Mass., Tuesday,

Discuss Self Achievement

E.E.'s To Seek Possibility of New Changes

On Friday evening, December 7, n the EE Lecture Hall a forum for the tentative Achievement Plan for the Electrical Engineering Department will be held. It is important that all undergraduates members of the department be present as it pertains to possible changes in departmental policy. Any outcome will be determined by the opinion of the majority. It has been ruled that faculty members be excluded at this time so that non-restrained discussion may prevail.

The birth of the forum is attributed to the belief that students may more creative work is present.

The major points of the plan deal icies regarding homework, lab work, and tests. In regard to the laboratory work, it is proposed that measures be taken whereby a student will be able to call his lab work and the apprentices. reports entirely his own. The policies regarding homework, too, are likely to change under this new tentative plan. It is proposed that in addition to the regular assigned problems, there should be given out comprehensive problems which would count heavily in the final mark. In this way, the homework would clearly show the understanding of the subject matter by the student and his capability in solving problems which are not of the standard type. Whether a proctor is present or not in exams is another detail to be determined by student opinion.

It is quite clear that changes and modifications must be made if such a plan is to be accepted or be a the faculty in this respect.

enable the student to get at the 'meat" of such work. Some suggestions are to re-word the syllabus, to insert leading questions, and to have more of the actual report writing in the lab itself.

The good to be derived from any such system can best be summed up in the views that a more professional outlook will be obtained by the student, a more mature outlook will prevail, and greater pride in personal achievement will be had.

Members in the panel will consist of Al Hansen, Pete Quamo, Mike See E. E. FORUM-Page 4

Little-Known Facts On Washburn Shop **History Revealed**

Articles Once Produced Brought Fame to Tech At Exhibitions in 1800's

The Washburn Shops, located in the southeastern part of the campus, contain within their red brick walls as many historical memories as the famous Boynton Hall, first building on the Tech campus. In 1867, Ichabod Washburn built this machine shop for the purpose of not only manufacturing a product but also for employing apprentices who were to be "suitably taught in all the departments of practical mechanism, workderive more benefit from their ing of wood and metals, so as to courses if individual thinking and make them so far as may be, skillful workmen, and fitted to carry on a DAYS BEFORE business for themselves, after they chiefly with the modification of pol- leave the shop at the expiration of their apprenticeship." The shop was directed by a superintendent, appointed by the trustees, who directed not only the shop workers but also

One of the first articles manufactured by the Washburn Shops was an adjustable drawing stand. This was a very popular item and these drawing stands, together with drafting tables, are still being manufactured today, and many of the finished products can now be seen around the campus in various class-

"The first large machine made in the iron shop was a 16-inch lathe with hardened steel bearings, spindle and belt cone. The shop also produced screw machines, grinding machines, mandrils, drills and fixtures. Pattern making, scroll sawing, wood turning, and the production of builders' finish were carried on in success. Co-operation is assured by the wood shop. As specialties the shop introduced the construction of facilitate report writing, to eliminate laboratories." To this date the some of the "horse-work", and to Washburn Shops are manufacturing drill grinders for use in industry, and there is a sample of one of these in the tool room of the shop.

The students who worked as apprentices in the first days of the shop were first employed in the making of small articles from wood. As they became more skilled they turned to making drawing stands, and finally, as seniors, were employed in making parts for speed- and engine-lathes. The articles produced by the skilled workers in the shop with the aid of the apprentices brought recognition See WASHBURN SHOP-Page 4

E. E. Forum To DEBATING CLUB TO FEATURED AT ASSEMBL



Ken Reeves to Play at I.F. Ball

ELEVEN DATING I. F. WEEKEND

Less than two weeks remain before one of the most outstanding events on Tech's social calendarthe Interfraternity Ball. December 14 will be the date of this year's formal and once again, Alden Memorial will be the scene of the ball. The formal will have a definite military flavor in that R.O.T.C. uniforms will be accepted as proper dress for the occasion. In addition, the receiving line will be made up of Col. Foster and Mrs. Foster, Col. Harris and Mrs. Harris, and Admiral Cluverius. The music for the affairjust the kind you'll want to hearwill be provided by Ken Reeves and his 15 piece orchestra. As you probably know, Ken played at last year's formal and is expected to be just as wonderful as he was at that time The dancing will take place from 9:00 to 2:00 o'clock with some spe cial entertainment planned for intermission. Four members of the or-Suggestions have been made to apparatus for chemical and physical chestra will present at this time a session featuring really tremendous Dixieland Jazz, but of course, there will be special goings-on at the various fraternities during the intermission for those whose preferences lie in that direction.

> Saturday and Sunday of the weekend will be taken up with special parties and events planned by the fraternities. However, on Saturday evening Tech's basketball squad will tussle with the Jumbos of Tufts with this game usually being a must for everyone.

Tickets for the I.F. Ball are four to the Institute as they won prizes dollars, and are on sale now at the various fraternities on the Hill.

CHEM ENGINES ARE TO SPONSOR SOCIAL EVENT

Unit OP Labs To Be Rocking to the Rhythm Of The Boyntonians

Mention the phrase "romantic place" to the ordinary person, and he immediately envisions a cozy, out-of-the-way rendezvous, flickering candelight, the low murmur of voices, the gentle tinkling of glasses, and soft, slow music. But to a Chem Engine what could be more romantic than to dance to the lilting strains of Boyntonian rhythm echoing through the vast maze of pipes and stills of the unit operations lab.

Come to Salisbury Friday evening, December 7. Draw your freshlybrewed coffee directly from a distilling apparatus set up by the enterprising engineers, and top off the steaming beverage with a dash of cream from a separatory funnel. Incidentally, 250 ml. beakers and glass stirring rods will be furnished by the management, instead of ordinary cups and spoons, which mere mortals use. There will be sandwiches, hot dogs and various other delectables 'en masse".

Dancing will not be the only activity on the agenda. The versatile Chem Engines are planning to perform several humorous, but nevertheless amazing, feats of engineering with their impressive collection of gadgets. If you want to make a big hit with your date, you can get her to stand over the compressed air hose which will be concealed on the

The evening promises to be an unforgettable one, as last year's was, so all Chem Engines and Chemists Come and pack the laboratory to Named Campus so all Chem Engines and Chemists capacity. The AIChERS will no doubt be there to add a little color Correspondent to the affair, even at the prospect of a dry evening. Freshmen interested are all cordially invited. The admission fee? . . . why there isn't any everything is free. Don't wait; get your date.

Peddler Notice SENIOR PICTURES ARE DUE

All Sophomores interested in Writing or Business can drop a note in The Peddler box in Boynton.

Tech Team to Meet Harvard on Wage **Price Control Issue**

Resolved: That the Federal Government should adopt a permanent policy of wage-price controls. This question, the national collegiate debate topic, will be the subject of this week's assembly program. Tom Rothwell and Bill Bicknell of Tech's varsity debating club will support the negative against the Harvard University affirmative team.

The Debating Club is one of the most active organizations on campus. Since September they have had 32 intercollegiate practice debates, most outstanding of which was their victory over the West Point team during a meet at the University of Vermont. It was then that they also defeated the Dartmouth club.

The next debate for Tech will be Tuesday evening December 4 at Holy Cross. Two important events are being planned for February, a novice debate at Tech for Worcester schools, and the M.I.T. and Boston University tournaments. Sometime this year the team will be in Brooklyn for the West Point regionals.

Dr. Howard Moore, coach of the Cark debating club will judge the Harvard meet. The scoring of debates include analysis of the question, evidence presented to support the argument, clashing or how close to the question both sides debate, and public speaking.

Considering the national importance of the topic and the creditable work of the Debating Club future debates are to be followed with

W. J. Cimonetti

William J. Cimonetti, '53, has rein the field of Chemical Engineering cently been appointed to the position of campus reporter for the Worcester Telegram on the Worcester Polytechnic Institute campus. "Cim" will work with Steve Donahue and Hugh McGovern in reporting every newsworthy item that originates at WPI, or is in any way connected with WPI organizations and activities. The campus reporter intends to obtain his news through the public relations office, but it is possible to contact him through the "C" box in Boynton Hall, his personal box in the Electrical Engineering Department, or at 26 Institute Road. The telephone number at that address is 5-2024.

TECH NEWS

Published Weekly During the College Year by The Tech News Association of the Worcester Polytechnic Institute

Associated Collegiate Press

EDITOR-IN-CHIEF Edward G. Samolis

MANAGING EDITOR John M. Tracy NEWS EDITOR Joseph Lojewski SPORTS EDITOR

FEATURE EDITOR Richard Cavanaugh SECRETARY Richard C. Gillette ASSISTANT SPORTS EDITOR Vyto Andreliunas

Michael J. Essex, Jr.
BUSINESS MANAGER
Robert Favreau
CIR

ADVERTISING MANAGER Ronald Thomps ASSISTANT MANAGER Walter Stewart

CIRCULATION MANAGER Robert Johnson
ASSISTANT MANAGERS
Timothy V. O'Toole, Jr.
David Fairbanks

James O. Sullivan Richard Samolis Robert Menard Roger R. Osell

JUNIOR EDITORS Stanley Berman Donald Oliver John Gearin Paul M. O'Neil COLUMNIST Alfred C. Bafaro REPORTERS

Francis Madigan William J. Cimonetti Richard T. Gates Bernard J. Petrillo

Paul E. Jalbert W. Whitman Mowry Henry F. Spadoni Donald R. Campbell

BUSINESS ASSISTANTS omas O'Cont Edward S. Baldyga Henry K. Burger Robert Junior PHOTOGRAPHER Robert Niro Robert Meyer Robert H. Pearce

Joseph Fratino John Calhoun William V. Raszka

John F. Malloy

John J. Gregory

CARTOONIST

FACULTY ADVISER Prof. John H. Mackenzie

Robert C. Jacino Thomas R. DeLuca

News Phones: Business 5-2024 Editorial 5-2024

TERMS

Subscription per school year, \$2.00; single copies, \$.10. Make all checks payable to Business Manager. Entered as second class matter, September 21, 1910, at the Post Office in Worcester, Mass., under the Act of March 3, 1879.

111 PLEDGED BY FRATERNITIES ON SATURDAY

Roy Wise

Sixty-eight Percent Of Freshmen Class Join Campus Houses

The following are the men pledged to the various fraternities on December 1:

Theta Kappa Phi

Bouvier, E. S. P. Costanzo, D. J. Crook, R. F. DeLuca, R.A. Fogarty, J. D. Grenier, D. J. Healey, T. J. Horan, F. J. Junior, R. A. Kelly, B. J. Leavitt, P. M. Ledoux, R. F. Leland, J. K. A. Lemieux, R. P. Lucey, R. J. McNamara, D. M. Mathews, J. S. Methee, G. R. Quintin, R.P. Remillard, J. F. Ryan, J. K., Jr. Saucier, F. L. Schultz, R. J. Venezia, R.A. Wakeen, K.L.

Alpha Tau Omega

Dayton, D. S. Givan, J. H. Lawhon, C. L. H. E. ikkanen. Manseau, H. L. Mongeon, R. K., Jr. Morgan, R. D. Rafferty, M. A. Rice, W. D. Richards, J. F. Sauer, H.S. Twitchell, A. R. Walters, C. F. Welsh, J. W.

Sigma Alpha Epsilon

Carlson, D. M. Clampett, J. E. Cutting, C. S. Francis, G. B., Jr. Goodwin, J. R. Rader, R.A. Sansoucy, R. J.

Sigma Phi Epsilon

Arms, C. P. Bell, H. C. Bloom, E. M., Jr. Butterworth, R. C. Campbell, B. M., Jr. Gray, D. E., Jr. Gustafson, R. W. Horstmann, P. H. Hurd, R.A. Johansson, E. W. Lord, A. W Moorhead, W. H., Jr. Neunherz, R. K. Olson, P. E. Power, W. B. III Rudman, A. W. Schneider, E. F. Schoppe, E., Jr. Sealy, B. A. Sechrest, R. C. Stempel, R. C. Warren, J. A.

Phi Gamma Delta

Brown, G. B. Burden, M. J. Clevenger, S. C. Drake, F. E. Goodwin, R. E. Flynn, E. P. Funsch, J. P. Hering, F Jones, P.C. Oldham, R. C. Smith, H. F.

Alpha Epsilon Pi

Goldman, R. L. Henschel, L. H. Levine, M. S. Schwartz, A. Y. Stahl, R. A.

Phi Sigma Kappa

Barton, H. S., Jr. Berthiaume, R. B. Brown, P. W., Jr. Cahill, E. M. Chan, M. C. H. Crawford, F. J. Davini, K. J. Ducayet, K. S. III Dudevoir, W.G. Edfors, J. E. Gagnon, L. A., Jr. Gilbert, J. P. Hoyle, R. F. McBride, R. J. Mahar, T. F. Pratt, D. A.

See 111 PLEDGED-Page 4

THE GREEK AROUND

By AL BAFARO

Phi Sigma Kappa

A lull settles over 11 Dean Street as the brothers return to the books after a turkey dinner and three nights of rushing. But before we packed off for home and the big bird, a successful weekend party was held at the House. The Tech Carnival, the faculty square dance, and a House party held the spotlight along with the girls. Everyone laughed and had fun, but I think we can award the prizes to Wayne Robertson, for his Russian Whiffenpoof song, and to Frank Flood, for his everpresent deep-throated cackle. Mr. and Mrs. Jim Donahue held the big ruler, with brothers taking shifts in baby-sitting for the couple.

The new pledges will get a taste of fraternity life immediately, with blind dates getting the call on a Pledge Nite party. We hope this to be a huge success, and we promise to Freshman first choice, with a grin. The brothers will take what the pledges can't get to in time. Wonder who will win.

As to rushing, the orchids go to Kenny Sorlin and his Arthur Godfrey piano playing. His one-man songs kept everyone in high spirits.

Theta Kappa Phi

Theta Kap proudly welcomes its new pledges. The new men were honored at a dance Saturday night, and the annual pledge banquet Sunday night.

The party, planned by Dud De-Carli, was a huge success. Dud delved further into alchemy, and came up with a new concoctionpineapple cranberry punch, which promises to compete with his worldfamed Knickerbocker Tankard.

The pledge banquet, held at the Coronado Hotel, had Professors Scheifley and Higginbottom as speakers.

John Gearin, a member of our Slop-a-long Kaplan and his ation, for the past fourteen years was was held up by an unexpected series presented with the National Distin- of events. Paul "the Claw" London guished Service Award by George Uihlien, National Executive Secre-

Sigma Phi Epsilon

Sigma Phi Epsilon is proud to be able to welcome its new pledges into the fraternity. This fact was exemplified on Saturday night when all the brothers got together and had a party in honor of these new men. Each year everyone looks forward to this day which brings to a close the main rushing period of the year; it is fitting and proper that we should celebrate-and we did! It is safe to say that Sig Ep had a "terrific time" on the night of December 1st.

The interfraternity relay team from the house-composed of Bruce Campbell, "Pete" Peterson, Roy Wise, and Bob Eldridge-has shown great spirit and fight up on the gym track. They are improving daily and should be tough to beat from here

Just before the Thanksgiving holiday John R. Black became pledged to Sig Ep. John, a transfer from Coast Guard Academy as of this year, should be congratulated; two weeks ago he became a married man.

Alpha Epsilon Pi

In a realistic atmosphere of the old west, complete with hay, horses, chuck wagon, and other sundry items; the A.E.Pi fraters welcomed their new pledges into the fold last Saturday night.

Guests arrived in jeans, plaid shirts, hats, and other pertinent paraphernalia and were treated to a variety of entertainment. Dancing of alumni are expected to attend, and stopped for three reels of western the stories will flow as old acquaintthrillers direct from Texas featuring ances are renewed.

advisory board, the Aquinas Associ- riders. After the movie the party and his partner Ernie "Dollface" Demar stopped the proceedings with a hold-up. The masked intruders demanded money, jewels, and food. Fortunately we were happy to have Dauntless Dave Elovitz, Texas Ranger, in the immediate vicinity, Armed with nothing but sixteen guns, seven knives, a bull whip, two swords and a water pistol, Dauntless Dave saved the party.

Dinner was rustled up on an oldfashion chuck wagon with brother Dick Meirowitz doing the cheffing, After chow, a Boston guest, Charlie Tex" Eisenberg treated the folks to a few choice tunes on his guitar.

The party was so successful and the atmosphere so realistic that during the course of the evening a number of uninvited horses wandered into the stable to partake in the enjoyment.

Sigma Alpha Epsilon

The S.A.E. relay team made its debut in I.F. competition by winning its first race in the excellent time of 2:25.2. Under the professional training of coach Don Post, the boys have rounded into shape nicely and should be one of the contenders for the trophy.

Last Saturday night the Sig Alphs staged their annual Pledge Dance with dancing to the music of Al Hakey and his Orchestra. A hearty welcome was extended to the new pledges and a good time was had by

At the present time the brothers are looking forward to the annual Alumni Banquet which is to be held this coming Sunday. A large number

Alert Frosh In Possession Of Goat's Head

Alas and alack, there is much weeping and gnashing of teeth among the downcast heroes of the Class of '54. Great blows were struck at the class honor on the fateful night of towards the Goat's Head, but they classic example of the efficiency of the Class of '55.

The whole sad affair began with the final act of the Tech Carnival. to them that ain't got. Immediately, the Frosh dashed to the stage to capture the coveted idols. But just as suddenly as it had appeared it was hoisted out of sight and supposedly disposed of. However, the conspirators had failed to reckon with the Freshman sentries posted outside of Alden. These sturdy protectors of class spirit quickly reported that the Head had not been carried off in the waiting car but must still be in the building. In-

trepid adventurers searched the far reaches of upper Alden, discovered the hiding place, overpowered the guard, and waited for reinforcements. In a twinkling, three platoons were assembled and assigned to escort the trophy to a waiting vehicle. When last seen, the car was plummeting through the darkness in the general direction of Lincoln Square.

There you have it. The downfall November 16. Not only did the of '54 was complete. Joyous throngs Sophs fail to win the Tech Carnival of Freshmen quickly spread the news. Cup along with a valuable point The outside world was informed by radio while the Sophs were stunned also lost actual possession of that by the announcement at the Carnirevered symbol of interclass compe- val. However, there is a ray of hope. tition. How this major catastrophe Already machinery is in motion for befell Bill Taylor and his boys is a the creation of a Goat's Rules Committee. The Class of '54 will still have a chance to recover the Head by fair means or foul. Of course, the showing of the Goat's Head after them that has, wish all the luck (?)

REMEMBER

ONLY 3 MORE WEEKS BEFORE CHRISTMAS Use Our LAY-AWAY PLAN

Your Neighborly Jeweler 131 HIGHLAND STREET

Compliments of GOYETTE'S ESSO STATION 102 Highland St., at Boynton St. Worcester, Mass. Tel. 3-9579

For That NEW LOOK on sick shoes hurry to

UNIQUE SHOE SERVICE

126 HIGHLAND ST.

UNDERWEAR Semmant Review

SHIRTS

SPORT SHIRTS ACCESSORIES PAJAMAS BELTS

TECH NEWS SPORTS

Football Fans of Nation Await Annual Heisman Trophy Award

Most Outstanding Football Player To Be Feted

Country's Sports Writers Vote To Elect Top Star Kazmaier-Parelli-???

As the 1951 college football season nears an end, the air is filled with the perennial comparisons. In hotstove leagues from coast to coast, the Monday morning quarterbacks argue at great length the knotty problems peculiar to the football devotee: the prime contender for national supremacy, single wing vs. T-formation, the trouble with Pacific Coast football, the Bright incident, subsidization of players, and . . . the year's most outstanding player.

To most of these questions perhaps only the future will supply the answers, but over 900 pair of eyes are watching gridirons this fall with the intention of coming up with an answer to the sixty-four dollar question: Who is the Most Outstanding College Football Player of 1951? These eyes belong to sports writers and broadcasters in every corner of 1936-Larry Kelley, Yale U. the country, and early in December, 1937-Clint Frank, Yale U. at the annual Award Dinner in New York, the man of their choice will stand up before a galaxy of football 1939-Nile Kinnick, U. of Iowa, greats, past and present, and receive the emblem of his achievement-The Heisman Memorial Trophy. This is its story.

In 1935, the Downtown Athletic Club of New York City, Inc., one of the world's largest clubs and occupying an entire thirty-six story building in lower Manhattan, decided to award a trophy to the Outstanding College Football Player in the United States.

Consequently, Frank Eliscu, a wellknown New York sculptor was commissioned to create a bronze figure of a football player which when properly inscribed would become the perma- 1951-? ? ? ? nent possession of the winner each

Various methods of balloting to elect the winner were considered, but Awards Letters finally the committee agreed that the For Varsity Sports sportswriters and broadcasters would be the only impartial and qualified | Class Numerals Also electors. These men are in a position to see the players in action and scan press reports.

The bronze was cast and first won Athletic Council was held recently

by Jay Berwanger of the University of Chicago in 1935.

In 1936, John W. Heisman, then Director of Athletics at the Downtown Athletic Club, passed away and the Trophy was renamed the Heisman Memorial Trophy. This seemed particularly fitting and met with instant approval because John Heisman had coached football for thirtyfive years from 1892 through 1927 at eight colleges. He was the inventor of the spin play and direct snap from center to back and was considered by many as the originator of the forward pass. One of his teams, Georgia Tech of 1916, ran up what may be football's largest score when it beat Cumberland University 220-0. John Heisman was twice President of the American Football Coaches' Association, First President and organizer of the Touchdown Club and a truly great figure in the football

The Heisman Memorial Trophy is football's greatest individual award Since 1935 it has been won by the following gridiron immortals:

1935-Jay Berwanger, U. of Chicago

1938-Davey O'Brien, Texas Christion U.

killed in action.

1940-Tom Harmon, U. of Michigan 1941-Bruce Smith. U. of Minnesota

1942-Frank Sinkwich, U. of Georgia

1943-Angello Bertelli, Notre Dame

1944-Leslie Horvath, Ohio St. U.

1945-Felix Blanchard, U. S. Mili-

tary Academy

1946-Glenn Davis, U. S. Military

1947-John Lujack, Notre Dame 1948-Ewell Doak Walker, Southern

Methodist U. 1949-Leon Hart, Notre Dame

1950-Victor Janowicz, Ohio St. U.

Athletic Council

Given To Frosh For Soccer and Football

The annual fall meeting of the

Sports Banquet to Be Held Dec. 11th

and the following awards were announced:

Those receiving varsity football Now Open To 'W's" included: George T. Abdow, Edouard S. P. Bouvier, Stanley Students Clevenger, Robert N. Eldridge, John F. Feldsine, Robert W. Fish, Theodore C. Fritz, John J. Gregory, Donald J. Grenier, Alan M. Hansen, David G. Holmes, Joseph Jiunnies, James S. Mackay, Edmond Majewski, John F. Malloy, William T. Mehalick, Thomas P. O'Connor, Hubert S. Peterson, Michael P. Shebek, and Edward A. Wolfe.

The manager of next year's team will be Charles Flanagan with Joseph

Soccer "W's" went to the following: Donald Adams, Elmer Corujo, David E. Beach, Fernado A. Couto, Ian A. Davidson, Warren A. Ellsworth, Alan S. Foss, Kenneth E. Haaland, Warren E. Palmer, Wayne W. Robertson, Richard G. Schmitt, and Gordon C. Willard.

Lucian H. Millard is next year' manager with Walter M. Stuart filling the assistant's position.

The following gained their Soccer numerals: Charles P. Arms, Alberto Arango, Alberto Arroyo, Fernando Arroyo, Hugh C. Bell, Richard E. Goodwin, Timothy J. Healy, Roland head, Richard A. Radar, Reynald J. A. Sealy, and Harold F. Smith.

ed to: Richard A. Zeleny, and Donald G. Post.

"CWC's" were awarded to: Fran-James E. Clampett.

Next year's manager of the Cross country team is Philip A. Charron with Paul R. Alasso, assistant.

Those receiving Football numerals included: Earl M. Bloom, Edward M. Cahill, Bernard M. Campbell, In First IF Relay; James D. Coulopoulas, Paul W. Brown, Wilfrid G. Dudevoir, Harry S. Barton, Donald E. Gray, Donald G. Grenier, Lionel A. Gagnon, Peter H. Horstman, Richard F. Hoyle, Thomas F. Mahar, Richard J. Mc-Bride, Charles Mahon, Thomas J. Remillard, Kenneth H. Russell, Ar- to be four tight races. Alpha Tau ski, Robert J. Schultz, Robert C. Stemple, Edmund G. Tornay and Joseph G. Wahl,

State Mutual Barber Shop 6th Floor State Mutual Building Appointments If Desired 340 MAIN ST. Tel. 4-1988

RELIABLE PRESCRIPTIONS HIGHLAND B PHARMACY 107 Highland St., Worcester, Mass. Phone: 6-0594

Swimming Pool

Installation of New Filter System To Give **Greater Sanitation**

Because of the excess time taken in installing a new filter system, the Tech swimming pool was opened to the students rather late this year. With this new filter system, using diatomacesous powder the water should be sky blue. Iron in the water also causes the eyes to smart but Fratino and William Shoenemann, this effect is eliminated with an addition of soda ash which brings the pH up to 7.2, almost neutral.

The whole system contains a shell, precoat pot, pipe and fittings, vent line, valves, flow sights, pressure gauges, filter elements and a power pump. The shell through which the water passes is the body of the sys-Robert E. Sullivan, Henry M. Strage, tem. The shell, a steel cylinder, 26 inches in diameter and 6'3" in height contains 13 tubes and has 104 square feet of filter area, It produces a flow rate of 210 gallons per minute. Under the old system which contained three filter tanks the total filter area was 101 square feet but this only had a flow rate of 150 gallons per

The diatomacesous powder, which F. Ledoux, Richard J. Lucey, John is not a sand but the fossil remains V. McKinney, William H. Moor- of a single celled, shell like microscopic marine plant, is back washed Sansoucy, Francis L. Saucier, Bruce frequently because of the inorganic matter and dirt it collects. About Cross-country "W's" were award- 25 pounds are added every six weeks.

This system has many advantages; among these are low operating cost, space saving compactness, relatively cis W. Madigan, Hugh K. Tufts, and high flow rate, brilliant clarity, high sanitation by the removing of all bacteria. The system also includes a heater which keeps the water at a temperature between 78° and 82° F.

Eight Houses Clash Close Race Forecast

SAE, PGD, TKP, ATO, Win Initial Meets; Phi Sig **Defends Crown Monday**

The IF indoor relay season started off with a bang last Friday, as eight thur W. Rudman, Robert C. Smolin- Omega and Alpha Epsilon Pi started things rolling in the opening race, which resulted in a close victory by ATO. Running for the winners were Wilson, Fenno, Nagel, and Lloyd, while Art Shepard, Mike Zucker, Dick Meirowitz, and Bill Schoenemann represented the losers.

> The best meet of the afternoon was the tussle between SAE and Lambda Chi. Sigma Alpha Epsilon turned in the best time of the day DeFalco, McCuen, Kirk, and anchor- be an interesting season.

Lloyd Jordan Principal Speaker; W's To Be Given, Captains Elected

The Annual Fall Sports Banquet of the Worcester Polytechnic Institute will lend to the corners of the Commons of Sanford-Riley Hall a festive atmosphere on the Tuesday eve of December 11, 1951. The festal proceedings will commence at 6:45 p.m. and the doors will be open to all interested students. The purchase of tickets may be made at any time by students at either the Alumni Gymnasium or Sanford-Riley Dormitory. All members of the football, soccer, and cross-country squads will be honored guests at the feast. Among the other honored guests present will be all members of the W.P.I. Athletic Council, press members from the Worcester Telegram and Gazette, Hugh McGovern and Ed Scannell, Fordyce Blake, head football coach at W.P.I. in 1916, and all coaches and assistant coaches of the Tech teams.

Following the termination of the meal the attendance will be addressed by several speakers. An introductory welcoming will be delivered by Wat Tyler Cluverius, president of the Institute, Lloyd Jordan, head coach of football at Harvard University, is to be the main speaker of the evening and should have many tales and facts of interest to give to the sports-minded assemblage. Subsequent to these addresses will come the presentation of the varsity "W's" to members of the football, soccer, and cross-country teams by Professor Percy R. Carpenter, head of the department of physical education at W.P.I. Those receiving letters in football and soccer have appeared in fifty per cent or more of the periods of game play. Election of team captains for the coming season will be held by squad members of the represented teams. Prior to the conclusion of the evening, movies of one of the Worcester Tech football games may be shown. A fine supporting gathering is hoped for and it is a certainty that the banquet will be well worth attending.

O'Connor, David A. Pratt, James F. hilltop teams clashed in what proved man, Davidson. In a worthy effort, Horne, Wright, Sanborn shone for the losers.

Theta Kappa Phi edged out Sig Ep in the third race of the afternoon. Running for SPE were veterans Campbell, Wise, Peterson, and Eldridge, while Oliver, Sullivan, Morgo, and Gregory ran for TKP. In the afternoon's finale Phi Gam got off to a good start by defeating Theta Chi.

This year as always few runners are in tip-top shape as yet. Consequently, it is difficult to predict who with an amazing 2:25.2. The win- will win the relays but right now ners looked like a champion team SAE looks very good and three other and displayed some fine runners in houses are not far behind. It should

A Capital Concern JAY'S

E. E. FORUM-From Page 1

Shebek, Bill Lloyd, Ray Giguere, and Ed Samolis. The AIEE-IRE, IHEE, and HKN are in support. The moderator will be Mr. Victor Siegfried, Director of Research at American Steel and Wire Company.

Another forum will be held on January 4 to take final action on the plan; balloting will take place at this time. The first forum will allow students to hear all arguments, both pro and con, and thereby enable them to make the right decision.

Of prime importance is the attendance of all EE's at the forum on Friday, December 7.

111 PLEDGED-From Page 2

Russell, K. H. Tornay, E. G. Wahl, J. G. Lambda Chi Alpha

Fenwick, W.C. Haas, R. T. Lake, N. D. Lindstrom, R. C. Olson, R. E. Robbins, G. A., Jr. Thurlow, B. J., Jr. Whittle, E. W.

AIEE To Meet

There will be a joint A.I.E.E. meeting of the Worcester senior chapter, and the student branch at W.P.I. on Tuesday evening, December 11, 1951, at 8:00 p.m. in the Janet Earle room of Alden Memorial. Guest speaker for the evening will be Mr. Richard L. Tremaine, Central Station Engineer for the Westinghouse Electric Corporation. Mr. Tremaine's talk will be on "Extra High Voltage Transmission".

Mr. Tremaine joined the Westinghouse Corporation after his graduation from the University of Maine in 1940. After a five year tour of duty with the U.S. Army, he returned to Westinghouse in 1946 to work on the 500 KV corona test project at Tidd, Ohio. Mr. Tremaine designed the corona instrumentation and was connected with the field testing and analysis of the data on this project.

Mr. Tremaine's talk will be augmented by use of standard and color slides. All members and students are invited to attend.

A.S.C.E. AND CAMERA CLUB HAVE MEETINGS

The Worcester Polytechnic Institute Camera Club will meet Wednesday at 7:30 p.m. Conrad N. Lindblad, a well-known amateur photographer, will be the featured speaker. He will discuss Color Slide photography. The meeting will be held in the Sanford Riley Hall reception room. Roy H. Wise, W.P.I. Camera Club secretary, is in charge of the program. Mr. Wise reports that several Worcester camera store owners have been invited.

The Tech chapter of the American Society of Civil Engineers met Monday at 7:30 p.m. in Boynton Hall. Francis S. Harvey, a 1937 W.P.I. civil engineering graduate, spoke. He is a consulting engineer for the design and investigation of all types of structures. He discussed specific problems that he had encountered in his position.

WASHBURN SHOP-From Page 1

in the Baltimore Fair in 1869, the fair of the American Institute, held known to be produced at one time.

Lubrication and Battery Service

Farnsworth Texaco

Station

Cor. Highland & Goulding Sts.

in New York in 1870, the Worcester | One of the most interesting products Fair of 1873, and the Vienna exposition of 1873.

It is interesting to compare the present day working of the Washburn Shops with those in the past. The shops are still controlled by the at the present time consists of: F. Harold Daniels, President of Riley pany in Cranford, New Jersey. Stoker Corp.; Wallace T. Montague, Vice-president of Norton Company; and Albert J. Gifford, Ex-officio. Prof. Kenneth W. Fowler is now Acting Superintendent, in the absence of John M. Bartlett, Jr. Prof. Warren B. Zepp is assistant to Professor Fowler. The days of apprenticeship for the students have ended; however, the students in Mechanical Engineering and Electrical Engineering still take courses in the machine shop, where their project is to construct a bench grinder.

Through the years, various products have been manufactured in the shops besides the usual articles turned out. Such items as elevators and washing machines were even

to come out of the shop was the Rawson Centrifugal Clutch-Coupling, developed by Louis W. Rawson, Superintendent of the Washburn Shops from 1903 to 1923, and Director of the Shops from 1923 to Shop Committee of Trustees which 1933. At the present time it is manufactured by the Centric Clutch Com-

> Amid the hum of the machines, the smell of cutting oil, and the blue smoke from the burning chips of metal being turned off by the lathes. one can think back to the days when the first class of apprentices "clad in calico short-jackets and overalls" labored diligently over their machines. Despite the difference in years, a student still works in an atmosphere where "miscellaneous jobbing and slatternly work are not (his) models, (and) second-rate workmen (are not) his instructors."

> > Everyone Welcome at

Tech Barber Shop

OUICK EXPERT SERVICE Closed Wednesday Afternoon

131 HIGHLAND ST. A. MACHENZIE, Prop.

CREW CUT A CREW CUT A CREW CUT

Court House Barber Shop SPECIALIZING IN CREW CUTS 15 Main St. Opposite Court Rouse State

CREW CUT A CREW CUT A CREW CUT

Stanley W. Johnson Inc.

FINE FLOWERS

14 Park Ave., Worcester Telephone 6-4333 470 Union Ave., Framingham Telephone 4357

HIGHLANDER DINER

"Where Good Food Is Not Just an Expression"

OPEN TILL MIDNITE

BOYNTON CAFE and GRILL

Restaurant Under Management

Tasty Sandwiches Good Food

Worcester Telegram

The Evening Gazette

Sunday Telegram

Radio Stations WTAG and WTAG-FM

PREMIER Cleaner Tailor

Expert tailor and cleaner SEE ED SHIVELL At Your Fraternity and Dormitory 115 HIGHLAND ST. Tel. 3-4298

HITE

CLEANERS - LAUNDERERS 113 Highland Street

For That Unusual Corsage CALL

Cooper's Flowers

133 Highland Street Telephone 5-4331

Member Florist Telegraph Delivery Association

Denholms

Shops For Men

Feature famous nationally advertised lines you know . . . and like to wear. STREET FLOOR



BOTTLED UNDER AUTHORITY OF THE COCA-COLA COMPANY BY COCA-COLA BOTTLING COMPANY OF WORCESTER

"Coke" is a registered trade-mark.

1951, THE COCA-COLA COMPANY



For complete information write today for booklet, "Engineering at Arma." Engineering Division, Arma Corporation, 254 36th Street, Brooklyn 32, N. Y.

"Stake out your life work on a frontier," a wise man once advised. "Ally yourself with a promising field, and

Arma Corporation offers such opportunity. With an unusually high ratio of en-gineers and physicists, in war and peace Arma spe-cializes in solving complex electronic design and de-velopment problems for our Armed Forces and industry problems in the new and coming realms of instru-mentation and automation.

