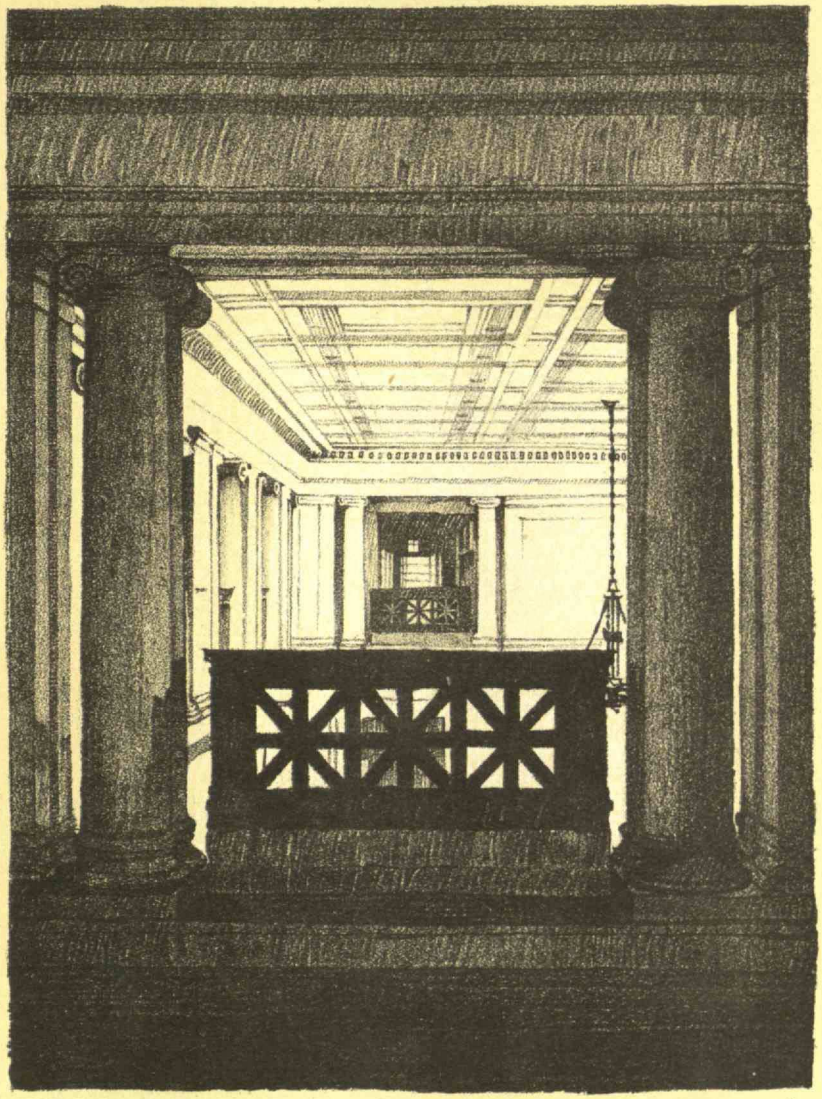
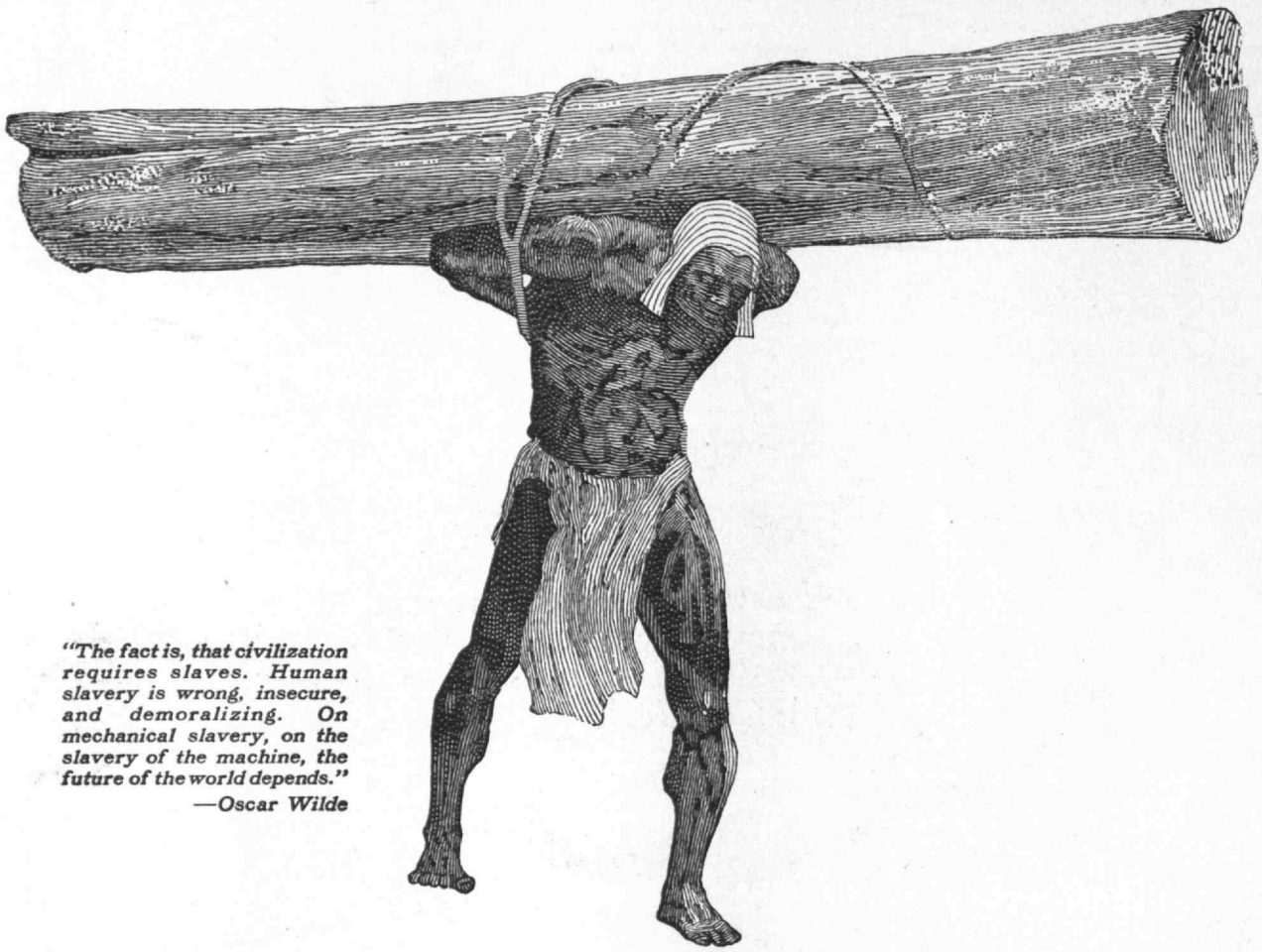
THE TECHNOLOGY REVIEW



SECOND FLOOR LOBBY — BY SAMUEL CHAMBERLAIN, '18

DECEMBER 1926

RELATING TO THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY



"The fact is, that civilization requires slaves. Human slavery is wrong, insecure, and demoralizing. On mechanical slavery, on the slavery of the machine, the future of the world depends."
—Oscar Wilde

Slaves

In a quarter century the General Electric Company has produced electric motors having a total of more than 350,000,000 man-power. Electric light, heat, and transportation have also contributed their part to the freeing of men. These are America's slaves. Through their service American workers do more, earn more, and produce quality goods at lower cost than anywhere else in the world.

You will find this monogram on all kinds of electrical machinery. To insure quality, ask for it on the equipment you buy for your factory, office, or home.

GENERAL ELECTRIC

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"In poker, yes—but no *poker hand can equal these three."*
"What are they?"
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HIGH PRESSURE HYDRAULIC

PUMPS **PRESSES** VALVES

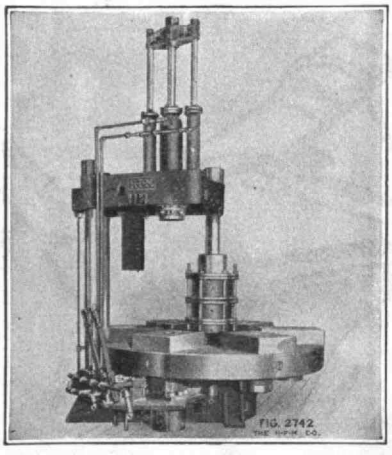
FACTORY
MOUNT GILEAD
OHIO.
U.S.A.
SINCE
1877

Twenty East Broad,
Columbus, Ohio
Dec. 1, 1926

Dear Alumni:—

Radio season—again! I wonder if we are going to have another All-Technology Phantom Dinner via radio. I hope so, as the one last winter certainly proved a great success.

Speaking of radio equipment—it is interesting to observe the different hydraulic pressing operations involved in its production. This includes molding all of the Bakelite parts about the set; forming the carbon electrodes in the dry "B's"; and now even molding the case in which the "A" Power Unit is housed. These cases, you know, are now made of rubber or composition materials, with two cross partitions forming the cell cavities.



I happen to be using the "Gould Uni-Power." Its case is molded on the H-P-M Turret Type Press illustrated in the accompanying photo. This press carries six sets of molds on the turret. It turns out a perfect case every sixty seconds. The advantage gained in the use of this semi-automatic turret type press is a very definite reduction in production costs.

Incidentally—cutting costs of manufacture for our clients is always our aim in all classes of pressing operations.

To keep you posted on the many new developments in high pressure hydraulic pressing applications, I will be glad to send you our new magazine—"THE HYDRAULIC PRESS." Shall I place your name on the list?

Yours for Tech.

Howard F. MacMillin II-21.

Howard F. MacMillin,
Vice-Pres. in charge of Sales.
The Hydraulic Press Mfg. Co.

The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

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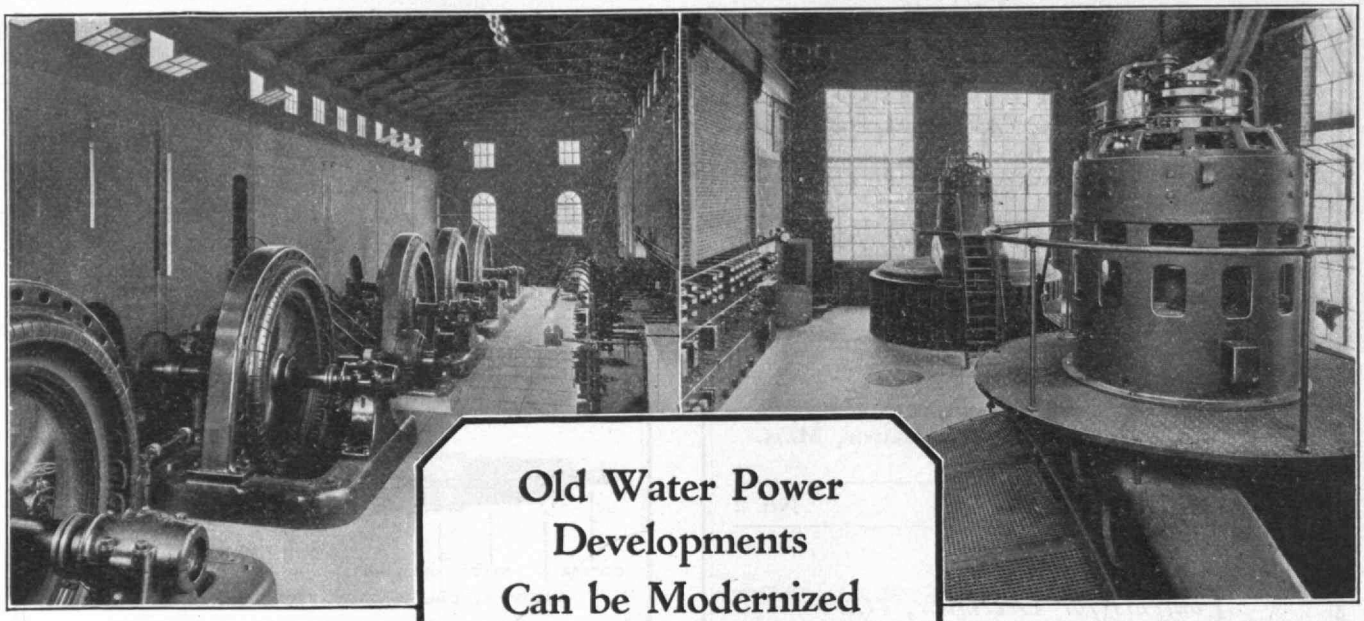

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The TECHNOLOGY REVIEW

VOLUME 29 · DECEMBER, 1926 · NUMBER 2

The Trend of Affairs

Dean Burton to the Front

MORE happily and sooner than could have been expected, the full-time manager of the campaign of the Dormitory Fund Committee has been found. He is former-Dean Alfred E. Burton, who returns from his California retirement to take charge of the plans which look toward the realization of what was once his most urgently reiterated hope.

The necessity for the services of someone who could give his full time to the work of promoting the new dormitory plans was stressed by Gorton James, '10, Chairman of the Dormitory Fund Committee in the course of his report to the Executive Committee of the Alumni Association, excerpted in the November issue of The Review. It was not at that time even remotely supposed that Professor Burton could be prevailed upon to undertake the work. His presence at the Institute, however (likewise chronicled in the November Review), just at the moment when discussion of this topic was most earnest, coupled with the fact that in his deanship, it was dormitories, their lack and their need, which furnished one of the most pressing problems of his administration, proved too strong a coincidence. More dormitories for the Institute has always been one of his most fond ambitions.

As a result, Professor Burton is already busily engaged in his new work. His appointment was announced on October 27 and in early November he left for an exploratory trip throughout the East which was expected to last until close to the middle of this month.

Specifically, the plans which Professor Burton is now engaged in furthering, call for five more units of like size to be added to the existing Class of 1893 Dormitory. The total cost of the new units is set at $1,200,000.

A note by Arthur D. Little, '85, on the Dormitory situation will be found in this issue on page 94.

From a lithograph drawn for The Review by Kenneth Reid, '18

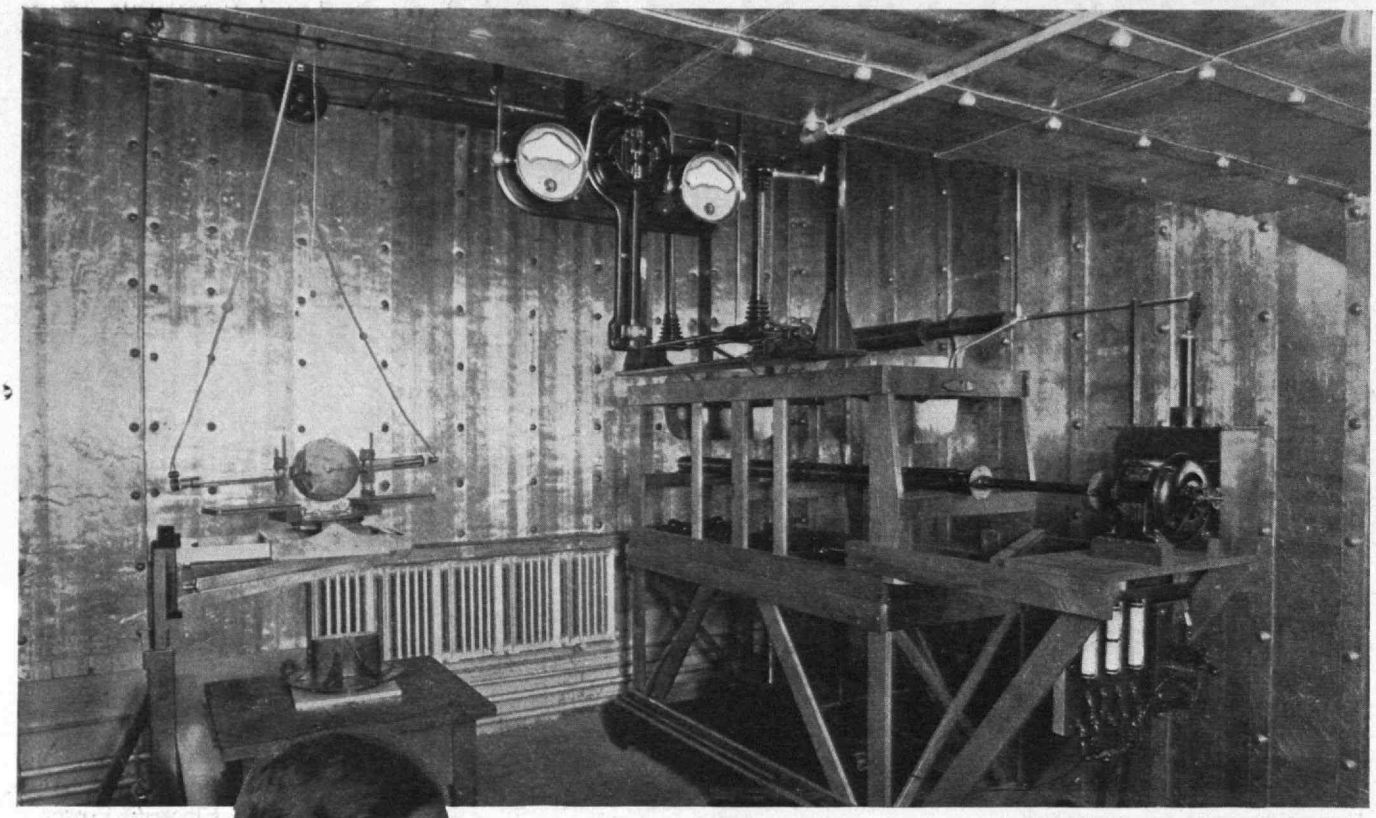
GERARD SWOPE, '95

President of the General Electric Company, on October 13 elected to the Executive Committee of the Corporation as recorded in the November Review

Pension Plan Effective

SIX YEARS ago there was appointed a committee to study the question of providing a pension and insurance plan for the members of the corps of instructors. Its members were Carroll W. Doten, Professor of Political Economy; Harry W. Tyler, '84, Walker Professor of Mathematics and Head of the Department of Mathematics; and Dugald C. Jackson, Professor of Electric Power Production and Distribution and Head of the Department of Electrical Engineering. The plan evolved was submitted to a meeting of the staff held on June 10, 1925, was approved, and the Massachusetts Institute of Technology Pension Association was formed.

From then until this fall it has been subjected to the scrutiny of various actuarial authorities and the Division of Insurance of the Massachusetts Department of Banking and Insurance, from whose hands it emerged unscathed so far as its general provisions were concerned. It is said that, although the law has provided for associations of this nature since some fifteen years ago, no one has taken advantage of its benefits, and consequently the insurance officials of the Commonwealth found themselves without the guiding hand of precedent and were obligated to be meticulous as to all details of the Technology proposal. Finally, on October 22 of this year, the Insurance Commissioner of Massachusetts said that the



X-RAY LABORATORY

This lead-lined cell at the Institute holds in abeyance the piercing rays produced by the large tube visible on the left. See also below

The "Hundred Billion Dollar Tube"

DR. COOLIDGE'S LATEST ACHIEVEMENT

A hundred billion dollars' worth of radium would hardly be enough to produce rays as intense as this cathode tube throws out. See the story on page 90

proposition appeared to conform "to the requirements of Section 39 of Chapter 32 of the General Laws, and when a certified copy of the by-laws with evidence of the legal formation of the association is filed with the Department the by-laws will be approved as provided in Section 40 of said Chapter."

Upon receipt of this statement, the Massachusetts Institute of Technology Pension Association met on November 3; unanimously approved its by-laws; learned with pleasure that 242 of the 282 members of the staff eligible for membership had joined; unanimously elected Dean Henry P. Talbot, '85, as President, and Professor Allyne L. Merrill, '85, as Secretary. To serve on the Board of Trustees, consisting of five members (three being appointed by the Executive Committee of the Corporation), Professors Tyler and Jackson of the Committee which formulated the plan, were elected.

Pension Plan Provisions

TO PROVIDE immediate capital for the establishment of the "Pension and Insurance Fund" the Institute has appropriated

$25,000. While participation is optional with present members of the staff, less than fifteen per cent of those eligible have failed to join. These will be obliged to join, if promoted in academic rank, as will all new appointees in the grades of Professor, Associate or Assistant Professor and Instructor, and to certain administrative offices. Assistants, Research Associates or Assistants, Lecturers, and members of the Department of Military Science and Tactics are ineligible.

Retirement for age is to take place at seventy and service beyond that point is to be only by special annual appointment, but, at the discretion of the Executive Committee of the Corporation, any member of the staff may be retired at any time after his sixty-fifth birthday.

The "Teacher's Annuity Fund" (formed by the contributions of five per cent of his salary by each of the participating members) will provide, upon retirement for age, an annuity purchasable by the individual's accumulated principal and interest, the annuity including such reversionary provisions for dependents as the individual may, with the approval of the Treasurer of the Institute, elect. The "Pension and Insurance Fund" (formed by appropriations from the Institute treasury equal to five per cent of each participating member's salary) will provide an equal annuity, but not to exceed $1,200 per year. In the event of permanent total disability the accumulated principal and interest of the individual's contributions to the "Teacher's Annuity Fund" will be repaid to him or to his designated beneficiary and the "Pension and Insurance Fund," through group insurance, will provide him with $5,000. The accumulated principal and interest of any member dying prior to retirement will be paid to his estate (or designated beneficiary), which will also receive the principal of his $5,000 group insurance policy. Any member terminating his service at the Institute for reasons other than these will be repaid the principal and interest of his contributions to the "Teacher's Annuity Fund."

Typothetae

BEFORE the United Typothetae of America — the society of employing printers in the United States — at its fortieth annual convention held in mid-October, in Detroit, President Samuel Wesley Stratton presented an address on "The Importance of Science and Engineering to the Graphic Arts." The address was part of the Typothetae program on education — a matter of much present concern to the entire printing industry, which, although by claim is the fifth largest of all industries, is by admission one lacking in all semblance of a scientific and technical control.

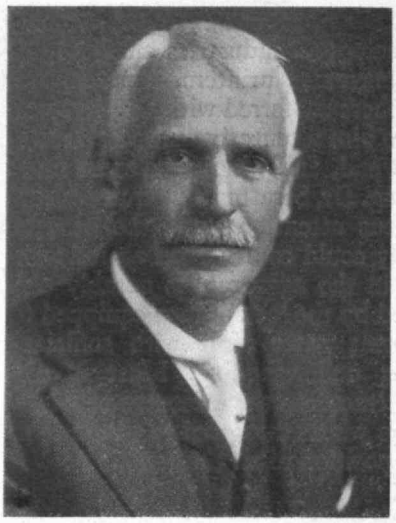
Although the Typothetae is by no means completely representative of the master printers of the country, Dr. Stratton's address before it takes an additional significance in the light of a discussion held at the Institute last spring (See The Technology Review for July, 1926) on the advisability of establishing at Technology a course dealing with the technology of industries allied to the Graphic Arts. A committee of printers, paper manufacturers and lithographers conferred with Dr. Stratton in May and laid before him a tentative proposal which might lead to such an end, and which this same committee is still considering. Dr. Stratton's Detroit address was intended to refocus attention upon the benefits which a scientific study could confer upon an industry which although huge in the aggregate is notably and chronically demoralized by the lack of men equipped to operate their component parts of it with sufficient economic and artistic understanding. Most of the industry's ills may be traced to the existence of a host of "marginal" printers whose struggles to continue in business dislocate the position of all the rest.

Endowment Insurance

MEMBERS of four classes, including 1923 which originated the plan, have taken out at the time of graduation some form of endowment insurance with the object of providing a gift to the Institute

WILLIAM D. COOLIDGE, '96

Assistant Director of the Research Laboratory of the General Electric Company, he developed the cathode tube, hailed as one of the most important scientific advances of the decade. *See the story on page 90*



HOTEL MAGNATE

Ellsworth M. Statler, President of the Statler Hotels, builder of the mammoth new Statler Hotel in Boston, spoke to the Faculty Club November 15, on "Human Engineering." See page 93

upon the occasion of their Twenty-Fifth Reunion. Figures showing the status of payments on these different plans as of November 1 have just been made public and are summarized in the chart on page 92. All of the policies have been deposited with the Bursar as are dividends on the policies, the latter being kept in a fund to care for the premiums of members who are unable for one reason or another to meet their annual payments and let them lapse.

The collection of premiums is handled directly by the insurance companies, which notify the Bursar of policies unpaid at the time of their grace dates. From the returned dividends and other funds the Institute has been carrying all delinquent policies for thee years after which they are turned in to the insurance companies in exchange for their "cash surrender" value.

As was inevitable many men did not keep up their payments. Of the Class of 1923 there were originally 455 men who agreed to pay an annual premium on individual twenty-five year endowment policies of $250 apiece with the John Hancock Mutual Life Insurance Company. After three years 88 of these had made no payments beyond the original contribution, and their policies were allowed to lapse, the Institute collecting the "cash surrender" value. Three more are being carried an extra year for special reasons, 47 more are behind on their 1925 and 1926 premiums (and will be allowed to lapse if the 1927 and previous premiums are not paid by next June), 38 owe for the 1926 premium due last June. Of the remainder, one has died and 276 are paid up, almost exactly two-thirds of the original subscribers.

The Classes of 1924 and 1925 used similar plans and now have 305 men paid up from 440 original participants and 241 from 325, respectively. Two members of the Class of 1924 have died and the proceeds of their policies, $500, have been turned over to the Institute to be held as a special deposit fund at interest to be included with the Class Endowment Fund available in 1949.

The Class of 1926 placed its insurance on a slightly different basis. They insured sixteen of their members for $5,000 each and one member for $1,000. Three hundred and ninety-three members of the Class agreed to pay pro rata expense of premiums on these seventeen lives.

NEW VISTA

Seen from a leafy vantage spot in the Public Garden, the new Statler Hotel and office building asserts itself in the Boston skyline