

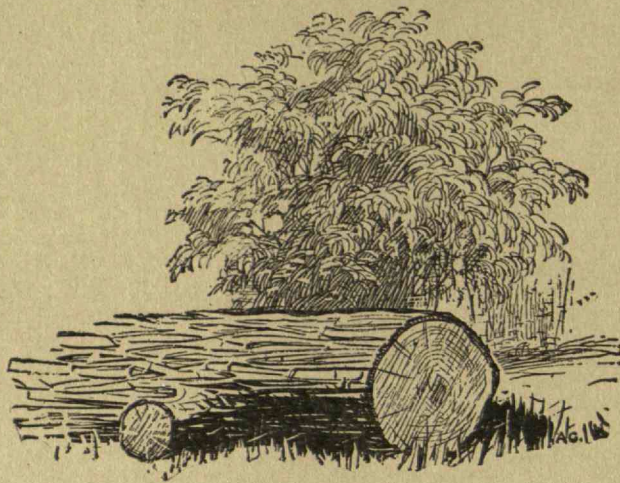
THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY



FEBRUARY
1 9 2 4

PUBLISHED BY THE ALUMNI ASSOCIATION



—are you sure you deserve it?

“Give me a log with Mark Hopkins at one end of it and myself at the other,” said, in effect, President Garfield, “and I would not want a better college.”

But if Mark Hopkins was an inspired teacher, it is just as true that James A. Garfield was an inspiring student.

Sometimes Garfield's praise of his professor is quoted in disparagement of present day faculties—the assumption being that we as listeners are sympathetic, all that we ought to be—and that it is the teacher who has lost his vision.

Is this often the case?

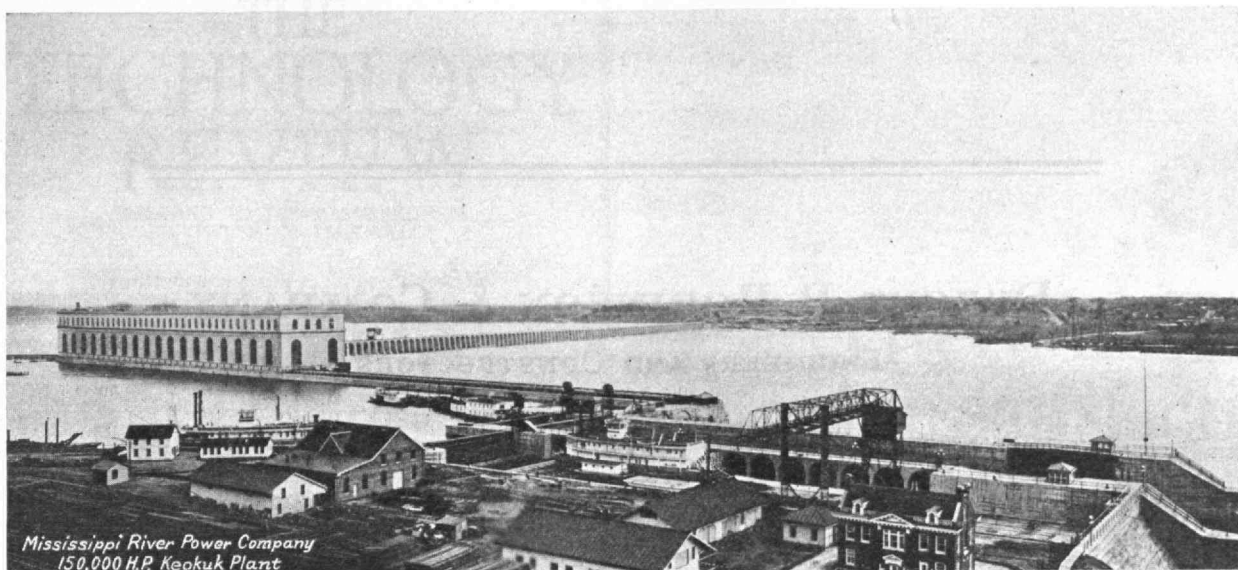
It is the recollection of one graduate at least that he did not give his professors a chance. Cold to their enthusiasms, he was prone to regard those men more in the light of animated text-books than as human beings able and eager to expound their art or to go beyond it into the realm of his own personal problems.

This is a man to man proposition. Each has to go half way. Remember, there are two ends to the log.

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an Institution that will
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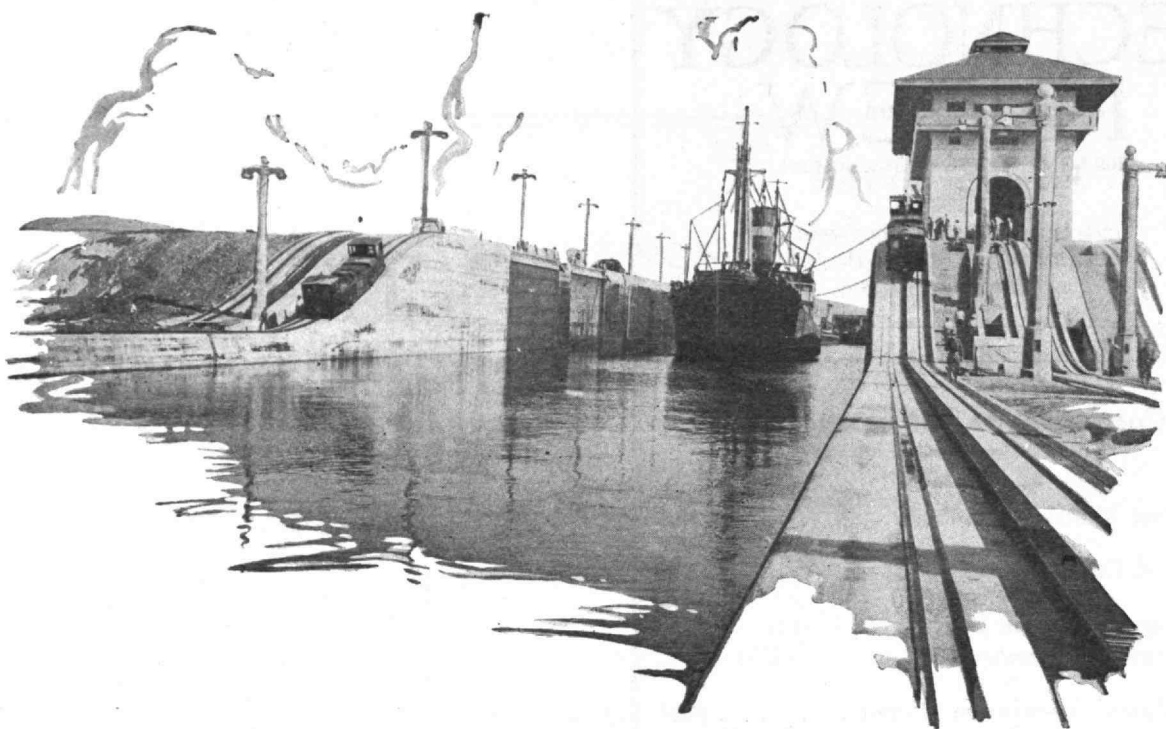
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GENERAL ELECTRIC

THE TECHNOLOGY REVIEW

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INSTITUTE OF TECHNOLOGY

Vol. XXVI

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The Past Month

NOT since the famous Alumni Dinner of 1920, when the identity of Mr. Smith was revealed, has there been an Alumni Dinner productive of so much interest or justifying that interest in so remarkable a manner. The full details of the dinner are reported elsewhere in this issue. Here it is important to record only two of the announcements made by Dr. Stratton during the evening. The first is the announcement that the Institute has practically doubled the area of its site by the recent action of the Corporation which purchased or optioned almost fifty acres of land stretching from Massachusetts Avenue (with the exception of several small parcels) to the west. Happily this purchase, at an average, cost no greater than the cost of the original land first purchased in Cambridge. The second announcement is that donors, still unnamed, have offered to the Institute funds for the construction of an Infirmary to fill the urgent need of the Institute for proper means and accommodation for the care of students who become ill.

No more significant events towards the expansion of the Institute has occurred, perhaps, since Technology's removal to its site upon Charles River Road.

LIKEWISE, at the dinner, came another event of interest and importance. It was the unveiling of the Blashfield Mural in the Main Hall of Walker

Memorial by Master Colin Maclaurin, son of Technology's late President. An extended description of the Mural is given upon another page of this issue by Harry J. Carlson, '92, who spoke at the dinner, of Blashfield and of the Mural, after the unveiling.

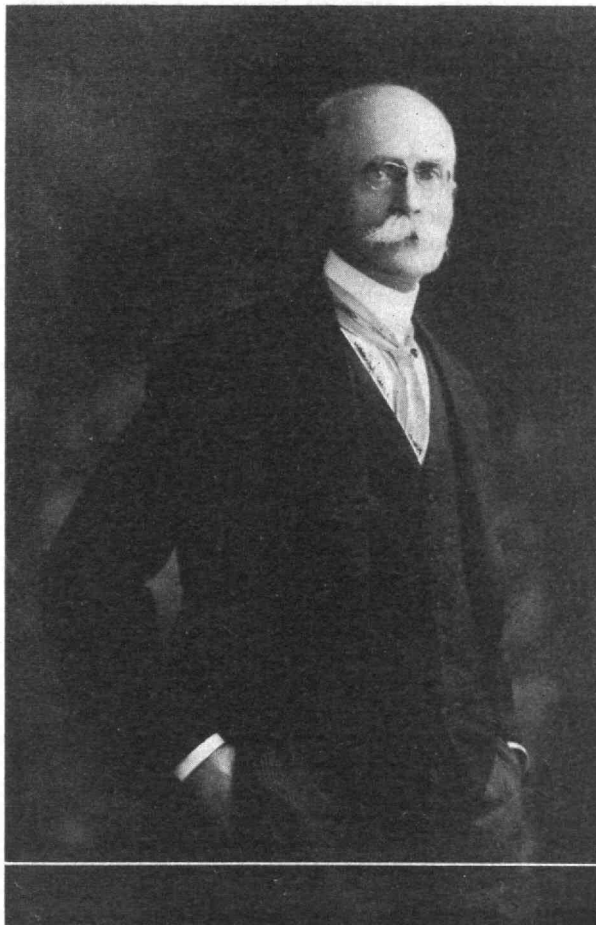


Photo by Marceau

EDWIN H. BLASHFIELD, '69

Painter of the Mural which now decorates the Main Hall of Walker Memorial. For a reproduction of the Mural and a description of it, turn to page 195

THE Lord Kelvin medal for eminence in engineering achievement has been awarded to Dr. Elihu Thomson, former Acting President of the Institute, and will be presented to him in London next summer when he will go abroad accompanied by a delegation of representatives from the American engineering societies. Professor Thomson is the first man in the United States to be given the medal and the second one in the world. The only previous award was made in 1920 to Professor Unwin of Great Britain. The medal is awarded triennially as a mark of distinction to a person who has reached high eminence as an engineer or investigator in a kind of work applicable to engineering with which Lord Kelvin was long associated.

NO state university is, after all, a prospect for Massachusetts. A commission appointed by the Governor in 1922 with legislative authority to investigate

certain phases of the state educational system reported to the General Court on January 12 its unanimous judgment that the need for additional opportunities and provisions for technical and higher

education "is not so great, nor so urgent, as to warrant the establishment of a state university." The report did recommend, however, the Junior College plan as the most efficient and economical way to provide opportunities for those who did not find the traditional college suited to their needs, but who wished some form of education beyond the high school.

TWO members of the Institute Faculty addressed sessions of the annual meeting of the American Association for the Advancement of Science held at Cincinnati between the recent holidays.

"Man is not only the product of evolution, but through his self-consciousness and his reason he can now control and direct it," said Dr. Hervey W. Shimer, Professor of Paleontology in delivering a paper entitled, "Some Forces in Man's Social Evolution."

Professor Edward P. Warner, '17, told the Social and Economic Session of the Association that the rates for air travel should be cut to 7/10 cents per passenger-mile. He cited the intensity of the competition between France and Germany for air transportation control in south central Europe and Russia as a forceful example by European governments of the value of the airplane as an economic weapon.

Announcement of important progress in all fields of science was made. Among the outstanding events recorded for the year 1923 were several of particular interest to Technology alumni:

Decrease of 4 per cent in the heat of the sun during the late months of 1922 and the early months of 1923

announced by Dr. C. G. Abbot, '94, of the Smithsonian Institution.

Distribution of heat in the spectrum of stars determined also by Dr. Abbot working at the Mt. Wilson Observatory and found to differ from distribution of light.

Discovery of the reversal of magnetic poles of sunspots by Dr. George E. Hale, '90, of Mt. Wilson Observatory, opening a new field in the study of sunspot phenomena.

Production of the world's shortest electric waves by ex-President Nichols and Dr. J. D. Tear. They were one-fiftieth of an inch in length and are equal to the shortest of heat waves.

CONTINUATION of the present emergency housing laws and the official study of substitute fuels for anthracite which, it is said, now costs the people of Massachusetts about \$90,000,000 a year, are the two outstanding recommendations made by Eugene C. Hultman, '96, Chairman of the Special Commission on the Necessities of Life and Emergency Fuel Administrator of Massachusetts in his annual report to the Legislature made public on December 7.

Of particular interest to Technology is Mr. Hultman's report on the anthracite situation. Of this, he said, "Since 1920 the commission has been trying to persuade consumers of anthracite who could use other fuels to do so. Due to the high price, poor quality, uncertain supply of anthracite, and the activities of the commission, bituminous coal, oil, coke, wood, gas and electricity are being consumed in increasing quantities in place

FROM THE OFFICE OF THE PRESIDENT

I am pleased to announce to the Alumni of the Institute, through the pages of The Technology Review, two recent occurrences of the greatest importance in the future development of the Institute.

The first of these is a practical 60% increase of the area of land on the Institute site. This has been accomplished by the purchase or the obtaining of an option upon a number of parcels of land which stretch from Massachusetts Avenue west, close to the plant of the Gray & Davis Company. A total of 592,000 square feet has been purchased from the Riverbank Trust and The Embankment Land Trust for the sum of \$296,000. Besides this outright purchase, the Institute has a ninety-day option upon 722,000 square feet of land, for which the price will be approximately \$250,000. General Coleman du Pont, '84, has, with an extreme generosity, offered to give the sum of \$125,000 towards this purchase if the balance can be raised within thirty days. As this is written, \$60,000 of this balance has been subscribed and as it reaches the Alumni, doubtless an even larger sum will have been contributed.

The significance of this action of the Corporation cannot be overestimated. The recent remarkable growth of the Institute has indicated all too clearly for the past few years that the fifty acres of land acquired for the development of the Institute on the bank of the Charles were, despite the foresight of early plans, insufficient. The addition of almost one hundred per cent to our acreage should give ample room for the future development of the Institute's activities, however far flung they may become.

The second announcement of importance relates to the proposed erection of an Infirmary. The Institute has been seriously handicapped for some time from the lack of any facilities by which it might care for its students when they became ill. Although a definite announcement at this time, of the donor of this essential building is not possible, I am able to state that it is now only a short time before a complete announcement of plans can be made.

The first announcement of these two accomplishments was made public at the Annual Dinner of the Alumni Association on January 5. Sent broadcast to the Alumni, as now it is, I am sure it will provoke the most widespread interest.

—Samuel Wesley Stratton.

January 10, 1924

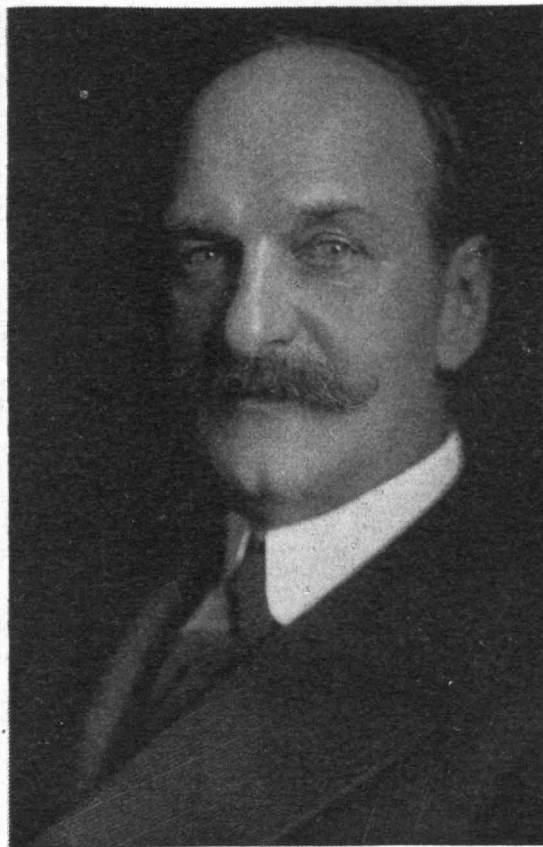
of anthracite. The commission . . . respectfully recommends to the Legislature that a sum of \$10,000 be appropriated for employing the Division of Industrial Coöperation and Research of the Massachusetts Institute of Technology, or other suitable agency, to study and report on the use of bituminous and other forms of fuel."

BEGINNING next fall the Department of Military Science and Tactics will add a Chemical Warfare unit to the courses for Juniors and Seniors continuing in the Reserve Officers Training Corps. The course was recently authorized by Robert C. Davis, Adjutant-General, in answer to an appeal by President Stratton to have such a course established at the Institute. The proposed unit will be the first unit of its kind to be established in the country.

The course, as it is planned, will resemble closely the present Ordnance R. O. T. C. unit.

Only men who are students in the courses of Chemistry, Chemical Engineering or Electrochemistry will be allowed to follow it.

HARVARD Bridge is not yet rebuilt but plans for its reconstruction continue to be put forth in increasing numbers. The Metropolitan District



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COLEMAN du PONT, '84

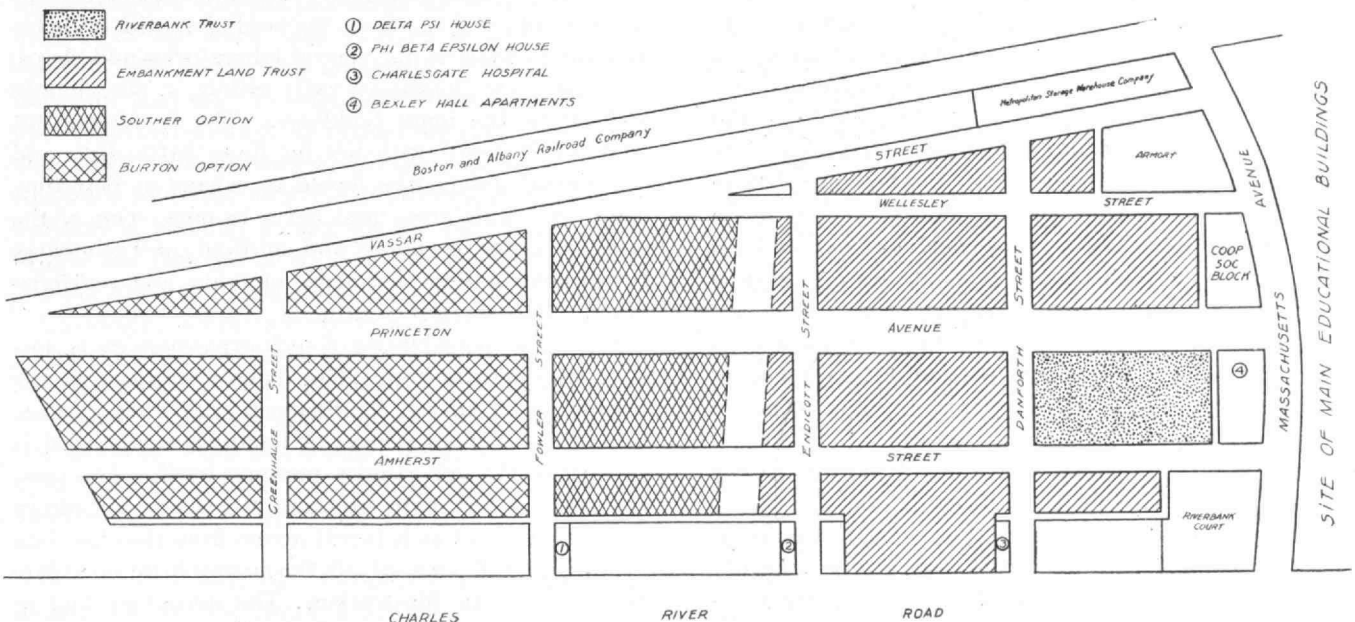
Whose generosity once more benefits Technology

Commission reported on January 4 to the Legislature that it found the propositions to build a new bridge and to reconstruct the present one both to be feasible. The Commission estimated the cost of the new bridge at \$2,700,000 and reconstruction of the present one \$800,000 if done in the most expensive style.

Of particular interest to Technology men are the plans drawn up by Robert D. Andrews, '77, for a seven-arch structure upon lines similar to the Bridge of the Trinity in Florence. The outer masonry would be of limestone similar to that used in the Institute buildings and harmonizing in color. The Review hopes in an early issue to present a symposium of plans evolved by Technology men for the reconstruction of the bridge.

THE One Hundred Second Meeting of the Alumni Council on January 11 was held for the express purpose of

listening to and discussing a unique plan put forth by Gerard Swope, '95, President of the General Electric Company, for the increase of revenue from tuition without at the same time placing students who cannot afford to pay more than at present, under a financial disadvantage. Briefly and inadequately set



THE NEW LAND REFERRED TO IN THE PRESIDENT'S ANNOUNCEMENT

The two tracts which have been purchased are the plots of Riverbank Trust and Embankment Lands Trust. The Souther and Burton options shown on the plan by double cross-hatching are the holdings toward the purchase of which General Coleman du Pont, '84, offered half the cost or \$125,000 if the remainder could be raised within thirty days. As The Review goes to press \$65,000 is all that is needed to insure Technology's ownership. The total area of the four tracts is approximately thirty acres, not including area which may be added later if streets are closed.

forth, the plan is gradually to raise tuition fees to a new and considerably higher level than their present one: to institute a committee whose task it would be to examine the character, scholarship, ability, general fitness and financial status of all students at the Institute and to place in the hands of this committee the authority to say how much a student should actually pay in cash for his tuition. For the difference between the full tuition rate and the sum which the student was adjudged fit to pay, the student would give his note, thus placing himself under a moral but not a legal obligation to discharge his indebtedness to the Institute as soon as he was financially able.

Following the setting forth of this plan the Council spent some two hours in lively, interested and close-knit debate and parted only upon the promise that at the earliest opportunity the discussion would be taken up again. There was a variety of comment upon Mr. Swope's plan, both favorable and unfavorable and it is the present hope of *The Review* that in an early forthcoming number the plan will be presented in full to the Alumni, together with criticisms and comments from representative Institute men.

AS *The Review* goes to press, comes the sudden and tragic news of the death of Professor Joseph Lipka. Professor Lipka came to the Institute as an Instructor in Mathematics in 1908 and since 1917 held the rank of Assistant Professor. His death removes from the Institute a research mathematician of the highest capability and a teacher justly enjoying wide popularity and respect. An account of his all-too-short career will appear in the March issue of *The Review*.

Editorial Comment

**Westward,
Ho!** The provident purchase, but recently announced at the Alumni Dinner, of land between Massachusetts Avenue and the Gray & Davis plant should be of the greatest importance to the Technology of the future. When the present site was bought a decade ago, it was apparent from the drawings then made that the present fifty acres seemed large enough to take care of the needs of the Institute for a long time to come. The educational buildings seemed adequate for the expected expansion, there was room for dormitories sufficient to house that portion of two thousand students who needed dormitories, there was room for a moderate athletic field and accessories. It seemed to the average man that the problem of expansion was satisfactorily settled for a long time to come.

Within the past five years, however, the need of special buildings for technical purposes has been keenly felt, special laboratories and shops for the rapidly expanding curriculum, buildings which for reasons of safety or floor space ought not to be a part of the main educational group; the dormitories, if we are adequately

to take of three thousand or more men, should not be crowded between the main plant and the Walker Memorial; the athletic fields obviously need enlargement, even without considering such special and urgent needs as a new gymnasium, skating rink, swimming pool and the like. The long desired and now promised infirmary, a necessary part of any institution our size, must have not only ground space but sufficient light and air around it. The architectural department must come home. The total of these needs makes it obvious that the new purchase, approximating thirty acres and nearly doubling the present tract, is not merely not extravagant but will probably very shortly seem hardly larger than enough.

The conditions almost parallel those of the purchase of a decade ago. The fact that the land was bought at a figure not greater than that of the present site, that fully half one fund was subscribed by the man who made the present site possible, General du Pont, the generosity of the Corporation and the satisfaction of the Alumni who heard the news remind one vividly of the circumstances attending the beginning of the present era. Then, too, the expansion is in the right direction away from the congestion of Kendall Square — although it is to be hoped that one of these days the Institute will be able to wipe out the eyesore of the old Leather Exposition building and reclaim that fine piece of water front. It is not too much to expect, also, perhaps, that since educational institutions are notoriously long lived and continuous enterprises, we shall sometime control the frontage on Massachusetts Avenue and the river front itself. Our position behind the lines is strategic; business enterprises change hands and pass, the school endures and consolidates its advances.

We have, then, in the very near future, room for as much dormitory space as we need, for athletic fields and their adjuncts, for special laboratories and shops, for the new infirmary, all within a five-minute walk from the main buildings. The problems that confront Harvard with her far flung battle line, and other great universities forced to expand as best they can over a wide area, need never be ours. One of the greatest assets, economic and spiritual, of Technology is her compactness, her sense of unity and centralization. This can now continue.

But the responsibilities of such expansion are no less than its opportunities. The danger is great, as the temptation is strong, for financial and other reasons, to adopt a Fabian policy, of building as the need is and where the opportunity presents itself. The present not too fortunate situation of the new dormitory now building, set as it is just across from the chocolate factory, in full view of all the merry little chocolate dippers, is a fair illustration. The dormitory had to go up and speedily; we are all glad it is going up. There was probably no other place so suitable for it. But the results, most of us feel, will not be altogether