

Entered at the Post Office, Boston, Mass., as Second Class Matter.

## TELUTION GIRCO + Canting + Uses

Written by Prof. Robert J. Roberts, the originator of the famous "Roberts Dumb-bell Drill." A copy of this little volume will be presented to young men visiting the Gymnasium of the Boston Young Men's Christian Association, cor. Berkeley and Boylston Streets. Open every week day from 8 A. M. to 10 P. M. ...

TAMES L. GORDON,

General Secretary.

GEO. ALLEN, JR., Secretay Main Department.



Offers large and pleasant outside rooms, from \$7.00 per week upward.

Dining room s conducted on both American and European systems.

At reasonable rates.

LEVI B. GAY, PROPRIETOR.

FREDERIC LORING, Manager.

## ARTHUR S. DOANE & CO.,

#### ENGRAVERS AND STATIONERS.

27 KILBY STREET.

BOSTON.

WEDDING AND VISITING CARDS.

#### COMPANY. GENERAL ELECTRIC

AND THOMSON-HOUSTON SYSTEMS.

Electric Lighting.

Electric Power.

Electric Railways.

SEND FOR OUR CATALOGUES

BRANCH OFFICES:

620 Atlantic Avenue, Boston, Mass. 173, 175 Adams Street, Chicago, III. 264 West Fourth Street, Cincinnati, O. Gould Building, Atlanta, Ga.

42 Broad Street, New York. 509 Arch Street, Philadelphia, Penn. 401-407 Sibley Street, St. Paul, Minn. Masonic Temple, Denver, Col.

15 First Street, San Francisco, Cal.

YOUNG MEN'S SHOES OF EVERY DESCRIPTION.

g Fashionable, Durable, and Moderate in Price.

Co-operative discount to students of Tech.

Thayer, McNeil & Hodgkins,

BOSTON. 47 TEMPLE PLACE.

## IS MADE EXPRESSLY FOR GENTLEMEN.

WHEN WE MAKE THE ABOVE ANNOUNCEMENT WE MEAN JUST THIS:

## It is made in Proper Style, Of the Best of Material, By the Best Workmen we can Hire.

It is not, like hundreds of factory-made shoes, made for shoe dealers to sell at \$3.00 or \$4.00 through extensive advertising.

We do an immense business in Boston, New York, Philadelphia, and other large cities on our Crawford Shoe alone, and we do it on the GOOD REPUTATION of our shoe.

Think of this, visit one of our stores, and examine the shoes for yourself. They are JUST AS GOOD as they look.

#### CRAWFORD SHOE STORES BOSTON. IN

611 WASHINGTON ST., opposite Globe Theatre.
225 WASHINGTON ST., next door to Thompson's Spa.
Under UNITED STATES HOTEL, cor. Kingston St.
56 MAIN ST. (Charlestown Dist.), Boston.

45 GREEN ST., near Bowdoin Square.
20, 22 and 24 PARK SQUARE, near Providence Depot.
182 and 184 BOYLSTON ST., near Columbus Avenue,

BOUVÉ. **CRAWFORD** Maker. å CO. Corp.,

#### BOOKBINDING

IN EVERY STYLE.

ALEX. MOORE, 3 School Street, BOSTON.

#### HOMEWARD BOUND.

BY SEA AND RAIL.

#### The Norfolk Route.

The palatial steamships of the Norfolk Route ply semi-weekly and direct between

#### BOSTON, NORFOLK AND BALTIMORE,

Sailing from Central Wharf, Boston,

#### Every Tuesday, Thursday and Saturday, at 2 o'clock P. M.

Connecting with Rail and Water Routes for Washington, D. C., the South, Southwest, and Pacific Slope.

You are respectfully invited to inspect our steamers, and see for yourself the accommodations offered.

C. P. GAITHER.

A. M. GRAHAM,

Soliciting Agent, 290 Washington St.,

Agent, Central Wharf.

BOSTON, MASS.

#### ALL RAIL.

#### The Shenandoah Valley Route.

The Shenandoah Valley Route connects with all lines from Boston to New York, and thence is via the world-renowned Pennsylvania Railroad, or picturesque Baltimore & Ohio, passing through Philadelphia, Harrisburg, Hagerstown, Antietam Battlefield, Old Charlestown, made famous as the place where John Brown was executed, or Wash. ington, Shenandoah Junction, the wonderful Caverns of Luray, the historic Natural Bridge, on to Roanoke and the magic cities of the New South, Bristol, Knoxville, Chattanooga, Nashville, Decatur, Florence Sheffield, Corinth, Grand Junction, Memphis, Little Rock, and Texas.

Kansas City, Colorado, Utah, and the Pacific Coast.

Chattanooga, Fort Payne, Birmingham, Meridian, Vicksburg, Shreveport, Texas,-Cleveland, Tennessee, Dalton, Rome, Anniston, Calera, Selma, Montgomery, Mobile, New Orleans, Old and New Mexico, and the Pacific Coast.

Atlanta, Macon, Jesup, Brunswick and Florida.

Through Pullman Car service from New York, Washington and Norfolk, to Roanoke, Louisville, Knoxville, Chattanooga, Nashville, Memphis, Birmingham, New Orleans,

C. P. GAITHER, N. E. Agt., 290 Washington St., Boston.

## DINING ROOMS.

100 and 102 DARTMOUTH STREET. 397 COLUMBUS AVENUE.

# Mr. HALE'S

Place, Boston.

Prepares for the Institute of Technology and for Harvard College.

Inquire of the former pupils of the school who are now in the Institute in regard to the preparation given.



# PHOTOGRAPHY.

CRAYONS.

WATER COLORS.

PASTELLES.

Take Elevator.

Easy of Access.

Centrally Located.

Occupying the large and commodious rooms comprising the entire top floor of the building at 611 Washington Street, opposite the Globe Theatre, where we have the largest and best northern light in the city of Boston.

At the new studio we have every facility for sustaining our reputation as excelling in "group pictures."

#### THE UNION GYMNASI 48 BOYLSTON ST. BOSTON.

SEASON OF 1892-93.

The Union Gymnasium opens October 10th, after extensive repairs and additions.

#### Latest Sanitary Plumbing.

Entirely new and improved bathing facilities and new apparatus, part of which has never before been introduced into any gymnasium, making it the most completely equipped and largest gymnasium in Boston. It is above the street level and open to light and air on every side.

Cards with full particulars may be had upon application.

#### TERMS.

Including the Union Membership (One Dollar), and entitling to all its privileges.

For One Year, use of Gymnasium after 7.00 P. M., and on holidays for such time as it may be open, \$5.00 For One Year, use of Gymnasium at all times when Keys, to be refunded on return of same JAMES W. MONTGOMERY Supt. GERMAN F. HOFFMAN EDWARD O. OTIS, M.D., (Harv.) Medical Director. George Peirce, Sec'y.

WM. H. BALDWIN, Pres.

## DRAFTING INSTRUM

DRAWING AND BLUE PROCESS PAPERS

Selected with especial reference to the requirements of Students of the Institute.

Scales, Triangles, Curves, T Squares, Etc.

## WADSWORTH, HOWLAND & CO.,

82 AND 84 WASHINGTON STREET, BOSTON.

SPECIAL RATES TO STUDENTS.

267 STATE STREET, CHICAGO

## L. P. HOLLANDER & CO.

SPECIAL DEPARTMENT FOR YOUNG MEN.

#### FINE TAILORING.

High Class Ready-made Clothing.

Furnishing Goods, Hats and Caps,

New and Correct Styles for Spring Wear.

The Best Goods at Moderate Prices.

202-212 BOYLSTON STREET and PARK SQUARE, BOSTON.

# Frank Wood,

Printer,

352 Washington Street, Boston.

#### SPECIAL RATES TO STUDENTS!

## F. J. KALDENBERG CO.,

MANUFACTURER OF

# Meerschaum and French Briar Pipes, Cigar and Cigarette Holders,

Walking Sticks, mounted in Gold, Silver, Ivory and Buckhorn.

#### CLASS CANES,

Made and Mounted after any Design.

PIPES BOILED, REPAIRED, AND MOUNTED IN GOLD AND SILVER.

Repair Work and Engraving done on the premises.

## 338 WASHINGTON STREET.

**ELECTRIC MOTORS** 

. . FOR . .

ALL POWER PURPOSES.

ELECTRIC

Hoisting Apparatus.

Thomson - Houston Practical & Successful Systems

Motor Co.,

620 Atlantic Ave.,

BOSTON,

THE ONLY

. . OF . .

Electric Tramways

. . ARE THE . .

EDISON AND THOMSON-HOUSTON.

#### DANCING.

**PRIVATE** ACADEMY, No. 24 DWIGHT STREET.

Evening Classes from Oct. 1st to May 1st. Private Lessons daily from 10 to 6. Please call or write.

Drawing Boards, Papers, Inks, Pens, Instruments, and Fountain Pens

At Discounted Rates.

## A. D. MACLACHLAN,

Tech. Co-operative Store. 214 Clarendon St., Boston, Mass.

## The Electrical Engineer.

A Weekly Review of Theoretical and Applied Electricity.

ARE YOU a STUDENT, an ELECTRICAL ENGINEER, an ELECTRI-In any case you will find CAL EXPERT, or in any way interested in Electricity? THE ELECTRICAL ENGINEER an interesting and useful weekly visitor. It is the oldest general electrical journal in America, and the leader in technical excellence and enterprise.

THE ELECTRICAL ENGINEER is in magazine form, convenient for reading, preservation and binding, and is amply and artistically illustrated. It is always up to date with electrical progress. Subscription, \$3.00 per year.

Address

## The Electrical Engineer,

203 Broadway, New York.

Subscriptions received at special student rates by the Editors of "The Tech."

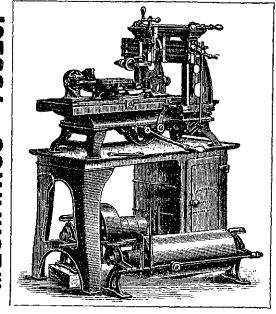
A PRACTICAL

## Hand or Power Planer

JR STOCK

INSPECT OUR

FCHANICS'

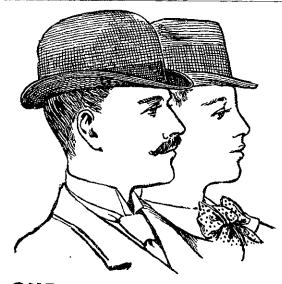


MINE Reed Lathes

A Large Assortment of Steel Rules, Calipers, Dividers and Small Tools.

## A. J. WILKINSON & CO.,

184 and 188 Washington Street, BOSTON, MASS.



OUR CHESTERFIELD,

\$3.

**OUR** HARVARD,

**\$2**.

Two new styles of hats for young men and youths in the correct shapes for Fall and early Winter. Blacks, Seal and English Browns, Pearl, Tan and Tobacco shades.

HAT DEPARTMENT.

A. SHUMAN & CO.,

BOSTON.

CLOTHIERS and OUTFITTERS.

# SAMUEL USHER, PRINTER,

NUMBER 171 DEVONSHIRE STREET,

BOSTON, MASS.

All kinds of School and College Printing for Classes and Fraternities executed promptly, and in the highest style of the art, at reasonable rates.

ESTIMATES CHEERFULLY FURNISHED.

#### BANJO AND MANDOLIN.

## G. L. LANSING,

Teacher, and Director of Clubs, 58 A WINTER STREET, BOSTON.

BEST INSTRUMENTS CONSTANTLY IN STOCK. MUSIC, STRINGS, ETC.

## ABRAM FRENCH CO.,

89, 91 and 93 Franklin Street,

IMPORTERS OF

## China, Glass and Fancy Pottery.

Wedding and Birthday Gifts

ALL THE LATEST PATTERN.

RICH CUT GLASS.

DINNER SETS,

From the Lowest Cost to Highest Grade.

WE ARE THE LARGEST IMPORTER OF HAVELAND & CO.'S FRENCH CHINA IN THE UNITED STATES.

Reasonable prices in our entire stock.

## ABRAM FRENCH CO.

## New Pictures.

Etchings, Engravings, Photographs, just received from the best American, English, French, and German publishers.

The largest and finest stock to select from in New England,—and prices satisfactory.

Special attention to Artistic Framing.

WILLIAMS & EVERETT,

190 Boylston Street, - Boston.



## J. C. LITTLEFIELD,

## Tailor and Outfitter,

21, 23 BEACON ST., BOSTON.

Exclusive Styles for Young Men.

DRESS SUITS A SPECIALTY.

DISCOUNT TO STUDENTS.

# FROST & ADAMS,

## DRAWING INSTRUMENTS

Supplies for Students, Architects, and Engineers.

SEND FOR ILLUSTRATED CATALOGUE.

No. 37 Cornhill, Boston.

LIBERAL DISCOUNT TO M. I. T. STUDENTS.



## "TECH" SPECIAL.

TAILORS TO THE TECH CO-OPERATIVE SOCIETY.

#### **EXCLUSIVE LONDON STYLES**

For students' wear our specialty, with prices moderate. Inspection solicited.

All goods warranted for excellence of make and superiority of colors.

のでは、100mmの

## Messenger Brothers & Jones

TAILORS AND IMPORTERS.

No. 388 Washington Street, Boston.

## Tech The

VOL. XII.

BOSTON, FEBRUARY 9, 1893.

No. 17

#### бне бесн.

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

BOARD OF EDITORS.

BOARD OF EDITORS.

RAYMOND BEACH PRICE, '94, Editor-in-Chief.

FREDERICK HOPPIN HOWLAND, '93.

ALBERT FARWELL BEMIS, '93.

FREDERIC WAIT LORD, '93.

JAMES RAMSEY SPEER, '93.

HAROLD ANTHONY RICHMOND, '93.

JULES GODCHAUX, '93.

HARRY LAWSON RICE, '93.

COLBERT ANDERSON MACCLURE, '94.

ANDREW DANIEL FULLER, '95.

EDWARD LEBER, '95.

CHARLES GILMAN HYDE, '96.

ANDREW DANIEL FULLER, '95, Secretary.

CHARLES REAY KNAPP, '94, Business Manager. CHARLES ROYCE BOSS, '93, Assistant 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.

FRANK WOOD, PRINTER, 352 WASHINGTON STREET, BOSTON.



HE Institute has purchased Winslow's Rink and the adjoining parcel of land for \$ 275,000. This gives us all that tract of land bounded by Trinity Place, our

present possessions, Clarendon Street, and the Old Colony railroad, and marks one of the most important events in our history.

The rapid growth in all departments has kept the Corporation busy providing the necessary room. Notwithstanding the fact that the Architectural Building has only been occupied a few months, the trustees saw that the present accommodations would soon be inadequate; moreover, if this property had been purchased by some firm intending to erect a large building upon it, the Engineering and Architectural buildings would have then been cut off from their entire light, which is naturally invaluable.

The purchase, however, is intended to provide for future needs, rather than present use, as we are now quite comfortably situated, on the whole. The Rink will, in all probability, be leased for a term of years, and consequently the next building will probably be erected between the Architectural Building and the Old Colony railroad.

The new acquisition is about fifty thousand square feet in area. This brings the area of the Institute property — excluding the shops, and also the land on Exeter Street, which is only leased — to about seventy thousand square feet in one block. This is certainly an excellent plant, more especially when we consider that it is in one of the most valuable districts in the country. The Institute is therefore assured of its home in Copley Square, and is free to expand to an enormous size. This has undoubtedly been the wish of every Tech man for years, and all are accordingly gratified.

One other wish, however, remains unsatisfied, and this is that some of our wealthy Alumni will endow the Institute with such an amount as its excellent work and magnificent plant deserve.

N the death of Bishop Brooks we have lost a man whose memory is especially dear to all Institute students, and whose absence we all most heartily mourn. Phillips Brooks, as Rector of Trinity Church, about which our College buildings are clustered, was ever present in our minds; and when he preached

annually the baccalaureate sermon to our graduating class, all who heard him knew that the whole soul of the man was in the words he spoke, and that he who should treasure up and follow his precepts would make as much as possible out of this life.

It is then most fitting that we, as students of the Institute, should show in some way the high esteem and reverence in which we held this man. Although in some ways unsatisfactory, we can suggest no more fitting manner for expressing the general grief in his loss, and our admiration for the man, than by answering, one and all, the call which has been sent out, and subscribing to the Institute fund, which will be handed over to President Walker, to become a part of the general fund for the monument.

Considered in some lights, nothing could be more fitting than that we should have a hand in the erection of this monument. A monument which is to become so familiar and sacred an object in the eyes of all present and future Institute men, should indeed be built in part by us.

"The three lower classes read the expression, and have only one interpretation for it. They feel how foolish they were to spend so much time in useless pastimes during "the last term," and how much better it would have been had they only been a little more careful about their cuts and their daily recitations. But to the Senior this sentence of three words has the deepest significance, and, when it has lost its meaning, that he will have severed his connection with the Institute as an undergraduate student is indeed a reality. It means more to him than he would at first be willing to admit, and to some it may mean more than they would at first hope to realize. The Senior has been with us for four long years, and has learned to know the Institute as a home, a play ground, an Alma Mater. But after "the last term" he leaves it, perhaps for ever, and begins his

fight with the business world, which may have many a hard knock in store for him. He will find that it is harder to get used to the ups and downs of the world, the older he gets, and that there is not always a kind professor or assistant at his shoulder to show him his mistakes and set him on the right track. But he will realize more, from day to day, what a boon to him an Institute education is, and how much of a start it has given him.

To all of the Seniors The Tech wishes the best results for "the last term," and Godspeed after they leave us in the spring.

#### COMMUNICATIONS.

The Editors do not hold themselves responsible for opinions expressed by correspondents.

TO THE EDITORS OF THE TECH:

In reply to the editorial which appeared in a recent number of The Tech, and which criticised rather severely some of the remarks made by myself at the annual meeting of the Football Association; I beg leave to state the following:—

In the first place, I made no report as acting president, as it has never been customary for the president to make one. Neither did I make any report as a delegate to the convention of the Triangular League, as the Institute is not a member of the League and hence has no right to send a delegate to its conventions. I was, however, instructed by the Executive Committee of the Football Association to present to the convention a formal application for admission to the League; which I did. This application was considered at the meeting and we were refused admission, which fact I duly reported to the Executive Committee. This ended my official connection with the affair.

At the annual meeting of the Association, when the matter of joining a league was being talked over, I stated that the Executive Committee had applied for membership to the Triangular League and had been denied admission. I also stated that I had talked with several of the delegates, after the meeting, and that they had said the only reason why Technology was not admitted was that the members did not desire to have more than three teams in the League.

This may be "an almost unintelligible explanation, utterly unsatisfactory in every respect, of the fact that

we were refused admission to a league composed of our old associates." It is, nevertheless, the only explanation that I was able to get; and I am afraid, if it does not satisfy "the students at large," that they will have to draw on their imaginations for a better one. That Technology was not "elbowed out by some carefully planned conspiracy, or allowed to slip out by dishonorable tactics," is self-evident, since we were not members of the league and could not slip out or be elbowed out. The real reason that we were refused admission may or may not be the one given above; whether it is or not is known only by the delegates that were present at the meeting.

In regard to some of the remarks in the letter signed by "R," which was published in the same number of The Tech, I will only say that any person who resorts to an annonymous letter in order to make personal criticisms is not worthy of any reply or consideration.

Very truly yours,

EDWARD D. CLARKE.

Boston, January 21, 1893.

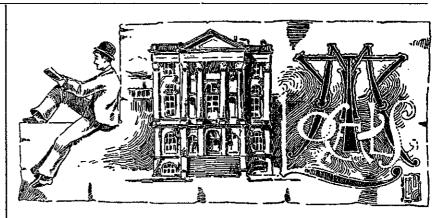
To the Editors of The Tech:—

With the beginning of this term it will be necessary for the Senior class to come to some definite decision in regard to the question of whether or not the cap and gown would be a suitable and advisable addition to the Class Day exercises. There have been several able communications printed already in your columns showing that, on the one hand the cap and gown would be the correct thing and on the other they would be entirely out of place in an institution of this kind.

It is very true, as was stated in No. 11 of The Tech, that the cap and gown are relics of the custom adopted at the English Universities, and that, looking at the question from a particularly ethical standpoint, there would be an incongruity in applying this custom to the Institute. But deciding this question solely by looking at the needs and requirements, which is generally admitted are many, in order to give to the graduating exercises the proper amount of dignity; how can we find anything which would lend more to the dignity of the occasion? The President of the Class has shown conclusively that the expense would not be more than we could all feel justified in making, if we knew that it would make our last meetings together seem more in the way which we would like to look back upon them in the future.

I would like to ask that President Walker and any of the Faculty, who care to do so, give us the benefit of their opinions through the columns of your paper. I am sure that their views upon the subject will be most valuable to us.

A '93 Man.



"Are the Freshmen all with us?"

The Modern Gorgons: Chemistry, Physics, Applied Mechanics.

Mr. Bernard will have charge of a Course IX. French section this term.

Professor Carpenter will conduct the secondyear English literature with Course IX.

"Technique" loses an earnest and devoted worker in the departure of Mr. Robeson.

Howe, '96, finds that at the second trial the exams. are easier to pass. Nevertheless he resigned.

Do not let it be said that you did not have a part in the erection of a monument to Phillips Brooks.

Did you get one? A picture of the football team in last week's Tech? Good, wasn't it?

A preliminary meeting of the "Institute Committee" will be arranged for Saturday or Monday next.

Mr. A. L. Kendall, formerly of '93, has returned to Tech, and resumed his course in Mechanical Engineering.

R. K. Sheppard, '94, Editor-in-chief of "Technique," has returned in good health to his work at the Institute, after an illness of a month or more.

The long-drawn faces and anxious questionings, "How did you come out?" have begun to subside, and the pressure of term work once more brings the weary-eyed and studious men to the front.

Mr. Robeson, Business Manager of "Technique," left for South Africa last Thursday. A host of Mr. Robeson's friends went to the

wharf to see him off. It will be safe to say his last recollections of the United States will be very pleasant.

The Senior Photographic Committee has decided to award Notman the contract for the class work. This appears to be a wise decision, as Notman has always done most excellent work for those classes that have patronized him.

Now is the time to call the attention of the Freshmen to the fact that their present course in Political History, is of practical value to them. Such courses are few enough at Tech, and, unfortunately, are generally most appreciated when they are over. A word to the wise is sufficient.

Now let the Grinds pour into the "Technique" box. Surely each one of us can recall some amusing incident, some good hit, or some apt saying which has occured since our entrance exams. Get them together now, put them in the "Technique" box, and let the bright side of Tech be well represented.

A Freshman's explanation: "It says in The Tech that one paragraph in the Dutch Exam. was a 'corker.' Why, I didn't think it so very hard, but you see the way of it is, these third-year men let things slide till just before the Exam." The assertion and complacency of Freshmen are truly proverbial.

All of the '93 Course II. and Course VI. men who did not have the opportunity of seeing the Watertown testing machine should make an effort to get the necessary permits to do so this term, for it is a sight which one is not often treated to. One of the largest testing machines in the United States.

The great French designer whom the Architectural department has engaged to succeed Professor Letang, has not yet arrived but it is hoped he will be with us some time during this term. Men who can take Professor Letang's place are rare, and we therefore ought not expect a suitable successor to be found immediately.

Mr. Bartlett, our instructor in Modelling, was called upon by the brother of the late Bishop Brooks, to take the death mask of the Bishop. The mask is a very perfect one, and this, together with the hands, which were also taken, will make it possible to produce an excellent statue of the great divine.

The Freshman, poor thing, is roasted again. Mr. F. H. Adams makes them draw in the architectural building, and assigns lockers for their material on the top floor of Rogers Building. "Good exercise before and after each recitation in that subject," says he. "Especially on a slippery day," say we.

Freshman (in exam. in military drill): "Lieutenant Hawthorne, will you kindly tell me what subdivision comes after C?"

Lieutenant Hawthorne: "Yes; D comes after C. I expected some such brilliancy as that."

There was an audible grin at this second Freshman with a pea-green shadow.

The beginning on course work by '96 men has caused considerable trouble in regard to conflicting recitations, especially in German and Chemistry. It is desired that every man should see the Secretary and the various instructors and settle the matter as soon as possible, as delay will cause a great deal of trouble, and not a few cage notices.

The class in Political History having been instructed to pay no attention to those persons outside affected with St. Vitus' dance, it will hereafter be entirely useless for Freshmen who are more than ten minutes late to shake the doors in attempt to gain admittance. Men bearing such propensities are, to say the least, not desired; so don't try it.

While the Freshmen were enjoying their vacation, or awaiting with impatience the long delayed reports, the sound of the saw and hammer resounded through the empty rooms and corridors of Rogers; and upon their return, a transition in the shape of a combined lecture, recitation, and drawing room greeted

them in room 43. "A wheel within a wheel," as it were.

Now that Institute men, and especially the Freshmen who have returned (for the semies always make their greatest ravages among first year men), have had a chance to look about them, they have discovered that many once familiar faces have disappeared, and that there are many more vacant seats at their disposal in the recitation rooms than there were but a few short weeks ago.

On Saturday morning, at the time of the usual drill recitation in Huntington Hall, Professor Sedwick lectured to the Freshmen on the "Hygiene of Student life." The lecture was made singularly interesting, and brought out many points which cannot fail to be of great value to every member of the class. The hearty applause which greeted Professor Sedgwick at the end, certainly proved how well his words were received and enjoyed.

There is a report circulated in the upper classes that there is a new method of marking and rejecting the drawing plates of the Freshmen in Mechanical Drawing. It is also stated, that although this system was adopted in the early part of last term, it was discontinued after one trial on account of purely gentlemanly reasons, and for fear it would corrupt the manners of the Freshmen. There is good authority for the statement that the first trial was an interesting one, and attracted too much attention.

The plan of work in second-year English Literature will be much changed this term. Three hours outside work is devoted to study of the new syllabus compiled by Mr. Dickinson and Professor Carpenter. Twenty minutes of each weekly recitation hour will be devoted to writing upon some subject included in the week's study, and the remainder of the hour to questions, talk, and recitation. This plan does away with the system which allows a man to let the lectures "slide" till the end of

the term, and will serve to keep the subject "up to date."

During the semiannual vacation, J. C. Brown, '93, was very seriously injured while driving at his home in Portland. The horse became frightened beyond the control of the coachman and all were thrown from the sleigh. Mr. Brown was thrown against a tree with considerable force, and received a severe blow just above the ear. He remained unconscious for five or six days, but at last accounts was recovering, and his doctor and friends are very hopeful for his complete recovery. accident is undoubtedly a most unfortunate one, as Mr. Brown would certainly have received his degree this year. We fear his injury is of too serious a nature to permit the hope of his being graduated this year with '93.

It happened last term, but it is too good to throw over. A certain professor, discussing with his class certain peculiarities of the race, said, turning to an evidently tired listener: "Now, Mr. F——, why is it, do you suppose, that one yawns during a lecture?" "Why," was the response, "we become so interested that we forget to breathe; hence it is necessary to take an especially long breath on realizing the absence of sufficient oxygen in the lungs." And the smile on the face of each that had awaited the discomfiture of the tired student to expand, changed to an appreciative roar, in which the professor joined with all heartiness.

The Boston Journal has the following: "It is a decided compliment to General Walker to be elected as successor to the late Emile de Laveleye in the Paris Academy of Political Sciences. Laveleye was one of the most voluminous of continental publicists, his works touching a wider range of topics than those of even our own Edward Atkinson. Such a diversity of study, of course, in a measure limited his position and influence in any one department, but nevertheless he stood well to the front among European economists.

To be selected to fill the vacancy caused by his death is an honor that any scholar might accept with pleasure."

It does not seem out of place for The Tech to call attention to the economic and historical courses which, through the courtesy of Professor Levermore and Dr. Dewey, are open to Institute men of all courses who are prepared to take them. The courses in History of Industry and in Social History are similiar in their treatment, and both consider the developement of modern methods and institutions,—the one in industrial, and the other in social relations. A third course in Socialism and Co-operation is an excellent supplement to Business Law or Political Economy, and will be treated by Dr. Dewey in his usual practical, energetic manner. Courses of such pratical nature and such broadening purposes are peculiarly valuable to Institute men, and will, we hope, receive as much recognition as possible.

The Senior class held a meeting on Saturday, February 3d, in Room 11, Rogers, and transacted the following business: The report of the Photographic Committee was accepted as presented by Chairman Dorman, of this Committee. He reported that The Notman Co. had offered the best rates, twenty cents for single photographs, and eighteen cents for each photograph where the amount ordered was \$10 or over. Special students to be included in the class photographs. Mr. Fowle, a member of the Committee, discussed at length the subject of photograph albums, and showed many suitable samples of albums. He also spoke of a beautiful design for an album which would be suitable for the class to present to President Walker. Mr. Bemis next introduced the question proposed in The TECH, concerning an "Institute Committee." Mr. Alden moved that the class elect two members to act with the president of the class as the representatives from the class of '93. This motion was carried, and Mr. W. G. Houck and Mr. M. Gorham were elected.

Mr. Godchaux then moved that the chair be empowered to appoint a committee of five to take charge of a class dinner to be given in March, after the condition examinations. This motion was carried. Mr. Bemis made a few remarks about the proposed monument to Phillips Brooks, which is mentioned elsewhere in this number of THE TECH, and said that President Walker had taken charge of a subscription list. No decided action was taken by the class upon this subject. Wason's motion that the class pay the class athletes' entrance fees at the closed athletic meetings was carried. The president proposed that the money necessary to do this be included in the class-day assessment. was some general discussion upon the subject of an Institute memorial from the class of '93. Nothing definite was decided upon. Mr. W. T. Dorman made a few remarks upon the World's Fair question. Mr. Godchaux moved that this question be dropped, and it was voted to lay this motion on the table. The meeting then adjourned.

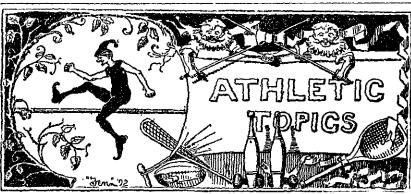
#### THESIS SUBJECTS.

COURSE VI.-ELECTRICAL ENGINEERING.

- C. V. Allen (with C. A. TRIPP): Tests of Belfast Lighting Plant.
- G. T. Blood (with A. G. Davis): Relative Motion of Diaphragm and Telephone Transmitter and Receiver.
- W. V. Brown (with A. C. Thomas): Tests on Thomson-Houston 15 H. P. Machines, Stray Power, etc.
- L. V. Buchanan (with A. A. Buck): Tests of Electric Light Station in Chelsea.
- A. A. Buck (with L. V. Buchanan).
- J. S. Codman, A. B. (with P. H. Wilder: Study of Potential, etc., of Thomson-Houston Constant Potential Dynamos.
- A. G. DAVIS (with G. T. BLOOD).
- E. D. DENSMORE (with L. B. DIXON): Calorimeter Method of Testing Small Motors.
- L. B. DIXON (with E. D. DENSMORE).
- A. G. FARWELL: Least Number of Vibrations necessary to determine Pitch.
- H. GILMORE (with G. T. HANCHETT): Study of Brush Dynamos.
- G. T. HANCHETT (with H. GILMORE).
- F. W. HADLEY (with J. E. WOODBRIDGE): Tests of Lexington Light Station.
- W. D. King (with G. E. McQuesten): Tests of Plant of Storage Cells.

- H. N. LATEY (with H. MAKI): Electric Street Car Motor Tests.
- H. Lewis, B. A.: Tests of Voltameters.
- H. MAKI (with H. N. LATEY).
- G. E. McQuesten (with W. D. King.
- H. A. Morss (with J. H. Reed): Tests of Thomson-Houston Dynamos at Cambridge.
- C. L. Norton (with P. H. Thomas): Measurements of Light.
- J. H. REED (with H. A. Morss).
- J. I. SOLOMON (with S. E. WHITTAKER, A. B.): Study of Alternating Currents from Cards of Dynamos and Transformers by the Ryan Electrometer, and other methods.
- L. V. STOWE (with C. TAINTOR): Losses in Converters.
- F. B. STUDLEY (with YORKE): Efficiency of Transformers.
- C. TAINTOR (with L. V. STOWE).
- A. C. THOMAS (with W. V. BROWN).
- P. H. THOMAS (with C. L. NORTON).
- C. A. TRIPP (with C. V. ALLEN).
- S. E. WHITTAKER, A. B. (with J. I. SOLOMON).
- P. H. WILDER (with J. S. CODMAN, A. B.).
- J. E. WOODBRIDGE (with F. W. HADLEY).

YORKE (with F. B STUDLEY).



FIXTURES.

Feb. 11. B. A. A.—Annual Open Handicap Games in Mechanics' Building.

March 3. Annual Interscholastic Scratch Games. March 11. M. I. T. A. C.—Fourteenth Annual Scratch

March 11. M. I. T. A. C.—Fourteenth Annual Scratch Games, Winslow's Rink.

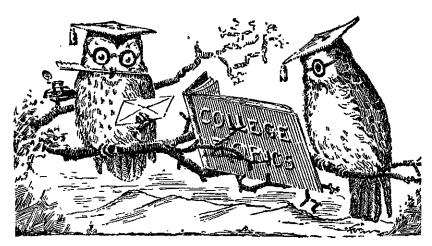
The several members of the Intercollegiate Football Association have had time to deliberate over the new rule adopted a short time ago, and various opinions have been expressed. None of these propose any other feasible method than the present one for the eradication of any tendency toward professionalism in college athletics. The strongest objection that can be raised against the law is that it fails to distinguish between a college and a university. The Intercollegiate Football Association is understood to be a university organization, and for that reason no member of such an institution of learning can be justly

barred from competing for a position on athletic teams of their respective universities. As it now stands, the question is no nearer solution than it was a week ago, and forms the topic of conversation among college men. Some scheme will, no doubt, be soon devised that will solve this all-important question.

From a study of the situation, as viewed by the institutions comprising the Association, we are able to give the following as the opinions prevailing in the different universities. Yale all is in a tangle. The students have repudiated the action of their athletic repre-These captains and managers are justified in resigning at any time, as the action of the students may be taken as a vote of lack of confidence in their ability to undertake such matters. Having thrown aside the rules presented by their own delegates, the students must themselves present regulations to be substituted. The rule has met the approval of all the captains and managers of their athletic teams, and it really gives Yale a decided advantage over her competitor.

At Princeton the rule has met with favor among the athletic managers, and also among the majority of students. They look upon the recent action at Yale as meaning the complete surrender of the principle of stamping out the semi-professional element in college athletics, Princetonians in general are merely awaiting with intense interest the outcome of this dilemma.

At the University of Pennsylvania there is more jollification over the recent turn of affairs. They have proposed many plans, and have decided now to hold their peace until the meeting of the graduate advisory board of the Intercollegiate Football Association, which meets in March. Then, it is expected, Yale will introduce some modifications. The latest decision Pennsylvania has arrived at, is to introduce an amendment that will put a time limit of four years on all players, beginning to operate from the time a man gains a position on any 'varsity team.



Mr. and Mrs. Cornelius Vanderbilt have tendered to the corporation of Yale College a building for students' rooms, to be erected on the college campus, as a memorial to their son, William Henry Vanderbilt, who was a member of the present Senior Class, and who died in May of last year. The new structure will necessitate the removal of old South College, and when finished will be the largest and finest building on the college grounds, and will nearly complete the inclosure of the quadrangle.

The students at Yale have voted against the legislation adopted at the meeting of the Intercollegiate Football Association a short time ago. This is the first time they have refused to sanction the action of their representatives at any meeting.

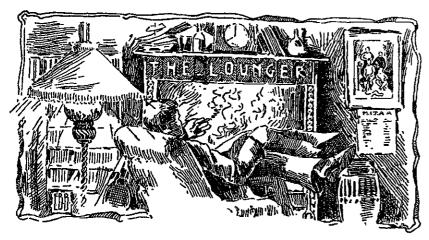
From the new Yale catalogue it appears that the authorities there have awakened to the need of greater attention to the study of English. Beginning with 1894 the entrance examinations are to include papers upon certain pieces of English literature, "selected as well for their probable attractiveness to the preporatory student as for their intrinsic importance." The questions are to be constructed with the special view of testing the candidate's familiarity with the subject matter, but weight is to be given to the literary form of the papers offered by the applicants. Already instruction in English has been extended to the Freshmen class. This is a field that has been too long neglected, and those who have had anything to do with the English of students know with what sad results.

. Cornell is represented on the world's congress auxiliaries of the world's fair by expresidents Andrew D. White and C. K. Adams, on the advisory councils on higher education and history; Profs. M. C. Tyler, J. M. Hart, H. S. White, and Benjamin I. Wheeler on the advisory council on literature, and Prof. H. Tuttle, on the advisory council on history. Cornell alumni are represented by E. H. Woodruff on the committee on libraries, and J. C. Arthur on the committee on science. The results of the recent examinations show only 38 men excluded from the university on account of insufficient scholarship. This is the smallest number for many vears. The policy of the university in insisting strictly upon its entrance conditions, which resulted in the rejection of over one hundred applicants in the fall, is amply justified by the results of these examinations.

The training season at Brown has begun, and the athletic team is already at work. The baseball team will begin in a few days. There is an unusual number of promising men in the Freshman class, and the baseball season promises to be favorable. Hugh Duffy of the Bostons, and T. J. Lovett, formerly of the Brooklyns, will again do the coaching. It is now the opinion that the team will take a Southern tour in the early spring.

The Christmas trip of the musical clubs was highly successful in a musical and financial way, and another short trip, which will take in some Pennsylvania towns, is being planned.

It is curious to note that Cornell University with \$8,000,000 endowment and an income of some \$500,000, is becoming hampered for funds. The explanation of this is that by the terms of its charter this University must educate free of charge 450 students from the State of New York, in consideration of the land grant which it received when founded. The cost of this free education is estimated at \$150,000 annually.



THE Lounger emphatically resents the assertion that his vacation was too much for him. It is a cowardly statement, and the person who made it knew at the time that he would never have dared do so had the Lounger been on the field to answer it.

The truth of the matter is that there was no room for the Lounger's usual weekly dissertation in the last Tech. as all have found out ere now. Should a set of resolutions be drawn up, setting forth the fact that the Lounger's familiar representation was missed on the last leaflet of the double number,—then he might take action to recover damages for exclusion from participation in the number's success; but barring such contingency the Lounger can only presume that he wasn't missed at all, which is a relief, if also somewhat of a humiliation.

The Lounger sat in his study one evening last week, listlessly scanning the head lines of an evening paper. Outside, the rain was coming down in timid, sneaking driblets, that froze when they got through coming. There was a steady drip, drip, going on in the direction of the window sill, while the skylight outside in the hall was suffering spasmodically in the same manner.

Occasionally the sound of the drops without would be interrupted by a piercing shriek which rang through the muddy vistas of the Back Bay as some belated denizen of the 4th precinct lost control of her feet and rested till somebody ran out to pick her out of the gutter. In fact, indulgent reader, it was such a night as Boston, and Boston only, can furnish. It was brought about by a skillful co-operation of many forces, natural and human.

In the first place, clouds had assembled on high according to the laws so admirably demonstrated by Professor Niles. Surcharged with moisture they awaited an opportunity. At a given signal from Boston's patron saint, the mercury began to rise. In ten minutes it had covered thirty degrees, and the thermometer registered 50° F.

Then the sluice gates above acted according to the poetical interpretation, and the surcharged clouds discharged their supercharge.

Ten minutes later the atmosphere arranged itself in layers a la Boston, according to temperature. Six feet from the ground ended the lowest layer—temperature 30° F. Then came piled up on this, successive layers of ever increasing temperature, carefully adjusted to produce the desired result. You all know the rest. In half an hour the ashes and sawdust scattered by the intelligent servant were covered by a thin veil of freezing water. An hour later the condition of the streets and pavements was that familiar to all of us.

Now the Lounger knew all this, and so when his eye was arrested by a communication in the paper aforesaid, setting forth certain beauties of Boston at that time of year, he very naturally paused, and read more carefully. Yes, gentle reader, it was true. Some ass, some double-barrelled, bean-collecting, Balaamite ass had had the nerve to spend a column in describing the beauties of Boston at the *present season*.

And the Lounger folded his feet and pondered over the excellent reasons for the assertions in the funny papers that the innocent and moss-grown Bostonian describes Heaven as slightly inferior to her own little town.

There was another man who used another column to explain why the Common attracted (!) so many strangers to Boston, but that's an other story—take the elevator.

#### Phyllis' Slippers.

Before the firelight's genial glow
She sits, and dreams of waltzes sweet,
Nor heeds the curious gleams that show
Grandmamma's slippers on her feet.

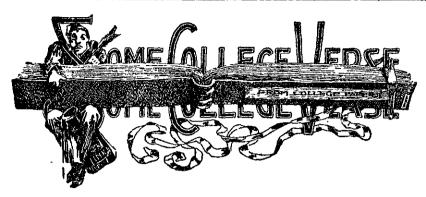
Ah, happy slippers, thus to hold
So rare a burden! It were meet
That you should be of beaten gold
To clasp so close such dainty feet.

H. A. R.

#### IN BASEBALL.

- "Will you drop into my mitten?" Said the fielder to the fly.
- "No I thank you," said the spheroid As he passed the fielder by.
- "My skin is very tender
  And your mitten's hard and tough,
  And though I fear you may object
  I think I'll use a muff."

-Williams Weekly.



#### BEHIND THE MASK.

Sir Cupid once, as I have heard, Determined to discover What kind of man a maid preferred Selecting for a lover. So, putting on a soldier's coat, He talked of martial glory; And from the way he talked, they say She seemed to like—the story.

Then with a smile sedate and grim, He changed his style and station; In shovel hat and gaiters trim He made his visitation. He talked of this, discoursed on that, Of Palestine and Hermon; And from the way he preached, they say She seemed to like—the sermon.

Then Cupid, puzzled in his mind, Discarded his disguises; "That you no preference seem to find, My fancy much surprises." "Why so?" she cries with roguish smile, "Why, prithee, why so stupid? I do not care what garb you wear, So long as you are-Cupid." -Williams Weekly.

#### FORSAKEN, ETC.

There's something about my sweetheart That fills my heart with alarm, And makes my suit seem hopeless-'Tis that other fellow's arm.

-Brunonian.

#### A PORTRAIT.

A slim young girl, in lilac quaintly dressed; A mammoth bonnet, lilac, like the gown, Hangs from her arm by wide, white strings, the crown Wreathed round with lilac blooms, and on her breast A cluster; lips still smiling at some jest Just uttered, while the gay, gray eyes half frown Upon the lips' conceit; hair, wind blown, brown Where shadows stray, gold where the sunbeams rest.

Ah! lilac lady, step from your gold frame, Between that starched old Bishop and the dame In awe-inspiring ruff. We'll brave their ire And trip a minuet. You will not? Fie! Those mocking lips half make me wish that I, Her grandson, might have been my own grand-sire. -Trinity Tablet.

#### WOMAN'S WANTS.

"Man wants but little here below," That cannot be denied; But woman wants the earth, you know, Then isn't satisfied.

-Ex.

#### EQUIVOCAL.

On the wealthy Larica's worn features I wrote In rhyme some extravagant praise. The verses were spurned (and I'm in the same boat), For I called them "Some Lines on her Face."

-Brunonian.

#### AN EQUINE WONDER.

Look ye! a horse which oft has won, A prize for him whose work he's done, As good a trotter o'er hard ground As can by any one be found. Which never yet has duty shirked, Nor murmured e'en when overworked, Besides a steed to ride upon, An undenied phenomenon, For on inspection it appears That this good horse has got dog ears. -Trinity Tablet.

#### FRESH ADVICE.

"We've had a tiff," said Soph to Fresh, "And now she will not speak to me; What letter had I better write?" And Freshie answered, "Let her be!"

-Red and Blue.

#### UNDER THE MISTLETOE.

She sat in the deep old casement And watched the daylight fade; She was spending her sixteenth Christmas, This fair little English maid,-And she pictured a splendid romance Like the tales of long ago, While she twined in the lace above her A spray of mistletoe.

The last clouds slowly vanish, Until through the window slips A beam of golden sunlight, That touches her saucy lips. No more will she wait a lover Or his tender greeting miss, For one has come in the twilight And stolen a Christmas kiss.

-Cynic.

#### PROPHETIC.

"Coming events cast shadows before," So thus we see from afar, That the Freshman will go to the Bench, And the Sophomore to the Bar!

- Williams Weekly.



#### OUR NEW SHIRTINGS

Are now ready. French Madras, English Oxfords, Scotch Cheviots and Wash Silks. For Men's Negligee and Outing Shirts; for Ladies' and Children's Waists and Blouses, or sold by the yard.

## THE PRINCE'S CRAVAT FOR GENTLEMEN, NEW.

Also, English Long Scarfs, The London Puff, and New Ascots.

Gloves made to our special order. The New Gold Tan, the Famous London Tan at \$1.35, Fowne's New Cavendish Tan, Fowne's Red Tan.

Shirts for Business Wear, Outing, Negligee, Traveling, and Dress Occasions, most thoroughly made, and always in stock for immediate use.

Pajamas, or East India Sleeping Suits and Long Night Shirts, made from the best English Flannel, Cotton and Silk, for Steamer, Sleeping Car, Yachting or Hunting; Medium and Heavy Weights for Men and Children.

Ladies' and Men's English Silk Umbrellas, in choice and entirely new designs, in Gold, Silver, and Natural Wood Handles, are just opened, \$2.75 to \$35, at Noyes Bros'.

## NOYES BROTHERS, Washington and Summer Streets.

Blazers, Sweaters, Tennis Suits.



And Clothing of all kinds,

#### CLEANSED OR DYED

and carefully pressed.

ALSO A

#### FINE FRENCH LAUNDRY DEPARTMENT.

## **LEWANDO'S**

French Dyeing and Cleansing Establishment,

17 Temple Place, BOSTON.

365 5th Avenue, - -

Bundles called for and delivered.

## St. Botolph Hall.

NEW TECH. DORMITORY.

Favorably situated at the corner of St. Botolph and Harcourt Streets, near all the Departments of the Massachusetts Institute of Technology.

## Furnished Suites

To let, including heat and baths.

#### Restaurant

In Building.

For terms apply on the premises.

GODFREY MORSE, PROPRIETOR.

## F. L. DUNNE,

TAILOR AND IMPORTER,

Transcript Building, 328 Washington St., cor. Milk St.,

BOSTON.

## SHOES

To be entirely Satisfying should have EASE, GOOD STYLE and DURABILITY.

This trio of Essentials are possessed by the



## FINE SHOES,

And we respectfully request Ladies and Gentlemen intending to purchase to allow us the privilege of trying on a pair; to see and feel this Shoe upon the foot, is to make a customer.

POPULAR PRICES

#### HATHAWAY, SOULE & HARRINGTON (Incorporated).

35 BOYLSTON STREET, Between Washington and Tremont Streets, BOSTON.

T. E. LOVEJOY, Manager.

You can save fully 25 per cent by purchasing your Fall Suit and Fall Oversack from

## LEOPOLD MORSE & CO.,

Cor. Washington and Brattle Streets.

We manufacture all our clothing, and have exclusive patterns in over one hundred styles especially adapted for young men.

AN INSPECTION OF OUR LARGE STOCK IS SOLICITED.

## L. E. FLETCHER & CO.

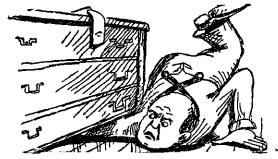
HATTERS AND MEN'S OUTFITTERS.

Hats in Leading and Correct Styles for Young Men. • • • •

· · · Novelties in Neckwear, Gloves, Hosiery, and Underwear. Canes, umbrellas, etc.

158 BOYLSTON STREET (odd. Common), BOSTON.

#### SWELL" STYLES.



## DRESSING CASE.

Scarf Pins, \$1.00 Link Buttons, \$1.00

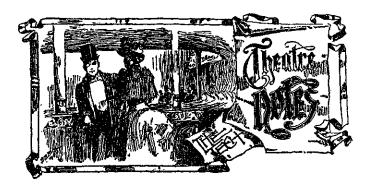
#### NICETIES FOR MEN'S WEAR.

Neck Dress (choice effects) 50c. to \$2.00 Crocheted 4 in hands, all colors \$2.00 \$1.00 to \$7.00 Embroidered Suspenders . \$1.50 to \$5.00 Gloves (lined or unlined) . \$2.00 to \$20.00 Umbrellas, good things Neck Mufflers and Dress Shirt Protectors. Ladies' Embroidered Garters and Handkerchiefs.

Men's Furnisher.

509 Washington, cor. West Street, 641 Washington, cor. Boylston Street, BOSTON, MASS.

BOSTON THEATRE. -Monday, February 13th, "The Country Circus." Evenings at 8; afternoons at 2.



TREMONT THEATRE. — Monday, February 13th, Neil Burgess in "The County Fair." Evenings at 8; afternoons at 2.

HOLLIS STREET THEATRE. - Monday, February 13th, John Drew in "The Masked Ball." Evenings at 8; matinees at 2.

COLUMBIA THEATRE. - Monday, February 13th, Rice's Surprise Party in "1492." Evenings at 8; afternoons at 2.

Boston Museum. -- Monday, February 13th, "Parvenu," by the author of "Queen's Shilling." Evenings at 8; matinees at 2.

GLOBE THEATRE. - Monday, February 13th, Francis Wilson in "The Lion Tamer." Evenings at 8; matinees at 2.

BOWDOIN SQUARE THEATRE.—Monday, February 13th, "A Nutmeg Match." Evenings at 8; matinees at 2.

#### CO-OPERATIVE TAILORS

TO NEARLY ALL THE SCHOOLS AND COLLEGES.

FRANK D. SOMERS.

No. 5 Park St., Boston.

Special designs in Woolens for Student trade. We do the largest Student trade of any fine tailoring firm in the country.

#### A. N. COOK & CO.,

IMPORTERS, MANUFACTURERS, JOBBERS AND DEALERS IN

## FINE HATS AND FINE FURS,

377 and 379 Washington Street, opp. Franklin Street, Boston, Mass.

WE AIM FOR THE FINEST AND BEST. NEW AND CORRECT STYLES.

Seal skin garments to order, tailor measure, fit guaranteed. Furs received on storage, insured against moths and fire.

## The Photographer

Huting

Is now located at his **New Studio**, with Reception Room and Atelier only one Flight from the Street,

146 TREMONT STREET, OVER HUYLER'S, BOSTON, MASS.

Awarded the Grand Prize by the Photographers' Association of America, at Washington, D. C., 1890.

Telephone Connection.



465 WASHINGTON ST., BOSTON.

## CLASS WORK A SPECIALTY.

All sittings made by the proprietor.

#### 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. Send postal to

#### M. KEEZER,

613 Shawmut Ave., Boston, Mass.

#### COPLEY SQ. HOTEL,

Huntington Avenue No Exeter Street.

AMERICAN AND EUROPEAN PLANS.

Cafe open from 7 A. M. to 12 P. M.

F. S. RISTEEN & CO.

#### YOUNG'S HOTEL, BOSTON.

J. R. WHIPPLE & CO.

J. R. WHIPPLE.

R. F. Ford.

J. B. Whipple.

C. I. LINDSAY.

W. H. LAPOINTE.

C. M. HART.

#### PARKER HOUSE, BOSTON.

J. R. WHIPPLE & CO.

J. R. WHIPPLE.

R. F. FORD.

J. B. WHIPPLE.

C. I. LINDSAY.

W. H. LAPOINTE.

C. M. HART.

## ARCHITECTURAL AND ART PHOTOGRAPHS,

For Students' use and for Room Decoration.

Special rates to Members of the M. I. T. Co-operative.

PHOTOGRAPH MOUNTING AND FRAMING.

SOULE PHOTOGRAPH CO., 338 WASHINGTON STREET, BOSTON, MASS.

SPECIAL ATTENTION IS CALLED TO THE HIGH GRADE OF PAPERS—THE MAKERS CLAIM FOR THEM "THE BEST IN THE WORLD"—FOR POLITE CORRESPONDENCE, THESIS WORK, COMPOSITIONS AND LECTURE NOTES (with various sizes of Covers to fit). Sold by

C. E. RIDLER, Stationer, Cor. Boylston and Berkeley Streets.

SCIPPLIFIC BOOKS DAMRELL & UPHAM,
The Old Corner Bookstore,
283 Washington St., Boston.

# College Men Ride Columbias Because

THE COLUMBIA BICYCLE RECOMMENDS ITSELF

To the student of **mechanics** for its construction:

To the student in the **arts** for its beauty:

To the **athlete** for its speed:

And to all for its acknowledged excellence.

HAVE YOU SEEN OUR '93 CENTURY? Send for a Catalogue.

POPE MFG. CO., Boston, New York, Chicago, Hartford.

# BUSINESS, and PROFESSIONAL MEN

Insure in the Atlas.

#### THE ATLAS ACCIDENT INSURANCE COMPANY,

OF BOSTON, MASS.

186 Devonshire Street, Boston, Mass.

Death by Accident.	Permanent Total Disability.	Loss of Both Eyes, Hands, or Feet.	Loss of Right Hand or either Foot.	Loss of Left Hand	Loss of One Eve.	Weekly In- demnity will be paid for 52 Weeks.
\$5,000	\$2,500	\$5,000	\$2,500	\$1,250	\$650	\$25
5.000	2,500	5.0 <b>0</b> 0	2,500	2,500	1,000	50

HENRY E. TURNER, Pres. "HUGH BROWNE, Sec. and Gen. Mgr. Thos. M. EVERETT, Supt. Agencies.

Any information in regard to Atlas Policies may be had of the Manager of Tech.

#### DAME, STODDARD & KENDALL,

We have a Complete Line of

#### Football Goods, and General Athletic Supplies,

Also CUTLERY, FISHING TACKLE, SKATES, and HAND CAMERAS.

New England Agents for The Elliptic Wheel, as ridden by Johnson, time 1.56 3-5.

DAME, STODDARD & KENDALL,

374 WASHINGTON STREET, - - BOSTON, MASS.

THE RIINSWICK

(American Plan.)
NEAR THE

Museum of Fine Arts, New Old South, Trinity (Phillips Brooks's) Church, and OPPO-SITE INSTITUTE of TECHNOLOGY.

**BOSTON'S** 

**Grandest Hotel** 

BARNES & DUNKLEE

Proprietors.



VICTORIA

(Nearest European Plan Hotel to M. I. T.)

In the Centre of Boston's Fashionable District,

THE BACK BAY.

Opened November, 1886, and within one week, the *Traveller* said, "It has established itself as the Delmonico of Boston."

#### BOSTON

# FOREIGN BOOKSTORE. CARL SCHOENHOF,

144 Tremont St., Boston, Mass.

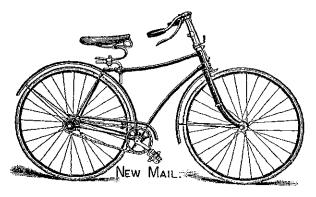
Liberal Discount to Tech. Students,
Especially on Works imported to order.

#### STUDENTS'

Note-Books, Paper, Envelopes, Stylo. Pens, and Fairchilds and Franklin Pens, etc.

H. H. CARTER & Co., 3 Beacon St.

"CO-OPERATIVE STORE."



## NEW MAIL.

CUSHION TIRES, \$100.

ALL DROP FORGINGS.

PNEUMATICS, \$120.

INTERCHANGEABLE PARTS.

Also, \$135 and \$150 GRADES; LADIES' \$100 and BOYS' \$35.

HANDSOMEST AND BEST WHEELS.

SECONDHAND WHEELS ALWAYS ON HAND.

GET CATALOGUE.

WM. READ & SONS, Manufacturers,

107 WASHINGTON STREET

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.

The Richmond Straight Cut No. 1 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.

The ALLEN & GINTER Branch of the American Tobacco Co., Manufacturers, RICHMOND, VIRGINIA.

## H. FARRINGTON, Merchant Tailor,-

411 WASHINGTON STREET, BOSTON.

Suits to order, \$30, upwards.

Overcoats to order, \$30, upwards.

Trousers to order, \$8, upwards. Dress Suits to Let.

## J. P. BOND, GENTLEMEN'S FURNISHING GOODS.

NECKWEAR.

OUR \$1.00 OPEN FRONT AND BACK SHIRT A SPECIALTY.

Also, full line Collars, Cuffs, Underwear, Gloves, etc.

141 DARTMOUTH ST., BOSTON.

Agent Dartmouth Laundry. Work called for and delivered.

## D. TOY,

TAILOR TO THE HARVARD CO-OPERATIVE.

71 BEACON STREET, BOSTON, MASS.

Opposite Public Garden.

Agent for Whitaker & Co. and Hill Bres., London, W.

## Typewriters at the World's Fair.



#### The Remington Secures the Exclusive Contract.

The Committee of Ways and Means of the World's Columbian Exposition has awarded to Wyckoff, Scamans & Benedict (Remington Standard Typewriter) the contract for furnishing all the writing machines to be used on the Exposition grounds during the Fair. A large number will be placed at convenient points throughout all of the buildings, and are intended for the accommodation of the general public, representatives of the press, and the officers of the Exposition.—Chicago Sunday Herald, August 7, 1892.

WYCKOFF, SEAMANS & BENEDICT. 15 SCHOOL STREET, BOSTON.

## GEO. H. GREENWOOD,

9 & 11 Boylston St.

Direct Importer of French and English Briarwoods, Meerschaums and Fine Smoking Mixtures.

O. A. JENKINS & CO.,

## COLLEGE ELATERS.

CORRECT STYLES.

BEST QUALITY.

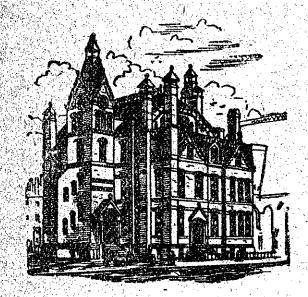


HEATH'S LONDON : HATS

A well-selected line of

MACKINTOSHES
CANES and UMBRELLAS.

407 WASHINGTON STREET, BOSTON.



Preparation for the

Established in 1828.

Massachusetts Institute of Technology.

THIS HAS LONG BEEN A SPECIALTY AT

#### CHAUNCY HALL SCHOOL.

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.

No. 593 Boylston Street, Boston. (Very near the Institute.)

# SOCIETY PINS, BADGES, PRIZES, Etc., IN GOLD AND SILVER.

## H.M. RICHARDS & CO.,

MANUFACTURING JEWELERS,

7 CREEN STREET,

BOSTON.

# UNIFORMS

CAPS AND GOWNS

We supply correct uniforms to Military Institutes in all parts of the United States.

We also supply Caps and Gowns for Graduating Classes of Universities and Colleges.

For particulars write to

G. W. Simmons & Co.,

Oak Hall, 32 to 44 North Street, Boston.