

The

POLYTECHNIC

POLYTECHNIC

PHI.



Vol. X.

Saturday, March 23, 1895.

No. 18.

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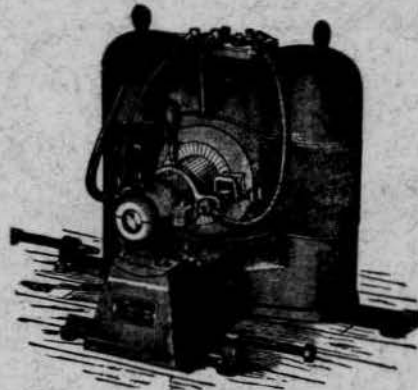
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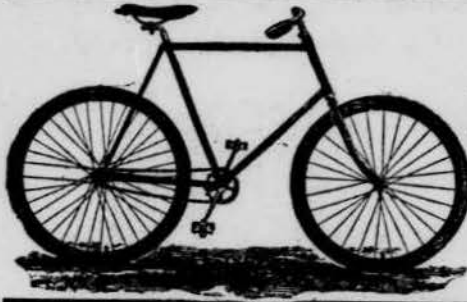
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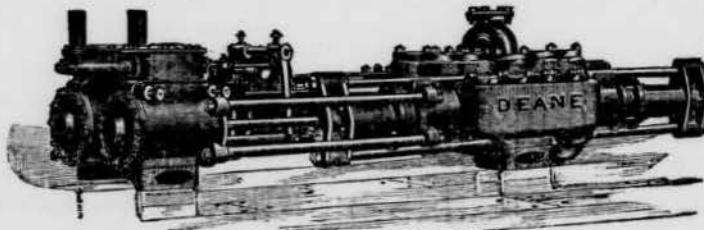
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THE W P I

Vol. X.

WORCESTER, MARCH 23, 1895.

No. 18.

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The W P I is published by the students of the Worcester Polytechnic Institute on alternate Saturdays during the Institute year.

Items of interest are requested from students and alumni of the Institute. All matter must be written in ink and accompanied by the author's name, not necessarily for publication, but as a guarantee of good faith on the part of the writer.

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TO DELINQUENT SUBSCRIBERS.

We stated our circumstances to you in our last issue, and have received a very meagre response, there being still a large number of unpaid subscriptions. Gentlemen, give us a chance; we cannot afford to lose money as well as time over this paper. We have told you how the matter stands, and must now demand that every subscription be paid.

It is seldom that we are called upon in these columns to announce a death, and so it is with a feeling of unusual sadness that we are compelled to speak of the death of the Honorable P. EMORY ALDRICH.

Since the death of Mr. Salisbury, Judge Aldrich has occupied the position of President of the Board of Trustees of the Institute. His administration has been marked by unprecedented advancement in every department. The courses of study have been broadened and a remarkable revolution has taken place at Tech. All this has been

mainly brought about by the energy and zeal of the late Judge Aldrich. Burdened as he was by the numerous positions of trust and responsibility which he held, he allowed none of them to interfere with his work for the Institute. Each of his responsible positions had a claim to his time and interest. Unselfish work and untiring energy reaped their reward. In everything his only aim and object was to do that which he had undertaken to the best of his abilities. To the last, in a ripe old age, he took a vital interest in everything with which he had been connected; and his death was brought about in the endeavor to satisfy the wants of others.

The sign of mourning which this issue bears but little represents the sorrow of the students. Words can but feebly express this inestimable loss that has come upon the Institute and upon all those connected with it. But we remember that there are those who mourn his death more than we can understand. To these we offer our sincere and heartfelt sympathy in this their great bereavement.

With this issue the tenth volume of the W P I is complete. The value of the volume has been somewhat depreciated by lack of interest on the part of some of the Board; this failing causing increased labor for the earnest men, at the same time rather dampening their interest. We must now express our sincere thanks to those friends who have so kindly aided us in our work, and especially to the Secretary of the Alumni Association and the Secretary of the Washburn Engineering Society.

We have endeavored to give our readers a faithful report of Tech events, and to suggest such changes as might benefit the Institute in any way, at the same time avoiding criticism as much as possible.

How ardently we long for a dormitory! How great would be the satisfaction felt if a sidewalk were laid up West street from Highland street to the Institute! We have contributed our mite.

We have reported very fully the meetings of the Washburn Engineering Society, and whenever possible have printed the papers read at the meetings. This occasions some criticism from undergraduates, nevertheless we think it advisable, and consider it the most fruitful of all our work.

Many changes have occurred during the past year. Dr. Fuller resigned, and Dr. Mendenhall came to us. Athletics have been placed on a new and firm basis. Our courses have been broadened, and the Monday lectures added.

We have passed successively through periods of transition and criticism, and have now entered upon an era of good feeling.

Long may it last, and great be the credit it brings to our Institute.

The excitement attendant upon the games of March 14th has now passed, but it has left its impression, deep and lasting. We must

have such a meet each year. Our first attempt was a success, but we can improve upon it. One success begets another; and we shall find this to be true by the increased number of entries from outside colleges and clubs, in all open events. In the closed events we shall see many men induced to enter by the successes of their friends. Conscientious training supplies many deficiencies, as we have seen.

While we have no very brilliant stars in the athletic firmament we can now see a coming radiance. It may not be this spring; it may not be next spring; but it is surely coming. Honest labor will bring its reward, and the men who have trained faithfully for these games will sooner or later make their mark in intercollegiate athletics.

And now all honor and praise to the managers of this affair. The Athletic Committee of the Faculty is responsible for the idea, and in part for its after development; but they confided the greater cares of management to Mr. E. B. Whipple, manager of the track team, and he it was who made the meet a financial success, having paid off all training expenses and placed a balance in the treasury of the Athletic Association. Manager Whipple has given nearly all his time for weeks past to business connected with the Games, and has accomplished much. Captain Allen has given his attention and experience to the young athletes and their feats in the competitions showed that his time had been spent to good advantage. Let us hope our next meet will be as well managed.

The announcement of the next meeting of the Washburn Engineering Society is made in the columns of this number. The papers to be read will undoubtedly be valuable, as the subjects are of great importance. Much benefit may be derived from these meetings and we earnestly advise undergraduates to be present whenever possible.

P. EMORY ALDRICH.

On Thursday night, March 14th, at 11.15, the Institute lost the President of its Board of Trustees and the entire city went into mourning for the late Hon. P. Emory Aldrich, Judge of the Superior Court of the State of Massachusetts. His death was brought about by no disease, but by a general collapse of the entire system, mainly caused by a trip to the West in the service of Union Church of this city. Drs. Thomas H. Gage and Homer Gage had been in constant attendance upon the Judge, but medical skill could not ward off the grim messenger, and he passed away in a calm sleep.

Peleg Emory Aldrich was born in New Salem, Franklin County, in 1813. He is directly descended from Puritan stock, as he was a lineal descendant of George Aldrich, who came to this country in 1635 and became one of the founders of the town of Mendon. From him has descended a family which is represented in an honorable way in nearly every State of the Union.

Judge Aldrich attended the ordinary district schools till he was 16 years of age, at which time he himself became a teacher. At Shelburne Falls Academy he received his academical education, but he owes his collegiate training only to his own hard private study. For some years he taught school in Massachusetts and then in Virginia. As a teacher in this last State he devoted much of his time to the study of law, and became so interested that, in the year 1843-44, he entered Harvard Law School, from which he was graduated with honor with the degree of LL.B. He then returned to Virginia, and in 1845 was admitted to the practice of law by the Judges of the Court of Appeals at Richmond. It was not his intention to practice in Richmond, so he soon returned to this State, entering the law office of Ashman, Chapman and Norton at Springfield. In the course of six months he was, in 1846, admitted to the bar of Hampden County.

He began the practice of law in the town of Barre. He was editor and publisher of the *Barre Patriot*, and in the constitutional convention of 1853 he represented the town of Barre. He married in 1850 the eldest daughter of Harding P. Woods, late of Barre. From 1853 to 1865 he was District Attorney for the middle district. In 1854 he came to Worcester and the following year formed a partnership with Hon. Peter C. Bacon, which was dissolved by his appointment as Justice of the Superior Court in 1873 by Gov. William B. Washburn. This last office he held at the time of his death.

Hon. P. Emory Aldrich was one of the first members of the State Board of Health. In the years 1866-67 he was one of the representatives in the legislature of the State. During this time he prepared an elaborate address on "The Right of Members to Vote on All Questions of Public Policy Vindicated." The principles which he declared in that speech on parliamentary law have since been declared correct, not only in the House of Representatives of the United States, but also in the British House of Commons.

The Judge was a member of the American Antiquarian Society. He has written a book on "Equity Pleading and Practice." In 1866 Amherst college conferred upon him the degree of LL.D. Judge Aldrich was an ardent member and worker for the Union Church of this city.

Actions on His Death.

On the night of March 16th the City Council passed resolutions on the death of Judge Aldrich. Mayor Marsh sent the following letter to the city council:

"MAYOR'S OFFICE, March 16, 1895.

"To the Hon. City Council: Gentlemen—It becomes my sad duty to inform you of the death of ex-Mayor P. Emory Aldrich, which occurred at his residence Thursday evening, March 14.

"Judge Aldrich was a native of New Salem, Franklin county, where he was born in 1813. In 1846 he began the practice of law in Barre, from which place he removed to Worcester in 1854.

"He was mayor of this city in 1862 and served one term as a member of the school board. In addition to the above distinctively municipal offices held by him, he has been an associate justice of the superior court since 1873, President of the Board of Trustees of the Worcester Polytechnic Institute since the death of its first president, Hon. Stephen Salisbury, member of the council of the American Antiquarian Society, and has held many other offices of great trust and honor.

"He brought to the discharge of every duty rare ability, conspicuous fidelity, sound judgment. He was progressive, just, friendly, sturdy in character, of unquestioned integrity, active and useful in all ways that make for the well-being of the community.

"Worcester has lost in his death one of its most valued and honored citizens.

"In view of this event I have called you together that you may take such action as you deem proper. Respectfully,

"HENRY A. MARSH, Mayor."

President Rugg of the Common Council then addressed the chair, and offered the following resolutions :

“ CITY OF WORCESTER,
“ IN COUNCIL, March 16, 1895.

“ *Resolved*, that in the death of P. Emory Aldrich the city of Worcester has lost a man of commanding character, an honored magistrate and one of her most distinguished citizens. He has served the city in the several capacities of member of the school board, representative to the general court, trustee to the Bancroft scholarship fund, and mayor. He conferred honor and dignity upon every station he occupied on account of the eminent ability and noble public spirit which he brought to the performance of every duty. The cause of education is under lasting obligation by reason of his services as President of the Trustees of the Polytechnic Institute. It was as justice of the superior court that he performed his greatest public work. For more than twenty years he illustrated the character of an upright judge, and demonstrated the qualities of greatness, of scrupulous honor, the strength and clearness of judgment, the absolute impartiality and unwavering sense of justice which should always attend that high office. He never concealed his contempt for questionable practices and all that was not pure and incorruptible. He maintained to the highest degree the dignity and character of the court and inspired confidence in its integrity and fairness. His judgments were always the result of profound learning, incisive, accurate thought and honest convictions.

“ As an honorable citizen, a blameless husband and father, and a just judge, his memory will remain as an example and an inspiration.

“ The character and virtues, the just sentiments and useful actions of distinguished men, preserved in the annals and cherished in the recollections of a grateful people, constitute their choicest treasures.”

“ *Resolved*, that these resolutions be extended upon the records of the city council and a copy be sent to the family as a token of our sympathy with them in their loss.”

As a further mark of respect the convention was dissolved.

The Bar Association held a meeting in the Court-house on the morning of March 16th. It was moved and carried that the bar attend the funeral of Judge Aldrich in a body, and George S. Taft was appointed marshal. A committee of seven was appointed to draw up resolutions. The meeting adjourned after a motion was made

and carried, that all law offices be closed on the day of the funeral from 10 o'clock till after the services.

A meeting of the Board of Trustees was held on March 16th at the home of Senator Hoar to take action on the death of President Aldrich. Senator Hoar presided and the following minute was offered by Rev. Dr. Merriman :

“ The Trustees of the Worcester Polytechnic Institute desire to place on record an expression of their deep sense of the great loss which they have sustained in the death on the 14th inst. of their distinguished associate and friend, the Hon. P. Emory Aldrich, LL.D., the President of the Institute.

“ Judge Aldrich has for many years moved as a familiar figure in this community and throughout the commonwealth—in every relation conspicuous for his great intellectual ability, his wide and profound learning, his practical insight and sagacity and his exalted character.

“ Recognized everywhere as among the first in his chosen profession of advocate, he has been even more distinguished by his long and brilliant service as a judge, while at the same time he has occupied with great credit honorable administrative, legislative and judiciary positions in this city and State, and made for himself a high place in various organizations as a thinker and scholar of the first order.

“ In all these relations, down to within two weeks of his death, and at the great age of over fourscore years, he has manifested the most tireless industry, an extraordinary capacity for work, a passionate and youthful enthusiasm for exact knowledge, a self-denying zeal for the service of his fellows, a high-minded and sensitive regard for the full and precise discharge of every responsibility, a charity, wisdom and devotion to righteousness, which have endeared him to his fellow-citizens of all ranks, and made his name and fame secure among the noblest sons of the commonwealth.

“ It is, however, in connection with Judge Aldrich's services as a member of the board that we wish especially to testify to our appreciation of his abilities and character.

“ He became a trustee of the Institute in June, 1877, and on the death of the first president, Hon. Stephen Salisbury, he was elected president, in November, 1884. He was reluctant to assume the office, for which he modestly insisted he had no fitness. Yet once convinced that it was his duty to do so, he took up the responsibility at a time of life when most men are disposed to lay down such burdens. Thus for more than ten years, in addition to his exacting and wearisome labors on the bench and in other

positions of trust, he has discharged the difficult duties of president of the trustees of a great institution of learning with such exemplary fidelity, tact, wisdom and devotion as to win the approval and admiration of all connected with it, and to constitute his administration an important factor in the steady growth and high success of the Institute.

"Always an ardent lover of good learning, Judge Aldrich became deeply interested in, and an earnest student of, technological education. He was always seeking information on the subject, and his last sickness was brought on largely by his over-eager zeal in visiting institutions similar to our own, with a view to increasing his knowledge of the best means and methods.

"Through his extended and exact legal knowledge, he often rendered highly useful service to the institute in various exigencies, and he was always conspicuously far-sighted, statesmanlike, energetic, fair, and hopeful in planning for the best things, and in meeting all the various and often delicate personal demands and relations that his office involved.

"His keen sense of justice and of duty was balanced by great generosity and charity. His sometimes apparently austere manner, and assertion of personal dignity, covered an unfeigned and sensitive modesty, deep and tender feelings, and a loving heart, quickly responsive to all high sentiments and affections.

"It is well known that seats of learning are among the most permanent of all earthly institutions. Our lamented President has borne his part faithfully and well in one of these; and if it be true, as Milton in his essay on education says, that "to do ought worthy memory and imitation, no purpose or respect should sooner move us than simply the love of God and of mankind," then the name of our friend and associate has a high and lasting place of honor among the benefactors of his fellows."

"In directing the secretary to transmit a copy of this minute to the family of Judge Aldrich, we desire to express to them our own sense of personal bereavement, and our most respectful and heartfelt sympathy with them in their sorrow."

The adoption of the minutes was moved by Mr. Morgan and, after some remarks, it was unanimously adopted; and at the suggestion of Mr. Washburn the trustees resolved to attend the funeral of Judge Aldrich on Monday.

"The Antiquarian Society has adopted the following minutes eulogistic of Judge Aldrich:

"By the death of our associate, Judge Aldrich, the society has been deprived of a sage adviser,

one of its ablest and most valuable members. His long lifetime, with a mind unclouded to the end, was passed in intelligent study; and his keen intellect deduced the real lessons taught by the annals of the past and showed him their true relations with the manners and institutions of the present. His liberal conservatism led him to resist any tendency to break loose from such traditions of the elders as had their foundations in the great principles of truth and justice, and at the same time to discard the errors which bigotry or blind dogmatism might labor to perpetuate. He had no patience with hypocrisy, and was possessed with a keen sense in detecting and unmasking dulness wearing the false guise of profundity.

"His contributions to the proceedings of this society were most valuable, and represented the results of much labor, of deep thought and of sincere conviction. He will ever be remembered as a wise and profound jurist, a true lover of his country and its institutions, a citizen whose influence and example were always in the right direction, a scholar who divined the true lesson inculcated by the result of his researches, and a man who left his impress upon his times and upon his fellow-men."

The Funeral.

The services were held in Union Church, Monday, March 18th, at 2 P. M. In accordance with the wishes of the family the services were very simple. Rev. F. F. Emerson officiated, assisted by Dr. Merriman. The honorary pall bearers were: Chief Justice Albert Mason of Brookline, Justice Caleb Blodgett of Boston, of the Superior Court, Senator George F. Hoar, Hon. Stephen Salisbury, Joseph Mason, Esq., Col. W. S. B. Hopkins, Thomas G. Kent, Esq., and Dr. Thomas H. Gage. Nearly all the Superior Court Justices and several of the Supreme Court Justices attended. The members of the Faculty of the Institute attended in a body and, as a token of respect, all exercises at the Tech were suspended on the day of the funeral. The members of the city government, heads of departments and ex-mayors also attended the services. From Friday morning till after the funeral services, the flags on Boynton Hall and the stone Court-house were at half-mast.

Judge Aldrich is survived by his wife and five children: Mrs. William B. Durant of Cambridge, Mrs. W. T. Wardwell of Newton Centre, Miss Josephine Aldrich, Charles F. Aldrich, Esq., and Edward Emory Aldrich.

'97's class supper, the second they have held, was served at the Lincoln House, Thursday evening, March 21st.

SENIOR CLASS MEETINGS.

Class meetings are of weekly occurrence with the Seniors, and Tuesday noons, from 12 till 1 o'clock, the chosen time, much to Prof. Bird's discomfiture.

At the meeting March 12, a letter from the Central Church was read offering the use of the church to the class for the baccalaureate sermon; this was accepted, and Rev. Archibald McCullagh, D. D., was chosen to preach the sermon.

Election of class day speakers was then made. Mr. F. M. Martin was chosen Tree Orator, Mr. C. A. Harrington Class Orator, and Mr. H. D. Temple Toastmaster for the banquet.

A nominating committee, consisting of Harrington, chairman, Cardwell, Clapp, Copeland and Morse, was appointed to bring in nominations for various class day committees.

Another meeting was held March 19, and the following committees chosen:

Banquet—Barton, chairman; Tilden, Clapp.
Class Day—Somerville, chairman; Copeland, Favor.

Reception—Denny, chairman; Harrington, Chambers.

Graduation—A. G. Warren, chairman; Fay, Bryant.

THE TECH INDOOR GAMES.

A Great Success.

The much talked of Meet has come and passed and joy reigns among the Tech athletes, for it a grand success in every way. Never has the Skating Rink held such an audience as that assembled there on March 14th. What stunning gowns! What pretty girls! Who could not run with such inspiration. Fast time was made in the sprints, the races were exciting, many good men were brought out, the crowd of spectators was large and enthusiastic, and what is still more a source of gratification to the managers of the venture, it was also a financial success.

From an athletic standpoint the Tech games, held March 14th, compare favorably with any held in the rink for a long time. Bigelow of Harvard twice equalled the world's amateur record of $4\frac{3}{8}$ s. in the 40-yds. sprint. In this event the running was the best seen in the rink this season. The open events were all hotly contested, the finishes full of excitement. The height of interest was reached during the team races. The one between the graduates and undergraduates being extremely close, the winner finishing hardly six inches ahead of his opponent.

The events were run off without any delays or tedious waits, and the crowd of 800 spectators was manifestly well pleased with the manner in which the games were conducted. Not for years have so many of the fair sex been seen in the Rink at an athletic meet, which surely speaks well for the Tech men. Another thing which pleased every student was the great interest the Faculty took in the games. In the south gallery were many members with their wives and friends.

The officials of the games were as follows:

Referee—H. A. Adams.

Finish Judges—A. B. Viles, R. A. Lohnes, A. O. Knight.

Field Judges—E. H. Kinsley, H. J. Fuller, N. C. Keyes.

Timers—P. H. Hurley, I. E. Bigelow, F. H. Coulson.

Starter—W. F. Donovan.

Clerk of Course—W. A. Beaudette.

Assistant Clerk of Course—F. E. Knowles.

Announcer—H. D. Temple.

Scorer—C. E. Putnam.

Inspectors—Prof. L. L. Conant, Dr. L. P. Kinnicutt, A. G. Mason, W. H. S.; R. L. Barker, W. A.; E. B. Whipple, W. P. I.; M. C. Allen, W. P. I.

The first event on the card, the 40-yds. dash, was called promptly at 8 o'clock. Thirty men out of forty entries answered to the call, and it proved to be a fast field. The event was run off in eight preliminary heats, two heats for second men, two semi-finals, and one final with four starters. Hitchcock was the only Tech man in the final heat, and he could only finish in third place, being beaten out by Hyland and Bigelow.

In the first heat the following faced the starter: J. T. Roche, Jr., W. H. S., scratch; A. O. Hitchcock, W. P. I., 6 ft.; M. D. Olmstead, W. H. S., 8 ft.; P. Hayes, E. G. A. C., 6 ft. Roche ran well and won in $4\frac{1}{8}$ s., with Hitchcock second.

In the second heat the starters were the following: R. L. Mason, W. H. S., 9 ft.; P. Des Prado, H. A. A., 2 ft.; E. E. Brown, W. P. I., 5 ft.; C. A. Booth, W. P. I., 6 ft. Mason won in $4\frac{3}{8}$ s. Brown was expected to show up well in this event, but the Harvard man passed him and finished second.

In the third heat the following started: W. A. Hackett, W. H. S., 6 ft.; W. L. Whalen, St. P. L. A. A., 8 ft.; A. G. Thomson, W. A. C., 8 ft.; W. R. Mansfield, H. A. A., 4 ft. Thomson won the heat with Mansfield in second place. Time, 5 s.

The fourth heat brought out the following: I. S. Clark, N. A. A., scratch; D. D. McTag-

gart, W. A. C., 8 ft.; G. A. Sargent, W. A. A. A., 6 ft.; J. W. Badger, W. H. S., 6 ft. The heat was noticeable in that it had in it the man who beat out Bigelow and Jackson at the M. I. T. meet in the 35-yard dash from scratch. Clark was not able to catch the leaders, and Sargent won in $4\frac{1}{5}$ sec., with McTaggart second.

In the fifth heat the following were on their marks: L. K. Brennan, W. A. C., 5 ft.; W. J. Desmond, W. H. S., 6 ft.; D. W. O'Connor, St. P. A. A., 7 ft.; A. L. Jackson, H. A. A., scratch. Jackson got away well and breasted the tape barely ahead of Brennan. The time was 5 s.

In the sixth heat the starters were the following: F. J. Zaeder, W. P. I., 6 ft.; G. A. Denny, W. P. I., 6 ft.; R. R. Smith, W. P. I., 6 ft.; F. H. Bigelow, H. A. A. and W. A. C., scratch. With three good men on the six-foot mark Bigelow had to run hard to win. At the report of the pistol he was off in fine shape and fairly flew down the rink, winning the heat in $4\frac{3}{5}$ s., equalling the world's amateur record for the distance. Zaeder won second place.

In the seventh heat the starters were: F. H. Brigham, W. P. I., 6 ft.; A. G. Mason, W. H. S., 6 ft.; C. R. Harris, W. P. I., 6 ft.; J. H. O'Brien, W. H. S., 6 ft. It was even up between the two Tech and two High School men on the start, as all were on the same mark. Brigham won the heat, with Mason second. Time, $4\frac{4}{5}$ s.

The field in the eighth and last trial heat had but two: M. C. Allen, W. A. C. and W. P. I., 7 ft.; W. H. Hyland, W. A. C. and C. G. A. A., 7 ft. It was a close race down, but Hyland had the best end and won in $4\frac{3}{5}$ s.

In the heat for second men there were the following men on their marks: Hitchcock, Prado, Mansfield and McTaggart. The heat was won by Hitchcock. Time, $4\frac{4}{5}$ s.

In the second heat for second men the starters were: Brennan, Zaeder, Allen and A. G. Mason. It was won by Zaeder. Time, $4\frac{4}{5}$ s.

The starters in the first semi-final were Zaeder, Sargent, R. L. Mason, Roche and Hitchcock. The heat was won by Hitchcock with Roche close on his heels.

In the second semi-final the starters were Hyland, Brigham, Jackson, Zaeder and Bigelow. It was won by Hyland, with Bigelow second. Time, $4\frac{3}{5}$ s.

The field was thus sifted down to the following four men when the final heat was called:—

W. H. Hyland, W. A. C. and C. G. A. A., 7 ft.; A. O. Hitchcock, W. P. I., 6 ft.; F. H. Bigelow, W. A. C. and H. A. A., scratch; J. T. Roche, Jr., W. H. S., scratch.

With the old High School boys on the scratch great things were expected in the race, but Roche lost his chance by going over the mark. He was set back a yard, and then the hearts of his friends sank, for they knew he had no chance, but he showed good pluck and ran his race. The race was awarded to Hyland, but it should have gone to Bigelow, as he broke the tape. The time was $4\frac{3}{5}$ s., which if the race had been given to Bigelow, would make the second time in the evening that he did the 40 yards in that time.

The team race between the graduates and the undergraduates was the next event. The race was thought to be a sure thing for the graduates, and in fact they would have won except for the fouling of Dadmun by Field.

The teams ran in the following order: Graduates, E. B. Whipple, E. A. Taylor, M. C. Allen and H. L. Dadmun; undergraduates, T. F. O'Connor, H. M. Warren, C. F. Vaughn and H. E. Field.

The distance was eight laps, each man running two. O'Connor had the pole on the start and when he finished he had a couple yards on Whipple. Warren added about eight yards to this. Vaughn held this distance for the first lap, but on the second, Allen cut it down to four, which Field had when he started off in front of Dadmun. Dadmun was soon up to Field, but was continually elbowed out when he tried to pass him. On the last stretch Dadmun had a good chance to win, but his strength was gone and he could not pass Field. He finished less than a foot behind and fell headlong as he crossed the line. The time of the race was 2m. $5\frac{1}{5}$ s.

Allen entered a protest against Field for fouling, which was allowed by the referee. This protest was withdrawn later, however, and the prizes given to the undergraduates.

In the trials of the 600-yard open, the following started in the first heat: N. M. Foster, W. A. A. A., 30 yds.; J. F. Powers, St. P. L. A. A., 30 yds.; W. J. Harrington, Worcester, 28 yds.; D. W. O'Connor, St. P. L. A. A., 25 yds.; W. S. Sampson, Jr., W. A. A. A., 25 yds.; A. A. Heath, W. A. C., 25 yds.; W. H. Hyland, W. A. C. and C. G. A. A., 23 yds.; C. H. Williams, H. A. A., 15 yds.

The race was not particularly exciting until the finish. It was won by Foster, Powers second and Williams third, which insured a chance for all in the final. The time was 1 m. $21\frac{4}{5}$ s.

In the second heat, the starters were J. E. Sweeney, St. P. L. A. A., 30 yds.; C. C. Duntton, Battery B, 30 yds.; C. K. Kilmer, W. A. A. A., 25 yds.; C. K. Bacon, W. A. A. A., 25 yds.; J. Rice, Y. M. C. A., 25 yds.; D. D.

McTaggart, W. A. C., 20 yds.; J. D. Delaney, W. A. C., 5 yards. Sweeney was thrown out by a fall on the corner. McTaggart ran a good race at the start, and was in the lead in short order. Delaney followed him, and at the finish they were trotting alongside each other. Rice was third. The time was 1 m. 24 s.

Sweeney was allowed to go into the final with the winners of the trial heats on account of the fall that he had received.

The final heat was a pretty race, Delaney running with great judgment. He remained in the rear until the last lap, when he began his sprint for the finish, quickly passing all the men and winning the race in 1 m. 21 $\frac{3}{4}$ s. McTaggart finished second, a few yards behind Delaney.

The class team races were the most exciting events on the program on account of the intense interest that the students took in them. The first race between the Seniors and Juniors was a hot one. In the second race the contesting teams were those of '97 and '98.

The Seniors and Juniors put the following men against each other: '95, Harrington, O'Connor, Stone and Field; '96, Warren, Brown, Reed and Vaughn.

The Juniors won the pole on the toss for position. Warren led Harrington all the way round and had three yards when they finished. O'Connor lost half a dozen laps by a bad stumble and he was weak on the corners. But on the stretches he flew, and on the last he made up all the distance, coming in even with Brown. Reed had the inside, but on the second lap Stone sprinted past on the back stretch, and he gave Field three yards start. It was all over when Field was given the start of Vaughn. The race was won by the Seniors in 2 m. 6 s.

The race between '98 and '97 was a surprise, for '98 expected to win, and '97 were not at all sure but what they would do so.

The teams ran against each other as follows: '97, Morse, Fish, Daniels and Lundgren; '98, Macomber, Smith, Dimick and Hastings. The Sophs had the pole and they were never headed. When Lundgren broke the tape he had a lead of over 20 yards. The time was 2 m. 11 s.

The final between '95 and '97 was run off after the other events, and was won by '95 in a close race. '97 had the pole and Harrington and Morse ran a dead heat. Fish got away slightly ahead of O'Connor, but was passed on the first lap and finished about ten yards behind O'Connor. Stone got away quickly, but Daniels ran a fine race and cut down the lead about two yards. Lundgren tried hard to beat out Field, but after his hard race in the 1000-yards run, was not equal to the emergency, and Field fin-

ished about three yards ahead. The time was 2 m. 7 s.

In the 1000-yard run the starters were confined to the students. They were as follows: F. E. Ross, 60 yds.; George D. Brown, 60 yds.; F. W. Smith, 60 yds.; H. G. Phelps, 60 yds.; C. C. Brooks, 55 yds.; Phil Goodrich, 35 yds.; C. A. Booth, 30 yds.; J. E. Brown, 25 yds.; O. W. Lundgren, 18 yds.

The race was a constant gain on the part of the low men, and the leaders were fighting and jostling each other all the time, until they became so tired they did not have the strength to run at the end. The race was won by J. E. Brown. Lundgren was second. It looked as if he would beat out Brown in the last straight, but he did not have the speed. The time was 2 m., 36 $\frac{2}{3}$ s.

In the 600-yard race open to students only, the starters were the following: F. H. Brigham, 35 yds.; H. G. Phelps, 35 yds.; C. F. Leonard, 35 yds.; F. W. Smith, 35 yds.; F. J. Zaeder, 30 yds.; G. A. Denny, 30 yds.; H. L. Hastings, 22 yds.; C. R. Harris, 22 yds.; H. M. Warren, 10 yds.; M. C. Allen, scratch.

This race was an easy victory for Brigham. He took the lead from the start, and easily kept the lead, finishing far ahead of the field in 1 m., 20 $\frac{1}{2}$ s. Vaughn and Allen ran a hard race for second place, the former winning by a few feet.

Next came the mile walk, in which the starters were: H. T. McClure, W. P. I., 25 seconds; G. H. Dolan, Worcester, 20 seconds; J. T. Walsh, W. P. I., 20 seconds; P. E. Barbour, W. P. I., 20 seconds, C. V. Moore, N. A. A., scratch; Fred Bruso, W. A. C., 5 seconds; J. J. Donahue, W. A. C., 5 seconds; C. A. Malm, Worcester, 25 seconds; P. J. Loftus, Worcester, 25 seconds; D. B. Sullivan, Worcester, 20 seconds; C. L. Barrett, Winfield A. C., 20 seconds; Philip Nichols, H. A. A., 15 seconds.

This big field of starters gradually decreased in number, until there were only four men on the track at the finish. Some of them had dropped out, while others had been ruled off. The contest was between Bruso and Malm, the former getting first place in the slow time of 8 minutes, 23 seconds. Moore, the N. E. champion, who started from the scratch, walked a plucky race, but was unable to overcome the handicaps of the leaders and had to content himself with third place.

The men competing in the pole vault were: B. Johnson, W. A., scratch; H. W. Leland, W. P. I., 12 inches; F. C. Harrington, W. P. I., 15 inches; A. B. Emmons, H. A. A., 3 inches. As was expected, Johnson won this event, clearing 9 ft., 11 $\frac{1}{4}$ inches, which gave him

first place over Harrington, whose actual vault was 8 feet, 8 inches.

The high-jump was a close affair, and five men competed. Brigham, the winner in the 600-yard, had a handicap of 3 inches over Zaeder, the scratch man, and by virtue of this he won first place on his jump of 5 feet, 2 inches. Zaeder was second with an actual jump of 5 feet, 3 inches.

After such an athletic meet, it is but natural that there should be a variety of feelings manifest among the students. A few suffer the disappointment of defeat, either individual or class defeat, others are happy over victory; but among the mass of Tech students nothing but pleasure is felt over the recent games. Such a success speaks well of our new Athletic Association, and of the men who had the affair in charge.

W. E. S.

The next regular meeting of the Washburn Engineering Society will be held in the Salisbury Laboratories, on Monday evening, March 25th, at 8 o'clock.

Messrs. M. C. Allen and F. W. Sawyer, graduate students of the Institute, will give a paper on "Long Distance Transmission of Power by Electricity." Mr. Clinton Alvord, of '86, will explain the "Construction of Eccentric and Odd-shaped Gears by a Graphic Method." The meeting will be an extremely interesting one, and a large attendance is certain.

BASEBALL.

With the coming of the warm Spring days thoughts of America's only game have continually filled the minds of all the enthusiasts in the college. The supporters of the game have good reason to feel pleased with the prospects for Tech's team the coming season, for at no time in the history of the Institute has the outlook for baseball been so encouraging, and so full of hope. With all last year's champion team back and the grist of likely candidates who have already signified their intention of trying for positions, it really looks as if fortune was with us. Still, no one can tell just what may come up, the most promising things have turned out poorly, and we must all remember that baseball was never successfully played on paper. To speak plainly, almost the entire success rests with the men "who play the game," and it may be well to renew our acquaintance with a few of them and become acquainted with a few others.

Our old captain is still with us, and he is fully aware that much responsibility rests on his

shoulders. Zaeder says he still "has his eye with him," and we know what he says, goes.

Last year's battery looks as fine as silk and as strong as a pair of oxen. "Freddie" has lost none of his old speed, and "Tommy" says its like "picking apples."

"Phil," the eagle-eyed, is still "on the turf," and Cullen is as lively as ever. Knowles, also, will again try for his position at third base.

For fielders, we still have Bunker and Harris. Owing to more pressing duties Gordon will not be seen on the diamond this year. This is an unfortunate circumstance, as it is feared that his withdrawal will leave quite a hole in centre field.

These men, however, are not the only players on the hill, by any means, and they are mentioned first only as a matter of courtesy to older men. We all know that there are men in the Institute who, with practice, can put up just about as good a game as some of the regular players, and these are the very men we want to come out. Nothing improves a team's playing so much as good honest rivalry in striving for positions, and the more men for one position the better.

Ninety-five has some likely candidates in the field who will endeavor to "strike the nine" before they graduate. Warren is a veteran at the game, having been on the team before. He will make a strong bid for a position. Walls, Stone and Chambers are other good men whose ability is well known.

Ninety-six has not exhausted all her baseball material yet. There will be some more good candidates out this year. Sibley puts up a first-class game, and Lamson, with practice, would make one of the best pitchers in the Institute. Beyer is also looking for the pitcher's position. He has some good curves and considerable speed.

Ninety-seven seems to be somewhat lacking in baseball material, but ninety-eight has quite a number of players. Smith has a reputation for "handling the sphere" which he will try to uphold, and it is rumored that Hitchcock can juggle the ball as well as sprint. Dimick, Synyer and Bloss are other candidates from ninety-eight.

Manager Coe has engaged the hall at Agricultural Park for practice during March, and the players have already commenced to "limber up" a little. The object in securing the hall was not so much to make players over there, as to harden the men a little, so that when they commence playing outdoors they will not stiffen up immediately.

The schedule which the manager has arranged

is probably the best which a Tech team has ever faced. Besides the regular list of games, a trip, after college closes, is to be taken through Western Massachusetts and Vermont. The complete schedule is as follows:

- | | | |
|-------|-----|--------------------------------------|
| April | 9. | Wesleyan at Middletown. |
| | 13. | Trinity at Hartford. |
| | 20. | Academy at Oval. |
| | 27. | Amherst Aggie at Amherst. |
| May | 4. | Amherst Aggie at Worcester. |
| | 11. | Tufts at Medford. |
| | 18. | Open. |
| | 22. | (Morning) Trinity at Worcester. |
| | 25. | Andover at Andover. |
| June | 1. | Tufts at Worcester. |
| | 7. | University of Vermont at Worcester. |
| | 12. | University of Vermont at Burlington. |
| | 18. | Dartmouth at Hanover. |

SHOP NOTES.

The edict of the City Council, prohibiting the use of city water for elevators, March 1st, has made things very busy at the Shops for the last six weeks.

Electric pumping plants have been installed at the People's Savings Bank, at the Five Cents Savings Bank, at Barnard, Sumner & Putnam Co. and at Clark's block. Steam pumping plants have been installed for E. T. Smith & Co., for the Whitcomb Envelope Co. and for Logan, Swift & Brigham.

All the plants have been upon the closed or pressure tank system, the elevators exhausting into an open tank, from which the water is pumped into a closed or pressure tank, where it is carried at a pressure of about 125 lbs., and from thence goes to the elevators, using the same water over and over again.

The plants are all arranged so that the pumps run intermittently, starting automatically when water is drawn from the pressure tank and stopping again automatically so soon as pressure has been restored to the pressure tank.

For use on the electric plants, the Perret slow speed electric motor has been employed, driving pumps both of the Deane and the Gould make. The size of plants ranges from 5 H. P. to 20 H. P.

In addition to these electric pumping plants four others are contracted for to be installed before the first of April, viz.: In the Armsby building, in the new Day building and in the Chase and Taylor buildings. These plants will be the same general type as the above, and will range from 3 to 20 H. P.

The current for supplying these motors is supplied by the Electric Light Co., and is of a potential of 500 volts. The current is me-

tered and charges are based upon the actual quantity used.

In addition to these pumping plants, the Shops have now on hand elevators for Northampton, Lawrence, Hudson and Clinton, Massachusetts; for Pawtucket, R. I.; for Dover, N. H., as well as for the Armsby and Day buildings in this city.

MR. POWELL'S LECTURE.

Mr. A. M. Powell, president of the Powell Planer Company, lectured to the Seniors Wednesday morning, March 13, on Evolution of the Planing Machine. The talk was given in the Physics lecture-room, and was profusely illustrated with stereopticon views of various machines from the earliest forms to the present highly perfected type.

Mr. Powell proved himself an entertaining speaker, and his experience as a practical business man, and a graduate of the Institute, rendered him exactly fitted to talk to undergraduates. He held the attention of his audience for over an hour, and was liberally applauded at the close.

LECTURE BY MR. GREEN.

The regular Wednesday lecture to the Seniors was given March 20, by Mr. S. M. Green of the Merrick Thread Company of Holyoke, who spoke upon "Modern Steam Boiler Plants." The lecture was fully illustrated with blue prints and charts, showing the various makes and styles of boilers.

The advantages and disadvantages of water-tube and fire-tube boilers were explained and compared, and much valuable information was imparted in regard to relative cost and efficiency of plants.

BANJO CLUB.

The Banjo Club played at an entertainment at the South Unitarian Church, on Friday evening, March 1st. There was a good audience and encores were frequent. Preceding the entertainment a turkey supper formed the centre of attraction, and it is needless to say that the club did well in this particular.

The club plays at Horticultural Hall, Tuesday evening, March 19, the occasion being the annual reunion of the "Maritime Provinces Association." All students who are interested should attend.

Rehearsals are being held weekly in anticipation of the Burlesque, for which some special music is being prepared for the club.

THESIS SUBJECTS.

The following are the Thesis subjects taken by the civil engineers of the Senior Class:—

N. G. Burton, } "Investigation of the Web-
E. J. Pickwick, } ster Water System."
G. O. Sanford, } "Comparison of Water
W. O. Wellington, } Measurements, Using
Weirs and Venturi Meter."

B. E. Savage, "Design of a Plate Girder Bridge."

F. H. Somerville, "Design of an Iron Highway Bridge."

TECHNICALITIES.

Professor (in Mechanics)—"Well, Mr. S—ne, what have you on your mind?"
S—ne—"Oh, nothing, sir."

Chalk talk in steam. Instructor—"We expand down to there (as the chalk breaks and falls to the floor), and then we get a drop."

The Sophomores have commenced electricity, much to their delight. A new text-book, by S. P. Thompson, is used instead of Deschanel, as formerly. The new work has an appendix on the U. S. Coast and Geodic Survey, by Dr. Mendenhall.

Frederic Whittemore, a Freshman, met with a painful accident in the woodroom at the shop, last Wednesday. His left hand was caught by a large circular saw, and three fingers and thumb were deeply cut. The wound was dressed at the City Hospital, and none of the injured members will be lost.

There is an excellent opportunity now open for joining the Central Church choir, as is noted in our advertising columns. It is to be hoped that some of the musical men of the college will take advantage of this chance of improving their voices. The instruction is free of charge, and is of great benefit to a young singer. Tech has always been well represented in this chorus, and we hope it will be in the future.

ONE EVENING.

They sat around the table four,
The game ran high, their spirits lower;
"I'll raise you five!" "The pot is mine!"
And thus it waged 'long the line.

NEXT MORNING.

They sat around the ralling four,
A bobtail flush on all galore;
"Your five shy!" the judge quoth he.
Solomon took their coats for three.

HIS MARKS.

"What mean these marks, my son?" he wrote;
The son's reply below I quote.

"A's average, and B is bad,—
Of these, you know, not one I had.
But E,—that's excellent,—I'd two,—
As well as you could wish I'd do.
The C means work done carefully,—
While D,—well, dangerously near to E."

—The Unit.

The Board of Trustees of Cornell have decided to build a large addition to Sage Hall, the women's dormitory increasing its capacity fifty per cent. The new addition will be an extension of the north wing and will cost \$50,000. It will be ready for occupancy next fall.

An intercollegiate lacrosse team, composed of the five best players from Johns Hopkins, Lehigh, and Stevens' Institute, will take a trip to Canada this summer. The men selected will practice at Stevens Institute at least ten days before starting.

At the College of the City of New York, an attempt is being made to revive the old college "Annual," which was formerly published by the Senior Class. At present it is being pushed forward by the fraternities.

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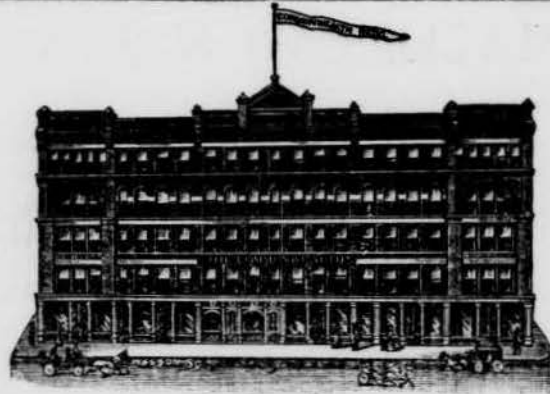
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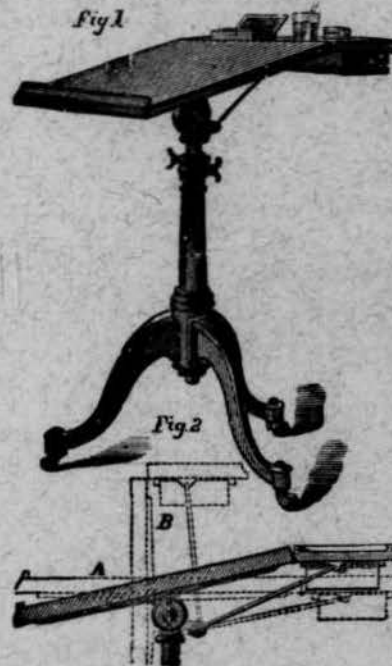
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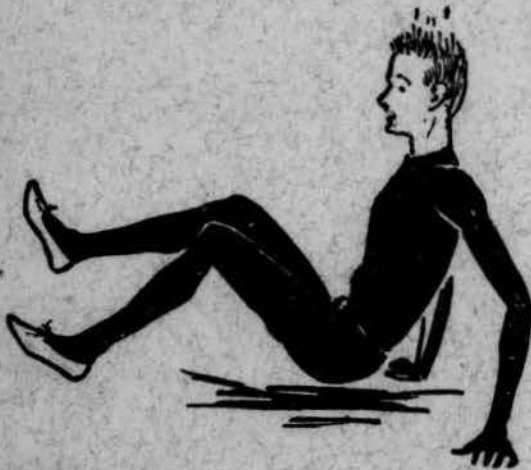
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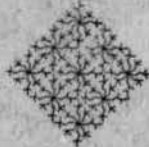
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