

RICHARD BALTZER ELECTED CAPTAIN OF 1930 HARRIERS

Holds 1000-yd. National Junior
Indoor Title and Two
M. I. T. Records

IS FORMER QUINCY STAR

Consistent Place-Winner for
Varsity Harriers During
Past Season

Richard K. Baltzer '31, of Quincy, Massachusetts, was elected captain of the 1930 cross-country team at a meeting of the team members held Monday afternoon. Baltzer succeeds Leon Thorsen '30, as captain of Technology's hill and dale contingent. He holds two Institute board track records and one national record and has been out for cross-country during the three years that he has been at Technology.

While at Quincy High School Baltzer was on the cross-country and track teams for three years. He ran the half-mile in track and was considered among the best in that event that the school has had in recent years. After graduating from Quincy, Baltzer came to Technology and resumed his track career under the tutelage of Coach Oscar Hedlund.

Set New Record

During his freshman year he broke the existing freshman record in the 600-yard run on the board track. This record was subsequently lowered by John Jewett last year. As a Varsity runner, Baltzer set a new record in the one and one-quarter mile run on the board track last year.

Bltzer's greatest achievement last year was accomplished when he won the 1000-yard National A. U. Junior indoor race at the Boston Garden.

After staying with a bunched field at the start of the race, he moved up
(Continued on Page 3)

Railroad Agents At T. C. A. Office

Posters About Building Tell
Of Ticket Procuring
Advantages

Ticket procuring service at the T. C. A. furnishes timetables, rates, or any other information desired by those going home during the Christmas holidays. Reservations can be made for sleepers, chairs, or railroad tickets. Thirty-five posters have been displayed about the Institute announcing the service. A special Technology car has been chartered to Chicago on the Michigan Central Railroad, and any other cars will be added when found necessary. Representatives of the Railroad Companies are: Mr. J. T. Kellner of the Boston & Albany; Mr. A. R. Maxwell of the Boston and Maine; and Mr. J. A. Good of the N. Y., N. H. & H.

Investigations of Solar Radiation Valuable For Weather Forecasting

Dr. Charles G. Abbot Engaged
In Studying the Variations
of Sun's Rays

This is the second of a series of articles concerning prominent alumni of the Institute.

Dr. Charles G. Abbot '94, secretary of the Smithsonian Institute, internationally eminent astrophysicist, is best known for his investigations of solar radiation and of terrestrial gaseous envelopes. As the result of observations taken over a number of years he has collected data invaluable to weather forecasting which is also of use in determining the size, temperature and relative distances of stars.

While working at the Mt. Wilson Observatory in California, Dr. Abbot studied the distribution of heat in the spectrum of the stars.

In this work he chose the ten brightest stars and first studied the character of the light from each. By separating the heat from them into a long spectrum and then calculating the probable temperature of each, sufficient data was found to determine their diameters. A radiometer was

Newton Boys Aim to Beat Dorm Card Record

Determined to shatter the amazing record of 13½ hours of continuous good, bad and indifferent pinochle recently set by five enduring sons of Technology, a quintet of Newton boys began a Whist battle last evening at 5:30 o'clock. In order to keep with the sanction of the Amateur Athletic Association it is reported that there is no gold at stake and the boys have only several hours of good clean fun ahead of them. In this respect, whatever record they attain may be accepted without question, since it is rumored untold fortunes changed ownership during the course of play at the Dormitory.

The Newton boys must be informed that they have accepted a challenge which did not exist since the Dormitory men were only in it for the fun and did not have in mind starting another "English Channel" contest again.

THE TECH Has First Banquet of Year in Walker

Professor Pearson will Address
Gathering on Aspects of
Institute Life

For the first time this year, all members of the various departments of THE TECH, and all candidates on the paper will meet for an informal banquet to be held at 6:30 o'clock this evening in the North Hall of Walker Memorial. Walker was decided upon as the scene of the affair as a furtherance of the 'Use Walker' campaign now being undertaken by the Institute Committee.

Professor H. Greenleaf Pearson, Head of the Department of English and History at the Institute, will be the speaker of the evening. Throughout his years of service at the Institute, Professor Pearson has consistently maintained a close contact with his students, and is highly regarded by the undergraduate body as a whole. He will address the gathering on various aspects of Institute life.

The entertainment, which will follow the dinner, will be featured by two women who are well-known entertainers in Boston theatrical circles.

CORP XV HAS FIRST OF DINNER MEETINGS

Tonight Corporation XV will hold its first monthly dinner meeting at the new Durgin Park and will be addressed on the subject of depressed business conditions. Mr. Leon V. Alden, a consulting engineer for the Thompson Lichter Company, will discuss the current financial weakness as an expert, since he has prepared a paper for the New England Conference on the same subject. The dinner will commence at 6:30 o'clock and signups must be made in Room 1-180.

SIGNUPS FOR 1930 JUNIOR PROM NOW ON SALE IN LOBBY

Campaign Will Continue Next
Week Until Beginning of
Christmas Vacation

ANNOUNCE PRIZE POSTERS

Signups for the Junior Prom, which will be the first dance of its kind to be held in Walker Memorial, are now on sale in the Main Lobby. The sale was started last Monday and many signups have already been sold despite the fact that the desk is open only between 12 and 2 o'clock.

Due to the fact that the table reservations are made in the order in which they are received, those desiring good tables are urged by the Committee to secure their reservations as soon as possible. Many of the better tables have been taken already but there are still some remaining for those wishing them.

Signups may be made up until the Christmas vacation, and a desk will be maintained in the Lobby between the specified hours until that time. The cost of the signup is \$5 with a redemption of \$7 before the Prom.

As in the past, the Prom will start at 10 o'clock and will continue until 4 o'clock. In addition to the dance itself, the \$12 total cost of the Prom will include a six course dinner that will be served at about midnight, breakfast at 4 o'clock, and the usual favor, the nature of which is always one of the surprises on Prom night.

Alfred H. Beckonert '32 has been announced as the winner of the first prize in the poster contest held by the Prom Committee. Charles W. Maskell '30 was the winner of the second prize. These two posters are on display on either side of the Main Lobby. The first prize was \$10 and the second \$5.

[USE WALKER]

COLLOQUIUM GIVEN FOR ADVANCED MEN

Mr. B. P. Romain Lectures to
Students in Course VI
On Wattmeters

Mr. B. P. Romain of the Weston Electrical Instrument Corporation presented a colloquium on "The Development of the Indicating Wattmeter" to the advanced students in electricity Monday and Tuesday afternoons from 2:00 until 4:00 o'clock in Room 4-213.

Mr. Romain based his talk on the following topics: First, he discussed the operation of the common types of instruments, the sources of error, and methods of compensating this error. The second topic was the design and use in actual operation of the essential parts. The colloquium was closed with a survey of the effects of different physical conditions and the means of making allowances for the same.

This is one of a series of colloquia offered by the Department of Electrical Engineering of the Institute for the benefit of the advanced students in the course. The colloquia are open to graduate students, seniors, and members of the junior honors group. All members of the instructing staff who are interested in these topics have been cordially invited to attend.

[USE WALKER]

AERONAUTICAL CLUB STARTS GLIDER WORK

Construction work on the Aeronautical Engineering Society's glider was started yesterday when the old covering was ripped off and the ribs removed. It will be necessary to replace the steel tube on the front end; make the ribs; put in a spar; and recover, tape, and dope the wings. A schedule has been prepared by the experimental committee assigning club members to special hours of work. This will be found on the A. E. S. bulletin board in building 10.

Institute Committee Holds Special Meeting

Pictures of the Institute Committee for the 1930 Technique will be taken tomorrow at 5 o'clock in Room 10-001. Attendance of all members will be required, as at a regular meeting.

Basketeers Will Play Brown Tonight in The Hangar Gym In Second Game of Season

Tickets For 1930
Dance to Be Had
At 'Snique Desk

Annual Dance Held in Walker
Memorial Main Hall Will
Be Formal Affair

Tickets for the annual Senior Dance this Friday evening in Walker Memorial Main Hall are now being distributed in the Main Lobby. Despite the fact that the distribution only began last Monday, many Seniors have already obtained their tickets at the Technique desk.

There are still quite a number delinquent Seniors however and the Committee wishes to urge them to secure their tickets as soon as possible. This dance is restricted to Seniors only and they will be admitted free of charge. Friday will be the last day on which tickets may be obtained.

Numerous Seniors have questioned during the last few days as to whether or not the dance will be formal. The Committee wishes to settle all of these doubts however as this dance as in the past will be a formal affair.

Chaperones for the event will be President Samuel W. Stratton, Dean Harold E. Lobdell '17, Professor and Mrs. James R. Jack, Mrs. Leonard M. Passano, and Mr. Morris A. Parris.

[USE WALKER]

A. S. R. E. PAYS HONOR TO PROFESSOR KEYES

Head of Chemistry Department
Given Honorary Membership

Professor Frederick G. Keyes, head of the Department of Chemistry, was made an honorary member of the American Society of Refrigerating Engineers at the twenty-fifth annual dinner of this organization. The honor was in recognition of Professor Keyes' "unusual service in developing the science of engineering in relation to refrigeration". The head of the Chemistry Department was the author of the first paper presented in 1914 in the first number of the Journal of the American Society of Refrigerating Engineers.

In his brief address following his election to membership, Professor Keyes spoke of "these stimulating contacts which a university or scientific engineering graduate school affords with young and often vigorous minds which play an important part in maintaining in the research laboratories an atmosphere favorable to scientific progress". Dr. Keyes is also a member of the American Mathematics Society, American Chemistry Society and the American Physical Society.

TECHNOLOGY GAME WILL OPEN SEASON FOR BRUIN CAGERS

Starting Lineup of Frosh Team
Announced—Play Harvard
Wednesday

PLAN GAME WITH CLARK

Tonight the Engineers will meet Brown at 8 o'clock in the Hangar Gym, after the Brown-M. I. T. freshman game which starts at 7 o'clock. This will be the first game of the season for the Brown cagers, and little is known of their strength, but they will undoubtedly offer the Beavers stiffer competition than they met in the New Bedford game.

Starting for Technology will be Motter at center; Lawson and Captain Nelson at guard, with Harrison and Nee in the forward berths. The members of the Brown squad which will probably see action in the game are as follows: Allison, Brown, Caukins, Harris, Hemelright, Mantell, Morey, Mozzochi, Smith, Snyder, Schein, and Walsh. Snyder, captain of the team this year, played at forward last year for the Bruins, and was one of the stars on last year's quintet. He will probably lead the scoring for the visitors in their opening game tonight.

Whether the Technology team will keep up the high percentage of shots which they sank in the New Bedford game last Saturday is doubtful. The
(Continued on Page 3)

[USE WALKER]

New Type Drive To Feature Talk

S. A. E. Meet Tonight to Discuss
Development of Front
Wheel Drives

Front wheel drives will feature this evening's meeting of the New England section of the Society of Automotive Engineers, to be held in the Hotel Kenmore Crystal Room at 8 o'clock. This meeting will be open to those interested in this latest big development in the automotive field, and members of the M. I. T. branch of the A. E. S. are especially invited.

The lecture will be given by P. M. Heldt, Engineering Editor of Automotive Industries and author of textbooks on automotive subjects. Mr. Heldt is known as an engineer who can show clearly and concisely the connection between the behavior of an automobile and the fundamental physical laws which govern its operation.

Professor Morris Opens Series of Popular Science Lectures Friday

Well Known Geologist to Talk
On His Experiences in
The Gobi Desert

Professor Frederick K. Morris of the Department of Geology, who was geologist of the Roy Chapman Andrews expedition to the Gobi Desert in Mongolia, will deliver the first of this season's Popular Science lectures. This will be the first one of a series of four lectures to be given this year under the auspices of the Society of Arts. The speaker has chosen to speak on "A Geologist's Travels in the Gobi Desert." His lecture will be given in Room 10-250 at 4 o'clock Friday, Saturday and Sunday. The first two days the lecture will be open to high school students, while next Sunday the general public is invited. Tickets may be obtained now free of charge in Room 3-115. Seats will be reserved for ticket holders until 3:55 o'clock when the doors will be open to the public.

Speaker Eminent Geologist

Professor F. K. Morris went first to China in 1920 when he studied the geological structures in several of the northern provinces. In 1921 he was

invited to join the Third Asiatic Expedition of the American Museum of Natural History of which Roy Chapman Andrews was leader and zoologist, and Professor P. Berkey of Columbia University chief geologist. At the end of 1923 the entire staff returned to America for a year of research work. By February of 1925 the Expedition again turned westward and pushed farther into the interior than had previously been possible. Disorders in China prevented field work during 1926 and 1927, but in 1928 successful explorations were again made.

At the end of that year the expedition returned to America and since then Professor Morris has, together with other geologists of the expeditions staff, been engaged with the necessary aftermath of fieldwork: the study of specimens, the drafting of maps and sections, the study of literature and the preparation of reports. Among the results of the Expedition's work can be listed a study of the history of the Gobi basin and of the Altai and Khangai ranges; the discovery and development of fossil-bearing formations; and the discovery of several ancient human cultures. Topo-
(Continued on Page 4)

A Record of Continuous News Service for 48 Years



Official News Organ of the Undergraduates of M. I. T.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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In charge of this issue:		Eric P. Newman '32	

HANDICAPPED

WHILE the Senior Class has taken upon itself the responsibility for opening the "Use Walker" campaign with a formal dance on this Friday night, individual members of the class evidently have not used their influence in their fraternities. Five Technology fraternities are giving dances that night. This is contrary to the Interfraternity Conference regulation, which permits only three "open" dances on one evening, but what is more important, this attitude is completely at variance with the spirit of cooperation absolutely necessary for bringing about the much-needed changes in Walker.

There are two events scheduled for this crowded Friday evening which warrant undivided support—the Senior Dance and the Athletic Association's Sports Night. Whatever may be done to promote greater interest in Institute athletics is most worthy of all possible aid from the students. Undergraduate Sports Night goes far towards this end. The Senior Dance, as has been explained in recent issues of THE TECH, is the first step in the big program which will result in a more commodious, satisfactory Walker Memorial. The magnitude of this enterprise is such as to require a most propitious beginning, something which the Senior party may very well provide.

These two major events are not in conflict. Dancers may add to the evening's enjoyment by including the sports exhibition on the program. On the other hand, the five fraternities are doing great damage by their present plans and are crippling the worthy Walker project at the outset. As Technology undergraduate groups, their conduct is open to intense criticism.

The least the Seniors of these fraternities can do is attend their class dance. The great importance of this event cannot be minimized. The attendance of all members of the Class of 1930 is essential, because on this dance depends to a great extent the results of the rest of this winter's extensive social program at Technology.

—Use Walker—

COSTLY RETARDATION

PROCRASTINATION is a more or less forgivable vice in most cases, but at times it becomes the bugbear which arrests the progress of worthy enterprises. Particularly unfortunate is the attitude which is taken by a large body of Seniors in regard to the appointments for photographs for "Technique."

Even with the deadline extended a week from the first-set date to accommodate those who neglected to make their appointments, there are still about one hundred seniors who have not answered. "Technique" is thus forced to spend a great deal of time and money in searching out these delinquents so that a complete and truly representative group may be included in the yearbook.

—Use Walker—

STAFF ELECTIONS AND PROMOTIONS

VOLUME XLIX of THE TECH takes pleasure in announcing the following elections and promotions, subject to the approval of the Institute Committee in accord with its Points System.

PROMOTIONS:

- To News Writer: George H. Sistare, Jr. '32.
- To Assistant Circulation Managers: Willis M. Moore, Jr. '32, Joseph J. Winkler '32, Earl D. McLeod '32.
- To Assistant Advertising Managers: William H. Barker '32, Addison S. Ellis '32, Willard B. Simonds '32, Maurice D. Triouleyre '32.

ELECTIONS:

- To Reporters: Joseph H. Coenen '33, Paul E. Davis '33, Edward Shea '33, William L. Sheppard '33, Clewelle W. Sweetser '33, Joseph L. Friedman '32, Dayton H. Clewell '33, Walter V. Skees '33, Robert J. Dunlavy '32, Alanson G. Bowen '33, John T. Groff '33, Alfred H. Munson '33.
- To Circulation Staff: Stanley L. Johnson '32.
- To Business Service Staff: Richard T. Hodgdon '33, George H. Ropes '33, Charles M. Thayer '32.
- To Advertising Staff: Kenneth G. Bell '33, Arthur L. Berry '33, Morris L. Brown '33, Jesse R. Henshaw '33.

As We See the Movies

THE UPTOWN

Warner Brothers loose their money belts in the making of the spectacle, "Show of Shows." As a whole it closely approaches an animated movie magazine. Old favorites and new work together in such a way so as to at least give the impression that they are having a lot of fun out of it. "Show of Shows" is a musical show; there is no plot and there is a master of ceremonies much in evidence. The opening is a pirate scene aboard a ship with Noah Beery and other villains with the "Is everybody happy?" man, Ted Lewis and his saxaphobians in command. There is a Florida Sextet with Ben Turpin and his magnetic optics. The Bicycle Club and Jack Mulhall go on an outing, singing "On a Bicycle Built for Two." Myrna Loy and Nick Lucas give a Chinese Fantasy and manage to create genuine oriental atmosphere without the foppishness of incense burning or blinking idols. There is a parody on "Singing in the Rain." The many elaborate chorus numbers are spectacular but for some reason soon become as interesting as an electric sign, blinking through its gyrations.

To the dyed-in-the-wool movie fan "Show of Shows" is interesting because of the galaxy of actors. The question, however, arises as to why the movie producers revert to the mechanisms of the stage for their scenes and effects. Perhaps they cannot realize that they have an art of their own, distinct and more comprehensive in some aspects than the stage can ever be. All in all if you go before six o'clock it is no more in price than a movie magazine and it speaks for itself.

Another of the currently popular screen mystery plays is on the bill at Loew's State this week. Conrad Nagel and Leila Hymans take the leading roles in this talkie version by Elliott Clawson of "The Thirteenth Chair," a melodrama from the pen of Baynard Veiller, the author of "The Trial of Mary Dugan."

The setting is nearly entirely laid in the palatial residence of Sir Richard Crosby, a British official in Calcutta, and the supernatural atmosphere of Eastern mysticism prevails throughout the plot. Margaret Wycherly gives without doubt the best exhibition of clever acting in the role of Mme. La Grange, an old Irish lady in the garb of a spirit medium.

The love element of the play is carried along by Conrad Nagel, who takes the role of Richard Crosby, the son of Sir Richard. His engagement to Helen O'Neill, his father's secretary is frustrated with many difficulties, but comes to the usual happy fade-out.

On the stage the Boston public has the opportunity of seeing Charles King, popular screen star of "Broadway Melody" and "Hollywood Review". He sings the favorite hits of his pictures, and pleases the audience with his smiling personality in rendering "Singing in the Rain" and "Broadway Melody." He is supported by a dance team who perform the intricate movements of Brazilian dancing very skillfully.

As We Like It

"TWELFTH NIGHT" THE REPERTORY

In "Twelfth Night," Henry Jewett's 11th Shakespearean production of the season, the Repertory company does a fine and really entertaining job. This production of one of Shakespeare's lightest comedies is marked by the excellence with which each one of the cast fills his particular role.

Arthur Powers is inimitable in his comic role of the perpetually inebriated Sir Toby Belch and was ably accompanied in his drunken brawls by Allen Nourse as Sir Andrew Aguecheek. Most entertaining was the scene in which the knight Sir Andrew puts up a heartless sword fight with an equally unwilling opponent, Viola, in the guise of a young man.

Howard Kyle in the role of Malvolio, finds a part that suits him much better than anything he has yet attempted this season. William Gilbert lends strength and dignity to his lines in the role of Duke Orsino.

Lark Taylor evokes applause by his singing of his song to the Duke. Cynthia Latham fills the role of Viola with her usual vivacity in the part of the young messenger to her lord whom she secretly loves. Margaret Smith as Olivia, who falls in love with her when she comes disguised as a man to bring suit for her lord, completes the romantic element of the piece. These complications are all very pleasantly ironed out in the final scene which comes as near to a dramatic situation as the play ever approaches.

Colorful and well executed costumes and sets of a fine simplicity of design were responsible for not a little of the appeal of this play.

THE EDITORIAL SPECULUM

In keeping with its policy of doing everything possible to help out the students, the T. C. A. has made arrangements whereby railroad tickets to any part of the country may be obtained at its office in the basement of Walker. Besides being more convenient than going down town to get tickets this service permits students to place the entire responsibility of getting pullman and railroad tickets and arranging their entire trip in the hands of competent men in the T. C. A.

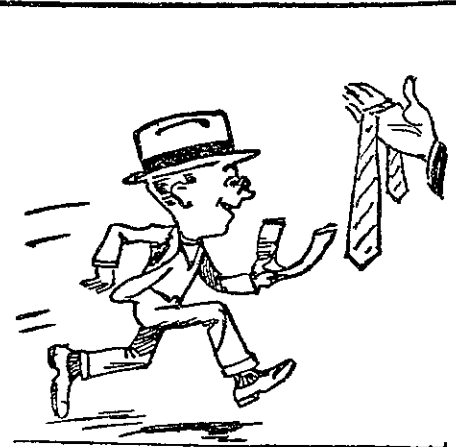
The Spectator remembers the trouble he had last year in getting his tickets home. By the time he managed to get down town all the lowers were gone and he was lucky to obtain an upper. The only day he was free to go to town was Saturday, and he recollects waiting in line many wearisome minutes. With this new service that the T. C. A. has thoughtfully instituted all this is a thing of the past, and procuring railroad tickets is the work of a moment in going down town or standing in line.

Professor Walter I. Slichter of the Department of Electrical Engineering, Columbia University, in speaking on the field for youth in engineering today said that the day of the young man in the scientific development of the talking picture, transatlantic telephony, and radio telegraphy has arrived. Corporations engaged in perfecting and producing devices used in this work are employing the services of more young men than technical schools are supplying, according to him.

Every able electrical engineer graduate of Columbia this year would have an opportunity to commence important research work in the laboratories of from four to seven Professor Slichter declared. Older engineers, on the

other hand, despite years of practical experience, are far less able to cope with the problems they are now confronted with than the 1929 college graduate with his special training in advanced fields.

"The plight of the older man," he continued, "is largely due to recent developments in engineering, especially in electrical engineering, which requires much greater familiarity with involved scientific principles than men who were trained a decade ago. The old cut and dried rule of thumb is no longer satisfactory because of the application of mathematics, physics and chemistry to modern scientific problems."



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**Elected Captain
Of 1930 Harriers**



RICHARD K. BALTZER '31

**BALTZER RECEIVES
HARRIER CAPTAINCY**

(Continued from Page 1)
near the front where he stayed in fourth place for half the race. Two laps from the finish he suddenly spurred to the front and held his lead over Barrie of Harvard and Maher of Holy Cross. He led Maher over the finish line by twelve yards in 2 minutes, 23 2/5 seconds.

This year as a member of the Varsity cross-country team, Baltzer finished in seventh place in the Holy Cross-M. I. T. dual meet and in fifth place in the New Hampshire-M. I. T. dual meet. In the New England he placed twenty-third, and in the I. C. A. A. A. meet at New York took 102nd place. He has been a constant scorer in the handicap meets held this fall and was third in the handicap cross-country race held early in the season.

**FAMOUS ALUMNUS
PREDICTS WEATHER**

**Conditions are to be Forecast
Long Time in Advance
At African Post**

(Continued from page 1)
ciety Expedition headed by Dr. Abbot established a station to measure the heat of the sun's rays and to thereby obtain data upon which to forecast weather conditions, weeks or even months ahead.

According to Dr. Abbot in a recent article, the expedition was a manifestation of the growing demand for more accurate knowledge of the cosmic forces and for an improved weather forecast. The present system of weather forecasting depends upon telegraph reports of simply rain or shine, and hot and cold temperatures existing at various places over the earth's surface. Such predictions are only roughly exact and, at best, do not furnish data for more than two days in advance.

Dr. Abbot stated that the primary cause of earthly weather changes is due to the amount of heat given off by the sun. The sun is occasionally troubled with pairs of spots magnetic in character. These spots are apparently dark magnetic bodies of gas thousands of miles high and wide. Their effect is equivalent to that produced by stirring coals in a furnace and causes a greater radiation from the sun. Thus, knowing that the sun is a variable, Dr. Abbot set out to find the temperature and other meteorological elements and to show how their variation could be used by weather bureaus. A large amount of data taken at the observatory at Brukkaros is being studied with this end in view.

Referring to the progress of astronomy, Dr. Abbot stated in a recent article that, "Due to the efforts of scientific men we are practically living in a new universe as compared with our ancestors of a century ago. Nowadays we appreciate that our earth, though large compared to a golf ground, is but a small member of the planetary system, only a hundredth of the diameter of the sun; that the light from the nearest star beyond the sun requires thousands and tens of thousands of years to reach us; that in our own galaxy, the number of stars is of the order of tens of billions."

**Program of Six
Events Planned
For Sports Night**

**Basketball Game and High
Jump Competition to Open
Activities**

Sports night will be opened by a basketball game in Walker Gym on Friday evening. This will be but one of the six features on the program of sporting events. Manager MacLaren has announced that in addition to the basketball game there will be exhibitions in Gym, Fencing, Wrestling, Boxing, and competition in the high jump. This is the first time that track has figured in the annual event and the competition is looked forward to with anticipation.

Opens Season

This annual evening of sporting events will open the Technology winter sports season in earnest. Basketball has already commenced, while Track, Gym, Wrestling, and Boxing will start competition in January. Sports Night gives Technology a good chance to see how its various winter sports teams are rounding into shape.

This year there has been an increase in the number of seats available for visitors, due to the fact that late arrivals last year were forced to stand during the program. The crowd this year is expected to exceed by far all those at previous Sports Nights.

Gym Exhibition

The gym team will have its regular program of events during the evening, with both Coach Forest and Coach Dolloff exhibiting. Wells, Sidur, and Knapp of last year's team are outstanding among the team members to exhibit while the four freshmen who exhibited at Posse Nissen will also take part in the exhibition.

The following schedule of events will be followed:

- 7:30-8:00 — Basketball
- 8:00-8:20 — High Jump
- 8:20-8:30 — Fencing
- 8:30-8:50 — Wrestling
- 8:50-9:15 — Gymnastics
- 9:15-9:30 — Boxing

—[USE WALKER]—

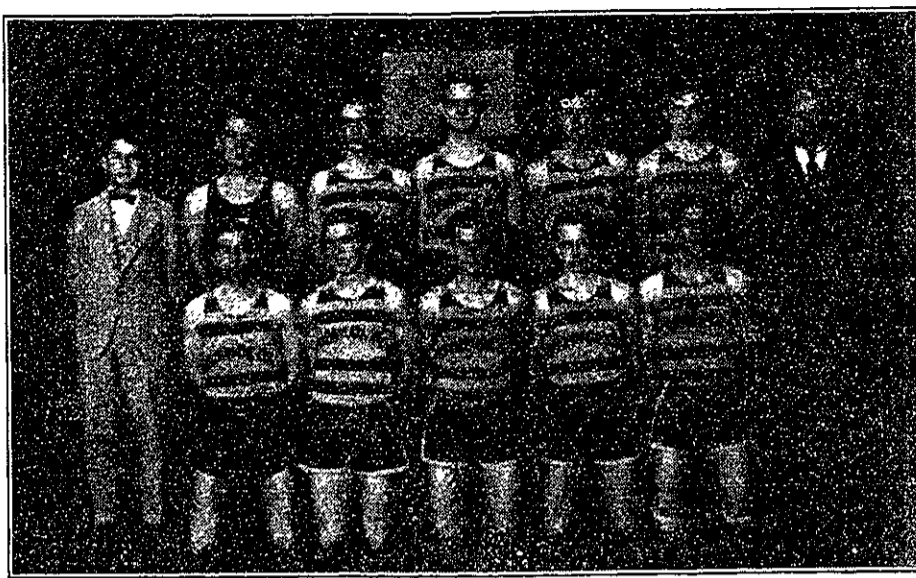
**HEALTH SURVEY OF
HOLYOKE FINISHED**

Dr. Murray P. Horwood '16, Associate Professor of Bacteriology and Public Health at Technology, has recently completed a detailed report of health conditions in Holyoke, Mass., in relation to tuberculosis. Included in the report is a comprehensive study of the vital statistics for tuberculosis, the available means of diagnosing the disease, and the methods of treatment in hospitals and sanatoria. The survey also covers the activities of voluntary health agencies, including the work of the Holyoke Tuberculosis Association, and the organization and accomplishments of the Holyoke Department of Public Health.

—[USE WALKER]—

A professor at Georgia Tech has asserted that he always gives better marks to students who appear in his classes dressed in white shirts and wear neckties. One student, who was sent out of class to change his sweater for a coat, returned attired in a tuxedo.

**VARSITY BASKETBALL SQUAD
WHICH MEETS BROWN TONIGHT**



Back row: Manager Yates, Paul, Captain Nelson, Motter, McDowell, Johnson, Coach McCarthy.—Front row: Nee, Harrison, Lawson, Bates, Dickinson.

**CAGEMEN WILL PLAY
BROWN TONIGHT AT 8**

**First Dance to be Held After
Game With Norwich U.**

(Continued from page 1)
game will undoubtedly be much tighter, and both teams will have difficulty in running up a score. Motter, who was high point man in the last game is expected to shine for the Engineers again tonight, while Lawson and Captain Nelson will make the M. I. T. defense strong. They have both been playing excellent games, and, with Motter, form the mainstays of this year's quintet.

Freshman Game

Preliminary to the Varsity game the yearlings will meet the Brown frosh in their first game this season. The lineup of the freshmen that will start tonight are as follows: Jewell, center; Feustel, forward; Dame, forward; Haas, guard; Farnum, guard. Brockleman, Hayden, and Shea will act as substitutes for the first yearling string. Although this is the first collegiate game for the freshmen, most of the men on the squad saw action in the demonstration game last Friday night against the upperclass team.

On Wednesday, the freshmen will meet Harvard in the freshman gym at Harvard. The game, which was originally planned to be played in the evening, will start at 4 o'clock.

Will Hold Dances

Dances, which are to follow the basketball games this season, will start January 11 after the game with Norwich University. The Orchestra that will play at these after-game balls has not been decided, but the "Harvardians" are being considered, according to Manager Yates, who is planning the dances to be held this season.

A game with Clark is being considered although final arrangements have not been made, for the middle of February, on the 15th or 16th. The game with Clark will fill the place left by Maine which was scheduled to play the Engineers on February 15.

**HOCKEY TICKETS GO
ON SALE FOR GAME**

**Fans Have Opportunity to See
Sports Night as Well**

Sports Night this year will be augmented by a hockey game with Boston University, the first of the season. Since the game does not start until 8:15, those interested in watching the exhibitions as well as the game can spend an hour at the Institute and then go to the Arena. Tickets will be on sale opposite the Bursar's Office this afternoon, tomorrow, and Friday. The hockey fans are advised to procure their tickets early in order to be sure of receiving choice seats.

Skating Improves

A practise session was held yesterday morning at the Arena and one will be held tomorrow also. All the members of the squad are improving steadily and promise a real combination of fast skating and clever shooting. Since the introduction of evening practise the members of the squad have found an added attraction. Horace S. Ford, Jr., president of the Class of 1931, gave this away when he remarked, "As long as we practise just after the Skating Club has a tea party, it's O.K. by me." Penn Hall heartily endorsed this statement.

—[USE WALKER]—

**A. A. PICKS DELEGATE
TO SOCCER MEETING**

Edgar M. Hawkins '30, President of the M. I. T. A. A., was approved as delegate to the meeting of the Intercollegiate Soccer Football Association of America at a meeting of the Executive Committee of the M. I. T. A. A. held Monday afternoon. Robert S. Backus '31, was appointed alternate. A recommendation that John C. Lyons '32, be approved as Supervising Manager of Football for the season of 1930-31 also was made.

—[USE WALKER]—

Advanced botany classes at Northwestern University receive airplane rides over the Indiana sand dunes as part of their required work this year.

Girls living in Seattle and attending the University of Washington have formed an organization which is called "Town Girls." One of the activities of the group is the selecting of a room, in a place near the campus, which the town girls may rent for a dollar a night, when they wish to be near the campus for some evening affair.

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NOTICES - ANNOUNCEMENTS

Of General Interest

Faculty Club Luncheon Meeting Prof. W. Lindgren, M.E., Sc.D.
Thursday, December 12, 12 M., Walker Memorial,
Faculty Dining Room

Professor Lindgren, Head of the Geology Department, will speak on "Recent Industrial Development in Sweden."

Measurement of Air Flow Dr. Sanford A. Moss
Friday, December 13, 3 P. M., Room 5-134

Dr. Sanford A. Moss of the General Electric Company is giving a series of lectures on "Measurement of Air Flow." The subject of his second lecture will be "Flow Measuring Nozzles, Venturi Meters, Orifices in Thin Plates, Pitot and Impact Tubes."

Open to students and members of the instructing staff.

Popular Science Lecture Prof. F. K. Morris, S.B., M.A.
Sunday, December 15, 4 P. M., Room 10-250

Professor Morris, Assistant Professor of Geology; Geologist of the Roy Chapman Andrews Expedition to Mongolia, will be the speaker at the Popular Science Lecture which is under the auspices of the Society of Arts. The subject of his lecture will be "A Geologist's Travels in the Gobi Desert."

CALENDAR

Wednesday, December 11

- 5:00—Senior Dance Committee Meeting, Committee Room, Walker
- 5:00—Institute Committee Picture, Room 10-001
- 5:30—Varsity Soccer Picture, Homberg Infirmary.
- 6:30—THE TECH Banquet and Smoker, Faculty Dining Room, Walker
- 7:00—Alpha Chi Sigma Smoker, North Hall, Walker
- 7:20—Tech Show Chorus Rehearsal, Walker Gym
- 7:30—M. I. T.-Brown Basketball Game, Hangar Gym

Thursday, December 12

- 7:00—Tech Show Chorus Rehearsal, Walker Gym

Friday, December 13

- 3:00—Lecture on "Measurement of Air Flow", Room 5-134
- 5:00—Baseball mass meeting, Hangar Gym
- 6:00—T. E. N. Dinner, North Hall, Walker
- 7:00—M. I. T. A. A. All Sports Night, Walker Gym
- 8:00—Senior Formal, Main Hall and Lounges, Walker

Saturday, December 14

- 2:00—T. C. A.-T. E. N. Annual Christmas Party, North Hall, Walker
- 2:00—Gym Team Practice, Walker Gym
- 6:00—Chinese Electrical Engineering Society Meeting, Faculty Dining Room, Walker
- 7:30—Varsity Basketball Game, Hangar Gym

Sunday, December 15

- 4:00—Popular Science Lecture, Room 10-250

Monday, December 16

- 6:00—Dinner Meeting of Class of 1900, Walker
- 6:00—A. I. E. E. Dinner Meeting, North Hall, Walker

Tuesday, December 17

- 5:00—M. I. T. A. A. Meeting, West Lounge, Walker
- 6:00—Soccer Team Banquet, Grill Room, Walker
- 7:20—Tech Show Rehearsal, Walker Gym

UNDERGRADUATE

VARSITY SOCCER

There will be a picture of the Varsity soccer team taken at 5:30 today in the basement of the Homberg Infirmary.

—[USE WALKER]—

MEN AT M. I. T. INFIRMARY

Wednesday December 11, 1929
 Barker, William
 Schwartz, I. H.
 Serrano, R.

Brooks Hospital
 Nolph, J.

Homeopathic Hospital
 Huston, W.

—[USE WALKER]—

SENIOR PICTURES

Technique wishes to announce that all Seniors who did not yet sign up for a sitting are given an opportunity to do so today at the Technique desk in front of the Information Office, when they are getting their ticket to the Senior dance.

—[USE WALKER]—

BASEBALL MEETING

A baseball mass meeting will be held at 5:00 o'clock on Friday, December 13 in the Hangar Gym.

—[USE WALKER]—

WANDERING GREEKS

Technique wishes to announce that a booklet has been placed in the Main Lobby on which all "Wandering Greeks" are requested to sign their names.

—[USE WALKER]—

CHESS TOURNAMENT

The first round of the Chess Club tournament will end Wednesday, December 11. All those who have not played their matches by that date will be ruled out of the tournament.

—[USE WALKER]—

C. E. S. SUPPER MEETING

A supper meeting of the Civil Engineering Society will be held in North Hall, Walker, Wednesday, December 18, instead of December 11 as previously stated. A meeting of the officers of the Civil Engineering society will take place Monday, December 9, at 5:00 P. M. in Room 1-238. Immediately after the meeting the Technique picture will be taken.

M. I. T. A. A.

The following men still have varsity awards waiting them in the M. I. T. A. A. office.

- C. A. Fearuside '31
- W. W. McDowell '30
- I. F. Delahuty '30
- C. W. Gutierrez '31
- F. A. Merrill '30
- R. W. Ide Jr. '30
- R. Lamorette '31
- P. F. Riley '30
- J. E. Chibas '31
- S. C. Gawlowicz '31

—[USE WALKER]—

TECH SHOW CHORUS

The rehearsals of the Tech Show chorus will be held in the Walker Gym Wednesday and Thursday at 7:30

—[USE WALKER]—

TECH SHOW CHORUS

There will be chorus rehearsals Wednesday and Thursday, Dec. 11, 12, in Walker Gym at 7:30 o'clock.

—[USE WALKER]—

BASEBALL MEN MEET MANAGER IN HANGAR

At the Hangar Gym the first baseball meeting of the year was held Monday night at 5:00 p. m., with a large number of new men coming out. Prospects for the formation of a Varsity team were discussed and a petition drawn up. Manager White feels that with the new men and the men he has already seen a first class team can be formed.

—[USE WALKER]—

M. E. S. MAKES VISIT TO FACTORY TODAY

The Blanchard Co., manufacturers of vertical shaft grinding machines, will be visited today by members of the Mechanical Engineering Society, and anyone else who is interested.

The party will meet in the Main Lobby at 3 o'clock and will walk to the plant, which is near the Institute. It is expected that they will return by 4:30 o'clock.

—[USE WALKER]—

Statistics prove that athletes at the University of California are, in general, better scholars than the average fraternity man.

MORRIS GIVES FIRST LECTURE OF SERIES

Speaker Was Member of Third Andrews Expedition

(Continued from page 1)
 graphical and geological maps have been made for more than a thousand square miles of country; route maps for more than two thousand miles and geological cross sections and profiles for more than four thousand miles.

Lecture Will Be Illustrated

Professor Morris will in his popular address talk about his many experiences in the Gobi desert. He will illustrate his lecture with a series of colored lantern slides, models and a number of specimens. One of the most interesting of those is a fragment of one of the prehistoric dinosaur eggs discovered by the Andrews expedition in the heart of the Gobi desert.

—[USE WALKER]—

PROFESSOR LEWIS TO ADDRESS CHEM CLUB

Professor Warren K. Lewis '05 of the Department of Chemical Engineering will be the speaker at the next meeting of the Harvard-Technology Chemical Club that will be held next Tuesday at 8 o'clock in the American Academy of Arts and Sciences, 28 Newbury Street, Boston.

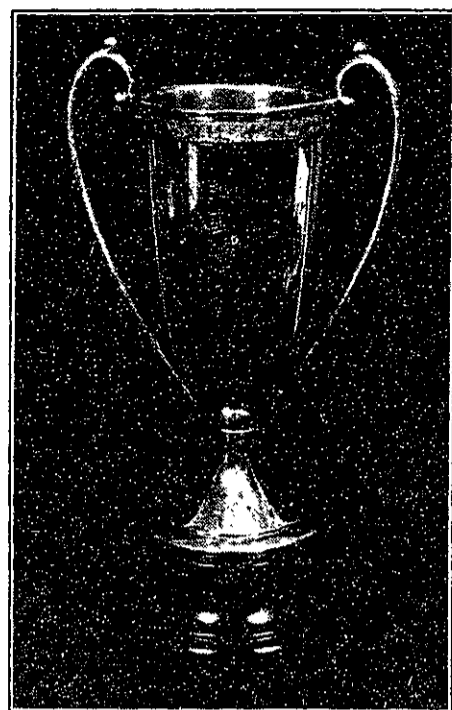
Professor Lewis will speak on "A Simple Derivation of Raoult's Law." Professor J. F. Hyde of Harvard will talk on the "Thermal Decomposition of Some Chlorophyll Derivatives."

—[USE WALKER]—

More than 2,500 students at Cornell have been given instruction in horsemanship in the last ten years. At present the U. S. Government has \$29,000,000 in horses, equipment and forage at Cornell. As a result the students want to start polo on a more comprehensive scale.

One of the social events at the New Jersey College for Women is a moonlight horseback ride. Treasure hunts on horseback are also very popular.

Publications' Cup for Winning Football Team



LECTURES CONTINUED BY SIR AUREL STEIN

"An Ancient Archive and the Ruins of Miran" is the theme upon which Sir Aurel Stein will lecture Thursday at eight o'clock in Huntington Hall, Rogers Building. This is the fourth lecture of the series of eight upon the general topic of "Explorations in Innermost Asia."

—[USE WALKER]—

CHRISTMAS TREE TO GLITTER IN LOBBY

This Saturday the Technology Christian Association will place an appropriately decorated Christmas tree in the Main Lobby. It will remain throughout the holidays for the benefit of those students who are not going home during this period.

FLYERS WILL MEET FOR WEATHER PLAN

Professor Rossby to Describe Scheme for New England

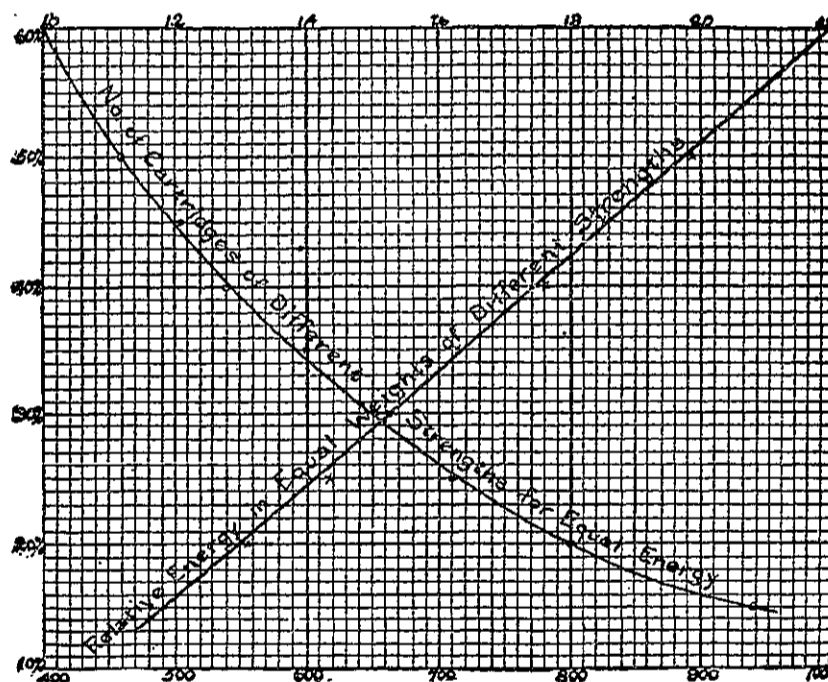
Professor Carl G. Rossby of the M. I. T. meteorological staff will outline a suggested first-stage observer scheme for the Greater Boston district at the second meeting of the Boston Commercial Airplane Operators and the weather experts of the Government. The group will assemble in the Curtiss Wright Flying Service hangar upstairs lounge room Friday afternoon of this week at 4:30 o'clock. All airplane pilots and flying company officials and employees are invited to attend.

It is hoped to have this scheme of operation in full development within the year. A bill is being presented to the State Legislature to provide for a Massachusetts Meteorological Commission to co-operate with existing flying weather agencies in securing the best possible weather service for the State.

—[USE WALKER]—

Following the Carnegie Foundation's recent report on athletics will be one on the relation of fraternities to college life and conditions. Five years are being devoted to this research.

Action of Explosives



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