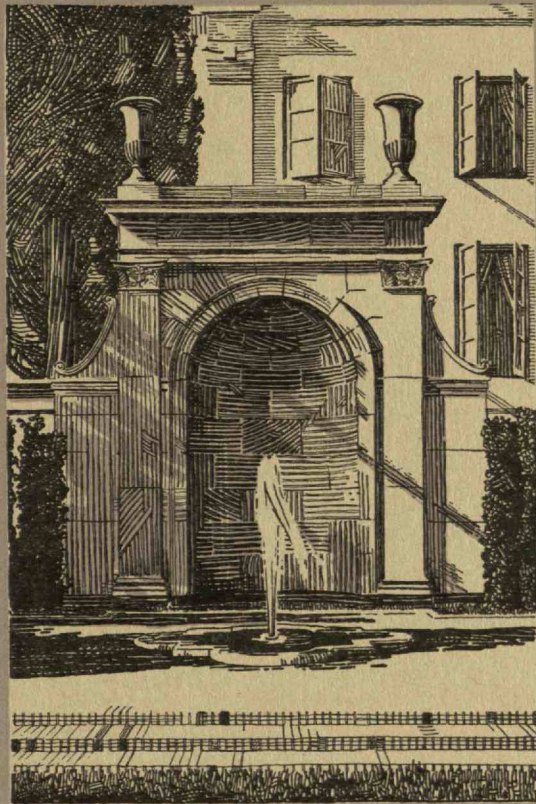


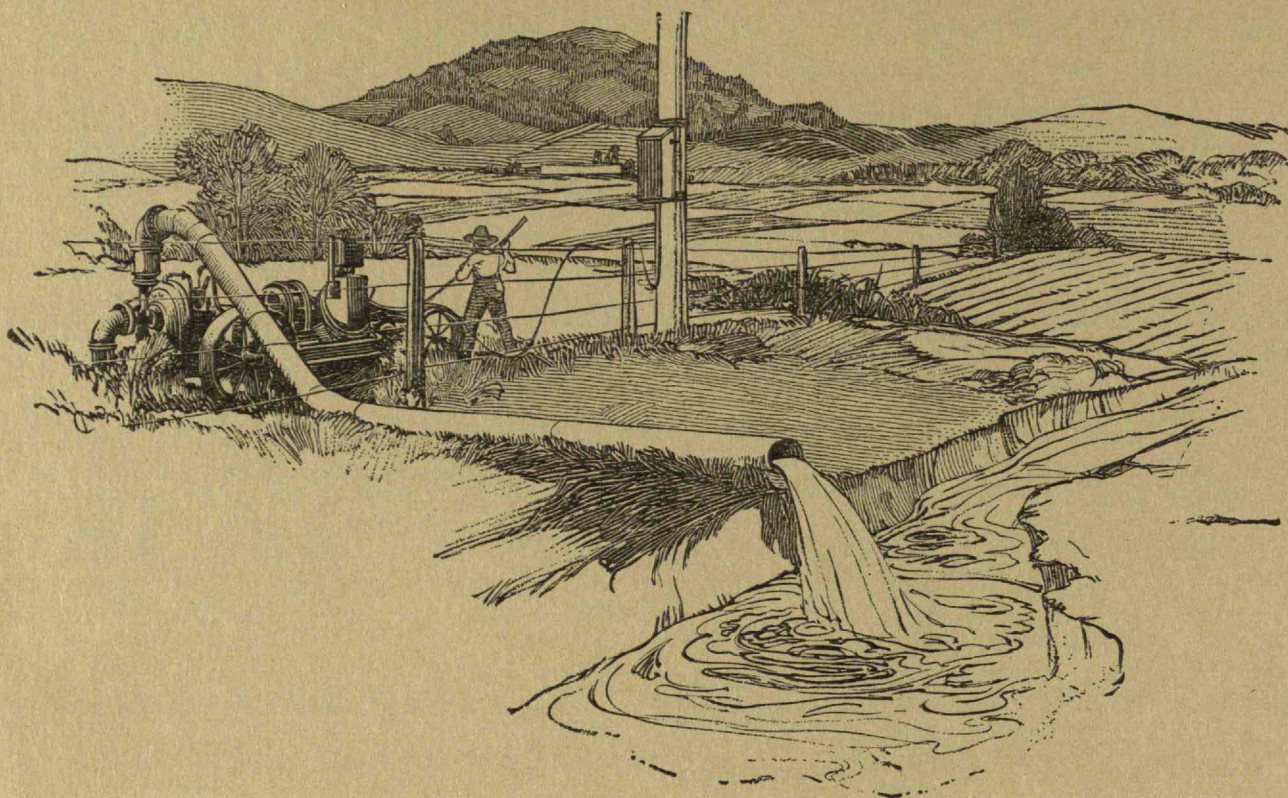
THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY



MAY
1925

PUBLISHED BY THE ALUMNI ASSOCIATION



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RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY

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THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Vol. XXVII

MAY, 1925

No. 7

The Past Month

VISITING Committees of the Corporation have sometimes visited and sometimes not, but under a new plan only recently evolved it seems likely that the functions of these committees will take on a new and important significance in the educational affairs of the Institute. The addition of a set of "Advisers" to the Visiting Committees of two Departments—Electrical Engineering and Naval Architecture and Marine Engineering—has already borne considerable fruit, (the latter having already suggested the establishment of a new course or option, for details of which see below), and the extension of the idea thus begun is contemplated as fast as an able and interested personnel may be found, and the application of the principle may seem appropriate.

"Advisers" to the Visiting Committees will be, in the mind of President Stratton, illustrious men in the industrial field most closely related to the Department in question. They may be already members of the Corporation or Alumni of the Institute—all the better if they are—but neither of these qualifications is a prerequisite to membership on the "Advisory Committee" formed from the combination of the Visiting Committee and its Advisers. One finds thus on the Advisory Committee to the Department of Electrical Engineering the names of Charles L. Edgar, President of the Boston Edison Electric Illuminating Company and J. E. Aldred, neither of whom is an Alumnus nor a Corporation member.

This latter Committee, with Gerard Swope, '95, President of the General Electric Company, Chairman

of the Visiting Committee, presiding, convened on April 8 at the office of the President for consultation with him and with several members of the Electrical Engineering staff. Other advisers, in addition to Messrs. Edgar and Aldred, were Frank B. Jewett, '03, Charles Neave, '90, Farley Osgood, '97 and Russell

Robb, '88. Elihu Thomson, non-resident Professor of Applied Electricity, was likewise in attendance. From 10:00 a.m. until late in the evening the Committee discussed the plans, problems and ideals of the Department, confining themselves not merely to a technical discussion of electrical engineering problems, but considering such diverse problems as the relation of instruction in physics, economics and English to the proper education of an electrical engineer. Study was given likewise to methods whereby individual students, particularly those of marked ability, could be developed with a minimum of restriction placed upon their own intellectual scope and ability.

The Committee on Naval Architecture and Marine Engineering, of which A. Farwell Bemis, '93, is Chairman, has in some senses progressed further than the Committee on Electrical

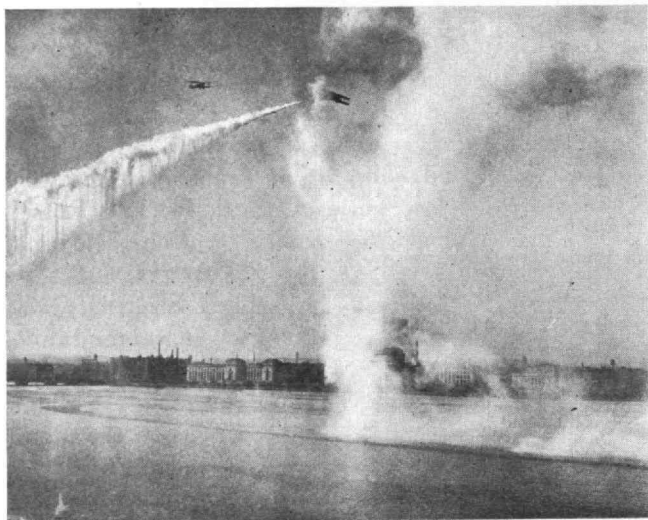
Engineering, in that it has already presented to President Stratton a full written report containing several recommendations for possible executive action. The Committee, with Prof. J. R. Jack, Head of the Department, participating, held a series of conferences in New York on December 17, 1924, with the executives of a number of shipping and marine organizations. Said the Committee at the outset of its report, viewing the



Notman

GROSVENOR D. W. MARCY, '05
Who, as Vice-Chairman of the General Reunion Committee, is the man behind the gun that is being loaded for the coming celebration

decrease of steel vessel tonnage built in this country from 3,300,000 in 1919, to 107,000 in 1924, "We have been led to the query as to whether we are making full and proper use of the fine equipment in professional teaching staff and physical plant to the full extent of our opportunities and obligations to the upbuilding and maintenance of our merchant marine. This has led to the query as to the fitness of graduates of the Department for practical service to the American ship-



SMOKE SCREEN

The Institute curtained from the Esplanade. See the story below

ping companies engaged in both coastwise and international merchant marine trade."

One of the most important suggestions made by the Committee was that a tripartite investigation be begun of the possibility of establishing at the Institute a course or option for training in the technique of the organization and conduct of shipping companies — the idea of the Committee being that if and when such a course were established, its arrangement would most profitably be coöperative; with practical work in shipyards or at sea dovetailed with theoretical work at the Institute.

THE recent visit to Boston on March 26, of Major-General Amos W. Fries, Chief of Chemical Warfare Service, U. S. A., was the occasion of a demonstration in Technology's front yard that will be remembered for a long time by everyone who witnessed it. While not entirely convincing as a military maneuver, æsthetically the gas curtain laid down by Lieutenant John T. Austin, flying a Martin bomber, was completely successful. Both banks of the river were lined with people at noon, the sun shone high and warm and scarcely a breeze was stirring as the big planes swept on from the airport in duck formation. They circled the basin once and then Austin let go. The smoke cloud hung suspended for a moment in heavy sworls of white, leaving deep shadowed recesses. Then it began to drift lazily down to the

water in long spirals. As the cloud sank it grew thinner so that the effect was much the same as that given by a graded wash rendering. The curtain was undeniably admirable as regards beauty. So far as military value was concerned, however, a mere layman could not feel convinced that behind this palpably thin screen planes could sweep up on Boston unobserved, bringing their loads of hell and death. There was no time when the other planes which were said to be simulating enemy ships could not be clearly seen except in the very first moment when behind the heavy bank their gaunt shadows hurtled across the white cloud.

During the afternoon, General Fries visited Technology to inspect the chemical laboratories and the work being done by the reserve officers' training corps. The country's only R. O. T. C. Chemical Warfare Unit is located at Technology. In the evening, General Fries was the principal speaker at a banquet in his honor given by the Boston section of the United States Chemical Warfare Association and the North-eastern section of the American Chemical Society in the Copley-Plaza Hotel. Robert T. Haslam, '11, Professor of Chemical Engineering at Technology, was in charge of the arrangements. Among the speakers were James F. Norris, Professor of Organic Chemistry at the Institute and President of the American Chemical Society, and Samuel H. Wilder, '91, Acting President of the Boston section of the United States Chemical Warfare Association. Throughout his stay General Fries was accompanied by Lieutenant Alden H. Waitt, '14, and Captain Thomas Phillips, both of the Chemical Warfare Service. Captain Phillips is Assistant Professor of Military Science and Tactics and in charge of the Chemical Warfare Unit at Technology.

STATISTICS recently released by the Registrar's Office give rise to interesting conjectures. For several years now it has been the duty of The Review to record continuous drops in the total registration at the Institute. The figures for 1923-24 for the three terms were 2949-2811-2719 respectively. The corresponding figures for the present year 1924-25 are 2938-2826-2748. Thus it will be seen that while the beginning of the year indicated a continued drop in registration, the second term showed an increase over the same period last year for the first time in a long while. The interesting feature of this is that the third term shows a still greater increase over last year's figures. One of two conclusions may be drawn. Since the decreases from first term registration are due largely to scholastic difficulties on the part of individuals, it might be that the reason for second and third term increases over last year's figures is that the scholastic ability of the student body has improved. The more logical conclusion to draw is that Technology has turned the corner and that we may now expect to see still further increases. Either conclusion is a happy one.

At a recent dinner given by the Engineering Foundation of which he is Vice-Chairman, the seventy-ninth birthday of Edward Dean Adams, '69, engineer, financier and philanthropist was celebrated as a national event. The roster of the dinner committee was a list of names to conjure with, including as it did, George F. Baker, Nicholas Murray Butler, Thomas A. Edison, Professor Michael Pupin, Newcomb Carlton, Robert A. Millikan and many others. During his full life, Mr. Adams has held more than 200 official positions and memberships. His affiliations are international. He has been closely connected with national electrical development and has been a director of numerous corporations including railroads, mining, power and a wide range of the industries. He is one of the grand old men of engineering and it is well that his services to the world should be thus recognized and applauded at so fit a time.

THE recent presentation of the John Fritz Gold Medal to John Frank Stevens, formerly Chief Engineer of the Panama Canal, has several features of interest to Technology Alumni although Mr. Stevens is not himself an Institute graduate. The Medal is the highest honor bestowed by the engineering profession in this country. Mr. Fritz has done great work for railroads, being the discoverer of the Marias Pass which is said to be the best railroad pass over the Rocky Mountains and the builder of the Cascade Tunnel of the Great Northern Railway. He was also head of the American Railway Mission to Russia in 1917-1918. He was President of the Interallied Technical Board, supervising the Siberian railways, when, if memory fails not, Henry J. Horn, '88, was Vice-President of the board. At the presentation John R. Freeman, '76, presided. Other holders of the medal include such men as Lord Kelvin, George Westinghouse, Alexander Graham Bell, Thomas Alva Edison, George W. Goethals, Guglielmo Marconi, Orville Wright, Elihu Thomson, former Acting-President of the Institute, and J. Waldo Smith, '86.

DOCTOR C. G. Abbot, '94, director of the Astrophysical Observatory of the Smithsonian Institution, has again furnished The Review with a news item of interest. His most recent exploit is that of estimating the diameter of ten of the brightest stars by separating their heat into a long spectrum and then calculating the probable temperature of each. In this work Dr. Abbot used a radiometer constructed by the late Dr. E. F. Nichols, former president of the Institute. Using the great telescope of the Mount Wilson Observatory, Dr. Abbot was able to obtain quite accurate measurements of heat far into the infra red. Beta Rigel was observed to have an estimated absolute temperature of 16,000 degrees Centigrade as compared with the sun's meagre 6,000. Sirius, the brightest

star in the heavens, was recorded at 11,000, Aldebaran, still going strong despite its frequent use by poets, recorded 3,000, Betelgeuse, 2,600 and Alpha Herculis, 2,500. The last two have an estimated diameter of 500 times that of the sun.

SPRING has come to the Institute and to the heart of Major Smith, its efficient Superintendent of Buildings and Power. All winter long a desultory battle has waged between the Major and *The Tech*, the undergraduate publication maintaining that the system of ventilation now in use in Eastman Hall failed to ventilate, and the Major proving by uncontrovertible statistics that the rooms of Technology were provided with super-ventilation of the most approved type. As the combat went on it became more acrimonious, a communicant of the student paper suggesting that the Major might attend a class to see how well his system was working, and the Major replying with some asperity that possibly the editors of the publication might do the same thing.

The warming zephyrs of the approaching summer



P. & A. Photo

CHARLES G. ABBOT, '94

The Director of the Smithsonian Institution's Astrophysical Observatory is still checking up on the sun which he caught napping a year ago

have, however, calmed the troubled seas and to-day there is no one at Technology that would not approve the newest devices which the Major has provided for the beautifying and improvement of the Institute.

The skating rink episode in the back yard has failed to daunt the Major. He still remains convinced that the rear lot is a place worthy of great improvement and to that end has provided a brand-new cement sidewalk leading from the back of Building Ten, diagonally toward Massachusetts Avenue. By performing this neat piece of construction (which is like the Pacific Great Eastern R.R. in that it gets tired and leaves its terminus unfixed) the Major has proved himself an active exponent of a larger building program for the further reaches of the Institute grounds. It can scarcely be expected that Technology will react any differently to the new improvement than does the average municipality. Therefore one may confidently predict that the hastening summer will witness the complete uprooting of the new walk for the purpose of constructing some magnificent shed.

Remark was made in *The Review* last fall about the new grass and hedges provided in the front yard. At that time the Major attempted to stop the inroads on his new turf of the foot of Attila by swinging ropes from walk to walk. With spring, the Major, has caused a number of natty blue signs, giving warnings to keep off the grass, to be placed on all the crucial corners. Perhaps these warnings might have received better heed had there been any observable grass to keep off of. At any rate they proved unsuccessful and at the very moment of this writing the Major's men can be seen constructing a still more stringent guard and one which promises to be effective. Graceful pipe rails are being driven into the ground at every corner, effectually transforming the grounds from a semblance of the deck of a storm-tossed destroyer to the general aspect of a freshly polished cafeteria at opening time. Only black glass sidewalks will be now required.

But all of the Major's activities have not been confined to the great out of doors. Within the confines of 10-250 he has been busy placing a new motion picture booth. With the aid of this new device it is expected that lectures in that room will be even more persuasive than they have in the past. More, painting of walls and ceilings has been revolutionized. The pliant slapping brush of the journeyman painter is relegated to the limbo where dwell the four-wheeler, the bustle, the course on War Arms, the "real estate agent" and (soon) the three-term calendar. A modern paintician, masked against noxious vapors like a charging infantryman, directs, now here, now there, the hissing nozzle of a spray machine. Thin and even goes the coat of creamy white lead. So marches science.

THE new Register of Former Students, dated 1925, made its appearance on March 30. It was eagerly hailed by those who had wearied of the necessity for

reference to the volume published in 1920, and which had been making for the past two years a relentless approach to the goal of complete uselessness as a compendium of up-to-date information.

The new Register fits the alumni body a bit tight at the waist. Fashion has changed; the Stylish Stout in directories, vogue in 1920, has given place to the new Straight Front. The 1925 Register, which must, one thinks, contain at least seven thousand more names than its predecessor, has somehow been compressed to a total of 423 pages, as compared with the 827 of the previous edition. This, although a feat comparable to engraving the Lord's Prayer on the head of a pin may, it is feared, give rise to the impression that plague has stricken at the Institute's Alumni and laid them low. But it is not plague: it is economy. The thinness of the volume should deceive no one as to the care, the thought, the trouble, the pain and the conscience that went into the making of it. It is a record as correct and as inclusive as could be humanly imagined, and great is the credit which it reflects upon Registrar J. C. MacKinnon, '13, its Editor, and Miss Julia Comstock, his executive lieutenant, in charge of the smooth-running Publication's Office in which the work was done.

Much less, however, is the credit which the volume reflects upon those who planned its physical appearance. Someone seems to have selected the telephone directory as a typographical ideal to follow, and then lost the way. The result is a specimen of the book-maker's art well calculated to make William Morris renounce his faith. The book is set in six point type, two columns to the page, with margins so scant at the trimmed edge that, at the binding edge, the eye can discern no space at all between the right-hand column of a left-hand page and the left-hand column of a right. Nowhere in the book are there any spaces or leads for relief of the myopic. Nor is there much expansive warmth in the style chosen for the imparting of the information so painstakingly gathered. Abbreviation's artful aid gives rise, for example to: "Grad. U.S.Nav. Acad.; XIII-A S.M.Lieut., Construction Corps, U.S.N., Navy Dept., Bureau of C. and R., Washington, D.C.," which, although inclusive, is not encouraging. The Register may not be an example of the best in printing but it has certainly given the micrographers something to think about. And even its displeasing appearance cannot detract from the genuine achievement of Mr. MacKinnon and Miss Comstock.

EVEN a book like the Register has its human interest. In the Alphabetical Register a long undisputed champion has been dethroned. In 1915 Joseph A. Aaron, '11, had the honor of being the Abou Ben Ahdem whose name lead all the rest. In 1920 he was still in his prime and sat the throne with easy grace. But in 1925 he has lost his honorary post irretrievably and is now led by Hart R. Aaron, '22, who sidled into first place