

75
ANDREW CARNEGIE
2 EAST 91ST STREET
NEW YORK

December 7, 1910

My dear Mr. MacLaurin,-

Ye're no blate. Just think of it, I hav given \$3,800,000. towards extending the Pittsburg school, and certainly it has cost as much more to bring it where it is, and you ask me to help Boston, which hasreceivd \$400,000. from me for the Franklin Institute! I enjoy the joke! Besides, I do not put the Pittsburg schools behind even the Massachusetts Institute of Technology. It is a close race and we'll see who is winner by and by.

Harty congratulations upon your success.

Always very truly yours,

Andrew Carnegie

Dr. Richard C. MacLaurin,
Massachusetts Institute of Technology,
Boston, Massachusetts.

P.S. If I mistake not, I am a part owner of that ground that my friend Lee Higginson and some of us purchast to unite the two institutions, which should be done.

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A NATIONAL OPPORTUNITY
AND A
NATIONAL DUTY

BY
RICHARD C. MACLAURIN

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A NATIONAL OPPORTUNITY AND A NATIONAL DUTY

BY RICHARD C. MACLAURIN

IN June last there was much stir in Boston over the opening of the new buildings of the Massachusetts Institute of Technology. Many millions had been spent on their erection and every effort had been exerted to make the great group worthy of the purpose for which the buildings were designed and of the splendid generosity that had made their erection possible. Science and art had joined hands to ensure that noble forms enclosed the vast laboratories that were so carefully planned to meet the exacting demands of their various uses and the result was everywhere acclaimed as eminently successful. To the ceremonies of dedication came a great concourse, including a distinguished group of representatives of foreign governments and institutions of learning and many thousands of alumni from all parts of the United States and of the world. Was this a mere local spectacle and the erection of these buildings but an incident in the life of the nation, no more worthy of remark than countless other incidents, or did it have a deeper significance as testifying to the growth of an institution whose maintenance at the highest level of efficiency presents, in the words of a prominent banker in New York, "not only a national opportunity, but a national duty"?

The greatest hope of America lies in her living faith in education, so that there is nothing that calls for comment in the up-building of a single school. There are, however, certain features of this school—the Massachusetts Institute of Technology—that give it a special significance and a special importance at this epoch in our history. Of these features it may suffice to indicate four:— (1) It is a school founded and maintained on belief in hard work, "a place for men to work and not for boys to play," an institution without nonsense and without frills devoting itself always with seriousness of purpose to the business on hand. (2) It represents in a striking way the modern spirit of co-operation, the sinking of differences and rivalries for the public good. Having established its independence by fifty years of successful labor, it has joined hands with Harvard University, to build up in these new buildings that have just been dedicated a great school worthy of the best

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traditions of both institutions, and not surpassed by anything of its kind in the world. And this same spirit of co-operation shows itself in the whole course of its educational practice. Amongst the many examples that might be quoted is its new course in chemical engineering practice. Here, according to the editor of *Metalurgical and Chemical Engineering*, "a splendid idea of the most direct co-operation between education and industry is being transformed into reality with a boldness of conception that is unique in the history of chemical education. It is a grand pioneer experiment in education." (3) This school, jointly conducted by Harvard and Technology, is a national school. Harvard, the oldest University in the country, has an historic setting that gives her a unique position and power. Technology, although only half a century old, has long drawn men in large numbers from all parts of the country and of the world, as widely even as Harvard, and scattered them still more widely. (4) It is pre-eminently a school of science and particularly of science that concerns itself with practical affairs—a feature of special importance when it is remembered that science has revolutionized the world and become the measure of modern progress in almost every field of practical endeavor.

Mr. Hughes tells us that the watchword of the country in these days of stress must be "America Efficient," but such a slogan must be futile unless the method and the spirit of science pervade the country and especially its business. It has long been recognized that we need more scientific methods in our agriculture and our manufacturing, for the improvement of our processes, the elimination of waste and the discovery of new devices. All enterprise involving such factors calls loudly for men trained in science. We need such men too for the organization of our business. In the past this has been done for the most part by men with little or no knowledge of scientific method; but in business as elsewhere "new times demand new manners and new men." Many of the methods that were serviceable a decade or two ago must be scrapped now, for they will no more suffice to meet the conditions of today and of tomorrow than will an old fashioned fort withstand the attack of modern artillery. Business today requires scientific method in careful observation and experiment, in openness of mind, in orderly arrangement of action, and in careful shaping of the means to the end desired. Often too it calls

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for expert knowledge of facts and processes in places where the need of such knowledge might hardly be expected. Thus in the selling of many products it is found expedient today to employ experts to enable the customer to make the best use of what he buys, not only to sell him the material but to help him design the structure into which it is to go. All such demands call for men trained in the methods and permeated by the spirit of science and they are demands that will grow in intensity as the economic struggle develops.

Here in America we have not yet experienced the full force of the competition of other nations. We have had what seemed for a time a boundless territory and limitless resources and as the country has developed we have had the great advantage of a varied home market. Conditions, however, have been rapidly changing of late years and the war will greatly accelerate the change. We have practically exhausted our virgin land, and are beginning to realize that we must cease to be reckless in the use of our resources. We are coming steadily closer to the position of Europe, demanding the abandonment of wasteful habits and careful planning to make the most of what we have. We have reached a stage where we *must* enter more largely into foreign trade, but here again our only hope of permanent success lies in the adoption of scientific methods.

There has been much popular discussion as to the opportunity of foreign trade that is presented to the United States by the war. There can be no question as to the opportunity. The Allies' command of the seas effectively shuts the central powers out of most foreign markets, and the occupation of the Allies themselves with the pressing problems of war leaves them less capital and energy than they would otherwise have to push trade in foreign fields. However, although the opportunity exists it is far more difficult to take advantage of it than is popularly supposed. In the first place the very conditions that have created the opportunity have also placed great obstacles in the way of profiting by it. "The scarcity of shipping, the rise of freight charges, the pressure of war orders, the revival of the home market, the scarcity of materials and the shortage of labor have all combined to interfere with the growth of new trade." These difficulties are due to the war, but there are others that will not pass with it. Of these,

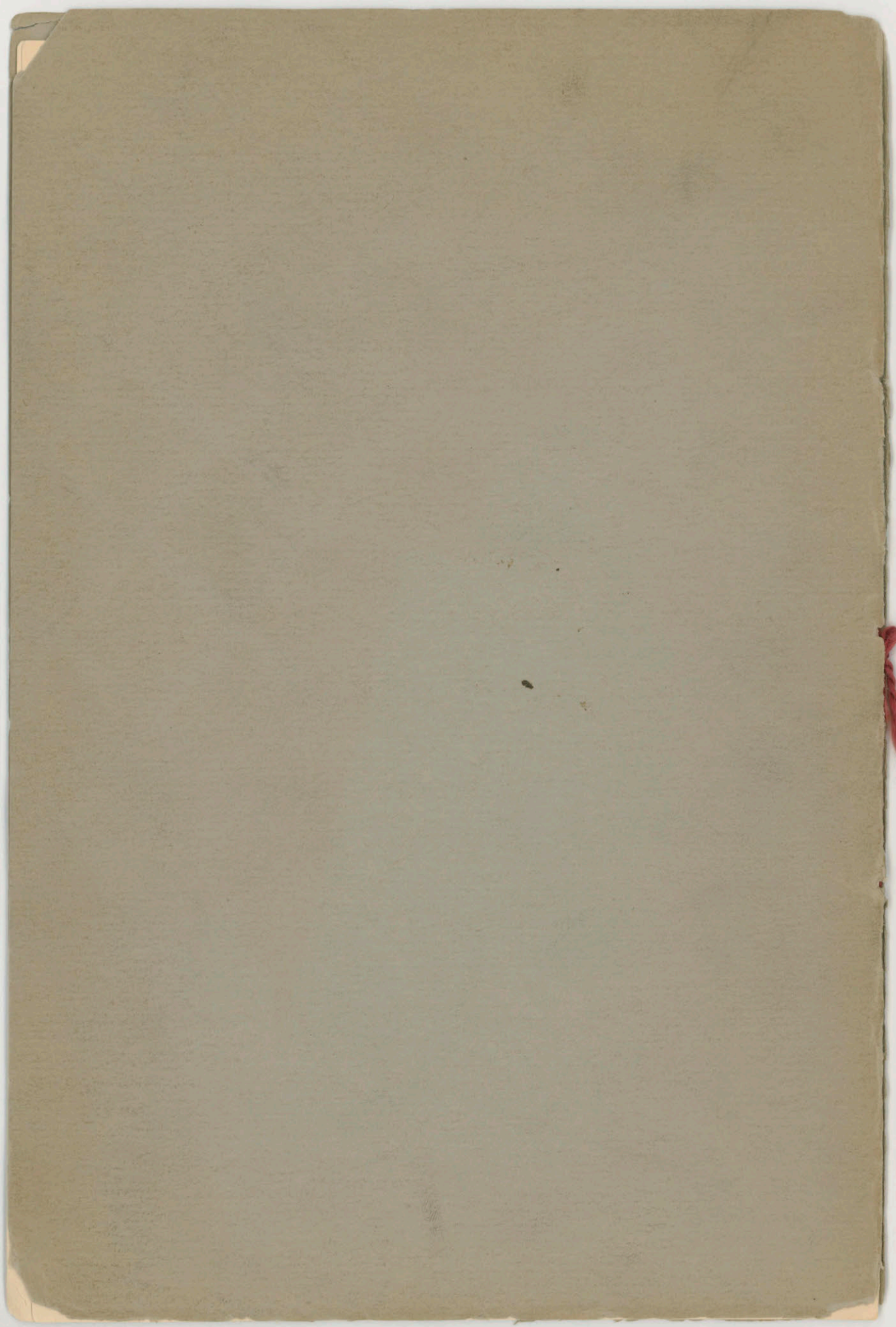
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two may be mentioned as of special importance. The first is the difficulty due to the fact that trade to be most profitable must be reciprocal and that while Europe produces what China, South America, etc., use, and uses what they produce, the United States does this far less completely and "naturally." It will require more careful planning and more deliberate development of certain industries to place the United States in a position that is even nearly as favorable in this respect as is that of England and Germany. The second is the great difficulty of cost of production, closely allied of course with the cost of labor. Labor costs are extraordinarily high today as compared with those in competing countries and they may be expected to reach the highest point just at the end of the war, when the crack comes. To maintain anything like such a scale of wages after the war will be no easy matter, however much the well-being of the community as a whole may make the maintenance of high wages desirable. The only possible hope is to increase the efficiency of our processes, so that in spite of the high cost of labor the cost of production may give us a chance of competing with other nations where the labor costs are materially lower. If this be true, it is equally true that no other means can be suggested of increasing the efficiency of our processes than the introduction of the scientific method into every phase of industry and commerce. Hence follows the importance of schools of applied science and the need of a national school of the highest efficiency that will attract men of parts from all sections of the Union. The London *Statist*, a leading financial paper, lays it down that "the domination of international trade by Germany can be ended only by other countries becoming at least as well educated *in science* as Germany . . . We in England had an immense advantage in practically a century's start of Germany in the competition for the world's trade, and we are now crying out that in another half-century Germany has beaten us in many fields. The question is, why and how? And the answer to that is simply—dislike of science, disbelief in real education, and lastly mental indolence. We have kept up at the older universities a system of education that was established in the Middle Ages. And we flattered ourselves that the kind of teaching that suited the Schoolmen is also adapted to make Britishers supreme in the economic world of today. As long as we indulge in that folly, so long Germany will beat us, let us

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resort to what alliances and what treaty engagements we may please."

It is sometimes said that the path of the United States will be smoother in the future because of the crippling of her competitors engaged in the great war. This, however, is a mistake. Even if the warring nations were crippled as much as is often supposed, it would be no advantage to us. A nation does not become rich by being surrounded by paupers, and if only China were rich what a profitable market she would offer for our wares! But the warring nations will not be crippled nearly so much as is popularly supposed—at least not all of them. They are doubtless spending capital at a prodigious rate instead of passing it on to the next generation, and the loss of their men is of course irrevocable. However, it is already manifest that there are compensations, that the war is bringing about great improvements in business methods and in the moral habits of the people and that in a short time these improvements may offset the vast losses that have been incurred. And it is difficult to exaggerate the great advantage that will accrue to these nations owing to the discipline of the war and its stimulus to unity. After the war our competitors will be unified, while we may still be pulling in various directions; they will be hungry and resolute, while we may be fat and self-satisfied with our prosperity; they will have laborers disciplined by self-sacrifice and used to low wages, while we may have to rely largely upon workers who have never thought of looking beyond their immediate interests and have experienced the highest wages in our history. To offset these disadvantages our hope is in the energy of our people, in their faith in education, and in their ability to draw more speedily than others upon the limitless resources of science. We have not always so drawn, but changing conditions will make this imperative and to provide for these changes presents *a national opportunity and a national duty*. "I like the Massachusetts Institute of Technology," said Thomas A. Edison recently, "because it gives to America the kind of education that is most urgently needed today, teaching her young men to work hard, to apply science to industry and to apply it everywhere and all the time."



At the end
of the
1896-1897

Entered
Cambridge
1892

1898

1904

1908

File in
Maclaurin

Richard C. Maclaurin, M.A., LL. D., Sc. D., late

Fellow of St. John's College, Cambridge, Professor of Mathematical Physics, Columbia University, New York.

Sketch of career. Born in Scotland in 1870. Early

education partly in Britain and partly in New Zealand. On proceeding to Cambridge, England, was elected a Foundation Scholar of St. John's College. Gained the highest possible position in the most advanced mathematical examination at Cambridge, being bracketed with the Senior Wrangler in the First Division of the First Class in Part II of the Mathematical Tripos. During the following year visited various educational institutions in Canada and The United States.

Meanwhile was awarded a Smith's Prize at Cambridge, his thesis being preferred to that of the Senior Wrangler. Returned to Cambridge to study law, and was awarded the McMahon Law Studentship. Joined the Honourable Society of Lincoln's Inn, London. Was elected a Fellow of St. John's College, Cambridge.

Spent six months in Germany. Was awarded the Yorke Prize of the University of Cambridge for a thesis dealing with "Title to Realty". In 1898 was appointed Professor of Mathematics at Wellington, New Zealand. Soon after this he became a Trustee of the University of New Zealand, and took an active part in the organization of technological education in the dominion. Obtained the degrees of Doctor of Laws and Doctor

Visiting
the
different
universities

Has been
Australian
university
lecturer

1897 after he came back from Canada

1896

1896

1896

of Science from the University of Cambridge. Was appointed Dean of the Faculty of Law in the University of Wellington, New Zealand, and whilst holding that office accepted the chair of mathematical physics at Columbia University in succession to Dr. Woodward, now of the Carnegie Institution.

A large number of scientific memoirs by Prof. Maclaurin have been published in the transactions and proceedings of the Cambridge Philosophical Society, the Royal Society of London, the Australasian Association for the advancement of Science, and in the Philosophical Magazine, and in February, 1908, the first part of his treatise on Light was published by the Cambridge University Press.

The following are some of his testimonials, mostly obtained in 1898, when he was appointed to a professorship in New Zealand:

From Lord Kelvin. (1898):

Mr. Maclaurin is a young man from whom much may be expected. He comes of an old family famous in the annals of the intellectual history of Scotland. [His father was one of my class mates in the University of Glasgow, and the son I have seen and talked with often since he entered at Cambridge.] He has been trained in a school of thoroughness, and, with his businesslike power of seizing on the essentials of a problem and his great energy and determination, he should make a success of anything that he takes in hand.

From Sir George Stokes, ^{former} President of the Royal Society of London, ^{Lucas} Lucasian Professor of Mathematics, Cambridge (1898):

"I have had the pleasure of seeing Mr. Maclaurin frequently during the latter part of his residence at St. John's, and ^I have been attracted alike by his ^{the} fine character and by his ^{the} scientific ability. His interests are extraordinarily wide and yet he has the power of concentrating all of his energy--and it is great--on any problem that he has on hand. He will make a success of anything that he undertakes, if enthusiasm and effort will avail."

From J. Larmor, Sc. D., F.R.S., Secretary of the Royal Society, Lucasian Professor of Mathematics, Cambridge:

"I am able without hesitation to express my judgment that Mr. R.C. Maclaurin is a skilful and profound mathematician, quite of the first rank."

From H.F. Baker, Sc.D., F.R.S., University Lecturer, Cambridge:

"Mr. R.C. Maclaurin ^{was} [has been] well known to me throughout his career at Cambridge. He is a man of extraordinary power and originality. "

From the Rev. C.E. Graves, M.A., Fellow and Classical Lecturer, St. John's College, Cambridge:

"Mr. R.C. Maclaurin's career during his residence at St. John's has been in every way honourable alike to himself and to his college. He has won the respect and esteem of all with whom he has had to do, and is thoroughly popular in our body. I need not speak of Mr. Maclaurin's mathematical attainments and abilities, which are abundantly proved and

attested; but, ^{7/4} having known Mr. Maclaurin for some years, I may say that he is a man of high character and principle, of much originality and power; earnest, energetic, clear-headed and sensible--a strong man who can hold his own and see his way,, and one who at the same time will be thoroughly genial and reasonable, and easy to work with and under." From Sir Robert Stout, Chief Justice of New Zealand, and Chancellor of the University.

"Prof. Maclaurin was a distinguished student in New Zealand and the distinctions he afterwards won in Cambridge prove him to be a man of great intellectual ability. Moreover he is no pedant, but a man of broad sympathies, clear-headed and sensible: a good speaker, with a business-like power of dealing with men. At the same time he is an admirable teacher. I ^{have} had two sons attending his classes at the University and I can, therefore, speak of his teaching abilities. They are of very high order.

⁵ I feel that it would be a great loss to our University were we to lose his services. He has taken a keen interest in the University and his advice has been most valuable. He is a gentleman of high character and I know of no one in New Zealand whose loss would be more felt should he determine to leave this colony." J

From the Rev. W. A. Evans, M.A., Chairman of Board of Trustees, University, Wellington, N. Z.

"Prof. Maclaurin's appointment in this University has ^{was}

(been] more than justified by results. He [has] proved himself to be true teacher, as well as a ripe scholar. The influence he [has] exercised over the students [has ^{was} been] in every way admirable and he [has] made for himself a unique position as a leader in the intellectual matters throughout the whole colony. To have ^{had} such a man as he is on the staff of the University ^{gave} ~~has given~~ the institution an educational tone that will go far to secure its future success. Prof. Maclaurin is a man of extraordinary versatility and great enthusiasm and is unsparing of his labours for widening the influence of the University."

From Alexander Macalister, M.A., M.D., L.L.D., Professor of Anatomy in the University of Cambridge,-

1908. ("I have known Professor Maclaurin now for a good many years, since his joining this University about sixteen years ago. All through his course and in the various stages of his career since he left here I have been in frequent touch with him, and with those who have been associated with him, and I testify with great pleasure to ^{the} his sterling worth and character, ^{of Mr. Maclaurin} to his earnestness and sincerity, and to the high esteem and regard entertained towards him by all those who have been associated with him either as fellow students, or fellow workers, or friends."

From W.S. Aldis, M.A., formerly Principal of the Durham College of Science,-

^{Of the} ~~When~~ "I have taught a] large number of able and promising young men, ^{several} several have become cabinet ministers, several are Judges of the High Court, and others are acknowledged leaders in the scientific

world.] None of them has impressed me so powerfully as Mr. Maclaurin. His mental gifts are extraordinary, and behind a quiet and unassuming manner there lies great force of character, and the power to carry him and any institution that he controls to almost certain success."

From Donald MacAlister, M.D., L.L.D., President of the British Medical Council and Principal of the University of Glasgow, *says:*

"I have pleasure in testifying to the high character and remarkable powers of Professor R.C. Maclaurin, who was successively scholar, postgraduate student, and Fellow of St. John's College, Cambridge. In the honour examination of the University he approved himself the ablest mathematician of his year and turning his attention to another branch of study (law) he won distinction scarcely less pre-eminent. Since then by his academic work in more than one University and by his original contributions to mathematical and physical science he has won for himself an enviable name on both sides of the world. His personal qualities are equally admirable and they have made for him fast friends in each of his fields of work. His powers, his attainments, and his energy justify all who know him in promising for him a valuable and indeed a brilliant career."

The following are ~~some~~ ^{a few} extracts from reviews
 Press Opinions of Professor Maclaurin's book on "Title to Realty:"--

Comptes Rendus (translated): "Its brilliant qualities render it worthy in every way of the high reward with which the University of Cambridge has thought fit to crown it."

Law Magazine and Review: "A work that well deserves attention. It requires no little care and skill to deal clearly with so complex a subject. Professor Maclaurin has, moreover, been successful in

his attempt, and has produced a work that should be undoubtedly of value, not only to students of real property law, but to all who take an interest in the history of the land laws."

Law Times: "We have always been led to expect a very high standard in the Yorke Prize Essay, and in the present volume we are not disappointed. Mr. Maclaurin has given us an admirable sketch of the 'Nature and Evidence of Title to Realty' for the last thirteen centuries."

Law Quarterly " It gives ^{8.} promise of a real school of legal history which may flourish and bear fruit, notwithstanding the general apathy of the profession towards everything not of obvious utility in practice."

The Times: "An original book that is not on the same lines as any other with which we are acquainted."

Scottish Law Review: "We are provided with a handy and lucid illustration of the growth of conveyancing styles from their shadowy origin down to the present day. It is to a lawyer's intelligence a most attractive evolution. The best word we have for Mr. Maclaurin is the expression of a hearty wish for just such an Historical sketch of our own practice in title to realty. Its faithful study of the latest archaeological scholarship makes the work as suggestive and informing in matter as it is direct and perspicuous in style."

Cambridge Review: "This is in many respects a notable work.

★ Its author has distinguished himself in a way that is, we believe, unique in the modern history of the University (Cambridge). He has gained two of the most coveted University prizes, prizes that are awarded for original research in his completely distinct branches of learning--law and mathematics."

Press opinions of Prof. Maclaurin's "Theory of Light."

Oxford Magazine: The appearance of the first part of Prof. Maclaurin's treatise on Physical optics will be gladly welcomed by all who have followed his valuable contributions to the recent literature of this subject. The originality of the treatment and the suggestive manner in which the

results of theory_x and experiments are compared at each stage in the inquiry will recommend the book to all students of optics."

Cambridge Review: "Prof. Maclaurin here summarises in a convenient form much of his own original investigations.... The book will be welcome to those who can breathe comfortably at this intellectual altitude."

Scotsman: "This erudite and original work aims at giving a systematic account of the theory of physical optics. It is a book that only ^a first-class mathematician could tackle, and it is by such that its substantial merits as a special study in an important department of modern science will be best appreciated."

Glasgow Herald: "The book will recommend itself to those skilled in higher mathematics. A good deal of the text embodies the substance of papers contributed by the author to the Royal Society. The volume contains much truly scientific analysis and shows great care in preparation."

Athenaeum: The opening words of the first chapter come somewhat as a surprise. 'What is the chief end of science?' we are asked; then follows a philosophical discussion as to how this question may be answered, the limitations which must be set to inquiries in physical science and the best methods of advancing knowledge in that field of investigation.... The book bears frequent witness to original investigation by

Prof. Maclaurin himself."

Morning Post: "Prof. Maclaurin's book is not intended for beginners, but the more advanced student will find it a valuable supplement to the existing literature. There is an interesting introductory chapter on the scope and method of science.....A most important feature is the constant comparison between theory and experiment, vividly illustrated by some excellent graphs. The handling of the subject leaves nothing to be desired in the way of clearness and conciseness.

Nature: "The book is especially valuable as giving a systematic mathematical discussion of various classes of phenomena from a common point of view. In particular many readers will be glad to have in an easily accessible form the author's own investigations. The style is clear and attractive, and the reader will appreciate the numerous excellent graphical representations of the somewhat complicated theoretical results. In a lively introductory chapter the author discusses the methods and aims of science."

Philosophical Magazine: "There have been so many advanced treatises on Physical Optics in the last few years that it might be thought superfluous to produce another. The present volume is, however, of so singular and at the same time of so important a character that no excuse is necessary for its birth. The work consists of much that is common to other treatises on optics. The distinctive feature is that a large part of the volume embodies in a modified form the substance of a series of papers by the author published within recent years by the Royal Society. In its thoroughness of treatment of the more recondite cases of interference there is no treatise in the field to compare with it. . . . We recommend this book to every serious student of Physical Optics."

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[Resolutions by the Corporation Jan 30. 1920]

RESOLVED that the following be spread upon the records of the Corporation as an expression of the profound sorrow and sense of loss caused by the death of our beloved President Richard Cockburn Maclaurin and a tribute to his memory, and that a copy of the same be sent to his family:

Richard Cockburn Maclaurin, since 1909 President of the Massachusetts Institute of Technology, died, after a brief illness, on the 15th day of January 1920. By his death not only does the Institute lose a leader of the highest quality whose achievements in the past only foreshadowed those that were to come, had his life been spared, but our country and the world is deprived of a great citizen whose loss is deeply to be deplored. Moreover, all those with whom he had come in contact whether in social relations, as an educator and administrator, as a public servant or as the head of a great institution of learning about whom centered the loyal devotion of a host of graduates, students and fellow workers, had for him not only respect and admiration but warm feelings of regard and affection such as few men have the quality to excite. To his friends and to those who knew him, his death is a personal distress and his loss one for which there is no compensation.

He was born in Scotland in 1870 of a family of refinement, many members of which had been distinguished in scholarship and science. He was fortunate in that he grew up in New Zealand, where he had the benefit of an environment entirely different from that of our older civilization. This resulted in a broadening of his views and an enlargement of his ideas which were distinctly helpful to him in his later work.

Entering the University of Cambridge, England, he there received the Degree of Master of Arts in 1897, with marked distinction in math-

ematics. He then turned his attention to the study of law and, in 1898, was Yorke prizeman in law at that University.

Returning to New Zealand with this unusual and admirable equipment as a scholar, especially in mathematics, physics and law, he remained in that Colony until 1905, serving for seven years as Professor of Mathematics in the University of New Zealand and for two years as Dean of the Faculty of Law in that University.

In 1907 he became Professor of Mathematics and Physics in Columbia University, New York and in 1909 was elected President of the Massachusetts Institute of Technology.

Meantime, he had written and published books and articles of a high order of merit on both scientific and legal subjects. His elaborate works on the theory of light placed him in the front rank of physicists.

He had travelled much and had been in particular a student of education and educational methods in different parts of the world.

When therefore he became President of the Massachusetts Institute of Technology, he had acquired from study and personal contact unusual knowledge of many different phases of our civilization and particularly of educational systems and had a broad foundation of scholarship, comprehensive in the important fields of law and physics and extensive in all branches of human effort.

He became President of the Massachusetts Institute of Technology at a critical time in its history. While the Institute had rendered great and constantly increasing service to education and to scientific development and the application of science to the arts, the time had come when it had largely outgrown its facilities and required reestablishment on a new basis. Not only was the ma-

terial problem of a new and enlarged plant in a new location of vital importance, but the necessity that the standards of the Institute should be maintained in harmony with the demands of constantly changing and expanding industrial conditions with which the Institute must surely keep pace, required renewed study and analysis of educational methods and conditions. Thorough consideration of the entire educational programme not limited to the apparent exigencies of the moment but involving a sound forecast of the necessities of future development was essential if the ideals of the Institute were to be realized.

An incidental question of great importance which had to be faced and settled was that of the relations with Harvard University which had been a subject of consideration for many years.

To these problems and to many others of a more detailed character which were involved in the general consideration of the future of the Institute, the new President devoted his thought and energy from the very beginning and without cessation until the end of his life. The magnitude as well as the difficulty of these problems appear more clearly, now that we look back upon them, than they did in 1909. They were not only physical, financial, educational and administrative but distinctly social, in that the new conditions that were to be brought about must surely be such as to harmonize with the demands of society and the need of the times. The different phases could not be dealt with separately but every effort and every achievement in one direction required corresponding effort and achievement in others, that the harmony and unity of the organization as a whole might be maintained.

The large success of the Institute in developing from its condition in 1909 to that of the present day is generally recognized. There can be no question that the credit for this success is due to

a marked degree to President Maclaurin, his character, capacity and personality. While he has had the loyal support of those associated with him in the management of the Institute and of its alumni, that support would never have been consolidated for effective and enthusiastic effort if it had not been organized and directed by him and if he had not had the rare qualities required to stimulate enthusiasm and to concentrate in persistent, harmonious work the efforts of all those who were called upon to cooperate with him. Back of all was the necessary element of far sighted leadership which should plan and develop in general and in detail and determine the direction in which work should be done. Such leadership required for success a capacity and quality seldom found. It was because the leadership was equal to the emergency, and the plans adequate, that the friends of the Institute became inspired with that zeal and confidence which placed them solidly behind the work.

Those who have been in a position to follow the development of the Institute since 1909 and all others who will take the trouble to study the subject as a matter of history, will agree that for the purposes of this great undertaking no one could have exhibited greater qualities of power and leadership than President Maclaurin. With clear intelligence he analyzed all phases of the problem. His energy and capacity in dealing with the complications of the situation were without limit. He faced the financial difficulties with the utmost courage and confidence, but never permitted them to divert his attention from the educational and administrative work as to allow the latter to deteriorate. When the new plant was assured, he gave wise and adequate attention to the very difficult problem of transferring the work to the new quarters without impairing its quality. As a great leader he was behind all the de-

tails of the organization involved in establishing the Institute in its new environment, utilizing to the utmost the help and cooperation that was so freely and loyally at his disposal, giving full credit to every one, but himself contributing the vital and essential elements of direction, coherence and stability.

Outside the great achievement of financing and establishing the new plant without even temporary disintegration of the quality of work of the Institute, certain special difficulties came into the situation which were calculated to try the soul of a leader. The first was the Great War, which if the affairs of the Institute had not been handled by a master mind, might have led to a most serious impairment of its efficiency. Here President Maclaurin showed to a marked degree his extraordinary intelligence and power to keep in order a situation that tended toward chaos. He carried the Institute through the war period with its efficiency unimpaired and with even an increase in its capacity for service. Nor should it be forgotten that during the war, he added to the burdens of his work admirable and effective service for the Government in fields outside the affairs of the Institute. As Director of College Training for the War Department, he played a conspicuous part in organizing the colleges of the land so that in the face of most trying conditions, their work was practically uninterrupted, while at the same time they performed valuable service in training their students for the exigencies of the war period.

A second episode that was to him most disheartening and which only his rare qualities of mind and character enabled him to meet without flinching, was the ultimate failure of the effort to establish sound educational relations with Harvard University. Firmly convinced that the interests of the Institute and of education gen-

erally required that there should be close cooperation with Harvard University in the teaching of applied science, President Maclaurin worked zealously to that end for years, again showing throughout the negotiations, which were conducted in the most admirable spirit on both sides, his power of dealing with great questions and his capacity as a leader in thought and action. When the relations between the two institutions were established on what seemed to be a sound and permanent basis, he felt that an important part of his work had been accomplished. He believed that the joint effort of Harvard and the Institute would surely result in the greatest engineering school in the world and in a gain to education and to the prosperity of our country which could not be measured. Because of the views of the Court as to the true construction of Gordon McKay's will, all this work and effort failed, necessitating an entire readjustment of the programme for the development of the Institute. It is largely to the credit of President Maclaurin that this reversal of its policy, forced upon it by conditions which it could not control, did not involve even temporary embarrassment of a serious character to the Institute.

Although bitterly disappointed and forced to approach the general problem of the development of the Institute from an entirely different point of view, President Maclaurin did not for one moment lose his confidence or his courage. The seriousness of the situation, of which he was fully conscious, particularly when the strain upon the resources of the Institute arising from the conditions excited by the war and the fact that payments from the State would soon cease were taken into account, only served to inspire him to further strenuous effort.

With the most indefatigable energy, he assumed the leadership of a new campaign to establish the Institute's finances upon a firm footing, again showing, to a superlative degree, all his qualities

as a great leader, - sagacity, power of conception and of administration, energy and a capacity for inspiring others. Again his work was crowned with success and on the very day on which he was stricken down by the illness which proved fatal, there was held the meeting of the alumni which was to note this new triumph of the Institute and of its President.

All through the record stand out conspicuously the great qualities of the man which have resulted in such great achievement. The obligations of the Institute to its many friends and in particular to the giver so long unknown, who has made such worthy use of the reward that came to him for his foresight and ability in giving to the world a great industry which operates only to the advantage of men, can never be expressed in words. They can only be felt. But this giver and the others who have cooperated with him, will be the first to recognize that, except for the personality of the President of the Institute and their confidence that under his guidance its future as a great power for good in this country and in the world would be assured, they would not have felt so strongly that it was the Massachusetts Institute of Technology which should have the immediate advantage of their liberality and good intent

In no department of his work for the Institute has President Maclaurin failed to show the same high qualities of power and leadership. He deserved and retained the confidence of the governing bodies, of the faculty, of the students and of the alumni, because of the loyalty, the entire absence of self-consciousness, the imaginative power and the intelligence, capacity and energy with which he approached his work. He had the full confidence of the public, for it was convinced, as soon as it knew the man, that he had the qualities of a good citizen and a great leader practically uncon-

taminated by any of the ordinary weaknesses of humanity.

His friends and those who had the good fortune to know him were attracted to him from the start by his fine character and by the richness of his personality, and found their respect and regard for him continually increasing as they knew him better. While his thought was always on his work and he was almost submerged by the intensity of his self-sacrificing and unsparing effort, he was always able, even at a time of serious exigency, to meet those with whom he came in contact with a friendly and personal charm, brightened by a sense of humor which he never seemed to lose even in his most serious moments. Every memory of him is pleasant and it is only from this pleasant memory that we who knew him can get even slight consolation for our great loss.

*?
inconvenience*

He was an admirable citizen. His standards of American ideals were of the highest.. Many times he has served the public in large ways and small, often at great sacrifice and the expense of personal inconvenience. If his life had been spared, he would have continued to serve the community to the limit of his power, for he recognized to the full the obligations of citizenship.

When President Maclaurin came to Boston, he brought with him his wife who was born at the other end of the world. Her support in all the trying years of her husband's work as President of the Institute, has been unfailing and most sympathetic. She has in many ways demonstrated the depth of her friendship for the Institute and her sincere devotion to its interests. To her and to his children we tender our hearty sympathy. It may comfort them to know that all the innumerable friends of President Maclaurin, many of them not even known to him, feel his loss as a personal and bitter calamity and only hope that their deep sympathy may to some

slight extent alleviate the grief of his family. That common grief can be tempered only by the recognition, which is universal, that he lived a great life and leaves behind him a memory which of itself makes this a better world.

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M. R. Miller

RICHARD COCKBURN MACLAURIN



RICHARD COCKBURN MACLAURIN, M.A.; LL.D.; Sc.D.

RICHARD C. MACLAURIN was elected to honorary membership in the Class soon after he took up his duties as President of the Institute, and by his good fellowship immediately won for himself a warm welcome from '93. His untimely death on January 15, 1920, following almost immediately after the successful raising of an endowment fund of \$8,000,000 for the Institute, was a tragic occurrence which deprived the Class of one whom it delighted to honor, the community of one of its most useful citizens and the Massachusetts Institute of Technology of a great scholar and leader.

Mr. Maclaurin, the son of a Scottish clergyman, was born in Scotland, in 1870. His early education was received in New Zealand, where his family removed while he was still a child; he returned, however, to Great Britain for his university training and obtained the degree of Master of Arts from Cambridge University, in 1897. The following year he went back to New Zealand to serve as Professor of Mathematics in New Zealand University, which position he held from 1898 to 1905, acting during a considerable portion of that period as Chairman of the Faculty, an administrative position somewhat similar to that held by an American college president. He later served for two years as Dean of the Law School at the same university. Prior to his return to New Zealand, he had spent nearly a year in the United States and Canada studying their methods of education, and while Chairman of the Faculty at New Zealand University, he travelled extensively through the British Empire, France and Germany in order to study the educational systems of these countries. In 1907, he came to New York to fill the chair of Professor of Mathematical Physics at Columbia University, a position which he occupied for two years.

When he came to Boston in 1909, as President of the Institute at the age of thirty-nine, he had already obtained high distinction as a scholar in two distinct branches—law and mathematical physics, having received from the University of Cambridge in 1904, the degree of Doctor of Laws for his achievements in that field, and from the same university in 1908, the much prized degree of Doctor of Science for his work in mathematics and physics.

While his accomplishments as an administrator before coming to Boston gave ample assurance of his ability as an executive officer,

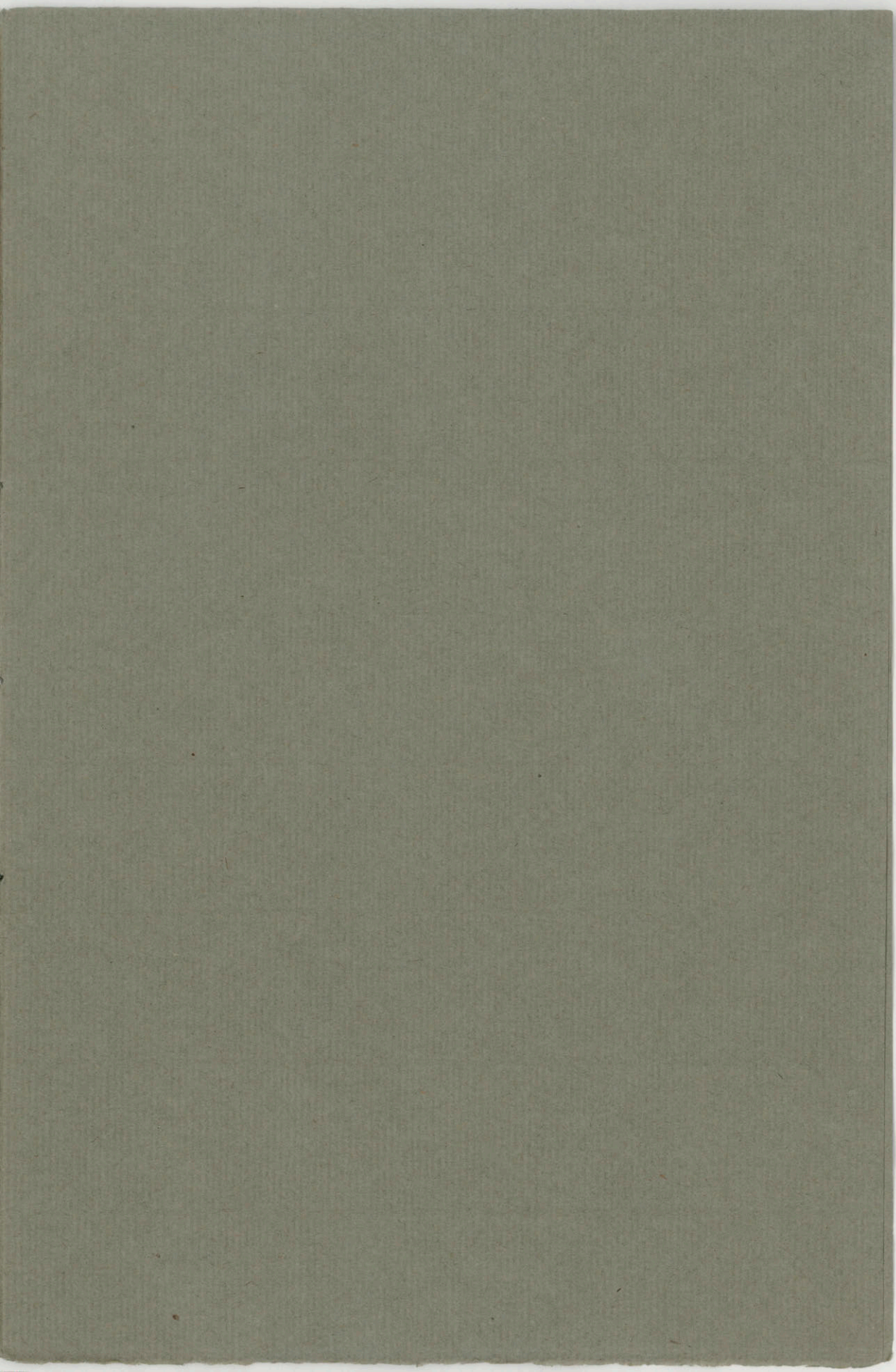
the problems facing him as President of Technology were of far greater difficulty than any he had previously overcome. He was personally unknown to the Technology faculty, alumni and students; he was a comparative stranger in the country and in Boston; his training had been in pure rather than in applied science; he was entering upon his duties at one of the most critical periods in the history of the institution, a period when great material accomplishments were required in order that the Institute might maintain its prestige and continue its growth.

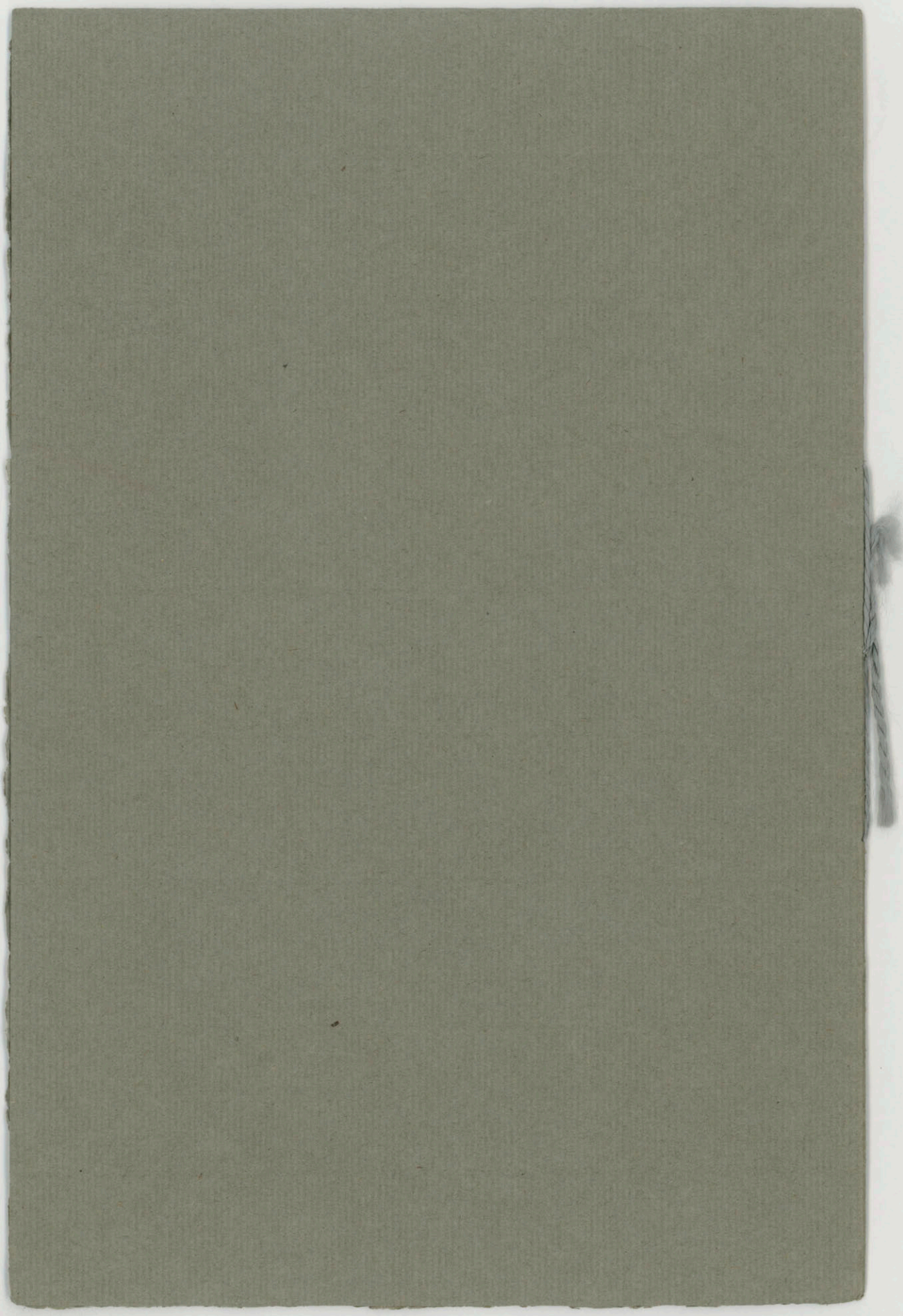
The impressive group of buildings of the New Technology in Cambridge, finished in a little more than seven years after he assumed office, furnishes striking evidence of his success in solving one of the difficult problems which confronted him when he entered upon his duties as President. The equally important task of raising the great fund of \$8,000,000 to maintain the Institute, with its unprecedented growth, in a period of war inflated prices forms merely another indication of his power of achievement in material things. It was, however, not such tasks that interested him primarily, in spite of his wonderful accomplishments, but rather the further development of the intellectual side of the Institute, which he looked upon as his next problem and which he felt himself especially fitted to undertake.

No man could have accomplished such noteworthy results in the few years that were given to Mr. Maclaurin without possessing unusual characteristics. His sincere character and his sound judgment upon men and affairs inspired confidence in all who knew him. These qualities coupled with his unassuming manner and kindly humor won for him friends and admirers wherever he went and enabled him to carry out with success policies which others would have found most difficult to accomplish.

In closing, the writer wishes to express the great personal loss which he felt upon the death of one who, during an acquaintanceship extending over a period of eleven years, inspired in him a continually increasing sense of admiration and affection. He believes that in this he is also expressing the feeling of all who were associated with Mr. Maclaurin during his life in Boston.

CHARLES M. SPOFFORD.





HEADQUARTERS OF THE ALUMNI ASSOCIATION

ROOM 37 ROGERS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY
BOSTON, MASS.

NOVEMBER 27, 1908.

The Executive Committee of the Alumni Association is pleased to inform the alumni that Dr. Richard C. Maclaurin's appointment to the Presidency of the Institute by the Executive Committee of the Corporation was confirmed by vote of the Corporation Monday, November 23, 1908.

Dr. Maclaurin is to be the guest of the Association at its annual banquet. The date, about the middle of January, will be announced later.

The Executive Committee sends herewith a brief account issued by the corporation of Dr. Maclaurin's life, and, below, an interview published in the *Boston Sunday Herald*, which, it believes, will be of interest to the alumni.

WALTER HUMPHREYS,
Secretary.

RICHARD C. MACLAURIN

Professor Richard C. Maclaurin, M.A., LL.D., D.Sc., now at the head of the Physics Department of Columbia University and Professor of Mathematical Physics in that institution, was born in Edinburgh, Scotland, in 1870. His early boyhood was spent in New Zealand, whence he returned, however, to complete his preliminary education in the English schools. In 1892 he entered the University of Cambridge, England, where he held a foundation scholarship in St. John's College. He took two degrees while at Cambridge, Bachelor of Arts in 1895 and Master of Arts in 1896. In his work for the latter degree, Mr. Maclaurin took the highest rank in the most advanced mathematical examination, being bracketed with the Senior Wrangler in the first division of the first class in Part Two of the Mathematical Tripos. He also received the Smith Prize for the excellence of his thesis in mathematics. Upon his graduation he was elected a Fellow of St. John's College.

During the years 1896 and 1897 he spent ten months in the United States and Canada, devoting himself to study and to visiting educational institutions of all classes, spending much time at McGill, Toronto, and Leland Stanford Universities.

Returning to England at the end of his American trip, he re-entered Cambridge University, this time to study law, and was awarded the McMahan Law Studentship, the most highly valued of its kind in the university. He became a member, at this time, of the Honorable Society of Lincoln's Inn, London. During this period he spent six months, on a leave of absence, in studying in Germany.

In 1898 he was awarded the Yorke Prize by the University of Cambridge for his thesis on "The Title to Realty," a difficult and important topic in British law. The thesis was published in English and French, and received world-wide comment from the highest legal authorities. Of it the *Law Quarterly* says, "It gives promise of a real school of legal history which may flourish and bear fruit, notwithstanding the general apathy of the profession toward everything not of obvious utility in practice." Professor Maclaurin has, therefore, gained the two most coveted prizes of Cambridge University, in two absolutely different and distinct branches of learning—mathematics and law.

In 1898 he was appointed Professor of Mathematics in Wellington, where the University of New Zealand is located, and soon afterward became a trustee of the university. In this position he took an active part in the organization of technological education in the colony. In 1903 he was made Dean of the Faculty of Law in the University of New Zealand, which office he held for four years.

In the fall of 1907 he was invited to take the chair of Mathematical Physics in Columbia University in New York City, which had been previously occupied by Dr. Robert S. Woodward, now President of the Carnegie Institution of Washington. A year later he was placed in charge of the Department of Physics at Columbia University.

In 1898 the degree of Doctor of Science was conferred upon Professor Maclaurin by Cambridge University, in recognition of his researches in pure science; and he was again honored, in 1904, by that university with the degree of Doctor of Laws, for his achievements in the study of law.

Professor Maclaurin has written, in addition to his theses, a large number of scientific papers of a high order dealing with various mathematical and physical topics. In a recent number of the *Revue Scientifique* he has an article on "Higher Technical Education in the United States," in which

the Massachusetts Institute of Technology is described as the typical American technological institution. Among other things he says in this article, "One may well question the wisdom of the policy common in American colleges and universities of separating, or attempting to separate, 'culture' from science and technology. The usual practice is to devote the earliest part of a student's life to so-called culture, and postpone his scientific and technical training to a later stage. This artificial arrangement is thoroughly irrational; for, if any separation be really required, it would seem more reasonable first to train the young mind thoroughly in scientific methods and leave the assimilation of real culture to a later period, when he has a broader outlook and a better knowledge of men and affairs. This is the educational principle underlying the training at the Massachusetts Institute of Technology."

In February, 1908, he published the first volume of a profound scientific treatise on "Physical Optics." Of this volume the *Oxford Magazine* says: "The appearance of the first part of Professor Maclaurin's treatise on 'Physical Optics' will be gladly welcomed by all who have followed his valuable contributions to the recent literature on this subject. The originality of the treatment and the suggestive manner in which the results of theory and experiments are compared at each stage of the inquiry will recommend the book to all students of Optics."

A reviewer in the *Glasgow Herald* writes: "The book will recommend itself to those skilled in higher mathematics. A good deal of the text embodies the substance of papers contributed by the author to the Royal Society. The volume contains much truly scientific analysis and shows great care in preparation."

It will be seen from these statements that Professor Maclaurin is familiar with the educational system of England, Germany, France, Australia, Canada, and the United States; that he has made a reputation for himself not only in scientific research and teaching, but also in legal investigation; and that he has had much experience as an educational administrator. He is known by scientific men all over the world; and his associates in educational, scientific, and legal work in England, New Zealand, and New York concur in testifying to his high qualities as a man, a scholar, and an educator.

The following are some of the testimonials which have been written by distinguished English scientists at the time Mr. Maclaurin went to the University of New Zealand, which have been secured by the Executive Committee of the Institute.

Lord Kelvin wrote: "Mr. Maclaurin is a young man from whom much may be expected. He comes of an old family famous in the annals of the intellectual history of Scotland. He has been trained in a school of thoroughness; and, with his businesslike power of seizing on the essentials of a problem and his great energy and determination, he should make a success of anything that he takes in hand."

Sir George Stokes, former President of the Royal Society, says: "I have been attracted alike by the fine character and by the scientific ability of Mr. Maclaurin. His interests are extraordinarily wide, and yet he has the power of concentrating all of his energy—and it is great—on any problem which he has on hand. He will make a success of anything he undertakes, if enthusiasm and effort will avail."

J. A. Larmor, Fellow and Secretary of the Royal Society, said: "I am able without hesitation to express my judgment that Mr. R. C. Maclaurin is a skilful and profound mathematician, quite of the first rank."

Rev. C. E. Graves, M.A., Fellow and Classical Lecturer at St. John's College, Cambridge, says: "Having known Mr. Maclaurin for some years, I may say that he is a man of high character and principle, of much originality and power; earnest, energetic, clear-headed, and sensible—a strong man who can hold his own and see his way, and one who at the same time will be thoroughly genial and reasonable and easy to work with and under."

Information of later date in regard to his work at New Zealand is contained in the following statements:—

Sir Robert Stout, Chief Justice of New Zealand and Chancellor of the university, says: "Professor Maclaurin was a distinguished student in New Zealand, and the distinctions he afterwards won in Cambridge prove him to be a man of great intellectual ability. Moreover, he is no pedant, but a man of broad sympathies, clear-headed, and sensible; a good speaker, with a businesslike power of dealing with men. At the same time he is an admirable teacher. I had two sons attending his classes at the university, and I can, therefore, speak of his teaching abilities. They are of very high order."

Rev. W. A. Evans, M.A., Chairman of the Board of Trustees of the University of New Zealand, says: "Mr. Maclaurin's appointment in this university was more than justified by results. He proved himself to be a true teacher as well as a bright scholar. The influence he exercised over the students was in every way admirable, and he made for himself a unique position as a leader in the intellectual matters throughout the colony. To have had such a man as he is on the staff of the university gave the institu-

tion an educational tone that will go far to insure its future success. Professor Maclaurin is a man of extraordinary versatility, great enthusiasm, and is unsparing of his labors for widening the influence of the university."

W. S. Aldis, M.A., former Principal of the Durham College of Science, says: "Of the large number of able and promising young men whom I have taught, none of them has impressed me so powerfully as Mr. Maclaurin. His mental gifts are extraordinary, and behind a quiet and unassuming manner there lies great force of character and the power to carry him, and any institution that he controls, to almost certain success."

Donald Macallister, M.D., LL.D., President of the British Medical Council and Principal of the University of Glasgow, says: "Professor Maclaurin, by his academic work in more than one university and by his original contributions to mathematical and physical science, has won for himself an enviable name on both sides of the world. His personal qualities are equally admirable; and they have made for him fast friends in each of his fields of work. His powers, his attainments, and his energy justify all who know him in promising for him a valuable and indeed a brilliant career."

[Special dispatch to the *Sunday Herald*.]

NEW YORK, November 14.—An institution with a greatly increased equipment of buildings and appliances, in a new site as near to the heart of the city as possible, with, perhaps, a dormitory system similar to that at Cambridge or Oxford; an undergraduate school combining liberal and technical education in a way to give the broadest development to the student's "human faculties,"—such is the future Massachusetts Institute of Technology as seen by its new president, Dr. Richard C. Maclaurin, of Columbia University.

Seated in his office in the Physics Building at Columbia, surrounded by his books and papers, Professor Maclaurin emerged to-day from the mysteries and intricacies of hydrokinetics and differential equations to talk with a *Herald* reporter about his plans for the Institute's development. They were large plans that he unrolled,—plans depending for their fulfilment upon the solution of some difficult problems; but Professor Maclaurin has faith in the loyalty of the people of Massachusetts and the great body of alumni to aid him in carrying them out.

He has no radical changes of policy to suggest. He would, perhaps, put a little more emphasis here, a little less there. But the Institute that he sees and hopes for is a new Institute built on the foundations of the old, an Institute broadened and expanded, with increased facilities, meeting new problems as they arise, but preserving the traditions of the past, and striving along the same general lines for the same great ends.

The growth that he looks for he believes will be achieved by the pursuit

of "a courageous policy of trust in the future." That seems to be the keynote of his confidence—a belief in the loyalty of those whom the Institute is intended to benefit. And he is confident. He has the faith that moves things. As he talked with the reporter, a spirit of optimism seemed to sparkle in his large blue eyes, to pervade his personality. It was easy to see that he was enthusiastic over the prospect, that he saw in his appointment a great opportunity for service.

PROUD OF INSTITUTION

The immediate need of the Institute, he says in effect, is money. The Institute has always felt that need. Dr. Pritchett felt it, and those who preceded him. But Dr. Maclaurin believes it will be forthcoming. That is what he means when he speaks of "a courageous policy of trust in the future." The Institute, he says, has "grown out of its clothes." He does not think the people of Massachusetts and the alumni will allow it to remain in that condition. The growth he looks for is but a normal growth. All he insists on is that the Institute shall not languish, that it shall keep advancing onward and upward as it has in the past.

"The people of Massachusetts," he said, "certainly ought to be proud of the Institute. It is an institution of international reputation, an institution that has accomplished great things."

As a scientist, he has his eyes upon it, and it is not surprising, in view of the man's remarkable advancement in his chosen career, that he is almost as familiar with the history, the traditions, the needs and resources of the Institute as those who have been working in it and with it.

"As far as plans for the future development of the Institute are concerned," he continued, "it is obvious that the main immediate need is a new site, new buildings, and generally increased facilities. The Institute was begun in a small way, and has gradually developed into an extremely important institution. The equipment which sufficed in the past is entirely inadequate to-day. The Institute has, so to speak, outgrown its clothes."

NEED OF A NEW SITE

"If you look to the history of similar institutions in other countries, you will find, I think, that in every case where an institution has outgrown its equipment, a change to a new site and new buildings has been a turning point in its career. Such a change has often converted a comparatively obscure institution, or, at any rate, an unknown institution, into an important one.

"I have specific instances in mind, but do not care to give them for obvious reasons. Their experience, however, leads me to believe that it is not easy to exaggerate the importance of a dignified and suitable site, and, of course, proper buildings."

"What do you think of the suggestion that the Institute be located somewhere in the country?" Dr. Maclaurin was asked.

"The question of the selection of a site for the Institute," he replied,

"is one that has engaged the attention of the authorities for some time. I don't think any one who understands the situation would be in favor of moving very far away. How far away the institution will have to go is a matter which is really dependent upon the amount of support it is able to secure. In other words, the exact site to which the Institute will be moved will be determined, very largely, in my opinion, by the condition of its finances."

FOR DORMITORY SYSTEM

"Personally, I should be sorry to think it had to go far, because there are many advantages for an institute of technology in being, if not in, at any rate near to a great city. I do not think those advantages would apply equally to a university, but an institute of technology, to do its best work, should be in or near the centre of things. I should regret very much if the Institute were forced to move out into the country."

"Do you think a dormitory system would add to the efficiency of the Institute?"

"I think there is a great deal to be done in that direction. The social side of the Institute is one of the sides Dr. Pritchett did a great deal to improve. And it is an extremely important side of the institution's activities. That, of course, would be one of the many advantages of a larger site. It would make it possible to provide in a somewhat more reasonable and satisfactory way for the accommodation of the students.

"If there were funds available, I should be in favor of some type of dormitory system. There are many different dormitory systems, and all have their good points. The system in vogue in the old English universities is the ideal one, except—and that is a very important exception—that as managed in England, it is expensive.

BELIEVES IN SOCIAL SIDE

"In England the students live in colleges, as they are called. Each man has a suite of rooms of fair size. Luxury is not encouraged at Oxford or Cambridge, and the richest student there will not have a more elaborate suite of rooms than the poorest. Of course, he can furnish his rooms as he pleases, but in general luxury is looked down upon.

"There are very few institutions on the Continent that have anything approaching the dormitory systems of the old English universities. In practically all cases the students live where and how they can. And that is the rule, too, in Great Britain outside of Oxford and Cambridge.

"The great advantage of the English system is that it enables men to have a good deal of social life among themselves. It promotes friendship and sociability. Men visit one another, and smoke and chat and work together. It promotes good fellowship, and good fellowship develops one of the most important sides of a man's nature. And I think the Massachusetts Institute of Technology has always taken the broad ground that it must do more than merely turn out skilled engineers. It must turn out high-minded men.

"I am thoroughly in accord with that idea, and if funds are available, I shall hope to see a dormitory system of some kind in connection with the Institute."

Speaking of the difference between educational methods in the Institute of Technology and those in foreign institutions of a similar character, Dr. Maclaurin said:—

FAVORS AMERICAN METHODS

"There is a great diversity in practice abroad. I have visited all the technological institutions of any great prominence in Britain, France, Germany, Switzerland, and Italy, and of course I have had special experience in Australia and been a good deal in Canada and the United States. And everywhere I have found a diversity in practice.

"Personally, I do not think it possible to transplant, at least it is not wise to attempt to transplant, an institution from one country to another. You may, of course, get hints as to profitable changes, but it is a curious fact that often what works admirably in one country seems not to work at all admirably in another.

"I think we must work out our own problems, and the American mind is alert enough readily to adopt suggestions wherever they come from."

"What is your ideal of a technological institute, Dr. Maclaurin?"

"That is a difficult question to answer briefly. The object of an institute of technology ought not to be to turn out merely professional men. But there is nothing new in that idea, for that has been the policy of the Massachusetts Institute of Technology in the past.

CULTURE AND EFFICIENCY

"I believe thoroughly in the broad man. I think it is a wise thing from every point of view to develop a man on broad lines, and I think the great thing to be avoided in all technological institutions is too much attention to details.

"In my judgment, it is a mistake to attempt to teach a man everything he may need to know. If we do that, we overcrowd him and disarrange his schedule, so to speak. We give him no time to think, no time to develop.

"There is a great future for any institution of a technological kind which has the courage to say that its ambition is not to turn out men who will be immediately useful as engineers, but rather men whose minds have been trained, whose human faculties generally have been trained, so that they will be alert and keen enough to take up with any new development which may present itself.

"I believe that the man who has a broad training is much more likely to succeed than the man who has a detailed professional training purely. And I think one of the features of the Institute which should be emphasized is that it always has taken a broad view of its ends. Its courses, for instance, are not purely scientific. It does something to develop the literary and even the artistic faculties of its students, and in my opinion this is a feature that ought to be rather more strongly emphasized in the future than it has been in the past.

QUALITY, NOT QUANTITY

"Then, the Institute has got two general courses open to it. One is to attempt to make itself more popular, to have more students. The other is not to strive for many students, but for students of high grade.

"Personally, my ambition would be along the line of that second course. I am not so anxious for more men as I am for an increase of men of the best type. I think that is what we must try for in the future—to make it an institution noted for its thoroughness, for its sound, thorough work."

"Would you make it a graduate school?"

"I certainly don't intend that. The fact that the Institute is an undergraduate school is really the main justification for its existence.

"It was the first important institution in this country, and almost any country, to establish a regular undergraduate course for engineers. The most the old universities did, if they did anything in engineering, was to tack it on to the end of some other course. The Institute struck out on a new line, and is copied all over the world by this time.

"I should never dream of departing from that tradition. I would continue it as an undergraduate school. Not, of course, that I object to a graduate school. The Institute will also have a graduate department, as it has to-day, but that will not be its special feature.

THE UNDERGRADUATE FEATURE

"There is a special reason for emphasizing the undergraduate element of the Institute's work. Harvard is in the immediate neighborhood and is beginning to develop a purely graduate school. Harvard has decided to do nothing but graduate work. That leaves the Institute absolutely free and untrammelled to develop its undergraduate school. There is no longer any danger of undue overlapping of the two institutions in the same neighborhood."

"Do you agree with Professor Noyes that it is not wise to attempt to separate 'culture' from science and technology, and to devote the earliest years of the student's life to academic training and leave his scientific and technical training for a later stage?"

"Dr. Noyes believes in a broad training, but his point, as I understand it, is this: that, if you are going to give a man a broad training, it might be wiser to lay the foundations in science, and put off the things which are supposed to give general culture, like literature and humanistic studies generally, to a later period, when the student has reached an age at which he can better appreciate those questions which require for their appreciation a better knowledge of men and affairs than a school-boy or a young man can possibly have.

AGREES WITH DR. NOYES

"In that I agree thoroughly with Dr. Noyes. I think it is a mistake, if you are going to give a man a broad training, to leave his scientific and technical training for the last."

"Would you put much emphasis on the study of English in the Institute?"

"I think an engineer ought to be able to express himself well, but the main point in the study of English is that it is a humanistic study,—a study that develops a man's human powers and sympathies. I think the study of English is very important."

"What about athletics, professor?"

"The question of athletics is a very different one in a technological institute from what it is in a general university. I believe thoroughly in athletics for young men, with certain reservations."

"First, I believe that the young man must enter into athletics for the sake of his health. That is absolutely essential for every man of normal physique. In the second place, I believe he ought to enter into athletics to develop certain moral qualities which are best developed by taking part in games properly conducted."

"That is as far as I go. I don't approve of the extreme vogue of athletics in certain institutions, when it goes so far that a man thinks and dreams and talks of nothing but athletics."

"But there is no real danger of that in a technological institution. The danger is really the other way,—that the men may become so absorbed in their work that they neglect athletics and suffer in health and morals in consequence."

HIS TRUST IN THE FUTURE

Dr. Maclaurin summed up his hopes in the new Institute of Technology in these words:—

"The experience of most similar institutions in other parts of the world is that a bold policy, a courageous policy of trust in the future is the wise one. To advance rapidly, an institution must not be afraid of its own development."

"The Institute of Technology has everything it could want in the shape of great traditions, distinguished and enthusiastic professors and alumni. I haven't any doubt that Massachusetts will see to it that, with these great assets, the Institute does not languish for lack of popular support."

Dr. Maclaurin gives one the impression of the alert, active administrator rather than of the scholar who has carried off distinguished honors in the great universities of the world, the student living amid his musty tomes. He believes in the theory of the sound mind in the healthy body, both for himself and for others.

Like a good Scot, he plays golf, and, like a good Englishman, he plays tennis and other games dear to the English heart, though, as he says, he plays all badly. And, like a good American, he likes the game of baseball, and also the game of football, with limitations.

GREAT CLASSICAL STUDENT

He is a great student of classical literature. "My interest in literature," he said, "began when I was a very small boy, and has continued unabated. My interests have been mainly, however, confined to English and French literature, particularly English.

"I am not a great reader of fiction. I have read the classics in fiction, like Scott and Dickens and Thackeray, but I read little modern literature. My interests have been, as I have said, with classical writers, particularly the English poets and the French essayists."

Dr. Maclaurin has resigned as head of the Department of Mathematics and Physics at Columbia, but has assured the authorities of that institution that he will remain there until they have had a reasonable opportunity to select his successor.

"I shall not go to Boston to take up my work there before May, at the earliest," he said, when questioned on this point, "but I shall go there occasionally to confer with the Faculty and with the members of the Corporation."

Dr. Maclaurin, in 1904, married the eldest daughter of William Young, head of the firm of William Young & Co., of Melbourne, Australia. He has one son, William, eighteen months old.

HONORARY PALLBEARERS

Dr. MacLaurin

Jan. 15, 1920.

Governor Calvin Coolidge

Welles Bosworth

Dean Alfred E. Burton

Professor Davis R. Dewey

Coleman du Pont

George Eastman

Merton L. Emerson

William Endicott

Frederick P. Fish

Judge Robert Grant

Francis R. Hart

Charles Hayden

Edmund Hayes

Walter Humphreys

Dr. Malcolm Kinsella

President A. Lawrence Lowell

Charles T. Main

Everett Morss

James P. Munroe

Henry S. Pritchett

James Ford Rhodes

Professor Robert H. Richards

Chief Justice Arthur P. Rugg

Dr. Payson Smith

Charles A. Stone

Moorfield Storey

Professor Henry P. Talbot

Elihu Thomson

Ambrose Walker

Edwin S. Webster

George Wigglesworth

75

BOSTON MAN SKIIS ACROSS THE ANDES

MacLaurin First Tourist to Accomplish Feat

SANTIAGO, Chile, Aug. 20 (AP)—One of the first tourists—perhaps the first—ever to cross the Andes on skis, William Rupert, MacLaurin of Boston, arrived here today by train from Los Andes, on his way to Valparaiso, to sail for home tomorrow.

Speaking before a luncheon of the American Society, MacLaurin told of a thrilling 40-mile trip from east of Puente Del Inca, Argentine-Andean resort, through Uspallata pass, then up and down neighboring peaks to the end of the snow line on the Chilean side, where he boarded the train.

Where he was unable to ski, he tramped part of the way and also used a mule which he got from a band of gypsies. He told of tramping through the famous mile-long tunnel in the pass in darkness to find the Chilean side closed. Fortunately the caretaker unlocked the gates, terming him a "loco Americano" (crazy American).

He said he narrowly escaped death when he skied down one peak in the middle of the night.

William R. MacLaurin of Boston, first Bostonian to cross the Andes on skis, is a graduate of Harvard, class of 1929. Born in Wellington, New Zealand, in 1907, he prepared for college at Country Day school. At Harvard he was a member of freshman and university track

Skis Over Andes



WILLIAM R. MacLAURIN

and cross-country squads, of the student advisory committee in 1927, and holder of a Harvard College scholarship in 1928-29 and a Francis H. Fiske scholarship in 1929. He was also a member of the Speakers Club, the Phoenix S-K Club, and the Mountaineering Club. His Boston address, as given in the Harvard class of 1929 book, is 12 Charles River square.

PUBLICATIONS

by Dr. Maclaurin.

Publications - R. C. Maclaurin

Technology Review

Educational and Industrial Efficiency, *Pres. Report Jan 1912*
 Science, January 20, 1911 July, 1911, page 409

The Reform of Oxford,
 North American Review, March 1911 *Pres. Rep. Jan 1912* Jan. 1911, page 72
 July 1911, " 409

The Outlook for Research
 The Pedagogical Seminary, March 1911 *Pres. Rep. Jan 1912* July 1911, " 409

Some Factors in the Institute's Success *Pres. Rep. Jan 1912*
 Science, April 1911 July 1911, " 409

Darwin at an American University *Pres. Rep. Jan 1912*
 Atlantic Monthly, June 1911 July 1911, " 409

Science and Religion: the End of the Battle
 Outlook, September 9, 1911 *Pres. Rep. Jan 1912* Jan. 1912, " 86

The Sherman Act,
 The Rollins Magazine, October 1911 *Pres. Rep. Jan 1912* Jan. 1912, " 86

Address to the American Chemical Society
 Science, July 1, 1910, Vol.32, p.10, Jan. 1911, " 72

The Main ^{Elements} Factors of Success *Pres. Rep. Jan 1913*
 Youth's Companion. June 1912 Jan. 1911, page 72

Science and Education, *Pres. Rep. Jan 1911*
 The School Review, May 1910, Vol. XVIII, p.319 July 1910, " 341

Some Tests of Academic Efficiency *Pres. Rep. Jan 1911*
 Popular Science Monthly, May 1910, Vol. 77, p.487 July 1910, " 341

Technical Education *Pres. Rep. Jan 1911*
 Youth's Companion, June 1910 July 1910, " 341

"Title to Realty"

"Physical Optics"

"Light" *In memoirs of Royal Soc. of London + other 2 of philosophical soc.*

Presidential Candidates and the Trust Problem *Pres. Report Jan 1913* Jan. 1913, page 76.
 in America.
 The Contemporary Review, November 1911 ¹⁹¹²

Scientific
 Research as a Financial Asset,
 The Youth's Companion. *July 10. 1913. Pres. Report Sent to Mr. Litchfield 10-31-13*

The Sore Need of Aviation, *Pres. Rep. Jan 1913* Jan. 1913, page 77
 Aero Club of America Bulletin, Aug. 1912.
 Volume I, No. 7, page 7. (1 page)

Address to the National Association of Cotton Manufacturers.
April 27th, 1910. printed by the Association.

(need not be noted in the
Technology Review.)

How New Zealand was Saved. Youth's Companion.

*Written May, 1913 - Probably published in 1914 -
Feb. 3, 1917 - not yet published -*

A National Opportunity and a National Duty

Stone & Webster Journal
August 1916

*main sec
2/2-17
Review
main sec
2/2-17*

Richard C. Maclaurin

elected at meeting of Executive Committee Nov. 11, 1908.

Nov. 23, 1908, vote of Nov. 11, 1908 amended (with reference to time of beginning service)

Nov. 23, 1908. Confirmed by Corporation.

✓

Assumed office June 1, 1909.

Professor (New Zealand University) Jan. 1, 1899 to Nov. 30, 1907

Professor (Columbia Univ., New York) Dec. 1, 1907 - May 31, 1909

President M. I. T. June 1, 1909. *till his death Jan 15, 1920*

8 Hillside Dr
Jan 18

My dear Professor Monroe

Just at this time while you are carrying out the last rites for your honored Head of the Institute, I feel that I must come into touch with one of you.

If it had not been for the serenity of the day, I should have gone in person and I am sure a place would have been found for me at the service, if I had sent my card with Dr. Tyler, who was the only usher whose name I knew - But I must express to some body my sorrow for you all, and for the Institute for the third time suddenly and

please let it stand, but if you back to the very
first year of this unfortunate Protestants, and
will have to value in that way - I have
been thinking of your demands of some of my
Protestants. The great test of your faculty,
and mind, is to think, what I have done,
I only met Dr. and Bro. (I was learning a few
things when they first came, but my own opinion
is of their coming, I am never over and over in
I cannot believe a message to them but I am
for the sake of them, and I want you to
know my thoughts on this point -

Sincerely yours

Francis W. Pickens

Mrs. P. P.

(Reg. in Charleston
1869-1886)

grievously afflicted - To me, the mem-
ories of the other two parsons are very
vivid - But this is more of a tragedy,
I think - Dr. MacLaurin has led
such a splendid, full life! It seems
hard he ought to have had many
more years, but he has accomplish-
ed so much and leaves such rich
memories.

I seldom see any
one now from the Institute but my
interest is as great as ever and I was
glad to hear about the great meeting
a week ago which my brother attend-
ed, he having been a Special Student in
Architecture years ago. With all
the millions coming in, and all the
fame over the world, my little
interest seems very, very small,
and what I had planned to leave
in my will seems so at one, yet-

Corp. meeting
March 18, 1926

We the officers and members of the Massachusetts Institute of Technology Women's Association are profoundly grateful for the Divine Dispensation which enabled Dr. Maclaurin to carry his work so far in the comparatively short term of ten years . . .

As he believed in the adequate education of women for advanced scientific and professional work, our peculiar loss is very great . . . This is a small part of the greater loss to the Institute and to the Nation. As a wise and just adviser, an interested friend we shall miss him always . . .

We offer to his family, to the members of the Corporation, and to our fellow alumni our deepest sympathy in this grievous bereavement . . .

Susan Minns, Honorary President
Mrs. Charles Winthrop Sawyer, President
Hattie L. Gates, Recording Secretary

I, in MacL envelope

*M. R. Mison
this copy*

RICHARD C. MACLAURIN, M. A., LL.D., D. Sc., late Fellow of St. John's College, Cambridge, Professor of Mathematical Physics, Columbia University, New York.

Sketch of career. Born in Scotland in 1870. Early education partly in Britain and partly in New Zealand. On proceeding to Cambridge, England, was elected a Foundation Scholar of St. John's College. Gained highest possible position in the most advanced mathematical examination at Cambridge, being bracketed with the Senior Wrangler in the First Division of the First Class in Part II of the Mathematical Tripos. During the following year visited various educational institutions in Canada and the United States. Meanwhile was awarded a Smith's Prize at Cambridge, his thesis being preferred to that of the Senior Wrangler. Returned to Cambridge to study law. Was awarded the McMahon Law Studentship, the most valuable thing of its kind at Cambridge. Joined the Honorable Society of Lincoln's Inn, London. Was elected a Fellow of St. John's College, Cambridge. Spent six months in Germany. Was awarded the Yorke Prize of the University of Cambridge for a thesis dealing with "Title to Realty". In 1898 was appointed Professor of Mathematics at Wellington, New Zealand. Soon after this he became a Trustee of the University of New Zealand and took an active part in the organization of the technological education in the dominion. Obtained the degree of Doctor of Laws from the University of Cambridge. Was appointed Dean of the Faculty of Law in the University at Wellington, New Zealand, and whilst holding that office accepted the chair of mathematical physics at Columbia University in succession to Dr. Woodward, now of the Carnegie Institution, Washington.

A large number of scientific memoirs by Prof. Maclaurin have been published in the transactions and proceedings of the Cambridge Philosophical Society, the Royal Society of London, and the Australasian Association for the advancement of Science, and in the Philosophical Magazine, and in February, 1908, the first part of his treatise on Light was published by the Cambridge University Press.

The following are some of his testimonials, mostly obtained in 1898, when he was appointed to a Professorship in New Zealand:

From Lord Kelvin, (1898).

"Mr. Maclaurin is a young man from whom much may be expected. He comes of an old family famous in the annals of the intellectual history of Scotland. His father was one of my classmates in the University of Glasgow, and the son I have seen and talked with often since he entered at Cambridge. He has been trained in a school of thoroughness and, with his businesslike power of seizing on the essentials of a problem and his great energy and determination, he should make a success of anything that he takes in hand."

From Sir George Stokes, President of the Royal Society of London, Lucasian Professor of Mathematics, Cambridge, (1898).

"I have had the pleasure of seeing Mr. Maclaurin frequently during the latter part of his residence at St. John's and have been attracted alike by his fine character and by his scientific ability. His interests are extraordinarily wide and yet he has the power of concentrating all his energy - and it is great - on any problem that he has in hand. He will make a success of anything that he

undertakes, if enthusiasm and unsparing effort will avail".

From J. Larmor, Sc.B., F. R. S. - Secretary of the Royal Society, Lucasian Professor of Mathematics, Cambridge.

"I am able, without hesitation, to express my judgment that Mr. R. C. Maclaurin is a skillful and profound mathematician, quite of the first rank."

From H. F. Baker, Sc. D., F. R. S., University Lecturer, Cambridge.

"Mr. R. C. Maclaurin has been well known to me throughout his career at Cambridge. He is a man of extraordinary power and originality.

From C. E. Graves, M. A., Fellow and Classical Lecturer, St. John's College, Cambridge.

"Mr. R. C. Maclaurin's career during his residence at St. John's has been in every way honourable alike to himself and to his college. He has won the respect and esteem of all with whom he has had to do, and is thoroughly popular in our body. I need not speak of Mr. Maclaurin's mathematical attainments and abilities, which are abundantly proved and attested; but, having known Mr. Maclaurin for some years, I may say that he is a man of high character and principle, of much originality and power; earnest, energetic clear-headed, and sensible - a strong man who can hold his own and see his way, and one who at the same time will be thoroughly genial and reasonable, and easy to work with and under."

From Sir Robert Stout, Chief Justice of New Zealand, and Chancellor of the University.

"Prof. Maclaurin was a distinguished student in New Zealand

and the distinctions he afterwards won in Cambridge prove him to be a man of great intellectual ability. Moreover, he is no pedant, but a man of broad sympathies, clear-headed and sensible; a good speaker, with a business-like power of dealing with men. At the same time he is an admirable teacher. I have had two sons attending his classes at the University and I can, therefore, speak of his teaching abilities. They are of a very high order.

I feel that it would be a great loss to our University were we to lose his services. He has taken a keen interest in the University and his advice has been most valuable. He is a gentleman of high character and I know of no one in New Zealand whose loss would be more felt should he determine to leave this Colony."

From the Rev. W. A. Evans, M. A., Chairman of Board of Trustees, University, Wellington, N. Z.

"Prof. Maclaurin's appointment in this University has been more than justified by results. He has proved himself to be a true teacher, as well as a ripe scholar. The influence he has exercised over the students has been in every way admirable and he has made for himself a unique position as a leader in the intellectual matters throughout the whole colony. To have had such a man as he is on the staff of the University has given the institution an educational tone that will go far to secure its future success. Prof. Maclaurin is a man of extraordinary versatility and great enthusiasm and is unsparing of his labours for widening the influences of the University."

Extracts from Reviews of Prof. Maclaurin's book on "Title to Realty":-

Comptes Rendus (translated): "Its brilliant qualities render

it worthy in every way of the high reward with which the University of Cambridge has thought fit to crown it."

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"It gives promise of a real school of legal history which may flourish and bear fruit, notwithstanding the general apathy of the profession toward everything not of obvious utility in practice!"

Scottish Law Review:

"The best word we have for Mr. Maclaurin is the expression of a hearty wish for just such an historical sketch of our practice in title to realty. Its faithful study of the latest archaeological scholarship makes the work as suggestive and informing in matter as it is direct and perspicuous in style."

Cambridge Review:

"This is in every respect a valuable work. Its author has distinguished himself in a way that is, we believe, unique in the modern history of the University (Cambridge). He has gained the two most coveted University prizes, prizes that are awarded for original research in two completely distinct branches of learning - mathematics and law".

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge Massachusetts.

January 15, 1920

It is my sad duty to inform members of the Corporation of the death of our President, Dr. Maclaurin.

The funeral service will be held in the Old South Church, Copley Square, Sunday afternoon at three o'clock.

Members are asked to inform the ushers that they are of the Corporation that they may be taken to the assigned seats.

James P. Munroe,

Secretary.

January 16, 1920.

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File in
Maclaurin.

Professor Maclaurin is now Professor of Mathematical Physics in Columbia University. He was born in 1870 in Edinburgh, Scotland. A few years of his boyhood were spent in New Zealand but his preliminary education was, for the most part, in English schools. He entered the University of Cambridge, England, in 1892, where after receiving the degree of B.A., in due course, he took the degree of M.A. in 1896. In Cambridge, he was a foundation scholar of St. John's College. In 1896, he gained in the University the highest possible position in the most advanced mathematical examination, being bracketed with the senior wrangler in the First Division of the First Class in Part II of the Mathematical Tripos. He also received the great honor of the "Smith Prize" at Cambridge, his thesis being preferred to that of the senior wrangler. After graduation, Professor Maclaurin was elected a fellow of St. John's College, Cambridge.

In 1896 and 1897, he was in the United States and Canada for about 10 months, spending his time in study and in visiting various educational institutions, from McGill ^{University} College in Montreal to Stanford University in California. He also spent 6 months at a German University in 1897.

Meantime, he had begun the study of law at Cambridge University and in London, intending to enter that profession. He was awarded the McMahon Law Studentship at Cambridge and joined the Honor-

able Society of Lincoln's Inn, London.

In 1898, the University of Cambridge awarded to him the Yorke prize for a thesis dealing with the "Title to Realty", a difficult and important law topic. This thesis has been published and has received world wide and favorable comment from the best authorities in such matters. The Cambridge (England) Review in commending this book called attention to the fact that "its author has distinguished himself in a way that is, we believe, unique in the modern history of the University (Cambridge). He has gained two of the most coveted University prizes, prizes that are awarded for original research in his completely distinct branches of learning - law and mathematics".

In 1898 Professor Maclaurin was appointed Professor of Mathematics at the University of New Zealand. He became a Trustee of the University and as such took an active part in the organization of technical education in the Colony. He was subsequently appointed Dean of the Faculty of Law in the New Zealand University, and while holding that office accepted the Chair of Mathematics and Physics at Columbia University as successor to Dr. Woodward now of the Carnegie Institute. He was invited to Columbia on the strength of his reputation as a scientist, which is international.

The degree of L.L.D. was conferred upon him by the University of Cambridge, England, in 1904, in recognition of his achieve-

ments in the study of law, and in 1898 the same University conferred upon him the degree of Sc.D. in view of his work in pure science.

Professor Maclaurin has published a large number of scientific memoirs of a high order in the Transactions and Proceedings of the Cambridge Philosophical Society, the Royal Society of London, the Australasian Society for the Advancement of Science and the Philosophical Magazine. In February, 1908, there was published at the Cambridge (England) University Press the first part of his very elaborate Treatise on Light.

In addition to his intimate knowledge of the work and methods of the universities of England, Canada, the United States and New Zealand, he has been in close touch with the universities of Australia.

Professor Maclaurin comes from a family famous in the annals of the intellectual history of Scotland. He is acquainted with scientific men the world over. He has the distinction which is perhaps unique, of having attained a great reputation not only in the field of science but also in that of legal investigation and administration. His work as Dean of the New Zealand Law School was highly satisfactory.

His associates in educational, scientific and legal work both in Cambridge and in New Zealand concur in attributing to him the marked qualifications as a man, a scholar and an educator.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

33 WEST THIRTY-NINTH STREET

NEW YORK



TELEPHONE, 4600 VANDERBILT
CABLE, CYANDRIC

Unconfirmed minutes of a Joint Meeting of the U.S. National Committee of the I.E.C. and of the Standards Committee of the A. I. E. E., at the A. I. E. E. Rooms, 33 West 39th St., on Friday, January 16, 1920.

The President of the U. S. National Committee, Dr. C. O. Mailloux, called the meeting to order at 2:35 P.M.

Present: Representing the U. S. National Committee - President Mailloux, Vice-President Crocker, Secretary Kennelly, and Messrs. Adams, Behrend, Burke, Chubb, Del Mar, Fisher, Hobart, Rushmore, Sharp and Skinner.

Representing the Standards Committee - Chairman Robinson, Secretary Cheney, and Messrs. Burke, Chase, Del Mar, Farmer, Fisher, Hanker, Hobart, Kennelly, Morehouse, Osborne, Rhodes and Skinner.

The minutes of the September 18, 1919, meeting were read and approved.

Report C.N.46 of the I.E.C. was read by Secretary Kennelly giving a preliminary report of the London plenary meeting.

President Mailloux announced that he had received a cable stating that the meeting of the Advisory Committees had been set for the week of March 27, in Brussels. It is expected that the delegates from all the National Committees will meet in Brussels, and exchange views on all active subjects, in order that the National Committees may come to the plenary meeting, to be held in the United States next Summer, prepared to take action on as large a quantity of work as possible.

A telegram was read from Professor D. C. Jackson, regretting that he was unable to attend, owing to the sudden death of President Maclaurin of the Massachusetts Institute of Technology.

After encomiums upon the achievements and personality of the late Dr. Maclaurin had been voiced by President Mailloux of the I.E.C., Vice-President Crocker of Columbia University, and Secretary Kennelly of Cambridge,

It was VOTED unanimously that the Secretary of the Committee be requested to communicate to the Faculty of the Massachusetts Institute of Technology, the sympathy and condolence of the joint committee in the great loss incurred by the death of the President,

For information of Administrative Committee

Dr. Richard C. Maclaurin, a loss which will be severely felt, not only by the Faculty, students, alumni and friends of the Institute, but also by the entire engineering world.

It was also VOTED that a copy of this minute be transmitted to Dr. Maclaurin's family.

Brief reports were read and accepted from Messrs. Hobart, Burke and Chubb on the I.E.C. meetings of October, 1919, which they had attended in London as U.S.National Committee delegates.

Professor Crocker expressed the gratification of the joint committee at the honor conferred on the American Committee by the selection of its President, Dr. Mailloux, to the Presidency of the I.E.C.

By Mr. Robinson - Moved: That the reports of Messrs. Hobart, Chubb, and Burke, and the preliminary copy of the I.E.C. rules, be circulated to the members of both committees.

Carried.

President Mailloux stated that greatly increased facilities would be required in order to carry on the work now contemplated.

By Mr. Crocker - Moved: That a committee be appointed by the Chair to investigate and report relative to organizing and carrying on the I.E.C. work.

Carried.

By Dr. Kennelly - Moved: That the Chair appoint advisory committees corresponding to the I.E.C. Advisory Committees described in C.N.46.

Carried.

(NOTE: See later action requesting the Standards Committee to report relative to the subjects which are to come up at Brussels)

By Dr. Kennelly - Moved: That a committee be appointed by the Chair to consider the question of an electrotechnical vocabulary in English.

Carried.

It was unanimously VOTED that a committee consisting of Messrs. Burke, Chubb and Hobart, with the Secretary of the U. S. National Committee, draw up a suitable report of the London October Meeting of the I.E.C. for publication in the A.I.E.E. Journal.

It was VOTED to transmit to General Secretary le Maistre, fifty copies of a N.E.L.A. document entitled "Transformer Standards-Types, Frequencies, Sizes, Voltage Ratings, Taps, Lead Markings, Polarity".

There was some discussion as to how best to progress the work at present, and particularly to get ready for the Advisory Committees meetings in Brussels. It was pointed out that if the work is taken up by the advisory committees authorized by Dr. Kennelly's motion, they would perhaps duplicate work of corresponding sub-committees of the Standards Committee. The general opinion was that the Standards Committees should continue, as in the past, to be the working body so far as American interests are concerned.

By Mr. Hobart - Moved: That the U.S.National Committee of the I.E.C. request the Standards Committee to take up all technical matters within the province of the eight advisory committees as embodied in the reports of the delegates, deal with the same, and report its recommendations at the earliest possible date to the U.S. National Committee.

Carried.

The meeting adjourned at 5:35 P.M.

A. E. KENNELLY,
Secretary,
U.S.National Committee of the I.E.C.

EDWARD J. CHENEY,
Secretary,
Standards Committee.



AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

33 WEST THIRTY-NINTH STREET, NEW YORK

U. S. NATIONAL COMMITTEE OF THE INTERNATIONAL ELECTROTECHNICAL COMMISSION

C. O. MAILLOUX, President
20 Nassau Street, New York

F. B. CROCKER, Vice-President

A. E. KENNELLY, Secretary
Harvard University, Cambridge, Mass.

C. A. ADAMS, Cambridge, Mass.
B. A. BEHREND, Boston, Mass.
JAMES BURKE, Erie, Pa.
JOHN J. CARTY, New York, N. Y.
L. W. CHUBB, Pittsburgh, Pa.
W. A. DEL MAR, New York, N. Y.
GANO DUNN, New York, N. Y.

H. W. FISHER, Perth Amboy, N. J.
H. M. HOBART, Schenectady, N. Y.
D. C. JACKSON, Boston, Mass.
B. G. LAMME, Pittsburgh, Pa.
W. S. MOODY, Pittsfield, Mass.
CHARLES ROBBINS, Pittsburgh, Pa.
E. B. ROSA, Washington, D. C.

D. B. RUSHMORE, Schenectady, N. Y.
CHAS. F. SCOTT, New Haven, Conn.
CLAYTON H. SHARP, New York, N. Y.
C. E. SKINNER, Pittsburgh, Pa.
S. W. STRATTON, Washington, D. C.
ELIHU THOMSON, Swampscott, Mass.
R. B. WILLIAMSON, Milwaukee, Wis.

(Central Office of International Electrotechnical Commission, London, England; General Secretary, C. le Maistre, 28 Victoria St., S. W.)

Extract from Minutes of a Joint Meeting of the U. S. National
Committee of the International Electrotechnical Commission
and of the Standards Committee of the American Institute
of Electrical Engineers at the Engineering Building,
39th Street, New York City, Friday, January 16th.

A telegram was read from Prof. D. C. Jackson, regretting that he was unable to attend the meeting, owing to the sudden death of President Maclaurin of the Massachusetts Institute of Technology.

After encomiums upon the achievements and personality of the late Dr. Maclaurin had been voiced by President Mailloux of the I. E. C., Vice President Crocker of Columbia University and Secretary Kennelly of Cambridge,

It was voted unanimously that the Secretary of the Committee be requested to communicate to the Faculty of the Massachusetts Institute of Technology, the sympathy and condolence of the joint committee in the great loss incurred by the death of the President, Dr. Richard C. Maclaurin, a loss which will be severely felt, not only by the Faculty, students, alumni and friends of the Institute, but also by the entire engineering world.

It was also voted that a copy of this minute be transmitted to Dr. Maclaurin's family.

D. M. BATES
LEWISTON
MAINE

January 19, 1920

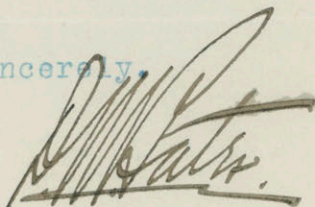
Mr. James P. Munroe, Secretary,
Corporation of Massachusetts
Institute of Technology,
Cambridge, Mass.

My dear Mr. Munroe:

I want to express to you and through you to all who are active at the Institute my feeling not only of grief but also of irreparable loss in the sudden and very premature death of Dr. MacLaurin. I feel too overwhelmed at this time to fully express my feelings. Dr. MacLaurin's career as our President was truly a glorious one and he has passed away at the very climax of his splendid and fruitful effort to place the Institute on a sound and enduring financial basis.

Believe me, with
kindest regards and deepest sympathy,

Yours sincerely,



D. M. BATES

D. M. LINNARD
MANAGER
C. E. W. MOORE
RESIDENT MANAGER



January 30th, 1920.

Mr. James P. Monroe, Sec.,
Mass. Institute of Technology,
Cambridge, Mass.

Dear Mr. Monroe:-

I am spending the Winter in California, and therefore cannot be present at any of the meetings of the Corporation for some little time.

I wish to join with the members of the Board in any action that may be taken in respect to the memory of Dr. Maclaurin, whose record and work for the Institute was marvellously good, and whose loss to the Institute I am afraid is almost irreparable. His death at the moment of his great success was sad, and deplorable beyond words.

Yours very truly,

E. W. Moore

EWR/AD.



VICTORIA UNIVERSITY COLLEGE,
WELLINGTON, N.Z.

13th February, 1920.

Miss Keeler

The Chairman of the Board of Trustees,
Massachusetts Institute of Technology,
Boston, Mass., U.S.A.

Dear Sir,

I am directed by the Professorial Board of this College to convey to you the following resolution, which was passed at the meeting of the Board on 10th February, 1920:-

"The Professorial Board of Victoria University College learns with the deepest regret of the death of Richard C. Maclaurin, President of the Massachusetts Institute of Technology, and sometime Professor of Mathematics at Victoria College, Wellington. By his wide scientific reputation and his great ability he conferred distinction on the College from its inauguration, and the College realizes that in him it has lost a valued friend."

I am,

Yours faithfully,

Registrar.

W. M. M. M.

*Corp. meeting
March 10, 1920*

FACULTY CLUB
NEW YORK UNIVERSITY
STEVENSON HOUSE UNIVERSITY HEIGHTS
NEW YORK CITY

The Faculty of the School of Applied Science of New York University wishes to express its sincere sympathy to the Corporation of Massachusetts Institute of Technology on the death of Richard Cockburn Maclaurin whose loss is so keenly felt in the educational world.

February 19, 1920.

INDIANA ASSOCIATION
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Wilson B. Parker,
President.

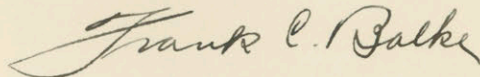
Frank C. Balke,
Secretary.

Prof. H. W. Tyler, Secretary,
Massachusetts Institute of Technology,
Cambridge, Massachusetts.

Dear Professor Tyler:-

I have the honor to transmit herewith a copy of the resolutions adopted at the last meeting by the Indiana Association of the Massachusetts Institute of Technology upon the death of Dr. Maclaurin.

Sincerely,



Secretary,
424 West Market Street.

Indianapolis, Indiana,
March Second,
Nineteen Hundred Twenty.

Whereas, in the death of Richard C. Maclaurin the world has lost a scientist of notable repute, the nation and the Commonwealth of Massachusetts a distinguished and invaluable citizen, and the Massachusetts Institute of Technology a leader who now stands enshrined with Rogers and Walker in the affectionate memories of Technology's sons and daughters, and

Whereas, the eminently successful presidency of Dr. Maclaurin has been conspicuous for his cordial relations with the corporation and his affectionate co-operation with the faculty of the Institute, it is with a special sense of loss that Technology's alumni have learned of the death of him who was the chief instrument in recent years in binding them to their Alma Mater with close and lasting bonds; therefore be it

Resolved, by the Indiana Alumni Association of the Massachusetts Institute of Technology that coincident with our sense of loss is a feeling of gratitude that Technology's leader was at least spared to see the successful culmination of his last great effort in firmly securing for the Institute a future worthy of its past, and that the new Technology on the Charles, the realization of his dreams, becomes by the crowning achievement of his life a monument to his memory. And be it further

Resolved, that the Indiana Alumni Association of the Massachusetts Institute of Technology, through its officers, express to the bereaved family, to the faculty and to the corporation of the Massachusetts Institute of Technology our deep sense of loss and sorrow, and that a copy of these resolutions be presented to said family, faculty and corporation.

For the Association,

Wilson B. Baker President
Frank C. Balke Secretary

*Corp Meeting of
Main 10.11.22*

Resolutions of the Faculty of the
Massachusetts Institute of Technology upon the
death of President Maclaurin.

For the third time in the history of the Massachusetts Institute of Technology, its Faculty is called upon to mourn the loss of a President suddenly removed by death. Richard Cockburn Maclaurin, like his distinguished predecessors William Barton Rogers and Francis Amasa Walker, has died in the very midst of self sacrificing labors on behalf of the Institute.

Born in Scotland of distinguished ancestry; educated in New Zealand and in England; distinguished as an investigator, and expert in Mathematical Physics and in the Law; acquainted by extensive travel with many and widely separated parts of the habitable globe; President Maclaurin was a man of extraordinary breadth, academic experience and distinction, as well as a rare combination of a man of culture, a man of science and a man of the world.

Dr. Maclaurin had no sooner accepted the Presidency of the Institute than he made a thorough study of its history and saturated himself with its spirit and traditions. He recognized immediately its peculiar place and mission in the field of education, and gave himself unreservedly to its upbuilding and development. He found it endowed with a reputation for labor and achievement, and with an able and enthusiastic body of teachers, students and alumni, but inadequately housed and imperfectly equipped. He quickly perceived its importance and its possibilities of increasing usefulness in a scientific and industrial age, and to its proper maintenance and development he straightway devoted all his powers of mind and body.

By his close attention to the history of the Institute, by his courage in the face of obstacles, and especially by his unremitting labors on its behalf, Dr. Maclaurin soon made himself virtually an Institute man. His loyalty to the Institute and to its spirit was complete. His efforts on its behalf, covering ten trying years, his absorption in its welfare, his absolute sacrifice of himself to its service, culminating in his death in the very hour of his triumph,- all these taken together constitute the highest tribute which could possibly be paid by any officer to any institution.

President Maclaurin had already made for himself an international reputation as a leader in modern education. His advice was sought by academic authorities from Europe to Australasia, and he looked forward with eager anticipation to a far greater development of the Institute in educational leadership and to its far larger service to mankind. Recognizing the high place of science in modern life and education, the potential fruitfulness of a close partnership between science and industry, and the importance of the applications of scientific knowledge to the conduct of human life, he was fully persuaded of the validity of the Institute's method of training, and of its ideals of breadth and thoroughness as a means of attaining these ends.

Becoming a citizen of the United States by choice rather than by accident of birth, Dr. Maclaurin threw himself wholeheartedly into the great struggle of the war. He gladly turned over to the service of the Nation all the various resources of the Institute in its new buildings and location, and he had the reward of seeing that service hailed everywhere as unsurpassed. When the call came to him to go to Washington, he responded without hesitation, and freely gave of his energy and of his wisdom to a difficult undertaking.

We tender to Mrs. Maclaurin and to his children our heartfelt sympathy, and we are proud to feel that we were permitted to share with them his extraordinary power of affectionate devotion.

Mills at Lawrence

Telephone Connection

Munroe Felt and Paper Co.

Office 79 Summer Street

Rooms 80 and 81 Merchants Building

James P. Munroe
President and Treasurer

William T. McAlpine
General Manager

Thomas E. Allen
Superintendent

Boston March 20, 1920.

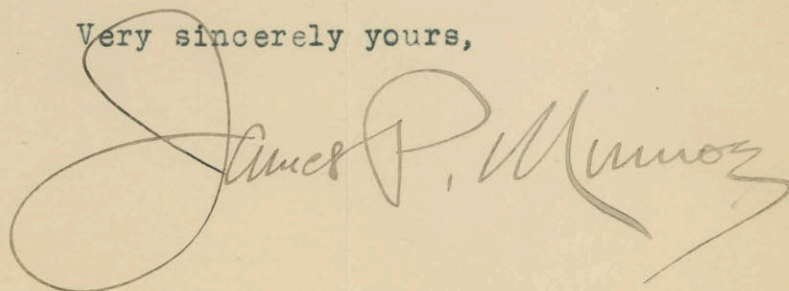
Miss M. R. Miller, Sec. to the Pres.,
Massachusetts Institute of Technology,
Cambridge, Massachusetts.

Dear Miss Miller:

I am returning, herewith, the report of the Corporation meetings of January 30th and March 10. The matters referred to in the note of the first meeting are taken care of in the second, except that in the last paragraph, please add the Technology Club of New York. I read the resolutions of that Club at ^{the} January meeting, but it was understood that they should be entered as of the March meeting.

It is understood, I presume, that these various resolutions are not to be spread upon the records, but are to be filed with the records of the Corporation. You can get a copy of the New York resolutions, if you havn't one, from Professor Rogers.

Very sincerely yours,



JPM/L

encl ✓

Cambridge 39, Massachusetts,
March 31, 1920.

Mr. G. E. W. Robison,
Victoria University College,
Wellington, New Zealand.

Dear Sir:

I am requested on behalf of the Administrative Committee, which has been appointed to assume temporarily the duties of the presidential office of the Institute, to express to you our sincere appreciation of the expressions of regret at the death of the late President Maclaurin. The resolution will be incorporated among the many kindly and sympathetic tributes that have come to the Institute. I am, dear sir,

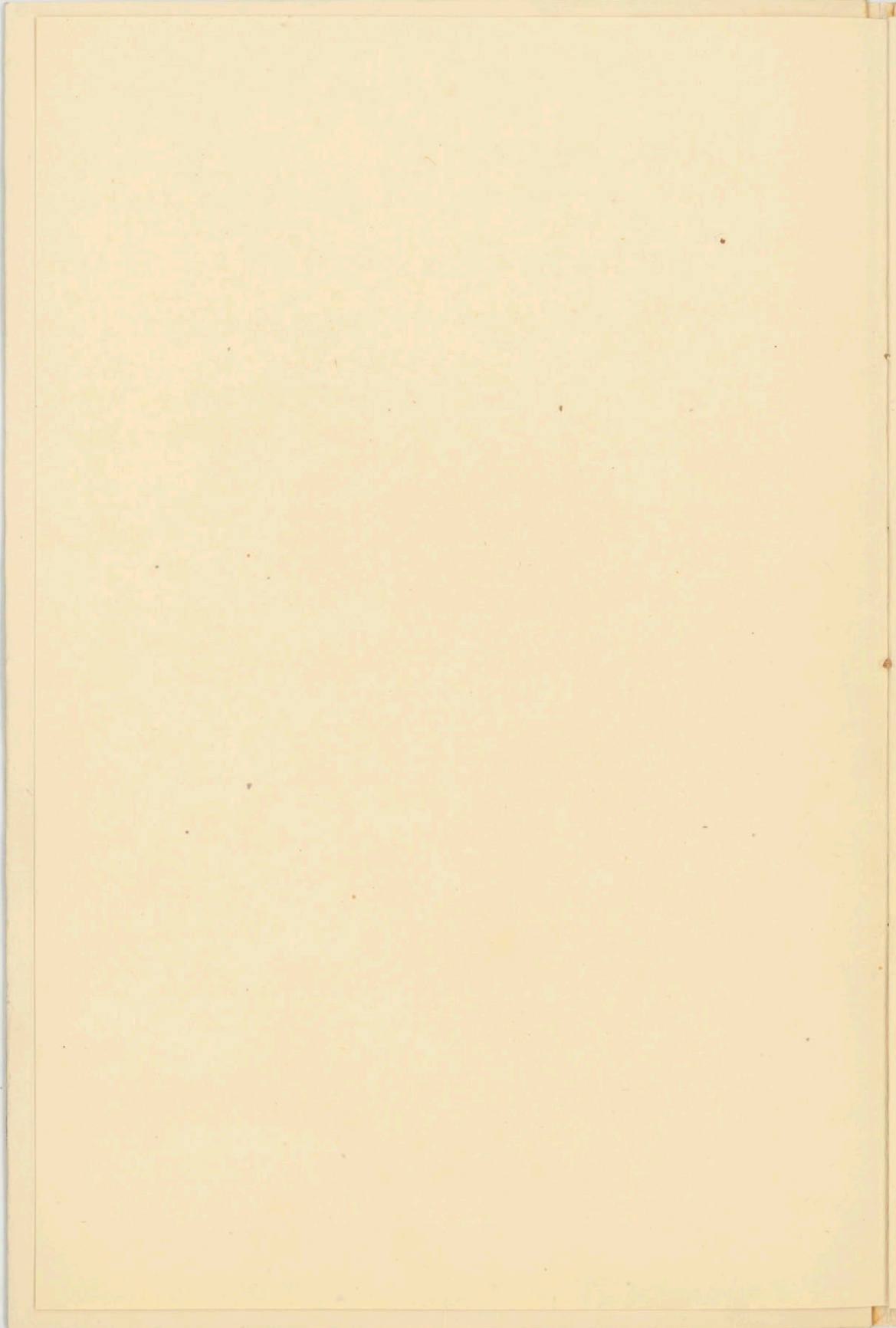
Sincerely yours,

For the Administrative Committee.

HPT/DCB

Massachusetts Institute of Technology

Resolutions by the Corporation



MASSACHUSETTS INSTITUTE OF TECHNOLOGY
RESOLUTIONS BY THE CORPORATION
ON THE DEATH OF
PRESIDENT RICHARD C. MACLAURIN

MANAGERIAL & FINANCIAL
KEYS BY THE CORPORATION
OF THE DEATH OF
PRESIDENT RICHARD T. MANLY

RESOLUTIONS BY THE CORPORATION

RESOLVED that the following be spread upon the records of the Corporation as an expression of the profound sorrow and sense of loss caused by the death of our beloved president, Richard Cockburn Maclaurin, and a tribute to his memory, and that a copy of the same be sent to his family.

RICHARD COCKBURN MACLAURIN, since 1909 President of the Massachusetts Institute of Technology, died after a brief illness, on the fifteenth day of January, 1920. By his death not only does the Institute lose a leader of the highest quality whose achievements in the past only foreshadowed those that were to come, had his life been spared, but our country and the world is deprived of a great citizen whose loss is deeply to be deplored. Moreover, all those with whom he had come in contact, whether in social relations, as an educator and administrator, as a public servant or as the head of a great institution of learning about whom centered the loyal devotion of a host of graduates, students and fellow workers, had for him not only respect and admiration but warm feelings of regard and affection such as few men have the quality to excite. To his friends and to those who knew him, his death is a personal distress and his loss one for which there is no compensation.

He was born in Scotland in 1870 of a family of refinement, many members of which had been distinguished in scholarship and science. He was fortunate in that he grew up in New Zealand, where he had the benefit of an environment entirely different from that of our older civilization. This resulted in a broadening of his views and an enlargement of his ideas, which were distinctly helpful to him in his later work.

Entering the University of Cambridge, England, he there received the Degree of Master of Arts in 1897, with marked distinction in mathematics. He then turned his

attention to the study of law and, in 1898, was Yorke prizeman in law at that University.

Returning to New Zealand with this unusual and admirable equipment as a scholar, especially in mathematics, physics and law, he remained in that colony until 1905, serving for seven years as Professor of Mathematics in the University of New Zealand and for two years as Dean of the Faculty of Law in that University.

In 1907 he became Professor of Mathematics and Physics in Columbia University, New York, and in 1909 was elected President of the Massachusetts Institute of Technology.

Meantime, he had written and published books and articles of a high order of merit on both scientific and legal subjects. His elaborate works on the theory of light placed him in the front rank of physicists.

He had travelled much and had been in particular a student of education and educational methods in different parts of the world.

When, therefore, he became President of the Massachusetts Institute of Technology, he had acquired from study and personal contact unusual knowledge of many different phases of our civilization and particularly of educational systems and had a broad foundation of scholarship, comprehensive in the important fields of law and physics and extensive in all branches of human effort.

He became President of the Massachusetts Institute of Technology at a critical time in its history. While the Institute had rendered great and constantly increasing service to education and to scientific development and the application of science to the arts, the time had come when it had largely outgrown its facilities and required re-establishment on a new basis. Not only was the material problem of a new and enlarged plant in a new location of vital importance, but the necessity that the standards of the Institute should be maintained in harmony with the demands of constantly changing and expanding industrial conditions, with which the Institute must surely keep pace, required renewed study and analysis of educational methods and conditions. Thorough consideration of the entire educa-

tional program, not limited to the apparent exigencies of the moment but involving a sound forecast of the necessities of future development, was essential if the ideals of the Institute were to be realized.

An incidental question of great importance which had to be faced and settled was that of the relations with Harvard University which had been a subject of consideration for many years.

To these problems and to many others of a more detailed character which were involved in the general consideration of the future of the Institute, the new President devoted his thought and energy from the very beginning and without cessation until the end of his life. The magnitude as well as the difficulty of these problems appear more clearly, now that we look back upon them, than they did in 1909. They were not only physical, financial, educational and administrative but distinctly social, in that the new conditions that were to be brought about must surely be such as to harmonize with the demands of society and the need of the times. The different phases could not be dealt with separately but every effort and every achievement in one direction required corresponding effort and achievement in others, that the harmony and unity of the organization as a whole might be maintained.

The large success of the Institute in developing from its condition in 1909 to that of the present day is generally recognized. There can be no question that the credit for this success is due to a marked degree to President MacLaurin, his character, capacity and personality. While he has had the loyal support of those associated with him in the management of the Institute and of its alumni, that support would never have been consolidated for effective and enthusiastic effort if it had not been organized and directed by him and if he had not had the rare qualities required to stimulate enthusiasm and to concentrate in persistent, harmonious work the efforts of all those who were called upon to co-operate with him. Back of all was the necessary element of far-sighted leadership which should plan and develop in general and in detail and determine the direction in which work should be done. Such leader-

ship required for success a capacity and quality seldom found. It was because the leadership was equal to the emergency, and the plans adequate, that the friends of the Institute became inspired with that zeal and confidence which placed them solidly behind the work.

Those who have been in a position to follow the development of the Institute since 1909, and all others who will take the trouble to study the subject as a matter of history, will agree that for the purposes of this great undertaking no one could have exhibited greater qualities of power and leadership than President Maclaurin. With clear intelligence he analyzed all phases of the problem. His energy and capacity in dealing with the complications of the situation were without limit. He faced the financial difficulties with the utmost courage and confidence, but never permitted them to divert his attention from the educational and administrative work so as to allow the latter to deteriorate. When the new plant was assured, he gave wise and adequate attention to the very difficult problem of transferring the work to the new quarters without impairing its quality. As a great leader he was behind all the details of the organization involved in establishing the Institute in its new environment, utilizing to the utmost the help and co-operation that was so freely and loyally at his disposal, giving full credit to every one, but himself contributing the vital and essential elements of direction, coherence and stability.

Outside the great achievement of financing and establishing the new plant without even temporary disintegration of the quality of work of the Institute, certain special difficulties came into the situation which were calculated to try the soul of a leader. The first was the Great War, which, if the affairs of the Institute had not been handled by a master mind, might have led to a most serious impairment of its efficiency. Here President Maclaurin showed to a marked degree his extraordinary intelligence and power to keep in order a situation that tended toward chaos. He carried the Institute through the war period with its efficiency unimpaired and with even an increase in its capacity for service. Nor should it be forgotten that during the war, he added to the burdens of his work admir-

able and effective service for the Government in fields outside the affairs of the Institute. As Director of College Training for the War Department, he played a conspicuous part in organizing the colleges of the land so that in the face of most trying conditions, their work was practically uninterrupted, while at the same time they performed valuable service in training their students for the exigencies of the war period.

A second episode, that was to him most disheartening and which only his rare qualities of mind and character enabled him to meet without flinching, was the ultimate failure of the effort to establish sound educational relations with Harvard University. Firmly convinced that the interests of the Institute and of education generally required that there should be close co-operation with Harvard University in the teaching of applied science President Maclaurin worked zealously to that end for years, again showing throughout the negotiations, which were conducted in the most admirable spirit on both sides, his power of dealing with great questions and his capacity as a leader in thought and action. When the relations between the two institutions were established on what seemed to be a sound and permanent basis, he felt that an important part of his work had been accomplished. He believed that the joint effort of Harvard and the Institute would surely result in the greatest engineering school in the world and in a gain to education and to the prosperity of our country which could not be measured. Because of the views of the Court as to the true construction of Gordon McKay's will, all this work and effort failed, necessitating an entire readjustment of the program for the development of the Institute. It is largely to the credit of President Maclaurin that this reversal of its policy, forced upon it by conditions which it could not control, did not involve even temporary embarrassment of a serious character to the Institute.

Although bitterly disappointed and forced to approach the general problem of the development of the Institute from an entirely different point of view, President Maclaurin did not for one moment lose his confidence or his courage. The seriousness of the situation, of which he was

fully conscious, particularly when the strain upon the resources of the Institute arising from the conditions excited by the war and the fact that payments from the State would soon cease were taken into account, only served to inspire him to further strenuous effort.

With the most indefatigable energy, he assumed the leadership of a new campaign to establish the Institute's finances upon a firm footing, again showing, to a superlative degree, all his qualities as a great leader, — sagacity, power of conception and of administration, energy and a capacity for inspiring others. Again his work was crowned with success and on the very day on which he was stricken down by the illness which proved fatal, there was held the meeting of the alumni which was to note this new triumph of the Institute and of its President.

All through the record stand out conspicuously the great qualities of the man which have resulted in such great achievement. The obligations of the Institute to its many friends and in particular to the giver so long unknown, who has made such worthy use of the reward that came to him for his foresight and ability in giving to the world a great industry which operates only to the advantage of men, can never be expressed in words. They can only be felt. But this giver and the others who have co-operated with him will be the first to recognize that, except for the personality of the President of the Institute and their confidence that under his guidance its future as a great power for good in this country and in the world would be assured, they would not have felt so strongly that it was the Massachusetts Institute of Technology which should have the immediate advantage of their liberality and good intent.

In no department of his work for the Institute has President Maclaurin failed to show the same high qualities of power and leadership. He deserved and retained the confidence of the governing bodies, of the faculty, of the students and of the alumni because of the loyalty, the entire absence of self-consciousness, the imaginative power and the intelligence, capacity and energy with which he approached his work. He had the full confidence of the public, for it was convinced, as soon as it knew the man,

that he had the qualities of a good citizen and a great leader practically uncontaminated by any of the ordinary weaknesses of humanity.

His friends and those who had the good fortune to know him were attracted to him from the start by his fine character and by the richness of his personality, and found their respect and regard for him continually increasing as they knew him better. While his thought was always on his work and he was almost submerged by the intensity of his self-sacrificing and unsparing effort, he was always able, even at a time of serious exigency, to meet those with whom he came in contact with a friendly and personal charm, brightened by a sense of humor which he never seemed to lose even in his most serious moments. Every memory of him is pleasant and it is only from this pleasant memory that we who knew him can get even slight consolation for our great loss.

He was an admirable citizen. His standards of American ideals were of the highest. Many times he has served the public in large ways and small, often at great sacrifice and the expense of personal inconvenience. If his life had been spared, he would have continued to serve the community to the limit of his power, for he recognized to the full the obligations of citizenship.

When President Maclaurin came to Boston, he brought with him his wife who was born at the other end of the world. Her support in all the trying years of her husband's work as President of the Institute has been unfailing and most sympathetic. She has in many ways demonstrated the depth of her friendship for the Institute and her sincere devotion to its interests. To her and to his children we tender our hearty sympathy. It may comfort them to know that all the innumerable friends of President Maclaurin, many of them not even known to him, feel his loss as a personal and bitter calamity and only hope that their deep sympathy may to some slight extent alleviate the grief of his family. That common grief can be tempered only by the recognition, which is universal, that he lived a great life and leaves behind him a memory which of itself makes this a better world.

