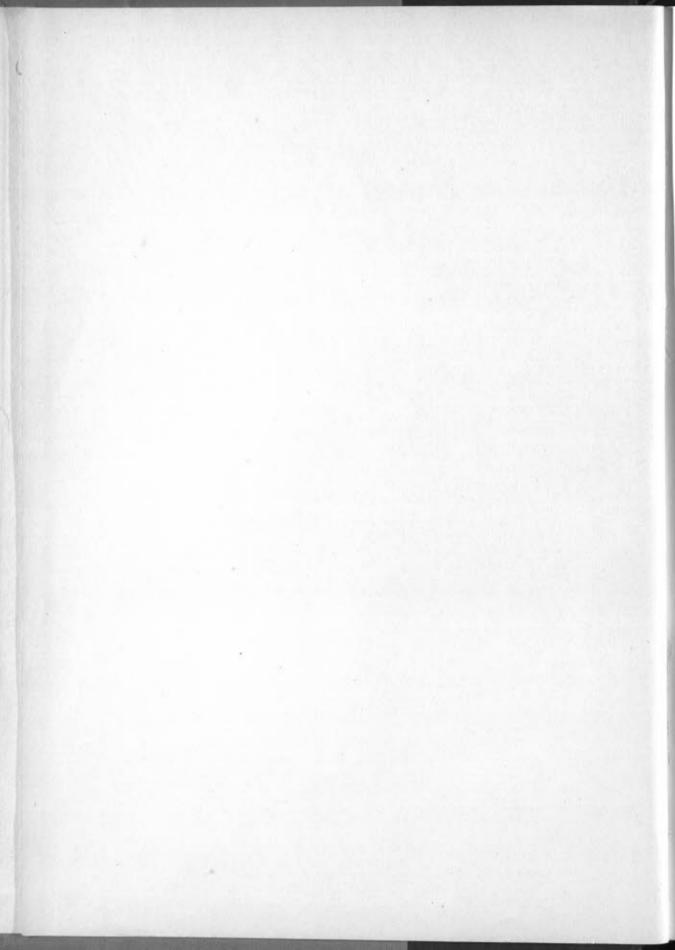


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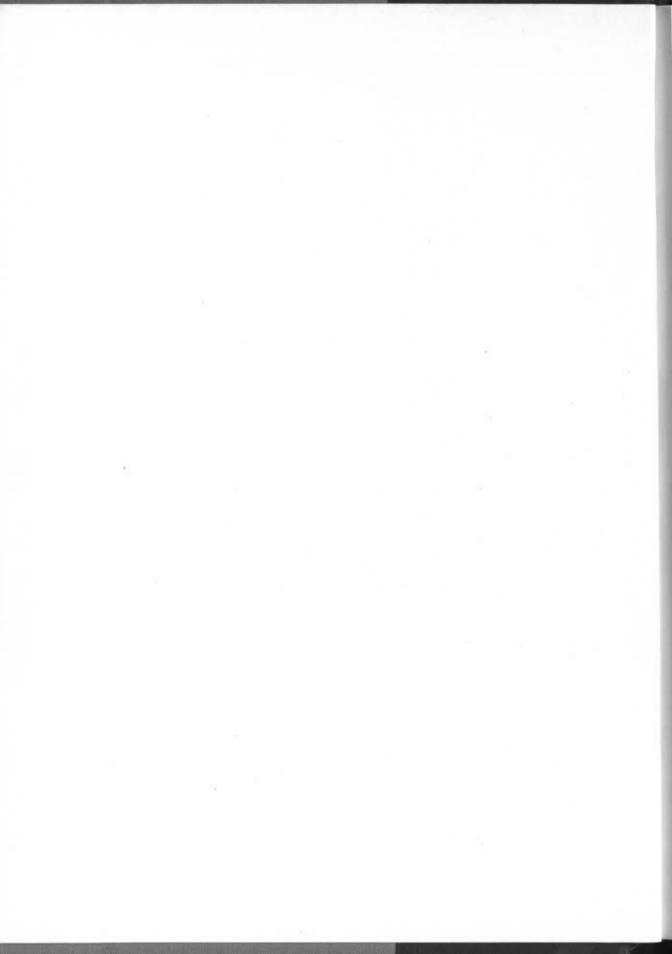
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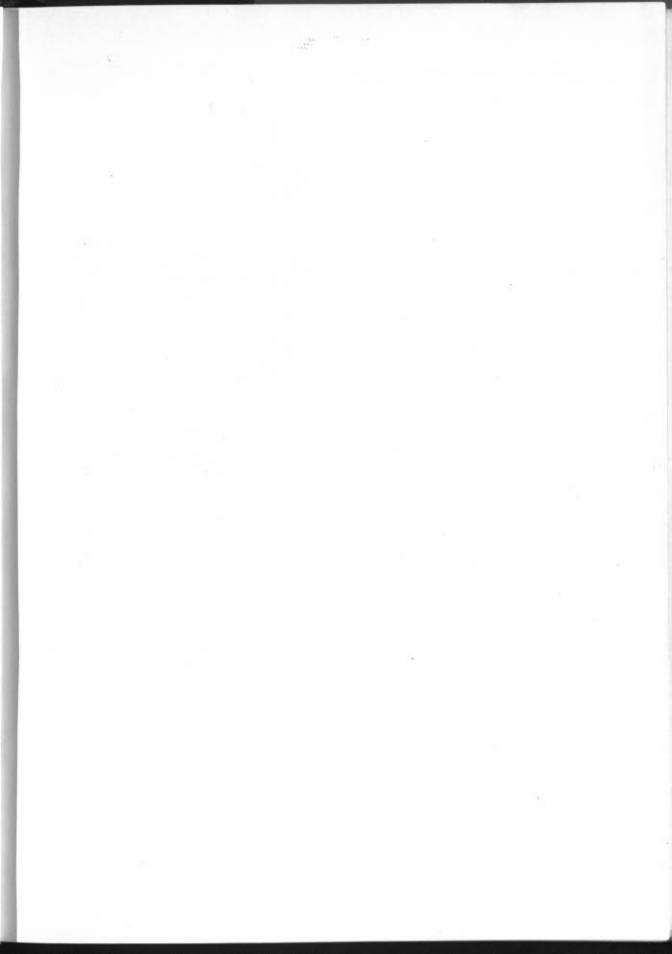
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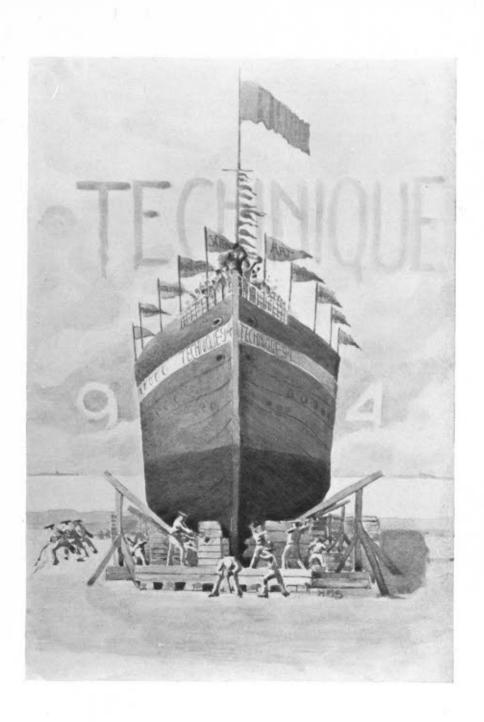
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mates, hoping that it may not be considered an unworthy memorial of the Class of Ninety-four. As the college publication they trust it will be pleasing to all their fellow-students. They beg the critics to deal charitably with the mistakes which they may find. From those who have labored and won, they are confident of receiving that sympathy which is mutual between fellow-workers. You whose turn has not yet come, judge not those things in which you have not had experience. Profit by the errors you find; but when tempted to speak or think unkindly, believe the testimony of this board that its work has been carnest as well as enjoyable.

Two musical selections will be found in this book, but neither of them has been called the "Institute Song." The board considered the songs and words of both selections worth publishing, but thought that in both cases the music was not the best that Technology could procure as its representative production. If, after the awakening which has occurred this year, steps shall be taken gradually but steadily towards the formation of a song book, the Technique board will feel that its angle of the state of the st

feel that its work has been beneficial to the school.

Thanks are due to many friends who have assisted the editors. One and all please accept the little that the board can offer as a trib-

ute to your kindness.

With best wishes for the continued increase in prosperity of the Institute, and for the success of future Techniques, the editors beg leave to place themselves in the background, that the book may speak for itself.

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GILBERT, F. A.

GOODWIN, RICHARD D.

HARDY, ALPHEUS H.

HOBBS, FRANKLIN W.

Hollingsworth, A. L.

HART, FRANCIS R.

HOLMAN, G. M.

Homer, E. B.

Howe, H. M. Jacques, W. W.

DUTTON, EDGAR F. EUSTIS, W. E. C.

FARNHAM, I. H.

FAUNCE, LINUS

FREELAND, J. H.

GARDINER, E. G. GILLEY, FRANK M. HAMMOND, GEORGE W. HARRIS, WILLIAM A.

HAYES, H. V. HOFMAN, H. O. HOLLINGSWORTH, S. HOLMAN, S. W. HOWARD, A. P.

Jackson, George

Jones, Jerome

Kastner, Charles Ladd, W. H. Lee, J. C.

LEVERMORE, CHARLES H. LODGE, H. ELLERTON Kendall, Edward Lanza, Gaetano Leeson, J. R. Little, Samuel Lowell, A. L.

LOWELL, PERCIVAL

Mason, Edward P. Miller, Edw. F. Moore, Alexander Morton, Galloupe MERRILL, A. L. MIXTER, S. J. MORSE, HENRY C. MOWER, GEORGE A.

Munroe, James P.

NILES, WILLIAM H.

NORTON, L. M.

NUTT, H. C. OSBORNE, GEORGE A.

PARKER, C. H. POND, FRANK H. PORTER, DWIGHT POWERS, C. E. PEABODY, C. H. POPE, T. E. POTTER, H. STAPLES PRANG, LOUIS PROCTOR, THOMAS E.

PUFFER, W. L.

PURINTON, A. J.

RICHARDS, R. H.
ROBINSON, J. R.
ROLLINS, WILLIAM H.
SAWYER, JOSEPH
SCHOFIELD, WILLIAM J.
SEGDWICK, W. T.
SHUMAN, A.
SMITH, W. L.
SANTIAL, F. G.

SWAIN, GEORGE F.

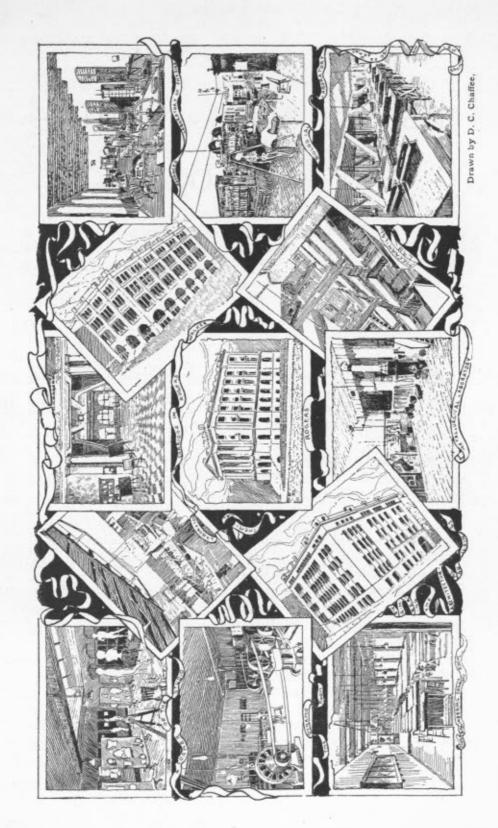
THOMSON, ELIHU

ROBERTS, GEORGE L.
ROGERS, EDW. L.
ROTCH, A. LAWRENCE
SAWYER, JACOB H.
SCHWAMB, PETER
SHAW, HENRY S.
SKINNER, J. J.
SONDERICKER, JEROME
STANWOOD, JAMES H.
SWEET, H. N.
TOLMAN, JAMES P.

TUTTLE, JOSEPH H. VAN DAELL, A. N.

Walker, Francis A. Weeks, G. W. Whitman, Herbert T. Willcutt, Levi L. Woodbridge, S. H. WATSON, WILLIAM
WHITE, ANTHONY C.
WHITMORE, WHLIAM H.
WILLIAMS, F. H.
WOODBURY, C. J. H.

WYMAN, MORRILL



#### THE

## MASSACHUSETTS INSTITUTE

OF

## TECHNOLOGY.

#### pells.

M. I. T.! Rah! Rah! Rah! M. I. T.! Rah! Rah! Rah! M. I. T.! Rah! Rah! Rah! Technology!

Technology! Rah! Rah! Rah!

Colors: Cardinal-Red and Silver-Gray.



T is not our intention to describe the changes that have made scientific schools a necessity the world over; neither will we follow the growth of technical colleges in general. Grand old Technology alone is our theme, and way down in our hearts we wonder at our audacity in attempting a history at which Herodotus himself might hesitate.

For some years prior to 1860 there had been a gradually strengthening undercurrent agitating the people of New England to the good that might accrue to the community from a greater diffusion of technical knowledge. The matter began to assume definite form when, on February 18, 1859, a meeting was held in the library of the Boston Society of Natural History, then on Mason Street. Mr. Marshall P. Wilder presided, and among the speakers were Prof. Louis Agassiz and Hon. Alexander H. Rice. As a result, a committee was appointed to prepare a memorial to the Legislature suggesting the reservation of four squares of the newly-acquired Back Bay lands, one "to be devoted to collections of implements, models, and other objects pertaining to agriculture, horticulture, and pomology;" another "to natural history, practical geology and chemistry, with ample room for museums of specimens;" a third "to those institutions devoted to the development of mechanics, manufactures, and commerce;" and the last "to fine arts, history and ethnology. A joint special committee of the Legislature expressed unreserved appreciation and indorsement of the plan, but were "united in the feeling that the present is not a propitious time for action in the premises."

Here appears prominently for the first time in this connection Prof. William Barton Rogers, who must always be revered for his noble virtues, as well as for being the founder of our beloved Institute. He prepared a second memorial, similar to the first, but with a most important addition, having in view the ultimate establishment of a "comprehensive polytechnic college" which should "put in practice a complete system of industrial education, supplementary to the general training of other institutions, and fitted to equip its students with every scientific and technical principle applicable to the leading industrial pursuits of the age." This also was acted upon unfavorably

by the Legislature.

In the belief that this second failure was due partly to the incompleteness or vagueness of the last idea in the plan, and encouraged by the earnest and increasing interest "generally felt for the establishment of an institution devoted to industrial science and education," a third scheme was presented by Professor Rogers, as chairman of a committee. The "Objects and Plan of an Institute of Technology, including a Society of Arts, a Museum of Arts, and a School of Industrial Science" rapidly grew into public favor. Interest was increased among those whose ideas were considered important by means of pamphlets. About two months later, in January, 1861, a meeting was called for the purpose of effecting a preliminary organization of the Institute. Notices were sent to those who had previously received reports. Those people were supposed to be familiar with the plan submitted to them, and to be able to present deliberate and weighty opinions, suggestions, or criticisms. quence, a form of association was adopted and a committee appointed. with Professor Rogers at its head, to act generally for the association until the incorporation of the Institute should be effected and the desired land grant secured. This committee was further empowered to frame a constitution and by-laws for the government of the various departments of the Institute.

So far we have seen the more limited idea of the Institute develop from the broad plan first submitted to the Legislature. Again Professor Rogers drafted a memorial. Aided by petitions in its favor from the Boston Society of Natural History, the American Academy of Arts and Sciences, the Boston Board of Trade, and other interested organizations, and supported by the influence of men in every part of the State, distinguished in business, art, science, culture and education, this memorial accomplished its main object. The Massachusetts Institute of Technology was incorporated in March, 1861, and one square of land in the Back Bay was forever donated to the Institute and the Society of Natural History. One condition is still attached to this grant, namely, that not more than one-third of the square shall be covered with buildings; at present this limit is practically reached.

The triple functions of the Institute are to-day so overshadowed by the School of Industrial Science that but few people are aware of the existence of a Society of Arts or of the plan for a Museum of Arts.

Through the untiring energy of Professor Rogers, who was soon after made President of his own creation, the public liberality was directed toward the new Institute. Through him the people became acquainted with the detailed purposes of this apparently complicated yet simple structure. The Society of Arts, as outlined by him, "would form itself into a department of investigation and publication, intended to promote research in connection with industrial science by the exhibition at the meetings of the Society of new mechanical inventions, products and processes; by written and oral communications and discussions, as well as by more elaborate treatises on special subjects of inquiry; and by the preparation and publication, statedly, of reports exhibiting the condition of the various departments of industry, the progress of practical discovery in each, and the bearings of the scientific and other questions which are found to be associated with their advancement." The Museum of Arts has never been made a separate function of the Institute because the immensely valuable collections owned by Technology seem to serve a more useful purpose distributed among the various courses of the School of Iudustrial Science.

In 1862 the operation of the Institute was begun by the formation of the Society of Arts. The importance of this branch of the Institute cannot be over-estimated. Since April of that year semimonthly meetings have been held regularly; they have generally been open to any one, and at them have been publicly exhibited for the first time such noted inventions as the Bell telephone, and various electrical appliances.

From 1861 to 1864 every effort was made to overcome the numerous financial straits encountered. Governor John A. Andrew materially aided these attempts, which were doubly difficult on account of "the peculiar circumstances" of the time. Even now the Institute is supported almost entirely by its tuition fees, its endowment being wholly inadequate to insure against disaster, to provide for the future, or to secure the apparatus and improvements necessary in every department to keep abreast of the times. It does seem as though an institution of such acknowledged standing and doing the good in the community that Technology does, must receive the bounty of every one interested in the welfare and progress of the country; but such, evidently, is not the case. Were it not for a generous Corporation (which has stood by us in times of distress), a wise and economical Faculty, and a prudent Executive, Tech. could not possibly occupy her present proud position. The Annual Report of the President and Treasurer shows only too plainly the pressing needs of Technology.

Through the earnest co-operation of the Society of Arts, the School of Industrial Science made a small beginning in February, 1865. A few rooms were hired in the Mercantile Building, on Summer Street, which was later destroyed by the great fire. The nucleus of what now requires six large buildings and one hundred and twenty instructors, was arranged there. One can scarcely refrain from smiling as thought returns to that little laboratory, of which almost the sole apparatus was a dozen test-tubes and a glass retort; think, too, of the twenty-seven students there, nearly all poorly prepared, and then consider the eleven hundred magnificent manly fellows who are, twenty-seven years later, the pride and support of Technology!

The next fall, part of the new Rogers' Building was occupied. Mrs. Stinson, the first woman to be connected with the Institute, took charge of the Chemical Supply Room. From the remarks of the students at that time one might suppose that things would go hard for a woman among those unfeeling young scientists, but that large, motherly heart could not long go unappreciated anywhere, and now many a graduate looks back with moist eyes to her kindly assistance and sympathetic words. She loves the whole Institute, remembers the very desks used by prominent alumni, and, if given an attentive listener, will chat for hours completely lost in memories of the past. It is such characters as Professor Rogers, Professor Atkinson and Mrs. Stinson that make this life worth the living.

Gladly would we follow the Institute from its infancy to the present day; watch with pride its expansion until two, three, and at last six buildings are outgrown; sympathize with it in trouble, (for even Tech. has its share); notice the increasing good it performs and rejoice with it in the proud eminence now attained. But we have digressed too much from the history first contemplated and our space is nearly used up. The life of Technology is, perhaps, best

studied from its Presidents, three men of whom the whole world may well be proud. They, together with our learned and able Professors, would make any school a grand success.

We cannot but pause a moment to admire the wonderful foresight and broad knowledge displayed by Professor Rogers in his outline of the Institute. From foreign institutions he adopted few From the outset the instruction in lecture-room and laboratory, in the recitation-room and in the field, "has been notably that of an institution that leads rather than follows in the progress of education." Our Institute is almost exclusively the product of that one "master-mind." How can we sufficiently appreciate him except by noticing that to-day his plan remains intact! Mathematics. physics and chemistry formed the basis of every engineering course. and what firmer one could be devised? Perhaps in no more remarkable way is his wonderful grasp of the situation indicated than by the establishment of a General Course of Collegiate Studies which appeared in his original outline. He evidently perceived the broadening influence that must be exerted upon an atmosphere of science by the mere "co-existence" of a collegiate course. One cannot but regard with satisfaction the continuance and constant improvement of this important, but comparatively little known to the outside world, department of the Institute. It is mainly this Course which distinguishes Technology from the multitudinous scientific colleges sprinkled over the United States. To General Walker also, for his untiring efforts to broaden the more purely technical courses, we should be profoundly grateful. Indeed, in view of the varied and broad courses of instruction offered, the Institute has been well styled a "Technological University."





# Class of Dinety-Three.

### Yell.

Ha! Ha! Ha! Biz! Boom! Bah! M. I. T.! Ninety-Three! Rah! Rah! Rah!

Colors: Orange and Black.

#### OFFICERS.

President.

ALBERT FARWELL BEMIS.

Vice-President.

Secretary-Treasurer.

FREDERICK NATHAN DILLON.

WILLIAM GABRIEL HOUCK.

Executive Committee.

HERBERT WATSON ALDEN.

FREDERIC HAROLD FAY.

MARVIN GORHAM.

## Minety=Three's Conceit.

SSURING the gentleman who is to officiate in Huntington Hall at a sadly near and swiftly nearing date that the theme is broad enough and brilliant enough for two, and that the treatise here to be given will, moreover, be merely "elementary," we start bravely out to chronicle for the last time in the pages of our college annual the deeds and doings of our class.

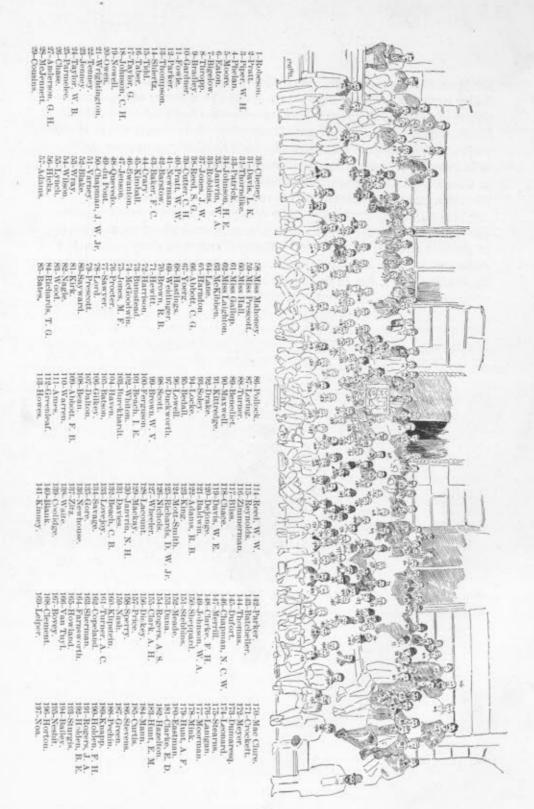
Yon stranger who shall enter Rogers with mind of that peculiar temper described by Byron, and, standing in the corridor, shall cast a searching glance over the thronging multitude, will discern a few whose features proclaim them of a more exalted sphere than that of the careless crowd about them, who walk there lost, and yet conspicuous, the grains of gold in all that mass of quartz. Gravity has set its mark upon them, the iron has entered into their souls—yea, steel and even building stone and mortar—learning has perched upon their brow as if born of that inflexible resolution dominating all, the resolution which has borne them on and on expectant toward a

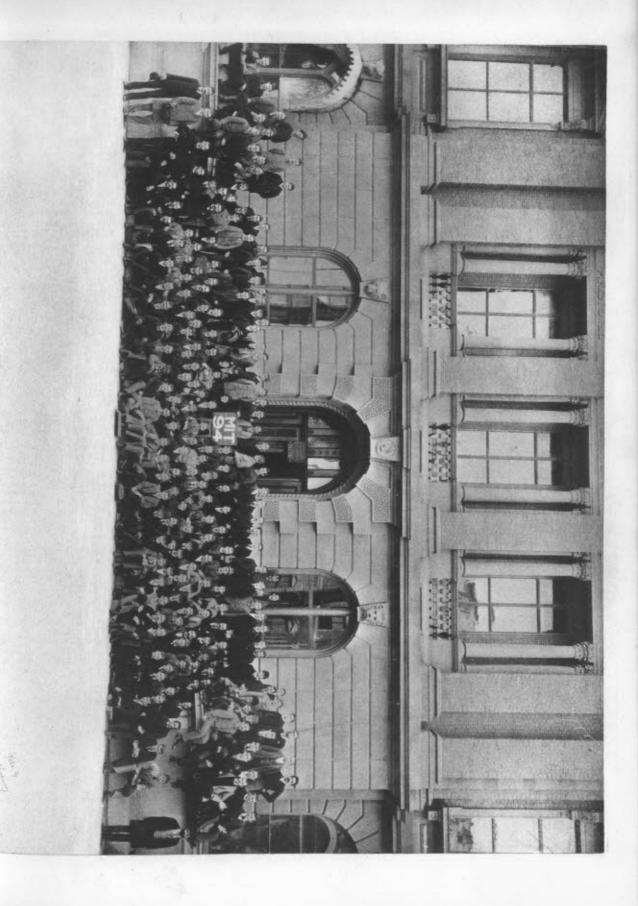
final decree of the Powers which is to be their just reward. smile not at earnestness; few we are indeed, we, the Seniors, a mere handful if you like, yet for four long years this has been our world and we have made in its history no insignificant part, but a portion brilliant and important. Former Techniques have narrated special features, pictured our athletic triumphs and reverses, touched lightly on our yachting party, the novel and successful event of our Freshman year, recorded our honorable literary achievements, told of our wonderful class dinners, and minor successes innumerable. and traditions have suffered no loss at our hands. The revered jokes of our dear Technology we have passed along in good repair. Heat is not the less hot, nor do the arms of the couple yet cease to delight the Sophomore. Time-honored saws are still with us-indeed, we have been a sharpenin' of 'em up so they now split the side or Cross the Fauncy of the under-classmen as well as, or better than before.

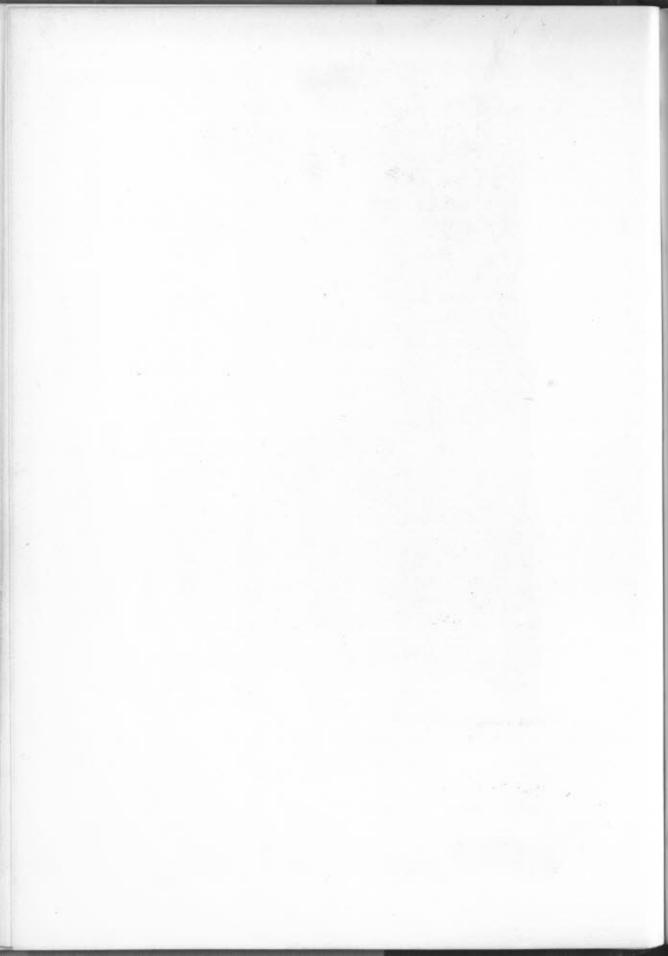
All this we have accomplished, but we have also done much Much has been said, but much remains unsaid. The curtain rises from the past on two impressive scenes. A class was seated in a hall of Walker. It was the closing lecture of a course, and the hour was nearly run. The lecturer faced and in defiant tones addressed his audience: "I am glad," said he, "that you and I are done with one another, that no longer we shall meet as teacher and No class has ever given me the trouble that you have caused, and with no class was I ever so glad to part." And in deathly silence the great body of men dispersed. Again was that class assembled, this time in Rogers. An instructor was saying parting words to his former students: "I believe you," he said, "to be the most typical college class that ever entered the halls of the Institute. The recollection of our relations will ever be among my most pleasant memories; we have understood each other, and it is with heartfelt sorrow that I part with you, my friends, the Class of Ninety-Three." And then, as the applause died away, this man who had treated us as men and laid down the precept that failures in work were due equally to the teacher and the student, who had liked to give all Honors, went out from our midst with the respect and regard of every man who had heard him.

The key-note to our character was in these two scenes; the last and best statement of our history is here. Athletic victories, literary and social triumphs will fade into the background of a general past, but the principles for which our men have labored will bear fruit forever. We rejoice in the fact that our class has stood for everything progressive, has scorned hypocrisy, responded spontaneously to kindness and interest, and promptly recognized merit and repulsed faulty methods. We are proud to count the number of representative men in our ranks, men whose influence has been for the good and for the advancement of all true Technology interests. That their places, that our places shall come to be well filled, we cannot doubt. It is Progress that we recognize, Progress for which we have labored; in whose train will come wider fields of enterprise, nobler aims and purposes, men still better fitted to work and to accomplish. A stepping-stone we have created, its recognition is our conceit, its use our satisfaction. New buildings are rising round about us, the spirit of advancement is in the air. Ninety-Three has simply done her share and must soon say farewell. Her men have begun aright; they will succeed, for, in the words of another man whom every one of us is glad to call a friend, "If not, why not?"











# Class of Ninety-Four.

### Yell.

'94 rah! Rah!
'94 rah! Rah!
Hoorah! Hoorah!
M. I. T., '94, Rah! Rah! Rah!

Colors: Gray and Blue.

#### OFFICERS.

President .- CHARLES ARTHUR MEADE.

Vice-President.
ROBERT KIMBALL SHEPPARD.

Secretary.
CHARLES WILLIAM DICKEY.

Treasurer .- RAYMOND BEACH PRICE.

Executive Committee.

FRANCIS CUSHING GREEN.

ISAAC BREWSTER HAZELTON.

THEOPHILUS CLIVE DAVIES.

## Minety=Four's Whim.

O gracious Muse, pray grant me lore Wherewith to tickle Ninety-Four, Sprinkled throughout with funny facts, With wit more sharp than "sat-on tacks." Let cauldrons boil and gruesome cats Go off anon on shadowy bats In "Murkie" hazing atmosphere That would e'en our scorchéd Chemists sear, If thus may flow enormous words, As musical as "Dickey" birds, From sticky, stubborn, author's pen,
Unlike the drawing ink we lend.
Conduct me o'er that whiskered "Meade,"
Where Sheppard stout his flocks doth feed
On Cuts and Grinds and "Price(les)s" pearls,
Where "Julius Cæsar Locke" unfurls
Ninety-Five's two captured flags
Taken on those "days of jags"
By Ninety-Four. Pray wind me up—
Whiz-z-z-z, ah! Inspiration comes:



GES ago, probably in the antediluvian period, lived a very peculiar people; but with all their strange ways, great was the respect and awe with which the neighboring tribes regarded them. Since they were governed by a body of wise men, collectively known as a "Faculty for Flunking," perhaps the reputed eccentricity of this Technologian nation was due in great measure to these exacting but just rulers. At any rate, all were abnormally hard

workers, yet those best informed say that few nations found more real enjoyment in "Life" and "Truth," or were more appreciated by the world at large.

One of their strangest customs, or, rather, lack of custom, was a complete absence of marriage. 'Tis true, history mentions a few cases where men had "wives," but we are informed also that these wives were identical with the men in every respect. Some scientists claim that traces have been found of a type of creature similar to our women. In an old manuscript recently discovered, which seems to bear the name "Technique," has been deciphered the term "Cow-Heads"; some assert that this applies to the peculiar being just mentioned, indeed, they state further that this female body was in looks much like the famed Annex Girl of old. This theory might explain the absence of marriage in this nation.

Be it understood, however, these people, upon reaching a proper age, were sent out upon original researches of all descriptions. Some few carried with them a talisman inscribed "S. B.," which they had gained through favor of the medicine men of the tribe, most of whom figured on the Faculty; but the majority were obliged, after vainly striving for the S. B., to start out unprotected, except by "spook charms." These charms were variously styled "assemblies," "dQ= hot stuff," "mules," "passes," and so on to infinity.

When these investigators had "pulled enough rocks," this generally being done by obtaining a "lucrative position" just after the Exams. (to be hereinafter described), they were at liberty to marry. Some favored ones, even during their minority, looked ahead to that happy state, visiting neighboring Amazonian tribes, of which Wellesley and Lasell were the most important, in order to get a "cinch" on future brides.

Not marrying among themselves and many investigators leaving each year, of course the depleted ranks had to be filled up. This was done by selecting yearly the best youths the world could offer, organizing them into a "Class," and training them to replace the departed members.

Such, in brief, was the nation of Technologians. Theirs was a progressive life, yet comparatively uneventful until the advent of the Class of '94. This crowd of greenlings was so temptingly innocent that the "Wise Fool," or Sophomore stage, tried to play horse with them. The result was a surprise to all, however, as the play resulted only 8 to 4, and, in the scrimmage that followed, '94 carried off the acorn. Taking this warning, the Class of '94, styled also Freshmen at that time, prepared for civil war. Meanwhile, class feeling waxed warm, the climax being reached when '93 and '94 chanced one day to meet in Winslow's Temple. But then the Freshman army was thoroughly organized, outflanking the Sophs at every move.

Finally 93's champion, a greased pig, and his staff, composed of a rooster, a pigeon, bags of flour, torpedoes, and various other characteristic leaders of the class, were taken captive and both victors and vanquished retired to recuperate for the above-mentioned Exams. These were the means employed by the Faculty to see who should receive the largest number of F's, by some deemed a great distinction. At this point many became tired of trying to win the favor of the medicine men or even of endeavoring to cram up spook charms; these generally sought lucrative positions.

After their last lesson, the Sophs determined to decide their supremacy over '94 by means of a picked team. The Freshmen were to have a similar one composed of those men in the class who could pitch a round stone the crookedest, hit it with a stick the hardest, and slide on to three bags and a flat stone the handiest. The now famous '94 won a most astounding victory.

All this time the Faculty and their hired men had been scrubbing up the Freshmen's brains till now most of them shone like the "handle of the big front door." Those who did not yet feel able to run the earth remained another year. Strangely enough they forced the new class called '95 to go through their own experiences. Somehow '94 had acquired the knack of selecting good teams, for their men kicked, ran and bucked ( $\frac{34}{0} = \inf (1) = \inf (1)$ 

During these two years '94 had proved itself an honor to the nation; it did much to change the frequent civil wars into friendly contests which should benefit the entire tribe, and it endeavored to show its appreciation of the hard-working Faculty by profiting by their advice. Its members could not be expected to hide their lights under a bushel, and they didn't. For this reason we find to-day so complete a history of their life and actions. Like all human beings they erred in many ways, but their intentions seem always the best and most honorable.

At last, in the proud position so nobly gained, '94 gave up petty contests, settled itself down to scientific, literary and social pursuits. The latest chronicles of the time in our possession at present, mention another set of Exams which threatened to distinguish every man with flunks. Many were overcome by the Heat, Thermo acting as a sort of office boy, like Veitel Itzig, famous in those times as a rogue,

sharper, and bunco steerer. But owing to the strenuous efforts of an unsatisfactorily philosophic Ham(ome)lette to keep all out of mischief by overwork on things called assemblies and incidentally to bring everybody at least one flunk, a few survived. Here, unfortunately, the manuscript ends. On some great masses of "cut and grind" rock, much resembling tombstones in shape, are mysterious inscriptions, however, which seem to denote the premature death of some distinguished men of '94, who were probably called "The Board of Editors of Technique." How they met their death is still an unsolved problem, the like of which has not occurred since those days of Misapplied Mechanics.

With this——" James, turn the crank; pray, Miss Muse, let me add just a few lines more!"

Time and tide on no man wait.
That is why the Muse and Fate
Have lips firm sealed to man's request
Till time shall tell him all the rest.





# Class of Ninety-Five.

#### Cheers.

Rah! Rah! Rah! Ree! Ree! Ree! '95! '95! M. I. T.! Rah! Rah! Rah! M. I. T.! Rah! Technology! X. C. V.!

Colors: Blue and Gold.

#### OFFICERS.

President, Charles Foster Tillinghast.

Vice-President.

Secretary.

EDWARD HALEY HUXLEY.

FREDERICK WILLIAM FULLER.

Treasurer.—'THOMAS BUTLER BOOTH.

Directors.

GEORGE WELLINGTON HAYDEN,

ANDREW DANIEL FULLER,

ALBERT GEIGER, JR.

### Minety=five's Egotism.



NCE more the editors of our great annual are asking for a history of what the Class of '95 has been doing this last year. We are only too glad to respond to this call, for we feel that we have a record for the past year, of which even the Class of '95 may well be proud. The history, however, of '95 is in some ways like the history of a nation, hard to write on account of the great variety of subjects which must be treated. Ninety-five above everything else

is a well-developed class. In its ranks may be found the scholar, the energetic, all-round man, the athlete, and, last but not least, the fine social gentleman.

But I hear you ask what has the Class of '95 done of which she should be so proud? This is equivalent to asking what the men of '95 have done individually, for by the men must you judge the class.

If you are speaking of the scholar, I fear I am a poor historian, but I feel confident that if I took the trouble to go with you and search out the grinds of the Institute in the places where they most do congregate, we should find a fair proportion of '95 men. In fact I heard it rumored that there was one man in '95 who was so unfortunate as to receive six H's at a certain examination not long ago. If you are asking of the energetic, wide-awake man, your question is easily answered, for I have only to point to the way in which the class has been conducted since we entered the Institute, a year ago last autumn. It might perhaps be fairly argued that there has not been enough class spirit shown at some of the recent meetings this year. But, gentlemen, with other valuable knowledge that we have acquired this year, we have learned that to every action there is an equal and opposite reaction. This, I am sure, explains the seeming lack of interest, since of course from the above law, there must be a very great reaction from the great zeal displayed last year in class meetings. We all feel confident, however, that this reaction is but temporary.

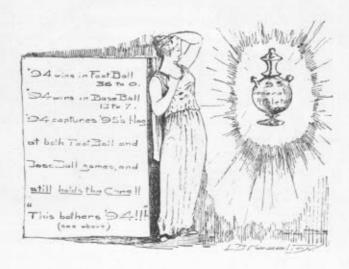
Next on our list comes the athlete; well, now you are talking! What Freshman class has ever made such a large score for itself in general athletics as '95 did last year," and where were our rivals in '94? But I will not press the subject † for I know it is not a pleasant one to the editors of Technique. Let us rather turn to football during this past autumn, and consider what a fine record has been achieved. But again you ask, what has this to do with '95, is it not a thing for which the whole Institute should be proud? Assuredly, we of '95 are doubly so, for from what class came the captain who led the team to victory on many a hard fought field? Was he from '93 or from '94, or from '96? No, he was from '95. Mr. Thomas, however, is not the only man in '95 who understands the game of football, for one man cannot win a victory from such a class as '96, and '95 won just such a victory.

Enough of athletics. Let us pass on, and see in what other fields '95 men have distinguished themselves. Let us turn to the social side, which is too much neglected here at the Institute. Again, as before, what men are at the head of the Glee Club, the Banjo Club and the Orchestra? Why, '95 men. There is only one event in the year that can be called a social event for each of the three lower classes separately, and this is the class dinner. By the showing made at these dinners we must, to a great extent, judge the strength of the social element in the class; '95 is well satisfied with the showing she made this year, there being an increase of nineteen members over last year.

<sup>\*</sup> See page 158. † See next page.

Now, gentlemen, I am afraid you will say that there is certainly one thing '95 can do, and that is, she can boast. If in my patriotism for my class, I have let my pen run away with me, I hope you will pardon me, but if we do not sing of our own glory, I am sure no one else will take the trouble.

And now a word to the members of '95. We have achieved, as we have seen, great things in the past, and have made a mark for ourselves at the Institute. Let us see that the good work goes on, let us be good scholars, good athletes, and above all good gentlemen. Let us work hard for the welfare of our *Alma Mater*, and secondarily for the Class of '95.





# Class of Dinety-Six.

### Yell.

Rackety-rix, co-ix, co-ix! Rackety-rix, co-ix, co-ix! Heigh-ro-kee, heigh-ro-kee! '96! '96! M. I. T.!

Colors: Crimson and Black.

#### OFFICERS.

President,-John A. Rockwell, Jr.

Vice-President. HENRY S. BALDWIN.

JOSEPH FRANKLIN, JR.

Treasurer .- WILLIAM H. CLIFFORD, JR.

Executive Committee.

W. P. Anderson, Ir.,

E. E. MEED, M. H. McGann.

## Minety=Sir's Vagary.



CARCELY five months have elapsed since '96 marshalled her forces in Huntington Hall to hear a certain agile individual tell fairy tales about drawing instruments, triangles and T-squares. It seems fully a year. Now, we are quite accustomed to Tech. and its ways; but how green we were those first few days, before we had learned that the Chapel was not a place of worship, and that the Bird was not an

ornithological specimen.

I shall never forget a little episode that happened on the day that the afore-mentioned individual talked to us in Huntington Hall. Later in the day I saw him in Rogers corridor looking over his mail, and I took the occasion to ask a Sophomore who he was. "Oh! the man with the brown whiskers?" asked the Soph. "That's Linus," and he went away whistling. I wanted to see about getting my instruments, so I walked up to the individual, and said in my most winning tone: "Mr. Linus, I believe you are the man who sells drawing instruments."

"Mr. Linus" didn't say much, but I noticed during the term

that Prof. Faunce seemed to have an unaccountable dislike for me, while his coadjutor, Mr. B., grinned every time he saw me.

The first occasion '96 had to distinguish herself was at the Rush. The football game we lost, owing our defeat rather to lack of time for practice and organization than to the lack of good material. In the Rush, however, the firm little phalanx which we formed around the cane made the latter unapproachable, and gave us the victory. The next morning the bulletin board in Rogers was covered with little notices that read something like this:—

#### WILL THE '96 MAN WHO TOOK MY CAP IN THE RUSH PLEASE LEAVE IT AT THE CAGE FOR

B. F. SWELDHED, '95.

But Mr. Sweldhed's missing head-gear still retains its place of honor on the '96 man's wall.

In December, the indoor meet of the Athletic Club was held. On that occasion '96 maintained the pace she had set for herself at the Rush by winning 36 points (nearly double the number scored by any other class). This is a record in which every Freshman

takes a pardonable pride.

Another occasion on which '96 showed her loyalty and enthusiasm, was that of the Republican Torchlight Parade. Some of us were Republicans, many were Democrats, and some few—very few—were Prohibitionists. But political creeds were swept away: and '96, almost to a man, did her best to swell the numbers of the Technology contingent. Class spirit asserted itself in one or two little scrimmages with the Sophomores, but both classes had the good sense to reserve the major portion of their strength for use on the persons and habiliments of the men from across the Charles. The results of this conflict may still be seen, for several of our men possess not only a red and gray gown, but a red and white one as well.

From the beginning, the Freshman Class has been made conspicuous by a series of new departures. In the first place Lieut. Hawthorn decided that the uniforms which had been considered satisfactory for previous classes were scarcely suitable to encase the martial forms of the present Corps of Cadets. Forthwith he decreed that we should adopt regimentals similar to those worn at West Point. The Sophs considered this the "most unkindest cut of all." They had counted on selling us their cast-off uniforms, and some of the more injudicious even went so far as to bank on the money they expected to realize thereby. Be it said to their credit, however, that

they heaped coals of fire on our heads by materially assisting Lieut. Hawthorn to get the battalion into working order.

The most important as well as the most significant fact in the history of '96 still remains to be recorded. We refer to the change of rule, whereby the departmental work begins with the second term of the Freshman year, instead of at the beginning of the Sophomore year. No longer will the gentle reader of the catalogue stumble upon that familiar phrase, "First year common to all courses: see page twenty so and so." But one inference can be drawn from this

change, '96 is a model class.

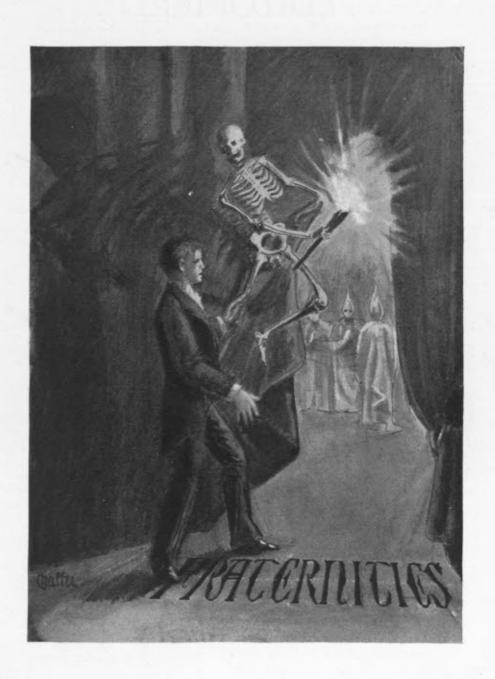
Choosing our courses was a difficult task. The amount of time that it took was large; and when we had finally decided we realized that we had merely fallen into our work without knowing anything about its value. We still find ourselves in the dark, though we are fast approaching the end of our babyhood, after which we may reasonably be expected to possess and display a minimum amount of wisdom plus a maximum amount of folly. To be able to compete with our immediate predecessors in this kind of exhibition we find that we shall require an immense amount of mental dieting. Tell us, O '95 men, the method by which you have been able to reduce the avoirdupois of your minds to—∞.

In the vista that is before us we catch glimpses of many pleasant by-paths and sunny walks, where we feel sure we shall meet experiences which will make our four years at the Institute a bright and interesting period of our lives. For we believe that having once learned

to work, success will follow.







# EDITORIAL.



IE reader will find the following pages devoted to the various fraternities and societies at Technology. They have always been an important factor in the excellence of the college annual, and in Technique they have year by year increased in importance on account of their constant extension in number and size. Surprise at the growth of societies in Technology has long since ceased. Indeed, to the acute observer, the growth has ever

been natural and expected.

There ought to be no occasion for an editorial of this nature, but so many have completely misunderstood and misrepresented Technology in the past, that, outside the Institute, comparatively little is known of the fraternities and their relation to Tech. life; consequently, a few words may not be amiss for those Technique readers not connected with the Institute. Technology has of late years offered to college fraternities a wide field for planting strong, vigorous chapters, a field that has been readily accepted in the past, and, undoubtedly, will be taken advantage of to a much greater extent in the future. Comparatively few of those dangers which are nearly always attendant on the rapid growth of societies in any college have been experienced; a fact rather remarkable when one considers the number of our students and the license allowed them. At present it is pleasing to see an evident increase of conservatism among the fraternities, most clearly manifested in the character and selection of men belonging to the various organizations. This influence upon the scientific student, a man rather inclined to radicalism before he arrives at more mature years, should be commended and fostered.

Past experience and present observation both indicate that the ground at Technology is well adapted for the maintenance of a strong and healthy fraternity life and spirit, like that of a vigorous plant in a fertile soil. The student of science has almost invariably shown fully as much adaptability to a genuine fraternity life as his brother student in the classical institution; and at Technology in particular the fraternity has fulfilled and can fulfil its mission in a greater degree than it could in many other places.

The lack of a feeling of unity among our students has been much deplored in the past. The "shoulder to shoulder" feeling, which ought to exist in the highest degree, is increasing. This is due in great measure, we think, to the increased interest in the support of chapter houses. With the interests of Technology at heart, Technique can warmly second the opinion of one of the famous college presidents of the past ten years, that the student life in the chapter house is a "distinct gain to good order, manly conduct, and sound scholarship."

The entrance of the college fraternity to the new University of Chicago has met with opposition. The chief argument against it has been that the existence of fraternities was not conducive to a broad scholarly feeling in the university. It is not for Technique to enter into argument or criticism on this matter, but simply to point out as an illustration, the fact that in Technology, while there are many exceptions, as there must be in every institution, those who are the broadest, best all-around men, those who do most in promoting the name and fame of their Alma Mater are, as a rule, members of fraternities.

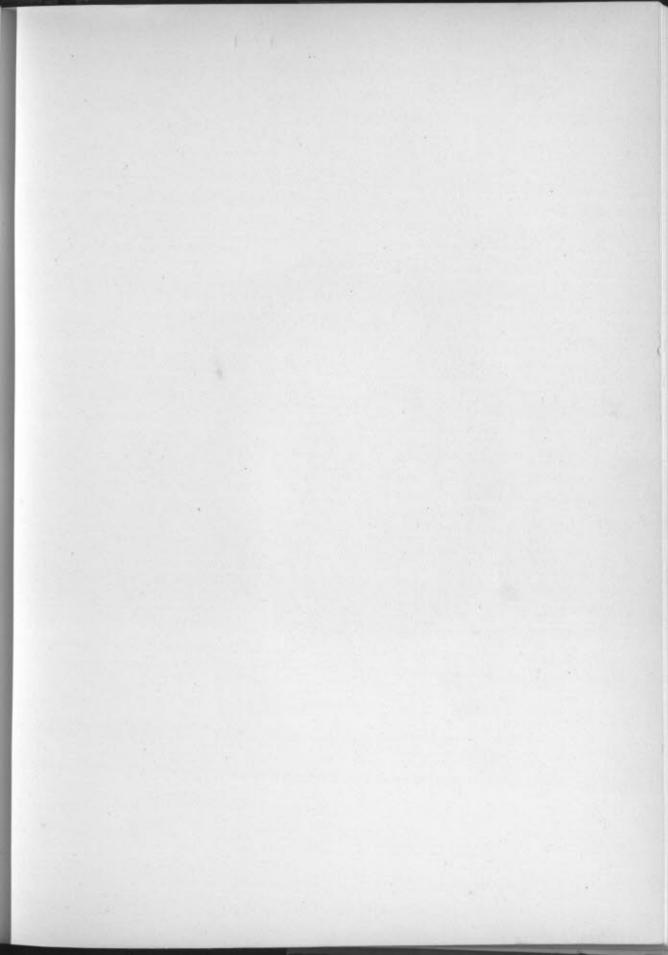
Of the local societies and the various clubs, but little can be said. They perform their functions in their own way, as truly as the fraternity does its part in the social life. The increasing interest of the men in their respective fraternities has caused attention to the local societies to flag somewhat, though the number and membership lists will show little or no diminution.

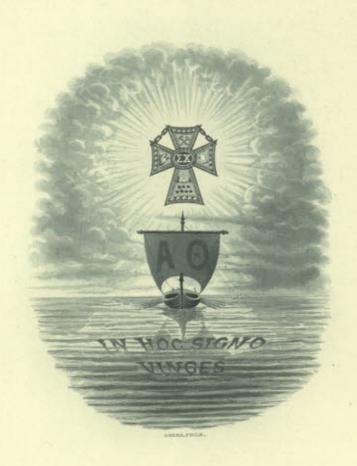
Last term "The Tech." spoke with feeling about the lack of interest in some of the professional and scientific societies. The importance of this is sufficient for us to call the attention of students to these organizations. These various clubs are, as their founders intended they should be, peculiarly helpful to the student in gaining broader instruction and information in the various branches of science, both pure and applied, by the exchange of opinions and ideas with his fellow-students. We have mentioned this last, but by no means is it least, and we trust that in the future the interest in these societies will be as warm as it has been in times past.

# Sigma (hi.

#### CHAPTER ROLL.

1857.	Γ.	Ohio Wesleyan University,									Delaware, O.
1857.	Н.	University of Mississippi,	43						2		Oxford, Miss.
1858.	Λ.	Indiana University,									Bloomington, Ind.
1859.	Ξ.	De Pauw University, .									Greencastle, Ind.
1859.	0.	Dickinson College,		4							Carlisle, Penn.
1859.	Ψ.	University of Virginia,									Charlottesville, Va.
1863.	Θ.	Pennsylvania College, .		90							Gettysburg, Penn.
1864	K.	Bucknell University, .					54				Lewisburg, Penn.
1866.	Z.	Washington and Lee Universi	ty,	V		-				-	Lexington, Va.
1866.	P.	Butler University, .			4				40		Irvington, Ind.
1867.	M.	Denison University, .				300					Granville, O.
1869.	Ω.	Northwestern University,					1		V		Evanston, Ill.
1871.	X.	Hanover College,								10	Hanover, Ind.
1872.	T.	Roanoke College, .			+						Salem, Va.
1872.	Σ. Σ.	Hampden-Sydney College,									Hampden-Sydney, Va
1873.	В.	University of Wooster,	24		2						Wooster, O.
1874.	Г. Г.	Randolph-Macon College, .		7							Ashland, Va.
1874	Δ. Δ.	Purdue University, .									Lafayette, Ind.
1876.	Z. Z	Centre College,				1.0					Danville, Ky.
1876.	I. I.	University of Alabama,							13		Tuscaloosa, Ala.
1877.	θ. θ.	University of Michigan, .									Ann Arbor, Mich.
1880.	Δ. X.	Wabash College, .			ψ.				41		Crawfordville, Md.
1882.	Z. Ω.	University of Cincinnati, .									Cincinnati, O.
1882.	Α. Γ.	Ohio State University, .									Columbus, O.
1882.	A. Z.	Beloit College,									Beloit, Wis.
1882.	Λ. Θ.	Massachusetts Institute of Tec.	hno	olog	ν,		11.47				Boston, Mass.
1883.	Α. Δ.	Stevens Institute of Technology	r.							33	Hoboken, N. J.
- M	A. E.	University of Nebraska,			7				23		Lincoln, Neb.
1883.	A. I.	Illinois Wesleyan University,		25							Bloomington, Ill.
-	Α. Δ.	Wisconsin State University,					0.4				Madison, Wis.
100	Α. Ξ.	University of Kansas, .									Lawrence, Kan.
200000000000000000000000000000000000000	A. N.	University of Texas, .							23		Austin, Tex.
	A. 0.	Tulane University,									New Orleans, La.
1886.	А. П.	Albion College,					-34				Albion, Mich.
	A. B.	University of California, .						1			Berkeley, Cal.
	A. P.	Lehigh University							4		Bethlehem, Penn.
	A. E.	University of Minnesota,									Minneapolis, Minn.
	A. T.	University of North Carolina,									Chapel Hill, N. C.
	Α. Υ.	University of Southern Califor	ni	1,				1		0	Los Angeles, Cal.
	Α, Φ.	Cornell University, .			4						Ithaca, N. Y.
	Α, Ψ,	Vanderbilt University, .									Nashville, Tenn.
	Α Ω		to.								Menlo Park, Cal.





# Sigma Chi.

Alpha Theta Chapter. Established March 22, 1882.

### MEMBERS.

EDMUND LOTHROP ANDREWS,
CHARLES ROYCE BOSS,
WILLIAM WORCESTER CUTLER,
CHARLES REAY KNAPP,
CHARLES EASTMAN LOCKWOOD,
RHODES GREENE LOCKWOOD,

CHARLES LATHAM NUTTER,
CHARLES BODWELL PAINE,
JOHN SHELLEY PECHIN,
RICHARD BRINSLEY SHERIDAN,
FRANCES MARSHALL SOUTHARD,
WALTER HERBERT VORCE.

### FRATRES IN URBE.

W. H. MERRILL, JR.,

J. A. HIGHLANDS,

F. L. PIERCE,

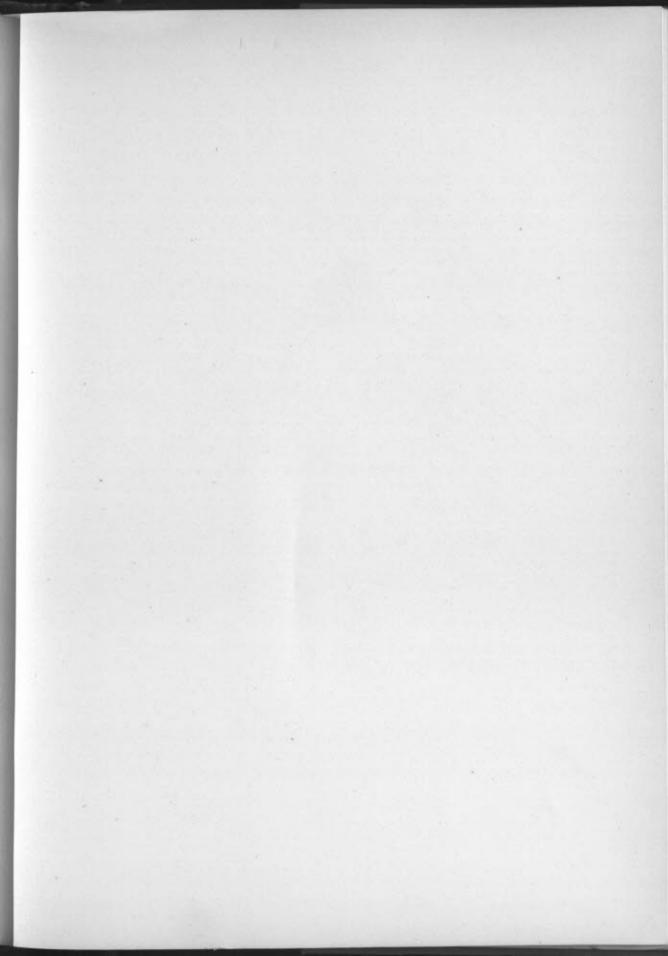
H. T. BARDWELL,

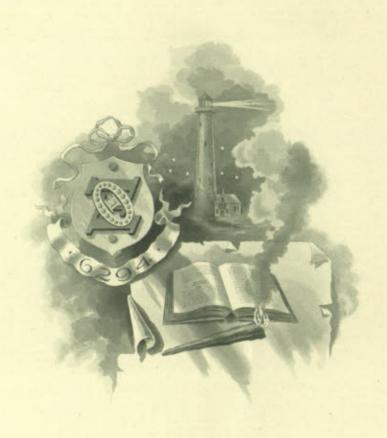
THEODORE STEBBINS.

# Theta Xi.

#### CHAPTER ROLL.

Α.	Rensselaer Polytechnic Institute,	10	10		 Troy, N. Y.
В,	Yale College,		3	1	New Haven, Conn.
Γ.	Stevens Institute of Technology, .		4	3.8	Hoboken, N. J
Δ.	Massachusetts Institute of Technology,		29		Boston, Mass.





Ducke Phila

# Theta Xi.

Delta Chapter.

#### MEMBERS.

WILLIAM POPE ANDERSON,
ALBERT FARWELL BEMIS,
JOHN CLIFFORD BROWN,
CHARLES EGMONT BUCHOLZ,
THOMAS ANDERSON BURNSIDE,
THOMAS IRVING CHAPMAN,
GEORGE CLEMENT COLBURN,
FRED MARSHALL CROSBY,
FRANKLIN WHITNEY DOLIBER,
WILLIAM COXE HASELTINE,
CLARK HOLBROOK,

FREDERICK HOPPIN HOWLAND,
RICHARD STANLEY HOWLAND,
GEORGE LAWSON,
FREDERIC WAIT LORD,
HENRY ADAMS MORSS,
EDWARD BRYANT RANDALL,
JAMES HENRY REED, JR.,
FRANK SOLON VAIL SIAS,
DAVID JEROME SPENCE,
JOHN WATSON TARBOX,
RIGBY WASON.

### FRATRES IN URBE.

ARTHUR HUMPHREYS ALLEY,
ALFRED MILLARD BLINN,
EDWARD LYMAN BROWN,
HENRY JOHN CONANT,
HARRY ELLSWORTH CLIFFORD,
NATHAN DURFEE.

FRED PARKER EMERY,
MORRIS LEIDY JOHNSON,
HERBERT STURGIS POTTER,
WILLARD FLOYD SPALDING,
TUNDLEY WILSON SPRAGUE,
WALTER BACON TROWBRIDGE,

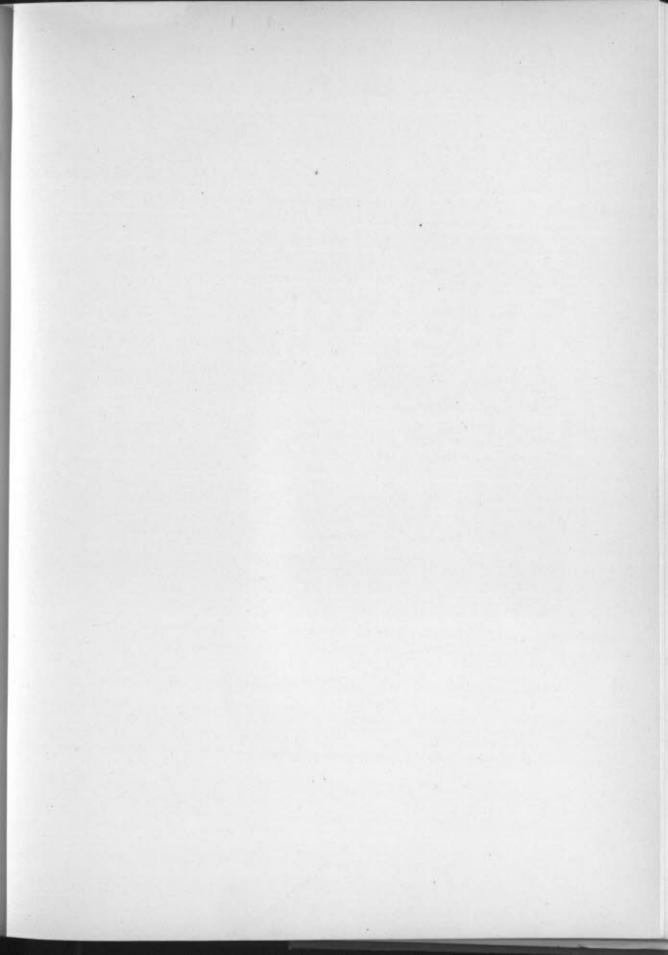
HARRY HAYWARD YOUNG.

# Phi Gamma Delta.

Founded 1848.

#### CHAPTER ROLL.

Alpha, .		*		Washington and Jefferson College,		31	- 54	- 5		1848
Epsilon, .	63			University of North Carolina, .			*			1851
Omicron, .				University of Virginia,						1853
Eta, .				Marietta College,						1855
Zeta Delta, .				Washington Lee University,						1855
Lambda, .				De Pauw University,				-		1856
Nu,				Bethel College,			1			1856
Xi, .				Pennsylvania College,				4.0		1858
Pi,				Alleghany College,						1860
Tau, .	12			Hanover College,						1864
Upsilon, .				College of the City of New York, .					-	1865
Psi,				Wabash College,						1866
Omega, .				Columbia College,						1866
Alpha Delta,				Illinois Wesleyan University, .						1866
Beta Delta, .				Hampden-Sidney College,						1866
Gamma Delta,	100		2.5	Knox College,				-	1000	1867
Epsilon Delta,		1		Muhlenburg College,					-	1867
Theta Delta,				Ohio Wesleyan University, .						1869
Delta Delta,				Roanoke College,		6				1870
Zeta,				Indiana State University, .		ė.,				1871
Nu Delta, .	-			Yale University,						1875
Omicron Delta,				Ohio State University,					- 15	1878
Beta,	1 14		*	University of Pennsylvania, .			-	-		1881
Rho Delta,				Wooster University,					•	1882
Delta,			*.	Bucknell University,						1882
Delta Xi.				University of California,		÷.,				1882
Pi Delta, .				University of Kansas,						1882
Sigma Delta,				Lafayette College,		*				1883
			*	Wittenberg College,			*	53		1884
Sigma,										
Alpha Phi,	*		*	University of Michigan,			*			1885
Lambda Delta,				Denison University,		*	1.0			1885
Zeta Phi,				Wm. Jewell College			*			1886
Beta Chi, .				Lehigh University,		*				1887
Theta Psi, .	1		*	Colgate University,	9		*			1887
Gamma Phi, .				Pennsylvania State College, .					*	1888
Kappa Nu,			*	Cornell University,						1888
Iota Mu,		9.7		Massachusetts Institute of Technology,		*				1889
Rho Chi, .	100		-	Richmond College,				100		1889
Mu Sigma, .		200		University of Minnesota,		je .			0.40	1890
Kappa Tau,	1			University of Tennessee,						1890
Beta Mu, .				Johns Hopkins University, .						1891
Pi Iota, .				Worcester Polytechnic Institute, .				-		1891
Nu Epsilon, .				University of City of New York,		6	- 1		9	1892
Lambda Sigma,	1.00			Leland Stanford Ir. University,						1802





Dreka, Phila

# Phi Gamma Delta.

Iota Mu Chapter. Established March 25, 1889.

### MEMBERS.

HERBERT ARMSTRONG,

EDWIN ALLEN BROWN,

SEWALL CABOT,

WILLIAM BEMENT CLAFLIN,

HAROLD GERARD FITTS,

FRANCIS GREENE.

PRESCOTT ANDREWS HOPKINS.

HARRY NELSON LATEY.

EDWARD LEBER,

HEIICHIRO MAKI,

CHARLES SAUNDERSON NEWHALL,

HARRY MILO PHILLIPS,

JAMES RAMSEY SPEER,

RUSSEL STURGIS, 2D.,

FREDERICK CHARLES SUTTER,

HERBERT LEAVITT WARDNER.

CHARLES FREDENBERG WRAY.

#### FRATRES IN URBE.

H. P. Bellows,

G. H. COFFIN,

W. N. COTTRELL,

C. E. DOBBIN,

C. F. LEE.

S. S. MARQUIS,

E. E. PROPER,

C. STEVENSON,

W. P. HUMPHREYS, JR.,

V. M. CUSHMAN,

C. H. LINCOLN,

G. W. SHAEFER.

# Delta Tau Delta.

#### CHAPTER ROLL.

### DIVISION OF THE EAST.

A.	Alleghany College, .										Meadville, Fenn.
Г.	Washington and Jefferson	Colle	ge,				*		*		Washington, Penn.
Θ.	Bethany College, .										Bethany, W. Va.
N.	Lafayette College, .		20						4		Easton, Penn.
P.	Stevens Institute of Techno			9							Hoboken, N. J.
T.	Franklin and Marshall Co	Mega			4						Lancaster, Penn.
Y.	Rensselaer Polytechnic Ins	titut	e,			-					Troy, N. Y.
B.A.	Lehigh University, .										Bethlehem, Penn.
B.N.		Techi	nolo	gr,				*			Boston, Mass.
B.M.	Tufts College										College Hill, Mass.
Β.Σ.	Boston University, .							*		*	Boston, Mass.
B.0.	Cornell University, .										Ithaca, N. Y.
	D	IVIS	NOIS	N O	F	гн	EN	OR	тн	2	
$\Delta$ .	University of Michigan,										Ann Arbor, Mich.
E.	Albion College,										Albion, Mich.
K.	Hillsdale College, .										Hillsdale, Mich.
Ι.	Michigan Agricultural Co.	Heee					20				Agricultural College, Mich.
M.	Ohio Wesleyan University.					20				-	Delaware, Ohio.
ψ.	Wooster University, .								14		Wooster, Ohio.
X.	Kenyon College, .							1		1	Gambier, Ohio.
Н.			2						3		Akron, Ohio.
Z.											Cleveland, Ohio.
B.	Ohio University, .						,				Athens, Ohio.
φ.	Hanover College, .										Hanover, Ohio.
B.A.											Bloomington, Ind.
B.B.											Greencastle, Ind.
B.Z.	Butler University, .		2								Irvington, Ind.
		DIV	ISIC	IN	OF	TH	IF V	WE	ST		
100			1010	,,,	01		-		011		Iowa City, Iowa.
0.	1					*					Indianola, Iowa
Ξ.		4							15		Ames, Iowa.
Ω.		- 4				*:		*			Boulder, Col.
B.K.							*				Minneapolis, Minn.
B.H.				đ.,				0			Madison, Wis.
В.Г.	University of Wisconsin,										Matuson, Wis.
	ı	DIVI	SIO	N (	OF	TH	E S	OL	JTH	١.	
Δ.	Vanderbilt University,					*					Nashville, Tenn.
Π.	University of Mississippi,										Oxford, Miss.
$B,\Delta$ .	University of Georgia,	3						1		-	Athens, Ga.
E, B,	Emory College, .		*				200		25		Oxford, Ga.
В.Ө.	University of the South,					-					Sewanee, Tenn.
B.E.	Tulane University, .				1		4				New Orleans, La.
B.I.	University of Virginia,	0.0		10							Charlotteville, Va.

# Delta Tau Delta.

Beta Nu Chapter. Established 1889.

### MEMBERS.

HENRY RENSSELAER BATCHELLER, RITTENHOUSE RANDOLPH MOORE, JOHN LOUIS NEWELL, GEORGE ARNOLD ROCKWELL,

FREDERICK POND SIMONDS.

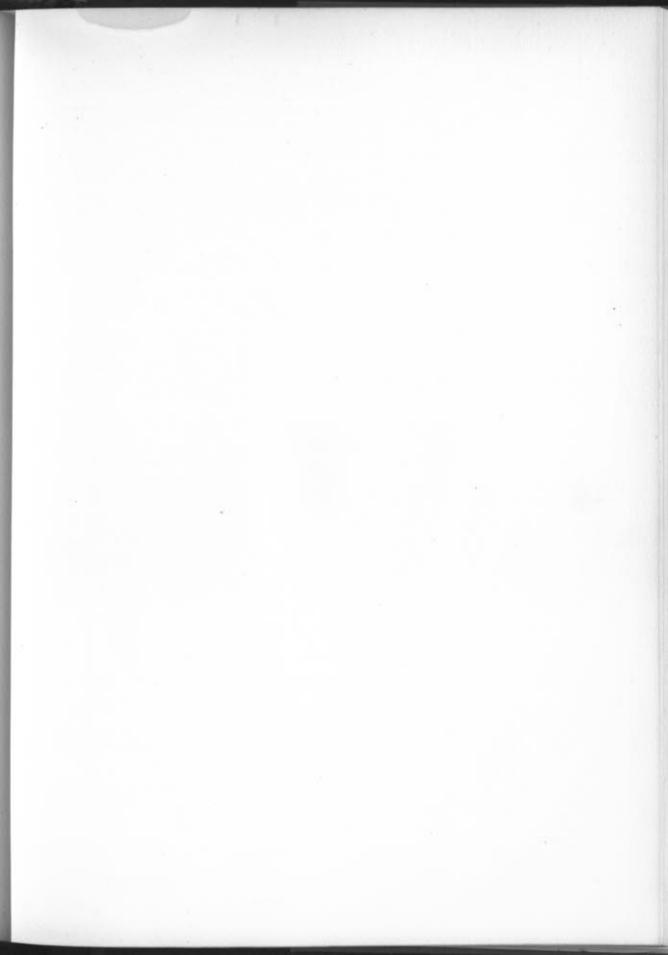
## FRATRES IN URBE.

GEORGE WILLIAM BRYDEN, LYMAN A. FORD, ANDREW NICKERSON WINSLOW, JEREMIAH CAMPBELL, CLIFFORD MOLINEAUX TYLER, HENRY B. PENNELL.

# Delta Psi.

#### CHAPTER ROLL.

	Columbia College, .								New York City.
Δ.	University of Pennsylvania	,							Philadelphia, Pa.
E.	Trinity College, .								Hartford, Conn.
I.	University of Rochester,								Rochester, N. Y.
Λ.	Williams College, .						1		Williamstown, Mass
Φ.	University of Mississippi,								Oxford, Miss.
Υ.	University of Virginia,							23	Charlotteville, Va.
Σ.	Sheffield Scientific School,		e.						New Haven, Conn.
T.	Massachusetts Institute of 2	echi	nolog	ev.	10	×			Boston, Mass.





# Delta Psi.

Tau Chapter.

### MEMBERS.

WILLIAM AMES,
WILLIAM JENNINGS BATCHELDER,
DANIEL MOORE BATES,
ROY HAMILTON BEATTIE,
SIDNEY ALFRED BEAN,
CHARLES WILLARD BIGELOW,
EDWARD DUTTON CLARKE,
THOMAS CURTIS CLARKE, JR.,
HENRY MIDDLEBROOK CRANE,
GEORGE KNIGHT DEARBORN,
FRANCIS WRIGHT FABYAN,
CHARLES HAMMOND GIBSON,

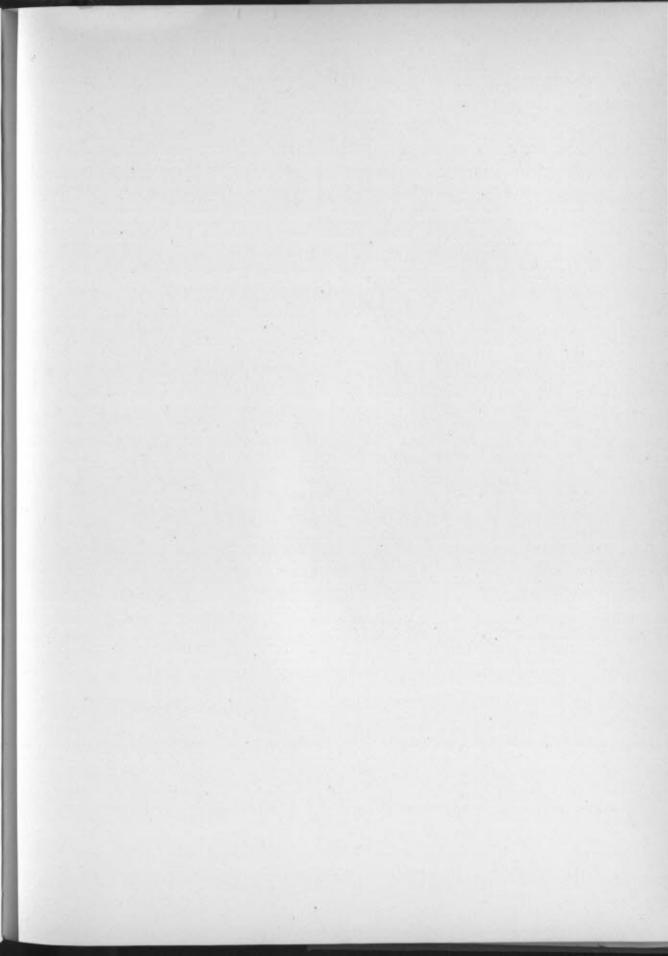
MARVINE GORHAM,
FRANCIS CUSHING GREENE,
LEWIS STONE GREENLEAF,
BEN EDWIN HOLDEN,
FRANK HOWELL HOLDEN,
JAMES BARNES HUMPHREYS,
MALCOLM HOBART MCGANN,
WILLIAM POWELL ROBINS,
JOHN ARTHUR ROGERS,
ANDREW LE BARON RUSSEL,
JOHN CONYNGHAM STEVENS,
FREDERICK TALLMADGE TOWNE,

# (hi Phi.

Founded 1824, at Princeton, N. J.

#### CHAPTER ROLL

Α.	University of Virginia, .											Charlottesville, Va.
В.	Massachusetts Institute of T	echno	legy,							4		Boston, Mass.
r.	Emory College,				2.5				÷			Oxford, Ga.
Δ,	Rutgers College,	4								,		New Brunswick, N. J.
E.	Hampden-Sidney College, .								Ŕ.			Hampden-Sidney, Va.
Z.	Franklin and Marshall Coli	ege,		2				V		1		Lancaster, Pa.
H.	University of Georgia, .											Athens, Ga.
θ.	Rensselaer Polytechnic Instit	tute.								V.		Troy, N. Y.
I.	Ohio State University, .						71		4			Columbus, Ohio.
К.	Brown University, .											Providence, R. I.
Δ.	University of California, .											Berkeley, Cal.
М.	Stevens Institute of Technology	937,				*:						Hoboken, N. J.
N.	University of Texas, .						8		16			Austin, Tex.
Ξ.	Cornell University, .			6				+>		3		Ithaca, N. Y.
0.	Sheffield Scientific School Yo	ile Co	llege				v		4			New Haven, Conn.
П.	Vanderbilt University,	-										Nashville, Tenn.
Ρ.	Lafayette College,		Ų.	- 5							Ġ.	Easton, Pa.
Σ.	Wofford College, .											Spartanburg, S. C.
Φ.	Amherst College,		4									Amherst, Mass.
X.	Ohio Wesleyan University.											Delaware, O.
ψ.	Lehigh University, .											So. Bethlehem, Pa.
Ω,	Dickinson College, .	85								5		Carlisle, Pa.
	1	LU	M	II	C I	AF	P	ſΕ	RS			
AL	ерн,											. Baltimore, Md.
BA	TH,										34	New York City.
-												Washington D C





Dreko Phila

## (hi Phi.

Beta Chapter, Established 1890. \*

### MEMBERS.

SAMUEL HUGH BROCKUNIER,
WILLIAM E. DAVIS,
ELWYN WILFRED STEBBINS,
CHARLES WILLIAM DICKEY,
HARRY ALEXANDER BALDWIN,
WALTER DANFORTH BLISS,
LESLIE DANA,
AMASA WALKER,
LUTHER ROBERTS NASH,
DUANE LEROI BLISS,

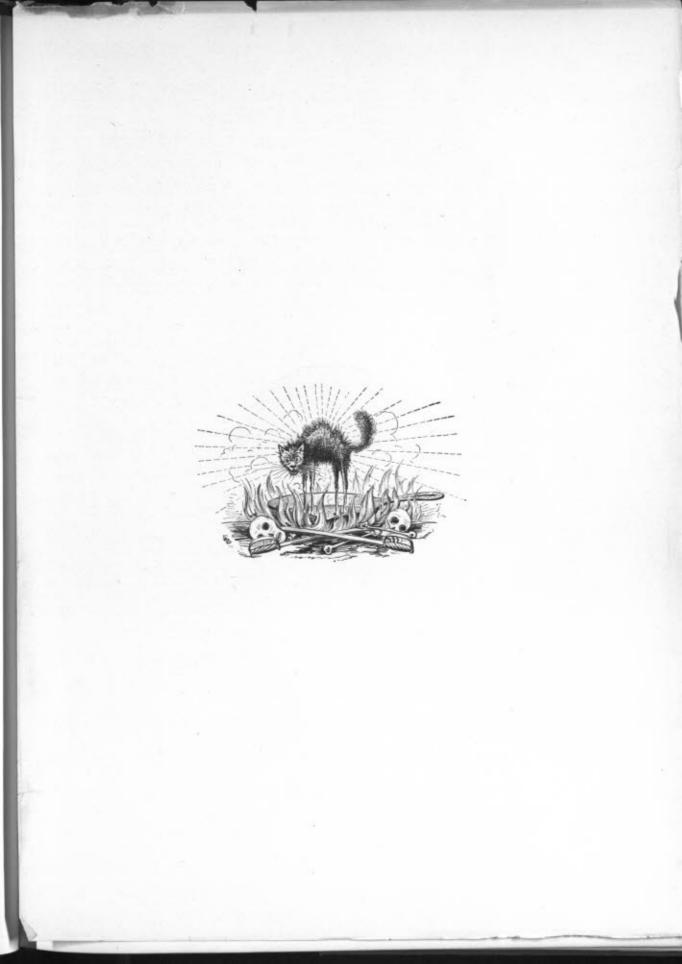
HERRY MORGAN APPLETON,
HARRY SARGENT GILMAN,
HERBERT JEREMIAH WATSON,
ERNEST KARL KLIPSTEIN,
HERBERT EUGENE DAVIS,
BENJAMIN HALSTED SHEPARD,
JOSEPH FRANKLIN, JR.,
CHARLES PERKINS MOAT,
HARRY GEORGE FISK,
ARTHUR PERLEY UNDERHILL.

<sup>\*</sup> The Tau Chapter of the Chi Phi fraternity was established at the Massachusetts Institute of Technology in 1873, and withdrawn in 1878.

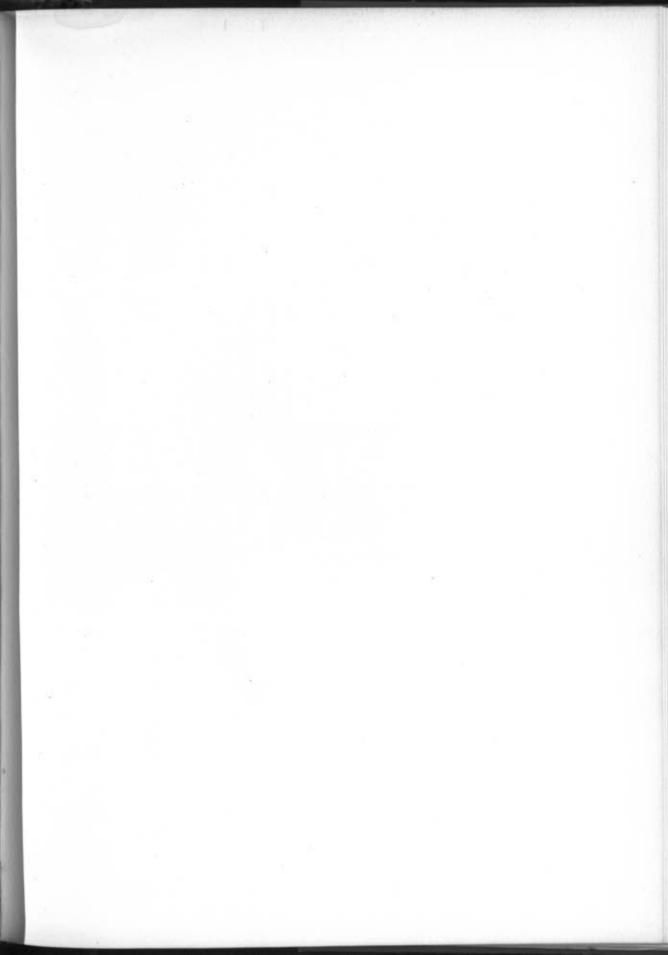
# Delta Kappa Epsilon.

#### CHAPTER ROLL.

Phi, .		$\tilde{\rho}(t)$		$\mathfrak{F}$		Yale University,					1844
Theta, .						Bowdoin College,					1844
Xi, .				9.5		Colby University,			¥		1845
Sigma, .			4			Amherst College,		ý.			1846
Psi, .						University of Alabama,			v		1647
Gamma,	1					Vanderbilt University,					1847
Upsilon, .		25				Brown University,			7		1850
Chi, .			្ន		10	University of Mississippi,		į.		-	1850
Beta, .				Ç		University of North Carolina, .	2				1851
Eta, .	2		ij		-	University of Virginia,					1852
Kappa, .						Miami University,	0				1852
Lambda,			7			Kenyon College,					1852
Pi,						Dartmouth College,					1853
Iota, .						Central University of Kentucky,		0			1854
Alpha Alpha,						Middlebury College,					1854
Omicron,						University of Michigan,					1855
Epsilon, .						Williams College,					1855
Rho, .			- 4			Lafayette College,					1855
Tau.						Hamilton College,					1856
Mu,						Colgate University,					1856
Nu.						College of the City of New York, .					1856
Beta Phi,			٠,		-	University of Rochester,		,			1856
Phi Chi, .		4				Rutgers College,	4.5				1861
Psi Phi,	62				-	De Pauro University,		v		7.4	1866
Gamma Phi,		22		32		Wesleyan University,	*11				1867
Psi Omega,	120		12			Rensselaer Polytechnic,				7.00	1867
Beta Chi, .		241		0.00		Adelbert College,			30		1868
Delta Chi,	813		5			Cornell University,		10			1870
Phi Ganima.		-				Syracuse University,	2.7				1871
Gamma Beta,			6			Columbia College,		4			1874
Theta Zeta,		0.0		10		University of California,					1876
Alpha Chi,	Ģ.		32		2	Trinity College,		2		07	1879
Phi Epsilon,	4					University of Minnesota,	23		2		1889
Sigma Tau.		āT.				Massachusetts Institute of Technology,		Ų.		100	1890













CONTRACTOR STATES

# Delta Kappa Epsilon.

Sigma Tau Chapter. Established 1890.

### FRATRES IN FACULTATE.

FRANCIS AMASA WALKER, ALFRED E. BURTON, CHARLES H. LEVERMORE.

### MEMBERS.

GARDNER ABBOTT,
HERBERT WATSON ALDEN,
MINARD TOWNSEND BARBOUR,
WILLIAM EARNEST BARBOUR,
EDWARD DRINAN BARRY,
EDMUND ENOS BLAKE,
THOMAS BUTLER BOOTH,
WILLIAM HOWARD BOVEY,
THOMAS THAYER BRACKETT,
ARTHUR AUSTIN CLEMENT,
WINTHROP COOLIDGE,
HENRY FILLMORE COPELAND,
THEOPHILUS CLIVE DAVIES,

LAURENCE BELMONT DIXON,
ARTHUR JAY FARNSWORTH,
ARTHUR GEORGE FARWELL,
ROBERT DOUGLASS FLOOD,
ARTHUR EDWIN FOWLE,
KARL SPRINGER HARBAUGH,
EDWARD LAURENCE HURD,
ALLEN WINCHESTER JACKSON,
GEORGE EARNEST MERRILL,
ROBERT KIMBALL SHEPPARD,
JAMES SWETT SMYSER,
AUSTIN SPERRY,
EDWARD AUSTIN TUCKER,

RALPH SPELMAN WHITING.

#### IN COLLEGIO.

THOMAS PELHAM CURTIS.

### IN URBE.

SEVERANCE BURRAGE, GARY NATHAN CALKINS, GEORGE VINCENT WENDELL, WILLIAM STUART FORBES, JAMES SWAN, LEONARD METCALF,

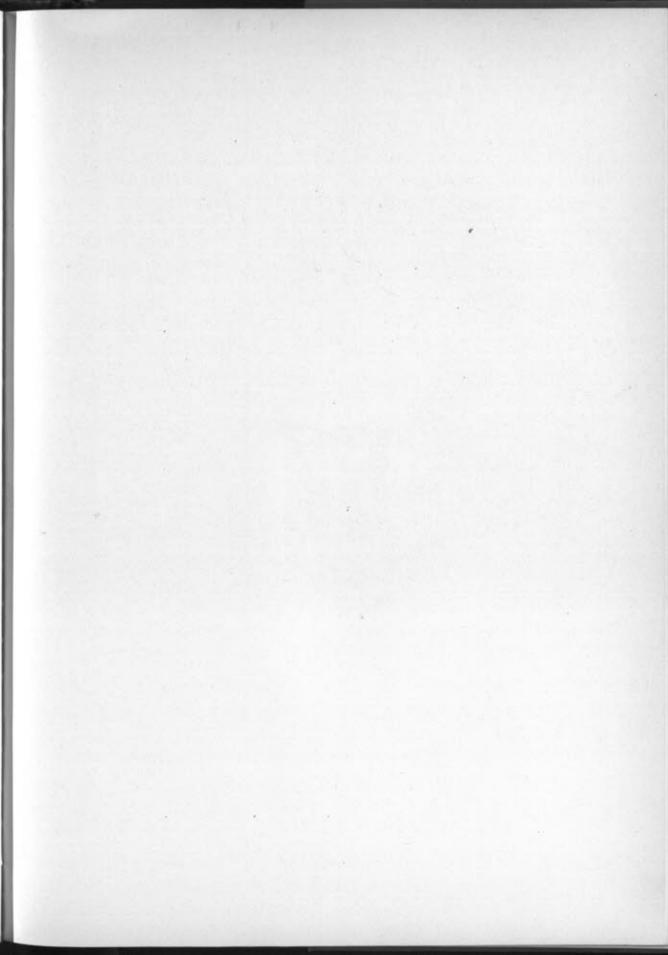
FREDERIC CHAMBERS BLANCHARD,

# Della Upsilon.

Founded at Williams College, 1834.

#### CHAPTER ROLL.

1834.								Williams,	٠		¥5		٠	- 7	Williamstown, Mass.
1838.				452				. Union, .		75				0	Schenectady, N. Y.
1847.								Hamilton,					٠		Clinton, N. Y.
1847.				2				. Amherst, .				٠			Amherst, Mass.
1847.			1				-	Adelbert,	$\overline{\mathcal{L}}$				٠		Cleveland, Ohio.
1852.				28				. Colby, .				4			Waterville, Me.
1852.	3				2			Rochester,					Ġ.		Rochester, N. Y.
1856.				0.0				. Middlebury,				4			Middlebury, Vt.
1858.			.5				4	Rutgers,	15		1.6		4		New Brunswick, N. J
1860.				2				. Brown, .		1					Providence, R. I.
1865.								Colgate,							Hamilton, N. Y.
1865.								, New York,							New York, N. Y.
1869.								Cornell,			1				Ithaca, N. Y.
1870.				180				. Marietta, .				57			Marietta, Ohio.
1873.					-			Syracuse,							Syracuse, N. Y.
1876.						-		. Michigan, .							Ann Arbor, Mich.
188o.								Northwestern,							Evanston, Ill.
1880.						0.00		. Harvard, .		1					Cambridge, Mass.
1885.					5.			Wisconsin,	,						Madison, Wis.
1885.								. Lafayette, .		٠,					Easton, Penn.
1885.								Columbia,							New York, N.Y.
1885.		¥		14				. Lehigh, .		1.5					Bethlehem, Penn.
1886.					200			Tufts,			. 1		(3)		College Hill, Mass.
1887.						-		. De Pauro, .							Greencastle, Ind.
1888.					-			Pennsylvania,			*		2		Philadelphia, Penn.
1890.		v						. Minnesota, .		18					Minneapolis, Minn.
1891.							9	Technology,			40				Boston, Mass.
1802.								. Bowdoin, .							Brunswick, Me.





( thymightest )

# Delta Upsilon.

Chapter Founded 1891.

### MEMBERS.

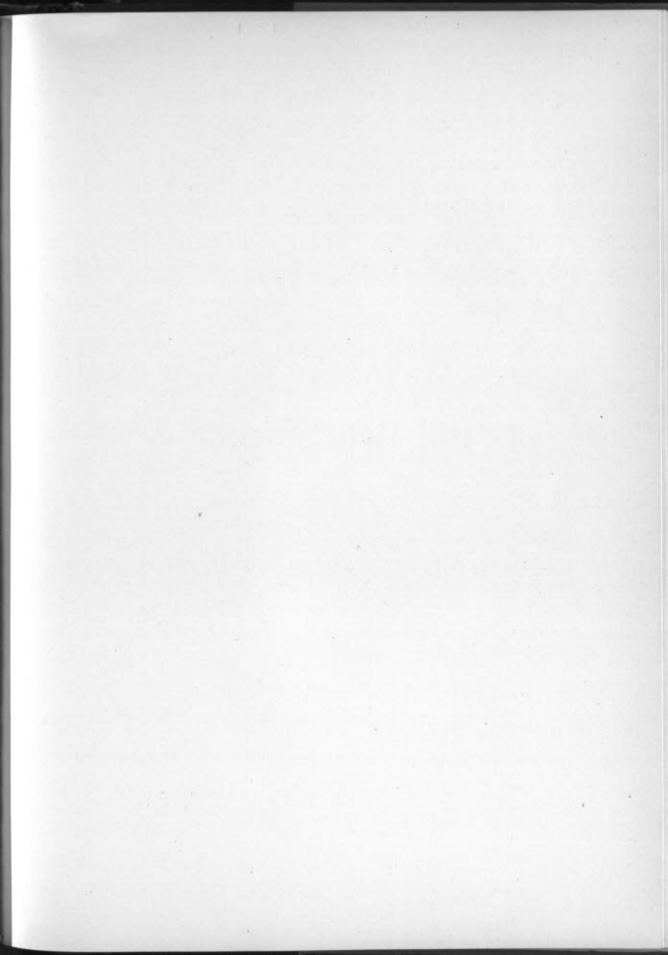
CHARLES VERNON ALLEN,
HARRY REVBURN BATES,
DUDLEY CHASE CHAFFEE,
HARRY LINCOLN CLAPP,
JOSEPH WARD CLARY,
FREDERICK EDWARD COX,
HORACE ALLEN CRARY,
CHARLES WARREN HAPGOOD,
HENRY ATKINSON HOLDREDGE,
WILLIAM GABRIEL HOUCK,
WILLIAM SPENSER HUTCHINSON,
ARTHUR HUGH JAMESON,
WILLIS TAYLOR KNOWLTON,
MAURICE LE BOSQUET,

JOHN WOOD LOGAN,
BENJAMIN MERWIN MITCHELL,
WALTER ELBRIDGE PIPER,
RICHARD WARREN PROCTOR,
THOMAS GLEASON RICHARDS,
WALTER OSGOOD SCOTT,
ALBERT BALL TENNEY,
PERCY HOLBROOK THOMAS,
JOSEPH EARLSTON THROPP, JR.,
WINTHROP LOWE TIDD,
JAMES RUSSEL WELLS,
WILLIAM CORTELYOU WHISTON,
KENNETH FOSTER WOODS,
HENRY YOERG.

# Phi Beta Epsilon.

CHAPTER ROLL.

Local at the Institute.





Droka Phila

# Phi Beta Epsilon.

### MEMBERS.

AZEL AMES, 3D., GEORGE LEE BLAKESLEE, HENRY BELIN DU PONT, ROBERT LESURE FULLER, GEORGE REUBEN HOWARTH, BENJAMIN HURD, JR., FRANK WILLIAM LOVEJOY, GEORGE OWEN, JR., GEORGE WHITEFIELD FAY REED, GEORGE FREDERIC SHEPARD, GEORGE WILMARTH SHERMAN,

LATIMER WILLIS BALLOU, EDWARD ELIAS DENNISON, FREDERIC WILLIAM FULLER, GEORGE WELLINGTON HAYDEN, FRANK SEAMAN HOWLAND, EDWARD HALEY HUXLEY, CHARLES ARTHUR MEADE, RAYMOND BEACH PRICE, CHARLES FOSTER TILLINGHAST,

CHARLES NELSON WRIGHTINGTON.

## FRATRES IN URBE.

CHARLES WILSON AIKEN, STEPHEN BOWEN.

SUMNER HATHERLY FOSTER,

AUSTIN DUNHAM BOSS, FRED ALLEN COLE,

WILLIAM COOLIDGE THALHEIMER,

JOHN GIFFORD THOMPSON.

# Sigma Alpha Epsilon.

Founded 1856 at State University, Tuscaloosa, Ala.

#### CHAPTER ROLL.

#### PROVINCE A.

Georgia	, Beta, .		University of Georgia, Athens, Ga.
46	Psi,	20	Mercer University, Macon, Ga.
46	Phi,		Georgia School of Technology, . Atlanta, Ga.
44	Alpha, .		Alumnus, Atlanta, Ga.
- 64	Beta, .	,	Alumnus, Albany, Ga.
.64	Sigma, .		Alumnus, Savannah, Ga.
- 16	Omega, .		Alumnus, Augusta, Ga.
Alabam	a, Mu,	50	University of Alabama, Tuscaloosa, Ala.
**	Iota, .	81	Southern University, Greensboro, Ala.
**	Alpha Mu,		Alabama A. and M. College, Auburn, Ala.
	Mu,		Alumnus, Montgomery, Ala.
			PROVINCE B.
South (	Carolina, Delta,	120	South Carolina College, Columbia, S. C.
**	" Gamma,		Wofford College Spartanburg, S. C.
44	" Phi,		Furman University, Greenville, S. C.
**	· Eta,		Alumnus, Honea Path, S. C.
North	" Theta,		Davidson College, Davidson, N. C.
44	" Xi		University of North Carolina, . Chapel Hill, N. C.
44	" Theta,		Alumnus,
Virginia	a, Omicron, .		University of Virginia, Charlottesville, Va.
**	Pi, (sub rosa)	172	Emory and Henry College, . Emory, Va.
**	Sigma,		Washington and Lee University, . Lexington, Va.
			PROVINCE C.
Tennes	see, Omega,		University of the South, Sewanee, Tenn.
41	Zeta, .		Southwest Presbyterian University, . Clarkesville, Tenn.
44	Lambda,		Cumberland University, Lebanon, Tenn.

#### SIGMA ALPHA EPSILON, Continued.

Tennessee, Eta,	Southwest Baptist University	Jackson, Tenn.
" Nu,	Vanderbilt University,	Nashville, Tenn.
" Kappa,	University of Tennessee,	Knoxville, Tenn.
" Alpha, .	Alumnus,	Chattanooga, Tenn.
Mississippi, Gamma, .	University of Mississippi,	Oxford, Miss.
" Theta, (sub rosa)	Agricultural College,	Mississippi.
" Theta, .	Alumnus,	Starkville, Miss.
" Gamma, .	Alumnus,	Meridian, Miss.
Texas, Rho,	University of Texas,	Austin, Texas.
	PROVINCE D.	10
Ohio, Sigma,	Mt. Vernon College,	Alliance, O.
" Delta,	Ohio Wesleyan University,	Delaware, O.
" Epsilon,	University of Cincinnati,	Cincinnati, O.
" Alpha,	Alumnus,	Alliance, O.
Kentucky, Iota, .	Bethel College,	Russelville, Ky.
" Kappa,	Central University	Richmond, Ky.
" Alpha Beta, .	Alumnus,	Nicholasville, Ky.
Missouri, Alpha,	University of Missouri,	Columbia, Mo.
" Beta,	Washington University,	St. Louis, Mo.
Michigan, Alpha,	Adrian College,	Adrian, Mich.
" Iota Beta, .	University of Michigan,	Ann Arbor, Mich.
Pennsylvania, Omega, .	Alleghany College,	Meadville, Pa.
" Sigma Phi,	Dickinson College,	Carlisle, Pa.
Iowa, Sigma,	Simpson College,	Indianola, Iowa.
New York, Alpha,	Cornell University,	Ithaca, N. Y.
Colorado, Chi,	University of Colorado,	Boulder, Col.
" Zeta, .	University of Denver,	University Park, Col.

Indiana, Alpha, . . Franklin College, .

California, Alpha. . Leland Stanford, Jr., University, .

Massachusetts, Beta Upsilon, Boston University, . . . .

Connecticut, Tau, . Trinity College, . . .

" Iota Tau, . Massachusetts Institute of Technology,

. Franklin, Ind.

Menlo Park, Cal.

Boston, Mass.

Boston, Mass.

Hartford, Conn.

# Sigma Alpha Epsilon.

Mass. Iota Tau Chapter. Established Nov. 25, 1892.

## MEMBERS.

ERNEST FRANKLIN BADGER,
WALLACE CLARKE BRACKETT,
HAROLD CHASE BUCKMINSTER,
WILLIAM WYMAN CROSBY,
HERBERT NATHAN DAWES,
JOHN THOMPSON DORRANCE,
ALBERT WESLEY DRAKE,

HERMAN HORMEL,
FRANK BIRD MASTERS,
WALTER ROBERT PHEMISTER,
MYRON EVERETT PIERCE,
SILAS ANTHONY SAVAGE,
ARTHUR PRIOR VANDENBERGH,
ROBERT SIDNEY WASON.

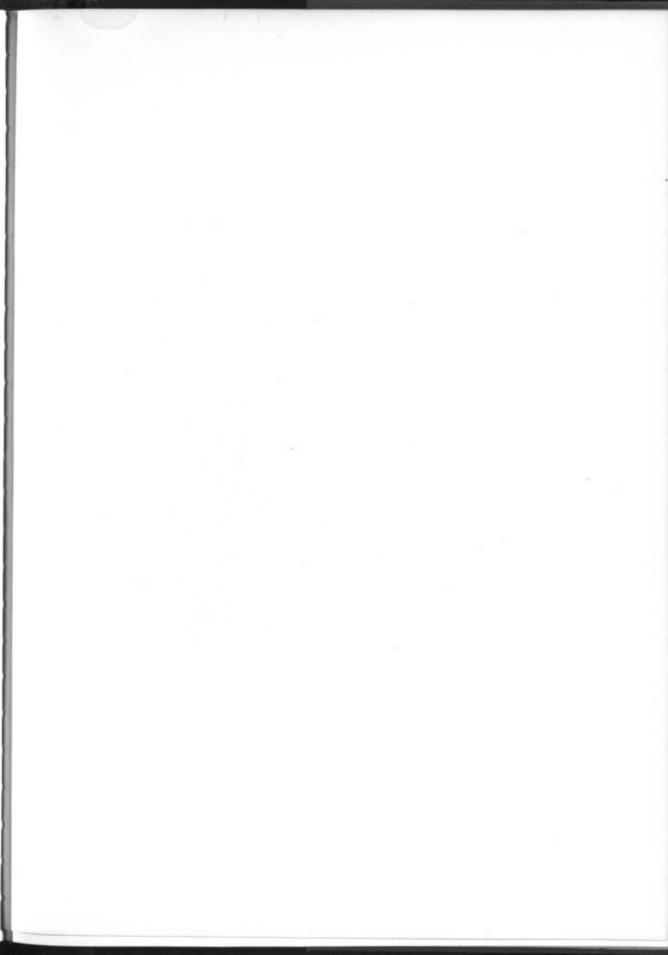
## Other Fraternities Represented.

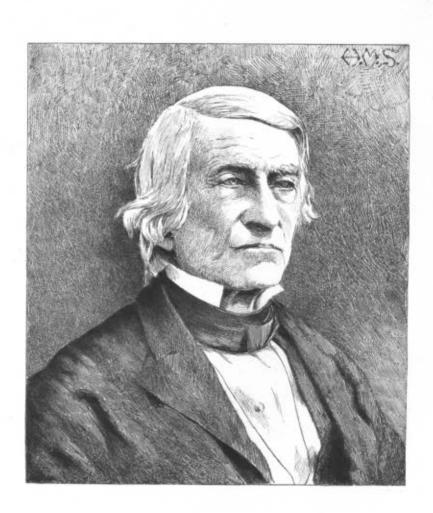
WILLIAM E. SWIFT,		PSI U	PSIL0	N.	Amherst College,
F. M. Mann, .					University of Minnesota.
James K. Morgan,				7	University of Michigan.
	В	ETA T	HETA	PI.	
ROBERT HEYWOOD FEI					Maine State College.
JOHN LORD NISBET,		X1	×	114	University of Virginia.
Conrad H. Young,	8		-		University of Wooster.
	TH	ETA L	DELTA	CH	1.
EDWIN FRANCIS HICKS					Columbia College.
PARKER CLEAVELAND	NEWBE	GIN,			Bowdoin College.
S. Edgar Whittaker,				়	Boston University.
		DELT	A PH	1.	
HAROLD A. RICHMONI	o, .				Sheffield Scientific School.
GUY LOWELL, .		*			Harvard University.
		CHI	PSI.		
ERNEST C. BRYANT,	19				Middlebury College.
	P	HI KA	PPA		
THOMAS MORRIS BROV	vn, B.	A.		00	Johns Hopkins University.
SAMUEL S. SADTLER,			- 1		Philadelphia.
	PH	II DEL	TA T	HET	4.
DWIGHT N. MARBLE,	1				Centre College, Kentucky.
	ALF	PHA T	AU O	MEG	Α.
W. H. Johnston,			19		Sewanee, Tennessee.
		SIGI	MA NO	<i>J</i> .	
Hugh Cowan Densor	٧,		65		University of Alabama.

## Fraternity Summary.

Sigma Chi,	12	Members.
Тнета XI,	22	44
Phi Gamma Delta,	17	66
Delta Tau Delta,	6	44
Delta Psi,	24	44
Сні Рні,	20	
Delta Kappa Epsilon,	27	44
Delta Upsilon,	28	44
Phi Beta Epsilon,	21	44
Sigma Alpha Epsilon,	14	44
Total,	191	**
Other Fraternities Represented,	16	44
Grand Total,	207	66

Eighteen and eight-tenths per cent, of the students at the Institute are members of Fraternities.





## William Barton Rogers.

HE life and work of William Barton Rogers should be familiar to every student of the Institute. To him we owe the very existence of our school, and to his wisdom, forethought and zeal much of its extraordinary success. It is indeed fitting that the Technique should contain some worthy tribute to his memory.

Given a certain result it is interesting to follow out the causes, conditions and events which combined

to produce it. As a result we have the founding of the Massachusetts Institute of Technology. Little did William Rogers, when a student in William and Mary College, Virginia, realize that he was destined to be the founder of such a great institution. And yet, as events proved, when the proper time came he was peculiarly fitted both by nature and by the whole work of his life to accomplish what he did.

He was born in Philadelphia, December 7, 1804, and was one of four brothers. His father, who had received his education in Trinity College, Dublin, Ireland, and was an able man of science, accepted the Professorship of Physics in William and Mary College soon after William's birth. The early training of his four boys was so influenced by natural inclination and the home atmosphere, that all have since become distinguished scientists.

After the death of his father, and while yet only twenty-four years of age, William Barton Rogers succeeded to the vacated chair of Physics. He was not entirely inexperienced as a teacher, for, by a course of lectures delivered the previous year before the Maryland Institute, in Baltimore, he had acquired some reputation in that line.

He at once began original investigations upon various physical phenomena, becoming shortly afterwards greatly interested in the science of Geology. He made important geological discoveries in the State of Virginia, and ably addressed the Legislature of that State upon the results of his researches, urging the importance of a thoroughly systematic geological survey of the whole State. In recognition of his excellent work he was made State Geologist in 1835, retaining that position until the year 1842, when the work was discontinued. The published results of the researches and investigations made while he was acting officially for the State, laid the foundations not only of Virginian, but at the same time of American geology. These reports, based upon purely original discoveries, and written when the science of Geology was in its infancy, are still interesting reading, and have been verified in their most important points by the results of succeeding investigations. Thus his fame was established, and his name will always be associated with American Geology.

In the meantime these State surveys did not interfere with his regular duties in William and Mary College. His scientific reputation became so assured that he was called to accept the position of Professor of Natural Science in the University of Virginia. gave lectures in Physics, Geology and Astronomy. Such was his power of exposition that invariably his lecture-room was crowded, leaving him barely room to manipulate his apparatus. greatly beloved and respected by his pupils, and there are many alive at the present day who regard it as one of the greatest privileges of their lives to have attended his lectures. In the prime of life, he was a brilliant orator, a rigid investigator, and a lover of all scientific That he excited universal admiration and respect is not Indeed, after an absence of many years, upon his return to join in a semi-centennial celebration of the University, he was received with a great ovation. Although the civil war had intervened, and he was known as a northern sympathizer, his popularity was undiminished. When he spoke with no diminution of his old eloquence, it being rather heightened by experience and strength of feeling, his "old students beheld before them the same William B. Rogers who thirty-five years before had held them spellbound in his class of natural philosophy; and as the great orator warmed up, these men forgot their age; they were again young, and showed their enthusiasm as wildly as when in the days of yore, enraptured by his eloquence they made the lecture-room of the University ring with their applause."

In the year 1849, Professor Rogers was married to Miss Emma Savage, daughter of Hon. James Savage of Boston. He went abroad with his wife, and in England was present at a meeting of the British Association for the Advancement of Science, held at Birmingham. There he was received with great warmth and respect, making a

remarkable impression. He returned to the University of Virginia, but in about four years removed to Boston. This was the great turning-point of his life. Being a man who could enter no community without attracting instant attention and admiration, he soon became an important figure in scientific circles, while his family connections and well-known reputation assured his position in Boston society.

During his early residence in Boston he occupied himself with the explanation of various physical phenomena, anticipating some of the later results of Sir William Thomson, Helmholtz, and Count Schafgottsch. He aroused much enthusiasm and greatly extended his reputation among the people of his new home by giving several courses of lectures before the Lowell Institute of Boston. Before crowded audiences of teachers and working people he exercised his wonderful power of exposition and illustration. He was a remarkable lecturer, possessing the power of marshalling facts and bringing them all to bear upon the point to be explained. By means of his felicity of expression and vividness of description he could often do without the material aids so indispensable to most teachers.

He was a member of the Academy of Arts and Sciences when he came to Boston, and became a member of the Boston Society of Natural History. For a long time he was President of the Thursday Evening Scientific Club to which his presence gave a reviving influence. If his remarks at the meetings of the latter could have been formally printed, they would be of great scientific interest and importance. Upon the death of Professor Henry, William B. Rogers was the one man who was universally named as the most suitable for the office of President of the National Academy of Science. It was a distinction which afforded him great satisfaction, and was a position which he greatly adorned on account of his unusual oratorical ability.

Next we come to the great work of his life, the founding of the Massachusetts Institute of Technology. Professor Rogers was admirably fitted for this work. A thorough man of science, theoretical and applied, an accomplished teacher, a brilliant orator, an indefatigable worker, and possessed of an iron will, delicate tact, and great experience, he united the qualities necessary for planning a great, scientific, educational institution, for pleading its cause, for uniting discordant elements, and for insuring its success. The conception of the idea was no sudden inspiration, but the plan for a school of applied science was gradually matured out of a larger and more general scheme to get the Legislature to reserve certain lands in the Back Bay for educational and public institutions. The project as

a whole did not succeed, but we have the Museum of Fine Arts, the Natural History Museum, and the Massachusetts Institute of Technology as evidence of the great success of a part of the plan.

In 1861 the State Legislature gave a charter for a scientific school, providing also for a provisional grant of land. The next year Professor Rogers was made president of the new enterprise. not until May 30, 1864, however, that it was formally organized by the adoption of a paper prepared by President Rogers, entitled "Scope and Plan of the Industrial School of the Massachusetts Institute of This remarkable document has stood the test of Technology." that he showed his great ability, good judgment and foresight. The grouping together of those studies and requirements which properly belonged to each special professional course, the elaboration of the different departments, required a man with a wonderful breadth. depth and variety of scientific knowledge. The experimental element of our school, which is recognized as one of the principal factors of its success, and as a characteristic feature, is due to the prominence given it in President Rogers' outline. On the question of discipline he showed his wide experience in college training, his large-heartedness and tact in freeing us from all the petty rules and regulations which are the cause of so much antagonism between teacher and pupil.

The early life of the Institute was not an easy one. The great weight and burden of the whole undertaking at that period rested upon the shoulders of its President. With infinite care and patience he fostered its growing resources, often by his own personal influence gaining means for its daily support. He piloted it skilfully and safely through the financial storm which followed the civil war. He saw his plans slowly maturing,—then from sheer exhaustion and overwork, in 1868 had to give up his high position, leaving their

development and completion to one of his colleagues.

For ten years Professor Rogers was not connected officially with the school, but in 1878, improved in health, revived in spirits, and unimpaired in intellect, he resumed his position as chief. But he had overestimated his strength and after three years of increasing feebleness and illness he was again forced to give up his office. He had however accomplished his purpose. His plans were in a fair way to be completely carried out, and to his successor he entrusted a completed edifice.

Although he was no longer president, possessing the prerogative of giving the final address to the graduating class, still as President Walker gracefully put it, at the graduating exercises held in Huntington Hall, May 30, 1882, "In a high sense Professor Rogers will always remain president of the Institute of Technology. . . . . Founder and father is his title perpetual, by a patent indefeasible"; and then turning to the Professor he said,

"Honored sir, in your presence no voice but yours should give the benediction to these young men and women as they step over the threshold of the cloister, out of tutelage, into the world."

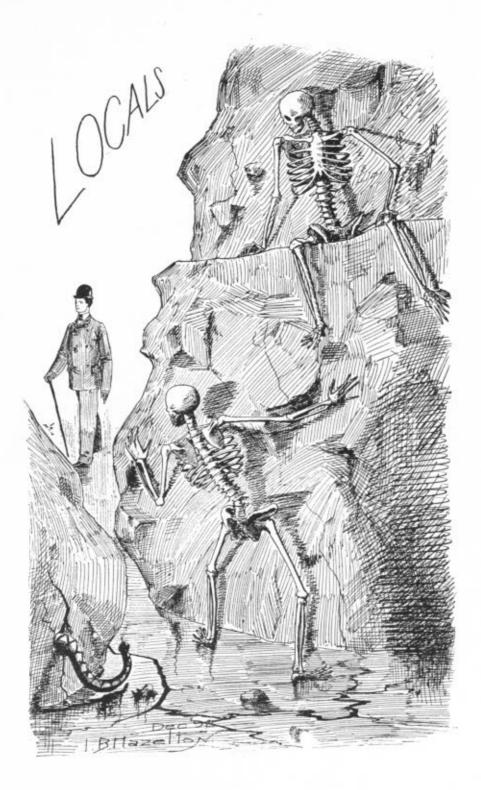
After this introduction Professor Rogers began a modest response, but in the middle of his address, he stooped forward an instant, then fell back in his chair and his work upon this earth was done. Few are they indeed who live to see their work so splendidly fulfilled as did he, and it is pleasant to think that before his death he was accorded the privilege of realizing the complete fruition of his hopes.

There remains but a few words to be said. The great man is dead; true to his nature he died at his post of duty. But the great institution which he founded lives on; living, breathing, ever growing, it is a lasting tribute to his memory.









## 2 G Society.

President.

FREDERIC HALL HARVEY.

Vice-President.

GEORGE WIGHTMAN VAILLANT.

Secretary and Treasurer.

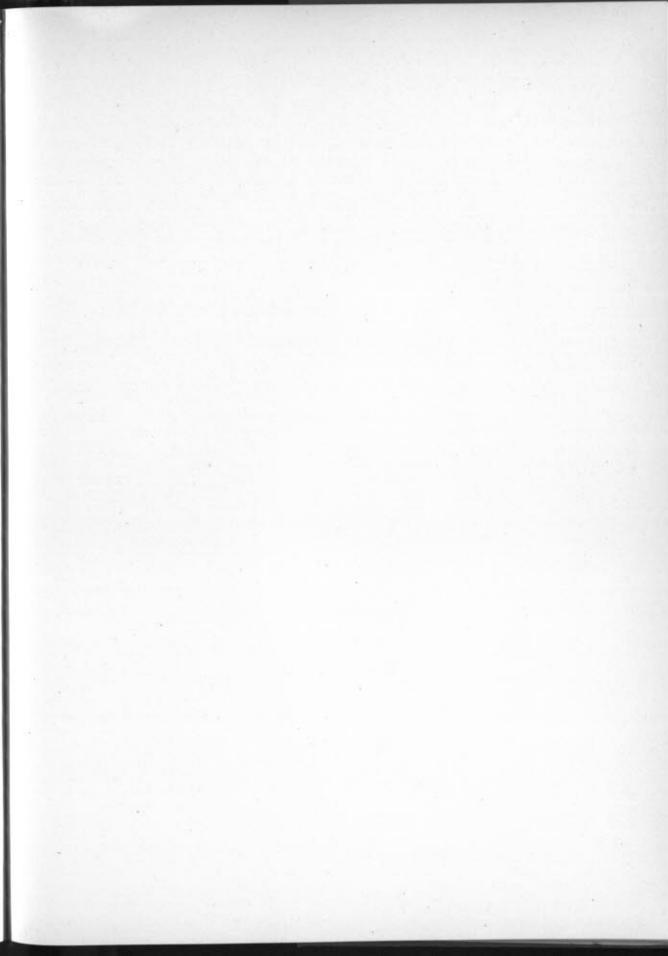
GLENN CHARLES BROWN,

G, K, T

FAUSTINO A. PEREZ.

## MEMBERS.

S. R. BARTLETT, F. H. HARVEY, W. HASKINS, N. A. STEWART, G. W. VAILLANT, W. H. WESTON.





District Philips

## K, S.

#### President,

HENRY LAWSON RICE, '93.

Secretary,

Treasurer,

HENRY RENSSELAER BATCHELLER, '94.

JOHN LORD NISBET, '94.

## ACTIVE MEMBERS.

CHARLES NOURSE COOK, '93,
THEODORE TAYLOR DORMAN, '93,
ARTHUR EDWIN FOWLE, '93,
HORATIO NEWTON PARKER, '94,
JOHN LOUIS NEWELL, '95,
GEORGE ARNOLD ROCKWELL, '95.

## ASSOCIATE MEMBERS.

DR. ARTHUR A. NOVES, '86,
L. KIMBALL RUSSELL, '86,
CHARLES R. WALKER,
WILLIAM A. COLLINS, '90,
WILLIS R. WHITNEY, '90,
HERBERT R. MOODY, '92,
WARREN H. WOOFFINDALE, '92,
GEORGE A. BASSETT, '92,
CHARLES T. WENTWORTH, '92,
CHARLES B. GRIMES, '92.

## The Mandamin Club.



Chief, John A. Rockwell, Jr.

Adviser in Council, P. K. Crocker.

Medicine Man, C. G. Hyde.

Council, H. S. BALDWIN.
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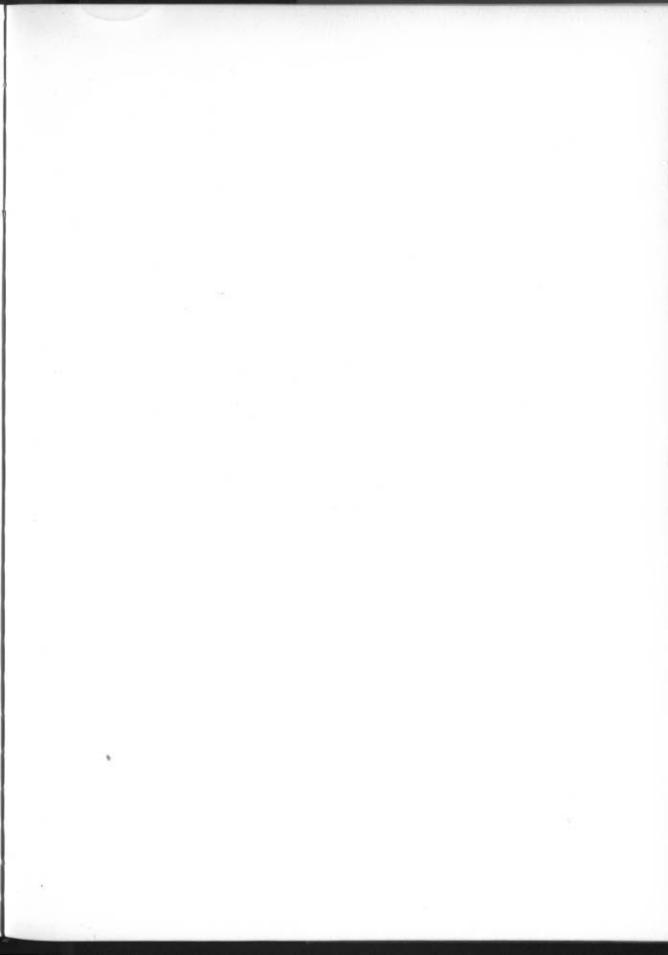
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Pater Pokus.\*

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Grand Guardian of "Kitty."

FREDERICK SOUTHGATE BIGELOW.

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SAMUEL HENRY BLAKE,‡

WINTHROP TRACY CASE,

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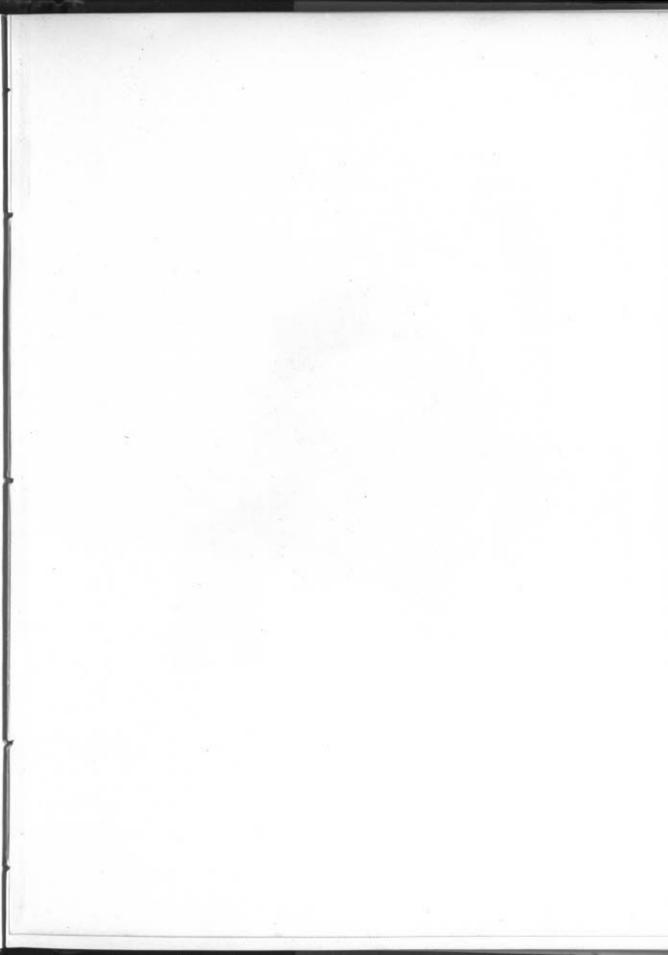
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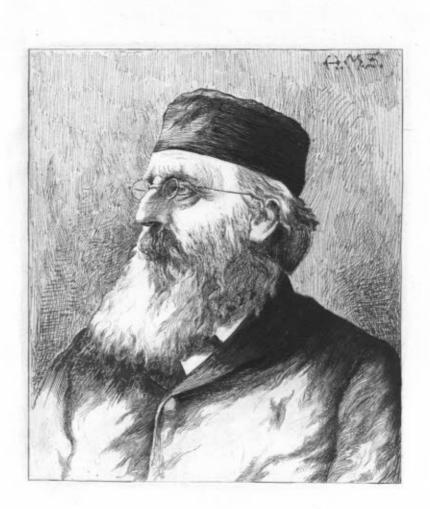
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## John Daniel Runkle.



HE present generation, with its elaborate system of public and private schools, is such that application and inclination are almost the only factors necessary for a person of average ability to possess in order to acquire a collegiate, or, at least, a good education. Not so very many years ago, comparatively speaking, not more than two generations back at the most, things were much different. In those days of the district school it was the exception when any pupil was ambitious

to learn anything more advanced than reading, writing and arithmetic. Each pupil was a teacher, as it were, helping his younger schoolmates as far as possible. There were no public preparatory schools for those wishing to go to college, and, therefore, the stimulus of fellowship was lacking. An aspiring student had to possess the sterling qualities of decision, perseverance, and courage to gain his end. On account of this fact more than any other exists the not uncommon opinion that one could advance much faster under the old system than under the present, for the few who did continue study were faithful and determined, working, not because they were obliged to, but because they loved to.

As we read over the lives of many of our greatest scholars, we find that their first instruction was received in some country district school. These men possessed the characteristics for overcoming the obstacles in their early school life, and those qualities proved to be the foundation of their success.

Such was the case with John Daniel Runkle. He was born October 11, 1822, in the town of Root, Montgomery County, New York. He became an eager student, and early formed the purpose of going to college, if possible. Like many farmers' sons he attended the district school in winter, working on the farm in the summer. As noth-

ing higher than arithmetic was taught in the school, it was not until he was sixteen years old that he saw an algebra or a geometry. Then a Senior in Union College established, in a neighboring village, a private school, which young Runkle attended, learning for the first time the higher branches of mathematics. This only continued about three months; but, from that time until he entered college ten years later, he studied alone without instruction. During this period he spent his time in various pursuits, but mainly in farm work, school-teaching and study. He prepared himself for college long before he saw his way clear to go. In mathematics he continued much farther than was required, going over the ground covered

in the whole college course.

When the Lawrence Scientific School was started in 1847, he felt that his place was there. Being then twenty-five years of age he considered himself too old to commence a regular college course, and immediately wrote to Professor Benjamin Pierce, asking his advice. As a result he entered there the next year. He had accomplished so much by himself that he was far advanced in the work of the school. He became greatly interested in Astronomy, and, under the instruction of Director W. C. Bond, worked in the Cambridge Observatory. Through his kind friend, Professor Pierce, in 1849 he received a position upon the American Ephemeris and Nautical Almanac, which department had just been established by the United States Government. This place he held until his resignation in 1884, being for a long time, after the death of Professor Pierce, the oldest in length of service connected with the work.

Upon the completion of his course in 1851, he received, much to his surprise and pleasure, besides his degree of Bachelor of Science, an

honorary degree of Master of Arts from the University.

About four years after his graduation, Mr. Runkle published in the Smithsonian Contributions to Knowledge a set of astronomical tables, which represent a great amount of labor and calculation. In 1858 he established the Mathematical Monthly, but this paper was destined to be short lived, for at the end of the third volume, upon the breaking out of the Civil War, it was discontinued. In the short period of its existence, however, it did much good; for, through the incentive of its prizes and the interest it excited among the younger mathematical students of the country, a number of them were led to pursue the study of the higher mathematics with remarkable success.

From the very first, Mr. Runkle was interested in the plan for the establishment of the Massachusetts Institute of Technology, and when it was started in the spring of 1865 he was made Professor of Mathe-

matics, the position which he still holds.

In 1868 President Rogers, on account of illness from care and overwork, was obliged to give up his position. The Corporation elected Professor Runkle acting president, and two years later president of the Institute. This was a critical period in the history of the school, a time when an energetic, capable man was needed as chief. That President Runkle was the right man for this difficult position is proved by the brilliant record which is his. He was

thoroughly aware that, in order to secure the success of the Institute, he must not let popular interest flag, but that he must constantly improve and enlarge the school, showing every one that Technology was still alive. During his ten years of office, for he resigned in 1878, there was not a year in which there was not some new feature or study added to the curriculum of the school. Although severely hampered by the lack of sufficient funds to carry out all his ideas, still, by ingenuity, tact, and good management, he succeeded in firmly planting many of the characteristic features which have been such potent factors in the remarkable prosperity of the Institute. Some of these departures were suggested by President Rogers, either in his "Scope and Plan" of the school, or afterwards; but the real labor and responsibility of introducing and arranging the most of them came upon President Runkle. Thus, President Rogers first conceived the idea of having Physical Laboratory work for large classes of students, but it was his colleague and successor who introduced it into our school. This system as first developed and adapted to the Institute by Prof. E. C. Pickering, Professor of Physics at that time, was the first laboratory of the kind ever established. The Mining Laboratory was President Runkle's conception. He was alive to the advantages to be derived from the practical together with the theoretical study of a subject. By a trip to mines in Colorado and Utah with a party of students during the summer vacation of 1871, he sought to accomplish this end, thus organizing the first Summer School of Mines. the close of the summer school he continued his trip to San Francisco, where he ordered to be built and sent on to Boston the necessary machinery and apparatus to fit up a complete practical mining laboratory, in the Rogers Building. With the able co-operation of Professor Richards, the whole idea was brought to completion. In 1872 President Runkle established the Lowell School of Practical Design; and in the next two years the Mineralogical Laboratory and the Gymnasium and Drill Hall. With the aid of the Women's Educational Association, a Women's Chemical Laboratory was completed in 1876, and in the same year an Organic Laboratory was added to the school proper.

During his visit at the Centennial Exposition in Philadelphia, President Runkle became very much interested in the Russian system of Mechanics Arts teaching as illustrated by an exhibit of models and plans from "The Imperial Technical School" at Moscow. When he returned to Boston he at once set about putting his plan into execution; but, having no money that could be devoted to the purpose, it was only by the co-operation of the Charitable Mechanics' Association and the generosity of individuals that he was enabled to found the department of Mechanic Arts. The interest which the establishment of this department in the Massachusetts Institute of Technology aroused in Russia led the Czar to send as a present to the Institute a

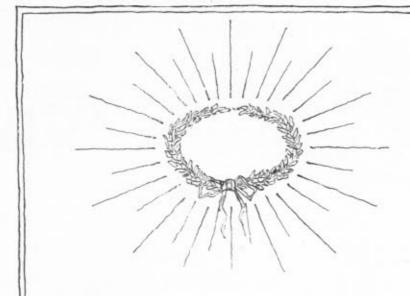
complete set of the Russian patterns.

The systematic and sweeping improvements made in both methods and apparatus in the short period of ten years was phenomenal. When, however, one realizes that the money for these different changes and additions, and for the maintenance of the school as well had to be raised by personal solicitation, the progress seems still more remarkable. After the great Boston fire in 1872 all the available resources of the city were required to repair the damage done; therefore, many of the most earnest supporters of Technology were unable to give their aid during that trying time. The great responsibility through this period rested upon President Runkle, and he showed his ability, energy, and pluck by the manner in which he officiated. Not only did he bring his charge safely through this time of financial depression and distress, but, at the same time, he increased its facilities and reputation. Bountiful praise is due him for his carefulness and devotion during his critical administration.

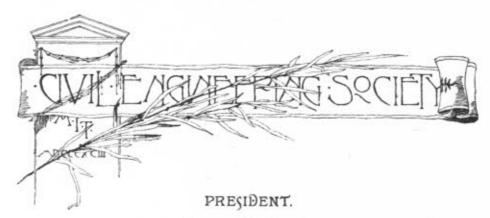
These ten years of care and anxiety had their effect upon President Runkle's health, and in 1878 he resigned the presidency, taking a two years' trip abroad as a relief from all official work. Ever mindful, however, of the cause of technical education, he visited many of the Continental scientific schools, always looking for suggestions and new methods. Upon his return he prepared and read before the Society of Arts a long paper upon the subject of technical schools, giving at length the result of his investigations abroad. He also resumed his old position as Professor of Mathematics, President

Rogers having been in the meantime re-elected president.

What need is there to write more about Professor Runkle? Who does not know and love that kindly face which shows the warm affection he feels for the Institute and every one and everything connected with it? With what a merry twinkle in his eye he sees the humorous side of that which others might treat harshly, and how earnestly he aids or advises any student who is wise enough to seek his help! Ah, Professor Runkle, you may well be devoted to Technology, for Technology loves you. May we for many years to come vote at Class Day, "Our most popular professor is John D. Runkle!!"



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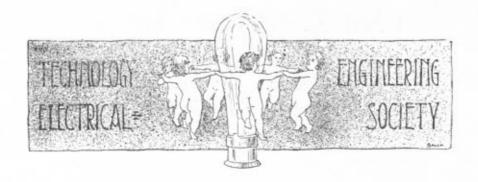
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# AN ARCHITECT'S TRIBUTE TO PROFESSOR EUGÉNE LÉTANG.

ROFESSOR EUGENE LÉTANG was born in the department of Nièvoe, France, in 1841. Early in life he learned the trade of his father, who was a stonecutter, and at the same time he acquired considerable skill in draughting. Later he entered L'Ecole des Beaux Arts, where he was especially successful, winning four medals for excellency in design during his course.

In 1870 his studies were interrupted by the Franco-Prussian war, in which he served, and rose to the rank of captain. When the war was over he returned to Paris, where he learned that the Institute needed an instructor in architecture. Business was unsettled in France, and the offer of the Institute being a generous one, M. Létang decided to accept the position, hoping to return to his native country after a few years. Year after year went by and it seemed advantageous for him to remain with us.

As we knew him at the Institute, he was a model professor. His standard was exceedingly high, and therefore his criticisms were severe. No student dared to trifle with him, but no professor could show a more sincere interest in an earnest endeavor, or give more encouragement by genuine sympathy than he. Few men have combined such widely different talents and have developed all to such a high degree as had Professor Létang. He was an artist in the broadest sense of the word, being, not only a skilled draughtsman, but a painter, a musician and a composer. In addition to this he was especially proficient in mathematics and well read in philosophy. It seems a wonder and a pity that this man, -a peasant, a soldier, an artist, a musician, and a true and perfect gentleman,-should be destined to live a life of quiet worth in a foreign country. But that which was loss to France has been our gain, for the present success of our noted Architectural Department is largely due to his exertions. Other colleges made him much better offers than the Institute could afford, but he stayed with us, faithful to the last, working for our interest and welfare for over twenty years. Since he has done so much for us, let us continue in the path Professor Létang has pointed out to us, so that the Architectural Department may stand as a living monument to his memory.



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Mr. H. W. Nichols.

HE object of the Club is to promote, among its student members, independent observation of geological facts, and to discuss the advances being made in geological science. The members are encouraged to exhibit specimens they may have obtained, and to ask questions which may have arisen from their experiences. The discussions are mostly of an informal character, but the results of continued study are frequently presented in a more elaborate manner; and occasionally the members have the pleasure of listening to geologists not connected with the Institute who favor the Club with material that is both new and interesting.

Among the most instructive papers of last year were those of H. D. Card on "Inclusion of Carbon Dioxide in Sapphire from Ceylon"; "New York Type of Drumlin," G. H. Barton; "The Occurrence of Bog and Pond Iron Ore," F. S. Hollis; "Nature of Eozoön Canadense of Dawson," A. W. Grabau; "Distribution of Felsite Boulders in Hingham, Massachusetts," by Prof. Crosby.

The Geological Club is open to members of Courses I., III. and XII.











BARD-9- EDITORY-1893 & EDITOR IN CHIEF &

· RAYMOND BEACH PRICE 94 ·

FREDERICE HOPPIN ROWLAND 95 HARRY LAWSON RICE 95.

ALBERT FARWELL BEHIS 93. JAMES RANSEY STEER 93.

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EDWARD LEBER 95. CHARLES GILMAN HYDE 96.

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· CHARLES REAY KRAPP-94. Business Marager.
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# ·BARD OF EDITORS · 1892

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Editor.

CLEMENT W. ANDREWS.

HE Technology Quarterly was planned and first published by members of the Classes of '87 and '88. Two volumes were issued under the direction of a Board of Editors chosen from the Senior and Junior Classes. Its objects were the publication of original investigations of instructors and students, and also the recording of researches and results of practical work of the alumni. Then, to insure greater permanence than was possible under a changing board of editors, it was edited by Mr. James P. Monroe, at that time the secretary of the Institute. Each number was to "contain articles of permanent value in the various departments of scientific investigation carried on at the Institute or by its graduates, including questions relating to Mathematics, Engineering, Metallurgy, Chemistry, Physics, Biology, History, Economics, Geology, etc." The Society of Arts on April 29th, 1892, voted to combine their own publications, including the principal papers read before the Society and their proceedings, with the Quarterly, thus making the latter the official organ of the Institute. The present volume, V., is so combined and is certainly of great scientific interest.



## Editors.

THOMAS R. KIMBALL, '87, HENRY D. BATES, '88.



N 1887 Professor Létang conceived the idea of publishing the best work of the Architectural Department of the Institute. With the aid of the Architectural Society and of Professor Chandler and others in that department, the first number of the Technology Architectural Review appeared in the fall of that same year.

To the Class of '88 is due in great measure the early success of the Review. But becoming finally too great a drain on the treasury of the Architectural Society, Henry D. Bates, '88, Thomas R. Kimball, '87, and Irving T. Guild, '88, each of

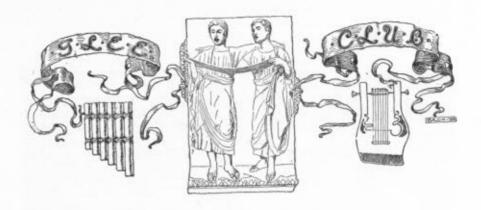
whom had been greatly interested in it from the first, undertook its publication, aided by an Advisory Board composed of authorities upon such matters. At last Messrs. Bates and Kimball took the entire work upon their shoulders, making it their business and furnishing their own capital. November second, 1891, the word "Technology" was dropped, since the idea conveyed by that title led many to suppose that a mere college publication could be of but little value.

At present the Institute supplies most of the material for the Architectural Review, which is believed to be the only periodical of such nature in the country that publishes college work. Technology is given her place at the head, as she deserves, for she has exerted no small influence upon the architecture of America. The Review receives also important contributions from the very best architects and artists in the country. The work of the winner of the Rotch Travelling Scholarship appears in it, and that means the best that Massachusetts can offer.

The Review is issued every six weeks, but next year it will probably be published monthly.







John Edward Wray, .	•			President.
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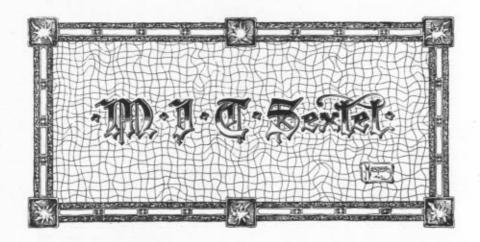
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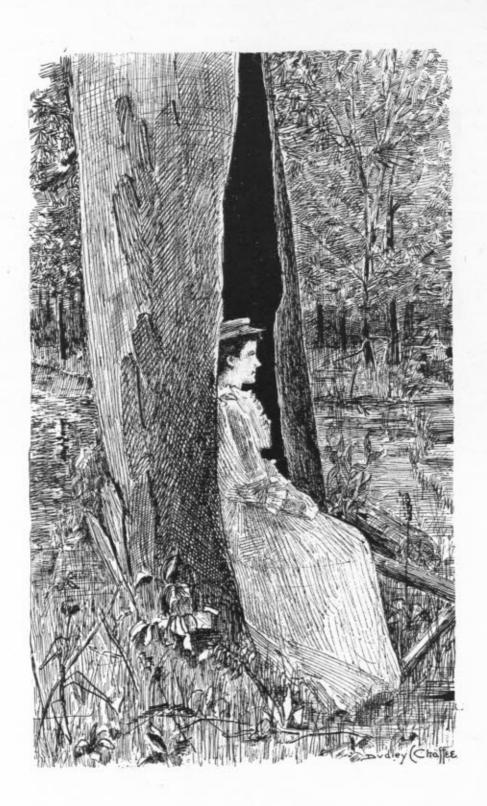
FRANK HOWELL HOLDEN.

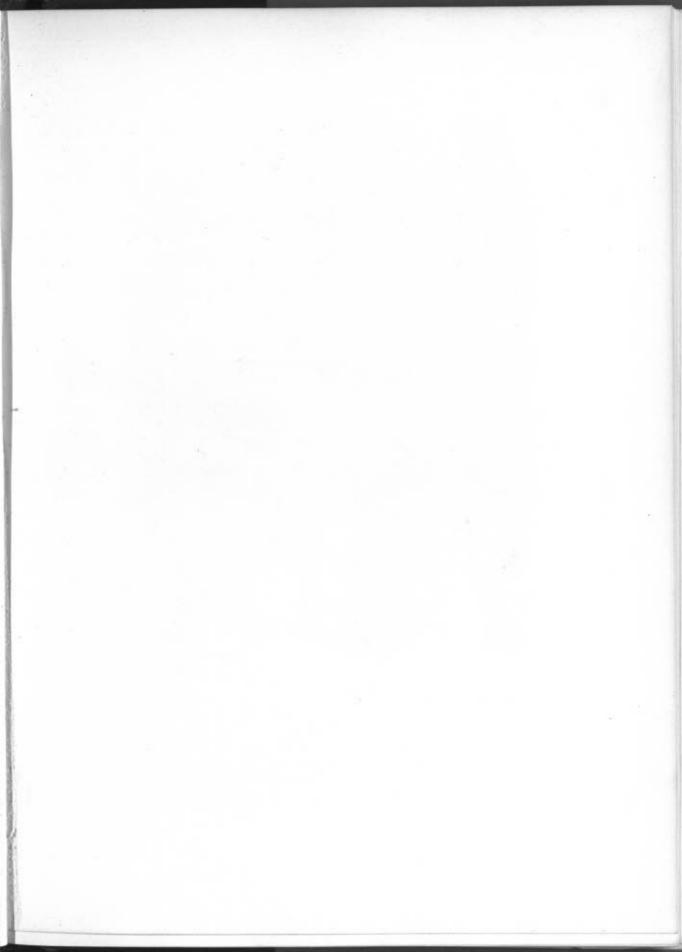
## VIOLA.

GEORGE OWEN, JR.

## VIOLONCELLOS.

HAROLD M. MOTT SMITH, FRED BURNS.







# Francis Amasa Walker.



effore his final resignation from the presidency of the Institute, President Rogers was for a long time much disturbed over the question as to who should be his successor. It was an important matter, for the position is one which no ordinary person can fill. It requires a man of great ability and experience. Wrapped up in the welfare of the school, having cherished its growth from a little,

struggling class of twenty-seven to a grand institution of learning, it was natural that he should hesitate in recommending any man as one to whom he might pass the reins, entrust the care and guidance of his noble charge. He solved the problem however, and it was with a great deal of satisfaction and pleasure that he saw President Walker begin his duties.

Francis Amasa Walker, economist, scholar, soldier, was born in Boston, Massachusetts, on July 2, 1840. Soon after his birth, his father, Amasa Walker, the eminent political economist and statistician, moved his home to the family estate in North Brookfield, Mass. Francis Walker received his first instruction in the common schools of that place, but afterwards fitted for college in the academies of Lancaster and Lester. At the age of fifteen he entered Amherst College, but was obliged to drop back a class because of ill health, graduating in the year 1860. After leaving college he began the study of law in the office of Devens & Hoar, Worcester, Mass. Upon the breaking out of the Civil War in 1861, he immediately enlisted in the regiment of Colonel Devens.

His military career was especially brilliant. Beginning as sergeantmajor of the 15th Massachusetts Regiment, he was soon promoted to the position of assistant adjutant-general on General Couch's staff with the rank first of captain, and afterwards of major. His next advancement was to the rank of lieutenant-colonel and then to colonel, while he held the position of adjutant-general of the 2d Army Corps, serving on the staffs of General Gouveneur K. Warren and General Winfield S. Hancock. At the battle of Chancellorsville, May 1, 1863, he was severely wounded and consequently was absented from the front for six months. The next year after his return he was captured at Reemes' Station, and was confined in Libby prison from August until October, when he was paroled. In consequence of this imprisonment his health was seriously impaired and he resigned from the service in January, 1865. The following March the brevet of brigadier-general was conferred upon him.

A staff-officer from the very beginning of his service, he was in a position to know the plan of action of many of the battles in which his Corps was engaged. It was an interesting situation to watch the development of the prearranged movements in the various engagements. Unlike the ordinary field officer, who has certain definite orders to execute and beyond that knows nothing, not even if the action is successful or not, the staff-officer, visiting various parts of the field and hearing from other officers the reports from the different divisions, can judge of the way the day is going. Although such an officer does not often gain great renown, his good service is appreciated by his general.

For some time after his withdrawal from the army, General Walker was in such poor health that he was in no condition to do anything, but in the fall of 1865 he accepted the position of instructor in Latin and Greek at Williston Seminary, Easthampton, Mass. His spare time he spent in study, making up for the time he had lost, and laying the foundation of much of the work which he has done since. But this work was not congenial to him. His heart was not in it, and after a period of three years he resigned. At that time, outside the large cities, the Springfield Republican was perhaps the most noted paper in the country. General Walker gained a position on its editorial staff, finding the work a most excellent training in the line of his special study. Naturally enough his chosen field was like his father's, that of political science and history. Following this line of work, in 1860 he became chief of the Bureau of Statistics in the Treasury Department at Washington, and in 1870-72 held the office of superintendent of the ninth census. During 1871-72 he was also superintendent of Indian Affairs.

He was called to the professorship of Political Economy and History at Sheffield Scientific School of Yale University in 1873. His work there was very gratifying to him. In fact this period of his life was quiet and agreeable, and it was with sincere regret that he afterwards left his pleasant home in the "City of Elms." While still at Yale he was made chief of the Bureau of Awards at the Centennial exhibition at Philadelphia. In 1878 he was appointed U. S. commissioner of the International Monetary Conference in Paris. Having secured leave of absence from his college duties he accepted the supervision of the tenth census. Professor Walker had been nearly nine years at Yale, the last two having been spent away from the University. He had fully expected to return to his old post upon the completion of his government work; but, in 1881, being offered the position of president of the Massachusetts Institute of Technology, he accepted that as his work.

President Walker's connection with the Institute is well known. Under his able administration the school has grown steadily in size and reputation, until now it stands at the head of the scientific schools of this country. His policy has been to follow out the ideas of the founders of Technology, as has been the course of action pursued heretofore. Before his association with the Institute as its chief, he was comparatively unfamiliar with its system and course of study. In the Sheffield Scientific School with which he was conversant, the curriculum differs considerably from that of Technology in that the practical laboratory work is there almost entirely omitted. It is more a school of pure science, although the most popular course is the one which corresponds to the general course at the Institute. President Walker recognized this fact, and, although it has been his wish to broaden the work of all the courses, he has not sacrificed or cut down any of the professional branches to accomplish that purpose.

Of late years President Walker has not given any instruction in political science or history. At first he took charge of those departments, until the number of instructors was increased so as to make it unnecessary. In 1883, he gave a course of lectures at Harvard on "Tenure of Land."

While residing in New Haven he was on the city and state boards of education, and upon his removal to Boston he was called to occupy the same positions there. He was elected in 1878 to the National Academy of Sciences. He is president of the American Economic Association. He is also president of the American Statistical Society and an honorary fellow of the Royal Statistical Society of London. He has recently been made corresponding member of the Institute of France in the department of Political Economy, an honor which affords him great pleasure and satisfaction.

President Walker had the degree of Doctor of Laws conferred upon him first by his own Alma Mater, Amherst, and since then has received it from Columbia College and St. Andrew's College, and from Yale, Harvard, and Dublin Universities. This last summer he was invited to attend the three hundredth anniversary of Dublin University to receive his doctor's degree in company with two other eminent political economists, Wagner from Berlin, and Leroy-Beaulieu from Paris. Thus three different countries were represented. He was very glad to accept. It was at that celebration that he made the speech which so pleased the Irish-Americans, that upon his return they tendered him a reception, assuring him of their deepest respect.

Besides his many addresses, magazine articles, and reports written in connection with the various interests with which he has been connected, President Walker has written a number of books upon different economical questions, and is one of the most eminent living authori-

ties upon political economy.

Esteemed and respected by all, may President Walker remain for many years longer in the position he fills so well, an honor and an ornament to the great school which he represents.





'93.

ALBERT FARWELL BEMIS, MARVINE GORHAM, WILLIAM GABRIEL HOUCK.

'94.

CHARLES ARTHUR MEADE, CHARLES WILLIAM DICKEY, RAYMOND BEACH PRICE,

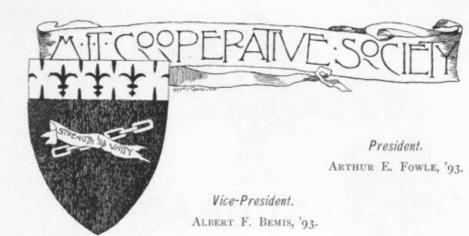
'95.

CHARLES FOSTER TILLINGHAST, GEORGE WELLINGTON HAYDEN, GARDNER ABBOT.

'96.

JOHN ARNOLD ROCKWELL, DANIEL MOORE BATES, JR., CHARLES GILMAN HYDE.

The Institute Committee is the recognized representative of the entire Student body. Its aim is to promote in all matters the welfare of the students.



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The sole object of the society is to advance the pecuniary interests of the students of the Institute. With this end in view the officers have endeavored to draw up the best possible list of affiliated tradesmen, by patronizing whom, the members of this society save yearly from five to thirty dollars; the discounts range from ten to fifty per cent.

The book exchange is at A. D. Maclachlan's, 214 Clarendon Street, where second-hand books may be bought or sold at reasonable rates.

The annual proceeds of the society are devoted to the "Co-operative" scholarships, given each year to promising and needy students at the Institute, who are selected by the Scholarship Committees of the Faculty and of this society.

The officers are elected at the annual meeting in April, and serve one year without remuneration.



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Vice-President.

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## MEMBERS.

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FREDERIC H. HARVEY.

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EDMUND L. ANDREWS, WILLIAM W. CROSBY, HOWARD R. BARTON, ALBERT G. DAVIS, WILLIAM W. CARTER, LAURENCE B. DIXON, HARRY L. RICE,

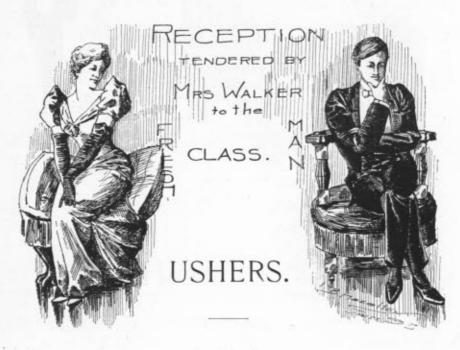
CHARLES N. COOK, THEODORE T. DORMAN.

## Class of Ninety-Four.

HENRY R. BATCHELLER,

HORATIO N. PARKER.

Class of Ninety-Five. BERTRAND J. CLERGUE.



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G. C. COLBURN,

C. G. HYDE,

R. Johnston,

J. A. ROCKWELL, JR.,

E. R. BRACKETT,

F. M. CROSBY,

BENJ. HURD, JR.,

W. M. PARTRIDGE,

R. S. WHITING.

#### Second Evening.

W. Ames, Jr.,

F. W. COBURN,

R. D. Flood,

M. McGaun,

H. A. WATERMAN,

H. P. BEERS,

R. W. CROSBY,

D. M. BATES,

J. A. PUTNAM,

L. N. WHITNEY.



NINETY-TWO.

R. WATERMAN, JR., W. P. GRAY,

S. Burrage, G. H. Ingraham, G. T. Forbush, W. R. Kales,

H. E. CLIFFORD.

#### NINETY-THREE.

H. W. Alden,

A. F. Bemis, W. R. Hill, E. E. Blake, A. E. Fowle.

#### NINETY-FOUR.

A. Ames, 3D, G. N. Leiper,

J. C. NOWELL,

H. F. COPELAND,

R. LORING, R. B. PRICE,

A. B. TENNEY.

## C. A. Howes,

C. A. MEADE,

R. K. Sheppard,

#### NINETY-FIVE.

S. H. FOSTER, H. HORMEL, J. L. NEWELL,

F. S. V. SIAS,

F. W. FULLER, E. H. HUXLEY,

F. A. Park,

W. C. Powers.

G. W. HAYDEN,

F. T. MILLER, G. F. SHEPARD, IR.

C. F. TILLINGHAST, P. H. WITHINGTON,

## Afternoon Parties.

Season 1892.

Saturday, February 13, February 27, March 12, March 26.

## COTILLION HALL.-DAGGETT'S ORCHESTRA.

## MATRONS.

MRS. FRANCIS A. WALKER,

Mrs. Wm. B. Rogers,

MRS. CHARLES R. CROSS,

MRS. GEORGE F. SWAIN,

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C. H. BIGELOW, '92,

G. E. McQuesten, '93,

H. S. WEBB, '92,

F. S. V. SIAS, '95.



President.
J. Ramsey Speer, '93.

#### Vice-Presidents.

H. A. RICHMOND, '93.

R. STURGIS, 2D, '94.

C. E. LEBER, '95.

E. A. Brown, '96,

Secretary, C. D. Pollock, '94. Treasurer, W. A. Johnson, '94.

## Members of Executive Committee,

F. N. DILLON, '93,

C. H. Johnson, '93,

F. W. Fuller, '95.

On April 27, 1892, about twenty-five Republican students assembled and decided to form an Institute Republican Club. A temporary chairman and secretary were chosen, and a committee was appointed to draw up a constitution. This meeting adjourned until May 7, when a constitution was adopted and officers were chosen.

Thus began the Institute Republican Club, whose purpose, in the words of its constitution, is "to extend and strengthen Republican principles in the Massachusetts Institute of Technology." The club joined the American League of College Republican Clubs, and was represented at the League meeting in Buffalo, N. Y., last summer, by Mr. W. G. Houck.

Good work was accomplished through the early part of the fall in getting students registered; and then, near the close of the campaign, came that memorable night,—the night of the great torchlight parade when we were escort to the Chief Marshal, with Harvard "four miles in the rear."

The club looks forward to another successful year in the state campaign of 1893.



THE · OFFICERS · OF THE · PARADE

## YE MOGULS OF YE REPUBLICAN PARADE AND THEIR SEQUENCE.

Mounted Marshals.

R. K. Sheppard, '94, Adjt.,
F. N. Dillon, '93, W. A. Johnson, '94. J. R. Sprer, '93, Chief, H. A. RICHMOND, '93,

Dismounted Marshals. A. E. BROWN, '96. R. STURGIS, 2d, '94, E. LEBER, '95,

Drum Corps. H. M. MOTT-SMITH, '94, Stick Slinger. Class of Ninety-Three.

COMPANY A. L. S. James, Captain, D. D. Jackson, A. E. FOWLE. H. A. Morss, H. C. WATERMAN.

COMPANY B. M. GORHAM, F. T. TOWNE, Theta Xi Coach. H. W. ALDEN, S. D. WALDRON, H. C. Johnson, Captain, W. T. Barnes,

Phi Gamma Delta Coach. Class of Ninety-Four.

C. N. Wrightington, Adjutant. R. B. PRICE, Major, STAFF.

S. H. BLAKE, H. F. COBURN. A. L. PATRICK, W. D. McJennett, H. M. CHASE, C. L. PARMELEE, COMPANY A.

N. CHENEY, 1st Sergeant. G. TAYLOR, 1st Lieutenant, R. B. Adams, Captain, COMPANY B.

H. W. GARDNER, 1st Lieutenant, F. W. Lovejoy, 1st Sergeant. W. H. KING, Captain, COMPANY C. T. HORTON, 1st Sergeant. V. L. BENEDICT, Captain, A. Ames, 3d, 1st Lieutenant,

COMPANY D. W. A. WILSON, 1st Lieutenant, H. P. HASTINGS, 2d Lieutenant, T. G. RICHARDS, Captain, D. W. RICHARDS, 1st Sergeant.

Delta Upsilon Coach. Class of Ninety-Five. COMPANY A.

E. H. HUXLEY, Captain, F. W. FULLER, 2d Lieutenant, C. F. TILLINGHAST, 1st Lieutenant, B. J. CLERGUE, 1st Sergeant.

COMPANY B. C. C. TAFT, 1st Lieutenant, P. H. BLODGETT, 1st Sergeant. G. W. HAYDEN, Captain, C. G. WILLIAMS, 2d Lieutenant, Two Ninety-Three Coaches.

Class of Ninety-Six. Every one for himself.

## THAT GLORIOUS MARCH.

OU remember that day—it came at last, in tears to be sure, but still it came. It did pretty well to come at all, considering the Tuesday that followed just after. Why didst thou weep, eventful day? From sympathy, that the Republican Club was "stuck," or that "Mike Jennett" had to perambulate with a rollicking, muddy Republican at each elbow?

Now then, to the assembly! Every man knew just where to fall in—the mud, chiefly; what to do—what he pleased, mostly; and how to do it—don't give a d—, entirely. Such discipline, well, Napoleon wasn't in it; such ruddy, silvery, splendor as could dim even Harold's tinware; such sport as only college boys invent—all this had we, all this and more.

Stuck in the mud at first we were, but soon we got a move on; then all the girls got stuck on us, 'tis said a few became dead gone; but we, untouched, did head the fun with Harvard four miles behind! Down Boylston Street, past dear old Tech., our column fine moved on. Roman candles, fireworks rare, did neither kid nor lover spare, hit one with o'er patched panties bare, betrayed the other with well-cussed glare.

On, yet on, and still we lead; some now new gowns do sorely need, for Bennie's Hat has bottom lost—a blaze, a fright, no gown the cost. And now we're

near our journey's end, in one long yell our throats we rend, pass Major



Briggs in quick review, and then, excepting very few, quickly tuck our duds away and ready make for the coming fray. And ye, too, marched on, proud Harvard men; though thousand strong, your haughty ken was soon informed it could not scare the Tech. Four Hundred in Scollay Square. The shades of evening hid the rest, but later, bumps and bruises kept from rest, partakers in this martial test, just as F's on semi-an's will often change a fellow's plans; make him burn the midnight oil, his whole night's rest completely spoil. Learn from

this, avoid a fix, don't do up Harvard-till '96.





### TECHNOLOGY CHRISTIAN UNION.

### COMMITTEE.

GEORGE W. STOSE, '93, F. A. HANNAH, '95, T. C. DAVIES, '94, Wm. C. Ewing, '96.

THIS Association meets each week on Wednesday morning, from twenty minutes to eight to five minutes of eight, in Room 14, Rogers Building.

The meetings are informal prayermeetings, and are conducted entirely by the students of the Institute.



GEORGE VINCENT WENDELL.

Second Marshal.

Third Marshal.

WILLIAM PALMER GRAY,

JAMES SCOTT PARRISH.

MACY STANTON POPE, HARRY ATWOOD BURNHAM, GEORGE HASKELL GOODELL, RALPH HAYES SWEETSER, George Hunt Ingraham. FRANK EATON NEWMAN,

Joshua Crane, Jr., Wallace Eugene McCaw, SEVERANCE BURRAGE, ALBERT PRESCOTT MATHEWS, FREDERICK CAMPBELL MOORE, WILLIAM WILLARD LOCKE.

### program.

OVERTURE. "Hungarian Lustspiel."

Kela Bela

ORCHESTRA. ADDRESS. By President of the Class,

WILLIAM ROBERT KALES.

ORATION.

Louis Derr.

Music. Gavotte. "Dance of the Shepherds." ORCHESTRA.

Fenimore

HISTORY.

MURRAY WARNER.

STATISTICS.

WILLIAM ESTY.

Song, Cornet Solo. "Oh! promise me." MR. THOMAS MULLALY. DeKovan

PROPHECY.

GAYLE FORBUSH.

The Music for the afternoon was furnished by Cheeney's Orchestra,

### CLASS-DAY EXERCISES.

Huntington Hall, May 30, 1892.



HE president of '92, Mr. Kales, began the exercises of the afternoon, by a short address to the Class, after which he introduced the Chief Marshal, Mr. Wendell. The latter, with well-chosen remarks, wound up the various officers of amusement and started them off before an attentive

audience.

First to unwind was the Orator, Mr. Derr. Tracing the growth and necessity of specialism from the changing conditions of the times, he finally enlarged upon the "Mission of Specialism." Ably and logically he applied his ideas to our educational system. "The extreme of general culture refines but enervates; over-concentration intensifies but narrows and degrades." True specialism, "does not sink the individuality of the man in his chosen work." "First educate the man; then, and not until then, train him for his particular work in life." This is the object of the great technical schools of today; to their graduates must be entrusted the industrial future of the nation. The real result of specialism is universal brotherhood, each man linked to the rest of humanity by his dependence upon others.

When the orchestra no longer interfered, Mr. Warner recited ancient and modern History. Great had been the Freshman and Sophomore triumphs of Ninety-two. As Freshmen they had whipped the Sophs., and as Sophs. they beat the Freshmen in every contest. They were the originators of "free trips to Moon Island." Theirs was the champion tug-of-war team. The fame of their Harvey and

their Charlie (polar opposites) extended throughout the land.

Mr. Esty next boldly announced that he was going to combine literal statement of fact and figurative metaphor. The products of combustion were very complicated, varying from "my highest ambition—moonlight, rowboat, summer's night, best girl, no chaperone," or "Tech. is a great collection of picked learning and salted mathematics" to "the most popular Professor is John D. Runkle." Analysis further proved, "Hoxie wears a 16½ collar, beating Grover;" Ruggles likes "dreamy blue eyes, complexion in sympathy with the surroundings;" and "I favor co-education because most women are smarter than some men."

Finally the Prophet, Mr. Forbush, with the aid of his "ghost" and a pretty ethereal stenographer, described the future. Twenty years later, when engaged in everything from politics to laying pipes to supply St. Louis with fresh Boston Baked Beans, Ninety-Two already courted fame. An unfortunate architect of that class was then superintending the completion of the New Boston Public Library.

Again and again did Ninety-two cheer in old Rogers, and the building re-echoed the sound as though loth to conclude the fond

farewell.

### Graduation Exercises.

After abstracts of several theses had been read, President Walker addressed the Class. Briefly, he said:—

"Your teachers, one and all, congratulate you on your scholarly success.

"I have frequently heard it remarked—indeed, it is a favorite saying among men of to-day—that the strength of a college is its alumni. I deny it, at least so far as this college is concerned. The Institute of Technology owes much to its graduates by the credit they have brought to it, by their professional achievements; yet there is one body to which the Institute owes even more, and that is to its students.

"But for the prevailing high character of our students the establishment of the Institute would have been a mockery. Be as honest, patient, diligent and careful in your professional lifetime as you have been in your college life here.

"I am sure your standard of work will be high; let your standard of professional attainment and scientific acquisition also be set high, so that you shall always be fitting yourselves for better things and greater achievements."

One hundred and thirty-two men then received degrees,

### Alumni Association.

THE idea of forming an Alumni Association of the graduates of the Massachusetts Institute of Technology was first definitely developed in the year 1874. A committee appointed by the Class of 1873 sent letters to all the graduates of the school at that time asking their opinions upon the desirability of having such an organization. The general feeling upon the matter was favorable for its establishment, and in January, 1875, a meeting was called for the

purpose of organizing an association.

The Institute was then ten years old, and had about ninety graduates, of which number twenty-seven were present at the meeting. The purpose of an Alumni society was discussed, and it was brought out that the formation was a duty more than a pleasure. By joining together they could, by the strength of their numbers and their combined and individual influence, make graduation at the Institute especially desirable, thus doing away with the prevalent feeling to the contrary, and raising the standard of the degree conferred by the school. The association should do all in its power to further the interests of scientific educational institutions in general, and of Technology in particular. Provisions were made for drawing up a constitution and the meeting was adjourned. Afterwards a constitution was adopted and it was then voted that the association should have regular yearly meetings at which, after the transaction of business, there should be social entertainments.

From this small beginning the present flourishing association sprung. Its growth has been parallel with that of the Institute, each year bringing a larger addition to the number present at its annual

meetings.

Besides this Alumni Association proper there are two other organizations of old Technology men, the Northwestern and the Western Associations, with headquarters at Chicago and Denver respectively. In these, membership is not restricted to graduates of M. I. T., but any one is eligible who has been connected with the school as a student.

The existence of so many active societies with the interests of the Institute at heart, is indeed encouraging to those who are thinking of the future prosperity of our school. For to whom could Technology more fittingly appeal for endorsement and aid than to her own offspring!



### COMPANY A.

Captain.—Benjamin Hurd, Jr.

Lieutenants.— Albert Ernest Smyser,

George Kimball Burgess.

### COMPANY B.

Captain.—Frederick Henry Walker,

Lieutenants.— CHARLES HENRY HOWARD STONE,

LAWRENCE KINGSLEY SAGER.

### COMPANY C.

Captain.—JOHN TILLEY,

Lieutenants.— ERNEST EUGENE MEAD,

WILLIAM CHIPMAN MASON.

### COMPANY D.

Captain.—WILLIAM HENRY ALLEN, JR.
Lieutenants.— EDWIN RAYMOND BRACKETT.
HERBERT EDWARDS SMITH.

Adjutant.—Frederick William Coburn. Sergeant-Major.—Richard Whitney.



ROBERT K. SHEPPARD, President.

A. MAURICE ROBESON, Secretary. ALBERT B. TENNEY, Treasurer.

### EXECUTIVE COMMITTEE.

S. HENRY BLAKE, CHARLES A. MEADE, RAYMOND B. PRICE.

### MEMBERS.

AZEL AMES, 3D.,
DUDLEY C. CHAFFEE,
ISAAC B. HAZELTON,
J. CALVIN LOCKE,
HAROLD M. MOTT-SMITH,
GEORGE W. SHERMAN.

### D. ff. Chapter

OF THE

### ALPHA SIGMA SIGMA FRATERNITY.

### ACTIVE MEMBERS.

Gardner, '93. Crocker, '96.
Pechin, '94. Howe, '96.
Claflin, '95. Hyde, '96.
Allen, '96. Rockwell, '96.

Sмітн, '96.

and others too modest to appear in print.

Passive or Honorary Member, Holt, '96.

This "man of the pea-green shadow," for whom even the "Babes in the Woods" have attractions, was so strenuously anxious to join a secret society that the above-named "Active Members" generously banded together for the express purpose of gratifying his desires.

He was given a bang-up and down initiation, of which no ambitious mortal could complain. After saying his prayers with becoming dignity and going completely to bed in a crowded electric car, receiving a Demosthenes hair-cut, and undergoing a beer shampoo, he joyously sang:—

What fools we mortals be, such asininity!

Now I proclaim
I am a bloomin' one, son of a roarin' gun,

Now am I tame.

Next day he shocked the worthy citizens of Boston by appearing in the heart of the Blue Stocking district in night shirt and fool's-cap, decorated with the ASS emblems, yelling at the top of his voice, "I am an ASS, a deep-dyed ASS, an ASS". The A. S. S. Fraternity is now in a dormant state, awaiting a second worthy candidate.

For a further account of its proceedings see "The Tech.," Vol. XII., No. 12.



### Athletics at Sech.



THLETICS at Tech.! What, really at Tech? Yes, that is what we say, although a year ago such a statement would have been doubted, for had not the other members of the Eastern Intercollegiate League disowned us? But now all is changed. We have overcome all apathy and hostility and have put a winning team in the field. What a surprise it was to the winners of the triangular league when we beat them, 6-4, after it had been

disdainfully asserted that we might be capable of playing with the Interscholastic teams.

But, in order to realize fully the improvement that has been made of late in our standing in athletics, just glance at our records of two years ago and then at those of to-day! They then, indeed, were but little better than those of a first-class academy, but now Tech. need not be ashamed to take her stand among colleges of her own rank.

What has wrought this change? Surely better men have not come to Tech. of late, for the records show that individuals have done remarkably well before, but interest in athletics is much more general now than formerly. Many men keep in training and take advantage of the numerous meets of athletic clubs about us to enter and compete for a prize. This spirit is highly commendable, and we hope that the success which has attended them will open the eyes of aspiring athletes so that, where one man has previously entered, ten will take his place. Surely a profitable lesson can be learned from Harvard in this respect, for the number of prizes they win is in direct ratio to the number of entries. Go in, boys, and win!

But athletics cannot prosper without the hearty support of every man at Tech. This is a trite utterance, but a very pertinent one. The remedy suggested has always been an appeal to the grinds to stand up for the honor of the Institute. What do they care about athletic honors? All they are here for, apparently, is to win scholastic honors for themselves, to gratify their own selfish ambition.

The way, then, to gain their support, is to appeal to their selfish natures by making the meets so interesting that they cannot afford to miss them.

Class spirit is commendable. The more we make the meets a struggle for supremacy among the classes, the more interest will be taken in them. Some events should be introduced which will be distinctly class events. The severest setback class spirit has received for years was the abolition of Tug-of-War and the failure to substitute something as interesting. In the old days the gymnasium was crowded with enthusiastic under-classmen, who made the welkin ring with cheers for their teams. Now, only athletic cranks care to witness events no more exciting than jumping, putting the shot, and the like.

The objection has been made to Tug-of-War that it is too great a strain upon the men. This is absurd, although intelligent men have been hoodwinked into believing it. No man with heart disease should pull on the rope, neither should he enter any other contest. After the doctor has pronounced a man sound physically, there is no more danger attending Tug-of-War than any other event. Neither does it require more than one-half the training to get into condition that the mile-run, for instance, does. Any man who has tried both appreciates that. Still, who would dare claim that the mile-run is dangerous? Surely not the class that *imagines* she has the fleetest runners in Tech, within her ranks.

Tennis is a standard sport. We are glad to see the interest growing under such discouraging conditions. Even the grind has been inveigled into dropping his books for a few moments to watch the spirited contests which have taken place upon our courts this fall.

Indoor polo was tried last winter and under proper conditions would have been a decided success. Unfortunately, one member of the league was unprincipled enough to attempt to win by unfair means. In a league, properly run and composed of square players, Tech. should win the championship easily. The public will never support unfair play.

Could we see in the near future a well-equipped gymnasium on one of the rapidly-diminishing vacant lots near the Institute, we should then lay down our pen, assured of Tech.'s athletic future.



### Officers.

F. W. LORD, '93, President. J. R. Speer, '93, Vice-President. F. C. Green, '94, Secretary. C. E. Buchholz, '93, Treasurer.

### Executive Committee.

'93, H. W. STANWOOD,

'94, R. STURGIS, 2D.,

'95, A. GEIGER, JR.,

'96, B. HURD.

### Sparring and Wrestling Meeting.

December 19, 1891.

### LIGHTWEIGHT SPARRING.

W. J. BATCHELDER, '95, vs. R. STURGIS, 2d, '94. Won by W. J. Batchelder, '95.

### HEAVYWEIGHT SPARRING.

H. Doe, '92, vs. F. H. Harvey, '92.

F. H. HARVEY, '92, vs. S. SUTTON, '92. Won by S. Sutton, '92.

### LIGHTWEIGHT WRESTLING.

- J. W. Thomas, '95, vs. H. D. Shute, '92.
- J. R. SPEER, '93, 78. F. A. SARGENT, '94.
- J. R. SPEER, '93, 75. J. W. THOMAS, '95. Won by J. W. Thomas, '95.

### HEAVYWEIGHT WRESTLING.

- J. CRANE, JR., 92. vs. L. B. MANLEY, '92.
- E. H. ROBERTS, '95, vs. W. R. KALES, '92.
- W. R. Kales, '92, vs. J. Crane, Jr., '92.
  Won by W. R. Kales, '92.

'92 won	1		16	points.
'93 won			8	points.
'94 won		152	8	points.
'95 won			10	points.

### 13th Annual Open Scratch Meeting.

Winslow Rink, March 12, 1892.

50-Yards Dash,\* 53 s. E. B. Bloss, B. A. A., and H. A. A.

50-Yards Hurdle, 71 s. F. W. LORD, B. A. A., and M. I. T. A. C.

One-Mile Run, 4 m. 562 s. W. H. Alliston, W. A. C.

One-Mile Walk, 6 m. 372 s. T. Shearman, M. A. C.

Running High Jump, 5ft. 8 in. G. R. FEARING, H. A. A.

Standing Broad Jump, 10 ft. 91 in. A. P. Schwaner, N. Y. A. C.

Running High Kick, 9 ft. 4 in. T. PORTER, M. A. C.

Pole Vault, 10 ft. 51 in. J. CRANE, JR., B. A. A. and M. I. T. A. C.

Putting Shot, (16 lbs.)40 ft. 10 in. E. J. GIANNINI, N. Y. A. C.

<sup>\*</sup> World's Record.

# Apparal Oaldoor Spring Meeting.

Charlesbank Gymnasium, May 4, 1892.

French Park W Ton, was each	t, thereon, ye, t. m. toke, y3, second.	A. French, '92; G. Lawson, '95, second.	3. K. Dearborn, '93; C. Taintor, '93, second.	W. J. BATCHELDER, '95; G. K. DEARBORN, '93, second.	7. A. Sargent, '94; T. T. Dorman, '93, second.	. Crane, Jr., '92; F. W. Lord, '93, second.	. Crane, Jr., '92; E. L. Andrews, '93, second.	3. OWEN, 3D, '94; E. H. CLAPP, '95, second.	J. D. HEYWOOD, '93; J. AIKEN, '94, second.	J. CRANE, Jr., '92; J. Dove, '95, second.	7. H. HARVEY, '92; C. H. PARKER, '95, second.	. 34 points.	37 points,	8 points,	. 23 points.
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				v.				o.		to ft, 8 4 in.	30 ft. 3 in.	92 won	93 won	'94 won	95 won
				2 m. 143 s.	m, 6 s.	163 s.	vá	m, 22 S.	ft. 4 in.	00	10	2	3 4	4	10
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						116	He	0	un	12	ne				
100-Vards Dash		220-Yards Dash	440-Yards Dash	Half-Mile Run	One-Mile Run	120-Yards Hurdle	220-Yards Hurdle	Two-Mile Bicycle	Running High Jump	Running Broad Jump	Throwing Hammer (16 lbs.)				
5	1	9	9	R	RW	H	H	Bi	Tig	310	H				
Spi		rds	rds	Tile	le.	ras	rds	ile	7 5	S	129				
Va		Va	Ya	1	MI	Ya	Ya	W	uin	uin	non				
0		50-	-07	Tal	2H	-02	-0	200	un	un	hre				
1	1	2	4	H	0	I	24	I	R	R	I				

<sup>\*</sup> Not recognized as M. I. T. A. C. record, as no pistol could be used for starting.

### 12th Indoor Winter Meeting.

December 10, 1892.

	B. HURD, JR., '96; E. A. BOESEKE, '95, second.	53 S B. HURD, JR., '96; C. W. DICKEY, '94, second.	6 ft., 3 in С. D. Heywood, '93; A. Sperry, '94, second.	9 ft. 9 in G. A. ROCKWELL, '95; C. D. HEVWOOD, '93, sec.	Rope Climbing, (20 ft. rope), 6 s. s BAKENHUS, '96; A. C. Jones, '95, second.	Putting Shot, (16 lbs.) 30 ft. 5 in W. B. Clafilm, '95; C. H. Parker, '95, second.	Fence Vaull 6 ft. 4½ in., H. C. Waterman, '93 : A. C. Jones, '95, second.	G. A. ROCKWELL, '95; HERSEY, '96, second	. 17 points.	6 points.	17 points.	32 points.*	
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,	35- Yards Dash, .	35- Yards Hurdle, .	Running High Jump, .	Standing Broad Jump,	de	itti	nce	Potato Race,					
	33	53	R	S	R	0	Fe	P					

\* See page 44.

### Summary of Class Points for the Year 1891-1892.

'92.	'9	3. '9	4. '	95.	'92. '9	93. '9	4. '	95.
35-Yards Dash		4		5	Special-Weight Sparring		5	
35-Yards Hurdle		8		1	Special-Weight Wrestling.	5		
Running High Jump		6		3	100-Yards Dash 5	3		-1
Standing High Jump		6		3	220-Yards Dash 5			4
Running High Kick	3	S			440-Yards Run	8		1
	5			4	Half-Mile Run	3		6
Rope Climbing		1	3	5	One-Mile Run	8		1
Putting Shot	5		3	1	120-Yards Hurdle 5	3		1
Team Race		5			220-Yards Hurdle 5	4		
Heavy-Weight Sparring		-			Two Mile Bicycle		5	3
Heavy-Weight Wrestling.					Running High Jump 1	7	3	
Light-Weight Sparring			3	5	Running Broad Jump 7	1		3
Light-Weight Wrestling		3		5	Throwing Hammer 6			3
	32	41:	9	32	34	42	13	23
					32	41	9	32
					- 66	83	22	55

### Summary of Points toward Individual Merit Cup for the Year 1891-1892.

J. CRANE, JR. '9227	W. J. BATCHELDER, '956	J. Aiken, '943
C. D. HEYWOOD, '93,11	T. T. DORMAN, '93 5	G Lawson, '95 3
	F. H. HARVEY, '92 5	CLAPP, '95 3
A. FRENCH, '9210	G. OWEN, 3D, '94 5	C. H. PARKER, '95 3
G. K. Dearborn, '938	E. L. Andrews, '934	W. B. CLAFLIN, '95
		C. F. Tillinghast, '95t
A. B. PAYNE, JR.		SEKE, '95

### AMATEUR POLO LEAGUE.

### President.

Major P. A. Dyer.

Vice-Presidents.

Secretary-Treasurer.

J. C. Noblit, M. I. T., R. O. DOHERTY, T. A. C. E. B. Bower, B. A. A.

Members.

B. A. A. First Regiment. Technology.

Trimount.

### TECHNOLOGY POLO TEAM.

Captain.

Manager.

F. P. SIMONDS, '93.

J. C. Noblit, '93.

First Rush.

Second Rush.

A. M. Moody, '94.

W. F. SPAULDING, '94,

T. I. Jones, '95.

Centre.

J. C. BOYD, '93.

Half-Back.

Goal.

F. P. SIMONDS, '93.

F. C. Shepherd, '92.

### SCHEDULE OF GAMES.

Day as D. A. A D.											
Dec. 22, B. A. A. vs. 1st Reg.,			6.5		*					×	0-1.
Dec. 24, T. A. C. vs. M. I. T.,		13.3				- 1					1-4.
Dec. 29, B. A. A. vs. M. I. T.,					*						I-2.
Dec. 31, 1st Reg. vs. T. A. C.,		*3									1-7.
Jan. 5, 1st Reg. vs. B. A. A.,			i ia		,			7.0		10	2-3.
Jan. 7, B. A. A. vs. T. A. C.,				4		8	28				0-4.
Jan. 12, T. A. C. vs. 1st Reg.,										112	7-0.
Jan. 14, 1st Reg. 78. B. A. A.,											0-7.
Jan. 19, T. A. C. vs. B. A. A.,	12		12		Ç						
Jan. 21, T. A. C. vs. 1st Reg.,											9-2.
Jan. 26, B. A. A. vs. M. I. T.,			130								4-0.
Jan. 28, 1st Reg. vs. M. I. T., .							-3				2-4.
Feb. 2, B. A. A. 78. 1st Reg.,											0-1.
Feb. 4, T. A. C. vs. M. I. T.,										10	6-2.
							3		-		-

Owing to disagreement the remainder of the games were not played.

### Standing of the teams at the time of disbanding.

CLUBS.	La da Ca	54, I, I.	Br Ar Ar	ISI KEG.	WON.	PER CENT, WON
T. A. C.	_	1	2	3	6	85.7
M. I. T.	1		1	1	3	60.0
B. A. A.	0	1		2	3	37.5
1st Reg.	0	0	2	-	2	25.0
Lost	1	2	5	6	14	

### FOOT BALL.



President.

J. C. Boyd, '93.

Secretary-Treasurer.

F. P. Simonds, '93.

Captain.

J. W. THOMAS, '95.

Vice-President.

E. D. CLARKE, '94.

Manager.

W. H. VORCE, '94.

Assistant-Manager.

J. S. PECHIN, '94.

Executive Committee.

J. C. Noblit, '93,

W. J. BATCHELDER, '95.

L. R. Nash, '94,

### Members of the 'Varsity Team.

F. В. Аввотт, '93,

Р. Н. Тномая, '93,

H. L. WARDNER, '94,

F. GREENE, '95,

G. A. ROCKWELL, '96,

J. W. Thomas, '95,

E. L. Andrews, 94,

H. S. GILMAN, '95,

C. Tanitor, '93,

W. A. Johnson, '94,

J. W. Cushing, Jr., '95.

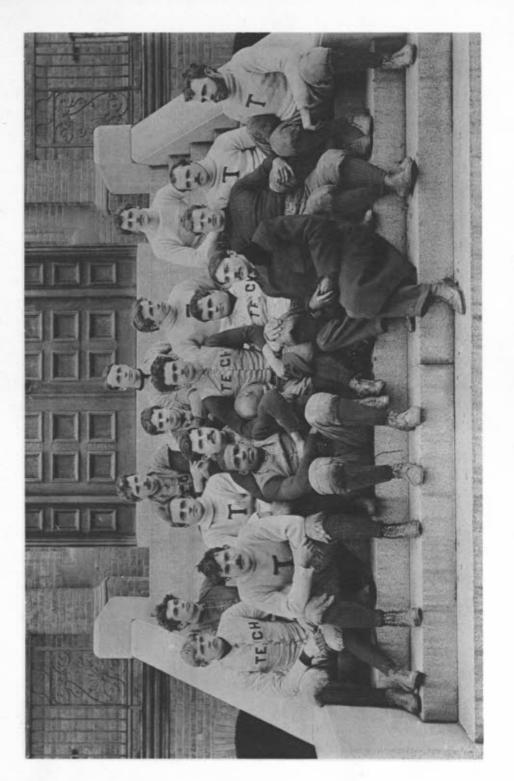
G. K. Dearborn, '93,

F. P. Simonds, '94,

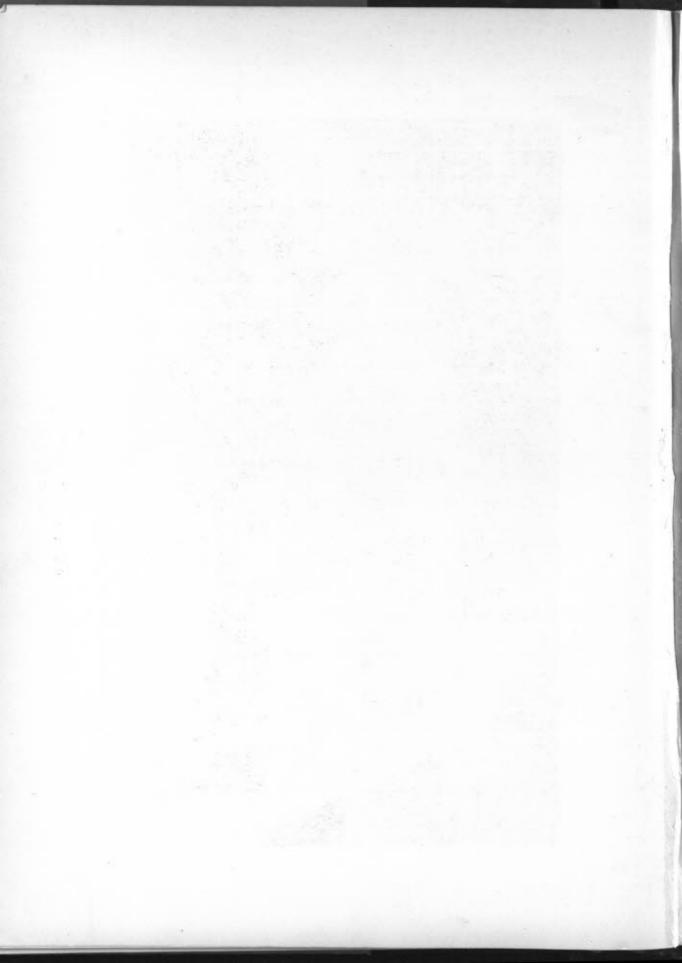
L. R. Nash, '94,

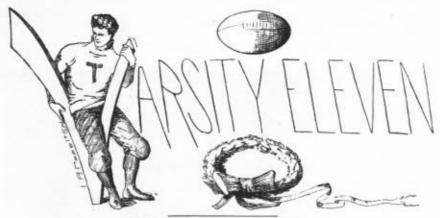
J. Manahan, '95,

T. P. CURTIS, '94



VARSITY FOOTBALL TEAM.
SEASON OF 92.





SUMMARY OF GAMES.

1. Boston, Oct. 8th-Holy Cross vs. Technology. Score: 0-42,

Rushers: Green, Johnson, Gilman, Manahan, Dana, Wardner, P. H. Thomas. Quarter-back: J. W. Thomas, (Capt.). Half-backs: Rockwell, Dearborn. Full-back: Andrews.

2. Boston, Oct. 12th-B. A. A. vs. Technology. Score: 0-12.

Rushers: Nash (Abbott), Wardner, Gilman, Manahan, Taintor, Johnson, P. H. Thomas. Quarter-back: J. W. Thomas (Capt.). Half-backs: Dearborn, Rockwell. Full-back: Andrews.

3. Amherst, Mass., Oct. 15th-Amherst vs. Technology. Score: 14-0.

Rushers: Green, Johnson, Taintor, Manahan, Gilman, Wardner, Nash. Quarter-back: J. W. Thomas (Capt.). Half-backs: Rockwell, (Simonds), Dearborn. Full-back: Andrews.

Boston, Oct. 19th—Exeter vs. Technology. Score: 0-58.

Rushers: Abbott, Mayo (Wardner), Gilman, Manahan, Taintor, Johnson, Wardner, (P. H. Thomas). Quarter-back: J. W. Thomas. Half-backs: Dearborn, Simonds. Full-back: Andrews.

5. Providence, R. I., Oct. 21st-Brown vs. Technology. Score: 6-30.

Rushers: Abbott, Wardner, Dana, Manahan, Cushing, Johnson, Thomas.

Ouarter-back: J. W. Thomas, Half-backs: Dearborn, Simonds. Full-back:

Andrews

6. Hartford, Conn., Oct. 22d-Trinity vs. Technology. Score: 6-12.

Rushers: Abbott, Wardner, Dana, Manahan, Cushing, Johnson, Thomas. Quarter-back: J. W. Thomas (Capt.), Half-backs: Dearborn, Simonds, Full-back: Kent.

7. Exeter, N. H., Oct. 29th-Exeter vs. Technology. Score: 0-22.

Rushers: Abbott, Nash, Cushing, Manahan, Taintor, Johnson, P. H. Thomas, Quarter-back: J. W. Thomas, Half-backs: Rockwell, Dearborn, Full-back: Andrews.

8. Cambridge, Mass., Nov. 2d-Harvard vs. Technology. Score: 34-0.

Rushers: P. H. Thomas, Johnson, Taintor, Manahan, Gilman, Cushing, Nash. Quarter-back: J. W. Thomas (Beers). Half-backs: Rockwell, Dearborn. Full-back: Andrews.

9. Boston, Nov. 5th-Amherst vs. Technology. Score: 4-6.

Rushers: Curtis, Cushing, Taintor, Manahan, Gilman, Johnson, (Simonds), P. H. Thomas. Quarter-back: J. W. Thomas (Capt.). Half-backs: Dearborn, Rockwell, Full-back: Andrews.

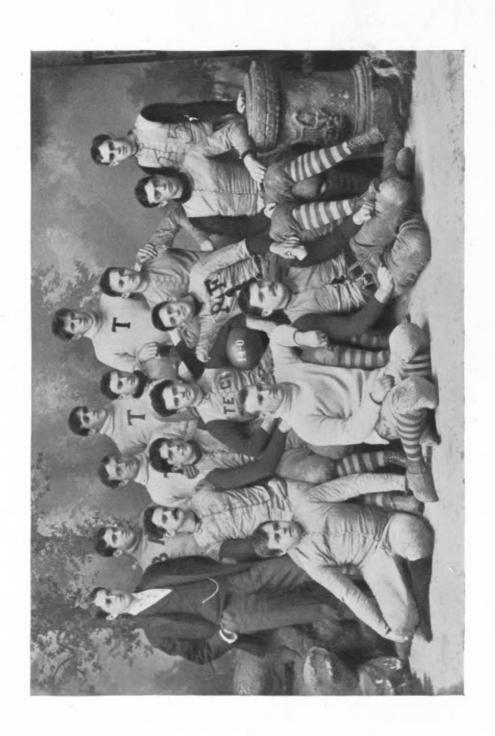
10. Providence, R. I., Nov. 10th-Brown vs. Technology. Score: 6-10.

Rushers: P. H. Thomas, Curtis, (Johnson), Taintor, Manahan, Gilman, Cushing, Green. Quarter-back: J. W. Thomas (Capt.). Half-backs: Rockwell, Dearborn. Fullback: Andrews, (Curtis).

11. Ithaca, N. Y. Nov. 12th-Cornell vs. Technology. Score: 42-12.

Rushers: Abbott, Simonds, Gilman, Manahan, Cushing, Johnson, P. H. Thomas. Quarter-back: J. W. Thomas. Half-backs: Rockwell, Dearborn. Full-back: Curtis.

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### '95 Foot Ball Eleven.

### RUSHERS.

Lawson, (Hayward), . Ends, . . . . Green.

Lebosquet, . . . Tackles, . . . (Captain) Newell.

Gilman, . . . . Cushing.

SCHMITZ, Centre.

### QUARTER-BACK.

J. W. THOMAS,

### HALF-BACKS.

BATCHELDER,

LEBER.

### FULL-BACK.

SIAS.

### Summary of Games.



### '96 Foot Ball Eleven.

### RUSHERS.

Manahan, Centre.

QUARTER-BACK.

BEERS, Captain.

HALF-BACKS.

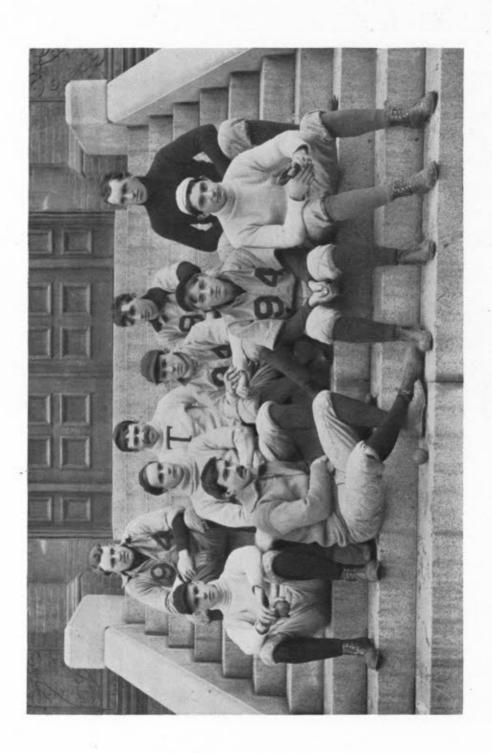
HOWLAND,

ROCKWELL.

FULL-BACK.

MEAD.

### Summary of Games.





Captain.

C. A. MEADE.

Manager.

J. W. TARBOX.

### Team.

P. Dumaresq, r. f.

F. H. Murkland, 1st b.
A. W. Drake, c.
E. Mink, p. and c.
E. Mink, p.

A. M. Moody, s. s. and p.
F. F. Maxwell, 3d b.
J. Pechin, c. f.
F. C. Green, l. f. and s. s.
C. A. Meade, 2d b.

J. W. Jones, l. f.

Substitutes: J. W. Chapman, D. W. Richards, Jr.

### Summary of Games.

Ninety-Four	9.	Cambridge High and Latin 7.
Ninety-Four	7.	Cambridge Manual 12.
Ninety-Four	18.	Hopkinson 5.
Ninety-Four		Cambridge, Y. M. C. A 7.
Ninety-Four		Boston Univ., '94 (forfeited by latter).
Ninety-Four	9.	Harvard, '95 14.
Ninety-Four		Harvard, '94 4.
Ninety-Four*	13.	Nmety-Five 7.

<sup>\*</sup> Drake's left leg broken in fifth inning by Fitts sliding in from third base.

### '95 Base Ball Feam.

Captain.

J. W. THOMAS.

Manager.

F. S. V. SIAS,

### Team.

J. F. MURPHY, 3d b.

H. W. HAYWARD, p.

J. W. Thomas, c.

E. Leber, s. s.

H. G. Fitts, l. f.

H. M. TUCKER, 1st b.

T. I. Jones, r. f.

G. LAWSON, c. f.

J. McK. Speer, 2d b.

Substitutes. F. S. V. SIAS, F. E. FAXON.

### Summary of Games.

Ninety-Five 13.	Boston Latin 3.
Ninety-Five 3.	Phillips Exeter 4-
	Cambridge Manual 13.
Ninety-Five	Ninety-Three 15.
	Harvard, '95 12.
Ninety-Five	Somerville High 12.
Ninety-Five 7.	Ninety-Four



### Members.

'93.

H. R. BARTON,
T. I. CHAPMAN,
W. W. CUTLER,
A. G. Davis,
R. J. DUNCAN,
M. Gorham,

N.	S.	Bean,
A.	A.	CLAFLIN,
G.	DA	NA,
C,	W.	DICKEY,

La	Α.	Abbott,	
F.	W.	BARDWELL,	JR.
G.	L.	BIXBY,	
Η.	C.	BUCKMINST	ER,
	F. G.	F. W. G. L.	F. W. BARDWELL, G. L. BIXBY, H. C. BUCKMINST

F. H. HOWLAND,	H. A. RICHMOND.
H. N. LATEY,	J. R. Speer,
G. E MERRILL,	G. W. Stose,
C. F. Morse,	K. S. SWEET,
A. B. PAYNE, JR.,	F. T. Towne,
H. L. RICE,	A. B. Wadsworth.
'94.	

5.71	
H. K. McGoodwin,	F. H. MURKLAND,
T. Horton,	W. H. SAYWARD, JR.,
A. R. Mackay,	W. B. Taylor,
E. I. Marvell,	T. VARNEY.
10.7	

'95.	
D. N. BURKHALTER,	A. D. FULLER,
E. E. DENISON,	W. HALLIBURTON,
H. A. Foster,	T. M. Lothrop,
S. H. Foster,	J. L. NEWELL.
A. N. Winslow.	

### Annual Tennis Tournament.

### SINGLES.

Preliminary Round. H. A. Foster beat Dickey, 5-7, 6-3, 6-3; Howland beat Bardwell, 6-2, 6-3; Bean, '94., beat Rice, 8-6, 6-3; Horton beat Cutler, 6-1, 7-5; Duncan beat Buckminster, 6-1, 6-1; Varney beat Payne, by default.

First Round. Davis beat Mackay, 6-3, 5-7, 6-4; Wadsworth beat Taylor, 6-3, 6-4; H. A. Foster beat Chapman, 6-4, 7-5; Howland beat Bean, 6-4, 6-2; Horton beat Duncan, by default; S. H. Foster beat Varney, 2-6, 6-4, 7-5; Claffin beat Abbott, 6-3, 8-6; Sayward beat Marvell, 3-6, 6-2, 6-4.

Second Round. Wadsworth beat Davis, 6-4, 6-0; Howland beat H. A. Foster 6-2, 6-1; Horton beat S. H. Foster, by default; Claffin beat Sayward, 6-2, 6-2.

Third Round. Wadsworth beat Howland, 6-2, 4-6, 6-4, 8-6; Horton beat Claffin 6-3, 6-0, 6-3.

Finals. T. Horton, '94., beat A. B. Wadsworth, '93., 6-4, 6-2, 6-1.

### DOUBLES.

- Preliminary Round. Taylor and Varney beat Richmond and Speer, 6-0, 6-4; Gorham and Towne beat Murkland and Claffin, 6-1, 4-6, 6-1; Howland and Horton beat Denison and S. H. Foster, 9-7, 3-6, 6-2; Davis and Abbott beat Sayward, Jr. and Dickey, by default.
- First Round. Wadsworth and Winslow beat Bixby and Bardwell, 4-6, 6-4, 6-1; Gorham and Towne beat Taylor and Varney, 4-6, 10-8, 6-2; Howland and Horton beat Davis and Abbott, 6-2, 6-1; Fuller and H. A. Foster beat Duncan and Barton, 8-6, 6-1.
- Second Round. Wadsworth and Winslow beat Gorham and Towne, 6-1, 3-6, 6-1; Howland and Horton beat Fuller and Foster, 6-1, 6-2.
- Finals. A. B. Wadsworth, '93., and A. N. Winslow, '95., beat F. H. Howland, '93., and T. Horton, '94., 6-3, 6-4, 6-4.

### Institute Records.

20-Yards Dash, F. W. LORD, '93. 3 S. 50- Yards Dash, 5 ts. C. E. Bucholz, '93. 100-Yards Dash. C. R. Boss, '93. 10 S. 220- Yards Dash, A. FRENCH, '92. 23 ts. 440-Yards Run, T. SPENCER, '91. 53% S. Half-Mile Run, T. Spencer, '91. 2 m. 62 s. One-Mile Run, 4 m. 442 s. F. A. SARGENT, L. S. of D., '94. Cross-Country Run, 31 m. 11 s. W. J. BATCHELDER, '95. F. W. LORD, '93. 120-Yard Hurdle, 17 5 S. J. CRANE, JR., '92. 220-Yard Hurdle, 29% S. One-Mile Walk, 8 m. 5% s. A. H. ALLEY, '91. 6 m. 401 s. C. H. WARNER, '89. Two-Mile Bicycle, 6 ft. 1 in. C. D. HEYWOOD, '93. Running High Jump, Standing High Jump, 4 ft. 10 in. F. R. Young, '86. Running Broad Jump, 20 ft. 81 in. J. CRANE, JR., '92. 9 ft 111 in. C. D. HEYWOOD, '93. Standing Broad Jump, 9 ft. 31 in. C. D. HEYWOOD, '93. Running High Kick, Fence Vault, 7 ft. 2 in. W. F. RIPLEY, '82. 10 ft. 7 in. J. CRANE, JR., '92. Pole Vault, 36 ft. 21 in. J. C. E. DE BULLET, '92. Putting Shot, (16 lbs.) 80 ft. 114 in. L. B. MANLEY, '92. Throwing Hammer, (16 lbs.) H. O. CARRIER, '95. Rope Climbing, (20 ft. rope.) 51 s.

### \*Collegiate Records.

A Collegiste Record is one made by a collegian in any games to which the I. C. A. A. A. A. A. A. gives approval.

Jarvis Field, May 24, 1881. Beacon Park, July 1, 1886. New Haven, May 10, 1890. Berkeley Oval, N. Y., May 17, 1890. Berkeley Oval, N. Y., May 30, 1891.	Berkeley Oval, N. Y., May 30, 1891.	. Beacon Park, Allston, July 9, 1890. Holmes Field, May 24, 1890.	. Travers Island, N. Y., June 29, 1889.	Berkeley Oval, N. Y., May 25, 1889.	. New Haven, May 31, 1888.	Berkeley Oval, N. Y., May 30, 1891	. Holmes Field, May 22, 1891.	Manhattan Field, May 28, 1892.	. Cambridge, May 10, 1886.	Cambridge, May 12, 1885.	. Cambridge, November 19, 1886.	Philadelphia, May 18, 1892.	Philadelphia, Oct. 7, 1887.	Worcester, May 28, 1890.	<ul> <li>Berkeley Oval, N V., May 30, 1891.</li> </ul>	Mott Haven, May 9, 1879.	. Berkeley Oval, N. Y., May 30, 1891.	Cambridge, May 16, 1891.	New England Championship Games, June 11, 1892.
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Harvard, Harvard Yale. Yale.	Princeton	H. A. A. N. Y. A.	Princeton	Amherst.	Vale.	Yale .	Harvard	Princeton	Harvard	Harvard	Harvard .	Harvard	Univ. of Penn	Williams	Columbia	Princeton	Yale .	Harvard	Harvard
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E. J. Wendell. Wendell Baker C. H. Sherrill. C. H. Sherrill. L. H. Cary,	L. H. CARY	W. C. Downs	W. С. Dонм	C. O. WELLS	W. G. LANE,	H. L. WILLIAM	I. P. LEE	A. Borcherli	H. H. BEMTS	H. Bemis.	H. Bemis	R. H. DAVIS.	B. PAGE.	CROOK .	MAPES .	LARKIN	D. RYDER	R. FINLAY	S. H. Evins
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100-Yards Dash	220-Yards Dash	440-Yards Run .	Half-Mile Run	One-Mile Run .	Three-Mile Run	120-Yards Hurdle	220-Yards Hurdle	One-Mile Walk .	Two-Mile Walk	Three-Mile Walk	Screw-Mile Walk	Two-Mile Bicycle	Running High Jump	Standing High Jump.	Running Broad Jump	Standing Broad Jump	Pole Vault .	Throwing Hammer (16 lbs.	Putting Shot (16 lbs.)

\* Obtained through the kindness of Wm. H. Wiggin, Jr. + R. H. Hale's time of 23 m. 48 4-5 s made on Holmes Field, Cambridge, May 22, 1891, is omitted because not admitted by competent judges.

### \*Intercollegiate Records.

An Intercollegiate Record is a record made at an annual meeting of the I. C. A. A. A. A. A.

100-Yards Dash	O.		21.458.				H.	L. H. CARY,	10	55	Pri	rinceton	- 10.7		Berkeley Oval, N. Y., May 30, 1891.
440-Yards Run			49 1-2 8.			5	E,	G. B. SHATTUCK	CK		Am	Amberst	,		Berkeley Oval, N. Y., May 30, 1801.
Half-Mile Kum .		Ç	1 m. 57 1-5 s.	5 8.		>	C.	W. С. Dонм		26	Pri	rinceton			Berkeley Oval, N. Y., May 31, 1800.
One-Mile Run	٠	*	4 m. 29 4-5 s.	8		Ċ.	o	C. O. Wells			Am	Amherst			Berkeley Oval, N. Y., May 25, 1880.
120-Yards Hurdle		g :	25 4-5 8.			Ξ	1	H. L. WILLIAMS	MS.		. Vale				Berkeley Oval, N. Y., May 30, 1891.
One-Mile Walk			6 m. 52 1-5 s.	oś.		ſr.	¥.	F. A. BORCHERLING	SRLIN	NG.	Pri	rinceton			Manhattan Field, May 28, 1802.
Two-Mile Bicycle .	,		5 m. 47 2-5 8.	of un		Ö	R.	J. R. BREWSTER.	TER.		. Vale	e .			Manhattan Field, May 28, 1802.
Running High Jump	5		6 ft. 1-2 in.			Ö	×	. R. FEARING	50		Ha	Iarvard		13	Manhattan Field, May 28, 1802.
Nunning Broad Jump			22 ft. 11 1-4 in.	4 iii.		>	M	MAPES .	1		Col	columbia			Berkeley Oval, N. Y., May 30, 1801.
		-	10 ft. 9 3-4 in.	t in.	1		D.	2. D. RYDER	S		Val		0 104		Berkeley Oval, N. V., May 30, 1801.
Throwing Hammer (16 lbs	(1.59)		107 ft. 7 1-2 in.	a in.		i,	×	R. FINLAY			Ha	Harvard			Berkeley Oval, N. Y., May 30, 1801.
Putting Shot (16 lbs.) .			40 ft. 9 1.2 in.	in.		Y.	Ĕ,	B. COXE	÷		Va	ale.			Manhattan Field, May 28, 1887.

<sup>\*</sup> Obtained through the kindness of Wm. H. Wiggin, Jr.

## \*English College Records.

Beau House, April 3, 1868. Lillie Bridge, March 18, 1869. Lillie Bridge, April 8, 1871. Oxford, March 15, 1879. Cambridge, March 9, 1880. Cambridge, November 16, 1880.	Queen's Club Grounds, April 8, 1892.	Oxford, March 9, 1888.	Queen's Club Grounds, March 25, 1890.	Lillie Bridge, March 19, 1880.	Oxford, November 14, 1865.	Cambridge, May 21, 1879.	Lillie Bridge, April 7, 1876.	Queen's Club Grounds, April 8, 1892.	Lillie Bridge, April 7, 1876.	Oxford, March 10, 1884.
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Oxford . Oxford . Oxford . Cambridge . Cambridge	Cambridge	Oxford .	Oxford .	Cambridge	Oxford .	Cambridge	Oxford .	Oxford .	Cambridge	Oxford .
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J. P. TENNANT J. G. WILSON J. G. WILSON M. R. PORTAL E. L. LUCUS.	C. J. B. Moneypi	J. K. CROSS	. Роглоск Нпл	. М. Нопси	N. JACKSON	KEITH FALCONE	. J. Brooks	B. FRY .	H. HALES	H. WARE .
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100-Yards Run †	440-Yards Run .	Half-Mile Run .	One-Mile Run .	Three-Mile Run	120-Yards-Hurdle +	Two-Mile Bicycle	Running High Jump	Running Broad Jump	Throwing Hammer	Putting Shot § .

Obtained through the kindness of Wm. H. Wiggin, Jr.
 + Best English record.

# Hammer weighed 16 lbs., handle unlimited, unlimited run.

# \*American Amateur Best=On=Records.

Washington, D. C., Oct. 11, 1890. Berkeley Oval, N. Y., April 30, 1891.	Beacon Park, Allston, July 9, 1890.	Manhattan Field, N. Y. Sept. 19, '91.	N. Y. City, Nov. 11, 1882, Manhattan Field, Sept. 19, 1891.	Bergen Point, N. J., May 30, 1890.	Berkeley Oval, N. Y., May 30, 1891. Montreal, Canada, Sept. 24, 1892.	Holmes Field, May 22, 1891.	Mott Haven, N. Y., Oct. 27, 1883.	Brooklyn, N. Y., May 30, 1884.	Manhattan Field, N. V., Nov. 6, '83.	B. A. A. Sports, Boston, May 5, '80.	Springfield, Mass., Sept. 30, 1892.	Travers Island, Oct. 8, 1892.	Travers Island, June 11, 1892.	. Detroit, Mich., July 4, 1891.	Travers Island, Oct. 8, 1892.	Philadelphia, Sept. 17, 1802.	Cambridge, May 16, 1891.	Travers Island, Oct. 8, 1892.	Manhattan Field, N.Y. Sept. 19, 91.	. Toronto, Ont., Sept. 28, 1889.
Detroit A. C Princeton, A. C	H. A. A. N. Y. A. C.	N. Y. A. C.	M. H. (Match Race) . Manhattan A. C	New Jersey A. C.	Yale A. C N. Y. A. C	H. A. A	Williamsburg A. C.	Williamsburg A. C	Williamsburg A. C.	Scottish Amer. A. C.	Manhattan A. C	Xavier A. A	N. Y. A. C	Pastime A.C. of St. Louis	N. Y. A. C	Schuylkill Navy A. C.	H. A. A.	N. V. A. C.	N. Y. A. C	N. Y. A. C.
JOHN OWEN, JR L. H. CARY	W. C. Downs	W. С. Dонм .	W. G. George T. P. Conneff	W. D. DAY	H. L. WILLIAMS . H. H. MERRILL .	J. P. Lee	F. P. MURRAY	F. P. MURRAY	F. P. MURRAY	E, E. MERRELL .	W. W. WINDLE	M. F. SWEENEY .	A. P. SCHWANER .	C. S. Reber	A. P. SCHWANER	W. S. Rodenbaugh	J. R. FINLAY	J. S. MITCHELL .	G. R. GRAY	J. S. MITCHELL .
21 4-5 8.	47 2-5 s	I m. 54 I-2 s.	4 m. 21 2-5 s.	14 m. 39 s	15 4-5 8.	24 4-5 s.	6 m. 29 3-5 s.	13 m. 48 3-5 s.	21 m. 9 1-5 8.	54 m. 7 s.	4 m. 28 3-5 s	6 ft. 4 r-4 in	5 ft. 3 1-4 in.	23 ft. 6 1-2 in.	ro ft. 9 7-8 in	11 ft. 5 3-8 in.	108 ft. 5 in.	145 ft. 3-4 in.	46 ft. 7 3-4 in	27 ft. 4 in .
																	6 [bs.]	5 lbs.) with run		
100-Yards Dash	440-Yards Dash.	Half-Mile Run .	One-Mile Run	Three-Mile Run .	120-Yards Hurdle .	220-Yards Hurdle	One-Mile Walk .	Two-Mile Walk .	Three-Mile Walk	Seven-Mile Walk .	Two-Mile Bicycle	Running High Jump	Standing High Jump	Running Broad Jump	Standing Broad Jump	Pole Vault	Throwing Hammer (16 lbs.)	Throwing Hammer (16 lbs.) n	Putting Shot (16 lbs.)	Throwing 56 lbs. wt.

<sup>\*</sup> Obtained through the kindness of Wm. H. Wiggin, Jr.

## +British Amateur Best=On=Records.

Beau House, April 3, 1863. Beau House, June 19, 1863. Lillie Bridge, March 18, 1869. Lillie Bridge, April 6, 1870. Cambridge, March 9, 1880. Cambridge, Nov. 16, 1880. Stanford Bridge, July 3, 1886.	Stamford Bridge, July 22, 1887. Stamford Bridge, July 22, 1887. Stamford Bridge, June 29, 1889. Oxford, March 9, 1888. Aston Lower Grounds, Apr. 21, 784. Stamford Bridge, Aug. 31, 1889. Oxford, Nov. 14, 1865. Lillie Bridge, April 15, 1878. Stamford Bridge, Iuly 2, 1886.	Alexandria C. and A. C. Grounds, June 3, 1888.  June 1, 1888.  Aston Lower Grounds, May 3, '84.  Preston, July 12, 1879.  Lillie Bridge, June 29, 1887.  Herne Hill Grounds, Sept. 26, '92.  Stourbridge Sports, Aug. 15, 1887.  Pendleburg, Aug. 5, 1871.  Queens Club Grounds, April 8, '92.  Kidderminster, July 11, 1891.  Lillie Bridge, April 7, 1876.  Dublin, July 11, 1885.
Oxford, A. C	Blackheath Harriers Cambridge Univ. A. C. Oxford Moseley Harriers Spartan Harriers Cambridge Univ. A. C. Cambridge Univ. A. C. Notts Forest F. C.	Cambridge Univ. A. C. Birchfield Harriers. Stoke Victoria A. C. Spartan Harriers Univ. of Penn. Hallington A. C. Burnley Cricket C. Burnley Cricket C. Cambridge Univ. A. C. Clonnel F. C.
J. P. Tennant W. M. Tennant J. G. Wilson A. J. Barer A. J. Barer E. L. Lucus F. G. L. Lucas A. Wharton I. H. Caro	C. G. WOOD H. C. L. TINDELL F. J. K. CROSS W. G. GEORGE J. KIPBLEWHITE C. N. JACKSON S. PALMER C. T. DAFT	S. Joyce H. Whyatt H. Webster C. W. V. Clarke M. B. Fowler W. B. Page W. B. Page C. B. Hargreaves C. B. Fry R. D. Dickenson G. H. Hales J. O'Brien
	48 1-2 s. 1 m. 54 2-5 s. 4 m. 18 2-5 s. 14 m. 29 3-5 s.	6 m, 32 1-5 s. 13 m, 54 4-5 s. 21 m, 25 1-5 s. 4 m, 49 4-5 s. 6 ft, 3 1-4 m. 4 ft. 10 in. 23 ft. 5 in. 11 ft, 9 in. 138 ft, 3 in. 44 ft. 10 1-2 in.
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2	n	E. Sum Jum Jum Jum (Jun
100-Yards Run	220-Yards Run 440-Yards Run Half-Mile Run Ont-Mile Run Three-Mile Run 120-Yards Hurdle	One-Mile Walk Two-Mile Walk Three-Mile Walk Two-Mile Bicycle Running High Jump Standing High Jump Running Broad Jump Fole Vault Throwing Hammer

+ Obtained through the kindness of Wm. H. Wiggin, Jr.

. Weighed 16 lbs. complete, head and handle; length of handle unlimited; unlimited run.

### World's Best-on-Records.

Denver, Col., August 18, 1889. Denver, Col., August 18, 1889. Oakland, Cal., February 22, 1888. Washington, D. C., October 11, 1890. Auckland, N. Z., February 6, 1891.	Canterbury, N. 25, r. Cortan, v. 1992. London, Eng., September 28, 1886. Boston, Mass., July 1, 1886. Philadelphia, Penn., October 15, 1881.	New Zealand, September 21, 1871. London, Eng., August 23, 1886.	New York City, September 19, 1891. Cambridge, Mass., May 22, 1891.	London, Eng., June 1, 1874. Springfield, Mass., September 30, 1892.	Melbourne, Australia, December 26, 1891. Travers Island, N. Y., Oct. 8, 1892.	Detroit, Mich., July 4, 1891. Dublin, Ireland, May 28, 1890.	Worcester, Mass., October 18, 1884. New Haven, Conn., March 19, 1887.	Kidderminster, Ireland, July 11, 1891. New York City, September 19, 1891. New York City, October 8, 1802.	The same of the sa
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H. M. JOHNSON, H. M. JOHNSON, H. BETHUNE, J. OWEN, JR., W. T. MACPHERSO	. *			, N	*			NOS	1
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H. M. Johnson, H. M. Johnson, H. Bethune, J. Owen, Jr., W. T. Macphere	E. H. PELLING, W. BAKER, * . L. E. MYERS, * .	Y. G. GEORGE,	7. C. PUFFER,	W. PERKINS, . W. W. WINDLE,	M. Conroy, .	S. REBER, DARBY, .	BURROWS,	R. D. DICKENSON G. R. GRAY, * .	S. MITCHELL,
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• 3	19 3-5 8. 47 3-4 8. 48 3-4 8.	12 23	15 2-5 8.	6 m. 23 s.	ft. 5 in.	9 -	48 ft. 8 in.	rr ft. 9 in. 16 ft. 7 3-4	1.
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Yan	Yan	N.S.	2 2	One-Mile Walk,	Running High Jump,	Standing Iriga Jump, Running Broad Jump, Standing Broad Jump,	Running Hop, Step and Running High Kick.	Pole Vault,	Throwing Hammer (16 lbs.),
50-Yards Dash, 100-Yards Dash,	220-Yards Dash, 440-Yards Run,	Haif-Mile Run, One-Mile Run,	120-Yards Hurdle,	One-Mile Walk,	Run	Standing Broad Jump, Standing Broad Jump, Standing Broad Jump.	Rus	Pod	Z

<sup>\*</sup> Amateur performance. † 4 ft. handle, 7 ft. circle.

### Records of American Colleges.

AS SENT IN BY THE SECRETARIES OF THE ATHLETIC ASSOCIATIONS, DECEMBER 1st, 1892.

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## Records of American Colleges (Continued).

AS SENT IN BY THE SECRETARIES OF THE ATHLETIC ASSOCIATIONS, DECEMBER 1st, 1892.

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## Records of American Colleges (Continued).

AS SENT IN BY THE SECRETARIES OF THE ATHLETIC ASSOCIATIONS, DECEMBER 1st, 1892.

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COLLEGES.		Wake Forest College, N. C.,	Washington Univ., Mo.,	Washington and Jefferson College, Fenn.,	Wesleyan Univ., Conn.,	Western Univ. of Penn., .	Western College, Iowa,	Westminster College, Penn.,	Westminster College, Mo.,	Willamette Univ., Oregon,	Williams College, Mass.,	Worcester Polytechnic Institute, Mass.,	Yale University, Conn.,





Our Course soon brought us to a hill covered with a forest of pine and oak. Here we stopped for a time, in order to make a map of the place. This being accomplished, we passed on. All this part of our way was very pleasant, for we saw and learned much that was new.

Soon after, our road passed through a horrible place called The Annuals. There were numerous pit-falls and mire-holes and many cunning contrivances to make us fall into them. But, by consulting the signs and records left to us by our predecessors and by the use of some ingenious devices of our own, nearly all passed through in safety.

After the period of recreation that followed this exhausting effort, we returned to the journey almost undiminished in numbers. Now our way lay across the water. Taking passage on a steamer, we soon arrived at a settlement by the sea.

It was decided to take the first steps toward building a railroad from this point through the valley that opened before us. Accordingly, we began to make a survey of the country in order to find the most favorable line. Also a map was made, showing all important objects, including buildings more than three feet square.

At one time it seemed as if further progress were impossible. Our line ran through an enclosure in which was a house and a "fierce" goat. The latter, upon discovering our approach, came toward us, lashing its sides with its tail and preparing to spring upon us. We were about to retreat, when two of the party attacked the monster so vigorously with snowballs that it was taken into the house by its mistress. Our two valiant comrades, flushed with victory, started through the enclosure, but were soon startled by a large volume of water, which was thrown from an upper window by the irate female who had rescued the goat. It narrowly missed the first, who hastened at once to a place of safety. The second, convulsed either by fear or laughter, did not notice a second pailful until it had drenched him thoroughly. He was surprised but not disheartened. Turning, he addressed the virago in words that were at once forcible and elegant, and which added to the satisfaction of the entire party.

We have often left our main road to explore the many little

paths that branch off from it.

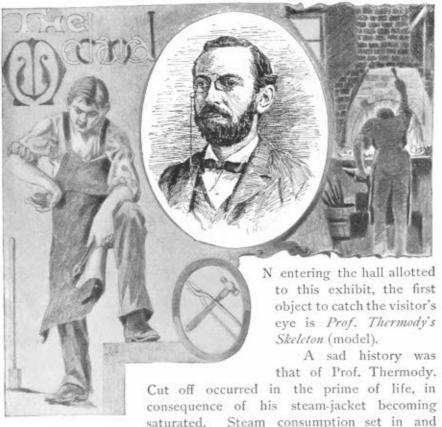
First among these was the mazy labyrinth of Physics. It was a strange place, first filled with many-colored lights, now dark, and then bright with forked flashes of lightning. We found it all "very interesting," but it was with some difficulty that we regained our road.

Then came a "Private way, dangerous passing." It was full of angles and lines, over which we stumbled, and sharp projections that we ran against. Many times we lost the way and were often on the point of complaining or becoming discouraged. But the genial guide of this path saved us. His helpful suggestions, and, above all, his sweet and sympathetic nature, did much to make the way brighter; but it was without regret that we finished the course.

Geology took us in another direction. This path was exceedingly rocky and crossed at frequent intervals by fissures and jagged outcrops. The way was hard, but with all its "faults" the memory of

it is pleasant.

Now we can only say that, although many difficulties have presented themselves, we have overcome them all, and our journey has, in general, been full of interest.



saturated. Steam consumption set in and

resulted in an early release, for the crank stopped at the dead point. His dismembered spirit is, however, still with us.

Descriptive Geometry may next receive attention. Here are samples of plates drawn by the students. Many of them have marks (F) upon them, showing that an instructor has looked at them. This sign is widely used at the Institute, and it stands for many notable things, such as:-Faculty, Faculty-notice, Fail, Faunce, Failed completely, etc.

Much time at the Institute is given to Drawing, the next exhibit.

Before drawing a machine, the students "take dimensions." Some of these are taken near the machine, others in the drawing-room. Dimensions are chosen by ballot, in the usual way, a majority vote electing the dimension.

Particular care should be used to distinguish the drawings of Course II. There are other students who draw with Course II., but

they confine their attention to minute pieces, such as watch screws, needles, and the like. They are, however, a jovial set, and may usually be found holding a meeting, in which they take great delight. The symbol of the course referred to is X, an unknown quantity.

There is still another group of men to be noticed. They live in hopes of reaching what is called "an assembly," but they are so passionately attached to a toy called the "Meyer Valve," that progress is decidedly slow. These men are in irony termed "Electricals."

Applied Mechanics is one of the most interesting subjects of the course. Here the students study the relation of the two members of a couple. The effect is measured by the length of arm between the members, multiplied by one member.

Cotton Machinery. Some of the Institute machinery may be seen. There is an automatic comb with brush attached, and many other ingenious devices, some pleasant, some unpleasant. Chief among the latter stands the Mule.

Of all vile and cruel beasts, none is more to be feared than this Mule—the vicious brute. Indeed, so intense is the hatred felt at the Institute for this machine, that it cannot work without a large supply of Cops.

In former years the work was done by Spinning Jenny (music being furnished by the piano-feed). The Mule has now been found to have the necessary intelligence—in fact, in him has been found the true Missing Link.

Forging. This important subject involves a problem of great perplexity for him who is called "the Sport." For how can a man work in gloves without spoiling them? and if he does not wear gloves, can he ever get his hands clean again? Then the red hot iron always leaves a horrid black mark when it falls on his nice brown boots, and the hot cinders always will fly out of the fire onto his hand just when he can't let go to brush them off. And why is it that iron always burns just in the place where it is not intended to be hot at all?

Pattern Work. In the Pattern Shop the students themselves manufacture the shavings used for lighting the forge fires. A great quantity of this material is consumed.

Models of some of the most representative men are also on exhibition. Let us begin with the most important. This, from one point of view, is undoubtedly the Janitor. The whole Institute—it might almost be said the Universe—depends on him and his pleasure. For some hidden reason he has not yet been granted a seat on the Faculty. There certainly should be a professor of Civil Janitoring.

N. B. These notes may be obtained at Riddler's—price, \$2.50. Students will also provide themselves with the corresponding book of plates and the list of errata.



VERY course has some marked peculiarity. That of the course in Mining Engineering and Metallurgy is the great extent of territory from which its members come. In Course III. there are now men from Mexico and California, Pennsylvania and Massachusetts, Illinois, Ohio, Minnesota and the Dominion of Canada. When it is remembered that New England, (the home of many

Course III. men,) is not much of a mining or metallurgical centre, it is not difficult to understand how the Red and Gray has been planted by Tech. Miners in almost every corner of the world. The four Options offered to would-be Miners give a wide range of studies from which a man may make his choice. This, perhaps, explains why such a large percentage of the Course III. graduates do not seem to confine themselves, in after-life, strictly within the limits of the Course itself, but branch out and become Chemists, Civil Engineers, and so forth.

After the end of the Sophomore year the Miners begin to feel like members of a distinct course. Up to that time it is well-nigh impossible to tell whether they are to become Chemists, or Civil or Mechanical Engineers, so wide must the preliminary training of the Miner be. The Summer School of Mining held last year in the anthracite coal regions of Pennsylvania, at Drifton, brought the '94 men into closer contact with their Professors and gave them a peep into what the future holds for them.

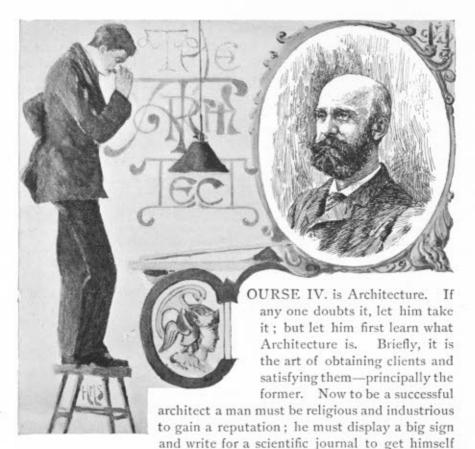
There were over a dozen students at the school besides Professors Richards and Hofman. The good people of the coal regions are, evidently, unused to getting great masses of brains into their region, for, though he tried on every miner's hat in the store, Professor Hofman was unable to find one large enough to enclose his massive brows.\* Our baseball team was managed and captained by Professor Locke, who, in spare moments, was wont to tell us how things are done in that wonderful California. T—r—z and Sch—rtz were instructed in baseball, and the latter, to his sorrow, was induced by certain designing persons, to learn the "national game." Though we worked pretty hard and got up early in the morning (occasionally) to go down into the mine, we all managed to have a pretty good time, "Hutchie" and "the Colonel," with the help of "Katie" and "Sarah," especially.

A part of us camped in what had been a miner's hospital and it was a trifle unpleasant to remember that we were sleeping in a building and in beds which men had died in. One stormy night, as we were dropping to sleep, we heard a sound like the report of a pistol and Sch—rtz roused himself to say: "I heard something already twice." † Investigation showed that the lightning had struck the telephone wires but no one had met a violent death, as we had at first felt inclined to believe.

The present flourishing condition of Course III. and its bright prospects for the future are due, perhaps, more to the hard work of Professor Richards than to any other man who has been connected with the Course in the past. Himself a graduate in the first class sent out into the world by the Institute, he has been connected, in one capacity or another, with his *Alma Mater* ever since, and much of the machinery and apparatus now in the Mining Laboratory is evidence of hard work on his part.

<sup>\*</sup> Doubting Thomases are respectfully referred to the Professor.

<sup>†</sup> This "dutchism" has since become the "nom de plume" of Sch-rtz.



talked about; he must join the club to meet "people;" be handsome and single to suit the mammas; dance divinely and flatter fluently to please the daughters. Having secured a client, he must be a painter, a sculptor, a draughtsman, a lawyer, an encyclopædia, and be able to adapt himself to all sorts and conditions of society in order to execute his work.

Notwithstanding all these severe requirements Course IV. is and always has been the best course in the Institute. This is evident from the fact that graduated Architects cover themselves with glory sooner than other sheepskin holders. Therefore they get more for their money than any other students. Q. E. D.

Our tabular view is a curiosity. With the aid of a logarithmic table and a system of rectangular co-ordinates, and following a method of solution analogous to that of the landlord who kept eight men in seven rooms, each having a separate room to himself, the Faculty

calculated that we might get two hours off on Sunday afternoons. This is a very ordinary accomplishment, however, compared with our being in the drawing room and at the Roxbury pudding stone quarry during the same periods of the same day; but there can be no doubt of it, as the records of the Institute are proof.

The "Frequent Visits to Public Buildings," have been dropped, and instead "The Art of Petitioning and How to Answer Petitions," has been substituted. Great importance is attached to the students' ability to think up new petitions. Exercises are given each week in actually writing and submitting them. "Thumbing over Photographs," "Flash Light Water Colors," and "Tact" have also been added to the curriculum, but as these occupy only "odd moments" they do not increase the work in the course.

There is one thing which is characteristic of our department—the medley concerts. Course IV. has always possessed considerable musical talent, and it is especially blessed in this Junior Class. The strains of Gounod, Mendelssohn and the Bowery, sung by our excellent quartette, after the lights are out in the office, find sympathetic chords in the inmost recesses of our hearts. Before these sublime measures have entirely died away, one is startled by the deep bark of an uneasy watch-dog followed by the short impatient yelps of a fretful little black-nose. A perfect Babel of discordant sounds fairly rends the atmosphere. Amidst the general uproar is distinguished a cat fight, so lively and realistic that not a single stroke is missing, and so true to nature that it would make a fine Angora cat turn striped yellow with envy.

After the applause has died away the clear high tenor of a priest rises above the hum of the low conversation. So natural and impressive it seems, that one involuntarily turns toward the great picture of the cloister of Moissac half expecting to see a monk with his face and head shaven performing the evening service, whereas it only says "Father Sullivan played Father Gallagher a game of domino-o-o-o-o-es." Then the lights dip, warning us it is time to go. As the last man reaches the foot of the stairs the current is turned off and silence reigns supreme in the Architectural Building. Ah! well—may we pass many such congenial and enjoyable hours as those in the Junior Drawing Room.



OURSE V., Chemistry, is one of the original courses of Technology. During the earlier ages of the Institute, those days when students at Tech. were scarcer than H's are at the present time, Course V. was always well represented. Although in former years—such is the advance of Science—a graduate did not need so much knowledge as is now required, yet to the success of these early representatives, (one of whom became Bishop of

Minnesota!) the present popularity of the course is largely due.

It is true that Course V. to-day is not so numerous as some courses, but it is very select. There are several reasons for this. Prof. Pope prefers it should be so, and deals out the necessary C's with a hand more careful than prodigal; then some persons of nervous temperament dread the ups and downs—from basement to top of Walker's—and others do not care to live in an atmosphere pervaded by hydrogen-sulphide, chlorine, and sloppy chemists' "cuss words."

The catalogue states that "Course V. is designed primarily to prepare students for actual work in connection with manufactures based on chemical principles." The writer does not propose to deny this, although his imagination is not sufficiently elastic to picture certain members of the present course engaged in any real labor; but he proposes to show how this design is carried out.

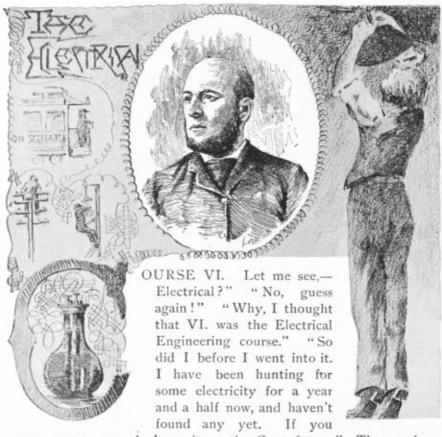
In the first term of the Sophomore year the embryo chemist, after examining his supply of apparatus, and wondering what "desecrators" are, begins Qualitative Analysis. This subject is very practical, as it gives the future chemist hope that in years to come his name may be heralded throughout the land, attached to the bottom of an affidavit for some soap or baking powder company. Theoretical Chemistry is taken up as an exercise to the imagination. Molecules are frequently placed on the blackboard, and their antics described by formulæ. These formulæ, by the way, make charming landscapes, when viewed in perspective, resembling certain German words in this respect.

In the second term of this year several new subjects are begun. Qualitative Analysis is replaced by Quantitative; Theoretical Chemistry dropped—as well as any men who got F F—and Mineralogy commenced. The Quantitative work is very interesting. It includes paying ten dollars for a platinum crucible, and weighing the same to a constant weight, with a constant wait—for it to cool. The instruction in Mineralogy consists of lectures and work in the laboratory, in which absent-minded students frequently mistake specimens for notes, and

go away with bits of precious metal.

Not until the third year, however, does the chemist feel that his real professional career has opened. Before this, his time has been more or less broken into by non-chemical, though useful subjects; but now, nothing short of justice to the lunchroom will stir him from his beloved pursuit. He spends hours together in the various Labs, talking of his future. He begins to have some faith in his own results, and would grow conceited were it not for representatives of other colleges who now join his course. These men, although having had no such advantages as Tech. offers, frequently know enough to instruct the professors. A course is had this year in Assaying.

The chemists' studies in the Senior year are largely elective. His choice is influenced by his prospects, or, if he has no prospects, by a desire for snaps. Organic Chemistry is the principal required subject. This consists of memorizing symbols. These symbols are short, and are often complete in one volume, unless written in German. The chemist is especially stimulated to original research, his neighbors' desks being his favorite field. The second term of this year is devoted almost exclusively to Thesis work. Some time, however, during this term, the chemist undergoes that generic change which enables him to become an assistant the following year, or to go forth into the world to answer that all-important question, "What will he be when he graduates?"



come across any, do leave it at the Cage for us." Thus spake a '94 VI. to a '94 I., and surely there were grains of truth in the statement.

Our men began, one day in September, 1891, with fond hopes of studying and experimenting upon that subtle element which is becoming such a potent factor in the active life of to-day. Though not old men, they dreamed dreams and saw visions of electric trains running 200 miles an hour, and air-ships propelled at a like rate; of telephony and telegraphy without wires; and hosts of other possibilities which they might invent or assist in accomplishing.

Their visions were soon dispelled, however, as they came down to the stern realities of Physics, given in allopathic doses by Professor Cross, and the sterner realities of Mechanism, rigidly linked in our memories with cranks and tie-rods An infinitely puzzling thing was the instantaneous axis of rectilinear motion, but when we came to drawing teeth, a mighty wail went up at such an addendum to our course. The root of the matter was that it savored too much of the Harvard Dental School.

Then there was a course in organ pipes and tuning forks, which finally resolved itself into a discussion of magnets. Our learned instructor would deliver a lecture upon the properties of the expression MLT-2, for instance. At its conclusion, when most of us were lost in wonder, some poor soul would venture to dispute the propriety of using T-2 instead of T2. Alas for him! Our worthy preceptor, wiping his hands with his handkerchief, would marshal his hosts and open fire with his oratorical Gatling, freshly charged from Webster and working with a velocity which none of us have yet calculated. As a result the upstart wilted, and relapsed into "innocuous desuetude" after the first round.

Our mathematics received much attention, as usual. One stumbling-block was the point of "osculation." All the fellows knew where to find it of course, and readily recognized the fact that it was formed where the curves became tangent, but how it could be applied to any other than *elliptical* curves they could not see.

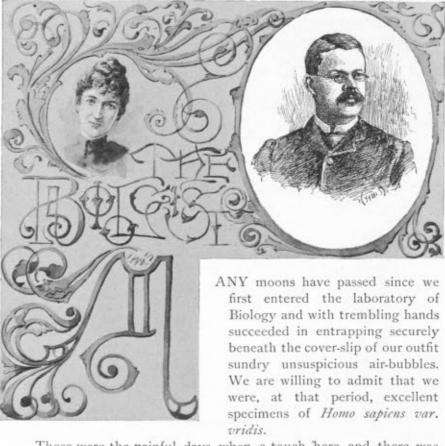
The above-mentioned subjects were the principal ones that we had through the year, though we must not forget the German love-stories we read with our genial Herr Bird. Now we ask the candid reader if they do not form an ideal course in electrical work? We thought so, and resumed our studies this year with greater expectations than before.

But, alas! what did we find? In the first place a course in valve constructions for steam engines. This was startling, but we decided it was a step in the right direction, for dynamos are usually run by steam engines. A study of the construction of roof trusses and bridges, however, has capped the climax, and most of us are sunk in despair, expecting next to investigate the best method of following a vein in the Calumet and Hecla.

A little relief was found in our course in thermo-electric diagrams and dimensional equations, for it smacked of the "fluid" at least. But what shall we say about Thermo? Ye gods! Was Luna the guardian deity of him who invented it? We "assume" so.

This, then, covers the principal subjects thus far, though Pol. Econ. deserves special mention for its connection with the weather. Some have attributed our rainy Mondays to the fact that they are washing days. We suggest, however, that it is because they are always Dewey mornings.

Here then let us leave Course VI. to Fate and the Faculty.



Those were the painful days when a touch here and there was all that was necessary to transmute us into Huxleys, Tyndalls or Darwins. But second year Physics passed within the range of our mentality; and our fair dream flew away neath the pale beams of the polariscope. Ah! that was the time of our unsophisticated and infantile ingenuousness, when we fondly imagined that a "microtome" was a small volume of epitomized knowledge, and conceived a "camera-lucida" to be an invention of the Prof.'s for elucidating hazy ideas found on exam. papers. Since those faintly remembered days we have come into close contact with the rude world, and we can confidently say that, under the guidance of our worthy Professor, we have seen life in all its stages.

And we have not been neglectful of the beauties of the numerous side paths which have branched occasionally from our strictly biologic road. Indeed our wanderings from the narrow way have led us into divers strange and remarkable places, and into still stranger and more remarkable adventures. Witness that eventful morning when the full glories of the Analytical Lab. burst, unheralded upon our tender biological sensibilities. 'Twas then we saw the Chemists! Ah! those Chemists! When we first beheld them patiently assisting the cause of science with the aid of a wash-bottle and a few accessories, we were reminded of that familiar line, "There saints in glory stand," until Mr. D-ckw-rth broke a beaker and liberated a solution con expressione, when the current of our thoughts became considerably diverted from their previous course.

Another of those charming little alley-ways which we explored upon our way led through very stony surroundings, so that we were tempted sometimes to quote that beautiful verse from Gray's Elegy:

Full many a gem, (quartz, garnet, tourmaline),
Did in some trays to us Herr B-rt-n bear,
Full many a time we wished they'd stayed unseen,
And been eroded by the desert air.

At last we found ourselves once more upon the highroad of biology. What a bewildering scene, and yet withal how beautiful and marvelous a landscape stretched behind and before. Behind, there on the left, lay that vast and luxuriant Cryptogamic forest where we had taken so many pleasant rambles. And is this sketch of too trivial a nature to forbid our mentioning with loving and sorrowful regret, the memory of him who led us there so well, but shall guide us with his helpful hand no more? There, also, just behind us on the right lay a treacherous morass, some traces of the ooze of which still clung to our garments. As one looked intently through the haze which rose above it he might distinguish these four ominous letters, HEAT. We perspired to think of it even then, and hastened to look forward to see what manner of country we were now to enter. We beheld the road widening, broadening, and traversing the higher levels of land where we hope ere long to enjoy more imaginable prospects and obtain clearer views. We trust that after we have traversed the path with observation and circumspection we shall find awaiting us at the end that "longed-for, elusive, much-sought-for, and so forth, and so forth," passport, bearing the cabalistic sign S. B.\*

<sup>\*</sup> This does not signify "seeking business," "slightly battered," or S-v-r-nce B-rr-ge.



E write this account neither to boom Course VIII., nor as a prospectus, to increase the price of its stock, but as a truthful history of one of the purely scientific courses of the Institute.

To the general mind, Course VIII. exists rather as a curiosity than as a line of study. In fact, it might almost be overlooked were it not for the number of Co-eds it contains; the presence of these fair students attract-

ing attention to the other "Physicisters."

In the Class of '94 there were four of us who felt the inspiration of original research strong enough to investigate the mysteries of the course in Physics. Provided with the requisite credits, we sent a mute appeal—attendance cards—to the Faculty, to look favorably on our projects. With that superb instinct which almost resembles understanding, the Faculty deciphered 'our intentions from said cards and allowed the gods to smile. So we found ourselves thus early in our career well started on the path of original discovery.

\* One of our first discoveries was that our course is no snap. We also found it to have been made by mixing Courses V. and VI. This mixture affected our heads in the same manner as certain other mixtures are prone to do. However, with intellects straightened by

<sup>\*</sup> Common to all courses, see pages 28 to 53 inclusive, of the catalogue.

reflection and pocket-books straitened by Ridler, we settled down to either live or die in the pursuit of science.

In our Sophomore year our time was spent in vibrating between the chem, lab, at the top of Walker Building and recitation-rooms at the top of Engineering Building. With avidity we chased atoms one hour, and the value of x during the next, although not with unvarying success. When our first "Intermediates" came, we found that even "pure science" is not proof against flunks. But with a courage born of familiarity with the subject, (of flunks,) we kept digging away. Neither the jeers of the "Chemists," nor the taunts of the Electricals at our course, affected our determination. We did no harm to the "Semies," and they kindly respected us, so our first milestone was safely weathered. Untrodden fields still awaited, and with pleasurable feelings mingled with awe, at the beginning of the second term we invaded the domain of "Original Records," the physical laboratory. Here we made ourselves very much at home, absorbed the attention of the instructors, and any stray pencils or small apparatus that happened to be unguarded. We heard interesting lectures on various subjects, and, despite the hard seats, managed to bring our sleep-average up to the required eight hours. Recitations in mathematics were constantly occurring, but we soon classed them as a necessary evil and got along as smoothly as the "bluff ability" of our Professor would permit. Our Sophomore annuals were passed with success.

One of our number did not return to begin the Junior year, but our forces were recuperated by a recruit from Course X. This year our work has been similar to that of the previous one, only somewhat more detailed. We have parted with our friends, the Chemists, leaving to them the generation of H2 S. and other harmless amusements. Most of our time now is spent in our old stamping-ground, the "phys" lab. in comparative enjoyment, although we are constantly interrupted by the arrival of members of other courses, assigned to the same locality by a too severe fate and severer Faculty. We still have mathematics and lectures, but we are becoming inured and hardened. When we glance back we find we have progressed; when we look forward we see the distance between us and our graduation has shortened. Soon, by the "Grace of God" and the Faculty, we may be writing our Theses on the high road for our degree, whence we will either astonish the world by our scientific discoveries or become electric car motor men and women.



of aqua regia. While he looked, his longrespected love for the popular metal was as gradually disappearing, and there arose within him a new spirit of determination as strong as the nascent fumes escaping from the test-tube

in his hand. As strongly as the stifling fumes repelled him from the dissolving gold, so the inner effervescence of his diminishing desire for the world's wealth impelled him to seek that alone no more. For through the tube he saw a world at strife, and, before all, lay disregarded social problems. He saw that the contents of his tube distorted the natural lives of its objects and took from each its better self.

Beyond this the test-tube failed him, so at last with a sigh he laid it down, and set out to search where he might continue his observations. Where should he learn to probe deeper into the lives and laws of men, to study the scientific principles involved, and to apply all to every-day life? Where might he learn to prepare himself accurately and liberally for life's many phases of activity? He did not find this place at the ordinary college, for there much that he did not want was added; and moreover a scientific foundation seemed wanting, as did also the defined progressive relationship which he desired most of all.

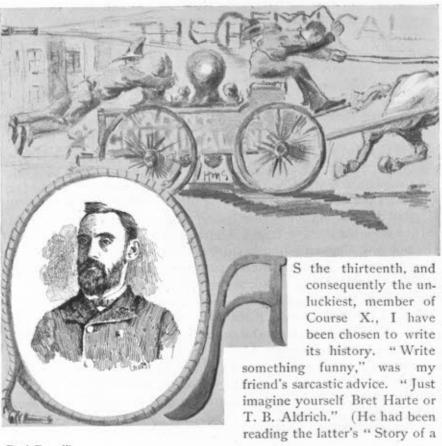
At length he entered the Course IX. library of old Rogers. As he went from shelf to shelf satisfaction and promise rewarded him. From their volumes he caught glimpses of science and history, economics and literature, philosophy and language. He learned that in the Technology course in general studies all these studies are pursued in a systematic, topical method. Here then he resolved to stay.

The hours flew by, and in their place were arranged the threads of his investigation. He studies the laws of the pendulum, becomes familiar with the laws of natural agents on the earth's surface, and traces a geologic formation. In another line of work he is looking through a microscope at cells of life, following the growth of plants and animals, and studying the scientific relations of man. In history he traces the development of the institutions and government of the United States from the earlier history of England; studies the spirit of the Renaissance, and then considers man in society. He learns of French and German authors, studies their history and literature as well as that of English writers; prepares themes and abstracts, and studies the methods and expressions of great essayists. He becomes acquainted with economic questions of the day by investigating present bank and rent systems, listening to the practical laws of every-day business, plotting on charts the currency issue, studying the principles of taxation, and by learning facts of commerce, industry, and finance. We might further follow him to higher mathematics, to advanced courses in history and economics, or to the more detailed study of literature and language, but we must now part with him, for his thesis in '94 will tell us the rest.

Such, then, is the instruction in Course IX., and, like the true blade, refined by influences of the past, moulded by science, tempered by modern methods, and sharpened by use, it will stand by its possessor in many situations. Yet this broad purpose of Technology training has been long unrecognized and its objects too long limited to Course IX. Here, then, is to the health of Course IX. and to the hope that the men of other courses may more and more enter into its objects!

### NOTE.

<sup>&</sup>quot;The curriculum has been arranged in the belief that the origin, growth and laws of political and industrial science can best be approached through the methods used in natural science."



Bad Boy.")

As it is, this is the fifth history that I have written, or rather, tried to write, for this is not yet written and the other four came to untimely ends. I now fully appreciate the feelings of other great authors whose first attempts have met with a similar fate. Any one who has ever tried to be humorous and failed, will understand my state of mind. A funeral sermon would be a welcome task.

But to proceed. "Course X. is the product of Course II. and Course V." This is the way my first endeavor opened. It seemed to me a very bright idea, but my friend is evidently not of a mathematical turn of mind, for not even a smile escaped him.

History No. I. continued to relate in my most jocose style, the various experiences of the Course, during its two and a half years of Tech. life. It described at length, our sojourn in the Analytical Laboratory, and it even made several jokes on the "Unknowns," platinum crucibles, and the Beaker Smash.

Then it told of our struggles with Mechanism and Cotton Machinery, and made a pun upon the mule which would have brought tears to the eyes of the animal itself. I should like to repeat that pun here, but subsequent events constrain me to omit it. However, a similar one may probably be found in the annals of Course II.

In addition to this I did not neglect to mention Physics and Heat. My description of the latter was scarcely temperate—so my literary friend remarked—and as for the former subject, I simply outdid myself.

To cut a long story short—I showed the result of my labors to the Editor. I watched him as his eyes ran over the pages, and as he approached the paragraph about the mule, prepared for a burst of hilarity. But he only sighed, and folding the manuscript, handed it back with the words, "Very funny indeed, Ha! Ha!" while his face would have made a child weep. That is the reason I do not repeat the pun about the spinning-mule.

I concluded to try again. The Course had just formed a society—the Baker's Dozen. This time my brilliant conception was that of the Spirit of Course X., who was represented as appearing to the writer some years after graduation, amid the striking of the midnight hour by deep-toned tower clocks, the sighing of the winds, the gentle soughing of pine-trees, and other ghostly accompaniments.

The Spirit narrated the fortunes of the society, and described the occupation of each member. But as the scene was laid in the future it was necessary to draw somewhat upon the imagination, which I did to the best of my ability. For instance, the gentleman who objects to strong language became a Methodist minister; the Democrat died, that is, the Spirit said he was working on furnaces; while the member who delights in cleaning out the Course by matching pennies, became a bank cashier or croupier, I do not remember which.

This second production received the same treatment as its predecessor. As for the other two I will not weary the reader with a description of them. They were remarkably well written, the Editor said, considering my inexperience, and only just missed being funny. He then asked me if I wouldn't like to have a short game of Draw Poker just to see who was the most humorous man.

This is why I have finally decided to cease to emulate my witty contemporaries, and to state the following solemn truths regarding Course X. at which I hope no one will have the incongruity to smile.

### COURSE X.

First, however, I must state that the Editor has malevolently limited the space for this article so that-



HE number is by no means the only odd thing about our Course, as there are several very curious illusions regarding it. The most usual idea is that we are to be seen trotting around with a soldering-iron in one hand and a water pipe in the other, or blowing a charcoal fire.

Another frequent supposition is that we spend most of our time digging sewers, and hence are expected to handle a pick and shovel with great dexterity.

Allow me to correct these two errors at once. We don't expect to be plumbers, neither do we look forward, and I might add backward, to any long career with pick and shovel. Although, as I say, plumbing is not our specialty, still, were it necessary, we might turn our abilities in that direction and give the Architects a few points.

Now let us come directly to the Course itself, a mixture of Civil Engineering and Chemistry, with enough Biology fitted in so we will not have too many afternoons off; we are never able to complain of lack of work. Last year we sat fifteen hours in Organic Chemistry lecture, spellbound, studying the way in which the carbon and hydrogen atoms change their bonds; and this year we are told we are whirl-pools in disguise. What will come next year we are almost afraid to

imagine, but we are anticipating great excitement chasing bacteria in water-supplies.

Among other very pleasant features of the Course is the number of places where we are supposed to belong. If we get tired of our plot in Surveying, or spoil a plate in Stereotomy, we can go over to the Biological Lab. and seek consolation with the guinea pigs or alligators; or if we find that Biology is not just what we are looking for, we have only to go to the Chemical Lab. and there drown our sorrows in an evaporating dish or get a new precipitate to "drive dull care away."

As we take all the topics in the "Programme" marked "All reg. students," to say nothing of all the rest, we have many fine business offers. There is a man in our Course who was offered \$150 a month, but he petitioned the Faculty not to take it, and they gave him a special exam., so he is still with us.

For three years there was considerable doubt as to whether it was possible for any man to graduate from Course XI. Last May, however, it was conclusively demonstrated a possibility, so now we are very much encouraged and hope to show the Institute the same proof at future dates.



it was the flame—when thrust into an atmosphere of hydrogen, and that Peter could talk slower than any man we ever knew. We passed or flunked our Mathematics, were told not to "begin at that end gentlemen," when we tried to twist the lion's tail, and we weally learned a little English fwom Wobby, the Hawvud man, doncher know.

But the jolly, lazy days of the first year were soon over, and work began in earnest. "What are you?" was the greeting we received from every one on the first day of the term. "Twelve, Geology," was the reply. "Oh! two, mechanical, Lanza, rank," or "VI., mathematics are rotten," volunteered the questioner. "You've got a great snap," he continued, and off he rushed. Now, my dear sir, you made a great mistake when you said Twelve was a snap. You may have a hard time of it in Six, because you can't handle the Mathematics, or in Nine, for instance, because you don't like History, and can't write easily, but do not think everybody else has an easy road because yours is hard in places. There's plenty of work in Twelve, and hard work, too.

We dropped in to see Charley's ghosts, and then went up to try a hand at the chemistry. What a mistake! Not one of us would have gotten through had it not been for Mrs. Stinson's good care. "Oh, you'll get through all right," or "Your work is very accurate," were the cheering words of the assistants. But when you get your report you've an L, and you go to get an explanation. "Yes, yes," you are told, "but I really couldn't mark you higher. Why, you weren't in here seventeen hours." "But I have only seven hours to give," you expostulate. "Mr. Smith, you must know that I am not responsible for that," is the answer. And you turn away wiser, but hardly satisfied.

Blowpipe came with the beginning of the second term. "I have assigned you gentlemen, lockers," said Mr. Barton, "and I'll see—." "Mr. Barton, what's the matter with this stuff?" comes from the back of the room. The instructor examines it. "I guess you had better remove that brick dust, Mr. B-tch-ll-r, and get some mineral and begin again." We also took up physical geology and mineralogy with this term, and two more enjoyable courses a man could not take. The exams. came, and then vacation. This brought the Summer School of Engineering and the School of Mineralogy. Both were great; very

interesting and very useful.

In the third year we began with structural geology and field work. The latter takes you about the world, to the "Tunnel," to Marblehead, Nantasket, East Somerville, and even-but not in ships, as our fathers before us-to Moon Island. We studied Biology, which means to cut up earth worms and ferns, till you are heartily sick of the sight of them; and zoology, which means-but none of us can tell, for none of us could ever find out. But Paleontology! "Mr. P-rk-r, what's this?" "Receptaculetes." "No. Mr. W-ts-n, will you identify the specimen?" "The government should control all the railroads and telegraphs. The Populist Party is the only one which knows how to manage Uncle Sam's finances," is the reply. The wearied Professor in despair asks the third member of the class, who answers correctly. "Now, gentlemen," says the Professor, "we will close the lesson with a Dysaster." But in spite of bluffs, parties and puns, all the class passed the semies safely, and then came a wrestle with attendance cards, and then-?



### THE YOUNG WOMEN AT THE INSTITUTE.

### Class of Ninety-Three.

### Class of Ninety-Four.

### Class of Ninety-Five.

### Class of Ninety-Six.

CHAMBERLIN, HELEN, LANGLEY, MARTHA ESTHER, NORRIS, GRACE ADELAIDE.

### Specials.

ABELL, ADELAIDE MAE, '95,		*							Physics,
ALLEN, ANNIE ELIZABETH, A. B.,	95,								Chemistry.
BANTA, MAY, B. S., '93.		* 0						1.5	Physics.
BARRETT, CAROLINE WHITNEY, '96	,								
BARTHOLOMEW, ETHEL, B. L., '94.		40.5							Architecture.
BARTLETT, BERTHA LEAVITT, '95,	3								Biology.
BULLARD, MARY BEAN, '94,									Architecture.
CARTER, MARION HAMILTON, '93,	12								Biology.
CHAPIN, MABEL HINDEKOPER, '95,									General Studies.
DANN, MARY ELIZA, '95.	54				40				Chemistry.
DENORMANDIE, SARAH YARDLEY, '	04.			200		7.5			Geology.
FISHER, LAURA, '95	240			1000				127	Biology.
FLETCHER, GRACE WEBSTER, '95,		33		27		3.3		133	Chemistry.
FOSTER, MARY LOUISE, A. B., '94.							200	3.5	Chemistry.
GAINES, BESSIE VENABLE, '94.	2.5				**		10		Biology.
HALLOWELL, LUCRETIA MOTT, '95.						-			Chemistry.
HOOPER, LAURITA THORNTON, '96,							ै		Chemistry.
									Architecture.
KRAMER, EMMA VIOLA, '94,	*						*		Architecture.
Locke, Hattie Francis, '95,				*					Architecture.
Lysaght, Bella Bernadette, '96,	n	1.0	*						
MASON, ELIZABETH SPAULDING, A.	В.,	90							
McElwain, Helen W., '96, .							*3		*** *
METCALF, MARY CHURCH, '95, .									Biology.
Perrin, Ethel, '95,	63		*		*		60		Biology.
PLUMMER, LAURA S.,		4.5		200				14	Biology.
SHEPPARD, CLARA EMMA, '95,	1.16				36.3		1.5		Biology.
TOWNE, LILLIAN M., '95,		77							Biology.
WARREN, MABEL LOUISE, '94,									Architecture.
WATSON, ELIZABETH S., '95, .				1					Geology.

### In Memoriam.

George V. McLauthlin, S. B.,

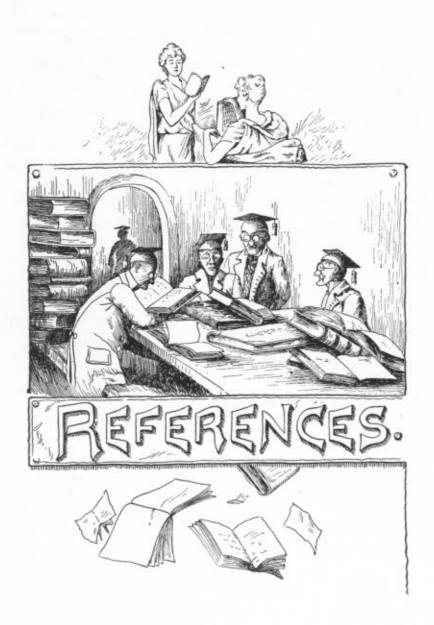
Assistant in Biology,

Died August 14, 1892.

George McKenzie Mitchell, Class of '93, Died September 9, 1892.

Percy Winthrop Mead, Class of '94, Died September 27, 1892.

John Aiken,
Class of '94,
Died February 19, 1893.



### GRADUATE STUDENTS.

### Candidates for Advanced Degree.

Hopkins, Prescott Andrews . S. B., Mass. Inst. of Technology.		Newburypor	t	*	*:	*9	140 Beacon St.
Meyer, Joseph Andrew, Jr S. B., Mass. Inst. of Technology.		Boston .		- 4	2.		Studying abroad.
Sanborn, Frank Edwin S. B., Mass. Inst. of Technology.	,	Boston .		0	1.	0	College Hill.

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Ames, John Worthington A. B., Harvard University.					Cambridge .			•		Cambridge.
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Brown, Willard Dalrymple A. B., Harvard University.				٠	Lexington		ż			Lexington.
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					Gadsden, Ala					140 Chandler St.
B. C. E., University of Alal		Į.			Committee, 221111					140 Chanaier on
Dyar, Harrison Gray .					Roxbury					49 Winthrop St.
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Fernald, Robert Heywood					Orono Ma					9 Temple St.
B. M. E., Maine State Colle				*	Orono, mor				*	9 rempie ou
Foster, Mary Louise .					Lauraica Plain					709 Centre St., J. P.
A. B., Smith College,					Jamana Franc	0.		ň		you centre out j. t.
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B. A., Amherst College.			
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D C Collage of the City of N	now V	ork	
Dh R Vale Unversity			New York, N. Y 17 Yarmouth St.
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Whitaker, Samuel Edgar.	29		Lynn Lynn.
	٠.		. Detroit, Mich 39 Union Park.
Wright, James Hayden A. B., Harvard University.			. Detroit, Mich 39 Union Park.

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	Jamaica Plain, 494 Centre St., J. P.	
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SKINNER, FENWICK FENTON,	Roxbury, 2849 Washington St.	
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ALDEN, HERBERT WATSON, A K E, Plymouth, N.	H., . 56 Chester Sq.
BAKER, FREDERICK WALLACE, Charlestown,	
BARBOUR, MINARD TOWNSEND, A K E, Chicago, Ill.,	66 Chester Sq.
Barstow, George Edward, Lynn, .	Lynn.
BELDEN, RICHARD EDWIN, New London,	Conn., . 20 Union Park.
BLAKE, EDMUND ENOS, A K E, Newton, .	Newton.
BRAMAN, SAMUEL NOYES, Wayland, .	Wayland.

### COURSE II .- Continued.

Name.	Home.	Residence.
BREED, STEPHEN ALEC, .		
CADWELL, WILLIAM HARRY,	. Nashua, N. H., .	. 89 Appleton St.
CARNEY, EDWARD BULLARD,	Lowell,	. Lowell.
CRAIGHILL, NATHANIEL RUTH		
CROSBY, WILLIAM WYMAN, Y	A E, . Woburn,	. Woburn.
DAWES, HERBERT NATHAN, Σ		
DAY, PHILIP BALDWIN, .		
FITZ, CHARLES FREDERICK, J.		. Watertown.
FRISBIE, WALTER LEVI, .		. 118 Chandler St.
GARDNER, JOHN HOWLAND,	그 그림 그 아내 내가 있다면 살아내면 가게 되었다면 하는데 없다.	. 20 Union Park.
Godchaux, Jules,		. 162 Huntington Ave.
GORHAM, MARVINE, Δ Ψ,		
HAGAR, EDWARD MCKIM, .	Chicago, Ill	. 18 Harris Ave., J. P.
HEYWOOD, CHARLES DAVIS,	. Holyoke.	A. A
KENISON, ERVIN,		. Chelsea.
KEYES, FREDERIC HALE,	Newtonville.	. Newtonville,
LANE, GEORGE H. THOMAS,	Norwood, Ohio,	
LATHAM, HARRY MILTON,	Stoneham	Stoneham.
LOGAN, JOHN WOOD, A T, .	. Bala, Pa.,	Newtonville.
		, . Newton Upper Falls.
MARSHALL, ALBERT TISDALE,	S B Brockton	Brockton
MITCHELL, BENJAMIN MERWI	S B., . Diockton,	for Columbus Ave
		. 220 W. Chester Park.
NUTTER, CHARLES LATHAM, 2		. 130 St. Botolph St.
PAINE, CECIL ERIC,		
PARCE, JOSEPH YALE, JR., .		
PHILLIPS, HARRY MILO, ΦΓ Δ		. 45 Orchard St., J. P.
REYNOLDS, ROBERT DUNCAN,		. 14 Gordon St., J. P.
RICHARDSON, FRANK DOUGLA		. 202 Dartmouth St.
RICHMOND, HAROLD ANTHON		
Speer, James Ramsey, $\Phi \Gamma \Delta$ ,	Phisburg, ra., .	. St. Doloiph Han.
STANWOOD, HERBERT WINTH		Chalcan
TAYLOR, CHARLES MALCOLM,		
TIDD, WINTHROP LOWE, $\Delta \Upsilon$ ,	raunton,	. 24 Mt. Vernon St., C.
Tomfohrde, John Frederic		
TOWNE, FREDERICK TALLMAN		
WALLACE, FREDERICK APPLE	TON, Lynnneid,	. Lynnfield.
WILSON, HARRY COLBY, .	. Nanant,	. Nanant.
WOODS, HENRY TYLER, .	Boston,	. 224 Huntington Ave.

### COURSE III.-Mining Engineening.

BROCKUNIER, SAMUEL HUGH, X Ф.	Marlborough, Marlborough. Cincinnati, Ohio, 83 Montgomery St. Wheeling, W. Va., 58 Chester Sq. Tower, Minn., 15 St. James Ave.
DEMOND, CHARLES DENNY,	East Boston, 166 Webster St., E. B Galt, Cal., 6 Rutland Sq.
RAYMOND, EDWARD LINCOLN, A. B.,	Boston, 53 Gray St

### COURSE IV.—Anghitectung.

Name.	Home.	Residence.
Baumaunn, Edward Steinhauer,	Chicago, Ill., .	
BISCOE, MAURICE BIGELOW, .	. Newtonville,	
BRADLEY, ARTHUR WILLSON, JR., .	Newport, Ky., .	. 16 Durham St.
BULLARD, MARY BEAN,	. Portland, Me., .	. 36 Hollis St.
Cox, Frederick Edward, Δ Υ, .	St. Louis, Mo., .	80 Huntington Ave.
Dufort, Cajetan Joseph,	. Montreal, Que., .	. Hotel Glendon.
EVANS, WILLIAM EUGENE,	Jamaica Plain, .	. South St., J. P.
FITTS, FREDERIC WHITNEY, .	. Somerville,	. Somerville.
GARLICHS, CHARLES FREDERICK, .	Brooklyn, N. Y.,	. 42 Holyoke St.
GATES, FRANK C,	. Denver, Col.,	. 56 Gray St.
GORE, HENRY WATSON, JR.,	Roxbury,	. 331 Warren St., R.
HILL, WILLIAM REED,	. Milton,	. Milton.
KLIPSTEIN, ERNEST CARL, XΦ, .	St. Louis, Mo., .	58 Chester Sq.
MERRILL, GEORGE EARNEST, AKE,	. St. Paul, Minn., .	. 56 Chester Sq.
PARKER, EDWIN MASON,	W. Acton,	W. Acton.
ROSENHEIM, SAMUEL FAISST, .	. St. Louis, Mo., .	. 27 St. James Ave.
SIMONDS, FREDERIC POND, ATA,	Salem, .	. 128 Marlborough St.
WARDNER, HERBERT LEAVITT, Φ Γ Δ,		. Bowdoin Ave., D.
		. Hanover.
WOOLLETT, WILLIAM LEE,	. Loudonville, N. Y.,	. 162 W. Springfield St.

### COURSE V.—Chemiston.

DILLON, FREDERICK NATHAN, . FORBES, FRED BETTINSON, .		W. Somerville, .		W. Somerville.
GAYLORD, WALLACE KENDALL,		. Wellesley, .		. Wellesley.
JACKSON, DANIEL DANA, .		Lanesville,		Newtonville.
JAMES, LAWRENCE STEARNS, .		. East Boston, .		. 56 Trenton St., E. B.
JAMESON, ARTHUR HUGH, A Y,	÷	Woburn,		148 Chandler St.
PICKERT, LEO WALTER,		. Roxbury, .		. 10 Greenville St., R.
WALKER, CHARLES RICHARD,		Cambridgeport,		Cambridgeport.

### COURSE VI.—Hectrical Angineening.

Abbott, Frederic Bassett,		Lynn,	. 19 St. James Ave.
ALLEN, CHARLES VERNON, ΔΥ, .		Holliston,	102 Pembroke St.
ANDREWS, EDMUND LOTHROP, Σ X	,	Chicago, Ill., .	. 220 W. Chester Park.
BARTON, HOWARD RITTENHOUSE, .		Englewood, N. J., .	192 Dartmouth St.
BERRY, HEREFORD,	÷	No. Andover, .	. 368 Columbus Ave.
BLOOD, GROSVENOR TARBELL, .		Newburyport,	Newburyport.
Brown, John Clifford, Θ Ξ, .		Portland, Me., .	. 33 St. James Ave.
BROWN, WALTER VAIL,		Oldtown, Me.,	9 Berwick Park.
BUCHANAN, LEONARD BROWN, .		Woburn,	. Woburn.
BUCK, ARTHUR AUGUSTINE,		Bucksport, Me.,	Chelsea.
CALLAHAN, DENNIS EDWARD, .		Boston,	. 329 Federal St.
CODMAN, JOHN STURGIS, A. B., .		Boston,	57 Marlborough St.
DAVIS, ALBERT GOULD,		Middlesborough, Ky.,	. St. Botolph Hall.
DENSMORE, EDWARD DANA,		Somerville,	Somerville.
DIXON, LAURENCE BELMONT, A K E	,	Chicago, Ill.,	. 56 Chester Sq.
DOLAN, PETER FRANCIS,		East Boston,	185 Chelsea St., E. B.

### COURSE VI.—Continued.

Name.	Home.	Residence.
Ellis, John,	. Woonsocket, R. I.,	. 40 Union Park.
FARWELL, ARTHUR GEORGE, A K E,	St. Paul, Minn., .	. 3 Union Park.
GILMORE, HOWARD, S. B., .	. No. Easton,	. No. Easton.
HADLEY, FREDERICK WALTER, .	Arlington Heights,	. Arlington Heights.
HANCHETT, GEORGE TILDEN, .	. Hyde Park,	. Hyde Park.
HOPEWELL, CHARLES FREDERICK,	Cambridgeport,	. Cambridgeport.
KING, WARREN DUDLEY,	. Peabody,	. Peabody.
LAMB, WILLIAM FRANKLIN, .	Roxbury,	. 23 Waumbeck St., R.
LATEY, HARRY NELSON, Φ 1' Δ, .	. St. Louis, Mo., .	, 216 W. Chester Park.
LEWIS, HERBERT, B. A.,	Haverhill,	. Haverhill.
Maki, Heiichiro, $\Phi \Gamma \Delta$ ,	. Tökyo, Japan, .	. 15 Claremont Park.
	Boston,	. 115 Newbury St.
Morss, Henry Adams, ΘΞ, .	. Boston,	. 323 Marlborough St.
NORTON, CHARLES LADD,	Springfield, .	. II Milford St.
REED, JAMES HENRY, JR., Θ Ξ,	. Boston,	. 3 Gloucester St.
RESOR, WILLIAM SETH,	Cincinnati, Ohio,	. 36 W. Cedar St.
ROBERTS, HAROLD BARNES, S B.,	. Boston,	. 81 Mt. Vernon St.
SOLOMON, JOHN ISAAC,	New York, N. Y.,	. 142 St. Botolph St.
STOWE, LOVELL BAKER,	. Caryville,	. Caryville.
STUDLEY, FRED BUTLER,	Rockland,	. 731 Tremont St.
SUTTER, FREDERICK CHARLES, & F.	Δ, Detroit, Mich., .	. St. Botolph Hall.
TAINTOR, CHARLES WILSON, .	Keene, N. H., .	. Pond St., J. P.
TENNEY, WINTHROP PARKER,	. Dorchester,	. Pleasant St., D.
THOMAS, ALFRED CLARENCE, .	Cincinnati, Ohio,	. 36 W. Cedar St.
THOMAS, PERCY HOLBROOK, Δ Υ,	. Wayland,	. Wayland.
TRIPP, CHARLES ALBION,	Hudson,	. 112 Pembroke St.
VINING, LOUIS BRADFORD, .	. Boston,	. 138 Huntington Ave.
WASON, RIGBY, Θ Ξ.,	. Girvan, Scotland, .	. 8 St. James Ave.
WHISTON, WILLIAM CORTELYON, A	Y., Newtonville, .	. Newtonville.
WHITAKER, SAMUEL EDGAR, A. B.,		. Lynn.
WILDER, PARKER HASTINGS, .	. Cincinnati, Ohio,	
WOODBRIDGE, JONATHAN EDWARDS,	. Duluth, Minn., .	. 25 Warren Ave.
YORKE, GEORGE MARSHALL, .		. Lowell.

### COURSE VII.—Biology.

CARTER, MARION HAMILTON,	Blowing Rock, N	Ι.	C.	112 Charles St.
COPELAND, WILLIAM ROGERS, A. B.,	Cambridge, .			Cambridge.
Dyar, Harrison Gray, S. B.,	Roxbury, .			49 Winthrop St., R.
KEITH, SIMEON CURTIS, JR., .	E. Bridgewater,		*	100 Pembroke St.
Wadsworth, Augustus Baldwin, .	Plainfield, N. J.			128 Marlborough St.

### COURSE VIII.—Physics.

There are no students of the Senior class in this course.

### COURSE IX.—Cenenal Studies.

Dearborn, George Knight, Δ Ψ,	Boston,			* 1	 6 Louisburg Sq.
FABYAN, FRANCIS WRIGHT, A 4.	Boston.				36 Beacon St.
CAMPAR WILLIAM BURT	Detroit	Mic	h		26 St. James Ave.

### COURSE IX .- Continued.

Name.	Home.	Residence.
HOWLAND, FREDERICK HOPPIN Θ Ξ.,	Providence, R. I., .	. St. Botolph Hall.
NORTON, FRANCIS COBB,	. Rockland, Me., .	. 128 Huntington Ave.
SMITH, ARTHUR BLAKELEY,	Providence, R. I., .	. 249 Berkeley St.
Walker, Amasa, X Φ.,	North Brookfield,	. 58 Chester Sq.
Wallis, Robert Norcross, .	. Fitchburg,	. 519 Columbus Ave.

### COURSE X .- Chemical Engineening.

CARTER, WILLIAM WOOD,		Boston,
( TO 19 ) TO 19	*	
CLAPP, HARRY LINCOLN, Δ Y., .		South Boston, 18 Atlantic St., S. B.
Cook, Charles Nourse, .	48	Woonsocket, R. I., 41 Mt. Vernon St.
DORMAN, THEODORE TAYLOR, .	0.0	Upper Montclair, N. J., 372 Boylston St.
FOWLE, ARTHUR EDWIN, A K E.,		Newton Centre, . Newton Centre.
HINCKLEY, JOHN FRED,		. Marlborough, 20 Rutland Sq.
MERRILL, FRANK HENRY, .		Newburyport, 5 Oxford Terrace.
RICE, HARRY LAWSON,		Lawrence, 129 Dartmouth St.

### COURSE XI.—Sanitary Engineening.

There are no students of the Senior class in this course.

### COURSE XII.—Ceology.

BALLARD, HETTY ORRILLA,	. AS	Roslindale,	. 152 Brown Ave., Ros.
NICHOLS, HENRY WINDSOR,		. Cohasset,	13 Follen St.

# Class of Ninety-Four.

### COURSE I.-Giuil Engineening.

Name.	Home, Residence.
AMES, AZEL, 3d, 4 BE,	Chelsea, Chelsea.
CLARKE, FRED HAMILTON,	Jamestown, R. I., . 132 Huntington Ave.
Coolidge, Prescott Hilton,	So. Framingham, So. Framingham.
COPELAND, HENRY FILLMORE, A K E,	Brooklyn, N. Y., . 68 Chester Sq.
Crary, Horace Allen, $\Delta \Upsilon$ ,	Sheffield, Pa., 314 W. Chester Park.
DENSON, HUGH COWAN, B. C. E	Gadsden, Ala., 140 Chandler St.
Dumaresq, Philip,	Brookline, Brookline.
FERGUSON, JOHN NEIL,	Readville, Readville.
HASTINGS, HARRY PAYSON,	So. Framingham, So. Framingham.
HAZELTON, ISAAC BREWSTER,	Wellesley Hills, Wellesley Hills.
HOWLAND, FRANK SEAMAN, Φ B E, .	Athens, N. Y., 60 W. Rutland Sq.
HUNT, ALBERT FRANCIS, JR.,	Newburyport, 3t Dartmouth St.
HUNT, EDWARD MARSHALL,	Portland, Me., 31 Dartmouth St.
JANVRIN, NED HERBERT,	Lexington, Lexington.
JANVRIN, WALTER ADAMS,	Revere, Revere.
LEONARD, FREDERICK MEEHAN, .	Jamaica Plain, 165 Green St., J. P.
MAXWELL, FRANK FLAGG,	Fernandina, Fla., 22 Claremont Park.
McKibben, Frank Pape,	Van Buren, Ark., . 88 W. Newton St.
Meade, Charles Arthur, Φ B E, .	
NEWBEGIN, PARKER CLEAVELAND, A.	B., θ Δ X, Defiance, Ohio, 36 Yarmouth St.
NICHOLS, WALTER BANCROFT,	Reading, Reading.
Pollock, Clarence Dubois, .	Washington, D. C., . 69 Appleton St.
STEARNS, FRED LINCOLN,	Hopkinton, So. Framingham.
STEBBINS, ELWYN WILFRED, X Φ, .	Boston, 58 Chester Sq.
TABER, GEORGE AYMAR,	Montrose, Montrose.
THOMSON, SAMUEL FORSYTHE,	Charleston, S. C., . Salem.
THORNDIKE, STURGIS HOOPER, A. B.,	Cambridge, Cambridge.
TIDD, ARTHUR WARREN,	No. Woburn, No. Woburn.
Wheeler, Robert Charles,	Temple, N. H., 298 Columbus Ave.
WINGATE, EDWARD LAWRENCE, .	Malden, Malden.

### COURSE II.-Meghanigal Engineening.

ABBOTT, FREDERICK BANCROFT,	Providence, R. I., 144 W. Newton St.
BAILEY, ROLAND,	Kingston, 154 W. Brookline St.
BAKER, FRED CHARLES,	Waltham, Waltham.
Barstow, George Edward, .	Lynn, Lynn.
CARY, HUNSDON,	Richmond, Va., 134 St. Botolph St.
CASE, WINTHROP TRACY,	Canton Center, Conn., 156 Warren Ave.
CHACE, MASON SMITH,	Dorchester, 31 Wales St., D.
CHAPMAN, JOHN WINSLOW, JR., .	Hyannis, 2 Columbus Sq.
CHAPMAN, NATHAN C. W., .	Hyannis, 2 Columbus Sq.

### COURSE II.—Continued.

1.00		
Name. Cheney, Nathan,	Home.	Residence. . 136 Chandler St.
Cousins, Sterling Green,	Boston, Fortuna, Cal., .	. 156 Warren Ave.
Davies, Theophilus Clive, $\Delta$ K E,	Southport, England,	
Day, Nathan Brown, A. B.,	Boston,	
Dejonge, Alfred Louis,		. 73 Cedar St., R.
EATON, EVERETT LAWRENCE,	Needham,	
GILKEY, ROYAL WALDO,	Watertown,	
HAVEN, GEORGE BARTHOLOMEW, .	Sangerfield, N. Y.,	, 162 W. Springfield St,
77 0 7		. 162 W. Springfield St.
HUBBARD, CHARLES BELA,	Woonsocket, R. I.,	. 168 W. Newton St.
JENSON, JOSEPH,		. Cambridgeport.
Jones, John William,	Needham,	
KIRK, ROBERT HORNER,		. 19 Union Park.
KITTREDGE, JOHN WOODMAN, .		. 8 Brookline Ave.
LACOUNT, HENRY OSGOOD,		. West Somerville.
LEIPER, GEORGE NEVILLE,	Philadelphia Pa	. 168 W. Newton St.
MAVERICK, SAMUEL AUGUSTUS, .		. 306 Columbus Ave.
MELLUISH, JAMES GEORGE,	Bloomington, Ill., .	
Mink, Edward,	W. Somerville, .	
MOULTON, RAYMOND EDWARD, .	Paris France.	. 8 St. James Ave.
OWEN, GEORGE, JR., & B E,	Lawrence	. 60 W. Rutland Sq.
PAESSLER, VINTON SHERMAN,	Roxbury,	. 80 Bower St., R.
PECHIN, JOHN SHELLEY, Σ X, .	Cleveland, Ohio.	. 220 W. Chester Park.
Quevedo, Narciso Tadeo, B. S., .	Guatemala, C. A.,	. Worcester.
RANDALL, EDWARD BRYANT, O Z., .	Medford,	. Medford.
REED, SAMUEL GORDON,		. 3 Oxford Terrace.
REYNOLDS, ROBERT DUNCAN, .	Iamaica Plain.	. 45 Orchard St., J. P.
RICHARDS, DANIEL WEBSTER, JR., .	Needham,	
RICHARDS, THOMAS GLEASON, Δ Υ,	Roxbury,	. 36 Lambert St., R.
RIPLEY, HENRY FRANCIS,	Hingham Centre, .	
ROBBINS, FRANKLIN HENRY,	Kingston,	
Savage, Silas Anthony, $\Sigma$ A E, .	Chelsea,	
SHURTLEFF, ARTHUR ASAHEL, .	Boston,	
SPERRY, AUSTIN, A K E,	San Francisco, Cal.,	. 56 Chester Sq.
SWANTON, HENRY AIKEN	Gardiner, Me., .	
Taylor, George,	Brookline,	
TAYLOR, WILLIAM BELLAMY, .	Brookline,	. Brookline.
TENNEY, ALBERT BALL, Δ Υ,	Brookline, Everett,	. Everett.
Tufts, Leonard,	Medford,	. Medford.
VAN TUYL, THOMAS WALTER, .	retrona, Ont.,	. 100 Huntington Ave.
WAITE, EDWARD BROUGHTON, .	W. Newton, .	. W. Newton.
Weil, Isaac, Ph. B.,	New York, N. Y.,	. 17 Yarmouth St.
WHEILDON, WILLIAM MAXWELL,	Boston,	
[	Hingham Centre, .	
WOOD, KENNETH FOSTER, Δ Υ, .	Central Falls, R. I.,	
WRIGHTINGTON, CHARLES NELSON, Φ	이번 사람이 아무슨 사람들이 보고 있었다. 그 이렇게 되었다면 하다 없다.	. Brookline,
Yoerg, Henry, $\Delta \Upsilon$ ,		. 112 Pembroke St.
	STATE OF THE STATE	

### COURSE III.—Mining Engineening.

Name.		Home.		Residence.
Locke, John Calvin,		Lockeford, Cal.,	÷	298 Columbus Ave.
MACKAY, ANGUS ROBERT,				. 198 Beacon St.
SCHIERTZ, FERDINAND ALFRED,				
SOLEY, WILLIAM ALEXANDER, .		Chelsea,		
THROPP, JOSEPH EARLSTON, JR.,	ΔΥ,	Philadelphia, Pa.,		33 Yarmouth St.

### COURSE IV.—Дորդիրերդեսորգ.

### COURSE V.—Chemistry.

ALLEN, ANNIE ELIZABETH, A. B., BATES, HARRY REYBURN, Δ Υ.,	. Cambridgeport,	. Cambridgeport. 69 Appleton St.
BEACH, IRVING EVERETT,	. Lawrence,	. 134 Huntington Ave.
CLAFLIN, ALAN AVERY,	Quincy,	Quincy.

### Course V. - Continued.

FOSTER, MARY LOUISE, A. B., GALLUP, HARRIET TOOKER, HICKS, EDWIN FRANCIS, JONES, MILTON FRANK, KINNEY, CHARLES NOYES, A. C., MOORE, LESLIE ROGERS, NISBET, JOHN LORD, B Θ Π., PHELAN, JOSEPH WARREN, PIPER, WALTER ELBRIDGE, Δ Υ., PRESCOTT, SAMUEL CATE,	Norwich, Conn., Peekskill, N. Y., Natick,	Newton Centre.  124 Pembroke St. 235 W. Canton St. 285 Columbus Ave. Natick. 676 Tremont St. Newton. 27 St. James Ave. 63 Lexington St., E. B., Hyde Park. Cambridgeport.
Proctor, Richard Warren, $\Delta \Upsilon$ . Scott, Walter Osgood, $\Delta \Upsilon$ .,	, . Billerica,	

### COURSE VI.—Hecetnical Auginecening.

ABELL, EDWARD WALTER, A. B., ADAMS, FRANCIS MULLIKEN, Ph. B. ARMSTRONG, HERBERT, $\Phi \Gamma \Delta$ , Detroit, Mich, BATSON, WALTER VENNARD, Allston, BEAN, NORWIN SHERWOOD, BENEDICT, VALLETTE LYMAN, BIGELOW, FREDERICK SOUTHGATE, BLAKE, SAMUEL HENRY, Chicago, III., BOVEY, WILLIAM HOWARD, $\Delta$ K. E., BURCKHARDT, HORATIO WOLCOTT, CLARK, ARTHUR HENRY, CLARKE, EDWARD DUTTON, $\Delta \Psi$ , CUTLER, CHARLES HENRY, St. Paul, Minn, Curler, WILLIAM WORCESTER, $\Sigma$ X., Waltham, ST. Framingham, Cutler, WILLIAM WORCESTER, $\Sigma$ X., Waltham, Sandy Hill, N. Y., DANA, LESLIE, $X \Phi$ , Kirkwood, Mo, DEXTER, EDWARD MCBETH, Milwaukee, Wis., DRAKE, ALBERT WESLEY, $\Sigma$ A. K. Kirkwood, Mo, Milwaukee, Wis., TARNSWORTH, ARTHUR JAY, $\Delta$ K. E., GREENLEAF, LEWIS STONE, $\Delta \Psi$ , HARWOOD, FREDERICK WILLIAM, JR., Springfield, HILL, WILLIAM GILBERT, JR., Malden, Lenox, Lenox, Lenox, Lenox, Lenox, Lond, FREDERICK WAIT, $\Theta$ Z. Mayer, Virginius Augustus, McCulloch, Alfred Hugh, NASH, Luther Roberts, $X \Phi$ , Roxbury, NASH, Luther Roberts, $X \Phi$ , Ridgefield, Conn., Newman, Arthur Brantley, Nowell, John Chase, Reading, PRATT, WILLIAM HEMMENWAY, REED, WALTER WILSON, Waltham, Waltham, Waltham,	108 W. Chester Park.  137 W. Newton St. 9 Pomeroy St., A. 45 Union Park. 150 Huntington Ave. 334 Shawmut Ave. 283 Columbus Ave. 56 Chester Sq. 89 Charles St. 126 Berkeley St. 6 Louisburg Sq.  S. Framingham. 220 W. Chester Park. 15 Joy St. 58 Chester Sq. 15 St. James Ave. N. Cambridge. 56 Chester Sq. 18 Mt. Vernon St. 11 Milford St. Malden. Cambridge. 140 Chandler St. 8 Mt Vernon St. 28 Dartmouth St. 61 Beech Glen St. 58 Chester Sq. 157 W. Concord St. Reading. Waltham.
REED, WALLER WILSON, Walliam,	

### COURSE VI .- Continued.

		Residence.
Name.	Home.	
REYNOLDS, HOWARD SIDNEY, .	Randolph,	Randolph.
ROBESON, ANTHONY MAURICE,	Belvidere, N. J., .	. 5 Concord Sq.
ROGERS, ARTHUR SILAS,	Salem,	126 Berkeley St.
SOUTHARD, FRANCIS MARSHALL, & X,	Brooklyn, N. Y., .	. 89 Appleton St.
TURNER, GILES McClure,	Stoughton, Wis., .	161 W. Brookline St.
VARNEY, THEODORE,	Indianapolis, Ind.,	. 126 Berkeley St.
VORCE, WALTER HERBERT, Σ X, .	Farmington, Conn., .	220 W. Chester Park
WARREN, HENRY ELLIS,	Newton Centre, .	. Newton Centre.
WESTCOTT, WILLIAM READ, A. B.,	Cambridge,	Cambridge,
WILSON, WINSLOW ABBOTT,	Dorchester,	. 72 Magnolia St., D.

### COURSE VII.—Biology.

BEDDALL, ALBERT RICHARD, .	Chelsea,	ċ	. Chelsea.
DE NORMANDIE, SARAH YARDLEY,	Kingston,		120 Marlborough St.
GAINES, BESSIE VENABLE,	Mossingford, Va.,		. 112 Charles St.
LAIGHTON, FLORENCE MARIAN, .	Portsmouth, N. H.,		63 Worcester St.
NAGLE, GEORGE HENRY,	13 Cortes St., .		. 13 Cortes St.
SAYWARD, WILLIAM HENRY, JR., .	Dorchester, .		69 Monadnock St., D.

### COURSE VIII.—Physics.

ABBOT, CHARLES GREELEY,	Wilton, N. H.,			- 3	265 Dudley St., R.
FOWLE, FREDERICK EUGENE, JR.,	Arlington, .	6	10		Arlington.
HALL, SARAH ABBIE,	Roxbury, .				Hotel Adelphi, R.
JACKSON, WILLIAM DUNHAM, ,	Bridgewater, .	e e			Bridgewater.
PRESCOTT, ALICE BEARDSLEE, .	Jamaica Plain,			1	123 Pond St., J. P.

### COURSE IX.—Cenenal Studies.

Boss, Charles Royce, Σ X.	¥11	. New London, Conn., . 220 W. Chester Park.
KING, WILLIAM HERBERT, .		Melrose, Melrose,
LANE, LUCIUS PAGE,	2	. Boston, 623 Tremont St.
NOA, FREDERIC MARTIN, .	1	Melrose Highlands, . 2 Park Sq.
SAWYER, ALBERT HAYDN, .		. Newburyport, 5 Oxford Terrace.
WRAY, JOHN EDWARD,		St. Louis, Mo., 408 Columbus Ave.

### COURSE X .- Chemical Bugineening.

Adams, Raleigh Bullard, Dorchester, .	2	. 2 Gleason St., D.
Anderson, George Herbert, . Newburyport, .		
BEACH, CHARLES BURR, Dubuque, Iowa,	10	. 71 Rutland St.
CHASE, HAROLD MAYSON, Lowell,		283 Columbus Ave.
CLEMENT, ARTHUR AUSTIN, A K E., Chicago, Ill., .		. 89 Charles St.
DAVIS, LEON KEITH, West Newton, .		West Newton.
DU PONT, HENRY BELIN, Φ B E., . Wilmington, Del.,		. 85 Appleton St.
LORING, ROBERT, So. Boston,		789 Broadway, S. B.
LOVEJOY, FRANK WILLIAM, & B E Concord, N. H.		
McJennett, William Dargon, . Norwich, Conn., .		88 W. Newton St.
PATRICK, ARTHUR LOOMIS, West Newton, .		. West Newton.

### COURSE X .- Continued.

Name. Home. Residence. PRICE, RAYMOND BEACH,  $\Phi$  B E., . Boston, . . . 35 W. Newton St. Sheppard, Robert Kimball,  $\Delta$  K E., Newton, . . . Newton. Sherman, George Wilmarth,  $\Phi$  B E., Fall River, . . . 60 W. Rutland Sq. Sturgis, Russell, 2d,  $\Phi$   $\Gamma$   $\Delta$ , . . New York, N. Y., . . . 19 St. James Ave.

### COURSE XI.—Sanitary Engineering.

### COURSE XII,-Geofony.



# Class of Ninety-Five.

### COURSE I.—Civil Enginequing.

### COURSE II.—Mechanical Engineering.

Arbot, Louis Andrew,	Boston, .			108 Pembroke St.
ASHTON, GEORGE FRANCIS,	Salem, .			Salem.
BALLOU, LATIMER WILLIS, Φ B E,	Woonsocket,	R.	I.,	60 W. Rutland Sq.

### COURSE II.—Continued.

Name.	Home.	Residence.
BARRY, EDMUND DRINAN, A K E, .		owdoin St., D.
BATCHELDER, WILLIAM JENNINGS, AS		ond St., J. P.
Bigelow, Charles Willard, Δ Ψ,		W. Cedar St.
그 그리고 그리고 가장 하고 있습니다. 그리고 있는데 그런 그리고 있다고 있다고 있는데 그리고 있는데 그리고 있다.		Chester Sq.
Boeseke, Edgar Augustus,		Warren Ave.
		xborough.
BURKHALTER, DE NISE,		St. James Ave.
그렇게 가게 하다면 가게 하게 가게 되었다면 얼마나 나를 가게 하다 되었다.		4 Tremont Street.
CARLETON, GUY,		Chandler St.
		Dudley St., D.
	되지만 [2] [10] [10] [10] [10] [10] [10] [10] [10	St. James Ave.
COTTON, HARRY WILLETT, .		Beacon St.
Crane, Henry Middlebrook, $\Delta \Psi$ ,	New York, N. Y., . 72	Pinckney St.
CUSHING, JOSHEPH WHITNEY, JR.,		Worcester St.
CUTTER, GEORGE ALBERT,		de Park.
DELONG, HAROLD WILLIAMS, .	Medford, Me	edford.
FAXON, FRANCIS EDWIN,		8 Falmouth St.
FLATHER, ERNEST JAMES,		o Pembroke St.
GARDINER, JOHN HOWLAND,		Gray St.
		lem.
GOLDSMITH, CLARENCE,	Andover, At	idover.
GREENE, GEORGE GOULD,	Constantinople, Turkey, Au	burndale.
HANNAH, FREDERICK AUGUSTUS, .	The state of the s	nelsea.
HARBAUGH, KARL SPRINGER, A K E,	Seattle, Wash., 56	Chester Sq.
HAVEN, HARRY MERRITT,		merville,
HOWARTH, GEORGE REUBEN, Φ B E, .		2 Columbus Ave.
Humphreys, James Barnes, ∆ ¥, .	New York, N. Y., . 20	W. Cedar St.
HURD, EDWARD LAURENCE, & K E,		attapan.
Huxley, Edward Haley, ♦ BE, .		ewton.
		o Boylston St.
Kotzschmar, Hermann, Jr., .		ellesley Hills,
LINCOLN, ALFRED VARNUM, JR.,	물건 : 이번 - [12] ' [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	Cordis St., C.
Lonngren, John Erik,		altham.
	기민들은 하루의 집에 가난 경기 있었다.	ookline.
Lynch, Albert Johnson,	Jamaica Plain, 47	Holbrook St., J. P.
	[HONE] [M. [HONE] [HONE] [M. [HO	3 Chandler St.
		ount Auburn.
MILLER, FRANKLIN THOMAS, .		iburndale.
Moore, John Denis Joseph, .		Worcester St.
Moore, Rittenhouse Randolph, Δ'		2 Dartmouth St.
NAY, IRA ALLEN, JR.,		Moreland St., R.
		unton.
PARKER, CHARLES HAMILTON,	Brookline, Br	ookline.
RICKEY, WALTER JOSIAH, ROBERTS, EDWIN HUGHES,		W. Chester Park.
SMEER FORMER PRANCES	- BOSTONIA CON BUILDING - BUILDIN	8 Huntington Ave.
SMITH, EDWARD FRANCIS,	Turner's Falls, 35	4 Columbus Ave.
SMYSER, JAMES SWETT, A K E, .	Exeter, Ont., 7 l	Rutland Sq. ookline.
STEVENS, WALTER FREDERICK, .	Newton Highlands N	ewton Highlands.
SWIFT, ROBERT WESSELHOEFT, .	New York N V	W. Cedar St.
		m, cedar of

### COURSE II .- Continued.

Name.	Home.	Residence.
THOMAS, JAMES WINTHROP, .	. Wayland,	21 St. James Ave.
TILLINGHAST, CHARLES FOSTER,	Φ B E, Providence, R. I.,	. 60 Rutland Sq.
TUCKER, HUGH MERCER, .	. Colorado Springs, Col.,	70 W. Rutland Sq.
VANDENBURGH, ARTHUR PRIOR,	Σ A E, New York, N. Y.,	. 115 Chandler St.
WINKLEY, WILLIAM HENRY, .	. W. Medford,	W. Medford.
Wolfe, John J. Colvin, .	Coeymans, N. Y., .	. 20 Rutland Sq.
WRAY, CHARLES FREDENBURG,	Γ Δ, Rochester, N. Y.	437 Columbus Ave.
YODER, LUTHER KELLER, .	. Reading, Pa., .	. 527 Columbus Ave.

### COURSE III.—Mining Angingquing.

Bean, Sidney Alfred, $\Delta \Psi$ ., Milwaukee, Wis., Coburn, Arthur Stone, Lowell,	19 St. James Ave. 20 St. James Ave.
CRAFTS, WALTER NATHAN, A. B Oberlin, Ohio.,	34 Claremont Park.
	Fayville. 21 St. James Ave.
JOHNSTON, WILLIAM HOOPER, A T Ω., Birmingham, Ala., LAWSON, GEORGE, Θ Ξ., Cincinnati, Ohio,	202 Dartmouth St. Brookline,
MURPHY, JOHN FRANCIS, Turner's Falls,	354 Columbus Ave. St. Botolph Hall.
REED, GEORGE WHITEFIELD FAY, \$\Phi\$ B.E., Lynn,	Lynn.
SEARS, MORTIMER ANDREWS, Boston,	201 W. Chester Park. 238 Huntington Ave.
Towle, Edward Avery,	Weymouth.

### COURSE IV.—Analitectune.

Ames, John Worthington, A. B., . Cambridge, Cambridge.
BARNARD, LEONARD MYRICK, . Gardiner, Me., 69 Appleton St.
BOURNE, FRANK AUGUSTUS, 5 Oxford Terrace.
Brownell, Charles Tilley, . Newport, R. I., 21 Gray St.
BUCHER, RUSSELL SAMUEL,
CHASE, WALTER SIMONS, Portland, Me., Lexington St., E. B.
CHENERY, WINTHROP HOLT, Belmont, Belmont,
CLAFLIN, WILLIAM BEMENT, Φ Γ Δ., Philadelphia, Pa., . 19 St. James Ave.
Dyer, John, Jr.,
EASTMAN, ALBERT GOODHUE, . Cambridgeport, Cambridgeport.
Fuller, Robert Lesure, φ B E., . Worcester, 60 W. Rutland Sq.
GEIGER, ALBERT, JR., Boston, 29 Commonwealth Ave.
GUTTERSON, FRANK ALDEN, Owatonna, Minn., 139 Worcester St.
HARLOWE, FRANK LORIN, Washington C. H., Ohio, 1323 Washington St.
HART, DONALD PURPLE, PH. B., . Marchton, Ohio, 20 Newbury St.
HAWLEY, JAMES JOSEPH, Wilkes Barre, Pa., . 5 Oxford Terrace.
KING, GEORGE GLENN, Concord, 18 Rutland Sq.
Leber, Edward, $\Phi$ $\Gamma$ $\Delta$ ., York, Pa., 19 St. James Ave,
LEWIS, MARION LINCOLN, W. Roxbury, March Ave., W. R.
LOCKWOOD, CHARLES EASTMAN, Σ X., Boston, 220 W. Chester Park.

### COURSE IV .- Continued.

McGonigle, Edward Andrew, .	. 1	Home. Somerville,	Residence. Somerville. 13 Union Park. 52t Columbus Ave. 43 Hancock St. 389 Boylston St. 6 Louisburg Sq. Newton Highlands.
SCOFIELD, DONALD CLEVELAND, . TAYLOR, ALFRED P., TURNER, HORACE KIBBE,	. 1	Council Bluffs, Iowa, Cleveland, Ohio, Mont Clair, N. J., . Quincy, Ill., Quincy, Ill., Freeport, Ill., .	18 Waumbeck St., R. 310 Columbus Ave. 310 Columbus Ave. 43 Hancock St. Newton. 49 Rutland Sq. 106 Appleton St.

### COURSE V.—Ըկգութելդ.

BADGER, ERNEST FRANKLIN, Σ A E, . Everett,		÷	1.0	Everett.
BLODGETT, PERLEY HARTWELL, . Hyde Park, .				Hyde Park.
BUCKMINSTER, HAROLD CHASE, Y A E, Malden,				Malden.
DANN, MARY ELIZA, Warsaw, N. Y.,	80		61	12 Gray St.
Defren, George, So. Boston, .				. 449 Eighth St., S. B.
DORRANCE, JOHN THOMPSON, ZAE, Bristol, Pa., .				527 Columbus Ave.
ELLIS, ROLFE MARSH, Hyde Park, .				Hyde Park.
FISHER, BESSIE FLORETTE, East Boston,	*0			142 Tremont St., E. B.
FLETCHER, GRACE WEBSTER, Milton,				Milton.
HALL, WILLIAM THOMAS, Boston, .				
HALLOWELL, LUCRETIA MOTT, W. Medford, .				
HORMEL, HERMAN, Σ A E, South Boston,				
LE BOSQUET, MAURICE, Δ Υ, Haverbill, .		i.	139	. 12 E. Dedham St.
MESERVE, CHARLES ARTHUR, . Allston, .				
SADTLER, SAMUEL SCHMUCKER, . Philadelphia, Pa	ı.,	7		525 Columbus Ave.
WALWORTH, JOSEPH EDWARD, . Lawrence, .			e) '	97 Appleton St.
WASON, ROBERT SIDNEY, Σ A E., . Nashua, N. H.,			33	. 293 Columbus Ave.
WATKINS, WILLARD HASKELL, . East Boston,				223 Saratoga St., E. B.
WESTON, DAVID BRAINARD, Sharon,				

### COURSE VI.-Higginigal Engineening.

Adams, Benjamin,	2.0	Be	lmont,		4.		Belmont.
ADAMS, CHARLES MILLS,		. Re	oxbury, .		2.2		. 59 Waverly St., R.
ALDEN, EDWIN CLEMENT, .		Ci	ncinnati,	Ohio	,		34 Savin St., R.
BARR, LAWRENCE, A. B.,		. Be	ston, .				. 275 Marlborough St.
BERRY, CHARLES WILLIAM, .		So	merville,		30.5	*.	Somerville.
Boedeker. John,		. Sp	ringfield.				. 92 Worcester St.
BOOTH, THOMAS BUTLER, AK E,							56 Chester Sq.
CARY, HUDSON,		. R	ichmond,	Va.,		7 13	. 134 St. Botolph St.
CLARKE, ROBERT CAMPBELL, .		A	tlanta, G:	3.,			20 W. Cedar St.

### COURSE VI .- Continued.

Name. Home,	Residence.
CODDINGTON, HARRY P., Hartwell, Ohio, .	118 Chandler St.
COOKE, CHARLES PRENTICE, Farmington, N. H.,	
Cooke, John Williamson, Waltham,	Waltham.
COOKE, JOHN WINFIELD, Farmington, N. H., .	
Coolidge, Willie David, Hudson,	112 Pembroke St.
CUTTER, FRED BERTRAM, Wakefield,	. Wakefield.
DEAN, ARTHUR DAVIS, No. Cambridge,	No. Cambridge.
DOLIBER, FRANKLIN WHITNEY, Θ Ξ, Brookline,	. 38 St. Botolph St.
DRISKO, WILLIAM JOHNSON, Boston,	16 Carver St.
EVELETH CHARLES FREDERIC So. Lincoln	. So. Lincoln.
	218 W. Springfield St.
FITTEN, JAMES TURNER, Atlanta, Ga.,	. 20 West Cedar St.
FLINT, RICHARD H., San Juan, Cal.,	13 Arlington St.
FULLER, FREDERIC WILLIAM, & BE, . Springfield,	. 60 W. Rutland Sq.
GOODYEAR, WATSON EDWARD, . Naugatuck, Conn., .	
	. 269 Columbus Ave.
HAYDEN, GEORGE WELLINGTON, & BE, Roxbury,	403 Warren St. R.
HOLDREGE, HENRY ATKINSON, 4 Y, . Omaha, Neb.,	. Milton.
HOWARD, LEMUEL FREDERIC, . Ludlow,	
HULSE, WILLIAM STEWART, Fort Wayne, Ind., .	124 Huntington Ave
HULSE, WILLIAM STEWARI, FOR Wayne, Ind., .	Danuero
INGALLS, CHARLES HENRY, Danvers,	Hotel Oxford
JACKSON, HENRY DOCKER, Boston,	. Hotel Oxford.
KEITH, WILLIAM HENRY, St. Augustine, Fla., . KLEINSCHMIDT, FRED, Cincinnati, Ohio, .	205 Warren St. D
KLEINSCHMIDT, FRED, Cincinnati, Onio, .	. 395 Warren St., Ki
LAWRENCE, RALPH RESTIEAUX, . Dorchester,	34 Summer St., D.
LIBBY, DORVILLE, JR San Francisco, Cal.,	128 Charles St
MARBLE, DWIGHT NEWCOMB, A. B., Owensboro, Ky.,	. 142 Marlborough St.
NELSON, HENRY EUGENE, Jamaica Plain,	203 Lamartine St., J. F.
NESBIT, ARTHUR FLEMING, A. B., . Milton, Pa.,	. 273 Columbus Ave.
PATTEN, WILLIAM FLETCHER, . Dorchester,	. 203 Savin Hill Ave., D.
RATHBONE, JOHN ADAMS, Detroit, Mich., .	. 314 Columbus Ave.
ROCHE, JOHN A., A. B., Haverhill,	1304 Washington St.
RUST, HAROLD NORWOOD, Wilkes Barre, Pa.,	. 150 Huntington Ave.
RUTHERFORD, NORMAN FRANKLIN, Bathurst, N. S. W.,	48 Tennyson St.
SCHALLER, FREDERICK FRANCIS, . So. Natick,	. So. Natick.
SHERIDAN, RICHARD GEO. BRINSLEY, EX, Cleveland, Ohio, .	220 W. Chester Park.
SLOAN, ALFRED PRITCHARD, JR., . Brooklyn, N. Y., .	. 308 Columbus Ave.
Comme Hannana France Roybury	75 Waverly St., R.
SWOPE, GERARD, St. Louis, Mo., .	. 360 Columbus Ave.
SWOPE, GERARD, St. Louis, Mo., TAPPAN, SANFORD, Manchester-by-the-Sea,	622 Tremont St.
WAITE, LOREN GLEASON, Maiden,	, Maiden.
WATSON, HERBERT JEREMIAH, X Φ., Boston,	242 Huntington Ave.

### COURSE VII.—Biology.

BARTLETT, BERTHA LEAVITT,	4.	. Somerville, .		Somerville,
CHAPMAN, WILLIAM LOUIS, .		Newtonville,		Newtonville.
CUTTER LEONARD TAYLOR,		. Nashua, N. H.,		293 Columbus Ave.

### COURSE VII .- Continued.

Name.		Home.	Residence.
FISHER, LAURA,		Boston,	108 Marlboro St.
Gatch, E. S.,		. Omaha, Neb.,	 . Braintree.
Greene, Francis, $\Phi \Gamma \Delta$ .		Cedar Rapids, Ia.	 202 W. Brookline St.
METCALF, MARY CHURCH, .		. Cambridge, .	 Cambridge.
NAGLE, GEORGE HENRY,		Boston,	13 Cortes St.
PERRIN, ETHEL,		. W. Newton, .	 W. Newton.
PLUMMER, LAURA S., .		E. Boston,	157 Princeton St., E. B.
SHEPPARD, CLARA EMMA, .		. Newton, .	 Newton.
TOWNE, LILLIAN M., .		Brighton,	88 Parsons St., B.
WOODS, FREDERICK ADAMS,		. Brookline, .	 Brookline.

### COURSE VIII.—Physics.

ABELL, ADELAIDE MAE,	Vi. 19	Allston,	. 19 Farrington Ave., A.
WOOD, FLORENCE ANNA,		Roxbury	9 Bainbridge St., R.
BANTA, MAY B. S., .		Brooklyn, N. Y., .	Wellesley.

### COURSE IX.—Cenequal Studies.

APPLETON, HENRY MORGAN, X Φ, .	Springfield, 58 Chester Sq.
BALDWIN, HARRY ALEXANDER, X Φ,	
Brown, Allen Percy,	Schuyler, Neb., . 273 Columbus Ave.
CHAPIN, MABEL HUIDEKOPER, .	. Brookline, Brookline.
CLAPP, GUSTAVUS,	Framingham, Framingham.
	Acton, Acton.
GILMAN, HARRY SARGENT, X Φ, .	Manchester-by-the-Sea, 58 Chester Sq.
GREENFIELD, WILLIAM HIRST,	Baltimore, Md., 128 Huntington Ave.
Holwill, John A.,	Brookline, Brookline.
RICE, WILLIAM JACKSON,	Leominster, 19 Follen St.
SANBORN, CLIFFORD BARTLETT, .	Norwood, Norwood.
STOWELL, ALVAH WOOD,	Leominster, 232 W. Canton St.
TORREY, GEORGE WINTHROP, .	Rockland, Rockland.
WILLIAMS, ROGER JAMES,	Canton, Canton.

### COURSE X.—Chemical Angineening.

BIXBY, GEORGE LINDER,		Foxborough,				. 1	Foxborough.
CLAPP, EUGENE HOWARD,		Roxbury, .		ৃ			Rockland St., R.
DENISON, EDWARD ELIAS, & B E,		Portland, Me.,	,				50 Rutland Sq.
DICKERMAN, JUDSON CHARLES, .		Boston, .			٠.		113 Pembroke St.
HAYWARD, HARRISON WASHBURN,		Hyde Park,					Hyde Park.
NEWELL, JOHN LOUIS, Δ T Δ,		Roxbury, .					41 Walnut Ave., R.
POWERS, WALTER CHAMPION, .		Springfield,				. 4	o St. Botolph St.
RICHARDS, FREDERICK L.,		Somerville,				5	Somerville.
ROCKWELL, GEORGE ARNOLD, A T A	6	Roxbury,				. 1	Hotel Warren.
TAFT, CHARLES CHESTER,		Jamaica Plain					go Eliot St. J. P.
WILLIAMS, WALTER SCOTT, .		Dedham,					

### COURSE XI.—Sanitanı Enginçening.

Name.	Home.	Residence.	
BRACKETT, WALLACE CLARKE, Σ A E.	Chelsea,	Chelsea.	
HARRIS, FREDERICK WALTER, .	Fitchburg, .	174 W. Springfield	d St.
SIAS, FRANK SOLON VAIL, O Z,	. Cambridge, .	Cambridge.	

### COURSE XII.—Geology.

DAVIS, STANTON KIRKHAM, .			Oakland, Cal.,	33	St. Botolph Hall.
GRABAU, AMADEUS WILLIAM,			Buffalo, N. Y.,	9	87 Appleton St.
RHODES, WILLIAM STEVENS, .		200	Jamaica Plain,		2 Knights' Court, J. P.
WATSON, ELIZABETH S., .	59		Weymouth, .	*	Weymouth.
Watson, Thomas A.,			Weymouth,		Weymouth.



# Class of Ninety-Six.

Name.	Home.	Residence.
Adams, Zabdiel Boylston, Jr., Allen, Mark Webb, Allen, Mark Webb, Allen, Ralph Whittier, Allen, William F., Allen, William F., Allen, William Henry, Jr., Ames, William, Jr., & \psi, Anderson, William Pope, Jr., \theta \( \), Anderson, William Pope, Jr., \theta \( \), Andrew, Frederick William, Andrew, William McCorkle, Bailey, Thomas Ward, Bakenhus, Reuben Edwin, Baldwin, Edward Arthur, Baldwin, Edward Arthur, Baldwin, Henry Sill, Barbour, William Ernest, & Ke, Barker, Edgar Harrison, Barker, George Gardner, Barnes, Charles Jenckes, Barrett, Caroline Whitney, Batto, Henry Desbrow, Batto, Henry Desbrow, Battelder, Charles Eildermann, Bates, Daniel Moore, Jr., & \psi, Beede, M Josie, Beede, M Josie, Beers, Herbert Page, Bell, Stewart Sargent, Bicknell, Percy Lincoln, Bigelow, Maurice Wells, Black, Maurice, Blakeslee, George Lee, \( \phi\) Be, Bliss, George Henry, Blodgett, Kinsley, Bowers, Allston Rice, Bowes, George Sidney, Brackett, Edwin Raymond, Brackett, Thomas Thayer, & Ke, Bragg, Edward Milton,	Framingham, Detroit, Mich., Boston, Denver, Colo., Boston, Providence, R. I., Cincinnati, Ohio, Boston, Linwood, Ohio, Kingston, Chicago, Ill., Dorchester, Middletown, Conn., Chicago, Ill., Lawrence, Woburn, Chicago, Ill., Boston, Syracuse, N. Y., So. Boston, Wilmington, Del., Cincinnati, Ohio, Stow, Chicago, Ill., Andover, Weymouth, Clinton, Toledo, Ohio, Cincinnati, Ohio, Waterbury, Conn., Newburyport, Pawtucket, R. I., Needham, Moosup, Conn., Newton, Minneapolis, Minn., Cambridgeport,	Framingham.  15 Blagden St. Hyde Park Ave., Ros. No. Cambridge. 293 Commonwealth Ave. St. Botolph Hall. Brookline.  1925 Washington St. 58 Chandler St. 154 W. Brookline St. 153 Worcester St. 308 Columbia St., D. 5 Concord Sq. 89 Charles St. 21 St. Charles St. Woburn. 138 Huntington Ave. 19 W. Cedar St. 40 W. Newton St. 930 Fourth St., S. B. St. Botolph Hall. Waltham. 5 Oxford Terrace. 134 St. Botolph St. Andover. Weymouth. 198 Beacon St. 5 Winthrop St., R. 103 Pinckney St. 60 W. Rutland Sq. 122 W. Newton St. Cambridgeport. Needham. 28 Worcester St. Newton. 56 Chester Sq. Cambridgeport.
Breed, Lewis Bazzoni, Brooks, John Flavel, Brown, Edwin Allen, $\Phi$ $\Gamma$ $\Delta$	. No. Hanover,	. 731 Tremont St.
Brown, Edwin Allen, $\Phi$ $\Gamma$ $\Delta$ , .	New York, N. Y.,	. 19 St. James Ave.

Name.	Home.	Residence.
Brown, Harry Webster, Brown, Paul Richardson, Brown, Theodore Lyman, Browne, Harry Patrick, Burgess, George Kimball, Burnside, Thomas Anderson, Θ Cabot, Sewall, Φ Γ Δ, Cadenas, M. H., Cadieu, Edward Leland, Callan, John Gurney, Cameron, Allan, Jr., Campbell, Justin Willis, Cannon, Lewis Telle. Carr, Robert Wentworth, Carter, Philip Greenleaf, Cary, Louis Alexander, Chamberlin, Helen, Chittenden, Albert, Clary, Joseph Ward, Δ Υ, Clary, Joseph Ward, Δ Υ, Clary, Joseph Ward, Δ Υ, Clayes, Ezra Eames, Clifford, William Henry, Jr., Clough, William Bentley, Cobb, Herbert Luther, Coburn, Frederick William, Colburn, George Clement, Θ Ξ, Coley, John Lonson, Colman, Willard Henry, Compton, George Kennedy, Conant, A. Bancker, Conant, A. Bancker, Conant, A. Bancker, Conant, Francis Melvin, Coolidge, Winthrop, Δ K E, Coristine, Walter Hawes, Corson, William Bertrand, Cotton, Leonard Miller, Cramer, Edwin, Crame, Stephen Dow, Crane, Thompson Baxter, Crocker, Carl Ira, Crocker, Percy Kemper, Crosby, Fred Marshall, Θ Ψ, Crosby, Ralph Worthington, Culver, Clarence Couch,	Winchester, Dayton, Ohio, Westboro. Houston, Texas, Newtonville, Portland, Oreg., Brookline, Brooklyn, N. Y., Chelsea, Lynn, Westford, W. Roxbury, Salt Lake City, Utah San Antonio, Texas, Portland, Me., Medway, Wellesley Hills, New York, N. Y., New York, N. Y., Mattapan, Rockport, Portland, Me., W. Springfield, Mansfield, Lowell, Boston, Westport, Conn., La Crosse, Wis., Dayton, Ohio, Groton, Plainfield, N. J., Watertown, Chicago, Ill., Montreal, P. Q. Watertown, Dedham, Milwaukee, Wis., Boston, Quincy, Portland, Me., Chicago, Ill., Melrose, Osterville, Rochester, N. Y.,	. Winchester 372 Boylston St 375 Columbus Ave Newtonville 295 Columbus Ave Brookline 126 Berkeley St Chelsea Lynn Westford Corey St., W. R. , No. Cambridge 306 Columbus Ave 38 Rutland Sq Brookline Wellesley Hills 38 St. Botolph St 21 St. James Ave Mattapan 109 Chandler St 21 Blagden St 42 Dundee St Mansfield 1 Yarmouth St Hotel Tudor 61 Chandler St 48 Chandler St 127 Pembroke St 760 Tremont St 760 Tremont St Watertown Brookline 708 Tremont St Watertown Brookline 708 Tremont St Watertown Dedham 129 Pembroke St 102 Mt. Vernon St Quincy Newton 330 W Chester Park Melrose 115 W. Newton St 5 Falmouth St.
CROSBY, RALPH WORTHINGTON, . CULVER, CLARENCE COUCH, . CUMMINGS, HENRY, IR.,	. Osterville, Rochester, N. Y.,	. 115 W. Newton St. . 5 Falmouth St. . 3 Union Park.
CURRY, WALTER ELMER, CUSHING, JOSEPH, JR., DAKIN, GEORGE WATERS,	. Melrose Highlands, . Fitchburg,	. Melrose Highlands. . 521 Columbus Ave. 20 Atwood Ave., R.
DAVIS, ROBERT ALLEN,	. Yarmouthport, .	, Somerville,

Residence.

1 mm.	
HOOPER, LAURITA THORNTON, . Brooklyn, N. Y., .	172 W. Brookline St. 4 Oxford Terrace. 15 St. James Ave. 15 St. James Ave. 98 Appleton St. Watertown. Wellesley Hills. Dedham. Newton Highlands. Garfield Ave., W. R. W. Newton. Millis. Lynn. 163 W. Chester Park. 76 Marlborough St. 112 White St., E. B. Brockton. Auburndale. St. Botolph Hall. 41 Rutland Sq. 21 Concord Sq.  16 James St. Quincy. Weymouth Heights. 681 Tremont St. Brookline. 140 Chandler St. 69 Montgomery St. Taunton. 3 Union Park. 32 Claremont Park. 1845 Washington St. 94 Huntington Ave. Newbury. 708 Tremont St. 86 Chandler St. 153 Worcester St. 75 Maple St., R. 156 W. Chester Park. Reading. Newburyport. 139 Worcester St. Melrose.
LAMBIRTH. WILLIAM HENRY, Boston,	. 20 Follen St.
LANGLEY MARTHA ESTHER, . W. Newton, .	. W. Newton.
Dalled Delled	Badford
LAWS, EUGENE HIRAM, Bedford,	, Bedford,
LEACH WILLIAM HENRY, IR Brooklyn, N. Y.,	. Cambridgeport.
LEACH, WILLIAM HERRY J. B. D. D. T. T.	16a Dorchaster St
LEARY, WILLIAM GARDNER, S. Boston	. 107 Dorchester St.
LEARY, WILLIAM GARDNER, S. Boston LEIGHTON, MARSHALL ORA, Portland, Me., .	. 45 Upton St.

Name.	Home.	Residence.
Leland, Walter Swift, Lewis, James Edward, Lewis, Richard Henry, Litchfield, Paul Weeks, Locke, Charles E., Lockwood, Rhodes Greene, 2 X Lootz, Alf C., Low, Cecil Horace, Lunt, Robert Somerby, Lyman, George William, Lynch, Charles Patrick, Lysaght, Bella Bernadette, Lythgoe, Hermann Charles, Mackay, George Baptist, Maclachlan, Andrew Dugald, Mahoney, Joseph Michael, Mansfield, Edward Stacey,	Saxonville, W. Somerville, W. Roxbury, Dorchester, Portsmouth, N. H., Boston, Gloucester, Newburyport, Salem, Lowell, Brooklyn, N. Y., Winthrop, Montreal, P. Q., Melrose, Dorchester, Boston, Wakefield,	Saxonville. W. Somerville. Park St., W. R. 94 Howard Ave., D. Chelsea. 118 Beacon St. 116 St. Botolph St. 73 Montgomery St. Newburyport. Salem. Lowell. Somerville. Winthrop. 198 Beacon St. Melrose. 21 Bailey St., D. 14 Newbury St. Wakefield.
Mansfield, Edward Stacey, Mansur, Leon Wallace, Marble, Louis Cortright, Mason, Elizabeth Spaulding, A. Mason, William Chipman, Mattocks, William Skinner, Maynadier, Causten Browne, Mayo, Walter John, McAlpine, William Horatio, McCann, Frank Goodman, McCarter, Frederic William, McClintock, Edwin Clare, McElwain, Helen W., McGann, Malcolm Hobart, A y, McGlynn, Thomas, McKay, James Albert, Mead, Ernest Eugene,	Houlton, Me., Swampscott, B., Boston, Weymouth, Lyndon, Vt., Taunton, Foxcroft, Me., Lawrence, Oak Park, Ill., Holbrook, Wollaston Heights, Boston, Philadelphia, Pa., Fall River, Pittsburgh, Pa.,	. 124 Pembroke St 312 Columbus Ave, . 164 W. Chester Park. Weymouth 162 W. Springfield St Taunton 295 Columbus Ave 97 Appleton St 180 Columbus Ave Holbrook Cambridge 177 W. Brookline St 130 Huntington Ave 19 Concord Sq 124 Pembroke St.
MEAD, ERNEST EUGENE, MERRELL, IRVING SEWARD, MERRYWEATHER, GEORGE EDMUNE MOAT, CHARLES PERKINS, X Φ, MOORE, MILTON ERNEST, MORGAN, JAMES KEELER, MORRICE, ARTHUR ANDERSON, MORRILL, CHARLES HERBERT, MORRILL, GUY LOUIS, MORRISON, WILLIAM WHITNEY, MORSE, LOUIS SHEPARD, NAGLE, JAMES WILLIAM, NEVIN, CHARLES KIRKLAND BARK NEWELL, HERBERT DAMON, NEWHALL, CHARLES SAUNDERSON, NORRIS, GRACE ADELAIDE, NORRIS, REGINALD, NORTHUP, EDWIN SAUNDERS,	o, Cincinnati, O., Portsmouth, N. H., Arlington, Orange, N. J., Montreal, P. Q., N. Andover Depot, Dorchester, Fort Canby, Wash., Ellsworth, Me., Somersworth, N. H., Concord Junction, ER, Allston, Hampden, Φ Γ Δ, Lynn, Chelsea, Brussels, Belgium,	. Waltham 58 Chester Sq Arlington 314 Columbus 4t Rutland Sq N. Andover Depot 35 Howard Ave., D 174 St. Stephen St 75 Waltham St 62 Berkeley St Concord Junction 71 Gardner St., A 152 Warren Ave 19 St. James Ave Chelsea 54 Chester Sq.

Residence.

Name.	Home.	Residence.
SMITH, WILLIAM GRAVES, SMYSER, ALBERT ERNEST, SMYSER, CHARLES JAMES, SMYSER, FREDERIC WILLIAM,	Mansfield,	. Mansfield.
SMYSER, ALBERT ERNEST,	Brookline,	Brookline.
SMYSER, CHARLES JAMES,	Brookline,	. Brookline.
SMYSER, FREDERIC WILLIAM,	Brookline,	Brookline.
SMYTH, JOSEPH HILTON,	Plymouth,	. 32 Myrtle St.
SMYTH, JOSEPH HILTON,	Holbrook,	Holbrook.
SNYDER, JOHN LOVETT,	St. Louis, Mo., .	. 684 Tremont St.
SOUTHER, ALLAN BARTLETT, .	Somerville,	Somerville.
SPENCE, DAVID JEROME, O E,	Georgetown, Ky.,	. 295 Columbus Ave.
STAMP, CHARLES EDMUND,	Cleveland, Ohio, .	228 W. Canton St.
SOUTHER, ALLAN BARTLETT, SPENCE, DAVID JEROME, $\Theta \Xi$ , STAMP, CHARLES EDMUND, STAMP, CHARLES MARCUS,	Mt. Vernon, Ohio,	. 89 Charles St.
STARBUCK, GEORGE FRANKLIN, .	Waltham,	Waltham.
STARR, RUSSELL TILLINGHAST,	Brooklyn, N. Y., .	. 126 Berkeley St.
STEARNS, WALTER M.,	Waltham,	Waltham.
STEVENS, ERVING EMORY,	Roxbury	. 30 Waumbeck St. R.
STEVENS, HAROLD CONVERSE, .	Braintree,	Braintree.
STAMP, CHARLES MARCUS, STARBUCK, GEORGE FRANKLIN, STARR, RUSSELL TILLINGHAST, STEARNS, WALTER M., STEVENS, ERVING EMORY, STEVENS, HAROLD CONVERSE, STICKNEY, JOSEPH WHITE, STONE, CHARLES HENRY HOWARD, STRADER, JACOB, JR., STRATTON, GEORGE EBER, STROUD LAMONT RUSSELL	Somersworth, N H.,	. 62 Berkeley St.
STONE, CHARLES HENRY HOWARD,	Newton,	Newton.
STRADER, JACOB, JR.,	Ashtabula, Ohio, .	. 77 High St.
STRATTON, GEORGE EBER,	Shelburne Falls, .	Brookline.
STROUD, LAMONT RUSSELL, STURM, MEYER JOSEPH, STURTEVANT, EDWARD LEWIS, JR., .	St. Albans, Vt., .	. 190 W. Brookline St.
Sturm, Meyer Joseph,	Chicago, Ill.,	7 Holyoke St.
STURTEVANT, EDWARD LEWIS, JR., .	So Framingham, .	. So. Framingham.
STURTEVANT, JOSEPH LEWIS, .	Quincy,	Quincy.
SUMNER, GEORGE WILLIAM,	Omaha, Neb.,	. 122 Chandler St.
SWANTON, JOHN CAMP,	Bath, Me.,	W. Somerville.
STURTEVANT, JOSEPH LEWIS, SUMNER, GEORGE WILLIAM, SWANTON, JOHN CAMP, SWEET, ELWOOD PERKINS,	Concord,	. Concord.
TALBOT, JAMES,	Holliston,	Holliston.
TAPPAN, LEWIS HOOPER,	Manchester,	. 627 Fremont St,
TARR, EDWARD GIBBS,	N. Bridgion, Me.,	100 Waitham St.
THANISCH, FRANK ARTHUR,	Diamarca Piain,	. 3305 Washington St.
THAYER, WILLIAM WILBERFORCE, JR	Lowell	Lowell
THOMAS, WILLIAM HARRISON, JR.,	Chalana	Chelses
THOMLEY, FRANK ATKINSON,	Lowell	Lowell
THOMPSON, ALBERT WILLIAM, .	W Trov N V	16t W. Chester Park
Towns Convers Pages Is	Hude Park	Hyde Park
TOWER, CLEMENT DATES, JIII	Haverhill.	Haverhill.
TROUT CHARLES FLIPHALET	Chicago III	. 676 Tremont St.
TRUTH CHARLES DEFINALES, .	Kansas City, Mo.,	. 78 Rutland St.
TROPPE CHARLES WILLIAM	No. Andover.	. 518 Columbus Ave.
THERE FRANK S	Marblehead.	Marblehead.
TUTTLE MORTON CHASE	Milford, N. H.,	. Brookline.
TVIER LUCIUS SPAULDING	Waltham,	. Waltham.
UROUIZA V BEA PEDRO, O Z.	Bilbao, Spain	. St. Botolph Hall.
THANISCH, FRANK ARTHUR, THAYER, WILLIAM WILBERFORCE, JR THOMAS, WILLIAM HARRISON, JR., THOMLEY, FRANK ATKINSON, THOMPSON, ALBERT WILLIAM, TILLEY, JOHN, TOWER, CLEMENT BATES, Jr., TOZIER, HENRY HARRIS, TROUT, CHARLES ELIPHALET, TRUMBULL, CHARLES DUNBAR, TUCKER, CHARLES WILLIAM, TUCKER, FRANK S., TUTTLE, MORTON CHASE, TYLER, LUCIUS SPAULDING, URQUIZA, Y BEA PEDRO, O Z., UNDERHILL, ARTHUR PERLEY, X \$\phi\$, VOSE, WILLARD BADGER, WADLEIGH, MELVIN,	Springfield,	. 140 Huntington Ave.
Vose, Willard Badger.	Hyde Park,	. Hyde Park.
WADLEIGH, MELVIN.	Salem,	. Salem.
WALDO, HERBERT CARLETON	. Ward Hill,	. Ward Hill.
WALKER, FREDERICK HENRY, .	Taunton,	. Taunton.
WATERMAN, HENRY ARTHUR,	Malden,	. Malden.
WADLEIGH, MELVIN. WALDO, HERBERT CARLETON, WALKER, FREDERICK HENRY, WATERMAN, HENRY ARTHUR, WAYNE, JACOB LLOYD, 3d.	Cincinnati, Ohio, .	. 58 Chandler St.

Name.	Home.	Residence.
WELLS, ALBERT JAMESON,	. Pottsville, Pa	. 53 A Dale St., R. Haverhill 56 Chester Sq. Newton.
WHITNEY, RICHARD, WHITTEN, WILLIAM HENRY, JR., WILLIAMS, BENJAMIN CHARLES, WILLIAMS, ROLAND H., WISE, SAMUEL FRANCIS, WOOD, WILLETT AUBREY, WOODSUM, ARTHUR FRANCIS, WOODWELL, JULIAN ERNEST, WOODWATT, ERNEST,	Jamaica Plain, Fort Smith, Ark., Remsen, N. Y., So. Boston, Detroit, Mich., Portsmouth, N. H., Newburyport, Evanston, Ill.,	771 Broadway, S. B. 518 Columbus Ave. 100 Waltham St. Newburyport. 41 Union Park.
Wyard, Edward Saxon, Young, Conrad Henry,	. Washington, D. C., . Canton, Ohio, .	. 30 St. James Ave. . 134 St. Botolph St.

In all the above lists, for residence addresses in suburban portions of Boston, the following abbreviations are used:

Α.			Allston,	М	*:	200		Mattapan.
B.		10	Brighton.	N	- 33	4		Neponset.
C.			Charlestown.	S. B.		4		South Boston.
D.	11		Dorchester.	R				Roxbury,
E.			East Boston.	Ros	- 27			Roslindale.
J. P.			Jamaica Plain.	W. R.		140	5903	West Roxbury.



### LOWELL SCHOOL

### OF

### PRACTICAL DESIGN.

### NAME.

BANNING, ALICE C., BASSETT, SARA W., BATTAGLIA, ORLANDO, BIRD, JOHN E., Buss, Charles H., CHASE, KIRBY F., CHILD, ROBERT C., COBURN, LILLIAN S., DOWNEY, FRANK J., FAIRBANKS, FRANK P, FERRY, GRACE E., FORD, HARRIET J., GALE, ALICE W., GREEN, HARRIE C., GREY, HENRIETTA, HALL, CLARENCE, HATCH, MABEL J., HICKS, EDWARD P., KALES, ANNA M., KEOHAN, EDWARD T., LAVERS, WILLIAM E., LILLIE, ALBERT W., LOCKE, MABEL, Manning, Helene, Nyhan, Adelaide, PARKER, ELLA I., PATTILLO, CAROL P.,

### HOME.

Newport, R. I., Newton, 22 Centre St., Roxbury, Norwood. Woburn, Lowell, Richmond, Va., Tyngsborough, 74 Westminster St., 7 Stanmore St., R., Milton. Watertown, Lynn, Fitchburg, 33 Northfield St., Salem, 101 West Chester Park, Hartford, Conn., Chicago, Ill., 92 Maverick St., E. B., 3117 Washington St., Chelsea, 592 Tremont St., Cambridgeport, 242 Lexington St., E. B., 770 Broadway, S. B., Gloucester,

### RESIDENCE.

415 Columbus Ave. Newton. 22 Centre St., R. Norwood. Woburn. Winthrop Highlands. Elm Hill Ave., R. Tyngsborough, 74 Westminster St. 7 Stanmore St., R. Hvde Park. Watertown. Lynn. Fitchburg. 33 Northfield St. Salem. 101 West Chester Park. 28 St. James Ave. 73 Pinckney St. 92 Maverick St., E. B. 3117 Washington St. Chelsea. 592 Tremont St. Cambridgeport. 242 Lexington St., E. B. 770 Broadway, S. B. Gloucester.

### NAME.

Phalon, Minnie,
Pierson, Gertrude E.,
Pitman, Sadie,
Richardson, Annabel
Sangez, Alphonse,
Sherwin, Eleanor,
Stevens, Mabel,
Taplin, William H.,
Taylor, Eugene A.,
Thurston, Alice C.,
Torry, Burton C.,
Twort, Minnie S.,
Wood, Marietta B.,

### HOME.

South Framingham, 75 Chester Sq., New Bedford, Andover, Paris, France, Jamaica Plain, Melrose, Charlestown, 11 Atherton St., Newport, R. I., South Weymouth, Lynn, 55 Bowdoin Ave., D,

### RESIDENCE.

South Framingham.
75 Chester Sq.,
New Bedford.
Andover.
11 Isabella St.
Jamaica Plain.
Melrose.
Charlestown.
11 Atherton St.
Somerville.
South Weymouth.
Lynn.
55 Bowdoin Ave., D.

40

### SUMMARY.

### UNITED STATES.

Connecticut, I
Illinois, I
Massachusetts, 35
Rhode Island, I
Virginia, I
FRANCE.

Total Number of Students,

## SUMMARY OF THE SCHOOL OF INDUSTRIAL SCIENCE BY STATES AND COUNTRIES.

	UNIT	ED ST	ATES.
Alabama,		4 N	fissouri,
Arkansas,			ebraska, 4
California,			fevada, 3
Colorado,		7 N	lew Hampshire, 29
Connecticut,		27 N	Tew Jersey,
Delaware,		2 N	ew Mexico, 2
District of Columbia, .			ew York, 50
Florida,			orth Carolina,
Georgia,		3 O	Phio,
Idaho,			regon,
Illinois,		40 P	ennsylvania, 24
Indiana,		5 R	hode Island, 24
Iowa,		9 S	outh Carolina,
Kansas,		1 T	ennessee,
Kentucky,		7 T	exas, 5
Louisiana,		3 U	tah,
Maine,		39 V	ermont, 4
Maryland,		6 V	irginia, 4
Massachusetts,		13 V	Vashington,
Michigan,		10 V	Vest Virginia, 2
Minnesota,		13 V	Visconsin, 9
			2
Total.—1,036 Stud			es and District of Columbia.  NTRIES.
Belgium,		ı N	fexico,
Bulgaria,	19.2		Tew Brunswick, 1
England,	37 7 7 8		lew South Wales,
France,			Ontario,
Guatemala,			rovince of Quebec, 5
Hawaiian Islands,			cotland,
Holland,			pain,
Japan,	14		'urkey,
	1655		(United States, 1,036
23 Students, ) 16 Countries.	Тот	CAL	Other Countries, 23

Total, 1,059

# SUMMARY OF THE SCHOOL OF INDUSTRIAL SCIENCE.

			BY	BY COURSES.	ES.				
	SENIOR	ن.	JUNIOR.	OR.	SOPHOMORE.	TORK.	REGULAR.	SPECIAL	T
	R.	vi	R.	S.	R.	'n	R.	ś	
	27	10	53	6	56	4	26	91	
П	33	13	29	61 EQ	4	24	901	8	
Ш	9	. 63	w	6	00	S	61	10	
IV	9	13	14	24	17	25	37	62	
V	90		13	I/S	14	7	35	12	
VI	40	01	30	91	42	10	112	36	
VIII	61	69	3	-	4	12	6	1.5	
VIII	3	1	4	• •	-	-	s	ы	
IX	9	_	ın	-	25	9	91	90	
X	90	:	1.5	:	Ξ	-	34	-	
XI	:	;	10	1	74	*1	5	3	
XII	61	:	1	3	-	60	3	9	
	138	45	144	98	17.5	100	457	231	
TOTAL		183		230		275			
			F	FRESHMEN			314	54	
			Ś	STUDENTS FOR ADVANCED DEGREE	ADVANCED I	DEGREE	3	:   30	
			T	LOWELL SCHOOL			40	٠.	

368

285

GRAND TOTAL .....

# Tabular Summary of Graduates.

uñ.	DEVD'	
AL	'A 'N	7-4881 4888 60 821 1 84 E 4 E 2 0 0 4 8 E E
TOTAL NUMBERS	S. F.	25.23.23.23.23.23.23.23.23.23.23.23.23.23.
Z	-p,peoperg	4.0113331433530834182315333
sal .	DEVD'	
COURSE XII.	'A' 'N	
XIX	'A 'S	
0	T. G. F.	
63	DEVD'	
COURSE XI.	'A' 'N	
5X	'A '8	1
O.	L. G. F.	
142	DEVD'	
COURSE X.	'A' 'N	
5×	'4 'S	
Ü	L. G. F.	· · · · · · · · · · · · · · · · · · ·
Q	DEVD*	
Y.	'd'N	H H . H . H . H
L	'A 'S	
SCL AND LIT.	T. G. F.	H H H H H H H H H H H H H H H H H H H
	DKVD*	
OURSE VIII.	'A' 'N	
00	'A 'S	
0	T. G. F.	
140	DEVD'	
COURSE VII.	'A' N	
200	'A '8	
O.	T. G. F.	
	DEVD'	
5d 50	'A'N	
COURSE.		20115
3	S. F.	8888112866
	T. G. F.	
<b>S</b>	DEVD.	
COURSE.	'A' N	
90	S. F.	: : - + 44 : - N44 4 . + N40 4 + N 50 5 2 4 7
0	T. G. F.	:
140	DEVD'	
COURSE IV.	'A' N	
100	'A 'S	
0	A.D.T	:::::===:400=:000=:01==000000
	DEVD.	
SSE.	'A' 'N	n : + # # : :
OURSE III.	S. F.	- : - u uu - u +o u u u + - u + v u r u v u - u
ŭ	T. G. F.	<ul><li>□ : 01 1/2 1/2 1/2 1/2 1/2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</li></ul>
	DEAD,	
SE	'A' N	
Course II.	'A 'S	H - H - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
ŭ	T. G. F.	
94	DEVD.	- : u d : n to u d = u d = : : : : : : u to = t 4
URS 1.	N. F.	22 2 4 2000 V 0 0 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
COURSE I.	'A' 'S	24480355553800000040514813
	T. G. F.	1==== =================================
	Classes	1868 1872 1871 1871 1874 1875 1876 1882 1882 1883 1883 1885 1888 1888 1888 1889 1889 1889 1889

T. G. F.-Total Graduated From. S. F.-Still Following. N. F.-Not Following.

T. G. F. and Graduated are correct; others are approximate.

# SUMMER SCHOOLS OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

### SUMMER SCHOOL OF CIVIL ENGINEERING.

This is open to third year students of Surveying and to any others who may be qualified. For the past two years it has been at the Delaware Water Gap where, beginning June 1st, one week was spent upon topographical work under charge of Professor Burton; a second upon hydraulics under Professor Porter; and the remaining two weeks upon geodetic and geologic work, the last under Professor Niles.

Tuition is free for Tech. men, the sole expense being for personal items. Usually ten to eighteen students in charge of three to five instructors take advantage of this rare chance to put to a practical test the knowledge and theories acquired during a year of hard work at the Institute.

### SUMMER SCHOOL OF MINERALOGY.

All Course XII. men and any who have taken Professor Crosby's course in Mineralogy (or its equivalent) may attend this school. It lasts one week, generally starting about July 4th. Probably this and the Summer School of Civil Engineering, will be united in the Adirondack region next year. South Paris, Maine, has been its headquarters during the past two years, whence trips were taken to Mount Mica, Hebron, Greenwood, and Noyes' Ledge. Mornings were spent in securing specimens which were labelled and arranged, and then Prof. Crosby lectured about them in the evening. About twenty were in the party last summer.

### SUMMER SCHOOL OF MINES.

Although this school is intended chiefly to supplement the Mining Option of Course IV. all the options are generally represented in it. Last summer Professors Richards and Hofman "chaperoned" fourteen students at Drifton, in the anthracite region of Pennsylvania. Two weeks were devoted to underground work—drilling, blasting, laying tracks, loading coal, and studying methods of timbering with Professor Hofman. Surface work also occupied two weeks, during which Professor Richards laid out plane-table and surveying work for each student; also geological sections, and surface maps. Designs of machinery and hoisting gear also were made.

These schools are to be strongly recommended as affording a grand opportunity for "pleasant hard work," better acquaintance with devoted and self-sacrificing professors, and the practical testing

of theoretical knowledge.

### CALENDAR.

### 1892-93.

School year began Monday, Sept. 26, 1892. Second term began . Tuesday, Jan. 31, 1893. Degrees Conferred Tuesday, May 30, 1893. Thursd'y, June 29, 1893, and First Entrance Examinations (Friday, June 30, 1893. Examinations for Advanced Standing Wednesday, Sept. 13, 1893. 1 Tuesday, Sept. 19, 1893, and Second Extrance Examinations . Wednesday, Sept. 20, 1893. School year of 1893-94 will begin Monday, Sept. 25, 1893. 1893-94. School year will begin . Monday, Sept. 25, 1893. Second term will begin Tuesday, Jan. 30, 1894. Degrees conferred Tuesday, May 29, 1894. (Thursd'y, June 28, 1894, and First Entrance Examinations Friday, June 29, 1894. Examinations for Advanced Standing Wednesday, Sept. 12, 1894. (Tuesday, Sept. 18, 1894, and Second Entrance Examinations. Wednesday, Sept. 19, 1894. School year of 1894-95 will begin Monday, Sept. 24, 1894. Oct. 12, and Dec. 14, 1892. Stated meetings of the Corporation, Mar. 8, and May 26, 1893.

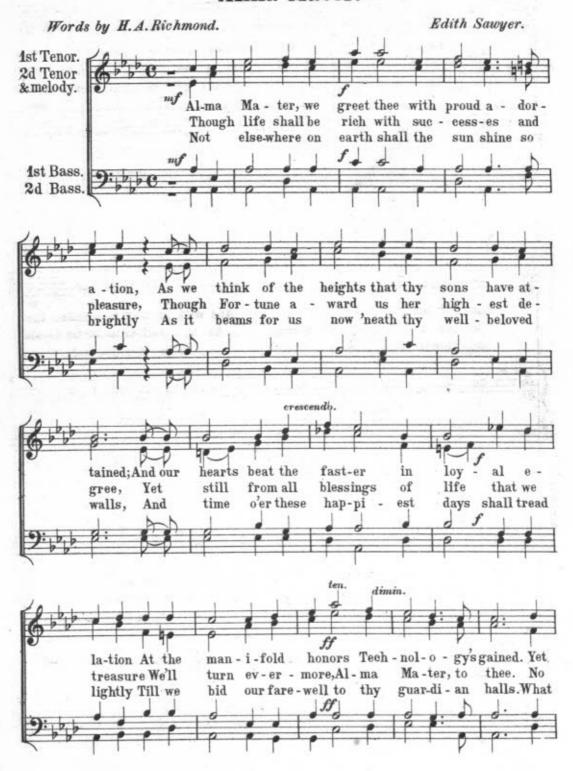
(First and third Tuesdays of

every month,

Stated meetings of the Executive Com-

mittee of the Corporation, .

## Alma Mater.





# A Toast to Technology.







## GRINDS.

Know by these presents all mankind, But chief of all, ye whom we grind:— Among the following:

Some will hit hard and others soft, Some will never hit at all; But if ye take them as they're meant, Lightly on you all they'll fall.

We were walking on the Charles-bank One fine afternoon in May, Going down to see the athletes, Strive for honors of the day.

A child looked up as we passed by, Of Cl-fl-n caught a glimpse; Then, turning to his mother, cried: "Oh, see the man with crimps!"

#### AN HORRIBLE EXAMPLE.

Prof. H-LM-N:—"Gentlemen, this radiant energy curve was jagged by absorption."

D-CKW-RTH, '94, COURSE V., has recently been making some very interesting experiments concerning the Effect of Torsion on Quantitative Calculations.

NORMAL PITCH (for '95) :- Four balls, take your base,

#### THERMODYNAMICS PAPER.

(Answer fully any four out of the three.)

- 1. Write three values of d Q.
- 2. Write them backwards.
- 3. Write them upside down.

January, 1893.

Proof sheet.

PROF. M-LL-R:—"Mr. W-rr-n, if you wished to make an engine run in the opposite direction, how would you do it?"

MR. W-RR-N:-" Connect the steam to the exhaust pipe."

Prof. Cr-ss:-"Mr. C-rt-s, please explain how a current flows through a wire."

MR. C-RT-S:-" A current flows in a wire in circles outside of it."

L-RD, (in the physical lab. trying to weigh without lowering the beam on to the knife edge):—" Hot stuff! struck it dead right the first time."

H. M. CH-SE: - I have within me a borrowed lunch."

"Too young to smoke."—"Little Peanuts," alias "Chub," alias
F. S. H-wL-nd, '94.

Prof. M-LL-R to Mr. B-v-v, '94:—" You can't move that indicator by blowing into it unless your breath is stronger than it ought to be."

Prof. S-dgw-ck:—"Animals don't like stimulants; men don't at first, at least that is my experience."

Prof. Cr-ss:-"I am not like a barrel of liquor on tap, and cannot lecture without some preparatory thought."

"Das Fraulein fasste zwei Beeren."
Is the way the line appears.
The student arose and translated,
"The maiden ordered two beers."

" 'Poles' close at 4.15 P. M."-'96.

"NICE-A-WAN."-L. K. D-v-s, '94, and pupils.

Professor, (looking at the board):—"What does that mean?"  $V_{-RN-Y}$ , '94:—"Oh that's an abstract number."

BÊTE NOIR OF TECH. STUDENTS.

" Assume . . . . ."

"It is evident . . . . ."

" Moreover . . . . ."

"It is clear . . . . ."

"From the definition . . . . "

"I think you can plainly see . . . . ."

"There is no doubt . . . . ."

"Obviously . . . . . "

"As previously stated . . . . ."

"Hence . . . . . "

"It can be shown . . . . ."

"It has been shown . . . . ."

"Approximately . . . . ."

" Thus . . . . . "

Thirteen hearts with but a single head, thirteen kids that cut as one.—

The Baker's Dozen.

Little T-rn-r, now a Junior
In Technology, Course IV.,
Quite agrees with others known of,
That all studies are a bore.

But when there appeared a problem
Upon which all should begin,
Little T—— was very positive
That all work was deep-dyed sin.

Theatres, dances, teas and parties

Quite filled up the time awhile;

But as these now failed to please him,

What could next his hours beguile?

As though in answer to his question,
Mother Earth and dear old Sol
Went and had an intervention
In October, this last Fall.

Quickly, with glass smoked and grimmy
So that they might better see,
Little T—— and Fweddy F-ttssy
Went to view it.—Um!—Aw Gee.

When this like all else had tired him,
And from talking he was hoarse,
He sought his stool—and there before him
Was this—from the Faculty, of course,—

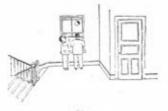
"Will you please give up designing,
As it's plain to all concerned,
That because it's so confining,
Other studies are not learned."













Prof. F—nc- (slightly rattled):—"If any student attempts to pass off his work as anybody else's, it will be treated as a serious offense."

#### HELPING HIM ALONG.

Prof. Cr-ss:—" Now when the current is reversed the armature swings to the other side,"

R-B-S-N, '94, (encouragingly):-" That's right."

A trying time:-fitting the new uniforms.

" Gosh: "-R. B. Pr-c-, '94.

At the '94 vs. '95 baseball game:—"Ch-s-, the flag was upside down when you photographed it. Shall we hold it again for you?"

CH-s-:-"Oh, no! it will be all right. I turned the camera upside down.

L-RD, '93 (on steps of Walker building) to Prof. V-N D-LL who is hurrying in :- " Professor, are you coming to German this morning?"

Professor:—"Yes! yes! In a minute! Am very glad you reminded me."

#### SO HE COULD FLUNK MORE MEN.

MR. CL-FF-RD:—" Which way could the current flow?"

"Doc":-Guesses right.

MR. CL-FF-RD :- "I wish there was more than two ways."

"Fass uns rath halten"—Translation:—"Let us hold a consolation."— T-RN-R, '95.

TO BE SUNG TO THE TUNE OF THE "OMNISCIENT OSTRICH."

Into Course One there once did come,
A young man wondrous wise,
Who carried his head so very high
It almost reached the skies.

He had lived so long and learned so much,

He was vain as vain could be;

And this vain young bird was frequently heard

To remark complacently:—

Chorus:—" If you seek for information or require an explanation
I'm a brimming fount of wisdom that responds to every call.
For assorted guilt-edged knowledge, I can discount any college;
I am N. H. J-NVR-N, and I know it all."



Published May 5, 1892.

Junior, (working Calculus):—What is the *sine* of infinity?"

Freshman:—"The sign of infinity! why it looks like a figure eight turned over on its side."

"I pray for power to digest all I have eaten." G. W. SH-RTL-FF, '94.

PROF. D-PP-LD:—"Well, gentlemen, we have translated two pages at sight in ten minutes. Now it is only a question of arithmetic how much you can translate in two hours. How much is it?"

Voice from front row:—"One page."
PROF. D-PP-LD:—"Yes, that is right."



NINETY-FIVE (kicking) :—" It's too much, I'll not bear it."

Mr. D-CK-NS-N:—" Well,—I'll take off those two little ones on top."

### UNPUBLISHED FRAGMENT OF CHAUCER'S PROLOGUE.

Ther was amang hem also an instructour; Ful wel known in Tech. was he by alle, Wher he taughté the Engellisch literature, To speke of stile, syntax, or rhetoric. In all this woreld ne was ther non hym lyk. A smale heed1 hadde he with a thyn visage. Of lecturing wel cowde he al the usage. Therto couthe he endyte2 and correct things, Therto couthe no studiant pynche at his markyngs. Of F F tooke he most care and heede; Not oo man ne yave he more thanne was neede. Al that he spak yt was of high sagesse And short and quick, and ful of grete justisse. Eke tolde he hem sakes3 ful with humour; The rollecal it was answered with rumour. This redes4 interromped5 they ful often, And sikurly6 ne did yt his ymoode7 soften. He made hem estudie harde and travail, And alle their kycking yt was hard of avail. But to be schorte, and state yt in ane rede: For soth no hadde he their affection won - - - -This man was yeleped8 Mr. D-ck-ns-n.

<sup>1</sup> Head; 2 recite; 5 things; 4 words; 5 interrupted; 6 surely . 7 temper; 8 named.



German Professor (to student who needed a good deal of prompting):

--- Now, Mr. Sp-rry, that was a very good translation - - - - of mine."

Although he should know better,
He puts an extra letter
In his middle name, as one can plainly see.
'T is a simple matter quite,
Yet it looks way out of sight
When it's written H. Mayson C.



INSTRUCTOR:—"The drawing of that foot and ankle is excellent, sir, excellent. Have you done any of that kind of work before?"

INCIPIENT ARCHITECT (modestly):—"No sir, but I sit behind the Co-eds in the drawing-room."

"Call you this a canary-bird cage?"

"Wilst have a matinée ticket?"

"You think you are working hard, don't you?"

G. W. H-mbl-tt.



Foot Ball? or Music?

### ETYMOLOGY.

PROF. V-G-L:—"'Besitzen' comes from 'sitzen,' 'to sit.' We can give it the meaning 'to sit all over.' Now what a man sits all over he evidently possesses. Therefore 'besitzen' means 'to possess.'"

D-CKW-RTH (when a Sophomore):—"Dr. N-y-s, can you tell me what this greenish, yellowish, red incrustation is?"

Dr. T-lb-t (in scientific German):—"Mr. B-tch-ll-r, you may begin."
B-tch-ll-r:—"Well, Dr. T-lb-t, I have not had time—in fact—I was not able to make much out of it. I have prepared only approximately four lines."

#### Contribution from Vassar :-

"For fun's our sole vocation,
And only inspiration,
The end of education,
Our constant occupation;
Yes, fun and recreation,
A general jollification,
Amusement and flirtation,
And sometimes osculation."

#### AN UNTRIED METHOD.



Give me a degree and I'll drop this bag.

#### LASELL GIRL.

Or light or dark, or short or tall, She sets a spring to snare them all. All's one to her.

She's young and she's foolish, yet scholarly too;
She's happy and careless, but she makes a good stew.
She can dance, and may flirt, but she also can drill;
And in the gymnasium works with a will.
She likes a good concert with Paddi and Patti;
She knows what's the latest, what's new and what's natty;
The ologies, isms, and fashions as well;
And she never forgets that she comes from Lasell.

## An Ad. for Lasell.

Let us take a little journey to a little country town;

And let us look about us for a house that 's painted brown.

Step just across the threshold and you stand bewildered there,

Enchanted by the pretty girls who meet you everywhere.

Listen to their words of welcome, step beneath their magic spell;

Linger, and 'twill not be long before you've learned to love LASELL.

What is the difference between Harvard and Technology? One is an institution of size, the other of sighs.

"Elle partit en levant les mains au ciel." Translated :- "She parted, leaving her hands on the ceiling." - W-ll-ms, '96.

D-M-R-SQ, '94:—" How do you spell smoke?"
C--L-DG-, '94:—" S-m-o-a-k, of course."
D-M-R-SQ:—" Darn it all! I went and spelled it s-m-o-k-e."

There was a young man from St. Paul, Who had such a very close call.

His girl called him *lovey*,

He thought she said *Buvvey*;

But they made up again before Fall.

Mr. H-rr-ck (lecture on English composition):—" All men have their peculiar style of manners, dress, etc."

Numerous voices from different parts of the room :- "And whiskers,"



The Tech.; guaranteed weekly circulation, 1,635 $\frac{1}{4}$ . The  $\frac{1}{4}$  goes to C. E. R-dl-r.

Freshman (on learning that  $H_2$  S is an important constituent of rotten eggs):—"I suppose the sulphur colors the yolk yellow, does it not?"



Mr. B-rdw-ll (to class in crystallography):—
"You see gentlemen, the axial plane follows cleavage."



During a Heat Lecture.



A third year student who had failed in physics discovered the above curious phenomenon while gazing at the moon one summer evening.

## A MOOD.

Out on the steps in the afternoon,
As the western sun sinks down,
I linger, for life seems out of tune;
And I sigh for the days of a distant June,
Away from the weary town.

Away from lecture, and desk and book, Away to the sea I'd roam, Where the waters wear a welcome look, And every rock has a friendly nook, Safe hid from the searching foam.

Ay, there I'd forget each law and rule
That prisons my spirit so,
And study unwearied in Nature's school,
The lessons learned of the breezes cool,
That teach the soul to grow.

H. A. R.

## O ROGERS' CLOCK.

O Rogers' clock, what fickle play
Of folly started thee astray?
Why stand'st thou there in idle show
Like some old sign of long ago
That ever points the self-same way?

Teach me the principle, I pray,
That makes thee go or makes thee stay;
Thy inmost artifice I'd know,
O Rogers' clock.

What right hast thou to thus delay
Poor Time forever and a day?
Thy fellows, fool, may tread too slow,
Or yet too fast a pace may go,
But thou'dst procrastinate for aye,
O Rogers' clock.

H. A. R.

# In the Good Old Days.

ECENT research in the land of the ancient Technologians has revealed a strange manuscript. Here is a translation with cribbed notes (not from Ridler's).

The Freshmen received their military training in a "Hole in the Ground." Their uniforms were most fantastic. The rig that protected the body "flunked" in attempting to "pass" for a jacket; the cap seemed well adapted to illustrate the intersections of cylinders and spheres—perhaps those youthful warriors studied the intersection of solids and the art of war at the same time, that they

might pierce an adversary with minimum friction, or cut recitations and still leave a Pass. This, however, is merely prefatory.

The day at last approached when the Freshmen were to show to the world their skill at arms. Winslow's Temple was secured for the occasion. Dreadful jealousy was rife among the Sophs., for never had they been able to attain such perfection in the drill; they set about to bring shame upon the ardent, confident Freshmen. First, they made counterfeits of the certificates of admission which '94 had lavishly distributed. But the latter were not without detectives. Discrepancies in the counterfeits were discovered, and "Colonel," aided by numerous "Cops," excluded from the temple thousands upon thousands of the Sophs., many accompanied by Amazons.

In vain did '93 plan to kidnap "Major" and Ye-Stick-Slinger-of-Ye-Band, thus to stop the drill, for did not these two carry toy pistols and fruit-knives to scare the Sophs. away? Then the man from Texas wanted to lasso "Major" from the Nigger Heaven at Dress Parade; but the "Cops" haunted the stairs to the upper apartments, whence the outwitted Sophs. had intended to discomfit the warriors below with bags of flour, torpedoes, and pea-shooters.

The rooster, a ringleader of the Sophs., was crestfallen at '94's magnificent march. Their windupwarrantedtorunsevendaygoasyouplease steam engine succumbed to the gigantic Murkie, its fragments later adorning many a Freshman's Castle. Ah, those were times of excitement! What a drill was that! Never (so said the "General") was



there a better Semi-Annual. The drill began; for some time nothing disturbed the silent, rapid manœuvres of that immense army. Suddenly, from an obscure corner of the Temple arose the plaintive strains of "Annie Roonie"; the time was good, and aided the step of the Corps. Annie died; then came tramp, tramp, faster,

always faster, until even "First in war, first in peace" couldn't catch it. But the Freshmen continued with even, well-regulated cadence, each man calm and determined. Once, only once, did it appear that the day might yet be lost. "Fours left" was commanded. A Sophomore howl arose drowning the order; every man hesitated, confusion seemed certain, but no, with a sudden inspiration every four wheeled to the left like clockwork—then what applause!

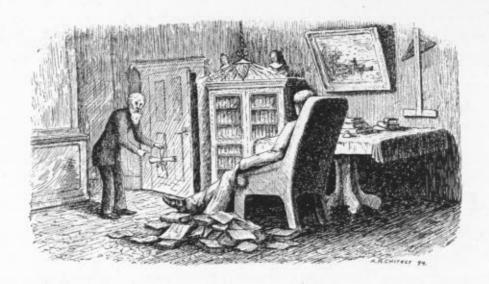
Finally came that climax, Dress Parade. All was silence—the line was grand. Suddenly commenced a rain of giant torpedoes, hitting those Stoics everywhere, but without producing a wince. Amidst this din was heard the thud of a heavy body; a barrel was knocked in,

and out ran—a greased pig, the idol of the Sophs. This invader began a vigorous assault upon '94's line, but woe to the pig. The General, trainer of Freshmen, was his match. The former bravely interposed his legs between his beloved Corps and the slippery hog, but the latter, nothing daunted, made straight on his way. General clutched at him, capturing an ear. "Uurg!" was the only effect. This obstacle passed, the triumph of piggie seemed assured, for a "stern chase is a long chase." At this critical point out poured a thin line of the Freshmen Body Guard, directing itself so that Mr. Pig's angle



of "entrance" equalled his angle of "deflection." The Freshmen were saved. Many a stout heart had quailed, but now they could go home in peace and read in the *Traveller* what the Sophs. had intended to do. Other valiant deeds were performed that day, but memory of them was blurred by the mazy intricacies of the triumphal dance which followed.

Thus did courage, skill, and coolness win; and the fiddler was paid by the Sophs.



# A "Tech" Man's Dream.

Once upon a midnight dreary,
While I sat me, weak and weary,
In my chamber, reading o'er
Notes and text-books by the score;
While I pondered, nearly napping,
'Neath the gas-light, stretching, gaping;
Gently heard I something rapping,
Rapping at my chamber door.

Ah! distinctly I remember
It was in that bleak December,
When myself and other members
Of the Class of '94
Had for weeks and months been groping
'Mongst the meanest, most provoking
Notes and Prof's that, without joking,
We had ever seen before.

As I sat there nearly sleeping,
Soon I heard the hinges creaking;
And a voice was gently speaking;
Speaking through my chamber door.
Then an old man, thin and doubled,
With a visage gaunt and troubled,
Entered painfully and hobbled
Noiselessly across the floor.

From his ghostly hand extended,
Hung a little roll, suspended,
Tied with ribbons, and appended
With the monogram "S. B."
And he clutched it wildly, seeming
Like a man forever dreaming,
While his eyes, upon it gleaming,
Shone with warning light to me.

"You are young," the old man muttered,
And he spoke in accents queer,
While the words he slowly uttered,
Only faintly reached my ear.

"Let me warn you now, my brother,
E'er you too shall learn too late,
And, like me, shall be another
Whose degree has been his fate.

"Many years ago I entered Your Technology so fair. All my heart's desires were centred On the parchment which I bear. But through years of ceaseless study, Through ambition to excel, I had ruined mind and body; Well-nigh lost degree as well.

"If your life is worth the living;
If there's aught in life beside,
Take the warning I am giving,
Let the Heat and Physics slide.

Drop your French and drop your Spanish; Cut your studies, and you'll find That your sorrows all will vanish Like the dew before the wind.

"This I give you," quoth he sadly,
Holding forth the parchment white.
"This is what you strive for madly."
And he disappeared from sight;
While a nameless sense of pleasure,
(Which can never be expressed,)
Filled me, as I viewed the treasure
Which to me I found addressed.

Suddenly I waked from slumber,
And the scroll returned no more;
But my note-books, without number,
Lay about me on the floor;
While a problem sheet in Statics,
Which I'd worked the night before,
Lay all crumpled, soiled, and useless,
So I had to do it o'er.

A. R. CHITECT.



Drawn from memory.
Published by President Walker's permission.

# Only Too True.



AINTY, pretty, charming girl,
How you set me in a whirl
As across the street you rush
Glancing up with modest blush!
Now I play the critic's part,
Ponder, study nature's art,—
Light blue eyes with subtle dart
Pierce the unresisting heart;

Ruddy cheeks resembling rouge,
A maiden's little subterfuge;
Cherry lips of gentlest curve
To offset whitest teeth do serve;
Golden hair of that rich tint
Which makes the painter's power seem stint;
A dainty figure, slender waist.—
"Critique" unfinished, and why such haste?
Ah, now, alas, you're lost to me;
You board a car inscribed, "Chelsea."

R. B. P. '94.



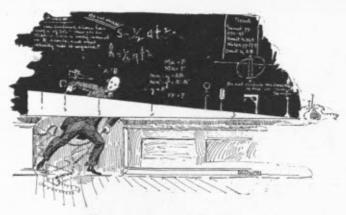
## Das Beckerzusammenschmettern.

A lad from old Newburyport
Proved of temper to be of the sort
To do something rash;
With a grand beaker smash
In the Lab. he intends to "cavort."

The tickets are fifty cents, boys,
And there's nothing the performance alloys,
For I vow and declare
All the Profs. will be there
Unless the applause Drown the Noyes.

Oh, the Chemists will glare with despair And tear out large handfuls of hair, When our "Andy" benign, With his beakers so fine, Doth parabolæ trace in the air.

S. '94.



Two to one on the marble.

## Regulations of One Hundred Years Ago.

Below are a few of the "LAWS, LIBERTIES, AND ORDERS" which were enforced at Harvard during the Seventeenth Century. Well may the underclassman of to-day rejoice at the change.

- No freshman shall wear his hat in the college yard unless it rains, hails, or snows, provided he be on foot and have not both hands full.
- 2. Freshmen are to consider all the other classes as their seniors.
- 3. No freshman shall speak to a senior with his hat on, or have it on in a senior's chamber, or in his own if a senior be there.
- 4. All freshmen (except those employed by the immediate government of the college) shall be obliged to go on any errand (except such as shall be judged improper by some one in the government of the college) for any of their seniors, graduates, or undergraduates, at any time, except in studying hours or after nine o'clock in the evening.
- 5. Every freshman before he goes for the one who takes him away (unless it be one in the government of the college) shall return and inform the person from whom he is taken.
- No freshman, when sent on an errand, shall make any unnecessary delay, neglect to make due return, or go away until dismissed by the person who sent him.
- When any person knocks at a freshman's door, except in studying time, he shall immediately open the door, without inquiring who is there.



An Assistant in Physics.

# The People at Home.

I sat with my books that were scattered about, By the window so cold and the starlight without, And thought in my heart in a place that was lone For a vision to show me the people at home.

For to-night I've been thinking and keeping at bay
Just a few little things that I can not give way.
And my heart is fast sinking and moaning within
For the scenes of the past with some things that have been.

The season just coming with festal array
For a glorious old time in a frolicsome way,—
The chatter of Edith like talk by the sea
Would be pleasanter now than all music to me.

I know a bright pair of those roguish brown eyes, And a glance on the sly that you cannot despise; With a form that's Hellenic in figure and mould, And a smile more catching than the fever of gold.

I see that the knotter of soft wedding ties
Must have tied up a field of considerable size
Of girls and their chums and the people at home,—
They've forgot about me in this old hippodrome.

I know a bright pair of those dancing blue eyes, And a cheek that would tempt the wisest of wise; With a form that's Hellenic in figure and mould, And a smile more catching than the fever of gold.

That little French play is awaiting my toil, And our "math" is a "terror" according to Hoyle. I think I am nervous and not in good tone On account of these people,—some people at home.

For I know a bright pair of those laughing gray eyes, And a mouth that's so lovely when set for a prize; With a form that's Hellenic in figure and mould, And a smile more catching than the fever of gold. But the "guvner" who 's working and driving away, Whether buying or selling, still drawing his pay, Has thought he would growl and let something come down; So he drops me a line to this old college town

Of "exams" that have past and made their demise, Together with cash that would be a surprise, And left in the sky of prospective event, A short space of time for the remainder of Lent.

A. P. B., '95.

## \*Song of the Triple Expansion Engine.

O hist, come list To my sad tale:

My endless task—this ponderous wheel to turn, Constrained and fettered by these leathern bands That tug and flap with grim disdain—I yearn To end ere time has run out all his sands.

I yearn for years now long gone past, when deep Within the earth I lay as nature meant—Black, stone-cloyed ore, unshaped within a heap, At rest, at peace, and from the sun safe pent.

I would unhand restraint and waste with rust, That mingling with the soil I might seek out My native home—but man has this mistrust, And slimed me o'er with oil, my flight to route.

Thus helpless doomed to everlasting toil, I strive each day to rend myself apart. But this is vain—my strength is now the foil That parries mine own thrust at mine own heart.

> O hist, pray list To my sad wail.

A. A. S.

<sup>\*</sup> In the Engineering Laboratory.

# College Statistics.

Name.	State.	No. of Students.	Colors.	Name of Annual
AMBERST.	Mass.	385	Purple and White.	Olio,
BELOIT.	Wis.	346	Gold.	Codex.
Brown Univ.	R. I.	549	Brown.	Liber Brunensis,
BRYN-MAWR,	Pa.	193	Yellow and White	Lantern.
CORNELL UNIV.	N. Y.	1576	Cornelian and White.	Cornellian.
DARTMOUTH.	N. H.	469	Green and White.	Ægis.
DE PAUW UNIV.	Ind.	1050	Old Gold.	Mirage.
HARVARD UNIV.	Mass.	2500	Crimson.	Harvard Index.
Iowa.	Iowa.	525	Scarlet and Blue.	Cyclone.
IOWA STATE UNIV.	Iowa.	750	Old Gold.	Hawkeye.
Lasell.	Mass.	165	Pale Blue.	Allerlei,
LEHIGH UNIV.	Pa.	600	Seal Brown and White.	Epitome.
MASSACHUSETTS INSTITUTE	Mass.	1100	Red and Gray.	Technique.
NORTHWESTERN UNIV.	111.	2000	Royal Purple.	Syllabus.
OHIO STATE UNIV.	Ohio.	725	Scarlet and Pearl Gray.	Makio.
PRINCETON.	N. J.	1061	Orange and Black.	Bric á Brac.
Rensselaer Polytechnic   Institute.	N. Y.	230	Cherry and White.	Transit.
TRINITY.	Conn.	121	Blue and Old Gold.	Trinity Ivy.
Turts.	Mass.	225	Brown and Blue.	Brown and Blue.
Univ. of California.	Cal.	724	Blue and Gold.	Blue and Gold.
UNIV. OF KANSAS.	Kan.	700	Crimson.	Helianthus Annus
UNIV. of MICHIGAN.	Mich.	2800	Sky Blue and Maize.	Palladium.
Univ. of the City of New York.	N. Y.	1200	Violet.	Violet.
UNIV. OF NORTH CAROLINA.	N. C.	350	White and Blue.	Hellenian.
UNIV. OF VERMONT.	Vt.	400	Dark Green and Straw.	Ariel.
UNIV. OF WISCONSIN.	Wis.	1300	Cardinal.	Badger.
UNIV. OF WOOSTER.	Ohio.	713	Black and Old Gold.	Index.
VANDERBILT UNIV.	Tenn.	710	Black and Old Gold.	Comet.
Vassar.	N. Y.	430	Rose and Gray.	Vassarian.
Wellesley.	Mass.	720	Blue.	Legenda.
WESLEYAN UNIV.	Conn.	271	Cardinal and Jet.	Olla Podrida.
WILLIAMS COLLEGE.	Mass.	350	Royal Purple,	Gulielmensian.
YALE UNIV.	Conn.	1969	Blue,	Banner.



## QUOTATIONS.

### "Guilty with some doubts as to his being the right man."

- " Eureka." -nd-rs-n, '94.
- " A bold bad man."-Mc J-nn-tt, '94.
- "'We are men, my liege."
  - 'Ay, in the catalogue ye go for men."

Freshmen.

- "Was shaply for to ben an alderman."-E. H. Cl-pp, '95.
- "An honest man, close buttoned to the chin; Broadcloth without and a warm heart within,"

Prof. B-rt-n.

- "When you looked sadly it was for want of money."-H. M. Ch-s-, '94.
- "A seriousness beyond his years."-T-nn-y, '94.
- "By my troth, a pleasant, spirited lady."-Mrs. Stinson.
- "Do noble deeds, not dream them all day long."-D. C. Ch-ff-e.
- "Thou art weighed in the balance, and art found wanting."-Faculty Vote,
- "With just enough learning to misquote,"-L-r-ng, '94.
- "Call me what instrument you will, though you can fret me, you cannot play upon me."—Prof. Cr-ss.
  - "Creeping like snail unwillingly to school."-D. W. R-ch-rds, Jr.
  - "Man is creation's masterpiece. So says man!"-Mr. H-rr-ck.
  - "Time elaborately thrown away."-3 hours per week drill.
  - "They say you are a melancholy fellow."—Cl-m-nt, '94.
  - "The fair, the chaste, the unexpressive, she."-The Office Assistant.
- "Jealous in honor, sudden and quick in quarrel, seeking the bubble reputation, even in the cannon's mouth."—Owen, '94.

- "The very hairs of your head are all numbered."-Prof. Cr-ss.
- "How great a matter a little fire kindleth."-A Pocket Crib.
- "I will make thee glorious by my pen."-F. H. H-wl-nd, '93.
- "Labor conquers all."-L-v-j-y, '94.
- "A noble youth with toil prodigious, His fault—he's almost too religious."

H-v-n, '94.

- "When fate summons, monarchs must obey."-Mr. H-mbl-tt.
- "The earth hath bubbles, as the water has, and these are of them."

  N-wh-use-, '94.
- "He hath a daily beauty in his life."-Prof. R-nkl-.
- "No pains, sir, I take pleasure in singing."-R. B. Pr-c-.
- "Be to her virtues very kind; Be to her faults a little blind."

The Bird.

- "Panting time, 'twill after him in vain."-C-rr-r.
- "Firm of words, speaking in deeds."-A. M. Robeson.
- "Though this may be play to you,
  "Tis death to us."

'95 at 36 to o Game.

- "Young man, nature gave us two ears, but one tongue, that we might hear just twice as much as we speak."—H-rb-gh, '95.
  - " Loveliest village of the plain."-South Boston.
  - "Out of my lean and low ability, I'll lend you something."

Prof. C. Fr-nk-ll-n.

- "Books are his passion and delight."-J-n-s, '94.
- "Shine by the side of every path we tread With such a lustre, he that runs may read."

Bulletin Board.

- "He doth indeed show some sparks that are like wit."-A. A. Cl-fl-n.
- "Of excellent discourse, pretty and witty, wild, and yet too, gentle."

  Miss L-w-s.

"I do not give you posterity as a pattern to imitate, But as an example to deter."

N. H. J-nvr-n.

"Framed in the Prodigality of Nature."-M-rkl-nd, '94.

"You write with ease to show your breeding, But easy writing's curst hard reading."

Ch-rl- Cr-ss' writing.

"In every age and clime we see, Two of a trade can ne'er agree."

Business Law.

"I have a reasonable good ear in music, let us have the tongs and the bones."—Sh-rm-n, '94.

"A flattering painter, who made it his care, To draw men as they ought to be, not as they are."

R-ss T-rn-r.

"The imprudent man reflects on what he has said; the wise man, on what he is going to say."—Mr. J-hn Sm-th.

"You know me well, a plain, blunt man, That loves my friend."

E. D. Cl-rk-.

"Thou sayest an undisputed thing in such a solemn way .- Prof. H-lm-n.

"Good-bye, proud world, I'm going home, Thou art not my friend and I'm not thine."

The "dropped" Student.

"A little learning is a dangerous thing."-N. H. J-nvr-n.

"It is an irrepressible conflict between opposing and enduring forces."

Freshman-Sophomore Rush,

"An inviting eye, and yet, methinks, right modest."-Miss W-rr-n.

"He draweth out the thread of his verbosity finer than the staple of his argument."—Cl-ff-rd.

"What rage for fame attends both great and small,
Better be d——d than mentioned not at all."

H. N. P-rk-r.

- "I'm weary of conjectures."-The Freshman.
- "A man he was to all the country dear."-Prof. Létang.
- "Something between a hindrance and a help."-Notes on Heat.
- "A rhyming, ranting, raving billie,"-S-v-g-, '94.
- "Happy, happy, happy pair."-Dr. N-y-s- and Cl-m-nt, '94.
- "Notes that wing their heavenly ways to mend the choir above." Song by Pr-c-, '94.

"A merrier man Within the limits of becoming mirth, I never spent an hour's talk withal,"

Prof. V-n D- -1.

- "I am not lean enough to be thought a good student."-E. H. H-xl-v.
- "I never knew so young a body with so old a head."-Mr. B--l-y.
- "You have waked me too soon, I must slumber again." Ch-ff- -, during lecture in Heat and Vent.
- "His words are bonds, his oaths are oracles; his love sincere, his thoughts immaculate."-Prof. M-rr-II.
  - "And out of mind as soon as out of sight."-Formulæ.
  - "A marvellous, witty fellow, I assure you."-T. C. D-v-es, '94.
  - "My age is as a lusty winter; frosty, but kindly."-Prof. -sb-rn-.
  - "We have seen better days."-Chairs in Huntington Hall.
    - "He could distinguish and divide A hair, 'twixt south and southwest side."

Mr. B-rr-s-n.

"All the great men are dying, and I don't feel very well myself." W-rr-n, '94.

- "Smooth runs the water where the brook is deep."-Prof. Cr-sby.
- "They're after me."-'95 flag.
- "Not merely for ourselves."-Technique Board.

## My Tale of Woe.

A youth from the place where the hay-seed grew,
Listen to my tale of woe!

He entered the "Tech." and was half way through,
When he met a maid, and her eyes were blue;
They fell in love as they sometimes do.
Listen to my tale of woe!

He neglected his studies and sought to woo,

Listen to my tale of woe!

For his heart was captured through and through.
But the list of flunks it grew, it grew;

And his landlord's bill was due, was due.

Listen to my tale of woe!

The maid he loved was good and true,

Listen to my tale of woe!

But the old man kicked 'cause he had no "glue,"

And the landlord kicked for the same thing too;

So he packed his duds and away he flew.

Listen to my tale of woe!

Out on the beach, away from view,

Listen to my tale of woe!

He knelt in tears while the cold wind blew,
And chilled his gizzard through and through,
While the shades of night around him drew.

Listen to my tale of woe!

The wind said "I'll be blowed," and blew,
Listen to my tale of woe!
While the wild waves wilder flowed and flew
Over the corpse which they throwed and threw;
Out where the sticklebacks growed and grew.
Listen to my tale of woe!

B. S. H.

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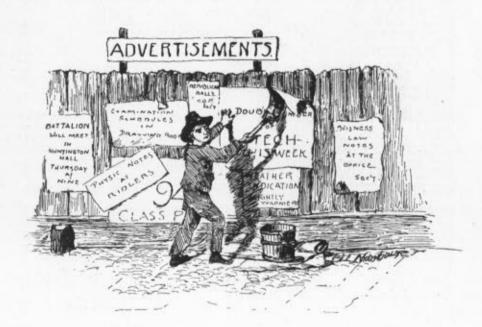
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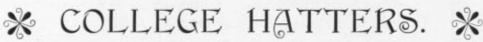
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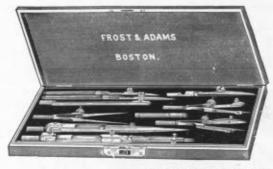
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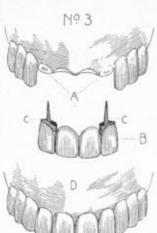
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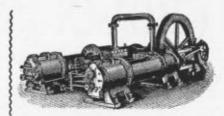
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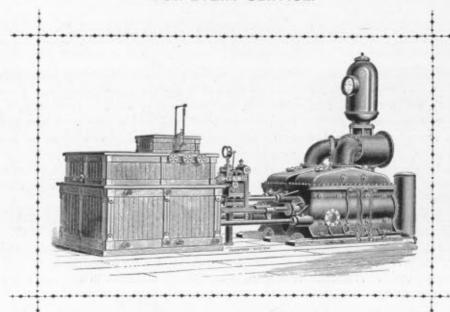
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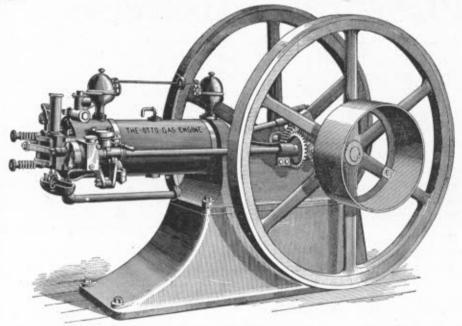
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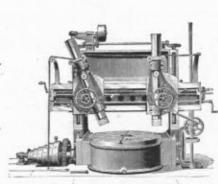
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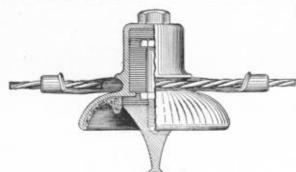
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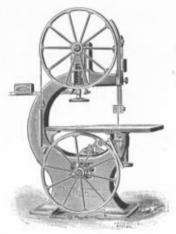
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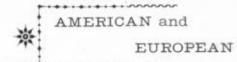
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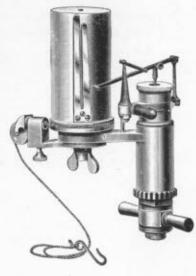
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76 Fifth Ave., New York.

#### THE CONNECTICUT

#### Fire Insurance Company,

HARTFORD

Cash Capital.

\$1,000,000.00.



Assets.

\$2,809,697.81.

J. D. BROWNE, Pres't.

CHARLES R. BURT, See'y.

L. W. CLARKE, Asst. Sec'y.



