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The Tech.

VOL. XIII.

BOSTON, NOVEMBER 16, 1893.

NO. 7.

THE TECH.

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

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

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

FRANK WOOD, PRINTER, 352 WASHINGTON STREET, BOSTON.



As the weeks slip by and we begin to realize that the term is nearly half over, the old question of social events assumes a prominent place in our thoughts. Most of us will remember how the afternoon Tech parties ended two years ago; how the "Technology

Assembly" was planned and carried out last spring upon very short notice, so that there should be no precedent established of a year without at least an attempt at a general social event. The success of that occasion practically initiated it as an annual addition to our festivities. Already the Juniors are discussing the best means of running their assembly, or promenade, whichever it may be styled.

In the first place, the only practical way to limit the ticket holders to the number that can

be accommodated in Pierce Hall—which is the only one in Boston suited to our needs—is by placing a fair price upon tickets. There appears to be some diversity of opinion as to how the affair shall be run. The best way out of the difficulty, it seems to THE TECH, is to throw upon the Institute Committee the responsibility of electing each year five men from the Junior class to manage a Technology assembly. This overcomes any local class action of cliques, gives each class indirectly an interest in the ball, and makes the management a position of honor. Precedent would soon establish things so firmly that many present troubles would cease to exist.

The early part of February is probably the best season to give the assembly, being just before Lent, in cool weather, and before the hard work of the second term has fairly begun. Several members of the Banjo Club have expressed their willingness to play at the assembly if wanted.

A plan for two or three days of festivities, such as most other colleges enjoy during the winter term, has called forth much enthusiasm. This will be discussed in a later issue of THE TECH.

LITTLE by little the "Technique" editors are realizing the difficulties of their task. As the work to be performed is more fully outlined, they become aware of their dependence upon our students at large for contributions, suggestions, and general assistance. Would that the mass of students could be brought to understand these conditions as perfectly as the editors themselves. Then, indeed, would "Technique" shine,—but the mere thought blinds us. However, since suggestions are in order, let the '95 editors carefully avoid unnecessary parody in verse.

Neglect of this was a lamentable failing in our last annual. No matter how beautifully expressed even a lofty idea may be, its effect is almost completely counteracted by the bare suggestion of metrical imitation.

AS most of us are aware, athletes especially, the gym. is lighted by daylight and gas-light, by the former chiefly. We can hardly expect one-dollar gas to compete with old Sol in brilliancy, but nevertheless we do desire and need better illumination at the end of these fast-shortening days. It is almost an axiom, stated by those who are supposed to know, that exercise, to be most beneficial, should be taken in a cheerful frame of mind. But who can be cheerful in a dimly lighted structure? Incandescent lights would answer every purpose, giving increased light better distributed, and superior ventilation. The electric plant in Walker Building, or the city circuit, could supply power conveniently.

THE rumor reaches us that a proposition has been brought before the Faculty to allow a week's intermission at both Thanksgiving and Christmas. It is very evident that such a recess would be at once beneficial to student and instructor alike, and would lead to most successful results. Every Tech man has looked with disfavor upon the one day usually granted at Christmas, while the three days at Thanksgiving have hardly been sufficient to give the much needed rest which is desired at the middle of a long and severe term of work. Even if the summer vacation was shortened somewhat, it would seem preferable to have two short seasons for recreation at times when it is most needed.

Although we discredit the report that such a proposal has actually been made, it is, nevertheless, worthy of careful consideration. The fact that many men drop out before the fall term is completed, is no little argument in favor of this scheme.

THE leasing of the Winslow Rink to the New England Art Students' League, will be an advantage to the Institute in more than a financial way. The League has a membership of about two hundred, and is supported by the *élite* of Boston. Naturally, therefore, it occupies a prominent social position in our city. The purpose of the league is the common aid of its members in the study of art; its desire now is to make the new "Grundman Studio Building" the art center of Boston. The extensive repairs have progressed so rapidly that even at this early date a fair idea of the new arrangements can be obtained. In the center of the building will be a dance hall, 115 x 48 feet. At one side of this is to be a banquet hall, 60 x 30 feet, which will contain a small stage for private theatricals. At the front of the building the library, reception rooms, smoking room, and business rooms of the Art League will be placed. Grouped around these, taking up the remainder of the first floor, will be disposed some of the studios of the members of the League. The second floor will be given up entirely to studios, the largest of which will be occupied by Mr. Ross Turner, instructor in water color at the Institute. Among the other noted artists who will occupy studios in the new building will be Arthur Dowe, Max Bartman, Mme. Peralta, Mr. and Mrs. Stone, Langford Warren, Mr. Claus, and others. There will be thirty-six studios in all. One room on the first floor will be occupied by a branch store of Wadsworth & Howland, dealers in artists' materials. This will bring a large supply to the Tech students within three minutes of any building of the Institute where such materials are used. While it is to be regretted that the finances of the Institute made this lease necessary, yet evidently the value of the Institute's property will be enhanced, by adding greatly to our site already happily surrounded. With Trinity Church, the new Public Library, the Museum of Fine Arts, the Natural History Association, the Art Students' League, and Copley Square

in its very midst, Technology certainly has an atmosphere as cultured as the Back Bay can give it,—one it would be extremely difficult to equal elsewhere in the country.

COMMUNICATIONS.

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

TO THE EDITORS OF THE TECH:—

There appears to exist considerable doubt in the minds of many of the men at the Institute as to the exact shades of Technology's colors. I believe the official announcement when they were chosen was that they should consist of "cardinal red and silver gray," but this definition allows a considerable difference to be observed among the flags at our football matches, and on other occasions where our colors are prominent, while all actually come within this definition. Now, what I would suggest is that the Institute Committee should decide just what shades we are in the future to go by, and, having decided, post the same in a glass case in Rogers Corridor, or some equally good place. If I have not made myself plain, I would suggest as a model the way the members of the Boston Athletic Association have their colors posted in the library of their clubhouse.

R. W.

TO THE EDITORS OF THE TECH:—

Where can the spirit of fairness of one class toward another be better shown than at the cane rush? But '96, however, descended to the low, unsportsman-like trick of using barbed wire on the flagpole. It was no credit, therefore, to '96 that her flag waved unfought for, for no one cared to be all cut up in attempting to tear it down; '97 made a mute appeal to the fair-mindedness of the spectators by not attempting it, although one '97 man did start the attempt, until throttled by at least seventy-five jubilant Sophs who nearly tore him to pieces in their wildness.

If '96 had put up her flag and guarded it successfully, it would have been a proud day for her; but never, never has any class but '96 been guilty of such an act! All honor, then, to the man who made the attempt, and may the ignominy of this unsportsman-like act follow '96 to the end. I am, respectfully, a sympathizer of '97.

C. A. M.

The Libraries of the Institute.

THE Institute possesses what is known as a working library. Its thirty thousand volumes and many thousand pamphlets, periodicals, and papers have all a direct bearing upon Institute work, and have all been carefully selected from time to time, as their need has become apparent in the development of the courses.

The collection embraces the widest range of scientific work, and is divided into libraries whose distribution and general arrangement is at once unique and advantageous. The several departments have been arranged in the different buildings where they are most convenient for the various courses. Thus we have a distribution and location as follows:—

- Mining Library, Rogers, Room 9.
- Biological Library, Rogers, Room 13.
- Geological Library, Rogers, Room 14.
- General Library, Rogers, Room 15.
- Mathematical Library, Rogers, Room 34.
- Library of Political Science, English, and History, Rogers, Room 40.
- Physics Library, Walker, Room 15.
- Chemistry Library, Walker, Room 43.
- Architectural Library, Architectural, Room 32.
- Engineering Library, Engineering, Room 40.

It is furthermore characteristic of all the Institute libraries that they are accessible to all students. A student is at liberty to take any book from any library, provided that he conforms to simple and necessary regulations. The one rule set down is that the name of the borrower, the name of the book, and the date be written in the record book provided in every library, and that in most cases the book be returned the following day. It is obvious that such a simple regulation imposes a trust on the student, the violation of which produces serious embarrassment in the work of others. But, on the other hand, the advantages of such a free use of books as this regulation permits can but be of the greatest value. Taken all in all, the selection, arrangement, and manner of conducting the libraries could hardly be surpassed, as far as actual benefit to the students is concerned.

Ninety-Six Victorious.

FOR the first time in four years the Sophomores have won the cane rush. For them to win the football game, however, is rather to be expected.

At three o'clock last Monday, '97 started the game by gaining ten yards with an opening wedge. The ball was lost on four downs, and '96 then worked to the opponents' line in seven minutes. Howland made the first touchdown; Sias failed for goal. A second touchdown for '96 was made by Rockwell eight minutes later. This gain was secured mainly by a 25-yard run of Rockwell's. Sias kicked a good goal from near the side line. Again '96 swept down the field. Howland was pushed over for a touchdown, but Sias failed for goal. The Freshmen then braced, and in short time sent McElwaine over for a touchdown. Goudy's try for goal failed. Here a side rush occurred, '97 trying successfully to secure some placards carried by the Sophs. The men had hardly begun to play again when time was called.

In the second half, Manahan replaced Robinson at center; '96 worked the flying wedge for a 20-yard gain, and hurried the ball toward goal. Just at the line the ball was dropped by a Soph, and picked up by Waldo, who, however, was forced to make a safety. Rockwell now broke through several times, but was well blocked by McCormick; '96's advance caused great enthusiasm on the Sophomore side of the field. The crowd, headed by a German band hired for the occasion, triumphantly marched to the flag pole and back, and raised some new transparencies to please the Freshmen. With this encouragement '96 quickly made another touchdown, but as usual the try for goal failed. Play was now pretty even, time finally being called with the ball on '97's twenty-yard line. Sophomores, 20; Freshmen, 4.

Good work was done for '97 by McElwaine, Washburn, and Underwood, while Sias,

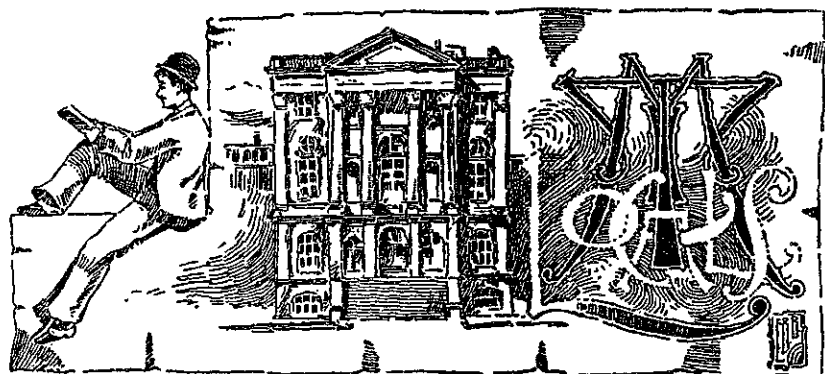
Batchelder, and Rockwell showed up well for '96. Three of '95's old players, Sias, Batchelder and Gilman, played on the Sophomore team.

The teams lined up as follows: '96—rushers, Brown, Mayo, Gilman, Robinson (Manahan), Whiting, Meade, Batchelder; quarter back, Tower; half backs, Howland, Rockwell; full back, Sias. '97—rushers, Underwood, Vinton, Worcester, McCormick, Heard, Washburn, Parker; quarter back, Mansfield; half backs, McElwaine, Waldo; full back, Goudy. Referee, Edward D. Clark, '94. Umpire, H. W. Hayward, '95.

After the game, those of the Freshmen who were courageous enough to enter the rush, formed themselves in concentric rings about those holding the cane. Most of the '97 men present seemed to prefer watching the combat from the outside. Unfortunately for '97, the Sophomore class did not show the same spirit. They made up two wedges, ready to bear down upon the Freshman crowd from different directions. Suddenly, however, one of the wedges broke loose to catch an unlucky Freshman, who had been discovered wearing "climbers." The culprit was driven up among the "bleachers", and fared roughly at the hands of the crowd. He was rescued by some '94 men, but was relieved of his "climbing irons" before getting free.

The Sophomore wedges once more formed for the rush and started toward the little Spartan band of Freshmen. The rest must be left to our readers' imaginations. When time was called, twenty minutes after the start, it was almost impossible to separate the contestants. With the assistance of upper classmen the hands remaining on the cane were at last counted. As a result, the Sophomores were accredited with twenty-one, the Freshmen with ten.

Had '97 been as numerous or as well organized as their rivals they would have fared better, undoubtedly. But they take their defeat gracefully and must now look for other laurels.



Are there no photographers in '97?

Thanksgiving vacation approaches!

Take advantage of the liberal prizes offered by the '95 "Technique" Board.

The Architectural Society is to have a dinner "when the designs are in."

Freshman (who was in the hottest of the rush): "I don't feel sore physically, but I do mentally."

The game with Williams, scheduled for last Saturday, was cancelled, owing to the crippled condition of our players.

Anarchy is making its way at the Institute. At least the manufacture of volcanic bombs progresses quietly in 12 Rogers.

A picture of the Junior Class on the steps of the Natural History Building, was taken for "Technique" last week Thursday.

The Society elected five new members, Herbert H. Barnes, J. Foster White, Geo. S. Moynehan, Jas. L. McQuarrie, and Chas. M. March.

A standing joke: Prof. Cr—ss (manipulating the water wave model), "the smaller cranks are moved by the action of a greater crank behind."

The members of Course XIII. were taken down to the wharves on Thursday, November 9th, to inspect the Gloucester, of the Baltimore line of steamers.

Mr. Adams has recently placed on exhibition in the Freehand Room of the Architectural Building a new line of casts, which are said to be very *drawing* attractions.

The Class of '96 will have a class group taken Friday, November 17th, at 1 P. M., on

the Natural History steps. All members of the class are expected to be present.

Course I., '95, has formed a football team, and challenged Course IV., '95. The game will probably occur this afternoon on the Clover Field. Two 15-minute halves will be played.

It should be the duty of each member of the Class of '96 to see that his class assessment is paid. Mr. M. E. Pierce is the class treasurer, and should be called upon as soon as possible.

"Do you believe in 'corporal' punishment?" one student asked another. "I prefer 'straight-cut,' answered the other, lighting a cigarette. And the questioner cannot yet see where the laugh came in.

On one side of the large bulletin board in Rogers corridor the morning after the election: "Professor F. will omit his lecture in Descriptive Geometry this morning." On the other side was found, "He voted for Russell."

Professor C—: "This experiment will prove the principle, if no accident occurs."

Tries it—string breaks—laughter!

Professor C—: "Well, at any rate I have proved that the unexpected always happens."

Several '96 men served as ushers at the Charity Fair in Music Hall at its opening, Monday evening, November 6th. Lieutenant Hawthorne was again, as last year, chosen marshal for the evening, the Sophomores acting as aids.

Prof. Elihu Thomson's lecture, to be delivered at Odd Fellows Hall, Lynn, at eight o'clock this evening, has been entitled "Lightning." Those intending to go may take the 7.10 train at the Eastern Station, Causeway Street, arriving in Lynn at 7.35.

American History. Mr. W—: "Columbus came to America, at a great expense to Spain, and brought back nothing but a few Indians; while Vasco da Gama sailed around

the Cape of Good Hope to Hindoostan, and came back *loaded, literally loaded!*"

We wish to correct an error which appeared in No. 4, concerning the election of the executive committee of the Sophomore Class. R. Johnston was the successful candidate for the position on the committee instead of P. F. Johnson, as stated in THE TECH of the above date.

A short meeting of the Freshman Class was held last Saturday in Huntington Hall. The official class election reports were read by the temporary secretary, and Mr. Bragg took the chair. It was voted to assess members of the class twenty-five cents each for current expenses of the class, and then the meeting was adjourned.

The Sophomore civils are now at work surveying a series of connected fields out at Clarendon Hills. Professor Burton proposes to make an exact survey of a considerable area there, which is of some interest geologically. After completing the work, the result will be embraced in a topographical map of the district.

Professor Cross was chairman of Section B of the International Electrical Congress, held in Chicago last August. Section B had to do with subjects combining theory and practice, and papers were read by many eminent electricians from this country and abroad. Several of the mechanical and electrical students of the Institute were in attendance.

At some time during the month Lieutenant Hawthorne proposes to give a stereopticon lecture to the Freshman class on the subject of "Small Ordnance," taking up principally the rifle. The lecture will be given in Room 37, Rogers, and will be open to men interested in the subject from the upper classes, in so far as the room will accommodate them.

We are not aware who were to blame for the contemptible display of egg throwing at the cane rush last week; but unfortunately appearances seem to implicate several Tech men, who were ably assisted by the little

urchins upon the grounds, boys not supposed to know better. Any student at Technology should be above such actions, whether he be Freshman or Senior.

On November 7th the Photographic Society held its regular monthly meeting. W. M. Partridge, '96, was elected vice president in place of Mr. Azel Ames, who was forced to resign on account of press of work. Other routine business was transacted, and the plan of work for the year discussed. Mr. W. W. Crosby, Mr. W. H. Lawrence, and Mr. H. W. Nichols were elected honorary members, and Mr. Mortimer Frank, '96, Mr. C. Drake, '96, and Mr. D. W. Richards, '94, active members.

Mr. E. B. Bird, '91, well known to many of our present undergraduates, has made the illustrations for "Olla Podrida," the Wesleyan Junior Annual. Last year he supplied nearly all the cuts for Amherst, Wesleyan, and Tufts. He has done work for Brown, and in fact nearly all the colleges in this part of the country. Just by a slip he lost the contract for the University of Pennsylvania's Annual. Would that more Tech alumni were like Mr. Bird, who retains his interest in Technology at its highest pitch, keeps in touch with our present conditions, and has many warm friends in consequence. He has a pleasant studio in "The Pelham," on Boylston Street, where many an idea is originated, to be multiplied later in various books and magazines.

The "Technique" Board have offered the following prizes: Best original, purely Institute song, words and music not necessarily by same author, \$25; best new college song, applicable to M. I. T., \$10; best artistic contributions, first prize, \$10; second prize, \$5; best original poem, \$5; best collection of grinds and quotations, \$5; best literary and miscellaneous matter, \$5; best value in advertisements, total amount being \$100 or over, \$25; to all others on all ads. secured, 10 per cent. The board reserve the right to

withhold any prize in case only undeserving contributions are received. Contributors should confer with A. D. Fuller, T. B. Booth, or G. H. Matthes on literary matters; F. B. Masters, G. H. Davis, or Allison Owen on artistic matters; A. L. Canfield or E. H. Huxley in relation to advertisements. "Technique" is an Institute publication; hence every student should assist in any way he can.

The Seniors in Course IV. have received notice to choose their theses and commence work immediately. This is a departure from the old custom of beginning thesis work at the first of the second term, and is caused by the change in the course of study which took place this year. Beginning with the Class of '94, the Seniors in Architecture will have a course in constructive design; and in view of this fact, the Faculty have required that each candidate for a degree in Architecture shall, in addition to making a design, solve some of the difficult problems in construction which would be met if the design should be executed. This has been optional previous to the new arrangement, and consequently comparatively few have chosen construction for a thesis. The new requirement has met with favor among the students, since it requires them to become familiar with a very practical branch of their profession.

Mr. Geo. R. Fuller, a graduate of the Institute, read a very interesting paper before the Society of Arts, Thursday evening, November 9th. The subject was the "Removal of Pathogenic Bacteria from Drinking Water." Mr. Fuller is at work in the Experiment Station at Lawrence. He claims that since the Lawrence water is purified by sand filtration, the death rates by typhoid fever and like diseases have been cut down exceedingly. The sand filter in use at Lawrence is two and one-half acres in area, and a similar one for Boston would require an extent of twenty-one acres. The system of sand filtration is in use in Berlin and London, where the typhoid fever

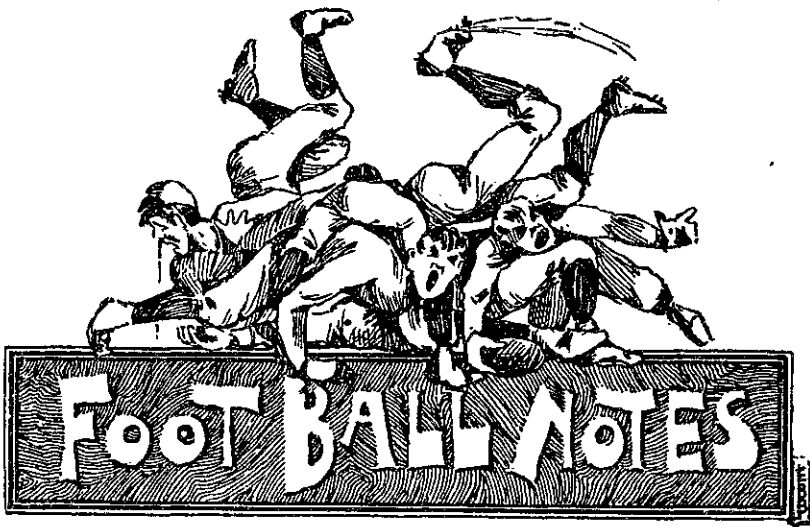
rates are far below those of American cities. The advantage of the sand filter in cholera times was illustrated by the good health of the city of Altona, which draws its water from the Elbe below Hamburg. In Altona the number of deaths by cholera was 328, compared with 7,611 deaths in Hamburg.

In the *University Magazine* for October we find the following items: "The '94 'Technique' is a very full book; it is profusely illustrated, and gives one the impression that there are some exceptionally clever men both with pen and pencil at the Massachusetts Institute of Technology."

"Both the Worcester and Massachusetts Institutes of Technology deserve the greatest credit for a uniformly good showing which they made in football. Their Faculties are opposed to athletics, and when it is considered that the gifted athletes of both universities think nothing of carrying thirty hours per week of recitation, in addition to their training, the success they have attained under the circumstances is truly remarkable. The M. I. T. has held the championship of the Eastern Intercollegiate League."

"Among the smaller leagues is the one between Worcester Institute of Technology (meaning, however, the M. I. T.), Trinity, and Brown. At present writing Brown refuses to sanction a rule urged by the other two members, stipulating that each member of a university eleven must take ten hours per week. This rule is undeniably in the interests of clean football, and Brown will probably grant the point finally. Various ugly rumors have been afloat concerning the Brown eleven, and this department takes great pleasure in publishing an extract from a letter by the manager of the Brown Football Association:—

"Neither Mr. Donovan nor Mr. Millard were financially induced to enter Brown University. These men have told me personally that they never intended to enter Yale. . . . There is not a candidate for the football team against whom the charge of professionalism can be brought."



Brown, 36; Tech, 0.

LAST week Wednesday Tech received its severest defeat of the season at the hands of a team which in years past has generally been as badly beaten by Technology. Our team has been in crippled condition for several weeks, but it is hardly probable that we would have beaten Brown even with our regular team in good condition. Just as long as student opinion continues in its present dormant state, doing nothing to induce our best men to appear on the football field, we may expect defeat instead of victory. When we glance at the fine physiques of many Tech men who can and ought to be on our teams, it makes us ashamed to compare our records with those of other colleges without half the material at their command. The weight of student sentiment makes men play, and gives them honor for so doing.

An audience, composed largely of ladies, encouraged the Brown team as it started the game, at 3.20. Ten yards with a V, followed by gains through the line, and a 25-yard run around right end by Millard, took the ball to Tech's 3-yard line. Here Tech got the ball, but soon lost it, whereupon McCarthy was pushed through for a touchdown. Millard kicked goal. Tech made eight yards with a flying wedge, but could gain no more, and had to punt. Tech's defense was extremely poor, and, coupled with Brown's splendid interference, heavier line, and more dashing play, allowed the ball to be in our territory

and in Brown's possession most of the time. Again McCarthy was pushed over for a touchdown, Millard failing for goal. Brown, 10; Tech, 0. Brown fumbled badly several times, but the quickness of her half backs saved her. Brown broke through the line, and gained around the ends almost at will, though Tech occasionally braced and held her heavier opponents nobly. Two more touchdowns were added in this half, one goal being kicked. Millard made a beautiful run of sixty yards from Brown's 15-yard line, but time was called before Brown could profit by the gain. Brown, 20; Tech, 0.

The second half was a repetition of the first. Except for the magnificent playing of Thomas and Curtis, assisted by Andrews, Perkins, and Manahan, the score would have been far worse than it was. The rest of the team played a listless game, which was not excusable even in an uphill struggle. Brown scored three more touchdowns, and Donovan kicked two goals. Brown, 36; Tech, 0.

The team work of Brown far excelled ours. We, however, had several substitutes, while Brown played the men against whom so much objection has been raised.

The teams lined up as follows: Brown—rushers, Denison, Aldrich, Hastings, Coombs, Smith, Nott, Robinson (Colby); quarter back, Donovan; half backs, Millard, Casey (Hopkins); full back, McCarthy. Tech—rushers, Underwood, Newell, Washburn, Manahan, Robinson, Perkins, Parker; quarter back, Humphreys; half backs, Curtis, Thomas; full back, Andrews.

Referee, E. Weeks, Brown, '93. Umpire, Frank Mason, Harvard. Attendance, 800. Two 30-minute halves.

Last Thursday afternoon, as the result of a challenge sent by the Baker's Dozen, the Senior Chemists, and Chemical Engineers lined up against each other for a quantitative analysis of the Clover field. Course V. started with the ball, but soon lost it by in-

effectual attempts to break through the Baker's Dozen center. "Analyt" made a gain of ten yards around left end; "Applied Mechanics" was the signal for a similar one about the right end. The Chemists then braced, but after hot resistance were forced by their more mechanical opponents to their 10-yard line. Here the ball was fumbled, and Lincoln made a fine run down the field to Course X.'s 10-yard line, and would have made a touchdown but for a cramp. The half ended with the ball in the center of the field. Score 0-0.

In the second half, Clement scored a touchdown for Course X. after a pretty run. The punt-out failed. The playing was even for the rest of the game, the score remaining, Course X., 4; Course V., 0.

Lincoln did the best playing for the Chemists, and Clement, du Pont, Sheppard, and McJennett did fine work for the Baker's Dozen.

COURSE X.	COURSE V.
Price, l. e.	Nisbet, r. e.
Chase, l. t.	Duckworth, r. t.
Davis, l. g.	Piper, r. g.
Lovejoy, c.	Bates, c.
Beach, r. g.	Kinney, l. g.
Anderson, r. t.	Moore, l. t.
Adams, r. e.	Scott, l. e.
Clement, quarter back.	Hicks, quarter back.
Sheppard } half backs.	Phelan } half backs.
(Clement) }	Clafin }
McJennett }	
du Pont, full back.	Lincoln, full back.

Ninety-seven played a good game against St. Mark's a week ago Saturday. At the end of the first half the score stood 6-4, in favor of the latter; but in the second half St. Mark's braced, and finally beat the Freshmen 20-8.

Lewis, Harvard's famous center rush, is said to have declared that Manahan, our old reliable, is the best center he has played against this year.

Three meteors were photographed at the Yale Observatory on the 9th and 10th of August. This was one of the few successful attempts ever made to determine meteor paths by photography.

A list of the captains of the principal college football teams of the country and the positions they play is given as follows: Harvard, Waters, half back; Yale, Hinkey, end; Princeton, Trenchard, end; Univ. of Penn., Mackey, tackle; Cornell, Barr, tackle; Amherst, Haskell, guard; Brown, Hopkins, half back; Dartmouth, Jones, tackle; Williams, Ide, quarter back; Wesleyan, Gordon, full back; Lafayette, Edwards, end; Mass. Inst. of Tech., Thomas, quarter back.

Recent football scores are as follows:—

October 28th.—Yale, 28; West Point, 0.
 Harvard, 58; Brown, 0.
 Princeton, 82; Wesleyan, 0.
 U. of Penn., 82; Lafayette, 0.
 Cornell, 10; Williams, 10.
 B. A. A., 26; Amherst, 0.
 Orange A. C., 34; Rutgers, 0.
 U. of Virginia, 28; Johns Hopkins, 12.
 U. of Minn., 34; U. of Mich., 20.
 Lehigh, 12; Annapolis, 6.
 Crescents, 20; Union, 8.

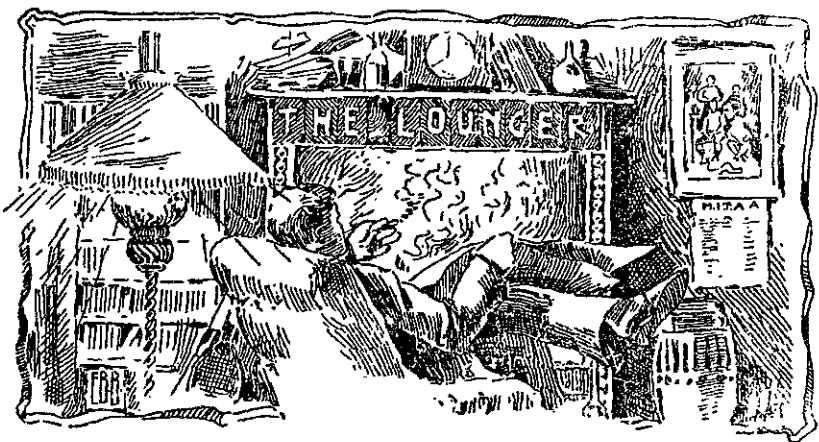
November 1st.—Amherst, 16; Amherst A., 2.
 Colby, 30; Maine State College, 4.
 Tech, 18; Trinity, 12.

November 4th.—Harvard, 34; Cornell, 0.
 Princeton, 4; Pennsylvania, 0.
 Dartmouth, 20; Williams, 0.
 Amherst, 12; M. I. T., 4.
 Worcester Tech., 10; Trinity, 0.
 West Point, 6; Union, 0.
 Gettysburg, 4; Dickinson, 0.

At the annual fall games of the H. A. A., E. B. Hill won the half-mile run from scratch in 1 minute $58\frac{4}{5}$ seconds. Anything under two minutes is remarkable running for the half. S. H. Foster, who entered with the Class of '95 at Tech, and is now at the Harvard Law School, won third in the quarter at these games.

The Technology cross-country run will be held about December 16th. The start and finish will be on Exeter Street, opposite the gym., the course being to Coolidge's Corner and return.

Amherst has an entering class of 143.



AGAIN the mill has ground out its annual supply of missing caps, torn shirts, and strained muscles, and the Lounger can settle down in the serene certainty that another cane rush is well over. Just why the underclassmen evince the most bitter hatred for each other at these times, and then relapse into unconcern for each other's existence, has always been a matter of great speculation to the Lounger. But as long as such conditions remain, the Lounger makes it his annual task to witness the fray, and to urge the lagging contestants to "get into it." How many fainting hearts has he thus induced to believe that further exhaustion will add greatly to class fame. On these occasions, too, he has stifled many a reckless scrap, and held back many a mucker whose sympathetic efforts are extended to every contestant, and whose yells always mingle with those of the Ruggles Street youngsters. The Lounger's sympathy is always with the Freshmen, so he holds them especially worthy of commiseration just now. But although 'tis true that this rush is over, this game is lost, and this opportunity for flag floating is past for them, what of it? Just think of the poor weaklings now struggling with the rudiments of algebra who will become their lawful prey in one short year! Surely the experience so bitterly gained by the Freshmen will aid them in laying low these upstarts who have not yet started up! For present consolation, the Lounger can only advise the Freshmen to discover Howe '96 succeeded in recovering lost property last year; and, in the spirit of true friendship, he would warn them not to advertise in THE TECH for missing articles of clothing.

The Lounger has little to say to the Sophomore. His great task, handed down from his ancestors, is done, and the Lounger is glad of it. The Sophomore may now carry his cane, and himself, as well, with all the pomposity and daring of a Boston policeman,—until the rush is forgotten.

Thoughtless.

Three sections of Freshmen in English sat,
And of sentences remedied many,
Till at last the Professor wrote on the board,
"I think that but little if any —"

"I cannot remember the rest," he said,
"But that is enough for you;
If you wished to make that sentence correct,
Pray tell me what you would do."

Then a Freshman rose with a doubtful air,
While the others breathless sat,
And said, "Professor, to make it just right,
I think I should leave out the 'that.'"

N. T. D., '97.

Ta(i)l(e) of a Shirt.

(Lost in the Cane Rush.)

It seems as 'twere but yesterday
I bought me that old shirt,
And got it at a bargain, too;
'Twas really cheap as dirt.

I wore it always next my heart,
For I did love it so.
Year in, year out it went with me
Wherever I might go.

But a Freshman loved it even more,
And so it came to pass,
I had to sacrifice it to
The glory of my class.

So now my shirt has gone away,
That shirt I held so dear,
And there is only left to me
A section of the rear.

Then, please, if any gentleman
Should ever chance to meet
A shirt without a wearer;
A shirt both short and sweet,

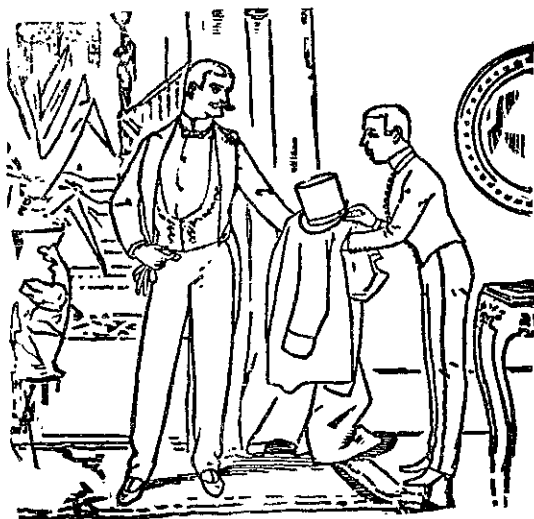
And much abbreviated,
And in an awful fix,
Why, will he please return it
To Mathews,

Ninety-six?

A STUDY IN COLOR.

Violet-brown is my lady's gown,
Violets are my lady's flowers.
Dark her deep eyes looking down;
Violet-brown is my lady's gown.
But her dear eyes, are they brown?
Violets, say, from rarest bowers.
Violet-brown is my lady's gown,
Violets be my chosen flowers.

—Vassar Miscellany.



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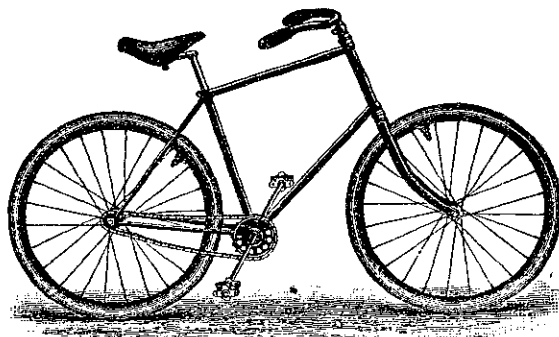
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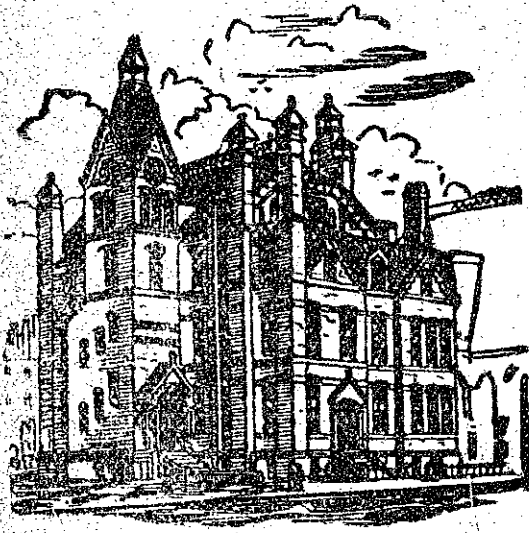
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