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# THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

## Boston, Mass.

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# CONVENTION A SPLENDID SUCCESS

## Chicago as host of Technology Clubs Associated outdoes all traditions—Delegates from every corner of the country meet to hear and cheer President Maclaurin, Department heads and invited guests

When the reunion committee of the Northwestern Association announced that the program of the convention would be "the time of your life" they made no false prophecy.

All convocations of this kind have their delights, but the degree of their success is best judged by the impressions that are left after the noise of the tumult and the shouting has passed. Under this test the Convention of the Technology Clubs Associated, held February 20–21, was the culmination of a long list of reunions. It was full of inspiration and satisfaction for those who attended, and its influence will roll back to the various local alumni centers, adding much to the *esprit de corps* of the alumni body.

From every corner of the country they came to Chicago. Nearly every center of alumni activity from coast to coast was represented at the convention. Boston sent a carload, and New York sent a partly filled car which was augmented by a number of excursionists between Albany and Rochester. They came from the South and from the North; and from whatever point of the compass they hailed, they brought with them enthusiasm, and good tidings from the men who were unable to accompany them.

The preparations for entertainment were characterized by the whole-souled hospitality that attaches to the Technology men of Chicago, and the spirit that was shown at the convention was a re-echo of the early meetings of the Northwestern Association, when the new note in the social life of Technology alumni was first sounded.

The centerof activitywas the Blackstone Hotel, where all the available rooms were taken by visiting brethren. The various delegations were met at the trains and escorted to the hotel, the largest being the New York and Boston company, which was received by Sturges, Lockett, Ferguson, Shortall, and others of the reception committee, at the La Salle Street Station, and escorted in automobiles to headquarters.

Here, after registration, a delicious lunch was served, giving an early opportunity to fraternize with old comrades and make new acquaintances from among those constantly arriving.

The excursions to various points of interest were attended by nearly all the guests. The places visited were: The Commonwealth Edison Company, excursion in charge of Louis A. Ferguson, '88; the Underwriters Laboratory, excur-

sion in charge of W. H. Merrill, Jr., '89; Stock Yards, excursion in charge of William B. Alright, '78; Sears-Roebuck Company, excursion in charge of Lonsdale Green, '87; Western Electric Company, excursion in charge of Harry L. Grant, '01. These great centers of commercial activity made a strong impression on the minds of the visitors, and revealed the importance of the influence that Tech men are exercising in these lines. Every preparation was made for the comfort of the guests and for proper description of the interesting features of the various plants. At each of them light refreshments were served and guides provided. Much interest was shown in the work of the Underwriters Laboratory, which was in charge of W. H. Merrill, Jr., '89, and where a score or more of Tech men are employed.

In the evening the departmental dinner was served in the great Cathedral Hall of the new University Club. The decorations were by Marshall Field & Company, under the direction of the chairman of the committee in charge, John L. Shortall, '87. The room had been converted into a German garden, the waiters being made up as barmaids. The guests sat at a round table in the center of the room, the departments being seated by themselves at long tables. Each guest wore a Pierrot cap of cardinal crêpe paper with large gray polka dots, and as soon as the caps were donned and the guests were seated, the pent-up enthusiasm of 250 men broke loose, and rents in the immediate vicinity were lowered materially. Every article of decoration and every appurtenance bore Technology colors or Technology symbols. Even the pulpboard coasters for the beer steins bore the seal of the Institute and the date of the reunion.

The great crowd cheered the President, cheered the professors, cheered Harvard, cheered the barmaids, and cheered each other, and when they were tired the male quartette continued the program with popular songs, the guests joining in the choruses. The theme of the dinner was beefsteak and onions with various delectable concomitants before and after. Between the courses there was music and singing led by the quartette and augmented by the "noise committee." During the evening a number of telegrams were received from individuals and associations. They were brought in by a special attendant of the president—a messenger boy garbed as a freshman with an M. I. T. drill cap and carrying a popgun.

When the coffee stage was reached President King of the Associated Clubs, said on taking the chair—

"The Technology Clubs Associated was brought into being one year ago," said Mr. King, "the idea being that the men out of close touch with the Alumni Association would have an opportunity to get together and show their loyalty to the Institute, and the Technology enthusiasm that exists in their various localities. The success of this idea is well exemplified by the splendid work that you men have already done at this first real meeting of the Technology Clubs Associated." Mr. King spoke of the enthusiasm of the meeting in New York a year ago, and of the brilliant prospects for the future. He said that as vice-president of the Alumni Association he had attended the Council meetings in Boston, and the character and influence of the association as he had seen it in these Council meetings has excited his admiration. He had no idea that the association was such an intensely vital organization. He then introduced the president of the Alumni Association, Jasper Whiting, '89, of Boston.

Mr. Whiting said that he came to bring the greetings of the professors and of the members of the Alumni Association who were unable to be present, and especially the greetings of the Alumni Council. He then described the activities of the Council and enumerated some of its more important recent accomplishments. He likened the Institute, with its government by a corporation and faculty, to a vehicle of which these two functions were two wheels and the Alumni Association a third —not primarily to steer that vehicle but to lighten the load on the other two wheels to make it an easier and more rapid carriage. The Council also stood in the

light of a friend with some knowledge of the difficult problems to be faced, always ready with friendly criticisms, suggestions, and assistance. He said that the Council was now trying to find ways to closer unite the bonds between the alumni and make it a mutual benefit association in the best sense of the word.

Mr. King next introduced Prof. Robert H. Richards, '68, representing the Mining Engineering Department, who referred to the beginnings of the department by saying that J. D. Hague was the first professor of mining engineering who retired and went into the profession of mining in California. The second professor was A. P. Rockwell, who remained until about 1873, when he became fire commissioner of the city of Boston. Professor Richards then smilingly said that they had some difficulty in finding a man good enough for the opening, but finally concluded that he would do to fill the gap. He then related his personal experiences in the early days of the department.

Professor Talbot, '85, of the Department of Chemistry, said that perhaps the most important single thought he could offer in regard to the department was the attempt that is being made in all courses to try to increase effectiveness on the side of teaching for power and not altogether for information. Within the department the aim is to increase the effectiveness of teaching with reference to the development of the research idea. By that he did not wish to convey the suggestion of someone working off in a corner on a perfectly useless thing, but it was intended rather to start the problem idea in the minds of the student. He then took up principally the course in chemical engineering, because of the great importance which it was assuming. He gave great praise to Prof. W. H. Walker, head of the course, and Professor Lewis, '05, his assistant. Chemical engineering is the newest of our professions and the least worked out, and an attempt is being made that involves both engineering and chemistry. With the prospect of better and newer equipment and larger laboratory space, the scope of the work will gradually develop. The speaker thought that this would eventually mean a laboratory in which important problems could be carried out on a semi-industrial scale, with industrial significance.

Prof. Edward F. Miller, '86, the next speaker, told his hearers of the reorganization of the Mechanical Engineering Department, and how duplication had been removed so that every bit of the work of the student had been made to count. The principal changes cut out much of the shop work and made the time that was used for that purpose more effective. A similar policy was pursued in other features of the course. One of the experiments tried this year was to put the second-year men into the study of scientific journals. He told of the new course in refrigeration; also the course in heating and ventilation, which every man is now required to take. The students in mechanical engineering have

JOHN L. SHORTALL, '87
Who had charge of the Smoker

increased 34 per cent in the last two years over the average number in the five preceding years. Professor Miller told about the prospects in the new building, making the statement that the department was now occupying 75,000 square feet, and in the new building it would have 175,000 square feet, which would be put to good use.

Prof. Dugald C. Jackson responded for the Electrical Engineering Department. He spoke briefly of the coöperative agreement with Harvard and said that this would bring to the Institute an addition of three members to the present staff of twenty-three, all these new men being especially distinguished. The department will then have a staff of unusual executive ability and reputation. He also spoke very briefly of the post-graduate instruction and research work and of the new quarters in Cambridge.

The Summer Camp of Civil Engineering was the subject discussed by Prof. C. M. Spofford, '93. He described the beauties of the summer camp at East Machias, Maine, and the great benefits that were accruing to the students through its establishment. The camp is not far from Bar Harbor, and the speaker suggested that Tech men who went to that resort could easily run up to the camp, where they would be particularly welcome.

I. W. Litchfield, '85, was introduced as the new field manager of the Alumni Association, an office recently created. He referred to the new Technology spirit which was sweeping the country and which had done so much for the Institute, and reminded the Chicago men that this new social phase of Technology life was started in Chicago hardly more than a dozen years ago. The Alumni Association has arrived at a very complete stage of organization; its work for and with the Corporation and the Faculty is of highest importance, and it has now begun to give its attention to the public and social development of the alumni. He closed with the hope that, when the dedication occurs, of our new buildings next year, on the occasion of the all-Technology reunion, there may be fifty alumni associations, one for each year of Technology history.

The nominating committee here brought in its report of new officers, who were unanimously elected. They are: President, J. W. Rollins, '78, Boston; vice-presidents, I. W. Litchfield, '85, Boston; Solomon Sturges, '87, Chicago; F. A. Smythe, '89, Cleveland; Benjamin Hurd, '96, New York; L. K. Yoder, '95, Pittsburgh; F. Dabney, '75, Seattle; associate-secretary, Andrew Fisher, '06, Boston.

It was recommended that the place of meeting for 1915 should be Boston, and in 1916 it was unanimously voted that the meeting be held in Pittsburgh.

J. W. Rollins, '78, the newly elected president of the Technology Clubs Associated, responded briefly in acknowledging the honor conferred upon him. He spoke of the New Technology enthusiasm that was contagious from one end of the country to the other, and that Boston was fully as much alive as any other point in the country. He promised that next year Boston would make the occasion worthy of the Technology Clubs Associated, and of the New Technology which will be dedicated at that time.

Mr. King then introduced President Maclaurin, who said:

I am not used to speaking from quite so high a moral altitude, nor from such a position of unstable equilibrium (laughter), but I shall do the best I can under the circumstances.

I want to say at the outset, before proceeding to anything else, that I hope all you men realize how stimulating a meeting like this is to the President and to the Faculty of the good old M. I. T. We have, at meetings like this, as we have in no other way, a vivid impression of the vitality of Technology, because we see face to face live men, and realize that each is doing a man's work in a man's way.

Your president has said that I am to speak to you about the New Technology. I might talk to you about that for hours, but there is one other thing that I want to speak about, and as I have to speak of two things, I must be brief with both. That one other thing is the recent alliance between Technology and Harvard. It is a thing of great importance, not only to the Institute and to Harvard, but in my judgment and in the judgment of impartial men, better able to judge than I as to its real significance, something as great, if not greater, than anything that has happened in the field of education in recent times.

Mr. Theodore Vail, president of the Telephone Company and one of the broadest-gauged men in this country, has given it as his deliberate opinion,

and he knows all about the agreement, that it is the greatest thing that has happened in his day in educational circles in this country. Why has he used such language? Mainly, I think, for two reasons: he has appreciated, as I hope you appreciate, that this agreement is significant of a large movement. It is the beginning of a great policy which may be followed, and doubtless will be followed by other educational institutions, a policy of coöperation—a policy whereby everything else will be set aside if it be possible in any way to do something better for the good of the community.

But I have not time to set forth all the significance of this agreement. Those of you who read your TECHNOLOGY REVIEW, as I hope you all do, will find the agreement set forth *in extenso* there. It covers only a page or so in this little book and I would suggest that all who are really interested, read, mark, learn and inwardly digest that simple document. If you have time to do more than study the agreement, possibly you will turn to an address which I made in Boston to the Alumni Council, and which is set forth here in this REVIEW.

As to the agreement itself, one thing that has gratified me more than anything else with reference to it has been the way in which it has been received, not only by the community of Boston and its neighborhood, but particularly by that group of men that follows Institute affairs far more critically and far more closely than any other—the alumni. I have heard little by way of adverse criticism from alumni anywhere. I have received many tokens of appreciation, and resolutions from alumni associations all over the country expressing their hearty approval. The latest of those resolutions has come to me since I sat down to this dinner tonight. I will read it:

"Forty-five members of the Tech Club of New Hampshire heartily endorse the policy of coöperation of Harvard and Technology in the Engineering Department." (Applause.)

That, I say, is typical of what is being done by alumni associations all over the country. I am not surprised at that because long before this agreement ever saw the light of day in any public way, it was presented to certain members of the alumni who, it seemed to me, ought to be consulted about such matters. It was presented in the first place to the five past presidents of the Alumni Association and, before any serious steps were taken by us, before the matter was laid even before the Corporation of the Institute, it received the hearty endorsement of those five persons. It was also explained to the Alumni Council which, at a large meeting in Boston, passed a unanimous vote approving it. And, as I stated already it has met since its passing with hearty endorsement from all over the land.

Now, what is this agreement? If you want to know it in detail study this book, but in substance it is the simplest thing imaginable. Here you have in Boston two schools of engineering: Technology that you know all about, and Harvard that you may occasionally have heard of. (Laughter.) The Harvard school has worked in various ways, first as a scientific school for half a century or more, and for the last few years as a graduate school of engineering. It was news to some people, although it is not news to you, that Technology had had a graduate school of engineering long before Harvard apparently ever thought of it, and that for almost a generation Technology had had not only a graduate school of engineering, but by far the largest graduate school of engineering in this country, as great a graduate school, in fact, as the graduate schools of all the leading institutions of learning in this couutry put together.

So there was nothing in the graduate idea that radically distinguished the school at Harvard from the school of Technology; and those of us who were in a position to watch the methods of instruction and the ideals that were pursued in the two institutions, could see that there was nothing radically different in the two, and that, from all points of view, it appeared that great gain would come about by their consolidation, or at least by some kind of coöperation.

To bring together two such schools under the circumstances which you know so well, in view of the past relations between these two institutions, was not an easy matter. It would have been absolutely impossible, had it not been that Harvard is fortunate in being governed today by men of the broadest spirit, who, once they had made up their minds that coöperation in this field was the proper thing to do, practically said, "Here you are, gentlemen. Suggest anything you like, anything that is at all reasonable, and that is consistent with our trusts and we will accept it."

All kinds of coöperation might have been carried out between these institutions in all kinds of ways. It was suggested, not by Harvard, but by some of our own men, that there should be some agreement whereby Harvard should concentrate its efforts on certain branches of engineering, and Technology should concentrate its efforts on certain other branches of engineering. I always took the position that coöperation of that kind was entirely out of the question, and that there was nothing else to be done that was worthy of serious consideration, other than a real consolidation of effort.

Finally, after the matter was discussed carefully between myself and my colleagues on the Executive Committee, and the Corporation of Harvard, it was agreed unanimously that for the good of both institutions and for the immense advantage to the country in general, that these two schools of engineering should be combined under the executive control of the Institute of Technology. (Applause.)

That, of course, is the main thing. Harvard agrees to carry on all the work in engineering that it will ever afterwards do in our buildings, under our executive control. What more could we ask? Practically everything is entrusted to our care.

If Technology were to refuse to enter into such an agreement it could only be actuated by some narrow-minded policy that ought not to be seriously considered by broad-minded men. I am not going to discuss the details of this agreement, it is all here, easily accessible, easily understood, but I do want to quote you the opinion of a man—I have quoted it elsewhere but I am going to quote it again—the opinion of a man who is absolutely impartial with regard to this agreement, because he is neither a Harvard man nor a Technology man, a man whom we all look to with respect, the greatest benefactor in a monetary way at least, that Technology has

ever had, Mr. Smith. (Laughter and applause.) His words when this agreement was explained, were in effect as follows: "That is surely the greatest compliment ever paid to an institution of learning. It is a carefully considered expression on the part of Harvard, the oldest and the most famous university in the country, and one singularly well placed to know all that can be known about Technology, that it has absolute confidence in that institution and in its powers to do the best that can possibly be done in the field of engineering. If Technology men do not appreciate that compliment they will disappoint me."

President Maclaurin then explained briefly the details of various stereopticon slides containing views of the grounds and buildings of the New Technology.

The meeting adjourned at 10.30 o'clock p. m.

### THE TRIP TO GARY

Saturday's program began with a trip to Gary, Ind. The special train provided for the Technology party, left the La Salle Street Station at 9.30 a. m., carrying over 200 guests. After a ride of twenty minutes or half an hour, the passengers detrained at Gary, and took possession of the special observation train provided by the works management, as it would be impossible to see the plant in any other way. This train shuttled in and out through the various buildings, and scattered through the crowd were men connected with the works—many of whom were Tech men, by the way—who explained the various features of the great plant.

The excursion was a most interesting and instructive one; but perhaps its most important service was making the men better acquainted with each other; for at every turn new groups were formed and new acquaintances were made, so that on the return trip the men were very thoroughly acquainted.

The train taking the party back to Chicago was enlarged by the addition of two baggage cars, each containing a long refectory counter loaded with sandwiches, salads, coffee, etc., which was appreciated fully as much as the more elaborate dinners that preceded and followed.

The entire excursion, including transportation and the delicious luncheons en route, was provided by Theodore W. Robinson, '84, vice-president of the Illinois Steel Company.

### THE BANQUET

In the afternoon there was a tango tea in the Blackstone ball room for members and guests, which was largely attended, and then came the grand banquet in the evening. This was held in the beautiful banquet hall of the Blackstone, which was strikingly decorated with Institute colors and symbols under the direction of Louis A. Ferguson, '88, whose touch was to be seen everywhere throughout the banquet.

There were about 250 men seated at round tables, by classes, the oldest class, '68, being represented by Prof. R. H. Richards and Col. Andrew H. Russell of Plymouth, who had come a long distance to be present.

Those sitting at the head table, beginning at the left, were Edward M. Hagar, '93; J. W. Rollins, '78, president of the Technology Clubs Associated; Prof. S. C. Prescott, '94, representing the Department of Sanitary Biology and Public Health; R. E. Schmidt, '87; Prof. H. P. Talbot, '85, representing the Department of Chemistry; John L. Shortall, '87; Prof. D. C. Jackson, representing the Electrical Engineering Department; F. K. Copeland, '76; Prof. Dana P. Bartlett, '86, representing the Department of Mathematics; Jasper Whiting, '89, president of the Alumni Association; A. W. Harris, president of the Northwestern University; President William E. Stone, of Purdue University, Lafayette, Indiana; Solomon Sturges, '87, president of the Northwestern Association; President Maclaurin of the Institute; later in the evening, President Lawrence Lowell, of Harvard; Theodore Robinson, '84, toastmaster; Dr. David Kinley, vice-president of the University of Illinois; Dr. Judson, president of the University of Chicago; William H. King, '94, former president of the Technology Clubs Associated; Prof. R. H. Richards, '68, representing the Departmen of Mining Engineering; S. M. Felton, '73; Prof. Edwin F. Miller, '86, representing the Department of Mechanical Engineering; I. W. Litchfield, '85, field

manager of the Alumni Association; Prof. C. M. Spofford, '94, representing the Department of Civil Engineering, and Louis A. Ferguson, '88, chairman of the banquet committee.

The menu cards were especially beautiful, the inscription on the cover being a steel plate engraving surmounted by a medallion of the Institute seal in gold, the leaves being bound together with cardinal and gray ribbons. For incidental divertisement at the banquet the committee had provided a quartette of Italian mandolin players in bizarre uniform, who sang very acceptably, as was evinced by the encore of the guests. After making their second appearance, Tech men, not to be outdone by heathen countries, furnished a voluntary quartette composed of the pride and flower of four of the principal cities of the United States—one of which was Indianapolis—and with costumes most effectively improvised, the quartette made a triumphant tour of the dining room. All through the dinner Tech songs were sung, and the cheering was copious and lusty.

The speakers were President Maclaurin, President Lowell of Harvard, President W. E. Stone of Purdue University, and Dr. David Kinley, vice-president of the University of Illinois. Theodore W. Robinson, '84, who introduced the speakers, made an unusually brilliant toastmaster, and his sallies of epigram and wit fell upon appreciative ears. The speeches were of unusual interest and we print them *verbatim*.

LOUIS A. FERGUSON, '88
Who engineered the Banquet

TOASTMASTER ROBINSON:—Within the lives of many who are here present Technology existed but as a dream, as a vision in the far seeing mind of William Barton Rogers. (Applause.) Technology, a short generation ago, was born in philanthropy and it has ever since been dedicated to public service. Its ideals have ever been progress; its accomplishments have been by opposition overcome. That was the old Technology.

We are facing tonight, with work having been started upon our new buildings and with the agreement with Harvard an accomplished fact, the New Technology. But let us remember, gentlemen, that the old Technology in her ideals, in her initiative, in her methods was always new; and we can hope for no better things for the New Technology than that she may ever remain old in her traditions of the past. (Applause.) I can conceive of no better motto to inscribe upon our new buildings than those words of Tennyson; "To strive, to seek, to find; but not to yield." (Applause.)

And now, gentlemen, I want to say a word as to the man who has done so much to make the New Technology possible. Five years ago it came to us that there was a man who, having encompassed the erudition of two continents, was seeking for new worlds to conquer. He was a scholar of the world. As an authority on the theory of light we knew that he had an illuminating vision; by his treatise on the titles to realty, we knew that he knew a site when he saw it. (Laughter and applause.) In the short time that he has been with us he has demonstrated that he is a past master in administration. As a matter of research he has dug up Mr. Smith (laughter and applause), and as regards his discretion we all know what that means by the publicity that he has given to the identity of Mr. Smith. (Renewed laughter.)

And now, with all these accomplishments, he has crowned his acts with that all important agreement, that coöperative arrangement between Harvard and Technology. Technology has had able men at her head, but no man has been more able than the man we love and honor and respect, the man who five short years ago came, saw and conquered, Dr. Maclaurin. (Prolonged applause.)

RICHARD C. MACLAURIN, President Massachusetts Institute of Technology: After such an introduction it is somewhat difficult to speak quite

without emotion. And I want you to understand that I am sincerely appreciative of the good things that you Technology men and other Technology men say about what I have done in the last five years. It is a work inspiring to have had a hand in, and it could not have been done without the support and coöperation of a vast army of loyal alumni.

When I came here tonight I was told that I should deal with some broad topic of education, but when I looked at the list of speakers who were to follow me, it seemed that it would be inappropriate for me to say anything about the broad fields of education, because they could be better entrusted to the hands of those who are to speak immediately after me. I thought, therefore, on this occasion that I might perhaps be permitted to say something about Technology itself. It has certain broad aspects, which broadly affect the whole industrial and educational life of this great country. So I feel in speaking of Technology, that I am really dealing with a large subject, not unworthy of the serious attention of serious men, whether they be Technology men or not.

But when I come to think about what I am to say concerning Technology, I admit I am in a difficulty. It would be usual under such circumstances to speak of what has happened in Technology since last I had the pleasure of meeting here such a company as this, but, were I to attempt that task I should be face to face with the difficulty of having to tell you a well-told tale. You already know the things that have been done, and there is little that I can say to add to your understanding of them.

Further than that, I am faced with the difficulty that in such a meeting as this, under the auspices of the Northwestern Association, there is inevitably induced in me a spirit of hopefulness, and hope will never look backward, but always looks ahead. And so I am constrained rather to peer into the future, and in the short time at my disposal to tell you something of what I see of the Technology that is to be.

Naturally in speaking of that I will confine my attention to the Technology of the future as it is affected by the doings of recent years. There are two great things in the recent history of Technology that have already been referred to—the alliance with Harvard and the building of what we call the New Technology.

As to the alliance with Harvard there is not much that I need say. The agreement itself you can read and understand. What its bearing on the future of Technology is to be time will show. But the obvious thing which must impress anybody when he thinks of the broad results of that agreement between two great institutions is the wonderful opportunity that it will present to the student of the future to have open to him the great resources, not only of the premier unversity of this country, but of the oldest or the leading technological institution. To open the resources of both these institutions to students must be a powerful magnet drawing men from all parts of the country, and in fact from all parts of the world; men of promise, men of ability, and it is, of course, by the attraction of such students that any institution of learning becomes great.

As to the effect of this alliance on the interna policy of the Institute, that seems to me a simple matter. I cannot see that it will produce any great change, any obvious change, either in the ideals of the Institute, in its plan of education, or in its methods of instruction. It will not in my judgment produce any change in the ideals of the Institute for the simple and important reason that the ideals of Technology and Harvard are in all fundamental matters the same.

What are those ideals? They are simply, gentlemen, the great ideals of thoroughness and breadth. The great charter of the Institute was set forth in clear language, in simple terms, in the little publication which every Technology man ought to read, the "Object and Plans," written by President Rogers. In that little work President Rogers laid great stress on this Institute as an institution devoted to useful and practical knowledge. But he took it upon himself to emphasize what in his judgment was useful and practical knowledge. This is what he says:

"We believe that the most truly practical education is one which unites with the habits of close observation and sound reasoning a large, general cultivation." And in the judgment of all serious students of Technology's history, the fact that Technology has always striven to live up to that great ideal is one of the main secrets of its success. So you know, and other men who have watched the Institute know, that the study of literature, of history, of economics, of languages and the broad principles of science enter largely into its curricula, just as largely, indeed, as time permits. That, I say, is one secret of Technology's success and that explains why, for many a day, Technology men have been able to hold their own and hold their own easily with the graduates of other institutions who have worked in their midst.

It is known to you, although it is not known to everybody, that for more than a generation Technology has been not only a graduate school of engineering, but by far the largest graduate school of engineering in this country. It has more than twice as many graduates of colleges in its school of engineering as any other school of engineering in this country.

Technology will not give up in the future its policy of catering particularly to the graduates of the high schools of the country. Nor will it give up in the future its policy of catering to the graduates of the colleges of the country. One great advantage of this alliance with Harvard will be that it will enable it more effectively to cater to both these classes of students. There will be a larger staff, a more varied staff, and more opportunity of meeting the needs of different kinds of students. But, as far as I see it, the great result of this alliance with Harvard will be that it will make possible the provision for something that is not being done adequately anywhere in this country, the provision for more advanced study and research in the field of engineering.

As I see it, the Technology of the future will draw to it graduates of the Institute itself and graduates of other engineering colleges from all parts of the country, who will find in this great center a wonderful equipment of men, and of machinery, and who