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For the benefit of students THE TECH will be pleased to answer all questions and obtain all possible information pertaining to any department of the College.
Contributions are requested from all undergraduates, alumni, and officers of instruction. No anonymous manuscript can be accepted.

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T ECHNOLOGY has again been called upon to lament an almost irreparable loss to her Chemical Department,—a loss which, under existing circumstances, will be only sustained with the utmost difficulty. After continued efforts during the past several months on the part of the corporation of Lehigh University, to induce Dr. Thomas M. Drown to accept the Presidency of that institution, and after repeated refusals on the part of Dr. Drown, he has at length consented, and will assume the duties of his new office in the near future. Thus Lehigh's ultimate success has cast but a deeper gloom over the misfortune of Technology.

In the death of Professor Norton, it was believed that Chemistry at Technology had received a blow from which it would recover but slowly. Nevertheless, through the efforts of a devoted corps of instructors, and through the immediate labors of Dr. Drown and a few associates, the work of the Department was not allowed to languish, but rather was advanced appreciably.

During the past few weeks the Department has suffered to an extent possibly greater than ever before. The acceptance by Dr. Evans, so well known to those interested in Organic Chemistry, of a position as chief chemist in a large New York corporation; the resignation of Mr. Andrews to take in charge the selection and arrangement of the John Crerar Library in Chicago; and, at last, the near departure of Dr. Drown as Lehigh's President,—mean losses which are truly dispiriting.

Dr. Drown graduated from the University of Pennsylvania in the class of '62, and afterwards spent a considerable period abroad as a student, first at the Mining School of Freiberg, Saxony, and later at the University of Heidelberg. Upon his return to America, he accepted for a year the position of Instructor in Metallurgy in Harvard University. In 1874 he became Professor of Analytical Chemistry at Lafayette College where he remained for seven years, at the same time acting as Secretary and Editor of the Transactions of the American Institute of Mining Engineers. In 1885 he was made Professor of Chemistry at our own college.

As chemist, also, to the Board of Health for the past several years he has undertaken a complete set of chemical analyses of spring and river waters throughout Massachusetts, and has obtained data which have proved singularly useful in constructing various water-supply maps of the State. In connection with the work of the Board, moreover, aided by Mrs. Richards, he has taken in charge the publishing of annual Health Reports, each volume of which has embraced several hundred pages.
of important statistics, together with eminently valuable articles on water supply, drainage, and water analysis.

Since 1887, Dr. Drown has added to the world of scientific literature a number of writings, among which may be mentioned Chemical Examinations of Drinking Water (1887), Review of Blair's Chemical Analysis of Iron, (1889), The Filtration of Natural Water (1890), The Effect of Aeration of Natural Waters (1891), and many other papers published in the Technology Quarterly and Proceedings of the Society of Arts, and Transactions of the American Institute of Mining Engineers.

Dr. Drown has been known to Technology men at large as the Head of Courses V. and X.,—to those who have come under his care he has been known as a warm, true friend. His efforts in behalf of our college have been wholly appreciated, and the entire student body will regret his departure. While we rejoice that a distinguished honor has come to one who has served so faithfully, nevertheless, we cannot but view the gap which remains with a feeling of sadness.

SINCE the date of our last issue, we have been enabled to obtain definite information concerning the organization of the Connecticut Valley Alumni Association. At the call of a committee of six graduates, consisting of Messrs. N. P. Ames Carter, '87, Guy Kirkham, '87, James S. Newton, '89, William A. Prentiss, '75, Henry Souther, '87, and Giles Taintor, '87, a dinner was held at the Massasoit House, in Springfield, on Thursday evening, March 28th. In the response of thirty enthusiastic men, a thoroughly enjoyable occasion, in which the purpose of the dinner was by no means forgotten, resulted. President Walker and Dr. Tyler, from Technology, and Mr. Munroe, as President of the National Alumni Association, were present and remarked the importance of the projected undertaking.

President Walker, when called upon to speak, referred to the growth of Technology along a variety of lines, and of the encouraging messages of the advancement and success of the older graduates which each incoming class brings with it. He adverted, also, to the difficulties which were constantly encountered on account of the lack of funds. In tribute to the faithful work of the corps of instructors, he said that it had been their constant aim to carry out most thoroughly the idea of a broad technical education. Mr. Munroe said: "Were this assembly as small as the proverbial acorn, it would still contain all the family characteristics of Technology. It has been said that the only objection to Technology students was that they rooted for Yale: in my estimation Technology students are wont to root for themselves, and have rooted deeply throughout the country. They owe much to President Walker, as the country knows and is thankful for, in that he has by his influence and work placed the Institute in the front ranks of technical educators, not only in this country, where it is easily first, but in Europe as well, where it is second to none. The institution has taken such enormous strides that it has indeed become a model and a pilgrimage for every foreign educator who comes to this country." Mr. Munroe closed with a plea for an organization which should be a constant factor in aiding the present work of the college and its governing body. Dr. Tyler spoke of the necessity for loyal graduates, and enlarged upon the duty which each alumnus owes to his Alma Mater, Technology. Other speakers of the evening were, Mr. Guy Kirkham, '87, Mr. George L. Munn, of Easthampton, and Mr. J. Frank Seavey, '86.

A committee of five, composed of Messrs. Kirkham, Carter, Souther, Newton, as Secretary, and Taintor, as temporary Chairman, was chosen to act as an executive body in completing the plans of the Association.
THE Summer School of Mining and Metallurgy has been one of the main features in the course in Mining Engineering since 1871, when the students in charge of President Runkle made a trip through the mining regions of Missouri, Colorado, and Utah. This year the school will be held in New Jersey and Pennsylvania, as announced in the circular letter from Prof. Hofman published in another column.

In many of the mining and metallurgical centers of the country, Technology men are holding responsible positions, and are always ready to assist the members of the Summer school in every way possible—to give them entrance to the various works and mines, and often to entertain them socially. At the iron and steel works to be visited this summer are the following graduates of Course III.: Mr. H. H. Campbell, '79, Superintendent of the Pennsylvania Steel Company at Steelton, Penn., where the students will investigate blast furnaces, the Bessemer and the open-hearth processes, and rolling mills; Mr. David Baker, '85, Superintendent of the Lackawanna Iron and Steel Company at Lebanon, Penn., who will exhibit to the students iron-ore mining and roasting, and iron blast furnaces; Mr. Joseph E. Thropp, Jr., '94, Assistant to Superintendent of Everett Furnace and Mines at Everett, Penn. Here the students will obtain an idea of iron and coal mines, coke ovens and a blast furnace for making foundry iron.

The advantages of this one month of intimate association with the practical side of mining and metallurgy are of such great value that the mining student should consider it a privilege to be present during his course at one of the Summer Schools. The experience and information in regard to the metallurgy of iron, copper, lead, silver, and zinc, coke making, and iron and coal mining, which the students can thus obtain, will be of the greatest benefit, and will be of especial aid to them in subsequent professional studies.

We publish this week a complete list of the theses subjects undertaken by Ninety-five men in Courses I. to V. inclusive. In a later issue the remainder of the class will appear with the problems which have been chosen. It has been encouraging to note the general enthusiasm in thesis work displayed by the Senior Class at large, and in almost every case success seems to be assured. The Faculty should be heartily commended for the working interest which has been evinced; many times a very considerable expense has been incurred to advance to the students all apparatus necessary for an extremely varied list of undertakings.

**Calendar.**

April 13th: Mandaman Club, Parker House, at 8 P. M.
April 15th: German Plays at Copley Hall, at 8 P. M.
April 16th: Junior Promenade, Pierce Hall.
April 17th: Glee, Banjo, and Mandolin Club's concert, Huntington Hall, 8 P. M.
April 18th: French Plays at Copley Hall, at 8 P. M.

**COMMUNICATIONS.**

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

To the Editors of The Tech:

Upon the call of Dr. Sargent, of Harvard, as spokesman of a committee, a meeting was recently held to form a gymnastic association, which is to include for the present various organizations in and about Boston. At this meeting the objects and general plan of such an association were discussed. The further enlargement of the plan and the working out of its details, as well as the framing of a constitution, were left to a committee of five to be appointed by Dr. Sargent.

The object of the promoters of this movement is to arouse a general interest in gymnastics, by arranging for a series of contests between teams of the different organizations to be represented in the proposed association. The two important features of these proposed contests are that each organization will be represented by a comparatively large team, and that the style and finish of the exercises, rather than their difficulty, will form the basis of selection of the successful team. By these provisions it is evident that a
large number of men will be induced to try for the teams, and hence be led to systematically develop their bodies. Thus the total real benefits to be derived from this association will be great,—greater, it seems to me, than those derived from athletic contests as usually managed.

It is important that the interest already aroused at Technology be extended, and that the recently formed temporary organization be replaced by a permanent one before the term closes. We shall then be ready in the Fall to take up the work in earnest, and turn out a winning team at the Winter meetings.

I might add that Dr. Sargent has consented to address a mass meeting of our students on this subject, at some date in the near future.

R. E. Bakenhus, '96.

To the Editors of The Tech:

In the Boston Transcript of March twenty-first, there appeared an article warmly commending the work of the Mining Department of the Institute of Technology, and especially the work of the Mining and Metallurgical laboratories. The article made very kind reference to me, but gave me credit far beyond my deserts. I now ask the privilege of writing a few lines to give credit to whom credit is due.

Professor Rogers, the wonderful teacher, the leader of modern educators, who laid out the lines for this school, included in his preliminary "Plan and Scope of an Institute of Technology," published about 1861, the outlines of a mining laboratory in terms which apply perfectly to the developed laboratory of to-day. His foresight seems to have been almost prophetic, for the paper was lost sight of during the development.

In 1871 President Runkle organized the first Summer School of Mining in Missouri, Colorado, and Utah. He raised a subscription, and obtained reductions from the various railroads so that the trip could be made with moderate expense to the students. In the meantime he had arranged that Professor Ordway should design assaying and smelting furnaces for the metallurgical laboratory; he placed two students in milling works, one at Virginia City, Nevada, to study the milling of silver ores, and the other at Grass Valley, California, to study the milling of gold ores. He prevailed upon Mr. Scott, of Booth & Co., and Mr. Joshua Hendy to furnish us with a stamp mill and amalgamating and concentrating machinery for gold and silver ores.

When I took charge of the laboratory I found the furnaces built, the machines chosen, and two young men primed to post me on the mounting and running of the machines. All of this came through President Runkle's keen foresight and Professor Ordway's great experience and ready suggestion. With the laboratory thus equipped, the rest has been a matter of steady growth and development of processes, furnaces, and machinery.

Nor can I leave this without saying a few words of thanks to those who have helped me. I had the sympathy of Professors Ordway, Wing, and Rockwell, and later of Dr. Drown, in helping the development of processes and of adapting them to teaching. I have been greatly favored with assistants and associates, who actively or by suggestion have aided in the development of these laboratories which have just been the subject of such high commendation. The list is:

The late C. O. Parsons, who designed the new works for the Boston and Montana Consolidated Copper and Silver Mining Company.
B. H. Locke, Mining Engineer, Denver, Colorado.
C. E. Stafford, Superintendent Bessemer and Open Hearth Departments of Schoenberger & Co., Pittsburgh.
J. W. Revere, Revere Copper Company, now of the Dominion Coal Company.
E. W. Rollins, of E. H. Rollins & Sons, Bankers.
B. L. Beal, Engineering Department of the Boston Transit Commission.
W. Foster, Mining Engineer, Boston.
F. W. Wood, President Maryland Steel Company.
F. A. Emmerton, Iron and Steel Expert, Cleveland, Ohio.
The late Elmer Faunce, Mining Engineer, Georgetown, Colorado.
F. H. Prentiss, President of the Buckeye Electric Company.
F. W. Clark, of Jonathan Clark & Sons, Builders, Chicago.
Henry M. Howe, Metallurgist, who has just received the Bessemer Medal.
Geo. F. Knapp, Oglebay, Norton & Co., Cleveland, Ohio.
Newbert M. Randall, Chief Chemist, Maryland Steel Company.
Timothy W. Sprague, Electrical Westinghouse, Church, Kerr & Co., Boston, Mass.
Chas. F. Hastings, late Assistant Supt., Bessemer Department Pennsylvania Steel Company.
H. O. Hoffman, Associate Professor of Mining and Metallurgy, M. I. T.
R. W. Lodge, Instructor in Mining and Metallurgy.

Robert H. Richards.
The Freshmen are receiving a short course in solid Analytics.

An Alumni Course II. smoke talk took place last Tuesday.

The Chorus of the Deutscher Verein Opera was photographed last week.

The old Woodbury oil machine has been set up in the engineering laboratory.

Mr. G. Waldon Smith took a photograph of the Senior Chemists recently.

One of the signs of spring is the removal of the board covering from Rogers steps.

There was no exercise last Friday in the Freshman freehand drawing classes.

Several of the Ninety-five Chemists will study abroad during the coming Summer.

The Harvard class games will take place on Holmes' field Friday of this week at 4 P.M.

The Deutscher Verein Chorus were measured for costumes last Saturday at Hayden's.

The Glee and Banjo club gave a most successful concert at the Shawmut Avenue church on the 3d.

Harvard's corporation may yet settle the football controversy and approve the action of the athletic committee.

It is probable that Prof. Runkle will not resume his duties at the Institute this year, owing to his ill health.

Mr. Harry Bates, a graduate of Technology, who was seriously injured at the Bradley Fertilizing Works, is now convalescent.

Captain Bigelow has had printed a small atlas containing maps of campaigns, which will be used in conjunction with his lectures.

The Geological Club met in Room 11 Rogers on the 4th. Mr. Graham read a paper on the Physiographic Features of Cape Ann.

On Saturday, April 6, Professor Niles gave his lecture on "Teaching of Physical Geography," in the series of lectures on Teaching now being given.

Apparatus has been sent recently to Chestnut Hill for use in the tests to be conducted there. Weighing barrels, scales, pumps, and necessary piping are among the articles.

The mechanical engineers are now in possession of a full set of drawings of the Chestnut Hill pumping engine, through the courtesy of Mr. Fitzgerald and city engineer Jackson.

On the Bulletin board in Room 42 has been posted a map of Boston and vicinity showing the different Metropolitan districts that are supplied with Parks, Sewers, Water, and Postal service.

Students who wish to practice the manual of arms out of drill hours may do so at the Armory between the hours of 12 m. and 6 p. m. They should obtain rifles and equipment of the janitor.

The programme of the Deutsche Verein's Lustspiele has been widely distributed. Judging from the large sale of tickets, there appears no reason to expect anything but marked success in the production.

Last Friday the Freshmen candidates for battery position on the nine were given hard practice behind the Gym. The outfielders now practice in the "clover field" and the infielders in the "oval."

At the end of every drill, hereafter, there will be a dress parade. Thus far the work of the companies has been admirable, and they expect to make a very creditable showing at their Annual Competitive Drill.

A meeting of the Biological Club was held last Friday. Miss Willey read a paper on
Digestive Proleotysis. Mr. Keith spoke on the Morphology and Biology of Yeasts and Miss Fitts on Zoöspheres in Dapernaldia.

Mr. A. Coonley, '96, who won second place in the competition for the "Preliminary Training Prize," will receive a cup also. Mr. Coonley won third in the high hurdles for Harvard at the Mott-Haven games last year.

The large truss which excited so much comment was tested last Friday in the Engineering laboratory. It sustained a load of 106,000 pounds, the full load remaining on for an hour. Another similar truss will be tested in a few days.

The concert of the Glee Club at Northampton on Friday, March 29, was witnessed by a very enthusiastic audience, composed almost entirely of college girls. After the concert, the Club serenaded the College in a very pleasing manner.

The present outlook for the drill with the Harvard Cadets is very encouraging. The only necessary arrangement yet to be made is the engagement of the Armory, which Captain Bigelow hopes soon to accomplish. Everything is in readiness to push the scheme as soon as this is assured, and an interesting contest is expected.

Ninety-eight again broke the record on the second intermediate examination in Political History, as only 9 per cent of the class failed. At the preceding examination, it will be remembered that only 6 per cent received failures. Both of these percentages are the lowest which have been held.

Applications for Scholarships should be made during the present week at Room 40, Rogers. All who cannot apply on April 12, 9.30—12.30, are requested to send Prof. Dewey a memorandum of their vacant hours. All applicants are also requested to call upon Secretary Tyler in his afternoon office hours.

The Freshman Baseball players are hard at work, and the announcement of the team will soon be made. The following are the dates which the manager has thus far made: April 13, Chauncy Hall; 17, Groton High; 20, Philips Exeter; 27, Williston; 30, Brookline High; May 9, Brown Freshmen; 18, '97—'98 game.

The utility of the Emery tester has been increased by the addition of large plate holders. A series of tests on the strength of bolted tenison members in bridges will now be carried on by the students. The specimens have been furnished by the Boston bridge works through the courtesy of Mr. H. W. Brown, chief engineer.

Competition for the Artistic Staff of the '97 "Technique" Board will close Monday, April 22, at 4.30 p. m. Those competing must submit one pen and ink, two wash, and three miscellaneous drawings. In one of these three drawings figures must be treated, and in another, lettering. All designs submitted must be suitable for publication in the "Technique."

The pleasant home of Professor and Mrs. Richards was the scene of two delightful receptions tendered to the third and fourth year Chemists and Miners, on Tuesday evening, April second, and Friday evening last. Among the many professors and instructors present was Dr. Drown, who was the recipient of many congratulations upon his election to the Presidency of Lehigh University.

The cast for the German play "Er ist nicht eifersüchtig" is as follows:

Dr. August Hohendorf . . . . Hermann von Holst, '96
Cäcilie, seine gemählin . . . . Kinsley Blodgett, '96
Baumann, ihr onkel . . . . . . Edwin C. Kramer, '96
Hermann, Hohendorf's diener . John E. Lonngrenn, '95

Following the play there will be a "Zwischenspiel" carried out by the Institute quartet, after which will be presented the prelude to Nessler's "Trompeter von Säckingen" with F. W. Smyser, W. R. Dodge, and R. S. Wason in the principal rôles, together with a chorus of forty voices.
On Friday, March 29th, Mr. Lambirth, assisted by Mr. Masters, escorted twenty-eight Technology men to East Boston, where an interesting period was spent in investigating certain mechanical processes. At the works of the Boston Forging Company, which were first visited, the students were shown the method of converting scrap iron into car axles. After spending a pleasant half hour in watching the operation, the contingent visited the Atlantic Works, where they found the boilers and various machinery parts of the yacht "Calypso" in the different stages of construction.

About four hundred students assembled in Huntington Hall last Wednesday to listen to President Walker's address on athletics. It was his first expression to the students on athletics, and his extended remarks were highly applauded. Mr. John Graham then entertained the audience by some sound practical experience, and made an urgent call for all beginners to test their ability. Mr. Hurd, '96, gave a short sketch of the history of the athletic club since its beginning, and Captain Thomas, of the track athletic team, issued a call for candidates to meet on the Irvington Oval, Monday, the 8th. Mr. Rockwell, President of the Athletic Club, presided.

A meeting of the M. I. T. Tennis Association was held April 4th in Room 11 Rogers'. The prospects of a tournament were discussed by the retiring president, Mr. Fuller, and others. The laying out of the old out-door courts between the buildings would cost fifty dollars and as the arrangements cannot be made this year a tournament is out of the question. Next spring, however, it is hoped that a favorable conclusion may be reached. The following officers were elected:— President, C. S. Hueter, '97; vice-president, H. W. Allen, '97; secretary-treasurer, A. R. Shedd, '98; executive committee, M. F. Delano, '98, W. C. Watrous, '98 and S. F. Wise, '96.


Mr C. B. Stebbins, who won the "Preliminary Training Cup," scored twenty-three points. His nearest competitor was Mr. A. Coonley, with eighteen points to his credit. Mr. Stebbins prepared for Technology at the Cambridge Manual Training School and Cambridge High School. He never competed in athletics before this year, and his short career has already ranked him among the best athletes at Technology. The points scored by the winners are as follows:

<table>
<thead>
<tr>
<th>Winner</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stebbins</td>
<td>23</td>
</tr>
<tr>
<td>Coonley</td>
<td>18</td>
</tr>
<tr>
<td>Nolte</td>
<td>17</td>
</tr>
<tr>
<td>Hall</td>
<td>15</td>
</tr>
<tr>
<td>Carr</td>
<td>12</td>
</tr>
<tr>
<td>Jones</td>
<td>12</td>
</tr>
<tr>
<td>Rumery</td>
<td>12</td>
</tr>
<tr>
<td>Shaw</td>
<td>9</td>
</tr>
<tr>
<td>Farquhar</td>
<td>8</td>
</tr>
<tr>
<td>Bakenhus</td>
<td>8</td>
</tr>
<tr>
<td>Sumner</td>
<td>8</td>
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<tr>
<td>Russ</td>
<td>8</td>
</tr>
<tr>
<td>Tillingham</td>
<td>7</td>
</tr>
<tr>
<td>Field, F. C.</td>
<td>6</td>
</tr>
<tr>
<td>Boeseke</td>
<td>5</td>
</tr>
<tr>
<td>Fuller</td>
<td>5</td>
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<tr>
<td>Ellis</td>
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<tr>
<td>Bodwell</td>
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<td>Butcher</td>
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<td>Hubbard</td>
<td>5</td>
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<tr>
<td>Mayer</td>
<td>5</td>
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<td>Page</td>
<td>4</td>
</tr>
<tr>
<td>Worcester</td>
<td>34</td>
</tr>
<tr>
<td>Field, D. D.</td>
<td>3</td>
</tr>
<tr>
<td>House</td>
<td>3</td>
</tr>
<tr>
<td>Powers</td>
<td>1</td>
</tr>
<tr>
<td>Washburn</td>
<td>1</td>
</tr>
<tr>
<td>Sergeant</td>
<td>14</td>
</tr>
</tbody>
</table>

The above was copied from the records of the Track Athletic Captain.
Professor Hofman has recently sent the following letter to the various members of Course III.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

April 2, 1895.

DEAR SIR: Professor Richards being prevented from taking charge of the Summer School of the Mining Department, the duty falls upon the undersigned. The school is held alternately at mining and metallurgical centers. This year mainly metallurgical works will be visited and incidentally some mines. The school will be held in New Jersey and Pennsylvania where the metallurgy of copper, lead, silver, zinc, iron and steel and the manufacture of sulphuric acid will be studied and a coal and an iron mine visited. The party will start not later than May 28 by the Fall River line for New York city, will visit Bergenport, Jersey City and Newark, N. J., and Lebanon, Steleton, Everett and Johnstown, Pa. The school will last from twenty-one to twenty-four days, closing at Johnstown. The expense including return to Boston is estimated to be:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad Fares</td>
<td>$35.00</td>
</tr>
<tr>
<td>Board and Lodging, 24 days at $1.50</td>
<td>36.00</td>
</tr>
<tr>
<td>Washing and Sundries</td>
<td>9.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$80.00</strong></td>
</tr>
</tbody>
</table>

All members of the party are expected to remain until the close of the Summer School. You are cordially invited to attend. Please reply before April 27th.

H. O. Hofman.

The Co-operative Society.

The Annual Meeting of the Co-operative Society was held Saturday, April 6th, in Room 20, Rogers. Reports were made by President E. H. Huxley, Secretary T. M. Vinton, and Treasurer, A. D. Maclachlan. The latter stated that in the past year the Society has provided one entire scholarship ($200), and one half scholarship ($125).

The Society accepted two proposed amendments to the constitution, and decided to undertake the management of all supply rooms throughout the Institute.

After the meeting of the Society a meeting of the Board of Directors was called for the election of officers for the ensuing year. Mr. H. G. Fiske, '96, was elected President; Mr. T. E. Tallmadge, '98, Vice President; Mr. R. S. Willis, '98, Secretary; and Mr. A. D. Maclachlan, '96, Treasurer.

The Architects' Dinner.

The most successful and enjoyable Dinner which the Architectural Society has given this year was that of last Tuesday evening, in honor of the men who took part in the recent Beaux Arts Society Competition at New York. Professor Despradelle and Professor Homer were present and joined with some thirty Architects in their round of jolly songs and stories. After the appetites of the gathering had been appeased, Professor Despradelle congratulated the honor men upon their success. J. H. Parker was artist of the evening and presided at the piano in his usual interesting manner. Mr. Chase rendered Raymond Moore's celebrated song most pleasantly, after which Mr. Thomas gave the midway dance. Professor Homer was reminded of an old plantation song which he sang with the enthusiasm of a student, and following this "Way Down upon the Swanee River," Mr. Bliss sang several delightful baritone solos accompanied by Mr. Loring. A round of stories was listened to, and a successful supper was declared at an end.

Theses.

Ninety-five men have at length wholly chosen thesis subjects, upon which they will be occupied until the middle of May. We publish this week a complete list of the problems undertaken by Courses I., II., III., IV., and V.

COURSE I.

AMES, AZEL, Jr.—A Design for a Turn-table for a 125-ton Engine.

BARROWS, H. K. (with B. C. Donham).—A Design for a System of Water Supply for the Town of Weston.

BELKNAP, F. W.—A Discussion of the Adaptability of Concrete as a substitute for Masonry in Structures exposed to the Weather.

CHURCHILL, P. M.—Tests of Paving Brick.

CLAPP, S. K.—A Design for a High Viaduct.

DONHAM, B. C. (with H. K. Barrows).—A Design for a System of Water Supply for the Town of Weston.

ELLIS, W. H.—A Design for a Pitched Roof to Cover a Large Audience Hall.
THE TECH 265

FULLER, A. D.—An Investigation of the Value of Tidal Reservoirs for Preserving the Channel in Harbors.

GREGORY, J. H.—A Design for an Iron Railroad Bridge.

HOWE, G. E. (with G. F. C. Merriss).—A Comparison of the Yields from Various Water Sheds with that from the Sudbury River Basin.


MATTHES, F. E. (with G. H. Matthes) —An Investigation of the Thermophone as a means of Determining the Temperature of the Tape in Base-line Measurements.


MERRISS, G. F. C. (with G. E. Howe).—A Comparison of the Yields from Various Water Sheds with that from the Sudbury River Basin.

MOREY, R. (with F. C. Schmitz).—Experiments on the Pressure of Wind on Surfaces Inclined at Different Angles.


ROURKE, L. K.—A Design for a Stone Arch.

SCHMITZ, F. C. (with R. Morey).—Experiments on the Pressure of Wind on Surfaces Inclined at Different Angles.

SIMMONS, A. L.—A Discussion of the Different Forms of Railroad Switches.


THORNDIKE, S. H., A.B.—The Sources of Error in Plane Table Work.

TUCKER, E. R.—A Discussion of some points in the construction of High Buildings of Steel.

WHEELER, R. N. (with F. C. Green, XI.).—Design of a Sewerage System for the Town of Concord, Massachusetts.

WIGGIN, T. H.—A Design of a large Staircase with Landing.


COURSE II.

L. W. BALLOU.—Tests of a fifteen hundred horse power double tandem compound engine.

E. A. BOESEKE.—Test of the Flour Mill Plant of the Toledo Milling Company (with W. E. Marmon).

J. H. BOURNE.—Tests of a 16” x 10½” x 12” Duplex pump, including an investigation of the velocity of the piston rods at different parts of the stroke (with H. Kotzschmar, Jr.).

A. L. CANFIELD.—Test of a refrigerating plant (with R. K. Shepard).

H. W. CRANE.—Investigation of the effects of bends and lengths of piping connections leading to the indicator.

L. A. CUTLER.—Design of a stone crusher.

A. L. DEJANGE.—Test of a new form of surface condenser (with T. M. Lothrop).

F. E. FAXON.—Tests of a rock drill (with H. M. Haven).

J. H. GARDINER.—Test of the strength and elasticity of malleable iron (with J. D. Moore).

F. A. HANNAH.—Tests of indicator springs (with F. B. Masters).

H. M. HAVEN.—Tests of a rock drill (with F. E. Faxon).


E. L. HURD.—Tests of a plant of a chocolate mill.


H. KOTZSCHMAR, JR.—Tests of a 16” x 10½” x 12” Duplex pump, an investigation of the velocity of the piston rod at different parts of the stroke (with J. H. Bourne).


W. C. MARMON.—Test of the Flour plant of the Toledo Milling Company (with E. H. Boeseke).


J. D. MOORE.—Tests of the strength and elasticity of malleable iron (with J. H. Gardiner).

F. A. PARK.—Maximum pitch for riveted joints for steam boilers.

W. J. RICKEY.—Determination of co-efficients for narrow weirs (with W. F. Stevens).

W. F. STEVENS.—Determination of co-efficients for narrow weirs (with W. J. Rickey).

J. W. THOMAS.—Comparative tests of a eleven hundred horse power steam plant using coke and soft coal (with C. F. Tillinghast).

C. F. TILLINGHAST.—Comparative tests of a eleven hundred horse power steam plant using coke and soft coal (with J. W. Thomas).

H. M. TUCKER.—Tests of the effect of jacketing single Engines (with J. J. C. Wolfe).


L. K. YODER.—Design of a riveting machine.

H. YOERG.—Tests of the effect of repeated stresses on riveted joints.

COURSE III.

A. S. COBURN.—Dressing and smelting of nickel ore from Dracut, Mass.

W. N. CRAFTS.—Coking by retort of bituminous coals.

F. W. DRAPER.—Coking by retort of bituminous coals.

B. HOWE.—Dressing of copper ore from Canton, Can.

H. J. SIEAFIE.—Milling of gold ore from Waverley, N. S.

B. STOUGHTON.—Smelting of copper ore from Davis, Mass.

A. E. WHEELER.—Refining of crude copper and separation of precious metals by electrolysis.
Rockwell, Swift, Powers, Wise, Thomas and others have begun their out-door training, and in a week more the oval on Irvington Street will be ready for the general use of all Technology athletes. Every man should come out promptly this spring, and train hard to fill up the gaps in our last year's victorious team.

There were three events Friday afternoon, the fifth. The first was the hurdles, Rumery, '98, won, with Sumner, '97, second, and Stebbins, '97, third; time, 5 1/2 sec. The Potato race was won by Wise, '96, with Huse, '98, second; time, 53 sec. The pole vault was the best event of the meet. J. Nolte, '98 (2 in.), won with a vault of 9 ft. 4 in.; A. V. Shaw, second, and Rumery, '98, third.

The meet Tuesday, April 2d, was not as successful as usual. The attendance and interest was fair, but the records were rather poor. Quite a number of men entered for the first time, and the men who have been winning week after week gave way to a new set. The first event was the 35-yard dash, and in this W. D. Hubbard showed excellent form.

Summary:—

35-YARD DASH.
1. W. D. Hubbard, '98 (scratch).
2. R. D. Farquhar, '95 (—3).
3. E. F. Russ, '98 (scratch).

Time, 4 3/4 seconds.

PUTTING SHOT.
1. A. Coonley, '96 (3 ft. 8 in.), 29 ft. 9 in.
3. W. M. Hall, '98 (2 ft. 9 in.), 30 feet.

RUNNING HIGH JUMP.
1. A. Coonley, '96 (8 in.), 5 ft.
2. W. M. Hall, '98 (scratch), 5 ft. 4 1/2 in.

Palmistry.
I read her fortune carefully,
But at her palm I did not look;
For easier and surer far
I found the tax assessor's book.

J. D. G.
The Friday games of March 29th showed a little falling off, both in competitors and spectators, over the Tuesday games. The work of Stebbins, '97, in the hurdles, was undoubtedly the feature of the day. His running form might be improved, but he certainly took the hurdles like a veteran. The potato race was also won by Stebbins who, in spite of his start from the boiler room, easily passed his opponents. Summary:—

**35-YARD HURDLE.**
First trial heat won by Stebbins; Bakenhus, second.
Second trial heat won by Sumner; Hall, second.
Third trial heat won by Powers; Rumery, second.
Semi-final heat won by Rumery; Hall, second.
Final heat won by Stebbins; Sumner, second; Powers, third; time, 5 seconds.

**POTATO RACE.**
First trial heat won by Wise; Farquhar, second; time, 51½ seconds.
Second trial heat won by Stebbins; Mayer, second; time, 49½ seconds.
Final heat won by Stebbins; Mayer, second; Wise, third; time, 52½ seconds.

**POLE VAULT.**
Nolte, first, 9 ft. 6 inches; Shaw, second, 9 ft., 2 inches; Page, third, 8 ft., 5 inches.

The Friday games of April 5th were the last of the indoor series of semi-weekly meets. There were very few entries and the attendance was poor. The weather has now become so mild that most of the runners are doing their regular outdoor work, and will be in good condition to start the training on Irvington Oval. Although the records of the last games were poor, it is easy to see that the semi-weekly meets have accomplished a great deal, and have produced a marked development in some events that are usually neglected. The practice in starting has been beneficial, and the pole vaulters are doing much better than last year. The Irvington Oval training begins this week, and means hard work to the men who are trying for the Worcester Team. Nothing can be more inspiring to our athletes than a truly enthusiastic crowd of spectators thoroughly interested in the training,—and every man in Technology should feel it a bounden duty to be often present at the Oval.

It is with high anticipation that the Lounger views the approach of the week of wanton festivity when the assurance of a brief respite from the wearying cycle of grinding may be our fleeting possession. The French Society has decided to outdo itself, and the German Society has expressed its intention of outdoing the Frenchmen, so it seems reasonably patent that something startling may be looked for. Their respective vassals, long stationed in Rogers corridor to sell the magic pasteboards, have, it is true, been with difficulty restrained from impromptu cane rushes, and other festive goings on, but this is merely preliminary, and doubtless does not betoken more than a hearty zeal for the welfare of their respective productions. However, the customary douceur has been promptly forthcoming from each, and the Lounger promises impartiality. With the Deutscher Verein to recall vanishing memories of Old Vienna and L'Avenir to dazzle our eyes with the bewildering mazes of the dance, to say nothing of the Prom. and the ambitious exhibits of the Photographic and Architectural Societies, Junior Week this year is surely to be memorable.

'Tis in sooth a masterpiece in the "poster" line which has recently directed the wandering attentions of the Technology mind to the histrionic efforts of L'Avenir. Her special artist depicted a truly lifelike semblance of Mephistopheles, well calculated to attract the Lounger's circumambient eye, and for a long time he stood gazing with wrapt attention on the vermillion outlines. He was vainly pondering whether they most resembled Edouard de Reszke in his famous rôle, or Monsieur the Promoter of the Ballet, when a shy voice at his elbow assured him in bashful confession that the model for the Mephistophelian signboard was none other than the one with the integral initials. Now that the Lounger's doubts have been set at rest by this frank, unsought-for confession, which came
with such charming naivete, he need place no great reliance on the portraits of this gentleman which are possibly to adorn the coming portfolio.

It has recently become evident that certain of the Lounger's friends in Ninety-eight have lost sight of the fact that they are still Freshmen. By some peculiar mental aberration they have convinced themselves that they are nothing less than learned P. G's, with a string of degrees after their names; but even did they occupy this exalted position, the Lounger is sure that the years spent in its attainment would suffice to temper the vivid green of their callowness which is now so painfully apparent.

There are some prerogatives which are properly left for the enjoyment of men older and more experienced in the ways of college life than Freshmen possibly can be, and to the latter the Lounger would suggest that the usurpation of privileges not their own is highly distasteful to upper classmen. Perhaps the Lounger has more especial reference to the bearing of some who aspire to position on The Tech Board. In this connection, however, let the Lounger disclaim any intention of discouraging men from trying to make the Board, for, on the contrary, he always heartily welcomes new acquisitions to the editorial staff, and upon them bestows his blessing with all possible alacrity. Nevertheless it may do no harm to remind some of these youthful litterateurs that while they still occupy the position of neophytes, the exercise of a little more circumspect and modest demeanor would do much to create a favorable impression in the minds of those with whom their fate rests.

Lent is nearly over now,
Penance days will soon be past,
Then we'll stop our fasting,
And be a little fast. —Yale Record.

That history repeats itself,
A proverb claims, I've heard,
But when in class I'm called upon
It never says a word. —Williams Weekly.

A GASTRONOMIC IDYLL.

"Have a
Bit of
Our spring
Chicken?"
Asked the
Waiter
Bowling
Low,
"Yes, and,
Waiter,
Don't for-
Get now,
Make it
This spring,
Don't you
Know."
—University Herald.

LOVE.
The first sip is sweet,
The last one is bitter.
If you are discreet,
Tho' the first sip is sweet,
The last you will cheat.
What old maxim is fitter?
The first sip is sweet,
The last one is bitter.
—Brunonian.

NOT WHAT IT SEEMS.
Like a pure lily midst the meadow sweet
She stands, imperious, fair, and tall;
And on his bended knee, low at her feet,
In suppliant attitude behold him fall.
And while the hot blood mantles all his brow,
And brook and wind of Venus make blithe rhyme,
Aglow, but with no am'rous flame I trow,
He ties her shoe-lace for the thirteenth time.
—University School Record.

A PASSING FACE.

A passing face, exceeding fair,
Goes swiftly by, in crowded place;
A smiling glance from eyes a pair:
A passing face.
I look, and wish some little space
In her regard, yet do not dare
To speak, lest I incur disgrace.
Mine's not experience so rare,
It happens thus in many a case;
We every one have met somewhere
A passing face.
—Southern Collegian.
Shirtings for Season 1895.

Madras, Cheviot, and Oxford Cloths, for the season of 1895, are now ready, and orders will be taken for Ladies' Shirts, Waists, Blouses, Jackets, Skirts, and Entire Suits, or sold by the yard, in dress patterns, if desired. Also for Children’s Wear. For Men’s and Youth’s business, Negligee and Outing Shirts.

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White Duck Trousers $1.75 to $5.00 per pair.

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AT THE THEATRES.—Week beginning April 15th, '95.

BOSTON MUSEUM.—For the first time in Boston, Mrs. Langtry will present her latest success, "Gossip," which has created such a sensation in New York. Incidental to the play, Mrs. Langtry will wear some gorgeous gowns that are exact copies of the coming spring styles from Worth's.


PARK.—Hoyt's "A Temperance Town." This popular play will be given by an admirable cast, including some of Boston's greatest favorites. Those few who missed the chance to witness "A Temperance Town" last year had better take advantage of the advance sale of seats, which is large. "A play to drive away the blues."

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