

The Technology Review

Published at Cambridge 39, Boston, Mass.

ROBERT E. ROGERS, *Editor*, Massachusetts Institute of Technology, Cambridge, Mass.

VOL. XXIII

NOVEMBER, 1921

No. 4

PRESIDENT NICHOLS RESIGNS

DR. ERNEST FOX NICHOLS, inaugurated president of the Institute only last June, has resigned his office because of ill health, and his resignation has been accepted by the Executive Committee of the Corporation. The resignation was announced November 20, 1921. He has been granted leave of absence until January 4, 1922, when the Corporation will meet and ratify the action of the Executive Committee.

Although Dr. Nichols was inaugurated president of the Institute June 8, he never assumed office, for soon after the ceremonies he was stricken with an illness which made it impossible for him to take up his duties. He has been spending the time since the inauguration in Woodstock, Vermont, where his physicians ordered him to recuperate. Because of this illness and its consequences his physicians insisted that he relinquish his post and after much discussion the Tech Executive Committee regretfully accepted the resignation on the ground that there seemed to be no alternative.

The post which is left vacant will be filled by Dr. Elihu Thomson of Swampscott, chief engineer of the General Electric Company who has been again appointed acting president, a post which he filled after the death of Richard C. Maclaurin in January, 1920, till Dr. Nichols was named last spring. The office carries no responsibility of actual management for it is under this condition that Dr. Thomson agreed to accept. The educational affairs of the Institute will continue to be directed by the Administrative Committee, consisting of Prof. Henry P. Talbot, who is also head of the chemistry department and acting dean; Prof. Edward F. Miller, head of the department of mechanical engineering and chairman of the Faculty, and Prof. Edwin B. Wilson, head of the department of physics.

Dr. Nichols' chief concern now will be to regain his physical strength after which he will probably resume his research work at Nela Park. The Corporation has already begun to search for a successor to him.

DEAN HENRY PAUL TALBOT

BY DR. JAMES F. NORRIS

Professor of Organic Chemistry, Massachusetts Institute of Technology

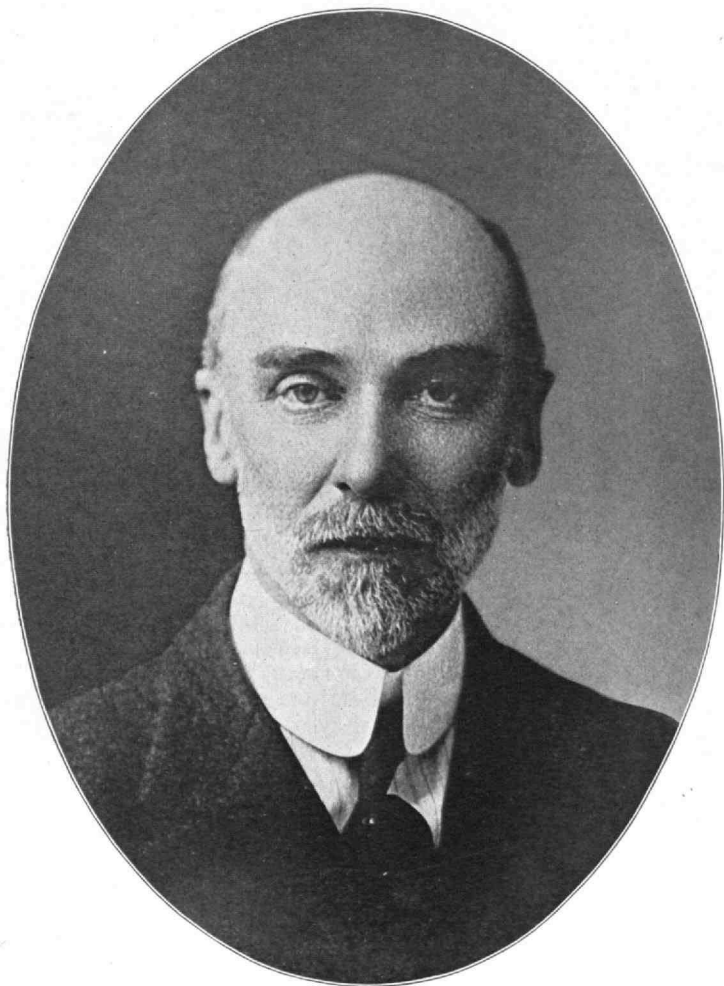
Reprinted from The Tech Engineering News

FROM the point of view of those connected with Technology, the retirement of Dean Burton and the appointment of Professor Talbot as acting Dean were, no doubt, two of the most important events of the last school year at the Institute. The students, especially, are anxious to learn the record and personality of the man who is to be their representative in the Faculty — the man to voice sympathetically their point of view as a body and to look after their individual interests. They want to know something definite of the one to whom they are to turn for counsel in their handling of the difficult problems that arise in connection with student government and other activities of the student body. I have been asked to sum up the more important events in the academic and scientific life of Professor Talbot and to sketch his personality. I have been associated with him for a number of years as a colleague in the Department of Chemistry and have had the opportunity to see how he handles men and things. After ten years of absence from the Institute my return made it possible to observe with the point of view of an outsider — with the perspective that is often lost by continuous association.

The student reserves his respect for the man who has accomplished things in the world and his confidences for the one who will meet him half-way with sympathetic interest. A review of the record of Professor Talbot as a chemist and administrator and a brief account of how successfully he has maintained an intimate and cordial relationship with the students of his department will assure the student-body at the outset that they have in their new Dean a man whom they can respect for his attainments, in whom they can confide, and one whose advice and judgment will be valuable.

Professor Talbot graduated at the Institute in 1885 and received the degree of Doctor of Philosophy from the University of Leipsic in 1890. He returned to the Institute as an instructor and was rapidly promoted through the several grades and was finally appointed Professor of Analytical Chemistry in 1898. He showed marked administrative ability and from 1895 was nominally in charge of the Department of Chemistry, although his official appointment to this post was not made until 1901.

Professor Talbot's training in chemistry was broad; his work as a student equipped him with the point of view of the analytical chemist; his research for the doctorate was in organic chemistry; and he devoted



HENRY PAUL TALBOT, '85
Acting Dean of the Institute

much attention to the study in Germany of the new physical chemistry which was being rapidly developed at that time. He was impressed with the importance of the advance of the science in this direction, and on his return from Germany he introduced at the Institute a course in physical chemistry, which he taught successfully. This course was one of the first in this subject given in American universities.

When Professor Talbot took over the instruction of the first-year students, he felt the advisability of bringing before them the more fundamental concepts of the newer chemistry. He accordingly prepared with the assistance of Professor Blanchard a text for this purpose entitled "The Electrolytic Dissociation Theory." Professor Talbot's progressive action in these two cases is typical of his attitude in educational affairs. He has been the leader in the development of his department to its present efficient condition and has served as chairman of committees on chemical education in the American Chemical Society and the Society for the Promotion of Engineering Education. Professor Talbot has shown unusual interest in the teaching of high school science and has been helpful in organizations devoted to the improvement of teaching in this field. He served as President of the New England Chemistry Teachers' Association and was for several years chief examiner in chemistry of the College Entrance Examination Board.

Professor Talbot's record as a member of the American Chemical Society brought to him last year the honor of election as one of the five directors who determine the more important policies of the Society and have full charge of its finances. He has been a member of the Council since 1898; he has served as associate editor of the *Journal of the Society* and as chairman of the Division of Inorganic and Physical Chemistry. He has also been a member of many important committees.

During the Great War, Professor Talbot was appointed a member of a small committee to act in an advisory capacity to the Bureau of Mines in the work it had undertaken in correlating the chemical activities of the country to meet the problems arising from gas warfare. He was particularly helpful in presenting to the Secretary of War directly the needs of this organization, which carried on for over a year, outside of the War Department, all the work on war gases.

Professor Talbot has always been interested in research. In the years following his return from Germany he published the results of several investigations in the field of inorganic and analytical chemistry. For a number of years he was chairman of the committee of the American Academy of Arts and Sciences that has charge of the C. M. Warren Fund, the income of which is devoted to aiding chemical research. In recent years, the small amount of time available after he had completed his work as a teacher and administrator has been devoted to editorial work and the writing of papers on educational, scientific and industrial subjects. He is the author of a widely read textbook on Quantitative Analysis. Professor Talbot is the consulting editor of the International Chemical Series, which comprises books on a wide range of subjects in the field of chemistry. During the war the *Atlantic Monthly* published

a series of papers by him on gas warfare. These were written in the interesting and lucid style which is characteristic of all of Professor Talbot's writings. As Chairman of the Faculty, and of the Administrative Committee since the death of President MacLaurin, Professor Talbot has had much to do with shaping the recent policies of the Institute.

Professor Talbot's work has always been appreciated by chemists, and it was with pleasure that they heard last June that Dartmouth College had bestowed upon him the honorary degree of Doctor of Science. In bestowing the distinction his record was summed up as follows: "Henry Paul Talbot—Administrator and Scholar, faithful and versatile contributor to the welfare of a distinguished sister institution of high learning; scientist whose interest in the discovery of new truths is matched by instinct for the application of those truths, of whose knowledge you have possessed yourself; by virtue of the authority vested in me, I welcome you to the fellowship of Dartmouth men and I confer upon you the honorary degree of Doctor of Science."

In the midst of all his scientific, educational, and administrative activities Professor Talbot consented to serve as acting Dean for the present year. A factor involved in his decision was, no doubt, the conscientious attitude which has been a marked element in his character. If he saw a duty he undertook it and put his best efforts into it. A colleague, who was a former student of Professor Talbot, considers his conscientious makeup to be his outstanding trait; he always had his lectures in such form that it was possible to take logical and well balanced notes; and he always saw that every student got a "fair deal."

When Professor Talbot came to the Institute there were no student activities; no "Tech," no "Show," and fraternity life had not been developed. Although he did not have the advantages that come from these important factors in making men of boys and in developing character and poise, he has always valued them. A former student said that a number of his fellows were led to join fraternities through the high opinion of them expressed by Professor Talbot. His sympathetic attitude was recognized by his election several years ago to active membership in the Phi Gamma Delta and Alpha Chi Sigma fraternities. In 1914 the Technique was dedicated to Professor Talbot, an honor the meaning of which the students know best.

Professor Talbot's belief in student activities has shown itself in the interest he has taken in the Students' Chemical Society, which has grown to be an important aid in developing its members. This attitude towards the various organizations controlled by the students has its foundation in the keen personal interest Professor Talbot has always shown in the students as individuals. One of my colleagues, in pointing out the cordial relationship that exists between Professor Talbot and the students who get to know him, noted the fact, evident to us all, that Professor Talbot has retained the spirit of youth. It could not be otherwise with the pleasure he derives from association with youth. For years his home has been open informally to his students and many

of the graduates of the Institute recall the hearty greeting they always received and the "Southern hospitality" of Mrs. Talbot. It will be of interest to the new students to know that Mrs. Talbot has the qualifications and sympathies that will make her an efficient helper to the Dean. There are occasions in the life of a young man just from home when the advice of a woman is valuable.

Professor Talbot knows the student well. For a number of years he took an active part in the instruction of the freshmen and met the seniors in chemistry in small classes in which all formality was dispensed with. In the course called "Thesis Reports" he took the opportunity of training men in the art of talking on their feet; and he corrected in a friendly spirit many faults in personality which stood in the way of success in the intercourse with men.

Those of us who know him best feel confident that the students will find in their new Dean a man after their own hearts.

PROFESSOR CROSS DIES SUDDENLY

PROFESSOR-EMERITUS CHARLES R. CROSS, '70, died very suddenly of heart trouble on Wednesday morning, November 16, at his home in Brookline. He was seventy-three years old.

This news comes as THE REVIEW goes to press. Professor Cross's life was peculiarly a part of the first half century of the Institute's life and with him one more of the small living band of pioneers is gone. A full memorial will be published in the January issue of THE REVIEW.

Will the Alumni of the Institute send in any incidents they may remember as notable or unusually interesting about Professor Cross, in either his public or his personal life, particularly if they are concerned with the early years of the Institute.

THE OCTOBER MEETING OF THE ALUMNI COUNCIL

Interesting reports from corporation members

THE eighty-sixth meeting of the Council, the first of this year, was held in the Walker Memorial on Monday evening, October 31. There was a goodly gathering at dinner, with Prof. E. F. Miller, the new chairman of the Faculty, as the special guest of the evening. The well-known Mr. Aiken "of Kansas" was salad orator, mixing truth and fiction indistinguishably, and the entire evening was a succession of funny stories, including the one that has been told at every Council meeting for the past six months. President Arthur D. Little, '85, presided.

The principal speech of the evening was the resumé and forecast by Professor Miller of the year past and the year to come. He first dealt with the registration, the largest to date, with a freshman class of 700 and a senior class of 1000, plus 350 men holding degrees or unclassified. We have, he said, the largest percentage of foreign students of any college in the country, seven per cent. From other colleges come 38 per cent, of whom 15 per cent hold degrees. The number of entering freshmen and the number of students from Massachusetts have not kept pace with this increase from other colleges and other countries. The Faculty is now 150, an increase of 25 over last year, largely because of the addition of 15 Faculty instructors, for example Mr. Lambirth of Course II, whose long and faithful service deserve the recognition.

Of great importance to the Institute, said Professor Miller, is the fact that last year the United States Government took the Ordnance School of the Army from the Aberdeen Proving Ground and asked Technology to undertake the work. The Government is sending us 25 men a year, has loaned us all necessary equipment, consisting of seven carloads of motors, worth about \$250,000. The men will remain for a full calendar year, taking the most advanced work the Institute offers, intensive work in calculus, applied mechanics, etc. Six of the best survivors of this course will be kept here for another year to take their A.M. Besides this, the Government is considering another Ordnance School for Technology, the school in gas engines, tanks and tractors. As soon as the new building, already started behind the old barracks, is ready to receive them, gas engines worth \$30,000 will be sent here. The naval constructors are here this year as usual, besides some men who are doing special research work in torpedoes, which will probably be continued.

Professor Miller also described briefly the very gratifying results of one year's work of the new Medical Department. Its growth has been very great; it has treated in one year 7643 patients, of whom 54 were surgical cases. In all serious cases parents are kept informed by tele-

graph, and the sick boys are visited constantly by Mrs. Archer T. Robinson, who is giving all her time to the work, and to whom Professor Miller paid a warm tribute. There were 236 cases treated from among the Faculty. For needy students who might not be able to afford medical attendance the Corporation appropriated \$5,000, of which \$350 was spent. During the year there were three deaths. Physical examinations were made to the number of 1017, including all freshmen and new students, all men engaging in athletics and any others who ask for an examination. Finally, added Professor Miller, the records of the Medical Department show that the student vitality is lowest in April, when over 1200 cases were treated.

In closing, Professor Miller said that so far as he knew, never had the Institute begun its school year so smoothly, with so little difficulty or friction as it had this year.

The other chief business on the program was to consist of statements by retiring and incoming term members of the Corporation. Harry J. Carlson, '92, on being asked to give an account of his stewardship, gave a detailed and encouraging account of the work in the past few years to build up the Architectural Department, in which he had been especially interested. He told how, with Dr. Maclaurin's encouragement, an attempt had been made to find the very best possible man to fill the vacancy as head of the department, and how out of a list of two hundred men the present head, Professor Emerson, was finally invited and at length accepted. Mr. Carlson then went on to sketch the new morale in the architectural work, resulting from the personality of the new chief, his interest in the work, and his generosity — the man known to his students as William the Affable, his instruments the oil can and the hammer. He spoke also of the joint Faculty of the Technology and the Harvard Architectural Schools and the conjunctive problems, a co-operation which has benefited both schools and the general architectural profession. In closing, Mr. Carlson said that he hoped the Architectural School would soon move across the river and again become one in spirit with the rest of the school, provided it was not put down in a back lot on the railroad track but given a position compatible with its artistic pretensions.

Dr. Mixter and Mr. Horne, also members, were not present to speak, but Colonel Locke and Mr. Metcalf spoke as "baby members" of the Corporation and pledged themselves to faithful service. Mr. Locke spoke of his interest in human engineering and the student activities and bespoke the interest of the Council in that line of endeavor; and Mr. Metcalf spoke of the problems resulting from the unparalleled growth of the school in late years, particularly those having to do with the great numbers of students and the increasing lack of personal contact by the instructors, many of whom were young and green at the work.

There was, following these speeches, brief discussion as to the place of meeting for other Council meetings in the year and for the annual dinner, the question being raised whether it would not be easier for the members to have the meetings in Boston instead of at the

Institute. The general sentiment seemed to be in favor of the Institute as a meeting place, Mr. Metcalf being especially strong in that point of view; it was finally left to the Executive Committee for decision.

Mr. A. J. Browning, '22, of *The Tech*, who has been working for most of the summer trying to build up the membership in the Alumni Association, made a brief but encouraging report, which will be found *in extenso* in another part of this issue.

Prof. Archer T. Robinson of the English Department, who travelled a good deal during the summer in the Middle West, partly on his own business and partly as a visitor from the Alumni Association to the local clubs, spoke of his experience in Washington, Chicago, Cleveland, ten cities in all, where he talked to Tech men and gave them the message of the central body of alumni. He declared himself 100 per cent sold to the Middle West, but insisted that the Tech men out there feel like orphans, cut off from all contact and sore on "the Boston crowd" as they call it, and thinking of Tech in terms of twenty-five years ago instead of as it is today. He especially urged the Council to re-establish connections, to get back in touch with their alumni, to get into touch with industry and with other engineering schools, and insisted that many members of the Faculty ought to be sent out frequently, not at the expense of the local associations but of the Institute.

This provoked an interesting and lively discussion, in which many took part, notably Mr. Holcomb of the Washington Club and Mr. James P. Munroe, who described the Princeton plan of alumni organization with a live wire general manager constantly on the move, who organizes backward fields, keeps them stirred up, has a lecture bureau at his disposal to send out, stumping the country when necessary; an expensive proposition but one which has brought millions to Princeton. President Little voiced, apparently, the sentiment of the gathering when in summing up he urged the Council to "hold the thought."

Other business of the meeting included a statement from Dr. Rowe in behalf of the new choral society which is to meet on Friday evenings at the Institute to sing good music, to which neighboring alumni are cordially invited. Mr. Everett Morss, in referring to Mr. Carlson's speech paid a tribute to him as having been the man to suggest Technology's proposed part in the threatened railroad strike, and also to settle the vexing problem of the Walker Memorial Dining Room and put it on its feet again.

It was voted that the annual dinner of the Association be held in the Walker Memorial on Saturday evening, January 7, 1922.

The Council then adjourned at the usual hour until November 28.

THE DRIVE FOR ALUMNI MEMBERSHIP

A summer's work in increasing interest in the association

BY ALBERT J. BROWNING '22

Editor's Note: As a result of last spring's discussion concerning the present condition of THE REVIEW and its future status, it was seen clearly that any change of policy in the magazine must largely result from increase in subscriptions, which meant automatically, an increase in membership in the Alumni Association. Incidentally, one method of effecting both seemed to lie in raising the level of the class notes and increasing their scope. For these two purposes a special agent was appointed, Mr. A. J. Browning, '22, general manager of *The Tech*, who during part of the summer worked to such good purpose that his report, a part of which is herewith published, as of general alumni interest, shows a gain of nearly \$2,000 in dues. As this is only the beginning of the work, the problem and its successful solution is placed before the brethren for their advice and suggestions.

In order to secure more members of the Alumni Association, it was announced at the meeting of the Alumni Council on May 23, 1921 that a special agent had been appointed and that a drive would be conducted for a period of seven weeks. The work of this special agent was to be three-fold; first, to obtain members for the Alumni Association; second, to assist the Class secretaries in getting more live Class notes for THE REVIEW; and third, to assist the editor in any way possible.

With fourteen thousand alumni and former students of Technology and only about four thousand of these as active paying members of the Alumni Association, there was a large field for such a drive. However, it was decided to work only with those men who had been out of the Institute less than twenty years.

The purposes of this report are: first, to present to the Alumni Association a summary of the work done by the special agent and, second, to serve as a reference for future drives.

Work was started on June 13, 1921, at which time the Class of 1921 was approached for membership dues. In the few minutes that the Class was assembled prior to receiving their degrees two hundred and forty-nine dollars was collected and two hundred and sixty-four seniors signed cards requesting that THE REVIEW be sent them and promising to pay dues.

Being a reserve officer, I was ordered to camp at Fort Monroe for a five-week period after the close of school and was unable to do any more work until July 25. At that time work was begun in earnest.