



# THE TECH

Boston, Massachusetts

November 1, 1894

Volume XIV

Number 6

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## .. CALENDAR ..

- November 1st.—Meeting of the Geological Society in Room 14, Rogers, at 4.15 P. M.
- November 2d.—Meeting of the Deutsche Verein in Room 11, Rogers, at 4.15 P. M.
- November 3d.—Meeting of Architectural Society in Room 12, Arch. Bldg., at 12 M.  
Football game, Technology '98 vs. Roxbury High School.
- November 5th.—Meeting of L'Avenir in Room 23, Walker, at 4.15 P. M.
- November 7th.—Christian Union Meeting in Room 27, Rogers, at 1.50 P. M.  
Football game, South End Grounds, Technology vs. Bowdoin.
- November 10th.—Football game, at Middletown, Technology vs. Wesleyan.  
Cross-country Run, at 3 P. M.

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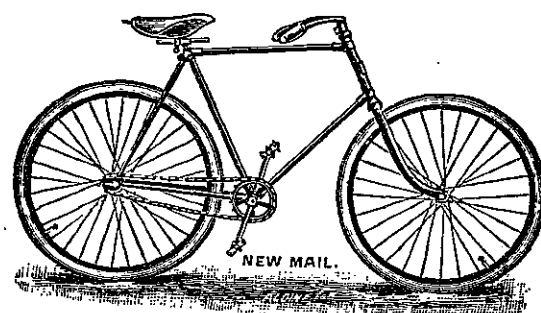
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# THE TECH

VOL. XIV.

BOSTON, NOVEMBER 1, 1894.

NO. 6.

## THE TECH

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

ANDREW DANIEL FULLER, '95, *Editor in Chief.*

CHARLES GILMAN HYDE, '96, *Assistant Editor in Chief.*

JOHN HOWLAND GARDINER, '95.

WILLIAM E. DAVIS, JR., '95.

EDWARD ARTHUR BALDWIN, '96.

BENJAMIN HURD, JR., '96.

REGINALD NORRIS, '96.

SHELDON LEAVITT HOWARD, '97.

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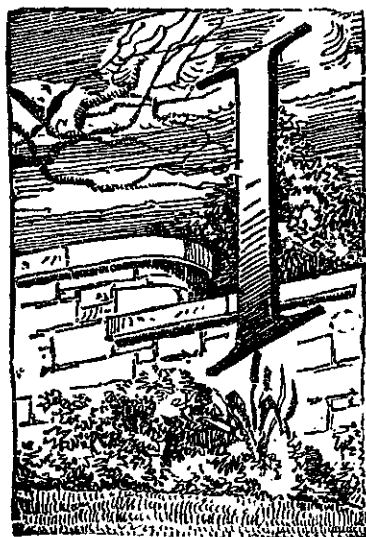
H. P. CODDINGTON, '95, *Business Manager.*

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

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

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

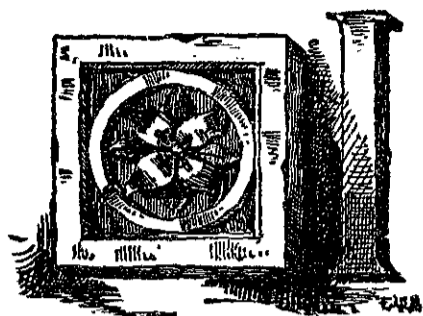
Entered in Post Office, Boston, Mass., as Second Class Matter.



IN spite of the unfortunate defeat at West Point, our eleven played a spirited game against Brown last Wednesday, and won by a score which must be considered very encouraging. Although the Brown team was somewhat crippled by the loss of Millard at full back, Hayden was unable to play for Technology, and the teams lined up with equal chances. The victory is especially laudable inasmuch as it was gained over a team which had been scored upon only by Yale and Harvard, and which had even succeeded in gaining points against Harvard's rush line. Brown's records of 10-0 at West Point and of 28-0 against B. A. A., only prove that Technology's football material is of

the right sort, and is capable of good work. The energy and snap which were characteristic of the game—and which may fairly be said to have been displayed by our men for the first time during the year—were prime factors in the success, and the interference was better than at any previous time. Moreover, the game was a clean one, and careful decisions on the part of the referees kept ill feeling at a minimum. Every man on the team must be commended for the work which he did. At the same time, it must be remembered that the success was only an initial one, and that the same quick work which was required in the game with Brown, must be constantly improved.

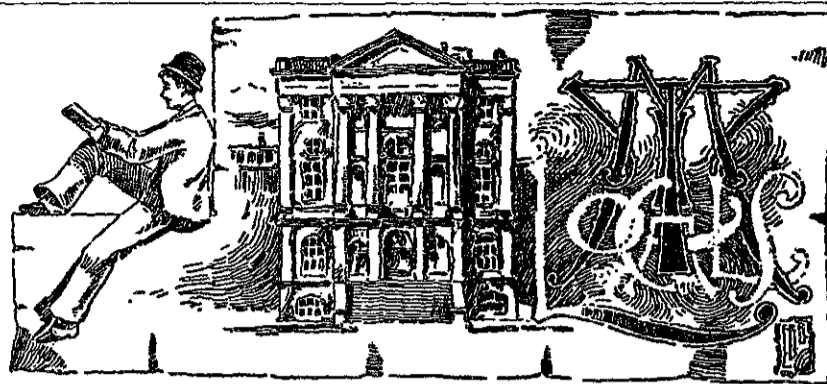
THE death of Mr. Charles O. Parsons, Course III., of the Class of 1873, brings to an end the active professional life of one of Technology's firm supporters and loyal graduates. His varied career, which Professor Richards has so well portrayed, we publish in another column. Entering at once into the busy field of a mining engineer in one of our largest steel manufacturing plants, Mr. Parsons rose rapidly from one position of responsibility to another, until at length, having mastered thoroughly the subject of mining engineering in all its details, he determined to enter upon the professional work of a consulting engineer. In this capacity his labors were successful to a high degree, and many of his investigations and inventions have added a wealth to the science of mining and of metallurgical operations. The history of his life must be inspiring to every man at Technology, as it deals with the difficulties and the success of one whose whole life must be identified as that of a true alumnus.



It may be a time-worn subject, but it has again become necessary to bring to mind the need of a better Technology pin; and judging from the inquiries that have come to our ears this fall, and the faults found in the design and makeup of the old triangular pin, it is advisable for the Institute Committee to call once more for designs. The previous competitions were unsuccessful from the lack of experience of the designers. Too many attempts at color arrangement were made, and too little attention was given to the form and proportion of parts, so that reproduction in metals was impossible. The response to the call last year was excellent, but ineffectual, for the reason which we have given.

Now that the subject has been brought before Technology early in the year, there ought to be a sufficient amount of interest to induce men to put more time and care upon the matter. From the number of consequent suitable drawings a pin may be chosen which will be satisfactory to the majority. Doubtless with the beginning of work for the year by the Institute Committee a formal competition will be opened. No prize will be offered; a pride in Technology should be sufficient to produce a hearty co-operation.

THE new measuring apparatus for the torsion machine in the Engineering Laboratories has been completed. The apparatus was designed by Professor Miller, and is intended to measure the arc of twist of materials under test. By two telescopes at a known distance apart, fixed at right angles to the shaft, readings may be obtained from a graduated scale forty-five feet from the machine. The telescopes are powerful, and afford readings to one hundredth of an inch. The device was tested a few days ago, and was found to be very accurate.



Ira Allen Nay, '95, has left Technology.

Guy Lowell, '94, is studying architecture abroad.

H. E. Hewitt, '94, is attending the Chicago University.

G. P. Lawson, '96, will return to Technology next term.

A. G. Farwell, '93, Course VI., is studying music in Boston.

Three of the officers of the Freshman Class are from Boston.

The Freshman Battalion was measured for uniforms last week.

There is a Record Cup for C. H. Parker in THE TECH office.

C. F. Richmond, ex-'97, is in the Sophomore class at Amherst.

Rumery, '98, broke the cross-country record in a trial run last week.

A subscription has already been received for the '96 "Technique."

J. W. Ames, '95, is with McKim, Meade & White, of New York City.

Nelson Wrightington, II., '94, is drafting for Curtis Davis & Co., Cambridgeport.

Some of the Senior Mechanicals have already begun work on their theses.

The Senior Mechanicals have challenged the Senior Electricals to a game of football.

Notes on Lecture III., military tactics, may now be obtained at Captain Bigelow's office.

The 'Varsity eleven was compelled to play Williams, on Wednesday, in a heavy rain.

Written tests in heating and ventilation will take the place of the usual examination at the semies.

The officers of the Freshman Class held a meeting in Room 11, Rogers, on Friday, October 26th.

There is a cup for W. Page, '97, winner of the second prize in the walk last May, in THE TECH office.

The text-book in American History for this year will be "Division and Reunion," by Woodrow Wilson.

Mr. George W. Blodgett began his course of lectures on Railroad Signals last Friday, in Room 23, Walker.

James Sawyer, manager of the Yale Glee and Banjo Clubs last year, is taking a special course at Technology.

W. S. Hutchinson, '92, Course III., has been made engineer of the Utica Gold Mine, Angels' Camp, California.

Captain Bigelow will continue to publish during the term copious notes on each lecture in Military Tactics.

Several of the '94 Architects have organized a luncheon club, and are taking their Wednesday lunches with Mrs. King.

A. H. Green, A.B., Harvard, '92, who holds the world's record for the pole vault (for distance), is in Course I., '96.

Hereafter the results of all tests made in the Engineering laboratory will be published in the *Technology Quarterly*.

The Institute has published some pamphlets on the heating and ventilation of the Walker and the Engineering Buildings.

The next meeting of Der Deutsche Verein will be held on Monday, November 5th, in Room 11, Rogers, at 4.15 P. M.

A series of timber tests are now being made in the Engineering Laboratory, upon oak, hemlock, and bird's-eye maple.

The Sophomore-Freshman cane rush will not be held on November 6th, as the football game cannot be arranged for that date.

Mr. Ross Turner has added several of his water colors of Old Colonial Buildings to the studies used in the Water Color Class.

J. O. Melhirsh, who entered the Institute with '94 and left at the end of his Sophomore year, has returned.

Ross F. Tucker, '92, Concrete Engineer of this city, has charge of the cement and concrete department of the *Brick-Builder*.

The Senior and Junior Architects had the same sketch problem this week. The subject was "Une petite fountain dans un square."

W. H. Keith, who left the Institute last January because of a severe attack of pneumonia, has returned, and will graduate with '96.

The class histories, which are written and submitted to the "Technique" Board, are due December 1st. The articles will be competitive.

Mr. F. W. Harwood, '94, who was President of the Electrical society last year, is with the Elektron Manufacturing Co., Springfield, Mass.

E. C. Klipstein, '94, who has been in St. Louis for two years, is now on his way to Paris to join the colony of Tech architects there.

At the next meeting of the Society of Arts, on November 8th, Mr. William Danmar will read a paper on the Colonial style of Architecture.

D. A. Gregg has a new scheme for Part I. of his Pen and Ink course. The first number is a dormer window rendered in four different methods.

It is the opinion of many of the patrons of the lunch room that a new blackboard, placed opposite the one now in use, would be a great convenience.

Some excellent photographs of the Palace of the Alhambra, at Grenada, are now hung in the third-year drawing room of the Architectural Department.

Entries for the cross-country run must be in by November 3d. The class captains should give the entries of their classes to the secretary of the A. C., Box 1, Cage.

Mr. J. O. Sumner, who has charge of the History of the Renaissance this term, is a graduate of Harvard. He has spent considerable time in German Universities.

A regular course of tests with the Emery machine has been established in the Engineering Laboratory. Each student will have two exercises, during the term, of three hours each.

During the week beginning October 21st, a series of inspections of the Cadet Battalion were held in the Armory. These inspections extended through the School of the Soldier.

At a meeting recently held at Rutland, Mass., President Walker was elected treasurer of a society formed for the purpose of securing the old Rufus Putnam house as a historical memorial.

Mr. Frank G. Stantial, '79, superintendent of the Cochrane Chemical Works, at Everett, has recently delivered three lectures on the Manufacture of Sulphuric Acid to the class in Industrial Chemistry.

A prize of twenty-five dollars, together with a commission of ten per cent, is offered by the '96 "Technique" Board to the student who obtains the largest amount of advertising matter before February 1st.

All artists studying at Technology are invited to contribute to the '96 "Technique." Wash drawings, pen and ink sketches, lettering, bulletin-board designs, and figure drawings will be most acceptable.

The Electrical Society has received into its membership the following: Charles W. Berry,

'95; G. C. Hall, R. S. Hardy, F. B. Cutter, W. O. Pennell, J. L. Putnam, K. A. Pauly, Herman Poppenhusen, and F. E. Guptill, '96.

Out of the Freshman Class, over one hundred and twenty had military training before entering Technology. From this number, forty received their training in Boston, and fifty-six others in the State of Massachusetts.

About two thirds of the Sophomore Architects have subscribed for J. A. Leveils' "Vignole," and Stuart and Revett's "Antiquities of Athens," instead of Tuckerman's "Vignole." The new books are an improvement on the old one.

Hereafter, physical disability and a doctor's certificate will count but little as excuses from Military Training. A special lecture course of two hours per week has been arranged for those who, for any reason, are unable to take armory practice.

Last week the Seniors completed the course in Dynamics of Machines with Professor Lanza, and the time formerly devoted to this subject will be used to extend Professor Cross's lectures on Electrical Engineering to two hours' length instead of one.

The full-page drawings devoted to the classes, and placed immediately preceding each class history in the "Technique," will be competitive. The best artists of each class are requested to submit suitable drawings, 10 x 14 inches, before December 1st.

Committees of three have been appointed in the several classes to collect grinds, quotations, etc., for the '96 "Technique." It is hoped that each Technology man will become interested in the matter, and will hand in contributions to the committee from his class.

A meeting of the Freshman Class was held in Huntington Hall, Monday, at twelve o'clock. The following officers were elected: President, W. M. Hall; 1st Vice President,

R. S. Willis; 2d Vice President, R. P. Tobey; Secretary, H. I. Lord; Treasurer, A. Sargent; Directors, J. E. Mara, E. Russ.

The results of the experiments which have been performed during the last three years in the Applied Mechanics Laboratory, have been verified and tabulated, and have been placed in the hands of Fourth Year students. It is believed that these are the only tests of this order which have ever been made.

The course in third year Architectural History has been changed so that instead of each student tracing promiscuous subjects in the Library, he is assigned a particular building of the period which is being studied. No two students are given the same building, and a valuable set of tracings will be the result.

At the last meeting of the Geological Club a very interesting book was presented to the Geological Library. It is a careful record of observations made in the field by students who accompanied Professor Crosby to Nova Scotia, last summer, and contains a complete geological description of the places visited.

A short while ago, two Course III. men, each of '90, visited the Mining Department: E. A. Rogers, late of the Boston and Montana Smelting Works at Great Falls, was on his way to Mexico, to undertake mining operations in that country; G. A. Packard, who has been heretofore in South Eastern Missouri, was about to start for the mining region of Montana.

Williams College suggests that the date of the N. E. I. A. A. championships be changed, as the Mott Haven games are too near for good results from N. E. Intercollegiate athletes who compete in both meetings. The suggestion is a good one, and since it has been offered, the Technology representatives should endeavor to have it changed to a day not conflicting with the annual examinations.

The Architectural Society will hold its first Bohemian Supper at Marliave's, on Saturday

evening, November 3d, at six o'clock. Besides the active members, an attempt will be made to have the Professors of the Course present, as well as some Architects from down town, and by so doing it is expected that the programme will be far better than any of last year. The Society is in a flourishing condition, and has the best prospects.

At the '97 class meeting held last Saturday, H. A. Noble and G. M. Lane were elected members of the Institute Committee. Mr. E. A. Baldwin addressed the class in behalf of the '96 "Technique" Board, and a committee, consisting of O. C. Hering and W. Humphreys, was appointed to secure material for "Technique" from the members of the class. Previous to adjournment President Allen announced that November 20th had been decided upon as the date of the cane rush.

Professor Miller, of the Engineering Laboratory, has designed a new set of holders for the Emery testing machine. These holders will grip plates from one and one-fourth to one one-hundredth inches in thickness of any width less than twenty inches. The gripping device consists of wedges, and the bursting pressure produced by these wedges is taken by two wrought-iron bands, which are shrunk on to each holder. The wedges are of cast iron, shod with hardened tool steel, and have corrugated surfaces. Each holder weighs twenty-six hundred pounds.

Two more cases are being constructed in the Mining Laboratory to contain the remainder of the Swedish Iron Exhibit which was at the World's Fair. These new cases will be similar to those set up last year, which are now filled. Many of the articles which have not as yet been catalogued and arranged, are now upon exhibition in New York, and are expected to arrive in the near future. The Swedish manufacturers have generously offered to replace any specimens which may have become rusted while upon exhibition, so that our collection will be practically faultless.

The standing of the second-year Architects in design is very low compared with that of previous classes. Credits are very scarce.

Mr. Lodge has recently completed a set of thirty-six scorification models, to illustrate the various metallic colorings which are employed in glazing. The collection will be placed in the Mining Laboratory, and will be used for reference by Course III. men.

Two boilers, manufactured by the Roberts Iron Works, Cambridgeport, were delivered this week for the new boiler room.

The Pope Manufacturing Co. have an exhibit of improved road beds in Room 46, Engineering building.

Serious annoyance to visitors is caused by students smoking in the lower hallway of the Architectural building.

#### Civil Engineering Society.

IN speaking before the Civil Engineering Society last Thursday evening, Mr. Stanwood explained a method of indexing, for future reference, valuable articles in the current magazines. This is done by means of cards, suitably filed, containing the name and a description of the article, together with directions for finding it. The plan must be commended for the readiness with which interesting bits of general information may be recorded; and, moreover, it has the merit of cheapness. Mr. Stanwood was followed by Mr. G. F. C. Merriss, with a short biography of George Stephenson, and by Mr. T. H. Wiggin on "The Survey of a Sewer Tunnel." Before adjourning it was voted that new members should not be liable for dues for the year of their election. This reduces the cost of membership for the first year to one dollar instead of one fifty, as formerly.

#### Technology 8; Brown 4.

TECHNOLOGY defeated Brown University, Wednesday, in a hard fought and intensely exciting game. To the surprise of everyone the team that weakened so the Saturday before, woke up and clearly outplayed the crack Providence eleven, which scored on Harvard and defeated B. A. A. by a larger score than Yale.

The game was one of the prettiest ever seen on the South End grounds, and there were many brilliant plays which kept the spectators in the highest pitch of excitement. Capt. Thomas was the hero of the day, and to him belongs much credit for the victory. His work both in interfering and in ground gaining was admirable, while his run from the center of the field on Foulitz's fumble, was the feature of the game, and won the day for Technology.

Brown winning the toss chose the wind, and Rockwell opened the game by a 40-yard kick to Donovan. Then Brown by rapid gains pushed the ball the entire length of the field and scored a touchdown in three and a half minutes. It was during these plays that the Providence eleven showed its best team work, and the momentum plays were used with great effect. The entire eleven worked together as a man, and the interfering was exceptionally close and rapid.

Rockwell kicked to McCarthy on Brown's 10-yard line, and after some unsuccessful attempts to move Manahan the ball went to Technology on four downs.

After gaining twenty yards Tech punted, and Ames dropped McCarthy with no gain. Brown forced the ball back a few yards but lost it on four downs.

Technology now had the ball on Brown's 25-yard line and it looked like a touchdown, but the Providence team was firm and soon recovered the ball. After a criss-cross netting four yards, Foulitz took the ball, and with superb interference made sixty-three yards before Rockwell tackled him.

The Tech center stood firm and McCarthy tried to punt, but McCormick dropped on the ball before it went three yards. Tech now forced the ball back to center, and the half closed with the ball on Tech's 30-yard line.

In the second half Whiting played tackle in place of Springer, otherwise the team remained the same. Hopkins kicked thirty yards and Underwood punted twenty on the first line up. Brown then worked the ball to Tech's 30-yard line, where it stopped and changed hands on downs. Thomas opened the long fight down the field by a 25-yard run around Robinson, and by steady playing, good hard work, Tech carried the ball to Brown's 3-yard line. Thomas tried center without gain, and it seemed as if Brown would stand the strain; but another dive and the plucky Captain planted the ball safely behind Brown's line, tying the score. Underwood failed to kick a goal.

Hopkins kicked to Tech's 10-yard line, but Thomas brought the ball back to within three yards of center. Underwood punted and Brown made slight gains.

Here Thomas broke through the line, and seizing the ball started down the field. It was a hard race, but the ball was planted between Brown's goal posts, and the game was won with but a minute to spare. No goal was kicked, and before the teams could line up time was called.

Technology's supporters carried off the victorious eleven on their shoulders. It was the best game Technology has played this year, and the 'Varsity easily wiped out the record of former defeats.

The teams lined up as follows: Technology, —rushers, Rawson, Whiting (Springer), McCormick, Manahan, Le Moins, Coburn, Ames; quarter back, Mansfield; half backs, Thomas, Rockwell; full back, Underwood. Brown,—rushers, Robinson, Emery, Lancy, Combs, Thayer, Nott, Dennison; quarter back, Donovan; half backs, Foulitz, Hopkins; full back, McCarthy:

Tufts, 4; Technology, 0.

MUCH to the surprise of everyone, Tufts College defeated Technology, at College Hill, last Saturday, by the score of 4 to 0. The game was rather loosely played throughout, and while Tufts played a much better game than usual, Tech put up the weakest game she has played this year.

The loss of Ames and Hayden was seriously felt by the Technology eleven, and the men became discouraged early in the game by the questionable decisions of the linesman.

Tufts won the toss and chose the west end of the field, and Rockwell started the game with a 35-yard kick, which Knowlton fumbled. Tufts now advanced the ball nearly to the center of the field, where Tech held for two downs, but Craig made a run of twenty yards, carrying the ball well into the visitors' territory.

Tufts tried the line four times without gain, and Technology took the ball on downs.

Rockwell ran around left end for twelve yards, and good gains followed by Thomas and Underwood until Technology had the ball on Tufts' 3-yard line with one yard to gain. A short gain was made by Thomas, and, to the astonishment of the visitors, Tufts was given the ball on four downs. Tufts made several slight gains, and time for the first half was called on Tufts' 15-yard line.

In the second half Howes kicked to Thomas, who made a pretty run of fifteen yards. Rockwell followed with another fifteen yards, bringing the ball to the center of the field. Two attempts were made to force center without gain, and after pushing Underwood two yards the ball went to Tufts on four downs.

Coburn was forced a few yards, Manahan was tried without gain, and Craig ran around Rawson for twenty yards. After slight gains through tackle, Smith was pushed over the line, scoring the first touchdown for Tufts. No goal; score, 4-0.

Rockwell kicked to Smith, and Tufts made two tries at guard, but found Le Moins and McCormick ready. An end play was tried, but

resulted in a loss of three yards for Tufts. In the next play Frew fumbled, and Mansfield, a Tech man, dropped on the ball. To the surprise of all the referee gave the ball to Tufts "because it changed hands." As it was fourth down, and doubly Tech's ball, Captain Thomas was justified in withdrawing his team.

The teams lined up as follows: Tufts,—rushers, Davis, Holbrook, Russell, Lane, Healey, Simpson, Eddy; quarter back, Knowlton (Frew); half backs, Craig, Smith; full back, Hawes. Tech,—rushers, Goudey, Coburn, Le Moins, Manahan, McCormick, Whiting, Rawson; quarter back, Mansfield; half backs, Thomas, Rockwell; full back, Underwood.

### A Representative Alumnus.

CHARLES O. PARSONS died at Spokane, Washington, October 5th, at the age of forty-seven years. Funeral services were held at Spokane with Masonic honors, and again quietly at his home in Shirley, Mass.

A brief account of his life and work will be of interest to the business man through the results obtained, and to the engineer and student in view of the methods used, and as an example to be followed.

He was a loyal son of the Massachusetts Institute of Technology, of the Class of 1875. It was most prophetic that as an undergraduate he was selected by President Runkle as one of the students of the Summer School of Mines held in Colorado, Utah, in 1871, to spend a month in studying the milling processes of the Pacific coast, with a view to starting a mining and metallurgical laboratory at the Institute. He spent the time in Virginia City and Gold Hill, Nevada. The experience he gained proved invaluable in initiating the new Mining and Metallurgical Laboratory. The value of his services was greatly enhanced by the fact that he had served for a time in a machine shop before coming to Technology.

After leaving the Institute, we find him first in the employ of the Pennsylvania Steel Company, entering the works as chemist and engineer on exploration work, investigation of ore fields, etc., and subsequently as assistant to the manager of the blast furnaces, an old-time iron founder. Parsons was restive under the rule of thumb practice prevalent. It was natural that a man of his intelligence and zeal should chafe in working under an old timer, and one

whose strongest argument against any improvement was that it was tried in his grandfather's time and proved a failure. But he evinced that tact and perseverance which characterized his whole career, and succeeded in coaxing into existence a good many economies. When he proposed to feed in mill scale and hammer scale he was told that "that was no good; it was old, burnt-up stuff." However, he gained his end, and before he left the works, in 1879, the furnace which had previously only yielded twenty-five tons per day, was yielding forty-five, with a prospect of a still greater improvement when the next furnace should go into blast.

If he had remained in the furnace work he would clearly have been among the foremost pioneers in introducing the great modern revolution in furnace practice. About the year 1879 he left the company, in order to enter the general field of expert mining engineering.

Immediately following the severance of his relations at Steelton, he went to Europe, and in the course of his trip examined the ore districts in Spain and Northern Africa. During that year he made an extensive exploration in the Black Hills country, and subsequently visited the Southwest, and was among the early investigators of the Southeastern Arizona Silver field, being interested in the development of the famous Tombstone group of properties, and prominently connected with the early projects for furnishing water to the Town of Tombstone.

About this time, 1881, he began the systematic study of the Copper Mining interests of the country generally, and was familiar with the whole question, both from the technical and commercial points of view. He had previously given some attention to the then new field for copper development, near the United States and Mexican Boundary line, at the noted Copper Queen Camp.

In 1882 he undertook the exploration and subsequent development of a copper property on the Gila River, in Southern Arizona, the prospect being large and tempting, his professional and business judgment leading up to a large money investment, of which he took a considerable portion himself; but the early results not being followed up, he promptly closed the project, pocketed his own losses, saving to his friends the money they had contributed. This was a striking illustration of his keen insight, ready judgment, and prompt withdrawal to avoid loss of professional honor. About this time, also, he made an examination into,

and reported upon the value, commercially, of certain Mill properties in the San Pedro Valley of Arizona, determining their future history.

In 1884 he made an extensive exploration in Mexico, and barely escaped a fatal illness through a concentration of all the positive elements in his makeup. The results of this exploration were professionally very satisfactory.

He subsequently spent a considerable time in Montana, as manager of a large property, and in 1884 returned to Mexico, to manage another enterprise of large proportions; but dissensions among the American and foreign owners prevented his going on with the work, and the whole project was dropped. About this time he made a trip to the Bermudas and Cuba, largely for recuperation.

Early in 1885 he examined and reported upon a large copper scheme in the Pan Handle of Texas, and incidentally looked up the question of coke production in the Indian Territory, and, later, visited Puget Sound to study the question of lumber production.

He had arranged to go to Germany to investigate metallurgical processes, but on the eve of taking the steamer, was induced to go once more to New Mexico; and on this particular trip narrowly escaped attack by Apache Indians, in the extreme Southwest corner of the Territory, but accomplished the object of his mission.

Immediately following this trip, he made an examination of properties near Yuna, Arizona.

In 1886, when called upon by the Boston and Montana Company to select a place for the site of their new works, Parsons chose Great Falls, on account of its splendid water power and on account of the liberal terms offered by the Great Northern Railroad for freighting ores, and of the water-power company for furnishing power.

In making his plans of works and processes, he fully realized that Montana was a territory ridden by labor unions, and that to make a success, labor must be eliminated as far as possible through the introduction of new appliances. His great converters and tilting reverberatory furnaces form nothing short of a revolution in the metallurgy of copper. Since they were put in operation the testimony of foreign engineers who have visited the works has been highly favorable. In these furnaces the metallurgy of copper and steel meet for the first time the ideas of the very latest steel plants, being transformed to meet

the needs of copper. This very fact proved a great difficulty to him, for when copper or steel experts were called into council each knew about the processes for his own metal, but neither could guess what would happen with the new adaptation. Feeling this, Parsons followed the dictates of his disposition, and kept all the designs in his own hands. But the minute details of installing works a mile long, and one eighth to one quarter wide was too much for one man, however capable. The capitalists were putting in their money freely; they began to ask for results, which, though coming, came too slowly. At times the owners reached the point of doubting the advisability of his plans. Finally the tension was too great, and the break came. Parsons resigned his position just before he was able to see the success of his plans. Their completion and inauguration was left to other hands.

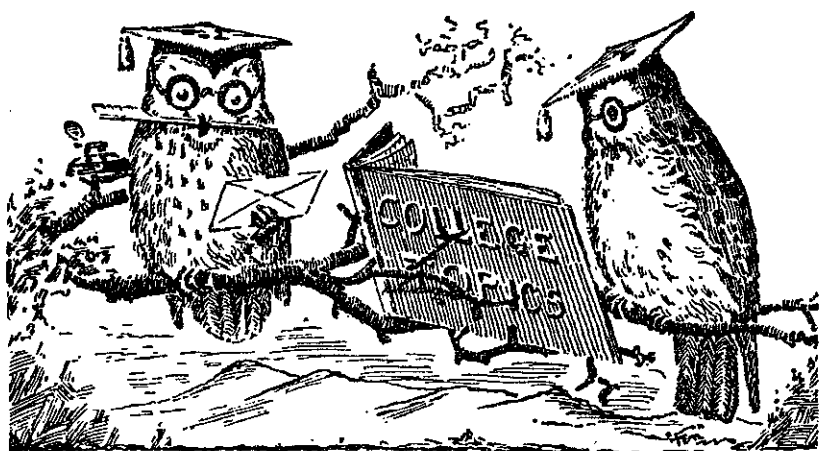
Since the works have been put in full running order, the predictions Parsons made have been more than realized. The great works now stand as a monument to his far-seeing engineering skill and business sagacity. Had he but delegated portions of his work to others, and given them the opportunity by gaining their lesser fame to add to his greater fame, he would have had the satisfaction of completing the work himself. No one knew or felt the mistake more than he did after it was made, or regretted it more keenly. But he had studied the whole problem so thoroughly that he was charged to a very remarkable degree with the details of every part of the plant before the first stone was laid, and knew how he wished everything to be done.

Parsons was a man who had few, if any, confidants. He trusted his friends without reserve. His kindness of heart is shown in the care he took of his aged parents. He was farseeing, never hasty in giving an opinion. Many times when others have differed from him, they have acknowledged him right in the end.

His positive nature, and his tenacious hold of opinions once formed, often caused him to be misunderstood, and his results criticised; no just complaint could be made of his work, from the standpoint of zeal and desire to serve his clients, and certainly no one of his rank and experience ever covered a wider field with such general success.

His integrity and energy were everywhere recognized—his professional fame is secure; the memory he leaves is that of a steadfast friend, a genial companion, and an honest man.

ROBERT H. RICHARDS.



Yale lost about \$1,000 on her Oxford trip.

The whole number of students at Wesleyan is 289.

Brown University is to have a new dormitory.

The University of Chicago has chosen scarlet for its color.

There are twenty-one Yale graduates coaching football this year.

The Amherst Faculty have prohibited Freshmen athletic teams.

The rush has been abolished at Cornell, and athletic contests substituted for it.

H. S. Patterson has been chosen captain of the Williams College athletic team.

The mile walk has been dropped from the list of track events at Harvard and Yale.

The number of students in the Lawrence Scientific School is larger than ever before.

Cornell and Columbia offer more scholarships than any other colleges in the country.

The death of Oliver Wendell Holmes leaves only five survivors of the Class of '29, at Harvard.

Yale has 200 instructors, Harvard 322, Cornell 152, University of Chicago 154, Princeton 77.

A new rule has gone into effect at Williams, requiring attendance at 90 per cent of the college exercises.

Robert Watson, H. U., '69, has been engaged as head coach of the Harvard Varsity crew for a term of three years.

The fall games at Cornell resulted in a tie between '97 and '98, which will be decided by a football game on November 10th.

President Eliot, of Harvard, has applied to the U. S. Government for one hundred rifles for the newly organized "Harvard Rifles."

A new laboratory for the use of the Sheffield Scientific School is being built at Yale. It will be ready for occupancy in the fall of 1895.

David Balliet, the famous Princeton football player, has left for Indiana, where he will be instructor in mathematics at Purdue University, Lafayette.

The Senate of the University of Michigan has offered a prize for the best general excellence in athletics attained by any student of that institution.

This year the grand stand seats for the University of Pennsylvania game will be assigned by lot, instead of in order of application, as last year.

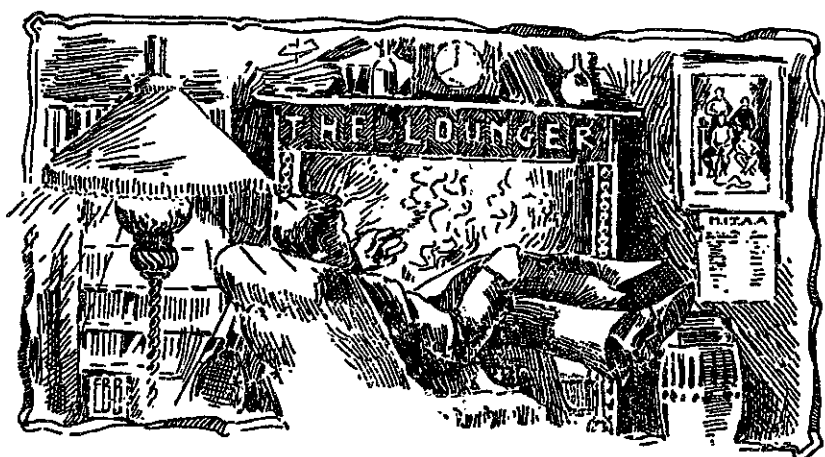
Princeton has the most liberal endowments for the encouragement of debate of any college in the country. Its debating societies have dormitories of their own.

At a mass meeting of the students of Brown University, in the interests of the football association, the sum of \$1,600 was pledged for the support of the eleven.

Professor Stagg, University of Chicago, thinks the new football rules give a great advantage to the stronger team, and that the scores this year will be one-sided.

Of the thirteen principal collegiate track records, Harvard, Yale, Princeton, and the U. of P. each hold three. The odd one was made by a Washington man by a jump of 23 feet 6 inches.

It has been said on the highest authority, that the elevens from West Point and Annapolis will meet this year. All opposition on the part of those in authority is said to have been withdrawn.



EVEN the peculiarly exhilarating excitement of going armed against sudden attack has begun to pall on the Lounger. This, together with the usual monotonously rectilinear character of Technology life, has proved too much of a strain for him, and he has branched out into hidden and devious paths of dissipation, seeking cruel and blood-curdling adventures and plunging deep into riotous excess. In the course of this wild life, he—ah, gentle Margaret Cheney, you have guessed it—he has visited the Food Fair, and devoured the contents thereof.

The manifold attractions of that modern Mecca have proved veritable lodestones for the loyal sons at Technology, and each and all have succumbed. Even the delights of visiting the Lyceum on free tickets (supplied gratuitously by the business manager every other Wednesday, from 11.59 A. M. to 12.01 P. M.) cut no figure in comparison with the charms of conversation with the sociable young ladies who frequent those gardens of happiness in the Mechanics Building. Have you eaten seven kinds of breakfast food in as many minutes, and irrigated the flourishing palm with chocolate too hot to drink? If not, you have wasted half your opportunities for enjoyment. The Lounger only regrets that he could not give a plain statement of all this sooner, but he learns that this beatific season is to recur three years hence, and advises all to enjoy themselves in '97. Often has the Lounger been indebted to the sirens who dispensed various seductive sweets over the counter, as well as to the skilled manipulators of the griddle. Many a day has he thus foreborne to visit Mrs. King in her subterranean lunch room, only to grow round-shouldered with the burden of trophies which eager damsels at the Fair vied in bestowing upon him. All these repose quietly on the corner of the Lounger's mantel, including some dozen bags of salt, which await a suitable subject in ninety-eight.

The Lounger is glad that the recent interview which he granted the military department has borne good fruit. The close adherence to his suggestions was indeed highly flattering, and it is with no small degree of satisfaction that he presents the new uniform for the edification of our militant hosts. The new moth-proof garments, which have been devised with especial reference to their keeping qualities (Memo. for '99), are entirely devoid of any suspicion of bell-boy aspect, having been constructed for use on all occasions, and may with propriety be worn in the drill hall. The Lounger's labors having met with such flattering success, he would suggest that the Freshmen might delicately embody their sense of obligation to him in a neatly engrossed testimonial, which well-won expression he would be proud to contribute to our visionary trophy room.

Encouragement of the youthful endeavor has ever been one of the Lounger's pet prerogatives. "It is, therefore, with the greatest pleasure and utmost feelings of satisfaction," etc., etc., that he acknowledges a recent contribution. Now, Frankie, your verses are very good, but they lack the true poetic ring. Besides, it is somewhat presumptuous in one so young to offer advice to his elders. But you display surprising familiarity with the antiquities, and, though the Lounger sees no immediate prospect of your displacing the present head of the English Department, you evince great boldness in your attempts. Therefore, strive on; delve deep into your prehistoric documents, communicate often with the Lounger, and when he graduates he will use his best efforts to secure for you the position of archæologist to the Institute.

### Lamentations.

Entered with conditions,  
Prospect fair for more,  
Faculty petitions  
Vetoed by the score.  
Flunk in recitations,  
Secretary's calls—  
Jove! what machinations  
Brought me to these halls?

### ALWAYS THE SAME.

Says Ninety-eight, in new-made togs,  
"We college men are jolly dogs."  
Says Ninety-five, iconoclast,  
"These Fresh are fresher than the last."

—Brunonian.



The ballet,—'tis no solemn show,  
And yet it oft appears  
That bald heads in a shining row  
Suffuse the front in tiers.

—*Yale Record.*

A WRITTEN LESSON.

I was happy that day,  
For I knew what to say,  
And I knew how to tell it;  
But I found with dismay,  
As is always the way  
When I know what to say  
And know how to tell it,  
That I know what to say  
But I never can spell it.

—*Vassar Miscellany.*

A true friend have I, a strong one indeed;  
He is always at hand whenever there's need;  
Each day he is drawn by me more and more,  
But his presence the chambermaid seems to abhor.

A comfort in trouble he is without doubt,  
The impress of his friendship is always about;  
But since day by day he grows stronger and stronger,  
Our acquaintance can hardly continue much longer.

Indeed, this may seem strange that a friend old and true  
Should be set aside for one that is new.  
The proverb proves false concerning friends of this type,  
So this one I'll drop and get a new *pipe*.

—*Lafayette.*

The girl stood on the burning deck,  
Awaiting death's ejection;  
The flames that lit the battle's wreck  
Just suited her complexion.  
The smoke was rising thick and fast,  
A cast-iron look around she cast,  
Then started off to find the mast  
In quite the wrong direction.  
Her father called her from below  
In accents sad and sadder;  
The maiden still refused to go,  
And kept on growing madder.  
The flames had nearly reached her jaws,  
But yet they heard her through a pause,  
"I will not leave this ship, because  
A mouse is on the ladder."

—*De Lancey Monthly.*

DOWN IN THE DEEP.

Down in the deep where dolphins leap,  
And the setting sun sheds golden glory,  
A world of life in a world of night  
Speaks never back to a world of light  
A line of its ancient story.

Down in the depth of a human life,  
Crowned with a wealth of winters hoary,  
Who shall say, "Lo! all is light"?  
It may be dark, it may be bright,  
The pages of its untold story.

—*Brunonian.*

SONG.

Ask not the hour, for what care we  
How Time speeds on his way?  
The golden moments pleasures are  
Throughout the livelong day.  
Then fill up the cup, for what care we  
How Time speeds on his way?  
The fairy hours flitting by  
No wand but Pleasure's obey.  
While the sun shines bright and the winds blow sweet,  
And the heart is young and free,  
We will have no care but to dance and sing  
Under the chestnut tree.  
Then fill up the cup, for what care we  
How Time speeds on his way?  
From sun to sun till the day be done  
We will live under pleasure's sway.

—*Brunonian.*

THE RHYME OF A HAND.

I'm sitting alone to-night by the fire,  
Alone with my old pipe, and,  
As I send the graceful blue rings higher,  
I dream of a dainty hand,  
Of a little hand I held last night,  
The fairest in all the land.

My heart leaps high with the flickering flame  
As I live that moment o'er;  
And my pipe's odoriferous smoke's the same  
As an incense burnt before  
The shrine of that hand I held last night.  
I pull at my pipe once more,  
But my heart sinks low as the fitful blaze,  
For where's the joy that can last?  
My pipe is out, and as cold as the ways  
In which my life has been cast.  
Ah, dear little hand that I held last night,  
Could I but recall the past!

The future may hold many joys in store,  
May honor, e'en glory bring;  
But can it e'er give what I value more  
Than the little hand I sing?  
The little hand I held last night,—  
'Twas four aces and a king.

—*Lafayette.*

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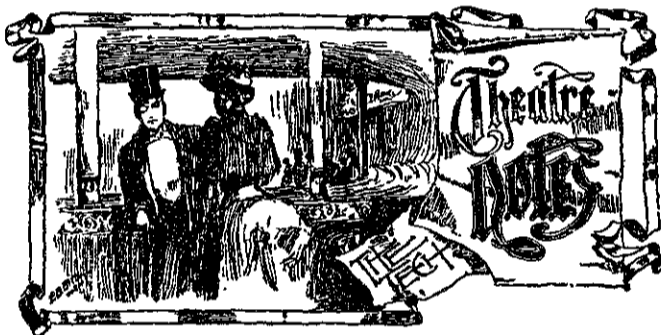
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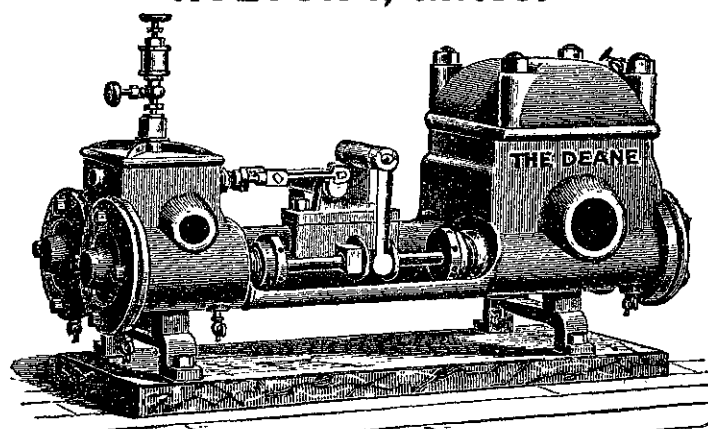
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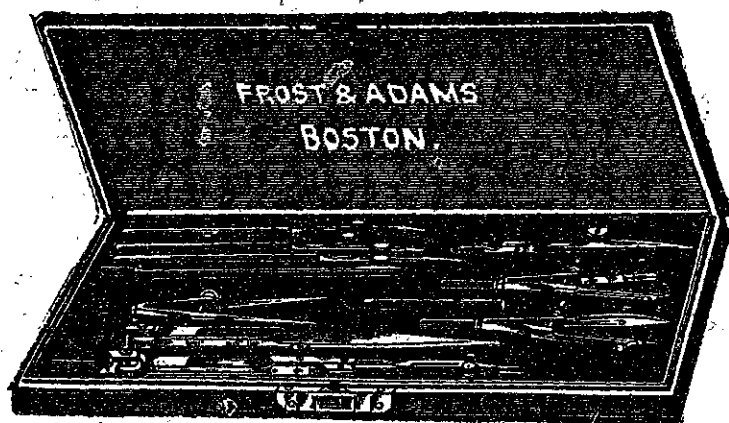
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