



Published throughout the school year, by the students of the MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Entered as second-class matter Sept. 16, 1911, at the Post Office at Boston, Mass., under the act of March 3, 1879.

MANAGING BOARD: E. E. Kartwinski '23, General Manager; W. G. Pearce, Jr. '24, Editor-in-Chief; C. H. Toll '23, Treasurer; Ingram Lee '24, Managing Editor; L. B. Leighton '24, Advertising Manager; E. M. Goldsmith '23, Chairman, Editorial Board; D. M. Schoenfeld '24, Circulation Manager; R. B. Bamford '24, Sporting Editor

EDITORIAL BOARD: H. A. Bruson, David Lasser; E. D. Cahill, P. A. Ryan; A. M. Kallet, F. R. Shaw

NEWS DEPARTMENT: Associate Editors: G. F. Ashworth, L. E. Fogg; F. A. Barrett, P. H. Goldings; P. K. Bates, E. S. Gray; K. B. Castle, J. P. Ramsey, Jr.; R. E. Dorr, G. C. Reinhardt

Assistant Editors: G. Y. Anderson, Jr., W. W. Dudley; S. H. Caldwell, M. S. McNaught; N. Cohen, D. A. Sherman

Staff: C. H. Barry, E. G. Peñock; G. I. de Benneville, A. I. Reinus; R. L. Dietzold, Charles Rich; F. W. Hall, O. B. Robinson; J. L. Lewis, H. J. Ryan; E. H. Long, H. G. Shea; C. W. Moore, M. L. Sinnicks; T. W. Owen, J. E. Sutcliffe

TREASURY DEPARTMENT: Assistants: F. L. Gemmer, A. W. Rhodes

Staff: E. W. Carlton, F. D. Murphy; M. M. Fireman, A. O. Sheppard; G. W. Glennie, R. E. Whitford; J. H. Hooks, W. M. Wolf

ADVERTISING DEPARTMENT: Assistants: Shedd Vandenburg, A. M. Worthington, Jr.; S. S. Merrill

Circulation Department: Staff: C. L. Simonson

Assistants: W. L. Nye, D. A. Henderson; L. R. Collins

Staff: E. H. Davidoff, R. G. Meyerand; L. M. Lucas

PUBLICITY DEPARTMENT: Manager: W. N. Webster

Staff: C. M. Flynn, Warner Lumbard; Samuel Glaser, A. D. Phelps

BOARD OF CONTRIBUTING EDITORS: H. L. Bond, K. C. Kingsley; C. A. Brauntingham, G. F. Nesbit; H. W. Dexter, J. C. Nowel; R. H. Frazier, W. D. Seefeld; F. G. Harmon, R. P. Shaw; D. B. Jennings, C. C. Taylor

Member of Eastern Intercollegiate Newspaper Association

In Charge of This Issue: J. P. Ramsey, Jr., G. Y. Anderson, Jr. Friday, January 5, 1923

QUICK ACTION NEEDED!

THE injustice and the absolute inefficiency of the existing method of selecting the members of the Technique Board have often been pointed out, but the calling of the attention of the Institute Committee to the condition of affairs marks the first definite step towards remedying the underlying faults.

The injustice of electing popular but inexperienced men to positions when there are available capable candidates who have worked as freshmen and Sophomores for Technique is patent. The inefficiency of a year-book board picked apparently on the basis of the previous experience of its men in other activities is also self-evident. What can be looked for then, but an inexcusable waste of time and untold difficulty in raising the quality of the book?

It has been suggested that in the future the editorial as well as the business positions be filled by competition. Just how the details of such a plan could be carried out remains to be seen, but the good name of the Institute and of the junior classes of the future demands that a drastic change be made before the election of the 1925 Electoral Committee.

RECEIVING THE MANTLE

TO those who but a few months ago regarded the election of a president as a panacea for all of Technology's ills, the announcement by Dr. Stratton of his policy of studying conditions rather than reorganizing the Institute may have come as a shock; but the knowledge that the difficult problems which will require solution will receive careful consideration is gratifying to those who have the welfare of Technology at heart. Though

always mindful of the needs of the industries, and the way in which its students could best be trained for entering them, the eyes of the Institute will be turned now, more than ever before, in this direction.

Association with President Stratton in the near future is eagerly anticipated. At student gatherings of every sort, he will be heartily welcomed. The need and desire for co-operation was strongly and wisely stressed at the convocation. It is indeed desired by the undergraduate activities and the entire student body, and it is to be hoped that it will be achieved with the greatest facility. In whatever action he may take, President Stratton may be assured of the complete confidence of the undergraduate body, for in him, Technology feels that it has gained a man with "heart to conceive, understanding to direct, and hand to execute."

COMMUNICATION

At the meeting called in Walker Memorial, Wednesday afternoon, to welcome President Stratton, it came to the attention of many of the faculty and students present that there was an unnecessary attitude of negligence and disinterest on the part of some of the student body. The occasion was one which would warrant, to those who boast of any savoir faire, a most dignified and manly exhibition by the undergraduates; instead, some students had the indecency to not only shove their neighbors, have on their hats, whisper and stir about in general, but even to smoke.

Now the former departures from the social curriculum may be condoned on the grounds of the hackneyed excuse, youth and general carelessness, but the smoking was inexcusable. It betrayed a lack of breeding which men at Technology cannot afford to do. The uncouthness of the smoking was deplorable and intensely discourteous to our new President.

Walker Memorial is the undergraduate building, but the fact that President Stratton was received in Walker does not give undergraduates liberty to be bores. Liberty and freedom are one thing, license another.

An Observer, Ex '22.

NOTICES FOR UNDERGRADUATES

OFFICIAL

The eighth meeting of Course 5.94, Recent Developments in Science will be held on Friday, January 5, at 4:00 o'clock. Professor J. F. Norris of the Department of Chemistry will speak on "The Future of Petroleum in Chemical Industries."

Two general studies for the second term will be "Roosevelt and His Times," given by Professor H. G. Pearson, and "Literary Study of the Bible," given by Professor H. L. Seaver.

The course in Public Speaking (GS 46) will be held, contrary to the original announcement, in room 2-390. Men desiring to take it must reserve the usual general study hours from 1 to 2 o'clock on Tuesday and Thursday, but not necessarily the third hour on Saturday. The third meeting of the week will be arranged to suit the convenience of individual groups. For further information, men should consult Mr. Copithorne, in room 2-176.

General Studies—In order to have a better opportunity to meet those students either taking or contemplating taking some of the General Studies, Professor William Emerson will be in room 3-115 on Tuesdays from 12 to 1 to answer questions or hear suggestions, or in any way facilitate the further effectiveness of these courses in their relation to Institute work.

Rifle Team range will be open for rifle practice this term as follows: Monday, 2 to 6 P. M., Girls' Rifle Team; Tuesday and Thursday, 1 to 5 P. M., R. O. T. C. Team; Wednesday and Friday, 1 to 5 P. M., M. I. T. Rifle Club.

UNDERGRADUATE

The Night Editor in charge of the next issue of THE TECH will be L. E. Fogg. All matters concerning the issue should be referred to him.

Important Meeting of all candidates for the boxing team Friday, Jan. 5, at 5:00 P. M. in the boxing room, third floor, Walker.

All Men interested in teaching English to foreigners or in leading Boys' Clubs are invited to the Social Service dinner at 6 P. M. tonight in the Faculty dining room. Leave word at the T. C. A. office.

The first regular rehearsal of the Technology Choral Society for the second term will be held Monday, January eighth, at 7:30 o'clock in room 5-330.

Broad Field in Mechanical Engineering By Professor E. F. Miller

Years ago there were two classes of engineers, Military engineers and Civil engineers, the term Civil engineer applying to a civilian engaged in any branch of engineering. Today the term civil engineer applies to one who has had specific training along certain special lines, in addition to a general education in those subjects which are fundamentals for any engineer no matter what particular branch of engineering he follows. We have today the Electrical, the Chemical, the Mining and the Metallurgical engineer as well as the Mechanical engineer.

The mechanical engineering field may be said to be that not covered by these other branches. It frequently overlaps and ties in with these—in fact, there is hardly any big engineering job which does not require in its staff of engineers an expert in each of these branches of engineering. All of the large engineering concerns, no matter whether their specialty is mechanical, mill, civil or electrical engineering have for each branch one or more engineers who are specialists in their line.

In general, the mechanical engineer designs steam power plants, selecting the boilers, turbines, engines, condensers and accessories needed. He designs industrial plants, textile mills, laying out the machinery and drawing the specifications. He also designs refrigerating plants, automotive machinery, machine tools, automatic machinery, conveyors of all kinds, steam and gas engines, steam turbines and general steam equipment. The heating and ventilation of buildings and of factories, the dehumidification and cooling or the conditioning of air in factories, the mechanical equipment of buildings, including elevators, power distribution, water systems, fire protection, etc., are all problems which the mechanical engineer handles.

Statistics compiled fifteen years ago, and similar statistics compiled five years ago showed that a very large percentage of the graduates of Course II were engaged either in mechanical engineering or in work closely associated with that line.

A student who is considering mechanical engineering as the course he might select naturally desires to know what the demand for mechanical engineers is likely to be at the time of his graduation. This demand, of course, will depend upon the condition of business. Three years ago when business was good every man in the graduating class in II had at least five offers and some men, particularly these men who were prominent in Technology activities, had as many as fifteen. By the middle of April, two months before graduation, fifty men had accepted positions, the average pay being \$147.50 per month; the minimum \$100 per month; the maximum \$275 per month. Last June when business was flat about 135 Seniors graduated from Course II. Of this number some 35 had positions waiting for

them or had accepted positions with parties to whom they had been recommended. On October 2nd our records showed that with the exception of two men who desired a special line of work in a certain section of the country, all had accepted places.

In general, it may be said that a student who finds Mathematics and Physics distasteful or uninteresting is likely to have difficulty with either Mechanical, Civil or Electrical engineering. The course in Mechanical engineering is planned to give one a thorough training in Mechanism, Applied Mechanics, Thermodynamics and its applications, Machine Drawing and Machine Design. An amount of work is given in the Foundry, in the Forge, in the Pattern Shop and in the Machine Tool Laboratory sufficient to make one familiar with the methods used in the industries. The lecture work in the various subjects is supplemented by work in the Steam, Hydraulic, Compressed Air, Gas Engine, Textile, Heat Treatment and Material Testing laboratories; these laboratories as a whole being unsurpassed by any in the world.

In addition to the above a laboratory 150 feet by 35 feet has just been erected on the north side of Vassar Street. This laboratory will house refrigerating machines and air compressors working to pressures of 2000 lbs. per sq. inch and above.

This year the Department offers in addition to the General Course, in which one has the choice of two professional electives in the fourth year, four options—Automotive Engineering, Engine Design, Textile Engineering and Ordnance, this latter being specifically for those students who are enrolled in the Ordnance branch of the R. O. T. C. and who, upon graduation, become 2nd Lieutenants in the Ordnance Reserve.

The Seniors in II have indicated their choice as follows:—

- General Course 37%
Automotive Engineering 34%
Engine Design 9%
Textile Engineering 9%
Ordnance, R. O. T. C. 11%

The Department is giving three special courses, one to Ordnance officers of the United States Army; another to Ordnance officers of the United States Navy, and a third to Torpedo Specialists of the United States Navy. Subjects in these courses are open to Seniors who are enrolled in any R. O. T. C. unit. A few of the Seniors have availed themselves of this opportunity.

The course in Mechanical Engineering while not an "easy course" is not too difficult for the average student to master, provided he is prepared to work hard. The course does not plan to make finished engineers; it intends to graduate men who are sound in theory and who have the ability to apply their knowledge to the problems which may confront them.

Shows This Week

ST. JAMES: "Wedding Bells." A matrimonial tangle presenting a new leading lady, Adelyn Bushnell.

SELWYN: "The Rear Car." A mystery play with more thrills than "The Bat," but not as finished.

SHUBERT: "Springtime." A musical show of romance in the last century after the type of "Maytime."

STATE: "Back Home and Broke." Thomas Meighan.

TREMONT: "Abraham Lincoln." The last week of John Drinkwater's famous characterization.

TREMONT TEMPLE: "Oliver Twist." Jackie Coogan.

WILBUR: "The Bat." The mystery play that still goes on.

BOSTON OPERA HOUSE: Walter Hampden. Tonight "Othello." Sat. mat. "Hamlet." Sat eve. "New Way to Pay Old Debts."

COLONIAL: "Good Morning Dearie." Musical show. Great success in New York.

COPLEY: "The Rivals." Jewett Players in a Sheridan comedy.

HOLLIS: "Lightin'." Percy Pollack.

KEITH'S: Raymond Hitchcock heads the bill.

MAJESTIC: Georgie Price and "Carnival of Fun."

PARK: "Robin Hood." Douglas Fairbanks.

PLYMOUTH: "The Goldfish." Marjorie Rambeau gets on in spite of her husbands.

"THE GOLDFISH" AT THE PLYMOUTH FULL OF FUN

This week "The Goldfish" starts its run at the Plymouth, featuring Marjorie Rambeau. In fact, the entire show is Marjorie Rambeau. In the first act she wins her audience and keeps it laughing until the last curtain. She is supported by a very small cast of nine persons.

The story is of a young couple who agree that if either tires of the other, all argument and hard feelings will be avoided by the presentation of a gold fish by the dissatisfied one to the other. A quarrel results in a reciprocal presentation. From that time on Jenny, the wife, climbs socially until she sickens of the unnatural life and, on the eve of the announcement of her engagement to a Duke of great prominence, she throws up the sponge and goes back to her first husband, Jimmy, who has held her love throughout the play.

In the last act Miss Rambeau jumps from tragedy to screaming comedy and back with the greatest ease and great effectiveness. It is a wonderful display of her remarkable ability, and contains more real humor than any play that has been to Boston for some time.

Orchestra Broadcasts

The Royal Purple orchestra of Northwestern University claims the distinction of being the first college orchestra to broadcast music by radio.

FORDS FOR HIRE WITHOUT DRIVERS REASONABLE FLAT RATES UNLIMITED MILEAGE ALSO LIMOUSINES FOR HIRE TEL. HASTINGS ST. GARAGE -- Near Tech -- UNI. 9830

Young Men's Hats Distinctive & Exclusive Styles Foreign & Domestic Manufacture Topcoats Agents for Burberry and Aquascutum English Coats Golf Suits Caps Gloves Neckties Collins & Fairbanks Co. 383 WASHINGTON ST BOSTON

YOU ARE INVITED TO VISIT The Miller Drug Co. CORNER BEACON AND MASS. AVE. The most modern up-to-date Pharmacy in Boston COLLEGE GRADUATE PHARMACISTS AT YOUR SERVICE

PACIFIC MILLS WE are the largest manufacturers in the world of all-wool and cotton warp Serges, Gabardines, Sicilians, Lustres, Voiles, Panamas, Granites, Poptins, Crepes, Batistes, etc. We also manufacture the most complete line of wash goods known, including plain, printed, and bleached fabrics, such as Crepes, Lawns, Voiles, Batistes, Serges, Pongees, Taffetas, Tissues, Mulls, Percales, Cambrics, etc. Lawrence, Mass. Dover, N. H. Columbia, S. C.

The Egyptian Room The Brunswick Dancing from 6.30 to 1 The Brunswick Boylston Street at Clarendon

I want a Tech graduate for Treasurer—an able, pushing young man. Will pay a good salary. If at end of year our relations are pleasant should expect man to take a substantial interest in the company, which has always paid 6% dividends. Bay State Artesian Well Co. E. J. H. TRASK, President 65 No. State Street Concord, N. H.