MEETING OF MEN OUT FOR TECH MONTHLY

Outline of the First Issue of New Monthly Presented to Candidates.

Men interested in the New Monthly will attend the meeting held in the lower office of The Tech yesterday afternoon and detailed information was given by the department heads. The management wishes to state further that men are needed for the Advertising and other business departments. Anybody who is interested, in the departments of advertising, circulation or business should report at once. In order for the new monthly to be a success, more advertising must be obtained. It is known that there are men in the Institute, especially the Freshman and Sophomore classes, who can get ads, and it is upon those men that the life of the Monthly is dependent. Unlike other lines of business, experience is not necessary. Men applying for positions on the staff of the business department should leave their names and addresses in the Tech office and address communications to 'Managing Editor of New Tech Monthly.'

TECHNOLOGY PLAYS COLUMBIA FRIDAY

Rival Team Has Beaten Cornell—New Plan for Seat Sale Adopted.

The Technology Hockey Team will meet Columbia University at the Arena next Friday evening in what promises to be a lively contest. Columbia's strength is measured by the score in which it defeated Cornell by a score of 2-0. Cornell, though not as good as in former years, has a very creditable team.

Columbia has a series of big games to play this week. On Wednesday evening she will go against Dartmouth, which ranks close to Harvard among the colleges, and on Thursday she will play St. Paul's School. The latter, though only a school team, ranks in the same class as the Columbia, so the men from Columbia will have some hard work before they have our players.

Bischaro, who played on the Institute team last year, but has not seen out this season, will play in the game Friday. He is expected to prove a valuable acquisition.

The management has arranged for a new plan of selling the seats for this game. The Arena is to be leased for this occasion, so that there will be no opportunity for making a profit on the seats. The surplus will be used by the team, and is expected to furnish money for paying a coach.

The price of tickets will be reduced, in the hope of inducing a large crowd to come. Tickets are on sale in the Tech office and are necessary. Men applying for positions of responsibility will be held before Friday's concert.

All Freshmen and Sophomores (not to mention upperclassmen) who have any literary talent or any ambition in newspaper work, are requested to meet in the Tech office at 5:00 p.m., Wednesday. Short talks will be given by the men who are at the head of the various departments, outlining the work for the rest of the year.

There is no sure way of increasing one's acquaintance with men worth knowing and thereby getting into line for various positions of responsibility and honor at the Institute and in after life.

The Tech needs your services and it feels that it can repay them tenfold. Places are open in all of the departments so that it is possible for a man to suit his tastes in selecting the one he wishes to go into.

CHESS CLUB

The lineup will be as follows: Technology Columbia
Kochan, p c e p, F. Dolebeare
Cochrane, c p c p, F. Dolebeare
MacLeod, r r, T. Webb
Winston, r c, W. Todd
Bischof, c p, W. H. Miller
Fletcher, r r, W. S. Miller

The Tech will adopt this system.

All Drawings Due.

CHEMISTRY SOCIETY

The 1914 Technique Electrolym Committee wishes to notify all the members of the Sophomore class that a slight error was made in the printing of the ballots, in that no space was marked out for the signature of the name marking the ballot. This does not mean, however, that ballots which have not yet had their pictures taken for the portfolio may make appointments for a sitting. All appointments for sittings must be made with the Committee and not at the photographer's

Nearly a third of the class have had their pictures taken already and it is expected that the photographic studio will be completed Saturday, February 14. All will be finished up for the month. It is necessary that men return their proofs to the photographer as soon as possible after having made a selection of the one they desire to go into the year book. It is desirable that a dark suit be worn when the pictures are taken.

As stated before, all sittings are free. The Committee has, however, obtained very low rates for the class and those who want to get pictures may take advantage of the reduced prices which were published in The Tech yesterday.

CHESS CLUB

All Freshmen and Sophomores (not to mention upperclassmen) who have any literary talent or any ambition in newspaper work, are requested to meet in the Tech office at 5:00 p.m., Wednesday. Short talks will be given by the men who are at the head of the various departments, outlining the work for the rest of the year.

There is no sure way of increasing one's acquaintance with men worth knowing and thereby getting into line for various positions of responsibility and honor at the Institute and in after life.

The Tech needs your services and it feels that it can repay them tenfold. Places are open in all of the departments so that it is possible for a man to suit his tastes in selecting the one he wishes to go into.

CHEMISTRY SOCIETY

All Freshmen and Sophomores (not to mention upperclassmen) who have any literary talent or any ambition in newspaper work, are requested to meet in the Tech office at 5:00 p.m., Wednesday. Short talks will be given by the men who are at the head of the various departments, outlining the work for the rest of the year.

There is no sure way of increasing one's acquaintance with men worth knowing and thereby getting into line for various positions of responsibility and honor at the Institute and in after life.

The Tech needs your services and it feels that it can repay them tenfold. Places are open in all of the departments so that it is possible for a man to suit his tastes in selecting the one he wishes to go into.
THE TECH

Entered as second-class matter, Sept. 15, 1893, at the post office at Boston, Mass., under the Act of Congress of August 24, 1876.

Published daily, except Sunday, during the college year by students of the Massachusetts Institute of Technology.

Manuscript Notes.

Science Notes.
The selection of a proper grade and quality of sand for the filtration of water supplies is an important problem for the engineer who is to construct a filtration plant and we give below the specifications which were drawn up by the U. S. Geological Survey as necessary for a satisfactory filter. After showing that the quartz sand is the best material the specifications continue:

"The silt sand shall be clean sand, with either sharp or rounded grains. It shall be entirely free from clay, dust, or organic impurities and shall, if necessary, be washed to remove such materials from it. The grains shall, all of them, be of hard material which will not disintegrate. The effective size shall not be less than 0.25 millimeter nor more than 0.56 millimeter. The uniformity coefficient shall not be more than 3.5. The sand shall be free from dust and shall not contain more than 1 percent finer than 0.125 millimeter, and shall be entirely free from particles greater than the diameters in the sand. The sand shall not contain more than 2 percent by weight of lime and magnesium, or calcium, and should be unleached as carbonates. In all other respects the sand shall be of a quality satisfactory to the engineer. Gravel for the floor of filters may be broken trap rock or granite screened to the proper sizes, or gravel screened from sand and gravel banks or a sandy nature. Gravel screened from hardpan or clayey material cannot be sufficiently cleaned. The gravel should not contain more than a very small amount of shale or limestone and should be washed entirely free from dust and silt. Magnesite is a mineral which is very prevalent in the eastern states."

(The continued to Page 4)

Established 1849

MACULLER PARKER COMPANY

400 Washington Street, Boston

Manufacture in workshops on the premises and offer for immediate use

Clothes for College Men

Attention is called to an importation from London of Overcoats in ultra styles - very desirable - made especially to order.

Stetson Hat Department
Fine Furnishing Goods,

MACULLER PARKER COMPANY

400 Washington Street

Table for Steel Detailing and Designing

BY J. A. AURINGER, C. E., A. B. C. E. ENGR.

These tables are for the draftsman and designer of steel structures compiled from the AMERICAN BRIDGE CO.'s Green Book of Standards, with new added material. It is just the book for the detailer, designer, architect, engineer, and steel company, and we trust that others who may come across this book would soon pay for itself in any drafting room.

W. T. HUNT, JR.
Structural Books

150 Nassau St., NEW YORK

She Seemed to Know All About It?

You Shouldn't Worry! Her Brother Always Had One.

Made for your individual tastes and requirements.

Our Fifty Dollar Full Dress Suit

is the choicest offering we have ever made. YOU CAN PAY more - we'll give you the value - but we take pride in this product of our expert workmen.

BURKE & CO., Inc., Tailors

18 School St., 843 Washington St.

Harvard Square

All Goods Required by Students at

Maclachlan's

502 Boylston Street

Drawing Instruments and Materials, Fountain Pens, Text Books

Who Does Your Typewriting and Stenographic Work?

Try

W. P. WATSON

The (upper) Tech Office

"The lowest price consistent with the best work"
POLICY OF THE E. E. SOCIETY CHANGED

Trips Will Be Made to Plants of a Non-electrical Character.

With the opening of this term the Electrical Engineering Society has started upon a broader policy than it has maintained in the past. The mid-year trip on which the Society took to New York and Philadelphia has shown that excursions to non-electrical plants are quite as important as those to strictly electrical plants for the course of an electrical engineer's work many non-electrical problems arise.

Any member of the Society who knows of some place to which he thinks the Society could make a profitable trip is requested to leave the name of the place with H. B. Richardson, President of the Society, or with L. E. Travis of the Program Committee. Should he be aware of any man in the company who would be willing to conduct a party it would be appreciated by the officers if his name was also left. At present the following places have been suggested: Boston Elevated Power Station, South Boston; Edison Power Plant, South Boston; the Gas Works at Everett or Malden; the General Electric Lamp Works, East Boston; the Boylston Street Subway; Boston & Maine Car Works at Billerica; Main Telephone Exchange; and the Packard Automobile Company.

Those who paid their dues for the first term only are reminded that the dues must be paid at once in order to be eligible to these trips. The dues may be paid to H. A. Affel '14, A. J. Hahn '14, or B. S. Curtis.

1916 BASKETBALL

Ten men reported for 1916 basketball practice at four o'clock yesterday in the Gym. Two teams were picked from those who reported and a likely scrimmage resulted. The men were given a good drill in shooting and passing and showed good form considering that no practice had been held last week.

Captain Dewson is endeavoring to get a game for some night during the next two weeks as one of the scheduled games has been canceled.
Boston Opera House

'TODAY, 8 to 10:40; first time in Boston. THE LOVE OF THE THREE KINGS (L'amore dei Tre Re). Libretto by Pietro Mascagni. Amato, Ladlar, Cond, Moranzoni.

WEDNESDAY, 8 to 10:40; CARMINA BURANA, Mendelssohn, Schumann, Mendelssohn, Cond, Andrade-Caplet. First performance since 1905. SECRET OF SUZANNE. Nielsen, Scott, Pevcheski, Cond, Andrade-Caplet. Followed by PATILLIAD. Nielsen, Ferrati-Fontana, Ancona, Everett, Cond, Moranzoni.

SATURDAY, 8 to 10:40. THE LOVE OF THE THREE KINGS. Same cast as Monday.

SATURDAY, 8 to 10. POP. PRICES: $1 to $2.50. MARTHA (in English). Scott, Szigeti, Ramella, White, Everett. Cond, Lyford.


Boston. THE LOVE OF THE THREE KINGS. STEINERT, 162 Tremont Street.

SATURDAY, 2 to 4:30. THE LOVE OF THE THREE KINGS. Same cast as Monday.

SCIENCE NOTES.

(Continued from Page 2)

er 52 percent carbon dioxide, the gas which is used for charging soda water, dinner ale and similar beverages. By far the greater part of the magnesite occurring in the United States is found in California, according to the United States Geological Survey, while reports have also been received of deposits in Nevada, Arizona and western Texas. A number of these deposits, especially in California, are of considerable size and yield magnesite of excellent quality, which is probably excelled by few, if any, of the foreign deposits and which is superior in purity to much of that mined elsewhere.

Bulletin 356 of the United States Geological Survey, entitled "Manganese Deposits of California," by Frank L. Hees, who has been in charge of the examination of the California deposits made in 1905 and during the winter of 1906-7. This bulletin is still available, but since its publication new deposits have been opened, consumption has increased, and inquiries constantly being received at the Survey for information relating to the occurrence and utilization of this material have led to the publication of Bulletin 540-S, entitled "Late Developments of Magnesite in California and Nevada," by Hoyt G. Gale.

California governing the production and consumption of domestic magnesite have not changed in any marked degree in recent years. The presence of many good deposits of this material in California must continue to furnish the impetus which will tend to put our own production on the market as soon as natural conditions will allow. At present by far the largest part of the magnesite used in the United States is imported and is consumed in the Eastern States. The importations have been about 400,000 tons per annum. Considerable interest in the domestic production of magnesite has been aroused of late in anticipation of the possible advantage that may result from the opening of the Panama Canal, and the hope that this country may enable California producers to reach the eastern ports at sufficiently low freight rates to allow them to place their product on the eastern market.

Bulletin 335 of the United States Geological Survey by Hans and Buc- lin 540-S by Gale are believed to describe all the commercial important magnesite deposits in the West. Copies of these reports may be obtained free on application to the Di-rector of the Survey at Washington, D. C.

According to returns received by the United States Geological Survey up to January 12, 1914, it is estimated by Ernest F. Burchard, that the quantity of Portland cement manufactured in the United States in 1913 was approximately 3,949,900 barrels, compared with 1,049,900 barrels in 1912, an increase of about 1,049,900 barrels or 12 percent. The estimated shipments of Portland cement during 1913 were 1,963,900 barrels, compared with 60,012,565 barrels in 1915, an increase of about 1,941,400 barrels, or 4.3 percent. On account of a large supply of production over shipments of cement at the mills apparently increased more than 45 percent, or from 8,873,606 barrels in 1912 to 11,375,000 barrels at the close of 1913. In 1913 the relations between production and shipments were the reverse of those for 1912, when shipments ex-ceeded production. It may be necessary to revise considerably the estimate of stocks, but it is probable that these figures for production and shipments are very close to those that will be shown by complete returns from all producers.

Although few definite statements as to selling prices are at hand it is evident that the average value per barrel was appreciably higher than in 1912. Increases of 10 to 25 cents a barrel are reported from several plants in the Central and Eastern States, but there were slight decreases reported from a few plants in the Rocky Moun- tain district. Two new plants, both in Washington, were added to the list of producers during 1913.

FRESHMAN DINNER

Since the Tech-Harvard Wrestling meet commences at eight o'clock on Saturday, arrangements have been made so that the Freshman Dinner will not be over by quarter before eight.

A special section has been reserved for all Freshmen who wish to see the box. Tickets may be purchased for both events in Rogers corridor any time closest to those that will be shown by complete returns from all producers.

A reunion of the "W" men at Washington, State college was held recently. It is planned to make this an annual event.

Other than the methods of fraud- ulently rubbing are being considered at the University of Washington.

CASTLE SQUARE THEATRE

Daily at 2:10 and 8:10.

THE GREAT RUBY