

THE TECH

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RICHARD C. MACLAURIN
THE LEADER

The Man Who Has Now Brought a New Technology to a Glorious Reality.

President Richard Cockburn Maclaurin, under whose guidance the Technology has found its way out of troubled waters to its present position of security, is a Scotchman, but in process of becoming an American citizen; for as soon as was possible his application was filed for naturalization. He was born in Edinburgh in 1870; his early boyhood was spent in New Zealand, whence he returned to England to complete his preliminary education in English schools. In 1892 he entered the University of Cambridge where he held a foundation scholarship in St. John's College. He took two degrees at Cambridge—Bachelor of Arts and Master of Arts, the thesis work for the latter being most advanced mathematics. He received the Smith Prize for excellence in mathematics. Upon his graduation he was elected Fellow of St. John's College.

Dr. Maclaurin next spent ten months in the United States and Canada (1896-97) studying and visiting educational institutions and spending much time at McGill, Toronto, and Leland Stanford Universities. Returning to England he re-entered Cambridge, this time to study law, and was awarded the McMahon Law Studentship, the most highly valued of its kind in the university.

In 1898 Dr. Maclaurin was appointed Professor of Mathematics in the University of New Zealand, became a trustee of the university and took an active part in the organization of technical education in the colony. In 1903 he became Dean of the Faculty of Law in the university, which office he held for four years. In 1907 he was invited to take the chair of Mathematical Physics at Columbia University, New York, and a year later was made head of the Department of Physics.

In 1898 the degree of Doctor of Science was conferred upon Professor Maclaurin by Cambridge University for his researches in pure science, and again in 1904 he was honored with the degree of Doctor of Laws by the same university for his achievements in the study of law.

November 23, 1908, Dr. Maclaurin was appointed by the Corporation of Technology to be President, and from that day he has been steadily working for the Institute with that success which has been so often set forth by announcements of substantial aid to it and its departments. Without a head since the resignation of Dr. Pritchett, the Institute had been unable to discuss important questions. One of these was the manifest impossibility of continuing its work in its present quarters if the full plans of its founders were to be carried out, and there were financial problems of consequence. Technology was then moving under shortened sail till the real captain should come aboard.

Dr. Maclaurin unified the Corporation and the Faculty, and with his

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Connected Buildings Arranged in Harmony With the Ideal Location

Departments to Flank Court With Library as Center—Design allows for Future Expansion



President RICHARD C. MACLAURIN

President Richard C. Maclaurin today makes public the first authoritative statement of the plans and presents the first drawings of the great white city that is soon to take its place on the Charles River Embankment. It will indeed be a white city, as the picture suggests, and to a much greater degree, since the material selected for the exterior walls and facades is a white Indiana limestone, although, of course, the walls themselves will be of that great nineteenth century invention, reinforced, or, as the latest nomenclature expresses it, armored concrete. The interior courts will be faced with light-colored brick.

From the photographs any one can gain for himself an idea of the magnificent proportions of the great group of buildings. There has never been selected in this country a site comparable to this for an educational institution and Technology is rising splendidly to meet the occasion. In the midst of the great metropolis of Greater Boston there has been established the picturesque Charles River Basin, a water park of hundreds of acres. Its embankments afford an unexampled opportunity for that municipal planning of architecture which is such a delight in European cities. Until now the opportunity

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EFFICIENCY THE KEYNOTE OF GENERAL PLANS

Logical Arrangements of Buildings, Future Development and Needs Considered.

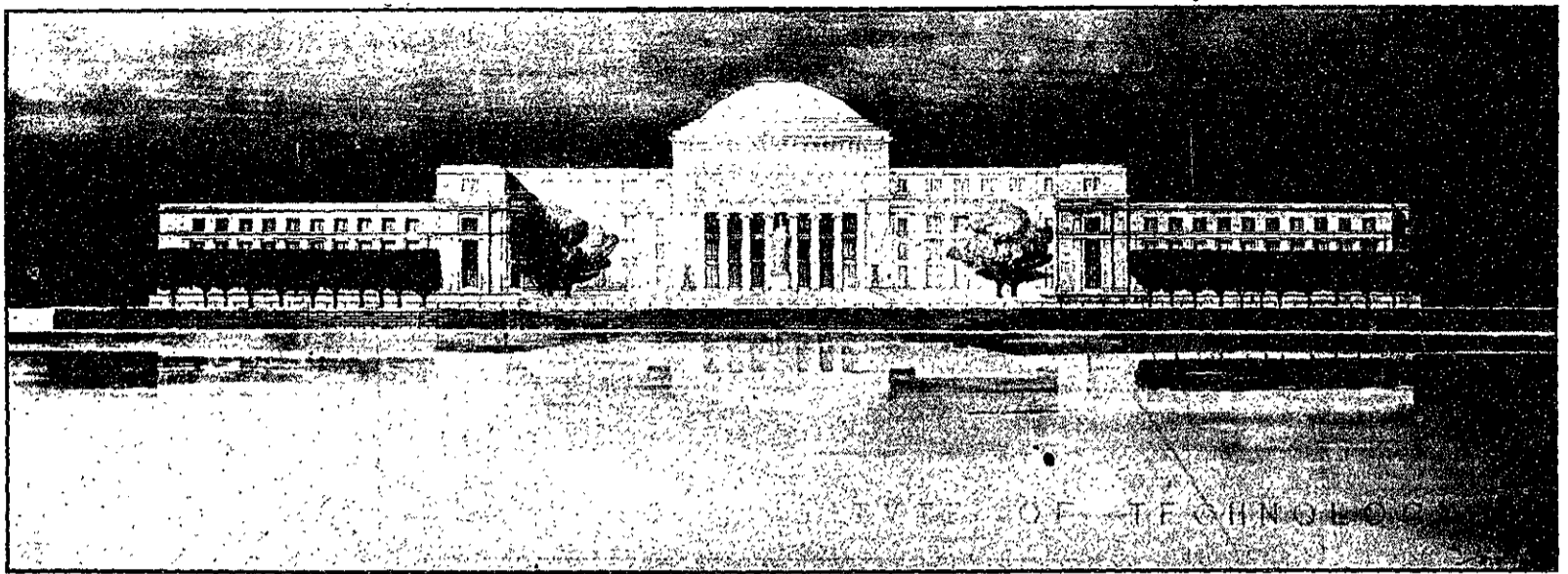
When it was evident that the Massachusetts Institute of Technology would presently be moved a unique method was adopted in its planning with the idea of securing buildings fitted for the special purposes of the school. It not infrequently happens that an institution must fit itself to what it finds in the way of construction, and this always involves more or less of misfitting. At the outset, therefore, it was determined that Technology should make no mistakes of the kind. To this end, therefore, the heads of departments were asked to prepare figures of what each one would wish if there were no other departments to be considered. In the same way the Walker Memorial committee was asked to state the needs for the student activities and with the latter the committee on athletics was requested to co-operate. There was thus secured a fundamental group of statistics, the space requirements for study rooms, lecture halls, laboratories and raughting rooms, together with those for administration, care and storage and for the student housing and activities, and little by little during the past two years the demands have been compared and arranged, so that the space needs have all been well determined.

Then there came the remarkable and generous offer of John R. Freeman of Providence, who volunteered to give as his contribution to the school from which he graduated a full summer in the consideration of the engineering problems. There has never been made any research into the conditions, equipment and fitness for the purpose of educational buildings comparable to this. Mr. Freeman sent his agents into every recent building for special use in American colleges, while President Maclaurin and members of the Faculty used their summer vacations in Europe in a similar investigation. The result has been a report in many typewritten volumes, profusely illustrated, which outlines every important educational building, including those for general or students' use that is to be found.

Mr. Freeman analyzed and reduced the vast mass of material and in his final report, a masterpiece of engineering literature, he outlined what the best means of attacking the different problems would be, and defined his own idea of what form the great school should take. He discussed the lighting, heating and ventilation, drainage, materials of construction and indeed every essential, and outlined the best form arrangement in his opinion for the buildings. The single structure was suggested by him, although its form as now to be adopted is not the same. The present one seems more elastic. The facts gathered have been of greatest value, and Technology owes a deep

(Continued on Page 3)

Huntington Hall, Saturday at 8.30 Sharp



FRONT ELEVATION OF EDUCATIONAL BUILDINGS AS SEEN FROM CHARLES RIVER BASIN

NEW MASS. TECHNOLOGY

(Continued from Page 1)

ty has been practically unimproved. Technology will show what can be done.

At the best place on the Cambridge Esplanade Tech has secured its land and, as the leading school for architects in the country, it will erect monumental structures that will enhance its fair name. And for an architect it has selected from among its own best product, William Welles Bosworth, '89, established these fifteen years in the city of New York.

Forum Like Court Approach to Library

No other than a dignified approach can be possible to the great central court which opens on the river. This rises in broad terraces of steps, suggestive of the splendid stairways of ancient temples. Here the gradual uplift of the court leads the eye to the great colonaded portico of the modern temple of learning, the Library.

Above, the eye is caught by the masses of the buildings, which, rising step on step as they recede, converge their lines to a focus in the impressive Roman dome that surmounts the library.

Educational Portion a Connected Group.

The educational portion of the New Technology may be described as a connected group of buildings, three and four stories in height, clustered about the library. There are to be no skyscrapers, as some individuals have feared. The library is the central feature in the constructions, as the book must be in education. And there is to be here the truest ideal of architecture, since the buildings express their purpose in every feature. The great dome rests on a vast structure whose pillared portico is ever an invitation to enter. It looks down on the court from a height of nearly two hundred feet and is the dominant note in the composition. The central court, open to the river front, expands into two large, though minor, courts when near the Esplanade. These openings, with other courts interior to the buildings and not public, ensure the necessary lighting of the rooms. The public courts afford a most flexible means for development of the esthetic. Grass plots will be here and there with splashing fountains. Trees will accentuate the corners, the greenery of shrubs will relieve the classic architecture and convenient seats will invite the visitor to tarry a while in pleasant places. From the purely decorative point of view the

opportunities are great, while the main quadrangle of nearly three hundred feet square affords the environment and place for some massive central figure or heroic sculptured group.

The New Technology will not be a touring mass to awe one with its sheer bulk, but will be a vast connected assemblage of harmonious structures, conceived and developed with artistic spirit and unity, and of



that scholastic order which will relate the structures to their purpose.

Classic Architecture with Pilaster Treatment.

Mr. Bosworth has selected a pilaster treatment of architecture as being the most consistent. Here light and air are the essentials, and this construction permits the recesses to be almost entirely of glass. At the corners, to accent the masses, are pavilions which will satisfy the eye as to the stability of the structures. The whole is to be of classic order.

In the buildings nearest the river, which here present long facades, the pilasters will be two stories in height, with the third story really constituting the frieze. In the structures farther back there is a fourth story, which, being above the entablature, is, in architectural phrasing, as in popular, termed attic.

It is this succession of buildings, increasing in height from front to rear, that is a distinctive feature of the New Technology and furnishes grades and lines that converge towards the massive octagon, from which rises the drum and its culminating dome. The dome is Roman in feeling and, with its ever open eye of perhaps thirty feet across, will as-

sure the day illumination of the reading room beneath. The general architecture will be simple yet exceedingly dignified and refined, and will carry by these qualities and its magnitude and perfect proportions rather than by its ornament.

Courts Will Light the Study Rooms.

The courts will be flanked by the department buildings, and the latter are to be linked together so as to afford circulation throughout all portions of the vast structure. It will be unnecessary for the student to go out of doors in passing from one exercise to another, and he may thus avoid, if he wishes, the shock of going suddenly from a warmed room into the chill of wintry weather. The bother of coat or raincoat will be removed.

The comparatively narrow buildings will receive light from both sides and, in addition, it is planned to place all the draughting rooms on the top floor. Here, hidden by the parapets, there will be the standard saw-tooth skylights and, as fortune will have it, the north is so placed that the skylights will run across the narrow dimension of the longer stretches of buildings.

Very Flexible Disposition of Departments.

For the fundamental principle of interior construction there has been adopted a system of bays of uniform size, which may in a way be compared to the sectional bookcase in the home library. The floors will be hung on the walls entirely free of the partitions. Rooms can then be made in any multiple of the unit merely by removing partitions, and since these support no floors, desired changes will be easy and inexpensive. Each department may in this way have its rooms precisely suited to its needs, instead of modifying its needs to suit the limitations of its rooms.

Sectional Bookcase Architectural Planning.

Besides expanding into adjacent room space the plannings permit growth in much the same way as the sections of the library. There is in the layout as planned today the chance of expanding the departments into future buildings, and the immediate constructions will afford the opportunity of erecting extensions or wings so that any department may expand into a building suited to its needs. And like the stacks of a bookcase, this may be added usually in either one of two directions, and with some departments three directions of expansion are available.

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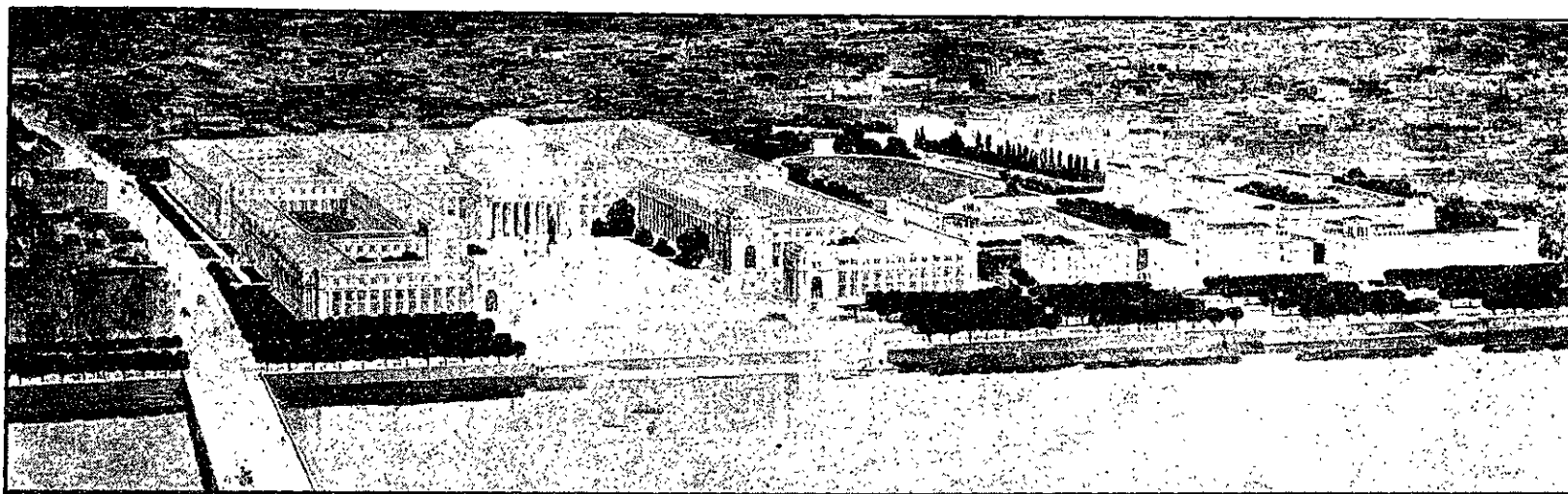
PRESIDENT MACLAURIN

(Continued from Page 1)

personality gained the confidence of the alumni and bound them as never before into a great force working for the benefit of their Alma Mater. One of the first fruits of this was the gift by T. Coleman du Pont of half a million towards the purchase of a new site, and that at Cambridge was chosen. Here there came an almost unnoticed bit of patriotism for the Institute, for when the payment was really made for the land, the Corporation without any fuss or advertisement made up the necessary quarter million and paid down the cash. Following up the idea that it was proper to ask the Commonwealth of Massachusetts to continue its aid to the school, President Maclaurin and the alumni took up this matter, and the signing of the bill by Governor Foss following the du Pont gift came as an insurance of the future. When the site question was settled the alumni began their quest of the million which they already have half assured, and in the midst of the planning the enthusiasm was heightened enormously by the great gift of the two and one-half millions of Mr. Smith. Other gifts have followed in sufficient measure to warrant the beginning of construction. As Dr. Maclaurin himself has said, the whole plan is beyond the present means of Technology, and gifts of the future must come to realize the full fruition of the great Institute. What is done now will be done in the best manner and will include the essentials, while the splendid student quarters, which are to be disposed about the Walker Memorial, remain for the future.

It must not for a moment be imagined that while the financial and construction portions of the Technology story have been so much in the public eye that there has been any neglect of the educational features. New courses, new laboratories, and even the full half interest in a new and unique school, testify that the Institute keeps abreast of the times and is prepared to furnish the kind of training that the rapid advances of technical engineering from time to time demand.

In all these varied functions Dr. Maclaurin has showed himself to be master of the situation, and by his skill, knowledge and his personality is smoothing away the difficulties that have attended the maintenance of Technology on the broad foundations laid for it by its projector and first president, William Barton Rogers.



BIRD'S-EYE VIEW OF ENTIRE LAYOUT. THIS DRAWING GIVES, PERHAPS, THE BEST IDEA OF HOW THE FUTURE TECHNOLOGY WILL LOOK

EFFICIENCY THE KEYNOTE OF GENERAL PLANS

(Continued from Page 1)

debt of gratitude to this great Rhode Island engineer.

Another alumnus, Professor William O. Crosby, devoted his attention and experience to the suitability of the soil for foundations. It is well known that the land which has been gained from the old Back Bay by filling is less stable than that of the formerly solid portions of Boston and Cambridge. There has been in many parts of the region a well defined settling, although fortunately most of the buildings have gone down their two or three inches without injury to themselves. Change in level in the Institute buildings is to be avoided, and accordingly the nature of the subsoils was to be determined. In addition to the borings which were numerous, tests were made by means of heavy loads to determine the coefficient of sinking under weight.

Next there was the selection of an architect, and about six months ago William Welles Bosworth, '89, now of New York, was chosen, the third of the Tech alumni here to undertake important work. Those who are conversant with the enormous detail of architectural work like this, the planning of fifteen acres of buildings to be built at once will realize how constantly Mr. Bosworth has been devoted to this special work. He has given attention strictly to the absolute needs of the planning, and for that reason the "pictures" that architects present oftentimes for the first feature of their work have here been neglected till today, although constructions are already under way at the site. Mr. Bosworth has had the constant aid and advice of Professor James Knox Taylor, head of the Technology Architectural Department. In his career as supervising architect to the United States Treasury, an office which he resigned to come to Tech, Mr. Taylor has had intimate acquaintance with large work; and the Institute constituted him consulting architect for the new buildings.

The alumni of Technology are again in evidence in the actual work of construction. Much was required in the way of general grading, and for a year this has been under way under the care of John T. Scully, '00, the head of a Cambridge corporation. The structures will be built by the Stone & Webster Engineering Corporation, the concern having five of its principal men, including both of those who give the name to the firm, Technology graduates.

NEW MASS. TECHNOLOGY
(Continued from Page 2)

This unique planning, the result of the careful consideration of the various technical men at the heads of the departments in consultation with the architect, will provide for the future. The coming needs of any department, unknown as they may be today, can be met without disarranging any of the departments that have been established. This provision for the future will assure to the departments about twice as much space as

Park Commission. Here the frontage of the Technology lot is fifteen hundred feet, while the length along Massachusetts Avenue is about the same. Half of the estate is to be devoted to the educational plant and the other half, to the east will be for the students and social facilities which the Institute has lacked and for which the foundations have just been laid. It is the intention to develop a dormitory system surrounding the Walker Memorial, gymnasium, Commons and other student

running parallel with the Esplanade. Pratt School of Naval Architecture.

Continuing along Massachusetts Avenue will be the Pratt School of Naval Architecture and Marine Engineering, for the maintenance of which Technology is to receive three-quarters of a million.

Auditorium and Engineering Departments.

Within the interior court, behind the Pratt School, may be seen the great Auditorium. This will replace Huntington Hall for the larger gatherings of the Institute and students. It will be double the capacity and will seat a couple of thousand.

Parallel with the Pratt School, but bordering the great central court, will be Hydraulic Engineering, and beyond this Mechanical Engineering, with abundant opportunities for taking in greater space. This expansion will be towards the back of the grounds and towards the railway. Near this will be placed the laboratories that involve the handling of very heavy weights. Near the railway will be placed the power plant. This at Technology figures up to about four thousand horsepower. Such a plant is ceaseless in its demands for fuel, and added cost is necessary if this must be brought in wagons.

Library and Administration Offices.

The central feature, the hub, about which everything is displayed, is the Central Library, which will here be relieved from the great scarcity of space that now characterizes it. Being the center of so many departments, the departmental libraries—in the present Institute scattered through different buildings—may be essentially in the ends of the spokes of the library wheel and be available to the departments in their own portions of the building, and yet fall under the care of the Central Library and its specially trained assistants.

The Administration will be to the right of the Library, the rooms of the Bursar and Registrar on the first floor and the President's and other offices above. Physics will have the wing to the left of the Library.

Biology, Chemistry and Mining

Coming again to the Esplanade front, the arms of the section to the right or east, the arms of the building that surround the minor court, will be devoted to General Studies and Biology, the latter occupying the inner wing parallel with the Esplanade. For the former, which it should be understood are increased slowly, there has been given little room to

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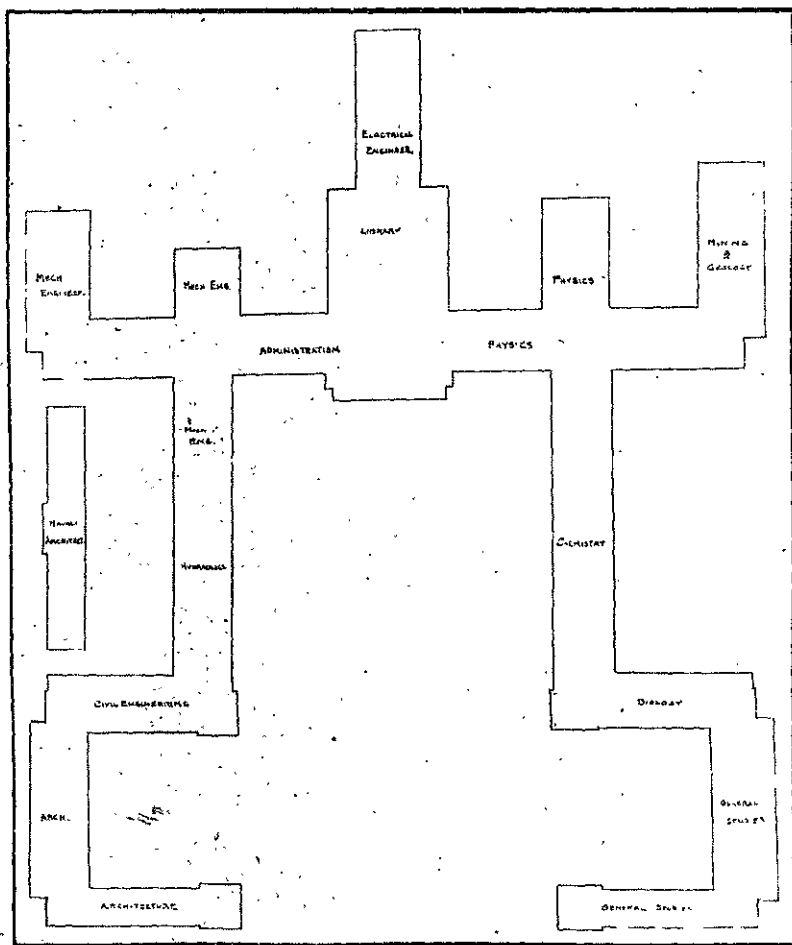


DIAGRAM PLAN OF THE EDUCATIONAL BUILDINGS, SHOWING THE LOCATION OF EACH DEPARTMENT

they receive when Technology makes its move two years hence.

Layout of the Departments.

(With reference to the distribution of the departments a glance at the bird's eye view or at the plan will be instructive.)

The great court opens upon the Charles River Esplanade, a boulevard established by the Metropolitan

features. Being on the east side of the grounds, the transportation needs will be supplied by the Kendall Square Subway station, only a block or two distant.

In the educational group, Architecture will occupy the right angle at the corner of Massachusetts Avenue and the Esplanade. On the third side of the court which Architecture borders will be Civil Engineering,

THE TECH

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SATURDAY, NOVEMBER 8, 1913

At a time of general rejoicing like the present, it is natural to ask, "To whom do we owe all this that we have received?" That, in this case, is no simple question. It would take many entire papers to give due credit to each one who has had a hand in it, so we will mention here only a few which occur to us at the moment.

President Maclaurin's untiring efforts in the cause of a Greater Technology place us in his debt more deeply than we can express. He has ever been on the alert to advance her interests, and has perhaps done more than any other one man to bring about the present glorious climax.

Another faithful booster has been O. R. Freeman of Providence, who devoted a whole summer of his valuable time to working on the plans.

W. W. Bosworth, the New York architect, is another loyal alumnus whose work has meant a very great deal to the undertaking.

Last, but not least, we wish to pay our tribute to the men who have contributed the money which has made this great step possible. We wish to thank not only "Mr. Smith" with his millions, but every loyal alumnus who has added his mite to the grand total. May Technology always continue to graduate men of their loyalty.

The man not on the paper who has done most to make this issue possible is Mr. John Ritchie. With his ever-present eagerness to help, he has rendered inestimable assistance to the paper, and through it to the student body. He has always helped us from time to time as occasion has arisen, and we are sincerely grateful, but on

this particular occasion he has done so much for us that we wish to offer a special word of thanks to our genial benefactor.

H. E. KEBBON, '12
NOW IN CHARGE

Another Institute Graduate Becomes
Local Representative for
Mr. Bosworth

Harold Eric Kebbon, the architect's local representative, is a graduate of the Institute, class of 1912. While at Technology he was very active in student affairs, being president of his class in the Senior year. He was editor-in-chief of Technique, won his class numerals and was a principal in the Tech Show.



HAROLD ERIC KEBBON

After graduation from Course IV he worked with John R. Freeman, '76, who was considering the engineering problems of the New Technology. Mr. Kebbon traveled all over the United States for Mr. Freeman, investigating various educational institutions, gathering material that was later to be used in planning the New Technology.

When ground was broken in Cambridge he was made Mr. Bosworth's local representative. Mr. Kebbon's position is one of great importance and responsibility, for he is the nominal head of construction.

In the rapid development of humanity which is taking place at the present time it is necessary that each individual take a deep and absorbing interest in one certain subject, but it is equally important that the people as a whole concern themselves with a variety of subjects, this necessitating that each individual have a number of topics in which he takes at least a passing interest.

Unless such were the case, the whole mass of humanity would be working without any coherent purpose, each unit being independent of all the others, and following a path of its own regardless of how that path interferes with those of the other units.

A professional man is liable, on account of the intense interest he feels in his work, to overlook these facts; and it is on this account that I make a point of advising each of you to mix as much as possible with his fellows, and to endeavor to make himself appreciated by them as something more than simply a hard-working engineer.—Waddell.

THIS IS THE NEW ART SHOP
Opposite Technology



ARTISTIC PICTURES AND FRAMING
Technology Banners and Pennants
College Posters, Seals and Souvenirs
Room decorating at moderate Prices
B. KABATZNICK
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The Technology Union Dining Room

is conducted on a co-operative basis for the benefit of the students of the

Massachusetts
Institute of Technology

It serves wholesome food at the lowest possible prices, and also furnishes employment to students.

42 Trinity Place

SOPHOMORES BREAK RELAY RECORD

Freshmen Decisively Defeated In Record-breaking Time Of 4:50 2-5.

The Sophomore Relay Team defeated the Freshman Team in the race run yesterday. The Sophomores have been very confident and sure of a victory ever since practice began, so that their victory surprised no one. However, both teams ran in very fast time. The Freshman team was fully as fast as the 1915 team of last year. The Sophomores finished in the record-breaking time of 4 min., 50 2-5 sec. This lowered the record set last year by exactly seven seconds.

The Sophomores took the lead at the start and were ahead throughout the race.

The flag passing of both teams was very good except for one or two bad

TECHNOLOGY WINS CROSS-COUNTRY RACE

Cook Star Of Run—Fast Times And Good Team Work A Feature.

Yesterday the Cross-Country Team swamped Holy Cross by the score of 23 to 67, scoring five men before the first Worcester runner crossed the line.

Cook, the individual winner of the race, showed excellent form, finishing in the very fast time of 23 minutes and 45 2-5 seconds. He has been showing great possibilities right along and running a consistent second and third on the team. Yesterday's performance makes the hopes of Technology for the Intercollegiate high as he and Benson are both in good trim. Benson, after leading most of the way at a fast clip, was seized with cramps on the Field and fell back to

FOOTBALL GAME IS SIX TO SIX TIE

Miller '16 And Gould '17 Star—Many Fumbles Mar The Contest.

The two football teams struggled four full periods of clean hard playing to a 6-6 tie. Both teams appeared slightly nervous at first and fumbles were frequent. Later these occurred less often and the ball was handled more cleanly. The Sophomores tore the 1917 line to pieces at the start of the game and Miller took the ball over at the extreme edge of the field. This made a punt-out necessary, and Miller caught the ball, but allowed it to touch the ground. No attempt at a goal was permitted.

The Freshmen then found themselves and began to take the offensive. They rushed the ends and tried several forward passes successfully. Gould and Winton made long runs and the latter finally plunged ten yards to the Sophomore two-yard line. Farnsworth then carried the ball over. After the relay race had been decided the 1917 men played desperately, realizing that they must take the game to win the day. But their forward passing was inaccurate and they were unable to put the ball across. Miller, Dewson, Krigger and Kaula played exceptionally well for the Sophomores, while Gould played

TUG-OF-WAR GOES TO THE FRESHMEN

Took Only Two Pulls To Decide The First Event On Field Day.

At 2.30 sharp the two Tug-of-War teams ran out on the Field amid the cheers of their classmates. The Sophomores and Freshmen both wore gray jerseys, while the 1916 men had the north end of the Field and 1917 the south. Both teams waited expectantly for the shot that was to open the 13th annual Field Day.

At 2.24 the shot was fired and both teams settled back with a vim that well stretched the rope. Quickly it was seen that the Sophomores had the drop on the less experienced men. It took but very short time, however, for the rope to quiet down and it gradually stood still with the 1916 men about a yard in the lead. For the first few moments the utmost efforts of each side were of no avail. Soon, however, the 1917 men began to gain and slowly, steadily and surely the Sophomores were pulled to the post. At 2.26-10 the second shot was fired and victory belonged to the Freshmen.

Immediately after the Relay race the two teams appeared again, 1916 determined, 1917 confident. This time the order of the two teams was reversed, the Sophs taking the south



RECORD-BREAKING 1916 RELAY TEAM

slow ones on the part of the Sophs.

Lawrason and Friend started the race, the pole being taken by Lawrason at the start. During the first 220 yards Lawrason gained about five yards on Friend. The next pair to run were Lapham and Gardiner. Lapham increased the Sophomores' lead by about two yards. Next Page 1915 outran Hulburd, making 1916 ten yards in the lead.

Then C. Dean '17 outran Goldstein '16, cutting 1916's lead down to three yards. The next two runners, K. Dean '16 and Doon '17 were evenly matched and the Sophomores still were about four yards ahead. Then Hayes '16 outran Day by about seven yards, giving the Sophs a lead of twelve yards.

Quihot '17 gained about four yards on Comiskey; and Sullivan '17 gained two more yards on Reid. Hine maintained the Sophomore lead of six yards, neither gaining nor losing.

Next Lieber gained about nine yards on Williams and Reed made 10 more yards on Bernard, giving 1916 a lead of about 20 yards. Finally, Loomis gained two more yards. Thus the Sophomore team finished over thirty yards ahead of the Freshmen.

SOPHOMORE NOMINATIONS

Nominations for 1916 Class officers open today. The officers to be elected are: President, Vice-President, Treasurer, Secretary, two members of Institute Committee, two members of the Executive Committee, and two members of the Athletic Association.

All nomination papers must be signed by at least ten members of the class.

The nominations close Saturday, November 15, at 4 o'clock.

second place. Nye came in third, about seventy-five yards behind Benson, beating out Newlin by a scant margin. Lee was close behind. After a little interval a squad of two Holy Cross and two Tech men entered the Field. Guething, who was merely running a time trial and not scoring for Tech, was in the lead with two Holy Cross men behind, but at the the lower turn Higgins of H. C. sprinted and beat out Guething by a few yards. O'Brien tried to follow his team mate, but was unable to pass Guething. Wilkins finished close behind, and this closed the scoring for Tech. Best, Brown and Donnelly of Tech came in before the rest of the Holy Cross team scored in the following order: Roesch, Lachapelle, Crowley and Brannigan.

The team scores were:—
Tech—1, 2, 3, 4, 5, 8; 23.
Holy Cross—6, 7, 12, 13, 14, 15; 67.

Graff was forced to drop out because of a bad foot.

Tech's team distinguished itself by two things in particular: First, the closeness of the scoring men; and second, by the all-round good times.

Next Saturday the men go to Hanover, to compete in the N. E. I. C. A. A. run. The teams prospects are bright and both Dartmouth and Brown being weakened by the loss of their stars the chances for first place are good.

The order of finish was as follows:
Cook, Tech; Benson, Tech; Nye, Tech; Newlin, Tech; Lee, Tech; Higgins, H. C.; O'Brien, H. C.; Wilkins, Tech; Best, Tech; Brown, Tech; Donnelly, Tech; Roesch, H. C.; Lachapelle, H. C.; Brannigan, H. C.; and Daly, H. C.



WINNING 1917 TUG-OF-WAR TEAM

brilliantly for the Freshmen. Winton also put up a strong game, especially on the defense.

The Sophomores kicked off and took the ball quickly on downs. They advanced fifteen, fumbled, and then held '17 for downs once more. With the ball on the 30-yard line Miller went around end for a touchdown. No goal attempted. Score: Sophomores 6, Freshmen 0.

Sixteen kicked off again, the ball going only about 20 yards. Thompson fumbled and Stowell recovered. Babbitt was injured and was replaced by Hunt. Simpson went in at quarter for '16, just as the quarter ended with the ball on '17's 40-yard line.

Jewett tore off 6 yards on a fake kick around left end, but the next play '17 held the Sophomores for downs. Winton made 10 yards around end and Gould made 5 more through center. Thompson made a slight gain and Gould again made five through tackle. Farnsworth made a short kick to Simpson. Dewson went through tackle for 15 yards, Krigger failed to gain and Simpson fumbled, but recovered. On another attempt Winton threw Simpson for a 5-yard loss, after which Love-

side and the Freshmen the north. Both the teams were a little over hasty to get the drop, so considerable jockeying resulted. On the drop it was again seen that the Sophs had the advantage for they gained about two yards. Gradually the Freshmen seemed to gain strength and again it was only the matter of a short time before the 1916 men were being dragged along. There was still fighting blood in the 1916 men, but good even counting on the younger men's part enabled them to gain momentum, and the Sophomores lost the last and final pull in the time of 2 min. and 10 sec.

joy punted. Winton made 10 yards and immediately repeated. With the ball on the two-yard line Coach O'Brien sent in orders for Farnsworth to go through center and the latter did so, tying the score. Farnsworth failed on an attempt to kick the goal. Score Sophomores 6, Freshmen 6. '17 kicked off to Krigger, ending the first half.

1916 kicked off to Gould and the later ran it back 20 yards. Farn-

(Continued on page 6.)

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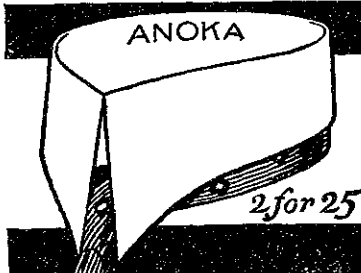
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PRATT SCHOOL OF NAVAL ARCHITECTURE

The place of honor on the Massachusetts Avenue front of the New Technology has been assigned to the Pratt School of Naval Architecture and Marine Engineering, recently endowed by the late C. H. Pratt of Boston. Mr. Pratt is one of the men who without personal acquaintance with the officers of the Institute left most of his estate to a department for which the Institute is celebrated the world over, but which is costly to maintain. Professor Cecil H. Peabody is the head of the department of Naval Architecture, and how celebrated the school is may be seen from the statement of a German student in the course, that he came to the Institute because there is no school comparable to it in his own country. There is also a son of a prominent Clyde shipbuilding man in Course XIII.

Mr. Pratt's will was the subject of a lively legal controversy in the courts, in which Technology was the winner. Only three conditions were made in the will, and these were: That the capital possessed by the donor should at his death remain in the hands of trustees until its amount reaches \$750,000, and that on receipt of the money "the said Massachusetts Institute of Technology shall forthwith erect upon its lands a substantial building of a kind and appearance and according to plans and specifications to be first approved by said trustees, and for that purpose is to use such portion of said fund as may be necessary." The remainder of the fund is to be kept for the support and maintenance of the school. The third condition is that the building shall have suitably inscribed on its outer walls the name, Pratt School of Naval Architecture and Marine Engineering, and that a bronze tablet bearing the inscription: "Presented by Charles Herbert Pratt to the memory of Eleanor Franklin Pratt, Catherine Blake Pratt and Franklin Stetson Pratt," shall be properly placed in its interior. The fund is now in the neighborhood of \$700,000, so that in about two years the condition of amount will be met.

FOOTBALL GAME A TIE

(Continued from page 5.)
worth went through tackle for ten more, Gould made an additional ten through center and followed it with 20 more. The latter was not allowed and '17 was obliged to punt. Dewson made 30 yards through guard, putting the ball in mid-field once more. The Sophomores punted and Thompson ran back 5 yards. He followed this by 40 yards though tackle, bringing the ball to '16's 20-yard line '16 then held for downs. The Freshmen soon regained the ball in almost the same place and tried to score on a forward pass, but Dewson intercepted it. Lovejoy kicked and the quarter ended with the ball in '16's possession in mid-field.

Miller opened the fourth quarter with a 5-yard gain and Allen went through for ten more. '16 punted and Miller intercepted a '17 forward pass, running it back 15 yards. Gould intercepted a forward pass to Krigger, carrying the ball 30 yards. '17 was penalized ten yards and a forward pass failed. On the fourth down Gould attempted a field goal from the 30-yard line. '16 rushed the ball from the 20-yard line to the center of the field, where '17 recovered the ball after blocking a kick. Gould made 15 yards on a forward pass just before the whistle ended the game.

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NEW MASS. TECHNOLOGY

(Continued from Page 3)

expand. These are studies which are obligatory upon large groups of the students, and they will grow in proportion to the general increase in the whole school. Biology, however, which in its full significance here includes Public Health, is given an excellent outlet. Chemistry will occupy the long building on the farther side of the great court and Mining Engineering and Metallurgy will occupy the northeast corner. Electrical Engineering finds its place behind the General Library, and this situation will allow its incomparable collection of books to be essentially a part of the General Library. The accompanying cuts in this issue give a clear idea of the plans.

Magnificent Sight from the River

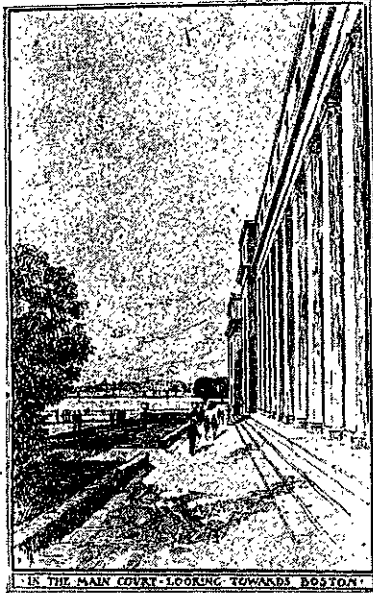
The picture that presents the elevation or view from the river, shows

strikingly the splendid proportions of the whole group. It is not possible to give the proper depth to the court, but one must realize that the vast dome is back from the Esplanade about six hundred feet. But the dignified character of the whole composition is evident, the splendid proportions of the structures to the front, and the building up of the masses as they converge, and towering aloft, the splendid dome, within which Bunker Hill Monument, if it were set, would show itself only by a few upper courses and the cap stone projecting through the "eye." There is no building comparable to this one in capacity in New England, excepting perhaps some of the great mill structures, and no other like it in architectural effect.

STUDENT BUILDINGS COVER ONE-HALF OF ENTIRE PLOT

Dormitories and Gymnasium to Be of Latest Type—Walker Memorial Central Motive.

Important as are the educational structures of the New Technology, they by no means comprise the whole of the plannings. Just as the educational courses look to it that the mind is broadened by literary studies in



addition to those purely technical, so the constructions will see to it that the social life of the young men is properly fostered. Till recently this has not been well cared for, owing to the lack of dormitories and social meeting places, but even now the old defect has been to a considerable extent removed by the establishment of the Union. In the Technology-on-the-Charles the grounds have been cut squarely in two, and it is the eastern half that will provide for the out-of-school life and activities of the students.

Fully Half the Lot for Student Life and Activities.

A great grouping of buildings (see the bird's eye view) will stretch along the Esplanade for more than an

present plan whereby many of the students get their meals at the Union, while dormitories will fill the space along the river and back to the great athletic field. The whole territory here is conveniently near the Subway, which in its course from Park Square to Harvard Square comes very close to the corner of the estate at the Kendall Square station.

Origin of the Walker Memorial

When General Francis A. Walker was president of Technology his attention was brought to the lack of social facilities, but the bread and butter needs of the Institute were then the absorbing thought. After his death the idea grew till it took the form that there should be a social center for the students, and that it should bear General Walker's name. Funds to the amount of one hundred thousand dollars were subscribed, but since it was then evident that the Institute could not much longer remain on Boylston Street, it was deemed prudent not to erect immediately any permanent building. Meanwhile, constructions for laboratories afforded space for the present Union and dining room; so the Walker Memorial fund has quietly grown till now it touches two hundred thousand, and the structure that this will erect is to be the nucleus about which the student life at the New Tech will segregate.

The plans of the Walker Memorial Committee call for a dignified building that will be in complete harmony with the educational group. It is to face the Charles in the center of the space allotted to student interests and very near, connected by a covered gallery, will be the Commons, where it is proposed to provide on much larger scale than at present for the meals of students and professors.

Memorial to Be Club House for Students.

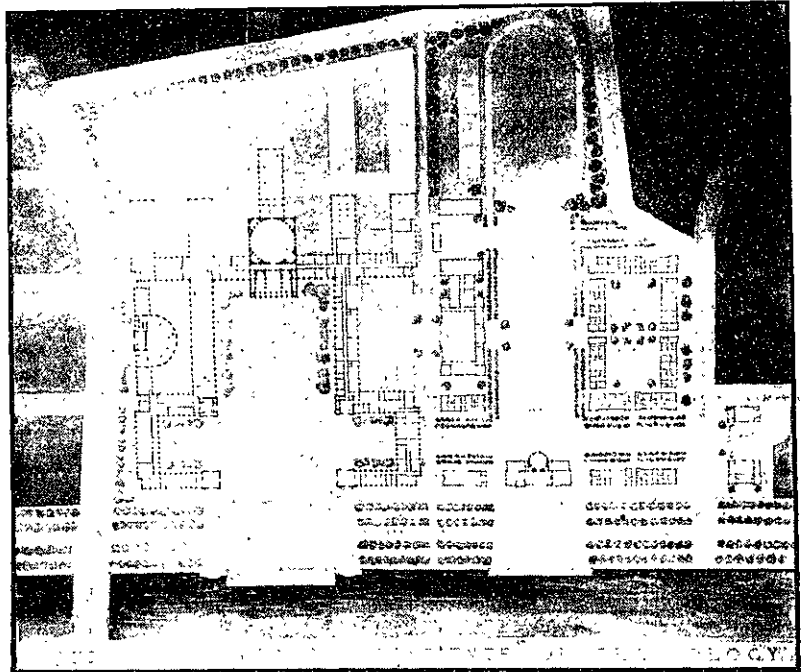
The purpose of the Walker Memorial itself may perhaps be best expressed as the club house for all the students. Here every one will feel at home, with an opportunity to entertain guests if desired. The committee has recommended a vast living room of four thousand feet area, which will open upon a terrace, with

all its appointments, including correctional rooms for those students who cannot take the regular work. A large gymnasium space is required, and it is hoped to have the great floor with an area of fifteen thousand feet. The track, it is expected, will be thirteen laps to the mile.

Outdoor athletics will be cared for by a great field in the rear of the grounds, with a track of four laps, a 220 straight-away, provisions for the other sports and a fine grandstand. The entrance to this field will be very conveniently placed with reference to Kendall Square and will not subject

occupying them. The arrangements are to be the best known to practical men. There will be an abundance of sleeping porches, the best of sanitary appliances and plenty of showers. Technology will look to it that its dormitories conduce first of all to the health of the students.

The fundamental plannings of this great student unit are due in the first place to the work of John R. Freeman, who assembled the information concerning the student housings in all the latest of the educational constructions. These figures were then placed in the hands of the special



DETAILED PLAN OF THE EDUCATIONAL AND STUDENT BUILDINGS

student or spectator to the inconveniences of the present grounds in Brookline. The Walker Memorial adjoins the dormitories and the Commons. Immediately behind the latter is the gymnasium, while at the rear of this is the field, equally close to the dormitories.

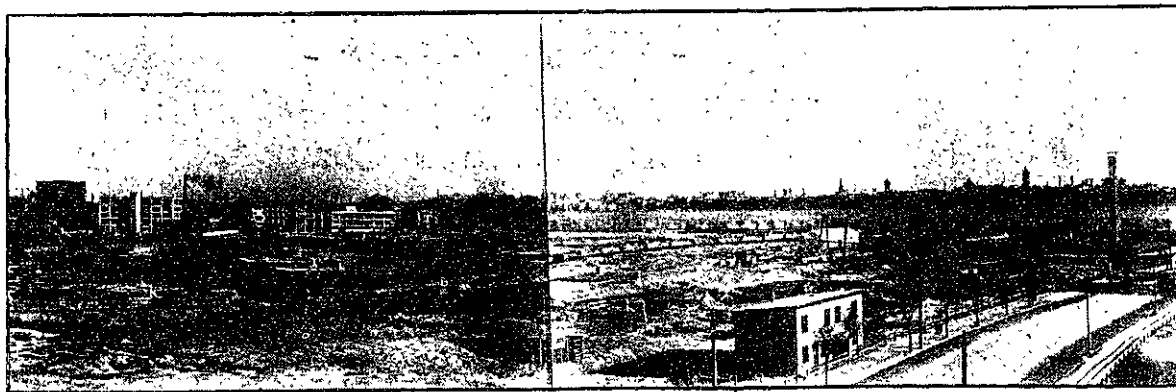
Up-to-date and Sanitary Dormitories.

It is planned to make two groups

Walker Memorial Committee, of which Dr. Harry W. Tyler is chairman, and were carefully considered with reference to this particular site. The architect may be depended upon to erect here buildings as well adapted to their purposes as are the educational buildings. The work will not begin at once, however, for at the moment the educational group has the right of way. It is sufficient of an undertaking to erect the fifteen acres of construction that will here be needed to house the enormous educational activities of Technology, so that the student buildings may wait a year or two till some of the more urgent of the others are out of the way. And again, while the Walker Memorial fund will perhaps erect the central feature in the group, there will still be needed large sums for the gymnasium and other structures, for which the necessary funds are not yet in hand.

Be patient and don't try to get on too fast. You may be over-estimating your own abilities. It takes all summer to ripen the best apples.—Baker.

Of course there are times in a man's professional career when it may be advisable for him to assert himself and demand proper compensation for his services, if he thinks that they are not adequately remunerated; but this should not be during the first few years of his practice, when he is in reality serving his apprenticeship. Later on, especially after marriage, when the welfare and comfort of wife and children depend upon the amount of his earnings, it becomes a man's duty to look out for the dollars.—Waddell.



A GENERAL VIEW OF THE SITE AT PRESENT, LOOKING TOWARD THE CHARLES RIVER BASIN FROM MASSACHUSETTS AVENUE

eighth of a mile and of considerable depth, behind which will be disposed the gymnasium and the athletic grounds. It is estimated that these buildings, when erected, will call for three-quarters of a million. Plans of a fundamental nature have been carefully developed by a special committee, and these will form the basis of the final work of the architect. There is to be for the principal feature the Walker Memorial, near at hand the Commons, an enlargement of the

a view of Boston across the Basin. Administration and public rooms are proposed and a small auditorium. Here will be housed the many student activities, The Tech, Technique, Tech Show, The Inst. Committee, etc., some thirty in number, with committee rooms and utilities.

It is estimated that the new gymnasium will call for one hundred thousand dollars and that it will be spacious—about forty thousand square feet in area. It is to be up-to-date in

of dormitories ranging along Ames Street on the eastern boundary of the grounds. They will be on what is known as the "staircase system," where comparatively small groups of men get access to their rooms through the same stairway. This is deemed better than the "hotel system," where there are long corridors and many men. The stairway dormitories resemble the private house and tend to the closer intimacy of those

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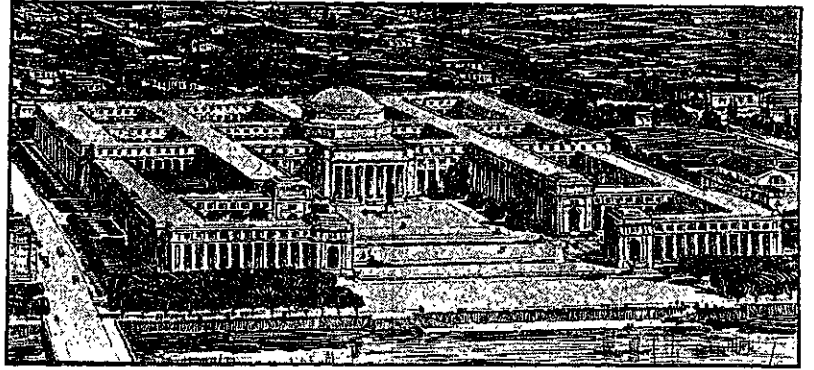
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BIRD'S-EYE VIEW OF EDUCATIONAL BUILDINGS

SIZE OF BUILDINGS COMPARED

Trinity Church or Public Library
Would Fit Into Court.

There will be two and one-half acres of roof-lighted draughting rooms at the New Technology-by-the-Charles, and the floor space will approximate from twenty acres for the educational buildings that are now under construction. These will make a Great White City of connected buildings lighted and ventilated by nine courts. The student who enters at one of the wings and traverse all the buildings once will have walked a mile and the floors spaced end to end would make a way forty to sixty feet wide from the State House to Harvard Square.

If the buildings were set up on Washington Street (Boston) the great white river front would run from the Old State House to the Old South Church (800 feet), including both and

all the intermediate buildings, while the block would extend towards the water so as to include the Custom House (1,000 feet).

There will be one great court (360 feet square) in the very center of the educational group, with an extension to the Esplanade out of which deploy two minor courts (160 feet square each). This affords from the steps of the library a view between the flanking buildings of about seven hundred feet to the Esplanade, which is itself two hundred feet wide. Into the central court could be set Trinity Church with its grounds, or the Boston Public Library, with room about them on all sides that would suffice for an ordinary city street, while the whole of the present Technology lot on Boylston Street, including the land of the Boston Society of Natural History, would go into the great court and its entrance, with fifty feet to spare between it and the buildings of the New Technology and a nice grass plot between it and the Esplanade.

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WILLIAM BOSWORTH THE ARCHITECT

Man of Broad Education and Wide Experience—Product of Technology.

The architect of the New Technology is William Welles Bosworth of New York, who began his architectural training in the Institute, which he joined in 1886, being affiliated with the class of 1889. After leaving Technology he entered the office of H. H. Richardson, where he remained for a



WILLIAM WELLES BOSWORTH
Architect

year and a half. He left this office to become associated with Mr. Olmsted in landscape work for Leland Stanford University in California. Later, for two years, he was on the staff of the "American Architect," and during this period made extensive studies of European architecture, especially in Rome. Going into business for himself, he designed various buildings for the Hampton Normal and Agricultural Institute in Virginia.

In 1896 Mr. Bosworth decided to devote several years to the broadening of his architectural training by studying in the best schools of Europe. He went first to London, where he worked for a while under the stimulus of Alma Tadema, and who encouraged him to devote months of work in the British Museum on the study of Greek subjects. He then decided to go to the Beaux Arts in Paris, where he entered the preparatory atelier of Godefroy Freynet. Here he soon earned a great local reputation. After completing his work in the preparatory atelier, he joined the atelier of Gaston Redon, the architect for the Louvre. Later he spent a considerable time working under Chaussemiche, who is now the architect of Versailles and the Trianon. He then went to Holland, and for a considerable period to Rome.

On his return to America, Mr. Bosworth entered the office of Carerre and Hastings, for whom he worked on the block plans of the Pan-American Exposition. Later he went to the Exposition as Resident Architect, and was responsible for the design and construction of a considerable number of subsidiary buildings. He also designed several of the buildings of the St. Louis Exposition. After remaining with Carerre and Hastings for three years, he spent some time studying architecture in Spain, and on his return to New York opened an office for himself.

He worked for several years designing the gardens for Mr. John D.

SPECIAL COMMITTEE ON WALKER MEMORIAL

Prof. Tyler and Colleagues Have Investigated Problems of Student Life.

The present Walker Memorial Special Committee was appointed by President Maclaurin in March, 1912, at the instance of the Walker Memorial Committee of the Alumni Association, to work out a more definite plan for the building, and also to consider and report on matters affecting the physical and social welfare of the students.

This committee, consisting of A. F. Bemis, '93, Dean Burton, Prof. A. A. Noyes, Dr. J. A. Rockwell, with Prof. H. W. Tyler as chairman, have held many meetings, several of which have taken the form of conferences on special topics with members of the faculty and with groups of undergraduates.

It has collected and studied a large



PROFESSOR HARRY TYLER

amount of data from other institutions through visits by J. H. Scarff, '11, and by the courtesy of J. R. Freeman, '76, and his alumni agents. It has corresponded with alumni and with college graduates at the Institute, and in general has studied these difficult problems, both broadly and thoroughly.

Rockefeller at Pocantico Hills, and all who have seen these gardens recognize their exceptional beauty. For the last six years a great deal of his time has been devoted to doing architectural work of various kinds for Mr. John D. Rockefeller, Jr., for whom he is just completing a private residence in New York. This residence is remarkable for its classic simplicity and dignity, and in all his later work Mr. Bosworth is remarkable for his power of getting fine effects by the simplest means. He evidently dislikes complication and ornateness, and never uses ornamentation except with some definite purpose in mind, and then sparingly.

The most important work upon which Mr. Bosworth is now engaged is the headquarters of the Western Union Telegraph Company. This is a thirty-story building at the corner of Broadway and Dey Street, is being constructed of white granite and is to cost between five and six million dollars. Those who have seen the plan and model of this building have been impressed by its grand simplicity, and the officials of the Western Union Company confidently expect that it will be recognized as the best building of its kind in New York. All who have employed Mr. Bosworth extensively in recent years speak in terms of unqualified praise of his originality, his good taste, his classic sense of simplicity and his efficiency in dealing with practical problems.



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