

MacEnnelly to Play at Sophomore Hop In Walker March 2

Committee Changes Orchestra;
Will Also Present
Floor Show

WALKER DECORATED

MacEnnelly's Victor Recording Orchestra has been definitely engaged to play at the Sophomore Hop on Friday, March 2. The dance committee had previously tentatively decided upon Andy Jacobson's Orchestra, but agreed to engage MacEnnelly instead.

A floor show will be presented, as a special feature, an hour after the dance begins. The show will consist of an eight-girl chorus, several specialty numbers, and a master of ceremonies.

To Use Novel Decorations

Spruce will be used to decorate the Main Hall of Walker, where the dance will be held. The spruce will be run between pillars on opposite sides of the hall and will also be twined around the pillars. In addition, ferns will be placed on every table.

Refreshments will be served during intermissions. The dance will be formal, as in previous years.

Reservations Limited

The number of reservations will be limited. Reservations will be obtainable in the main lobby for a week beginning Monday, February 26. The fee will be \$2.25 a couple.

The following guests have been invited: Dr. and Mrs. Compton, Professor and Mrs. Hamilton, Mr. and Mrs. Richard E. Evans, Dean and Mrs. Lobdell, Mr. and Mrs. A. A. Lawrence.

COMMUTERS HOLD BOWLING MATCH

Cambridge and Dorchester Move
Into Tie for First

Six new officers of the Commuters' Club were elected Wednesday by the Board of Directors of the club. Gerald M. Golden, '35, Brighton, was chosen president; John P. Carey, '35, Belmont, vice-president; William E. Keefe, '35, Arlington, secretary; and Frederick W. Travers, '35, Arlington, treasurer.

Two members-at-large of the Executive Committee were also chosen. They are Kenneth D. Young, '35, Needham, and Hamilton H. Dow, '35, Boston. These two and the other four officers make up the Executive Committee.

Elected by Board of Directors

The officers were elected by the Board of Directors of the Club, a group made up of the leaders of the local clubs.

Carey was formerly treasurer of the Club, Travers was secretary, Young was a member of the Executive Committee and also chairman of the Budget Committee, and Dow was chairman of the Publicity Committee.

C. E. SOCIETY TO SEE BERGER PLANT

A trip to the Berger Company plant Friday will be sponsored by the Civil Engineering Society. All students are welcome to attend the group, which will leave the Institute at 2.00 P.M. and which will inspect the manufacture of high-grade surveying instruments at the plant.

On Monday evening at 6.00 P.M. in Walker the Society will hold a dinner meeting at which Dr. William Bowie, Chief of the Division of Geodesy of the United States Coast and Geodetic Survey, will talk on the work of the coast and geodetic survey, with special reference to some of his personal experiences in this field.

Dorm Men Drive Cars from Fourteen States

Some of the more hardy dormitory residents have driven a long way to get to Technology. A recent survey of the registration plates in the dormitory parking space reveals that out of sixty-nine cars parked there, very nearly half of them have Massachusetts registrations. It may be that these cars have come from more distant points and then were registered here.

The next state in popularity is New York, with twelve cars against the thirty-one of Massachusetts. Next in line is Pennsylvania with nine. Two places, New Jersey and District of Columbia, have three representatives, while Connecticut and Wisconsin have two each.

Earthquake Stress Recorder Designed

One-Ounce Device Saves Months
in Making Seismographic
Calculations

A new device known as a stress recorder which will save months of seismographic calculations has been designed by A. C. Ruge, research associate in seismology in the Department of Civil Engineering. The instrument, which is now being used in the study of the effects of earthquakes in buildings, measures the stresses in the models of building frames. It promises important advances in the knowledge of earthquake-resistant methods of construction for buildings, bridges and other structures.

(Continued on Page 6)

700 ALUMNI THROG TO GREAT ANNUAL DINNER

Weather Balloons Explore Heavens Over Middle-West

Results of Survey Are Expected
to Yield Valuable Data in
Making Forecasts

WEATHER PLANE ASSISTS

The study of weather conditions in the stratosphere being made by the Institute at Lambert Field Airport, St. Louis, Missouri, was initiated last Tuesday when weather conditions were suitable for the take-off of the first of forty balloons which are being sent up with instruments for determining atmospheric conditions. Plans for a series of high altitude flights over Missouri have also been made by Lieutenant Henry B. Harris, research pilot of the weather research airplane.

Balloons Burst in Rarefied Air

The balloons, which are about four feet in diameter when inflated, were released at intervals of two hours from Lambert Field Airport. Each balloon carries specially designed instruments weighing only a few ounces each for automatically recording temperature, humidity and atmospheric pressure. The balloons rise many miles above the earth and finally expand and burst in the rarified air of the stratosphere. The instruments are inclosed in bamboo shock-absorbing frames, and the fluttering fragments of the broken balloons are

(Continued on Page 6)

Aldred Lecturer



Photograph by Bachrach
HARLOW SHAPLEY

Harlow Shapley Delivers Fourth Aldred Lecture

Harvard Astronomer and Member
of Corporation Speaks
on Galaxies

WON RUMFORD MEDAL

Dr. Harlow Shapley, director of the Harvard College Observatory, will discuss "Engineering Problems and Practice in the Construction of Galaxies" in the fourth Aldred lecture this afternoon in 10-250 at 3 o'clock.

Dr. Shapley, who is internationally known as one of the greatest of modern astronomers, received his doctorate at Princeton in 1913, and for seven years served as a member of the staff at Mount Wilson Observatory. He has directed astronomical research at Harvard since 1921. Last year he was appointed a term member of the corporation at Technology.

For his achievements as scientist and educator, Dr. Shapley has been awarded an honorary doctorate of laws by the University of Missouri and the degree of doctor of science by Harvard. He has been the recipient of the Draper medal of the National Academy of Sciences, the University medal of Brussels, and the Rumford medal of the American Academy of Arts and Sciences. Next May he will receive the gold medal of the Royal Astronomical Society, and at the same time will deliver the annual Darwin lecture in England.

PROM FACILITIES ARE ALL RESERVED

Several Places May be Opened
Next Week, Committee
Announces

The Junior Prom committee announces that all tables have been reserved for the dance. Therefore, no more tables will be available until next week. This is possible because in some instances one man has signed up for a whole table. In the event that his party decides not to take the whole table, there will be several places available. Reservations will be held until Monday, but if not redeemed by then will be sold.

So far, tables for 225 couples have been reserved. This is 25 more than the budget provides for. Invitations will be available in the main lobby next week.

Walker Memorial Will Be Scene of Important Event

Dr. Frank Aydelotte Is Speaker;
Engineering Education
Subject of Address

NEW HIGH SPEED CAMERA FILMS TO BE EXHIBITED

Activities Plan to Entertain
Alumni With Displays
In Afternoon

Seven hundred alumni from all parts of the east will return to Technology tomorrow evening for the largest dinner in the history of the Alumni Association. The supper will commence at 6.30 o'clock and will be held in the main hall of Walker Memorial.

The guest speaker will be Dr. Frank Aydelotte, president of Swarthmore College, who will discuss "Adventures in Engineering Education." President Karl T. Compton will address the alumni with a paper called: "Ghosts and Skeletons." Presiding at the dinner will be the Hon. Redfield Proctor, president of the Alumni Association.

Before the dinner, the Institute undergraduate activities will perform for the entertainment of the alumni. In the gymnasium of Walker there will be an athletic program, including a performance by the entire gym team, boxing matches and an exhibition of fencing by Joseph Levis, a graduate of the Institute and national fencing champion. Many of the classes will hold meetings during the afternoon.

Activities to Entertain Alumni

Throughout Walker the activities will have displays for the benefit of the alumni. In all of the publications offices some of the staff will be at work preparing copy for their respective issues. They will be pleased to explain any of the details to interested visitors. Tech Show will have on exhibition a miniature stage, illustrating the various parts and mechanisms thereof. During the dinner, the Musical Clubs will present a musical program.

This general open house for undergraduate activities will be held from 5.30 to 6.30, the dinner beginning immediately upon its conclusion.

"Technology," New Motion Picture,

To Be Shown

A feature of the evening will be the announcement by Vice-President Vannevar Bush of the first showing of the Institute's new motion picture, "Technology." This film portrays the experiences of a young man who comes to the Institute to inquire about the nature of its courses and activities and the types of career which such a course of training may open to him. A number of duplicates of this film have been prepared and will be distributed and shown through Technology clubs, honorary secretaries and science teachers in schools.

New Super-Speed Camera To Be Exhibited

Dr. Harold E. Edgerton, whose work in super-speed motion photography has created widespread interest, will show a new film of interesting subjects taken at speeds up to 6,000 pictures a second.

Dr. Aydelotte, who was professor at the Institute from 1915 to 1921, has had a wide experience in the study and teaching of English. He was graduated from Indiana University in 1900. He matriculated in and

(Continued on Page 6)

Apparatus Used to Find Time It Takes for Automobile Driver to Apply Brakes



HOW LONG IS SPLIT SECOND? RESEARCH ON MOTORIST'S REACTION GIVES ANSWER

New Device Shows the Average
Time Required by Driver to
Apply Brakes is 3/4 Seconds

"When I saw that child dash out in the street in front of my automobile, I slammed on the brakes in a split second." These were the words of a careful driver who avoided an accident through quick thinking. But just how long was the split second? How much time passes between the driver's sighting the emergency and his acting on what he has seen?

An investigation to determine the time lag in the individual's response to an emergency while driving an automobile is now being carried on at the Institute in conjunction with the Massachusetts accident survey. The results will show precisely how

fast on the average a driver can apply his brakes after seeing a red light appear on the car ahead of him.

The results already found from the tests given to more than twenty-five men at Technology show that a person meeting an emergency while driving at 60 miles per hour would travel 64 feet before he actually applied the brakes. This calculation holds for ideal conditions, but if the driver were watching the scenery, or if his mind were occupied with something else, the lag would be correspondingly greater.

Average Lag Is .73 Seconds

The average time lag for the men already tested at the Institute is .73 seconds. Because these men might be

(Continued on Page 5)



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REMEMBRANCE OF THINGS PAST

ANNUALLY the alumni of the Institute gather for one evening from, literally, the four corners of the earth, drawn together for the brief space of a day by a common motive. Some of them go to considerable expense and trouble to attend a function which on the surface is no more interesting than many they can experience at home.

They are drawn here by memories, memories of voices, of faces, memories which are losing their sharp edges and growing dim. The desire to see how their friends have changed and prospered, to view again scenes which are the same, yet subtly changed, is strong enough to cause them in many cases to go to considerable inconvenience merely to spend a few hours together.

For the greater pleasure of these veterans the Institute, in addition to the main features of the evening, has arranged for exhibitions of the various undergraduate activities. Here the alumni will have the opportunity to note how these activities are carried on now and compare them, probably with results detrimental to the whippersnappers in control at present, with the good old ways as practiced in the good old days.

AN ILL WIND?

PARIS rioted and the French government was on the verge of collapse, all because the people discovered how oppressive governmental graft can be upon an almost empty pocketbook. The French have long had a reputation for a popular nonchalance about political affairs. It was said that they could not take their government seriously. But that was when the French people were relatively prosperous.

Now that changes in currency standards on the part of the other world powers have withdrawn most of France's stock of gold and the nation has been given a taste of real depression with its attendant discomforts, the government has had to bear the brunt of the growing discontent. Six cabinets have fallen in twenty-one months; and when the Stavisky pawnshop case was brought to light, Parisian mobs decided that more than an overthrow of the cabinet was needed to clear up the scandal in high places.

In this country, political graft has become a national institution, probably as bad as that in France; and the depression has had a similar effect in convincing people that graft is an expensive luxury. Thus, many of our most powerful municipal machines, such as those in New York, Boston and Pittsburgh, have been recently submerged for the first time in years. Our national administration has done its best to keep its enormous recovery program free from politics and corruption. It realizes that any scandals in its operation might turn the public enthusiasm for it into antagonism.

'Tis an ill wind that blows no good! Perhaps this depression will secure the various political units of the world honest and efficient governments.

ALUMNI AND ATHLETICS

IT APPEARS that Yale University's football team did not have an exceedingly successful season in 1933; and for some time the alumni clamored loudly for a new coach, whose choice they seemed eager to dictate. To an alumnus of Technology, where the students have undisputed control over such matters, this situation probably appears peculiar. It is of no great moment to him whether or not we turn out a winning team; he realizes, in any case, that the coach and players have done their best.

Athletics at Technology are quite free from the undue emphasis they are given at most of the colleges in this country. Their primary function here is the development of the physique and character of the participants. They are not looked upon as a source of income, an agent for publicity, or an entertainment for the alumni. The system is unique, for example, in that squads are not cut in any sport, so that poor players get the same opportunity for exercise as the expert. The measure of the success of any sport is not the number or proportion of games won but the number of students out for it.

It is gratifying that Technology can keep its standards of sportsmanship above board at a time when so much graft and commercialism is being bared in other collegiate institutions. The alumni have shown little desire to lower these standards. Perhaps the reason is that the work of the Institute affords it so much real prestige that no great athlete attainments are needed to give it prominence in the eyes of the world.

PHOS GROWS CANNY

THE decision of the Managing Board of *Voo Doo* to reduce the price of the publication from twenty-five to fifteen cents will be good news to an undergraduate body that since 1929 has seen no reductions in publication prices except that of this paper. *Voo Doo* will appear Tuesday.

Newspapers, magazines, and the like, fall into that class of petty luxuries which has suffered more than any other in these times of depleted incomes. Unfortunately Technology's publications have been all too slow in cutting prices to fit changing times. Only last year was *THE TECH* made to sell at three cents.

It now remains for the other two Technology undergraduate publications to accept the changes wrought by the financial revolution of 1929-34, and cut their cloth accordingly.

PARADISE FOR HARVARD

DEAN Alfred C. Hanford of Harvard has submitted to President Conant a plan which would inaugurate the Oxford-Cambridge system there. This plan would make the attendance of classes arbitrary. Students would be expected to take two examinations a year. Thus, states Dean Hanford, will greater intellectual activity be stimulated.

This would of course be an excellent plan for that rare species of student who does not require pedagogic prodding, but for the student who must not only be driven to water, but also made to drink (by far the greater part of the enrollment of any college) it would mean a paradise of ineptitude and probable oblivion.

Again it must be pointed out that no educational system yet devised has succeeded in turning out consistently famous men. We must not forget that in the making of any article there are two major divisions, the material and the process, and as far as higher education goes, the process is of minor importance.

Certainly the system will work, if applied by good students and teachers. But then, almost any system will work under similar conditions.

ELECTIONS

VOLUME LIV is pleased to announce the following elections to the staff of *THE TECH*: Benjamin B. Dayton, '36, Business Service Manager; Oscar A. Fick, Jr., '36, Associate Advertising Manager.



The Passive Resistor

The sagacity and competent leadership of Dr. A. Lawrence Lowell, sometime president of Harvard, are qualities so intimately tied to the man that they will ever be connected with his name. Likewise the scholar's eager inquiring mind and the subtle wit of the truly keen intellect, we may not dispute as integral parts of his personality.

But we are feeling a little chastened, nevertheless, or perhaps the atmospheres of Harvard and this Institute generate conflicting auras about their individuals.

It was a reception of a certain lady of Beacon Street who had invited numerous foreign students to meet some of the domestic brand, and vice versa, from Boston colleges. When we entered what seemed like a large room jammed with an excessively large number of people, we were given a paper on which was printed a rough Mercator projection of the globe, with minor details omitted.

The object, we were told, was to wait for a signal. When you heard that, you started around the room, getting everyone to sign their name in the margin and draw a line to the place they came from. All this time you had to listen for another signal (a small peeping noise from a shy individual standing near the door), and when that came, you stopped. The one who had the most names won a red plush bathtub with pink pin cushions, or something.

Barely had the game started, when we, bright little stirrers-uppers that we are, decided to fix things properly. We had, in point of fact, rebelled from the inferiority complex resulting from superior individuals putting their name over Afghanistan and Middle China. Ergo, we selected a convenient looking locality in the South Pacific somewhere a thousand odd miles west of South America, and proceeded to affix our names to a small circle drawn neatly in.

It created quite a stir. And we felt quite the little smarty when one of our friends came up, all in a fidgit, and murmured that the sometime president of Harvard, Dr. A. Lawrence Lowell no less, was not only at the party but wished to know the person who had lived in the South Pacific.

In fact, we felt smarter and smarter as Dr. Lowell said howdoyoudo, in a deep grave voice. Drawing a deep breath we started our explanation.

"You see, Dr. Lowell, that's an atoll, and the reason we put it down there is because we haven't even been near the Pacific."

"Do you mean to say, then," said the Doctor, "That you didn't live in the South Pacific?"

Ready to burst in our fine frenzy, we replied with a devilish twinkle in our merry eyes, "No, Doctor, not atoll."—

And he didn't get the point.

ARGUE? WHY NOT?

Every student loves an argument. If you don't believe this just drop in on any gathering of undergraduates and listen to the pro's and con's being bantered back and forth. Any subject and any opponent seems to suit Joe College, and the more, apparently, the merrier.

To this popular pastime we extend our unqualified support. There is no pleasanter way of spending the odd hours between or after lectures; there is a lot to be learned from one's fellows, and there is a lot of mental training in itemizing a subject and in picking holes in your opponent's items.

Unfortunately there are a few spoilsports in our midst who are forever suggesting that we should confine ourselves to arguing upon subjects with which we are pretty familiar.

And what unutterable bores we all should become! All our powers of self expression would fade from us.

New Sound System Now In Operation

Amplifier Installed in Lecture Room to Be Used Regularly

The sound system which has been in the process of installation for some time in Room 10-250, is now complete and ready at any time for use. It has been ready tried on about a dozen special occasions, the apparatus has proved a success. The acoustical properties of the room make sound reception effective.

Beginning next week there are plans for use of the system four or five times each week. It will probably be used regularly in the freshman chemistry lectures for the convenience of both lecturer and student. Professor Richard D. Fay and William M. Hall of the Electrical Engineering department were fully aware of the need for such equipment and were most instrumental in making and promoting the plans. The parts of the system were bought outright and installed through the Superintendent of Buildings and Power of the Institute electricians.

The system is made up of a Simonson electric amplifier, a Western Electric speaker attached to horn of the square type, and microphone either of two types. A desk microphone of the condenser type may be used in most occasions but, for the convenience of a speaker who must move about while speaking, lap microphones which fasten to the lecturer's coat may be used when needed.

In addition to being useful for lectures and addresses in the room this sound system is so arranged that it may be used when desired for sound pictures. Suggestions and work in this special detail were made by Frank H. Conant of the Technological Photographic Service.

The First Church of Christ, Scientist

Sunday Services 10.45 a.m.

and 7.30 p.m.
Sunday school, 10.45 a.m.; Wednesday evening meetings, 7.30 p.m.; in the church edifice, Norway, Falmouth and St. Paul Streets. The church is open to visitors Wednesday and Friday from 10 a.m. until 5 p.m.
Reading Rooms—Free to the Public, 209 WASHINGTON ST., opp. State St., STATLER OFFICE BLDG., PARK SQ., 66 NORWAY ST., cor. Mass. Ave.
Authorized and approved literature on Christian Science may be read, borrowed or purchased.

JORDAN MARSH COMPANY STORE for MEN

A Separate Store in a Separate Building

Complete Snow-train Equipment

In our sporting-goods section you'll find everything you need for winter sports in equipment and clothing. Of course there is equipment for every other sport too, but here are a few of our seasonal specialties.

Northland ridge-top hickory skis, \$13.20 to \$14.75

Northland jumping skis, \$15.75

Olympic ski harnesses, \$4.50 pr.

Ski boots, \$6.50 to \$8.95

Snow shoes, \$7.50 to \$10.50

Snow shoe harnesses, \$1.25 and \$1.50

Men's ski pants, \$6.95 to \$9.95

Tubular skate outfits, \$4.45 to \$11.50

Woolen jackets, \$4.95 to \$12.95

Toboggans, \$7.95 to \$16

Men's flannel shirts, \$4 to \$5.50 (gray, navy, or plaid)

Woolen sport socks, 50c to \$3.50

SECOND FLOOR—ANNEX

INITIATE TEN INTO QUADRANGLE CLUB

Outstanding Freshmen Chosen for Honorary Society

Ten freshmen were initiated into the Quadrangle Club, the honorary society of the Freshman and Sophomore classes, Wednesday night. The outstanding members of the freshman class are elected to this club at the beginning of the second term each year.

Those initiated are Frederick P. Baggerman, Cleon C. Dodge, Conover Fitch, Gray Jensvold, Thomas R. Kinraide, Rinaldo V. Kron, James R. Thomson, John B. Toy, Robert H. West and Stanley D. Zemanski.

The purpose of the Quadrangle Club is to foster better relationships among the two lower classes.

Vassar, according to a sociology professor at Lehigh, was founded by a brewer who was trying to prove that women really could be educated. —*The Hoya.*

OFFER COURSE IN TEXTILE RESEARCH

Six Weeks of Laboratory Work and Lectures Included

The Institute is again offering a special course in textile research intended for textile executives, research directors, laboratory technicians, and others interested in this field, beginning March 2. To insure efficient use of the laboratory facilities the size of the group will be limited to 20.

The work is arranged to afford lecture and laboratory exercises on Friday and Saturday each week for six consecutive weeks, making it possible for men in the industry to attend conveniently. Twelve lectures will be devoted to textile analysis and will include discussions of the character and necessity for textile testing; the design of textile testing laboratories; bone dry tests; conditioning apparatus; correction for moisture; yarn analysis; twist and thread counting devices; corkscrew in plied yarns; auxiliary apparatus; textile testing machines; special tensile testing machines; and the measurement of special properties of fabrics.

Twelve lectures will be devoted to textile microscopy and will include discussion of textile microscopes and how to use them; light and the microscope; specimen mounting; theory of textile micrometry; applications of textile micrometry; rapid and precision sectioning; color as it applies to textile microscopy; micrography of textiles; photomicrography of textiles; micro-analysis of fabrics; micro-analysis of yarns; and micro-

Solving of Unsolvables Casts Doubt on Honesty

"To pay or not to pay, that is the question." And with apologies with Shakespeare, that is the question facing a certain officer of the freshman class.

It seems that there is a puzzle into which one puts numbered blocks, and then tries to arrange them into consecutive order without removing them from the box.

The aforementioned class officer had read that the solution was impossible. He consequently bet another class officer two dollars that he could not solve the problem in two hours.

In an hour and a half the second class officer came out of his room with the impossible apparently accomplished! Now the first officer, after consulting his book again, does not know whether to pay or to accuse the first officer of removing the blocks.

analysis of fibers. The lectures will be illustrated with slides, motion pictures, and experiments.

In addition to the laboratory work performed by members of the class, opportunity will be afforded for conferences. Successful completion of the work entitles the student to credit in the subjects taken. Each member of the group will be registered as a special student.

Highway Survey Solicits Aid of 10,000 Drivers

Engineers Seek Information About Accident Hazards, Safeguards, and Driving Habits

Ten thousand automobile drivers throughout the state are going to have an opportunity to give engineers of the Massachusetts CWA Highway Accident Survey the benefit of their opinions on accident hazards, traffic safeguards and driving habits in a questionnaire which is now being distributed.

In announcing the study, Colonel Robert C. Eddy, who is in charge of the survey being made under the direction of the Institute, emphasized the vital importance of the motorists' viewpoint.

"We are seeking the opinions and helpful suggestions of some 10,000 Massachusetts automobile drivers," he said, "because their experience on the highways should enable them to give us valuable assistance. The highways are built for the convenience and pleasure of the people, and we feel it is their right to make suggestions for increasing the safety and pleasure of driving. Specially trained engineers will submit the questionnaires to a large group of motorists, who do not place themselves under any obligation in answering the various questions."

Test questionnaires distributed to determine what information would be most interesting to motorists as well

A report from a school of education stated that one of the freshmen spent the summer soaking his nose in brine, because someone told him that he would have to keep it to the grindstone in college.—*McGill Daily.*

"The idea that girls are an inspiration for football players to do bigger and better things is a hoax," says Coach Michael Percarovich of Gonzaga University.—*The Technique, Atlanta.*

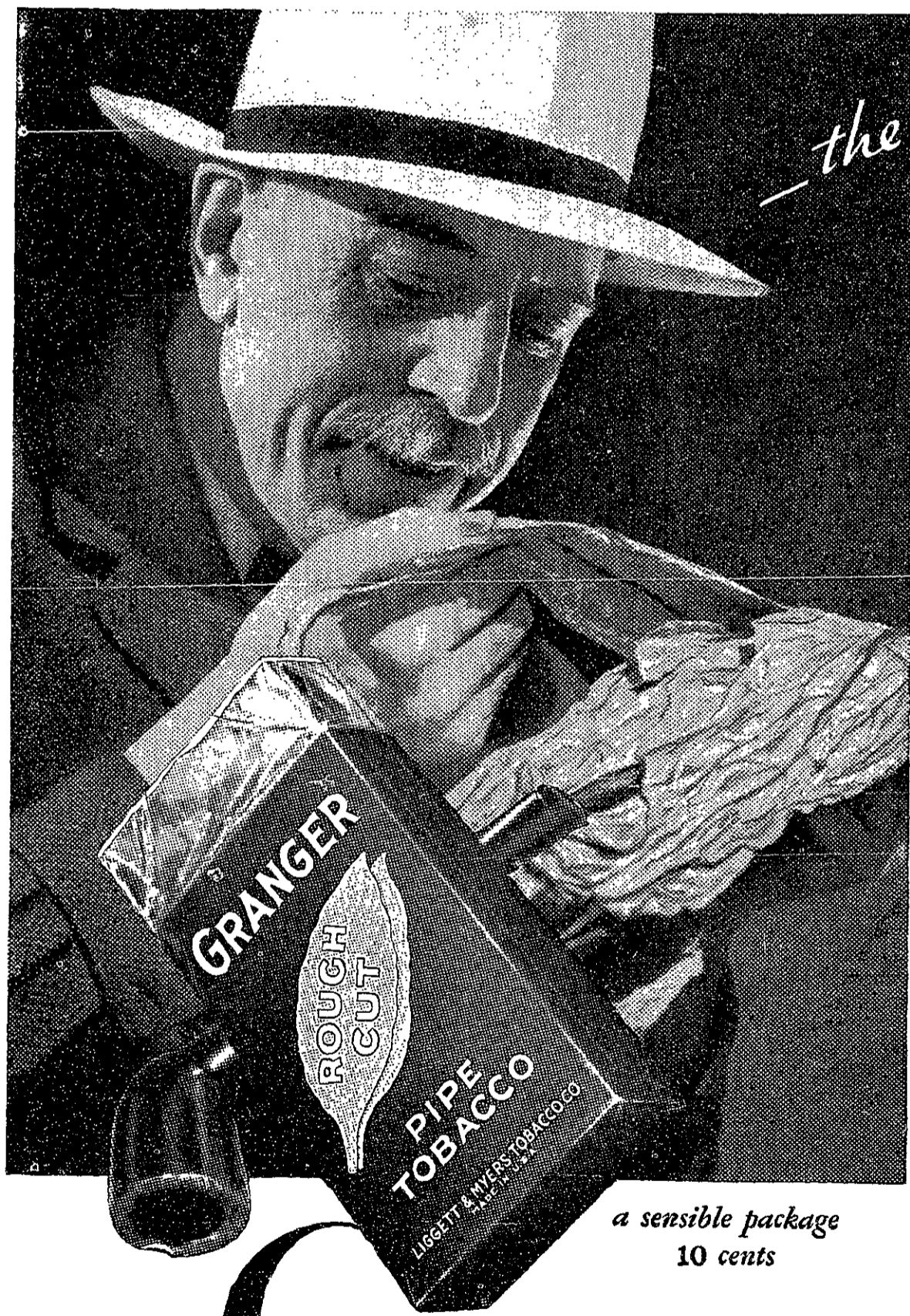
Oh, yeah?
An examination at the University of Mississippi asked for the principal parts of a Latin verb. One paper bore, "slippee, slippere, falli, bump-tus." The paper, when returned, contained the inscription, "fallo, failere, fluncto, suspendum."—*The Hoya.*

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2nd SENSATIONAL
WEEK "THUNDER OVER MEXICO"



—the abc of pipe tobacco

The best tobacco for pipes comes from Kentucky... and it's called "White Burley"

WE use White Burley in making Granger Rough Cut. It comes from the Blue Grass region of Kentucky—ripe, mild leaf tobacco that just about tops them all for fragrance and flavor.

From the right place on the stalk we select the kind that's best for pipes. Then we make it into Granger by Wellman's Method and cut it up into big shaggy flakes.

White Burley tobacco—made the way old man Wellman taught us how to make it—that's Granger.

"Cut rough to smoke cool" is the way pipe smokers describe Granger—try it

Granger Rough Cut

the pipe tobacco that's MILD
the pipe tobacco that's COOL

—folks seem to like it

BELL ENTERED IN N.Y.A.C. SPRINTS

Technology Star to Run Against Fast Competition

Track Captain Invited to Compete in Special 50-yard Dash

ONLY ENGINEER TO RUN

Dick Bell, Technology's star sprinter and track captain, has been invited to run in the special sprint event at the New York A. C. Games tomorrow night, it was announced this week.

His most outstanding opponents will be Wedmyer, Navy's star; Johnson, freshman flash from Columbia; and Jannell, Fordham's ace dash man. The latter was among the qualifiers for the finals in the sprint event at the Millrose games.

Bell in Better Form Now

Bell has come along slowly this season, not doing very well in his first competition, but has gradually rounded into form. At the B. A. A. games last Saturday he broke the local record for the 50-yard dash, and at New York tomorrow he will attempt to continue his victories.

Bell will be Technology's only representatives to compete at the New York meet.

Cagers Lose Eighth Game

Basketball Team Falls Before Weak Clark Team, 32-21 in Slow Game

Playing the usual type of unorganized game, the Technology varsity basketball team fell before the onslaught of an inferior Clark quintet at Worcester last Wednesday night by a score of 32 to 21. This was Clark's first victory this season.

The shift which brought O'Brein to center and Garth to forward did not work out as well as Coach McCarthy had hoped, and he was obliged to resort to the old combination. Frequently the Engineers' shooting and passing was quite ragged.

McCarthy Optimistic

McCarthy hopes to break the prevailing jinx which has followed the team this year when the team meets Williams at the Hangar gym on Sat-

VARSITY MATMEN LOSE TO TUFTS

Jumbos Take Five Matches; Freshmen Win, 19 1/2-12 1/2

In a meet that saw every bout except the last go to the time limit, the Tufts matmen defeated the varsity wrestling team, 19 to 9. Judd, Boyan and Captain Poole were the winners for Technology. George was forced to default his bout because he was unable to make the weight.

The Technology freshmen defeated the Tufts freshmen by the score of 19 1/2 to 12 1/2 in a preliminary meet.

Varsity
118-pound class—Gillespie (Tufts) won from George by default.
126-pound class—Slate (Tufts) defeated Marderosian, time advantage, 3.38.
135-pound class—Judd (M.I.T.) defeated Spofford, time advantage, 3.24.
145-pound class—Boyan (M.I.T.) defeated Mattioli, time advantage, 7.00.
155-pound class—Hingston (Tufts) defeated Isbister, time advantage, 9.14.
165-pound class—Captain Poole (M.I.T.) defeated Johnson, time advantage, 6.14.
175-pound class—Smith (Tufts) defeated McCaughan, time advantage, 7.51.
Unlimited—Captain Linberg (Tufts) defeated Graham, fall, 2.05.
Freshmen
118-pound class—Pagan (Tufts) defeated Noedeman, time advantage, 7.25.
126-pound class—Ergang (Tufts) defeated Harum, fall, 3.10.
135-pound class—Slate (Tufts) and Testa drew in two overtime periods.
145-pound class—Webb (M.I.T.) defeated Goodall, fall, 8.32.
155-pound class—Stewart (Tufts) defeated Baerman, time advantage, 8.05.
165-pound class—Heid (M.I.T.) defeated Ordon, fall, 6.41.
175-pound class—Pellam (M.I.T.) defeated Desmet, time advantage, 7.55.
Unlimited—Cestoni (M.I.T.) defeated Kramer, fall, 24 secs.

urday night. To date, the team has won two out of eight games, a poor showing compared to the unusual record made last year which brought the team the Greater Boston championship and gave Sysko a position on the All-New England team.

The freshman basketball team lost their eighth straight game Wednesday to St. Georges at Newport, R.I., by a score of 37 to 17.

The summary:

CLARK			
	gls.	fts.	pts.
French, r.f.	3	0	6
Vincera, l.f.	0	0	0
Burwick, l.f.	2	0	4
Brierly, c.	5	1	11
O'Connor, r.g.	0	3	3
Perry, l.g.	4	0	8
Totals	14	4	32
M. I. T.			
	gls.	fts.	pts.
Demo, l.g.	1	0	2
Kennedy, r.g.	2	1	5
O'Brien, r.f.	2	4	8
Murphy, c.	1	0	2
McIver, c.	1	0	2
Thornton, l.f.	1	0	2
Garth, r.f.	1	0	2
Totals	8	5	21

UNDERGRADUATE NOTICE

The Photographic Department of *Technique* announces that all informal photographs which are to be considered for the 1934 *Technique* must be turned in by March 1. A box has been placed just outside of the Information Office for collecting these photographs.

ENGINEER BOXERS SEEK INITIAL WIN IN THIRD MATCH

Team Will Not Be Handicapped by Forfeits as in Past Matches

The Engineer boxing team will attempt to break into the win column tomorrow when it meets the U. S. Coast Guard Academy at New London. The Beavers' ego is still low on account of a 12 1/2 to 3 1/2 beating received last Saturday at the hands of New Hampshire. Faring better than in the last meet, the previous forfeits in the 115, 175 and heavy-weight classes will not handicap the team, as they will be compensated for by holding one extra 135-pound bout and two extra 145-pound bouts.

Muldowney is entered in the 125-pound class, and it is expected that he will repeat his brilliant showing made at the New Hampshire meet, where he was one of the three Tech victors.

Several Changes in Line-up

Captain Wetherill, as usual, will box in the 135-pound class, together with Bradford, also a victor at New Hampshire and who has usually fought in the 125-pound class. Among the 145-pounders, ex-Captain Carey will share honors with Leftus and Woll. Leftus has been losing weight lately and thus has been forced to box in a lighter division. Ed Gaughan, hard-hitting 155-pounder, will attempt to repeat his New Hampshire victory with another K.O. to his growing list.

Since the intercollegiate boxing rules do not govern the Coast Guard Academy, Bob Thorson of the freshman team will experience his first collegiate bout, fighting in the 165-pound class.

According to Tommy Rawson, the boys are not all in top condition because of the strain of the recent exams and their lack of training. However, since the team is not hindered by defaults it is expected that it will fare better than in the New Hampshire meet, where it had a handicap of four points out of a possible sixteen.

Frosh Track Team in Indoor Meet

First Year Men Face University Extension School on Boards

Track Coach Oscar Hedlund has arranged a full week-end schedule, with the freshman runners facing the University Extension School and the varsity men participating in a handicap meet on the board track. Over twenty first year men are entered in the dual meet and a large number of upper classmen are expected to compete in the handicap meet.

The freshmen who are entered in tomorrow afternoon's event are as follows: Low and high hurdles, Faatz and McClellan; 50-yard dash, Houghton, McClellan, Sabi and Wilkes; 300-yard dash, Sabi, Wilkes and Pulsifer; 600-yard dash, Cooper, Moffatt and Haskel; 1,000-yard dash, Guerke, Oakes and Matthews; high jump, Schilling; pole vault, Woods; shot put, Sawyer and Thompson; broad jump, Lipnick and Dreselly.

GARONO FINALIST IN DORM SQUASH

In the semi-finals of the Dorm Squash Tournament, Louis Garono, '35, yesterday defeated Dave Ingalls, '34, by the score 3-2. This means that Garono will meet the winner of the Lucas-Vallone match, to be held as soon as Lucas recuperates from an attack of scarlet fever. The scores in last night's game follows: 9-15, 10-15, 15-10, 15-11, 15-12.

The University of Oklahoma football team gained a half mile on forward passes alone during the 1932 season.—*McGill Daily*.

Four Squash Tournaments Starting; Classifications Include All Groups

With four squash tournaments about to get under way, players of varying calibres may all find opportunity to compete. The feature is the Emerson Cup Tournament, the competition for the large silver cup donated by Charles J. Emerson, '04. The winner will have his name engraved on the cup and retain its possession for one year, and with the runner-up receive miniatures of the large cup which they may retain permanently. To date, over 120 men have signified their intention of competing, and the sign-ups will continue for several weeks.

In addition, an inter-fraternity contest open only to members of the Institute fraternities, together with a Junior Varsity tournament open to all undergraduates except lettermen, are now in progress. In fairness to the graduate students and to the members of the faculty, a tournament exclusively for them is also being held. The sign-ups for all these contests must be in on or before Wednesday, February 21st. The deadline for the Emerson Cup sign-ups will be announced later.

Beaver Swimmers Expect to Repeat

Seek Second Consecutive Victory Against Trinity Team Tomorrow

Fresh from their victory over the Boston University natators, the swimming team will travel to Hartford tomorrow afternoon to tackle a weak Trinity team. At the same time the first year team will stack up against a strong and highly favored Exeter team.

The varsity will be without the services of DuRoss in the 50-yard dash and the relay because of an injury recently received in an automobile accident. However, with Captain Vaughan and Summers in the 220-yard dash, Paige in the dive, Granberg in the 50-yard dash and Mueller and Vonnegut in the breast stroke, the Engineers should pile up a sufficient score to win the meet.

Dodge, Freshman Mainstay

Although the freshman team has as yet failed to win a meet, Cleon Dodge is still undefeated in 50 and 100-yard dashes, and has been the mainstay on the relay team. Swimming in the Roxbury Boys' Club pool last week, he made a record time of 24 1/2 secs. for the short dash. Dakin, another of the first year mainstays, will not enter the Exeter meet because of an infection.

The line-ups for tomorrow are as follows: Varsity — medley relay, White, Edmonds and Granberg; 220-yard free style, Summers and Vaughan; 50-yard dash, Brown and Granberg; dive, Paige and Wells; 440-yard free style, Hamilton and Vaughan; 150-yard back stroke, Edmonds and Hope; 200-yard breast stroke, Mueller and Vonnegut; 110-yard free style, Callan and Granberg; 440-yard relay, Callan, Summers, Granberg and Vaughan.

Freshman — 50-yard dash, Dodge and Haywood; 100-yard dash, Dodge and Rutherford; 220-yard breast stroke, Bliss and Burnett; dive, Rogers and Heywood; 150-yard back-stroke, Kron, Smith or Fishel; 220-yard breast stroke, Goldsmith and McCrane.

10,000 DRIVERS WILL AID HIGHWAY SURVEY

(Continued from Page 3)

as the highway experts indicated the eagerness of drivers to contribute their observations.

The survey engineers want to know what automobile drivers consider the best methods of traffic control. They will be asked for their opinions on the direction of traffic by lights and by police officers at city street intersections. Their opinion on "stop before entering" signs, blinkers and automatic traffic lights on highways also will be sought. Are these signs and lights properly located? Are there enough or too many warnings at intersections, curves and school zones? The survey engineers are also particularly interested to know what highway locations are considered by motorists as danger spots.

Other interesting questions being asked drivers are: Do signs indicating permissible speeds on highways help to prevent accidents?

Is the law requiring hand or auto-

matic signals indicating turns or stops on state highways a reasonable requirement?

Should this law be extended to cover all roads?

Are the responsibilities of pedestrians and motorists on highways clearly understood?

Should the schools be required to teach children accident prevention?

Is the present method of inspecting cars and equipment adequate?

Should inspection be extended to include tires, rear vision mirrors, visibility through windshield, bumpers and stoplight?

In Massachusetts an examination is required before a driving license is issued. Would it be advisable to re-examine drivers at stated intervals?

Should drivers be required to present a certificate of proficiency from some recognized or state-operated training school?

At what age are applicants sufficiently mature to represent a good safety risk?

Would a reduction in insurance premiums for good drivers and an increase for careless drivers help to prevent accidents?

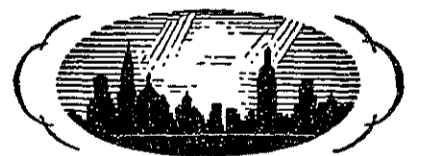
What penalties would help to cure drivers of careless habits?

Would some system of merits for good drivers and demerits for careless drivers help to reduce accidents?

These and other interesting questions are being presented to various drivers in a prepared questionnaire on which, in addition to his answers to specific questions, the motorists may add such comment as he thinks will be helpful.

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**DELAY TIMER TESTS
MOTORISTS' TIME LAG**

(Continued from Page 1)

above average in ability to react quickly to certain stimuli, there is a possibility that the average man would take longer to respond.

To find out what the test is like, this reporter went out in one of the cars used in the investigation and took the driving test. Two cars are used in the test, the car carrying the measuring device with the observer being followed by the auto driven by the subject. After the lead car and the subject's car turned out on Memorial Drive, data was taken at intervals. With the attention of the subject concentrated on the stop light of the forward car, a monotonous high-frequency hum coming from the instrument in the back seat, occasionally the red light would appear and

the driver's foot would jump from the accelerator to the brake.

Tests Satisfactory

The cars came back on the opposite side of the river and concluded the trip behind the Institute. After computations were made to transfer the data into time units, the inventor of the device, C. W. Frank, a graduate of Technology, explained the mechanism of the instrument. At the instant the red light flashes in the forward car, a charged condenser starts discharging. When the subject sees the light and applies the brake, an electrical impulse is sent to the lead car, operating a relay which stops the discharge. A vacuum tube voltmeter automatically measures the potential across the condenser, and the observer records both the measurement and the distance between the cars. A series of measurements determines the average time lag for the subject.

A group of engineers under the direction of Professor C. E. Tucker of the department of electrical engineering are carrying on the research, the initial results of which have been pronounced satisfactory.

A lady is a woman who always remembers others and never forgets herself. —*The Maine Campus*

Marriage is an institution, but who wants to live in an institution. —*The Wooden Heel.*

**WHEELOCK SCHOOL
AIDS CONCERT**

The program for the coming joint Musical Clubs concert with the Wheelock School, to be held on February 21 from 8.15 P.M. to 2 A.M. in Walker Memorial, was announced today. Matrons for the evening will be Mrs. James Jack and Mrs. Leicester Hamilton for Technology, and Mrs. Lyle Ring, Miss Marion Gilbert and Miss Laura Holmes for Wheelock.

The Combined Glee Clubs will render "Jerusalem" by Parry and "As Torrents in Summer" by Edgar. The Banjo Club will follow this with Tschaikowsky's "Danse Russe Tre-pak" and "Jota" by E. Granados. The Wheelock Glee Club will present "The Moon Reappears" by Purcell and two folk songs. Following this, the M. I. T. Glee Club will give "Down Among the Dead Men" by Taugh-Williams, "With Hearts Uplifted" by Schredof, and Robertson's "Jolly Roger." The M. I. T. Orchestra will follow with Luigini's "Ballet Egyptian" and two others. In conclusion, the Combined Clubs will present "Mother Moscow" by Tchesnokoff.

Exactly thirty-nine freshmen at the University of Florida were promised the freshman class presidency during one active campaigning of rush week. —*The McGill Daily.*

**INSTITUTE BEGAN
WITH 15 STUDENTS**

Ten Instructors Offered Six Courses for Class of '69

On February 20, 1865, when this Institute was established, fifteen students and ten instructors constituted the total population of the school. Six courses of instruction were offered. By 1897, the enrollment had increased to 1,200. Fifty years after the founding of the Institute, when the school moved from its quarters on Boylston Street to its present site, the instructing staff of 300 was teaching 1,900 students in 15 courses. Now, in 1933, some 68 years since its establishment, the Institute has a total population of 3,420 people.

Of this number, 520 are members of the instructing staff, which includes about 85 professors, 55 associate professors, 75 assistant professors and 93 instructors besides lec-

turers, research associates and assistants, teaching fellows, and assistants, technical assistants, and national research fellows.

There is a total of 2,650 students including 440 graduate students, taking the 18 courses now offered.

The 3,670 people of the Institute also include about 250 persons employed, whose positions range from janitor to stenographer.

UNDERGRADUATE NOTICE

There are a number of openings for freshmen as assistant manager of the track team. All first year men interested may leave their name with the A. A. secretary on the third floor of the Walker Memorial or see Bill Cross at the Track House any afternoon after five o'clock.

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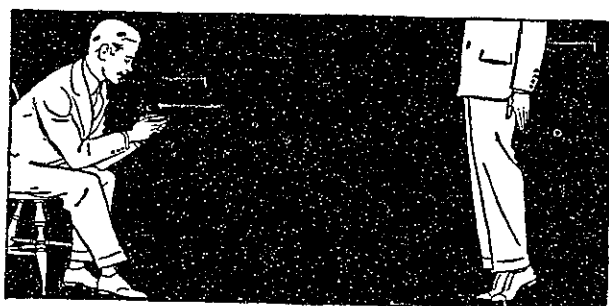
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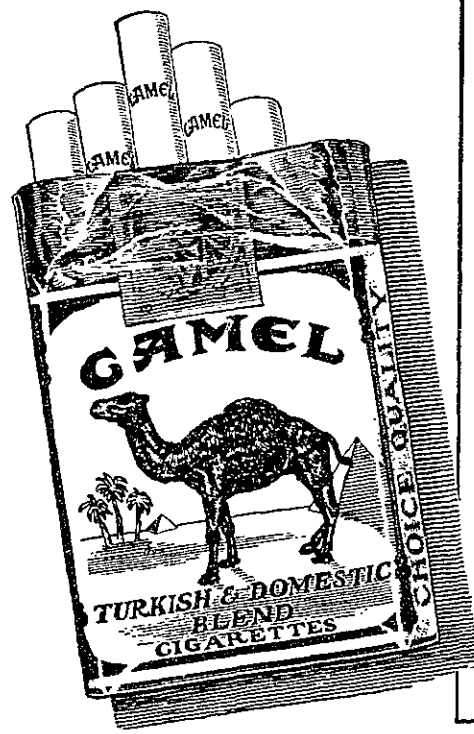
indulging in any other nervous habits—start protecting your nerves.

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CALENDAR

Friday, February 16

2:00—American Society of Civil Engineers Trip to Berger Co. Leave Corner of Massachusetts Ave. and Memorial Drive.
3:00—Aldred Lecture, Dr. Harlow Shapley on "The Construction of Galaxies," Room 10-250.

Saturday, February 17

2:00—Aristocrats Rehearsal, North Hall.
2:00—Beta Theta Pi Basketball Practice, Hangar Gym.
7:00—Annual Alumni Dinner, Main Hall, Walker Memorial.
8:00—Wellesley-Roslindale Dance, Commuters' 5:15 Club.

Monday, February 19

5:00—Dormitory Dinner Club, Grill Room, Walker Memorial.
5:00—Tech Show Orchestra Rehearsal, East Lounge, Walker Memorial.
6:00—American Society of Civil Engineers Dinner Meeting, North Hall, Walker Memorial. Speaker, Dr. William Bowie, Authority on Geodesy.
7:00—Tech Show Chorus Rehearsal, Walker Gymnasium.

Tuesday, February 20

5:00—Commuters' 5:15 Club Showing of the Film, "Technology," Room 10-250.
8:00—Chemical Club Meeting, Dr. William H. Walker, Speaker, Moore Room, Building 6.

WEATHER CONDITIONS STUDIED AT ST. LOUIS

(Continued from Page 1)

relied upon to break their speed of descent.

Professor Carl G. Rosby, director of the division of meteorology, and Louis Harmentas, research associate, are in St. Louis with specially designed meteorographs, one of which is attached to each balloon.

Dr. J. Bjerknes, the distinguished Norwegian meteorologist who is now visiting the Institute, is co-operating at Cambridge with Dr. Hurd C. Willett of the Institute staff in making the weather forecasts upon which the release of the balloons will depend.

Meteorographs Used

Many of the balloons are expected to reach an altitude of 12 miles above the earth, and because they may be carried great distances by wind currents each balloon will bear an identification tag offering a reward of \$5.00 to the finder, provided the instruments and their records are not tampered with. Further instructions will advise finders how to care for the instruments until Professor Rosby sends a special shock-absorbing container in which to ship them to his laboratory.

A mid-continent location for the experiments was chosen in the hope that most of the instruments would be found on land. To carry out the study in New England, where the prevailing winds are from the west, probably would result in loss of most of the balloons at sea. The information gathered in these upper air observations is expected to result in important contributions to knowledge of meteorological conditions in the stratosphere and to advance studies of weather forecasting.

Extension of the Institute's high altitude meteorological exploration is made possible by a grant of more than \$8,000 from the Rockefeller Foundation.

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EARTHQUAKE RECORDER SAVES ENGINEERS' TIME

(Continued from Page 1)

Effect on Structures Studied

In the solution of construction problems, the engineer must translate his fundamental knowledge of earthquake movements into terms of their effect upon the structure he is designing in order to test its strength. For simple buildings he can utilize mathematics, but for structures of more than three or four stories the task becomes so involved as to be practically impossible by such means. He has, therefore, long sought other methods of accomplishing his purpose.

The significance of the instrument designed at the Institute is that it gives at once data of importance to the engineer. In previous methods of model study the "deflections," or motions, of the models were measured and from these the stresses had to be calculated by a tedious process. The stress recorder not only marks an important advance in this branch of the science but can be used to determine the stresses caused by simple forces, such as wind, as well as those caused by more complex earthquake forces. Once the engineer has the data on the stresses in the beams and columns of the model, it is a simple matter for him to apply them in terms of the full-sized structure.

Device Weighs One Ounce

The stress recorder, which weighs only an ounce or so, by an ingenious system of mirrors, lenses and prisms, writes a record of the stresses in models on photographic paper by means of a pencil-point of light moving back and forth across the paper, which is fastened to a revolving drum. Simultaneously, time marks are "flashed" on the record by an electric spark operated by a magnetically controlled tuning fork. This arrangement enables the observer to compute time intervals on the record to an accuracy of 1/1000 of a second or better. The models used in Technology's laboratory of engineering seismology are made up of flat steel bars welded together at the joints. At the "floors" of the frame are iron weights proportioned to represent in miniature the weight of the prototype structure.

Artificial "Quakes" Produced

A model, if built according to the correct model laws, will react to an artificial earthquake in exactly the way the large structure would react to a natural earthquake, only on a smaller scale. If the scale is chosen properly it is quite possible to build a model of a ten-story structure having a total height of only four or five feet and a total weight of perhaps a hundred pounds. Such a model can be put on a "shaking table," which produces an artificial earthquake, and the results will immediately reveal more than months of careful figuring could. The model automatically solves the problem, and in that sense is a special type of calculating machine which gives the answer to equations so complex as to be beyond human calculations. The answer is given by the model in the form of vibrations caused by the earthquake, and these the engineer measures in the laboratory.

Engineering Field Much Overcrowded Says David Fiske

Too Many Engineers on Market, Hence Good Education Is Necessary

Opportunities in the field of engineering are found to be limited, according to the statistical analysis of five professions in a recent article by David L. Fiske, Secretary of the American Society of Refrigerating Engineers. The answer to the question asked by his title "Are the Professions Crowded?" is "yes" in the case of engineering and law and "no" in the case of medicine. The data used relates to the numbers, and employment of men in these groups from 1890 to 1930 together with a forecast of future population at the present educational rate.

According to Fiske, "the number of engineers . . . is the key to their social-economic status" rather than their "training, abilities, incomes, organizations, or other factors commonly given more weight." An analysis of our professional population in the past, is more fundamental, the author states, and contributes more to an understanding of the situation than such matters as education and character.

The analysis shows a very rapid increase in the numbers of graduates of engineering schools in the past two decades. To keep up employment a relative increase in the demand for technical services must be brought about. "My own opinion," declares the author, "is that the demand for such services will not greatly increase in the next decade or two above what it was from 1920 to 1930."

Young Engineers Predominate

A preponderance of young men (25-45 years of age), compared to older ones, appears to be common. The case is most severe in engineer-

ing, indicating the younger men will grow into conditions less favorable than those enjoyed by the generation ahead of them. The rate of education is such as to foretell a gross enrollment (men age 25 to 64) of 265,412 in 1950 if those of four or more years of engineering education are counted.

If those of one or more years of formal training are included, the number becomes 363,500; this compares with 194,997 employed in 1930 and 34,174 in 1900. In relation to the national population, the number of engineers has more than tripled from 1900 to 1930, while the number of doctors decreased by one quarter.

The large number of younger engineers in relation to the smaller group of older men tends to lower the price of technical service, the article points out. The growth in number of the younger group, during which no danger signals are likely to be noticed, cannot go on indefinitely without relation to general economic indices, such as population, production, and wealth. Eventually it must be stabilized. Since the growth comes from the continuing entrance of young men into the field, the total is liable to exceed the demand, and then decrease, with painful consequences.

Competition Accentuated

The success of previous groups tends to encourage the continuance of the supply of younger men. The result is that ratio between the old and young groups of engineers has gone above 2.5, when the normal ratio among professional men, engineers included, is 1.8. This brings about strained conditions of competition.

"It is ironical," the article continues, "that the converse of all this is commonly assumed to be the case. Because employment has risen, we are told, things are getting better. 'Because those older than I have done well,' the engineer says to himself, 'therefore I, with my improved technical training, will get my recompense in due time.' He may get it, but his reason is wholly wrong."

The facts of the analysis shows that within the next twenty years the number of men in the engineering profession will probably increase a third over that employed in 1930, if newcomers are limited to those with four years of college training. vail in the profession.

INSTITUTE USES 78 FLOODLIGHT

Cost of Illuminating Building Each Night Only One Dollar

A total of 78 floodlights ranging from 250 watts up to 1,000 watts are used nightly in lighting the building and grounds of the Institute. Distributed along the grounds near the Charles River on the inside of the huge horseshoe formed by the main group of buildings, and so focused that their beams illuminate the buildings, are 56 1,000-watt floodlights. The lighting of the dome, so that can be seen at night from a great distance, is accomplished by having eight 1,000-watt and two 500-watt lamps on the roofs of the adjoining buildings. The length of time the buildings are illuminated nightly is determined by the season of the year. Three hours each night about the average. The nightly lighting of the buildings and dome was started in June, 1929, about the time that Dr. Compton was inaugurated as president of the Institute.

Twelve floodlights are employed in lighting the grounds of the Institute. One 1,000-watt lamp is located on the roof of Walker Memorial; another, 500-watt, is placed on the roof of Munroe; a 250-watt on the roof of Building 20 illuminates the track while another 250-watt lamp on the roof of Building 8 lights the ground between Buildings 38 and 46. Eight 1,000-watt floodlights on the roofs of the main buildings complete the nightly illumination. The ground lighting, which was instituted about ten years ago, is carried on throughout the night.

Because of the fact that the Institute generates its own electric power, at a cost of about \$0.009 per kilowatt hour, this elaborate illumination is carried out at an average nightly cost of only \$3.25. Of this sum, \$2.25 goes for lighting the grounds and \$1 for lighting the buildings.

ROGERS SOCIETY TO HOLD DANCE

The Rogers Association will hold a dance at the Boston Architecture Club on March 9. The price will be a dollar and a half.

700 ALUMNI THROG TO LARGEST ANNUAL DINNER

(Continued from Page 1)

received degrees from many other important colleges, including Harvard University, Allegheny College, Yale University, University of Pennsylvania, University of Pittsburgh and Oberlin College.

He was chosen a Rhodes scholar from Indiana to Oxford from 1905 to 1907. While there he gathered much information which was subsequently to take form in the publication of several books concerning the ancient English school.

His career as an English teacher began when he accepted a position as an instructor in the Southwestern State Normal School in 1900. Since then he has taught in Indiana University, Louisville High School and M. I. T. He was made president of Swarthmore College in 1921, and has held the position ever since.

Has Written Many Books

Among the many books which he has written or edited are: "Elizabeth Rogues and the Vagabonds," "College English," "The Oxford Stamp," "English and Engineering" and "The Oxford of To-day."

He is a member of many national organizations, including the Phi Beta Kappa, National Research Council, World Peace Association and the American Association of University Professors.

President Compton is expected to discuss some of the current problems of education from the point of view of the parents, the student, and the educator.

The guests at the head table will include Dr. Aydelotte, Dr. Compton, Dr. Bush, Professor Edgerton, Mr. Proctor, Orville B. Denison, Stephen S. Townsend, Edward L. Moreland, Harrison P. Eddy, Jr., Professor Charles E. Locke, secretary of the Alumni Association, and Raymond S. Stevens.

Members of the committee in charge of the dinner are Mr. Stevens, chairman; Dr. Allan W. Rowe, Hamilton L. Wood, Percy R. Ziegler and A. W. K. Billings, Jr.

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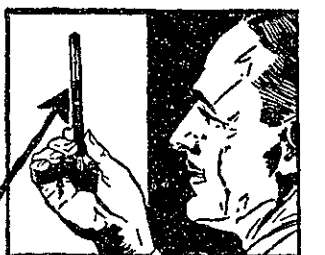
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 More Ink

Without Increase in Size

Sacless Transparent Barrel
Tells When to Refill

NO MORE RUNNING DRY AT A CRITICAL MOMENT

This new miracle—a pen utterly new and basically different—the Parker Vacuum Filler Pen—has twice the usual ink capacity. Moreover, its beautiful barrel of transparent amber shows the quantity of ink within—yet looks like solid black until held to the light. Shows when to refill. No more running out of ink at a critical moment. Come in and see this miracle pen at only \$2; transparent or flashing jet. Jet pencil to match, \$2.50. Ask also to see the Laminated Pearl model of this great Vacuum Filler at \$7.50—has two-way writing point of Platinum and Gold.



The Set \$7.50

Like twin jewels—Parker Vacuum Filler Pen and Pencil, including gift box.

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