

HARVARD DEFEATS ENGINEER SEXTET BY SCORE OF 7-2

Superior Crimson Teamwork
Outstanding Feature
Of Fast Game

PETERSON SCORES GOALS

Individual stars shone last night in the Harvard-M. I. T. hockey scrap, which Harvard won 7-2. The Harvard squad had the teamwork which the Tech team lacked. Nevertheless the Beaver players did great individual work. Outstanding players for the Tech team included Captain Hazeltine, Penn Hall and Peterson. The game started at 8:30 with a large M. I. T. rooting section present.

The game started with individual rushing on the part of both squads. Tech made the first try for goal with a long shot which was blocked by the Harvard goaltender. After a bit of scrimmage, Whiston made several very fine stops of almost sure Harvard shots. As the quarter progressed Ben Hazeltine made several nice offensive drives in Harvard territory, only to lose the shots since his teammates were not there to help him out. He also did some very fine defensive work in backing up the forward.

Harvard Scores Three in First

For ten minutes neither team could bring forth a score. Fine and careful scrimmages characterized this early part of the game. Then in a general mix-up around the M. I. T. goal the puck eased itself into the wicket. Martin was credited with the goal. In a few seconds Barry Wood did the same thing, making the goal with about all of the two teams around the wicket. Then in individual efforts Hall and Orbanowski carried the puck far into the Harvard territory, only to be blocked by Captain Ellis's careful guarding. With seconds left of the first 15 minute quarter Wood slipped along one into the Beaver wicket. The score at the end of the first quarter was 3-0.

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DESCRIBES DIESEL POWERED MOTORBUS

S. A. E. Gives Demonstration Of German-Built Bus

Construction features of the Mercedes-Benz Diesel-powered motorbus were discussed by Mr. J. M. Pratt, of the National Railway Appliance Company, at a meeting of the M. I. T. chapter of the Society of Automotive Engineers last Wednesday.

Following the meeting, which was attended by about sixty persons, the bus was demonstrated on the campus, and those present were taken for a ride through Cambridge.

This bus is powered by a six-cylinder solid-injection Diesel engine, which will operate on almost any combustible liquid. No ignition or carburation systems are required, since the accurately metered charge of fuel oil is injected into the highly compressed air in the cylinder at the time when the air is at its highest temperature.

Operating expenses of this type of bus are said to be about one quarter of those of the usual gasoline-operated kind; otherwise, this bus is similar to others.

Course XVI Staff Members Perfect Device to Improve Wind Tunnel

Work on Model Coaster Near Completion After Three Years' Effort

Apparatus, which so far as is known is the first of its kind in existence, has been designed by Dr. Richard H. Smith, '19 and Mr. J. Van H. Whipple, '21, both of the Aeronautical Engineering department, and is known as the model coaster. It is to be used in aeronautical research projects involving problems of drag and air flow on models of airfoils, disks, spheres and other shapes. The coaster is now being installed in the steam and hydraulic laboratory.

At present models are universally tested in wind tunnels, which consist essentially of a large tube through which air is sucked at high velocity

Grave Walking Initiate Arrested in Cemetery

Motorcycle Officer Michael Merrigan of the Boston Police force does not believe in ghosts. But yesterday morning at 3.30 A. M. his convictions were almost shattered, by a Technology student. Merrigan was riding along Commonwealth Ave. and was just passing Evergreen Cemetery at the Chestnut Hill Reservoir, when he noticed the figure of a man running among the tombstones. Immediately the officer stopped and went in to investigate. He shouted to the figure to halt but it was not until he threatened to shoot that the man stopped.

Upon questioning he proved to be Zebulon L. White, Unc, who was being initiated into a fraternity. His part of the initiation consisted of visiting a cemetery, finding a tombstone with the name Wilson on it and taking its measurements. He was brought to the Brighton Station, where he was released after officials of the Institute corroborated his story.

Crewmen Urged To Foster Friendship Among Themselves

Sutherland, Haines, MacLeod Speak at Annual Banquet Of Boat Club

Good fellowship and a spirit of friendship among the members of the crew was stressed as an important requisite for success at the annual banquet of the M. I. T. Boat Club, held last Wednesday evening in the Grill Room of Walker Memorial. Forty-two crewmen were present, thirty of these being members of the boat club and the other twelve Freshmen.

William P. G. Hall '31, Commodore of the Boat Club, acted as toastmaster and introduced Coach Sutherland of the freshman crew as first speaker. Coach Sutherland stated that he had deepest confidence in the freshmen, and that he would eventually develop a freshman crew to beat the varsity. Bertram H. MacLeod '31, captain of this year's crew, then spoke, and asked the team to work together toward the realization of that spirit of friendliness which would mean so much to the success of the team this year.

The amiable Bill Haines, coach of crew, was then introduced, and in a spirited speech asserted that he hoped Coach Sutherland would succeed in beating a Varsity Crew with freshmen. He told the Varsity men to try to take their training more seriously and keep in condition despite the work which he knew each man had to do to keep up in his studies.

He also urged this spirit of good fellowship, pointing out that the success of last year's Junior Varsity was due in no little measure to the fine spirit existing between the members of the crew. He advocated "boiler room conferences," in which the men gathered together in the boat house and held informal discussions among themselves. His speech closed with a hearty Merry Christmas to all present.

Eight new men were initiated into the club just before the banquet. They were: R. M. Trimble, E. F. Thieler, J. W. Regan, R. H. Valentine, W. C. Miller, and R. P. Glenn, all of the class of '33; R. H. Yates '31 and D. W. Fetters '32.

KEEN COMPETITION IS PREDICTED FOR MEET ON BOARDS

Handicaps Will Be Cut Down
To Give All Men Equal
Opportunity

SEVEN RACES SCHEDULED

With two weeks of intensive work-outs on the new track M. I. T. runners are rapidly getting on to the knack of running on the boards and the times are showing a decided improvement. The second handicap meet of the winter will be held tomorrow afternoon with seven events being run off and the competition is expected to be as close as it was last Saturday with somewhat better times.

Coon and Benjamin will continue their rivalry in the high jump which is one of the events scheduled. In the Interclass Meet Benjamin beat out Coon by a small margin and the Sophomore star is out to even the score with his old rival. Grondal, the captain of the track team is entered in the shotput and will compete from scratch. This means that he will have to be at his best to cope the event for there are several promising freshmen entered, including Lockhart who placed second to Grondal in the Interclass meet. Winerman, Ghirardini, and Jewett, all of whom have shown much promise in practice. These yearlings will be given handicaps, probably larger than they really deserve, and Grondal will have to put the shot well over 40 feet to clinch first place.

Cummings to Run 60 Yards

The other events to be held include 60 yard dash, 45 yard hurdles, 440 yard run, 880 yard run, and the mile run. Cummings, the freshman who equalled the 40 yard dash record will probably be entered in the 60 yard dash but he will have plenty of competition from Huff, Bell, Dworzecki and Kinraide. Bell, in particular is a very promising sprinter. He got away to a poor start in the race last week but came fast at the finish to place fifth.

Due to the fast times which have been turned in recently by the members of the squad, there will be a wholesale cutting of handicaps for the coming meet to allow all the participants an equal chance of winning. The meet is scheduled to start at 2 o'clock.

Actor Presents Lecture On Shaw

Maurice Colbourne Discusses Famous English Writer As Countryman

"We never permit anyone to say things about us as we permit and gladly permit Bernard Shaw to say," stated Maurice Colbourne at a lecture given last Wednesday afternoon in Room 1-190 under the auspices of Professor Robert E. Rogers of the English Department.

Mr. Colbourne is an English author, actor, producer, and economist, who will appear shortly in Boston in Shaw's play, "The Apple Cart". He is well qualified to speak as he not only has written a book, "The Real Bernard Shaw" but is a personal friend of the eminent playwright.

Wit Permits Levity

"We Englishmen allow Shaw to think for us just as we let outsiders govern us, for the outstanding prime ministers during the past decades have been Welshmen and Scotchmen. Shaw's wit permits him to say such things and it is his wit alone that has enabled him escape the modern equivalent of the snake."

Shaw's popularity often puts him in the most embarrassing situations, despite the fact that he leads a quiet private life. Like all good citizens he pays his bills in the orthodox manner by check. Last year he sent to the bank for his pass book to determine his balance and discovered that for over three months no checks had been presented to the bank for collection. Tradesmen had been selling the checks for Shaw's autograph and were obtaining more than the face value of the check. Shaw now is compelled to deal in cash only.

Good Manners Essential

"Shaw's autograph has become quite valuable so that the day has gone when one could write and ask for an

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Freshman's Fasting Is In Vain As Scales Err

In the mind of one freshman scales have suddenly taken a most important position. The hapless individual was entered in the All-Technology wrestling tournament and two days before the matches he found to his utter dismay that he was four pounds above his class weight.

Immediately he began a period of fasting and thirsting which threatened to beat the records held by the Sahara camels. Finally, substantially weakened by his hours of self denial, he went to weigh in. Lo and behold he was three pounds underweight in his class! Rushing to the scales where he had been accustomed to weighing himself he found that they overweighed by three pounds. All his suffering had been in vain and for the first time this freshman discovered that there was one thing harder than becoming an Engineer and that was becoming a wrestler.

Engineer To Lead Colloquium About Newest Insulations

General Electric Expert Will Discuss Progress In Dielectrics

At the colloquium of the Electrical Engineering Department next Monday and Tuesday, Mr. G. M. J. Mackay of the Research Laboratory of the General Electric Company will talk on "Insulation", discussing materials, their electrical characteristics such as dielectrical loss, conductivity, etc., and examples of application, as in high tension.

In regard to the problem of suitable dielectrics, the Electrical Engineering Department issues the following notes: "Electrical insulation includes a great variety of materials of very different chemical and physical characteristics. Because of this complexity and the difficulties involved in producing perfectly homogeneous compositions, rules for design have been based almost entirely upon empirical data.

Progress Made Recently

"Some progress has been made during recent years, however, in the understanding of some of the more fundamental causes of insulation failure, and industrial applications have been made such as in high tension cable, where the operating stress has been doubled."

Mr. Mackay will lead the presentation on Monday and Tuesday from 2 o'clock to 4 o'clock in Room 10-275. This colloquium is open to Seniors, Graduate students and Junior honor students of the department of Physics, Chemical Engineering, and Mechanical Engineering. Members of the instructing staffs of these departments are especially invited to be present. As the presentation and discussion will occupy both days, students attending are expected to so arrange their work as to be present on both occasions, out of courtesy to the leader and in order that they may derive maximum benefit from the presentation.

Students May Have Personal Interviews

Students who especially desire to have a personal interview with Mr. Mackay should leave their names with

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TEAMS PRIMED FOR DECIDING GRIDIRON BATTLE TOMORROW

Pi Delta Epsilon Championship
At Stake as THE TECH
Encounters T. E. N.

HARD BATTLE EXPECTED

Two confident publication elevenens will meet on the frozen ground of Tech Field tomorrow afternoon at 2:30, in the final game of the Pi Delta Epsilon football tournament. The husky warriors of T. E. N., victorious over the Voo Doo by the score of 7 to 0, will meet the hardy gladiators of THE TECH, at whose hands Technique suffered a lasting defeat to the tune of 12 to 0.

Both teams are being whipped into shape in preparation for the battle. Gene Cary, '33, in charge of the T. E. N. aggregation expects to use practically the same team which beat Voo Doo, in tomorrow's encounter. Much will no doubt depend on the end runs of Lloyd, who will in all probability act as quarterback, and the plunges of Shelby and Hall. Carey, the center, and Dick Kropp, 200 pound right guard should also prove a hindrance to any offensive attempted by the opponents.

THE TECH, on the other hand, will have a powerful backfield which will include Paul Davis, Ralph Davis, and Fred Wehmiller, which so successfully crushed Technique. Gil Roddy, who intercepted a pass and 30 yards for a touchdown in the last few minutes of the game with Technique, will act as quarterback. The line will be featured by Bill Barker, Stu Fleming, Dick Craig and Ed McLaughlin, and is the same line which held back the Year Book delegation.

The game should be interesting and not without its thrills. Since the final game between THE TECH and Voo Doo ended in a tie last year, the cup which is given to the victorious publication has not yet been officially won and this year will be the first time it will be awarded, if the game does not result in a tie. For this reason, each team will fight its hardest to have its name engraved on the silver loving cup.

CHEMISTS PLAN SOAP FACTORY INSPECTION

Double Trip Will Be Made to Accommodate Members

Owing to the difficulty of getting all members to go on the same day, a double trip will be made this week by the Chemical Society to the Cambridge plant of Lever Bros., on Wednesday and Thursday, Dec. 17 and 18. Lever Bros. is a world wide association of soap manufacturers, making the well known products, Lux, Rinsol, Lifebuoy Soap and other soap products, as well as dynamite, glycerine and a glycerine used as an anti-freeze in automobiles.

These products are supplied to the United States by the Cambridge plant, and by a new one at Hammond, Ind. The company has its main plant in Port Sunlight, England, and maintains plantations in South Africa, where palm and palm nut oils are produced. An idea of the care with which the soaps are made can be obtained from the fact that thirty thousand tests are necessary per week.

Boundaries of the United States Show Many Strange Eccentricities

Lack of Geographical Data By Treaty Makers Resulted In Corrections

One of the striking things about a map of the United States is the many eccentricities of State and National boundary lines. An account of these oddities and how they came about is given in considerable detail in a bulletin recently issued by the United States Geological Survey. The causes that have resulted in the many peculiar quirks that grace the boundaries of some states range from compromises made to adjust differences and the fact that a few olden monarchs in Europe never learned their geography lessons.

An example of the irregularities that result from adjustments is the

"Southwick Jog" which appears on the boundary between Massachusetts and Connecticut, established because in adjusting errors in the boundary as previously run by compass, a long narrow strip of land was given to Connecticut, and the "jog" ceded to Massachusetts was intended to be an equivalent area. It is said that the "panhandle" at the southeast corner of Missouri resulted when a prominent landowner tried to have his plantation included in the new state.

On the northern boundary of Minnesota is a projection which included a land area of about 124 square miles separated from the main part of Minnesota by the Lake of the Woods. It resulted from the use of inaccurate maps by the treaty makers and has been described as a "politico-geograph-

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