REPORT OF THE UNDERGRADUATE WALKER MEMORIAL COMMITTEE.

The undergraduate committee respectfully submits the following report on the report of the Alumni Walker Memorial Committee report made in May 1913. PURPOSE OF THE COMMITTEE

This committee was appointed by the Institute Committe日 in November 1913 at the instance of Pres. Maclaurin, to critisize and suggest changes in the plans submitted by the Alumni Committe日, and to give the undergraduate opinion as to the allotment of space in the New Walker Memorial to student activities.

PROCEDURE .

1. The proceedure of the work of the Committee has been to consider each section of the Alumni report to interview various men and recent gradutates interested in the plans, and to obtain the opinion of as many undergradustes as possible. Considering how briadly and thoroughly the alumni had studied the problems, it has been thought advisable to limit its work to a very careful study of certain portions of the report.
2. 

As the structure of the following report is similar to that of the Alumni, the latter should be read in conjunction with this report.
II. LOCATION AND AREA.

In as much as the actual construction is now going on, there is little to be said about the recommendation as to the location of the Memorial and the student buildings, but the committee feels that the plan of Mr. Bosworth, which places the Memorial directly on the Esplanade, the student buildings in a quadrangle, and the athletic buildings and field in the rear, is by far the best arrangement.

The committee takes exception to the latter part of Section 5 of Article 2 which reads:
"that the Athletic Field should be planned for use for not less than twenty-five years, thereafter admitting of replacement if required by the Institute's general growth."

The committee feels that the Athletic Field should be considered an integral part of the student group, and that the keeping of this entire group absolutely intact is of paramount importance. It is fully understood and realized that the space
3.
needed for student accommodation and Institute growth will greatly increase, but the committee strongly urges that in order to meet this increase, the Athletic Field should not be sacrificed and should not, under any conditions, be removed from the original student group. Rather than this, the expansion should be met by acquiring additional land near the site. Perhaps it seems somewhat early to consider such expansion at this time but there is a tendency toward having traditional intentions carried into effect, and it is to forestall, if possible, any such intention that your committee takes this decided stand. The committee wishes to emphasize the recommendation "that the Walker Memorial and the Dining Hall be connected by an Arcade." We believe this to be highly desirable and further suggest that this be enclosed and heated, and as much a part of the two buildings as possible. The committee agrees that all available open space should be used for tennis courts, except the area enclosed by the group of student buildings, which we recommend be planted with large, growing trees, and fine expanses of lawn; which arrangement would correspond to a campus.
4.

## III. WALKER MEMORIAL.

The committee heartily agrees with Sections, $A, B, C$, and $D$ of the alumni report, and after much consideration and many interviews agrees that it is to be desired that the Dining Hall and the Walker Memorial be separate and distinct buildings connected by an arcade. It seems desirable that these should be separate for several reasons, the most important being, odors and noise always exist in a college dining hall. This has been found to be the case in almost every instance where the quick serving of a large amount of food is necessary. Other colleges have found it so and in many places where the problem has had to be solved, a separate building has been used as in Yale. However, if an enclosed'arcade were built, such as is recommended, the advantages of a single building would be retained. to a great degree.
E. (Ground Area)

The committee agrees with practically all of this section, but deems it absolutely essential that the ground area should be at least 16,000 square feet. In our interviews with both the members of the alumni and faculty who are interested, we have recelved the opinions, that the present plans in the alumni report
5.
are to a large extent, inadequate.
F. (The Interior)

Your committee asks the forebearance of the Alumni Committee when we say that we do not think they were quite as cognizant of the student needs and requirements of the undergraduate activities as others more intimately connected with student life. We therefore find it necessary to recommend that the interior arrangement of the Walker Memorial be largely revised and changed.

In order to bring out the interesting facts about undergraduate activities, the committee has compiled the following information which may help to familiarize the readers of this report with present conditions. Institute Committee.

It is necessary to say but very little regarding the Institute Committe日. It is made up of some 28 representations from the classes and activities and is the governing body of the undergraduate association. It's power is very great, and it is expected that it will become more of a force even than now when Technology is established in Cambridge.

The business office of this committee will become a sort of business centre for all activities, where the
6.
telephone exchange is placed, the business of the finance committee is carried on, the services of $a$ stenographer can be had, where books can be filed in a general fireproof vault, etc., etc.
"The Tech"
The Tech, founded in 1881 is a fortnightly paper, has gone through the stages of becoming a weekly, a tri-weokly, and finally a daily in 1909. It now holds a strong position in Technology endeavoring to give the students a daily newspaper covering every phase of Institute life. Its staff amounts to forty men and its business departments handles about $\$ 4000$ during our year.

> "Tech Show"

Tech Shows started in 1898 for the purpose of raising funds for the athletic association, and this object has been continued throughout the 16 years of its successful existence, improving and enlarging constantly.

The work of the show is divided between two departments, the business and stage, each having a corps of ten or twelve men on their active staffs, with 60 or 70 in the cast and chorus, falling under the stage department. The managers and their assistants in both the departments and working throughout the entire
7.
year and rehearsals for the cast and chorus take up the greater part of February march and April. The money handled during the year amounts to about $\$ 7000$. Connected with the show is an orchestra of some fifty men which practices throughout the year, and plays for the various performances given in Boston, Providence Northampton etc.

All the work in all departments is done by students, excepting a coach, an orchestra leader, and a dancing master are employed.

TECHNIQUE.
Technique, the Institute Annual, is published in April by a board of fifteen Juniors. The Technique board is elected each spring by a committee of twenty five Juniors elected by a popular vote of the class. The new board takes up its work at the beginning of the school year. Weekly meetings are held in the Technique office, but almost all the work is done by the individual members in their spare time. The Technique office is in constant use throughout the year, and owing to the secrecy that is always maintained concerning the book, the office could not be used for other purposes at any time.
8.

The annual income of Technique is approximately $\$ 5000.00:-$ from advertisements, $\$ 2000.00$; from the sale of books, $\$ 2000.00$; from fraternity, club and other inserts, $\$ 1000.00$. The profit varies each year from $\$ 200.00$ Q to $\$ 1100.00$ according to the quality of the book and the number of advertisements secured. The profit is turned over to the Institute Committee to be used as that committee may see fit. In case of a defecit the members of the board are required to make it up.

Technique is improving with each issue. The old hard and fast styles have been left behind, and each year sees a better and more attractive book. The future is very bright for Technique. THE M. I. T. COMBINED MUSICAL CLUBS.

The combined Musical Clubs date from 1886, when a Mandolin, Banjo, and Guitar Club were founded, the Glee Club having been started in 1884. The clubs now number about sixty men, being composed of three separate organizations, the Glee, Banjo, and Mandolin Clubs. These are bonded together under one association, the M.I.T. Combined Musical Clubs, which secures the concerts and collects all fees from the members.

About ten concerts are given during the year, two
9.
of which, one in December and one in Junior Week, are held in Boston. The remaining concerts are given in towns adjacent to Boston, and extended trip not having been taken since 1910.
"PROFESSIONAL SOCIETIES"
Professional societies hold a very important position at the Institute. There are at present eight societies in the larger courses, all of which aim to bring the students in closer touch with practical men of the outside world. Members of the faculty of all departments are very enthusiastic in their support of the societies and in many cases consider attendance at the talks and smokers almost as part of the students required work. The memberships range from fifty to one hundred in the several organizations.

COSMOPOLITAN CLUB.
The very cosmopolitan nature of Technology, with its fifty nationalities and 113 foreign students made it quite fitting that in 1910 a truly Cosmopolitan Club shovld be founded.with a purely social purpose. The club succeeded admirably, now having an enthusiastic membership of about 70. "National Nights are given during the year which are very popular.
10.
T.C.A.

The Technology Christian Association, affiliated with the Young Mens Christian Association, has an active membership of about 400. Its aim is to be of service and to inspire its members to a more Christian life. It holds talks weekly in the Union where some of the most famous speakers in the vicinity speak on practical and moral subjects.
M.I.T.A.A.

Athletics are controlled by this student Athletic Association, and an Advisory Council. It is expected that in the near future the student organization will increase in power and authority and be a much more important factor in the regulation of athletics. As it is now, it has merely powers of recommendation and approval, $2 . s$ to the action of the Advisory Council. The membership is about 20.
"The Technology Monthly"
The Technology Monthly, just recently organized
and now combined with the Harvard Engineering Journal, is so new that it is difficult to state just what its field of activity will be. It aims to give voice to the student and faculty opinions of a serious and scientific nature, and at the same time to bring before the
11.

Institute news from the outside world as well. Its staff consists of 15 men.

The Committee has also sent the following circular letter to each activity at the Institute which could possible need space in the New Walker Memorial. Dear Sir:

The undergraduate Walker Memorial
Committee asks you to answer the following questions in order that the recommendations of the Committee to the President as to the allotment of space to student activities may be as accurate and impartial as possible. It should be borne in mind that in the New Technology conditions will be somewhat different from those at present and that the number of men engaged in activities will increase materially in many cases.
(1) Present space given to activity who use rooms?
(2) Present space given to activity? (Square feet).
(3) Actual needs of the activity?
(4) How much actual desk space is needed?
(5) In what way would your activity wish the alloted floor space divided?
(6) In case of rehearsals how much space is needed and how often used?
(7) How much stenographic work does your activity have?
12.
(8) Would your activity be willing to pay its proportionate share of expense of office service?
(9) What expansion is expected in the activity in the New Technology?
(10) Have you made any arrangements for a fund to provide new desks, furnishings, etc., which will be used by your activity exclusively in the Walker Memorial?
(11) How is your activity doing this?
(12) Remarks.

Replies were received from each activity and are summarized in the following tabulation.
14.

With these figures as a working basis your committee has studied very carefully the suggested plans in the Alumni Report with regard to the allotted space for activities and general rooms as well. The present space occupied by activities above amounts to a total of 5000 Square feet, and the amount desired as is clear from the above tabulation is 13,000 sq. ft. It is quite evident from the alumni plans that only about one half of the actual necessary space for present needs and future expansion has been provided for. The committee therefor recommends that 13,000 square feet be given to activities alone divided as suggested in the accompanying tentative plans.

This recommendation may at first thought seem somewhat excessive in view of the very small allotment in the Alumni Report and in view of the fact that only 5000 square feet is occupied by the activities now, but after a thorough investigation of the activities, needs with a view to the future expansion as is evident In the replies tabulated above, your committee is still convinced that this figure is none too large. Future expansion is expected in nearly all activities. The committee feels that a most important fact in favor of granting this large amount of space to student activities is that many of the following clubs and activities
are rising the lecture rooms and class rooms of the Institution. The Tech Show uses the Union dining room at much in convenience to the dining room authorities. The Institute Committee uses a lecture room in English C, the Banjo Club a class room in Lowell building. Conflicts between the Musical Clubs and. the Tech Show rehearsals are notorious. The Technique Electoral Committee must take any room that it can find, although this is unquestionably one of the most important undergraduate committees, meeting twice or three times a week during the entire second term. The Senior Class Day Committee has much trouble in obtaining an adequate meeting room. Many smaller committees such as the Juniop Prom Committee and Senior Portfolio Committee experience the same trouble. The professional Societies, one of the most important branch of student activities, must hold their talks and meetings in lecture and drawing rooms.

We therefore submit the following recommendations as ${ }_{1}^{\text {to }}$ the arrangement of the interior. There should be a basement and three floors arranged approximately as follows:

The basement should include:
16.

## Basement

Tech office ..... 2000
Technique (office) ..... 500
Tech Show (business office) ..... 400
Monthly ..... 220
Institute Committee (office)this ..... 200
general office for allu typewriting, telephone etc.
M.I.T.A.A. (office) ..... 100
Musical Clubs (Office) ..... 150
Committee Room (Institute Comm)also used by Technique Elect.Committee, Class Day Commit-tee etc.)1200
Two Musical Club rooms (centre of building sound proof wall ..... 2400
Bowling alleys ..... 3100
General lavatory ..... 500
Store Room for activities ..... 300
Reserving room, store room, space needed for kitchen supplies ..... 2000
17.

Reasons are numerous for the placing of the grill on the top floor and the activity offices and rooms in the basement. If the activities are located in the basement, no business would be transacted above the first floor, and by having entrances to the basement from the campus, would be of great convenience to men engaged in activities and do away with the needless passing through other parts of the building.

The grill, if situated on the third floor would have an excellent outlook over the Charles River basin, and would be much more pleasant from an aesthetic point of view. A roof garden might also be run in the fall and spring in connection with the Grill. By having the kitchen on the top floor all objectionable odors etc. would be dispensed with

The first floor should contain a general living ana lounging room 3500 Sq . ft. with settles and fireplaces open in genoral effect, two stories high. This room should be placed in the front of the building with the longer side facing the Esplanade. A check room near the main entrance to the Memorial ( 600 sq . ft.) an office for administration purposes (300 sq. ft.), a library, reading room and writing room 3000 sq . ft. Faculty and Alumni reading, writing and smoking rooms 3000 sq. ft.

Total 10,500.
18.

This figure does not include halls which should be broad and attractive. The main entrance should be on the side opposite the Esplanade, facing the group of student buildings. There should be entrances on each side and a broad terrace on the front off the large living room. A very good general layout for this floor is shown by the accompanying plan of H. K. Franzheim. Second Floor (mezzanine)

Ladies retiring room (next to auditorium) 300

Cosmopolitan Club room 600
T.C.A. office and room 1200

2 Rooms for general use of clubs, etc. 1200

Auditorium 3500
with movable chairs to admit its use for small dances etc.

Billiard and pool room 3500
The remainder of this floor would be occupied by the upper part of the large living room.

The Auditorium should extend to the roof and the entrances to the balconies should be from the third floor.

The third floor should be a grill room seating 125 (2000sq.ft.) 3 smaller dining rooms, arranged
19.
when thrown together to seat 50 ( 800 sq . ft). Auxiliary Kitchen, serving room, pantry, service, lavatory 1500 sq . ft. A small gymnasium with lockers, shower baths etc. 3500 (sq. fe.)

Arcade .
should contain:
Telephone booths,
Cigar stand
Soda fountain
Barber shop and boot-blacking establishment
Student Post-Office
Check room
News stand and book store run and managed by the Cooperative Scciety.

The Committee suggests that the application of the manager of the present Tech Barber Shop be given favorable consideration.
20.

In this report the Committee deemed it advisable not to discuss the questions of organization and administration, but limited its work to the needs of the activities and to the reconstruction of that part of the alumni report which dealt with the space and requirement of the activities.

Respectfully submitted.


George R. Urquhart
$\$$


T票展たのい星

RIVER FRONT
FITST F LOOR．


SECONDFLOOR


Perch. Engmienny.
Me. H. P. Sabin'
Dear Sir:
In answer to yours of Feb $19^{\text {th }}$
the executive committee have decided upon the following answers to your questeoics:
(i) At present about half a doyen men are engaged in official duties. Total meubersluts is 30 , being lower than previous two yeas.
(4) This being a new society the increase in merubusliip should be looked for as very Large and same allotwew of desks as for average socity would probably be requed.
(7) Increase in stenographic wink looked for tho comprarlitively small at present.
(9) Expansion looped fir in newbldgs to be large since not only is the Course (Option 2) comrparitively now but the society itself jot recently founded.
5.A. Sill chimu. coin.

of the
silatarhutapte 3natitute of ©erhnulage
nostrox Tek 2/ 1014
Men. A. P. 大abmi
Sein Walker Nemorial Connni-
Slear Kis:-
The answess to questione subinitted to the Civil Engineesing tority are as follous.

1) 150 membere.
2) None
3) Use of anditorcime for meetinge Deak spacte.
4) Spare for one desk.
5)     - 
6)     - 
7) Vury iticle soay 30 litters foryen)
8) Zes.
9) Increase in menberslip to aboit 200 10) No
10) 

$12 \quad$

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Thatat, filanaarhuartta
316 tinntuigtor the. Boslow, Mass.

Huy dear tmr. Oabier. Mar. 2,1914.

Qu the accomparying theet are th anowers 5 thi curoturs ishich the tusergradual boeter thenorial Committee heo subuitter wour cheb Iou wie votice that sonce questions are left menswered, His is due 157 is ract that cuditions mivolue in thise queothons to not exciat a bur club. Tisht th committe every succes


The Cosmopolitan Club, Dear Sis:

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The Undergraduate Welter Memorial Committee ask you to answer the following questions in order that the recommendations of the Committee to the President as to the allotment of space to student activities may bo sa scourato and impartial as possible. It should be borne in mind that the number of men engaged in activities will increase material iv in many cases.

(2) Present space given to activity? (Square feet). \& the Sher.
(3) Actual needs of the activity is 3. room tobit eau hoer at 40 n po proper. Th
(4) How much actual desk space is needed?
(5) In what way would your activity wish the alloted

(6) In case of rehearsals how much space is needed
and how often used?
(7) How much stenographic world does your
activity haver forging in th precut, ven lithe olengraphic wats.
(8) Would your activity be willing to pay its

* proportionate share of expense of office service? -
(9) What expansion is expected in the new Technology?
(62) Have you made any arrangement for a fund to provide new desks,
furnishings otc., which will bo used by your motivity
exclusively in the Walker Memorial? Io. Geo, we have hen planning ties'.
(11) \#ow is the activity doing this? 11 . Sot definli yet.
(12) Remariss, the above awewers are hosed on the prencut enditions of
 benefits, as thepropect of having greater number of foreign she cher is Tech. in thfutire ot right, a roue large entagh it provide fro such an increase is desirable wilt hest wishes gov every maces. Yours harbin iAsi, secintorr

Boston, February 24,1914.

Mr. Henry P. Sabin, Sec.
Boston, Mass.

Dear Sir,
In response to your request of Feb . 19 th. referring to the Walker Memorial permit me to reply for the Electrical Engineering Society as follows.

Questions 1-6. The only need that we have for room is a place where meetings of 100 students may be held. The upper rooms of the Union now serve this purpose.

Questions 7-12. The amount of stenographic work is such that it can be handled by the officers of the society and the society would not be willing to pay for such work. As the size of this society increases only as the number of students increases it will not meet the problem of a sudden expansion with the removal to Cambridge.

Yours very truly,


# MASSACHUSETTS INSTITUTE OF TECHNOLOGY, boston, mass. 

## INSTITUTE COMMITTEE

A. C. Dorrance, pres
F. P. SCULLY, VICE.-PRES.
C. W. WOOD, SEc.-TREAS.

February 25, 1914.

Mr. H. P. Sabin, Sec'y.,
Undergraduate Malker Memorial Committee,
Massachusetts Institute of Technology•
Dear Sir:
At present the accomodations of the Institute Committee are decidedly inadequate and in answering your questions we shall not base our report upon the present allotment of desk space, etc., but rather upon the needs of this Committee under the changed conditions of the New Technology.
(1) At the present time, the Institute Committee has a desk in the office of the Tech Show. This desk is used principally by the President and SecretaryTreasurer, although the Point System and Union Committees also use it occasionally. The Executive have Committee should ${ }^{\text {a }}$ room in which the regular business of the Institute Committee could be transacted. 中he meetings of the committee-at-large would properly be held in one of the general meeting rooms of the Walker Memorial.
(2) Present Space about 50 sq . It.
(5) A room about the size of the present Technique Office is needed. Approximately 250 sq . ft.

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

OFFICE OF THE BOSTON, MASS.
INSTITUTE COMMITTEE
A. C. Durance, pres.
F. P. SULLY, VICE.-PRES.
C. W. WOOD, SEC.-TREAS
(4) Threedesks will probably be needed. Floor space covered 40 sq . At.
(5) One large room.
(7) All minutes, reports, and notices of the Committee are type-written.
(8) Yes.
(9) The Institute Committee will undoubtedly continue the expansion which has been so noticeable in the past three years. At present it is the connecting link between practically all of the principal activities and we have every reason to believe that the Committee will be of even greater importance under the now conditions.
(12) If possible, the Institute Committee office should be given a prominent location, so placed that the offices of the other activities would be readily accessible

In this report, the needs of the Finance Comession have not been included, except that one of the desks in our office could be placed at the disposal of the officers of the Finance Commission.

For the Executive Committee,

## Antic $C$. Oonance

# Mechanical Engineering Society 

of the

## Massachusetts Institute of Technology

Affiliated with the American Society of Mechanical Engineers

Prof. E. F. Miller, Honorary Chairman H. W. Treat, Chairman<br>W. H. Brotherton, Vice-Chairman L. L. Downing, Secretary<br>F. P. Karns, Treasurer

Govering Board

491 Boylston St., Boston, Mass., Peb . 25, I9I4.
Mr. H. P. Sabin, Sec.,
Undergraduate Walker Memorial Comm.,
234 Newbury Street,
Boston, Mass.
Dear Sir,-
In answer to your letter of Feb .19 , I will try to answer your questions as well as possible.
(I) There are at present about I25 members of the Nechanical Engineering Society.
(2) There is at present no space given to this activity.
(3) The actual needs of the activity is a room or rooms which might be used for a library, a reading room, or a place of mecting for the Governing Board and the different committees.
(4) No actual desk space is needed.
(5) One room with possibly a small ante room would be sufficient.
(6) In place of the rehearsals mentioned in this question, the M.E.Society would have lectures and smokers which will probably be held in some main hall.
(7) The stenographic work of this activity is limited to letters and circulars pertaining to the trips and lectures of the society.
(8) This activity would be willing to pay its proportionate share of expense of office service.
(9) In the New Technology it is expected that the society will

# Mechanical Engineering Society 

## of the

## Massachusetts Institute of Technology

Affiliated with the American Society of Mechanical Engineers

Prof. E. F. Miller, Honorary Chairman
H. W. Treat, Chairman
W. H. Brotherton, Vice-Chairman
L. L. Downing, Secretary
F. P. Karns, Treasurer

## Governing Board

C. H. Wilkins
R. L. Parsell
F. G. Purinton

491 Boylston St., Boston, Mass.,
be larger in membership and that there will be better interest and more activity. Efforts will be made to interest every man in courses two and five.
(IO) No provision has been made for furnishings, etc., but the fund which is carried over from year to year by the society might be used for this purpose.

Any further information regarding the M. E. Society will be gladly given upon request.


Chairman M.E.Society.

# MASSACHUSETTS INSTITUTE OF TECHNOLOGY GLEE, BANJO AND MANDOLIN CLUBS SEASON 1913-1914 

Technology Union, 42 Trinity Place

BOSTON, MASS. February 25, 1914.

Undergraduate Walker Memorial Committee, Massachusetts Institute of Technology Boston, Massachusetts.

Dear Sirs:

In answer to the questions in your letter of the 18th. relative to the needs of the Combined Musical clubs in the IIew Technology, I wish to submit the following:
(1) 65 men in Clubs at present, and all use the rooms.
(2) The clubs have two aesks, occupying about 40 sq . ft.,
in the outer Show office.
For rehearsals rooms $A$ and $B$ in the Union, and 6 or
26 Lowell are used at least six times every week.
(3) The sctual needs of the Clubs are:-
(a) An office for the General Manager and his assistants.
(b) Two large rooms for rehearsals.
©4) 100 square feet of desk space is needed.
(5) A satisfactory division is indicated in answer 3.
(6) Two rooms about1800 square leet each are needed, one or both being used every afternoon for two hours.
(7) Whe stenographic work consists of about 200 letters a year, and is very likely to double or triple.
(8) The clubs would be willing to pey their proportion share of the office expenses.

# MASSACHUSETTS INSTITUTE OF TECHNOLOGY GLEE, BANJO AND MANDOLIN CLUBS SEASON 1913-1914 

Technology Union. 42 Trinity Place Boston. Mass.

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(9) As soon as the alumni recover from the recent calls made on their cash for the new builaings the Clubs should be making long trips such as the musical organizations of almost all other colleges take, and such as the clubs made to Chicago in 1910. mhis shoula bring out even more men than are in the Clubs at present, and would greatly in crease the work of the managers. With the concentration of students in the dormitories the number of rehearsels would probably be increased; too little time can be demanded of the members under present conditions to get the results desired on the artistic side.
(10) There is as Jet no fund for furmishing offices. (11)
(12) The most important need of the Clubs is rooms for rehearsals that are large enough tumytirl so that the men will not be so used to cramped quarters as to be unable to perform well in an auditorium. A reasonable sized room is absolutely essential; it would be better to heve one large room tham two that were too small.
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# MASSACHUSETTS INSTITUTE OF TECHNOLOGY gLee, banjo and mandolin clubs SEASON 1913-1914 

Technology Union, 42 Trinity Place
BOSTON, MASS.

At present there are always conflicts between the rehearsals of Glee, Banjo, and Mandolin Clubs, and the Orchestra and Tech Show Gast and Chorus. The Glee Club always has to rehearse in the room where their piano is. The Mandolin and Banjo Clubs miverffe never rehearse at the same time, but the Glee club generally conflicts with one or the other making two rooms imperative. The rooms should be separated by a sound proof wall at least.

It is very probable that a furnishing-fund for the Musical Clubs' rooms will be started this year.

Hoping this is what you desired, I am, Yours truly,


## SOME FACTS ABOUT THE

## $\mathfrak{T}$ erhnulugg Chhristiant Asssuriationt

It is the largest student organization at M.I.T.
405 members, (January 15,1914$)$
Average attendance 250 at 12 Thursday noon
meetings this year.

## ACTIVITIES

Practical, helpful talks Thursdays at 1.30 in the Union.

Bible study and discussion classes.
Social service.
Freshman advisory system.
Co-operation with local Churches.
Small collection of helpful books at entrance to General Library.

The Association has two secretaries who are at your service for any sort of help or counsel.

TWO GOALS NOW BEFORE US:

1. Increase the membership to 500 this term.
2. Get all the members to take an active part in some Christian work.

Expansion and intensive development.
Will you help us reach these two goals?
MEMBERS PAYING $\$ 1.00$ OR MORE TO THE
T. C. A. HAVE MEMBERSHIP PRIVILEGES IN THE BOSTON Y. M. C. A. ASK FOR A CARD.

TECHNOLOGY CHRISTIAN ASSOCIATION

BOSTON, MASS
L. r. talbot, general secretary
F. H. BLAIR, ASSISTANT SECRETARY

Miles e, Langley, 13
PRESIDENT

March 4,1014

Mr.H.P.Sabin
234 Newbury St.,
Boston, Mass.
Dear Mr.Sabim,
I am sorry that I was not able to answer your questions in regard to the xacommodations desired by the T.C.A., by the date suggested. We did not have a meeting of the executive committee in time to do that, and in a matter so important as this I did not care to answer withdut giving the men a chance to talk the whole situation over carefully. This is especially true since $I$ am not likely to be connected with the T.C.A. When these plans go into effect.

I tmust be borne in mind that the T.C.A.is situated rather differently from other organizations in many respects. Hence $I$ find some difficulty in replying in just the form in which your questions are puit. For instance, the number of men who use the rooms (see No.1) is small at the present tome, if by that we mean those who actually use the office. If, however, we mean the men who attend the Thursday noon meetings, we must say 350 , since that is the maximum attendance, and the average this year is 250 .

Answer to 1: 40 now.
2. About 160 sq.ft. ( $10 \times 16$ )
3. " 1200 " , divided as indicated in 5.
4. Room for at least two secremaries, each having a roll-top

WALTER B. SNOW. '82
Prof. George b. Haven, '94
DEAN ALFRED E. BURTON
WILLIAM C. EWING. 97
DON S. GATES, BOSTON Y. M, C. A
PROF. DUGALD C JACKSON
FRANK L. LOCKE, 'B6, BOSTON' Y.M.c.u.
F. NATHANIEL PERKINS

TECHNOLOGY CHRISTIAN ASSOCIATION

BOSTON, MASS.
L. R. TALBOT, GENERAL SECRETARY
F. H. BLAIR, assistant secretary

Miles E, Langley, '13

RALPH H. HOWES, ' 14
desk,with provision for another assistant secretary, who will come as the work grows. In addition, room for a typewriter-desk. This das not aake into account room for letter-files,book-cases,etc, which I presume you do not mean to include in this question.
5. In accordance with diagram enclosed.
6. It is hard to answer this question,since the Association does not now have any function calling for rehearsals. In the new buildings it will have such affairs ffom time to time. We should w want the right to use any room available for play rehearsala,etc., on these occasions, which would not be frequent.
7. The two secretaries now do all the typewriting, and there is no stenographer to take dictation. After the change to the Cambricge buildings,it will be expected that one of the assistants shall act as stenographer, as one of his duties.
8. Probably not,since the Association will have its own office force,as explained in 7 .
9. From two to three times the present attendance at the Thursday noon meetings,at whatever time and place they may be held. A much larger increase is expected in all other lines, but this is certain to be espacially noticeable in the use of the offices by the students for consultation with the secremaries and with one another, and for planning in the interests of the Association.
10. The student treasury ought to have a small balance at the end of this year to be applied to this purpose; the Advisory Board

WALTER B. SNOW, 'eZ
Prof. george b haven, '94
TREASURER
dean alfred E. Burton
William C. Ewing. ' 97
DON S. GATES, BOSTON Y. M. C. A
prof, Dugald C Jackson
Frank L. LOcke, 'be, boston y.m.c.u. F. Nathaniel Perkins

TECHNOLOGY CHRISTIAN ASSOCIATION

## BOSTON, MASS.

L. R. TALBOT, GENERAL SECRETARY
F. H. BLAIR, Assistant secretary

OFFICERS

Miles E, Langley, '13
Charles g. Norton. 15
Vice president
Ralph H. Hows, 14
treasurer
also is bearing this in mind.
11. See 10.
12. What the T.C.A. needs more than anything else is a place where it will be before the student body. In spite of all we cando now, there are men in the Institute who hardly know there is such an organization. The present office is in an out-of-the-way part of the "campus"; we need to be in a prominent place, When such a place is provided, ten times the number of men who are now really active will use our rooms and thus give us a chance to get acquainted with them. It should be borne in mind that in our case it is not the number of men who will hold positions of responsibility that other must be considered, as in the case of almost every activity, but the number who can be attracted to put themselves within the reach of our influence. Meetings, Bible study, etc., are merely means to the end of extending that influence.

for the Cabinet of the T.C.A.
S. H. TAYLOR, GENERAL MANAGER
E. A. WEAVER, EDITOR-IN-CHIEF
L. E. ARMSTRONG, MANAGING EDITOR

THE TECH
PUBLISHED DAILY AT
PUBLISHED DAILYAT THE
Established 1881
G. A. PALMER, TREASURER
C. W. LACY, ADVERTISING MANAGER
H. ROGERS, CIRCULATION MANAGER
H. ROGERS, CIRCULATION MANAGER

OFFICES
42 TRINITY PLACE
or back bay 2180

1. No men - portatly an mimudiate monocot 75 .
2. 500 gog. of
3. 1900 ry. ft. -2000gft. Fitter
4. Six large basho, tue smack nus.
5. 


6. No rehearsal.
7. absent 10 Kors for ret.
8. Hes. Defending on Netter The Ted in Ni future world hive a connived brot-beefen and divirgrafter. This is seryprotate. 9. Au munediote merease os yo then and in hies years
S. H. TAYLOR, GENERAL MANAGER
E. A. WEAVER, EDITOR-IN-CHIEF
L. E. ARMSTRONG, MANAGING EDITOR

THE TECH

PUBLISHED DAILY AT THE
G. A. PALMER, TREASURER
C. W. LACY, ADVERTISING MANAGER
offices
42 TRINITY PLACE or back bay 2180

100 men working ont for si=glafur.
10. 710.
/1. $\qquad$
12. Ore tie 5 shat such a find this year.
if $h=$ hentitly and the Test entire NE: flan mild me st out as folloros for hoo aviaygaients

$\frac{1+2}{1+2}+\frac{1}{x}$

Feb, 17,1914.

The Technique, Dear Sir:

The undergraduate Walker Memorial Committee asks you to answer the following questions in order that the recommendations of the Committee to the President as to the allotment of space to student activities may be as accurate and impartial as possible. It should be borne in mind that in the New Technology conditions Will be somewhat different from those atvpresent and that the number of men engaged in activities will increase materially in many cases. (1) No. of men engaged in activityewho use rooms? $15-18$
(2) Present space given to activity? (Square feet): 220 se
(3) Actual needs of the activity? 350 s\% fo ineluching
(4) How much actual desk space is needed? 50 so r fr
(5) In what way would your activity wish the alloted floor space divided? thur small affiees.
(6) In case of rehearsals how much space is needed and how often used ?
(7) How much stenographic work does your activity have ?
(8) Would your activity be willing to pay its proportionate share of expense of office service ? Yes
(9) What expansion is expected in the activity in the

New Technology? heme
(10) Have you made any arrangement for a fund to provide new desks, furnishings, etc., which will be used by your activity exclusively in the Walker Memorial \& fund has been started.
(12) Remarks.

It will be of great convenience to the committee if the executive board of the activity answers these questions before February 25th.
Very truly yours

## 234 Newbury St., Boston.

## ESTIMATE FOR WALKER MEMORIAL CLUB HOUSE

April 26, 1915.
This estimate is based upon four unnumbered $1 / 16^{n}$ scale architectural sketches and one elevation, date of issue April 23rd, 1915, and verbal specifications from the architectrs office, written up under date of April 26, 1915.

## $\underline{S U M M A R Y}$

```
1 - Foundations
2 - Superstructure
3- Interior Partitions & Finish
4-Plumbing, Heating, ete.,
5 - Electrical Work
6 - Service Equipment
    Total Cost Exclusive of
        Architect's Fee
```

CUBIC CONTENTS between outside lines of wall and from top of basement floor to top of parapet $=$ COST per cubic foot

$$
596,000 \mathrm{cu} . \mathrm{ft} \text {. }
$$

$$
40 \phi \quad "
$$

# SPECIFICATION FOR WALIKER MEMORIAI <br> Massachusetts Institute of Technology <br> Stone \& Webster Engineering corporation, Agt. <br> Constructing Engineers 

April 26, 1915.

## General

The following is a brief specification to form a basis for an estimate for the Walker Memorial, in accordance with conversations between Messrs. Kebbon, Thomas, and Alden, Saturday, April 24, 1915.

Foundations
Reinforced concrete on wood piles.
Structural Frame
Reinforced concrete.
Stonework
Iimestone facing on all four elevations.
Window reveals of such depth that the total exterior
wall thickness, including stone and backing, will not exceed 17 ". Granite Base Course

At ground line only.
Iimestone Steps
Landing and free standing columns.
Floor Grades

| Basement | Grade 16.10" |  |
| :--- | :---: | :---: |
| First Floor | $"$ | 29.60 |
| Second " " | " | 46.10 |
| Third | " | 61.60 |
| Roof of East \& West Wings | $"$ | 74.60 |
| $"$ " Center Portion | $"$ | 79.60 |

## Watorproofing

Basement walls waterproofed from top of footings to ground line at grade $21.6^{1}$. Basement floor waterproofed by a membrane layer underneath the structure floor. Basement walls waterproofed on outside with plastic waterproofing.

Exterior walls waterproofed with R. I. W. on
the inside.
Roofing
Tar and gravel roofing laid on a float finish
surface over cinder crickets.
Skylights
One skylight 10 ft . wide by 40 ft . long over the center portion of the gymnasium. Windows

As shown on the plans, figured at $\$ 1.00$ per square foot.

Floor Finishos
Granolithic finish throughout the basement.
Фerrazzo in the lobby of the first floor and wood floors throughout all other rooms on the first floor and upper floors. Stairs

Structural steel with marble treads, landings and risers.

Iron balustrades; wood rails and wainscoting of
Keene cement.

$$
[4 / 26 / 15]
$$

Interior Wood Trim
Of oak in all rooms consisting of baseboard, chair rail and picture moulding. Wood panels and beam ceiling in dining room on the first floor and wood panels five feet high in vestibule on the second floor.

Caen stone wainscoting in lobby of first floor. Plaster panels and plaster beam ceiling in lounging room on the first floor. Ornamental plaster ceiling in the lobby of the first floor. Stone fireplace in dining room and lounging room on the first floor and in library on the second floor.

Wood stage in auditorium but no stage accessories, curtains, etc., are included.

A large locker room and toilet room in basement equipped with 150 lockers and 14 fixtures.

No equipment, shelving or furniture is figured in the gymnasium, auditorium, dining room, kitchen, library or various lounging rooms in the building.

The gymnasium is figured as located in the third story instead of in the basement as shown on the plans and a corresponding number of offices have been moved from the third floor to the basement.

A tile walkway is figured on the roof four feet wide entirely around the high portion of the boilding to permit observation of the River.

Interior partitions of gypsum block; 12" terra cotta fire walls are required.

A heating system is figured in the building with an underground steam connection from the east end of Building $\mathbb{N o}$, 2.

Ventilation and automatic sprinkler systems have both been omitted.

## STONE \& WEBSTER ENGINEERING CORPORATION

STONE \& WEBSTER BUILDING, 147 MILK STREET, BOSTON, MASS. CONSTRUCTING ENGINEERS

DWIGHT P. ROBINSON HOWARD L. ROGERS.

FIRST VICE PRESIDENT A TREASURER. GEORGE O. MUHLFELD. VICE PRES. a CONSTRUCTION MANAGER. FRED. N. BUSHNELL

CABLE ADDRESS STOWEbENCO-bOSTON LIEbERS CODE


NEW YORK
CHICAGO.
DALLAS.
commonwealth national bank building
SEATTLE.

ADDRESS ALL COMMUNICATIONS TO THE CORPORATION
REFER TO EXECUTIVE
Job Order $\mathbb{N o} \cdot 1536$.
Boston, Masses, April 27, 1915.

Dr. R. C. Maclaurin,
Pres., Massachusetts Institute of Technology
491 Boylston Street, Boston, Mass.
Dear Dr. Maclaurin:-
In accordance with a request from Mr. Kebbon we have prepared an estimate of the cost of the Walker Memorial Building, based on sketches furnished by him, and we wish to confirm the figure of $\$ 240,000.00$ given to Mr. Kebbon yesterday

The plans from which the estimate was prepared are very preliminary and the estimate is as conservative a. We are justified in making it on the information at hand. Complete details could very readily alter the total cost fifteen or twenty per cent more or less.

We are enclosing a brief summary of the estimate, and the specifications upon which it was based.


Vice President.
Enclosures

## Walker Memorial Committee Records.

 Thursday, Feb. 17, 1916.The Committee met at the Union Club at 5:30 p. m. Present:- Messrs. Baker, Batchelder, Bemis, Hibbard, Mons, Noyes, Rockwell, Tyler also Mr. Kebbon and Mr. F. I. Locke 。 of the former Alumni Committee on "Commons."

Mr. Kebbon presented a new elevation and revised floor plans which were examined and discussed in detail.

In the basement it was agreed to omit all but one of the servants' rooms in the southwest corner, making a new entrance and transferring the ladies' rooms to this wing.

On the first floor, it was agreed to provide an entrance on the west side of the dining hall across the terrace, and it seemed to be the general opinion of the Committee that it would be expedient to omit the fireplace at the end in order to utilize the entire width of the dining hall for cafeteria or other service. There should also be doors connecting the main dining hall with the dining room and lunch room adjoining thing these doors might ordinarily be kept closed.

Second Floor. Some members of the Committee thought communication between the ends of the building important by means of a gallery in the dining hall, but there was decided objection to this and no action was taken.

Third Floor. It was agreed to omit names of particular activities.
The chairman presented the following letter from President Maclaurin which was much appreciated by the Committee.
"I regret that an engagement makes it impossible for me to be present at the next meeting of the Walker Memorial Committee. It seems now as if the long and arduous labors of your committee are to be crowned with success, for the essential features of the plan last presented in the Technology Review seem to have met with general favor. Doubtless, further study would suggest modification of details, but it would be a great matter to have the broad outlines of the plans fixed so that building can begin with as little further delay as possible. The Executive Committee of the Corporation is ready to begin building operations as soon as it has assurance from the proper authority that the plans are acceptable to the alumni. I understood you to say that your Comrittee expected to be ready to bring the matter to the attention of the Alumni Council at its next meeting. of course, all recognize the importance of avoiding further delay."

Mr. Morss also spoke in regard to the circular about to be issued by the Alumni Fund Committee.

Voted that the Walker Memorial Committee, having approved plans for a Walker Memorial Building submitted by the Corporation the architect, recommends that all subscriptions for the Memorial, less Committee expenses, be released and turned over to the corporation of the Institute for use in the construction of the said Walker Memorial.

Voted that the Committee authorize the chairman to appoint two members to act as a sub-committee with him to represent the Committee in case any question should arise as to minor details of the plans.

Voted that the Committee express general approval of the plan, for organizing an administration, published by the former committee of five in the Technology Review for June, 1913, except in so far as the changed character of the present building plans may render modifications desirable.
3.

In regard to unpaid subsciptions, it was voted that the chairman be authorized, in conference with Mr. Morss, to prepare a circular letter to be sent to persons whose subscriptions had not been paid.

ALUMNI ASSOCIATION OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY BOSTON

February 19, 1916.
Mr. H. E. Kebbon,
Stone \& Webster Co., Massachusetts Ave., Cambridge, Mass.

Dear Mr. Kebbon;
mile send
I encloses a copy of the records of our Committee meeting. In regard to the details of the plans, the following points were, I think, more or less definitely agreed upon.

Basement. Include shooting gallery, now or later, under eastern terrace. Omit all but one servants' rooms putting in a new entrance in the southwestern wing and transferring the ladies' rooms to this wing. Provide windows for the kitchen making the steps at the northern end narrower, perhaps 25 to 50 feet. Arrange, if practicable, for duplicate stairs from the kitchen to the serving room. Look out for ventilation of squash and hand ball courts. Rectify entrance in northeastern wing with reference to rooms ad. joining, as suggested by Mr. Cook.

First Floor. Provide steps for western terrace and side entrance from it to great dining hall. Shift fireplace from end of hall in arranging for cafeteria service on a large scale. On this point, however, I refer you to President Meclaurin. Provide doors from great dining hall to small dining room and lunch room, not neeessarily for ordinary use. Provide for any necessary storage of stage, etc.

## ALUMNI ASSOCIATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
BOSTON
H. 3. Zebbon
-2-
in connoction with use of great dining hall as an auditorium. Second Hloor. Divide dining and meeting room in northwestern wing. Possibly movable partitions would suffice. The proposed introduction of galleries in the great dining hall seemed not to comend itsele to the Committee, but I wish some solution might be Lound which would afford a connection with these dining rooms and the Tech Club Jibrary. If the two are intonded for the same people, I feel sure that it will prove very inconvenient for them to go dowm to the first floor and cross the main dining hall, even is they are able to enter it from that end, which seems doubtful. Moreover, I think we must expect that the use of different parts of the building may change as time passes and that some sort of connection betveen the ends may be more important at a future time than at the outset. I do not wish to set my judgment against that of my associates who objocted to the gallery, but only to express the hope that you will consider the possibility of some solution acceptable to them also. It might be well to exchange the library and the billiard room.


## ALUMNI ASSOCIATION

 OF THEMASSACHUSETTS INSTITUTE OF TECHNOLOGY BOSTON

## H. E. Kebbon

 -3.Third Floor. It seems important that any feasible means be taken to make the floor of the gymnasium relatively sound proof. It is understood that names of activities will be omitted. The space for toilet in the southeast wing seems larger than necessary.

There are probably other matters of detail which came to your oi attention, but which I made no memoranda.


## ALUMNI ASSOCIATION

of THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
BOSTON

February 21, 1916.
Dr. R. C. Maclaurin,
Massachusetts Institute of Technology, Boston, Mass.

Dear Dr. Maclaurin;
Your letter of February lGth in regard to the Walker Memorial was received by the Committee with much gratification, and the following votes were passed.
"Voted that the Walker Memorial Committee, having approved plans for a Walker Memorial Building submitted by the Corporation to the architect, recommends that all subscriptions for the Memorial, less Committee expenses, be released and turned over to the Corporation of the Institute for use in the construction of the said Talker Memorial."
"Voted that the Committee authorize the chairman to appoint two members to act as a sub-committee with him to represent the committee in case any question should arise as to minor details of the plans."
"Voted that the Committee express general approval of the plan for organization and admininstration published by the former Committee of five in the Technology Review for June 1913, except is so far as the changed character of the present plans may render modifications desirable."

ALUMNI ASSOCIATION OF THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY BOSTON

Dr. Maclaurin
-2-

In regard to unpaid subscriptions, it was voted that the chairman be authorized, in conference with Mr. Morss, to prepare a circular letter to be sent to persons whose subscriptions have not been paid.

Unless some serious question should arise affecting the carrying out of the plans in a fundamental way, the Committee hopes that its protracted responsibilities are closed, and looks forward to the prompt beginning and early completion of the Walker Memorial with great satisfaction.

In regard to certain features of the situation, I may comment as follows:-

First, dining hall, etc. The Walker Memorial Committee has naturally never regarded the problem of the general dining arrangements as within its province. We have been glad,for certain reasons, that they should be combined with our building, but we have not been able to give such thorough study to this problem as to enable us to express a confident opinion in regard to this part of the plans or in regard to the best method of conducting this highly important service. We are of the opinion that the space

ALUMNI ASSOCIATION
OF THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY BOSTON

Dr. Maclaurin -3-
provided in the dining hall, the accessory dining rooms, the kitchen, etc. is substantially adequate and well proportioned, but just how this space shall be used seems to me a question requiring expert study. So far as I can judge, such study would not in any case need to involve important architectural changes or thereby delay the beginning of construction.

Some members of the Committee, including myself, are inclined to favor a cafeteria system for the great dining hall as a whole, believing that this will economize service as well as space and that, if it is well planned and well managed, the subsidiary dining rooms will meet all other needs.

Faculty and Alumi. There has been considerable interest and considerable uncertainty as to the relation of these to the Walker Memorial. I think I represent the consensus of opinion of the Committee in saying that we believe it best, for the present at any rate, that members of the instructing staff and Alumni share the use of the Walker Memorial with the undergraduates and that without actual exclusion of undergraduates from any part of the building there be an informal reservation of one dining room for their use with the expectation that they will also use the second floor library in the southeast corner as a sort of headquarters.

ALUMNI ASSOCIATION
OF THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY BOSTON

Dr. Maclaurin -4-
Maintenance. The report of June 1913, which has been referred to in one of the votes quoted above, recommended a uniform annual tax of $\$ 4.00$ on undergraduates and an associate membership for staff and alumi at $\$ 10.00$. For the combination building, the adoption of such a plan might be attemed with some difficulty, and it is appreciated that the tuition which our students pay is such as to make any addition objectionable. On the other hand, I can not help feeling that if the Walker Memorial is made absolutely free to undergraduates, they will appreciate it somewhat less than if they, by contributing to its support, make it in a different sense their own undertaking. Moreover, it will be extremely difficult, if the Walker Memorial is made free to all undergraduates, to collect any dues from instructing staff or alumni. Again, if the Walker Memorial has no independent income, in the absence of both endowment and dues, I fear it will suffer financially from the preference which the general treasury must always give to educational expenses. For these reasons, though the question has not been acted upon by the present Committee, I hope the idea of membership dues will not be abandoned without quite careful consideration of all its aspects. The alternative of optional membership and dues would, however, be entirely objectionable from my standpoint as membership ought to be universal for male undergraduates.


ALUMNI ASSOCIATION
OF THE
massachusetts institute of technology
BOSTON

Dr. Maclaurin -5-

In regard to certain features of the plans, I enclose a copy of a letter to the architect.

$$
\begin{aligned}
& \text { Very truly yours, } \\
& \text { do. or. Jyeu }
\end{aligned}
$$

March 15, 1916.

Dear Mr. Wan:
Thank you for your lottor of Perch Eth. It was the best judgment of the committee that whatever could be accomplished by the general circulation of plane, or even by their preentation to the Council, had been already gained, and that attention at the resent meeting should be focussed not on architectural details but on the general question embodied in the resolutions offered. I appreciate of course that we may have misjudged the situation to some extent and that we may have been over-anxious to see work begun promptly. However that may be, the planming rests finally with the Executive committee of the Corporation and has now passed from our hands to theirs, we reserving, as you know, the right to deal with minor alterations or to reopen the whole question if there should be any radical change, for example, in consequence of serious shortage of funds.

I am taking the liberty to refer your letter (with a copy of this reply) to President Mactomitin.

Very truly yours,
Nr. L. C. Meson.
(signed) H. W. Tyler.

# Boston, Mass. Mar. 22, 1916. $\mathrm{APB} / \mathrm{H}$ 

Dr. R. C. Maclaurin,
Mass. Institute of Technology, Boston, Mass.

Dear Dr. Maclaurin:-
This morning I tried to get you by 'phone but you were evidently having a long tussle with someone. This letter may serve the purpose.

In connection with laying out the cafeteria and dining room details in general, I would suggest that you personally 'phone or write $\operatorname{lir}$. Holt and, if feasible, make a definite arrangement with him to act in on advisory capacity, through Mr. Kedbon, with the understanding, however, that we may take other advice, as, for instance, that of Miss Stevenson of the Laboratory Kitchens. IVy point is that we ought to consult Holt on the details as soon as possible under definite arrangements regarding his compensation, however, that we should not necessarily confine our consultation to him, but be free to call in other authorities. This advice ought to be taken as soon as possible (this sounds like a doctor's prescriptron).

I want very much to have a talk with you soon, perhaps next week, regarding the running of these various new fundtions of the Institute's,- dormitories, Walker Memorial, commons, etc. If you have not decided how these matters should be taken care of, I would like to go over the subject with you.

Yours truly,
A. F. Bemis.


Mr. H. E. Kebbon,
Cambridge, Mass.
Dear Jix. Kebbon:-
In response to your letter of the 20th, enclosing revised plan of the Walker Memorial and requosting any criticisms I might have as soon as feasible, I essune you have heard, or will hear, from Dr. Maclaurin, with whom Dr. Tyler, Mr. Baker and I had a conference yestoxdey aiftemoon.

The revised plan in the main looks very good and I see no reason why a building with these general outlines should not be proceeded with.

Mr. Holt seems to be very much interested in helping to get the cafeteria and other dining room details as nearly right as possible to fft the conditions. Subject to whatover arrangementis D2. Maclauin may make with him for acting in a consultative capacity, it seems ta me it would be well to get in touch with him as soon as possible, giving him a dimension sketch of the plan covering space evallable for the purpose, thus enabling him to make a concrete guggestion regaxding the arragement of the fixtures, etc.

Personally I would favor getting advice from someone elso as well, possibly Miss Stevenson of the Laboratory Kitohens, Who was a grest ixiond of Mre. Richards and, undoubtedly, would be very glad to be of service in the matter.

> Yours truly,
A. F. Bemis.

COPY to Dr. Maclaurin.

# April 12th, 1916 <br> ABC 

Mr. C. A. Holt.
Cambridge, Mass.
My dear Mr. Holt.
I understand from Dr. Maclaurin and Mr. Kebbon that you are planning to leave within a few days for a trip to the West which will take you through Chicago. Both Dr. Maclaurin and Mr. Kebbon thought that it would doubtless be quite helpful to you in connection with the problem of the cafeteria in the Walker Memorial if you could stop off in Chicago to visit the University of Chicago. Inasmuch as I was recently in Chicago and took the occasion to visit the University for the purpose of seeing the cafeterias they maintain there. I was asked to write you and broach the subject to you. Would it not be possible for you to arrange to stop over in Chicago and spend a few hours during the middle of the day at the University of Chicago? I feel quite sure you would find it interesting and profitable.

At the time of my visit about the first of March I met Miss Cora C. Colburn who is at the head of all the cafeterias and dining rooms at the University. I have enclosed a letter of introduction to her, and I hope that she will be able to show you about her plant. If for any reason you should not be ankle to meet kiss Colburn, I think it would be well for you to see, if possible, Wife. Alice P. Norton, who is the mother of Prof. Norton of MII.T., but lives in Chicago and is connected with the University and is interested in matters of this nature. She would be able to show you around.

In order to save time and trouble. I might suggest that you call Miss Colburn's office by telephone from the city and make an appointment with her before you go out to the University. I am writing her that you may call upon her, and I will say in closing that I very much hope that the details of jour trip will be arranged to make this visit in Chdeago.

Very truly yours,
A. F. Bemis

QR

Copies to
Dr. Maclaurin
Mr . Kebbon

Apr. 20, 1916.
$A F B / H$

Dr. R. C. Maclaurin, Pres.,
Mass. Institute of Technology, Boston, Mass.

Dear Dr. Maclaurin:

## Walker Memorial

As arranged at the last meeting in your office regarding the Walker Memorial, I gave Mr. Holt a letter of introduction to Miss Colburn of Chicago University.

Also as arranged, I asked $\mathbb{M r}$. Holt to see how the plan involving two U-shaped serving counters would work out.

In connection with either plan of serving counter, I want to suggest making the dining room in the northwest corner of the first floor a grill room, and eliminating from the service in the main dining room all thought of special grill order service. Such service in my opinion would be impracticable for the main dining room, anyway, and under the plan I suggest those who wish the special grill orders would, naturally, go to the grill room for them. Such a room could be made very attractive, and I believe it would work out very well from a practical point of view.

There are one or two other suggestions I want to make regarding details of the plan in the north end of the basement and first floor, and assume that it would not be too late to make such changes when kitchen, dining room and storage room details are again brought up by Mr. Kebbon or you for consideration.

Yours truly,
A. F. Bemis.

COPIES to Dr. H. W. Tyler
Mr. H. E. Kebbon

# Boston, Mass. June 12, 1916. 

$\mathrm{AFB} / \mathrm{H}$

Mr. H. E. Kebbon,
Cambridge, Mess.
Dear Mr. Kebbon:
Walker Memorial - Basement Plan
Answering your query of the $9 t h$, there is nothing to which I object in the arrangement of rooms in the north end of the bascment of the walieer Hemorial recent plans, which to correct would require ony change in the proposed struoture of the building, as far as I con see.

Hy criticism is simply that with more study I am confidont a better arrengement of the vaxious functions can be worked up so that the servents' locker and dreseing rooms and, preferably, elso their dining rooms may be near the servants' entrance, as well as near the service stailway leading to the second stoxy, in order to avoid the necessity, according to present plans, of indiscriminate pesesting bock and forth through the suppl, behory end butcher's rooms of the servants working on the second floor, who, otherwise, would have no reason for getting down into those rooms. decording to the experts with whom I have talked, it is extremely important to keop 011 supply roomg partienlarly end, preferobizy. also the bekery and batcher shop, etc., under lock and key and constent supervision of the superintendont and away from servants who havo no businoss with that part of the work. Hotwithstanding thot IIr. Holt has approved of the plans in this particular as they oxist, I an confident that some further study, possibly some further expert advice, would result in materiel improvement.

I hope to make a more concrete suggestion myself but am, naturally, seriously hundicapped in so doing by láck of expert knowledge on the subjoct.

Yours truly,
COPY to Dr. R. C. Maclaurin.

- A. N. Bemis.

June 22, 1916.

Dear Dr. Maclaurin:
At a conference attended by Messrs. Bemis, Ford, Holt, Kebbon, and myself, the plans for the basement of the Walker Memorial were discussed, and Mr. Kebbon agreed to study the matter further, as there appeared to be time, without delaying the construction.

It was the belief of all of us that one change ought to be made at this time, namely: the provision for a simple covered driveway at the north end of the building for delivering supplies and for the removal of waste. I understand that this was previously cut out on account of the estimated cost of $\$ 2000$, but this was said at our meeting to be excessive, and in the absence of such a tunnel it seems pretty certain that there will be serious trouble from ice and that the basement entrance is likely to be unsightly with the inevitable exposure of garbage and other waste.in process of removal. If it should seem necessary to economize somewhere else, to offset this, wouldn't an insignificant reduction in the height of the building cover it? I raise this last question on my own responsibility.

I have arranged for a conference between Mr .
Ambrose Walker and $\mathbb{M r}$. Kebbon in regard to the fireplace.
Very truly yours,
ir Jjen

Dr. R. C. Maclaurin.
apferve onvice serve serie drivern of N. Kou kr punded cst is hept lo minuixion. Pewhefry caniffecen so at ho
 Aru in prpien made thendich truer tive the ju ca sme, somes to beth.




















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metreis

Dear Mr. Semis:
I wrote to Mr. Kebbon regarding the question that you raised with reference to the Walker Memorial and have just received his reply, as follows-
"In answer to your letter requesting information as to the provision which has been made in the Walker Memorial for the T. C. A. and other student associations, I would say that six offices have been provided on the top floor and two in the basement, making eight (8) in all, none of which have been definitely assigned any activity. I believe that eight is the number of offices prescribed by the Walker Memorial Committee, but I shall investigate the matter more fully."
Yours sincerely,

October 23, 1916.

Mr. A. F. Bemis,
P. O. Box 5179,

Boston, Massachusetts.


Pasquale Galassi. President PAUL T. CAMPBELL, Treasurer

ASSOCIATES
ALBERTO LEVIS
REGINALD HARDCASTLE


382 BOYLSTON STREET
BOSTON, MASS.April 27, 1921.

Densmore \& LeClear, 88 Broad Street,
Boston, Mass.

Mr. Bullock.

Gentlemen:
We are pleased to hand you herewith our formal proposal for furnishing and setting a terrazzo floor with either an $8 "$ or $6 "$ sandtary terrazzo base in one single space in a building in Boston.

You will notice that our proposal quotes three prices: the first price is based upon us furnishing you with a floor and base of either white or mixed colored terrazzo divided into panels $10 x 10$ with a brass strip and this price is based upon you furnishing us with a prepared concrete foundation to within $1-1 / 2 \pi$ of the finished surface.

Price \#2 means an addition to price \#l if we are to furnish a. so the $1-1 / 2^{\prime \prime}$ extra thickness of concrete foundation, making our work a total thickness of $3^{\prime \prime}$.

Price $H^{H}$ means to cover the labor for removing and carting away of $7 / 8 \%$ floor board and floor screeds now in the under concrete.

We have taken into consideration that you wish a first-class job in every respect and guarantee the surface against cracking.

If given this work we mean to carry this purpose out to the best of our ability.

Thanking you for the opportunity of quoting you, we are,
Very truly yours, P. GAIASSI CORPORATIONS,

$P G: S$ (Enc.)

## P. Galassi Corporation

P. Galassi, President<br>382 Boylston Street, Boston

Date April 27, 1921.

Dear Sir:
We propose to furnish and set on prepared foundation as described below:
Name of WorkTerrazoName of Structure and location......................unknownBoston, Mass.
as per plamsxandzspecifications:bymeasurements as described below(Archt.)
April 26, 1921

April 26, 1921

## submitted to us

For the sums as follows:
Upon a foundation furnished to us wi thin $1-1 / 2^{\prime \prime}$ of the finished surface, we will furnish and set in a room $100 x 100$ a white or mixed colored terrazzo floor having a $6^{\prime \prime}$ or an $8^{\prime \prime}$ sanitary terrazzo base at the four walls; the floor being out up by brass strips into panels of $10 x 10$, for the sum of ................................................... Price \#l ........ . . $\$ 5150.00$

# If we are to furnish and set $1-1 / 2^{n}$ extra thickness of concrete, please add to the foregoing sum....................Price \#2 ......... \$1000.00 

If we are to remove the present wood floor, whi ch we understand consists of one layer of $7 / 8^{\prime \prime}$ board and the floor screeds at present under concrete and cart same away from building, please add to the fore-
going sums........................................................... 700.00


THIS PROPOSAL IS SUBMITTED WITH THE UNDERSTANDING THAT IF IT IS ACCEPTED, THE CONDITIONS NOTED BELOW, SHALL GOVERN THE EXECUTION OF THE WORK.
FOUNDATIONS TO BE FURNISHED US TO WITHIN (on wa ..........in.) OF FINISHED SURFACE.

1. This proposal is subject to acceptance thirty days from date and is void thereafter at the option of the undersigned.
2. Loss of time due to strikes, lockouts, or any causes beyond our control to be added to the time of completion.
3. The use of hoisting facilities including labor and power for the operation of same, gangways, the necessary water, heat, light and storage space in the building to be provided by the owner or general contractor without expense to us.
4. No specific or pro rata charges for the use of telephone, plaster patching, general cleaning, general office expense, stenographer, watchman or temporary structures are included in this proposal. No allowance is made for pro rata charges of any sort or description.
5. This proposal is based upon the assumption that the fire insurance on our material, whether merely delivered at the building or set in place will be carried by the other party to the contract without expense to us.
6. If a surety bond is required in connection with our work add the amount of the premium.
7. Should additional plans or details, covering work included in this proposal and submitted to us during the execution of this work, fail to correspond with those drawings of date mentioned above, we reserve the right to readjust our prices to conform thereto.
8. We are to have opportunity for continuous and uninterrupted work from date we commence execution of work to date of completion thereof, or be reimbursed for expense incurred for any interruption for which we are not responsible. Where we are delayed through no fault of our own, in the installation of our material we shall receive at least $75 \%$ of the value of all material as manufactured for this contract.
9. Monthly payments to be made on or before the 15 th of the month of $75 \%$ of the value of the material delivered at the building ready to be installed, and $90 \%$ of the work done in the building during the preceding month.
10. Please note, that unless otherwise stated, we include in this proposal final cleaning of our work; which process to be done once, and once only, at such times as it may be deemed wise for the best interest of the work of all parties interested.
11. We are not to be held liable for defects which may appear in our work resulting from movement of foundations for which we are not responsible.
12. This proposal when accepted becomes a contract which is subject to the approval of our credit department.
13. The above clauses 1 to 12 shall take precedence over any conflicting provisions contained in any plans, specifications or other contract documents.

## गuxy 93, 2922.

W. W. E. Sral th, 4 Boy2iton Stwoot, Boston, Messs*

Dons 39\%*Snitha

 inozutes teeving up tho old wood sloos and tho soreodes


He hess egreod to put in to pesttgrn int hess submettod no design. It has occumpod to ve that poyhapes if you taiked with hig it zaticht havo aomothing to do boungucl inevining a thorough2y good job, no I Euggost then you hayo hiu propare a doskgn.
Wo are incilizod to accopt mproposition ss scon as doteilla exre arreanged but if the vorlic 2r to be done, no tine whould bo lost in gotting gtasctod as it wis.? tnke at lamet a month to do the job.

2910-2


Evarett Mosps.

To The Corporation
Massachusetts Institute of Technology Cambridge 39, Mass.

The Alumni Council of the M.I.T. Alumni Association wishes to present to you the following facts and recommendations:

1. The Walker liemorial was designed for and dedicated to the use of the Student Body of the Massachusetts Institute of Technology.
2. Since its erection the various activities housed therein have grown greatly so that present facilities are wholly inadequate.
3. It is of basic importance that the Walker Memorial remain the center of all of the general student activities.
4. To provide for present necessities, and allow for reasonable future growth, some sweeping change must be made.
5. Of the many interests now centering in the building, but one can be moved without serious detriment, namely the athletics in the gymnasium.
6. By freeing this space, remodeling and reapportioning the area thus made available, not only can all of the other student activities receive sample provision, but yet other activities now housed outside can also be provided for.

## THEREFORE

It is respectfully requested that the following changes be authorized and carried out:

1. The second half of the seaplane hangar be transformed into a gymnasium according to plans appended.
2. The Field House be increased in size to provide additional locker and bathing space to replace that given up by athletics with the relinquishment of the gymnasium.
3. The space thus freed in the Walker Memorial, namely the gymnasium, the adjacent locker and bath rooms, the hand bell courts, etc. to be remodeled and reapportioned according to plans herewith submitted.

An initial estimate of the total expense involved as originally computed is as follows:

| Hangar | $\$ 24,000.00$ |
| ---: | ---: |
| Walker Memorial | $103,000.00$ |
| Total | $\$ 27,000.00$ |

This original estimate can be modified, as shown in the appendix, to reduce the gross expenditure to a sum less than $\$ 100,000.00$.

Assuming the cost to be this amount, namely $\$ 100,000.00$, the several activities, most nearly concerned with the change, have voluntarily offered to pay $\$ 40,000.00$, or $40 \%$ of the total cost. The apportionment among the several activities will be based upon the additional space facilities offered to them under the revised plan. CONCLUSION.

The Advisory Councils of the several activities have declared their approval of this plan, namely, the assumption by the student activities of an obligation of $40 \%$ of the cost of the changes, to be paid as shown in the accompanying sheet.

The Alumni Council of the M.I.T. Alumni Association formally votes its approval of the plan as here offered, and respectfully petitions the Executive Committee of the Corporation to authorize it being carried into effect at once, transforming the hangar during the summer and remodelling the Walker Memorial during the Fall.


PROPOSED METHOD OF DIVIDING EXPENSE FOR WALKER MEMORIAL CHANGES.

Original Estimate (including 10\% addition)

| Hanger | $\$ 24,000.00$ |  |
| :--- | ---: | ---: |
| Walker |  | $103,000.00$ |
|  | Total | $\$ 127,000.00$ |

Revised Estimate


Institute Committee:
25 yds. plaster
1 Door Iights
2 Doors
Meeting Room:
Removing partition
340 yds. plaster
2 Doors
Stage
Voo Doo:
2 Doors
Mezzanine Floor:
Steel Work
500 yds. concrete slab (3) 2.50 per yd. 1250.00
Pinished floor 5000 ft. (3) .35 per ft. 1750.00
Pipe Rail around balcony 180 ft.
(9) 2.00 per ft. 360.00
(If ornamental, design should be given for estimate)
Plaster under floor slab 500 yds. (3. $4.00^{\circ}$

1200 yds. fireproof office partitions
(3) 15.00

57 Doors
(2) 40.00

75 Light outlets
(20.00

4 Fireproof stairways (3) 1000.00
3000 sq. yds. painting
14 outside windows through wall@ 300.00
Lounge ceiling:
312 ydis.
(2) 15.00

Plaster and glass treatment
similar to room 2-390
Skylights through roof slab, including
removal of present roof slab, 1650
sq. feet (3) 20.00
Rear:
Partition 75 yds. © 15.00
Lower five outside windows a 125.00
Ladies' Rest Room Partition
20 yd̃s.
(14) 15.00
$\underline{2000.00 \quad 10360.00}$
18000.00
2280.00
1500.00
4000.00
1350.00
4200.00
4680.00

2 Doors
(2) 40.00
300.00
80.00

5 sanitary hoppers and enclosures 150.00 750.00
3 wash bowls 75.00
2 skylights 256 sq. ft. (0) 15.00
225.00
$3840.00 \quad 6945.00$
Changes in heating and ventilating system

## ESTIMATED COST OF REMODELING THE NAVAL HANGAR.



> Memorandum in regard to Staff and Mlumni at the Walker Hemorial.

It is understood to be not yet settled whether undergraduates will pay a uniform assessment ot not.

The instructing staff need something in the nature of a Faculty Club, particularly for social purposes at the noon hour.

AIus. Wo special provision seems to be important for alumi in view of the location of the new Institute.

With a vievi to identifying staff and alumni with the Walker Memorial, promoting social relations between these groups and the undergraduates, providing social opportunities for members of the staff and gaining needed support for the Nalker Memorial, the following proposals are offered:

2t. Instructing staff to have a reserved dining-room, belcony and living-room on the second floor with an sdditional assessment of $\$ 5$ or $\$ 10$ (to be determined). (ro part of the Perans paying the fur might form a Facculty cent., Building wold be closed to members of the staff, and mombers of the staff not paying any assessment would have free use of the other dining-room facilities.

Alumni haven associaten or sustaining membership carrying the same privileges as those indicated for the instructing staff, the fee to be \$5. pur yern Taunderyy cent

It is on question whether staff and alumi members should be identified with the present rechnology club. In favor of such identification it may seem that the Club will have no tbabr logation in the near future and whatever tradition
attaches to the name will be preserved in the Walker Memoriel. On the other hand, it may be better that the associate membership in the Walker Memorial should be independent of any previous tradition and that the club should, if it pleases, continue ite name and organization without collecting dues and with the possibility of holaing occasional meetings in the Walker Hemorial until such time as circumstances may determine either lisoontinuance of the erganization or the shoice a neviloastion a differmo poling

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY

WALKER MEMORIAL BUILDING
COMPARISON OT ESTIMATES.

Total amount of April 1916 estimate,
$\$ 460 ; 000$.
Reductions made since April 1916:


## WALKER MEMORIAL.

Reductions proposed but not made -
(1) Use of simpler hardware, $\$ 1,000$.
(2) Omission of terrace lamp posts, 1.500. Hrarkertuade
(3) Omission of partitions \& finish, and fl.rms. 5,000.
(4) Omission of ornamental plaster, Dining Rm. 7,100.
(5) Omission of finish from Bowling Alleys, and Pool room,
(6) Omission of all finish from terrace, 800.
(7) Fire place to be simplified,

1,000.
(8) Changing tower limestone to artificial,
3.500 .
(9) Driveway, to be eliminated,
3.000.
(10) Leaving terrace basements entirely unfinished,
1.500.

$$
\text { Total, } \ldots . \$_{0}
$$

Additions \& increases since April 1916 estimate.
(I) Increased cost of excavation,

Due to excessively soft bottom and unusually long hall to dump.
(2) $50^{\circ}$ piles used instead of $30^{\circ}$
(3) Size of footing increased to include extra piles required, $\$ 15,600$. 7.300.

Total increase in fdtns.a/c
2,700.
(4) Base course changed from $1^{\prime}-6^{\prime \prime}$ to $2^{\circ}-6^{\prime \prime}$

> in height, 1,200.
(5) Pilaster stones made solid instead of pointed.

1,400.
(6) Brick lining added in gym.

Total increase in stone \& Brick a/c, - -- --
$\begin{array}{r}1,600 \\ \hline\end{array}$
(7) Furring added along exterior walls.
3.300.

Total increase in partition a/c 3,300.
(g) Stairways changed from wood to limestone,

4,000 .

(9) Increased cost of floors,
Changesfrom maple to parquetry oak
in Dining room, Lounging room \& Reading Rm.
(10) More expensive type of door \& trim specified,

2,400.
(9) Increased cost of floors,
Changesfrom maple to parquetry oak
in Dining room, Lounging room \& Reading Rm.
(10) More expensive type of door \& trim specified,
(9) Increased cost of floors,
Changesfrom maple to parquetry oak
in Dining room, Lounging room \& Reading Rm.
(10) More expensive type of door \& trim specified,
$\begin{array}{lc}\text { (9) Increased cost of floors, } \\ \text { Changesfrom maple to parquetry oak } & 2,400 \\ \text { in Dining room, Lounging room \& Reading Rm. } \\ \text { (10) More expensive type of door \& trim specified, } & 2,600 .\end{array}$
(11) Fireplaces made more elaborate,
(12) Beamed ceilings added in Dining Rooms \& Grill room:
(13) Wood cornices added in several rooms,

3,000
4,200.
3.800. 1,400. Piowhent:
(14) Wood panelling added in Dining Rooms,

Grill room \& Lounges, Entrance lowly
(15) Mirrors added in grille room,

Total increase in Mill
Total increase in Millwork a/c,
4.500 .
(16) Marble floors added in entrance lobbies and Trophy room, Total increase in marble $a / c$,
(li q. $\mathrm{L}-1250$ :
2. 700.

2,700.
(17) Interior ornamental grilles added in Main lobby, Dining room \& N.vestibule, $1,200$.
(18) Tower window grilles elaborated.
$\checkmark$ (19) Fire shutters added @ north end of Dining room,
(20) Bronze saddles added
(21) Exterior transom grilles added
$V(22)$ Circular stair added. 2,800. 200. 400. 400. 300.

Total increase in ornamental iron $a / c$,
(23) Hardware total increased in proportion to increase in millwork and ornamental plastering
Total increasein hardware $a / c$,
3.200.
$\checkmark(24)$ Furred ceilings added in reading rm.
4.200. Lounge rooms, grille rm. North Lobby, faculty \& Alumni rooms, North Dining rooms and floor Cafeteria \& Toilets,
$\checkmark(25)$ Metal ceiling added in list floor Cafeteria, 1,200.
(26) Plaster beams added in Reading rm. 6,700. Lounge room, trophy room \& North dining rm .
(27) Plaster sinkage in rooms outside of Main dining room, 700.
(28) Plaster cornice added in North lobby, Trophy room \& North dining rm.
(29) Furring added in upper walls of gym. 1:000.
(30) Fluted pilasters added in Trophy rm. 1,100.
(31) Fluted columns added in Dining rm. 2,500.
(32) Ornamental plaster ceiling added in

Faculty \& Alumni Dining rm.
400.
(33) Fluted pilasters added in North

Dining rm. 300.
(34) Plaster mouldings added in Faculty \& Alumni rooms and library, 400.
(35) Ornamental brackets \& Caps added in Reading rm, lounge rooms, Trophy rm. 500.
(36) Ornamental plaster band added in

Main dining rm. 2,200.
(37) " plaster caps added in
(37) " plaster caps added in
600.
(38) Inserts added for hung ceilings, -.. 400 .

Total increase in plaster a/c,
23,000.
(39) Ornamental painting specified, 1,500. (40) Canvas walls added in lounge room \& Reading rm. 400. Total increase in painting $\mathrm{a} / \mathrm{c}$ 1,900.
(41) Increase in plumbing $a / c$, 12,400. 20 more fixtures than in Apr. estimate. Increased price of plumbing materials. More elaborate system than was contemplated in April 1916.
(42) Increase in Heating \& Ventilating a/c, 10,900. Large amt. of indirect heating required. Thermostatic control added. Increased costs of $\mathrm{H} . \& \mathrm{~V}$. materials,
(43) Increase in Electrical a/c,
3.400.

Covers addition of bracket lamps, floor \& wall plugs and the cost of more ornamental fixtures than originally contemplated.
(44) Miscellaneous increases not tabulated, 2,000.

Total amt. of Increases,
\$119,800.
Amt. of April estimate as reduced, $405,200$.

Total amt. Apr. est. as reduced plus increases, - . - \$525,000.

Explanation of $\$ 125,000$ difference between Estimate of January 1917 and $\% 400,000$ Appropriation.
(1) Proposed Reauctions from April 1916- Rstimates winich have become commitments

Construction of driveway at north Ocoupation of Serrace Basement $\$ 4000$. $\$ 2500$. 1500.
(2) Increased cost of poundations

Inereased aost of Iabor
Increased cost of excavation Increased length of piling Inereased sige of footings
(3) Increase in Labor Rates

Labor on Foundations - $\$ 35000-$ see (8)
Labor on Superstrueture $65000-6 \%$
Labor on Interioz Fork $75000-20,5$
11500.
4000. 7500.
(4) Increase in eost of Materials 23500 .

Materials in Poundations 825000 - See (2) Materials under contract 170000-Not Inc. Materials Still to be purchased $\frac{155000}{525000}-3.5 \% \quad 23500$.
(5) Incresse in Architectural Requiroments
62000.

Tnterior Pinish 28500.
Ornamental Iron
plastering o Painting
Plumbing, Heating \& Ventilating and Blectrieal Work

## MOEAI

Mote:
From the ssme plans andestimate made in Apri1, 1916, would have totalled $\$ 490,000$ instead of $\$ 585,000$. would have totalled $\$ 490,000$ instead of $\$ 585,000$. Increase in Labor Rates - ratem (3) 11,500. " cost of Mat. $"$ (4) $\frac{25,500 .}{35,000}$ "Cost of Nat. - (4) $\frac{25,500 .}{35.000 .}$

Reductions suggested by Mr. Kebbon, . . . -
(1) Omit finish in Billiard Rm. Bowling alley
and shooting gal. - . - $\$ 2,200$. $?$
(2) Reduce Gym. walls to $8^{\prime \prime}$ \& $4^{\prime \prime}$ and use
sand limes Brick, ........... 1,600.
$\begin{array}{cc}\text { (3) Make } 1 N . \& ~ S . ~ s t a i r s ~ o f ~ a r t i f i c i a l ~ s t o n e, ~ & 2,000 \\ \text { (4) Omit terrace posts, }-\ldots, \ldots & 1,500 .\end{array}$
(5) Make gym. Window grills of Hollow metal or wood covered, ......... 2,000.
(6) Eliminate fireplace, small lounge, 700.
(7) Make ent. lobby grilles of wood, 200
(8) Dining rm. floor, straight oak, ..... 1,000.
(9) Vent outlets in dining rm. ceiling of
flat metal. .............. 400.
(10) Make serving rm. ceiling of wood, 1,000.
( (11) N. West lobby walls of plaster instead of wood. - -
(12) Grille rm. ceiling directly on concrete, Plaster wainscot instead of wood, .... Eliminate Mirrors, ................. 200.
150.
200. - ? ? velan 500.
(13) N. تast lobby gran.floor \& base instead of marble, . . - 500 . Grilles simplified or made of wood: - - 100.
(14) Eliminate panelling from Passage 134,
(15) Omit finish from faculty \& alumni dix. rm. 1,700. Faculty \& Alumni Din. Rm. ormit ornaments from ceiling,
350. Simplify cornice \& eliminate ${ }^{\text {minfouldings, }}$ ?
(17) North Dining rme ceiling on slab, Eliminate small beams, " window trim \& entrance panels, 500. 1,300. Make pilasters flat, Iighten cornice,
(18) Trophy rm. plaster on conc. beams and add small wood beams directly to ceilingl,200. Omit fluted columns, 1,600.
(19) Omit false ceiling in serv. \& Dishwash.rm. 150.
(20) " wire lath walls from gym. . . . ." plaster side walls painting 400. 250 . 300.
(21) Replace marble in basmt. by granolithic. 200. Eliminate ceiling plaster from basmt.rms. 500.

Total amt. of estimate minus reductions,

\$23.800. <br> <br> FOR TRE} <br> \title{

$\frac{\text { PROGRAM OF REQUIREMMNTS }}{\text { FOR TREE }}$ <br> \title{

$\frac{\text { PROGRAM OF REQUIREMMNTS }}{\text { FOR TREE }}$ <br> WALKER MFMIORIAL CLUBHOUSE <br> NEW TECHITOLOGY SITE <br> CAMBRIDGE, MASS. <br> $$
-:-
$$

}

## THE BUILDING

The design and choice of building material depends on the type decided upon for the Institute as a whole. It will cost approximately $\$ 250,000$. The Memorial should be in its general character, simple, dignified and attractive. It should be easy of access, and have entrances on all sides with ample light and air. There should be provision made in the form of porticos, etc., for such out-of-door sociability as has found a place in the past on Roger's steps.

THE INTIERIOR
It is assumed that there may be four to five floors, but the grouping of rooms proposed must be considered merely tentative.

The interior should include the following rooms with about the area specified. The division between floors is somewhat arbitrary. It will be necessary to provide lunch space for at least six hundred students.

## Basement

Lunch Room
Lavatories

$$
2 .
$$

First Ploor
Entrance Hall ..... 1000
Administrative Office ..... 500
Reception Room ..... 500
Social Rooms ..... 2500
Grill Room ..... 1000
Rsading Room ..... 1000
Second Floor
Student Offices ..... 2000
Writing Room ..... 1000
Room for Games ..... 1000
Library ..... 1500
Faculty Room ..... 1000
Third Floor
Gymnasium(To be used later asAuditorium)
Fourth Floor
Kitchen ..... 1000
Additional Offices for Student Activities ..... 1000
Miscellaneous ..... 1000
Additional lunch space ..... 3500

