

WE GUARANTEE TO MEET IN COMPETITION
any Tailoring concern in this city, in the matter of Fit, Quality, and Price.

HIBBARD, MASON CO.,

FINE TAILORING,

Dress Suits, Silk Lined, to Order, \$45.

515 Washington Street, Boston.

THE HOTEL HUNTINGTON,

Copley Square and Huntington Avenue.



C. A. JONES & CO., Proprietors.

STUDENTS' SUPPLIES.

Blank Books, Note Books, Drawing Papers, Pens, Inks
of all kinds, Fountain Pens.

PERIODICALS AND MAGAZINES.

Writing Paper and Envelopes with TECH Monogram
and Imprint Paper by the pound, at

SOUTHWELL'S,

Corner Dartmouth Street and Columbus Avenue,
and 439 Boylston Street.

2d door from Berkeley Street.

OAK GROVE CREAMERY COMPANY, DAIRY LUNCH ROOM.

445 BOYLSTON STREET, COR. BERKELEY, opp. Y. M. C. A. Building.

Where can be had Sandwiches of all kinds, Soups, Tea, Coffee, and regular Dairy Lunch.

EVERYTHING FIRST CLASS.

Pure Fresh-churned Butter, in Quarter-pound Prints, Five and Ten Pound Boxes,
Pure, Fresh Milk and Cream, delivered in Glass Jars. Fresh-laid Eggs.
Pure, Full Cream Cheese, American (plain), Sage, Neuf-
chatel and Edam. All kinds of Fruit Ices.

NELSON L. MARTIN.

STUDENTS' SUPPLIES.

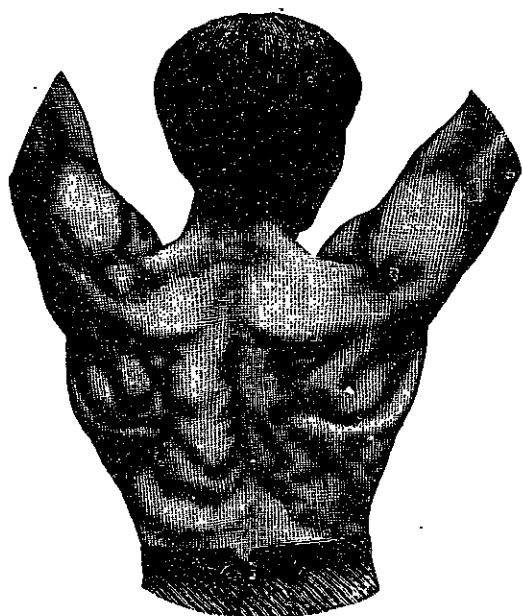
Drawing Instruments and Materials of all kinds

GET THE BEST!—**FOUNTAIN PENS.**—WATERMAN'S IS THE BEST.

Lowest Prices and Finest Quality of Goods Guaranteed.

At Room 10 Engineering Building and Basement of Architectural Building.

R. J. NORMAN.



GYMNASIUM
 Physical
 Culture
 Keep in
 Condition
 by using
 our
GYMNASIUM.

Boston Young Men's Christian Association,
 Boylston and Berkeley Streets.

TERMS, \$10 PER YEAR.

MEDICAL SUPERVISION.

FINE APPARATUS.

CONVENIENT LOCKERS.

FREQUENT CLASSES. FREE INSTRUCTION.

OPEN, 9 A. M. TO 10 P. M.

R. J. ROBERTS, Director.

Drawing Boards, Papers,
Inks, Pens, Instruments, and Fountain Pens
 At Discounted Rates.

A. D. MACLACHLAN,

Tech Co-operative Store,

214 Clarendon St., - - Boston, Mass.



Your address, with six cents in stamps, mailed to our Headquarters, 11 Eliot St., Boston, Mass., will bring you a full line of samples, and rules for self-measurement, of our justly famous \$3 pants; Suits, \$13.25; Overcoats, \$10.25, and up. Cut to order. Agents wanted everywhere.

New Plymouth Rock Co.

Bookbinding

IN EVERY STYLE.

ALEX. MOORE, 3 School Street, BOSTON.

C. E. RICHARDSON,

141-Dartmouth Street-141

FURNISHING GOODS, and Agent for DARTMOUTH LAUNDRY.

Orders by mail receive prompt attention.

Goods called for and delivered without extra charge.



J. C. LITTLEFIELD,
Tailor · and · Outfitter,
 21, 23 BEACON STREET, BOSTON.

I can offer you a larger and more complete assortment than can be seen elsewhere, and at lower prices for the same qualities. Look in and examine my prices before placing your order.

GOLF BREECHES, RIDING BREECHES, AND DRESS SUITS A SPECIALTY.

DISCOUNT TO STUDENTS.

HASTINGS...

PHOTOGRAPHER

To the Class of '95, M. I. T., and
Tech Editorial Group '96,
Pastels, Crayons, Water Colors.

No. 146 Tremont Street,
Over Huyler's.

Branch... No. 1068 Boylston Street,
Corner Massachusetts Avenue.

SILVER MEDAL, Boston, 1881. Gold Medal, Boston, 1887. Grand Prize, P. A. of A., Washington, 1890. Bronze Medal, Washington, 1890. Gold Medal, Boston, 1892. Silver Medal, Chicago, 1893. Aristo Award, St. Louis, 1894. Gold Badge, Cramer Award, St. Louis, 1894. Special Diploma, Illustrative Class, St. Louis, 1894. Gold Medal, Boston, 1895.

STANDARD CLOTHING CO.,

MANUFACTURING RETAILERS OF

HIGH GRADE CLOTHING

From both Foreign and Domestic Fabrics.

ALSO ADVANCE STYLES IN TROUSERS, SUITS, ^{AND} OVERCOATS.

Full Dress Suits Constantly on Hand.

395 WASHINGTON ST.,

- -

BOSTON MASS.

THE Union Gymnasium

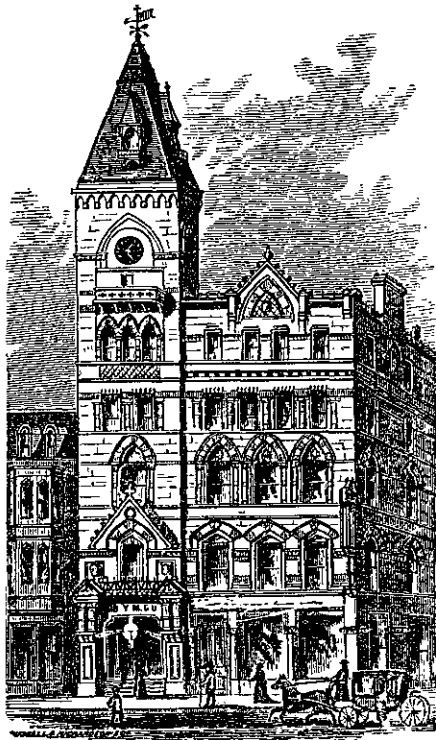
48 BOYLSTON ST. (near Tremont).

PRACTICAL.

Complete
Modern
Apparatus.

Popular
Classes.

Terms,
\$5 and \$8
per Year.



POPULAR.

Extra
Large
Lockers.

Competent
Instructors.

No Extra
Charge
for Instruction

BOSTON YOUNG MEN'S CHRISTIAN UNION.

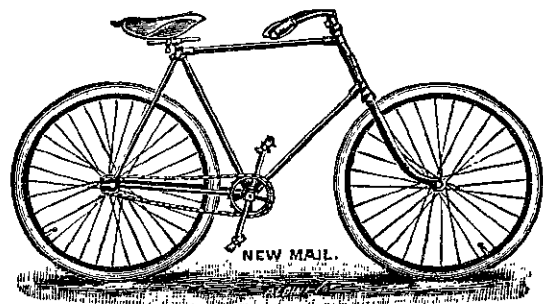
W.M. H. BALDWIN, Pres.

GEORGE PEIRCE, Sec'y.

NEW MAIL

HIGHEST GRADE LIGHT ROADSTER.

\$85.



MEN'S AND LADIES' pattern . . . \$85

Also **TEMPLAR**, best medium grade Man's
Wheel . . . \$60

ATALANTA, Ladies' Pattern . . . \$60

Boys' and Girls' Wheels . . . \$15 up

A few Shopworn and Secondhand Wheels, taken in
trade, at very low prices. Bargains. \$25, \$30, etc.

Catalogue and Secondhand list.

.. WILLIAM READ & SONS ..

107 WASHINGTON STREET, BOSTON.

L. P. HOLLANDER & CO.,

202 and 212 Boylston Street, and Park Square.

High Grade Ready-made Clothing for Young Men,

EXCLUSIVELY OUR OWN MAKE.

We would call special attention to our very attractive lines of

Homespun and Scotch Tweed Sack Suits at prices ranging from \$18.00 to \$26.00.

Knickerbocker Trousers, \$6.50 to \$9.00.

Silk-lined Covert Coats, \$24.00 to \$26.00.

Frank Wood,

Printer,

352 Washington Street, Boston.

The Massachusetts Institute of Technology,

BOSTON, MASS.

FRANCIS A. WALKER, PH.D., LL.D., PRESIDENT.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY offers courses, each of four-year duration, leading to the degree of Bachelor of Science, in Civil, Mechanical, Mining, Electrical, Chemical, and Sanitary Engineering, in Architecture, Chemistry, Physics, Biology, Geology, and Naval Architecture. A less technical course, in General Studies, is offered to students wishing to qualify themselves for business pursuits.

To be admitted to the first-year class, applicants must have attained the age of seventeen, and must pass satisfactory examinations in Algebra, Plane Geometry, English, History, French (or German), and Advanced Algebra or Solid Geometry.

A division of these entrance subjects between two successive years is, with certain restrictions, permitted.

Entrance examinations are held at the Institute in June and September of each year. In June, applicants are examined in New York, Philadelphia, Chicago, and other principal cities. A circular stating times and places is issued in advance, and will be mailed on application.

Graduates of colleges and scientific schools are admitted, without examination, to such advanced standing as is warranted by their collegiate training.

The catalogue of the Institute and any of the following descriptive circulars will be mailed free on application:—

MASSACHUSETTS INSTITUTE OF TECHNOLOGY: an illustrated pamphlet describing the laboratories of the Institute.

Of the departments of Civil Engineering; Mechanical Engineering; Physics and Electrical Engineering; Architecture; Chemistry; Biology; General Studies; Naval Architecture.

In regard to Opportunities for Teachers; The Lowell School of Design; Summer Courses.

H. W. TYLER, SECRETARY,

491 Boylston Street, Boston.

FOOTWEAR.

All styles in Calf, Winter Russet,
and Patent Leather.

Razor, Piccadilly, and Wide Toes.

Rubbers and Overshoes of all kinds.

PRICES REASONABLE.

Our \$4.00 and \$5.00 Shoes are
of superior style and quality.

Discount to Technology.

T. E. MOSELEY & CO.,

469 WASHINGTON STREET.



Raphael, Angelo, Rubens, Tasso

The "LINENE" are the best and most economical Collars and Cuffs worn; they are made of fine cloth, both sides finished alike, and, being reversible, one collar is equal to two of any other kind.

They look like linen, and are the only goods that a well-dressed gentleman can wear in place of real linen.

They are not to be washed; all laundry trouble and expense are avoided.

They are perfect-fitting, retaining their shape better than any other goods.

A box of ten Collars or five pairs of Cuffs for twenty-five cents.

A sample Collar and pair of Cuffs by mail for six cents in postage stamps. Name style and size. Address

REVERSIBLE COLLAR CO.,

77 Franklin St., N. Y.

27 Kilby St., Boston.

HOUGHTON & DUTTON.

HOLIDAY BOOKS

OF EVERY DESCRIPTION!

CHILDREN'S LINEN BOOKS. FANCY SHAPE BOOKS. INDESTRUCTIBLE TOY BOOKS.

COLORED PICTURE BOOKS, containing all the standard Fairy Tales, Mother Goose, Mother Hubbard, Three Little Pigs, etc., etc.

BOARD COVER BOOKS, such titles as Alice in Wonderland, Arabian Nights, Boys' and Girls' Annual, Wood's Natural History, Fairy Tales of all kinds, travel, adventure, etc., etc.

In the above lines we have nearly one thousand titles, and it is the greatest line of Children's Books that can be found in this section of the country. Prices on this line range from

3c. to \$1.98 each.

HANDY VOLUME sized books, standard classics, fiction, and juvenile; over four hundred kinds to select from. Prices from

12c. each upward.

HANDSOME CLOTH-BOUND BOOKS, two hundred standard titles, including travel, adventure, fiction, standard works, juvenile, only **20c. each.**

PHOTOGRAPH ALBUMS.

A splendid assortment; Plush, Celluloid, and Leather. Prices range from **89c. up to \$8.98 each.**

The Largest Variety
and the Lowest Prices.

BOYS' AND GIRLS' BOOKS.

By popular authors, and in nice cloth bindings, **33c. each.**
175 titles, only

HALF-BOUND BOOKS. FANCY BOUND BOOKS.

With gilt tops, etc. Prices heretofore from \$1.25 each upward.
250 titles to select from. **49c. and 50c. each.**

GIFT BOOKS of all sizes and kinds. From the lot we mention one called

"OUR OWN COUNTRY,"

Containing five hundred superb photographs, with graphic historic illustrations, constituting a complete history of picturesque America; 320 pages, size 11 x 13; regular price, **\$1.49 each.**
\$5.00; only

A FULL LINE OF STANDARD SETS
at the lowest prices in Boston.

Bibles and Episcopal Prayer Books, Hymnals and Catholic Prayer Books, at all prices.

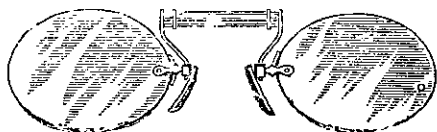
POETICAL WORKS of all kinds, prices from 12c. to \$4.98 each.

TREMONT AND BEACON STREETS.

**CONTINENTAL CLOTHING HOUSE,
MEN'S, BOYS', AND CHILDREN'S CLOTHING,
GENTS' FURNISHINGS, HATS AND CAPS.**

Fine custom work made from measure. Uniforms of every description. Special attention given to TECHNOLOGY and ENGLISH HIGH SCHOOL UNIFORMS. Workmanship the best. Prices the lowest.

CONTINENTAL CLOTHING HOUSE,
Corner Washington and Boylston Streets, Boston, Mass.



OF ALL BAR SPRINGS THE FOUR-BAR IS THE BEST

C. E. DAVIS,
Manufacturing and Prescription Optician,
No. 2 Park Square, Rooms 1 and 2, Boston.

MAKER OF THE FINEST CLASS OF PRESCRIPTION OPTICAL WORK AT A SAVING OF 75 PER CENT ON OLD PRICES.

SAMPLE PRICES: Compound Cylinders in Steel (best quality), \$2.50. Artificial Human Eyes, to Patient, \$4.00. Fifteen per cent special discount to students.

IMPORTER OF ARTIFICIAL EYES.

SELECTION PACKAGES FURNISHED.

**Why use Pond's Extract?
Why not something else?
Because—**

DR. J. J. THOMAS says: "It is incomparably superior to any extract of Hamamelis I have ever used."

DR. O. G. RANDALL says: "Nothing can equal Pond's Extract. I have tested others, and yours is four times as strong as the best."

DR. J. C. MITCHIE says: "Pond's Extract of Hamamelis Virginia is the only reliable article I have found."

DR. H. K. WEILER says: "The difference between Pond's Extract and so-called Witch Hazel is the difference between a cent and a dollar."

DR. H. F. MERRILL says: "It is far superior to any I have used in strength and purity."

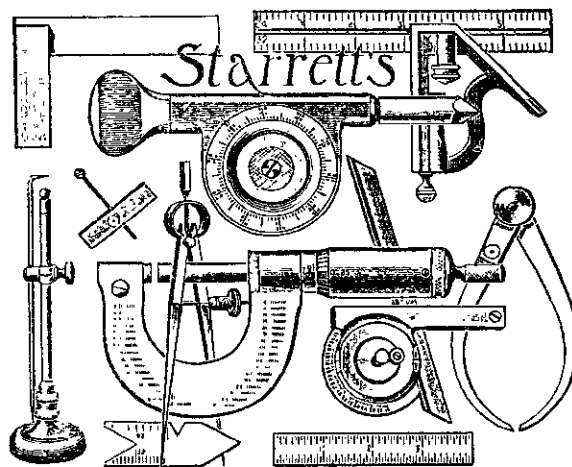
DR. R. J. HARRISON says: "I have never found any extract equal to Pond's."

DR. POWELL says: "Hereafter I shall use no other than Pond's Extract."

And numerous others of similar purport.

No proprietary article on the market is so much imposed upon as Pond's Extract; but the poor quality of Witch Hazel being manufactured, and the poor results obtained by using it, are fast educating the public to buy the genuine article.—THE WESTERN DRUGGIST.

And that's why.



**30 HARDWARE DEALERS
IN BOSTON**

SELL STARRETT'S FINE MECHANICAL TOOLS

THE BEST MECHANICS

USE THEM.

SEND FOR CATALOGUE No. 13.

86 PAGES, ILLUSTRATED, FREE.

THE L. S. STARRETT CO., BOX 62,

ATHOL, MASSACHUSETTS.

TRADE MARK

COLLINS & FAIRBANKS
CELEBRATED

HATS

SOLE AGENTS FOR
HENRY HEATH'S AND
A.J. WHITE'S LONDON
HATS

STYLES CORRECT
QUALITY UNEQUALLED

381
WASHINGTON ST. BOSTON

Wm. Brooks & Co.
Importing Tailors

15 MILK STREET.
OPPOSITE OLD SOUTH CHURCH.

LONDON OFFICE, 6 SAVILE ROW, W.

BIRTHPLACE OF FRANKLIN.

BIRTHPLACE 1706

THE LARGEST ASSORTMENT OF FOREIGN WOOLLENS SHOWN IN BOSTON

M. I. T. CO-OPERATIVE.

THE TECH

VOL. XV.

BOSTON, DECEMBER 19, 1895.

NO. 12

THE TECH

Published every Thursday, during the college year, by students of the Massachusetts Institute of Technology.

CHARLES GILMAN HYDE, '96, *Editor in Chief.*
SHELDON LEAVITT HOWARD, '97, *Assistant Ed. in Chief.*
EDWARD ARTHUR BALDWIN, '96.
CLARENCE WARNER PERLEY, '96.
RALPH SPELMAN WHITING, '97.
THOMAS EDDY TALLMADGE, '98.
RAYMOND SMITH WILLIS, '98.
WILLIAM MONTAGUE HALL, '98.
CHARLES E. A. WINSLOW, '98.
LESTER DURAND GARDNER, '98.
WARD WELLINGTON WARD, '98.
CLARENCE RENSHAW, '99.

RAYMOND SMITH WILLIS, '98, *Secretary.*

W. R. STRICKLAND, '98, *Business Manager.*

Subscription, \$2.50 per year, in advance. Single copies, 10 cts. each.

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

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

Entered in Post Office, Boston, Mass., as Second Class Matter.

Ye Profes and Sophs, ye Specials, Grinds,
Ye Freshmen void of joye,
Ye Seniors, Juniors, Janitors,
And eke ye Co=eds coye,
Ye may believe whate'er your bent
Where'er ye may abide,
Ye Tecbe extends best wishes for
A merrie Christmas=Type!

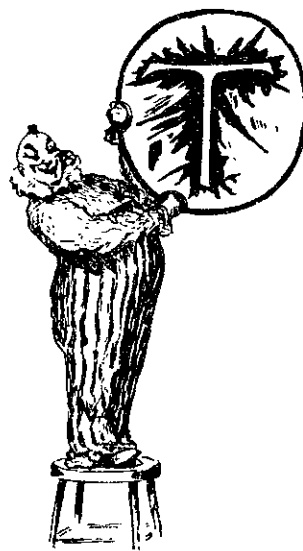


after knowledge, workers and students, young and old, are all in a greater or less degree

WHEN at this most joyous season of the year, Christmas casts its delightful spell over the hearts and minds of all, when even men of the busy world, delvers in the arts and sciences, seekers

under the influence of Christmastide, THE TECH extends its warmest and most sincere greetings.

On this return of that most hallowed time which brought to the world its message of peace and good-will to men—a time which, by the happiest arrangement, has been made almost from time immemorial the occasion for the gathering together of families often so widely separated by the demands of education and of labor—a time, also, when the thoughts of men turn for a while from the cold aspects of Nature, Science, and Industry, to the more moral and tender considerations of home and friends—at this time above all others, it is the earnest wish of THE TECH that a universal spirit of good humor, good fellowship, kindly and charitable feeling may reign among us all.



HERE has been heard nothing but commendation on all sides, so well did the Minstrels of Saturday night do their work, and so far did the results surpass all expectation—and THE TECH hastens to congratulate the Members of the Show, collectively and individually, and the Management, upon the entire success of the performance, and to congratulate Technology, as a whole, upon its hearty support of so worthy an undertaking. Especially do we commend the earnest, sacrificing efforts and the devoted work of the one who has taken the enterprise wholly in charge. No portion of the evening was allowed to drag, and a merry throng it

was which finally left Huntington Hall at a goodly hour. We rejoiced to see the hall so well filled with an enthusiastic audience of friends of our college, its professors, and students.

The undertaking has well demonstrated what may be done in the way of raising funds for our organizations encumbered with debt. If such a performance is given again to aid the Athletic Association, Technology men may assure themselves of a successful affair and should turn out in general support, as was done so well on Saturday to aid our unfortunate Baseball Association of two years ago.



ONE of the striking features of President Walker's report to the Corporation is the mention made of the extraordinary demands of the various engineering professions upon the Institute for its graduates.

Nearly two thirds of those who took the degree in Electrical Engineering last year had secured positions at the time of receiving their diplomas. Those of the Civil and Sanitary courses are, at present, all employed, while the number of students graduated in Mining Engineering was considerably smaller than the number of applications for men received by that department.

These decidedly encouraging figures indicative of the extent of this call for our graduates are attributed by the President to the fact that the Institute itself has created the demand which its students at present supply. In another part of the report, where the history of the establishment of some of the more prominent courses is given, President Walker states that when technical schools were in their infancy, their methods of training were comparatively unknown, and it is made obvi-

ous that the demand for graduates to-day is purely due to the uniform excellency of their technical education and the success which they have achieved in their work.

Toward the close of the report General Walker says: "I have spoken of the Institute as creating the demand which its graduates were intended to supply. This is only one of the many instances in which the ordinary principle of commercial life is reversed. In regard to all the lower wants of our kind, in regard to all that has become familiar and traditional, it is demand that creates supply. In regard to all that is fine, and high, and noble, in regard to all that is new and inspiring, it is the duty of those who are interested in the moral, intellectual, and spiritual advancement of man, to see to it that a supply is created which in turn will create a demand that in time may, perhaps, be trusted to take care of itself."

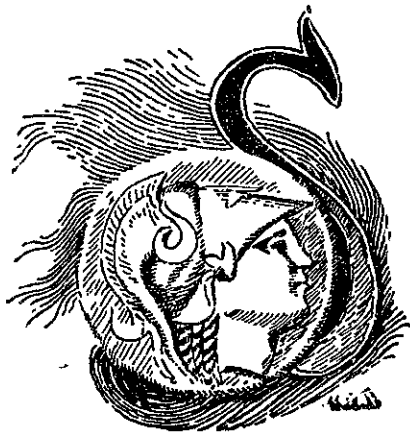


BY the time this issue of THE TECH is before its readers, the members of the three upper classes of Technology will have received from the Statisticians of "Technique," '97, a blank form, and a request to furnish the Board of Editors with a statement of the approximate expenses incurred by them during their several years' attendance at college. It should be understood that this request is made with the hearty approval of our President and several other members of the Faculty, with a view of arriving as nearly as possible at the average actual expense of the collegiate course, as well as that of each separate year, and to this end it is hoped that every student receiving a blank will give the matter his thoughtful consideration, and endeavor to give the Board figures which shall be fairly accurate.

While it is desired that each blank returned shall be signed by the student answering its

questions, it must be further understood that the matter will be treated as strictly confidential; and rather than receive a small number of approximations the Board will accept blanks which do not bear signatures, provided that the class and number of years of attendance of the student are given.

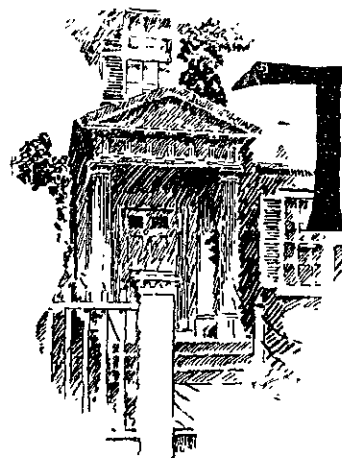
But a short time now remains before "Technique" will go to press, and it is urged that the student body should respond promptly to this call, and aid the Editors in successfully completing a table of statistics which will prove an interesting feature of the volume.



O little is known by the outside world, and even among our own younger students, of the opportunities furnished by our newer and smaller courses, that THE TECH feels that a few words concerning them would be in order at this time, particularly as many of our first-year students are naturally feeling somewhat uncertain about their choice of course which must soon be made. The older courses need no recommendation, as the success of their graduates is known to all. Of the courses more recently established, Course X. graduated its first students in 1891, when six men received the degree of Bachelor of Science in Chemical Engineering. The graduates of this department now number forty men, nearly all of whom we think have easily secured congenial employment in their chosen profession. Course XI. started its prosperous career in the year following Course X.'s *debut*, and although but few men have availed themselves of the especial advantages offered by this course, the graduates now numbering but thirteen, the opportunities open to men who have completed this course seem to be constantly increasing. The system of Metropolitan Water Supply now being introduced in this state and

involving an expenditure of twenty-seven million dollars, is only one indication of the possibilities of the Sanitary Engineer. Course XII. being really one of the older courses in which the engineering branch has taken precedence need not here be considered. Concerning Course XIII., the course in Naval Architecture is of too recent origin to make any data of much value, the class of Ninety-five being the first to include graduates in Naval Architecture among its members, although Ninety-three and Ninety-four included six graduates who took a naval option. It is fair to add, however, that the five graduates of Ninety-five, as well as the other naval students above mentioned are for the most part engaged in their professional pursuits, two of them being connected with the Navy Department.

In general we would say, let the student choose that course in which he feels his energies will find their most congenial employment, and we can confidently predict that the greatest and fullest development of his powers will result, even though the student does not choose the profession for which his course was specially designed to prepare men, and it is one of the chief merits of our system that one course may fit a man for several occupations. The graduate will be better fitted for his struggle with the world by having chosen that course in which he felt he could accomplish the best results.



THE proposed University Club at Harvard is receiving much attention, both from graduates and undergraduates. The plan suggested by the alumni is to build near the College yard a large clubhouse which will accommodate about fifteen hundred men. Such a house would cost

fully one hundred thousand dollars, and would be arranged in a manner similar to any large social club.

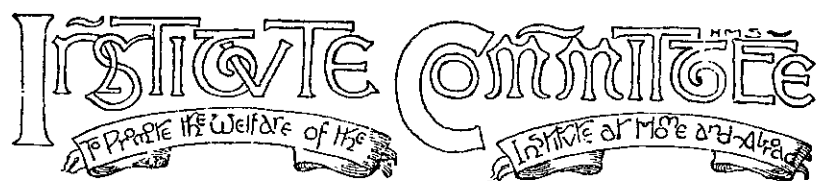
At a recent meeting of graduates, President Eliot, Bishop Lawrence, Mr. Charles Francis Adams and other distinguished gentlemen pronounced themselves heartily in favor of the scheme. The object of the club is to unite as much as possible the different interests of the students, who are at present much separated by the diversity of studies resulting from a university education. Besides binding together the different interests, athletic, social, and intellectual, of the undergraduates, such a club affords a pleasant meeting place for visiting graduates. Although the enthusiasm thus far seems to be confined largely to the graduate body, the proposal seems to us in the highest degree desirable and admirable.

WE announce with pleasure the election of Mr. Ward Wellington Ward, '98, to the Editorial Staff of THE TECH at the regular Board meeting Monday, December 16th.

WE regret to announce the sad death of Mr. Max Carleton, of the Class of '99, on the afternoon of December thirteenth at five o'clock.

Mr. Carleton left Boston for his home in Wakefield on the four o'clock train over the Boston and Maine Railroad. After leaving the train at Wakefield he started to walk down the track, as had been his custom, and in order to avoid the north-bound Portland express he began to cross the tracks. Apparently the noise of the Portland train confused him, and he was unaware of the approach of the south-bound Berwick express, which struck him, killing him instantly.

Mr. Carleton graduated with honor from the Wakefield High School, Class of '95, and was a promising member of the Freshman Class at Technology.



WHEN in February, 1893, the four classes then at Technology elected delegates who should constitute a body to be known as the Institute Committee, they did so with the express purpose of "promoting the welfare of the Massachusetts Institute of Technology at home and abroad." Each year subsequently men have been placed upon the Committee with this end in view. Many subjects immediately connected with student undertakings have been fully discussed, and much has been accomplished; but from the very beginning of its existence the Committee has been forced to struggle against a lack of interest on the part of the undergraduate body, which has been, to say the least, truly disheartening.

One of the fundamental ideas upon which the Institute Committee was based is set forth in an editorial which appeared in THE TECH at the time of its establishment: "What especially demands its attention [referring to the new Committee] is the slipshod way in which Technology is 'reported' in the newspapers [papers outside of Boston.—Ed.]. As it is now, men looking for a 'soft snap' eagerly seize the opportunity to become enrolled as such reporters!"

Each succeeding Committee has attempted to place Technology news before the reading public, but for one reason and another has been unable, up to this date, to accomplish a great deal along these lines. This year Dr. Ripley has become interested in the matter, and at the last meeting of the Committee, held on December 12th, steps were taken which will, without doubt, result in an extended correspondence between Technology and the country at large.

Another matter which caused considerable notice last year was the success of the efforts

of the Institute Committee toward obtaining an agency for the cashing of students' checks. The Bay State Trust Company accommodated Technology men during the latter portion of the year; but this year, owing to an unfortunate occurrence which caused the Trust Company considerable inconvenience, that concern has declined to further continue its benefactions.

Thus the matter is left in precisely the same position in which it has existed heretofore, and now the Institute Committee has again to undertake the matter of saving Technology men the great inconvenience of journeying to the Shawmut Bank whenever the cashing of a check becomes necessary. Messrs. Sawtelle and Willis were appointed by the Committee at its last meeting to confer with Mr. Wigglesworth, Treasurer of the Corporation, with the idea of obtaining a solution of this perplexing problem.

No By-laws had ever been adopted by the Committee until this year, with the result that an annual complication in regard to matters of procedure occurred. The present members, feeling the need of a regular yearly round of certain duties, in addition to the necessary work which will arise periodically, ordered a sub-committee to draw up a set of By-laws. Messrs. Humphrys and Hutchinson reported on a series of such laws, from which we extract the following:—

“3. The Class presidents shall constitute a sub-committee on newspaper correspondence. This committee shall also advise and co-operate with the press correspondent of the Faculty, and shall adopt and execute suitable plans for keeping the work of the Institute before the general public.

“4. At the second regular meeting of each committee, the President shall appoint one member as a custodian of trophies. His duty shall be to collect class, team, and society photographs, prize cups, and badges, historic implements of play, and other articles of interest suitable for a trophy room.”

President Walker's Report.



THE annual report of President Walker to the Corporation of the Institute is nearly ready for publication. The past year has been one of great satisfaction to everybody connected with Technology, and has been marked, on the whole, by a very gratifying progress. For the benefit of our readers we make the following extracts:—

“My message to-day is, in general, one of congratulation. In spite of losses deeply felt in the Corporation and Faculty, the work of the school has gone bravely on; new courses of instruction have been instituted, new laboratories equipped, although no buildings have been erected; our numbers have held good, in spite of the continuous hard times, which have told heavily on the main body of our students. May 28th last we added to our list of alumni 143 graduates, bearing the diploma of the Institute, and all of them, we believe, well prepared to do their work in life.”

“Among the events of the year, that which naturally rises first to our minds is the grant bestowed by the Legislature of Massachusetts, in answer to the petition of the Corporation, which was authorized at the last meeting. Nothing could be more gratifying than the response which came from all parts of the Commonwealth when it was made known that the usefulness of the Institute was threatened by its straitened financial means. The bill passed both houses of the Legislature in the very terms of the petition, appropriating \$25,000 per year, for the term of six years, with a single amendment, cordially accepted by those who represented the school in the matter, appropriating, in addition, \$2,000 per year, during the same term, for ten free scholarships beyond those established under the acts of 1887 and 1888.

“For this bounty of the State it behooves all friends of the Massachusetts Institute of

Technology to be sincerely grateful, and its officers of instruction pledge themselves, through me, here and now, that at the end of this term of years the Commonwealth shall be richer, and not poorer, for the relief so opportunely afforded to this school of industrial science."

"It may be said that an institution like this, after an active life of nearly thirty years, ought not to be in such a case financially; that relief to an amount like that embraced in the act of 1895 should be found important—much more, indispensable. The fact that the needs of the school were so pressing at the time of our petition was wholly due to the resort of students to its halls, directly in consequence of the ever-increasing reputation which had been given to it by the conspicuous success of its graduates in the various industrial professions toward which our training is directed. The petition of Technology was not a cry for compassion from an institution that had outlived its usefulness and was slowly declining from popular neglect, but an appeal for co-operation in a work in which the Commonwealth is itself deeply interested, and which contributes vitally to the support and development of its industries and its trade. Had the Institute of Technology remained a small college of 250 or 300 students, such as it was 15 years ago, its means would not be reasonably sufficient for its wants. With our 1,200 students we ought to have an income-yielding fund of several millions of dollars to render the school independent of temporary fluctuations, to which it is now so painfully subject, and to afford a guarantee that through succeeding generations the Institute shall be found in the forefront of scientific and technical progress. Is it possible that the means will be long withheld which shall suffice to afford security for the future, as well as the power of continuous improvement and advancement, according to our opportunities and to the needs of the great industrial community within which we are placed?"

"In spite of the fact that more than one hundred colleges and universities in the United States are offering instruction more or less like that which we give, the reputation of the Massachusetts Institute of Technology still suffices to make its diploma an honored passport into technical employment. I am glad to believe that the reason for this unusual initial success of our graduates is due to the character of our instruction, as described by Mr. William Mather, M.P., President of the Association of Technical Institutions in Great Britain, in his annual address delivered in London in February last.

"The spirit and energy of the students, their conspicuous practical knowledge, the thoroughness with which their scientific knowledge is tested in the course of instruction, step by step, and the power of adaptation and resource they possess on entering workshops and manufactories, railroads or mines, public works and constructive engineering,—all these fruits of the training of this Institute are, so far as I have seen, not equaled on the continent (Europe). The faculty of applying scientific knowledge and principles is the test of scientific attainments in the realm of industry."

Concerning the positions filled by recent graduates President Walker says:—

"On the 28th of May I conferred, on behalf of the Faculty and Corporation, the degree of Bachelor of Science in Electrical Engineering upon thirty-three young engineers. At the time I handed them their diplomas nearly two thirds had secured professional positions. Professor Swain informs me that all his graduates in civil, sanitary, hydraulic, and railroad engineering are in service, and that he has been obliged to decline numerous applications. Professor Richards, in his annual report, states that since the first of September he has had ten applications for men where he has been able to send but two. In the chemical department we have frequently been obliged to call upon other institutions for their graduates, as laboratory assistants, in the failure to keep

enough of our own to fill the places. I might continue the story, but these statements suffice. While here and there, by reason of exceptional ill fortune or from lack of tact and address, a graduate of the Institute of Technology may be for a short time out of employment, it remains true that the industries of the United States take up the young men whom we have trained for life as readily as, and even more readily than, they did in the time of our first five or six classes."

The report gives full statistics of the graduating class of Ninety-five. Of the members of this class, 25 graduated in Civil Engineering, 15 in Architecture, 13 in Chemistry, 33 in Electrical Engineering, two in Physics, 11 in Chemical Engineering, four in Sanitary Engineering, five in Naval Architecture, while four graduated from the Department of General Studies.

The registration this year is only four in advance of that of last year. This year it is 1187. The division of the students into the various classes is given below: Graduates and candidates for advanced degrees, four; Seniors, 189; Juniors, 189; Sophomores, 197, and Freshmen, 272; Special students, 336. According to this count, the Senior class is larger by 36 than that of last year; the Junior class is larger by three; but there is a decrease of 19 in the Sophomore class, of four in the Freshman class, and of 11 among the Special students.

The geographical division of the students is interesting to note. Thirty-eight states are represented, as is also the District of Columbia. Massachusetts, of course, leads, with 719 students, which is 60.6 per cent of the whole. The students from the other New England states number 120. Those from other parts of the country number 348.

Foreign countries are well represented. Those countries sending one student each are Brazil, Central America, Chili, New Brunswick, New South Wales, Mexico, Porto Rico, Spain, and Venezuela. England, Japan, Nova

Scotia, Ontario, and Quebec are represented by two each. There are two students each from Turkey and Cuba.

The only counties in the state not represented are Dukes and Nantucket. The Massachusetts students come from 132 cities and towns. Middlesex leads with 256 students, Suffolk has 214, Essex sends 92, and Norfolk County, 67.

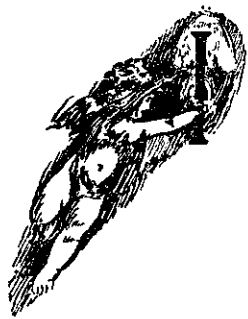
The number of women in the Institute this year is considerably ahead of last year. This year there are 75—an increase of 17. Nine of these are graduates of other colleges. Among the women students, seven are Seniors, three are Sophomores, four are Freshmen, and 61 are Special students. The courses pursued by the women are Architecture, Chemistry, Geology, Biology, and Physics.

The graduates of colleges at the Institute number 80. Of these, 13 are graduates of Technology, four of them being candidates for advanced degrees. There are 11 graduates of Harvard, five of Smith, four of Williams, three each of Brown University and the Sheffield Scientific School of Yale; two each of Amherst, Maine State College, College of the State of New Jersey, Dartmouth, and several other colleges in various parts of the country.

The Statistics of the Corps of Instructors shows the number of instructors of all grades to be 146. Of these the greatest number (29) are in the department of Chemistry, while Physics and Electrical Engineering come next with a total of 25. The report of the libraries of the Institute shows total accessions to the number of 4,407. With these additions the Institute as a whole now possesses a library of 37,654 volumes and 11,922 pamphlets, making a grand total of 49,576.

The report contains mentions of the deaths of two members of the corporation—ex-Gov. Alexander H. Rice and Benjamin P. Cheney. The report of Mr. Wigglesworth will be given in a later issue of THE TECH.

An Unsatisfactory Romance.



It was at Christmas time, a year ago, that Jack Hollis, then a popular member of the Junior Class, first believed he had found the ideal of all his youthful dreams. The circumstances were somewhat peculiar. Jack was on his way home, down on the Shore Line, and, as luck would have it, he was alone. That is, at first, but just a moment before the train started the ideal already alluded to entered the car, and, as seats were already scarce, took the one beside our hero. That gentleman was not long in making up his mind concerning the attractions of his fair companion, but what was he going to do about it? That was the question. That she was *bien gentille, cette petite* was at once apparent. He rapidly revolved in his mind certain schemes for breaking the ice, *a la* "Mr. Barnes of New York," but all in vain.

Finally an idea occurred to him. He had in his "grip" some new magazines with which he had intended to enliven the monotony of his journey. He took them out and offered them to the charming unknown in his most courteous style. Jack's manners, you know, are really worthy of the sincerest form of flattery. The offer was graciously accepted, and she selected a *Harper*, which, by fortunate chance, was marked with the lender's name and address.

The details of the rest of the journey are not familiar to the writer, but that the young lady was not unaware of, or indifferent to, the impression she had created was attested by the fact that when she arrived at her destination a rose from the bouquet she had worn was left in the seat by his side.

Here our chapter ends, although it is by no means all, for a few days later our friend Jack received a delicate little note thanking him for his kindness on a certain occasion, when he had been the cause of an unexpectedly pleasant journey. The note was not signed, but, with

an induction that was worthy of Conan Doyle's immortal hero, Jack observed that the note paper was adorned with a monogram, and that the envelope bore the impress of a fashionable stationer of Boston. He lost no time in calling on the stationer, from whom he learned that the young lady's name was Edith, and that she was probably a sister of a Charlie Washburn whom he already knew slightly.

As may readily be imagined, Hollis instituted a most vigorous cultivation of Washburn's acquaintance, but not to much purpose. His cigars continued to be accepted with the same polite gratitude, his invitations to dinner or to the theater met always the same courteous acceptance, but no mention of a sister had rewarded poor Jack's conscientious endeavors.

"Washburn is so d——d uncommunicative," he said, disgustedly. But finally he dropped finesse, and one day as he and Washburn were walking up Boylston Street he asked, bluntly, "Say, old man, you have a sister, haven't you?"

"Yes," answered Washburn, guardedly. He well knew Hollis's reputation among the ladies, and may have wished to preserve his relative's heart intact.

"Well," continued Jack, encouraged by this confession of relationship, "isn't her name Edith, and didn't she go down to New York last year at Christmas time?"

Washburn conceded this to be true also, and added that he and his friend, Tom Sheridan, had seen her off at the station, where Sheridan had wasted his money by buying her a bunch of roses. "She used to think that Sheridan was awfully soft," he added in explanation.

"Yes, she wore roses," said Hollis with a smile, now sure that he was on the right track at last, although the fact that the roses had been given her by another presumptive admirer nettled him slightly. But his satisfaction at the success of his expert detective work outweighed that slight mortification, however, and he was emboldened to proceed, regardless

of Washburn's query how he happened to know so much of his sister's doings.

Jack was in high feather. His pretty Shore Line *inconnue* was found out, and her identity with his friend's sister firmly established. So he branched boldly upon the topic he had all along been leading up to, and said abruptly: "Well, see here, old man, why can't you and I get up a little *matinée* party. You might take your sister," he suggested artlessly, "and I'll ask my cousin Jess. We can lunch at the Victoria, and go down town from there. You can introduce me to your sister at the Junior Prom. to-morrow night," was his concluding concession to the proprieties.

Washburn listened to Jack's diaphanous theater party scheme in evident amusement.

"My sister wouldn't go, I'm afraid," he said, after a brief pause. "In the first place she's in Europe, and in the second place she's engaged to Tom Sheridan. Going to marry him as soon as she gets back."

Poor Jack couldn't say a word, and by the time he had regained his composure they had gotten to the Rogers Building. "Come on across the street," he said to Washburn. "I can't spin out the whole of my yarn here, but I can tell you later perhaps how a very smart man once got left."

"Two Manhattans, Robert, please."

Course XIV. ('96!)

Though toward a different course degree
Each Senior now is steering,
Yet all could take a high S. B.
In Political Engineering.

KAW.

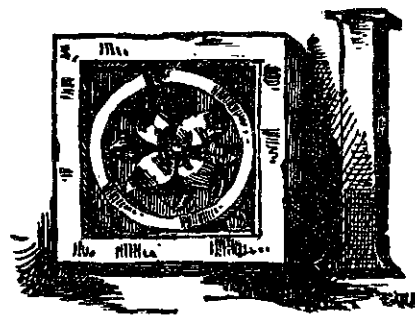
Then and Now.

I used to say, on Christmas Day,
The choicest present that you get
(And yet the last), the rest you pass,
Waits for you in the stocking toe.

But now I say, on Christmas Day,
The choicest present I shall get,
Nor yet the last, is from a lass—
And waits beneath the mistletoe.

T. E. T.

In the Station.



IF the truth of the matter must be told, Marion was going to New York for some Christmas shopping, and I promptly discovered that I had business in New York, too. It was easily arranged that I was to accompany her, and I walked down to the station feeling very much at peace with the world, for I was in just deeply enough to make the trip in her company a very pleasant anticipation. I placed her small bag upon a seat in the waiting-room, and went across to the little flower-stall. It took me a good while to decide whether to get roses to match her dress, or violets, her favorite flower. At last I chose the violets, and finding that the time had come when I should meet her, I snatched up the bag in passing, and ran out to the platform.

Marion was nowhere to be seen, and I was carelessly watching the people crowding out from an incoming train, when a little blonde girl rushed up to me from among the crowd, and cried out, with the prettiest Southern inflection: "How do you do? I'm *so* glad to see you! Such a frightful journey! Violets! O, how dear of you!" And before I knew where I was, my flowers were in her hand, and her wraps were over my arm. I was beginning rather awkwardly to disclaim my right to this warm greeting, when a disturbance behind made me turn around, and an excited little man, with a pink in his button-hole, hastened up, followed by a policeman and a crowd of loafers. "There he is! There he is!" shouted the former, pointing, to my amazement, at me.

"What do you want?" I cried, in astonishment.

"That's my bag!"

"No such thing," I replied.

"What is your name?" asked the officer.

"His name is Harry Carter. It's perfectly outrageous of you!" put in the fair unknown, paying no heed to the gentleman who protested.

"I am Harry Carter, and that is my bag with my initials on it."

"My name," I ventured meekly, "is Jones. This bag belongs to a friend of mine, and I thought had no initials on it."

"I'm afraid you must come with me, sir," said the policeman. "This bag has H. C. plainly marked on the side. Your story and the lady's don't agree. You must both ——"

"Good Heavens, this lady has nothing to do with it. I will come if I must, but I beg you don't ——"

"O, Harry, I will come wherever you do. It is some horrible mistake."

My name is Edward, but I too thought there was some horrible mistake. The officer was a very considerate fellow, and at my request got a carriage, and as I stepped in and the little Southerner followed, I saw, amid the jeering crowd, Marion's astonished face. The hopelessness of explaining the situation came over me, and I sank back in despair. Then I caught sight of something in Marion's hand, and one gleam of hope came to me. I sprang out of the carriage.

"That bag ——"

"Yes," she answered as cool as you please. "I found it in the waiting-room. Where are you going?"

"There!" I cried, seizing the bag and comparing it with the other. "Don't you see how like they are? I took the wrong one from the seat."

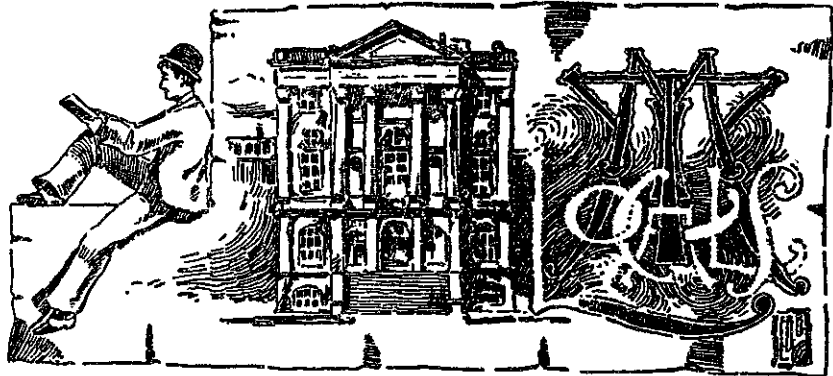
"Then you're not my cousin?" said the little girl with regret; "he was to meet me, and I was to know him by that bag and the letters my sister worked."

"I have the honor to be your cousin, Miss Cartwright," said the man with the pink.

"Come Marion," said I, "we shall miss our train."

And, do you know, that Southerner kept my violets after all.

KAW.



Several sections in First-year English are writing daily themes this year.

The Varsity football picture was placed on exhibition in Rogers corridor last week.

On account of repairs upon apparatus Mr. Blodgett did not meet his class on Friday last.

The Deutsche Verein held its first meeting of the year for the election of officers last Friday.

All contributions to "Technique," in order to be published, must be handed in before December 28th.

A very good flash light of the life class was taken by Russell Porter, '96, and has been posted in the Senior drawing-room.

A copy of the "Code of Ethics" adopted by the Boston Society of Architects has been posted in the Senior Drawing-room.

Last Friday evening a large number of the students of the Architectural Department were entertained most pleasantly by Mrs. F. W. Chandler, at 195 Marlborough Street.

On December 14th, seventeen of the Senior Electricals inspected the Interlocking station of the Boston and Albany R. R. at Riverside, under the supervision of Mr. Blodgett.

The Marsh Pump used in running the large fountain in the Mechanics Building during the recent Fair has been placed in the Engineering Laboratory for use in experiments.

Notices have been sent out for a meeting of L'Avenir at the Hotel Oxford this evening. M. Despradelle has kindly consented to speak, and several members of the Society will bring their banjos.

On last Saturday, Mr. F. E. Forster, '96, while leaving a car in front of the Institute, was struck by a car going in the opposite direction. He was carried to a physician's office where his injuries were attended to.

The Mandaman Club held a meeting and dinner Saturday, December 7, at Parker's, at which Messrs. Kinsman, Riotte, and Gilpin, of '99, were initiated. The next regular meeting of the Club will be held Saturday, January 4th.

The Executive Board of the class of Ninety-nine held a meeting December 10th, at 4 P. M., in room 22, Rogers. Appropriations were made to cover outstanding debts and to provide for necessary expenses, and other matters of more or less importance were considered.

At the meeting of the Biological Club on the 10th, M. O. Leighton spoke on the "Physiological Differences in Cells Morphologically Similar," and Mr. D. D. Jackson concluded with an account of "Iron Pipes in Water Supply and the Changes they Undergo in Use."

At a meeting of the Walker Club on the 13th, the committee on an English play reported in favor of giving such a representation. The Club accepted the report of the committee and negotiations are pending with an excellent coach, a member of one of the best companies in this country.

The Engineering Laboratories have recently been presented with two large Hogue injectors, a Hancock inspirator, and a Marsh pump with a capacity of 800 gallons per minute. Mr. Samuel Cabot has presented the Steam Laboratory with a Guild and Garrison pump of a capacity of 150 gallons per minute.

There will be published in the next issue of the "Technology Quarterly," and in subsequent issues, a number of tables of results of tests recently made in the Engineering Laboratory. These tests will be also separately

bound and will be of great value, not only as reference books, but for the sake of comparison with foreign and government tests.

The Deutsche Verein held its first meeting of the year last Friday, for organization and the election of officers. H. von Holst, '96, was chosen President; W. G. Zimmerman, '98, Vice President; J. E. Lonngren, '95, Secretary; A. D. Spiess, '97, Treasurer; H. A. Poppenhusen, '96, H. R. Valkamp, '97, and G. F. Ulmer, '98, members of Executive Council.

Many Technology men, particularly those taking chemical courses, will be interested in the daily exhibitions of acetylene, the new illuminating gas, which are being given in the rooms of the company in the Telephone Building, corner of Milk and Oliver Streets. These exhibitions have aroused much interest among hundreds of visitors, including scientific men from the Institute and other colleges.

Dr. Bigelow, formerly an instructor in Biology, has been equally successful in his new rôle of General Librarian. Among the very commendable features which he has introduced in his new work is a "new book department," where officers of instruction may inspect new books which have been sent by the publishers for that purpose. Instructors may also order through the librarian books for their private use.

The Southern Club held a meeting Saturday evening, December 7, at the rooms of Mr. W. R. Bonnycastle, on West Canton Street. Messrs. Keyes, Vogt, and Muhlhauser, of '99, all of Washington, D. C., were elected to the club. A design for a pin, which consists of a cotton ball on a leaf bearing the letters S. C., was accepted, and a committee was appointed to secure a design for insertion in "Technique." The next regular meeting of the club will be Saturday, January 4th, at the rooms of Mr. F. P. Blake.

A regular meeting of L'Avenir was held on the 9th, Mr. Winslow in the chair. Mr.

Blachstein gave a very interesting account of the younger Dumas and read extracts from a Paris newspaper. After the regular meeting a business meeting was held to discuss the payment of the Society's debt. Mr. Mason made a report as Treasurer, and communicated the offer of Mr. C. Bernard to give a course of French readings for the benefit of the Society. A committee to consider the project, consisting of G. L. McCarthy, '97, E. P. Mason, '97, and G. L. Smith, '98, was appointed by the chair.

All First-Year students are requested to fill out choice of course cards as soon as possible. A general circular in regard to the choice of courses can be obtained at the Secretary's office, and the heads of the various departments will be glad to advise individual cases during appointed consultation hours. The gentlemen in charge of the various courses are as follows, and their consultation hours may be found on the general bulletin board:— Course I., Professor Swain; Course II., Professor Lanza; Course III., Professor Richards; Course IV., Professor Chandler; Courses V. and X., Professor Talbot; Courses VI. and VIII., Professor Cross; Course VII., Professor Sedgwick; Course IX., Professor Dewey; Course XI., Professor Porter; Course XII., Professor Niles; and Course XIII., Professor Peabody.

Mother Goose Revised!

Sing a song of Seniors! lovingly they try
Little politicians to run in on the sly!
But on joyous Class Day, wont there be some fun?
These same politicians will see what they have done.

W. S. R.

Winter.

The winter comes: the sullen snow makes all things cold
and white.
Where now are fled the blossoms which bloomed of late
so bright?
Where are the birds whose merry song was once so blithe-
some gay?
Where are the crowds which used to lounge on Rogers'
steps all day?

Alumni Notes.

Mr. S. G. Reed, '94, has obtained a desirable situation with the Crosby Indicator and Valve Company.

We regret to learn of the death, on December 2d, of Charles Wood, Course I., '86, Chief Engineer of the Cincinnati, Hamilton & Dayton Railroad.

At the last regular meeting of the Society of Arts, held in Room 11, Rogers, Thursday evening, December 12th, Mr. Howard A. Carson (Course I., '69) read a paper on "Various Inventions and Devices for Tunneling and Building Passage-ways Under Rivers and Other Bodies of Water." Mr. Carson is well known as one of our oldest and most successful graduates in Civil Engineering. He has repeatedly held important positions in charge of large engineering undertakings, among which may be mentioned that of Chief Engineer of the Metropolitan Sewage Commission, and that of Chief Engineer of the Boston Transit Commission.

H—1.

The formula "H is to L"
Was given in Physics one day
For the students to "easily prove"
In the "usual simplified way."

He wrote it down first in this way $\left(\frac{H}{L}\right)$,
And juggled it thus for a bit;
He wrote it like this (H:L), and like this (H-L),
Then said it aloud,—and then quit!

TO ———.

I sit before a blazing fire,
My feet stretched out in lazy ease,
And draw deep draughts from my polished briar,
Sweeter than honey of Syman Bees.

A roseate glow pervades the room,
A restful blank steals o'er my mind;
A face steals softly through the gloom,
Your own sweet face, demure and kind.

I rest my arm about your waist,
I feel your trembling figure quake;
I feel your hair brush o'er my face,
I feel your lips, and—I awake.

—Yale Courant.



There has been a slight falling off in attendance in Director Boos's classes since the middle of the term.

Cummings, Rockwell, and Bakenhus, of our present relay team, were members of the team which defeated Brown last year.

All members of the class of '99 who intend to take an active interest in athletics should report to Captain Ferguson without delay.

E. Mansfield, '96, ex-Manager of the Football team, has been appointed Treasurer of the Athletic Club by the Executive Committee.

Grosvenor, of last year's Amherst Track Team, now Technology, '98, broke the Institute record for the 35-yard dash at the Gym. last Friday.

Season and life-membership tickets to the Athletic Club may be obtained from E. S. Mansfield, '96; price, one dollar and three dollars, respectively.

All men not members of the 'Varsity, who have received supplies from the Football Association, are expected to return them for use next year. Members of the 'Varsity having supplies not of use to them, are requested to do likewise.

The first in-door games given by the Boston Athletic Association this season took place in their Gymnasium, Wednesday, December 18th. The events were open to B. A. A., H. A. A., Newton A. A., and M. I. T. A. C.

Captain Cummings was unable to secure the Armory for the use of the team which is to run against Worcester Athletic Club, thus

making it necessary for the candidates to train in the Gym. It is to be lamented that Technology has no suitable place for in-door running.

Captain Ferguson has about a dozen men out trying for positions on the '99 track team. The probable make-up of the team will be as follows: Burch, Ferguson, Milligen, and Corse in the high jump; West, Kimball, Farnum, Vogt, and Keyes in the 35-yard dash; Copp, Ferguson, and Farnum in the hurdles; Copp, Kimball, and Muhlhauser in the shot put.

An excellent collection of teams, which have represented Technology, is hung in the Gymnasium. It is a pity that this collection should be broken, through the negligence of the Manager of the '98 Football team, for two years. Never before since the collection was started in '88 has a picture been omitted. We hope to see the list made complete at an early date.

The Athletic Club will send a team to run a relay race against the Worcester Athletic Club at the Worcester-Suffolk Athletic Club's Joint Meet at Worcester, Thursday, December 19th. Inasmuch as neither the Armory nor the Mechanics Building could be obtained for practice, the team has been compelled to train in our gymnasium, which is entirely inadequate for the purpose. Captain Cummings chose the following team from the ten candidates, Wednesday, December 11th: Cummings, '96 (captain), Rockwell, '96, Grosvenor, '98, and Bakenhus, '96, with Grey, '97, and Beers, '97, substitutes. Our chances for winning are excellent, as the team is training hard and is composed of experienced men.

THE M. I. T. A. C. INDOOR CLASS CHAMPIONSHIPS.

The Indoor Meet will be held Saturday evening at 8 o'clock, December 21st. It is the duty of every student to support the Athletic Club in its undertaking by turning out

at this time, and thus assist in reducing the deficit in the treasury.

Points obtained at this meet will count toward the class championship cup. The wrestling matches are to be divided into two classes, light and heavy, the dividing weight being one hundred and forty pounds.

There is some promising material in the Freshman Class, and it is hoped that this meet will prove to be of considerable advantage in bringing it out. The athletes are showing interest in the meet, and are training hard.

Harrington, '96, is doing good work in wrestling, and Bakenhus, '96, in rope climbing. Green, '96, and Lootz, '96, are training for the shot put. Green seems to be doing the best work. He won the individual championship last year, and is likely to win points in a number of events. He is one of the best all around athletes in Boston.

The hurdle race bids fair to be an excellent contest, with Sumner, '97, Stebbins, '97, Bucher, '98, Copp, '97, Allen, '97, Grosvenor, '98, and Ferguson, '99, entered. They are all in excellent form and fast. Sumner ran well at Worcester last year and Ferguson was the champion of the Interscholastic League. Both should win points.

Wise, '96, Grey, '97, Allen, '97, and Beers, '97 should make the potato race interesting. Wise won last year, but Grey seems to do better in practice. The high jump will offer a close contest between Green and Grosvenor. The dash presents a fine field, including Grosvenor, '98, Ferguson, '99, Watrous, '98, Bakenhus, '96, Beers, '97, Grey, '97, Noyes, '98, and West, '99. Grosvenor, who came from Amherst this year, ran second to Patterson in the 100-yard and 220-yard dash at Worcester last year.

Ja Wohl.

Life is real, life is earnest,
But it might be much more fun
If the distance t'wixt our lectures
Didn't keep us on the run.

A. W. J.

To M——.

Mia Bella, lady fair, let me sing of thee;
Let me tell of waving tresses,
Let me sigh for thy caresses;
Sweet my dream shall be.

Mia Bella, lady fair, thine are eyes of night;
Stars are they of Love's own lighting,
Though they gleam for mine heart's blighting;
Gleam with wond'rous might.

Mia Bella, lady fair, roses thy lips be;
Use them 'stead of bow, Dan Cupid.
Hark ye! wound not other, stupid!
Shoot but only me!

Mia Bella, lady fair, queenly is thy mien;
Aphrodite's self thou'rt masking
In the smile of her thou'rt basking,
Conquering and serene.

Mia Bella, lady fair, thus I sing of thee;
Sweet, cause not my heart's undoing!
Sweet, now yield thee to my wooing;
Give thy heart to me!

W. S. R.

My Dream.

I dreamed I woke on Christmas Eve, and saw before me
laid
The morrow's gifts, which Santa Claus to me had kindly
made.
A molecule, some atoms, and a nice fresh profile plane;
A brand-new Avogadro's Law, a Ninety-eight class cane;
A dew-point, and a turning-point, and, lest both these
might pall,
A joke of one of my old Profs. which had no point at all;
A dyne of electricity, a quart of energy;
And then my last five-weeks' report, I never hoped to see;
And, though you'll doubt it, yet I saw, as well as I was
able,
That all these things were laid out on a logarithmic table.

KAW.

Technology Minstrels.

SATURDAY evening last saw a representative gathering of Technology men and Technology maidens assembled in Huntington Hall to witness the initial performance of the Minstrels. The interlocutor and end men were decidedly in the spirit of the occasion, and their songs and hits on the traditionally notorious Technology institutions and individuals were irresistible, while the songs by Messrs. Tucker and Howland were equally well appreciated and enthusiastically encored.

The second part, like the first, consisted of a series of enjoyable surprises. The instrumental solos of Messrs. Barber and Shepard were excellently done, and the mirth-provoking encore of the latter was unique, to say the least. The song and encore by Mr. Barker were among the finest bits of vocal work, and "D'ye T'ink I am Too Small?" was rendered with becoming Freshman modesty. Mr. Denison's Solo Dance was particularly fascinating, and this and the character sketch by Messrs. Leighton and Young were the hits of the evening.

The Glee Club, ably assisted by Mr. Melluish, were in excellent voice and did some very creditable work. Too much praise cannot be given Mr. Leighton for his untiring efforts to which success is largely due. The following was the programme:—

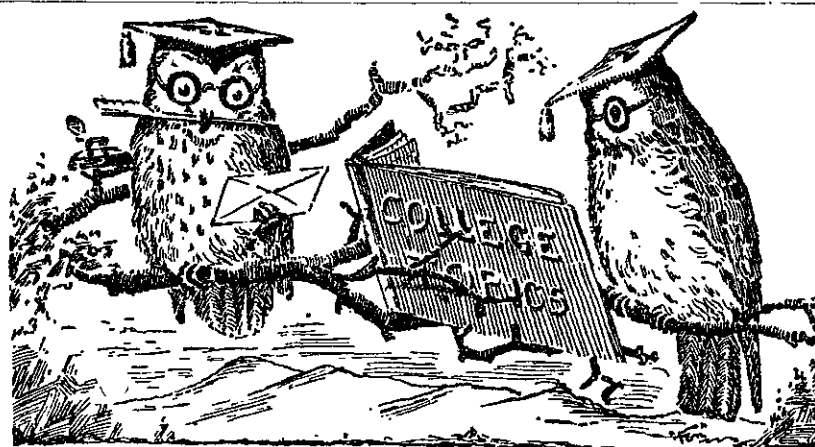
PART I.

Arranged and directed by Marshall O. Leighton.

- | | | |
|--------------|-------|-------------------------------|
| Interlocutor | . . . | Augustus Clark Lamb, '97. |
| David | . . . | Conrad Henry Young, '96. |
| Rastus | . . . | Walter Mulliken Stearns, '96. |
| Willie | . . . | Frank Stevenson Tucker, '97, |
| Bones | . . . | Marshall O. Leighton, '96. |
1. Opening Chorus.
 2. Bones and David.
 3. Song, "My Beautiful Irish Maid,"
Atherton Howe Tucker, '98, and Quartette.
 4. Willie and Rastus.
 5. End Song Rastus.
 6. David and Bones.
 7. End Song Bones.
 8. Song, "Nellie Gray,"
J. Hastings Howland, '97, and Chorus.
 9. Rastus and Willie.
 10. End Song. David.
Accompanist, J. G. Melluish, '96.

PART II.

1. Banjo Solo George Frederick Shepard, '96.
2. Solo Dance Ned Elias Denison, '95.
3. Tenor Solo Edgar Harrison Barker, '96.
4. Character Sketch { Marshall O. Leighton, '96.
Conrad Henry Young, '96,
5. Mandolin Solo James Saxton Barber, '98.
6. Solo, "D'ye T'ink I am Too Small?"
Harry G. Johnson, '99.
7. "Old Folks at Home Glee Club.
Obligato by Winthrop Rufus Dodge, '98.



The corner stone of the new Columbia University Library at Morningside Heights was laid recently.

The students of Columbia were recently favored with a lecture on "Macbeth," by Henry Irving.

There are at present two hundred and forty-six Yale men holding professorships in American institutions.

Williams has decided to adopt the "Honor" system in examinations, patterned after the Princeton system.

The total registration of Williams College is three hundred and fifty-five,—a gain of twenty-five over that of last year.

Annapolis has a loving cup which is given each year to the student who has done the most for the advancement of athletics.

It is stated that the charter of Rutgers College is the only charter in the United States which requires the teaching of grammatical English.

The trustees of Dartmouth College have voted to allow women to take the postgraduate courses of the college, but not the undergraduate courses.

Measures are being taken by Harvard graduates to form a University Club in Cambridge, in order to bring the students of the various departments into closer social relations.

The game for the championship of the Pacific Coast, between Leland Stanford University and the University of California, re-

sulted in a tie, the score being 6 to 6. Walter Camp and Frank Butterworth of Yale coached the rival teams.

Edmund Clarence Stedman, the famous poet, has declined the offer of the new Billings Chair of English Literature at Yale. The chair was founded two years ago by Judge E. W. Billings of the class of '53, who left \$75,000 for its maintenance.

Yale men are feeling very jubilant over the victory in the annual debate at Princeton. Yale is so tired of being told that she is too athletic that this new evidence of ability is hailed with joy as an indication of healthy activity in all branches of her college life.

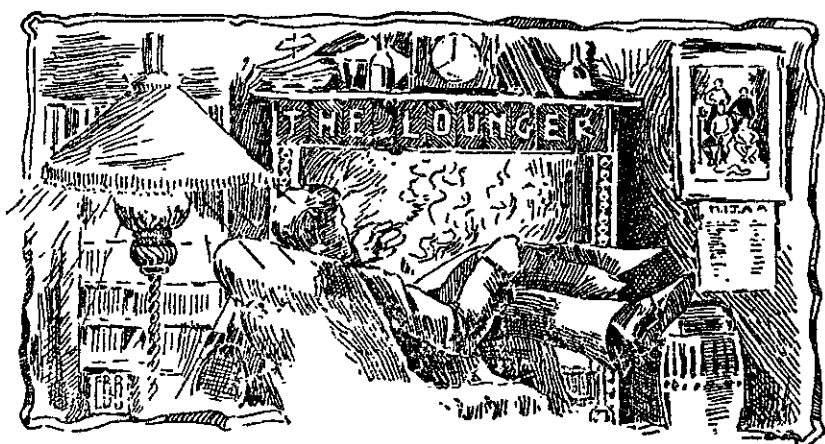
Coach Watson, of Harvard, has been at Cornell several times in the past few weeks, and it is well known that some proposition for a race between the crews of the five colleges is being considered by the members individually. But they refuse to express any opinion as to the merits of the proposition. It is probable that Harvard will not interpose any objection to Yale as one of the contestants if such a race is arranged. If this race takes place, Harvard will have fulfilled her agreement with Cornell. If the proposition falls through, Harvard and Cornell will have their race as per contract.

There was a meeting of Williams' students recently, at which the committee chosen to draw up a constitution for an honor system made its report. The committee presented a system patterned after those of Cornell and Princeton. The plan gives complete freedom to students in examinations, but requires every student to certify in writing that he has neither given nor received assistance. All charges of fraud would be referred to a committee of ten, four Seniors, three Juniors, two Sophomores and one Freshman—this committee to have sole decision in cases of reported fraud, and to recommend extent of punishment to the faculty for final action.

The most popular course at Yale this year is the course in modern novels, which is now taken by 258 students. Dr. Phelps, who has charge of the course, maintains that the novel is at present the most important form of literary art. The course for the next term includes the following books taken from foreign authors: P. Heyse, "The Children of the World;" H. Sudermann, "Dame Cure;" Turgenev, "A House of Gentlefolks" and "Fathers and Sons;" Tolstoi, "Anna Karenina" and "Where Love is, there God is Also;" Sienskiewicz, "Pau Michael;" Bjornson, "Synnove Solbakken" and "In God's Way;" Daudet, "Jack;" Loti, "An Iceland Fisherman;" and A. France, "The Crime of Sylvester Bonnard."

John D. Rockefeller has given \$7,000,000 to educational purposes,—more than any other living man has given. But Stephen Girard exceeded him in his benefactions by about \$1,000,000. The following is a list of those who have given more than \$1,000,000 to educational institutions:—

Stephen Girard, Girard College, Pennsylvania	\$8,000,000
John D. Rockefeller, University of Chicago	7,000,000
George Peabody, various institutions	6,000,000
Leland Stanford, Leland Stanford, Jr., University, California	5,000,000
Asa Packer, Lehigh University, Pennsylvania	3,500,000
Johns Hopkins, Johns Hopkins University, Maryland	3,500,000
Paul Turlane, Turlane University, Louisiana	2,500,000
Isaac Rich, Boston University	2,000,000
Jonas G. Clark, Clark University, Massachusetts	2,000,000
Vanderbilt Brothers, Vanderbilt University, Tennessee	1,775,000
James Lick, University of California	1,650,000
John C. Green, Princeton College	1,500,000
William C. De Pauw, De Pauw University, Indiana	1,500,000
A. J. Drexel, Drexel Industrial School, Philadelphia	1,500,000
Leonard Case, School of Applied Sciences, Cleveland	1,200,000
Peter Cooper, Cooper Union, New York	1,200,000
Ezra Cornell, Cornell University, New York	1,000,000
Henry W. Sage, Cornell University, New York	1,100,000



It was indeed a pleasant reminder of Junior Week to behold the gay and festive throng assembled in Huntington Hall at the recent Minstrels. The Lounger delights in such occasions because they give him an opportunity to view his friends collectively and to gaze to his heart's content upon many pretty girls and their gallant escorts, to the latter of whom, it may be said, he vouchsafes but a cursory inspection. The Lounger enjoys looking at a pretty girl, and he must confess that the sable minstrels provided that opportunity for enjoyment to a very gratifying degree.

Sable enough and to spare were those same minstrels, whose merry pranks and quips delighted and amused the goodly audience, and with whose performance the Lounger must express his satisfaction. The antics of the end men were quite up to the mark, too, and Liza Jane and all the other dusky belles were duly exploited. In the vaudeville entertainment that followed the Lounger also found a proper relaxation from his weighty cares, being particularly edified at the Hibernian act and at the graceful caperings of Bro. Eli. The plunk plunk of banjo and mandolin was likewise highly pleasing, as well as the sweet warblings of our silver voiced singers, one of whom the Lounger might ask for the loan of a *mou-choir* during his songs. But it was a jolly show, all the same, and one which for all around success the Lounger has seldom seen exceeded at Technology.

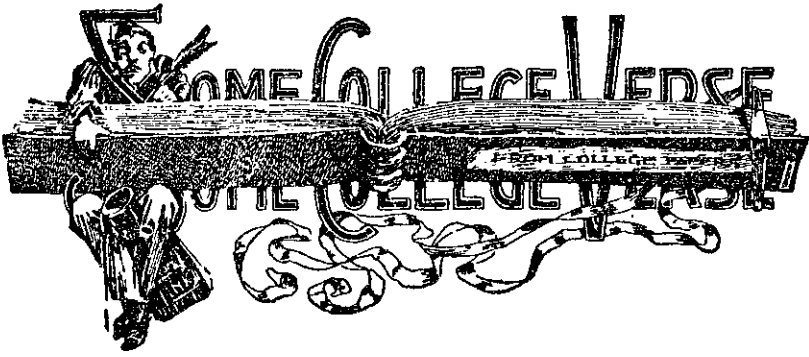
It is surely a fortunate provision of an inscrutable providence—aided and abetted, doubtless, by the cheery tales of Charles Dickens—that causes our hearts to warm into a particularly jovial conviviality at Christmas time. Never does the Lounger's open fire crackle with such aggressive jollity as now; never does the fragrant tobacco smoke curl upward so gracefully; never is the delightful solace of an arm-chair so welcome as at Christmas, when perhaps the

contrast with the whistling wind and biting cold without, serves to emphasize the antitheses to the usual creature discomforts.

Perhaps the Lounger may be forgiven his little homily in view of the cause of it, and because there is a semblance of ingratitude, almost, in not acknowledging, to ourselves at any rate, our appreciation of whatever blessings may fall our way. And so in the spirit of the time, let the Lounger settle himself comfortably in his chair mid the cheery blaze of the hearth and the soft radiance of the lamp, there to meditate upon the joyful times of the past and the future.

Many, indeed, are the thoughts that crowd upon his memory at the familiar scenes in whose midst he has passed so many pleasant hours, and fain would he be to recount some of the interesting episodes of long ago, which now well up into his thoughts with such curious persistence. But the old yet ever new story of the phases of the Tech man's lot is daily recited by the twelve hundred men at Technology and needs no extended rehearsal now. Freshman, Sophomore, Junior, Senior—and then? This logical sequence of a Tech man's existence—that is, with proper modifications and exceptions—forms, to be sure, an interesting train of events whose divers episodes provide such a variety of life. Verdancy, pomposity, jollity, dignity, and finally a modest sense of complete incapacity may possibly indicate the "leading motives" of the cycle which the trembling youth enters upon, finally to become assured, strengthened, sobered, and bachelored within an inch of his life.

All this might lead the Lounger into an empty vein of speculation, alike unprofitable to himself and to his readers, which leads him to remark in passing upon the concordance of the ideas upon the subject of speculation possessed by Cervantes and himself. He will refrain, however, from considering so attractive a subject, and content himself merely with the sight of the visions of the past, will renew his acquaintance with many a ghost of bygone years, and will dream away the blissful hours till the coming of the savory goose. Not even the progress of the interesting events in Ninety-six shall disturb him, not even shall the bamboo cane of our jaunty Sophs arouse his interests, nor shall anything be suffered to mar the peace and joy of his brief vacation. And so with good feelings of the utmost indifference to mundane concerns, he will wish to all his friends long life, a Merry Christmas, and a Happy New Year.



As they sit upon the sofa,
 A familiar tune she trills.
 "Draw me nearer," is the whisper;
 The enraptured youth fulfills.
 —*Oberlin Review.*

INCONSISTENT.
 They used to think the world was flat—
 'Tis round we now aver—
 But still to corners of the earth
 We often times refer.
 —*Trinity Tablet.*

ALWAYS APROPOS.
 Said he, "May I speak a word with you?"
 Said she, "I'm at your disposal
 Whether or not 'tis apropos."
 Said he, "'Tis apropos-al."
 —*The Lafayette.*

THE GERMAN BAND.
 It had but one tune and they didn't know that,
 Yet the band played on.
 When phazed by a sharp they would put in a flat,
 And the band played on.
 Till I, getting desperate, hurled a brickbat;
 The Leader knows where it hit at,
 And close in its train came a maltese dead cat,
 Still the band played on.
 —*Yale Record.*

AT THE SYMPHONY.
 I sit and listen and love it all,
 Here by the orchestra.
 The violins, how they plead and call,
 Taking the voice of her!
 The brasses brave have a martial tone,
 The cymbals clash in strife;
 The grave bassoons half muse, half moan,
 Chanting the deeps of life.
 The 'cellos brood, and the flutes rise clear
 In a cry that soars and sings;
 The rippling harps ensnare mine ear
 With a vibrant rush of wings.
 O sweet with words no lips may dare,
 This speech of the orchestra!
 And yet, that burst from the wood-wind there,
 Was it weal or woe of her?
 —*Trinity Tablet.*

ALAS.

A lass more sweet
 You will not meet
 In any street,
 Alas!

A miss above
 All dreams of bliss,
 She takes my love
 A miss.

—*Cornell Era.*

JAMIE'S WORD WI' THE SEA.

(A Waitin' for Jennie.)

Ye'll no fret ye mair the noo,
 Wull ye, sea?
 Like ye've dune the winter through,
 Roarin' at the sands and me.

Ye were wearyin' yersel'
 Till her bit,
 Wee, licht fuitstep by ye fell,
 Ay, but lookee noo! an' quit!

Ken ye no the way she rins?
 Hoo her hair,
 Ower-muckle fer the pins,
 Blaws about her everywhere?

Ye'll no stop yer clattrin' din?
 Puir blin' thing!
 Ye'll no see her happy rin;
 "Jamie!" ye'll no hear her sing.

Hoots! Awa', ye loupin' sea,
 Doon yer' sands,
 Jinnie's callin' doon tae me!
 Jinnie's haudin' oot her hands!

—*Columbia Lit.*

WINTER AND SUMMER.

Beneath the arbor's clamb'ring vine
 Pierced by a moonbeam here and there,
 I tightly held your hand in mine,
 And softly smoothed your rippling hair.
 Your head upon my shoulder lay,
 You whispered you were mine away—
 'Twas last July.

The summer now, alas, is spent;
 Our ways no longer blend,
 On books and college I'm intent,
 While you to pleasure tend.
 But oft I drop philosophy
 To pause a bit and think of thee—
 And last July.

When winter snows deck hill and dale
 In white to rival thy soft arms,
 Pray, will my pleadings still avail?
 Still may I claim thee and thy charms?
 Or wilt thou then my colors furl?
 And prove thyself a summer girl—
 By Christmas Tide.

—*Ex.*



**Football, Field and
Country Outfits**

- | | |
|-----------------|-----------------|
| Negligee Shirts | Fishing Shirts |
| Waterproofs | Gymnasium Suits |
| Sweaters | Guernseys |
| Towels | Wrappers |

English Waterproofs
For Ladies and Gentlemen

For Storm, for Street, for Traveling.
The latest production, \$7.50 to \$45.00.

English Hold-alls
Steamer Wraps and Rugs

NOYES BROS.

Agents for the Celebrated

HUMBER CYCLES.

In every cycle factory in the world HUMBER Cycles are admittedly the best product in cycle construction which inventive genius, precise methods, skilled mechanism, and unlimited facilities have produced. They are the standard of supreme excellence in all parts of the civilized world. Send for catalogue.

SHIRTS.

Gentlemen's Dress and Business Shirts, \$1.50, \$2.00, \$2.50 and upward.
NEGLIGEE SHIRTS, \$1.50, \$2.00 and upward.

BICYCLE AND GOLF OUTFITS.

Lounging and Blanket Wraps, \$5 to \$25.

GLOVES. The New Grip Driving Glove, the Famous London Tan at \$1.35. Fownes' New Craven Tan, Fownes' New Cavendish Tan, Fownes' Best Cheverette Gloves.

PAJAMAS or East India Sleeping Shirts, and Long Night Shirts, made from English Flannels, Cotton and Silk, for steamer, sleeping car, yachting, or hunting.

SPECIAL LAUNDRIES for Dress Shirts, for Family Work, for Collars and Cuffs. The BEST work possible to be done.

NOYES BROTHERS,

Washington and Summer Sts., BOSTON, MASS., U. S. A.

Established 1828.

CHAUNCY HALL SCHOOL

HAS LONG MADE A SPECIALTY OF

PREPARATION FOR

TECHNOLOGY.

REFERENCE is made to the INSTITUTE FACULTY in regard to the thoroughness with which Chauncy-Hall pupils are fitted, not only for entering the Institute, but also for pursuing successfully their subsequent work. Preparation, also, for business and for college.

393 Boylston Street, Boston.

(Very near the Institute.)

If You Draw,

PURCHASE YOUR . . .

Drafting Instruments,
Drawing and Blue Process Papers,
Scales, Triangles, Curves,
T Squares, Colors, etc.,

FROM THE MANUFACTURERS.

Wadsworth, Howland & Co.,

INCORPORATED,

Branch Store: Grundmann Studios,
adjoining Architectural Building.

Main Office: 82 & 84 Washington St., Boston.

Factories: Malden, Mass.

SPECIAL RATES TO STUDENTS.

**ALBERT BENARI,
Tobacconist,**

33 TREMONT STREET, - - BOSTON, MASS.

Cigarettes, Tobacco, and Smokers' Articles.
Agent for Hale's Smoking Mixture.

Scientific Books } DAMRELL & UPHAM,
The Old Corner Bookstore,
283 Washington St., Boston.

**DR. CHARLES P. VESPER,
DENTIST,**

194 Boylston Street, opp. Public Garden,
Boston.

CLASS-DAY INVITATIONS,

BLANK BOOKS, FOUNTAIN PENS,

CAN BE FOUND AT THE CO-OPERATIVE STORE,
H. H. CARTER & CO., 5 Somerset St., near Beacon.

MANDOLIN, Banjo and Guitar Lessons.

Instruments, Best Strings, Latest Music, etc.

G. L. LANSING, No. 171 Tremont St.

Ask for Mr. Lansing.

Gentlemen! I wish to call your attention to the fact that I am **paying** the **highest Cash Prices** for **Cast-off Clothing**. Also **Cleaning** and **Repairing** done at short notice. Money to loan. Send postal to

M. KEEZER,

117 I-2 Pleasant Street, Boston.

I can be found outside the Technology Buildings on Boylston St. daily



MESSENGER & JONES,

High Class

Tailors,

388 Washington St., Boston.

ALL GARMENTS CUT IN STRICT ENGLISH STYLE.

M. J. T. Co-operative.

New Tech Pin.

HENRY GUILD & SON

Have the best Tech Pin yet for 75 cents; also a combination of gold and silver for \$1.25. For sale at the Institute and

433 Washington St., Boston.

**OUT OF ?
PAPER ?**

If so, no store in Boston can give you better value for your money than ours.

**BOSTON LINEN, BOSTON BOND,
and BUNKER HILL**

are the nicest papers in existence, and can be had in all the correct sizes, daintiest tints and latest finishes. Full lines of Students' Notebooks, Theme Papers, and general stationery.

SAMUEL WARD CO., 49 Franklin St., Boston.

ALL KINDS

Woodworking Machinery.

S. A. WOODS MACHINE CO.

172 High Street, Boston.

COLUMBIA TAILORING ROOMS,

Ladies' and Gents'

FINE * TAILORING.

DRESS SUITS TO LET.

Fancy Dyeing and Cleansing. Goods called for and delivered free.

597 I-2 TREMONT ST., BOSTON.

I. SHEINWALD, Manager.

PHILADELPHIA ICE CREAM COMPANY,

150 Tremont Street, Boston.

Telephone No. 1060.

E. M. LAWS, Prop.

Ice Cream Soda a Specialty.

Afternoon Delivery to Brookline and Highlands.

TECH Trade Solicited.

REPAIRING, ALTERING, AND PRESSING

Done promptly and in satisfactory manner.

Latest Style GARMENTS Made.

A. MOSMAN, 423 Boylston Street
(near Berkeley Street).

CHAS. C. HUTCHINSON,

SURVEYING INSTRUMENTS,

Charts, Books, and Compasses.

150 AND 152 STATE ST., BOSTON.

ARCHITECTURAL PHOTOGRAPHS,

The Largest Collection in America.

All the best Public Buildings, Churches, Private Houses,
and Business Blocks in Boston and New York.
Richardson's Works of Importance from all over New
England. Also a complete line of

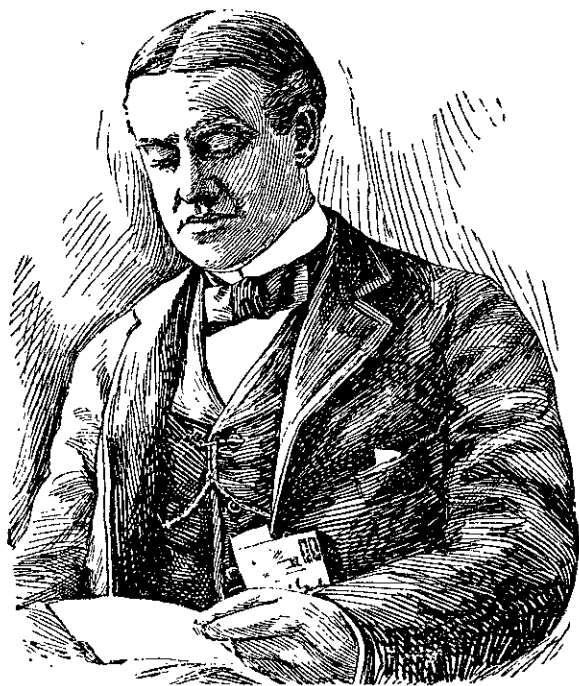
Art Photographs for Room Decoration.

STUDENTS WELCOME TO EXAMINE, WHETHER DESIRING
TO PURCHASE OR NOT.

SOULE PHOTOGRAPH CO., Publishers,
338 Washington Street, Boston.

FALL GOODS NOW READY.

OF HAMILTON PLACE BOSTON.



NAT GOODWIN.

Week beginning December 23, 1895.

Boston Theatre.—"Old Kentucky" is having a successful run. The charm lies in the characteristic scenes from Kentucky, particularly the Lexington race.

Park Theatre.—Those who buy tickets for a Hoyt play go prepared to laugh and have a good time, and they will find plenty of material for amusement in "A Contented Woman," which deals with the suffrage question, which is always

and ever both interesting, and, to the sterner sex, amusing. The play will amuse thousands before its engagement is ended.

Hollis Street Theatre.—"Ambition," the new play which Nat Goodwin presents to the public, is the strongest thing in which he has been seen. It is a story of love and politics. Now, when the public is discussing the Presidential situation in earnest, such a play appeals to them with unusual force and interest, and the piece provides Mr. Goodwin with a fine opportunity for displaying his particular talents.

Boston Museum.—Judging from the crowded houses at the Boston Museum, one would suppose that it was some novelty just being presented; people go a second and a third time, and the entertaining powers of the piece are not confined to any one class, but interest all, young and old. Remember it will only remain a few weeks longer.

Tremont Theatre.—Clara Morris, the American emotional actress, will be the attraction at the Tremont for Christmas week, in "Miss Moulton," "L'Article 47," and "Camille."

Castle Sq. Theatre.—The best proof of the favor with which the present system of giving operas weekly at the Castle Square is received is by the reception accorded them each Monday night. The production of "Rip Van Winkle" was an immense success, but so is each opera they have given us, which is owing not only to the company, but the conscientious care and liberality of the management.

LEADING OUTFITTERS

OF

High Grade Mackintoshes

AT POPULAR PRICES.

For the Principal Colleges in New England,
Regular Co-operative Discounts.

CLEVE & KRIM,

Metropolitan Rubber Co.

49 Summer Street, Boston.

SHOESFor **STUDENTS AT TECH**

\$4, \$4.50, \$5, \$5.50, and \$6 a pair.

Thayer, McNeil & Hodgkins,

Members of }
Co-operative. } 47 Temple Place, Boston.

F. L. DUNNE, Maker of Men's Clothes.

Sporting and Muffi Dress of every Description.

Exclusive London Fabrics for Golfing,
Riding and Bicycling. Sample garments of the Latest London Fashions in Sporting Clothes.

TRANSCRIPT BUILDING, BOSTON.

COWLES ART SCHOOL,

145 Dartmouth Street.

Special attention given to EVENING CLASSES FOR TECH STUDENTS in life and cast drawing.

Address —————

F. M. COWLES, Manager.

Tuition, \$4.00 per Month. Three Evenings per Week.

THE BRUNSWICK

BOSTON.

Boylston and Clarendon Streets,

(Adjoining Copley Square)

Near the Museum of Fine Arts,
New Public Library, New Old
South Church, and opposite
Trinity (Phillips Brooks')
Church, and Institute
of Technology.

**KEPT ON BOTH AMERICAN AND
EUROPEAN PLANS.**

BARNES & DUNKLEE, Proprietors.

H. H. BARNES, Manager.



FOOTBALL SUPPLIES . . . We can furnish every requisite for the game —

**UNIFORMS, HEAD HARNESS, SHIN GUARDS,
NOSE PROTECTORS, SHOES, etc., etc.**

A full assortment for Fall and Winter Sports. Send for complete Catalogue.

The OFFICIAL FOOTBALL GUIDE for 1895, edited by Walter Camp, and rules revised by committees from Yale and Princeton, and Harvard, Pennsylvania and Cornell. Price, ten cents.

WRIGHT & DITSON, Boston, Mass.

Wholesale, 95 Pearl Street.

Retail, 344 Washington Street.

DAME, STODDARD & KENDALL.

We are making a specialty of

FOOTBALL AND GYMNASIUM CLOTHING.

Also carry everything pertaining to Football and Gymnasium Purposes

Discount to Tech students.

NO. 374 WASHINGTON AND NO. 2 FRANKLIN STREETS BOSTON.



The Richmond Straight Cut No. 1 Cigarettes.

Cigarette Smokers who are willing to pay a little more than the price charged for the ordinary trade cigarettes, will find this brand superior to all others.

These **Cigarettes** are made from the brightest, most delicately flavored, and highest cost **Gold Leaf** grown in Virginia. This is the **Old and Original Brand of Straight Cut Cigarettes**, and was brought out by us in the year 1875.

Beware of imitations, and observe that the firm name as below is on every package.

ALLEN & GINTER

THE AMERICAN TOBACCO CO., SUCCESSOR,

Manufacturer,

RICHMOND, VIRGINIA.

QUICK LUNCH

BOYLSTON CAFÉ,

A. ALGAR, Proprietor.

707 BOYLSTON ST., corner Exeter.

HOTEL PLAZA,

419 Columbus Ave., Boston.

Pioneer of the new hotel center in Boston. Noted for its superb location, superior rooms, excellent cuisine and service. Standard hotel for giving more value for price than any first-class hotel in city.

BARBER SHOP

Everything in connection first class.
College work solicited.
Shaving, 10 cents.

BILLIARD ROOM

F. S. FROST, Pres.

H. A. LAWRENCE, Treas.

H. C. GARDNER, Sec'y

THE RIGHT PLACE TO BUY MATHEMATICAL INSTRUMENTS,

Colors, Drawing Papers, Blue Process Papers, T-Squares, Scales, Curves, Triangles, and all kinds of Architects' and Engineers' Supplies and

Artists' Materials

AND PICTURE FRAMES, IS AT

FROST & ADAMS CO., 37 CORNHILL, BOSTON, MASS.

NEW CATALOGUE FREE ON APPLICATION.

Importers, Wholesale and Retail Dealers.

Special Rates to the M. I. T. Students.

GEO. H. GREENWOOD,

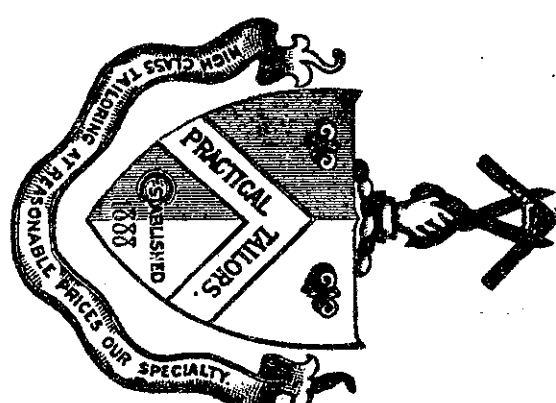
9 AND 11 BOYLSTON STREET,

DIRECT IMPORTER OF

FRENCH AND ENGLISH BRIAR PIPES

AND SMOKERS' NOVELTIES

The Most Complete Stock of Fine Goods in the City.



HIGH CLASS TAILORING

at Reasonable Prices
our specialty.

Suits and Overcoatings,

\$35 and upward.

TROUSERINGS, \$6 and upward.

Dress Suits from all fashionable
cloths, silk lined and faced, \$50
and upward.

NOTE.—We are Practical Tailors and
Cutters, and give our personal atten-
tion to the cutting and fitting, all gar-
ments being made up on the premises
under our constant supervision, thus
enabling us to produce the very best
garment in fit, style, and workman-
ship, and at a price which we are con-
fident is about one third less than the
same class of tailoring elsewhere.
INSPECTION OF SAME INVITED.

ALLAND BROS.

PRACTICAL TAILORS,

3 and 4 Park Street,

(STREET FLOOR)

Notice our Window Exhibit.

Priest's Dining Room,

102 Dartmouth Street, Boston.

21 Meals (full ticket), \$4.00. 14 Meals, Breakfast and Dinner, \$3.00. 7 Meals, Breakfast, \$1.50.
7 Meals, Lunch, \$1.20. 7 Meals, Dinner, \$1.75.

HOURS FOR MEALS.—Week Days: Breakfast 6 to 10; Lunch, 12 to 2.30; Dinner, 5 to 8. Sundays: Breakfast, 8
to 10.30; Dinner, 12.30 to 3.30; Lunch, 5.30 to 7.30.

C. M. PRIEST, Proprietor.

NECKWEAR

UMBRELLAS

L. E. FLETCHER & CO.

College Hatters and Outfitters.

Latest Styles and Popular Prices. Custom Shirts a Specialty.

M. I. T. CO-OPERATIVE SOCIETY.

No. 158 Boylston Street, Boston.

GLOVES

CANES