

Oak Grove Creamery Company,

DAIRY LUNCH ROOM
445 Boylston St., cor. Berkeley, opp. Y.M.C.A. Bldg.
Where can be had

SANDWICHES OF ALL KINDS, SOUPS, TEA, COFFEE, AND REGULAR DAIRY LUNCH.

Our menu consists of a careful selection of the most appetizing and seasonable viands the market affords. In every case everything is of the choicest quality, cooked and served as food of this sort should be cooked and served. Our unique combination breakfast plan is proving a most popular feature.

\$5.50 Check for \$5.00.

Pure Milk and Cream.

All Kinds of Meats.

NELSON L. MARTIN,

Special Attention to Students.

TRINITY COURT **Petit Lunch** 2 STUART STREET

Regular Meals 20c and 25c.

MEN'S OUTFITTER

A. Cohen

329 COLUMBUS AVENUE

Agent for the CAMBRIDGE LAUNDRY.
Work called for and delivered promptly.

Special Discount to Tech Students

M. T. Students

EXAMINE OUR

**Drafting
Instruments
and Supplies!**

WE CAN OFFER YOU
THE BEST AT
LOWEST RATES.

WADSWORTH, HOWLAND & CO., Incorporated,
216 & 218 Clarendon Street,
(OPPOSITE SIDE OF WALKER BUILDING.)

WE CARRY A COMPLETE ASSORTMENT OF THE CELEBRATED

HART, SCHAFFNER & MARX

CLOTHING

— FOR —

Young Men

This consists of new and snappy styles in Suits and Topcoats designed especially for the student and correctly dressed young man.

Continental Clothing House
WASHINGTON AND BOYLSTON STS.

Royal Dairy Lunch

11 and 12 PARK SQUARE

BOSTON MASS.

Open Day and Night

A. C. STONE,
C. H. MANSFIELD, } Proprietors

Browning, King & Co.,

700 Washington Street, BOSTON.

CUSTOM DEPARTMENT

Is now prepared to show the
latest novelties for all garments.

Overcoats to order, - - - \$20 to \$55
Suits to order, - - - \$20 to \$40
Trousers to order, - - - \$6 to \$12

Fit and Wear Guaranteed.

MATTHEW KING, Manager.

The BERKELEY HOTEL

Berkeley and Boylston Streets

EUROPEAN AND
AMERICAN PLANS

Modern in Every Detail

Restaurant à la Carte

Dining room table d'hôte

CAFÉ and Billiard Rooms

Entrance on Berkeley Street

JOHN A. SHERLOCK

C. F. HOVEY & CO.,

Importers and Retailers of

Dry Goods,



FINE CUSTOM MADE
SHIRTS A SPECIALTY.



PARIS,
7 Rue Scribe.

BOSTON,
33 Summer St.,
AND
42 Abon St.

Spectacles

-- and --

Eyeglasses

*Finest Quality,
Most Perfect Adjustment,
Moderate Price.*

Pinkham & Smith

Opticians,

288 Boylston Street,
Boston, Mass.

SCIENTIFIC BOOKS

DANRELL & UPHAM,
The Old Corner Bookstore
283 Washington St., Boston.

ALL GOODS REQUIRED BY
STUDENTS AT

MacLachlan's,

214 Clarendon Street.

Drawing Instruments and Materials, etc.
Fountain Pens, Text Books.

"Be it ever so humble, there's no place like home."



**Everybody's
Coming Home
From
Everywhere**

from the lake, from the seashore, from the dressy hotel, from the fishing camp, from the old farm, from a few days "off," and from all sorts of outings. "Nowhere to come but back," and mighty glad of it. No nicer town in the world to come back to, and we all help to make it so, if we do say it ourselves.

Now you're home again, how about your clothes? Isn't your wardrobe a little depleted after the hard racket you have given your clothing during your outing? If so, we just want to remind you that our

Fall Suits and Top Coats

are in and waiting for you. Prettier, sweller, or more desirable Suits and Top Coats you never feasted your eyes upon. This is the home of new ideas and we will wager anything that you will never complain of a single price we name. Come see.

OAK HALL,

Washington and Elm Streets.

A. Shuman & Co., CLOTHIERS.

Youths' and Men's Outfitters,
WASHINGTON and SUMMER STREETS.



We deal exclusively in well-made and excellent fitting Clothing for Youths and Men, in pure wool fabrics; Hats, Furnishing Goods and Shoes, Umbrellas, Traveling Bags, Mackintoshes and Canes. ❁❁

THE LARGEST EXCLUSIVE MANUFACTURING
RETAIL GARMENT HOUSE IN NEW ENGLAND.



Shuman Corner, Boston.

THE MIDVALE STEEL CO.,

**Locomotive and Car Wheel Tires,
Forgings and Castings,
Bar Steel.**



**Nickel Steel
Forgings
for
Marine Engines.**

**Ordinance
Forgings
and
Castings.**



**OFFICE AND WORKS:
PHILADELPHIA, PA.**



Hall & Hancock

Novelties in - - - -

SOFT HATS

* * * AND * *

STIFF HATS

CANES, * UMBRELLAS
HAT CASES AND GLOVES

407 Washington Street

DISCOUNT TO TECH STUDENTS

PAMONA GLOVE

\$1.50

VERY DESIRABLE

RAY, OUTFITTER

509 Washington St., cor.
West St.

BOSTON



THE LARGEST ASSORTMENT OF FOREIGN WOOLLENS SHOWN IN BOSTON.

CO-OPERATIVE.

In writing advertisers kindly mention THE TECH.

THE TECH

VOL. XXI.

BOSTON, OCTOBER 10, 1904.

NO. 1.

THE TECH

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

WALTER HAVENS FARMER, 1902, *Editor in Chief.*

H. S. MORSE, 1903, *Assistant Editor in Chief.*

I. RAYNE ADAMS, 1902, *Secretary.*

H. W. MAXSON, 1901.

P. G. L. HILKEN, 1901.

C. A. SAWYER, JR.

E. B. MACNAUGHTON, 1902, *Art Editor.*

ARTHUR SMITH MORE, 1902, *Business Manager.*

ERNEST HARRAH, 1904, *Assistant Business Managers.*

DAVID ELWELL, 1904.

OFFICE HOURS:

Editor-in-Chief,
Business Manager,

Monday, 12-1 P. M.
Saturday, 12-1 P. M.

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.

Subscription, \$2.00 per year, in advance. Single copies, 10 cts. each.

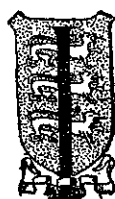
Entered in Post Office, Boston, Mass., as Second-Class Matter.

Press of Lounsbury Nichols & Worth Company.

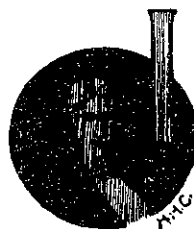


ONCE again the Editors of THE TECH sharpen the well-worn pencil and bring forth from the darkness of the office closet the trusty shears and indispensable pot of paste. THE LOUNGER, he who guides the wavering footsteps of the timid Freshman, has again donned his mask, and is fully prepared to offer wholesome advice and worthy suggestions to all who are in his opinion in need of the same. The Business Manager is once more on the war path, after a four months' period of needed rest and recuperation, and even now his war-whoop may be heard echoing along the corridors of Rogers.

The introduction of new ideas will make THE TECH more interesting than ever before, and it is hoped that the paper will receive the proper support by alumni and undergraduates alike.



IN another column of this issue of THE TECH will be found an invitation and appeal to members of the entering class to try for THE TECH Board. The management of the paper wishes to see that class early represented on its staff and trusts that the matter will be taken up in a creditable manner.



IT was gratifying in no small way to members of the upper classes, and indeed to all who were present at the address made to the entering class by President Pritchett, to see the spirit manifested by the entering class towards the President and the intelligence with which his address was received. Of the address itself there is little that needs be said; it was, as are all of Dr. Pritchett's addresses, simple, strongly terse and direct in its illustrations and applications. It is not this side to which there is need to point. It is the personal note in the President's address which is to be thought of and appreciated. The Freshman is too little likely to realize the advantages which are gained by personal contact with his instructors and with the members of the Faculty. Last year President Pritchett took the initiative in many new measures which brought the undergraduates

into closer contact with one another, and, more than that, with the Faculty. In his address Dr. Pritchett dwelt, moreover, upon the fact that life at the Institute means, first of all, work. This undoubtedly is, in large measure, understood by the entering class, but the second principle for which life at the Institute stands, or should stand: the broad development along physical, ethical and æsthetic lines, is one which not only Freshmen, but upper-class men as well, have yet to learn. The emphasis given it by Dr. Pritchett is most desirable. Nothing is of more importance. It is well to remember that it is an ideal not to be dismissed as affecting one accidentally; it is essential to real success.



OW that the confining work of the college year has again commenced, the preservation of health and strength becomes a problem of primary moment to the student. The solution to this problem is the gymnasium. Two objections to exercise in a gymnasium are frequently put forward: that fresh air and out-of-door exercise are better, and that the gymnast exercises those muscles most easily controlled, thereby becoming unequally developed. Both are true to an extent. However, when time is precious, as is that of the Tech student, exercise must be at once varied and condensed, as is the case in a gymnasium. Also each student at the gymnasium is measured by the instructor and is then subjected to a system of exercises adapted to his needs, so providing against the second objection. The student who does not take this exercise for his body's sake alone, finds a practical and immediate return for time expended, in a clearer brain, with a consequent ability for more rapid and efficient work.

Pres. Pritchett to the Freshmen.

At one o'clock on October 2nd, the opening day of the school year, President Pritchett delivered the annual address of welcome to the entering class in Huntington Hall. Many upper classmen were present as well as Freshmen.

President Pritchett spoke in part as follows:

"One of the privileges which comes to those who have to do with the work of instruction is the opportunity, year by year, to enlarge one's acquaintance. This means in most cases to enlarge the number of their friends. It is my pleasant duty today to welcome you to the Institute of Technology, to its work, to its associations and to its friendships. The years that you are to spend here will, I hope, be full of earnest work. I trust they may bring you no less the experience of wholesome companionship and the reward of sincere friendship. In these relations I hope I may have a part. Your student life is not to be isolated from that outside. It is to be a part of it, and a preparation for the work of the world. Earnest as is the life you will wish to lead here, it does not absolve you from the relations of other men; the relations and the duties of kinship, of the social order, of citizenship.

"The country in which we live and under whose protection we pursue our several paths in peace and security has, during the past month, passed through a deep experience. It is right that you should, as citizens, share in the problems that such events suggest; and, as I look into your faces, I can but remember the words of the dead President, so recently struck down by the hand of an assassin, spoken as I said good-by to him a year ago when I came to the institute. 'I hope,' he said to me, 'that some way will be found to teach the young men in our schools a better estimate of the dignity and honor of serving one's country well, and that in some way they may come to understand that men in high place in Government are honestly striving for good ends, and that unworthy purposes are stumbling-blocks, not helps, in a political career. I wish,' said he, 'that the boys of the country might understand that they are factors in the country's upbuilding and must learn to take upon themselves its responsibilities.'

"His death has brought afresh to the attention of all citizens questions of grave import and of far-reaching consequences. It is not my purpose to dis-

cuss these questions in any other way than to echo the President's words and to remind you that they are questions in which you have an interest and a responsibility. Two thoughts occur to me which seem to have special significance for you as students and citizens. It is easy to see that the shot which killed President McKinley was aimed at the destruction of all law and of all authority. Even the dullest citizen of our republic can appreciate that the spirit which stands behind this act is subversive of our whole legal and social order. But it is well to remember that all violations of law tend toward the overthrow of the nation's rights. The corporation which buys from a corrupt city government the franchises which belong to the whole people, the public officer who betrays his trust, the mob which substitutes force for legal process, or which undertakes to administer justice by mob trial, is sowing the seed whose fruit is Anarchy. Obedience to law is a heritage which our race has acquired only after centuries of struggle, and any violation of the law is a sin against the rights of all.

"Let us remember, even as students, one other thing. The question before the American people today is not whether the Government can suppress anarchy or bribery or municipal corruption or how to deal with any one of the problems which confront it. It is the old question which has been before us these hundred and twenty-five years, and it is a part of the very nature of our republican institutions. That question is, will the body of our citizens give intelligent and conscientious thought to problems of citizenship? With an intelligent citizenship all these problems can be patiently and successfully met. They can be met successfully only by such a citizenship, and therefore if I may say one word to you at the beginning of your life here which I should be glad to leave with you it is this: While you are learning to be engineers do not forget that you are citizens of the Republic, and share its responsibilities.

"As to your life here I can at least say this: The Institute of Technology is a place where men come first of all for work and study. I trust you may find this atmosphere to be to your liking and that you will undertake your life here in that spirit. But I shall be disappointed if you do not also find here that which ministers not only to work, but to scholarship and to culture, and that the associations with the

professors and instructors, as well as with each other, may be helpful to you in your relations with men as well as in the pursuit of the particular branch of applied science which you are to follow.

"There is a vast difference between training and education. A man may be a highly-trained engineer and yet remain uneducated in the best and broadest sense. I commend to you the ambition to be educated engineers as well as to be trained engineers. You will find among professors and instructors every wish to assist and to encourage. I beg to assure you of my own desire to share your confidence and your friendship. There is no work which I can do in the Institute of Technology so important as that which brings me in touch with your life and your difficulties and your aspirations. You can do me no greater pleasure than to come to me for a word of consultation or advice, and to admit me to your friendship."

Y. M. C. A. Reception to 1905.

Last Friday evening the members of the Freshman Class were tendered a reception in the library of Rogers Building by the M. I. T. Y. M. C. A. The reception was wholly informal and was given with the hope that the members of the class would find an opportunity of becoming acquainted with at least a few members of their class. A large number availed themselves of this opportunity and a very pleasant evening was spent. About nine o'clock President Pritchett arrived and after greeting some of the upper-class men present, shook hands with the members of the Freshman Class.

Later in the evening the president made a few remarks which were warmly applauded. Professor Porter was then introduced and spoke briefly on the work of the Y. M. C. A. in the Institute. Refreshments were served and shortly after a school yell was given and the students separated.

Calendar.

Saturday, October 12th — Hare and Hounds Run from Newton Highlands; leave Trinity Place Station at 1:54.

The Sumatra Expedition.

Boston, Oct. 1, 1901.

To the Editors of THE TECH:

GENTLEMEN:

In reply to your invitation to give to THE TECH an account of the results of the M. I. T. Eclipse Expedition to Sumatra, I send you the following brief summary of events in hope that it may partially meet your desires.

The Expedition left New York, February 24th, and arrived at Padang, West Coast of Sumatra, April 6th. We carried with us an equipment of astronomical and geodetic instruments which was in part the property of the Institute and in part a loan from the United States Coast Survey and the Harvard College Observatory. The whole outfit weighed about four tons.

There was but one transfer of passengers and freight between New York and Sumatra. This transfer was made at Genoa, where the party took passage on the *Königin Regentes* of the Netherlands Steamship Company. On the voyage across the Atlantic, through the Mediterranean and Red Seas and the Indian Ocean, only the briefest stops were made, a few minutes at Gibraltar, a few hours at Naples, Port Said, and Perim, and then at the next stop we found ourselves in the heart of the tropics, where the "sun at noon right above the mast did stand." At Padang we received a hearty welcome from Dutch officials and the United States consular agent. The United States Naval Observatory, the Smithsonian and Lick Observatory parties were already on hand, having reached Sumatra via San Francisco and the Pacific Ocean two days ahead of us. Two English Expeditions and a portion of the Dutch Expedition came on the same steamer with ourselves. All these parties began their work of preparation at once. Japanese, French, and Russian astronomers arrived several weeks later.

It was desirable that observers should be scattered as widely as possible over the available area in order to decrease the chances of general failure in the event of clouded skies, and for this reason each party picked out a separate station. As the Dutch government very kindly offered free transportation on a railroad connecting Padang with coal mines in the interior, the Massachusetts Institute of Tech-

nology Expedition endeavored to show its full appreciation of this courtesy by locating at the end of the line, at Sawah Loento, some one hundred and twenty miles from Padang.

The time between our arrival and the date of the eclipse was fully occupied by the construction of buildings and brick piers for the different instruments. Labor was cheap, but so Orientally slow that even a month and a half was not a day too much for our preparations. During this month and a half we realized that Sumatra was one of the rainiest spots on the face of the earth, but as it often cleared up at noon over our station, we were hopeful. The long-expected day of the eclipse, May 18, 1901, was not a perfectly clear day at Sawah Loento, not such a day as we had been favored with in Georgia the year before, nevertheless we were one of the most fortunate parties on the Island. At the times of the four contacts the sky was sufficiently clear to enable us to determine these with precision. At noon, during totality, which lasted nearly six minutes, there was a light, filmy cloud between us and the moon. The cloud moved rapidly from west to east. The cloud was so thin that the shape of the corona could be seen with the naked eye, and through the large telescope the sun's prominences and the fine polar streamers were distinctly visible. On developing the photographic plates taken with the cameras of eleven feet focal length, Mr. Harrison W. Smith found that the cloud had interfered little if any with his results. Our corona pictures are a complete success, and photographs of the region near the sun show many small stars. Much of the success is due to the mechanism for following the motion of the sun devised by Mr. Smith.

The Institute party was provided with instruments for doing work which was not directly dependent on the weather, instruments for making magnetic and pendulum observations. The observations with the magnetometer were made by Mr. George L. Hosmer with the utmost care, and show disturbances of the needle during totality. These results have been forwarded to Professor Bauer of the United States Coast Survey, and will soon be published in the journal of *Terrestrial Magnetism*.

A determination of the force of gravity was made at Sawah, Loento, on the week previous to the

eclipse. This is valuable as furnishing a determination of the force of gravity at a new point on the earth's equator. Two more pendulum stations were made at Singapore on our return voyage. The object of making these last two stations was to connect the work of the Coast Survey half-second pendulums which we had in our party, with determinations made twenty years ago at the same point with a Kater's pendulum. It is interesting to note that this work of twenty years ago was done by President Pritchett, then a member of the United States Government Party returning from New Zealand, where they had been to observe the transit of Venus. These observations of ours at Singapore have done much towards connecting and putting on the same basis gravity determinations made by distinct types of pendulums in widely different localities.

At the present time Mr. George L. Hosmer is completing the circuit of gravity observations by swinging the pendulums at the base station in Washington, D.C.

So much for the work we set out to accomplish in a scientific line. Much of interest has happened that was not in the scientific prospectus which it is pleasant to recall; "but that is another story." The whole voyage from New York to Genoa, thence to Sumatra, *via* the Suez Canal, thence to Java, Singapore, Hong Kong, Shanghai, Japan, Honolulu, San Francisco and Buffalo, was a thoroughly enjoyable one for every member of the party. All were well during the entire six months. Our three months under the equator are remembered with as much pleasure as any part of our travels. We are all of us one day older than if we had remained at home, on account of our circumnavigation of the world from west to east, but aside from this no member of the party shows any ill effect from the trip. It is needless to say that it was hot under the equator, but every one in the United States this year has experienced days and nights fully as trying to one's constitution as any that we passed through. We dressed in the thin white tropical costume of the Colonial Dutch, and lived on the Malay diet of rice which has proved to be the salvation of those who dwell in those torrid climes. That all went so smoothly under the strange and foreign conditions in which we found ourselves, is due largely to the fact that a native Hollander, Mr. Gerard H. Matthes of

the class of '95 was a member of the expedition. In addition to acting as interpreter he was of invaluable assistance at all times.

As a result of our late experiences we have learned that if it is true that the sun never sets on British soil, it is also true that the sun is always shining on some alumnus of the Tech. We expected to meet the alumni at Genoa, Japan, and the Sandwich Islands, but we were surprised to be taken in hand at Shanghai by Mr. Murray Warner of '92, who with one of his mandarin friends showed us over the old Chinese town.

ALFRED E. BURTON.

Undergraduates and The Tech.

In such an institution as Technology in which most of the work is technical and engineering in its character, it should be remembered that there are other sides to a broad education besides the attainment of skill and knowledge in simply engineering work. Some time ago a noted railway man gave a lecture before the Civil Engineering Society, and in the course of the lecture he said of the Tech graduate that he had three failings: that in general he could not write legibly, that he could not spell well, and that he could not form a correct English sentence. While this remark was made partly humorously, yet there is a great deal of truth underlying it. It is here, in the Institute, that the opportunities offered for improvement in these deficiencies should be made use of. Among the opportunities offered, work on undergraduate publications is of importance. And of undergraduate publications, there will be no disputing, THE TECH is preëminent for journalistic practice. It has then, if the work is conscientiously performed, a value in that it offers a chance for constant practice in composition,—something which is much to be desired. The management of THE TECH wishes to impress upon the members of the two lower classes the opportunity which is thus presented, and to urge upon the members of these classes to respond to this call credit-

ably. The editor-in-chief will be glad to meet anyone wishing to try for THE TECH staff at his regular office hours, or any others, at THE TECH office.

The Football Outlook.

Indications point to a very promising and successful season for the Technology Football Team of 1901. Not only are several of last year's team back to play their old positions, but many new men have been out for practice, and the work being done on Irvington Oval every afternoon seems encouraging. Mr. F. J. Crolus, who brought out such an excellent team last year has again been engaged to take charge of the coaching. The practice so far has been light, intended only to get the men into condition for hard work this week.

Of last year's team Capt. Hooker will take care of one end and Pope, Barry and Wood are out to try their old positions as half-backs. Metcalf, who did such splendid work until injured, is in excellent condition, and will play full-back, while Hunter will continue his former position at center. Quarter-back and most of the line positions are open to competition, but some good material has shown up, and taking it all in all, the team should give an excellent account of itself.

Manager Cook has arranged the following schedule for this season. Accounts of the game will be given in THE TECH as they are played.

Wednesday, October 9th, Holy Cross at Boston.

Saturday, October 12th, Amherst at Amherst.

Saturday, October 19th, Wesleyan at Middletown.

Saturday, October 26th, Tufts at Boston.

Saturday, November 2nd, N. H. State at Durham.

Saturday, November 6th, Brown at Providence.

Saturday, November 9th, Worcester at Boston.

Saturday, November 16th, Class Games '04 vs. '95 at Boston.

Communications.

TO THE EDITORS OF THE TECH:

May I, through your columns, call attention to the work of the Hare and Hounds Club. The club holds runs of five to eight miles in length on Saturday afternoons, in the country about Boston. The object of the runs is healthy exercise; not great speed.

Both the captain and the trainer of the Technology Track Team indorse the work of the club and desire that all men who intend to try for long or middle distance events next spring shall attend the runs regularly. The value of such work as a foundation for athletic training is shown whenever English athletes compete with Americans. The Englishmen who have done cross-country work regularly for years may be beaten in the dashes and field events but it is very seldom that they fail to capture the longer runs on the track.

The Hare and Hounds runs are not, however, for the athletes alone, as many of our runners take no part in the regular meets. Of the nine men who finished enough runs to win the club emblem last year only three competed in the spring games.

On behalf of the Club I wish to invite every able-bodied man in the Institute to come out for as many of the runs as possible. Men who have never had experience in this work are urged to come out for the first runs as these will be shorter and slower than those later on.

FREDERICK H. HUNTER, '02,
Manager.

Hare and Hounds Run.

The Hare and Hounds Club begins its work for the year with a run from Newton Highlands next Saturday. New men should bring gym. suit, sneakers and towel. Tickets at commutation rates can be obtained from the manager at the station before the train leaves.

The Trials of a Freshman as Told by a Freshman.

EDITOR'S NOTE. [We print the following article just as it was submitted to us.]

I wonder if everyone is affected the same way that I was when I went to my first recitation in Algebra. After considerable trouble I managed to find the room where the fatal struggle was to take place. Softly and in awe of the professor sitting upright in his chair at the front of the room, I stole in and slid quickly into the nearest seat. Shortly after, the recitation began and the professor in low gruff tones asked us to come forward and show our registration cards. Now it so happened, fortunately, I thought then, but unfortunately as I found later, that when I reached the room, the back seat in the corner nearest the door was unoccupied and into that I had crept. But unfortunately that seat was too far away for me to hear a word that the professor said. However on seeing the others start forward, off I started, too, not knowing why. On reaching the desk I very quickly found out it was our registration cards that were wanted. Now unfortunately, I had worn a different suit on the day I received my registration card and had forgotten to change the card; so there I stood, the professor glaring at me and wondering why I stood so mum and without my card. All the while I was trying to murmur, "I left it at home." Finally he seemed to catch the last word, "Home," he exclaimed, "well what are you up here for?" "Didn't you hear me say, if you haven't it with you bring it next time?" With sunken head I start for my seat which *unfortunately*, this time, was away off in the corner of the room nearest the door; finally, it seemed ages before I got there, I reached it. Then the lesson commenced. It had been assigned on a general bulletin which unfortunately I had not seen. However I soon found out from the fellow ahead of me that it was on logarithms. For the second and last time in that hour I considered myself lucky. Here was my strong point, but I found much to my sorrow that here, too, was my weak point.

"Brown, define a logarithm of a number," growled the professor. Brown couldn't define it to suit him, and neither could the next man nor the next, and at each time the fellows all became more excited. This was visibly augmented by numerous questions from the professor. Between trying to answer the

questions and defining a logarithm of a number each and every member of the class went under. Then the round of the section was started with another question which was finally answered by the fellow next to me. So the next question must come to me. Now I had been unable to hear anything spoken by the professor up to this time but could only guess at what was said by the several fellows trying to answer the questions. Then came the question, (I found out what it was later) "What is the number of which $3\frac{1}{2}$ is the logarithm?" "I can't hear," I murmured. He evidently didn't hear *me*, for he said "What's that," and I, thinking he said, "Can't you," said "No sir." I knew something was wrong for everyone laughed, the professor excepted, *of course*. Then occurred the following dialogue, I answering his questions by "Yes" and "No, sir," as I thought they ought to be answered. Many of them I found out after were wrong.

"Can't you hear me?" "No, sir."

"What is the number of which $3\frac{1}{2}$ is the logarithm?"

"No, sir?"

"Are you deaf?" "No, sir?"

"Didn't you hear me?" "Yes, sir."

"Then answer the question." "No, sir."

Then angrily "Sit down." I heard this last as it was said more forcibly than the former ones. I had noticed that all the sections were laughing and that with the successive questions had so rattled me that I was so confused I couldn't have told my name if I had been asked. I wasn't called on again that hour.

Soon the recitation closed much to my relief, and I found out then what I had done. Meanwhile I am keeping a wide tract of land between myself and that professor in the hopes that when he finds me in the front seat at the next recitation he won't recognize me.

Are You a Tech Subscriber?

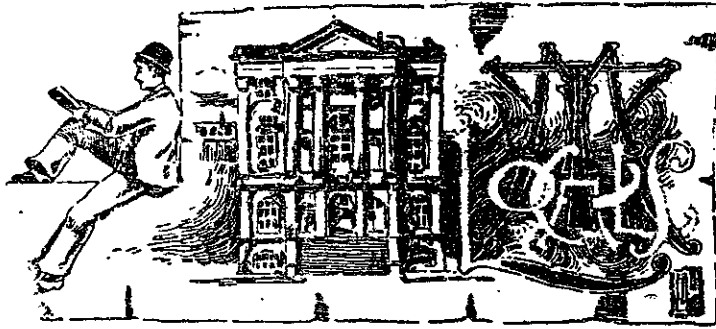
There are three reasons why you should be.

1st. THE TECH is the only Institute Paper.

2nd. It contains all the Institute news and furnishes the only means of keeping thoroughly in touch with Institute affairs.

3rd. We need your support.

Subscription, \$2.00 per year.



Prof. Sedgewick was very ill during the summer, but has returned to the Institute.

Mr. C. H. L. N. Bernard has left the Institute and is now instructing at Harvard University.

Those wishing to try for places on the Banjo Club should leave names for Donald Belcher, '02, at "Cage."

Any man wishing to try for the Mandolin Club will please send in his name as soon as possible to Fjeld, '02, "Cage."

The first meeting of the Young Men's Christian Association will take place in Room 11, Rogers, Friday, October 11th at four o'clock.

Crocker, '04 and Dillon, '04 of last year's football team have left the Institute. Crocker has entered Harvard and Dillon has gone to Dartmouth.

P. G. L. Hilken has left the Institute and is working for the Fore River Ship and Engine Building Company at Quincy, Mass.

J. T. Cheney, '03, owing to his *Technique* work, has handed in his resignation as Secretary-Treasurer of the Football Association. C. Patch, '02, has been elected to the office.

Men belonging to fraternities not represented by chapters at Technology will kindly leave their names and fraternity at "Cage" for Society Editor, *Technique* 1903.

Mr. Burrison assigning desks in Mechanical Drawing: "Cigar (Segar) 275." Certainly a good one at that price," and the class laughed.

Dr. Tyler, Professors Barton, Cross, Talbot, Goodwin and Puffer, and Messrs. George and Newell were abroad during the past vacation.

Mr. George Leonard Hosmer, instructor in the Civil Engineering Department was on August 28th married to Miss Lucy Morse Harmon, at Randolph, Mass.

H. W. Maxson is in Pittsburg, playing quarter-back for the Homestead Athletic Club football team, but will return to the Institute in December or January.

There will be a mass-meeting of the entire student body to consider the football question, in Huntington Hall, Friday, October 11th, at one o'clock. President Pritchett will speak and everyone is urged to be present.

Dr. Hough has been at the Massachusetts General Hospital critically ill with typhoid fever, but was released last week and left for his home in the South to recuperate. He will not be back for at least one month.

All men who may wish to try for the Glee Club are requested to send their names to C. Patch, '02, Leader, "Cage." The Glee Club expects to have rehearsals Tuesday and Friday nights.

Naval Cadets Ferguson, McIntee and Spillman of Annapolis have been detailed to the Charlestown Navy Yard by the United States Government and are taking theoretical courses at the Institute.

W. L. Cook, '02, has resigned from the managership of the football team. J. M. Grice, '03, Mr. Cook's assistant, has been elected to fill the vacancy and A. W. Wells, '04, has been elected Assistant Manager.

During the past vacation Professor Arlo Bates has added another volume entitled "Talks on writing English," Second Series, to his list of publications. A review of this new work will be given in a future issue of **THE TECH**.

Models of the 2970-ton six-masted schooner *George W. Wells*, and of A. S. Bigelow's steam yacht *Pantooset* have been added to the collection of the Naval Architecture Department.

The Annual Handicap Meet of the M. I. T. A. A. will take place at Soldiers Field, Cambridge, Saturday, October 19th, at 3 P. M. The entry book can be found at the gymnasium.

At a meeting of the Class of 1903, held last Tuesday, it was stated that nominations for class officers must be handed in on or before Saturday noon, October 12th, to Secretary Cheney.

Owing to the insufficient number of recitation rooms to accommodate the large classes, several rooms in the house formerly occupied by the Technology Club, on Newbury Street, have been fitted up as recitation rooms.

The St. John's Society will hold a service and reception to all students interested in the aims of the Episcopal Church, in Trinity Church on Monday, October 21st. Full particulars later. Special speakers.

Captain Baird, military instructor at the institute, has announced several changes to be made in the uniform worn. The color will still be dark blue, but straight collars will take the place of the turn-down pattern heretofore worn. The jackets will be trimmed with inch-and-a-quarter black braid and brass buttons will be discarded. The style of cap used in the regular army will be adopted.

Professor Sondericker will not return to the Institute this year. He has been ill for a considerable length of time and his eyes are very weak.

We regret to state that H. H. Saylor, 1902, a member of THE TECH Board has not returned to the Institute this year. Mr. Saylor is at present in an architect's office in Philadelphia. We are also very sorry to note that R. B. Pendergast has

resigned from the editorial staff of THE TECH. Mr. Pendergast does not expect to resume his studies here until next term.

Maxson, '01, Captain of last year's Varsity eleven, is playing professional football with the Homestead Athletic Club, which by the way is the best aggregation of players in this country, excelling in fact all of the "big four" college teams. The eleven played Altoona yesterday, 45-0, Altoona gaining just two yards. On the team are Overfield of Penn.; Poe of Princeton; Bemus and Hawley Pierce of Carlisle Indian School; Mosse of Kansas; Nieman of Cincinnati; Randolph of Penn State; Fultz, Gammons, Richardson and Hunt of Brown.

The Civil Engineering Summer School was held this year at Machias, Me. Twelve students attended, and, under Professor Robbins and Mr. Sweet they were given instruction in topographical and hydraulic work. In the topographical department a plane-table survey was made of the region round about, while in the hydraulic department measurements of the flow of Machias River were taken, as well as readings of a tide gauge, to determine the elevation of mean sea level. The summer school lasted three weeks. This is the last year the summer school will be held at Machias, at least for several years, as altogether it has been held there for three years.

The Society of Arts.

The 554th regular meeting of the Society will be held at the Institute, Rogers Building, on Thursday, October 10, 1901, at 8 P. M.

Naval Constructor William J. Baxter, U. S. N., will address the Society on "*The Olympia*: a General Description of this Famous Ship, and a Discussion of the Development of Cruisers during the Past and the Tendency of Future Progress." Members are requested to invite friends interested in the subject. George V. Wendell, *Secretary*.



'76. C. A. Sawyer, of Chicago, visited Technology while in Boston last month.

'85. I. W. Litchfield, at one time editor-in-chief of *THE TECH*, visited the Institute during the summer. Mr. Litchfield is with the Deering Harvester Co., of Chicago, and is President of the Northwestern Alumni Association.

'89. Prof. Frank A. Laws, VI., was married at Salem, Mass., during the past vacation.

'94. W. H. Bovey, VI., is general manager of the Washburn Crosby flour mills, Minneapolis, Minn.

'97. John A. Collins, X., will on Wednesday evening, October 16th, at eight o'clock, be married to Miss Mabel Fisher at the Universalist Church, Newtonville, Mass.

'98. Walter G. McConnell, XIII., is chief draughtsman in the Hull Department of the Fore River Ship and Engine Building Co., Quincy, Mass.

'00. Joseph S. Croswell, II., died at Rolla, Mo., on Monday, September 23rd, twenty-four years of age. The funeral took place at Cambridge, Mass.

'00. R. H. Glover, III., ex-1900 is employed in a mine at Victor, Colorado.

'00. H. A. McPherson, XIII., is a draughtsman at the Fore River Ship and Engine Building Co., Quincy, Mass.

'00. J. F. Wentworth, XIII., was married to Miss Elizabeth Powers, at Rochester, N. H., on August 5th. Mr. and Mrs. Wentworth are living in Washington.

CLASS OF 1901.

A. A. Casani, I., A. B. McDaniel, IV., and G. E. Gustafson, I., are with the American Bridge Co., East Berlin, Conn.

C. N. Chubb, I., is assistant on the Engineering corps for the Allegheny Terminal.

F. W. Claflin, I., is transit man on the engineering corps of the B. & A. R. R.

L. Du Pont, I., is draughtsman for the Pencoyd Iron Works.

W. F. Davidson, II., is draughtsman for the National Steel Co., New Castle Pa.

E. P. Fleming, III., is surveyor and assayer for the Troy Copper Co., Globe, Arizona.

A. H. Birks, IV., was with the Eastern Bridge Co., Worcester, during the summer, will return to Institute this fall for advanced work.

L. S. Butler, IV., expects to study architecture in Paris this winter.

J. C. Woodsome, VI., is back at the Institute as assistant in Mechanical Drawing.

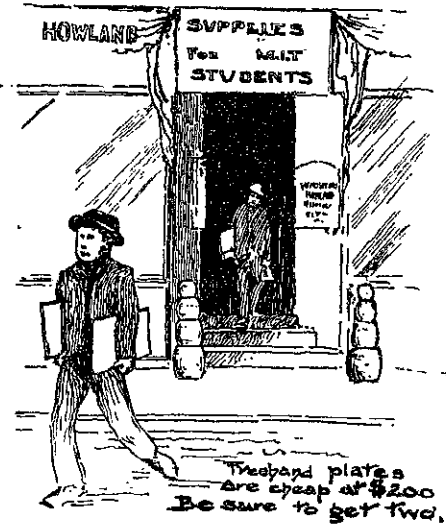
H. H. Kennedy, VI., and H. E. Dart, VI., are assistants to Professor Laws.

W. G. Blauvelt, VI., is with the American Bell Telephone Co., Boston.

W. A. Read, XIII., J. A. Ross, Jr., XIII., and J. F. Wentworth, XIII., took the Government examinations for Marine draughtsmen at Washington, this summer. Read has been appointed to the Brooklyn Navy Yard, Ross to the Mare Island Navy Yard, San Francisco, and Wentworth is employed in the Navy Department at Washington.

F. C. Ayers, XIII., O. H. Perry, Jr., XIII., E. T. Robbins, XIII., and F. B. Webster, XIII., are employed by the Fore River Ship and Eng. B'ldg. Co., at Quincy, Mass.

H. R. White, XIII., has returned to the Institute as assistant in the Mechanical Engineering Department.



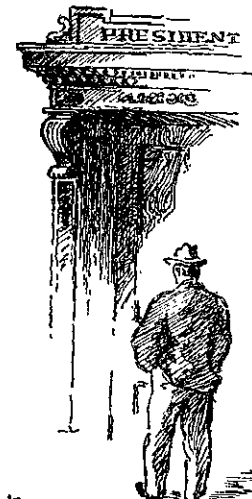
Remember, in the Secretary's office, this is not A. W. Tyler



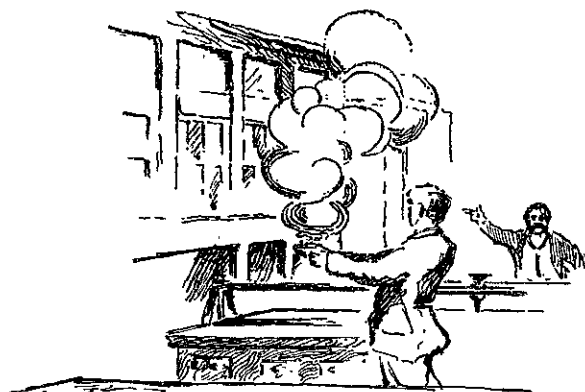
Don't think this is the place to hang your hat



The proper air of attention in the drawing-room



the President is always glad to see you but he has troubles of his own Tell yours to Thompson

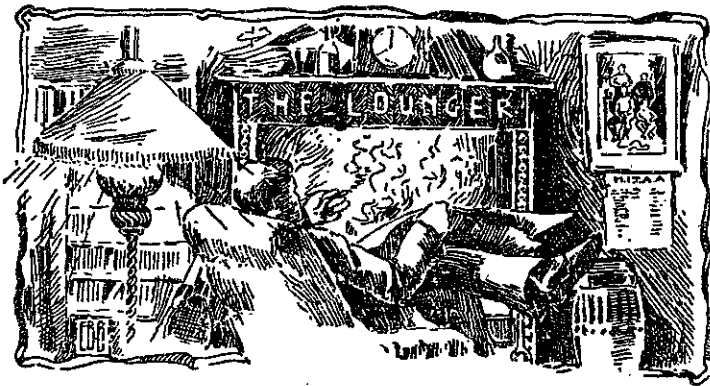


Be sure to give Prof. Bardwell chance to yell "But that under the hood" It will make him happy



Subscribe to everything in sight

HINTS ON HOW TO BE A FRESHMAN.



To those who this year are making their entrée upon the little stage called the Massachusetts Institute of Technology, and who are to act their part thereon, THE LOUNGER would fain offer the advice that, while to be ambitious is well, to be cautious is better, and in a stage filled with phenomena like our Bursar, Spinoza and Janitor John, to say nothing of THE LOUNGER and Professor B-rdw-ll, it is well to practice the retiring virtues. To those also, to those who will shortly worship at the shrine of the Professor of Mechanical Drawing and receive inspiration at the hands of the Professor of Freshman Chemistry, THE LOUNGER extends the most cordial hand-shake that it is possible to give.

It is now more than four months since THE LOUNGER lay down his pen, and it is with a feeling of sadness that he now takes it up. True it is that the Institute has prospered in many ways during that season, and that it has grown prodigiously this year in numbers. Can it, however, be forgotten even for one ephemeral second that we have lost from among us C. H. L. N. Bernard and Corporal Bailey? Quantitatively we have gained undoubtedly, but qualitatively? The Institute will seem to those who have dwelt in the glory of the sun-burst personality of the first and the mellifluousness of the second, hardly like the Institute of old. There is one reassuring note, however in the fact that, with all necessary apologies, THE LOUNGER is still on deck, and that THE TECH is still given away for an economic exchange of two dollars.

As Tech enters upon the season of misery and torment designated in the catalogue as the school year, THE LOUNGER would seize time by his hoary beard and uncover a few mysteries for the benefit of the C seeking Freshman.

The first matter requiring explanation is that the table in Roger's Corridor upon which small books were displayed on the opening day, was the Y. M. C. A. Information Bureau. The individuals stationed behind the table should technically be termed informers.

The above mentioned books may be used for the keeping of accounts, and as a handy place for Co-op

tickets. THE LOUNGER would suggest that there is no necessity for entering the fact that two dollars was expended for Freehand Charlie's Letter Plates. The Freshman will probably remember that.

The "Cage" in the farther end of the corridor is not essentially a repository for hats. Other articles, such as drill suits, may be left there. The use of the term "Cage" is unfortunate. It should have been reserved for that portion of the secretary's office, best connected in the student's consciousness with the date October 10th. (No remuneration is expected for this adv).

By the way, in case an upper-class man can be persuaded to part with the drill suit of his youthful days, if he should chance to remark that it is second-handed, pay due respect to his age and experience.

The Freshman should evince no surprise at the inscription over the Chapel door. If the words "Brunswick Exchange" were inscribed in Greek characters it might appear more classical; however the student is just as welcome. Prayer-books may be obtained at Mac's and Ridler's. Searles' is generally conceded to be the better, but Allen's has one advantage in being cheaper.

Since the immortal occasion when the chief executive of the Y. M. C. A. received a letter addressed: John Smith, President Mass. Inst. of Technology, Boston, THE LOUNGER has naturally felt even more than the usual respect for that institution. When, on October 2nd, he entered Rogers and saw in the corridor the Y. M. C. A. table covered with many and various things he made haste to obtain from there one of those little books of which the Freshman asks "Do you give these away?" Such was the manner in which THE LOUNGER became acquainted with the following extract from this cyclopedia of exact knowledge which is furnished for the benefit of the unsophisticated:

1902.

Semi-annual Exams. begin Feb. 11, 1902.

Second term begins Feb. 11.

Annual Exams. begin March 27.

Degrees conferred, School ends June 10.

Just how far such information is of living value is not for THE LOUNGER to explain. But surely the prospect of the semi-annual examinations beginning the same day as the second term, and that February 11th, and, further, the indication that the final examinations commence March 27th, would rather lead one to suspect that the second term, this year will be, to put it mildly, a cinch. In comparison with this regime at Tech, life at that casino for the young across the Charles, must be grinding indeed. It has been suggested to THE LOUNGER by a Pharisee that the Y. M. C. A. printer must, like many others, attend chapel, but this THE LOUNGER regards as a base slander.

Neckwear
Gloves
Hosiery
Undewear

Shirts

LAUNDRY WORK
A SPECIALTY



ARRANGE WITH US TO DO YOUR
WORK WHILE YOU ARE IN BOSTON
IT WILL PAY YOU



KEEP MFG. CO.

Makers of Keep's Shirts

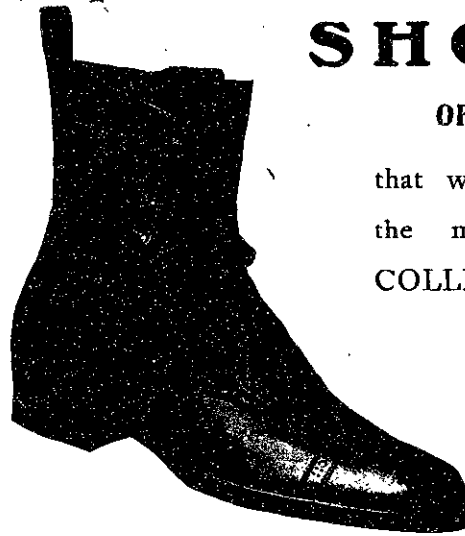
156 Tremont St., next West St.
BOSTON

T. E. Moseley & Co.

SHOES

OF SPECIAL DESIGN

that will appeal to
the most critical
COLLEGE MAN



Prices \$3.50 to \$8.50

145 TREMONT ST., Between Temple Pl.
and West St.

10% TO TECH - - - BOSTON

Hotel Nottingham



The Only Hotel Facing
Copley Square.

Three minutes walk from the
New Back Bay Stations of the
Boston & Albany and N. Y.,
N. H. & H.

Patronage of Tech Students is solicited
in our Cafe.



European Plan.

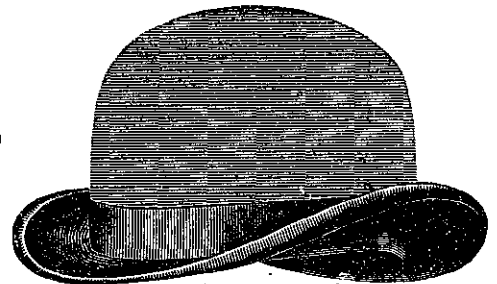


Check Baggage Back Bay Station, Boston.

A. H. Whipple.

FALL HATS

1901



All Facilities for
IRONING
and
SHAPING
HATS

This Department receives our

Special Attention

We invite your inspection of what
is correct.

**Silk and
Opera Hats**

A SPECIALTY

THE SAWYER CO.

134 BOYLSTON STREET - - BOSTON
Hatters, Glovers and Shirtmakers

Abram French Co.

IMPORTERS OF

China, Crockery
AND
Glassware.

47 and 49 Summer Street,
3 Doors east of Hovey's

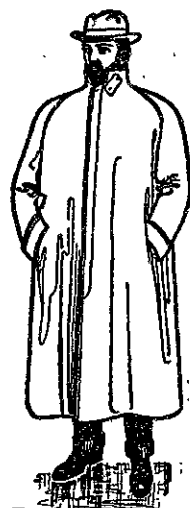
MEMBER OF CO-OPERATIVE SOCIETY

Reserved for

**AMERICAN
TOBACCO
COMPANY**

New York.

The Bostonette Rain Coat



THE BOSTONETTE
RAIN COAT

Guaranteed absolutely water-proof in all the handsome colorings. No young man's wardrobe complete without a

"Bostonette"

PRICES:

\$10. \$15. \$20.

SOLD ONLY BY

Standard Clothing Co.,

395 Washington Street.

Just below Winter St.

The Official Tech Pin.

Gold Plated on Silver, \$1.00.

Gold, \$2.50. Silver 75 cents.

HENRY GUILD & SON,

Manufacturers of HAM-
MER AND TONGS, and
other Society Pins

433 Washington St., cor. Winter St., BOSTON.



A. S. ADAMS

Maker of the Official

M. T. T. Pin

8 Winter St., BOSTON.



HENRY H. CARTER,

Consulting Engineer,

95 MILK STREET, ROOM 68.

Telephone 2424.

PRESIDENT METROPOLITAN CONTRACTING CO.,

Street, Sewer and Water Works Construction.

Estimates.

Advice to Contractors,—Expert Testimony.



Week Commencing October 14, 1901.

Hollis Street Theatre. — Miss Viola Allen, in Stoddard's great historic romance, "In the Palace of the King," enters on her last week in Boston. As Dolores, Miss Allen is seen in a role well suited to her artistic ability and great personal charm. Her success has been tremendous.

Colonial Theatre. — Miss Mary Mannering continues her success in "Janice Meredith." She is always a favorite in Boston and the title role of her present play gives great opportunity for her to dis-

play her talents. She is supported by an admirable company.

Tremont Theatre. — "The Princess Chic," with Marguerita Sylvia as the princess, is now in its third week. — The music is of an uncommonly ambitious and lofty character and is exceedingly well rendered. The chorus is far above the average.

Boston Museum. — "Sky Farm," by Edward E. Kidder, is laid in the Berkshire Hills. The character types are numerous and strongly drawn and well portray the New England farmer of years gone by.

Castle Square Theatre. — "A Million of Money" is being given this week. Next week the old-time favorite, "Pudd'nhead Wilson," will be played by the regular company.

Columbia Theatre. — Rice's "Evangeline" continues as a strong favorite. The whole performance is marked by the snap and vigor of Mr. Rice's musical efforts. The opera is amusing and well rendered, the chorus is very attractive, and the costumes and scenery are gorgeous.

Boston Food Fair. — Most successful Food Fair in America. Royal Marine Band of Italy next week. Gorgeous electrical effects.


HERRICK TICKETS Copley
ALL THEATRES Square.
Telephone 608 and 950 Back Bay.

Private Lessons a Specialty.

MISS POST,
Dancing and Deportment,
Pierce Hall, Copley Square.

PRIVATE LESSONS AND CLASSES.
Office hours from 9 to 11 a. m.

"THE GIRLS ARE FOND OF THESE"



TECH EMBLEMS.

Greatest Variety.
Lowest Prices.

BENT & BUSH,

387 WASHINGTON ST., BOSTON.

COES & STODDER

MAKERS AND RETAILERS OF

STUDENTS' SHOES

78 BOYLSTON ST. 14 SCHOOL ST.

10 PER CENT DISCOUNT TO TECH STUDENTS.

In writing advertisers kindly mention THE TECH.

NEUCHÂTEL.

SEYSEL.

Rock Asphalt

Floors for Stables, Laundries, Hospitals, Dye-Houses, etc., etc. Perfect Sanitary Floors—Water and Acid Proof.

GRANOLITHIC

In all its forms,—Sidewalks, Steps, Curbing, Cooping, Driveways, Floors, etc.

TAR CONCRETE

Walks and Driveways.

Fire-proof Floor Construction and Waterproofing of cellars.



Electric Light Supplies

Elec. Railway Supplies

Telephone Supplies

Largest and most complete
line in New England.



Stuart-Howland Co.

279-287 Devonshire St.,
BOSTON.

Telephones: Branch Exchange
Boston, 4144; Boston, 4127.

CHAS. HEAD & CO.,

Stock Brokers,

53 State St., Boston. 17 Broad St., New York.

Oliver Ditson Co. Piano Warerooms.

140-141 BOYLSTON STREET.

HEADQUARTERS OF THE **KNABE PIANOS**, Grands and Uprights, excelled
by none in the world. Also

BRIGGS, RICHMOND, NEW ENGLAND
And Other Good Makes.



PIANOS TO RENT.

A large stock of fine second-hand Pianos to rent, including the following makes: Knabe, Chickering, Vose & Sons, Briggs, New England, Shoninger and other celebrated makes, all in fine condition. Call at our warerooms and hear the wonderful Angelus that assists you (gives you the execution) to play the most difficult compositions, while you give your own expression and personality to the performance. This enables you to study all the compositions of ancient and modern masters in your own homes, and to play them as the greatest artists would play them even if you do not know a note of music.

OLIVER DITSON CO., 140-141 BOYLSTON STREET.

In writing advertisers kindly mention THE TECH.

Clinton Wire Cloth Co.

SOLE PROPRIETORS AND
MANUFACTURERS OF

WIRE LATH

Double Twist Warp, Stiffened (Iron Furred)
Stanley Corrugated, Stephens Rigid.

Plain, Japanned or Galvanized.

The most Perfect and Economic.

FIRE PROOF Construction.

SEND FOR CIRCULAR.

BOSTON, NEW YORK, CHICAGO,
Sears Bldg. 76 Beekman St. 137 Lake St.

FACTORY — Clinton, Mass.



Richardson, Hill & Co.,



*Bankers and
Stock Brokers.*

40 WATER STREET, BOSTON, MASS.



Stocks and Bonds Bought and Sold in All
Markets. Commercial Paper Negotiated.



ADAMS HOUSE EUROPEAN PLAN



Washington St., BOSTON

GEO. G. HALL, Proprietor.

Wollaston Foundry Co. General Foundry Work.

Manufacturers of

Piano Plates and
Fine Machinery Castings.

FOUNDRY AT WOLLASTON.

A. A. LINCOLN, 116 BEDFORD STREET,
Treasurer. BOSTON.

At Office from 12 to 2 Daily.

New England Adamant Co.,

MANUFACTURERS

ADAMANT WALL PLASTER



79 Milk Street, Room 25, BOSTON, MASS.

Telephone, Boston 3517.

W. B. BANIGAN, General Manager.

STONE & WEBSTER,


Electrical Experts
and Engineers.....



OFFICE, * * * 93 FEDERAL.

MINER ROBINSON,

Electrical Engineer,

306 Equitable Building, BOSTON.

High Grade Electrical Work of Every Description.
Complete Electrical Lighting and Power Plants.

TELEPHONES.

BOSTON, **3331: also MAIN 4087: WEST NEWTON **141.


The Mason Regulator Co.,

Established 1883.

MANUFACTURERS OF

Standard Appliances for the

Automatic Regulation of Steam,

Water and Air Pressure.

158 Summer Street, * * * Boston, U.S.A.



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
(Philips Brooks') Church
and Institute of
Technology.

KEPT ON BOTH AMERICAN
AND EUROPEAN PLANS.

BARNES & DUNKLEE, Proprietors.

H. H. BARNES, Manager.



In writing advertisers kindly mention THE TECH.

WHY Pay \$7.00 for a Patent Calf Oxford, when

✿ You Can Buy Them for \$4.50 of

E. W. BURT & CO.,

40 WEST STREET.

We are MANUFACTURERS, and we sell direct from our factory to you.

GOLF SHOES — EXTENSION HEELS — WING TIPS.



TENNIS OXFORDS.

THE TECH

1901 - 1902



NEW and absorbing feature
of this year's Tech will be a
series of cartoons on familiar scenes,
persons and places about Tech. The
first of the series is given in this
number



Subscription, \$2.00

A. S. MORE, Business Manager ✿ ✿

McMORROW,

(Formerly with H. H. Tuttle Co.)

College Shoes

— FOR —

College Men

OPP. YOUNG'S HOTEL.

238 Washington Street, BOSTON.



J. C. LITTLEFIELD,

Tailor and Outfitter,

12 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.



= SHOES =

FOR COLLEGE MEN

A SPECIALTY.



THE HENRY H. TUTTLE CO., . . Washington and Winter Streets, Boston.

Gifts for All Occasions.



WEDDINGS,

ANNIVERSARIES,

BIRTHDAYS.

Gold, Silver and China Novelties. Class Engraving. Athletic Prizes.

H. Stowell & Co., Incorporated, 24 Winter Street.

In writing advertisers kindly mention THE TECH.