

Sigma Xi Chapter To Initiate Men Next Wednesday

Over a Hundred Staff Members,
Graduates, and Seniors
Are Admitted

DEAN PRESCOTT TO TALK

First initiation of the Massachusetts Institute of Technology chapter of the Society of the Sigma Xi will be held next Wednesday at 4:00 P. M. in Room 6-120.

Dean Samuel C. Prescott will give an address at the initiation ceremony, entitled "Co-operation in Research: A High Objective for Sigma Xi at Technology."

At 6:30 o'clock in the evening an informal dinner will be held for the initiates in Walker Memorial.

Following are names of members from the staff to be initiated:

Professor Jason C. Balsbough, Professor James A. Beattie, Mr. Charles H. Blake, Professor Charles B. Breed, Professor Earle Buckingham, Mr. M. J. Buerger, Professor Otto G. C. Dahl, Professor Tenney L. Davis, Professor Raymond D. Douglass, Professor Herbert B. Dwight, Professor Harold E. Edgerton, Professor Philip Franklin, Professor Harold L. Hazen.

Professor Victor O. Homerberg, Professor Eberhard Hopf, Mr. John G. Kirkwood, Professor Warren K. Lewis, Professor William H. McAdams, Professor Hans Mueller, Professor Samuel P. Mulliken, Professor Walter H. Newhouse, Professor James F. Norris, Professor Bernard E. Proctor, Professor Kenneth C. Reynolds, Professor Walter C. Schumb, Professor John C. Slater, Professor Julius A. Stratton, Professor Elihu Thompson, Professor Manuel S. Vallarta, Professor Bertram E. Warren.

Members from the graduate student body are to be:

Samuel N. Alexander, Robert T. Armstrong, Arra S. Avakian, Gilbert Ayres, Neil S. Beaton, Baalis E. (Continued on Page 4)

PLANS FOR CLASS DAY ANNOUNCED; DR ROWE TO DELIVER ADDRESS

Redfield Proctor and Professor
Locke Will Present Class
Banner to Bell

Announcement of the plans for Class Day, June 4 at 2 o'clock in Walker Memorial was made last night by Proctor Wetherill, '34, Chairman of the Class Day Committee. The program will be as follows:

Presentation of class banner to Richard Bell, President of the Class of 1934, by the Hon. Redfield Proctor, President of the Alumni Association, and Professor Charles E. Locke, Secretary of the Alumni Association. Official welcome of the graduating class to the alumni body.

Presentation of the class ring to Walter H. Stockmayer, President of the Class of 1935, by Richard Bell.

Beaver Oration to be given by the man elected in the Senior class ballot. Address by Dr. Allen W. Rowe, ex-president of the Alumni Association and member of the Corporation. (Continued on Page 3)

MASQUE ELECTS NEW MEMBERS TO SOCIETY

Twenty-Four Men to Be Initiated
at Banquet Thursday

Twenty-four new members will be initiated to Masque, honorary society of Tech Show, at a banquet to be held Thursday at 6:30 o'clock in North Hall. Eleven of the new members are Seniors.

Professor William C. Greene, coach of Tech Show, will be the speaker at the occasion. Members of the advisory council, Assistant Bursar Rhind, Walter J. Hamburger, and James Donovan, will be present at the initiation banquet.

The new members are John C. Austin, '36; John B. D'Albora, Jr., '34; David W. Dale, '35; Gordon Day, '34; Louis B. C. Fong, '35; Foster R. Jackson, '34; Chandler Wentworth, '34; William B. Pritchard, '36; Sidney Grazi, '35; Carlos F. Lavevas, '35; Arthur L. Conn, '34; M. Scott Dickson, '35; Charles L. Austin, Jr., '36; A. Rufus Applegarth, '35; Wilfred R. Grosser, '35; Paul C. Grueter, '35; Martin A. Gilman, '36; Lawrence Canters, '36; Eino A. Jaskelainen, '34; Fred A. Prahl, Jr., '36; William W. Towner, '36; George E. Wuestefeld, '34; Robert M. Becker, '34, and Arthur B. Ellenwood, Jr., '34.

Hazen Appointed Exchange Prof.

Electrical Engineer to Serve
on Faculty of Ohio
University

In the first of a series of exchange professorships between the Institute and other educational institutions, Professor Harold L. Hazen of the department of electrical engineering has been appointed to serve next year as a member of the faculty of Ohio State University, President Karl T. Compton announced yesterday.

Professor J. F. Byrne, of the electrical engineering department of Ohio State, will in turn spend the coming year at Technology. Dr. Hazen's appointment marks the beginning of a general plan, announced last fall, for the exchange of Institute professors with other colleges and universities in this country and abroad.

The plan, a suggestion of Professor D. C. Jackson, is designed to broaden the experience and educational outlook of faculty members and to assimilate the best methods of teaching as applied in other schools.

Graduate of Institute

Professor Hazen graduated from Technology in 1924, receiving his master's degree there in 1929, and three years later, the degree of doctor of science in electrical engineering. In the same year, he was appointed an assistant professor in the department. Immediately following his graduation he was employed by the General Electrical Company at Schenectady and Pittsfield, and in 1927 carried on field work for the American Telephone and Telegraph Company at Richmond, Va.

At Technology Professor Hazen has cooperated in the design and construction of several important electrical devices, among them the network analyzer, upon which whole power systems are represented in miniature for the solution of circuit problems, and the differential analyzer of "Thinking machine," used to solve difficult mathematical equations.

Consultant for Stations

Professor Byrne is a graduate of Ohio State University, receiving his master's degree there in 1928. The following year he was appointed an instructor in the department of electrical engineering, where he now holds an assistant professorship. Professor Byrne has carried on extensive research in the field of electrical communications especially in relation to broadcasting frequency, and has acted as consultant for a number of broadcasting stations throughout the country.

FLYING CLUB HAS EIGHT TECH STUDENTS

Fly Average of One-Half Hour
Per Week at Airport

Every week-end a group of Technology students who call themselves the school Flying Club may be seen down at Wiggins airport in Canton watching the planes come in and take off. Some of the group, with the required number of hours in the air have regular licenses, while others are piling up mileage in order to qualify for licenses.

Participating in the flying club are Lincoln Orr, '36; Karl A. Gelpke, '36; Lawrence W. Sharpe, '36; Thomas P. Nelligan, '36; Arthur W. Gilbert, Jr., '35. On the average the men fly about one-half hour per week. "Once you've been up," is the unanimous sentiment of the club, "you'll want to go in for it in a big way."

Most of the planes at the airport, which has a branch in Providence, are available for operation by members of the club. The equipment at the airport includes a Spartan Lowing, a Kinner Sportster, the latest design in Kinner planes, with 125 horsepower, a Fairchild, '22, open monoplane, Fairchild, '24, cabin plane, a Taylor Cub, two Spartan biplanes, and three Stinson monoplanes.

The staff at the airport consists of a chief pilot, and two assistant instructors.

This reporter, who was shown around the airport two weeks ago, had his first flying experience in the Spartan biplane, J-65, with Arnold Chamberlain, chief mechanic, and limited commercial pilot, at the controls.

A 225 horse-power motor roaring, a fifty mile wind cutting over the top of the wind-shield, the plane took off, and in several minutes the airport was far below, a speck on what looked like a roadmap. On the turnpike the cars appeared to be almost standing still. After several minutes aloft, the plane idled over the field, preparing (Continued on Page 2)

Invent Automatic Tuning Device for Radio Receivers



EARNEST A. NORDBERG AND ARTHUR K. BAKER

WILDCATS WIN OVER ENGINEER STICKMEN

Forster Elected Captain for
Next Year After Game

The Technology's lacrosse season came to an unsuccessful close last Saturday afternoon, when the team was defeated by New Hampshire University, 8 to 4. A review of the game by quarters shows that at the end of the first period the Engineers were trailing their opponents, 3 to 0. In the second quarter the boys found themselves and scored two goals, the first by Forster, and the second by Halverson. The half closed with the score of 4 to 2.

In the third period Lufkin and Asch tallied for Tech, while Borger efficiently staved off the Wildcats to keep them from scoring. During the final period, New Hampshire applied pressure in a series of attacks that started its final rally. Coach Luther Gulick, handicapped by lack of substitutes, was unable to send in fresh replacements and consequently the final whistle found the Engineers on the short end of an 8 to 4 score.

After the game Robert Forster was elected captain for next year. With a large nucleus to be back from this year's team Coach Luther Gulick is optimistic about next year's prospects.

LIGHTWEIGHT CREW WINS OVER HARVARD

Freshman Boats Lose; Second
Heavies Trail at Yale

As a climax to a most eventful season, the Technology 150 pound varsity crew rowed to victory over the Harvard lightweight Saturday by the impressive margin of 2½ lengths. In spite of the stiff wind that caused miniature waves on the Basin, the boat made the fast time of 7 min. 16 sec. over the Henley distance. This was the last race that the men of this boat will ever row together, since three of its members are graduating this year.

In the other races on the Charles, the Crimson freshman 150 pound boat defeated the M. I. T. freshmen 150 pounders, the Harvard freshman second heavyweights defeated the M. I. T. entry and the second Harvard varsity 150's defeated the second M. I. T. 150's. Rowing against the Yale junior varsity at Yale, the Engineer second heavies lost by two lengths.

5:15 MOONLIGHT SAIL HELD NEXT THURSDAY

The annual moonlight sail and dance sponsored by the 5:15 Club will take place on Thursday, May 31, on the steamer Mayflower, which has been chartered exclusively for the occasion. The boat will sail from Rowe's Wharf at 8:45 P. M., and, following a cruise about the harbor, will dock at 1 o'clock.

Tickets at \$1.75 per couple will go on sale Wednesday, May 23, and will be on sale every day during examination week in the Main Lobby.

CROCKER SPEAKS AT INITIATION BANQUET

Six New Men Are Now Members
of Alpha Chi Sigma

Ernest C. Crocker, '14, was guest speaker at the initiation banquet of Alpha Chi Sigma, last Friday at the Hotel Commander. The banquet followed the initiation of six men into the student chapter of the honorary chemical fraternity. The new members are: James B. Allen, '36; Hebert M. Borden, '36; Louis J. Gillespie, Jr., '34; Thomas A. Terry, Jr., '36; Bernard Vonnegut, '36; and Roy P. Whitney, '35.

Mr. Crocker is now connected with the Arthur D. Little Co. His remarks were concerned with the "Contributions to Science from the Goat: Odors and Smells."

HUNT, RETHORST WIN IN NET TOURNAMENT

Tech Ace Seeded Number Two;
Team Loses Saturday

Gilbert Hunt and Scott Rethorst advanced in the New England Intercollegiate Tennis Tournament yesterday as they won their matches at Longwood. Rethorst scored an upset when he eliminated Kelleher of Williams, who is seeded number three, in straight sets, 8-6, 6-0. Scott had won an earlier match also in straight sets.

Hunt, who has been seeded number two, had no trouble in winning his only match of the day from Taylor of Springfield, 6-4, 6-3. Huston of Dartmouth who won the individual title last year has been seeded number one. The only Engineer doubles team, Captain Jim Eder and Scott Rethorst, will not swing into action until today.

The tennis team was nanded its second setback of the year last Saturday afternoon at the hands of Williams, 6 to 3. Hunt, Captain Eder, and Newman won their individual matches, while Rethorst, Ruckman, and Feuchter lost, but the team dropped all of the doubles matches.

VI-A STUDENTS READ PAPERS AT A. I. E. E.

Burns and Longley Will Speak
at Worcester Meeting

Gordon K. Burns, '34, and John F. Longley, '33, both of Course VI-A, will deliver papers at a regional convention of the New England Division of the American Institute of Electrical Engineers to be held in Worcester on May 16, 17, and 18. Longley will discuss a System of Police Communication, while Burns' paper concerns Television. The papers will be read on Friday morning at a session of students of the nineteen engineering colleges in this section of the country who will compete for the annual national and regional prizes offered for the best papers presented by students.

Invent Automatic Radio Tuner and Remote Control

Earnest A. Nordberg and Arthur
K. Baker, Both Juniors,
Are Inventors

DEVICE FIXES PROGRAM

Will Tune a Radio Receiving Set
in Advance for as Much
as Six Hours

Copyright, 1934 by THE TECH
Inventors of an automatic radio tuner and remote control are Earnest A. Nordberg, '35, and Arthur K. Baker, '35. This device is primarily designed to tune a radio receiving set in advance for any period of time up to six hours, so that after the device has been adjusted no further tuning in of programs is required during the time interval for which the device is designed to operate.

Remote Control Part of Device

Combined with this device is a remote control unit, not unlike present day systems in its function, but which differs greatly in its method of operation. Its chief advantage is its use of only five wires to the radio set instead of the customary twelve or more.

The main principle of the tuner is the clamping in place by springs of 32 closely spaced discs in positions corresponding to points on the dial representing different stations. One disc corresponds to a fifteen minute interval so that by setting a series of discs at the same point a station may be retained as long as desired. 24 of the locking units are reserved for automatic operation and eight for remote control. By the use of a double-field reversible electric motor, controlled by the discs a new station is tuned in.

Tuning Not Hampered

Located underneath the clock, which is set in a front panel of the (Continued on Page 4)

TRACKMEN CAPTURE ELEVEN FIRSTS AND DOWN BROWN, 92-43

Johnson Scores 13 Points; Bell
and Jenkins Each Win
Two Events

In its only home appearance this season the M. I. T. track team badly trounced the previously undefeated Brown team, 92-43, in a dual meet last Saturday at Tech Field. Stan Johnson made the best showing of the meet by winning the broad jump and the low hurdles, and placing second in the high hurdles for a total of 13 points. Captain Dick Bell and Mort Jenkins were tied for second honors with 10 points each. Bell won the 220-yard dash in 21½ seconds, equalling his own Institute record, and also won the 100-yard dash, while Jenkins won both the mile and half-mile runs.

Brown Loses Spinney

Brown suffered a severe loss when its star sprinter, Harry Spinney, sustained a strained leg while warming up for the 100-yard dash.

Out of a possible 15 first places, Tech captured 11. First places other than those previously mentioned were taken by Gorham Crosby in the 120-yard high hurdles, Johnny Talbert in the two-mile run, Bill Tomlinson in the high jump, and Gordon Donnan and Harold Dixon in a tie in the pole vault.

SENIOR WINS PRIZE GIVEN BY A. S. M. E.

Samuel Untermyer, II Awarded
\$50 Prize at Conference

Samuel Untermyer, 2nd, of New York City, a Senior at the Institute, has been awarded first prize for the best technical paper presented at the second annual New England student conference of the American Society of Mechanical Engineers, held at Rensselaer Polytechnic Institute on May 11 and 12.

The only Technology student to take part in the competition, Untermyer was given the award of \$50.00 for a paper on Ignition Promotion in the High Speed Diesel. Twelve other papers were presented at this meeting. He is a nephew of Samuel Untermyer, the distinguished New York lawyer.