CLASS-DAY NUMBER

THE TECH

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THE TECH

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THE TECH

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For the benefit of students THE TECH will be pleased to answer all questions and obtain all possible information pertaining to any department of the College.

Contributions are requested from all undergraduates, alumni, and officers of instruction. No anonymous manuscript can be accepted.

During the remainder of the college year the office of THE TECH, Room 30, Rogers Building, will be open on Thursdays from 12 M. to 1.30 P. M.

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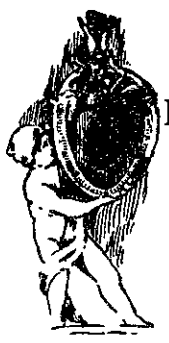


THE pleasure in a new freedom from restraint and in the beginning of a new and more vigorous life must bring with it to each one of the graduates in '96 a certain sadness at parting from old friends and old associations, a certain yearning for the college life of the last four years. In many cases perhaps this may wane and the love for Alma Mater never again be so strong as at present. This is the event that each loyal Tech. man should do his utmost to prevent. More and more each year is the truth realized that a college does not simply include the men who, at a given moment, happen to be within its walls, but all the members of the larger body, bound together by common interests, common aims, and common associations, of whatever date. The alumnus who holds himself constantly in touch with college life finds an inspiration in the thought of the great fellowship in which he shares, and in the memory of youthful hopes and the high aims connected with it. The undergraduate, on the other hand, gains enthusiasm from the love he sees manifested by those who have trodden the same path and by their appreciation of the benefits which he enjoys. May the men of '96 carry out with them then the sense that they are still vital units of the greater Technology, and that by virtue of this fact they have privileges and duties which are of paramount importance.

THE Class of Ninety-six can look back with pride upon an unusually successful Commencement Week. The class was the largest ever graduated, and the number of friends who crowded Huntington Hall on each occasion was almost too great for comfort.

The first affair of the week, the Alumni Reception, was a notable one in several ways. The surroundings were very much more in keeping than those of previous years. President Walker's outline of the plan for a new building aroused unusual enthusiasm, and the official launching of the Technology Club after the meeting was the starting point of what we believe will be a great work for the Institute.

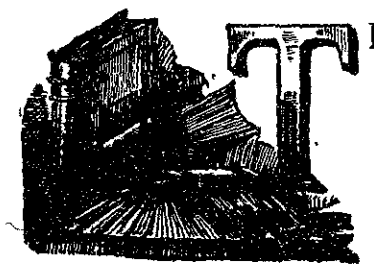
The Glee and Banjo Club concert was a pleasant occasion leading up to the more important festivities of Class Day. The weather for the latter was unpropitious, but the decorations made Rogers Building very presentable within. The exercises passed off with great success, and the Committee of Arrangements is to be congratulated upon its excellent work.

The graduating exercises of Ninety-six were noteworthy not only on account of the size of

the class, but also from the fact that, for the first time, students graduated in each of the thirteen courses. The abstracts of theses read were, therefore, more widely representative than in any previous year. The fact that two of those who read abstracts were young women is also important.

In short the Commencement Week of Ninety-six was worthy of her undergraduate career. May her future successes do honor to both!

N. E. I. P. A. Meeting.



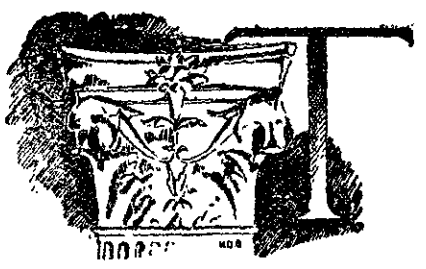
THE New England Intercollegiate Press Association held this year the most successful meeting in its history. The transformation of an "appendage to the Worcester meet" into a strong, active, and useful organization, is due in large part, as it is pleasant to record, to the energy of the President of the Association, Mr. Hyde, late of THE TECH.

The first session was held in the afternoon of May 22d, in the rooms in Rogers Building adjoining THE TECH office. Twenty-three delegates were present, representing papers published at Amherst, Amherst Agricultural College, Bowdoin, Brown, Colby, Mt. Holyoke, Smith, Technology, Trinity, Tufts, Wellesley, Williams, and Worcester Polytechnic. President Hyde opened the meeting, and papers were read on the various phases of college journalism. A discussion followed on these points which furnished valuable hints to the members, and also gave rise to curious comparisons. For instance, the contrast between Smith College with five hundred Alumni subscribers and Technology with six was a pregnant one.

At the second session of the Association a Constitution, drawn up by Mr. Hyde, was unanimously adopted without alteration, and the following officers elected for the ensuing year: President, F. B. Whitney, of the *Williams Weekly;* Vice President, Miss Josephine Batchelder, of the *Wellesley Magazine;* Secretary-Treasurer, G. L. Miner, of the *Brown Daily Herald;* member of Executive Board, H. H. Titsworth, of the *Amherst Student.*

A pleasant dinner was enjoyed in the evening at the Vendome with Mrs. Irvine, of Wellesley, and Mrs. Sedgwick, as patronesses. Mr. Stedman, of the *Brown Daily Herald,* was toastmaster, and presented the following list of speeches: "The New England Intercollegiate Press Association—Its Probabilities," Fred B. Whitney, of Williams; "The Growth of College Journalism," Owen H. Smith, of Tufts; "Printing Ink," Charles I. Towne, of Brown; "Our Foes," Charles E. A. Winslow, of Technology; "Proximity *vs.* Coeducation," Percy II. Boynton, of Amherst; "Aut Scissors, Aut Nullus," Miss Anna H. Branch, of Smith; "Customs," Walter W. Parsons, of Trinity; "The Ox Bow," Miss Bertha C. Bidwell, of Mt. Holyoke; "Stories," H. H. Titsworth, of Amherst.

The Alumni Reception.



THE Annual Reception of the Alumni Association to the Senior Class was held this year at the Exchange Club, and proved in several respects a noteworthy occasion. Some three hundred Alumni welcomed the members of the largest class ever graduated from the Institute, and a goodly number of the faculty and corps of instruction. An excellent supper was served at seven o'clock, after which the guests filled the hall above for the exercises of the evening. The Glee and Banjo Clubs very pleasantly filled in the gap before these commenced.

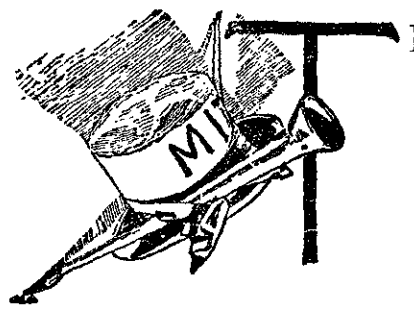
The Banjo Club was completely drowned out, however, by the thundering applause

which greeted the entrance of President Walker. Mr. J. P. Munroe, President of the Association, opened the proceedings with a speech of welcome, delivered with his usual felicity, and introduced the first speaker, President Walker, who congratulated the Class of Ninety-six on its success, and on the qualities which had helped to win that success. He then spoke of the new building projected, whose existence he hoped in a few days would be made certain. He sketched the advantages to be gained: the finest Laboratory of General Chemistry in the world, a new Biological Laboratory, more space for the Department of Architecture, and a commodious reading-room for the students. The only difficulty in the way was the lack of funds, and that the President hoped to see surmounted by the same daring policy which thirteen years ago built the Walker Building, incurring a debt of $175,000, and which has been justified by the fact that this debt is entirely paid at the present day.

Mr. Munroe announced the subject of general discussion for the evening to be "Greater Boston," and introduced the Hon. George G. Crocker as the first speaker. Mr. Crocker assured his hearers very effectually of the success of the Subway, by detailing the number of Institute men connected with its construction; and spoke of some problems in transportation for the future, notably the conveyance of passengers from the new southern station across the city. He closed with an appeal for good citizenship. Mr. Crocker was followed by Mr. William H. Lincoln, of the Corporation, who spoke of the progress of Boston commerce, and hailed the Department of Naval Architecture in the Institute as a coming factor in American shipbuilding. Mr. W. B. de Las Casas closed this part of the programme with an account of the Boston Park System, and eulogized the foresight shown by the people in providing it.

Mr. Munroe then introduced Mr. C. G. Hyde, president of the Senior Class. Mr. Hyde made a strong impression by an excellent speech in which he spoke of the encouraging state of affairs at the Institute, and voiced the regard of Ninety-six for the faculty and corporation, and, in particular, for President Walker. The evening closed with an appeal for The Technology Club, by Mr. Munroe, and circulars and application blanks were distributed after the close of the meeting.

The Senior Concert.



THE concert tendered to the Class of '96 by the Glee and Banjo Clubs was held in Huntington Hall on Saturday, June 6th. The hall was more than filled, and though the ranks of the clubs were sadly thinned by the lateness of the season, their work gave pleasure and was warmly applauded. Mr. Johnson met with his usual enthusiastic reception and responded to several encores.

The following appeared upon the very pretty programme:—

PART I.

1. Improvisation . . . Dr. C. D. Underhill, '87.
   Glee Club.
2. Arabian Patrol . . . . . Lansing.
   Banjo Club.
3. "Little Tommy" . . . . . Macy.
   Glee Club.
4. Baritone Solo . . . . . Selected.
   Winthrop Rufus Dodge, '98.
5. "Dancing Darkey" . . . . . Lansing.
   Banjo Club.
6. Negro Medley . . . . . .
   Glee Club.

PART II.

1. "Eliza Jane" . . . . . Packard.
   Glee Club, Solo by Harry George Johnson, '99.
2. Tenor Solo . . . . . .
   Edgar Harrison Barker, '96.
3. Normandy March . . . . . .
   Banjo Club.
4. "Our Tiny Bark" . . . . . Beschnitt.
   Glee Club.
5. Ethiopian March . . . . . .
   Banjo Club.
6. "What Shall He Have?" . . . . Bishop.
   Glee Club, James George Melluish, '96, Accompanist.

Baccalaureate Sermon.

Delivered before the Graduating Class of the Massachusetts Institute of Technology, Sunday, June 7, 1896, by the Rev. Dr. Donald, of Trinity Church, Boston.

Proverbs xxiii. 23. "Buy the Truth."

It is frequently taken for granted that men engaged in physical studies, engineering, electricity, chemistry, and biology are irreligious; not wicked or unmoral above men engaged in other studies—language, literature, philosophy,—but irreligious. It is asserted that they are pre-eminently and characteristically unsensitive and irresponsive to whatever belongs, or is asserted to belong, to the idea and worship of God. Darwin is claimed as their noblest type—a man of singularly pure character, but caring nothing for the things of the spirit—as the things of the spirit are ordinarily defined. Romanes is an exception,—a man who showed a marvellously deep interest in religion while making investigations and discoveries which have given him a high place among the great scientists of Europe. A man of science is not expected, by the general public, to be a thoroughgoing, earnest, interested, intelligent man of God. There is a widely prevalent opinion that there is something in the very nature of physical studies which makes belief in God, Heaven, and the Spirit difficult, and perhaps impossible. And, as a consequence, there is an equally prevalent opinion that they who have given themselves up to the mastery of physical studies will speedily make manifest a disinclination to, and an inaptitude for, religious ideas, and the consideration of spiritual truth. If this opinion were founded upon substantial facts, then a Baccalaureate Sermon to a body of young men fresh from four years' strenuous devotion to physical studies in yonder laboratory would be a flagrant solecism. It would be as great a blunder as to provide a magic lantern exhibition for the pupils of the Perkins Institution for the Blind, a symphony concert for the deaf mutes at Northampton. It is because I believe that opinion is baseless, and is a virtual slander upon students of physical science, that I gladly accepted the invitation of the Senior Class of the Massachusetts Institute of Technology to preach to them to-day. You will remember, young men, that there is no provision in the statutes or regulations of the Institute for this service. You will remember that the request for it came from you to me, and not from me to you. And you will remember that I greeted and granted your request with an eager joy. Under the happy circumstance of your voluntary invitation, and of my voluntary acceptance of it, we have met in God's house to ask God's blessing upon the knowledge you have gathered in the last four years, and upon your use of it in the years that are beckoning you with glowing hands. It would be difficult to imagine conditions more favorable to preacher and audience than these which I have described. It is as if the willing seed and the willing soil should unite to invoke the blessing of the sunshine and the shower.

In that widely read and justly admired little book entitled "The Greatest Thing in the World," Professor Drummond makes love, or charity, the central and supreme principle of human life. He shows how, without love, the best we have is defeated, and quite wins us over to his proposition by the brilliancy of his illustrations, the cogency of his reasoning. But apart from the significant fact that St. Paul explicitly says, "And now abideth faith, hope, love, these three, but the greatest of these three is love," it is clear that faith without truth is superstition, hope without truth is empty credulity, and love without truth speedily degenerates into mere personal fondness, into a condition of mere affectional sentiment that exalts emotion above character. The universe is manifestly and squarely built up upon the truth of its creation. Civilization rests solidly upon the truth of the civilized beings who compose society. Truth alone is ultimate. Should the truth of the Creator fail, the universe would lapse back into the chaos out of which the Creator's truth originally called it forth through long evolutionary processes. Truth alone is ultimate. Should the truth of man fail, society would break in pieces, as it has again and again broken in pieces when man for a moment lost, or threw away his truth, and attempted to live by something other. From the point of view of religion the only place, and from the point of view of science the best place, in which to locate the origin of the forces, the laws, the orderly processes of the great total world, is the truth of God. Creator and sustainer of all things, known and unknown, just as the truth of man is the origin of the

social forces, the social laws, and the social order of civilization.

But are we using the word truth in an illicit sense? Are we making it mean what it does not, and ought not, to mean in order to support a novel proposition? Any such suspicion disappears the moment we perceive that truth implies personality, —nay, rigidly requires it; for truth is the conformity of the thinker to the reality he thinks about. The reality may exist, but if there be no thinker there is no truth. We speak of the truths of mathematics or of chemistry, but to explain our speech we have to admit a subtly implied personification of mathematics and chemistry. There is a conformity of the science of numbers to the realities with which that science deals. We unconsciously think of mathematics as a person investigating, and discovering, and combining certain realities, and reporting in propositions and axioms the results of its work, which henceforth are called truths. And it is only as this subtle personification is recognized that we may legitimately speak of the truths of any science. Even the truths of religion are subject to this fact.

Truth, then, inexorably implies personality, and only a person can create truth. The moment any man's thought is in harmony with, conforms to, any sort of reality, a truth is freshly created. There can be no truth for any of us until we have conformed our thought to some reality; and however different be the processes by which we gain our truth, it is not gained until there is complete harmony between our mind and the reality with which the mind deals. The truth of God, therefore, is the conformity of his mind to the great sum of realities in all the universe. The truth of man is the conformity of his mind to so many of the realities of the world as he has ascertained.

You, young men, have been in search of truth during the four ardent years that end this week. You, therefore, will testify that you secured her only upon terms. You have patiently investigated a multitude of realities,—the realities of electricity, of substances, iron, quartz, gas, chemicals; the realities of motion, of the action of one substance upon another; the realities of heat, light, air,—all these you have investigated, and in exact proportion as your thinking has conformed to whatsoever reality you have established, you have gained a truth; some of you have gained more, some less—but the realities, or the opportunity to come into personal contact with them, have been equally presented to you all. You know that what you clearly think about any reality you have had to do with, in laboratory or class room, that the exactness of the harmony between what you clearly think and the thing you have been thinking about, relentlessly determines whether or not you carry away from the Institute any scientific truth. You cannot carry it away in a book or on paper; no one can remove it for you. Each of you, as separate persons, must bear away in his own mind whatever of truth you have secured.

This explains the significance and appropriateness of our text. Buy the truth. It is never given away. It cannot be given away. Purchase is written upon it. Again I call you to witness that you have given something valuable for what you, as experts, possess to-day. Four years of youth and manhood, years of hard, incessant toil, have been paid over the school counter for the truths which to-day are yours. You have taken nothing for granted. You have weighed and measured everything with scrupulous exactness. You have rigorously applied the tests which the thing to be ascertained required. You have repeated delicate experiments again and again to guard against identifying a coincidence with law. You have heroically withstood your failures and disappointments. You have verified your neighbors' results, and have been nobly determined that the thing which is, and as it is, should become your own. This is the hard coin paid down as the purchase money of the truth you possess to-day. The road to learning is dotted with tollgates, through which no man may go who cannot pay in the conscientious toil, the heroic patience, and the supreme faith, inflexibly demanded. The electrician, the chemist, the engineer, and the biologist, have bought the special truth which is to make them masters in the coming years.

Some of you, I fancy, will revert this afternoon to those moments in your careers when you heedlessly thought you could gain truth by some method less costly than that of purchase. You tried, perhaps, to borrow her, meaning never to return her. You might as well try to borrow a man's joy, or a child's innocence. You threw dice for her, and tried to win her by a chance. As well throw dice

for health and long life. You waited for her to be brought you by some faithful toiler, who could only report that he had gained, but could not share. And then, as all of us at last come to do, you recovered your senses and bought her upon her own terms, meeting all her conditions and submitting to all her tests. Henceforth you, pre-eminently, are the men who are to declare to your fellows that whoever would possess truth must buy her as you have done. You will find yourselves insisting upon the fact of which our text to-day is emphatic declaration.

You will have observed, I think, that, so far as one who is not a student of physical science can, I have sympathetically met you upon your own ground, and have stated nothing to which you have not readily assented. You will agree with me that truth is the creation of a person who has brought himself into conformity to some particular reality. You will agree with me that conformity is the result of taking thought; and so you will sympathetically meet me when I try to emphasize, what you already know, that beside the special truths you have been busy buying, there are other truths for you to possess. For there are realities of the conscience and the spirit just as substantial and enduring as the realities of force and material, and combinations of material and force, over which you have bent in acute and eager thought, and these must be investigated and understood if we are to be thoroughly equipped for the sort of life we have to live. If I am told that the steel bridge over the great river is incontestible proof of the realness of those substances and their qualities upon which the ingenious mind of man worked to produce the bridge, I must reply that the tragedy of Macbeth is no less a proof of the realness of the human conscience; that the immortal prophecy of Isaiah is no less a proof of the realness of the human spirit. The working of Macbeth's conscience is, and is recognized to be, a picture of the working of every man's conscience when the "sight of means to do bad deeds makes bad deeds done." The concrete atheism which Isaiah rebukes, the beauty and peace of a thorough trust in God, which he describes, are to-day exactly what men knew they were in Isaiah's time,—the evidence of the reality of the human spirit denying or worshiping God. Ethical compunction is as much a reality as a bar of steel. Spiritual sensitiveness to the presence of God is as well attested a fact as the sensitiveness of the magnetic needle to the influence of the pole.

Moral truth is the creation of a person,—it is the harmony of our thought with the realities of the moral order disclosed in the conscience. "Thou shalt not steal." That is not a truth; it is a command. It is only when our thought and feeling correspond to the reality of a personal ownership not ours, that we feel the imperativeness of the command. And so we have to buy our moral truth; have to pay down the patient, painstaking, exact, authentic investigation of all those realities which are furnished by the conscience and by the relations we bear to our fellow-men, in order that our thought may be in harmony with these ascertained realities. There is no other way of securing that ethical certainty and ethical clairvoyance necessary to the fully furnished man, whatever be his special profession or work. What I am insisting upon is, that the very methods you have employed to gain any scientific truth are those by which moral truth must be gained. There is no royal road to character as there is none to learning.

Spiritual truth is the creation of a person; it is the harmony of our thought with the realities which lie back of our awe, our reverence, our instinctive and fundamental sensitiveness to the Divine. For God is all about us. In the matchless and immortal words of the Psalms: "Thou art about my path and about my bed, and spiest all my ways. For, lo, there is not a word in my tongue but thou, O Lord, knowest it altogether. Whither shall I go, then, from thy spirit? Whither shall I go, then, from thy presence? If I climb up into heaven, thou art there; if I go down into hell, thou art there. If I take the wings of the morning and remain in the uttermost parts of the sea, even there also shall thy hand lead me, and thy right hand shall hold me. If I say peradventure the darkness shall cover me, then shall my night be turned to day." This is testimony to a great reality, the solid, enduring existence of something with which we have to reckon. And as we heed it, sound its depths, and test its quality, as we bring our thought into harmony with it, we buy that spiritual truth which is as necessary to personal completeness, personal safety, and to social completeness and safety as well, as are physical truths to the successful practice of any of the professions in which you are to engage.

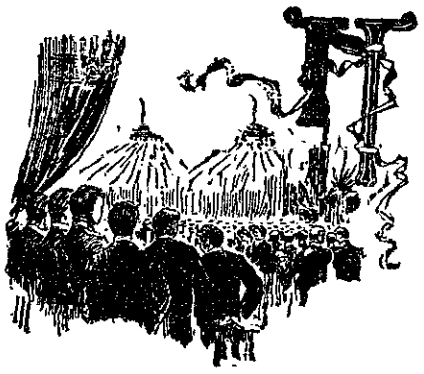
But above all stands Jesus Christ, the great real-

ity. The solid mountain out of which you are to dig coal and iron, the solid land upon which you are to build your architecture and lay the lines of your great roads, are no more realities than the living Christ, from whom the world takes the revelation of the will of God, and upon whom rests securely our human faith. His spirit has entered into all our history, and is indissolubly a part of it. His law is at the heart of all that is noblest in our civilization. His influence has swayed and sways what is purest in our society. His character is the mark set for the nature of man to reach. History and contemporary human life are as full of this real living Christ as the earth and the air and the sea are full of the substances and forces with which the intellect of man is called to deal. We cannot complain that all is vague and illusive. Christ is too real and definite a person to warrant a complaint like that. What think ye of Christ—not the Christ of speculative and controversial theology, but the Christ of the simple, beautiful Gospels—the Christ of the best Christianity to-day—what think ye of that Christ? is the commanding question of our time. He is the great reality, and only as we bring our minds and wills and hearts into conformity with His mind and will and heart, can any of us possess that truth which is the eternal life he came to give to all the sons of men. To as many as receive Him, to as many as buy the truth of his supreme revelation of God's will, to them, and to them alone, does he give the power to become the sons of God. He is the light that lighteth every man that cometh into the world; but as he bought us with a price, so must we buy the truth he declares, but does not give away, with his price; and that purchase money, as I have been trying to show all through my sermon, is a strenuous study of Himself—a loyal and loving surrender of ourselves to his guidance and his inspiration. The purchase of truth formulates the great law of life everywhere.

Because you have been, and are, and are to be, in the rich life that opens to you to-day, students, buyers of truth, I have brought you this message as one pre-eminently fitting this service and this hour. Fare ye well. The world is the richer for the gains you have made of the truths you are henceforth to use. The world will be more amply furnished with what ministers to its comfort and convenience because of the competent service you are to give it. See to it that the world is more ethically clear-headed, more spiritually minded, more reverent, obedient, compassionate, just and pure, because you bring into the heart of all your service, to refine and steady and ennoble it, a profound and reasonable belief in the Lordship of Jesus Christ.

Fare ye well! And may the blessing of God Almighty, and the grace of Christ our Lord, and the invigorating fellowship of the Holy Spirit, be with you always. Amen.

The Class-Day Exercises.



NINETY-SIX had very unpropitious weather for her class day; but if the outside of Rogers Building presented a dreary aspect the interior did not. Palms and ferns in profusion graced the corridors, and Huntington Hall wore an appearance of unwonted festivity. It was crowded to the doors with a gay and enthusiastic audience, which filled every seat and crowded all the aisles and doorways.

The platform was occupied by the Class-Day Committee and Officers. The first Marshal was Benjamin Hurd, the second, J. A. Rockwell, Jr., and the third, Butler Ames. At half past two the class filed in, and President Hyde began the exercises.

THE PRESIDENT'S ADDRESS.

FRIENDS: Our college course has been run. Ninety-six has all but reached the last goal post marking the entrance into that greater world which you represent. To-day you have come in a spirit of sympathy with our college and with our class to participate in these exercises. If our programme partakes of extreme simplicity, it is in direct accord with the wishes of that noble man, our Founder and first President, William Barton Rogers, and characteristic, also, of those principles by which the work of our college has ever been directed. You we greet. To you Ninety-six extends its most cordial welcome. We thank you for your coming and

for your interest. It is in you and in your presence that our Class Day enjoyment is chiefly centered.

It is with especial pleasure that we find among our guests our honored President. We shall not soon forget his constant interest in us as a class and as individuals; we shall ever remember his kindliest welcome which has always and at all times been accorded to us; we shall cherish the memory of his true sympathy and his ready advice in every trouble; we honor him as a friend, as a hero—as a man.

To the Faculty and Instructors we extend our warmest greeting. For their labors, for their sacrificing work, for their sympathy and co-operation, for their comradeship and for their friendship, we alike are grateful. If we, to-day, are in any measure fitted to cope with the problems of the world into which we are about to enter, it is through these men and through their devoted efforts.

We welcome, too, our fellow-students of other classes. We are glad that their interest in us brings them here this afternoon.

We salute these walls which now surround us perhaps almost for the last time. At length we perceive the meaning in the frieze above your heads. It is as if the silent figures, hitherto dumb, to-day came down to speak to you. Here we stand, the Engineer, the Chemist, and the Architect, the man of science, and the man of affairs, and first realize how the pictured wall epitomizes the great work which the Institute undertakes and represents.

But most warmly of all, most sincerely of all, we greet our parents. It is they who have brought us here; it is through them that we have come to this day. Their love and their wishes have been our best influence and our inspiration. They may have denied themselves to maintain us here. To-day marks the consummation of their sacrifice. If in the busy hours of our work we have not made manifest our realization of their loving gift, to-day, at least, our appreciation is most earnest and most sincere. With intense gratitude we thank them. May our lives of devotion and of industry prove in the future their happiness and their pride.

Classmates—for four years we have worked side by side. We have shared together the sorrow and the joy, the disappointment and the success of our work. We have learned to know each other well; we are comrades and friends. The friendships of our college course have done much to shape our life here. Let us make of them an inspiration for the future, cherishing whatever in them is kindliest and best, and working side by side in that strength which belongs to true comradeship, and to true comradeship alone.

To Technology, our Alma Mater, our intellectual mother, we owe a vast debt. We have received from her, her best and highest gifts. We have received from her an education practical and broad. We in Ninety-six shall extend, in return, our constant interest and our loyalty.

This afternoon, also, we wish to express our gratitude to the members of the Glee and Banjo Clubs for their contribution to our Commencement pleasure; to Dr. Donald for his beautiful words of advice and of encouragement in the Baccalaureate Sermon of yesterday; and to the members of the Junior Class, who, as ushers, during the past few days, have so materially aided us in welcoming our guests.

Alas! these words of greeting must be also words of farewell: of farewell to the college which has formed so large a part of our life; of farewell to friends with whom association has been so happy and so beneficial.

That you may have an insight into the life which we are about to leave, that you may receive hope from the future which we shall soon make known to you, it gives us pleasure this afternoon to carry out the programme which has become the custom of Technology Class Days. For the presentation of those who follow me in these exercises, I shall call upon one to officiate who has steadily held our deepest respect and admiration. He has always worked unselfishly for the honor of his college and of his class; to-day, in our appreciation, we have given him the distinguished honor of First Marshal. Ladies and Gentlemen Friends, it gives me great pleasure, and I hold it a privilege, to introduce to you as Chief Marshal of our Class Day, Mr. Benjamin Hurd.

Mr. Hurd, after a few brief words as to the important position occupied by the Class of Ninety-six, introduced M. A. L. Drum, the Historian.

THE CLASS HISTORY.

Although the history of the Class of Ninety-six is indelibly engraven on the heart of each one of its members, and has, since its advent, held a prominent place in the annals of the Institute, it is fitting that a retrospective panorama of the doings and achievements of the class should be presented for the benefit of the many kind friends who have manifested their interest by attending these her closing exercises.

During the past four years Technology has been our world, and we played in her history no insignificant part, but rather a role both brilliant and important. We rejoice that Ninety-six has stood for everything progressive, responded spontaneously to kindness and interest, recognized merit, and abhorred and repulsed mean and underhand methods. We are proud to count the number of representative men in our ranks who have been with us from the beginning; men whose influence has been for the good and the advancement of Technology interests.

These have been the underlying principles of the class of Ninety-six, and by means of them we leave for the benefit of posterity a history that will ever be a tradition among future classes, and will be held up as a model by future faculties.

Well—all histories have a beginning; I must revert to the memorable day when the members of Ninety-six, as verdant freshmen, first climbed the stone steps of "Old Rogers" and gazed admiringly on the supposed onyx pillars that support the ceiling of the now well-known corridor. But the veil was soon to be removed from the inviting aspect of the Institute, and together with other things we were to learn that these beautiful pillars were a plaster of Paris deception that could support a load of 25,000 pounds to the square inch according to the very reliable G. Lanza.

The unusual splendor of this September day of four years ago (now that I recall it, it was raining water in the spheroidal state) ominously bespoke the advent of the class of Ninety-six which was destined to reign at the Institute for four years, and then to occupy in future ages the place of honor in the memory of Technology.

Apropos of the seas running outside, we were plunged into a sea of tabular views, attendance cards, upper classmen, and signboards. Who, therefore, could blame us if, overawed by the nonchalance of the Sophs, we handed our wet umbrellas to the Bird point foremost, and received that bewitching smile with which she can throw down the most presumptuous Freshman.

The first marshalling of our forces was in Huntington Hall, where it was announced that a certain lank individual would tell us fairy tales about drawing instruments, triangles, and T squares. The mandatory style was typically Fauncy, and so we bought our instruments where he suggested, regardless of price, thus adding greatly to his exchequer. Our next excursion was to the chemical laboratory, otherwise known as the Freshman's Hope Repository, and where old "Immediately" says with the poet, "Leave hope behind who enter here."

As the weeks passed by, some of the mysteries of the Institute were revealed to us; we began to suspect that Chapel was not a place of worship, and that the Bird did not have wings. Even some of us began to put chapel contributions in conspicuous places in our expense accounts, to the great delight of the folks at home.

Through the kindness of the Faculty, the hero of the battle of Wounded Knee was placed at our disposal in the optional course of Military Science. I say optional, for those who did not care to wear the brass buttons were able to get doctors' certificates at two dollars a head or twenty dollars a dozen from a well-known physician on the avenue. The result was that thirty-five per cent of the class were found to be physically incapable of bearing arms, much to the regret of our instructor, who remarked one day that strange to say many of the disabled men were our most prominent athletes.

Notwithstanding the number of disabled men in the class, we turned out in sufficient numbers to win our first cane rush. Oh! the excitement of our first rush, and how our hearts beat as the Sophomore wedge bore down on our little phalanx about the cane. As row upon row of us was torn from the bunch, we became as fiends incarnate, and soon the usual number of men, stripped to the waist, their shirts hid in the bosom of some combatant, appeared in the center of the rush and sought retaliation. But at last it was over, and we had won, and our joy knew no bounds, although many of us had to wend our way homewards incased in empty barrels for reasons best known to ourselves.

Shortly after the rush came the annual indoor athletic meeting, at which Ninety-six won twice as many points as any of the other classes, and commenced the new era in athletics at the Institute. Hurd, Rockwell, and Bakenhus, the men who brought Technology's name to the front at Worcester in 1894, won their first prizes in these games.

There was also the Republican torchlight parade where we marched without regard for our political proclivities. After the march we met the boys in crimson from across the Charles, and though they outnumbered us three to one, yet many of us have parts of their garments in the way of souvenirs hanging in our rooms. Just about this time we learned the art of sign swiping, and woe to the window whose

sign contained an M, an I, or a T. It usually lost a letter during some dark night.

All our nonsense disappeared, however, with the opening of the Semies, and then we went home for a much-needed vacation. The fates were very propitious to us, and nearly all our four hundred returned for a second trial in the great struggle for existence the ensuing term.

The fall of '93 saw great changes in the class, when we met as Sophomores on the steps of old Rogers. Deducting those who had gone into business or had decided to go abroad, there was only half of the four hundred left. But we were the flower of the flock, and we electrified the upper classmen by the easy manner with which we ignored the Freshman and deciphered our Tabular Views. This was the first time that we really knew what choice of course meant, and in a great many instances those who had been boon companions parted to pursue the study of their respective professions.

The first event of any importance in the Sophomore year was the Freshman class meeting, which we ran so smoothly that our famous first marshal was elected president of the Freshies, and was instructed to send a note to the Sophs announcing that the Freshmen were their most humble servants. When we were finally ejected from the class meeting and an inventory taken, it was found that one of the massive doors of this historic hall was torn from its hinges. The bill which our treasurer received from the bursar was duly paid.

The class election, which lasted for days and nights, saw one of the bitterest fights that was ever waged between two class factions, brought all of our best men to the front, and for the second time that year was our most worthy first marshal elected a class president.

As the weeks sped by the members of our class began to assume prominent places in the Institute's societies and organizations; many of our "Ink-slingers" were elected to the Board of Editors of THE TECH, and the two Johnnies, Rockwell, and Manahan showed themselves to be the mainstays of our football eleven. No one who ever saw the old full-back sprint down the field with the pigskin under his arm, after catching a long punt, will forget Rockwell, who would sell his soul to defeat Brown. And many a time in my memory has he covered thirty yards of the gridiron to score a touchdown that has lowered the colors of the men from Providence.

We have established many precedents at Technology, but the first and most important one was our defeat of the Freshman in both the football game and cane rush of '93. This was the first time that a Sophomore class had been strong enough to win both events from the Freshman. Besides these victories, our flag waved gallantly over the South End grounds, and we stole the only pair of climbing irons that the Freshman could secure. How many times at our memorable class dinners have we lovingly kissed those canes and climbers,—trophies of our victories.

The "Semies" came and went, and the only thing worthy of mention was the fact that the Lion flunked fifty-one per cent of the class in "Descrip." Just about this time we became the recipients of the far-famed Tech Faculty notices which range from form A to form G; the last of which says that "Unless you immediately deviate from the downward path, even though unwillingly, Technology must lose a bright star from its firmament." The faculty was obliged to recognize that the standard set by Ninety-six was so high that only the bright men could continue on its rolls as regular students.

The spring of '94 saw that bright meteor, the 'Varsity baseball nine, flash across Tech's horizon and sink into darkest oblivion, which, we hope, will never allow it to reappear. We have one consolation, namely, that not a Ninety-six man was allowed to play on the nine, their rivals, Ninety-five, being in control.

Ninety-six's interests were all centered in the New England Intercollegiate Athletic meeting at Worcester, in which we were about to compete for the first time, and which we won handily, to the great astonishment of the college world. The points were nearly all won by Ninety-six men, especially by our great quarter-miler Rockwell, and by our famous "timber-topper" Hurd. Our defeats at Worcester in the last two years are due mainly to the fact that these two men were unable to train for the track team.

As you may see, this Sophomore year was an important one for the dear old class, and its list of victories will never be equaled. No one could therefore object to the lordly air that we assumed as Juniors when we returned in the fall. All the positions of prominence in Tech institutions were held by members of our class. In athletics, in the musical clubs, and in the literary organizations we were the leaders, and successful ones at that.

Our committee conducted the most famous junior week that has ever been held at Tech, and the Ninety-six "Technique" surpassed all its predeces-

sors. The French and German plays were marvels of the histrionic art, and Orpheus himself would have been pleased with the sweet renderings of the musical clubs. While in the great football ballet, the Tech men in tights and corsets, as devotees of Terpsichore, looked as comely and as graceful as the disciples of Delsarte, and danced with the ease and agility of pupils of Kiralfy.

Ninety-six was, as usual, equal to an emergency when the course in Heat, that disastrous "Water-jump" in the Tech steeplechase for a degree, was successfully passed by all its members, thanks to a compilation of questions and answers made from the old examination papers on the subject.

We were also foremost in athletics, and won the class championship for 1894.

After three years of toil we entered upon our senior year, and felt that at last we were rounding the bend, and coming in sight of the much-coveted sheepskin. Our first term left many pleasant memories of the hours we spent with the "Old Man," and the bets we made as to which of the old stories he would tell at a certain lecture. Those were pleasant days, and full well we felt the glory and dignity of the senior's mantle. We were above the common herd, and even the most reserved "Prof" felt obliged to recognize us. But naturally the year could not pass by without giving the famous parliamentarians of the class an opportunity to show their skill as politicians, and so the election of the Class Day officers was made the basis of a veritable faction fight between the fraternity and non-fraternity men. The consequences of the fight were not very disastrous, and served merely to teach both sides the virtue of patience, and it brought forth the accomplishments and ability of the leadesr.

The "Semies" were the downfall of many men, but excellent opportunities were given by the faculty to make up conditions, and nearly all of the men who entered as regular seniors at the beginning of the year received last Friday the notice from Dr. Tyler for which four years of hard work have been spent. It read: "I take pleasure in informing you that you have been recommended by the faculty for the degree of Bachelor of Science."

This little printed slip of paper was ample payment for the many hours that we had spent at Thesis work and in hard and laborious grinding. Of course every man made some wonderful scientific discoveries while in the realm of Thesis?—such as that glass is non-hydroscopic, and that Diphenyl-biphenyl is a hard name to remember, and that all engine and boiler tests must be conducted on a strictly "cold water" basis.

It will be well worth your while to attend the graduation exercises to-morrow, and hear from the discoverers' own lips what wonderful developments they have made in science.

Now the work of the historian is completed, and for further account of Ninety-six's triumphs we must wait until our well-known *raconteur*, the prophet, speaks. What the future has in store for us we can but surmise; but this we may say with certainty, that the years to come will testify, as those just passed, that Tech has no more loyal sons than her children who twine the crimson and black about the red and gray.

Our athletic victories, literary and social triumphs, will fade into the background of the past and lose their detail, but the principles for which we have labored will bear fruit forever.

Mr. Hurd next presented Mr. Joseph Harrington, the statistician, as the "most conspicuous man in the class."

CLASS STATISTICS.

LADIES AND GENTLEMEN: In appearing before you to-day I do so with a profound sense of my inability to present anything which shall convey an adequate notion of the work we have done, the performances of the class, and the amount of brains contained therein. It might not be so difficult to make an estimate of the latter, but perhaps it is more complimentary to omit that discussion. Soon after it was decided that I was to be a disciple of Æolus on this occasion, I was asked, "Well, what are the vital statistics of Ninety-six?" It reminded me of the question put to the bright boy who had just survived the horrors of an examination. He was asked if he found the questions very difficult, to which he replied that the questions were very easy, but what was hard was the answers.

Of all the technical schools of America, Technology stands at the head. We have to-day 1,187 students and 125 instructors, beside 26 lecturers on special subjects. The ratio of students to instructors is 9.5 to 1. Cornell, which stands next to us, is but 65 per cent as large. There are in this country 14 other technical schools of note, gradually diminishing in numbers until we reach our neighbor on College Hill with 7.7 per cent.

Not only are we first in numbers, but it is my claim that we are first in certain conditions which are most essential in making the man out of the boy. No one, as the saying is, can get through this school on his name or his pocketbook. I do not imply that such is the case in other schools. I simply say that, as far as I know, our requirements are more comprehensive and more exacting than elsewhere—and we are glad of it. We entered 362—we graduate 188. But if any of you think that this is a course of health-destroying severity, I assure you that you are mistaken. Look at our graduates -- smoked glasses at the cut-rate book store, only $19.75—you will have hard work to find any consumptives or cripples among them. In answer to a question I asked the class, less than one-eighth consider their course at all too difficult; and it may be of interest to know that, with but two exceptions, these unhappy individuals are all from Course VI.

There are a few points which may be of interest to the loving friends of Ninety-six, and which I will recite, if I may be permitted. They will necessarily be somewhat disjointed, as it is out of the question to concoct anything which shall be typical of the extreme unity and brotherly love of this class. I have but little else than figures to give you. However, figures cannot lie—that is, figuratively speaking. Perhaps I can make up the deficiency.

In the winter campaign eight were victors and twelve slain. I refer you to the daily papers of that time for further details. Enterprising reporters were abroad, and nothing escaped their eye or their imagination.

This is evidently a rising generation. Consider that aggregation of civilians which, with us, is at the top, both of the list and of the Engineering building—Course I. Provided we were able to find one who attended every exercise he is supposed to for a whole week, and considering he went home for dinner (which they never fail to do), he would be obliged to ascend 2,070 steps, or 1,206 feet vertical height. In the school year he would have gone 42,210 feet straight up in the air, and during the course, at the same rate per year, would have gone 168,840 feet, or 32 miles off the earth. What a fine start this would give them, were it not counteracted by an equal descent! Although the resultant elevation of the body is zero, let us hope that it has had some effect upon their intelligence. We of the Engineering building certainly need an "alleviator."

Ninety-six has a large number of married men, of whom I have been able to discover four. Course II. contains a working majority of these, namely three. Members of that favored course will at once recognize the name of our most prominent Benedict—Fred. W. McBowie! It is a curious coincidence that the number of married men exactly tallies with the number of bewhiskered students. I do not mean that every married man has whiskers, or every bewhiskered man is married. Would that they were! The bearded men's club is now on a firm foundation. Mr. Roberts at one time threatened to disturb the equilibrium, but the late Mr. Bowie threw himself into the breach, and the number was maintained.

There being some dispute as to certain dimensions of the class I determined to go to the very bottom of the thing, and so asked them to kindly inform me as to the size of their feet. Although there was some little diffidence among certain members, I found that most of the feet in their possession are normal. Only one has feet which are not mates, and the prize for the largest pair goes to Course V. Our friend Lythgoe can tell you all about it. If all the shoes of the class were placed side by side, they would cover an area as large as one of the evanescent tennis courts in the rear of the abode of the Sons of Rest. But enough! That covers the ground.

We have many men of length among us, the stately Mr. Pennell standing at the head of the line, and carrying his 6 feet 4 inches as though he had been used to it all his life. At the foot we find Socks,—er—I mean Mr. Sax. This remarkable person, whose agreeableness varies inversely as his length, is only a hair over 5 feet. The average height is 5 feet 8.9 inches. Now if each member should stand upon another's head, this human column would be 1,079 feet high, with a ratio of length to diameter, Mr. Wayne excluded, 863. I attempted to calculate what the outside fibre stress would be by the formula $f = \frac{M\ y}{1}$, but failed, owing to the fact that this class does not have anything to do with the letter F.

We come now to a rather weighty subject, the average of the class being 153 pounds. Course VI. holds the cup for heavyweights, with Course II. a close second. Mr. Wayne carries off the individual prize, weighin' 242 pounds.

It may interest you to know that there are now not far from 1,000 persons in this hall, whose aggregate weight is about 70 tons. I esteem it quite an honor to speak to a 70-ton audience. The total weight of the stu-

dents now in these seats and upon the platform is 28,764 pounds. Now, Room 33, Engineering, holds 49 people. When we get the proper tip 98 feet begin to pound, and as we lift one foot for one pound, this is equivalant to 98 foot-pounds! I understand the floor was figured by a certain wise head for this very emergency, so that '97 may feel perfectly safe next year. This does not seem like a very large amount of work, but I can tell you it is more than the Boston Ice Company does all winter.

This is the first class in which three brothers graduate. As was suggested by one of our professors, it is too bad that the Smyser family did not make special arrangements with the Faculty, whereby they could have been taken cheaper by the dozen.

And now let us consider for a moment the moral or intellectual side of the question. I think that it is in this connection that we have the best right to feel proud of our record. The very fact of our being here to-day is ample proof that we possess not only a certain amount of information necessary to pass examinations, but that we have acquired the quality of "stickability," or the ability to stick to a thing until we get it; one of the most valuable lessons taught at the Institute. Disorderly conduct is unknown. We don't have time for it.

I endeavored to get an expression of opinion regarding the imbibition of alcoholic beverages, and was pleased to find the proportion so indulging is negligible. I know of no one in the class now who indulges in the use of strong drink—to any considerable extent. Only seven men have attended Chapel this year, although one confessed he had held services in his room. We are all abstainers—Course VI. from the use of liquor, IV. and IX. from work, II. from matrimony, etc. In reply to a question as to their favorite drink, one man was rash enough to say that he preferred Boiler Test Lemonade to all else. I received one answer to this question which I have never been able to comprehend. It was this: "I prefer that delightfully soul-soothing and palate-tickling beverage, the allotropic Course VI. Test Tonic." This is something new, I think. I know it not. I suppose it is that illusive something which is commonly referred to as the "Electrical Fluid."

Only twenty per cent are users of tobacco, and I will state that, to the best of my recollection, the men who used most frequently to sit on the steps of this building during our first and second years and smoke their pipes or cigarettes, are the very ones who are not here to-day.

"In the spring the young man's fancy lightly turns to thoughts of love." Either this is not spring, or the majority of this class are not young men. Scarcely a dozen were able to say that they had made the most of their opportunities. All the rest of this fine aggregation are perfectly obtainable. Considering that this is '96, and that there will not be another leap year for eight years, I may be somewhat rash in thus publicly announcing this. Still, I trust that no harm will come from it. As I remarked a moment ago, there are but a few of us whose hearts have been lost. A curious coincidence was brought out by my investigations. It is a fact that the dozen men who are engaged, are the very ones who, judging from the size of their hats, have the largest heads. Now, whether this is owing to a case of "swelled head' at being beloved so young, or whether they became engaged because of their superior brain capacity, I do not know.

A few remarks relating to our societies may not be out of place. Fifteen Greek letter societies are represented in the school, and the number of students belonging thereto is 192. This is sixteen per cent of the whole. The same figure applies to the class. Then there are twenty-six local organizations besides the menagerie, the Veteran's Association, J. Pechin, President, and the United Order of the Sons of Rest. The chief officer of the latter appears to be M. J. Sturm. All the architects are naturally members, and those in Course IX. are elegible by virtue of their inoccupation.

That this is a very well-behaved class, is shown by the fact that not one was ever—to use a slang expression—fired out of his room. That thoughtful man, Mr. Smith, once came near it; but as he had that day drank large quantities of—er—water! he proved to be fireproof. There is one individual whom we would expect to be constantly going off, but who in reality was never fired in his life—except with enthusiasm—Mr. Cannon. There are several, however, who have shown a remarkable propensity for moving. Three men have each occupied ten different rooms while at the Institute, and one man has made twelve changes, notwithstanding he is a married man.

There is one thing I wish to speak of here which gives me a great deal of pleasure, and that is to announce that it is the almost unanimous opinion of the class that our most popular Professor is John D. Runkle.

And now, finally, let me state the results I obtained as to the satisfaction regarding the general condition of things at the Institute. I think it is a good commentary upon our earnestness that ninety-five per cent did not object to examinations—and our examinations *are* examinations—although all agreed that they should be modified. Very few have ever overworked, and their criticisms of their respective courses were slight. All this would seem to indicate a widespread sentiment of approval, and that we are eminently satisfied that this has proved to be that which was promised—"Not a place for boys to play, but a place for men to work."

And if all future students will come here with that fact impressed upon their minds, we shall increase in prosperity and numbers, until the school whose name is the synonym for all that means greatness, honor, and worth, shall be The Massachusetts Institute of Technology.

Next, Mr. Conrad H. Young detailed the future triumphs of Ninety-six as follows:—

THE PROPHECY.

CLASSMATES, DEAR FRIENDS: I am most happy to be allowed the privilege of informing you of the various successes which have befallen those present, of whom so much has already been said, and in whom you are so much interested.

Twenty-five years have elapsed since we graduated from our beloved Alma Mater, and I shall endeavor to inform you of what we have accomplished from that period to this.

On the morning of June ninth, eighteen hundred and ninety-six, the last undergraduate meeting of the largest class which Technology has ever graduated, was held in old Rogers. Many questions were brought to the attention of those present, the most important of which was the future welfare of every man in the Class of Ninety-six.

I need only to mention the panic of eighteen hundred and ninety-three, and the slow recovery of our country from it, in order to bring clearly to your minds how dark was the outlook for deserving young men in quest of good positions at the time of our graduation.

Ninety-six was not the class to be discouraged by any such condition of affairs; for like the shrewd merchant who, when trade is dull, creates a market for his wares, she created a field of usefulness for herself. We had been in session for a short time only when in rushed Whitten, that fiendish grind of Course VIII., with the information that he had resigned his double position of haunting the physical laboratory and lugging coal for the boiler test. We were quickly informed by him that Tucker had been in communication the night before with a few spirits from Mars, as they had been attracted to Boston by the magnetic influence of Technology. From them he learned a secret chemical process by which the soul could be separated from the body and sent to the planet Mars. The news was received with great excitement,—which was, however, somewhat dampened when he added that the soul could not exist in Mars unless accompanied by the body. Instantly the class arose to the emergency. Wells, Scovel, Hapgood, and Brackett came to our rescue, and in a few months had completed an apparatus not widely different from the X-ray machine, by which specific gravity could be regulated, and our bodies transported to any point in space simply by pressing a small button.

I am at liberty to inform you—of course confidentially—that these buttons were to be had at Ridler's at the usual price, upon presentation of a check from the bursar, which could be procured only with the usual delay.

It may interest our friends to know that that part of the above sentence relating to Ridler has become a classic with us, and is used with as much reverence as the quotations of the ancients were in the days of our youth.

The latter, owing to the happy intervention of the corporation, died, as poor literature does, shortly after we left the Institute, and blessed were all classes thereafter.

Upon the arrival of our souls and bodies at Mars, there was much confusion with regard to their union. Happily, however, Guy Wall had remained behind, aud owing to his "great pull" with spirits, he induced one whose surname was Manhattan to return to Mars, and restore us to our normal condition.

To our own delight, we discovered that this new world was inhabited by a colony of spirits, and we were informed by them that after years and years of searching through the entire universe, they had chosen us as the nucleus for the mortal colonization of their continent.

The climate is not widely different from our own, and everything with which nature has so abundantly endowed us was found there, with the exception, however, of coal and dust.

Our second meeting was called to order and presided over by Charles Gilman Hyde, who so ably ushered us from the position of undergraduates to that of incipient alumni, at the alumni banquet, a few nights before our commencement day. Every man was there, and each was determined to do his individual part toward the development of this beautiful paradise.

A new button store was immediately established by Sax, the only infant in the class, with Sturm, Baldwin, and Putnam as general peddlers and public criers; for during their sojourn at the Institute they had won the enviable reputation of being the noisiest men in the class. Unfortunately our patent transporting machine would not work when the co-eds got into it, which accounted for the despondent condition of the architects.

However, Nevin, Smetters, and the men from the course in general studies, were temporarily installed as cash-girls, with Molly Merriwether as forewoman; and I must say that they all filled their positions most admirably, though at times Molly had considerable trouble in trying to convince Smetters that there were others, even if they did not know quite so much.

The next thing we were in need of, as is generally the case with new settlements, was a church. Trout, Bakenhus, and Fresch immediately set to work on plans and specifications. The stone was procured from the large quarries of Pingree and Heerman; the timber from Gordon, James & Co. The construction was carried on by Messrs. Pressy and Joseph Driscoll, supervising and constructing engineers. So to-day we have a church structure that even rivals dear old Trinity.

Rawson has become famous as a bank architect; but notwithstanding his brilliant success he is forever busted,—the reason for which can be learned by applying to Lawrence and his patent meddling machine.

Porter had left us, in order to explore the surrounding country, accompanied only by his gun and a sketchbook. After several days he returned with glad tidings and complete sketches of a waterfall far more beautiful and much larger than our own beloved Niagara, and from which originate the canals in Mars of which we have already heard so much.

A central power station was located here, and is now under the management of Hurd, Guptill, and Stevie Crane. Stevie is not satisfied, however, with his present position, and for many years he has been trying to invent a method of killing time and then using it over again.

So long as our button store stood by us we had no difficulty whatever in floating about from place to place, but we were at a loss to know just how to communicate with one another as rapidly and conveniently as we had been in the habit of doing on the earth. Hardy solved this question by developing some crude ideas which he had gained from Nicholas Tesla, before his departure from the earth, and invented a system by which we could communicate with one another. It was necessary, however, to have a central thought station by which our various waves could be controlled. Ingalls was put in charge of the general office, and Grush was put in charge of the mental telephone to the earth, by means of which he was kept in constant communication with the co-eds of Ninety-six.

They were not to be outdone, however, for Miss Florence Wood came to the rescue of her bereaved sisters and invented certain improvements on the transporting machine, by which they also could be sent to Mars. After several applications to the Board of Immigration, it was decided to allow them to enter as raw material, with no duty, and from henceforth they were given that for which they had so long and so patiently contested, equal rights with man.

As our progress became more rapid, and our development more complete, we had need of better facilities for the transportation of freight. Crosby, Lootz and Bates soon solved this problem for us by constructing a system of pneumatic, underground tunnels, through which articles could be sent with almost lightning-like rapidity. Through the efficient and untiring efforts of Rockwell and Perley all bacteria and microbes were done away with, so that henceforth we were no longer victims of disease, and consequently we were insured an everlasting life.

We were not wholly without amusement, for owing to the great successes of the theatrical plays developed in Technology during our four years there, such able actors as Cramer, Von Holst and Henry were produced for us, and they are to-day far superior to Jefferson, Fritz Emmet, and Irving.

Stearns and Leighton have afforded us much amusement in the minstrel and variety line of entertainment, and have introduced the various freaks which we were obliged to bring with us. Owing to lack of time I shall refrain from giving their names.

Our textile manufacturing interests have been ably carried on by Messrs. Thompson, Bowes, Conant and Foster.

Our newspaper and publishing interests are now most ably conducted by Messrs. Hyde, Baldwin and Drum, with Mansfield and Jameson snugly couched in the poets' corner.

Mannahan and Lock have constructed a magnificent hotel which covers a rectangle one mile square, on the exterior of which is all that can be desired in the way of racing tracks, golfing courses, tennis courts, and all the facilities for outdoor sports known to man. The interior contains all that can be required in the way of luxury and amusement, and I wish to extend to you all a most hearty invitation on the part of the Class of Ninety-six to return with me and join those whom you loved so dearly, and enjoy an everlasting life of pleasure and comfort.

Mr. E. S. Mansfield, the poet, began the more classic portion of the programme.

CLASS POEM.

From out the deep, unfathomed shades of night,
  Where ebon blackness held full sway o'er all
The earth, and sea, and sky, and barred from sight
  All Nature's sleeping charms, there came the call
For light; and o'er the peaceful Grecian plain,
  In golden splendor decked, outpours the sun.
The Cronian mount reflects its purple stain,
  The world awakes to greet the day begun.
The glorious, ardent rays bathe all the flood
  Of gently flowing Alpheus, which speeds
Eager to mix with his the living blood
  Of Claudius, whose tide, reviving, feeds
The banks along the green Olympic shore.
  The morning zephyr, stealing, wends its way
Amid the grove of Altis, thence to soar
  And kiss the olive branches, which this day
Cut with a golden knife, and brought with song,
  Shall deck with envied fame the hero's brow,—
Guerdon of ardent toil and patience long,—
  How light against it weighs all labor now!

Within the Grecian province all was peace;
  The gods of war forgot their savage rage;
The sword suppressed, they bade the song increase,
  And checked the annals on the bloody page.
From all the country 'round, ere rising day
  Had dried its dewy moisture from the air,
The folk came flocking, through each rustic way,
  To the great games in eager zest to fare.
From months of constant toil and training come,
  With limb and mind made strong by ceaseless care,
Before the throng, with anxious wonder dumb,
  The sons of pure Hellenic blood make bare
Their brawny arms, and strip to join the fray.
  The hour which heart and eyes have longed to see
Has come at last, and this, the crowning day,
  Brings glory or despair as fate shall be.

The trumpet's silver note has pierced the air,
  The great bronze eagles have been lifted high,
To Zeus a tribute sent of incensed prayer,
  And clouds of dust swirled upward toward the sky.
The straining feet have the goal's altar passed;
  The shouts of praise have risen, and been stilled;
The victor's heart, which late with fear beat fast,
  Is now with joy of fame and triumph filled.
With pageant rare, the temple doors are swung
  To greet the victor's glory-bearing feet;
While mid the palms his glorious deeds are sung,
  The wreath of olive feels his temples beat.
Though oft before these stately temple walls
  Have rung and quivered with some victor's praise,
No less the pride which on this hero falls,
  No less the sweetness of these swelling lays.
For in each life the hours which make it blessed
  Come new, as if no human heart had known
This joy before, no other lips been pressed
  To this full cup which sparkles at their own.

For four long years, with strong united hearts,
  The Class of Ninety-Six have strained each nerve
To win the race. A race which has its parts
  For all to share, its ways for each to serve.
The goals they sought were knowledge, truth and fame;
  The prize they wished, a seat on honor's throne;
They strove to leave behind a glowing name;
  'Twas for success they ran, and this alone.
The thorny course o'er which they toiled has lain
  Amid the realms of science, that vast land
Whose ways diverge throughout the widening plain,
  Whose shiny steeps rise high on either hand.
With souls aflame to reach the aimed-for end,
  Along the track each classmate took his place,
Their brawny muscles swelled with the low bend
  To make each moment tell. Throughout the race,
With brave young hearts, and purpose strong and true,
  They kept their footing well, yet oft they sought
With longing glance to pierce the dimness through,
  That they might see what would for them be wrought
Within the distant lighted vale beyond
  Where future holds her ever secret sway:
And know if fate would smile on wishes fond,
  And learn if longed-for goals were far away.

As flows a streamlet down the mountain side
  'Midst twigs and bushes, stones and massed debris;
Now gushing, sparkling, white as nature's bride,
  And rushing onward toward the raging sea;
Now leaping over rocks obscured by foam;
  Now flowing gently through the quiet mead;
Enlarging, swelling, seeking still to roam;
  E'er hasting toward its goal with willing speed,—
So sped the class upon its strenuous way;
  Each onward leap left less to be passed o'er,
New troubles met were conquered day by day,
  And knowledge gained made way for knowledge more.

But one there was whose sympathetic eye,
  At every turn, through all the rugged ways

The conflict watched. No faint dejected sigh
Escaped his list'ning ear. No word of praise
Deserved was left unsaid. No race is long
With such a smile to cheer the fainting heart;
Naught but his earnest words could prove so strong
To cause the ling'ring step again to start.
And friendly voices, stirred by friendly souls,
E'er had a word of sympathy to speak,—
When hearts grew faint, when eyes lost sight of goals,
When rugged paths made weary bodies weak.

Successes won were stones on which to rise
To nobler themes, to grander, loftier heights;
While conflicts lost e'en helped to win the prize
By urging on the limbs to swifter flights.

Though lined with thorns, and far o'er rugged steeps
Their devious pathway led, and seemed to lose
Its winding way in ever-sinking deeps,
Till eyes could scarce discern which way to choose;
Yet high above their course there shined a light
So clear and bright that demon's blackest cloud
Could never bring the semblance of a night,
Nor dark forebodings ever be allowed,—
If eyes made blind by watching depths below
Could rise to view this gracious beacon flame,
Could but reflect its all pervading glow,
And show in blazing words its lofty name.
One's duty known, with conscience bright and true,
And courage, staunch, of deep conviction born,
With heaven's smile to warm one's nature through,
And heart of flesh one's actions to adorn;
All these combine to feed a flame by far
More bright than that on Ætna's burning peak;
And, when thus formed, becomes a lasting star,
To lead the travelers toward the goal they seek.

The race has now been ended; here we rest
Victors at last; the marks of conflict cling
Unto our forms, as when we lately pressed
The bounding clod, our journey's end to bring.
For labors done, for reaching well the goal
A prize awaits us. Soon 'midst music's strains
The bright reward shall gladden every soul;
And naught of toil but memory remains.
The thoughts which make our joyful hearts beat fast
Have moved a host of other hearts before;
Honors which stir our souls e'en to the last
Have made for other souls joy's cup brim o'er.
But none the less the pride which o'er us steals,
No less the pleasure brought by conflicts won;
For with new life, the scene to us appeals,
And joys, anew, crown earnest labors done.

But for each victor, olive-crowned, a place
Waits in the busiest haunts of men. The eyes
Of all the land are fastened on his face;
His fame on glory's wings forever flies.
So we, now marked by honor's blazing pen,
Should strive to honor her whose fost'ring care
Has trained and built us up with minds of men
And made the olive chaplet ours to wear.

To join the world of men we hasten on;
Let no poor weakness drag our manhood down;
Let us be true to that which we have won,
Nor bring dishonor on our olive crown.

The exercises closed with the oration by Mr. H. A. Waterman, after which the guests of the class inspected the exhibits and laboratories of the Institute, and finished the afternoon with a dance in the Engineering Building.

THE ORATION.

It is the prevailing impression that city governments generally are in a deplorable condition. It is quite evident why such an opinion should exist. In the city of Philadelphia there has recently been completed a large reservoir, built by contractors who are a part of the political machine which controls the city. One million five hundred thousand dollars have been expended; yet this basin will not hold water, and the contractors dare not attempt to fill it, because the inside embankment, instead of being built of clay, as the specifications require, was built of a mixture of clay and sand; and the city of Philadelphia is called upon to pay two hundred and fifty thousand dollars in addition to the million and a half already expended, in order to make this reservoir fit for the purpose for which it was intended.

But this is but one illustration of the enormous corruption which exists in hundreds of our cities to-day. The public well knows what the recent investigations into the administration of the city of New York have brought forth; and while many will say that these things are true of New York, but are not true of any other place, yet there is a large number who firmly believe that these things are true of New York to an extraordinary extent, simply because New York is the largest city in the country and offers the greatest prizes to boodlers, and that in the smaller cities, or in nearly all the other cities, we should find something of the same kind if an investigation should be made.

There are two reasons in general why the government of great cities in this country is defective. In the first place, the problem, until very recently, has been one of comparative unimportance. In the early days, when the cities began to grow, but little attention was paid to municipal affairs. It is true we had cities of very considerable size even before the close of the last century; yet they did not occupy that place in the general political system of the country which the great cities do to-day. The problem at that time

did not attract attention; not because the cities were better governed, but rather because, on the whole, the subject of their government was not considered as especially important.

In the second place, while this problem was growing in importance, and while the part the cities were to occupy in the economic, industrial, and political life of the country was becoming more and more a decisive one, at the same time the great political problem as to whether it was possible to extend the realm of free government over a country as vast as ours, and maintain practically the same law and the same freedom in one part as in another, was looming up in ever increasing proportion. While the question as to whether the Declaration of Independence was to mean anything in the life of the American people was an open one,—so long as we had to fight for such fundamental principles as these, it is not surprising that very little attention was given to local questions. But now the time has come when we must give to these questions the same careful consideration and the same energy which has been devoted to the solution of general political problems.

In the misgovernment of cities lies the root of national corruption. At the present time our cities dominate our national affairs to a marvelous extent. The political leaders of the day have received their training in the management of city politics; and until our municipalities have been placed in the keeping of honest, faithful servants, there can be but little hope of any material elevation in the tone of national politics. The administration of national affairs is never any better than the men who direct them; and for that reason, there can be no general reform in the political methods of the country until the individual cities and communities see to it that their local affairs are conducted with the same purity of motive and the same business-like integrity and economy that characterize the conduct of private business.

But someone says, how shall this be done? We must cast aside from city government all political management. The interference of national parties should never be tolerated in any community. Only too often, voting is a choice between two evils. The weak point is at the primary elections. It is here that your influence is needed. No one who is familiar with ward politicians need ask why. The business men and the professional men in our cities and large towns should drop their theories and their speculations for the time being, and attend the primary elections. If one must stay away from either, it is by all means more appropriate that he should absent himself from the regular election and not vote for the candidate nominated than that he should stay away from the primary election where he may insist upon the selection of good men.

Dr. Holmes says that at one time in the history of the world the people became very anxious to find out whether there was a man in the moon. Philosophers pondered over it; scientists discussed it; and everywhere it became the subject of profound deliberation. Finally, one old man made this happy suggestion: "Let us appoint a day and an hour, and at that time, let everybody in the world shout as loudly as possible; and we will make such a thundering amount of noise that if there is a man in the moon he must certainly hear and respond." "This is the very thing," everybody said; and they prepared to test the efficiency of their lung power. The day approached; the hour approached; the minute approached. Here was a man who said, "I am only one among so many; I will listen." Another man said, "I am only one among so many; I will listen." Another man over there said, "I am only one among so many; I will listen." And so every man thought he was only one among so many and that he would listen. And Dr. Holmes tells us that the most profound silence that ever reigned upon the earth prevailed at that time. It is very much like this with our American cities. Every man is waiting for his brother to take the first step. There is a duty for each one of us to perform. We must decide to do our share and to do it well, whether our fellow citizen does his or not; we must work for the city that might be and that ought to be.

Men must have something to believe in, to be loyal to, to fight for. It is always the ideal that inspires heroism and devotion. All great and worthy work is done under the inspiration of ideals. The sculptor is looking not at the things that are seen, but at the things that are unseen, when he calls the angel from the marble block. The musician is listening to the voices that were never heard on land or sea when he indites the symphony. The architect beholds the temple in the air before he builds it upon the earth.

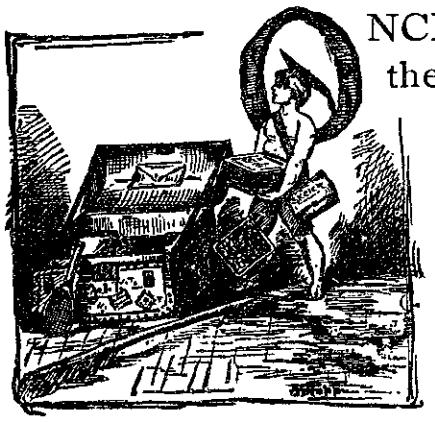
We have a national ideal. The prosiest American has some conception of it. It was the nation that might be, and the nation that ought to be, that kindled the ardors of Revolutionary patriotism; that Sam Adams and Patrick Henry plead for, and that Washington fought for. It was the nation that ought to be

that Meade's army saved upon the heights of Gettysburg. It is only because there is a national ideal to which our love and loyalty can be given that patriotism exists.

But there is just as much need of an ideal for the city as for the nation—an ideal of liberty, of purity, and of perfection; of leaving the things that are behind, and stretching forth unto the things that are before. There is sad need of a kind of civic life that is not yet, but that might be, and that ought to be, and that must be, if right shall triumph.

Classmates, we are about to leave our school days behind us and take up the responsibilities of active life. We may not be sculptors nor musicians, but we shall have our part in the large, fair, noble task of building up municipal life. We are to build not merely the streets and parks, the warehouses and shops, the halls and homes, but the institutions, the customs, the laws in which civic life is manifested. The ideal stretches before us a cloud by day and a pillar of fire by night. If we will be true to it—to the city that might be, and the city that ought to be—we shall succeed in the most important work set before us.

The Graduation Exercises.



ONCE more, on Tuesday, the ninth of June, Huntington Hall was filled to overflowing,—this time for the Commencement of Ninety-six. President Walker, the Faculty and Corporation, Acting-Governor Wolcott, and Dr. Donald occupied the platform.

President Walker opened the programme with an explanation of the scope of theses, and abstracts representative of the broadest work of the school were read by graduates from each course in the Institute. The theses read and their authors were as follows: "A Practical Investigation of Bleaching of Cotton Cloth by the Mather Kier," D. M. Bates, Jr. (X.); "The Use of a Small Model for Determination of Stability," E. M. Bragg and W. S. Leland (XIII.); "Osmotic Pressure Measurements and the Validity of Avogadro's Law as Applied to Solutions," G. K. Burgess (VIII.); "The Geological History of Lake Cochituate," Miss E. F. Fisher (XII.); "A Plan for Sewerage and Sewage Disposal in the Town of Needham, Mass.," C. G. Hyde and W. H. McAlpine (XI.); "Methods of Encouraging Immigration to the United States," J. H. Knight (IX.); "A Study of a Spitzkasten," C. E. Locke (III.); "A Comparative Study of the Efficiency of the Pressed Yeasts Sold in Boston," C. W. Perley (VII.); "Academic Hall and Gymnasium for Radcliffe College," Miss Esther Stone (IV.); "An Investigation of Certain Properties of Wooden-rimmed Fly Wheels," A. W. Thompson and C. H. Young (II.); "An Investigation of the Acetylene Prepared from Copper Acetylide," C. W. Tucker (V.); "A Design for a Jackknife Drawbridge for a Double-track Railroad," C. A. Wentworth (I.); "An Investigation of Certain Alternating Current Phenomena," L. N. Whitney and W. O. Pennell (VI.).

Degrees were then awarded as follows:—

MASTERS OF SCIENCE.

Frank Augustus Bourne, S.B., in Architecture; Herbert W. Chamberlain, S.B., in Architecture; George Defren, S.B., in Chemistry.

BACHELORS OF SCIENCE.

Course I.: Thomas Ward Bailey, Reuben Edwin Bakenhus, Carl Ira Crocker, William Tully Dorrance, A.B., James Michael Driscoll, Joseph Driscoll, Andrew Hugh Green, A.B., Nathan Clifford Grover, B.C.E., John Sanford Hallaran, George Edward Harkness, Harvey F. Hawley, Frank Allen Howard, Joseph Milton Howe, Eugene Christian Hultman, Minor Story Jameson, Alf C. Lootz, Herbert Damon Newell, Joel Horace Pillsbury, Harry Albert Pressey, B.S., Nathan Herbert Sanderson, Samuel Tupper Smetters, Ph.B., Harold Converse Stevens, Samuel Forsythe Thomson, Charles Eliphalet Trout, Charles Austin Wentworth.

Course II.: Butler Ames, George Francis Ashton, Ernest Carlton Atkins, George Sidney Bowes, Augustus Jesse Bowie, A.B., John Flavel Brooks, John Lonson Coley, Willard Henry Colman, Henry Gardner, Edward Bertelle Gordon, Jr., Joseph Harrington, Hiram Britton Hartwell, Frederick Morse Heermann, James Buist Henderson, Walter Herman James, John Erik Lonngren, Frank Goodman McCann, Irving Seward Merrell, George Edmund Merryweather, Edwin Daniel Pingree, Daniel Artemas Richardson, Edwin Hughes Roberts, John Combs Scovel, Jr., Albert Ernest Smyser, Frederick William Smyser, James Swett Smyser, Harrison Southwick Taft, B.P., Lewis Hooper Tappan, William Bellamy Taylor, Albert William Thompson, Henry Arthur Waterman, Albert Jameson Wells, Julian Ernest Woodwell, Conrad Henry Young.

Course III.: William Pope Anderson, Jr., Francis Polk Blake, Winthrop Coolidge, Franklin Hayes Davis, Charles E. Locke, Charles Saunderson Newhall, James Wallace Raynolds, Mortimer Andrews Sears, Bradley Stoughton, Ph.B., Frank Arthur Thanisch.

Course IV.: Russell Samuel Bucher, Lewis Telle Cannon, Helen Chamberlin, Winthrop Holt Chenery, Edwin Claassen Cramer, Henry Cummings, Jr., George Fresch, Jr., Robert Lesure Fuller, Abram Garfield, A.B., Ralph Coolidge Henry, James Cleveland Hopkins, Howard Kingsley Jones, Marion Lincoln Lewis, Charles Kirkland Barker Nevin, Harry Dustan Rawson, Moritz Sax, Donald Cleveland Scofield, George Frederick Shepard, Jr., Herbert Edwards Smith, Esther Stone, Meyer Joseph Sturm, Lucy Doolittle Thomson, A.B., Hermann Valentin von Holst, A.B., John Howard Willis, A.B.

Course V.: Edwin Raymond Brackett, Harold Mayson Chase, S.B., Stephen De Meritte Gage, Leonard Harrington Goodhue, Charles Warren Hapgood, James Henry Haste, Leebert Lloyd Lamborn, B.S., Eugene Hiram Laws, Hermann Charles Lythgoe, Charles Perkins Moat, Frank Newell Smalley, Charles Henry Howard Stone, Henry Harris Tozier, Charles William Tucker, Grace Abbie Van Everen, Robert Sidney Wason.

Course VI.: William McCorkle Andrew, Edward Arthur Baldwin, Charles Eildermann Batchelder, David Webster Beaman, Augustus Jesse Bowie, A.B., Lewis Bazzoni Breed, Harry Webster Brown, Harry Patrick Browne, John Gurney Callan, Albert Edmund Cluett, A B., William David Coolidge, Henry Middlebrook Crane, S.B., Stephen Dow Crane, Nathan Hagar Daniels, Jr., Robert Allen Davis, Leonard David Perley Dickinson, Alphonsus Ligouri Drum, Henry Granville Grush, Frank Edward Guptill, Walter Atwood Hall, Robert Samuel Hardy, Walter Munroe Hollis, Benjamin Hurd, Charles Henry Ingalls, Theodore Inslee Jones, William Henry Keith, Charles Edward Lawrence, B.A., George William Lyman, John Henry Manahan, Edward Stacey Mansfield, Charles Morris, Jr., Fred Brown Owen, Karl Almon Pauly, Walter Otis Pennell, John Luther Putnam, Albert Felix Ruckgaber, Norman Franklin Rutherford, Lawrence Kingsley Sager, Frederick Francis Schaller, Walter Mulliken Stearns, Joseph White Stickney, George William Sumner, John Tilley, Arthur Perley Underhill, William Guy Wall, Jacob Lloyd Wayne, Lambert Nutt Whitney, Willett Aubrey Wood.

Course VII.: Marshall Ora Leighton, Clarence Warner Perley, John Arnold Rockwell, Jr.

Course VIII.: George Kimball Burgess, Joseph Hewett, William Henry Whitten, Jr.

Course IX.: Harry George Fisk, Henry Rogers Hedge, William Russell Hedge, Joseph Hyde Knight, James George Melluish, Andrew Le Baron Russell, Henry Kent Sears.

Course X. Daniel Moore Bates, Jr., Francis Melvin Conant, Frederick Everard Forster, Harrison Washburn Hayward, Paul Weeks Litchfield, William Lacy Root, Fred Haskell Smith.

Course XI.: Frederick Elbert Field, Charles Gilman Hyde, William Horatio McAlpine, Howard Everett Smith.

Course XII.: Elizabeth Florette Fisher, Myron Leslie Fuller, Amadeus William Grabau.

Course XIII.: Edward Milton Bragg, Joseph Ward Clary, Ralph Worthington Crosby, Harold Williams De Long, Walter Swift Leland.