HARVARD CAPTURES OPENING HOCKEY GAME

Score Six To Two In Harvard’s Favor—Cochran Stars For Technology.

In the opening game of the season the Harvard seven defeated the Technology team by a score of six to two. Both teams showed lack of form and team work, the whole game being individual work by spurs by the members of both teams. Team work was seldom seen and in many cases ceased to exist at all for long periods. Both teams will have to develop considerably if they expect to come through the season in any kind of shape. Cochran was the whole Tech team, being far too quick. His individual rushes the length of the Arena with the pucks were the features of the game. Although playing coverpoint position he was seen more often out with the (Continued on Page Four)

WINTER CONCERT AND DANCE THIS EVENING

Orders Can Be Obtained At Cage Today—Concert at Portsmouth New Year’s Eve.

The Winter Concert and Dance of the Combined Musical Clubs in the Copley Hall tonight promises to be one of the largest ever held. Of the entire number of seats about fifty remain unseated; it is likely that these will be disposed of today as many of the alumni are attending to attend. For those who have already purchased tickets a supply of dance orders will be left in the Union at noon today.

The manager of the Combined Clubs desires all men who have tickets for the concert to sell to make their final report to Geo. R. Dyreya at 1:00 o’clock today in the Union. Preliminary preparations have been completed for the trip to Portsmouth N. H., on December 31st. The plans of the Union College have also been arranged for the Clubs to appear in that institution on Saturday evening, January 3rd. The trip will be discussed after each of the above concerts.

C. E. SOCIETY TRIP

The men going on the C. E. Society trip to Riverside will leave Sunday morning on the 6 o’clock car from Copley Square. The men must sign up before Friday noon with either Thomas, Hestole or at the Cage. A charge of 35 cents will be made to cover the cost of the car fare and the carriage is invited to see the new Boston and Albany bridge lifted into place.

AERODYNAMIC LAB OPENED WEDNESDAY

Prominent Men Attend—Wide Interest Among Scientific Men.

The new flying machine study laboratory of the Institute was opened Wednesday and about forty, including Dr. Macaulay, Dr. A. F. Zahm, of the Smithsonian Institute, and Professor Alexander McArdle, Director of the Westinghouse Laboratory, attended the simple program which served as a dedication. The apparatus of the new laboratory was explained, and the occasion brought to light the spirit of Technology to avail itself of all the existing forces in the community. In other countries where the actual practice of flying has advanced through drift of much fatal experience to a great extent, the necessity is recognized of early determination of the achievements therein.

The plan is to distribute the lyrics for this year’s Show to those who intend to write music for them. The party then visited the sales department and saw the case of books which is being prepared for the San Francisco Exhibition. Mr. Eaton, an Institute alumnus, who made the arrangements for the (Continued on Page Four)

M. E. SOCIETY TRIP TO WALTHAM WATCH CO.

Mr. Eaton, An Institute Alumnus, Shows Party Ingenious Machines.

Yesterday afternoon the first party of the M. E. Society visited the factory of the Waltham Watch Company, which employs about 2500 and produces about 500 watches per day. The trip began at the proper time, when two 500 K. W. 125 volt D. C. generators, driven by Cooper tandem compound engines, and two 350 K. W. vertical Westinghouse sets, which supply the group drive motors, throughout the factory, were inspected. The party also examined the air compressors, which supply the automatic machines.

The methods and manufacturing departments were next visited where many marvelously human machines were seen. For instance, there were the automatic screw machines, turning out almost invisible screws, the automatic turning machines, with as many as 10 parallel chucks, passing the work from one to the other by arms or gears, pneumatically operated cam-controlled valves. There were also the automatic drills which performed more than thirty operations per minute, the milling, punching and stamping machines on which the gears, balance wheels and the rest of the 160,000 watches which is being prepared for the Waltham Watch Company.

TRIP TO CAMBRIDGE

Electrical Engineers Visit Simplex Wire Co.

Yesterday and Wednesday members of the E. E. Society visited the plant of the Simplex Wire Co., in Cambridge, and the evolution of insulation material, from the raw rubber to the finished product, was witnessed. The rigid electrical specifications of the Company’s engineering staff, and the tests for insulation, resistance and capacity necessarily carried out, want to show that this line of the electrical industry is an important one.

NEW RECORDS

The Union Committee is planning to buy some new records for the Union vetrola. Tomorrow at one o’clock a large number of records will be played at the Union, and the gratefully be made from these. The Committee invites all those who are interested to be present.

WRESTLING MEET TOMORROW NIGHT

Technology Team Will Tackle Beverly Y. M. C. A. Again At M. I. T. Gym.

Tomorrow evening the Wrestling Team will compete with Beverly Y. M. C. A. in the first home meet of the year. The meet will be held in the gym, and it is hoped that a large crowd will take advantage of this opportunity of proving that school spirit still exists in the Institute. The wrestling team has already defeated the Y. M. C. A. team at Beverly and confidently expects to duplicate the victory upon its own ground. Tickets for the meet can be procured for 25 cents from any member of the wrestling team.

Six or seven boats will probably be put on tomorrow night; two or three in the 150-pound class and one in every other weight. The men wrestling for the Institute will probably be as follows: heavy weight class, Captain Crowell, a 165-pound class, Browd; Wood; Goodell, a 135-pound class, Rounds, Gibb and Schuman; 125-pound class Bone and Stevens and 115-pound class, Loo.

SONGS FOR SHOW

Lyrics To Be Set To Music During Christmas Vacation.

On Monday, December 21st, at five o’clock, stage manager Cameron will be at the Show rooms to give out the lyrics for this year’s Show to those who intend to write music for them. The plan is to distribute the lyrics now, as men who intend to enter the competition may be able to work at them during the Christmas recess. The music will be called in on the first Monday after Christmas vacation, that is, January 4, 1915. At this time, it will be looked over by the coach and then returned to the writers for a final revision. All (Continued on Page Six)

CALENDAR

Friday, December 18, 1914.

1.00—Senior Governing Board Picture.

At Neills's.


6.00—Basketball Practice. At Gym.

8.00—Wrestling Meet. At Gym.

Saturday, December 19, 1914.

1.10—Portfolio Committee Ballots. At Union.

2.00—Indoor Track Meet. At Gym.

8.00—Wrestling Meet. At Gym.

Monday, December 21, 1914.

1.00—News Staff Meeting. Tech Office.

5.00—Basketball Practice.
THE TECH

NOTICED as second-class matter, Sept. 18, 1911, at the postoffice at Boston, Mass., under the Act of Congress of March 3, 1879.

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NIELSON RECOVERING

The Cushing Hospital reports that Benjamin Nielsen, who was taken of the Union is two hundred, only a week ago, is getting along well, though he is getting along well, it is not yet decided whether he will be able to leave the hospital.

BOYS'-SCHOOL TRACK

The Junior Class will hold its annual dinner in the Union at 6.30 on January 12th. The committee in charge has arranged to have moving pictures by the Vitagraph Co., illustrated songs and other features which will not be announced until later. As the seating capacity of the Union is two hundred, only a limited number may attend the dinner.

SENIOR OFFICERS

The picture of the Governing Board of the Class of 1915 will be taken at Notman’s today, at 1 o'clock.

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FORUM TO ORGANIZE ON PERMANENT BASIS

Will Hold Meeting This Noon To Plan Activities For Coming Year.

The M. I. T. Forum will hold a meeting this noon at 1:30 in F. Eng. C, given for the purpose of completing a permanent organization and planning the year's activities. All men interested in the study of Socialism, as well as those who applied for membership in the Club last Tuesday, are invited to attend.

The Forum is affiliated with the Intercollegiate Socialist Society, with branches in over fifty of the leading American colleges and universities. The purpose of the Society is "The promotion of an intelligent interest in Socialism on the part of College Men and Women.

The activities of the Forum will include the procuring of several speakers during the year to address the students on subjects connected with Socialism. It is not unlikely that the Forum will also hold regular discussion meetings, and possibly also some form of study course. These matters will be discussed and decided at the meeting today.

ELECTRICAL SOCIETY

Meeting Tuesday Night—Mr. Blood Will Speak.

The Electrical Engineering Society will hold a meeting in the Union on next Tuesday, December 23, at 8 o'clock. Mr. W. H. Blood of the Stone & Webster Company has been secured to speak and will give "Some Suggestions on the Making of Examinations and Reports." Mr. Blood is a graduate of the Institute and has had a wide experience in engineering work. The subject which he has chosen is very interesting and every member of the Society should plan to be on hand.

COMMUNICATION

To the Editor of The Tech:

I have been told by an alumnus of the Institute that the original idea of a "Point System" was to make conditions such that one man could not hold the important offices of several activities, or in other words to make it impossible, for instance, to be a class officer and at the same time hold a high position on the Show or The Tech. I question whether the new "Point System" proposed at the last meeting of the Institute Committee fulfills the original purpose of such a system. It would certainly seem that if the proposed system allows a man to be advertising manager of the Tech or Tech Show and at the same time be the secretary of his class and vice-president of the T. C. A. it is not conducive to a distribution of honors. A number of these possible combinations of offices which a man can hold were given in a recent communication to your publication. It is unnecessary for me to repeat these.

In fact a mere perusal of the Point System Committee's report published in full in the issue of the Tech on

PHONOGRAPH RECITAL GIVEN IN THE UNION

Edison Diamond Disc Machine Is Demonstrated by Choice Program.

A pleasant variety in the way of entertainment at the Union was given on last Wednesday, when the Edison Phonograph Company gave a demonstration, in the form of a concert recital, of the recently developed Diamond Disc Machine. The following program was given:

Overture from William Tell—Rossini

Cherubin Overture—Meyerbeer

Ah non credo vi (Mignon)—Thomas

Serenade—Titi

Minere (Il Trovatore)—Verdi

Ave Maria—Schubert

Happy Days—Steele

AERODYNAMIC LAB.

(Continued from Page One)

The laboratory in Cambridge includes a four-foot blowing tunnel in which velocities may reach forty miles an hour. A seven-foot fan sucks the air through the tunnel, in the center of which, where the air currents are most regular and steady, there are arrangements for placing the various devices to be tested. The most novel feature of the equipment is the aerodynamical balance; an instrument measuring forces in any one of three directions. It measures wind pressure, the twist due to inequalities of pressure and the lift and is adaptable to all kinds of surfaces. Thus the effect of the wind on planes may be determined, or on such complex things as propellers or even different forms of sails. The balance is of the pattern of that devised for the National Physical Station at Teddington, England, which institution permitted Technology to use its patterns and the instrument for America was made at shape in Cambridge, England. It was accorded the honor of a special social at work. In fact the readiness to do things struck the guests, Dr. Zahn remarking that the laboratory is already achieving results.

Wide interest has been aroused among scientific men for this school is the first of its kind and the Government has already recognized the value of the new course and it is proposed by the Signal Service to supply officers for special training along the special lines of serial studies at Technology.

December 13th will afford ample evidence of the numerous ways in which the proposed arrangement would defeat the original aim of the "Point System."

Next Tuesday at the regular meeting of the Institute Committee the question of the adoption of a new system (Continued on Page Four)
INDOOR TRACK MEET
IN GYM TOMORROW

Entire Track Team Will Take Part in Practice Meet

There will be a practice Track Meet in the Gymnasium at three o'clock tomorrow afternoon. Every man on the Track squad is to take part, and consequently there will be no workout in the early afternoon. There will be no charge for admission. The following events are open to competition: thirty-yard dash, thirty-five-yard high hurdles, forty-yard, eight-lap, fifteen-lap, high jump, pole vault, shot-put and three-lap relay. All those taking part in the meet will run in the last event. This meet is strictly a Technology event and is open to all who wish to compete. No prizes will be awarded, but the meet will give an idea of how the members of our Track Team compare.

M. E. VISIT WALTHAM
(Continued from Page One)

party treated the men royally. His kindness and the willingness of the guides and employees to answer the innumerable questions made the trip very instructive and successful.

The second party leaves Rogers Hall at 1:45 today. The men are particularly requested to stick to their group and guide, as this helps the guide and allows the group to see more, since the guides knew how and where to see the most in the least time.

HARVARD WINE HOCKEY
(Continued from Page One)

forward, Fletcher playing back with Gould. Winton's work was good but he did not show up much speed although he handled the puck cleverly. The Harvard scores came principally in the first period when Blakewood at goal was conspicuous for his absence at inopportune times, having more or less of a propensity for wandering away from the goal. He showed up well by streaks only in the first part of the game but managed to settle down in the second half when he put up a fairly good defense. Left wing seemed to be the weak place in the lineup and the lack of a good man there to meet one of Harvard's strongest men was noticeable. The lack of substitution of varsity caliber as compared with the Harvard subs who were nearly as good as their first string men, was mentioned as one of Harvard's strongest men was noticeable. The lack of substituted men on the Tech team encourages and strengthens the Tech team encouragement and confidence of Harvard's sulbs who were nearly as good as her first string men, wea.

The game opened with Baldwin of Harvard opposing Winton at the face-off. Technology got the jump on the Harvard men when the whistle blew, and carried the puck well down into Harvard territory where the Cambridge men put up a stiff fight and managed to rush the puck down to the Tech goal where Morgan scored the first goal of the season. It came after three minutes of play. Play was well mixed up for a time after this, the rubber being kept down by the Harvard goal, Tech getting several shots at the cage but being unable to get by Wynde, the Harvard goal tend. The play was sawed up and down the ice for a time until Blakewood got rather venture and Curtis shafted in behind him and scored. Wansanaker, who replaced Curtis, scored easily a minute or so after. Technology braced up again and kept Harvard on the run for quite a while after this. Cochran put up a fine showing at this time and showed good speedily work both in defense and in rushing the puck. Townsend finally succeeded in scoring Harvard's fourth goal, and the last one of the half.

The second half opened with Technology on the aggressive but after one minute and a half of play Wansanaker of Harvard scored the fifth goal of the evening. From that on Harvard seemed to have its own way and after three minutes and forty seconds Townsend snatched the puck out of a scrimmage and cleverly shot it past Blakewood into Tech's cage.

These two goals in such a short time seemed to arouse the red and gray team and they showed a style of play which had been seriously lacking up to that time. Tech made several brilliant dashes down the ice but unfortunately they did not gain very much until Cochran took the puck to the length of the rink and by clever dribbling and good judgment shot it into Harvard's net scoring Tech's first goal. This score seemed to give the Tech team encouragement, and they turned the tables somewhat so that most of the playing went in front of the Harvard goal. At one time Winton and Captain Fletcher made a clever dash down the ice and showed some much needed team work but unfortunately no more scoring for Technology took place until the time Townsend shot the puck past Harvard's goal; after eighteen minutes of play. The result of the half found Tech forced to play on the defensive and the time ended with the score in Harvard's favor six to two.

For Technology, Cochran certainly played an excellent game. Although playing cover point, a defensive post, (Continued on Page Six)
Graphic Description Of Testing Out Miniature War Vessels.

At the dinner of the Naval Architectural Society last Tuesday night, one of the most fascinating branches of experimental science was described by Prof. Keith of the Department of Naval Organization and Design, and the United States Experimental Model Basin, with which he was formerly connected, was the subject of his talk.

The Model Basin is situated near the Potomac River about a mile outside the city of Washington. It is 470 feet long, 42 feet wide, and 14 feet 8 inches deep. The building over the basin is 500 feet long and 14 1/2 feet wide on the inside. It is heated in winter by an elaborate heating device which maintains a constant temperature all the year around. The constant temperature, in turn, allows for a constant speed, thus making a more or less uniform temperature all the year around. The building is divided into two parts. The forward part is 14 feet 8 inches deep and is used for testing purposes.

There are also guides for a good response from Techno-
TECHNIQUE BOARD

Two More Men Are Elected To The Art Department.

As a result of the recent competition for the Art Department of the Technique Board, William W. Sprague and Howard T. Evans have been elected to fill places as assistants to this department. Sprague is a member of Theta Chi and Secretary of the Architectural Society. Evans is a member of Theta Xi and is taking course IV.

HARVARD WINS HOCKEY

(Continued from Page Four)

tion, he was all over the rink at once and played equally well on the offensive and defensive. Winton and Captain Fisher also played a good game. Wanamaker and Townsend excelled for Harvard, each having two goals to his credit. Wythe played a good game at goal, making several good stops. Neither team has had very much practice so far and Technology has been the most handicapped in this respect and both showed a great chance for improvement especially as regards team play. The lineup is as follows:

Technology
Blackwood, g
Wythe, front
Geidt, p
Morgan
Cochrane, c
Winton, c
Caldwell, Fisher
Townsend
Kelley, Toye
Wanamaker

Harvard
Redman, g
Winton
Cochrane, c
Winton
Caldwell, Fisher
Townsend
Kelley, Toye

Goals First Half.
1. Harvard by Morgan
2. Harvard by Curtis
3. Harvard by Wanamaker
4. Harvard by Townsend

Goals Second Half.
5. Harvard by Wanamaker
6. Harvard by Townsend
7. Technology by Cochrane
8. Technology by Winton

References: H. W. Foster and Ernie Deedy.

Time twenty minute periods.

THESS ASSIGNMENTS

The list of thesis subjects for Seniors of courses V and X has been posted in Walker Building. Not all men know their work, however, and it will be a week or so before a definite settlement is made. Course VI subjects have been up some time and a few of the electives have already made their choice.

FINE ARTS TALK

There will be two lectures given at the Museum of Fine Arts Sunday afternoon. Mr. William Hopperman Graves, formerly president of the Grueby Pottery Company, will speak on "Majolica and Porcelain" in the Western Art Study Room at 2:45, and Mr. Richard Andrew, instructor in the Massachusetts Normal Art School, will speak on "Why an Artist's Style Changes" in the Painting Galleries at 3:30. No admission will be charged.

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