

# DR. ALLAN W. ROWE DIES

## Referendum Permits Holding Tech Circus by Six-Vote Margin

### 346 VOTES OPPOSE INSTITUTE COMM. ACTION ON CIRCUS

Austin, Denton, duPont, Holman and Thornton Elected To Prom Committee

### ONLY 510 VOTE ON CIRCUS

Over-riding the Institute Committee by the slim margin of six votes, the student body voted Wednesday to "permit the Tech Circus to be held under the Institute name."

At the same time the Class of 1936, in a re-election, picked as members of the Junior Prom Committee John C. Austin, Richard A. Denton, William B. duPont, Charles R. Holman, and Fletcher P. Thornton. Alternates are Charles M. Saffer, Jr., Lawrence Kanters, and John D. Gardiner.

#### Only 510 Vote

Only 510 valid votes were cast in the Circus referendum, it was announced at last night's Institute Committee meeting. Of these, 346 were in favor of the Circus and 164 opposed. Two-thirds of the votes, or 340, were required to over-ride the Institute Committee.

John B. Ballard, '35, chairman of the Budget Committee, was designated to investigate conditions under which Tech Circus might be run, and to make a report to the Institute Committee.

A committee to investigate the present method of conducting elections and to make suggestions for improvement (Continued on Page 5)

### VARIETY FEATURED BY MUSICAL CLUBS

Paul St. Regis Orchestra Will Entertain Following The Concert

In an endeavor to remove the formal stiffness of its previous functions the management of the Combined Musical Clubs will present tonight in the Main Hall of the Walker Memorial a more varied program than usual.

Briefly, the program will range from the heavy classical to the light ballads and will be relieved by an interlude in magic. Following the concert the Paul St. Regis Orchestra will entertain until two o'clock.

#### Banjo Club Begins Program

The Banjo Club will open the program at 8:30 sharp with the lively "Halo March", followed by an arrangement of "Then I'll be Tired of" (Continued on Page 4)

### KEY DANCE CANCELED ON DR. ROWE'S DEATH

Because of the unfortunate death of Dr. Allan Winter Rowe it was felt proper to cancel the Beaver Key Dance which was to be held after the Harvard-Technology basketball game tomorrow night.

Dr. Rowe has been intimately connected with the athletics of the Institute for many years and the Key was organized several years ago to fill a need long advocated in the minds of the Advisory Council.

## Institute Makes Animated Cartoons; Directed by Visual Education Dept.

### First Picture Shows Wave Form In 250-Mile Electric Power Line; Method To Be Used In Teaching Many Subjects

For the first time, the visual animated form of the behavior of an electrical wave as it travels along a 250-mile transmission line has been produced at the Institute by the new division of visual education. It is the first of a series of animated scientific and engineering motion pictures designed to facilitate methods of teaching.

Other films in the proposed series include the presentation of descriptive geometry in animated form, the operation of complex machinery, principles of physics, problems of human relations, and many others. This method of visual education is expected to be particularly effective in helping students to grasp the meaning of many of the more difficult subjects, which are not easily described by conventional teaching methods. The films, while designed primarily for instruction of students of the Institute, are expected to be available to other educational institutions.

High Voltage Lines Shown  
The new film, "Traveling Waves on Transmission Lines" is a combination

animation and outdoor scenes showing various types of high voltage power lines. What happens when a switch is closed and electricity flows along such lines is graphically presented in the form of a dark wave flowing along a power line. The picture reveals that for a few millionths of a second after a switch is closed the electrical wave flows back and forth on the line and is often accompanied by extra high voltages. The effect is similar to the wave forms produced when water flows into a trough, strikes the end and rolls back and forth, finally reaching a steady level. The same phenomenon occurs on a smaller scale when an ordinary household light is turned on.

#### Impulses Reconstructed

The mathematical analysis of the complete effect is so complicated that it has never been worked out, even for the simplest actual conditions. The form and progress of the electrical impulses have, however, been accurately reconstructed in the department of electrical engineering at Technology for the first time from precise continuous records made at short intervals along the line which was carrying the impulse. The study was made on a laboratory model of a 250-mile power

(Continued on Page 8)



Dr. Allan Winter Rowe

#### AN EDITORIAL

WITH the passing of Dr. Allan Winter Rowe, Technology has lost one of its most distinguished alumni and one of its most loyal friends. His untimely death has brought to an end a career of notable service to science, to his Alma Mater, and to his community, but the institutions he has developed will exist as long as there is athletic competition at the Institute. Although he was eminent as a scientist and an educator, Dr. Rowe will probably be best remembered by the faculty and students here for his untiring activity in the Alumni Association and for his successful efforts to develop the ideal collegiate system of athletics at Technology.

At a time when it was the widespread tendency for colleges and universities to degrade the original purpose of athletics by commercialism and dishonest practices, Dr. Rowe and his colleagues on the Advisory Council for Athletics raised the level of athletics at the Institute toward even greater conformance to the ancient Greek ideal of sportsmanship. His object was to have amateur sports conducted for the greatest physical, mental and moral development of the students rather than as a source of income or publicity for the school. Through his influence, varsity football, with its attendant evils, was never revived at the Institute after its abandonment at the time of his graduation.

The best way in which the proper reverence for his memory, felt by all connected with the Institute, can be

(Continued on Page 2)

## DORM DANCE TESTS HOUSEHOLD ABILITY

"Intelligence Dance" Features Xylophone and Clarinet Specialties

"Is vinegar made out of pickle juice?" "Are Quaker Oats fed to horses?" Questions such as these will determine the household ability of the feminine entrants to the Dorm informal "Intelligence Dance" to be held in Walker next Friday December 14.

Jaques Marlowe and his Waterfront Orchestra will provide the music. Included in the program are several xylophone numbers, and a selection by a novelty clarinet player, who plays two clarinets at one time.

#### To Play School Songs

Orchestrations of the Tech "Stein Song," and "Take Me Back to Tech" have been arranged by Jaques Mar-

(Continued on Page 8)

## TECH FRATERNITY MAN FOUND DEAD

Funeral Services Will Be Held At Home In Albany, New York

Funeral services for Jesse Russell White, Jr., '37, who was found dead in the Delta Upsilon House, 526 Beacon Street, Tuesday morning, will be held at his home in Albany, New York, where his body was taken by his father.

White's death, according to the medical examiner, was called a suicide from potassium cyanide poisoning. According to Dean Emerson of the Architectural Department, White was found dead in his bed at 8 o'clock on Tuesday morning and all rumors to the contrary are entirely erroneous.

He was seen descending the steps of the Rogers Building by members of

(Continued on Page 4)

## EMINENT ALUMNUS

Succumbs Yesterday Afternoon After Being in Hospital Since Field Day

KNOWN FOR STUDIES OF GLANDULAR SECRETIONS

Was Secretary Of The Advisory Council On Athletics At Institute

Dr. Allan Winter Rowe, '01, member of the Institute corporation and former president of the Alumni Association, died yesterday afternoon of uremic poisoning at the Huntington Memorial Hospital.

He had been confined to the hospital since Field Day. Dr. Rowe was well known from his activities as secretary of the Advisory Council on Athletics which he helped found. Dean Harold E. Lobdell as a member of the Advisory Council of Athletics will have charge of the funeral arrangements.

He devoted most of his scientific career to biochemical research in the field of medicine, and was Director of the Evans Memorial for Clinical Research and Preventive Medicine of the Massachusetts Memorial Hospitals as well as professor of physiological chemistry in the Boston University School of Medicine. He was internationally known for his studies of internal glandular secretions.

Was Member of Olympic Committee

As one of the Institute's most distinguished and active alumni, Dr. Rowe had long been interested in the development of athletics at M. I. T. and had been a member of the advisory council on athletics since 1911. He was also a member of the American Olympic Committee and a director of the Sportsmanship Brotherhood.

Dr. Rowe's far-reaching contributions to amateur sport are well described in this tribute which he wrote

(Continued on Page 4)

## FRESHMAN DEBATERS TO MEET HOLY CROSS ON MUNITIONS TOPIC

Forum Speakers Debate Place Of Married Women In Social Order

Although several of the co-eds were expected to defend the position of married women in industry, they failed to appear at yesterday's meeting of the Debating Society. Tonight, a freshman team will debate against Holy Cross at 7:30 in Room 2-190. The undergraduate and graduate body has been invited to attend.

"Is the woman's place in the home?" was the topic which produced a lively discussion. But with no women to present a strong case, the argument was almost entirely one-sided. Among the points brought up at the open forum were: The addition of more workers to industry increased the supply to such a point that the wage scale was lowered with consequent necessity that men not having a living income, must rely upon support from the married members of the household. Working decreases the idealistic respect of men for women by their appearance beside them in labor's ranks.

Again the affirmative contended that the American social structure depends on the integrity of the family. For that reason they argued that the

(Continued on Page 8)



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MINORITY RULE

AN UNREPRESENTATIVE REVERSAL

THE unfortunate results of the referendum on the revival of the "Tech Circus" present another example of what always happens when a comparatively small group wants a special privilege and the rest of the electorate is too apathetic despite ill effects which are likely to result from its grant to express its opinion on whether or not the privilege shall be given. Out of 2009 undergraduates eligible to vote on the measure, five hundred and ten did so and the required two-thirds majority necessary to reverse a decision of the Institute Committee was exceeded by only six votes. Thus it was possible for less than twenty per cent of the students to give the sanction of the Institute to an affair which all responsible individuals agree cannot help but reflect discredit on the school.

It is regrettable that so few students of the many who, we have good reason to believe, concurred with the opinion issued by the Institute Committee on the matter, had enough active interest to express this concurrence by means of the ballot. Since many students who would not approve the idea of a "circus" in principle saw no way in which the holding of such an affair would apply to them if they did not choose to participate, they did not consider the intangible "good name of the Institute" sufficient reason for expending the energy necessary to cast a ballot against it. Proponents of the "circus" on the other hand, had everything to gain by voting, and most of them did so.

Despite the results of the referendum, "Tech Circus" next year is still far from a reality. There is little doubt that it will be necessary for its organizers to post a bond of considerable size to meet any possible losses. And that those who are willing to deposit such a bond is extremely questionable. Decency and good taste dictate that if, despite all financial difficulty, the circus is held, it should be under such scrupulous regulation by the Institute Committee that a repetition of the untoward incidents of former years will be impossible.

CONSCIENCE AND THE STATE

CIVIL VS. RELIGIOUS LIBERTY

THE recent decision of the United States Supreme court which sustains the right of land grant colleges to require military training has been regarded by students at Technology with considerable interest, inasmuch as compulsory R. O. T. C. at the Institute has come before the attention of the school as an

issue on several occasions. The court, in a unanimous opinion, upheld the regents of the University of California in their suspension of two students who refused because of conscientious and religious objections to submit to military training.

It is evident at once that the issue at hand was whether the primary duty of a citizen is to his God or to his state. In its decision that the state must be considered foremost, the Supreme Court has interpreted correctly the letter and spirit of the Constitution. However, it has emphasized the fact that religious freedom in this country extends only so far as the government wishes to define the word "religious." Complete religious freedom would mean absolute liberty to carry out the duties and dictates prescribed by one's religion.

However, when an exercise of such freedom would have results which might be potentially inimical to the general welfare of the community, the state finds it necessary to define limits to the forms which this exercise might take. In this case, the state has decided that the duty of defending one's country against all enemies takes precedence over the duty to one's God to refuse to take human life. Thus it is evident that the conflict between church and state exists in the United States despite a theoretical separation of the functions of the two.

That the government has the legal right to demand military training from the colleges to which it gives money, or from any college for that matter, is indisputable. However, from the standpoint of what it should do rather than what it can do, it is questionable whether the requirement of military service from the comparatively small number of conscientious objectors in colleges where it is now compulsory will strengthen the nation's military defenses appreciably. Yet the psychological effect of forcing such training upon such individuals is crushing to the success of all the laudable large-scale movements now in operation to establish international co-operation and amity and to the achievement of world peace. That those of the younger generation who, in time of peace are inspired to preserve that peace on a more stable foundation, must submit to training for war in order to prepare themselves better to advance the peace, is a paradoxical situation and one that is greatly to be deplored.

LEARN LESS — KNOW MORE

DETAIL OR PRINCIPLE?

ABOUT the only constants in the engineer's world are the basic laws of the exact sciences. Developments in his profession outmode techniques before those techniques are themselves entirely developed. The increasing rapidity with which new problems arise makes it more and more difficult for the man trained in specific practices to hold his own.

Under such circumstances the task of an educational institution which aims to turn out men best equipped to operate the material world is to compromise between the practical details which will make a graduate immediately useful and the theoretical knowledge which is the basis for creative work and progress.

At present, intensive training in some narrow field cannot meet the needs of present-day engineering students. Because it is virtually impossible for the student to predict what his work will be, or even what he will do for the first few years after graduation, a seeming paradox is created whereby the need for experts in an increasing number of fields can best be met by a withdrawal from specialized training by the schools.

That the problem has been recognized is shown by the general demand for six year engineering courses and the establishment at Technology of a five-year course. The Institute, believing in the necessity of the present amount of detail, and realizing the engineer's need for broadness of background has adopted the most obvious course, an extra year of college life.

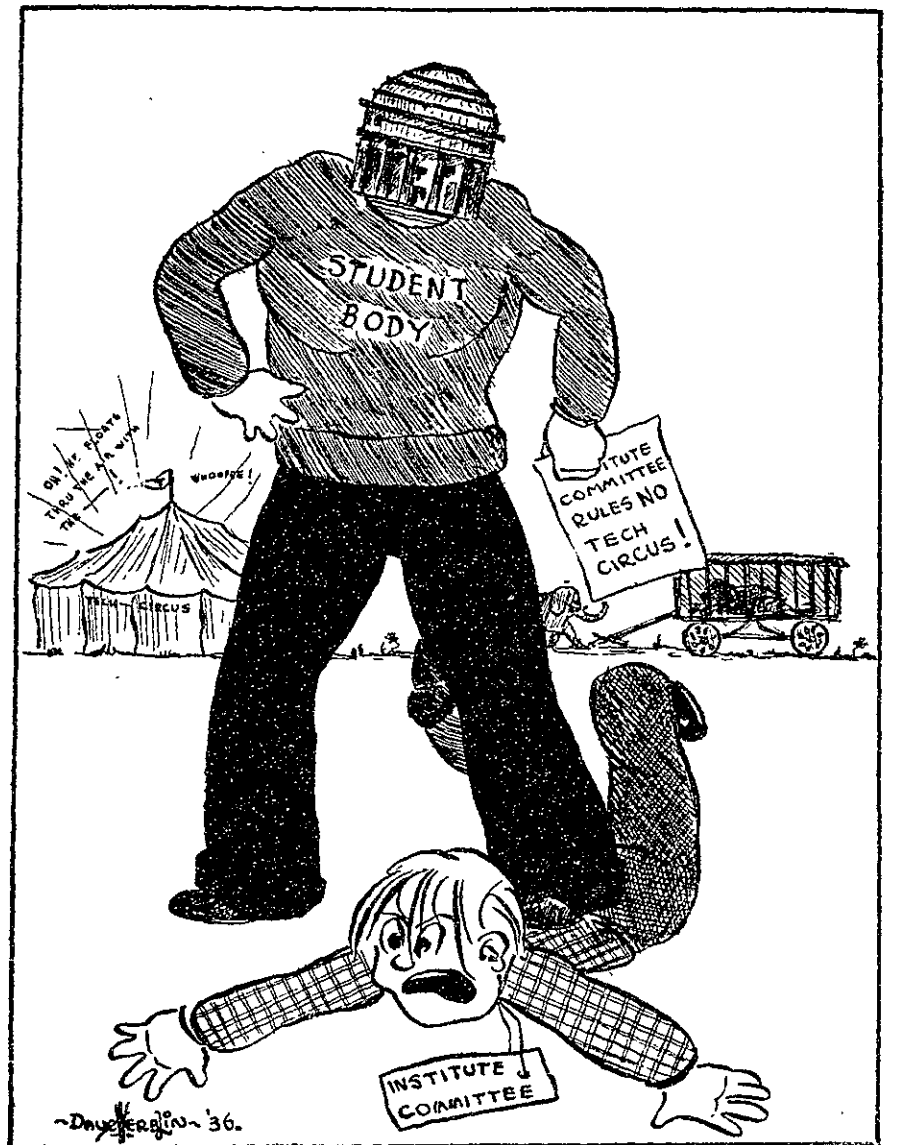
That price is too heavy for many men to pay. It may well be that men who must make the most immediate profitable use of their knowledge would act wisely to acquire the most general engineering training available rather than to pick "useful" courses.

DR. ALLEN WINTER ROWE

(Continued from Page 1)

expressed is the perpetual maintenance of the athletic system on the same high, unimpeachable plane at which he left it. By this means, the ideals of manhood and sportsmanship which his life has exemplified will become the heritage of all future generations of Technology students.

HE ALMOST MISSED



By Long Distance telephone, a sales executive recently "covered" more than 153,000 miles in three business days. He spent a total of eight hours in talking with his agents in 194 cities—using Sequence Calling Service.

This service enables subscribers to place with the Long Distance operator any number of calls on which they wish to talk consecutively. Connections are completed rapidly with a minimum wait between calls.

Sequence Calling is just one of the many services developed to gear the telephone more and more closely to business needs.

Why not visit your folks tonight by telephone? For a lot of pleasure at bargain rates, use station-to-station service after 8:30 P. M.

BELL TELEPHONE SYSTEM

**PROFESSOR WILLETT  
DISCUSSES WEATHER  
AT GRADUATE DINNER**

**Guest Of Graduate House Talks  
On Collection Of Data  
For Forecasting**

Mysteries and difficulties of weather forecasting were discussed by Professor H. C. Willett of the Aeronautical Engineering Department at a dinner of the Graduate House last Wednesday evening, December 5.

Dr. Willett first explained how the data is collected for the weather bureau from a number of observation stations and airports throughout the continent. Much valuable information, he said, is obtained by pilot balloons sent up into the higher strata of the atmosphere.

Mail planes form the most useful source of information, he continued, the only disadvantage being that data is least obtainable when it is needed because of flying difficulties in bad weather.

**Data Plotted**

All available data is immediately plotted on large charts by the experts of the weather bureau, Professor Willett stated. He then pointed out that both horizontal and vertical planes are used in the plotting and that the finished product is a map of the continent on which are located all isobars, high and low pressure areas, as well as directions and velocities of air currents, and temperatures with respect to elevations.

Professor Willett showed by means of charts how cold air will slide beneath hot air and in time build up a cyclone formation with resultant precipitation. It is the prediction of the location of the cyclonic centers which causes the weather man most trouble, since he has always to imagine and foresee the unexpected before it happens.

**Recent Weather Charted**

To demonstrate the method of making a forecast, Professor Willett discussed several charts upon which information dating from Thanksgiving Day had been plotted. These charts showed the changes of location of high and low pressure areas and indicated that a stream of cold air is now passing toward Boston from the northwest, thus causing weather for the immediate future.

When asked if it were possible to make weather forecasts for more than a few days in advance, Professor Willett said that so far no reliable means for doing this had been discovered; although there were certain phenomena such as sun spots whose effect could be observed and predicted in advance, but that no successful correlations had so far been made.

The success of a forecast, he affirmed, depended so much upon its method of verification that it was difficult to make comparisons of relative success. This is caused by the different types of verification methods employed by each man making a prediction, he declared.

**THOMAS TO SPEAK  
HERE THIS MONDAY**

**"Engineer And Social Order"  
To Be Topic Of Talk  
Before L. I. D.**

Norman Thomas, Socialist Candidate for President in 1932 and in 1928, and an Executive Director of the League for Industrial Democracy, will speak at an open meeting of the M. I. T. Chapter of the Student League for Industrial Democracy on Monday, December 10th at 11-12 o'clock in Room 5-330.

Mr. Thomas has taken the subject, "The Engineer and the Social Order." After the talk he has agreed to answer questions.

This is the first time Norman Thomas has been at the Institute in a number of years, for, although he was scheduled to speak here last year, the engagement had to be cancelled because of the sickness of a member of his family.

**FOREIGN STUDENTS  
DRAMA CLUB GUESTS**

**Plays Will Be "Poor Aubrey"  
"Not In The Evidence"  
At Rogers**

Foreign students of the Institute will be the guests of the Drama Club in their presentation of "Poor Aubrey" and "Not in the Evidence", on Monday evening, December tenth, 1934 in the Commons room at Rogers.

The regular performance will be given Saturday, Dec. 8, 1934. Members of the Drama Club do not pay admission fees, but guests of the members will be charged twenty-five cents. Between the presentation of "Poor Aubrey" and "Not in the Evidence" there is to be a long intermission during which refreshments will be served.

Included in the cast of "Poor Aubrey" is Mr. Robert Hershey, Mrs. Robert Hershey, Mrs. F. A. Adams, and Mrs. John A. Fellowes. Those taking roles in "Not in the Evidence" are Mrs. H. E. Rossell, Mrs. E. W. Kimbark, Mrs. John Hicks, and Mrs. W. Ross.

The annual three-act play which anyone can attend is being planned for production early next year. The matter of price and place for performance is now under discussion. Last year tickets sold for seventy-five cents and a dollar, and the production, "The First Mrs. Fraser" was given at the Peabody Playhouse in Boston. Those in the cast were Professor William A. Crosby, Mrs. Leroy Marek, Mrs. Lombard Squires, Mrs. John Hicks, Mrs. Hans Mueller, and Mr. Robert Hershey.

Professor Fuller directed. Of last year's proceeds a considerable amount went to the fund for Unemployed Engineers; the remainder went into the treasury to cover initial expense this year. If the proceeds this year cover expenses, part of the profit will probably go again to some charitable institution. Later in the year there will be another evening of two one-act plays.

The Drama Club is composed of members of the Matrons, the Dames, and the Faculty. Originally it was an extra activity of the Matrons and Dames. Both groups displayed an unusual interest in the Drama Club, and it grew so rapidly that it became a separate activity.

**TECH SHOW PROSPECTS  
DISCUSSED AT SMOKER**

**Professor Rogers Main Speaker;  
Clark Renders Music**

Approximately one hundred men were present at the "Tech Show" smoker, held last night in Walker Memorial. Professor Robert E. Rogers, the principal speaker, talked about the future prospects of Tech Show.

Jean Clark, the composer of the music for the past four shows, played several selections from the programs of previous productions.

Tryouts for this year's show will be held in Walker Gym at 7:30 o'clock on Monday, December 10. Everyone interested in any phase of "Tech Show", cast, chorus, or management—should report to the gym at this time.

**TECHNOLOGY STUDENTS  
WILL AID POST SANTA**

To aid in wrapping Christmas presents which are to be distributed to poor children by the Boston Post, a group of Technology men is being organized by THE TECH to go down to the Post workshop at 110 Federal Street, Boston, this Sunday at 2:30 in the afternoon, where a group of college girls are also giving their services.

Students who wish to give a small amount of effort in this humanitarian cause are requested to leave a note in THE TECH newsroom stating that they will be present at that place on Sunday. Those for whom it would be more convenient can meet the group of TECH staff members who are starting at 2:00 P. M. for the workshop in a group from the newsroom in the basement of Walker Memorial.

.... *At Yale* ....

**A** TRADITION OF REFINEMENT IN DRESS HAS BEEN MAINTAINED THROUGH GENERATIONS BY YALE UNDERGRADUATES AND ALUMNI.

It is therefore a significant tribute that well-dressed Yale men prefer trousers and slacks equipped with Kover-Zip, the invisible seamline closure.

Further evidence of Kover-Zip's correctness from the standpoint of style is its approval by Yale's leading college tailors.

.... *J. Press* .... famous Yale and Harvard tailor for over 40 years, says—"Our custom tailoring establishments in New Haven, Cambridge and New York, always scrupulously cautious in the acceptance of design innovations, whatever their origin, are nevertheless responsive to every style development that is in good taste.

"Although we have been witness to a growing favor for the zipper fly, we could not accept the ordinary slide fastener as fit for fine clothes. The new covered zipper, however, does meet our standards in every respect and we are now prepared to equip trousers and slacks with the Kover-Zip fly."

*Outstanding college tailors, arbiters of style,  
endorse Kover-Zip as the only slide fastener  
fit for fine custom clothes.*

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**COLLEGE MEN PREFER  
CLOTHES MADE WITH  
INVISIBLE CLOSURE**

Style experts and fashion authorities are well aware that the preferences of college men form an important and dependable indication of the trend in men's apparel.

One detail of men's clothing which until now has never been satisfactory is the fly of the trousers. The buttoned fly, no matter how carefully made, is bulky because of the extra fold of material required; it bulges and wrinkles in a way that is most unsightly.

The slide-fastened fly gives a much smoother and neater effect in front than is possible with buttons, but the ordinary slide fastener has an uncovered strip of metal that is objectionable to men who take pride in being well-dressed.

The new invisible style-line closure, the Kover-Zip fly, has every practical advantage of the ordinary zipper, and in addition is superior to it from the standpoint of good taste because no metal shows—the units of the fastener are concealed by a grosgrain ribbon that harmonizes with the fabric of the trousers and is guaranteed to outlast the garment.

The Kover-Zip fly has been acclaimed and adopted by "best-dressed" seniors in America's foremost colleges, and a typical expression of opinion about it is the following statement by Arthur Willis of Dartmouth, class of 1934:

"The trouble with the early type of slide fastener was the display of metal—too much of a suggestion of work clothes. I'm for this new covered zip with the invisible fastener, it's a finished product for a finished dresser."



College men everywhere, from Cambridge to Palo Alto, welcomed the Kover-Zip fly and now demand it alike on dress trousers, informal suits and slacks. Smooth and smart, efficient and durable, Kover-Zip is the closure for all modern clothes.

**T. E. N. GETS AWARD  
FOR EXCELLENCE OF  
EDITORIAL WRITINGS**

**College Magazine Association  
Cites Feature Articles  
Of Last Year**

Four certificates for excellence have been awarded to the *Tech Engineering News* by the Engineering College Magazines Associated for the period from September 1933 to June 1934.

Awards consist of a first place for a single editorial, a first place for editorials in general, a second place for the best illustrated magazine, and a third place for a single student-written article.

First place for a single editorial was presented to Vinton K. Ulrich, '35, for his editorial entitled "Engineering for Humanity" which appeared in the March 1934 issue. In it he proposed a nation-wide pension system which would provide for the retirement of all workers after they have reached a certain age and have worked a certain minimum number of years.

As a plausible solution to the problem of unemployment this plan, he believes, should interest every engineer and scientist.

"Our Fiery Visitors" is the title of the article which won third place in the single student-written article competition for Paul W. Allen, '37. It appeared in the May, 1934 issue. In it he discussed meteorites, presenting definitions of types of meteorites, their history, and theories concerning their actions within the earth's atmosphere.

He also pointed out that a meteor or "shooting star" never reaches the ground since the average meteor weighs only one grain and yet produces light which is visible for forty to seventy miles in the brief interval during which it exists in the earth's atmosphere.

Following is the single editorial which won first place:

**Engineering For Humanity**  
The passage of fifty years has placed the engineer and scientist in the position of the greatest benefactor of society. In earning this name, the

technologists have brought forth literally thousands of devices which serve to uplift humanity in general; but in all this progress, little thought has been given to those few who lose by these developments.

Let us take for an example, the development of the air brake for railway trains. With the adoption of this invention we find that railroad accidents are decreased immensely, transportation is quickened, and both freight and passenger rates reduced. But to turn to the other side of the picture—many brakemen find themselves out of work, since it is possible for the engineer to perform more effectively from his place in the cab the work of many men. Not one sensible person will condemn this, or other inventions, on the ground that it works hardship on a few.

But this few is really large in number! What has the technologist done to counteract this evil? The time has come when the engineer and the scientist should support a measure which will aid in permanently reducing unemployment.

A nation-wide pension system which will provide for the retirement of all workers after they have reached a certain age and have worked a certain minimum number of years seems to be a plausible solution to the problem. A plan which would cover the whole country in every industry should be the aim. The money for this pension could be obtained by small payments deducted from the workers' salaries and small sums donated by the employers. A large Canadian railway has provided a similar pension for a number of years, and that system has now become practically self-supporting, requiring only very small contributions from the employees. If a man transferred from one industry to another, he should lose none of that money which had accumulated during his period of employment. Should he retire from work before the time for his pension, the amount which had been applied from his salary, plus interest, would be returned.

An outstanding feature of this plan is that it would enable a man (or woman) to retire after reaching an age of fifty-five or sixty with an income comparable to that which he was

**CODD DISCUSSES  
MUNITIONS FACTS**

**Will Address Students And  
Faculty in Room 5-330  
This Afternoon**

Speaking on "America's Munitions and National Defense," L. A. Codd, editor of the magazine "Army Ordnance", will address a gathering of R. O. T. C. students and faculty members in Room 5-330 today at 4 o'clock. He will discuss particularly the proposed idea of nationalization of the munitions industry.

As editor of "Army Ordnance," Mr. Codd has acquired national prominence on the subject because of his editorials in which he replied to accusations made against American munition makers precipitated by the Senate investigation which has gained much publicity. Likewise he has gained note from his recent debates with Senator Nye, who is chairman of the Senate Investigation Committee.

In his lecture Mr. Codd will bring forth the principles of the Army Ordnance Association, a national organization of American citizens pledged to industrial preparedness for war as this nation's strongest guarantee of peace. Among the objectives of this organization are assisting in effecting industrial preparedness, stimulating interest in design of ordnance material, promoting understanding and co-operation among scientists, engineers and Ordnance officers, and assisting in development of personnel for Ordnance work.

earning before retirement. But above all, it would tend to relieve unemployment, which can be blamed upon the high state of mechanization existing, by preventing the accumulation of multitudes of aged men in industry. It would give the young man an opportunity to find employment; it would give a man something to work for; and it would make all working persons independent after reaching a certain age. This last benefit would automatically relieve the work of many well-

(Continued on Page 8)

# Associates Praise Dr. Rowe; Express Regret of Death

In the death of Dr. Allan Winter Rowe, the Massachusetts Institute of Technology loses one of its most devoted and helpful alumni; intercollegiate athletics loses one of its ablest advocates of clean sport for sport's sake and not for profit; medicine loses a distinguished investigator in that difficult but important field dealing with glandular functions.

Dr. Rowe has been a member of the Institute's corporation since his retirement as president of the alumni association in 1933. His interests have centered chiefly in student athletics and welfare and in the department of biology and public health. His contacts have been vigorous, positive, and very helpful.

All who have known Dr. Rowe intimately, or worked with him, have come to respect and love him because of his sincerity, unflinching honesty, and unselfishness and generosity in his work for those organizations or activities to which he has devoted his entire time and energy.

Our feeling of loss is intensified by the suddenness of his passing, in the very midst of activities which he felt to be the most important of his life.

—President Karl T. Compton

Allan Winter Rowe—polished gentleman, accomplished scholar in a difficult field of research, champion of clean amateur athletics, effective and devoted friend of the Massachusetts Institute of Technology. His brilliance gave color to every Institute gathering. His determined individualism in a standardized world lent courage to all who recognized the need for valiant independence of thought.

He is cut off in his prime. Institute undergraduates will never have a more energetic and able supporter of all that is most worth while in college life. They have many friends, but Allan Winter Rowe will never be replaced.—Dr. Vannevar Bush.

The Alumni Association has suffered an irreparable loss in the death of Dr. Rowe and every Technology man has lost a friend unstinting in his friendship. He was a member of innumerable (seven at the time of his death) Alumni committees, secretary of his class for 13 years, member of the Alumni Advisory Council on Undergraduate Athletics for 23 years,

member of the Alumni Council for 24 years, President of the Alumni Association during 1932-1933, and one of its representatives on the Corporation since 1933. In all of these activities his zeal was unflagging, his contributions unique and incalculable. During his presidency he made 31 visits to Alumni Clubs and so vitalized the Association's work that its effectiveness was remarkably increased. The officers of the Association relied on him constantly, found him always ready to help, knew him as a gallant friend that we are now appalled to lose. We speak for the Association and the Review Staff, to whose aid he came so many times, and for all his fellow Alumni in expressing the sorrow which prevails throughout our ranks.

C. E. Locke, '96  
J. R. Killian, Jr., '26  
R. T. Jope, '28

The death of Dr. Rowe deprives the Institute of one of its most loyal, able and useful sons. His loss will be very keenly felt, not only at Technology, which he loved to serve, but also by a host of those who had found him a brilliant scientist, a delightful companion, and a steadfast friend.

Dean Samuel C. Prescott.

### Statements —

The passing of Dr. Allan Winter Rowe, '01, will be keenly felt because of his untiring help at all times in fostering clean and manly sports, both by needed advice and far-sighted action.—Coach Oscar Hedlund.

## TECHNIQUE CONCLUDES DRIVE TODAY AT FOUR

Today is the last opportunity for *Technique* sign-ups, the drive ending today at four o'clock. There are three different methods for purchasing this issue, the fiftieth consecutive edition.

The alternatives are, paying four dollars cash, two dollars cash, and half later, or signing a bursar's pledge for the whole amount.

New features this year are the arrangement of senior pictures and statistics, and the assignment of separate sections of the book to fraternities, dormitories, summer camps and professions.

## DR. A. W. ROWE DIES YESTERDAY P. M.

### Was Secretary Of The Advisory Council On Athletics At Institute

(Continued from Page 1)

to another great sportsman several years ago:

"By precept and example he inculcated, developed, and exemplified those high ideals of true sportsmanship which are the sound basis of human relations; with far-seeing vision, he conceived and advocated those principles of conduct which today are developing and moulding the youth of this country."

### His Concept Of True Spirit

His conception of the true spirit of amateur sportsmanship is again well illustrated in the lines inscribed above the gate which once stood at the entrance to Technology's athletic field.

"Not the quarry but the chase

Not the laurel but the race,

Not the hazard, but the play

Make me, Lord, enjoy alway!"

Dr. Rowe was born on July 31, 1879, the son of Arthur H. and Lucy H. Rowe of Gloucester, Mass. Following his graduation from the Institute in the class of 1901, of which he was permanent secretary, he spent a year in industrial work in Providence, followed by two years of research with the late W. O. Atwater at Wesleyan University, where he was awarded the degree of master of science in 1904.

In the same year he was awarded the Swett fellowship at Technology and carried on advanced studies at the University of Göttingen, receiving his doctorate in philosophy in 1906. Upon his return to this country he became a lecturer at the Boston University School of Medicine and two years later was appointed professor of chemistry. From 1907 to 1914 he was also affiliated with the Harvard graduate school, where he engaged in advanced study and research with the late Professor T. W. Richards.

### Director of Research at Evans Memorial

He had been a member of the staff of the Evans Memorial since its foundation in 1910, and since 1921 had been its director of research. He was a trustee of the Boston Psychopathic Hospital and this year accepted the same post at Norwich University.

Prominent in scientific circles, Dr. Rowe was a fellow of the American Association for the Advancement of Science, the American Academy of Arts and Sciences, the American Physical Society, and Economics Engineering Foundation, and the Chemical Society of London. He was an honorary fellow of the Reale Societa Italiana d'Igiene, vice-president and trustee of the Memorial Foundation for Neuro-Endocrine Research, and formerly president of the Association for the Study of the Internal Secretions and honorary secretary of the International Anaesthesia Society.

### A Member of Many Societies

He was a member and councillor of the American Chemical Society, and also held membership in the American Electrochemical Society, the American Society of Biological Chemists, the American Physiological Society, the Society of Experimental Biology and Medicine, the Academy of Medicine, the Societe Chimique de France, and the Societe de Chimie Biologique. He was an associate member of the American Medical Association and an honorary member of the Massachusetts Medical Society.

In addition to his other activities, Dr. Rowe for a time was president of the Boston School of Physical Education. He was a member of Theta Xi and Phi Beta Kappa fraternities, and belonged to the St. Botolph, University and Union Boat Clubs. Dr. Rowe was an unusually gifted speaker and writer and was the author of many distinguished scientific papers and various articles of wide cultural interest.

Colgate has introduced brilliantly colored covers for examination books with a view of taking the student's mind off the impending terror.

## Dedicating Field House



The picture above is the last picture known to be taken of Dr. Allan Winter Rowe, '01, who died yesterday. It was taken at the Field Day exercises October 26, while Dr. Rowe was speaking at the dedication of the new Barbour Field House.

## TECH FRATERNITY MAN FOUND DEAD TUESDAY

(Continued from Page 1)

the Department Monday evening, a fact which refutes other statements of the death. No reason has been advanced for the suicide, and Dean Emerson said, "In addition to being one of the students of high rank in the Architectural Department (his rating is over 4.00), he was liked and respected by teachers as well as students."

As a token of this esteem, thirty members of White's class have sent a bouquet of roses to the funeral.

## MUSICAL CLUBS FEATURE VARIED ENTERTAINMENT

(Continued from Page 1)

You," and will conclude their part of the program with "Zacatecas March." The Glee Club conducted by Richard L. Hughes, '35, will render Mendelssohn's "Farewell to the Forest", Mozart's "Ave Verum" and the popular Victor Herbert's "Gypsy Love Song."

The Bach Double Concerto in D Major for two violins follows. The Concerto will be played by Edward Gelus, '35, and Justin Shapiro, '36, accompanied by Miss Mildred Spiegel.

Fourth on the program will be selections by a newly formed octette. They will sing "Drink to Me Only with Thine Eyes" and a negro spiritual, "Talk About Jerusalem". The octette consists of David Buckwalter, Richard Hughes, Gerald Rich, Edward Morr's, William Saylor, Harold Everett, Louis Birchall and George Aken.

### Orchestra to Render "Intermezzo"

Returning to a more serious type of music, the Orchestra conducted by Allen Creighton, '35, will render "Intermezzo" from Mascagni's "Cavaliere Rusticana" and the overture from Rossini "Italians in Algeria."

A Magical Interlude with Bernard Whitman, '35, will precede the finale with the Glee Club singing "Take Me Back to Tech" and "The Stein Song".

The matrons will be Mrs. Karl T. Compton, Mrs. James R. Jack, Mrs. Leicester F. Hamilton, and Mrs. Ralph T. Jope.

In keeping with the occasion the hall will be decorated in a manner most conducive to the Yuletide season. The admission to both the concert and dance will be two dollars per couple. As is customary, the attire is formal.

Spinach, green peas, beans, and asparagus are the most popular vegetables at Harvard according to a survey by officials at the University. Steaks rank ahead of chicken, lamb chops and roast beef in popularity. Tomato juice and pie with ice cream are also "in great demand."

—The Crimson

Left-handed ping-pong is being instituted at Minnesota University in order to cure the students who stammer.

## HOME FOR THE CHRISTMAS HOLIDAY?

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Don't spoil the thrill of getting home again by worrying about the shipment of your baggage. Solve the problem by leaving everything to Railway Express. We will call for your trunks, baggage and personal belongings and send them home on fast passenger trains through to destination. You can take your train home with peace of mind—knowing that your baggage will be there quickly and safely. Railway Express service means economy. We give a receipt on pick-up and take a receipt on delivery... double proof of swift, sure handling. If you cannot go home, send your presents to your family and friends by Railway Express.

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## Isn't Xmas Shopping enough to faze a man?

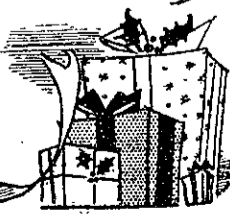


*specially a COLLEGE man with exams in the offing, and a budget on hand.*

## FILENE'S CLOTHES-INSTITUTE-SERVICE-BUREAU TO Your Rescue!

We'll do all or little for you—as you wish! Like to shop but need help? Miss Wessman or one of her able assistants will go with you and point out the best bets in this big Filene universe of Xmas gifts. OR if you hate to shop—give us your gift list, tell us how much to spend and leave the rest to us—we'll have gifts selected and ready for approval in short notice—even wrap them festively and mail wherever you say. (To save time, phone Hancock 3800 for appointment—but of course you're welcome to drop in personally—we're on the fourth floor of *The Franklin-Hawley Building.*)

# Filene's





Bicycle Riders

Bicycling seems to be gaining popularity among Institute students and profs. We've known for a long time, of course, that several students employ this invigorating method of transportation to and from classes. Well, the other day, we saw a bicyclist rolling along the drive in back of the Institute. As it approached, whom should we recognize but Mr. Fairley of the Ec. & Soc. Sci. Dep't. All decked out in a blue stocking hat and a blue jacket, we wonder who'll be the first to bring his date to a Technology dance on bicycle. Think it over boys.

Hints and Insinuations

One of our young friends taking E21 asked us the other day to make use of our column to inform his professor that the class was unfavorably impressed by the prof's method of teaching. (He didn't use exactly those words, but we want to keep this column respectable.) Another student wanted us to tell a story about the first young man's roller-skating adventures. So to preserve peace, and, incidentally, our neck, we're going to let the parties concerned figure out just whom we mean.

Columns

Wonder how many students realize just how wide a variety of subject matter is covered in THE TECH? Brother Alpha, for example, shows you how to use caps in nine out of ten words, and is a side-line review books in Walker. Incidentally, if you can understand more than half of the reviews you're a better man than we are Gunga Din. But we suppose that's fame, to be able to write something no one else can understand. That's the trouble with our column. Sometimes people understand more of it than we intend them to.

Coedgewise deals with those quaint creatures who suddenly appear around the corner of a corridor and are gone before you can even stumble over

them. Unfortunately, nothing ever happens to the coeds except teas, and receptions, and marriages; so their column isn't sensational. True, there was a great story of a Field Day battle in the Margaret Cheney room, but we don't believe it ever got into print.

Away from the Grind, the fraternity news, is an innovation. It appeals mainly to frat men who get their names in it, we suppose. The Engineer Dresses shows how to dress, but not when. You're supposed to know that by now. And our own humble duty is to tell you something about yourselves that you don't know, and even if you did you wouldn't believe it.

Hints for the Scientist

From time to time, we intend to submit for your approval, helpful applications of science to such subjects as woman, health, love, examinations, and the like. The following bit of information may be useful to you some day.

Health: 100 c.c. of 36 normal sulphuric acid taken internally will relieve the most stubborn case of constipation.

SMALL PERCENTAGE CAST VOTE ON TECH CIRCUS

(Continued from Page 1)

ing this method was appointed at yesterday's meeting. The committee is scheduled to report on its findings at the Institute Committee meeting of February 14, 1935, so that any changes that are made as a result of its recommendations will go into effect before the Senior Week Committee elections in February.

The committee chosen consists of Paul Cohen, '35, Editor of THE TECH, chairman; John C. Austin, '36; Hal L. Bemis, '35, chairman of the Freshman Rules Committee; Samuel S. Fox, '35, chairman of the Elections Committee; Gerald M. Golden, '35, president of the 5:15 Club; Edward E. Helwith, '35; and Ralph D. Morrison, Jr., '37.

Favor Open House

It was announced at the meeting yesterday that the question of holding Open House at the Institute next year would be brought up at the next meeting of the Corporation. The Institute

Committee then passed a resolution stating that it favored having Open House again and that it would render whatever aid it could if the Corporation approved the event.

At yesterday's meeting the Institute Committee also approved the selection of Lawrence Kanters, '36, and Arthur E. Wells, '36, as members of the elections committee.

Poll Started Circus Interest

Interest in a Circus this year was aroused when a poll of dormitory and fraternity men conducted by THE TECH a month ago revealed that a large percentage of those polled favored having a Circus. As a result, the Institute Committee passed a resolution at its meeting a week later, saying that it did not "sanction or permit the Tech Circus to be held under the Institute name."

Within ten days a petition signed by over fifty students was presented to the Institute Committee. This necessitated a referendum, which was held Wednesday. The ballot contained a statement of the Institute Committee's motion, followed by the question, "Do you wish to reverse this decision of the Institute Committee?"

Electioneering Was Charged

The Junior Prom re-election was held after charges of electioneering were sustained by the Institute Committee. A letter had been sent to fraternity Juniors urging them to unite on four designated men, to ensure fraternity control of the committee.

The Executive Committee, which investigated the matter, was unable to determine who sent the letter, but it recommended a re-election. The Committee also stated that it found evidence of electioneering among commuters and dormitory groups.

The Institute Committee voted for a re-election, using the same nominations as in the previous election. Samuel S. Fox, '35, chairman of the elections committee, told a reporter for THE TECH that the name of James L. Camp, which was on the ballot in the first election, was removed for the second election because the Elections Committee discovered that Camp was not a member of the Junior Class. In the Directory Camp is listed as an unclassified student.

Brother Alpha



There ought to be, Brother Alpha tells us, a thesis run on Sound Proof Walls as a Means of Conveying Information and Disturbing Equipose. The Permeability Co-efficient of a classroom combined with the Magnavocality Constant of an Assistant Professor induced, he thinks, a Corona Effect of such wattage as nearly to burn out a Friendship of Long Standing. Furthermore, he was forced to do Research instead of Light Reading to get more data on the Phenomenon, and still doesn't see why it had to happen.

It came about thus. Piper turned up again. This man Piper is an Old Customer from Tuftonboro, up in the New Hampshire sticks, where he operates the family shingle mill. He is Past Kleagle of the Ku Klux Klan Chapter and a First Lieutenant, Eng.-Res., O.R.C. (inactive). Also he is Assistant County Chairman for the G. O. P.

He's not a Politician, you understand, but a Patriot. He works hard to save the country. He can view with alarm Barney Baruch, Thomas Jefferson, the Pope, and General Burgoyne in every woodpile in Carroll County, and he points with pride to the fact that Tuftonboro hasn't sent a Democrat to the General Court since Franklin Pierce's time. Even last month they gave Styles Bridges a thumping majority in two figures and nary a vote for the New Deal, Stephen A. Douglas, or the League of Nations.

Well Piper, being in Boston last week, dropped in on Brother Alpha, as is his custom when he gets tired of the North Station. He wants more Engineers in Politics, the Scientific Method applied to National Problems, Efficiency (Model XV) in County Administration, and all that. And, natu-

ally, he wants it all Republican, that the country may be saved.

Brother Alpha, hoping soon to get back to his reading, was agreeing affably, when a barking crescendo from an adjacent classroom sent these words crashing through the sound-proof walls:

"And so, gentlemen, you see that in America Rugged Individualism is really a Sin."

That, said Alpha, sent Piper blazing like a Star-Spangled Comet back toward Tuftonboro. Now from Clew to heaven the beacon burns, the Klansmen see it plain; from north and south the sign returns, and John Stark rides again. Piper has declared war on the Institute.

While waiting to be strong-armed by a Punitive Expedition, Brother Alpha thought he'd read up enough Facts on Politics and Patriotism to have a Conviction to be hanged for, if it came to that.

This Week in Walker

First there is this late Engineer later still in Politics Herbert Hoover his Challenge to Liberty. Liberty it seems is liberty to be a Rugged Individual, and that is Wonderful. Mr. Hoover, who once wrote the textbook for one of the Course III courses, flunked E11 at Stanford. Even so you get the idea that the New Deal is All Wrong, and that there's still a Republican Party to Save the Nation, just as Piper said. But Piper made it all so much clearer.

Then there is this Frank R. Kent, who writes a column of the same name for the Herald, his The Great Game of Politics, a 1934 revision of the 1923 work to cover new rules and penalties. It's like Professor Roberts' Introduction to Politics, that used to be E21 before they got Scholarship into the Sophomore year. But it's more Practical, the Kent book. It actually tells you how to get to be a Boss step by step, and shows how Political Machines actually work, gear by gear. The Engineer in Politics could hardly find an easier elementary text to follow, but it isn't Patriotic, like Hoover and Piper.

A book they tell us was sent free to all Senators and Congressmen is Esme Wingfield-Stratford his They That Take the Sword. He reviews the history of mankind to show that war is just a disease of civilization that can be cured, like the duel and blood feud. The cure, he says, is Love, not artificially restricted to States and Countries, but of Humanity. It ends with the peroration, "Civilization must be Saved. Who Will Help?" Otherwise it's another Outline of History.

The book this week for genuine feeling and intensity is Ignazio Silone his Pontamara. This is a story of a little Italian hill town that tried to fight back at Mussolini, and shows what happens to Rugged Individuals when they get in the way of the Big Black-Shirted Steam Roller.

For the Department of Deans and Big Executives there are two detective stories. One is Jefferson Farjeon his Sinister Inn and the other Alpha forgets. Anyway, he says, they're more suitable for the Division of Assistant Deans and Little Executives.

A poll ticket at N. Y. U. reveals that seniors expect to be earning \$3,600 five years after graduation.

Folks seem to like it  
yes, and  
here's why—

We know that smoking a pipe  
is different from smoking a cigar or  
cigarette . . . and in trying to find  
the tobacco best suited for pipes . . .

We found out that the best tobacco  
for use in a pipe grows down in the  
Blue Grass Section of Kentucky, and it  
is called White Burley.

There is a certain kind of this tobacco  
that is between the tobacco used for ciga-  
rettes and the kind that is used for chew-  
ing tobacco.

This is the kind of tobacco that we use,  
year after year, for Granger Rough Cut.

We got the right pipe tobacco, made  
it by the right process . . . Wellman's  
Process . . . we cut it right . . . rough cut.

The big Granger flakes have to  
burn cool and they certainly last  
longer, and never gum the pipe.



... in a  
common-sense  
package—10c

the pipe tobacco that's MILD  
the pipe tobacco that's COOL  
—folks seem to like it

# Hockey, Swimming, Basketball, Swing Into Action

## BEAVER SEXTET ELECTS MATHIAS SEASON CAPTAIN

First Team Shows Well In Last Practice Before Tiger Game Tomorrow

### STARTING TEAM NAMED

Frederick David Mathias, 4th year architect, was selected by his team mates to pilot them through the 1934-35 hockey season in an election held after the final pre-season practice yesterday morning. Mathias will take up his duties in the opening game against Princeton at Nassau tomorrow, December 8.

The new captain, elected to replace the injured Paul Daley, is a resident of Westmount, Quebec. He first played hockey at Ashbury College, where he prepared for M. I. T. During his first three seasons here, he played defense, but this season Coach George Owen shifted him to forward, where he has shown well throughout the practice season. Mathias was elected by the ten players whom Owen selected to make the Princeton trip tonight.

### Team Clicks Nicely

The closing practice consisted chiefly of a workout for the first team, which clicked nicely as it easily repulsed all the combinations pitted against it. This first sextet, which will probably open against the Princeton Tigers Saturday, consists of: Leman, center; Driscoll, right wing; Mathias, left wing; Goodwin, right defense; Parker, left defense; and Van Patten-Steiger, goalie. Goodwin, high scoring wing of last season, was another player whose position Coach Owen changed because he felt Herb would be more valuable as a defense player. Owen had a chance to get a line on this year's team when he finished last year as head hockey coach.

The additional four men who will journey to Nassau are: Cohen, center; Forsburg, wing; Healy, wing; and Notman, defense. The squad will be minus the services of its second goalie, Kenny, who was injured by some acid which got into his eye in laboratory Wednesday. Kenny will only be out about a week if the eye heals as rapidly as the doctors expect.

### Duplin Attends Practice

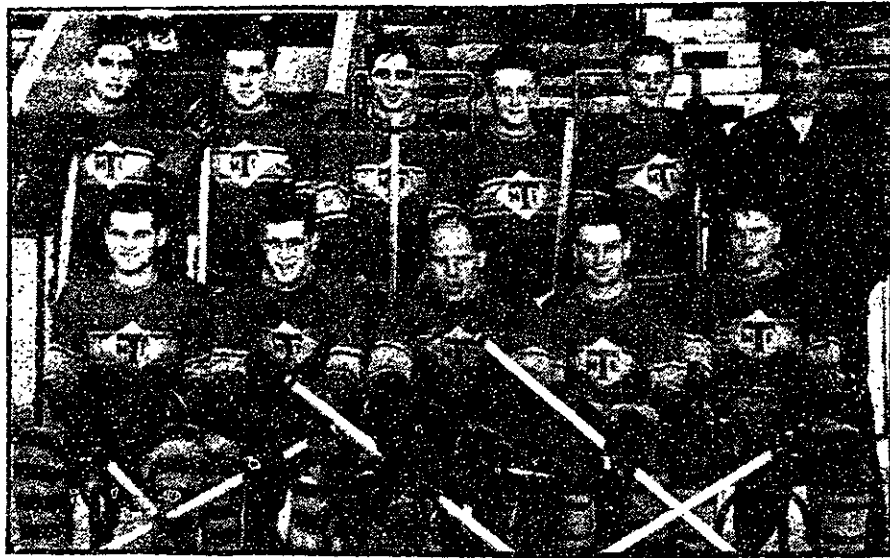
Interested helpers at Thursday's practice were Victor Duplin, former Beaver hockey coach, and Frenchie La Croix, who used to tend goal for the Boston Westminster Club, a professional aggregation. Duplin, who was replaced by Owen last year when he went South to take a new position, helped out here and there on the ice. La Croix, a friend of Owen, spent the morning instructing Van Patten-Steiger in a few of the fine points of goal tending.

### Owen Satisfied

Owen was well satisfied with the team's showing. In an interview after practice, he stated, "I think we have a fairly good team. Of course, we'll have some trouble with some of the stronger teams we play, but the boys are all hard workers with plenty of pep and spirit. I hope for a successful season." Owen, who is beginning his first complete year as head coach, has been hard hit by the loss not only of Paul Daley, but of Bill Shea, a promising wing whom the M. I. T. A. recently ruled ineligible because he has not been in school a sufficient number of terms.

The ten-man squad, Coach Owen, and Manager Towers Doggett will leave for New York by train tonight. They will spend both tonight and tomorrow night in New York, going down to Nassau Saturday noon and returning to New York after the game. The players will be equipped with new hockey sticks and new uniforms, which are bright red with a gray M. I. T. on the front, a gray number on the back, and red and gray striped stockings. Tech fans will have a chance to see the new Beavers in action on Tuesday night, December 11,

## Puck Chasers Who Open Season Tomorrow



Coach George Owen will open his first year as regular coach of the Technology hockey team tomorrow afternoon when his charges stack up against a hard assignment in the form of the Princeton Tigers, at Nassau, N. J. The men who have been chosen to make the trip are, front row (left to right): Driscoll, Captain Mathias, Van Patten-Steiger, Forsburg and Goodwin; second row: Parker, Notman, Healy, Cohen, Leman and Coach Owen.

## SPORTS COMMENT

This week seems to be a big one as far as the starting of various sport schedules is concerned. Squash got under way Wednesday, with both the varsity and junior varsity outfits taking it on the chin. The Faculty team was more fortunate, winning its first contest of the season in Class C of the State Interclub Squash Racquets League.

Although it might not officially be termed the opening of the wrestling season, that sport really got its start for the winter on Wednesday with the preliminary rounds of the All-Tech tournament. Coach Jay Ricks ought to be able to uncover some promising material at least for his freshman team and possibly for his varsity squad.

The third aggregation to start the ball rolling this week is the Tech hoop team, led by Captain Johnny Demo. Tomorrow night the Engineer hoopsters will take the floor against a veteran Harvard five which already has one victory under its belt. According to reports on the B. U.-Crimson contest on Wednesday, despite the rather one-sided score, Harvard appeared none too impressive. Tomorrow's game should be a good test of both fives, with Tech having at least an even chance of coming through with a win.

Still another group of athletes to inaugurate its season is the hockey team. With their newly elected leader, Dave Mathias, the Beavers visit Nassau, New Jersey, tomorrow to take the ice against Princeton, which can be counted on to have a very strong sextet. The Tech team will undoubtedly miss Paul Daley from the center berth, for the former Boston All-Scholastic star was an outstanding performer on the ice.

The last team to get into action is the swimming team. Bob Granberg leads the natators to Springfield tomorrow, but unless the Tech swimmers perform unexpectedly well, they can not hope for victory. Springfield concentrates on physical training, so it is only to be expected that such a college should produce a better than average team.

It was recently announced that Bill Berkeley, former captain of the Technology Hockey team, has been appointed defense coach of the Boston College puck chasers. It can be safely said that the team that Berkeley led was the best ever playing for Technology. That was back in the season of 1926-27 when Vic Duplin, last year's coach of the Beavers, was a star offense man and Berkeley played defense. Although the Beavers never piled up their score they won most of their games by a small margin, the only real defeat being at the hands of a crack Dartmouth team, by the overwhelming score of 7 to 0. Yale, on the other hand was scarcely able to eke out a 2 to 1 victory. Berkeley later played with the Olympic team in 1928 and then with the University Club Sextette. Last year he stepped in temporarily in his teammate's shoes when Vic Duplin went south.

when the team will face the Harvard skaters at the Boston Arena.

### Freshmen Begin Practice

Because of the unusually heavy schedule next week, Owen has planned only light workouts during both practices. Accordingly, he will have his first chance to devote some time to the freshmen, who will report on Monday and Thursday mornings, next week. No regular practice schedule has as yet been worked out for the yearlings, but they will have their first chance to show Owen their worth on Monday.

Excavations in the ancient town of Maiden Castle reveal that the "bargain basement" isn't new. Pits dug in the earth under what used to be a series of shops offer a range of goods almost equal to those of the universal providers of 1934.

## ENGINEER SHOOTERS WIN THIRD STRAIGHT

Continuing their unbroken record, the Technology Rifle team finally eked out a win over the Arlington Rifle and Revolver Club last Friday night by the close score of 894 to 892. The teams were even until the last score was counted when the M. I. T. team drew into the lead and won by the slim margin of two points. The high scorer for the Beavers was Joseph F. Keithley, '37, who shot 86 offhand and 96 prone. The high scorer for the Arlington Rifle team was Chester Elroy who made a score of 87 offhand and 99 prone.

This Friday night, a shoulder to shoulder match with the Beverly Rifle Club will be shot on the Technology Rifle Range at 7:30 P. M.

## TECH HOOPMEN OPEN AGAINST CRIMSON FIVE

Engineers Eager To Start With Win Against Harvard Tomorrow

### VISITORS ARE FAVORED

Both Technology basketball teams, the varsity and the freshmen, will tangle up with Harvard tomorrow night at the Hangar Gym. Primed and ready for battle, the varsity Engineers will endeavor to repeat the trimming they gave the Crimson last year. Captain Demo and "Obie" O'Brien will start as guards with Gay a promising Sophomore, and Bill Garth as the two fast-stepping forwards. Dick Smith will occupy the center berth. Other new men who will probably see action tomorrow and throughout the season are Jack Simpson, Prouty, Weppler, Wojtczak, Denton and Morgan.

It is difficult to foretell the outcome of this battle for this is Tech's first game this year and it is hard to tell how this new combination of men will click while in action.

## BOXERS TRAINING FOR FIRST MEET

Travel To Harvard For Bout On Next Saturday Evening

Tommy Rawson is rounding his boxers into shape this week in preparation for their first bout of the season on December 15th against Harvard. This year Harvard is playing host to the leather pushers and Tommy expects to return home with a victory. It has been a number of years since the Engineers have pounded out a victory over the Crimson. It is rumored that Harvard will start three of last year's freshmen on next Saturday night, and Tommy Rawson perhaps will start three sophomores in action.

The probable line up, based on regularity of workouts and skill shown, probably will find Norton, 115 lbs.; Muldowney, 125 lbs.; Claffee, 135 lbs.; Lefthes 145 lbs.; Gaughan, 155 lbs.; Wirtz, 165 lbs.; and Thorson, 175 lbs.

In their first game of the season last Wednesday night, Harvard defeated B. U. to the tune of 40 to 24 in (Continued on Page 8)

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You'll cut a neat figure in Arrow's new Mitoga. Its wedge-shaped proportions are really masculine. Broad shoulders and narrow waist—no bulging blouse effects—no wrinkling over bosom—it's actually shaped and tailored to fit your body. Remember, only Arrow Shirts have Arrow collars. \$2 and up

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**FINALS OF ALL TECH WRESTLING MEET TO BE CONCLUDED TODAY**

**Torrance, Craig And Peyton Stars In Wednesday Preliminaries**

The annual wrestling classic, which started last Wednesday afternoon provided several major upsets and at the same time brought to light some very promising prospects. The bouts, eight minute affairs, for the most part did not go the full time since the men were not all in best form and awkward early falls usually resulted.

The major upset of the day was provided by Newton Peyton, a freshman, who defeated Don Cestoni, Ricks' leading candidate for Varsity heavyweight honors. Cestoni has an enviable reputation from his work on last year's freshman team, and was picked by wrestling fans as the logical winner in his class, but Peyton had a little too much class for him and put him down in four minutes flat.

One of the other promising finds is the person of Tommy Torrance, a sophomore, who competed in both the 118 and 126, and having won all his bouts will compete this afternoon in the finals for both classes. The most interesting bout to watch was in the 155 pound class between Smith and Nicholson. Although Smith was the final victor, during the first ten sec-

**Wrestling Award**



Above is shown the medal that will be awarded the winners of the finals of the All-Tech wrestling tournament this afternoon.

onds of the match he came very near being put down by Nicholson. However he made a game come-back and at the end of 1 minute and 34 seconds he had put Nicholson down. The finalists are:  
126 lb. class: Milius and Torrance.

135 lb. class: Halpen, Bartholomew, and Craig.  
145 lb. class: Webb and Carchia.  
155 lb. class: Arnold and Baggerman.  
165 lb. class: Heal and Arnold.  
175 lb. class: Pallam and Storm.  
Heavyweight class: Peyton and Baral.

**FIRST INDOOR TRACK HANDICAP MEET HELD**

**Jenkins Awarded Straight T; Other Cross Country Awards Announced**

With indoor track practice having started this week, Oscar Hedlund will run off the first handicap meet on the boards on Saturday afternoon. Many of the men have already signed up in the different events and excellent competition should result in the opening event of the winter season.

The 40 yard dash, the 60 yard low hurdles, 2 and 8 lap races will be on the list of events. In the "barn" the shot put, the broad jump and the high jump will be contested.

Mort Jenkins was awarded a straight T for the second successive year for his work on the cross country team, it was announced at the meeting of the Advisory Council of the A. A. Tuesday afternoon. Other awards, the cTc were given to John Talbert, Tom Oakes, Doug Chalmers, Henry Guerke, William Bates, Wendell Fitch, and Eugene Cooper.

**THE TECH FOOTBALL TEAM FACES THETA CHI IN FINAL GAME**

**Newsies Confident On Victory Against Fast, Light Fraternity Team**

THE TECH football team will go into action for the last time this year when they stack up against the Theta Chi team on Sunday morning on the Tech Field. The same team that saw action last Sunday against the Walloping Waiters will take the field again.

To date THE TECH team has won one game, tied one and lost one and will be out for another victory. The newsies will have the advantage over the fraternity men in that they have played together before.

However the fast Theta Chi team has held a few practice sessions and boasts of a number of former high school stars, and is confident that they can handle the light newsie team. Will Roper, who played with his prep school team will call the signals for the Greeks with Price, Ihmels and Forman aiding him in the backfield. The line will be composed of Faatz and Van Dorn at ends, Fisk and Thipard at the tackle positions, Summersgill and Kemp at guard, and Ewald the center.

Chmielewski, who guided THE TECH team to a victory last week will again call the signals and will be aided in

**Away From The Grind . . .**

On Thanksgiving eve the Sigma Chi fraternity gave a house dance and effectively celebrated a day free from physics and math. One of the features of the affair was the comparatively large dancing space per couple. This was partly the result of a large number of students having already left Boston for the holiday and also of an increase of dancing space made available by the use of an amplifying system.

Roger DeWitt and his eight piece orchestra furnished their usual brand of mediocre music, but the performance of the blues singer, Peggy Russell, was extraordinary—extraordinary for the effectiveness with which she produced that brown, blue feeling.

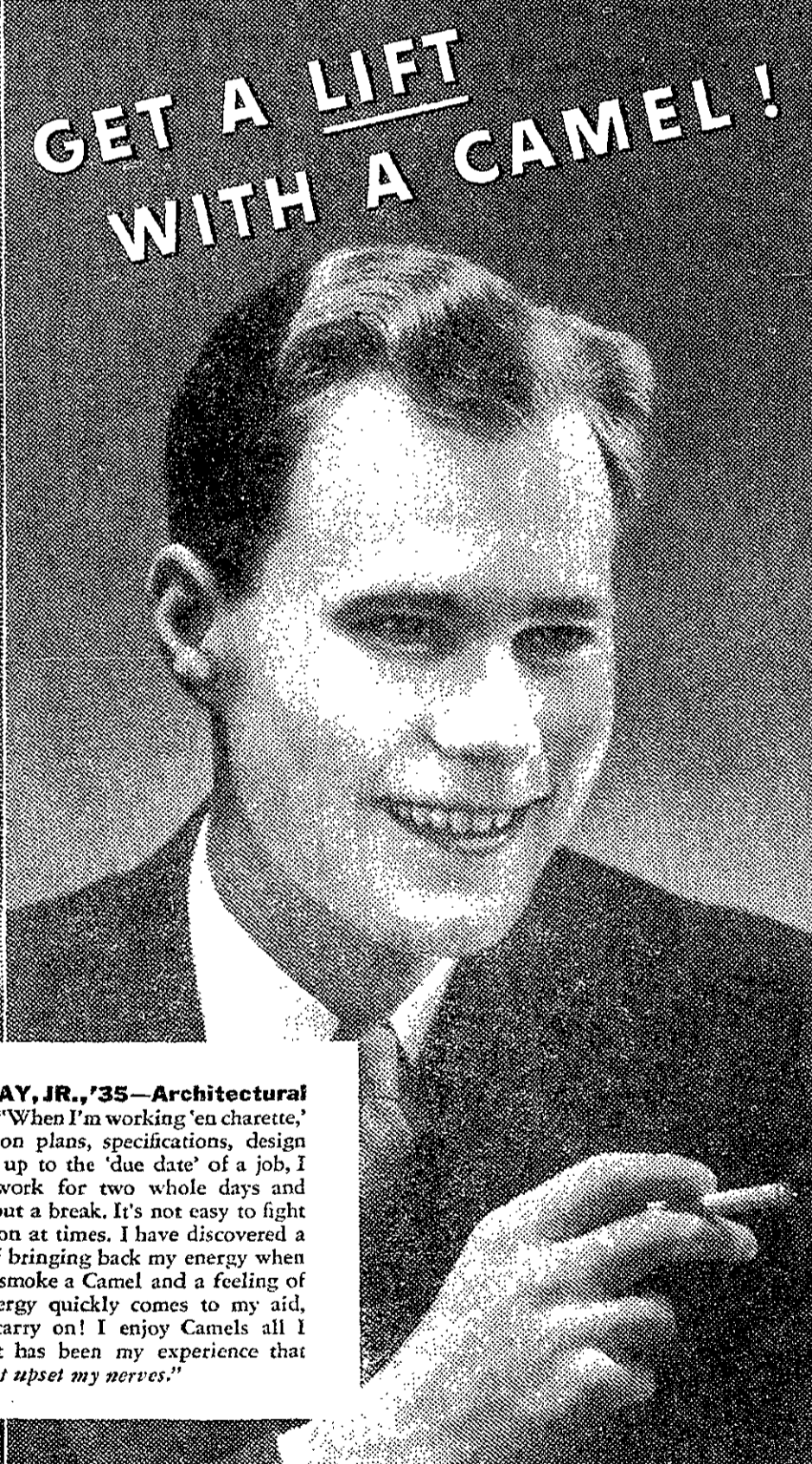
Some of the Sigma Chis were conspicuous by their absence, particularly dashing Elmer Nertz—just where could Elmer have been?

It is rumored that the next Interfraternity Dance is to have scintillating Ina May Hutton and her band of Melodears to furnish the music. This seems to be a good idea for it will give the dance an added attraction of a rather warm floor show.

carrying the ball by Webb, Vincens and Fellouris.



WHEN TIRED OR TROUBLED. . .



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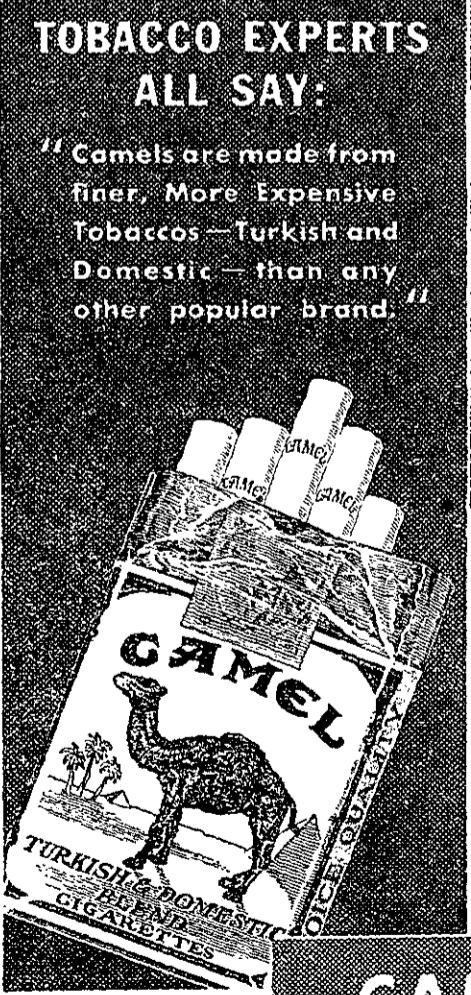
**ALBERT FAY, JR., '35—Architectural Student:** "When I'm working 'en charette," as we say, on plans, specifications, design work—right up to the 'due date' of a job, I sometimes work for two whole days and nights without a break. It's not easy to fight off exhaustion at times. I have discovered a good way of bringing back my energy when I need it. I smoke a Camel and a feeling of renewed energy quickly comes to my aid, and I can carry on! I enjoy Camels all I wish, for it has been my experience that Camels don't upset my nerves."



**NOTED GIRL EXPLORER.** Mrs. William LaVarre says: "When I'm tired, I just stop and smoke a Camel. It wakes up my energy in no time. And here's an important point—smoking Camels steadily does not affect one's nerves."



**TRANSPORT PILOT.** "When I notice that 'all in' feeling," says Maurice Marrs of the United Air Lines. "I pull out a Camel, light up, and the tiredness is quickly relieved. I smoke them steadily, and never know that I have nerves."



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9:00 P.M. C.S.T.  
8:00 P.M. M.S.T.  
7:00 P.M. P.S.T. } **THURSDAY** { 9:00 P.M. E.S.T.  
8:00 P.M. C.S.T.  
9:30 P.M. M.S.T.  
8:30 P.M. P.S.T. }

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# CALENDAR

**Friday, December 7**  
 4:00—Ordnance Talk on Munitions, Room 5-330.  
 7:30—Holy Cross Debate on Munitions, North Hall, Walker Memorial.  
 8:30—Combined Musical Clubs Christmas Concert, Walker Memorial.

**Sunday, December 9**  
 10:00—Football Game, THE TECH vs. Theta Chi, Tech Field.

**Monday, December 10**  
 3:00—Electrical Engineering Colloquium, Room 10-250.  
 6:15—Dorm Dinner Club, Grill Room, Walker Memorial.  
 7:30—Tryout for Tech Show, Walker Gymnasium.  
 8:00—Play for Foreign Students, Rogers Building.

## TECH HOOPMEN OPEN AGAINST CRIMSON FIVE

*(Continued from Page 6)*  
 spite of erratic playing and poor passing. However, this victory should give them an edge over Tech. Jim Grady and Bill Gray are the Crimson boys to watch, while Demo, Garth, and Obrien are expected to star for the Engineers.

As it has already been mentioned in a previous issue, the Tech frosh team is exceptionally strong and should win this first encounter.

## T.E.N. AWARDED PRIZE FOR EDITORIAL CONTENT

*(Continued from Page 3)*  
 fare agencies and would relieve children of the burden of support of their parents.

Obviously, it is not possible to put this idea into operation at once; it is necessary to work out some plan for those who are nearing the retirement age or have already passed it, because the financial backing has not been accumulating over the years. A bond issue floated by the Federal Government might be used to obtain the necessary backing. There is, however, no reason why the pension plan cannot be immediately initiated on such a basis as to benefit the younger workers in the ensuing years.

For the technologist, in particular, to support and promote such a move would demonstrate in full the realization that he occupies a key position in this age of mechanization, and that he is willing to carry out the duties imparted. Truly fitting would be the title—Human Engineer.

Vinton K. Ulrich, '35

## "INTELLIGENCE DANCE" TESTS HOUSEHOLD ARTS

*(Continued from Page 1)*  
 lows, as a special feature of the evening.

Souvenir booklets, containing the question sheet, will be distributed to the girls attending, the first time that this has been done at a Tech function.

"With Jaques Marlowe presenting the music, the household questionnaires, the contest among the girls' colleges for the largest representation, gay decorations, and surprise features—all for a price not to exceed \$1.50—we feel sure that next Friday will be one of Technology's social highlights," declared Louis Pfanz, '35, Chairman of the Dance Committee.

## MUNITIONS MONOPOLY SUBJECT AT DEBATE

*(Continued from Page 1)*  
 woman as a mother should devote her entire activity toward the proper bringing-up of her children instead of entering competition in industry with men. Further, they claimed that by improper bringing-up the loss to society is greater than the gain by additional income.

The negative said that the family was primarily dependent upon a constant source of income from whatever means it came. Furthermore they said that women were equally competent to hold positions formerly held by men alone.

Tonight a team composed of Russell C. Coile, '37, Harold James, '37 and Allan E. Schorsch, '37, will uphold the negative side of the proposition "Resolved; that there should be a state monopoly of the munitions industry."

## INSTITUTE DEPARTMENT MAKES ANIMATED MOVIES

*(Continued from Page 1)*  
 line in which actual operating conditions could be reproduced.

In making this study, which was carried out by Professor Louis F. Woodruff, it was necessary to determine the form of the wave every seven miles along the transmission line. The records were made by a device called a multi-element cathode-ray oscillograph. Many hundreds of these reconstructed forms were carefully prepared as paper cutouts and photographed to make possible the throwing on the screen of the actual progress of voltage down a line. The speed of the actual wave is the same as that of light, 186,300 miles per second, but on a 20-foot screen it is slowed down to about one six hundred millionth of this speed, so that several seconds are required for a single passage of the wave. In future films it is planned to present other electrical wave forms, including those produced by lightning discharges striking on or near power lines.

An animation stand such as is used in producing Hollywood's familiar animated motion pictures is also employed in making the animated science and engineering pictures. The camera operates vertically and looks down

## ENGINEERING SOCIETY LOSES MODEL GLIDER

### Miniature Mahogany Monoplane Taken From Building 33

Wind tunnel Model of a projected soaring Glider is reported lost by the Managing Board of the Aeronautical Engineering Society.

The model, a carefully finished mahogany highwing monoplane with a span of about thirty inches, was taken from a desk in the Rigging Laboratory in building 33.

Julius B. Schliemann, '36, President of the A. E. S., asks that any information regarding the model's whereabouts be communicated to a member of the Managing Board or to Mr. James B. Kendrick, Room 33-222.

upon the animation diagrams, each of which represents some slight change in motion or position, and is photographed separately and in the desired sequence. More than 1,500 separate paper cutouts were made for presenting the electrical wave in animated form.

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