st received
asking that the inscription over certain doorways be
changed to allow for several words in each. These
changes are all unnecessary to us and we regret that
suggested addition and more specific instructions.

Yours very truly,

CC D. Hall
1032

October 29, 1928

Mr. Charles Z. Klander
1429 Walnut Street
Philadelphia, Pa.

My dear Mr. Klander:

The committee on symbolism for the new mathematics buildings is busily engaged in formulating its report, but we need some advice from you on one point now.

We understand that the inscription over the arch E118 may contain as many as 140 to 150 letters. Also when Mr. Taylor was here he said that the inscriptions over the doors E126 and E127 could likewise be as extensive as E118 if we desired.

Again he said that the space over door 115 and 116 might be rearranged so as to allow more extensive inscriptions than the shields would permit.

We are proposing to make all of the above inscriptions by using the names of famous mathematicians but we are hoping that they can be worked in by some kind of artistic designs which will keep them from looking like a mere bulletin board tabulation. We may be able to suggest some appropriate design but of course leave final decision with you.

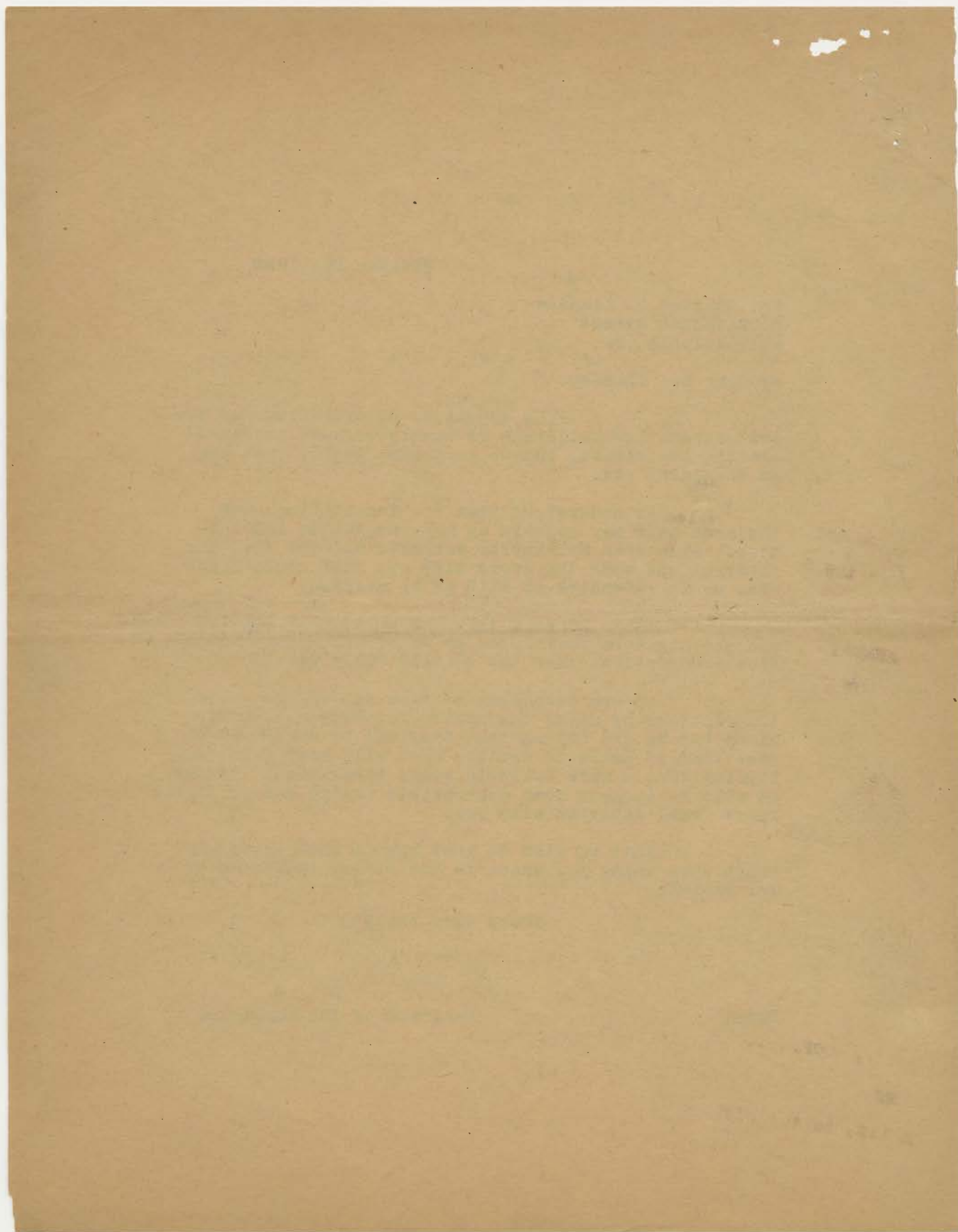
What we wish to know now is whether we may count upon using the space to the extent indicated by Mr. Taylor.

Yours very truly

H. E. Slaughter

HES:K

Chairman of the Committee



REPORT OF THE COMMITTEE ON SYMBOLISM FOR THE
NEW MATHEMATICS BUILDING.

All the places specified by the Architect for inscriptions are given below with his notations, but they are arranged in groups about the various entrances.

GROUP I. MAIN SOUTH ENTRANCE.

B. Arch over entrance E 102. Official inscription
BERNARD A ECKHART HALL

E. Arch over the door E 101. We recommend
THE MATHEMATICAL SCIENCES

L 1, L 2. Two shields, right and left of Arch E 102.
Portrait heads of NEWTON and GAUSS

GROUP II. MAIN NORTH ENTRANCE.

C. Arch over the entrance E 125. An arrangement
of the names:

LEIBNIZ, EULER, JACOBI, POINCARÉ, CAUCHY

Note. The names in this group and in all subsequent groups are here given in chronological order, but they may be put in a different order if it better suits the architect's designs. It is hoped that the designs may be such as to avoid the appearance of a mere bulletin-board list of names.

REPORT OF THE COMMITTEE ON SYMBOLISM FOR THE

NEW MATHEMATICS BUILDING

All the places specified by the Architect
for inscriptions are given below with his notations,
but they are arranged in groups about the various
entrances.

GROUP I. MAIN SOUTH ENTRANCE.

B. Arch over entrance E 103. Official inscription

BERNARD A. BERNARD HALL

E. Arch over the door E 101. No inscription

THE MATHEMATICAL SCIENCES

I. I. 1. 2. Two plaques, right and left of Arch E 102.

Portraits heads of NEWTON and GAUSS

GROUP II. MAIN NORTH ENTRANCE.

C. Arch over the entrance E 105. An inscription

of the names:

LEIBNIZ, KUIPER, JACOBI, POINCARÉ, GAUSS

Note. The names in this group and in all subsequent groups are here given in chronological order, but they may be put in a different order if it better suits the architect's design. It is hoped that the design may be such as to avoid the appearance of a mere bulletin-board list of names.

Dik

October 27th, 1928

Mr. Charles Z. Klauder
1429 Walnut Street
Philadelphia, Pa.

Dear Mr. Klauder:

Eckhart Hall

Replying to your telegram of the 24th, I talked this over with Mr. Taylor and showed him a number of photographs. The real fine photographs of the Chapel came so late that we could not use them in our present literature, and some of the foreground still showed marks of the construction.

Mr. Murray of Goodhue Associates in New York is expecting to have some interior photographs as well as a new set of exterior ones taken soon by a competent architectural photographer. I hope that you will not need these at once so that there will be time for us to furnish some of the later more perfect photographs.

In the meantime kindly accept with my compliments the enclosed booklet which we are issuing for the dedication ceremonies. With kindest personal regards, I am

Sincerely yours,

L. R. Flook

LRP:K
CC-LRS
CC-PCW ✓
CC-Publicity Office

710

October 27th, 1923

Mr. Charles E. Klauder
1429 Walnut Street
Philadelphia, Pa.

Richard Hall

Dear Mr. Klauder:

Replying to your telegram of the 26th, I talked this over with Mr. Taylor and showed him a number of photographs. The real fine photographs of the Chapel came so late that we could not use them in our present literature, and some of the foreground still showed marks of the construction.

Mr. Murray of Goodhue Associates in New York is expecting to have some interior photographs as well as a new set of exterior ones taken soon by a competent architectural photographer. I hope that you will not need these at once so that there will be time for us to furnish some of the later more perfect photographs.

In the meantime kindly accept with my compliments the enclosed booklet which we are issuing for the dedication ceremonies. With kindest personal regards, I am

Sincerely yours,

J. R. Flook

CC-Publicity Office
CC-Pow
CC-IRS
LRF:K

REPORT OF THE COMMITTEE ON SYMBOLISM FOR THE
NEW MATHEMATICS BUILDING.

All the places specified by the Architect for inscriptions are given below with his notations, but they are arranged in groups about the various entrances.

GROUP I. MAIN SOUTH ENTRANCE.

B. Arch over entrance E 102. Official inscription
BERNARD A ECKHART HALL

E. Arch over the door E 101. We recommend
THE MATHEMATICAL SCIENCES

L 1, L 2. Two shields, right and left of Arch E 102.
Portrait heads of NEWTON and GAUSS

GROUP II. MAIN NORTH ENTRANCE.

C. Arch over the entrance E 125. An arrangement
of the names:

LEIBNIZ, EULER, JACOBI, POINCARÉ, CAUCHY

Note. The names in this group and in all subsequent groups are here given in chronological order, but they may be put in a different order if it better suits the architect's designs. It is hoped that the designs may be such as to avoid the appearance of a mere bulletin-board list of names.

REPORT OF THE COMMITTEE ON SYMBOLISM FOR THE

NEW MATHEMATICS BUILDING

All the places specified by the architect

for inscriptions are given below with his notations,

but they are arranged in groups about the various

entrances.

GROUP I. MAIN SOUTH ENTRANCE.

B. Arch over entrance N 103. Official inscription

BERNARD A. BERNARDY HALL

K. Arch over the door N 101. No inscription

THE MATHEMATICAL SECTIONS

L. I. L. E. Two plaques, right and left of arch N 102.

Portraits heads of NEWTON and GAUSS

GROUP II. MAIN NORTH ENTRANCE.

C. Arch over the entrance N 105. An inscription

of the names:

IMMIRIS, EULER, JACOBI, POINCARÉ, CAUCHY

Note. The names in this group and in all sub-

sequent groups are here given in chronological

order, but they may be put in a different order

if it better suits the architect's designs. It

is hoped that the designs may be such as to

avoid the appearance of a mere collection of

list of names.

F. Arch over the door E 126, leading to first floor west corridor. An arrangement of the names: CAVENDISH, FOURIER, OERSTED, FRANKLIN, OHM, FRAUENHOFER, HELMHOLTZ, BECQUERAL, GIBBS, ROENTGEN.

G. Arch over the door E 127, leading to the northwest stairway: An arrangement of the names: CREMONA, LOBACHEVSKI, ABEL, HAMILTON, GALOIS, SYLVESTER, WEIERSTRASS, ADAMS, HILL, RIEMANN.

GROUP III. ENTRANCE THROUGH RYERSON PASSAGE WAY.

A, D. Over the north and south arches, E 131, E 133.

We recommend no inscriptions, but do not object to tracery if the Architect desires.

H 1. Over entrance E 132 to the Physics Building:
RYERSON PHYSICAL LABORATORY

H 2. Over entrance E 134 to the Mathematics Building:
BERNARD A. ECKHART HALL

GROUP IV ENTRANCE THROUGH MANDEL PASSAGE WAY.

P. Over the door, E115, leading to the northeast stairway. An arrangement of the names: AHMES, EUCLID, ARCHIMEDES, AL-KHOWARIZMI, BHASKARA, LEONARDO, COPERNICUS, GALILEO, KEPLER, DESCARTES.

Q. Over the door E 116, to the High Voltage Laboratory: An arrangement of the names: FARADAY, KELVIN, HERTZ, ROWLAND.

7. Arch over the door E 128, leading to first floor west corridor. An arrangement of the names: CAVERDISH, FOURIER, ORNSTEIN, FRANKLIN, GUN, BRAUNHOFER, HENNING, BECKHOFER, GIBBS, ROSENBERG.

8. Arch over the door E 127, leading to the northwest stairway. An arrangement of the names: CREW, LOBACH, AMEL, HANLON, SALON, SYLVESTER, WEINSTEIN, ADAMS, HILL, RIMANN.

GROUP III. ENTRANCE THROUGH RYERSON PASSAGE WAY.

A. D. Over the north and south arches, E 131, E 133. We recommend no inscriptions, but do not object to inscriptions at the adjacent doors.

H 1. Over entrance E 132 to the Physics Building: RYERSON PHYSICAL LABORATORY

H 2. Over entrance E 134 to the Mathematics Building: BERNARD A. RYERSON HALL

GROUP IV. ENTRANCE THROUGH MARSH PASSAGE WAY.

F. Over the door, E 118, leading to the northeast stairway. An arrangement of the names: AMES, RUGLID, ARCHER, AL-THAN, MARARA, LONARDO, COOPER, GILLING, KILBY, DECATTER.

G. Over the door E 116, to the High Voltage Laboratory. An arrangement of the names: PARADAY, KILBY, WHITE, ROWLAND.

R. Over the door, E 118, leading to first floor east corridor. An arrangement of the names: NAPIER, HUYGENS, BERNOULLI, D'ALEMBERT, LAGRANGE, LAPLACE, FRESNEL, HENRY, NEWCOMB, MAXWELL.

GROUP V. THE VARIOUS REMAINING SHIELDS, 22 IN ALL

With respect to all the shields except the two, L 1 and L2, in Group I, we wish to allow the greatest freedom to the Architect, but we would make the following suggestions for his guidance in case they prove practicable.

K 1 to K 6. THE SIX SHIELDS UNDER THE ORIELS:

We would suggest the six regular solids if this is feasible:

Photographs of Models on the Original

Tetrahedron Hexahedron Octahedron Dodekahedron Icosahedron Sphere

O 1 to O3. Above Arch E 117, west end of Mandel Passage Way: We suggest the shields of three great universities which have profoundly affected the development of mathematics in America:

GOETTINGEN, PARIS, CAMBRIDGE

J 1 to J 10, IN THE GABLES, AND M 1, M2 IN THE
NORTH BAYS: We suggest the twelve Signs of
the Zodiac, or if this is not feasible then
Grotesques selected by the Architect.
Likewise a Grotesque for Shield N on the
west elevation.

The Committee desires further questions or
suggestions from the Architect and we stand ready to
cooperate in any way indicated.

Respectfully submitted by unanimous agree-
ment of the Committee

W. D. MacMillan, representing Astronomy

J. K. Morse, representing Physics

H. E. Slaught, Chairman, representing Mathematics

11 to 10, in the garden, and in 1, in the
North Bay; we suggest the twelve signs of
the Zodiac, or if this is not feasible then
Grotesques selected by the architect.
Likewise a Grotesque for Shield 2 on the
west elevation.

The Committee desires further questions or
suggestions from the Architect and we stand ready to
cooperate in any way indicated.
Respectfully submitted by unanimous agree-
ment of the Committee

W. D. MacMillan, representing Astronomy
J. E. Morse, representing Physics
H. E. Shapley, Chairman, representing Mathematics

910

January 7th, 1929

Mr. H. E. Slaughter,
Chairman,
Committee on Symbolism.

Dear Mr. Slaughter:

Eckhart Hall

The Architects ask if you cannot give them
your decision particularly with reference to the inscrip-
tions for various doors and arches.

They are now engaged in making full-size draw-
ings for the stonework and will be ready in a few days
for the inscriptions.

Anything you can do to accelerate this require-
ment will be greatly appreciated.

Sincerely yours,

L. R. Flook.

LRF:EM

CC*CKlauder
FCWoodward ✓
LRSteere

January 7th, 1929

Mr. H. B. Blaght,
Chairman,
Committee on Symbolism.

Dear Mr. Blaght:

Rockport Hall

The Architects ask if you cannot give them
your decision particularly with reference to the inscrip-
tions for various doors and arches.

They are now engaged in making full-size draw-
ings for the stonework and will be ready in a few days
for the inscriptions.

Anything you can do to accelerate this respon-
sible will be greatly appreciated.

Sincerely yours,

L. R. Flook.

BRP:EM

CC: Alexander
PC: Woodward
LRS:era

116

, Chairman
Committee on Symbolism
Eckhart Hall
Faculty Exchange

Dear Mr. Slaught: Bernard A. Eckhart Hall
Symbolism

Enclosed please find one set of blue prints
consisting of eighth scale elevations and details,
architect's drawings #1004, sheets #8, 9, 11, 12, 13
and 14, together with three copies of list of inscriptions
and charges.

The architect asks that we give him our decision
just as soon as practicable.

I shall be glad to be called upon if I can
be of assistance in this connection.

Yours very truly,

L. R. Flook

LRF:K
CC-FCW *referred*
CC-LRS

114

Chairman
Committee on Symbolism
Eckhart Hall
Faculty Exchange

Dear Mr. Wiaugh:
Bernard A. Eckhart Hall
Symbolism

Enclosed please find one set of blue prints
consisting of eight scale elevations and details.
architectural drawings 61004, sheets 48, 9, 11, 12, 13
and 14, together with three copies of list of inscriptions
and charges.

The architect asks that we give him our decision
just as soon as practicable.

I shall be glad to be called upon if I can
be of assistance in this connection.

Yours very truly,

L. R. Flook

LEF:K
CC-FOW
CC-LRS

SYMBOLISM

October 15, 1928.

LIST OF INSCRIPTIONS AND CHARGES

BERNARD A. BOKHART HALL

For

UNIVERSITY OF CHICAGO

- A - Inscription over arch - E133 - 18 to 22 letters.
- B - " " " - E102 - "Bernard A. Bokhart Hall".
- C - " " " - E125 - about four words, with large shield and two small shields.
- D - " " " - E131 - same as A.
- E - " " " - E101 - "Physics - Mathematicae".
- F - Inscription with or without shield over door - E126.
- G - Similar to F over door - E127.
- H1 - One word inscription over door - E122 and shield
- H2 - Similar to H1 over door E124.
- J1 to J10 - Ten shields in gables, forty-eight feet above grade.
- K1 to K6 - Six shields under oriel, seventeen feet above grade.
- L1 and L2 - Two shields over arch - E102.
- M1 and M2 - Two shields on north bays, thirty-two feet above grade.
- N - Shield on west elevation, thirty-six feet above grade.
- O1 to O3 - Three shields above arch - E117.
- P - Shield above door - E115
- Q - Two shields above door E116.
- R - Inscription above door E118 - 140 to 150 letters

MEMORANDUM

October 10, 1944

MEMORANDUM FOR THE RECORD

SUBJECT: [Illegible]

1. [Illegible]

2. [Illegible]

[Illegible]

3. [Illegible]

4. [Illegible]

5. [Illegible]

6. [Illegible]

7. [Illegible]

8. [Illegible]

9. [Illegible]

10. [Illegible]

11. [Illegible]

12. [Illegible]

13. [Illegible]

14. [Illegible]

15. [Illegible]

16. [Illegible]

17. [Illegible]

18. [Illegible]

19. [Illegible]

20. [Illegible]

21. [Illegible]

D. B.

July 10, 1928

My dear Mr. Slaughter:

I am glad you are willing to accept the chairmanship of the Committee on Symbolism for the Bernard A. Eckhart Laboratory. Mr. Steers will let you know when the services of the Committee are required, and what the nature of your work will be.

Yours cordially

Frederic Woodward

Acting President

Mr. H. E. Slaughter
Department of Mathematics

July 10, 1928

My dear Mr. Stoughton:

I am glad you are willing to

accept the chairmanship of the Committee on

Symbolism for the Bernard A. Eckhart Laboratory.

Mr. Stearns will let you know when the services

of the Committee are required, and what the

nature of your work will be.

Yours cordially

Frederick Woodward

Acting President

Mr. H. E. Stoughton
Department of Mathematics

The University of Chicago
Department of Mathematics

July 5, 1928

Mr. Frederic Woodward
Acting President of the University of Chicago
Faculty Exchange

My dear Mr. Woodward:

I received your memorandum asking me to act as chairman of the Committee on Symbolism for the Bernard Eckhart Laboratory. I am not very clear as to the duties of this Committee, but I assure you that whatever is possible I shall be glad to do. It would be well if this Committee could be informed as soon as possible with respect to the progress of the building plans, etc.

Yours very truly,

H. E. Slaughter

HES/KF

June 6, 1928

Mr. H. E. Slaught
Mr. J. K. Morse
Mr. W.D. MacMillan

Upon the request of the Board of Trustees' Committee on Buildings and Grounds, I am appointing a committee on symbolism for the Bernard Eckhart Laboratory. Will you be good enough to serve as members of this committee, and will Mr. Slaught please act as chairman?

Professor Edgar Goodspeed has had a good deal of experience in the use of symbols in Gothic architecture, and I suggest that you consult him whenever you deem it expedient.

Yours cordially,

FREDERIC WOODWARD

FW:L

June 8, 1922

Mr. H. R. Haight
Mr. J. R. Morse
Mr. W. D. MacMillan

Upon the request of the Board of Trustees,
Committee on Buildings and Grounds, I am appointing
a committee on symbols for the Bernard Eastman
Laboratory. Will you be good enough to serve as mem-
bers of this committee, and will Mr. Haight please
act as chairman?
Professor Edgar Goodspeed has had a good deal of
experience in the use of symbols in Gothic architecture,
and I suggest that you consult him whenever you deem it
expedient.

Yours cordially,

FREDERICK WOODWARD

Wm.

111

CHARLES · Z · KLAUDER · ARCHITECT
1429 · WALNUT · STREET · PHILADELPHIA

COPY

August 6, 1928

Re: Bernard A. Eckhart Hall

Mr. L. R. Flook
Superintendent of Construction
University of Chicago
Chicago, Ill.

My dear Mr. Flook:

I have your letter of August 2 and fear after reading it that I have not in my letters of July 23 and 30 made myself sufficiently clear.

The Mathematics Building is somewhat more involved and complicated than buildings usually are for the reason that it is not entirely a classroom building and yet has some classrooms, casually located, and these must conform with a law in Chicago which requires a lighting of one to five. We have never had to meet that condition of glass area in any of our other college work. If the building were entirely made up of classrooms, the problem would be easier.

Now, the questions of design, construction and heating and ventilating have always to be coordinated, but where so much of the wall surface is given up to glass, as in this building, to make a start on the working drawings is somewhat like finding the beginning of the circumference of a circle. We could long ago have started our 1/8th inch scale linen drawings of the elevations and plans, but I held off hoping that I could discuss the matter of heating and ventilating with the engineer or his representative in this office, where the architect, the engineer of construction and the engineer for the heating plant could all discuss their necessities. This meeting would then be a point of departure for all.

We now have determined on the architectural form of the windows, piers, mouldings, size of openings, etc. We have also considered the necessary thickness of wall, as well as the floor supports in relation to the piers, but one factor is left out and that is a definite consideration of where our risers will be placed. We do not see how the engineer can locate his pipes from such drawings as we are sending him, but we think after an hour's conversation in this office there would be no doubt in his mind or ours as to where they should be

Re: Bernard A. Eckhart Hall

August 6, 1928

Mr. L. R. F. - #2

placed. If the engineer does not come here, we shall have to send one of our representatives and Mr. Gibson, our engineer of construction, to Chicago and then they will not have the advantage of my cooperation unless I too should come. It, therefore, seems advisable to us to have the engineer come here.

We are trying our utmost to comply with the University's request for speed, but find that we are unable to make the progress we desire until these questions are settled. We have already been longer on this building than is usual, part of the reason being that several departments have to have their problems satisfactorily solved and coordinated in one building and partly because we wish to obtain the very best results. While we are not disturbed at all by the lapse of time, we know that the University is.

Would it not be possible for the engineers to meet us here in this office? Perhaps you would like to sit in at such a conference.

Yours very truly,

(Signed) Charles Z. Klauder

CZK:B

CC Dr. Woodward
Mr. Steere
D. Rm.

August 6, 1938

Mr. Bernard A. Lambert, Jr.

Mr. A. H. P. - 12

placed. It was explained that the same date, we shall
need to send one of our representatives and Mr. Lambert
our statement of cooperation, as Chicago and New York
will not have the advantage of my cooperation unless I
have already done. If, however, some advice is to be
to have the matter done soon.

We are trying our utmost to comply with the
University's request for speed, but this time we are
unable to meet the request as the matter will require
discussion and action. We have already been looking on
this matter from a number of points of view, and we are
that several departments have to have their views
particularly on the subject of cooperation in the building
and finally because we wish to obtain the best of
all. While we are not concerned at all as the matter
of time, we have been the University's.

While it may be possible for the matter to
be sent on from in this office, it might be better
to put it in as such a conference.

Yours very truly,

(Signed) Charles E. Kinsler

CC: 12

Mr. Bernard A. Lambert, Jr.
Mr. A. H. P.
Mr. A. H. P.

THOMAS E. DONNELLEY
731 PLYMOUTH PLACE
CHICAGO

July 21, 1928

dit

Mr. Frederic Woodward
University of Chicago
Chicago, Illinois

My dear Mr. Woodward:

I am in receipt of your letter of July 19th concerning the designation of the Bernard A. Eckhart Hall, and have given instructions to Mr. Flook to see that the plans carry this designation.

Believe me,

Sincerely yours,

Thomas E. Donnelley

TED/MCN

RECEIVED
JAN 10 1904
U.S. DEPT. OF AGRICULTURE
WASHINGTON, D.C.

JAN 10 1904

Mr. George B. Cooper
University of Illinois
Urbana, Illinois

Dear Mr. Cooper:

I am in receipt of your letter of the 10th inst. regarding the
distribution of the Illinois State Fair, and have
been instructed to let you know that the
same will be forwarded.

Believe me,

Very truly,
J. B. Cooper

Yours,

D. L.

July 18, 1928

My dear Mr. Donnelley:

We have all fallen into the habit of referring to the new building for Mathematics, Physics and Astronomy, as the Bernard A. Eckhart Laboratory. I have consulted the faculty committee and it is agreed that the name should be "Bernard A. Eckhart Hall."

It is true that the Physics Department will have a number of laboratory rooms in the building, but it is not primarily a laboratory building, and as a home for the Mathematics Department the word "Hall" is deemed more appropriate.

I am sending a copy of this letter to Mr. Steers.

Yours cordially

Frederic Woodward

Acting President

Mr. T. E. Donnelley
731 Plymouth Court
Chicago, Illinois

July 10, 1928

My dear Mr. Connelley:

We have all fallen into the habit of referring to the new building for Mathematics, Physics and Astronomy, as the Howard A. Howard Laboratory. I have consulted the Faculty committee and it is agreed that the name should be "Howard A. Howard Hall". It is true that the Physics Department will have a number of laboratory rooms in the building, but it is not primarily a laboratory building, and as a home for the Mathematics Department the word "Hall" is deemed more appropriate.

I am sending a copy of this letter to Mr.

Sincerely,

Yours cordially

Frederic Woodward

Acting President

Mr. F. E. Connelley
731 Plymouth Court
Chicago, Illinois

The University of Chicago

SUPERINTENDENT OF CONSTRUCTION

July 16th, 1928

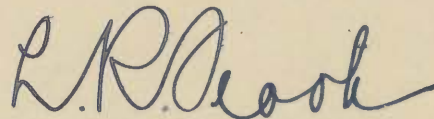
Mr. F.C. Woodward:

Bernard A. Eckhart Hall

In conference with Professor Bliss, Chairman of the Faculty Committee for the new building, he brought up the question of the name of this building stating his objection to the use of the word "laboratory". I understand that he has suggested that the building be called Bernard A. Eckhart Hall.

I discussed this with Mr. Steere before he left on a vacation. Mr. Steere asks if you will be good enough to address a letter to Mr. Donnelley with your recommendation for the name of the building so that the matter might be acted upon at the next meeting of the Committee on Buildings & Grounds.

Sincerely yours,



L. R. Flook

LRF:K

*Submitted to Donnelley
for Review
in Committee*

The University of Chicago

July 15th, 1938

Mr. J. H. Woodhead:

Edward A. Tamm

In conference with Professor Allen, Chairman of the Faculty Committee for the new building, he brought up the question of the name of this building. He objected to the name of "Law Library" and suggested that the name be changed to "Law Building". I understood that he had suggested that the building be called "Edward A. Tamm Hall".

I discussed this with Mr. Allen before he left on a vacation. Mr. Allen said if you will be good enough to address a letter to the Faculty with your recommendation for the name of the building to that the name might be acted upon at the next meeting of the Faculty.

Sincerely yours,


J. H. Woodhead

Enc:

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALMERN C. HOWARD
JOHN A. MacMAHON HERBERT C. WISE
ELLERY K. TAYLOR

July 19, 1928.

Re: Bernard A. Eckhart Hall

Dr. Frederic C. Woodward,
Harper Hall,
University of Chicago,
Chicago, Illinois.

Dear Sir:-

We enclose herewith, for your
information, copy of the notes made by
our Consulting Structural Engineer during
his visit to Chicago on July 11th and
12th.

Very truly yours,

Charles Z. Klauder
J.

EKT-L
Enc.

cc-D.Rm.

RECEIVED
JULY 10 1918
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

July 10, 1918.

Mr. Bernard A. Eckhardt Hall

Mr. Frederick C. Woodward,
Harper Hall,
University of Chicago,
Chicago, Illinois.

Dear Sir:

We enclose herewith for your
information copy of the notes made by
our Consulting Structural Engineer during
his visit to Chicago on July 11, 1918.

Very
truly
yours,
J. E. Spill

UNIVERSITY OF CHICAGO

BERNARD A. ECKHART HALL

Minutes on Structural Questions of Visit to Chicago on July 11th and 12th, 1928.

An all day conference was held on Wednesday, July 11th, at the office of Mr. Flook, at which Mr. Flook, representing the University, and Messrs. Taylor and Gibson, of Charles Z. Klauder, were present. Professor Compton was called on during the afternoon. The structural questions brought up at this meeting were as follows:

Foundations: We were advised by Mr. Flook that for buildings of the height of Eckhart Hall, concrete spread foundations were used. The soil pressure found satisfactory for this height of building is 3,500 lbs. per sq.ft. Piles are not used for buildings unless they are over 5 stories in height.

Reinforced Concrete: Gravel is to be used for the coarse aggregate. In specifying the mix, the water ratio is to be used instead of the proportions usually named.

Basement Walls: The basement walls are to be reinforced concrete.

Test Pits: Test pits had been made which will be about the centre of the building, one being on the front of the building and the other at the rear. In front of the building this pit was excavated about 6'6", and water was found at 6'0" below the side-walk level. The other hole seemed to be on slightly higher ground and, therefore, water was found at a depth of about 6'6". It was called to the attention of Mr. Flook that the Building Code requires borings to be made to a depth of 35'0" or more to verify the material found at this depth. Mr. Flook stated that they had already made such tests for the Building Department and that in his opinion no additional deep borings would be required for this building.

Sump Pit: A sump pit with 4" drain will be required in the basement, the pit to be lined with a c.i. basin with cover.

Basement Floor: It was suggested by Mr. Flook that the basement floor be made 8" in thickness and be reinforced. A caulked joint between the basement floor and the walls is desirable. It was suggested by Mr. Flook that the waterproofing and damp-proofing required for the basement should be done by the Imperial Waterproofing and Damp-Proofing Co., of Chicago, as they have been very successful in their work at the University.

UNIVERSITY OF CHICAGO

BERNARD A. ECKHART HALL

Minutes on Structural Questions of Visit to Chicago on July 11th and 12th, 1928.

An all day conference was held on Wednesday, July 11th, at the office of Mr. Flook, at which Mr. Flook, representing the University, and Messrs. Taylor and Gibson, of Charles E. Kinsler, were present. Professor Compton was called on during the afternoon. The structural questions brought up at this meeting were as follows:

Foundations: We were advised by Mr. Flook that for buildings of the height of Eckhart Hall, concrete spread foundations were used. The soil pressure found satisfactory for this height of building is 2,500 lbs. per sq. ft. Piles are not used for buildings unless they are over 5 stories in height.

Reinforced Concrete: Gravel is to be used for the coarse aggregate. In specifying the mix, the water ratio is to be used instead of the proportions usually named.

Basement Walls: The basement walls are to be reinforced concrete.

Test Pits: Test pits had been made which will be about the centre of the building, one being on the front of the building and the other at the rear. In front of the building this pit was excavated about 8'6", and water was found at 6'0" below the sidewalk level. The other hole seemed to be on slightly higher ground and, therefore, water was found at a depth of about 6'6". It was called to the attention of Mr. Flook that the Building Code requires borings to be made to a depth of 35'0" or more to verify the material found at this depth. Mr. Flook stated that they had already made such tests for the Building Department and that in his opinion no additional deep borings would be required for this building.

Sump Pit: A sump pit with 4" drain will be required in the basement, the pit to be lined with a C.I. basin with cover.

Basement Floor: It was suggested by Mr. Flook that the basement floor be made 8" in thickness and be reinforced. A caulked joint between the basement floor and the walls is desirable. It was suggested by Mr. Flook that the waterproofing and damp-proofing required for the basement should be done by the Imperial Waterproofing and Damp-Proofing Co., of Chicago, as they have been very successful in their work at the University.

Live Loads: The floors are to be designed for the following live loads:

Corridor	75#
Stairways	100#
Class rooms	75#
Roof	25#

The Building Code of the City of Chicago really only calls for a live load of 40# for class rooms, but Mr. Flook stated that it is very often found desirable to move partitions and, therefore, if the floors for the offices and classrooms were designed for 75#, then they could move the partitions as they desired. Therefore, I will design all floors for class rooms, offices and lavatories to support a live load of 75# per sq.ft.

Roof: The structural work for the roof is to be of fireproof materials. Mr. Flook made the suggestion that on top of the slab should be placed 2 x 3" sleepers, 16" on centers, and the space between the sleepers filled with fire-resisting material. To these sleepers should be nailed 1" sheathing, to which the slate is to be nailed. The structural members of the roof are to be either steel or reinforced concrete. Mr. Flook stated that they have constructed some steep roofs of reinforced concrete.

Structural Plans: On account of the long spans, it will be necessary to use structural steel for the auditorium and also any other places where the span is too great for reinforced concrete, but the reinforced concrete is to be used wherever possible. Steel tile with concrete joists seems to be preferable on account of cost. The suspended ceiling under the joists is to be supported by 3/4" channels spaced 12" on centers and by #18 galvanized wire mesh.

W. Herbert Gibson

cc-Mr. Donnelley
Dr. Woodward
Mr. Steere
Neiler, Rich & Co.
Mr. Flook

Live loads: The floors are to be designed for the following live loads:

Roof	25%
Class rooms	75%
Stairways	100%
Corridor	75%

The Building Code of the City of Chicago really only calls for a live load of 40% for class rooms, but Mr. Flook stated that it is very often found desirable to move partitions and, therefore, if the floors for the offices and classrooms were designed for 75%, then they could move the partitions as they desired. Therefore, I will design all floors for class rooms, offices and lavatories to support a live load of 75% per sq. ft.

Roof: The structural work for the roof is to be of fireproof materials. Mr. Flook made the suggestion that on top of the slab should be placed 2 x 3" sleepers, 16" on centers, and the space between the sleepers filled with live-resisting material. To these sleepers should be nailed 1" sheathing, to which the slate is to be nailed. The structural members of the roof are to be either steel or reinforced concrete. Mr. Flook stated that they have constructed some steep roofs of reinforced concrete.

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W. Herbert Gibson

cc-Mr. Donnelly
Mr. Woodward
Mr. Steere
Nelson, Rich & Co.
Mr. Flook

7/11/1928.

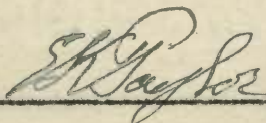
Plumbing:

Flush Valve to be Sloan.
Seats black or maroon, "Church" or "Whalebonite".
Urinals, like Douglas' half length and with automatic
flush.
Lavatories, china
Metal parts chromium plated
Mirrors without any frames

(Note: A 10" wide shelf should be provided across W.C.
cubicle back)

Although other buildings have some outside rain
conductors they all give trouble with ice and it is
preferable to have inside, using either galvanized
steel or galvanized wrought iron pipe.

Soapstone sinks will be provided by the Owner.
The Plumber is to set the sinks and provide and set
all piping, fittings, faucets, drain inlets, etc.



E. K. Taylor

cc-Mr. Donnelley ✓
Dr. Woodward
Mr. Steere
Mr. Flook
Minute Book

Plumbing:

Flush Valve to be floor.
Seats black or masonry, "Gumtree" or "Whispering".
Urinals, like Douglas, half height and with automatic
flush.
Lavatories, china
Metal parts chromium plated
Mirrors without any frames

(Note: A 10" wide shelf should be provided across W.C.
cubicle back)

Although other buildings have some outside rain
conductors they all give trouble with ice and it is
preferable to have inside, using either galvanized
steel or galvanized wrought iron pipe.

Suspension sinks will be provided by the Owner.
The plumber is to set the sinks and provide and set
all piping, fittings, faucets, drain inlets, etc.



M. E. Taylor

cc-Mr. Donnelly
Mr. Woodward
Mr. Steere
Mr. Black
Minute Book

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALNERN C. HOWARD
JOHN A. Mac MAHON HERBERT C. WISE
ELLERY K. TAYLOR

D, f

July 17, 1928.

Re: Bernard A. Eckhart Hall

Dr. Frederic C. Woodward,
Harper Hall,
University of Chicago,
Chicago, Illinois.

Dear Sir:-

We are enclosing herewith, for
your information, copy of the minutes of
two meetings attended by our representa-
tives while in Chicago July 11th and 12th.

Very truly yours,

Charles Z. Klauder
J.

EKT-L
Encs.

cc-D. Rm.

RECEIVED
JULY 17 1928
U.S. DEPARTMENT OF JUSTICE
DIVISION OF INVESTIGATION
WASHINGTON, D.C.

July 17, 1928.

Mr. Bernard A. Gorman, Hall

Mr. Frederick C. Woodard,
Harper Hall,
Chicago, Illinois.

Dear Sir:-

We are enclosing herewith for
your information, copy of the minutes of
two meetings attended by our representative
in Chicago July 11th and 12th.

Very truly yours,

Charles E. Hughes

Enc. 1

cc-D. M.

Minutes of Conference regarding the Bernard A.
Eckhart Hall at the office of Nailer, Rich &
Company, Chicago, July 12, 1928.

Present: Mr. Rich and Mr. Jenson representing Neiler, Rich
& Company, Mr. W. Herbert Gibson, Consulting
Structural Engineer and Mr. E.K. Taylor represent-
ing Chas. Z. Klauder, Architect.

Fan Room:

Mr. Jenson said they would need a fan room in the
basement about 25'-0" long. Mr. Taylor suggested
that the Engineers discuss with Mr. Flook taking
space occupied by dark rooms 18, 19 and 20 relocat-
ing them elsewhere if possible. Wherever the fan
room goes an areaway should accompany it as air
will enter here.

Exhaust Air:

This should be discharged from above the top story,
if possible through one large or several small
dormer windows in the loft in the rear overlooking
the library roof.

Transformer Room:


This room should be squared off by taking a part
of Service Room No.5. Mr. Jenson will furnish the
Architect with a detail for the areaway top, vent
and baffle.

Duct Space:

Typical double partitions will have double beams
below with a clear space of 10 $\frac{1}{2}$ " to receive 10"
ducts. The large Lecture Room and Library above,
however, should have space for 15" ducts.

Lighting Fixtures:

Mr. Taylor stated that his office wished to take
care of all exterior lighting fixtures and such
special interior fixtures as may be required in
vestibules, main entrance hall, library and possi-
bly the large Lecture Room. Other lighting fixtures
should be selected by the Engineers or Owners.



E. K. Taylor

cc-Mr. Donnelley
Dr. Woodward
Mr. Steere
Mr. Flook
Neiler, Rich & Co.

Minutes of Conference regarding the Bernard A. Eckhart Hall at the office of Neller, Rich & Company, Chicago, July 12, 1938.

Present: Mr. Rich and Mr. Jensen representing Neller, Rich & Company, Mr. W. Herbert Gibson, Consulting Structural Engineer and Mr. E.K. Taylor representing Chas. E. Mander, Architect.

Van Room:

Mr. Jensen said they would need a van room in the basement about 25' x 10' long. Mr. Taylor suggested that the Engineers discuss with Mr. Flook taking space occupied by dark rooms 18, 19 and 20 relocating them elsewhere if possible. Wherever the van room goes an alleyway should accompany it as air will enter here.

Exhaust Air:

This should be discharged from above the top story, if possible through one large or several small dormer windows in the loft in the rear overlooking the library roof.

Transformer Room:

This room should be squared off by taking a part of Service Room No. 5. Mr. Jensen will furnish the Architect with a detail for the alleyway top, vent and baffles.

Duct Space:

Typical double partitions will have double beams below with a clear space of 10" to receive 10" ducts. The large Lecture Room and Library above, however, should have space for 15" ducts.

Lighting Fixtures:

Mr. Taylor stated that his office wished to take care of all exterior lighting fixtures and such special interior fixtures as may be required in vestibules, main entrance hall, library and possibly the large Lecture Room. Other lighting fixtures should be selected by the Engineers or Owners.

E. K. Taylor

cc-Mr. Donnelly
Dr. Woodward
Mr. Steere
Mr. Flook
Neller, Rich & Co.

Minutes of Conference regarding the Specifications for the Bernard A. Eckhart Hall, University of Chicago, July 11, 1928.

Present: Mr. R.L. Flook, Supt. of Construction, University of Chicago, Mr. W. Herbert Gibson, Consulting Structural Engineer for Chas. Z. Klauder and Mr. E.K. Taylor representing Mr. Klauder.

Time: 9 A.M. to 5:15 P.M.

Present Buildings Examined:

Swift Hall
Medical School
Mandel Hall
New Chapel
Ryerson Hall
Wieboldt Hall
And others in passing

GENERAL ITEMS -

Name: The name of the building should be "Bernard A. Eckhart Hall" instead of Laboratory.

Ground Water:

Two large holes have been dug, one about at the center of the front of the building and the other near the rear. In both water stands at 6'-6" or 6'-8" below grade which about equals grade of adjacent sidewalk on the front. A layer of muck or black earth is shown about 4'-0" below grade with good fill on top of it, - in general sub-soil with a few brick bats. Below the muck is fine sand. The top soil at grade does not count for much as the site is now occupied by tennis courts.

At Mandel Hall:

The Chas. Z. Klauder drawings are to include the wall of the Eckhart Hall against which the additional 15'-0" of Mandel Hall will be built under a separate contract.

Minutes of Conference regarding the specifications for the Bernard A. Eckhardt Hall, University of Chicago, July 11, 1938.

Present: Mr. R.D. Block, Dept. of Construction, University of Chicago; Mr. E. Herbert Gibson, Consulting Structural Engineer for Chas. E. Kinsler and Mr. E.K. Taylor representing Mr. Kinsler.

Time: 9 A.M. to 5:15 P.M.

Present Buildings Examined:

Swiss Hall
Medical School
Mandel Hall
New Chapel
Harrison Hall
Nichols Hall
and others in passing

GENERAL ITEMS

Name: The name of the building should be "Bernard A. Eckhardt Hall" instead of Laboratory.

Ground water:

Two large holes have been dug, one about at the center of the front of the building and the other near the rear. In both water stands at 6'-3" or 6'-8" below grade which about equals grade of adjacent sidewalk on the front. A layer of muck or black earth is shown about 4'-0" below grade with good fill on top of it. - In general sub-soil with a few brick bats. Below the muck is fine sand. The top soil at grade does not count for much as the site is now occupied by tennis courts.

At Mandel Hall:

The Chas. E. Kinsler drawings are to include the wall of the Eckhardt Hall against which the additional 15'-0" of Mandel Hall will be built under a separate contract.

At Mandel Hall (Continued)

The Architect of Mandel Hall will prepare his own drawing and specification and get bids on the work. Mr. Flook will send him copies of the Eckhart Hall elevations so that his work can tie in with that of Chas. Z. Klauder.

Alterations with Ryerson Hall:

See rough sketch of basement and first floor corridor connecting Ryerson with Eckhart. A rolling steel shutter should be placed in the openings at each story, as Ryerson is not a fireproof building. In the first floor the existing corridor is to be extended full width to the new building but in the basement a half width passage will suffice as shown on sketch.

Present iron stairs to basement are to be re-located next to first floor corridor as shown. All this work is to be done by the contractor for Eckhart Hall. The present first floor corridor has a 6'-0" marble wainscot with a terrazzo floor. A pier is to be removed and replaced by steel beam above where present corridor joins new.

Exterior Steps:

The plans show exterior flight of six steps. If possible this should be made four. The law states that if more than four risers are used they must have a handrail on each side and if more than 8'-0" wide must have center rail, which must be double (two handrails) and with high newel posts.

Extent of the Chas. Z. Klauder Specification:

These are to cover the following items:

- Building
- Plumbing, including equipment plumbing
- Built-in laboratory fittings
- Book stacks
- Special lighting fixtures

7/11/38.

At Mandel Hall (Continued)

The Architect of Mandel Hall will prepare his own drawing and specification and get bids on the work. Mr. Flook will send him copies of the Eckhart Hall elevations so that his work can tie in with that of Cass. E. Klander.

Alterations with Ryerson Hall:

See rough sketch of basement and first floor corridor connecting Ryerson with Eckhart. A rolling steel shutter should be placed in the openings of each story, as Ryerson is not a fireproof building. In the first floor the existing corridor is to be extended full width to the new building but in the basement a half width passage will suffice as shown on sketch. Present iron stairs to basement are to be re-located next to first floor corridor as shown. All this work is to be done by the contractor for Eckhart Hall. The present first floor corridor has a 6'-0" marble wainscot with a terrazzo floor. A pier is to be removed and replaced by steel beam above where present corridor joins new.

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Extent of the Cass. E. Klander Specification:

These are to cover the following items:

Building
Plumbing, including equipment plumbing
Electric Laboratory fittings
Book stacks
Special lighting fixtures

7/11/1928.

Neiler, Rich and Company's Specification:

This will include:

Heating
Ventilation
Electric Wiring
Elevator

The University will attend to the following:

Finished grading
Lawn making and shrubbery
Walks
Sewer connection
Transformers, 2300 volt wiring
Alberene stone
Laboratory equipment
Movable furniture
Lecture room chairs

Separate Contracts:

Mr. Flook wishes to separate from the General Contract the items of painting, mastic or linoleum floors and finished hardware.

List of Contractors:

Mr. Flook will furnish this later.

Trade Practices in Chicago:

This is a long story which is best answered by a reference to some other specification for a recent Chicago building. Mr. Flook very kindly loaned Mr. Taylor such a specification for reference. Mr. Taylor on his part left with Mr. Flook a copy of the specification for the Princeton Chemical Laboratory to show the Chas. Z. Klauder general practice.

Changes to Floor Plans:

(See marked floor plans).

Under Sloping Roofs:

In general straight walls under sloping roofs should be 5'-6" high. Jambs at dormers should be splayed.

Heiler, R. and Company's Specification:

This will include:

Heating
Ventilation
Electric Wiring
Elevator

The University will attend to the following:

Finished grading
Sewer main and manhole
Water
Power connection
Transformers, 2500 volt wiring
Aluminum stone
Laboratory equipment
Mobile furniture
Lecture room chairs

Separate Contract:

Mr. Flock wishes to separate from the General
Contract the items of painting, mastic or
linoleum floors and finished hardware.

List of Contractors:

Mr. Flock will furnish this later.

Trade Practices in Chicago:

This is a long story which is best answered
by a reference to some other specification
for a recent Chicago building. Mr. Flock
very kindly loaned Mr. Taylor such a speci-
fication for reference. Mr. Taylor on his
part left with Mr. Flock a copy of the
specification for the Princeton Chemical
Laboratory to show the Chas. E. Alexander
general practice.

Changes to Floor Plans:

(See marked floor plans).

7/11/1928.

Basement Plan should have window in "Physics Research" Room No. 24 made longer and an areaway added. A window without areaway should be added between this window and the bay window foundation to light the side of the Spectroscopy space. Omit part of the six island piers and replace with two dark rooms 4'-0" wide with vestibule between, having sink recessed in double partition. Omit other dark room in this room No. 27 and add vestibule to No. 29. In Room No. 2 have vestibule (to dark room) 2'-3" wide with each door 2'-0" wide. Omit high voltage space off of rooms 12 and 14. Each high voltage space in both floors is to have a pair of light steel doors (without mullion) such as are used on coat lockers, about 3'-6" wide.

Transformer Room should have floor drain, 3'-6" wide steel door to corridor, areaway about 4'-6" square with 4'-0" x 4'-0" special manhole cover, opening at least 3'-6" wide between area and room without door.

Toilet Room No. 22:

Mr. Flook suggests locating on narrow end with waterclosets moved over.

First Floor Plan:

Mail will not require a closet, - merely a fixed group of boxes to the right of the stairs. Have closet open off of Office No. 111. Change name of Rooms Nos. 113 and 116 to "Laboratory" instead of Office. Have toilet room open off of Office No. 118 instead of off dark room. In Laboratories Nos. 105, 106 and 109 change Dark Room to High Voltage Space. Have door from Passage 135 to Laboratory No. 134. Have door 3'-6" wide between Labs. 102 and 103.

NOTE: Upper floor plans have not as yet been reviewed by the Professors in charge.

Corner Stone:

The drawings should show a corner stone set down over a box about 10" wide, 8" or 9" deep and about 15" long.

Under Sloping Roofs:

In general straight walls under sloping roofs should be 5'-6" high. Jambs at dormers should be splayed.

7/11/38

Basement Plan
should have window in "Physics Research" Room No. 24 made longer and an airway added. A window without airway should be added between this window and the bay window foundation to light the side of the spectroscopy space. Out part of the six island piers and replace with two dark rooms 4'-0" wide with vestibule between, having sink recessed in double partition. Out other dark room in this room No. 27 and add vestibule to No. 29. In Room No. 2 have vestibule to dark room 2'-3" wide with each door 3'-0" wide. Out high voltage space off of rooms 12 and 14. Each high voltage space in both floors is to have a pair of light steel doors (without mullion) such as are used on coat lockers, about 3'-8" wide.

Transformer Room should have floor drain, 3'-8" wide steel door to corridor, airway about 4'-8" square with 4'-0" x 4'-0" special manhole cover, opening at least 2'-0" wide between area and room without door.

Toilet Room No. 22:

Mr. Black suggests locating on narrow end with waterclosets moved over.

First Floor Plan:

Hall will not require a closet, - merely a fixed group of boxes to the right of the stairs. Have closet open off of Office No. 111. Change name of Room No. 112 and 113 to "Laboratory" instead of Office. Have toilet room open off of Office No. 112 instead of off dark room. In Laboratories Nos. 105, 106 and 108 change dark room to High Voltage Space. Have door from Passage 108 to Laboratory No. 104. Have door 2'-8" wide between Lab. 102 and 103.

Upper floor plans have not yet been reviewed by the Professor in charge.

NOTE:

Corner Stone:

The drawings should show a corner stone set down over a box about 10" wide, 8" or 9" deep and about 12" long.

Under Sloping Roofs:

In general straight walls under sloping roofs should be 8'-8" high. Jambes at dormers should be sloped.

7/11/1928.

Sill Heights:

If interior sills are slate the underside should clear the top of the 30" high tables.

Elevations:

A set of photostats of three elevation sketches was handed Mr. Flook, with a negative duplicate for getting additional sets if desired.

Third Floor:

An outdoor emergency passage should be provided from Ryerson Hall to the new building, being about 3'-0" wide, promenade tile roof with parapet or rail.

Specification Notes

Demolition:

The University will remove such parts of the tennis courts as they may wish to save. All other demolition shall be done by the Contractor being principally on and in Ryerson Hall.

Excavation and Grading:

Contractor to remove top soil and pile as property of the Owner. Owner will spread top soil, supplying such additional as may be needed and will plant lawns and shrubbery. Contractor shall bring subgrade to a level 6" below lines of finished grade ready to receive top soil.

Foundations:

Piles are not required. Foundation walls should be of concrete.

Wall Thickness:

A wall should be dimensioned 17" instead of 16" and thicker walls 4" more.

Limestone:

The material should be run of quarry, strip stone, in not more than 4" different heights (preferably 3).

Bill Heister:

If interior walls are slate the underside should
clear the top of the 30" high tables.

Elevations:

A set of photographs of three elevation sketches
was handed Mr. Floor, with a negative duplicate
for getting additional sets if desired.

Third Floor:

An outdoor emergency passage should be provided
from Ryerson Hall to the new building, being
about 8'-0" wide, promenade like roof with parapet
or rail.

Specification NotesDemolition:

The University will remove such parts of the
terrace courts as they may wish to save. All other
demolition shall be done by the Contractor
being principally on and in Ryerson Hall.

Excavation and Grading:

Contractor to remove top soil and pile as property
of the Owner. Owner will spread top soil, supply-
ing such additional as may be needed and will
plant lawns and shrubbery. Contractor shall bring
subgrade to a level 6" below lines of finished
grade ready to receive top soil.

Foundations:

Piles are not required. Foundation walls should
be of concrete.

Wall Thickness:

A wall should be dimensioned 17" instead of 16"
and thicker walls 4" more.

Limestone:

The material should be run of quarry, strip stone,
in not more than 4" different heights (preferably 3).

Limestone (Continued)

Smooth rubbed finish unless Mr. Klauder wants mouldings with knicked bits. The burden of proof as to the quantity of strip stone required should rest on the General Contractor, the quarry being required to furnish strip stone in quantity ordered and no more, being F.O.B. Bedford (or other quarry point) with "freight allowed to Chicago". General Contractor to pay freight and demurrage charges if any. (Note: Ryerson Hall has a machine tooled finish but the front of the building is largely covered with ivy). To use face stone as a part of a bearing wall the Chicago Building Code requires 4" minimum thickness plus 20% 8" thick to give a bond.

Other Stone:

No granite is required. No cut bluestone is required. No flagstone for walks required in contract, as the University will provide and lay all walks, using Ohio flagstone where possible but concrete where needed to match present walks.

Wall Furring:

2" double face terra cotta is satisfactory, although split furring is used on several other buildings.

Roofs:

All buildings in this group are red tile roofed with copper flashing. The felt used is Wilson Imperial 50 lb. felt, 4" lapped. The tile are 6" x 12", 3/8" thick Ludovici Celoden red tile 5" to the weather, held by 1 1/2" copper nails No. 12 gauge. Color should match Ryerson Hall. Copper is 16 oz. Flat roofs should be asbestos asphalt smooth surface roof, without raggle blocks. Two layers of Celotex should be placed on flat roofs before starting roofing. The cap or counter-flashing should be secured in the reglet on top of stone copings by means of expansion bolts and pointed full with Hetzel's oil cement. Where the counter-flashing laps over flashing it should be secured by expansion bolts or lead expansion shields. The valleys of sloping tile roofs should be of asbestos asphalt roofing finished with 6" x 9" x 1" "slab" tile or promenade tile with 1/4" joints. Drawings should be marked "Slab Tile Gutters".

Cement surbasses, - painted, are not wanted.

Finestone (Continued)

Smooth rubbed finish unless Mr. Klander wants
mouldings with knicked bits. The burden of proof
as to the quantity of strip stone required should
rest on the General Contractor, the quantity being
required to furnish strip stone in quantity ordered
and no more, being F.O.B. Bedford (or other country
point) with freight allowed to Chicago. General
Contractor to pay freight and demurrage charges
if any. (Note: Ryerson Hall has a machine loaded
finish but the front of the building is largely
covered with ivy).
To use face stone as a part of a bearing wall the
Chicago Building Code requires 8" minimum thick-
ness plus 20% 8" thick to give a bond.

Other Stones:

No granite is required. No cut Finestone is re-
quired. No Finestone for walks required in con-
tract, as the University will provide and lay all
walks, using Ohio Finestone where possible but
concrete where needed to match present walks.

Wall Finishing:

2" double face terra cotta is satisfactory, al-
though split facing is used on several other
buildings.

Roofs:

All buildings in this group are red tile roofs
with copper flashing. The tile used is Mission
Imperial 50 lb. tile, 4" lapped. The tile size
is 8" x 12", 3/8" thick Indiana Celadon red tile
5" to the weather, held by 1 1/2" copper nails No.
12 gauge. Color should match Ryerson Hall. Cop-
per is 16 oz. Flat roofs should be asbestos
asphalt smooth surface roof, without raggle
blocks. Two layers of Celotex should be placed
on flat roofs before starting roofing. The top
or counter-flashing should be secured in the
reglet on top of stone copings by means of ex-
pansion bolts and pointed full with Herculite
oil cement. Where the counter-flashing laps over
flashing it should be secured by expansion
bolts or lead expansion shields.
The valleys of sloping tile roofs should be of
asbestos asphalt roofing finished with 8" x 8" x 1"
"slab" tile or pre-made tile with 1/4" joints.
Drawings should be marked "Slab Tile Gutters".

Roofs (Continued)

The slab tile gutters and flat roofs should be specified in one part and the regular tile roofs and flashings in another. Roofs should be guaranteed for ten years.

As snow backs up in gutters, copper flashing should extend 2'-0" under roof tile which latter should terminate on a line with coping.

The four lower courses of roof tiles should be pointed in Hetzel's oil cement.

Skylight:

Mr. Flook suggests a series of four or five small saw tooth skylights over the Library, each above 3'-0" high. He refers the Architect to the skylights made by the Blasco Company of Chicago.

Windows:

Hope & Sons have furnished most of the steel casements. International and Crittall will be satisfactory. At Wieboldt Hall arch heads have leaded glass set in the stone as will be used on this new building. Although double thick glass will be satisfactory, Mr. Flook wishes the Architect to consider the new "flat process" glass of the American Window Glass Company. There is no objection to fixed transoms with the sash operated on window cleaning hinges or pivots. Provision should be made for window screens but they are not to be included in the contract. The vestibule doors should have a removable panel where a screen could be inserted.

Floors:

The type of floor construction will be explained in his minutes of this meeting, (structural engineer).

The basement floor should be an 8" thick stone concrete slab reinforced to resist water pressure. The Imperial Waterproofing Company should be given the contract to apply the cement finish on the slab and the cement finish on basement exterior walls and to guarantee them watertight.

In the upper stories cement floors should be used sparingly, if at all. Toilet rooms are to be terrazzo with a low (2") terrazzo surbase. Corridor floor in first story is desired in 6" x 6" brown clay tile by Mr. Flook. Corridors in upper floors might be the same or terrazzo or linoleum with terrazzo border and base.

Cement surbases, - painted, are not wanted.

Roofs (Continued)

The slab life gutters and flat roofs should be specified in one part and the regular life roofs and flashings in another.
Roofs should be guaranteed for ten years.
As snow backs up in gutters, copper flashing should extend 2'-0" under roof life which latter should terminate on a line with coping.
The four lower courses of roof tiles should be pointed in Hefzel's oil cement.

Skylight:

Mr. Flook suggests a series of four or five small saw tooth skylights over the library, each about 3'-0" high. He refers the architect to the skylights made by the Blasco Company of Chicago.

Windows:

Hope & Sons have furnished most of the steel casements. International and Crittall will be satisfactory. At Wilschmidt Hall arch heads have leaded glass set in the stone as will be used on this new building. Although double thick glass will be satisfactory, Mr. Flook wishes the Architect to consider the new "flat process" glass of the American Window Glass Company. There is no objection to fixed transoms with the sash operated on window cleaning hinges or pivots. Provision should be made for window screens but they are not to be included in the contract. The vestibule doors should have a removable panel where a screen could be inserted.

Floors:

The type of floor construction will be explained in his minutes of this meeting. (structural engineer).
The basement floor should be an 8" thick stone concrete slab reinforced to resist water pressure. The Imperial Waterproofing Company should be given the contract to apply the cement finish on the slab and the cement finish on basement exterior walls and to guarantee them watertight.
In the upper stories cement floors should be used sparingly, if at all. Toilet rooms are to be terraces with a low (8") terrace surface. Corridor floor in first story is desired in 6" x 8" brown clay tile by Mr. Flook. Corridors in upper floors might be the same or terraces or linoleum with terrace border and base.
Cement surfaces, - painted, are not wanted.

7/11/1928.

Floors (Continued) (Continued)

In offices, laboratories, glass rooms, etc. Mr. Flook prefers mastic about $1/4$ " thick and as a second choice 6 milimetre brown linoleum. If mastic is used it can be used as surbase also. If linoleum, then surbases would be cement coated with "Minwax".

Partitions:

In general partitions are to be 4" terra cotta hollow tile. Those around dark rooms may be 2" solid plaster. Around High Voltage spaces may be plaster or steel.

Interior Marble:

Although other buildings have marble wainscots 7'-0" high it was decided to have these 6'-9" with toilet cubicles of same height. Mr. Flook wants a marble strip over the cubicle doors and not a nickle plated bar. Hanging stiles should be $1\frac{1}{2}$ " extended to terrazza surbase without the use of a metal foot. Carthage gray (Missouri) marble is the cheapest in Chicago for good toilet room work.

Fittings for marble work should be chromium plated instead of nickle.

Plastering:

Smooth plaster is wanted practically throughout the building. The Auditorium should have acoustical plaster or other acoustical treatment. Mr. Flook has always found Professor Watson a very good consultant on acoustical problems.

In toilet rooms plaster should come flush with marble.

In using metal lath the University prefers galvanized wire lath to the customary expanded metal.

Interior Woodwork:

As Ryerson Hall is finished in birch it will be satisfactory to finish Eckhart Hall in birch but the finish in the new building will be walnut as against the so called mahogany in the existing building. Most of the other buildings on the campus are finished in white oak. Mr. Flook wishes to have as little interior woodwork as possible consistent with proper expense. He has no objection to steel frames for interior doors if they can be anchored tight. Mr. Taylor explained our custom of having one large

Plaster (Continued)

In offices, laboratories, glass rooms, etc. Mr. Flook prefers mastic about 1/4" thick and as a second choice 6 milimeter brown linoleum. If mastic is used it can be used as surface also. If linoleum, then surface would be cement coated with "mastic".

Partitions:

In general partitions are to be 4" extra cotta hollow tile. Those around dark rooms may be 2" solid plaster. Around high voltage spaces may be plaster or steel.

Interior Marble:

Although other buildings have marble wainscots 7'-0" high it was decided to have these 6'-0" with toilet cubicles of same height. Mr. Flook wants a marble strip over the cubicle doors and not a nickel plated bar. Hanging tiles should be 1/2" extended to junction surface without the use of a metal foot. Carriage Gray (Massouri) marble is the cheapest in Chicago for good toilet room work. Fittings for marble work should be chromium plated instead of nickel.

Plastering:

Smooth plaster is wanted practically throughout the building. The Auditorium should have acoustical plaster or other acoustical treatment. Mr. Flook has always found Professor Watson a very good consultant on acoustical problems. In toilet rooms plaster should come flush with marble. In using metal lath the University prefers galvanized wire lath to the customary expanded metal.

Interior Woodwork:

As Ryerson Hall is finished in birch it will be satisfactory to finish Ryerson Hall in birch but the finish in the new building will be walnut as against the so called mahogany in the existing building. Most of the other buildings on the campus are finished in white oak. Mr. Flook wishes to have as little interior woodwork as possible consistent with proper expense. He has no objection to steel frames for interior doors if they can be anchored tight. Mr. Taylor explained our custom of having one large

Interior Woodwork (Continued)

light of wire glass in doors from rooms to corridors and this met with Mr. Flook's approval, to be obscure in class room doors but clear in doors to laboratories.

Picture Moulding of wood may be replaced by concealed galvanized picture mould.

Platforms where shown in class rooms to have a moulded birch edge and to be floored with linoleum, all linoleum being furnished by the Owners.

Blackboards:

Blackboards should be 4' high, set 3' above the floor and should have a removable wire grating over the chalk gutter. It is important, in a mathematical building such as this, to have as many blackboards as possible in the class rooms, lecture rooms, etc.

Stairs:

Mr. Flook asks that all stairs be made "easy" following the well known rule of two risers plus a tread to equal 25". (Note: Headroom from edge of nosing to nearest ceiling measured normal to the stairs should never be less than 6'-6"). The rise should be 7 $\frac{1}{4}$ " or better still 7" which means a net tread of 11".

Mr. Flook prefers slate treads, risers, and skirtings for the main stairs, on a concrete structure. All stairs should have a closed well. Secondary stairs should be cement on concrete structure.

Painter's Finish:

Smooth surface plastered walls and ceilings should be painted as follows:

Primer coat

2 coats of lead and oil, second coat stippled

Coat of starch stippled

When the wall becomes soiled, due to the Chicago smoke, the starch coat is washed off bringing the dirt with it.

As birch is used the finish will be rubbed varnish. Where cement floors or cement subbases are used, they should be coated with "Minwax".

Interior Woodwork (Continued)

Light of wire glass in doors from rooms to corridors and this met with Mr. Wook's approval, to be opaque in class room doors but clear in doors to laboratories.

Picture Molding of wood may be replaced by concealed galvanneal picture mould.

Plastering where shown in class rooms to have a rounded pitch edge and to be finished with linoleum, all linoleum being furnished by the Owners.

Blackboards

Blackboards should be 4' high, set 3' above the floor and should have a removable wire grating over the chalk gutter. It is important, in a machine school building such as this, to have as many blackboards as possible in the class rooms, lecture rooms, etc.

Stairs

Mr. Wook says that all stairs be made "easy" following the well known rule of two risers plus a tread to equal 65". (Note: Headroom from edge of nosing to nearest ceiling measured normal to the stairs should never be less than 8'-6"). The rise should be 7" or better still 7" which means a net tread of 11".

Mr. Wook prefers slate treads, risers, and skirtings for the main stairs, on a concrete structure. All stairs should have a closed wall. Secondary stairs should be cement on concrete structure.

Painter's Finish:

Smooth surface plastered walls and ceilings should be painted as follows:

- Primer coat
- 2 coats of lead and oil, second coat stippled
- Coat of starch stippled

When the wall becomes soiled, due to the Chicago smoke, the starch coat is washed off using the dirt with it. As hich is used the finish will be washed away. Where cement floors or cement sidewalks are used, they should be coated with "Minwax".

Hardware:

There is no University grand master key. Each building has a master key of its own. Mr. Flook says they have had good results with Corbin and Sargent. He preferred not to use Yale. The Architect will therefore use his customary Corbin numbers.

Exterior doors should have guarded latch with inside and outside cylinders.

Other latches should have the guard feature.

The University has standardized on the "L.C.N." door check made by the Norton Company.

For finish on interior hardware Mr. Taylor proposed Bower-Barff. Mr. Flook said he preferred dull brass finish as found on the other buildings.

Doors to class room will follow the custom of the office of Chas. Z. Klauder by using push and pull plate with guarded latch to be retracted, operated by key from corridor and small knob inside.

Each corridor door to class room and laboratory is to have a card holder.

Lockers:

Arrange lockers along walls of corridors, recessed flush with the plaster and with the terrazzo or tile base under the lockers. The University will provide and set all lockers. In offices hooks are preferred to lockers.

Miscellaneous Items:

Interior window sills may be of slate, located to clear the 30" high tables. Table in library alcove is 24" x 36".

Exhibition room walls were discussed. The Architect proposes wood lining perhaps covered with burlap. Mr. Flook is to consult the professors and report later.

Lead will probably not be needed over windows.

Doors to constant temperature room need not be different from other doors.

Models for Carving:

Joseph Dux, an architectural modeler of Chicago, is recommended as having done other good work at the University. A lump sum should be included for his models and the carving should be done at the quarry. If carving needs touching up after erection to meet the approval of the Architect, Mr. Dux can attend to it as an extra.

Hardware:

There is no University grand master key. Each building has a master key of its own. Mr. Flook says they have had good results with Corbin and Sargent. He preferred not to use Yale. The Architect will therefore use his customary Corbin numbers.

Interior doors should have guarded latch with inside and outside cylinders. Other latches should have the guard feature. The University has standardized on the U.C.W. lock check made by the Norton Company. For finish on interior hardware Mr. Taylor proposed lower-half. Mr. Flook said he preferred gold brass finish as found on the other buildings. Doors to class room will follow the custom of the office of Chas. E. Alexander by using brass and pull plate with guarded latch to be recessed, operated by key from corridor and small brass in side. Each corridor door to class room and laboratory is to have a card holder.

Lockers:

Average lockers along walls of corridors, recessed flush with the plaster and with the ferrule on the base under the lockers. The University will provide and set all lockers. In office blocks are preferred to lockers.

Miscellaneous Items:

Laboratory window sills may be of slate, located to clear the 30" high tables. Table in library alcove is 24" x 36". Exhibition room walls were discussed. The Architect proposed wood lining perhaps covered with purple. Mr. Flook is to consult the professors and report later. Lead will probably not be needed over windows. Doors to constant temperature room need not be different from other doors.

Models for Carving:

Joseph Dux, an architectural modeler of Chicago, is recommended as having done other good work at the University. A lamp was shown and included for his models and the carving should be done at the quarry. If carving needs touching up after erection to meet the approval of the Architect, Mr. Dux can attend to it as an extra.

CHARLES · Z · KLAUDER · ARCHITECT
1429 · WALNUT · STREET · PHILADELPHIA

COPY

May 23, 1928

Re: Bernard A. Eckhart Laboratory
University of Chicago

Mr. L. R. Flook,
Supt. of Construction
University of Chicago
Chicago, Illinois

Dear Sir:

We mailed you yesterday as promised in our letter of May 16th, two sets of red-line prints of plans at 1/16 inch scale of Scheme "H" revised to date May 21, 1928. This revision consists in a reduction of cubage to 777,000 feet as compared with 783,000 for Scheme "G" already in your hands, while maintaining the simplicity of roof line and mass shown in the perspectives of the original Scheme "H".

In plan you will note (1) the lecture room on the second floor adjacent to Ryerson with balcony on third floor, (2) library with stack on second and third floors as well as on intermediate levels all connected by vertical circulation, (3) class rooms of the same capacity as those in Scheme "G" though arranged differently in plan, (4) forty research rooms as against thirty-three in Scheme "G", (5) fewer offices than in Scheme "G", though the same number on the third floor. This difference is somewhat offset by the added study room on the third floor which could be used to supplement the student's offices on the fourth floor. (6) The absence of a Social Room. In other respects the plans seem to us practically equal.

We hope that these plans may enable you to make progress toward a final decision.

Very truly yours,

DOS:H
CC Dr. Woodward ✓
D. Rm.

COPY

May 22, 1928

Mr. Bernard A. Bohannan Laboratory
University of Chicago

Mr. J. E. Flood,
Dept. of Construction
University of Chicago
Chicago, Illinois

Dear Sir:

We called you yesterday as promised in our
letter of May 15th, two sets of red-line plans of
plans at 1/16 inch scale of Bohannan "B" building as
data May 21, 1928. This revision consists in a
reduction of space to 777,000 feet as compared with
788,000 for Bohannan "B" - twenty in your name, while
maintaining the simplicity of roof line and mass
shown in the perspective of the original Bohannan "B".

In plan you will note (1) the feature was
on the second floor adjacent to Bohannan with library
on third floor, (2) library with book on second and
third floors as well as an intermediate level all
connected by vertical circulation, (3) glass rooms
of the same capacity as those in Bohannan "B" though
arranged differently in plan, (4) forty research
rooms as against thirty-three in Bohannan "B", (5)
fewer offices than in Bohannan "B", though the same
number on the third floor. This difference is
somewhat offset by the added study room on the
third floor which could be used to supplement the
researcher's offices on the fourth floor. (6) The ap-
pearance of a Social Room. In other respects the plans
seem to be practically equal.

We hope that these plans may enable you to
make progress toward a final decision.

Very truly yours,

CC Mr. Woodward
J. E. Flood

D. I. f

May 24, 1928

My dear Mr. Bliss:

In response to your letter of May 18, I wish to say that I quite agree with your committee in the conclusion that it would be difficult to justify the use of the money at present in hand for the development of the undergraduate teaching of astronomy. I therefore approve your recommendation that the plan at present under way be carried to a conclusion, and that the top of Ryerson shall be used for astronomical equipment until a more comprehensive program can be devised and financed.

In regard to the name of the new building, I am in entire accord with you that the new building should be regarded primarily as the center of work in mathematics and that Ryerson should continue to be regarded as the center of work in physics. The order in which the three departments were mentioned in Fairweather's news interview was purely accidental and should be regarded as such. I shall keep this matter in mind and to what I can to avoid any ambiguity.

Yours cordially,

FREDERIC WOODWARD

Mr. G. A. Bliss
Department of Mathematics
Faculty Exchange

FW*L

May 24, 1928

My dear Mr. Hilt:

In response to your letter of May 16, I wish to say that I quite agree with your committee in the conclusion that it would be difficult to justify the use of the money at present in hand for the development of the undergraduate teaching of astronomy. I therefore approve your recommendation that the plan at present under way be carried to a conclusion, and that the top of Ryerson shall be used for astronomical equipment until a more comprehensive program can be devised and financed.

In regard to the name of the new building, I am in entire accord with you that the new building should be regarded primarily as the center of work in mathematics and that Ryerson should continue to be regarded as the center of work in physics. The order in which the three departments were mentioned in Fairweather's news interview was purely accidental and should be regarded as such. I shall keep this matter in mind and to what I can to avoid any ambiguity.

Yours cordially,

FREDERIC WOODWARD

Mr. G. A. Hilt
Department of Mathematics
Faculty Exchange

W-1

The University of Chicago
Department of Mathematics

May 18, 1928

Dean F. C. Woodward
Faculty Exchange

Dear Dean Woodward:

I have tried recently to reach you over the telephone without success. Our Committee, Gale, MacMillan, and myself, discussed yesterday the provisions for Astronomy in the new building. We were unanimously agreed that, as we understand the situation, it would be difficult to justify the use of the money at present in hand for the development of undergraduate teaching of Astronomy. We recommend that the plan at present under way should be developed to a conclusion. It seemed to us highly desirable that the top of Ryerson should be used for Astronomical equipment until a more comprehensive program for the development of Astronomy on the Campus can be devised and financed. I understand that Mr. Klauder is likely to be here on Monday, and I hope that some decision can be reached during his visit.

Professor Moore spoke to me this morning about the name for the new building. He would like to have ^{an} indicative of the mathematical activities which will be housed there. He was disturbed over the fact that today's newspaper account of Fairweather's remarks about ~~the~~ new buildings mentions Physics, Mathematics, and Astronomy in that order. He thinks that the record of our Department justifies a home for us in which we shall be hosts rather than guests. It seems to me that there are strong arguments for his point of view, from the standpoint of both Physics and Mathematics, and I hope that the name of the new building will not be selected without giving us a chance to express them. Professor Moore would be much pleased if published statements about the new building could mention Mathematics first.

Yours very sincerely,

G. A. B. B. B.

B:IL

I do not feel quite so strongly about this as he does but I believe that it would be well to cultivate the impression, ^{which is also the fact,} that the center of gravity for Physics remains in Ryerson, and that the new building is primarily for mathematics and mathematical astronomy.

G. A. B.

CHARLES · Z · KLAUDER · ARCHITECT
1429 · WALNUT · STREET · PHILADELPHIA

COPY

June 30th, 1928.

Re: Bernard A. Eckhart Laboratory

Mr. L. R. Flook,
Supt. of Construction,
University of Chicago,
Chicago, Ill.

Dear Sir:-

We are sending you today, by parcel post, special handling, seven sets of blue prints of the 1/8" scale floor plans, Basement to 4th Floor inclusive, for the Eckhart Laboratory.

These embody the changes proposed at the last conference in Chicago. There are, however, in addition, changes in the position of the classroom on the first floor, which has been moved to the second floor immediately above its former location, the remaining space on the first floor being transformed into two laboratories, each with a dark room. The classroom on the second floor has thereby been forced to the third floor.

This change has grown out of the Building Department's requirement for 20% floor area in clear glass, which has necessitated larger windows than we had planned and resulted in a very careful study of fenestration, and this study has resulted in the changing of these classrooms.

We are continuing our work on Elevations, which, however, cannot be completed until we have received from you the final corrections in plan.

Very truly yours,

DOS:M

CC - Mr. Woodward ✓
DR

CHARLES N. KLAUDER - ARCHITECT
1000 N. WALNUT STREET - PHILADELPHIA

COPY

June 20th, 1933

Mr. Bernard A. Eckhart Laboratory

Mr. E. E. Wick,
Capt. of Construction,
University of Chicago,
Chicago, Ill.

Dear Sir:-

We are sending you today, by parcel post, special handling, seven sets of blue prints of the 1/8" scale floor plans, basement to 3rd floor inclusive, for the Eckhart Laboratory.

These embody the changes proposed at the last conference in Chicago. There are, however, in addition, changes in the location of the classroom on the first floor, which has been moved to the second floor immediately above the former location. The remaining space on the first floor being rearranged into two laboratories, each with a sink room. The classroom on the second floor has thereby been forced to the third floor.

This change has grown out of the Building Department's requirement for 800 sq. ft. area in clear glass, which has necessitated larger windows than we had planned and resulted in a very careful study of fenestration, and this study has resulted in the changing of these classrooms.

We are combining our work on elevations, which, however, cannot be completed until we have received from you the final corner theme in plan.

Very truly yours,

CCN:M

CC - Mr. Eckhart
DE

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW. E. HENDRICKSON ALMERN C. HOWARD
JOHN A. MacMAHON HERBERT C. WISE
ELLERY K. TAYLOR

June 21, 1928

Re: Bernard A. Eckhardt Laboratory

Mr. Frederic C. Woodward, Vice Pres.
University of Chicago,
Chicago, Illinois.

Dear Mr. Woodward:

At the meeting in Chicago reference was again made to verticality in the design of the south front of the Eckhardt Laboratory Building. I had gone to the meeting fully prepared as to the layout of plans and, as I thought, with the elevation sufficiently indicated to enable the Building Committee to authorize me to proceed with working drawings. Authorization was given to proceed, and I left the meeting determined to give the whole subject further study because I had somewhat the same feeling as the members of the Committee.

I am convinced that the elevation which we now have for the south front is far superior to the one submitted at our meeting in Chicago. I am sending a sketch of the old south elevation and a sketch of the new with a perspective in each case. I am sending a copy of this letter to Mr. Donmelley so that he may be informed in the matter.

I hope I may have an early answer authorizing me to proceed with this newer elevation; which may be termed a minor change but one fraught with a great deal of significance.

Very truly yours,

Charles Z. Klauder

CZK S
CC Mr. Donmelley
Draughting Room

THOMAS A. BALDWIN ARCHITECT
1000 NORTH MICHIGAN AVENUE
CHICAGO, ILLINOIS
TELEPHONE 1-1000
BALDWIN & BROTHERS

Jan. 11, 1923

Mr. Bernard A. Roberts Laboratory

Mr. Frederick C. Woodward, Vice Pres.
University of Chicago,
Chicago, Illinois.

Dear Mr. Woodward:

At the meeting in Chicago reference was again made to verticality in the design of the south front of the Roberts Laboratory building. I had gone to the meeting fully prepared as to the layout of plans and, as I thought, with the elevation and section indicated to enable the building committee to authorize me to proceed with working drawings. Unfortunately, however, I had not the meeting scheduled to give you time to proceed, and I left the meeting determined to give the whole subject further study because I had expected the same meeting as the review of the Committee.

I am convinced that the elevation which we now have for the south front is far superior to the one submitted at our meeting in Chicago. I am sending a sketch of the old south elevation and a sketch of the new with a perspective in each case. I am sending a copy of this letter to Mr. Woodward so that he may be informed in the matter.

I hope I may have an early answer authorizing me to proceed with the new elevation, which may be termed a minor change but one fitting with a great deal of elegance.

Very truly yours,

THOMAS A. BALDWIN
1000 North Michigan Ave.
Chicago, Ill.

June 7th, 1928

Mr. L. R. Steere:

Bernard A. Eckhart Laboratory

Mr. Stevens in Mr. Klauder's office came to Chicago on Thursday, May 31st with the revised sketches of Scheme "H".

This scheme is for a "T" shaped building built against Ryerson, with the "T" along University Avenue and projecting some 45 ft. south of Ryerson with a volume of 777,000 cu.ft. This also moves the east wall of the building further west from University Avenue than does Scheme "G".

After talking this scheme over in Mr. Woodward's office, a conference was arranged with the Faculty Committee and at 11 o'clock on Friday, June 1st, Mr. Stevens and I met with Professor Bliss, Chairman, Mr. Gale, Mr. MacMillan, and Mr. Rainey. Scheme "H" was emphatically condemned for many reasons of which the following are outstanding:

- (a) The library arrangement separating the stacks from the reading room is wholly inadequate and entirely impracticable and was condemned seriously by Mr. Rainey.
- (b) Eighteen offices were eliminated which puts the Astronomy Office completely out of the building.
- (c) The Social Room was eliminated.
- (d) Jag in second floor corridor south of Ryerson corridor is bad.
- (e) For the same volume and presumably the same cost the usable floor space would scarcely equal two-thirds of the area of Scheme "G".

The Committee feels rather badly that Mr. Klauder had taken three weeks to study Scheme "H" which had been disregarded per wire dated May 29th and feels that Scheme "G" well worked out will give an arrangement which will be satisfactory to them, but that Scheme "H" would not in many respects be very much of an improvement over the present situation.

June 7th, 1933

Mr. J. H. Stevens:

Barth A. Roberts Laboratory

Mr. Stevens in Mr. Klander's office came to Chicago on Thursday, May 1st with the revised sketches of Scheme "H".

This scheme is for a "T" shaped building built against Hyattson, with the "T" along University Avenue and projecting some 25 ft. south of Hyattson with a volume of 777,000 cu. ft. This also moves the west wall of the building further west from University Avenue than does Scheme "G".

After talking this scheme over in Mr. Woodward's office, a conference was arranged with the Faculty Committee and at 11 o'clock on Friday, June 1st, Mr. Stevens and I met with Professor Biles, Chairman, Mr. Gale, Mr. MacMillan, and Mr. Rainey. Scheme "H" was emphatically condemned for many reasons of which the following are outstanding:

(a) The library arrangement separating the stacks from the reading room is wholly inadequate and entirely impracticable and was condemned seriously by Mr. Rainey.

(b) Eighteen offices were eliminated which cuts the Astronomy Office completely out of the building.

(c) The Social Room was eliminated.

(d) Lay in second floor corridor south of Hyattson corridor is bad.

(e) For the same volume and presumably the same cost the usable floor space would scarcely equal two-thirds of the area of Scheme "G".

The Committee feels rather badly that Mr. Klander had taken three weeks to study Scheme "H" which had been disregarded per wire dated May 29th and feels that Scheme "G" will work out will give an arrangement which will be satisfactory to them, but that Scheme "H" would not in many respects be very much of an improvement over the present situation.

-2-

June 7th, 1928

The Faculty Committee, as stated by Mr. Bliss, Chairman, strongly condemns Scheme "H" and reconfirms their approval of Scheme "G".

Yours very truly,

L. R. Flook

LRF:K
CC-FCW ✓
CC-GAB

May 24th, 1928

Professor G. A. Bliss,
Faculty Exchange.

Dear Professor Bliss:

Bernard A. Eckhart Laboratory

Herewith copies of Mr. Klauder's letter of May 16th and attached is a roll of prints showing on a small scale the further development of Scheme "G", but somewhat modified.

Mr. Stevens at his last meeting stated, as you recall, that Mr. Klauder will be equally satisfied with Scheme "G" or Scheme "H". Upon further study it has become apparent that he has a pronounced preference for Scheme "H". Do you not think it well to study both Scheme "G" and "H" and ask Mr. Klauder to come to Chicago for a conference after we are ready with our comments and suggestions for changes, presenting this matter to the Committee on Buildings & Grounds, say within the next two weeks?

Yours very truly,

L. R. Flook.

LRF:EM

cc-FCW ✓
LRS

Mr. F. C. Woodward,
Mr. L. R. Steere:

Mr. Bliss will call a meeting of his Committee this morning to consider Scheme "H".

L. R. Flook.

May 24th, 1928

Professor G. A. Bliss,
Faculty Exchange.

Dear Professor Bliss:

Bernard A. Eckhart Laboratory

Herewith copies of Mr. Klauder's letter of May 18th and attached is a roll of prints showing on a small scale the further development of Scheme "G", but somewhat modified.

Mr. Stevens at his last meeting stated, as you recall, that Mr. Klauder will be equally satisfied with Scheme "G" or Scheme "H". Upon further study it has become apparent that he has a pronounced preference for Scheme "H". Do you not think it well to study both Scheme "G" and "H" and ask Mr. Klauder to come to Chicago for a conference after we are ready with our comments and suggestions for changes, presenting this matter to the Committee on Buildings & Grounds, say within the next two weeks?

Yours very truly,

L. R. Flook.

LRP:RM

cc-PGW
LRS

Mr. F. G. Woodward,
Mr. L. R. Steere:

Mr. Bliss will call a meeting of his Committee this morning to consider Scheme "H".

L. R. Flook.

C O P Y

CHARLES Z. KLAUDER ARCHITECT
1429 Walnut Street, Philadelphia

May 16th, 1928

Re: Mathematics Building

Mr. L. R. Flook, Supt. of Construction,
University of Chicago,
Chicago, Illinois.

Dear Sir:

We have wired today as follows:

"Do not expect me this week. Visit must be
postponed. Letter follows."

While we have been waiting for information which
you promised us as to the relocation of certain minor parti-
tions for Scheme "G", we thought it advisable to give further
study to Scheme "H", without disturbing its external appear-
ance.

We hasten to send this letter, expecting to send
plans within a day or two. Our rough studies indicate that
not only is the plan itself improved over what we have heret-
ofore submitted for this Scheme "H", but we have been able
to reduce the cubage appreciably so that it will approximate
that of Scheme "G". The arrangement improves on the side of
orderliness; and not the least attractive feature of it, from
the point of view of the Physics Department, is that the
eastern facade is eleven feet further back from the curb than
it was in our first studies for this Scheme. The plans will
apprize you of the fact that the lecture room will be located
on the second story. It will require a balcony on the third
floor level. Fortunately the escape stairway at this extremity
of the new building is in an admirable position to give access
to the balcony. One of the characteristics of this plan that
makes it result in a better elevation, is the fact that all
portions of the building are thin from side to side.

Manifestly it would be unwise for me to come to
Chicago before having had an opportunity to more fully study
this possibility.

Very truly yours,

(Signed) CHAS. Z. KLAUDER

CZK S
CC Dr. Woodward
Draughting Room

COPY

CHARLES E. KLAUDER ARCHITECT
1429 Walnut Street, Philadelphia

May 1934, 1934

Re: Mathematics Building

Mr. L. H. Flock, Asst. of Construction,
University of Chicago,
Chicago, Illinois.

Dear Sir:

We have wired today as follows:

"Do not expect me this week. Visit must be
postponed. Letter follows."

While we have been waiting for information which
you promised us as to the relocation of certain minor parts
of the building, we thought it advisable to give further
study to Scheme "H", without disturbing the external ap-
pearance.

We hasten to send this letter, expecting to send
plans within a day or two. Our rough studies indicate that
not only is the plan itself improved over what we have heretofore
submitted for this Scheme "H", but we have been able
to reduce the cubage appreciably so that it will approximate
that of Scheme "G". The arrangement improves on the side of
orderliness; and not the least attractive feature of it, from
the point of view of the Physics Department, is that the
eastern facade is eleven feet further back from the main
it was in our first studies for this Scheme. The plans will
apprise you of the fact that the lecture room will be located
on the second story. It will require a balcony on the third
floor level. Fortunately the escape stairway at this extremity
of the new building is in an admirable position to give access
to the balcony. One of the characteristics of this plan that
makes it result in a better elevation, in the fact that all
portions of the building are this from side to side.

Manifestly it would be unwise for me to come to
Chicago before having had an opportunity to more fully study
this possibility.

Very truly yours,

(Signed) CHAS. E. KLAUDER

COR 8
60 Dr. Woodward
Draughting Room

201

The University of Chicago

Office of the Vice-President and Business Manager

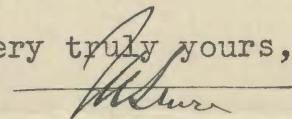
ROOM 1300, 189 W. MADISON ST.
TELEPHONE FRANKLIN 1034

May Eighteen
1 9 2 8

Dear Mr. Woodward:

Thank you very much for your letter of May 12, advising of the appointment of the faculty committee on the Bernard A. Eckhart Laboratory. I am passing this information on to Mr. Flook.

Very truly yours,



L. R. Steere

Mr. F. C. Woodward
The University of Chicago

EVB
CC LRF

The University of Chicago
Office of the President and Business Manager

RECEIVED
MAY 18 1938

May 18 1938

Dear Mr. Woodward:

Thank you very much for your letter of May 18, advising of the appointment of the faculty committee on the Bernard A. Rothman Laboratory. I am sending this information to Mr. Fleisch.

Very truly yours,
[Signature]

I. H. Elliott

Mr. F. C. Woodward
The University of Chicago
IVS
CC 1117

216
May 12, 1928

My dear Mr. Steere:

In response to your request I have named the following committee on the Bernard A. Eckhart Laboratory: Mr. Bliss, Chairman, Mr. Gale, and Mr. MacMillan. They have been notified of their appointment.

Yours cordially,

FREDERIC C. WOODWARD

Mr. L. R. Steere
The University of Chicago
189 W. Madison Street
Chicago, Illinois

FCW:L

May 12, 1928

My dear Mr. Steere:

In response to your request I have named the

following committee on the Bernard A. Lockhart

Laboratory: Mr. Bliss, Chairman, Mr. Gale, and Mr.

MacMillan. They have been notified of their ap-

pointment.

Yours cordially,

FREDERIC C. WOODWARD

Mr. L. R. Steere
The University of Chicago
189 W. Madison Street
Chicago, Illinois

FCW:L

2014
May 12, 1928

Messrs Bliss, Gale and MacMillan:

Gentlemen:

Mr. Steere has requested the appointment of a committee on the Bernard A. Eohart Laboratory, so that he may know to whom he may look for official approval of plans from time to time. In response to his request, I am asking you to be good enough to serve as the committee. Mr. Bliss will act as Chairman.

Yours cordially,

FREDERIC C. WOODWARD

FCW:L

2012
May 12, 1928

Messrs Bliss, Gale and MacMillan:

Gentlemen:

Mr. Stearns has requested the appointment of a
committee on the Bernard A. Eckhardt Laboratory, so
that he may know to whom he may look for official ap-
proval of plans from time to time. In response to his
request, I am asking you to be good enough to serve as
the committee. Mr. Bliss will act as Chairman.

Yours cordially,

FREDERIC C. WOODWARD

FCW:L

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALMERN C. HOWARD
JOHN A. MacMAHON HERBERT C. WISE
ELLERY K. TAYLOR

May 16, 1928

Re: Mathematics Building

Dr. Frederic C. Woodward, Vice Pres.,
University of Chicago,
Chicago, Illinois.

Dear Dr. Woodward:

I have today telegraphed Mr. Flook, in answer to a wire from him, advising that I could not come to Chicago this week. This telegram was followed by a letter, a copy of which I am sending you so that you will be conversant with the progress in this office.

Very truly yours,

CZK S
CC Draughting Room

CHARLES · Z · KLAUDER · ARCHITECT
1429 · WALNUT · STREET · PHILADELPHIA

COPY

May 16, 1928

Re: Mathematics Building

Mr. L. R. Flook, Supt. of Construction
University of Chicago,
Chicago, Illinois.

Dear Sir:

We have wired today as follows:

"Do not expect me this week. Visit must be postponed. Letter follows."

While we have been waiting for information which you promised us as to the relocation of certain minor partitions for Scheme "G", we thought it advisable to give further study to Scheme "H", without disturbing its external appearance.

We hasten to send this letter, expecting to send plans within a day or two. Our rough studies indicate that not only is the plan itself improved over what we have heretofore submitted for this Scheme "H", but we have been able to reduce the cubage appreciably so that it will approximate that of Scheme "G". The arrangement improves on the side of orderliness; and not the least attractive feature of it, from the point of view of the Physics Department, is that the eastern facade is eleven feet further back from the curb than it was in our first studies for this Scheme. The plans will apprise you of the fact that the lecture room will be located on the second story. It will require a balcony on the third floor level. Fortunately the escape stairway at this extremity of the new building is in an admirable position to give access to the balcony. One of the characteristics of this plan that makes it result in a better elevation, is the fact that all portions of the building are thin from side to side.

Manifestly it would be unwise for me to come to Chicago before having had an opportunity to more fully study this possibility.

Very truly yours,

C. Z. K.

CZK S

CC Mr. Woodward
Draughting Room

COPY

May 12, 1900

Mr. J. M. Gurnea, Chicago

Dear Sir,
I have the honor to acknowledge the receipt of your letter of the 10th inst.

and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

I am, Sir, very respectfully,
Yours truly,
J. M. Gurnea

Very truly yours,
J. M. Gurnea

The above is a true and correct copy of the letterhead of the Chicago & North Western Railway Company, dated and captioned as above, and is not to be used for any other purpose. The Chicago & North Western Railway Company is not responsible for the contents of this letterhead, and it is not to be used for any other purpose. The Chicago & North Western Railway Company is not responsible for the contents of this letterhead, and it is not to be used for any other purpose. The Chicago & North Western Railway Company is not responsible for the contents of this letterhead, and it is not to be used for any other purpose.

Very truly yours,
J. M. Gurnea

Very truly yours,

J. M. Gurnea
Chicago & North Western Railway Company

Dit

Students' Observatory
at the
University of Chicago

Approximate Prices on Equipment
May 1928

1. Ten-inch equatorial refractor mounted on heavy iron pillar with driving clock and circles and eight eyepieces
(G.A. 144) = Gaertner Catalogue, A 144 \$8500
solar spectroscope (see star spectroscope)
Position filar micrometer (G.A. 252) \$ 450
Star spectroscope with prism (G.A. 275) \$ 285
(or Junkun# c, No 172 \$525 with 2 prisms)
Polarizing eye-piece (G.A. 228) \$ 120
~~(Cooke; 23 ft 6 in. \$900 sterling)~~
Stellar photometer
25-ft dome (Cooke; 23 ft 6 in. \$900 sterling)
- 2 & 3. 6-inch and 5-inch (on hand)
(Stationary 6-inch, A 140, \$2950)
4. Broken-tube transit (on hand)
- 5 & 6. Combined straight transit and zenith telescope,
(G.A. 300) \$2800
7. Four piers
8. Pairs of Ross lenses \$1000
9. Three sextants ^{one} (now on hand)
10. Additional clock
11. Three chronometers
12. Warner & Swasey chronograph with 3 drums
13. Radio time receiver
14. Four kiosks
15. Coelostat and spectrohelioscope
16. Photoheliograph

(2)

Approximate prices on equipment. (cont.)

- 17. Small spectroscopes
- 18. Dark rooms
- 19. Bedrooms
- 20. Stereopticon
- 21. Globes, spheres, calculating machines, measuring
machines, surface photometers.

Approximate prices on equipment. (cont.)

Small typewriters	17.
Desk sets	18.
Refrigerators	19.
Stoves	20.
Glass, silver, calculating machines, measuring machines, surface photometers.	21.

ITEMS OF EQUIPMENT

Suggested ^{for} ~~of~~ the Students' Observatory
of Eckhart Hall

Submitted by Edwin B. Frost

1. A 10-inch achromatic telescope of focal length about 13 feet with modern equatorial mounting and a 4-inch finder. It should have as accessories a solar spectroscope for observing solar prominences and for studying the solar spectrum and the chromosphere; a standard Warner & Swasey micrometer; a simple stellar photometer; polarizing eyepiece and a full set of ordinary eyepieces. The dome for this telescope should be about 25 feet in diameter, but it may be octagonal or hexagonal in shape to conform to Gothic architecture.
- 2 & 3. The present 6-inch and 5-inch Clark refractors should be remounted on the roof at a suitable distance from each other and from the 10-inch, also under Gothic domes.
4. The present broken-tube Bamberg transit mounted on a low pier.
5. A straight transit, for time, such as is generally used by our Coast Survey.
6. A zenith telescope of the Warner & Swasey pattern. All of these instruments should be of about 3 inches aperture.
7. Four piers to be provided at suitable places for setting up a portable ^{portable} universal instrument and for the use of sextants with mercury horizon.

ITEMS OF EQUIPMENT

Suggested by the Research Laboratory

of Harvard Univ.

Submitted by Edwin E. Frost

1. A 10-inch achromatic telescope of focal length about 10 feet with certain special mounting and a 4-inch finder. It should have an accessories a solar spectrograph for observing solar prominences and for studying the solar spectrum and the chromosphere; a standard filter & camera; a simple stellar photometer; polarizing eyepiece and a full set of ordinary eyepieces. The base for the telescope should be about 25 feet in diameter, but it may be octagonal or hexagonal in shape to suit the building.
- 2 & 3. The present 6-inch and 8-inch Clark telescopes should be removed on the roof at a suitable distance from each other and from the 10-inch, also under suitable dome.
4. The present broken-down Ramsden refractor mounted on a low pier.
5. A refracting transit, for time, such as is generally used by our Coast Survey.
6. A zenith telescope of the Warner & Swasey pattern. All of these instruments should be of about 2 inches aperture.
7. Four piers to be provided at suitable places for setting up a portable universal instrument and for use of instruments with various horizon.

8. A very important item of equipment to be attached to the side of the tube of the 10-inch equatorial is a pair of Ross lenses of 3 to 4 inches aperture, costing about \$1,000 for the pair.
9. Provisions should be made for three good sextants. Our present ones may suffice.
10. An Additional accurate clock.
11. At least three chronometers.
12. A Warner & Swasey chronograph with three drums.
13. Modern equipment for receiving time signals by radio for controlling clocks.
14. Four protected kiosks with illumination for use of star charts.
15. Very important and not expensive, a coelostat with Hale's spectrohelioscope projecting downward into observing room below.
15. A photoheliograph attachment for photographing the sun, for measuring position of sun-spots.
17. Small spectroscopes for observing stellar spectra with 10-inch refractor.
18. Dark room with at least three stalls and facility for enlarging photographs.
19. Provision should be made for an office with bedroom and bath for a resident Fellow who would be the guardian of the astronomical equipment. Adjacent thereto should be an sleeping room for the professor in charge, to occupy when

1. A very important item of equipment to be attached to the side of the tube of the 10-inch spectrometer is a pair of brass jaws of 3 to 4 inches aperture, costing about \$1,000 for the pair.
2. Provision should be made for three good venting, but present ones may suffice.
3. An additional accurate clock.
4. At least three chronographs.
5. A battery of battery chronograph with three lamps.
6. Modern equipment for receiving time signals by radio.
7. For controlling clocks.
8. Room protected clocks with illumination for use at night.
9. Very important and not expensive, a connection with telephone.
10. Spectrophotometer projecting downward into chamber for below.
11. A photometer attachment for photographing the sun, for measuring position of sun-spots.
12. Small spectroscopes for observing stellar spectra with 10-inch refractor.
13. Dark room with at least three tables and lighting for enlarging photographs.
14. Provision should be made for an office with battery and bath for a resident fellow who would be the assistant of astronomical equipment. Adjacent lavatory should be an sleeping room for the professor in charge, to be ready when

19. (cont) "sleeping over" or resting before early morning observation.

20. A stereopticon should always be available in an astronomical lecture room seating from one hundred to one hundred fifty people.

21. There should be an adequate supply of globes, spheres, calculating machines, measuring machines for spectra, and a surface photometer, on suitable slabs with good north light.

19. (cont) "Sleeping over" or resting before early morning shower.

version.

20. A stereoscopic should always be available in an entrance-

level lecture room seating from one hundred to one hundred

twenty people.

21. There should be an adequate supply of chairs, tables,

coloring materials, mounting machines for slides, and

a surface photometer, on suitable stands with good north

light.

April 25, 1928

My dear Mr. Bliss:

I was greatly surprised by what you said in your letter from Washington as to Professor Frost's expectations. I had supposed that the needs of the men in Astronomy had been fully stated and considered, and it is discouraging to contemplate the prospect of another re-consideration of the plans. However, if the claims of Astronomy have not had a hearing, I agree that it is better to hear them now than later. I suggest that you talk it over with Dean Gale at once, and if he is of the same mind, call in Professor Frost.

Yours cordially,

FREDERIC C. WOODWARD

Mr. G. A. Bliss
Department of Mathematics
Faculty Exchange

FCW:L

April 25, 1928

My dear Mr. Bliss:

I was greatly surprised by what you said in your letter from Washington as to Professor Frost's expectations. I had supposed that the needs of the men in Astronomy had been fully stated and considered, and it is discouraging to contemplate the prospect of another re-consideration of the plans. However, if the claims of Astronomy have not had a hearing, I agree that it is better to hear them now than later. I suggest that you call it over with Dean Gale at once, and if he is of the same mind, call in Professor Frost.

Yours cordially,

FREDERIC C. ROODMAN

Mr. G. A. Bliss
Department of Mathematics
University Exchange

Yours

COSMOS CLUB
WASHINGTON, D. C.

April 22, 1928

Dear Woodward:

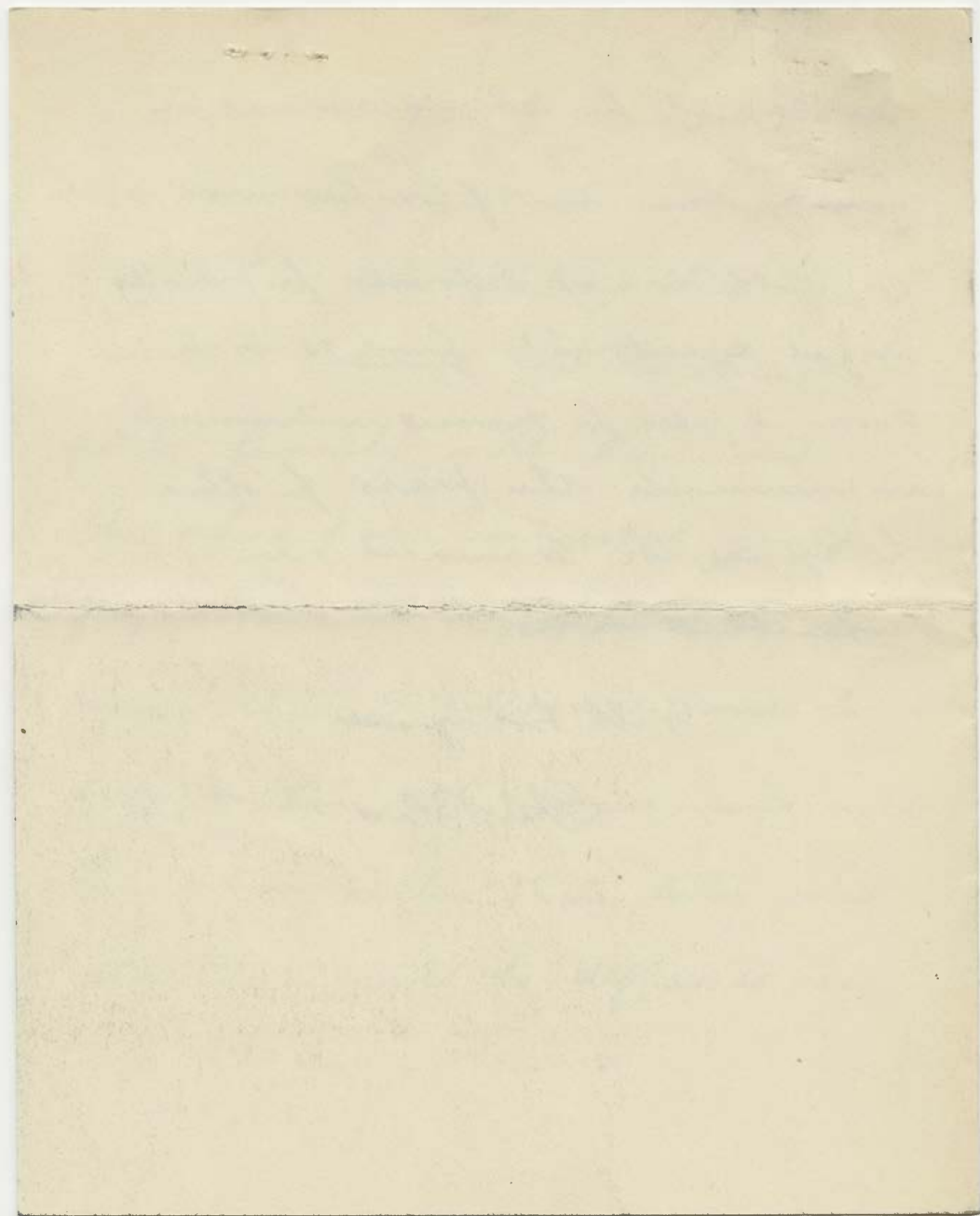
I came down to
Washington on The train yesterday
with Frost. He is full of plans
for the top of the new building
and is ^{confidently} expecting all or a large
part of them to be carried out.
He thinks that Miss Millan is
properly interpreting these plans to us.

I listened mostly and did not undertake to object or contradict, but I have the feeling that this question should be discussed quite frankly with him and the others of our interested groups very soon. He is ~~ex~~pecting so much that I believe it would be better to have the argument with him now, rather than later when alterations would be difficult and

certainly if he should succeed in forcing some sort of compromise. His talk was of 3 domes for various sized equatorials from 12 inch down, 2 piers for transit instruments, innumerable other piers for other purposes, etc. It sounded very impractical to me.

With best regards

G. A. Bliss



CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALMERN C. HOWARD
JOHN A. Mac MAHON HERBERT C. WISE
ELLERY K. TAYLOR

April 20, 1928

Re: Mathematics Building

Dr. Frederic C. Woodward, Vice Pres.,
University of Chicago,
Chicago, Illinois.

My dear Dr. Woodward:

Mr. Stephens has returned and I am pleased to think from his reports that we seem to have made some progress. I wish, however, to write to you in confidence, remembering yours and Mr. Donnelley's desires that we should do the best possible architecture at the University of Chicago. I know I need not tell you that architecture is a compromise between idealistic masses and limiting conditions, but it is only fair to say that in the constant struggle to reconcile these two factors the architect inevitably becomes more proficient to the degree that limiting conditions very often become an advantage in the hands of an able designer. This is merely a preamble to what I wish to say because I now think we are at the cross-roads and we must strike a balance between the technical requirements and what may be termed good design, as I see the latter.

Just before Mr. Stephens left for Chicago I thought of a solution in respect to the low tee-shaped building which made for pronounced serenity and an avoidance of too much of the picturesque, and so my letter in which I picked the other design as being more desirable at the present, although not in the future, does not now hold. The tee-shaped design (presented by Mr. Stephens at the last meeting) is lower, being what we term two and one-half stories to the eaves in height, and it has in addition fewer parts and longer and quieter ridges, but that is all dependent on its being attached to Ryerson; that is, attached without a gap between Ryerson and the new Mathematics Building. It appears, however, that its plan is not as good and that it would cost more money. Being less in height to contain a given number of rooms it means a greater perimeter of wall and the smaller use of the space within the slope of roof. It also has more corridor and rooms, and these are the things which I think make the building cost more.

If the other design, as it seems now, is to go on, I think that it is my duty to say that it is not my first choice as to design, and that should take with it the realization that I have given you two solutions, both of which I think are good aesthetically; one however being better than the other, whereas its plan may not be as good.

I am not averse to proceeding with which ever design

1952-1953

Dr. Frederic C. Woodward -

you incline to, taking all these differences into consideration, but it would be a relief to me if you were to express a preference, knowing of my thoughts respecting the two designs.

In the meantime we are proceeding with the plans which seemed the more desirable at the meeting last Tuesday.

Very truly yours,

Wm. F. Kland

CZK S
CC Draughting Room

In, Webster C. Webster

your letter is, which will show differences in the
it will be a relief to you to know a difference, showing
of the Webster manuscript for the edition.

In the manuscript is an interesting note on the
found the note in the manuscript for the edition.

Very truly yours,

Webster C. Webster

Oct 2
1880

DESIRED	
CABLE	
<input checked="" type="checkbox"/>	FULL RATE
<input type="checkbox"/>	DEFERRED
<input type="checkbox"/>	CABLE LETTER
<input type="checkbox"/>	WEEK END LETTER

Patrons should check class of service desired; otherwise message will be transmitted as a full-rate communication.

WESTERN UNION

NO.	CASH OR CHG.
CHECK	
TIME FILED	

NEWCOMB CARLTON, PRESIDENT

J. C. WILLEVER, FIRST VICE-PRESIDENT

Send the following message, subject to the terms on back hereof, which are hereby agreed to

T Mr. Charles Z. Klauder
E 1429 Walnut Street
L Philadelphia, Pennsylvania
E
G
R
A
M

LETTER RECEIVED. PLEASE SEND STEPHENS WITH PLANS AS SOON
AS POSSIBLE.

F. C. Woodward

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. one-half the un-repeated message rate is charged in addition. Unless otherwise indicated on its face, this is an un-repeated message and paid for as consideration whereof it is agreed between the sender of the message and this company as follows:

1. The company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines; nor for errors in cipher or obscure messages.

2. In any event the company shall not be liable for damages for mistakes or delays in the transmission or delivery, or for the non-delivery, of any message, whether caused by the negligence of its servants or otherwise, beyond the sum of five thousand dollars, at which amount each message is deemed to be valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated-message rate is paid or agreed to be paid, and an additional charge equal to one-tenth of one percent of the amount by which such valuation shall exceed five thousand dollars.

3. The company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination.

4. Domestic messages and incoming cable messages will be delivered free within one-half mile of the company's office in towns of 5,000 population or less, and within one mile of such office in other cities or towns. Beyond these limits the company does not undertake to make delivery, but will, without liability, at the sender's request, as his agent and at his expense, endeavor to contract for him for such delivery at a reasonable price.

5. No responsibility attaches to this company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the company's messengers, he acts for that purpose as the agent of the sender.

6. The company will not be liable for damages or statutory penalties in any case where the claim is not presented in writing within sixty days after the message is filed with the company for transmission.

7. It is agreed that in any action by the company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

8. Special terms governing the transmission of messages according to their classes, as enumerated below, shall apply to messages in each of such respective classes in addition to all the foregoing terms.

9. No employee of the company is authorized to vary the foregoing.

THE WESTERN UNION TELEGRAPH COMPANY
INCORPORATED
NEWCOMB CARLTON, PRESIDENT

CLASSES OF SERVICE

TELEGRAMS

A full-rate expedited service.

NIGHT MESSAGES

Accepted up to 2:00 A.M. at reduced rates to be sent during the night and delivered not earlier than the morning of the ensuing business day.

Night Messages may at the option of the Telegraph Company be mailed at destination to the addressees, and the Company shall be deemed to have discharged its obligation in such cases with respect to delivery by mailing such night messages at destination, postage prepaid.

DAY LETTERS

A deferred day service at rates lower than the standard telegram rates as follows: One and one-half times the standard night letter rate for the transmission of 50 words or less and one-fifth of the initial rates for each additional 10 words or less.

SPECIAL TERMS APPLYING TO DAY LETTERS:

In further consideration of the reduced rate for this special Day Letter service, the following special terms in addition to those enumerated above are hereby agreed to:

A. Day Letters may be forwarded by the Telegraph Company as a deferred service and the transmission and delivery of such Day Letters is, in all respects, subordinate to the priority of transmission and delivery of regular telegrams.

B. This Day Letter is received subject to the express understanding and agreement that the Company does not undertake that a Day Letter shall be delivered on the day of its date absolutely, and at all events; but that the Company's obligation in this respect is subject to the condition that there shall remain sufficient time for the transmission and delivery of such Day Letter on the day of its date during regular office hours, subject to the priority of the transmission of regular telegrams under the conditions named above.

No employee of the Company is authorized to vary the foregoing.

NIGHT LETTERS

Accepted up to 2:00 A.M. for delivery on the morning of the ensuing business day, at rates still lower than standard night message rates, as follows: The stand-

ard telegram rate for 10 words shall be charged for the transmission of 50 words or less, and one-fifth of such standard telegram rate for 10 words shall be charged for each additional 10 words or less.

SPECIAL TERMS APPLYING TO NIGHT LETTERS:

In further consideration of the reduced rates for this special Night Letter service, the following special terms in addition to those enumerated above are hereby agreed to:

A. Night Letters may at the option of the Telegraph Company be mailed at destination to the addressees, and the Company shall be deemed to have discharged its obligation in such cases with respect to delivery by mailing such Night Letters at destination, postage prepaid.

No employee of the Company is authorized to vary the foregoing.

FULL RATE CABLES

An expedited service throughout. Code language permitted.

DEFERRED HALF-RATE CABLES

Half-rate messages are subject to being deferred in favor of full rate messages for not exceeding 24 hours. Must be in language of country of origin or of destination, or in French. This class of service is in effect with most European countries and with various other countries throughout the world. Full particulars supplied on application at any Western Union Office.

CABLE LETTERS

For plain-language communications. The language of the country of destination may be employed, if the Cable Letter service is in operation to that country. Subject to delivery at the convenience of the Company within 24 hours if telegraphic delivery is selected. Delivery by mail beyond London will be made if a full mailing address is given and the words "Post London" are written after the destination. Rate is approximately one-third of the full rate; minimum 20 words.

WEEK-END LETTERS

Similar to Cable Letters except that they are accepted up to midnight Saturday for delivery Monday morning, if telegraphic delivery is selected. Rate is approximately one-quarter of the full rate; minimum 20 words.

CHARLES Z. KLAUDER ARCHITECT
1429 WALNUT STREET PHILADELPHIA
EDW E. HENDRICKSON ALMERN C. HOWARD
JOHN A. Mac MAHON HERBERT C. WISE
ELLERY K. TAYLOR

April 12th, 1928.

Re: Bernard A. Eckhardt Laboratory

Dr. Frederic C. Woodward, Vice President,
University of Chicago,
Harper Hall,
Chicago, Ill.

My dear Dr. Woodward:-

We have prepared, in diagrammatic but careful form, two sets of plans for the proposed Mathematics Building, keeping in mind in both instances the possibilities of the mass and the detail which may be applied to the mass, and have satisfied ourselves with the aesthetic result. We have designated these schemes, respectively, "G" and "H".

For the present, we feel that "G" is perhaps better in appearance but that "H", while perfectly acceptable as a piece of design, would be a better adjunct to a future building running across the end of the great court if such a building were designed in somewhat the manner indicated on the drawings which have already been submitted to you for the University Avenue Elevation.

Scheme "G" provides a room for the Physics Department, which would contain 120 persons. "H" proposes an auditorium which would accommodate 250 persons. Both have libraries, with light to the north. That in Scheme "G" is the better, although in Scheme "H" the stack must be housed in two tiers on the second floor and one tier on the third, which latter may be an advantage for the Mathematics Department.

The purpose of this letter is first, to inform you as to how we have been proceeding and second, to say that we are ready now to present these plans to the departments. I think it would

RECEIVED
JAN 10 1930

1930

THE UNIVERSITY OF CHICAGO

Department of Chemistry
University of Chicago
Chicago, Ill.

Dear Sir:
I have received your letter of the 1st inst. regarding the matter of the University of Chicago. I am sorry to hear that you are having trouble with the University. I am sure that you will be able to solve the problem.

I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem.

I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem.

I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem. I am sure that you will be able to solve the problem.

Dr. Woodward

-2-

4/12/28.

suffice if on this occasion Mr. Stephens should present the drawings and he could at the same time, if one or the other scheme meets with the approval of the departments, get information supplementary to that which we already have. The whole would then be put in better form, ready for acceptance by the Building Committee or the Board, or both, unless you feel that our work has been well enough done for these bodies to authorize us to proceed with working drawings at once.

Mr. Stephens would be prepared to be in Chicago on Tuesday morning. If that is not convenient, will you name a date.

Sincerely yours,

W. L. K. K. K.

CZK:M

CC - Mr. Thos. E. Donnelly
DR



Dr. Woodbury

W. W. Woodbury

...it is on this occasion Mr. Woodbury should be
sent the question and he would be the first to
one of the other members with the approval of
the Government. It is necessary to
...the first of the year
...in better than the last
...Committee on the Board of Health
...that our work has been well enough for
...these bodies to maintain it to prevent any
...disagreement.

...Mr. Woodbury would be prepared to be
in Chicago on Tuesday evening. It is not
...with you on a date.

Very sincerely yours,
W. W. Woodbury

W. W.

CC - Mr. T. A. Woodbury
US

271b

April 23, 1928

My dear Mr. Klauder:

I have your letter of April 20 and am greatly interested in your comments on Schemes "G" and "H". I quite agree with you that Scheme "H" is distinctly the better of the two, and I was somewhat disappointed when I found that the departments preferred Scheme "G". The latter, however, is a very effective design, and in view of the departmental preference and the substantial difference in cost I feel disposed to go ahead with it. The fact is that I'm afraid that a reopening of the question might cause considerable delay, and without any assurance that the departments could be satisfied.

My suggestion is that you go ahead with Scheme "G", at least to the point of incorporating the changes proposed at the last meeting. If you will then send us the sketches of both Scheme "G" and Scheme "H", I shall show them to Mr. Dornmelle and see if he has such a decided preference for Scheme "H" as to make it worthwhile to reconsider our selection.

Yours cordially,

FREDERIC C. WOODWARD

Mr. Charles E. Klauder
1429 Walnut Street
Philadelphia, Pennsylvania

FCW:L

April 25, 1928

My dear Mr. Klander:

I have your letter of April 20 and am greatly interested in your comments on Scheme "O" and "H". I quite agree with you that Scheme "H" is distinctly the better of the two, and I was somewhat disappointed when I found that the department preferred Scheme "O". The latter, however, is a very effective design, and in view of the departmental preference and the substantial difference in cost I feel disposed to go ahead with it. The fact is that I'm afraid that a keeping of the question might cause considerable delay, and without any assurance that the department could be satisfied.

My suggestion is that you go ahead with Scheme "O", at least to the point of incorporating the changes proposed at the last meeting. If you will then send me the sketches of both Scheme "O" and Scheme "H", I shall show them to Mr. Dannelley and see if he has such a decided preference for Scheme "H" as to make it worthwhile to reconsider our selection.

Yours cordially,

FREDERIC C. WOODWARD

Mr. Charles E. Klander
1429 Walnut Street
Philadelphia, Pennsylvania

FWW:L

Mr. Woodward.

212

March 30th, 1928

Mr. L. R. Steere:

Bernard A. Eckhart Laboratory

Replying to your letter of March 23rd, your letter to Mr. Klauder of the 24th, and Mr. Klauder's letter to you of the 21st, our meeting on Tuesday was put over until Wednesday.

Mr. Klauder and his designer, Mr. Stephens, arrived at Mr. Woodward's office at about 9:30 A.M. Wednesday, March 28th. We spent some time looking at the preliminary sketches and plans which Mr. Klauder brought in and later Professors Gale, Compton, and Dempster came in. In the afternoon session Professor Michelson came in for a while and Professor Lane of the Physics Department attended.

For the meeting of March 29th Professor Bliss came in bringing Professor Dixon, and Mr. Gale, Mr. Compton, with Mr. Klauder and Mr. Stephens attended the sessions both morning and afternoon. Mr. Woodward came in for part of the time on each day.

Mr. Klauder brought with him four schemes showing floor plans, Schemes A, B, C, and D showing various arrangements and various cubages. He also brought the sketches he had before showing the elevations of the building, which are not materially changed in one of the schemes and in addition two elevations showing a possible development along the west side of University Avenue from 58th to 59th St., both of these sketches showing a four-story building centered on the 58th St. block by a three-story building in one scheme and a two-story building in the other scheme to give best results.

The discussion soon eliminated three of the four sets of plans getting down to Scheme "C" which above the third floor was a "U" shaped building to the north, giving a narrower building and good offices and in the center to the north showing a large lecture room. This scheme as drawn by Mr. Klauder showed the large reading room to the north.

All of the aspects of all of these plans were discussed, many of them in great detail and in a fine spirit of co-operation. Every effort was made to come to agreement as to the major features of the plan so that Mr. Klauder could proceed.

Mr. Woodward

March 30th, 1933

Mr. J. H. Moore:

Richard A. Klander Laboratory

Replying to your letter of March 23rd, your letter to Mr. Klander of the 25th, and Mr. Klander's letter to you of the 21st, our meeting on Tuesday was put over until Wednesday.

Mr. Klander and his designer, Mr. Stephens, arrived at Mr. Woodward's office at about 9:30 A.M. on Wednesday. We spent some time looking at the preliminary sketches and plans which Mr. Klander brought in and later Professor Galt, Gompson, and Decker came in. In the afternoon session Professor Nicholson came in for a while and Professor Lane of the Physics Department attended.

For the meeting of March 23rd Professor Bliss came in bringing Professor Dixon, and Mr. Galt, Mr. Gompson, with Mr. Klander and Mr. Stephens attended the session both morning and afternoon. Mr. Woodward came in for part of the time on each day.

Mr. Klander brought with him four schemes showing floor plans, Scheme A, B, C, and D showing various arrangements and various elevations. He also brought the sketches he had before showing the elevations of the building, which are not materially changed in one of the schemes and in addition two elevations showing a possible development along the west side of University Avenue from 25th to 32nd St. Both of these sketches showing a four-story building centered on the 25th St. block by a three-story building in one scheme and a two-story building in the other scheme to give best results.

The discussion soon eliminated three of the four sets of plans getting down to Scheme D, which above the third floor was a "U" shaped building to the north, giving a narrower building and good offices and in the center to the north showing a large lecture room. This scheme as drawn by Mr. Klander showed the large reading room to the north.

All of the aspects of all of these plans were discussed, many of them in great detail and in a time spirit of co-operation. Every effort was made to come to agreement as to the major features of the plan so that Mr. Klander could proceed.

March 30th, 1928

The first definite agreement to be reached was that the 10" equatorial telescope (a proposed gift) should not be mounted on either Ryerson or Eckhart Laboratory but that the present 5" student telescope now mounted in the small dome at the Botany Greenhouse and the present transit should both be mounted on the roof of Ryerson, where even a small dome might be hidden by the parapet wall. In other words, Mr. Klauder need not bother about this.

It was agreed that Mr. Klauder should restudy Scheme "C" and make two variations:

1. Omit entirely the large lecture room (250 seats) of the Physics department; place the library room on the second floor north of the corridor with capacity for 88 readers and 66,000 volumes in a two-story stack with provision on the floor immediately under the stack for future expansion of the stack, such expansion probably to come not earlier than fifteen years. The space on the first floor immediately below the reading room to be used for research rooms of Physics; the second floor space ^{west} of the reading room to be made into a large lecture room (125 or more), five or six offices to be arranged near the reading room for the use of the Mathematics Department, many other features of Scheme "C", namely spectroscopy and other physical research rooms in the basement; Physics research rooms and one or two classrooms on the first floor, classrooms on the second floor for the use of Mathematics, the third floor to be devoted to faculty offices for the Department of Mathematics except where placing offices in the reading room on the second floor would mean putting up several of the smaller classrooms to the third floor, the fourth floor to be used for student workrooms and offices; except that for Mr. Compton's work in high voltage a room extending from the basement to the second floor would be arranged at the north end of the east wing. With this arrangement the ceiling of the first floor north of the corridor could be depressed under the bookstacks in order that the standard school height of ceiling could be kept and at the same time two levels of bookstacks could be used along the south wall of the reading room.

2. Same as Scheme "C" except attempt to get the large lecture room in on the second floor west end, moving the reading room to the east end, arranging for circulation; other features being substantially the same as #1.

March 30th, 1938

March 30th, 1938

The first definite agreement to be reached was that the 10" equatorial telescope (a proposed gift) should not be mounted on either Ryerson or Kober Laboratory but that the present 5" student telescope now mounted in the small dome at the Botany Greenhouse and the present transit should both be mounted on the roof of Ryerson where even a small dome might be hidden by the parapet wall. In other words, Mr. Kinner had not bother about this.

It was agreed that Mr. Kinner should readily Scheme "C" and make two variations:

1. Split entirely the large lecture room (250 seats) of the Physics Department; place the library room on the second floor north of the corridor with capacity for 50 readers and 50,000 volume in a two-story stack with provision for floor immediately under the stack for future expansion of the stack, such expansion probably to come not earlier than fifteen years. The space on the first floor immediately below the reading room to be used for research rooms of Physics; the second floor space of the reading room to be used for large lecture room (125 or more), five or six offices to be arranged near the reading room for the use of the Mathematics Department, many other features of Scheme "C", namely spectroscopy and other physical research rooms in the basement; Physics research rooms and one or two classrooms on the first floor, classrooms on the second floor for the use of Mathematics, the third floor to be devoted to faculty offices for the Department of Mathematics except where placing offices in the reading room on the second floor would mean putting up several of the smaller classrooms to the third floor, the fourth floor to be used for student workrooms and offices; except that for Mr. Tompkins' work in high voltage a room extending from the basement to the second floor would be arranged at the north end of the east wing. With this arrangement the ceiling of the first floor north of the corridor could be depressed under the bookshelves in order that the standard school height of ceiling could be kept and at the same time two levels of bookshelves could be used along the south wall of the reading room.

2. Same as Scheme "C" except attempt to get the large lecture room in on the second floor west end, moving the reading room to the east end, arranging for circulation; other features being substantially the same as 1).

March 30th, 1928

Scheme #1 above, which looks most favorable would involve more expense in the alterations of Ryerson to make the present west rooms, second floor, rooms #19, 20, 21, and 22 into a large lecture room seating 200 or more, changing the present library of Physics into a lecture room seating perhaps 50 and changing the present second floor east room, #32, now to be cut down by a corridor, to a room with a capacity of perhaps 80, all of these lecture rooms being served from the present storeroom and apparatus room on the second floor of Ryerson which will not then be disturbed.

Another scheme which Mr. Klauder will look into is to put the large lecture room of Physics on the first floor with facilities at the west end where a small elevator could be put in serving the apparatus and storeroom to bring set-ups into the large lecture room. This would be more expensive but it would doubtless solve the major problem in the planning of this building and offset remodeling expense or extra cubage which would make the other schemes more expensive.

Mr. Klauder stated that he thought he could have the elevations made within ten days and come out again for a conference at which time we could probably agree on a plan.

Yours very truly,

L. R. Flook

L. R. Flook
Superintendent of Construction

LRF:X
CC-FCW ✓
CC-LRS (2)

March 30th, 1958

W. B. Wood

第 10 页

The University of Chicago

March Twenty Four
1 9 2 8

Dear Mr. Klauder:

I have your letter of March 21 and note there are several points upon which you need additional information with respect to the plans for the Mathematics Building.

I also wish to acknowledge receipt of your telegram of the 23rd. Arrangements have been made for a conference at Mr. Woodward's office immediately after your arrival on Tuesday.

Very truly yours,

L. R. Steere

Mr. Charles Z. Klauder
1429 Walnut Street
Philadelphia, Pennsylvania

LRS:EVB

CC to Mr. Donnelley

Mr. Woodward ✓

Mr. Flook

The University of Chicago

March Twenty Four
I 9 8

Dear Mr. Klander:

I have your letter of March 21 and note there are several points upon which you need additional information with respect to the plans for the Mathematics Building.

I also wish to acknowledge receipt of your telegram of the 23rd. Arrangements have been made for a conference at Mr. Woodward's office immediately after your arrival on Tuesday.

Very truly yours,

J. R. Steere

Mr. Charles E. Klander
1429 Walnut Street
Philadelphia, Pennsylvania

LRB:EVB
CC to Mr. Donnelly
Mr. Woodward
Mr. Flook

The University of Chicago

Mr. Woodward

March Twenty Three
1 9 2 8

Mr. Flook:

I am enclosing copies of the correspondence with Mr. Klauder, and shall be glad if you will confer with Mr. Woodward and arrive at some tentative basis for the preliminary sketches as promptly as possible.

Very truly yours,

LS
L. R. Steere

LRS:EVB
Enc

The University of Chicago

Mr. Woodward

March Twenty Three
1 2 3

Mr. Flook:

I am enclosing copies of the cor-
respondence with Mr. Kinsler, and shall be
glad if you will confer with Mr. Woodward
and arrive at some tentative basis for the
preliminary sketches as promptly as possible.

Very truly yours,

L. H. Steere

LRS:WVB
Enc

CHARLES Z. KLAUDER
1429 Walnut Street
Philadelphia, Pa.

March 21, 1928

Dear Mr. Steere:

Your letter of March 9 has been received. I have come back refreshed, but I find it a little difficult to get into the swing of things.

New plans for the Mathematics Building were made during my absence. I had the feeling, however, that they would not result in a satisfactory mass design, so we are now working on another set of plans. We hesitate to depart from the layout of rooms, because shown in diagrammatic form by the department; but have no doubt that we can solve the problem with satisfaction to everyone, if we are given sufficient time for study and discussion.

When I was last in Chicago I was told that a 3" transit had been presented to the University, that you did not know where to put it and asked if I could find a place in this building. Immediately there was discussion as to whether it should properly be placed in this building. Subsequently I received instructions to make revisions for a 10" equatorial telescope. Since there was discussion about this, and since the request is not a very firm one, I am of the opinion that we had better not include these features in the building. In my experience I have frequently encountered a desire to install in buildings objects which are on second thought believed more appropriately placed elsewhere. It seems to me that if a 10" equatorial telescope were placed in this building, with such knowledge as I have of the working of such an instrument, it should go in a dome, but whether it does or not I fear that the design will be involved in whatever way the instrument may be used. Therefore, I shall prepare a design without provision for either the transit or the telescope.

In looking over the plans given us by the department and after having heard the staff discuss the features of the plan, I find myself in a quandary. For instance, they have shown all class rooms on the second floor and research laboratories on the first floor. Without a special reason for such an arrangement the architect would naturally place those rooms which contain the most people on the first floor and relegate the rooms for research, which contain fewer people, to a higher level, if only that they may be further removed from disturbances. In other words, I believe that to confine the greatest number of persons to a horizontal circulation is better than to have them constantly climbing stairs. But there may be some stronger reason in the mind of the department which would determine the arrangement submitted in their diagrammatic sketches.

We are told too that we may make a design in which a lecture hall is not included. We are not told, however, that we may regard that as positive, so we find ourselves in the position of feeling that we must show two schemes or two studies of plans, one with and one without a lecture room and conditioned in a manner that we think we shall have to assume, realizing that neither may meet the desires of the department.

If we seem to be delaying, it is because of these uncertainties, and not because we are slow in designing a building. If you could learn whether there is any objection to our suggestion that the class rooms may better be placed on the first floor, will you not let us hear from you at once.

There will be no charge in connection with the suggested location of the high school gymnasium over Belfield Hall.

Yours very truly,
(Signed) Chas. Z. Klauder

CZK:B

CHARLES E. KLAUDER
1429 Walnut Street
Philadelphia, Pa.

March 21, 1923

Dear Mr. Stearns:

Your letter of March 9 has been received. I have come back refreshed, but I find it a little difficult to get into the swing of things.

New plans for the Mathematics Building were made during my absence. I had the feeling, however, that they would not result in a satisfactory mass design, so we are now working on another set of plans. We hesitate to depart from the layout of rooms, because shown in diagrammatic form by the department, but have no doubt that we can solve the problem with satisfaction to everyone, if we are given sufficient time for study and discussion.

When I was last in Chicago I was told that a 3" transit had been presented to the University, that you did not know where to put it and asked if I could find a place in this building. Immediately there was discussion as to whether it should properly be placed in this building. Subsequently I received instructions to make revisions for a 10" equatorial telescope. Since there was discussion about this, and the request is not a very firm one, I am of the opinion that we had better not include these features in the building. In my experience I have frequently encountered a desire to install in buildings objects which are on second thought better more appropriately placed elsewhere. It seems to me that if a 10" equatorial telescope were placed in this building, with such knowledge as I have of the work of such an instrument, it should go in a dome, but whether it does or not I leave to you. I shall prepare a design whatever way the instrument may be used, whether the transit or the telescope, without provision for either the transit or the telescope.

In looking over the plans given by the department and after having heard the staff discuss the features of the plan, I find myself in a quandary. For instance, they have shown all class rooms on the second floor and research laboratories on the first floor. Without a special reason for such an arrangement the architect would naturally place those rooms which contain the most people on the first floor and relegate the rooms for research, which contain fewer people, to a higher level, if only that they may be further removed from disturbances. In other words, I believe that to confine the greatest number of persons to a horizontal circulation is better than to have them constantly climbing stairs. But there may be some stronger reason in the mind of the department which would determine the arrangement submitted in their diagrammatic sketches.

We are told too that we may make a design in which a lecture hall is not included. We are not told, however, that we may regard that as positive, so we find ourselves in the position of feeling that we must show two schemes or two studies of plans, one with and one without a lecture room and conditioned in a manner that we think we shall have to assume, realizing that neither may meet the desires of the department.

If we seem to be delaying, it is because of these uncertainties, and not because we are slow in designing a building. If you could learn whether there is any objection to our suggestion that the class rooms may better be placed on the first floor, will you not let us hear from you at once.

There will be no change in connection with the suggested location of the high school gymnasium over Belfield Hall.

Yours very truly,
(Signed) Charles E. Klauder

CEK:B

The University of Chicago

Office of the Vice-President and Business Manager

ROOM 1300, 189 W. MADISON ST.
TELEPHONE FRANKLIN 1034

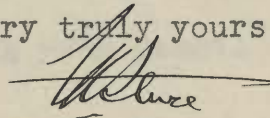
January Twenty Four
1 9 2 8

Dear Mr. Woodward:

I am enclosing a copy of a letter from Mr. Flook of January 18, reporting on the conferences between Mr. Klauder and members of the departments with reference to the new Mathematics Building, together with a copy of my reply of this date.

It may be that settlement of this matter could be expedited by the appointment of a committee, perhaps with Mr. Bliss as chairman, through whom the various suggestions could be cleared and crystalized into definite recommendations from the departments concerned.

Very truly yours,



L. R. Steere

Mr. F. C. Woodward
The University of Chicago

LRÆ:EVB
Enc
CC to Mr. Flook

The University of Chicago

January Twenty Four
1 9 2 8

Mr. Flook:

I am sending a copy to Mr. Woodward of your report of January 18 on the conferences with Mr. Klauder regarding the Mathematics Building, and enclose a copy of my letter of transmittal.

I am in entire accord with your suggestion that, if possible, we should obtain a definite statement from the departments, covering the accommodations they deem essential for their purposes, and that the location and arrangement of these should be left to the architect.

I note that Mr. Klauder has been given a general idea of the cubage limitations we have in mind and suggest that we await receipt of his preliminary sketches before asking the President to determine the exact amount to be allocated to the cost of construction.

As requested, I am returning your pencil sketches herewith.

L. R. Steere

LRS:EVB
ENC

CC to Mr. Woodward

January Twenty Four
1 2 3

Mr. Block:

I am sending a copy to Mr. Woodward of your report of January 12 on the conference with Mr. Klander regarding the Mathematics Building, and enclose a copy of my letter of transmittal.

I am in entire accord with your suggestion that, if possible, we should obtain a definite statement from the departments covering the accommodations they deem essential for their purposes, and that the location and arrangement of these should be left to the architect.

I note that Mr. Klander has been given a general idea of the cubage limitations we have in mind and suggest that we await receipt of his preliminary sketches before asking the President to determine the exact amount to be allocated to the cost of construction.

As requested, I am returning your pencil sketches herewith.

L. R. Steere

IRS:EVJ
ENC
CC to Mr. Woodward

January 18th, 1928

Mr. L. R. Steere:

Bernard A. Eckert Laboratory

In conference during the past two days with Mr. Charles Z. Klauder, we started with a meeting in Mr. Woodward's office on Monday morning at which meeting were present, Mr. Klauder, Mr. Woodward, Mr. Compton, Mr. Bliss, Mr. MacMillan, and Mr. G. K. Morse. On Tuesday, after showing Mr. Klauder over the ground, we held a conference in Mr. Gale's office at which were present Mr. Klauder, Mr. Gale, Mr. Compton, Mr. Bliss, Mr. MacMillan and Mr. G. K. Morse.

This Committee, as you doubtless know, have gone back to the original scheme prepared by Mr. Morse (which scheme Mr. Jackson did not like) with the library on the second floor south, a large lecture room on the second floor north side of the corridor west end, seating 350 (with balcony seating 50); the building being used basement and first floor by the Physics Dept. except for two class rooms, the second floor devoted to class rooms, the third floor to offices, and the fourth or attic floor being devoted to student work rooms.

This plan indicated the new building going up to present Mandel Hall, (with no allowance for the south extension of Mandel) and separated about 25 ft. from Ryerson Laboratory building.

The library plan has been modified to the extent of raising the first floor ceiling so that a double-deck book stack can be provided along the entire north wall of the library reading room. This was approved by Mr. Rainey with the qualification that he would prefer a room with north light.

This plan shows a set-back about 15 ft. wide along the south front at the third story level; an opening at Ryerson at the first floor level from Hutchinson Quadrangle south; and a passage through the new building just south of Mandel by going indoors and out again.

Mr. Morse seemed convinced that his is the only feasible plan and some of the members were convinced that restrictions in design imposed by his plan were essential. The attached mimeographed sheet is a copy of the information which Mr. Morse made up and handed to Mr. Klauder. You will note that #7 provides for astronomical instruments on the roof of the tower. This tower is an idea originating in the original Coolidge & Hodgdon perspective sketch. Since a dome at this location

January 18th, 1928

Mr. L. R. Stearns:

Bernard A. Bokert Laboratory

In conference during the past two days with Mr. Charles E. Klander, we started with a meeting in Mr. Woodward's office on Monday morning at which meeting were present, Mr. Klander, Mr. Woodward, Mr. Compton, Mr. Bliss, Mr. Macmillan, and Mr. G. E. Morse. On Tuesday, after showing Mr. Klander over the ground, we held a conference in Mr. Gale's office at which were present Mr. Klander, Mr. Gale, Mr. Compton, Mr. Bliss, Mr. Macmillan and Mr. G. E. Morse.

This Committee, as you doubtless know, have gone back to the original scheme prepared by Mr. Morse (which scheme Mr. Jackson did not like) with the library on the second floor south, a large lecture room on the second floor north side of the corridor west end, seating 250 (with balcony seating 50); the building being used basement and first floor by the Physics Dept. except for two class rooms, the second floor devoted to class rooms, the third floor to offices, and the fourth or attic floor being devoted to student work rooms.

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Mr. Morse seemed convinced that this is the only feasible plan and some of the members were convinced that restrictions in design imposed by his plan were essential. The attached mimeographed sheet is a copy of the information which Mr. Morse made up and handed to Mr. Klander. You will note that it provides for astronomical instruments on the roof of the tower. This tower is an idea originating in the original Goodidge & Hodgdon perspective sketch. Since a dome at this location

January 18th, 1928

would be unsightly, it has been found practicable, we think, to mount the proposed 10" equatorial transit (which is now available, disposing of the present 6" telescope in the student observatory at Ellis Ave.) and mounting likewise the 10" transit instrument (now in the Greenhouse on Ellis Ave.) in the roof of the north section (elevated and let down through a hatchway in the roof so that it would only be visible at times of use and probably then would not be high enough to appear above the parapet wall).

I also called Mr. Klauder's attention to another possibility, that if the provision for the two astronomical instruments on the roof at the north end of the building along the street proves too difficult in design that we might study the central roof of Ryerson Laboratory as a possible location for these instruments.

These several conditions are of course too strict to permit of freedom in design.

Mr. Klauder was very patient and offered several suggestions. We left the meeting with the understanding that Mr. Klauder would make probably three studies of this building, having several things in mind which he deems of major importance as follows:

(a) The building should not be separated from Ryerson but the roof of the new building should run over to the roof of Ryerson, to give continuity of wall and a longer roof line, which he considers especially important.

(b) The south end of Hutchinson Court should likewise have continuity of wall surface, if only one story.

The "Morse" plan makes a very poor elevation for the south end of the quadrangle. Another project which the laboratory men have in mind for a later expansion of the shop area of the Ryerson Annex indicates that there is a possibility of getting a one-story continuity across the south end of Hutchinson Court.

(c) Mr. Klauder feels, as we have felt, that the plan for future construction along University Avenue is vital in this connection as it will immediately affect the south elevation, and that the most attractive group would be made by closing the frontage along the street with a nice archway through a future building centered on East 58th Street. He said that he would make a little sketch of this study which would indicate about how such construction along University Avenue might affect this building. He rather indicated that he would want to show a gable end with the projection south of the south face of Ryerson Laboratory along the street side.

January 13th, 1938

would be unsightly, it has been found practicable, we think, to mount the proposed 10" equatorial transit (which is now available, disposing of the present 6" telescope in the student observatory at Ellis Ave.) and mounting likewise the 10" transit instrument (now in the greenhouse on Ellis Ave.) in the roof of the north section (elevated and let down through a hatchway in the roof so that it would only be visible at times of use and probably then would not be high enough to appear above the nearest wall).

I also called Mr. Kinder's attention to another possibility, that if the provision for the two astronomical instruments on the roof at the north end of the building along the street proves too difficult in design that we might study the central roof of Ryerson Laboratory as a possible location for these instruments.

These several conditions are of course too strict to permit of freedom in design.

Mr. Kinder was very patient and offered several suggestions. We left the meeting with the understanding that Mr. Kinder would make probably three studies of this building, having several things in mind which he deemed of major importance as follows:

(a) The building should not be separated from Ryerson but the roof of the new building should run over to the roof of Ryerson, to give continuity of wall and a longer roof line, which he considers especially important.

(b) The south end of Hutchinson Court should likewise have continuity of wall surface, if only one story.

The "Access" plan makes a very poor suggestion for the north end of the quadrangle. Another project which the laboratory men have in mind for a later expansion of the shop area of the Ryerson Annex in location that there is a possibility of getting a one-story connection across the south end of Hutchinson Court.

(c) Mr. Kinder feels, as we have felt, that the plan for future construction along University Avenue is vital in this connection as it will immediately affect the south elevation, and that the most attractive group would be made by placing the entrance along the street with a nice archway through a future building centered on East 58th Street. He said that he would make a little sketch of this study which would indicate about how such construction along University Avenue might affect this building. He rather indicated that he would want to show a guide and with the projection south of the south face of Ryerson Laboratory along the street side.

January 18th, 1928

I tried in these meetings to persuade these gentlemen not to fix the requirements too rigidly, but to let Mr. Klauder have free play in planning and see if he cannot provide the things they want in a building which he will consider a superior architectural design. I think that Mr. Klauder understands this and he promises to give it his best effort with several men during the next two or three weeks so that we can look for his preliminary designs on this enlarged basis at that time.

Will you kindly let me know just what money is available for this project. Prof. Compton stated his understanding that the total sum is \$1,075,000. On our basis of 160% this would give \$672,000 for the building and fees, which at 70¢ would be 960,000 cu. ft. This basis was given to Mr. Klauder tentatively as the maximum cubage which this project could now reach. There is every indication at this early stage that a volume of 960,000 cu. ft. will be more than ample to take care of what the departments now want.

Sincerely yours,

L. R. Flook
Superintendent of Construction

LRF:K

January 18th, 1932

-3-

I tried in these meetings to persuade these gentlemen not to fix the requirements too rigidly, but so far Mr. Kinsler has free play in planning and see if he cannot provide the things they want in a building which he will consider a superior architectural design. I think that Mr. Kinsler understands this and he promises to give it his best effort with several men during the next two or three weeks so that we can look for his preliminary designs on this enlarged basis at that time.

Will you kindly let me know just what money is available for this project. Prof. Compton stated his understanding that the amount was \$1,000,000. On our basis of 1932 this would give \$672,000 for the building and fees, which at 70% would be \$470,400. This basis was given to Mr. Kinsler tentatively as the maximum budget which this project could now reach. There is every indication at this early stage that a volume of 900,000 cu. ft. will be more than ample to take care of what the departments now want.

Very sincerely yours,
L. R. Flook

Superintendent of Construction
The Board of Trustees
University of Chicago

Enclosed for the Board of Trustees are two copies of the report of the Committee on the Survey of the Physical Sciences, dated January 10, 1932.

Very truly yours,
L. R. Flook

1

Di

January 20, 1928

My dear Mr. MacMillan:

Thank you very much for your letter of January 19 with quotations from Professor Frost's letter to you relating to astronomical equipment in the Bokhart Laboratory. Professor Frost's experience ought to be of value and I assume that you have shown his letter to Mr. Bliss or have given him a copy of it. Perhaps it would be well to send a copy to Mr. Klauder, or at least quotations from it. Mr. Klauder's address is 1429 Walnut Street, Philadelphia, Pennsylvania.

Yours sincerely,

FREDERIC C. WOODWARD

Mr. W. D. MacMillan
Department of Astronomy
Faculty Exchange

FCW:L

January 30, 1928

My dear Mr. Hamilton:

Thank you very much for your letter of

January 19 with quotations from Professor

Proctor's letter to you relating to astronomical

equipment in the Eckhart Laboratory. Professor

Proctor's experience ought to be of value and I

assume that you have shown his letter to Mr. Hilt

or have given him a copy of it. Perhaps it would

be well to send a copy to Mr. Kinsler, or at least

quotations from it. Mr. Kinsler's address is

1432 Walnut Street, Philadelphia, Pennsylvania.

Yours sincerely,

FREDERIC C. WOODWARD

Mr. W. D. Hamilton
Department of Astronomy
University Exchange

YOW:1

W. D. MAC MILLAN
THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.

January 19th, 1928.

F.C.Woodward,

Vice President.

Dear Mr Woodward:-

I am taking the liberty of sending you a quotation from a letter which I have just received from Professor Frost which I think will be of interest to you.

"I have had very little chance to talk with Bliss about the new Eckhart Laboratory, and we did not take up the question of the astronomical equipment, which should be provided. My experience in teaching Practical Astronomy, for about eight years at Dartmouth, and in design and construction of instruments here, ought to be of value in this connection. and therefore I should be very glad to have the Building Committee call upon me at any time for suggestions.

"In a general way, I believe that we should have about a ten-inch equatorial refractor, carrying also two photographic cameras, with lenses of the new Ross design, of aperture three or four inches, and ratio 1:7. In photographic work the ten inch would make an excellent guiding telescope. The instrument could be carried perfectly well on steel beams supported by the heavy walls of the building.

"It must be nearly twenty years ago that I took up the question of architecture of domes appropriate for a Gothic building. Carl Kinsley looked this up at my request while he was spending some time at Cambridge, England.

"We should probably also have one straight transit instrument of three inches aperture, such as is used by the U.S.Coast and Geodetic Survey.

"I don't think that it would be wise to install any kind of a reflector in the smoke and dirt of the city. The silvering would have to be done too frequently, and would be too troublesome for its use. The present instruments would, of course, be installed on the roof in appropriate small domes or shelters. There should be two or three piers about four feet high on which portable instruments or artificial horizons could be placed for observations, with theodolites and sextants.

"I also believe that the new Hale spectroheliograph should be installed with coelostat and vertical tube leading to a room below, for solar work. This would not be an expensive equipment, and the necessary parts of the coelostat can be obtained with a few hundred dollars, from the men who formerly worked with the optical shop at Pasadena. and are now supplying these instruments according to Mr Hale's design."

Yours truly, *W.D. Mac Millan*

Dz

The University of Chicago

Department of Buildings and Grounds

January 9th, 1928

Mr. F. C. Woodward:

Mathematics Building

Replying to your question on the telephone, Scheme "A" by Mr. C. Z. Klauder, architect, dated November 15th has a total of 675,870 cu. ft.

Cost of Building (100%)	
675,870 cu.ft. at 70¢	= \$473,109.
Equipment (10%)	= 47,311.
Building & Equipment (110%)	\$520,420.
Endowment - 50% of Bldg.	= 236,554.
Total cost for Scheme "A"	\$756,974.

This was for a building extending north along University Avenue only two stories high.

For the larger building which the departments now require to give more space in the basement for the Physics Department, particularly spectroscopic work, to enlarge the library and give more space on the north wing would require a cubage of approximately 804,000 cu.ft. which would cost approximately as follows:

Cost of Building (100%)	
804,000 cu.ft. at 70¢	= \$562,800.
Equipment (10%)	= 56,280.
Building & Equipment (110%)	618,080.
Endowment - 50% of Bldg.	= 281,400.
Total cost	= \$899,480. or say \$900,000.

Yours very truly,

L. R. Flook

L. R. Flook
Superintendent of Construction

LRF:K

The University of Chicago

Department of Architecture and Construction

January 2nd, 1928

Mr. F. C. Woodward:

Mathematics Building

Replying to your question on the telephone
November 19th has a total of \$75,270 and is
Scheme "A" by Mr. F. Woodward, architect, dated

Cost of Building (1927)	
\$75,270 cost at 70% =	\$52,689
Equipment (10%)	7,527
Building & Equipment (1927)	\$60,216
Endowment - 50% of Bldg. =	26,108
Total cost for Scheme "A"	\$86,324

This was for a building extending north along
University Avenue only two stories high

For the larger building which the Department
now require to give more space in the basement for the
Physics Department particularly spectroscopic work
to enlarge the library and give more space on the north
wing would require a sum of approximately \$200,000 and is
which would cost approximately as follows:

Cost of Building (1927)	
\$200,000 cost at 70% =	\$140,000
Equipment (10%)	20,000
Building & Equipment (1927)	\$160,000
Endowment - 50% of Bldg. =	100,000
Total cost	\$260,000 or say \$250,000.

Yours very truly,

L. H. Frank
L. H. Frank

Superintendent of Construction

ENR:X

27

December Ten
1 9 2 7

Dear Mr. Donnelley:

In response to your inquiry regarding the status of the floor plans for the new Mathematics Building I find that Dean Gale wishes to have reconsideration given to the question of providing a lecture room, which, you will recall, was abandoned in the later designs. Mr. Rainey, the Librarian, has also submitted some suggestions with reference to library accommodations, and a committee consisting of these two gentlemen, with Mr. Bliss, of the Mathematics Department, and Mr. Morse of the Physics Department, is endeavoring to work out the revisions. Mr. Woodward and Mr. Flook are keeping in close touch with this situation and a final decision will undoubtedly be reached within a short time. Under the circumstances, however, perhaps Mr. Klauder should be advised that we are not yet in position to submit final plans to him

Very truly yours,

L. R. Steere

Mr. T. E. Donnelley
731 Plymouth Court
Chicago, Illinois

LRS:EVB

Copy Mr. Woodward
Mr. Flook

December Ten
1927

Dear Mr. Donnelly:

In response to your inquiry regarding the status of the floor plans for the new Mathematics Building I find that Dean Galt wishes to have reconsideration given to the question of providing a lecture room, which, you will recall, was abandoned in the later designs. Mr. Rainey, the Librarian, has also submitted some suggestions with reference to library accommodations, and a committee consisting of these two gentlemen, with Mr. Bliss of the Mathematics Department, and Mr. Morse of the Physics Department, is endeavoring to work out the revisions. Mr. Woodward and Mr. Flook are keeping in close touch with this situation and a final decision will undoubtedly be reached within a short time. Under the circumstances, however, perhaps Mr. Klander should be advised that we are not yet in position to submit final plans to him.

Very truly yours,

L. R. Gessner

Mr. T. E. Donnelly
751 Plymouth Court
Chicago, Illinois

LRG:EVB

Copy Mr. Woodward
Mr. Flook

—
—

SEARS, ROEBUCK AND Co.

EXECUTIVE OFFICES
CHICAGO

December 7, 1927.

Dr. Max Mason,
University of Chicago,
Chicago.

Dear Dr. Mason:

Upon Mr. Rosenwald's return he found
the two documents on the Mathematics and Physics
Building, which he begs to acknowledge and will
let you know as soon as he has anything definite
to report.

Yours very truly,

M. Stinson

Secretary to
Mr. Julius Rosenwald.

W. H. BAKER & CO.

CHICAGO, ILL.

1890

1890

1890
1890
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1890

W. H. BAKER & CO.
CHICAGO, ILL.
1890

W. H. BAKER & CO.
CHICAGO, ILL.
1890

W. H. BAKER & CO.
CHICAGO, ILL.
1890

Dr

December 5, 1927

Dear Harold:

I have sent two copies of the enclosed
description of the Mathematics Building
to Julius Rosenwald.

Cordially yours,

Max Mason

Mr. Harold H. Swift
Union Stock Yards
Chicago, Illinois

474
December 5, 1917

Dear Harold:

I have sent two copies of the enclosed
description of the Westmastic Building
to Julius Rosenberg.

Cordially yours,

Max Mason

Mr. Harold H. Swift
Union Stock Yards
Chicago, Illinois

Dr

December 5, 1927

Dear Mr. Rosenwald:

I am sending you two copies of a document on the Mathematics and Physics Building in accordance with the suggestion to Mr. Swift. Will these two be enough? If not, we will prepare more at once.

It is fine to have such interest from you in this matter. Either Mr. Woodward or I will go with you at any time to make a visit and explain the situation in greater detail.

Cordially yours,

Max Mason
President

Mr. Julius Rosenwald
Sears Roebuck & Company
Chicago, Illinois

December 5, 1934

Dear Mr. Rosenwald:

I am sending you two copies of a document on the Hottel and Pyralis Building in accordance with the suggestion to Mr. Self. Will these two be enough? If not, we will prepare more at once.

It is time to have such interest from you in this matter. Either Mr. Woodard or I will go with you at any time to make a visit and explain the situation in greater detail.

Cordially yours,

Max Mason

President

Mr. Julius Rosenwald
Sears, Roebuck & Company
Chicago, Illinois

L2

December 1, 1927

Dear Mr. Rosenwald:

I am sending you a document on the Mathematics and Physics Building in accordance with the suggestion to Mr. Swift. Another copy is being prepared and will go forward to you tomorrow. Will these two be enough? If not, we will prepare more at once.

It is fine to have such interest from you in this matter. Either Mr. Woodward or I will go with you at any time to make a visit and explain the situation in greater detail.

Cordially yours,

Max Mason

President

Mr. Julius Rosenwald
Sears Roebuck & Company
Chicago, Illinois

December 1, 1937

Dear Mr. Rosenwald:

I am sending you a document on the
Laboratory and Physics Building in
accordance with the suggestion to
Mr. Smith. Another copy is being
prepared and will go forward to
you tomorrow. Will these two be
enough? If not, we will prepare
more at once.

It is time to have such interest from
you in this matter. Either Mr. Woodward
or I will go with you at any time to
make a visit and explain the situation
in greater detail.

Cordially yours,

Max Mason

President

Mr. Julius Rosenwald
Sears Roebuck & Company
Chicago, Illinois

The University of Chicago

Department of Buildings and Grounds

Miss K

SUPERINTENDENT

October 29th, 1927

Mr. F. C. Woodward
President's Office
Faculty Exchange

Dear Mr. Woodward:

I have again written Mr. Klauder to make sure
that he does not take the Scheme "G" sketches too literally.

Thanking you for calling this to my attention, I am

Sincerely yours,

L. R. Flook

L. R. Flook
Superintendent of Construction

LRF/K

The University of Chicago

Department of Zoology and Botany

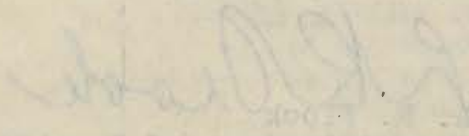
October 23rd, 1927

Mr. T. D. Woodward
President's Office
Faculty Exchange

Dear Mr. Woodward:

I have again written Mr. Kinsler to make sure
that he does not take the name "G. Gordon" too literally.
Thanking you for calling this to my attention, I am

Sincerely yours,



Superintendent of Conservation

You are this matter. Either Mr. Woodward
or I will go with you at any time to
make a visit and explain the situation
in greater detail.

Cordially yours,

Max Nelson

Mr. Julius Rosenwald
General Secretary
Chicago, Illinois

Mr. Julius Rosenwald
General Secretary
Chicago, Illinois

Misc R

October 24, 1927

My dear Mr. Flook:

I thank you for the copy of your letter of October 20 to Mr. Klauder which you sent to me. My purpose in writing is to inquire if Mr. Klauder was informed that there is still some difference of opinion as to whether the building should turn the corner toward Mandel Hall, or leave a gap there. In your letter you say that the prints of Scheme "G" show the general arrangement and approximate distribution of floor space now agreed upon. What I am suggesting is that this statement should be qualified, as I have indicated above. If this has been made clear to Mr. Klauder, you need not pay any attention to this letter.

Yours sincerely,

FREDERIC C. WOODWARD

Mr. L. R. Flook
Faculty Exchange

Wol

11/11/27

October 24, 1927

My dear Mr. Flook:

I thank you for the copy of your letter of October 20 to Mr. Klander which you sent to me. My purpose in writing is to inquire if Mr. Klander was informed that there is still some difference of opinion as to whether the building should turn the corner toward Handel Hall, or leave a gap there. In your letter you say that the prints of Scheme "D" show the general arrangement and approximate distribution of floor space now agreed upon. What I am suggesting is that this statement should be qualified, as I have indicated above. If this has been made clear to Mr. Klander, you need not pay any attention to this letter.

Yours sincerely,

WERNER C. WOODWARD

Mr. J. R. Flook

Faculty Exchange

WJ

October 20th, 1927

Mr. T. E. Donnelley
731 Plymouth Court
Chicago, Illinois

Dear Mr. Donnelley:

At the request of Mr. Steere, I have composed
the attached letter to Mr. Charles Z. Klauder.

Mr. Steere suggests that it have your
approval before releasing to Mr. Klauder.

May I have your comments on this letter.

Yours very truly,

L. R. Flook
Superintendent of Construction

LRF/K
CC-LRS
CC-Mr. Woodward.
Enc.

October 20th, 1937

October 21, 1937

Mr. T. E. Donnelly
731 Plymouth Court
Chicago, Illinois

Dear Mr. Donnelly:

At the request of Mr. Steere, I have composed
the attached letter to Mr. Charles E. Kinsler.

I am sure Mr. Steere suggests that it have your
approval before releasing to Mr. Kinsler.

May I have your comments on this letter.

Yours very truly,

J. H. Block

Superintendent of Construction

LRB/K
CC-LRS
CC-Mr. Woodworth
Enc.

October 20th, 1927

Mr. Charles Z. Klauder
1429 Walnut Street
Philadelphia, Pa.

Dear Mr. Klauder: Mathematics and Physics Building

Mr. Steere has asked me to send to you the data for a preliminary design for this building.

The attached red line prints of Scheme "C" show the general arrangement and approximate distribution of floor space now agreed upon by the Department of Mathematics and the Department of Physics.

As to floor levels, we would like to carry the second floor of the new building level with the second floor of Ryerson Laboratory adjoining to the west.

The floor levels of Ryerson are as follows:

1st to 2nd floor and 2nd to 3rd floor each 15'4"

Basement to 1st floor - 8'0" except as for certain small laboratories, where the floor level has been lowered, the bottom of the stone foundation being 12'0" below the first floor level.

It is customary with us to make new buildings of this type 13'0" floor to floor on account of the code requirement of 12'0" floor to ceiling clear, exclusive of beams. On our preliminary sketch we indicated the new building to be 11'0" from the basement to the first floor and 12'0" from the fourth floor to the finish plaster line.

I have talked with your Mr. Wise about this building and he is securing a copy of the Chicago Building Code.

A copy of the University Guide Book is also enclosed. This shows on Page 49 the south end of Mandel Hall from the S.E. and on Page 34 the south elevation of Ryerson; on Page 36, Ryerson from the S.E. which indicates the west end which is like the east end to which the new building is joined.

For a building of this type it is now a practice to trowel the structural slab and apply Gen. Battleship Linoleum for the ordinary spaces, classrooms, offices, etc., with perhaps a little better treatment for corridors and entrances.

October 20th, 1937

Mr. Charles E. Klander
1489 Walnut Street
Philadelphia, Pa.

Mathematics and Physics Building

Dear Mr. Klander:

Mr. Steere has asked me to send to you the data for a preliminary design for this building. The attached red line prints of Scheme "O" show the general arrangement and approximate distribution of floor space now agreed upon by the Department of Mathematics and the Department of Physics.

As to floor levels, we would like to carry the second floor of the new building level with the second floor of Ryerson Laboratory adjoining to the west.

The floor levels of Ryerson are as follows:

1st to 3rd floor and 2nd to 3rd floor each 12'4"

Basement to 1st floor - 8'0" except as for certain small laboratories, where the floor level has been lowered, the bottom of the same foundation being 12'0" below the first floor level.

It is customary with us to make new buildings of this type 12'0" floor to floor on account of the code requirement of 12'0" floor to ceiling clear, exclusive of beams. On our preliminary sketch we indicated the new building to be 11'0" from the basement to the first floor and 12'0" from the fourth floor to the finish plaster line.

I have talked with your Mr. Wise about this building and he is securing a copy of the Chicago Building Code.

A copy of the University Guide Book is also enclosed. This shows on Page 49 the south end of Handel Hall from the S.E. and on Page 54 the south elevation of Ryerson; on Page 55, Ryerson from the S.E. which indicates the west end which is like the east end to which the new building is joined.

For a building of this type it is now a practice to provide the structural steel and apply steel battens for the ordinary spaces, elevators, etc., with perhaps a little better treatment for corridors and entrances.

-2-

October 20th, 1927

The attached sketch is the result of a series of conferences held for the purpose of working out the space required and keeping within the available funds. The cubage can not exceed this amount unless additional funds are provided.

We are ordering a survey and will send you this information as soon as it is received.

Yours very truly,

L. R. Flook
Superintendent of Construction

LRF:K
CC-LRS
CC-Mr. Woodward

October 30th, 1937

The attached sketch is the result of a series of conferences held for the purpose of working out the space required and keeping within the available funds. The enclosed can not exceed this amount unless additional funds are provided.

We are ordering a survey and will send you this information as soon as it is received.

Very truly yours,
J. H. Block

The Board of Directors of the University of California

San Francisco, California

Dear Sir:

I have talked with your committee and they have decided to accept the plan for the new building.

I am enclosing with me a copy of the plan for the new building.

I am enclosing with me a copy of the plan for the new building.

I am enclosing with me a copy of the plan for the new building.

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I am enclosing with me a copy of the plan for the new building.

I am enclosing with me a copy of the plan for the new building.

MATHEMATICS BUILDING

Section A

Length 128 feet

Breadth 52 feet

Height 62 feet

Cost of building 430,000 cubic feet at 70¢ - \$311,000

To equip

32,000

To endow

157,000

Total

\$500,000

Section B

Length 145 feet

Breadth 56 feet

Height 62 feet

Cost of building 520,000 cubic feet at 70¢ - \$364,000

To equip

36,000

To endow

180,000

Total

\$580,000

600

$$\begin{array}{r} 1040.752 \\ 430.000 \\ 520.000 \\ \hline 950.000 \\ 90.752 \end{array}$$

$$\begin{array}{r} 1170.000 \\ 1080.000 \\ \hline 90.000 \end{array}$$

Mr James Morrison
 55
 Fuller Morrison
 Drug Co. & Chemist St.
 Mrs. My enrichment
 worker in many
 women's activities.
 Cultured - Infused
 with husband
 interested in all cultured
 undertaking. My old
 chgs people.
 2 or 3 million
 Has son in business with
 him. 4 or 5 children

Murphy
 Harold Smith
 Baker Street
 Diner

Wholesale Drug Co.
 Van Schaack
 2 men - R. H. & C. B.
 R. H. Has 2 sons in the
 industry - on both paid
 n. y. l.

Greeny
 St. Louis
 Pns. Monsanto
 Chemical Co.
 St. Louis -
 Biog sketch of his
 career in
 Am Magazine
 2 or 3 months ago
 Total

Length 145 feet
 Breadth 55 feet
 Height 62 feet
 Cost of building \$20,000 cubic feet at 75¢ - \$15,000
 To equip
 To endow
 Total

1040.725
 120.000
 920.725

1150.000
 1280.000
 2430.000

Proposed Building for Mathematics

at the

University of Chicago

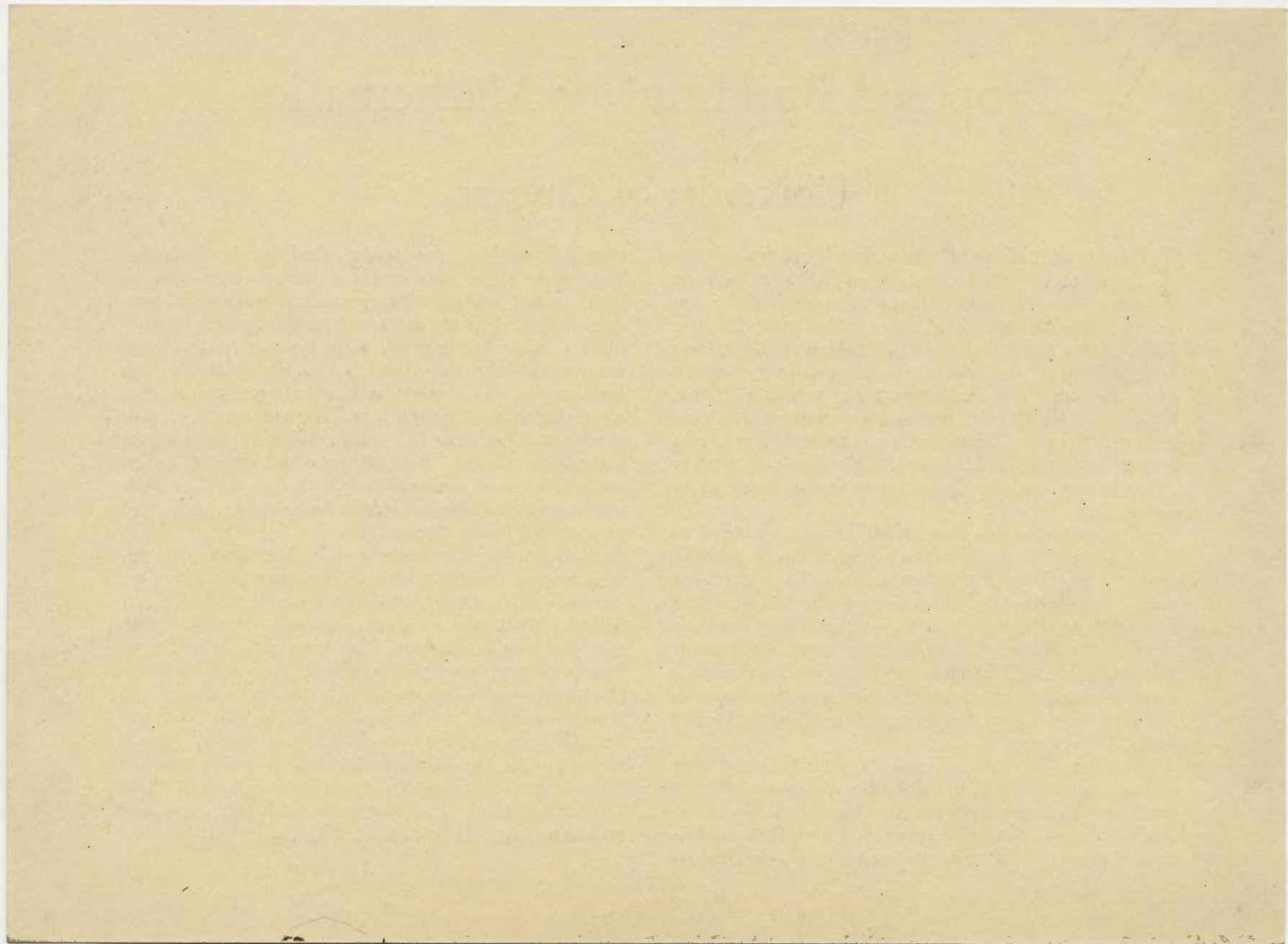
IN large part through the activities of its science departments, the University of Chicago has been noted for brilliant research work since its foundation. Of the four Americans awarded the Nobel Prize for Science, two, Professors Michelson and Millikan, received this distinction for work done in the Physics Department, while a third, Doctor Alexis Carrel, began his career at the University. No less distinguished are the University's contributions to Astronomy. The work at Yerkes Observatory and on the campus is internationally recognized.

The American Mathematical Society, devoted to the research in mathematics which must precede research work in the other sciences, was founded mainly through the initiative of the University's Department of Mathematics, which has furnished the Society three presidents. The same department has on its Faculty five out of the fifteen mathematicians who are members of the National Academy of Sciences, and has a Corresponding Member of the Paris Academy of Sciences.

Ryerson Physical Laboratory was built in 1893 and enlarged in 1912, in both cases by means of gifts made to the University by Mr. Martin A. Ryerson. No building having been provided for Mathematics and Astronomy at the University, these depart-

ments have been for years cared for in Ryerson. Meantime there has come a tremendous growth both in the subject-matter and the number of students handled by the departments of Physics, Mathematics, and Astronomy, now housed in Ryerson. Because of the developments in these fields, the facilities of the present building are no longer adequate for these departments. The increased student enrolment has crowded the building far beyond its intended capacity. As a consequence, men of international repute are seriously handicapped in their important work by mechanical obstacles that would be avoided by increased space.

It is proposed to remedy these handicaps by constructing a building east of Ryerson on the same frontage, with a wing extending north to the end of Mandel Hall, and an arch connecting it with Ryerson. Its four stories and basement will be given to Mathematics, pure and applied, and will provide the additional laboratories, classrooms, offices, and library essential to the welfare of the Mathematics and Mathematical Astronomy Departments. It will also increase the facilities available in Ryerson for Physics by releasing the space now occupied there by Mathematics. The cost of the building, including endowment, will be at least \$800,000.



A PROPOSAL
FOR A NEW MATHEMATICS AND PHYSICAL LABORATORY
AT THE
UNIVERSITY OF CHICAGO

Submitted
by
THE UNIVERSITY OF CHICAGO

A PROPOSAL
FOR A NEW MATHEMATICS AND PHYSICAL LABORATORY
AT THE
UNIVERSITY OF CHICAGO

Submitted
by
THE UNIVERSITY OF CHICAGO

THE NEW MATHEMATICS AND PHYSICS LABORATORY AT THE UNIVERSITY OF CHICAGO

This building is urgently needed to do away with overcrowding which is handicapping research and teaching. These departments are fundamental to all scientific work at the University. They stand first in the country in past achievement and promise of future service.

RYERSON LABORATORY

Thirty-four years ago Martin A. Ryerson of Chicago gave a building for the physical sciences to the University of Chicago in honor of his father. The building has since borne the name, Ryerson Physical Laboratory, and has been the workshop of a series of men eminent in American science. It has amply proved its qualities of usefulness and architectural beauty but at the present time it is inadequate for the expanded staffs and increased number of students of the three departments which use it.

THE SCIENCES OF MATHEMATICS AND PHYSICS

Mathematics and Physics are foundation sciences. Mathematics is a scientific language in which the laws governing the universe can most conveniently be expressed, and through the cultivation of which new laws of great importance can be discovered. It is useful in expressing the relations of things to one another in fields so divergent as medicine, economics and engineering. It is basic to Physics and Chemistry, and to all the applied sciences deriving from them. Physics, using Mathematics as a tool, studies the nature of matter, - the ways in which atoms are made, the forces which govern their interaction, and the nature of light. Its values can be expressed in such practical terms as health and disease, radio, bridges, skyscrapers, trains and telegrams. The cultivation of research and training of teachers in these fields is a central duty of a civilized community and a particular opportunity of the University of Chicago.

PERFORMANCE IN PHYSICS AND MATHEMATICS

The University and City of Chicago have been for many years a principal center of physical and mathematical research in the United States due to the efforts of the group of gifted men who have worked in Ryerson Laboratory. This fact is attested by the world-wide recognition which has come to these Chicago workers in science. Three of them, Professors A. A. Michelson, Robert A. Millikan, and Arthur Compton, have received Nobel Prizes for their work. Michelson, patriarch of American physicists, received the prize in 1907, Millikan in 1923, after he had left the University, but for work done here, in 1923 and Compton in 1927. Michelson is famous because he has measured the speed of light with increasing accuracy and laid the foundation for the Einstein theory; Millikan isolated the electron and measured its electrical charge; Compton has determined more intimately the relation

THE NEW MATHEMATICS AND PHYSICS LABORATORY AT THE UNIVERSITY

OF CHICAGO

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HYPERSON LABORATORY

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Mathematics and Physics are foundation sciences. Mathematics is a scientific language in which the laws governing the universe can most conveniently be expressed, and through the cultivation of which new laws of great importance can be discovered. It is useful in expressing the relations of things to one another in fields so divergent as medicine, economics and engineering. It is basic to Physics and Chemistry, and to all the applied sciences deriving from them. Physics, using Mathematics as a tool, studies the nature of matter, - the ways in which atoms are made, the forces which govern their interaction, and the nature of light. Its values can be expressed in such practical terms as health and disease, radio, bridges, x-ray apparatus, trains and airplanes. The cultivation of research and training of teachers in these fields is a central duty of a civilized community and a particular responsibility of the University of Chicago.

PROGRESS IN PHYSICS AND MATHEMATICS

The University and City of Chicago have been for many years a principal center of physical and mathematical research in the United States due to the efforts of the group of gifted men who have worked in Hyenson Laboratory. This team is assisted by the world-wide recognition which has come to these Chicago workers in science. Three of them, Professors A. A. Michelson, Robert A. Millikan, and Arthur Compton, have received Nobel Prizes for their work. Michelson, partner of American physicists, received the prize in 1907, Millikan in 1926, after he had left the University but for work done here, in 1923 and Compton in 1927. Michelson is famous because he has measured the speed of light with increasing accuracy and laid the foundation for the Einstein theory; Millikan isolated the electron and measured its electrical charge; Compton has determined more intimately the relation

between radiation, light and electricity. Only five Nobel Prizes have been given to Americans in science.

Colleagues of these men in the United States have evaluated and acknowledged their work through the Hughes Report. This Report, made by President Hughes of Miami University, is based on the findings of a large group of American scholars of great distinction. These men and women, professors in leading institutions, were asked to weigh the achievements of representative universities and colleges in twenty different departments. In the judgment of this group both the Physics and Mathematics Departments of the University of Chicago received first place in the country.

The Department of Mathematics has been an exceedingly powerful one since its organization in 1891. Its prestige has lasted and become a veritable tradition. Four recent leaders in the group are Professors Moore, Dickson, Bliss and Wilczynski. All four are members of the National Academy of Sciences. No other institution has had as many, - the nearest being Harvard with two members. In the last issue of American Men of Science the editor, J. M. Cattell, lists Chicago as having the first Mathematics Department of the country. The mathematical department has done work of vital educational significance in training graduate students. It has granted more than one hundred and forty Ph. D. degrees, - the highest academic degree. Of this number, fifty-two are professors in American universities, thirty are associate professors and nineteen are assistant professors. A number of others are instructors in universities, in private research, or in business. The influence of such an output of trained men is very great on the quality of American education and research. These are measures of performance which do not emphasize the actual increases in applicable human knowledge which have come out of the researches of these departments.

HOUSING CONDITIONS

It has been indicated above that Ryerson Laboratory is no longer adequate alone to house these departments and their distinguished workers. Laboratory space for professorial research is limited and over-crowded. Graduate students and research fellows are not properly taken care of for sheer lack of working space. Nine members of the Physics staff share three offices, and there carry on much of their desk work and conferences with students. The mathematical department have four offices for twelve members and only four class-rooms for its students of whom there were approximately 200 during the recent Summer Quarter. Many of these students who are candidates for higher degrees should have desk and office space for themselves.

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THE BUILDING

See attached photographs of architect's drawings. Location- East of Ryerson and connected with it by bridge and tunnel. Layout - Basement and first floor for Physics. Second, third and fourth floors for Mathematics and Mathematical-astronomy. The Physics Department will also be benefitted by release of space in Ryerson now occupied by Mathematics.

FINANCING

Total cost	upwards of	\$900,000
Available from General Education Board gift		<u>\$400,000</u>

Available from special conditional gift		\$500,000
		<u>\$250,000</u>

Balance, the gift of which will carry the privilege of naming the building		\$250,000
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Payments may be in installments between now and the completion of the building.

CONCLUSION

This means that \$250,000 will do two things:

1. Provide essential scientific service at a crucial time in the history of science and in the history of the University.
2. Provide a worthy memorial which will be widely known because thousands of people throughout the world will be benefitted by the research conducted in the building.

THE BUILDING

See attached photographs of architect's drawings. Location - East of Hyerston and connected with it by bridge and tunnel. Layout - Basement and first floor for Physics. Second, third and fourth floors for Mathematics and Mathematical-physics. The Physics Department will also be benefited by release of space in Hyerston now occupied by Mathematics.

FINANCING

Total cost	\$250,000
Available from General Education Board gift	\$100,000
Upwards of	\$150,000
Available from special conditional gift	\$100,000
Balance, the gift of which will carry the privilege of naming the building	\$50,000

Payments may be in installments between now and the completion of the building.

CONCLUSION

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2. Provide a worthy memorial which will be widely known because thousands of people throughout the world will be benefited by the research conducted in the building.



The Nobel Prize winner of 1907 congratulates the prize winner of 1927. Splendid types of American men, they illustrate at once the character and humanity which is typical of men of science. They are two generations of scientists - and they encourage the hope that those who are coming on will not fail to measure up to the high standards set by the older group. Both ask only time and place to work. Professor Michelson has the only single office in Ryerson Laboratory. Professor Compton shares his space with two other men.

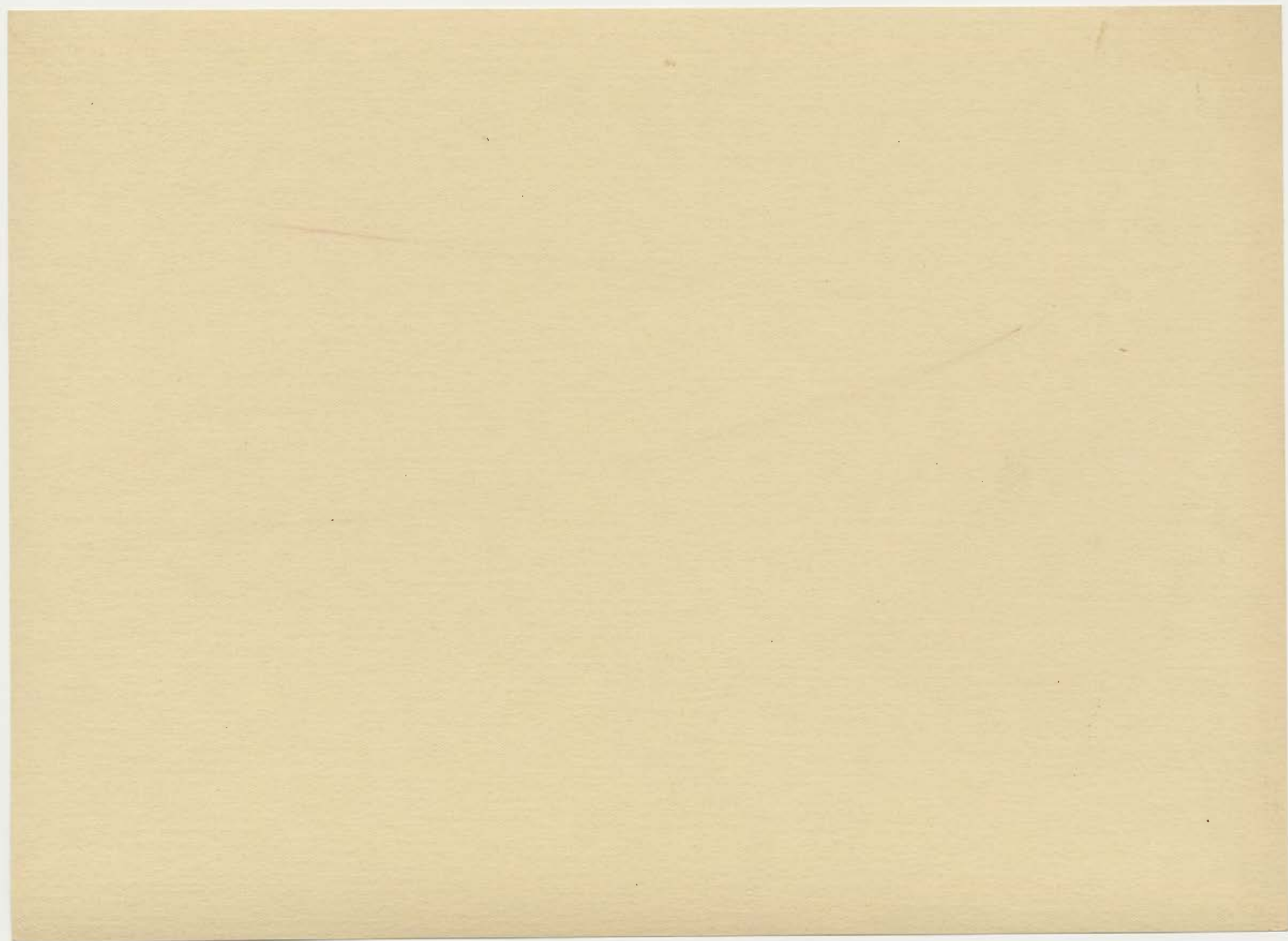
Professors Michelson and Compton

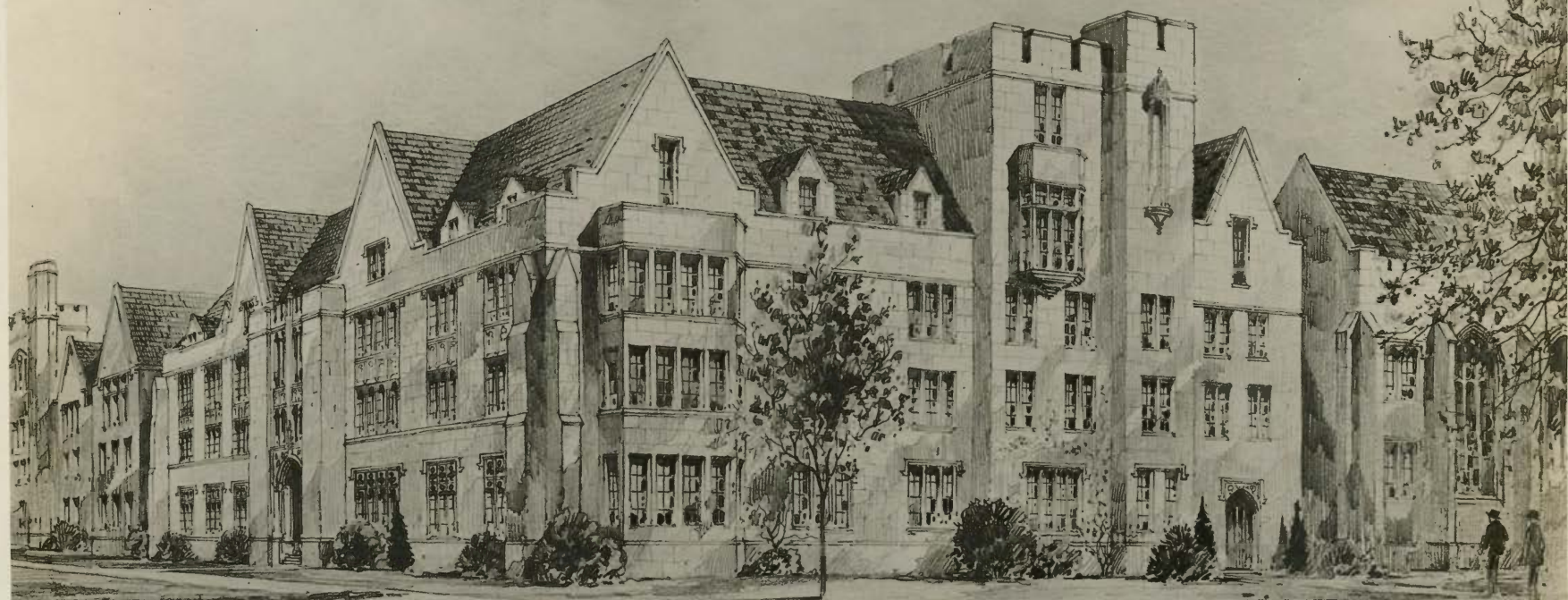
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 Professor Compton shares his space
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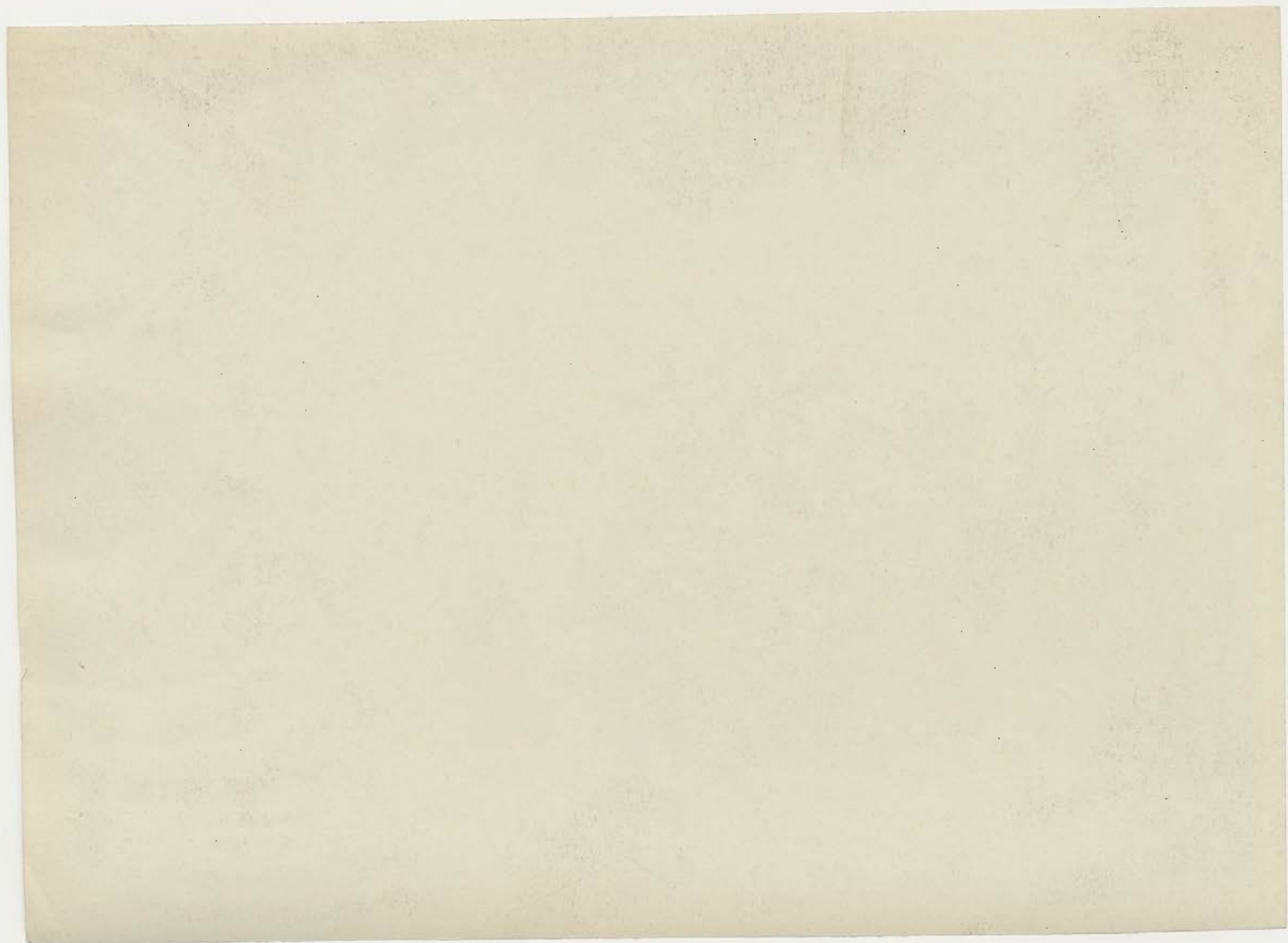
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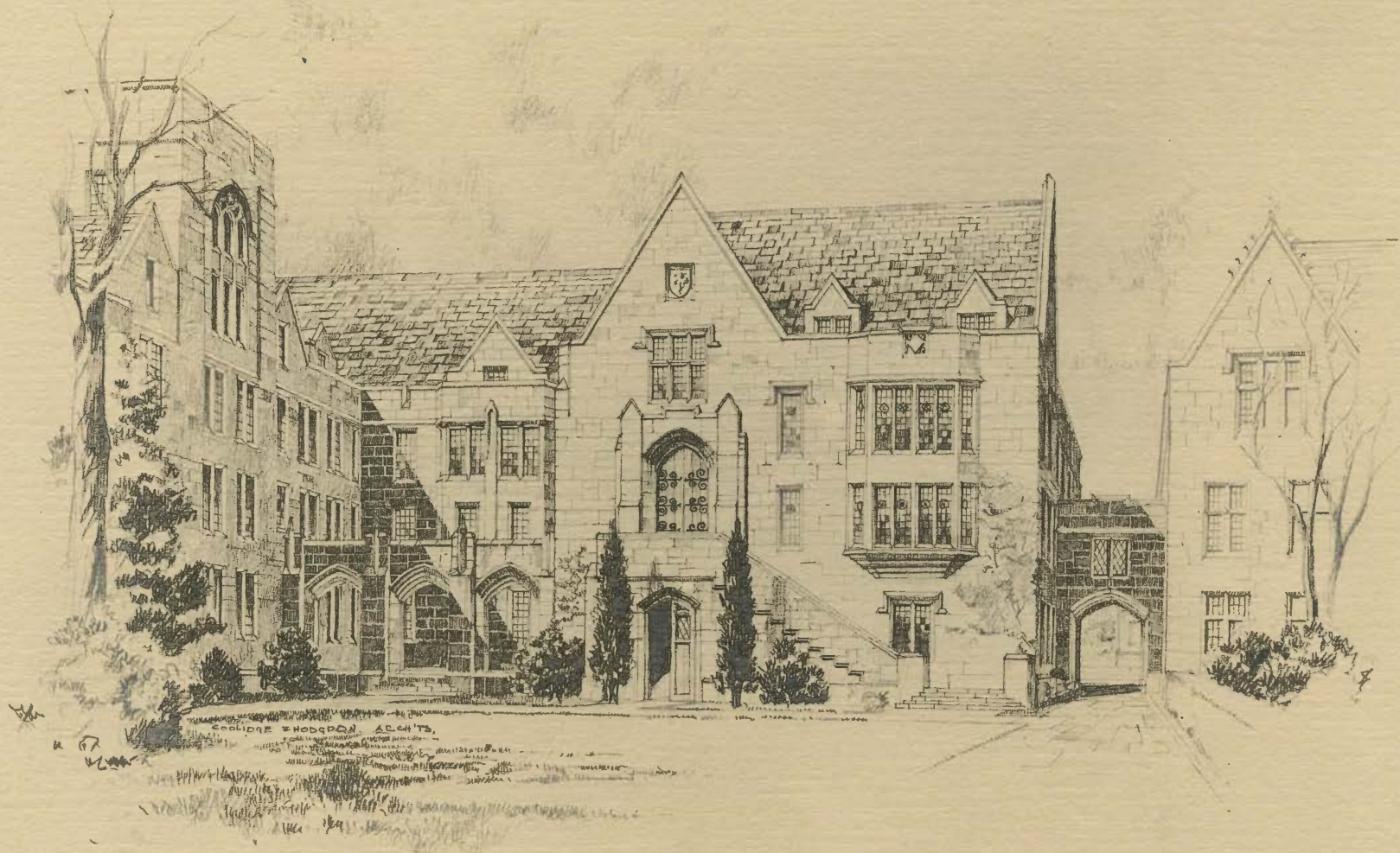
Professors Nicholson and Compton

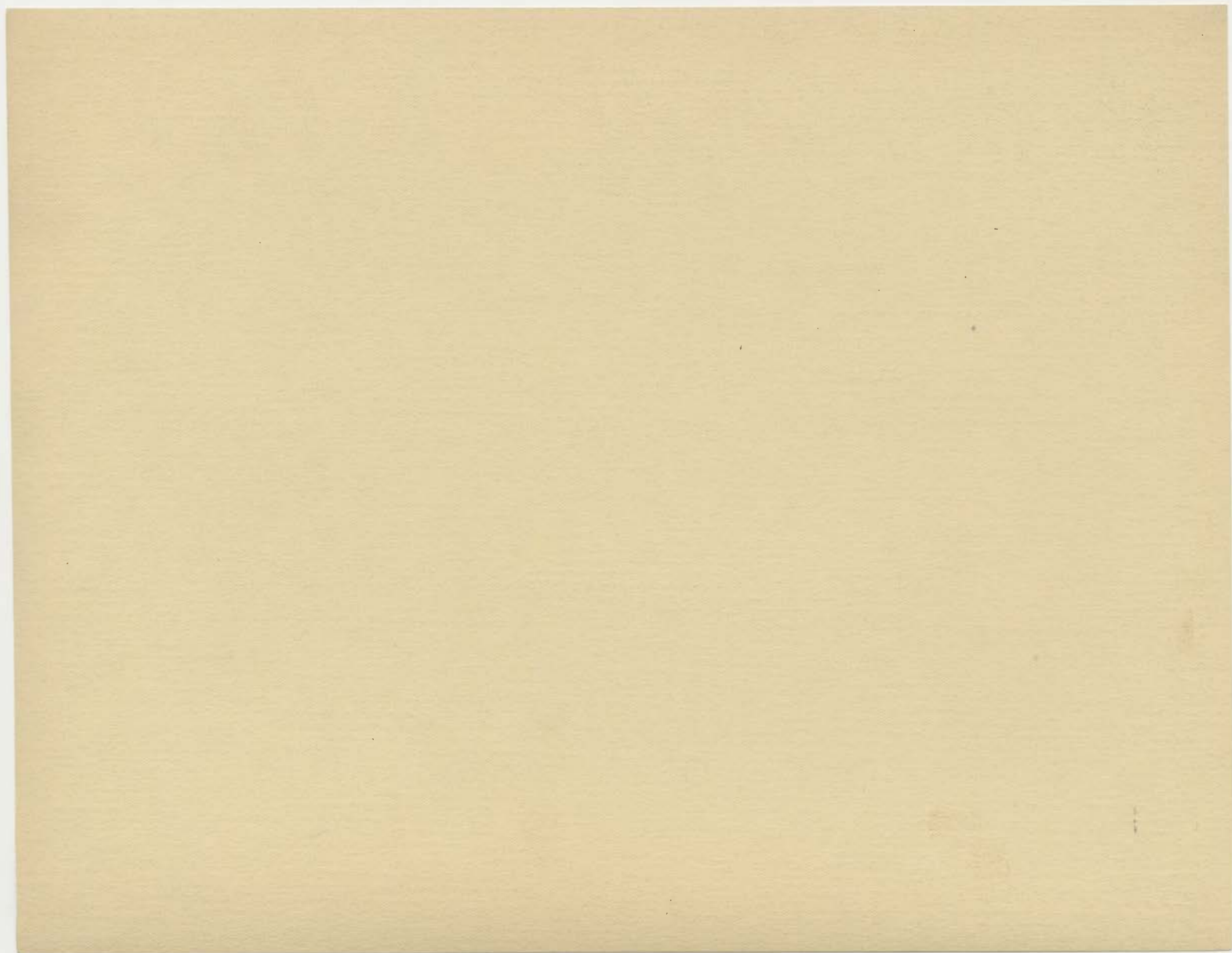














COOLIDGE & HODGSON ARCHTS.



27

REQUIREMENTS OF THE PHYSICS DEPARTMENT
for
A NEW BUILDING FOR MATHEMATICS, PHYSICS AND ASTRONOMY.

#1. Communication and Circulation.

Two connections between the Ryerson Laboratory and the new building will be required. One a bridge connecting the second floors and the other a basement tunnel, and an additional entrance to the corridor to the annex of Ryerson.

#2. Library Stacks.

The stacks containing the books pertaining to physics should be on the second floor. It is assumed that the mathematical books will be in stacks extending up to the third floor. There should be no entrance to the stacks except past the attendant's desk, which should be arranged for at the entrance to the stacks in a manner somewhat similar to the Rosenwald library. It would be desirable to have not more than three tiers of stacks to accommodate both physics and mathematics books. It is important that no books may be removed from the stacks, without the knowledge of the attendant, so that it may be possible to enforce library rules. The entrance to the stacks from the reading room should be through a door that can be locked when the attendant leaves.

#3. Large Lecture Room.

To accommodate 300 as called for under mathematics and equipped with the following apparatus:

Coelostat in roof for vertical shaft of sunlight (or any equally effective method for sunlight all day over lecture table.)

Electrically operated curtains for darkening.

Lights controlled both from table and from lantern positions by master switch.

2 lantern positions, one transverse, the other normal to lecture table. 2 screens.

Moveable (sliding) blackboards entire length of table.

Lecture table: 2 covered sinks, one at each end; covered 12" lead gutters along front base of table for jets and similar experiments.

Circuits under table: 2 - 3 wire, 110-220 A.C. mains 75 amps.

4 - 3 " 110-220 D.C. " " "

REQUIREMENTS OF THE PHYSICS DEPARTMENT
for
A NEW BUILDING FOR MATHEMATICS, PHYSICS AND ASTRONOMY.

*1. Communication and Circulation.

Two connections between the Ryerson Laboratory and the new building will be required. One a bridge connecting the second floor and the other a basement tunnel, and an additional entrance to the corridor to the annex of Ryerson.

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*3. Lecture Room.

To accommodate 300 as called for under mathematics and equipped with the following apparatus:
Coolest in roof for vertical shaft of sunlight (or any other effective method for sunlight all day over lecture table.)
Electrically operated curtains for darkening.
Lights controlled both from table and from lantern positions by master switch.
3 lantern positions, one transverse, the other normal to lecture table. 2 screens.
Movable (sliding) blackboards entire length of table.
Lecture table: 2 covered sinks, one at each end; covered 12" lead gutters along front base of table for jets and similar experiments.
Circuits under table: 2 - 3 wire, 110-220 A.C. mains 75 amperes.
" " " " 110-220 D.C. " " " " 4 - 3 " " " "

1 storage battery circuit, 2 open circuits from trans. board.
4 heavy duty rheostats under table 2-30 and 2-75 amps. capacity, connected so as to be plugged in series with any circuit.
Flush instrument panel on wall visible from all parts of room, having:

A.C. Voltmeter - C-220	A.C. Ammeter 0-75
A.C. Frequency meter 60 cycle	0-7.5
	(0-3)
1 D.C. Voltmeter, ranges (0-30	1 DC Ammeter (0-7.5
(0-300)	(0-75)
	1 DC Milliammeter { 0-1000 ma
	0-10

with plugs and jacks below to cut instruments in with rheostats on any circuit combination. All switches and binding posts in panel in rear of table.

4 gas and 4 compressed air outlets under cover sink in table top. One 1 1/2" comp. air outlet pipe, additional.

Flat ceiling or brackets above table for various ceiling attachment as pendulums, pulleys, mirrors, etc.

Lock tool box and drawers in all remaining available space back of table.

1 or 2 galvanometers permanent with illuminated scale mounted above or at ends of lecture table. Wire outlets brought to junction box on table.

Hvac pump and motor mounted under cover in table-top.

#4. Basement.

The basement, with the exception of a room for services such as ventilating fans et., will be devoted to research in physics. The level of the floor must be well above the water line, at least at elevation + 8, and the rooms must have at least 10'-0" in the clear ceilings. It is required that all rooms except photographic dark rooms or rooms for special spectroscopic equipment shall be well lighted with at least two double hung windows in areas or a most. All walls and ceiling to be plastered, and floors to be "dust" proof.

#5. Standard Research Rooms.

Type A. Well lighted rooms with plastered walls and ceilings and dust proof floor 13' in width and 20' in length, equipped with heavy slate slab securely fastened along two side walls and provided with a sink with hot and cold water taps, a gas outlet, a compressed air outlet, a cut out cabinet with switches for 110 and 220 AC, 110 and 220 D.C. and two battery circuits. No floor piers are required. Windows to be equipped with opaque shutters or blinds.

Type B. A room approximately 12'-0" wide and 30'-0" long, divided into two rooms by a temporary smooth tile partition made dust proof and equipped with double doors. The inner room having the dimensions of 10'-0" in width and 12'-0" in length, forming a dark research room, the remaining space being well lighted, and both inner and outer rooms equipped as called for in type A.

1 storage battery circuit, 2 open circuits from trans. board.
4 heavy duty rheostats under table 2-30 and 2-35 amperage capacity,
connected so as to be plugged in series with any circuit.
Flash instrument panel on wall visible from all parts of room, hav-

ing:
A.C. Voltmeter - 0-250
A.C. Frequency meter 60 cycle
1 D.C. Voltmeter, ranges (0-30 (0-5
(0-300
A.C. Ammeter 0-75
0-7.5
1 DC Ammeter (0-7.5
(0-75
1 DC Milliammeter (0-1000 ma
0-10

with plugs and jacks below to cut instruments in with rheostats on
any circuit combination. All switches and binding posts in panel
in rear of table.
A gas and a compressed air outlet under cover sink in table top.
One 1 1/2" comp. air outlet pipe, additional.
First ceiling or brackets above table for various ceiling attachment
as pendulums, pulleys, mirrors, etc.
Look tool box and drawers in all remaining available space back of
table.
1 or 2 galvanometers permanent with illuminated scale mounted above
or at ends of lecture table. Wire outlets brought to junction box
on table.
Hinge clamp and motor mounted under cover in table-top.

4a. Basement.

The basement, with the exception of a room for services such as ven-
tilating fans etc., will be devoted to research in physics. The
level of the floor must be well above the water line, at least at
elevation + 8, and the rooms must have at least 10'-0" in the
clear ceiling. It is required that all rooms except photographic
dark rooms or rooms for special spectroscopic equipment shall be
well lighted with at least two double hung windows in area or a
most. All wall and ceiling to be plastered, and floors to be
"dust" proof.

5. Standard Research Rooms.

Type A. Well lighted room with plastered walls and ceilings and
dust proof floor 12' in width and 20' in length, equipped with
heavy plate glass securely fastened along two side walls and pro-
vided with a sink with hot and cold water taps, a gas outlet, a
compressed air outlet, a cut out cabinet with switches for 110
and 220 AC, 110 and 220 D.C. and two battery circuits. No floor
plugs are required. Windows to be equipped with opaque shutters
or blinds.

Type B. A room approximately 12'-0" wide and 30'-0" long, div-
ided into two rooms by a temporary smooth tile partition made
dust proof and equipped with double doors. The inner room having
the dimensions of 10'-0" in width and 12'-0" in length, forming a
dark research room, the remaining space being well lighted, and
both inner and outer rooms equipped as called for in type A.

NUMBER OF STANDARD RESEARCH ROOMS REQUIRED IN THE NEW BUILDING IN ADDITION TO THE ROOMS IN RYERSON.

A. Spectroscopic Work.

Profs. Gale, Monk and Watson.

6 Type B Rooms } in addition to rooms in Ryerson numbered
3 Type A Rooms } 14, 18, 15, 16, 17.

B. X-Ray.

Prof. Compton.

9 Type B rooms

6 Type A rooms

C. Positive Rays and Electronic Physics.

Professor Dempster.

3 Type B Rooms } in addition to 8, 10, 11, 12.
3 Type A. Room } 13, 60 in Ryerson Lab.

D. Astrophysics Prof. Lemon.

No rooms in newbuilding, provided that rooms numbered 3, 4, 6 and 7 are available in Ryerson.

E. Crystal Structure. Mr. Morse.

No rooms in newbuilding provided that rooms numbered 21, 20, 22 and 23 and 3 are available in Ryerson.

#6. Offices in New Building.

No offices will be required in the new building provided Room 32 is made into 5 offices for the staff. It is considered desirable that the offices for the staff be located near together for purposes of easy communication and conference.

#7. Special Rooms Required.

A. Enlarging camera room 10' x 20'. Camera bed on one side terminating in north window with shutter and studio light. Sinks, cupboards and plate-drying cabinets on the opposite side.

B. Battery room, 13' x 20' in basement.

C. Switchboard room 12' x 15' adjoining battery room, equipment to

D. X-ray Laboratory shop, 13' x 20'. Equipped with services as enumerated in Type A and woodwork benches, lathe and drill press cupboard shelves etc.

E. Spectroscopic Equipment. - in basement:

1. Two rooms 3 feet square for housing circular or Rowland

NUMBER OF STANDARD RESEARCH ROOMS REQUIRED IN THE NEW BUILDING IN ADDITION TO THE ROOMS IN RYERSON.

A. Spectroscopic Work.

Prof. Gale, Monk and Watson.

Continued in Ryerson number 2

2 Type B Rooms in addition to 8, 10, 11, 12.
3 Type A Rooms, 14, 15, 16, 17.

B. X-Ray.

Prof. Compton.

2 Type B rooms
2 Type A rooms

C. Positive Rays and Electronic Physics.

Professor Dempster.

2 Type B Rooms in addition to 8, 10, 11, 12.
2 Type A Rooms, 13, 14 in Ryerson Lab.

D. Astrophysics.

Prof. Lemon.

No rooms in new building, provided that rooms numbered 3, 4, 5 and 7 are available in Ryerson.

E. Crystal Structure.

Mr. Morse.

No rooms in new building provided that rooms numbered 21, 22, 23 and 24 are available in Ryerson.

46. Offices in New Building.

No offices will be required in the new building provided Room 22 is made into 3 offices for the staff. It is considered desirable that the offices for the staff be located near together for purposes of easy communication and conference.

47. Special Rooms Required.

A. Enlarging camera room 10' x 20'. Camera bed on one side terminating in north window with shutter and studio light. Sink, cupboards and plate-drying cabinets on the opposite side.

B. Battery room, 13' x 20' in basement.

C. Switchboard room 2' x 12' adjoining battery room, equipment to

D. X-ray laboratory, 13' x 20'. Equipped with services as enumerated in Type A and woodwork benches, lathe and drill press

cupboard shelves, etc.

E. Spectroscopic Equipment - in basement:

1. Two rooms 12' x 12' each for housing circular or Rowland

mountings. These should be fitted with icebox doors; should be unventilated, and insulated from temperature changes so far as possible.

2. A space at least 50 feet long x 10 ft wide for the installation of a Littrow mounting, with conditions same as (1).
3. These three rooms should open into a large room of indeterminate dimensions but having about 1200⁰ feet of floor space, for the preparation of apparatus. This space should be plentifully equipped with wall switchboards for 110 D-C; 220 D.C; 110 A.C.; 220 A.C; dead wires for battery circuits, and, if provided, boxes for high tension circuits.
4. At least 6 dark rooms, conveniently located, preferably at three different points in the basement, and having about 35 to 40⁰ sq. ft. of floor space.
5. Two constant temperature rooms, about 18 x 12 feet, equipped with slate slabs and piers, for microphotometer and other similar work.
6. In planning the basement, arrangements must be made to admit sunlight, from at least two points, by the most direct paths to the rooms in items (1), (2), (3).
7. At least two laboratories of type B should be arranged so that a beam of sunlight may be admitted from a coelostat.
8. All rooms in which large spectroscopic equipment is mounted must have floors as free from vibration as possible.

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 4. At least 6 dark rooms, conveniently located, preferably at three different points in the basement, and having about 25 to 40 sq. ft. of floor space.
 5. Two constant temperature rooms, about 18 x 12 feet, equipped with state alabs and here, for microphotometer and other similar work.
 6. In planning the basement, arrangements must be made to admit as much light, from at least two points, by the most direct paths to the rooms in items (1), (2), (3).
 7. At least two laboratories of type B should be arranged so that a beam of sunlight may be admitted from a coelostat.
 8. All rooms in which large spectroscopic equipment is mounted must have floors as free from vibration as possible.

The University of Chicago

The Committee on Development
ROOM 1703, LYTTON BUILDING, CHICAGO

reps *Eckhart*

Interoffice Correspondence

Date: January 19, 1925

To: Dr. Burton ✓
Dr. Aitchison

Subject:

75 *XV 11*

From: C. E. Tucker

Enclosed is revised copy suggested for the photofolio to place opposite the picture of the proposed Mathematics Building. I understand that the copy as now used in the folio is obsolete due to the recent change in terminology in connection with this building. Does this revision meet with your approval? *4 ref*

contributions to Astronomy. The work at Yerkes Observatory and on the campus is internationally recognized.

The American Mathematical Society, devoted to the research in mathematics which must precede research work in the other sciences, was founded mainly through the initiative of the University's Department of Mathematics, which has furnished the Society three presidents. The same department has on its Faculty five out of the fifteen mathematicians who are members of the National Academy of Sciences, and has a Corresponding Member of the Paris Academy of Sciences.

Ryerson Physical Laboratory was built in 1893 and enlarged in 1912, in both cases by means of gifts made to the University by Mr. Martin A. Ryerson. No building

The University of Chicago

The Committee on Reorganization
of the University of Chicago

Date: January 12, 1925

Subject:

Chief Correspondent

To: Dr. Burton
Dr. Atkinson

From: C. R. Johnson

Enclosed is revised copy suggested for the photolith to place opposite the picture of the proposed Mathematics Building. I understand that the copy as now used in the photo is obsolete due to the recent change in terminology in connection with this building. Does this revision meet with your approval?

by mechanical operations that would be avoided by increased

space.

It is proposed to remedy these handicaps by con-

structing a building east of Hyerson on the same frontage, with a wing extending north to the end of Mendel Hall, and an arch connecting it with Hyerson. Its four stories and basement will be given to Mathematics, pure and applied, and will provide the additional laboratories, class rooms, offices and library essential to the welfare of the Mathematics and Mathematical Astronomy Departments. It will also increase the facilities available in Hyerson for Physics by releasing the space now occupied there by Mathematics. The cost of the building, including endowment, will be \$800,000.

75. XVII

PROPOSED BUILDING FOR MATHEMATICS

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The American Mathematical Society, devoted to the research in mathematics which must precede research work in the other sciences, was founded mainly through the initiative of the University's Department of Mathematics, which has furnished the Society three presidents. The same department has on its Faculty five out of the fifteen mathematicians who are members of the National Academy of Sciences, and has a Corresponding Member of the Paris Academy of Sciences.

Ryerson Physical Laboratory was built in 1893 and enlarged in 1912, in both cases by means of gifts made to the University by Mr. Martin A. Ryerson. No building

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Date: January 10, 1928

having been provided for Mathematics and Astronomy at the University, these departments have been for years cared for in Ryerson. Meantime there has come a tremendous growth both in the subject-matter and the number of students handled by the departments of Physics, Mathematics, and Astronomy, now housed in Ryerson. Because of the developments in these fields, the facilities of the present building are no longer adequate for these departments. The increased student enrolment has crowded the building far beyond its intended capacity. As a consequence, men of international repute are seriously handicapped in their important work by mechanical obstacles that would be avoided by increased space.

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