

THE TECHNOLOGY REVIEW

• RELATING • TO • THE • MASSACHUSETTS •
• INSTITUTE • OF • TECHNOLOGY •



JULY, 1923

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A Life of Francis Amasa Walker

Third President of the Massachusetts Institute of Technology

By James Phinney Munroe



GENERAL WALKER was eminent as a soldier, a statistician, an economist, an administrator, an educator, and, above all, as a man.

He was born in 1840, graduated at Amherst in 1860, fought through the Civil War and was breveted Brigadier General at twenty-five; was Superintendent of the Census at twenty-nine, Commissioner of Indian Affairs at thirty, Professor in Yale at thirty-one, President of the Massachusetts Institute of Technology at forty-one, and died at fifty-seven.

His first book, on the Wages Question, published in 1877, at once attracted the attention of economists, and was made part of the curriculum at Oxford. His Political Economy, published in 1883, marked him as the leading economist of America, if not of his time. He was the first President of the American Economic Association, and filled many other posts of usefulness and honor.



Partly because his family felt that no man's biography should be written until his life work has been before the world for twenty-five years, the present biography is but just ready. Its author was Secretary of the Faculty of the Institute of Technology during a large part of President Walker's administration.

The extracts from the author's Civil War reminiscences and letters meet a wide and undying interest; the accounts of his activities as a statistician, economist and educator are of very exceptional value to all associated with these pursuits; the chapters on the Institute must be of great interest, not only to all Technology Alumni, but also to every undergraduate who finds daily satisfaction in the use of the Walker Memorial; and the book as a whole appeals to all who find entertainment and instruction in reading exemplary biography.

The volume contains 437 octavo pages of text, exclusive of the index and seven half-tone illustrations. The price is \$4.00.

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THE TECHNOLOGY REVIEW

RELATING TO THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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Vol. XXV

JULY, 1923

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Contents

ORVILLE B. DENISON, '11, PORTRAIT	413
THE PAST MONTHS	413
THE INAUGURATION OF THE NINTH PRESIDENT	417
THE EFFECT OF SCIENCE IN THE EVOLUTION OF INDUSTRY	421
<i>By Samuel Wesley Stratton</i>	
THE GRADUATION OF NINETEEN TWENTY-THREE	424
LOUIS DERR: 1868-1923	426
<i>By H. M. Goodwin, '90</i>	
TWO COUNCIL MEETINGS	427
"A LIFE OF FRANCIS AMASA WALKER"	432
<i>By Robert E. Rogers</i>	

TECH MEN IN THE PUBLIC EYE 434		EDITORIAL COMMENT 442
WITH THE UNDERGRADUATES 436		NEWS FROM THE ALUMNI ASSOCIATION 444
ATHLETICS 439		NEWS FROM THE CLASSES 448
CLASSIFIED ADVERTISING		480

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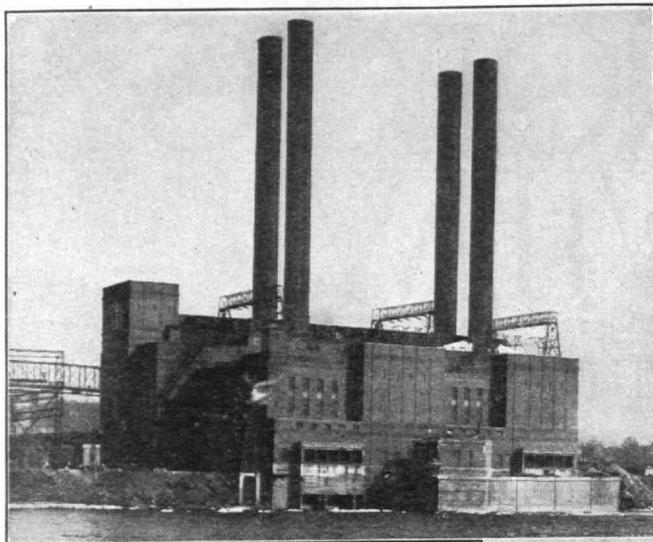
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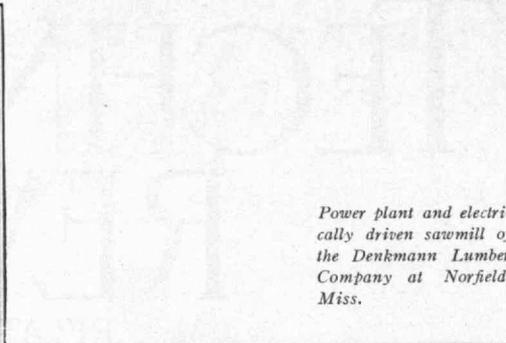
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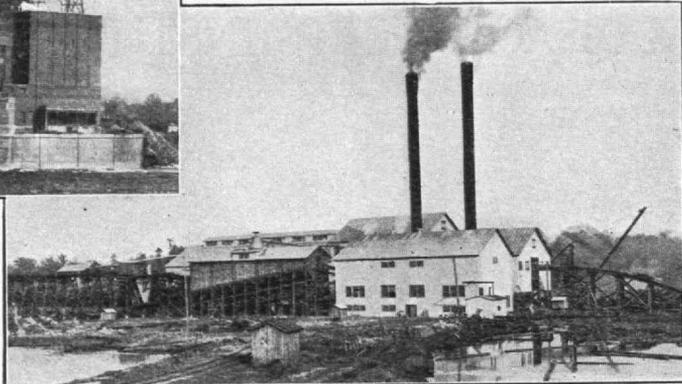
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Colfax Station of the
Duquesne Light Com-
pany at Cheswick, Pa.



Power plant and electri-
cally driven sawmill of
the Denkmann Lumber
Company at Norfield,
Miss.



Meeting Individual Power Requirements

The ability of this organization to provide power units to meet the needs of different industries is well illustrated by the two plants shown above.

Colfax* is a mine-mouth super-power plant with an ultimate capacity of 360,000 k. w. — 120,000 in operation and 60,000 additional now being installed. As part of the "Duquesne Power Ring," it is a vital factor in the supply of industrial power to the Pittsburgh District. Its size is limited only by the supply of condensing water available from the Allegheny River, on which it is located.

The Denkmann plant, by contrast, has only one 1000 k. w. turbo-generator unit — less than one-three-hundredth the size of the ultimate Colfax development. It supplies power to an electrically driven sawmill, designed and constructed for the Denkmann Lumber Co. As the timber will be cut over in relatively few years, it was desirable to keep the plant investment at a minimum. To that end a second-hand boiler plant was installed, and the building constructed simply of sheet iron on a timber frame. The turbo-generator unit operates with a barometric condenser utilizing the two log ponds in the foreground for cooling. These are connected by a flume — the condenser pump intaking from one pond and discharging into the other.

Whether your power plant problem is large, including substations, transmission lines and other elements, or whether it is an accessory to a manufacturing plant, this organization can contribute to its profitable solution.

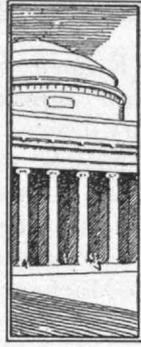
**A technical description of Colfax Station will be sent on request.*

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THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY



The Past Months

OF PARAMOUNT importance in the two months that have passed since the publication of the last Review is, of course, the Inauguration of President Stratton in Symphony Hall on the morning of June 11. The formality of the ceremony befitted its importance. Under the skillful marshaling of Colonel Frank L. Locke, '86, the events of the day ran off with speed, precision and effectiveness. The event is fully dealt with in other pages of this issue and it is our duty here to record no more than the happening.

GRADUATION, which came next day, was a fitting sister ceremony. It was held outdoors, in Eastman Court, and was distinguished from graduations of previous years by many new features and the absence of some old ones. Academic dress was prescribed for Faculty and graduating students. There were two formal addresses and the old time assortment thesis abstracts were jettisoned. The speakers were Elisha Lee, '92, Vice-President of the Pennsylvania Railroad and Major-General André W. Brewster, Commander of the First Corps Area.

Another feature of the day was the individual award of diplomas. These were carefully racked in front of Dr. Stratton, who made an individual presen-

tation to every man in the alphabetically arranged line which passed before him. This innovation, replacing the scramble of other years, added in great measure to the dignity of the ceremony.

The arrangements were admirably handled by a Faculty Committee of five of which Professor Theodore H. Dillon of the Department of Electrical Engineering was Chairman.

THOMAS ALVA EDISON was on hand. He came to see his son, Theodore Miller Edison, receive his diploma. In view of Mr. Edison's previous picturesque and stringent criticisms of the American educational system his presence at a ceremony which served officially to brand his son as 'uninformed and ignorant' was deemed most interesting by approximately five hundred newspapers throughout the country. The consensus of their opinion seemed to be that the graduation of Theodore M. was a thoroughly good joke on Thomas A. But Mr. Edison got out of his dilemma by making the admission that a technical institution was perhaps a bit more worthy of esteem than a college of liberal arts,

and having thus cleared his conscience, offered his son a job in his plant without the previous formality of answering any questionnaire. Edison *fits* greatly en-

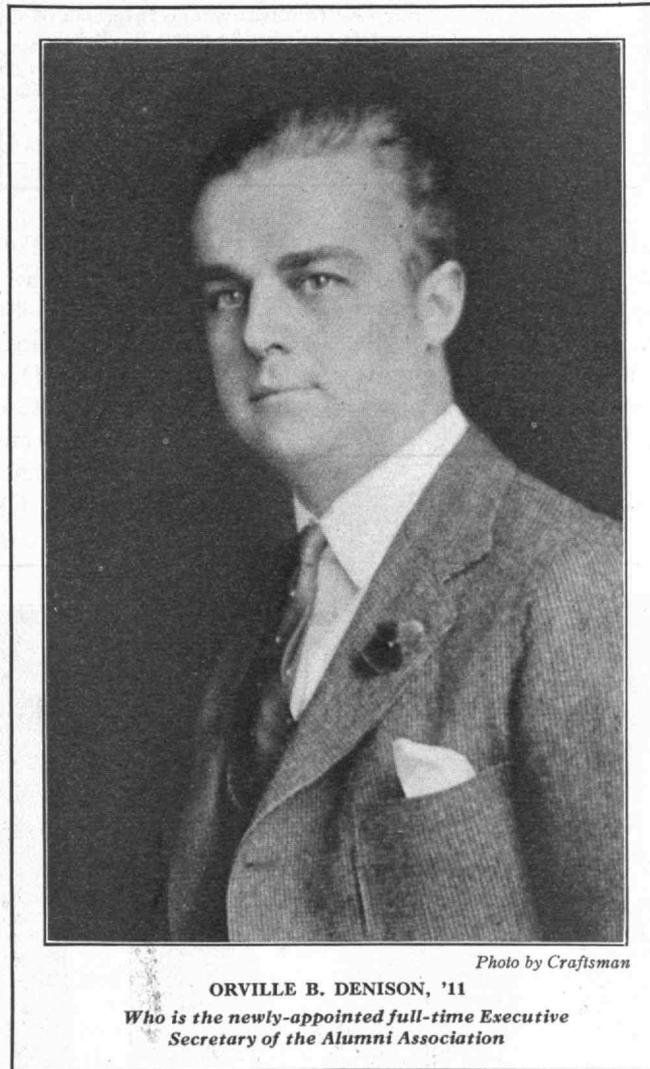


Photo by Craftsman

ORVILLE B. DENISON, '11

Who is the newly-appointed full-time Executive Secretary of the Alumni Association

riched the value of this joke by announcing his refusal of this offer and his intention to return to Technology next year for graduate work. Technology re-welcomes him and looks forward to Mr. Edison's attendance at the ceremonies which will confer upon his son successively the degrees of Master of Science, Doctor of Philosophy and anything else in the bestowal of the Institute that he cares to work for.

ANNOUNCEMENT is made by the Executive Committee of the Alumni Association of the appointment of Orville B. Denison, '11, as first incumbent of the newly-created post of Executive Secretary of the Alumni Association. The need for some full-time officer of the Association who will devote all his efforts to its upbuilding and to the furtherance of its aims and ambitions has long been felt. The choice of Mr. Denison is happily made and the Review, which expects to profit largely by his efforts, pauses a moment to hymn its pleasure at his appointment and to pray for his success in what will be an exacting, but, it is confident, a successful and profitable undertaking for everyone.

ENCYCLICAL

The new officers of the Alumni Association greet their constituency

To Members of the Alumni Association:

Mr. Carlson and his associates have given us a splendid administration and we rejoice in what they have done.

The new administration will strive to maintain the great record of the past.

We hope to increase the achievements of the Alumni Council and we shall strive for a closer and more effective relation with the local Technology Clubs.

These purposes we believe can be promoted by greater regularity of attendance of Council members, by the election of representatives who find it practicable to attend, to replace those who resign because attendance is impracticable; by sending reports of proceedings to all alumni who are interested; by the work of our new Executive Secretary, Mr. Orville B. Denison, '11, whose entire time will be given to the work of the Alumni Association, which will permit actual contact, by travel, with the local associations; and by the development of a committee or group in each local club to co-operate with the Council.

It shall be our purpose to advance the interests of Technology. The Institute depends upon the loyalty of its Alumni and we shall count upon your support.

George L. Gilmore, '90, *President*
Arthur T. Hopkins, '97, *Secretary*

June 28, 1923.

INSTITUTE men received their measure of honorary degrees in June. Most notable was the award to Dr. Stratton of the Harvard LL.D. which he received in common with William Lyon Mackenzie King, Prime Minister of Canada, James Hardy Dillard and John Pierpont Morgan. Tufts College bestowed upon Everett Morss, '85, Treasurer of the Institute, the Degree of Master of Arts. "Your genius has developed one of the leading industries in this vicinity" said the award. "The Boston Chamber of Commerce has profited by your leadership. As one of the Corporation of the Massachusetts Institute of Technology you have helped to place engineering education on a higher plane. Tufts College honors herself in granting to you the Degree of Master of Arts." Upon Professor Samuel C. Prescott, '94, head of the Department of Biology and Public Health, was conferred the Degree of Doctor of Science. At Kingston, Rhode Island State College conferred the Degree of Doctor of Science on Professor Augustus H. Gill, of the Department of Chemistry and the Degree of

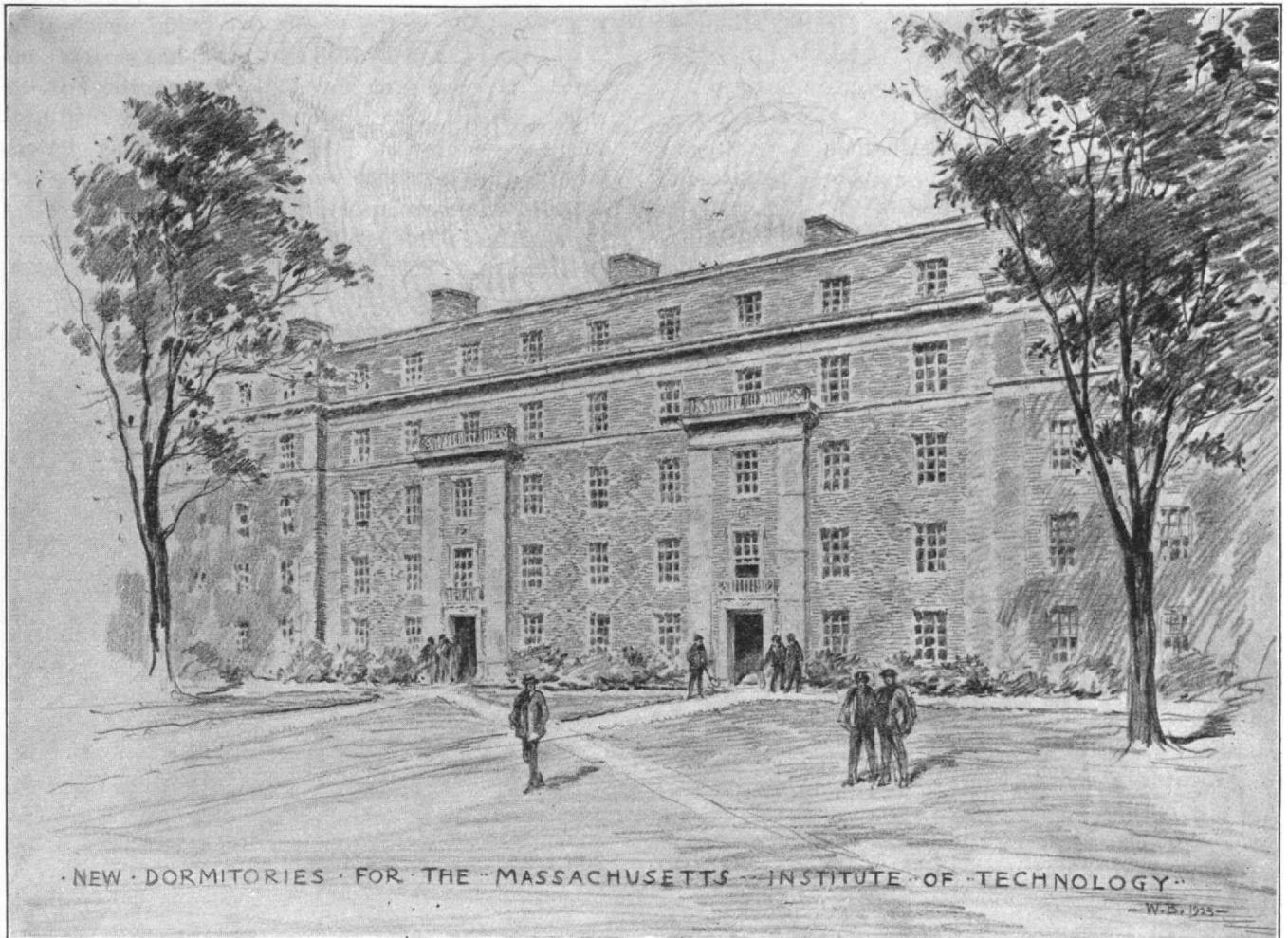
on a higher plane. Tufts College honors herself in granting to you the Degree of Master of Arts." Upon Professor Samuel C. Prescott, '94, head of the Department of Biology and Public Health, was conferred the Degree of Doctor of Science. At Kingston, Rhode Island State College conferred the Degree of Doctor of Science on Professor Augustus H. Gill, of the Department of Chemistry and the Degree of



Photo by Notman

THREE NEW CORPORATION MEMBERS

Left: Willis R. Whitney, '90
Center: Walter Humphreys, '97
Right: Charles R. Main, '09



Sketch by Welles Bosworth, '89, Institute Architect

YOU SEE THAT LETTERING ABOVE ?

It represents no dream. It will fast be translated into accomplished fact. The letter below shows how it all came about.

Master of Science on Professor R. H. Smith who has for thirty years been in charge of the Institute's Machine Tool Laboratory.

FORMAL announcement of new elections and appointments was made on June 8. The new term members of the Corporation to succeed Paul W. Litchfield, '96, Arthur D. Little, '85, and Eben S. Stevens, '68, now retired, are Willis R. Whitney, '90, Director of the Research Division of the General Electric Company at Schenectady, Walter Humphreys, '97, former Registrar of the Institute and now Secretary-Treasurer of the National Association of Wool Manufacturers and

The Letter That Did It

June 9, 1923

President and Corporation,
Massachusetts Institute of Technology,
Cambridge, Mass.

Gentlemen:

Appreciating the great need of more dormitories in order that the undergraduate life of the Institute may more adequately and more healthfully express itself, the undersigned, representing the Class of 1893, take pleasure in hereby tendering to you our pledge of \$100,000.00 toward the erection of an additional dormitory building. In tendering this gift, we do so with the understanding and expectation that such a building, supplementing the present dormitory, be started at an early date — approximately the 1st of September.

Very truly yours,
CLASS OF '93

Francis W. Fabyan, *President*
Frederic H. Fay, *Treasurer*

Charles R. Main, '09, Consulting Engineer.

The list of Faculty promotions is headed by the name of Dr. Vannevar Bush of the Department of Electrical Engineering who becomes a full professor. Two other Associate Professors promoted to the full grade are W. J. Drisko, '95, of the Department of Physics and W. H. Timbie of the Department of Electrical Engineering. Assistant Professors Robert E. Rogers, English, Frank L. Hitchcock and Joseph Lipka, Mathematics, William H. James, Mechanical Engineering and Clair E. Turner, '17, Biology and Public Health become Associate Professors. New Assistant Professors are M. P. Hor-

wood, '16, Biology and Public Health, George Rutledge, Mathematics, James A. Beattie, '17, Physico-Chemical Research and W. G. Brown, Aeronautics.

J. C. McKinnon, '13, who has been Assistant to the Acting Registrar since the resignation, a year ago, of Walter Humphreys, has been appointed permanent Registrar. The one resignation of Faculty grade is that of F. R. Kneeland, Assistant Professor of Organic Chemistry, who had previously been on leave of absence.

SINCE Technology took from the Bureau of Standards its old head it was perhaps only fair that it should supply the new one. This arrangement may seem idyllic, but it has been consummated in all actuality. Dr. George K. Burgess, whose appointment as Head of the Bureau of Standards, in succession to Dr. Stratton, was recently announced by President Harding, graduated from the Institute's course in Physics in 1896. A short account of his career will be found in this issue on page 434.

PLANS are at present under way for the establishment of a Faculty Pension and Insurance system at the Institute. A system of retiring annuities has been under consideration by a Faculty Committee since April, 1920. A provisional scheme now extremely likely to be put into effect contemplates a contribution by the Institute each year from unrestricted funds of an amount equal to 5% of the total salary roll and the contribution each month for every member of the instructing staff (with some possible exceptions) of 5% of his salary. From the funds thus accruing the Institute will be able in future to provide insurance in case of death or total disability of a teacher and will likewise be able to provide satisfactorily for teachers who retire on reaching the age limit of sixty-five.

TWELVE of the twenty-five living members of the Class of 1873 met at Young's Hotel on the evening of May 31 to observe the Fiftieth Anniversary of their graduation from the Institute. There was no regular program. After dinner, letters from absent members were read and the Class sat about to smoke and deal in reminiscences. Dr. Francis H. Williams, President of the Class, was Toastmaster, and Robert A. Shailer, Secretary, read the letters.

In 1870 the Class sat for its picture on the steps of Rogers. At their Fiftieth Reunion once again they gathered on these self-same steps and once again were photographed.

Next evening the Class participated in the joint reunion held by the first ten classes of the Institute. Members of all classes from '68 to '77, whose ranks are now too thinned to make single reunions effective, gathered at the Boston City Club for a dinner over which President Stratton presided. The Class of '73 was the only one of these classes to hold, an autonomous reunion.

SUMMER reading is dead. The ancient requirement that students between their Freshman and Sophomore years shall read and report upon a certain number of non-professional books in the summer is a thing of the past. In the recent reorganization of Faculty Committees, mentioned in the May issue of the Review, the Committee on Summer Reading was abolished and no provision was made for the future administration of its work. The English Department, which had never been very enthusiastically in favor of the requirement, urged that this state of affairs be left unremedied and so, since there was no one to administer this work there was none who need perform it. A recent vote of the Faculty officially abolished the requirement.

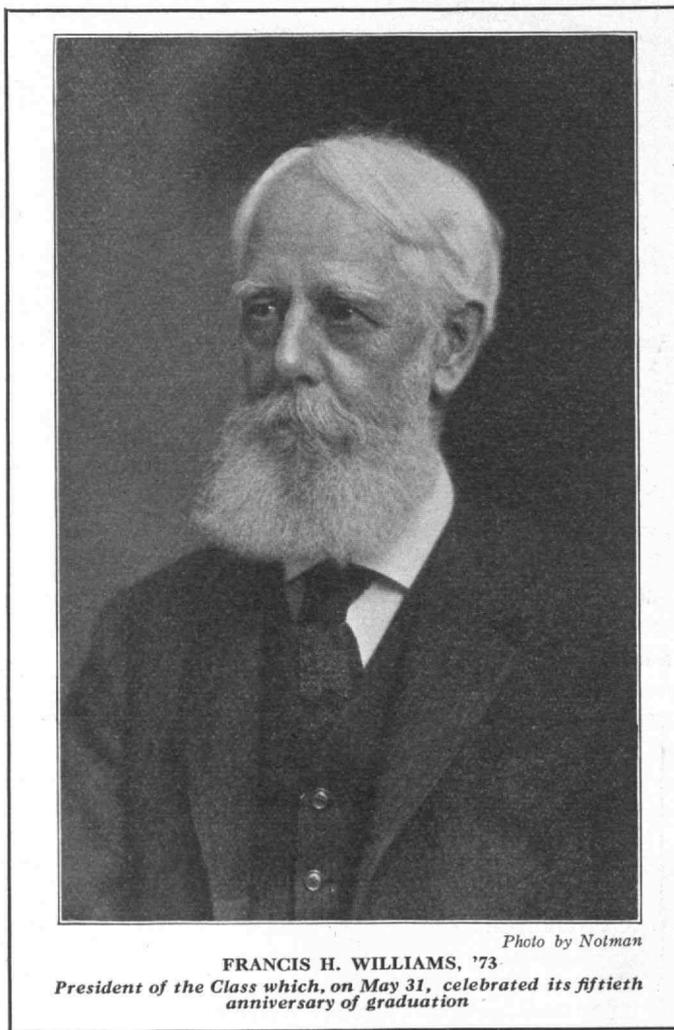


Photo by Notman
FRANCIS H. WILLIAMS, '73
President of the Class which, on May 31, celebrated its fiftieth anniversary of graduation

Committee on Summer Reading was abolished and no provision was made for the future administration of its work.

To Our Readers

Volume XXV ends with this July number. Our readers are reminded that the Review is not again issued until November. This November issue will be the first of Volume XXVI and will be placed in the mails on October 25.