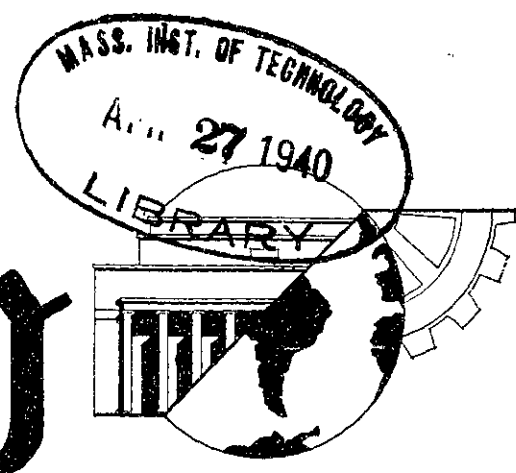


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The Tech

Vol. LX, No. 22

CAMBRIDGE, MASS., SATURDAY, APRIL 27, 1940

Complimentary

30,000 VISIT INSTITUTE TODAY

Inst. Comm. Alters Class Voting Rules

Candidates Permitted To Name Platform In Elections

Each candidate in future class elections may submit to the Elections Committee a two hundred word statement of policy to be posted by the Elections Committee at least a week in advance of the balloting, according to an amendment to the Undergraduate Constitution passed by the Institute Committee last Thursday evening.

This information is to be posted in addition to the record and photograph now required. A companion amendment calling for the presidential candidates to talk to their respective classes for equal amounts of time concerning their policies was defeated after a drawn-out debate which lasted nearly an hour.

Racial Restrictions Abolished

A motion to eliminate all racial restrictions existing in the constitutions of the various honorary societies was passed by an almost unanimous vote. The Quadrangle Club, Sophomore honorary society, was the first to comply with this regulation, when it introduced an amendment to its constitution to that effect.

Other business which transpired included a Junior Prom Committee report, a Walker Memorial Committee report concerning changes in the point system, the approval of Arnold S. Mengel, '41, as chairman of the Student-Faculty Committee. Those who submitted proxies to the meeting were Richard F. Cottrell, '41, William M. Folberth, Jr., '41, and Donald W. Ross, '40.

Anti-Aircraft Guns Being Shown Today

Latest Army Equipment Goes On Public Display On Institute Grounds

A mobile anti-aircraft gun with complete equipment including the latest type of director and searchlight is included in the exhibit of the Military Science department on display in front of the Hangar Gym.

Within the gym there is a 155 mm. cannon being displayed by the Coast Artillery section, which will answer questions on the gun. A special detail of 15 soldiers has been assigned by the National Guard to manage the exhibit.

Gas Masks Display

The Chemical Warfare and Engineering division exhibits, on display in the second floor of Building 5, include an exhibition of gas masks, both modern and old fashioned, and a modern 4.2 inch chemical mortar.

Three assault boats, T.N.T. and detonators, and a 1926 model pontoon bridge are being shown and explained to visitors. There is also an exhibit of Rifle Team equipment, including rifles, targets used in meets, and photos of the team in action.

The Signal Corps is holding a demonstration of field radio and message sending of the same type that is used in wartime maneuvers. This may be seen on the campus between the undergraduate dormitories and the Eastman Building.

Dr. Compton Welcomes Guests

With sincere pleasure I join with the students of the Institute in bidding you welcome to Open House. Our doors are open today to parents, young people, and all other citizens of the community who are interested in science, engineering and architecture, or in M.I.T. as an institution devoted to education and research.

One of the most significant features of Open House is the fact that it is conducted entirely by the students of the Institute. Because they are enthusiastic about their work and proud of their activities, they are eager to demonstrate the kind of things which occupy the attention of this great institution.

You will be interested to know that more than five hundred research projects are currently in progress directed toward fundamental scientific discovery, the creation of new products, the improvement of industrial processes, the promotion of public health, the assistance of governmental agencies, and many other aspects of the public welfare which may be aided through science.



President Karl T. Compton

Among these varied activities I hope that each of you will find much that is interesting and stimulating.

Karl T. Compton
President

April 27, 1940

Fifteenth Open House Is Showing Visitors Scientific Phenomena

Open House Committee Extends Official Greeting

In the name of the students of Technology, we, the Open House Committee, welcome you, our guests. Today we are doing our utmost to bring to you a representative picture of the vast fields covered at the Institute.

The exhibits which you see are but examples of the work of our students and staff, and are intended to help you realize what science and engineering contribute to industry and to our daily lives. Our central theme, "Mankind, Industry, Technology," from the initials M.I.T., expresses the relation we hope to show you today.

David T. Morgenthaler, '40
Chairman, 1940 Open House

With the theme "Mankind, Industry, Technology," the Institute opens its doors to the public today for its fifteenth Open House. To illustrate the theme, exhibits have been prepared by each course to show the 30,000 expected guests the relation of the work of each department to the country in its home, civic, and industrial life.

The exhibits of the courses are planned as examples of the work of the students in the course. The exhibitors are to explain the relation of their specific exhibit to the general field of their course, and how the work in that field affects the daily life of the visitor. Besides the men operating each exhibit, there are in each section men in R.O.T.C. uniforms who are to describe the apparatus and its operation and answer questions.

Tour Arranged

Colored arrows have been arranged to show the way to the outstanding exhibits on "self-conducted tours". The tour starts in the lobby of the Rogers Building and by following the colored arrows, guests will be directed through the various displays.

Besides the exhibits which have been set up by each department, a number of special events have been planned, including lectures on several phases of technology, a concert by the glee club, a lacrosse match, a soccer game, and a crew race. Many undergraduate activities, in addition, have arranged displays of their work.

Wind Tunnel Open First Time Today

Big Range Of Conditions Available For Institute Aeronautical Engineers

The Wright Brothers wind tunnel, designed to produce flight conditions in the laboratory, is opened for public inspection for the first time today.

This wind tunnel provides a greater range of conditions than any other in America. It simulates flying conditions from sea level to stratosphere altitudes of 37,000 feet, and produces wind velocities up to 400 miles an hour. Designed to operate at a maximum pressure of four atmospheres, it can also be run at a pressure of one quarter atmosphere.

High Speeds Attained

The tremendous wind speeds are made possible by a six-bladed, variable-pitch propeller nearly 13 feet in diameter, driven by an A.C. motor cooled by a special ventilating system. Delicate balances record the behavior of models under test, the information thus obtained being transmitted by electrically operated instruments to an adjoining laboratory building.

This new wind tunnel, the seventh built by the Institute since 1913, is of basically the same design as the one built by the Wright Brothers in October, 1901, from which was obtained the data that made possible their first successful flight.

Imperial Ballroom Of Statler Scene Of I.F.C. Dance

Dorm Open House Ball Takes Place In Walker With Large Attendance

Fraternity men and their dates danced last night to the music of Richard Himber and his Orchestra at the annual Interfraternity Conference Ball held at the Hotel Statler, while Marshard's Music supplied rhythms for the dancing of dormitory men at the biennial Open House Ball held at the same time in Walker Memorial.

During the intermission at the I. F. C. dance, minstrels and accordionists entertained those present, and led them in the singing of many Technology songs. The Open House Ball, patterned along the lines of a party, featured a professional magician, and song cards which enabled the guests to sing the most popular songs along with the orchestra.

The chaperones at the I.F.C. were Dr. and Mrs. Karl T. Compton, Mr. and Mrs. Horace S. Ford, Mr. and Mrs. Delbert S. Rhind, Mr. and Mrs. Nathaniel McL. Sage, Prof. and Mrs. Albert A. Schaefer, Mr. and Mrs. James R. Killian, Jr., Mr. and Mrs. Walter H. Stockmayer, and Dr. Avery A. Ashdown.

House Shown Heated With Solar Energy

Climaxing many years of experimentation by the Chemical Engineering department, the new solar energy house, to be heated entirely by rays captured from the sun is on public exhibit today after having been operated only a week.

The building, constructed last September, is an attempt to harness the unlimited energy generated by the sun and convert it into heat for practical application. With it opens the possibility of heating buildings without using fuels such as coal, fuel oil, or electricity.

The exhibit, building 34, is open to the public during the day. Mr. Byron B. Woertz will explain it to visitors.

Calendar Of Events

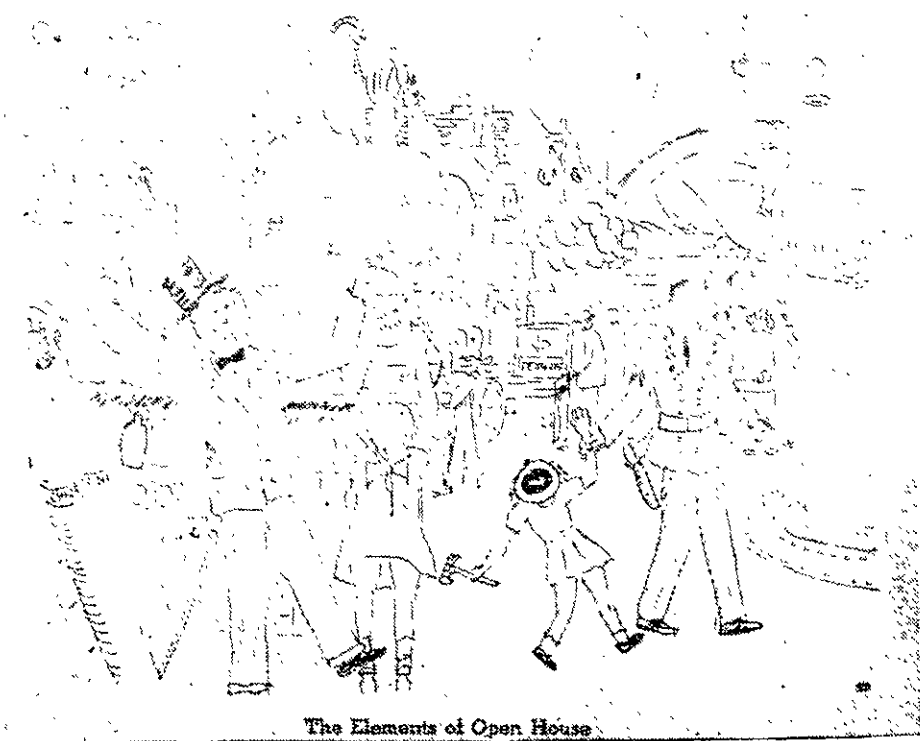
- 10:30 A.M. Industrial Leaders Preview—Room 7-111.
- 11:00 A.M. Low Temperature Experiments—Room 10-250.
- 11:15 A.M. Glass Blowing—Room 6-120.
- 1:00 P.M. Lacrosse vs. Springfield—Briggs Field.
- Inorganic Chemistry Experiments—Room 2-390.
- Modern Metallurgy—Room 8-431.
- 1:30 P.M. Organic Chemistry Experiments—Room 4-270.
- 2:00 P.M. Sailing Exhibition—Charles River.
- Low Temperature Experiments—Room 10-250.
- Glass Blowing—Room 6-120.
- Modern Metallurgy—Room 8-431.
- "Liliom"—a drama—Room 2-190.
- 2:30 P.M. Organic Chemistry Experiments—Room 4-270.
- Glee Club Sing—Lobby of Building 7—Floor 2.
- 3:00 P.M. Inorganic Chemistry Experiments—Room 2-390.
- Modern Metallurgy—Room 8-431.
- Exhibition Wrestling Match—Hangar Gym.
- Debate with Tufts—Room 4-370.
- 3:30 P.M. Organic Chemistry Experiments—Room 4-270.
- 4:00 P.M. Low Temperature Experiments—Room 10-250.
- Modern Metallurgy—Room 8-431.
- 4:15 P.M. Crew Race—Charles River.
- 4:30 P.M. Crew Race—Charles River.
- Organic Chemistry Experiments—Room 4-270.
- Glass Blowing—Room 6-120.
- 4:45 P.M. Crew Races—Charles River.
- 5:00 P.M. Crew Races—Charles River.

CONTINUOUS EXHIBITS

- Wright Wind Tunnel.
- Military Science Motion Pictures—Room 5-208.
- Anti-Aircraft Exhibit—Hangar Gym.
- Progress of American Industry Movies—Room 1-143.
- Salesmanship Movies—Room 1-136.
- Thorne-Loomis Films—Room 1-146.
- Economics Department Film—Rooms 1-132 and 1-135.
- Cape Cod Canal—Building 20.
- Electrostatic Generator—Building 46.
- Counterfeit Money Movies—Room 11-004.

Room numbers are divided into two parts. The part before the hyphen refers to the building number, while the last three figures, after the hyphen, designate the number of the room in that building. The first of these latter three digits refer to the floor. A numbered plan of the Institute will be found on Page 12.

SURELY NOT HERE



The Elements of Open House

M. I. T. Club of Northern New Jersey Plans Banquet In Newark Next Month

Just about the liveliest Tech alumni organization in existence, the M. I. T. Club of Northern New Jersey, will hold its sixth annual banquet at the Newark A. C. on May 2.

The members of this famous club are in for an evening of entertainment from the looks of the events planned for the occasion. During the program, the developments which *Fortune* says will "cause the replacement of 40,000,000 radio sets and \$75,000,000 worth of broadcasting equipment" will be described by their inventor, Major Edwin H. Armstrong.

Frequency Modulation Is His Development

Broadcasting by frequency modulation (or FM), by which a listener hears a radio broadcast as though he were actually listening to the performer and not as though the program was coming through his loud speaker, is the process which Major Armstrong has developed and which he will explain at the banquet Thursday night.

Major Armstrong must share the evening's spotlight, however, with another noted personage, who will be present at the meeting not by virtue of his having discovered something but by having been himself discovered.

Speaker Discovered at Chem. Society Meeting

A year ago the officers of the New Jersey Club began a search for a man who could revive the faltering art of after-dinner speaking. When the quest seemed blackest, they suddenly found him at a meeting of the American Chemical Society. He was Professor F. Alexander Magoun, himself a professor and alumnus of the school which the club represents.

The banquet is only one of three major events on the New Jersey Club's annual program. A Fall smoker, a Winter meeting, interspersed with beer parties at P. O. N., round out the social affairs of the organization.

Club Has Many Activities

Under the leadership of President William B. Coleman, '24, the Club has established many other activities. It contacts directly the 1,450 known Technology alumni in Northern New Jersey. It provides Institute scholar-

(Continued on Page 5)

NORTHEASTERN UNIVERSITY SCHOOL OF LAW DAY PROGRAM Three Years EVENING PROGRAM Four Years

A minimum of two years of college work required for admission. A limited number of scholarships available to college graduates. LL.B. Degree conferred Admits men and women 47 MT. VERNON ST., BOSTON Near State House

Follow Black Arrows For Complete Tour

In order to cover systematically all the major exhibits in the main building, the Open House Committee suggests that visitors start their tour in the Lobby of the Rogers Building and follow the black arrows on the halls of the corridor which point out the route.

At the entrance to each department's exhibit, guides meet the guests and lead them through it, pointing out the outstanding features. At the end of the exhibit, the guides leave the party to follow the arrows to the next department's display.

Official headquarters of the Open House will be in Room 10-200. If any children or property are lost during the day, the Lost and Found department will be situated in this room. There will also be extra ushers for special parties at the headquarters.

Civil Engineers To Show Miniature Scale Railway

A demonstration of a complete modern railroad in operation is the highlight of the Civil Engineering Department display in Room 1-345. To accomplish this a detailed railway system in miniature has been set up with the aid of models.

The exhibit includes 10 trains, 400 feet of track, 60 relays, over a mile of wiring, automatic block signals, automatic train control, automatic interlocking, color light signals, spring switches, remote control switches, and a centralized traffic control board.

Doctor Collins Will Produce Extreme Cold

Frozen Rubber Nail To Be Driven Into Wooden Block

New England spring weather has often been greeted with overcoats and mufflers, but what would our hardy populace do if they suddenly entered a room 454 degrees F. below zero?

Dr. Samuel C. Collins of the department of Chemistry will attempt to approach this temperature, absolute zero, in public demonstrations today in Huntington Hall (Room 10-250), by liquefying and solidifying gases.

Molecules Stop

According to the theory, at absolute zero, gases turn into either liquids or solids, and molecules stop chasing each other around inside of all substances. In this demonstration Dr. Collins will liquefy hydrogen and oxygen, and produce solid carbon dioxide.

In one experiment a rubber nail is frozen and driven into a wood block with a hammer made out of frozen mercury. A rubber ball, when put in liquid air, loses all its elasticity, and when thrown against a wall cracks into hundreds of pieces. Lead, which at ordinary temperatures is soft, proves to be very elastic at 270 degrees C. and liquid oxygen has enough magnetic properties to hold a hammer well enough to cause considerable difficulty in removing it.

Pohndorf Elected A.P.O. President

Members of Alpha Phi Omega, honorary service fraternity, elected their officers for next year at a meeting held in the East Lounge of Walker Wednesday at 8:00 P.M.

Those who will serve in official capacities are: Henry L. Pohndorf, '41, president; Daniel D. Degen, '41, vice-president; Leslie Corsa, '41, secretary; Daniel M. Schaeffer, '42, treasurer; Harvey Kram, '42, historian; Robert R. Insande, '42, alumni secretary.

New Men Pledged

The following men were formally pledged into the society during the meeting: William O. Strong, '42; John J. Guarrera, '43; Sydney Cramer, '41; John T. Lipford, '43; Karl G. Baresel, '42; Thomas A. Mitchell, '43; Wilton M. Fraser, '42; John E. Gardner, '43; and Maxwell H. Kaplan, '42.

Henry L. Pohndorf, '41, was elected to receive the annual service trophy award in recognition of his work in the chapter during the past year.

The Tech Relaying Sport Results By Radio And Teletype

Mechanical Labs Operating Today For Visitors

All of the many Mechanical Engineering laboratories are in operation for visitors today. The public will have a chance to see an endless variety of heavy and light machinery under operating conditions. Course II men are present at the various labs to explain the exhibits.

In the Testing Material Lab in Building I the compression and torsion machines are in operation. Metal beams, concrete blocks, and large pieces of timber are being broken to test their strength. The many engines in the steam and hydraulic Lab, including the Corliss engine and the 24,000 gallon steam pump, illustrate the problems of this type of machinery.

In the heat measurement lab the visitor can see the high temperature furnace, the optical pyrometer, and an exhibit on insulating materials. Knitting machines, looms, spinning machines, and other clothing manufacturing machinery are being exhibited in the textiles lab, together with photomicrographs of the various fabrics being produced.

Other displays are in the research lab, photoelasticity lab, lubrication lab, machine tool lab, and welding lab. The Institute's power plant is also on exhibit, while Ford and Plymouth engines are being shown in the automotive lab. The foundry is making sample die-castings for the visitors as well as running the strippers, core makers, drop hammers, drop forges, etc.

Covering all the main news events of the day, The Tech is making of the main types of modern communication today—teletype, telephone, radio, and messenger service—to 1 bulletins of news in the most accessible spots in the Institute Building.

The soccer and lacrosse games radioed from the Briggs Field and crew races in conjunction with Radio Society are radioed from a lowing launch. These radio messages are picked up by a receiving station in the Great Court and relayed teletype from the Main Lobby to News Room in Walker Memorial.

Messengers Used

Messengers operate from the points to blackboards situated in Rogers Lobby, Main Lobby, East Lobby, and Walker Memorial Lobby on which are posted periodic bulletins of the latest news of these events.

The radios and telephones were secured through the courtesy of Major Kirke B. Lawton, head of the Signal Corps division in the Military Science department, while the teletypes were supplied by the Western Union Telegraph Company.

Photographers Busy

Staff photographers will be working with the Open House Committee today, making a picture record of the Fifteenth Open House. Offices of The Tech are open for public inspection including the News room and engineering department, Room 3 in Walker Memorial, and the Business office in Room 301 of Walker.

HIGH GRADE TYPEWRITING

Wide experience in scientific work of all kinds. Statistics. Long carriage machine. Facilities for handling large quantity of work at short notice.

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CHAUNCY HALL SCHOOL

Founded 1828

One hundred and twelve years of accumulated experience in preparing students for higher educational institutions is available to Chauncy Hall students, the past forty-five years having been confined to specializing for the Massachusetts Institute of Technology. That the school is successful is demonstrated by the fact that during the past sixteen years students from forty-three foreign countries and forty-four of the United States have attended Chauncy Hall School.

Experience shows that failure on the part of students after entering the Institute is usually due to insufficient preparation rather than to the difficulty of the Institute courses.

Students who have successfully met Chauncy Hall requirements have no difficulty in carrying the Institute courses efficiently and creditably.

At Chauncy Hall students are trained in correct methods of study, accurate habits of observation, sound reasoning, and clarity and conciseness of expression. In addition to thorough preparation in the entrance requirements, especial training is given in Mathematical and Scientific subjects beyond secondary school work, such as the efficient use of the slide rule, the art of report writing, the correct use of Laboratory instruments, the theory of error and precision of measurement.

Students planning to enter the Institute are advised to take an extra year of preparation at Chauncy Hall rather than to begin work handicapped by "Conditions" or by "Cram" courses taken during the summer.

If you desire the advantage of such training, write or telephone for an appointment.

553 BOYLSTON STREET
BOSTON, MASSACHUSETTS

FRANKLIN T. KURT, Principal.

LAVATORY LIST

The following is a list of rest rooms in the Institute:

MEN	1-301	3-201	4-466	WOMEN
8-113	1-101	2-150	4-001	8-215
3-331	1-027	1-201	3-131	10-383
4-101	6-313	5-016	1-367	3-301
4-266	3-431	1-029	1-167	5-116
4-401	4-266	8-413	8-019	2-248
4-066	4-366	4-166	7-107	1-265
2-360	5-416	4-101		7-207

Infirmiry Will Be Open In Case Of Any Accident

Located on the ground floor of Building 11, between the Massachusetts entrance in the Rogers Building and the main lobby in Building 10 is the Homberg Infirmiry which will be open continually during Open House. The medical staff will be ready to take care of any unforeseen accidents which may occur. Visitors who are taken ill will get immediate aid at the Infirmiry.

IF IT'S CAMERAS OR SUPPLIES WE HAVE IT

Lee's CAMERA SUPPLY CO.

TELEPHONE ELIOT 1074

298 MASSACHUSETTS AVENUE CAMBRIDGE, MASS.

The Man in the Slot



NINETEEN MINUTES before a big city newspaper's first edition goes to press. Page by page, a story starts coming across the city editor's desk.

The city editor reaches for his phone, calls the make-up editor in the composing room. "How we doing?" he asks. "This City Hall story looks pretty hot."

"We're going to be tight. Keep it down," warns the make-up editor. "We can't squeeze the Washington story another inch."

"Okay," responds the city editor. He looks at the penciled layout for Page One, scribbles some figures in the upper corner of the sheet of copy, and with an expert twist sends it sailing onto the big horseshoe desk next to his own.

"We're tight, Mac," he calls to the man in the slot. "Cut it a third."

▶ Seventeen minutes now to the deadline... only ten for cutting, editing, headline-writing. For those vital ten minutes, the responsibility rests on the shoulders of the man in the slot... newspaper parlance for the head of the copy desk.

A dozen considerations flash their chain lightning patterns across the slot man's mind. Tyler's story... Tyler the brilliant and touchy. He got it out of that certain municipal department which is giving off a faintly gamy odor. The boss will want it in all editions. This isn't the big break though, just another build-up to it. Damn good story... real stuff in every paragraph. Hard to cut. Needs a headline with sock. Who's to handle it? Ward's fooling around with that zoo story... Won't do, his cuts make Tyler sore. Colihan's a better bet.

"Colihan," says the man in the slot. One of the furious pencil-wielders around the rim of the horseshoe looks up. "Cut this a third and put a thirty-six head on it in time for the bulldog."

All this has used up fifteen seconds.

Colihan has nine and a half minutes to cut and edit and write a top headline and sub-headline. Every line of both headlines must count exactly so many characters and spaces, figuring *i* as a half and *m* and *w* one and a half characters.

Then the slot man will take just fifteen seconds more to review Colihan's work, change "banned" to "curbed," sniff the whole concoction for traces of libel, and shoot it to the news editor in the composing room.

It is a shorter story than Tyler's original, and a better one—keener of edge, swifter of impact, yet complete in every essential detail.

▶ The slot is not a glamorous job. It hasn't been discovered by Shubert Alley or the fiction magazines. To the cub reporter, eager for by-lines and self-expression, the whole copy desk looks like a backwater. It takes maturity—grasp of the whole art of news presentation—to appreciate the little miracles that a good copy desk passes.

▶ Among the men who write and edit *The Weekly Newsmagazine*, the man in the slot and the men on the rim are held in greater respect, perhaps, than in their own city rooms. For more than any other newspapermen in the business, *TIME* men write with the consciousness that they must cut, prune, hone, concentrate, and distil. The fight against the clock is not so desperate on a weekly, but the battle for each line of space is many times fiercer.

And the raw material for

each issue is mountain-high... product of *TIME*'s own 75 correspondents, 500 news scouts, and the 100,000 correspondents and reporters of all the nation's newspapers and wire services, throughout a whole week of the world's activities.

▶ Journalism in the U. S. A. pours out millions of words each week; *TIME*'s limit is some thirty thousand. And when every word must do the work of a dozen, it needs to be a better word, and more economically joined to its fellows. Nouns must paint landscapes, adjectives must do portraits, verbs must shoot straight.

Each story in *TIME* must be direct, keen, complete; each story must earn its place as an essential link in understanding the world's news of the week.

▶ *TIME* has developed the art of news condensation, as practiced by the slot men and rim men of the dailies, to a new high. For every issue of *TIME* is "tight"—its limit that irreducible minimum of news every intelligent man and woman must know. Which is one reason why *TIME* has won the genuine devotion of 700,000 busy families—with their ranks growing deeper every week.

This is one of a series of advertisements in which the Editors of *TIME* hope to give College Students a clearer picture of the world of news-gathering, news-writing, and news-reading—and the part *TIME* plays in helping you to grasp, measure, and use the history of your lifetime as you live the story of your life.



TIME

— THE WEEKLY NEWSMAGAZINE —

The Tech

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stood: Regardless of the reasons which bring visitors to Technology on the day of Open House, they are welcome. This day, of all days, the Institute plays host to everyone. Everyone is invited, everyone is a guest.

If the visitors to Open House are welcome, they are also warned. For, lest they conclude otherwise, the Technology which they see from 11 to 6 on Saturday, April 27, is not the Technology which functions the other 364 days of the year. Open House is not designed to give guests a representative picture of daily life at Technology.

During the regular school year, for days on end, the Institute sees nothing resembling the magnitude of the Open House demonstrations. Students and staff come and go without a hint of importance or display. But on this one day Tech forgets the routine, turns on the wind tunnel and stroboscopes, steams up, and invites the public in for a little exhibition of what it can really do.

Mistaking the myriad exhibits for daily class-room work is not the only conclusion which might be drawn from a visit to Open House. It's just as easy, after his tour, for the visitor to envisage the Tech man as a cold-blooded sort of fellow who knows or cares little more than about which coil to adjust or which valve to turn.

There is another side, of course. Theory has just as big a place in the spotlight of the Institute's academic work as practice and activities have a bigger place than either in its outside play. Seeing only the machines with their practical methods and not the books with their theoretical derivations or the publications' exhibits, for example, with their evidences of social opportunities, can turn Open House, from the guest's viewpoint, into a distorted illusion.

One-sided or not, Open House is above all Technology's one big chance to put on its show of science. Maybe the visitors won't understand all of it. Maybe, unfortunately, they'll misinterpret what they do understand. Yet the biggest, saddest consequence of the whole affair would occur if the public should forget that, after all, the men at the Institute are human beings, part of a whole scheme.

Enjoy yourselves, guests, and go way appreciating the advantages which are ours. At the same time, please keep in mind the existence of those indefinable factors which, although unrelated to tensile machines and high frequency coils, do influence to an immeasurable extent our finer sensibilities.

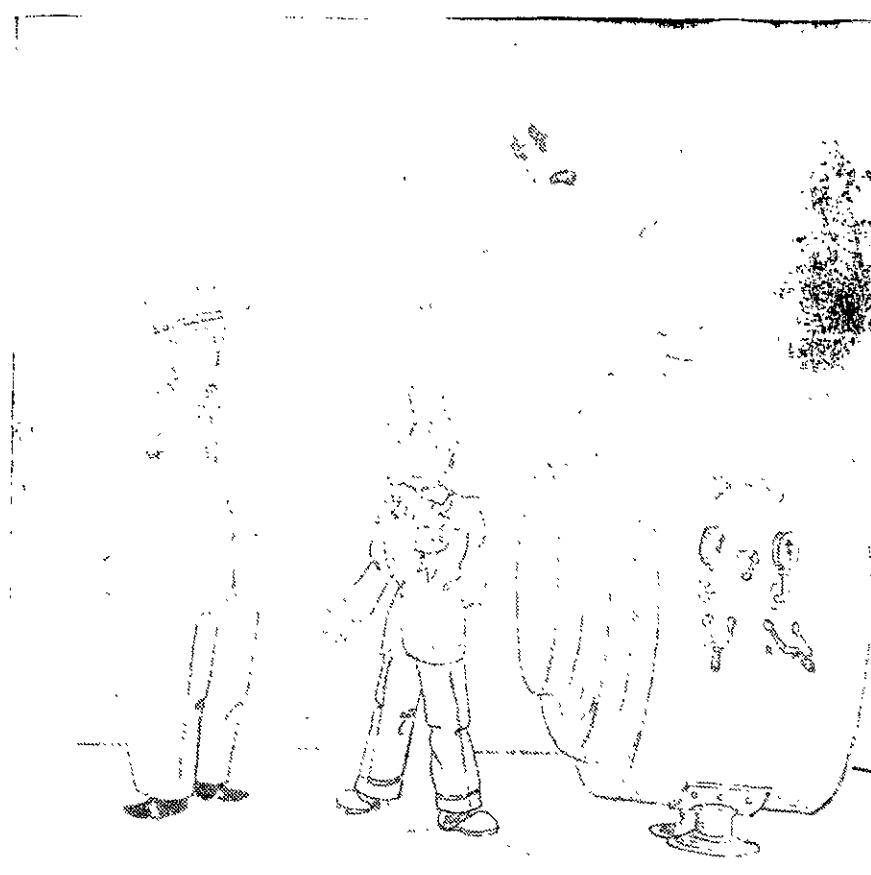
HYPOCHONDRIA

President Dixon Ryan Fox of Union College recently stated, "Anything that saps the sense of individual responsibility will rot the American character. With rare exception your individual future is in your own hands, and anyone who tells you that you are the creature of circumstances is doing you no favor. The typical American in times past has manhandled circumstances, and you have got to do it now.

"Profanity is stupid and offensive, but I confess I feel a strong temptation to swear when I read the various long catalogues why young men cannot succeed in these times."

With uneasiness in national and international relations, insecurity in business activities, and timidity in education's whole outlook, President Fox's ringing fearlessness comes as a shot in the arm. Success rarely comes without initiative, and the biggest millstone around ambitious youth's neck today is the defeatist doctrine which is being preached by people who ought to know better.

DON'T YOU BELIEVE IT



"OH, THAT SIR!— THAT'S JUST A HYDROMAGNETIC VOLTO SPECTROMETER."

ART SPEAR

Reviews and Previews

SCREEN

Young Tom Edison. Mickey Rooney, Fay Bainter, George Bancroft, Virginia Weidler. Mickey, the "Wonder Boy" is given his chance at a serious part. **Two Girls On Broadway.** Lana Turner, George Murphy, Joan Blondell.

Musical, 1940 style.—**LOEW'S STAT & ORPHEUM**

My Son, My Son! Brian Aherne, Madeline Carroll, Lewis Hayward, Laraine Day. A dramatization of Edna Small's best-selling novel. **On The Own.** The Jones Family is back again.—**METROPOLITAN**

The Life of Giuseppe Verdi. Recommended. A splendid character study of a great operatic composer.—**FIN ARTS**

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TO LOOK AND TO SEE

For the fifteenth time in its history the Massachusetts Institute of Technology is holding Open House. On this day the Institute officially flings open its doors to the public and invites, "Come in and look around."

Accepting the invitation this year, according to the Open House Committee, will be some thirty thousand people.

Why should these people come? For just what reasons will thirty thousands of people pass through Technology's doors this Saturday?

Curiosity has a lot to do with it. Many people will browse through the labs and lectures just to check up on the Institute. The renown of its methods and accomplishments have a fascination which a lot of persons feel they'd like to ascertain for themselves first-hand. Curiosity, too, will bring many prospective students to Tech. For them, Open House seems to provide the perfect opportunity to see if the greatest scientific school in the Western Hemisphere really is great enough to consider entering.

Not everyone, however, will visit the Institute purely out of curiousness. We like to think that many will come on the suggestion of those connected with the Institute—students, staff, alumni. But the figure of the enterprising student, parking his girl in front of the biggest motor in the dynamo lab, and casually remarking, "Oh yes, I made some load tests on that motor some time ago and found it to be quite inefficient . . ." unhappily will be a familiar one before the afternoon is very old.

Of course, hundreds will come on the urge of the layman's reluctant interest in, but genuine respect for, scientific demonstrations and paraphernalia; and hundreds more will come for sheer amusement as they would take in a movie or a circus.

But let one thing be unequivocally under-

Elec. Eng. Dept. Stages Display

Power, Communications Measurements Are Phases Of Exhibition

Equipment for testing the exposure meters of visitors is one of the features of the exhibit which the Electrical Engineering department has set up for Open House. Based on the Institute's conception of the three phases of Electrical Engineering, power, measurements, and communications, the display attempts to show the work of the department in each of these fields.

Machinery in the electronics laboratory is in operation all day. Men there are building vacuum tubes with visitors' initials in them which light up. The tubes will be given to the visitors. Oscilloscopes, and other interesting pieces of equipment are being run there.

Under the auspices of Professor Wilmer L. Barrow, a number of graduate students in the department will give a demonstration and lecture on micro-wave equipment and the results which are observed with it. Professor Harold E. Edgerton is also demonstrating his high-speed photographic equipment.

The communications section of the course exhibit is trying to give a general outline of modern developments in the field of communication. Records are being made of visitors' voices and being given away. There is a television display, and a showing of other electrical equipment used in communications.

In the illumination laboratory, besides being able to check the calibration of their exposure meters, visitors can see an exhibit showing the differences in light production between fluorescent lamps and various types of incandescent bulbs.

The high voltage research laboratory, under Professor John G. Trump, is in operation, and there is an exhibition of several machines which have been developed for the analysis and solution of different types of mathematical equations.

Open House Is Managed By Student Committee

Much of the credit for the work done in developing and making possible the 1940 Open House exhibits is due to the efficient management by the Open House committees.

David T. Morgenthaler, '40, is general chairman, assisted by Phelps A. Walker, '40, who handled the publicity, and George R. Weinbrenner, '40, chairman of the committee on exhibits.

Wesley J. Van Sciver, '40, heads the reception committee and Jack M. Klyce, '41, is in charge of assignments.

"Invisible" Glass Result Of Research By Dr. Hawley Cartwright Of Faculty

Glass can be made almost "invisible" as a result of the work of Dr. Hawley Cartwright of the department of Physics in the Institute. A minutely thin coating of metal fluorides deposited on the glass cuts down surface reflection through the principle of interference of light, enough so that practically all of the light is transmitted and none reflected.

This development is of especial interest to photographers, since the reduction of reflection at air-glass surfaces in lenses increases the lens

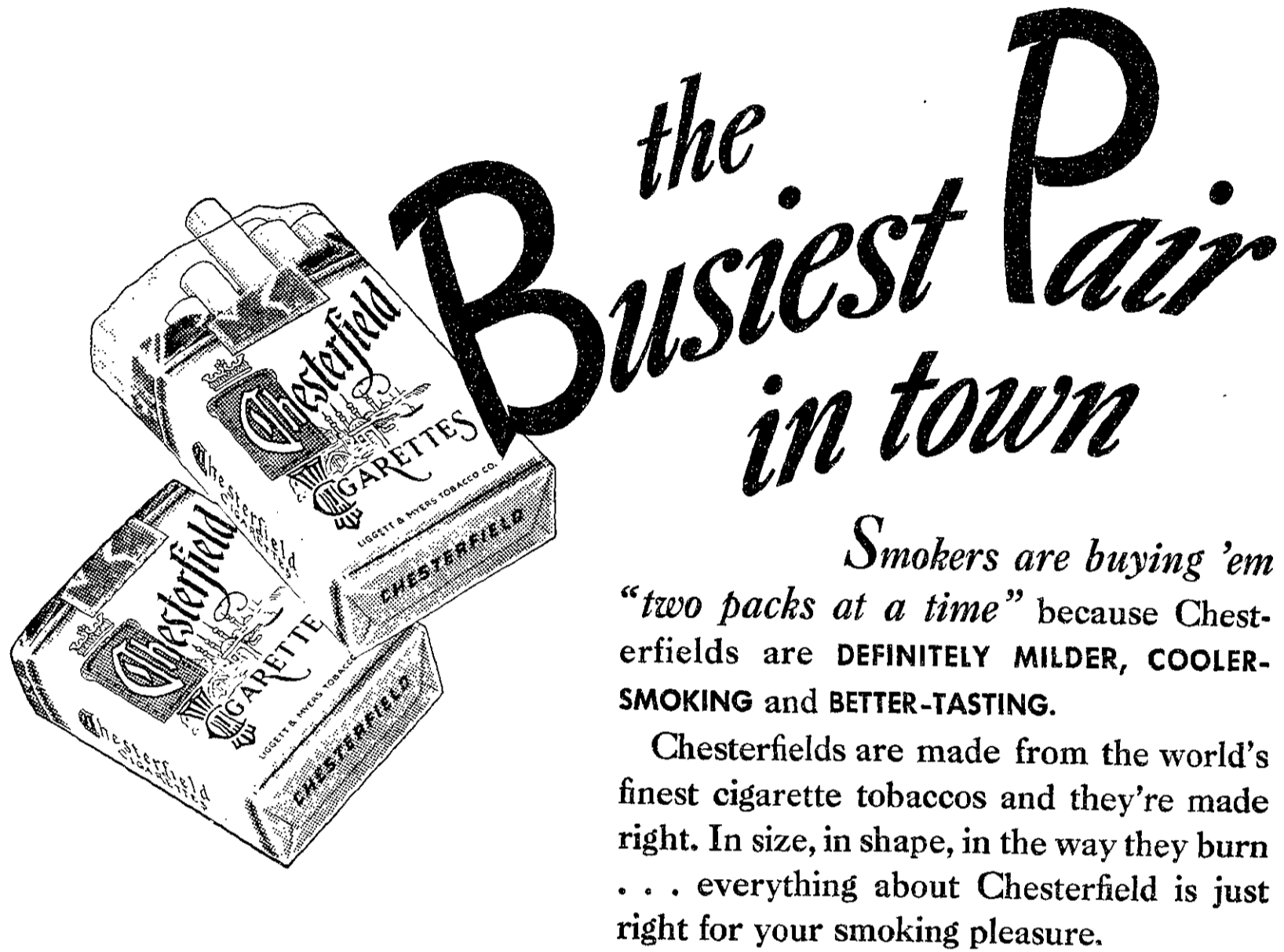
"speed". In large lenses, it is necessary from the optical standpoint to have several separate lenses, sometimes as many as five or six. Since each separate lens ordinarily reflects some ten per cent of the light that reaches it, this means a considerable loss in the amount of light that is able to act on the film. Unfortunately, some of this reflected light is again reflected, with the result that flares, and in extreme cases, ghost images are formed. Dr. Cartwright's discovery eliminates this difficulty almost entirely.

Newark Alumni Meet

(Continued from Page 2)

ship aid. It even helps to bring men and jobs together through cooperation with the New York Club and the Institute's Placement Bureau.

This New Jersey organization is one of eighty of the so-called local Technology alumni clubs, most of which are located in the United States. Clubs, however, can be found in Canada, Mexico, South America, Europe, and Asia—all part of the huge system of alumni organization whose members do so much toward keeping alive the Technology spirit which they acquired while at the Institute.



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Sorry, Beau



WE know you made the high hat famous, Brummel. But it has no place at Lafayette. Not that our tastes are low. On the contrary, our shelves are lined with Who's Who in radio and photography. It's just that our credo is economy.

That's why the Lafayette catalog which comes out, like the debs, about this time every year, is required reading for undergrads in engineering. This book lists thousands of radio parts, tubes, cameras and equipment. And all nationally advertised. But the crux of it is this—our prices are bed-rock low. Get to know us soon . . . get everything you need in radio here, and pocket the savings. The catalog, by the by, is FREE.

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Chesterfield
America's Busiest Cigarette

Statistics Show Huge Size Of Institute Plant

Fuel, Power Bills Reach Astronomical Figures Last Year

It's colossal, it's stupendous, it's gigantic! And we are not talking about "Gone With the Wind." All the adjectives in the Hollywood vocabulary would not suffice to tell of the size of the figures which seem to pop up everywhere when we start investigating the Institute plant.

The fuel and power that goes into the heating and lighting of the Institute, and the running of the machinery provide some of the biggest figures. Last year, for example, 1,922,493 gallons of fuel oil were employed, and 22,862,000 pounds of steam. Beside this, 5,511,600 kilowatt-hours of electricity were used. These figures, though, are a little too big for us to worry about, so we leave it to the reader to figure out for how many years this amount of oil and electricity would light and heat his home. We offer to supply slide rules for any hardy soul who wants to try and figure it out.

It was Mr. Albert V. Smith, superintendent of Buildings and Power, who was kind enough to give us these statistics. And as we sat there, feeling smaller and smaller with the announcement of every number, we still managed to open our mouths long enough to ask for more. And, as Mr. Smith was very obliging, we got more.

Water, it turned out, was another item on which figures had made a good start on a trip to some distant star. 110,000,000 cubic feet were used last year by the Institute. And air! It's free, so the Institute uses a lot of it: 217,900 cubic feet every minute, to be exact. Nineteen fans pump the air in, and after preheating to 68° F., it is delivered to the various classrooms and laboratories. The two largest fans, Mr. Smith told us, are located in Building 4, where the chemistry labs require extra ventilation. And seeing that it has been 525,600 minutes since the last visitor to Open House left two years ago—well, you figure it out.

Camera Club's Winners Made Known Thursday

The nine winners in the Camera Club's first Annual Salon were announced Thursday night. All of the fifty-nine entries are now on exhibit in the Photo-Service Galleries, basement of Building 11.

In the Action-Candid Division of the contest, the winners were Dexter K. Bowers, '43; Alan M. Milman, '43; and Augustin J. Powers, '40. Basil Staros, '41; Augustin Powers, and Samuel A. Scharff, '43, were the winners in the Technical Division. The prizes in the Pictorial Division were awarded to Samuel Scharff and Dexter Bowers, while third place was gained by Lawrence E. Welch, '40, and Wallace Blanchard, '41, together. The winner of the Best-in-Show prize has not yet been chosen.

'Atom Smasher' Developed Here

The transmutation of every element but one and the creation of artificial radioactivity in several elements are among the accomplishments of the Technology physicists who have been working recently with the Institute's electrostatic generator, appropriately nicknamed "The atom smasher".

The generator, designed by Dr. Robert J. Van de Graaff of the Institute staff, is capable of delivering a continuous stream of positive or negative charges of a potential of 2,500,000 volts which can be directed at a target by means of a focusing column. If electrons are desired, a heated metal filament is used, and if deuterons (heavy hydrogen ions) are desired, an electric arc is passed through a tube containing heavy hydrogen gas.

Two other generators, one pictured in the cut on the right, to be used exclusively for the production of x-rays, have been built at the Institute in the past three years for two Boston hospitals where they are being used in research and cancer treatment. At the Institute, however, the group of experimenters, which consists of Dr. Van de Graaff, Dr. Lester C. Van Atta, Dr. Chester M. Van Atta, and Doyle L. Northrup, is confining itself to research in nuclear physics.

HIGH VOLTAGE DEFEATS CANCER



This high-voltage electrostatic generator, installed in a Massachusetts hospital for cancer treatment, is but one example of the many instances in which Technology scientists have cooperated with outside agencies in the interests of public welfare. The apparatus is similar to that used at the Institute in atomic research.

Institute And Industry Join Through Cooperation Bureau

Probably two of the major factors behind the reputation which the Institute has won for itself are the Division of Industrial Cooperation and the Placement Bureau. They serve as points of contact with industry for members of the Institute staff, students, and Alumni.

Industrial concerns are also attracted by the reputation of the Institute and submit problems to the Institute through the Division and the Bureau. These problems may lead to the setting up of research programs or they may be concerned entirely with personnel.

Although the main purpose of the division is for the administration of research projects being conducted for outside concerns, it serves actively in many other ways. Telephone inquiries and letters from outside parties requesting information are answered or directed to the proper staff members. In short, the Division functions as a "Tell You Where" directory.

Research projects brought in by industries are considered in a favorable light: if they are fundamental in nature, if the Institute is equipped with the necessary facilities for conducting them, and if such research will further the educational program of the Institute and enhance the prestige of the Institute and its staff. Routine testing is not encouraged except occasionally on the grounds of courtesy or convenience. In general, research projects which can normally be conducted by commercial laboratories are not considered. In addition

to pure industrial research, the Division frequently cooperates with the various technical departments of the Civic, State, and Federal Governments in the solution of important scientific and engineering problems affecting the welfare of the public and the good of mankind.

As the Institute endeavors to cooperate with industry so does industry endeavor to assist the Institute in the education of its students. One method of accomplishing this is by means of the cooperative courses whereby students are actively engaged in plant work during part of their undergraduate careers.

Many other industrial concerns contribute funds for scholarships and fellowships and in the case of such support from industry, the only stipulations made are in regard to the general field in which the work is to be conducted.

Moody Elected To Head A.S.M.E. For Next Year

Elections of the A.S.M.E. officers took place at a meeting held Thursday afternoon, April 25.

Muller P. Moody, '41, last year's plant trip chairman, was elected president; Raymond F. Koch, '41, became vice-president; and Carl M. Mueller, '41, and Walter L. Threadgill, '41, were chosen as treasurer and secretary respectively. Professor Alvin Sloane is honorary faculty chairman for the organization.

Two Machines Calculate For Spectrograph

Energy Levels And Wave Lengths Are Determined

So fast does the Institute's huge concave grating spectrograph turn out spectrograms that two new and complex instruments had to be designed and constructed to handle the calculations. Without the new machines, six months would be required to measure the spectrograms made by the powerful grating in a few hours.

The first of these instruments measures the wave length of spectrum lines on the spectrum photographs, making all necessary computations. The other determines the energy levels of atoms or molecules from the spectrum lines they emit.

Took Days To Set

Formerly the spectrum lines were measured by a machine containing a carefully made screw with which measurements of length could be made, accurate to 1/25,000 of an inch, an operation which for a plate containing many lines would take several days. Each line was measured several times and the results were reduced by complex calculations which take longer than did the original measurements. In the new wave length measuring machine recently constructed all of these operations are done automatically.

Once the spectrum lines for a particular atom have been measured the next process is to determine the energy levels, which give an indication of the atomic structure. The Technology interval sorting machine carries out all of the necessary subtractions automatically and sorts the constant intervals out into neat piles. Values are recorded by punching holes at proper positions in a paper tape perforated like moving picture film.

Technology Leads In Color Research

Prof. Hardy Develops New Spectrophotometer For Exact Measuring

The average person believes that the word "color" is self-explanatory, but the scientific world maintains that only the surface of the entire field of color and color analysis has been touched.

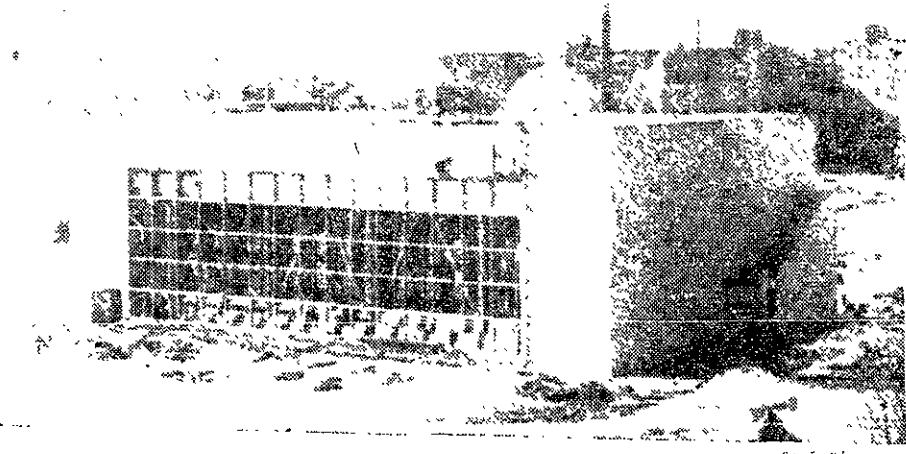
New advances, particularly in the accuracy of color measurement, have only recently begun to have their effect on industry. Plants which assemble parts made in various parts of the country can now be certain that the finished product made in San Francisco is the same color as that made in New York.

Technology Pioneers in Colorimetry

One of the reasons for the swift advance in this field is the work of the Technology color research laboratories, and in particular that of Professor Arthur C. Hardy, Technology physicist who perfected a new recording spectrophotometer.

Spectrophotometry is the measurement of the amount of light of different wave lengths reflected or transmitted by a given surface, which is recorded in standardized form as a simple line graph whose ordinates are in terms of units of 'reflectance' and abscissae in terms of the wave length of the light in millimicrons.

NEW POOL ALMOST FINISHED



Technology's already large consumption of air, water, fuel oil, electric power, and what-not will jump still farther with the completion of the new swimming pool, latest addition to the Institute plant.

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Stroboscopic Lights Freeze Sports Action

Visitors May Take Speed Ray Pictures In Room 2-051 Today

Photographs of track meet contestants, racing shells or hockey pucks midair are among the applications which have been made in the news photography field of the technique developed by Professor Harold E. Edgerton of the department of Electrical Engineering for taking high-speed pictures of bodies in rapid action. The stroboscope, by means of which these pictures are made, is an apparatus for emitting very short, brilliant flashes of light that stop rapid action. When using repeated flashes, the number may vary from 600 to 1400 flashes per minute; when single flashes are used, they may be as short as one-hundred-millionth of a second.

Public May Use Stroboscopes
Stroboscopic pictures may be taken by visitors today in the Hobby Shop, Room 2-051. Subjects and stroboscopes provided by the Hobby Shop; visitors may use their own cameras, any type being satisfactory. Recently the International News Service has been using this type of equipment under the name "Speed Ray" in covering many fast-action sports events. The Tech is the only college newspaper in the country to use photographic staff has used these stroboscopes for news work.

Stresses Tested
Here at the Institute, Professor Edgerton, aided by Herbert E. Grier and Kenneth J. Germeshausen, have been trying their methods of investigation to testing stresses in production



Staff Photo

stroboscopic action shot of John Quinn, '42, The Tech sports news editor, using a driver, shows how this photographic technique may be used to cover sports events. This picture was made by The Tech staff photographer with his own camera, using stroboscopes built by the Hobby Shop. Visitors may take similar photographs, using their own cameras, in Room 2-051.

lines and have greatly increased efficiency of much industrial apparatus. While working in cooperation with glass companies on the problem of strengthening glass, Professor Edgerton and Frederick E. Barstow discovered that cracks move at the rate of 5,000 feet per second. This was discovered by taking two pictures of the glass at an interval of five-millionths of a second, measuring the distance that the cracks travel in that time.

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Technology Chem. Lab. Way Back When . . .



Chemistry students apparently did much the same sort of work back in the gay nineties as they do today, if this old wood-cut of an Institute chemical laboratory, loaned by the Technology Review, is a criterion. Of interest is the great number of women students shown—almost half of the workers present. Today's coeds are decidedly in the minority, forming only a little more than one per cent of the total student body.

Many Changes Liven History Of The Tech

Students Run Paper Since Its Founding In November, 1881

Founded over half a century ago, The Tech has since its beginning been the official undergraduate publication of the Institute. Starting as a small bi-weekly magazine it has grown into the largest non-athletic activity at Technology. In many ways the story of The Tech follows closely the progress of the Institute itself.

The Tech's history starts in 1873, when The Spectrum, the first Institute publication, was founded. Organization and management of The Spectrum were solely in the hands of the class of 1875. In spite of many editorials asking the students to make contributions, the paper remained with the class and ceased without notice when they entered their Senior year.

Founded in 1881
The first issue of The Tech appeared on November 16, 1881. Organization of the paper had been decided upon at a general meeting directed by H. Ward Leonard, '83. The first issue consisted of twelve pages with an elaborately designed, brown paper cover. It was received with much enthusiasm by the students, and the first volume was definitely a financial success. The organization of the staff at this time was very simple. Six men were on the Board of Directors, which managed the paper and chose an Editorial Board to write the news.

Weekly By 1890
In 1890 The Tech changed from the bi-weekly to a weekly. This shift proved quite a success, the quality of the news showing much improvement. In Volume XV, four special numbers were issued, and since that time special issues have been published by The Tech for the same annual events, namely, Christmas, Junior Week, Class Day, the Junior Prom or I.F.C. Ball, and sometimes Thanksgiving. Once or twice a year a humorous take-off on the paper is issued.

From Volume XX to XXII, The Tech was at its peak as a magazine. A different cover was designed for each issue, and many photographs ap-

(Continued on Page 8)

Secret Service Shows Exhibit Of Counterfeits

The United States Secret Service is cooperating with the Institute for Open House by lending a comprehensive collection of counterfeit notes, stamps, and coins, which is on display in the basement of Building 11. Visitors may also attend a motion picture entitled, "Know Your Money", which is being shown continuously in Room 11-004.

Technology Pioneer In American Education

Pres. Rogers Introduced The Laboratory Method Of Teaching

Since the time of its conception eighty years ago, Technology has been a unique institution where new ideas and experiments in education are continually being tested in order to provide complete scientific training for its students.

At the very beginning, when he assumed the presidency of the Institute, the founder, William Barton Rogers introduced the laboratory system of instruction in America. His greatest contribution to scientific education, outside of the actual establishment of Technology, was the Rogers Laboratory of Physics, named in his honor in 1872. This laboratory was the first of its kind in the nation and has as its counterpart the modern Rogers Physics Laboratory in Room 4-410.

General Studies Started

Rogers' successor, Francis Amasa Walker, in one of his first acts as president, established a "general course" in scientific subjects and included many social subjects in addition. The present division of General Studies includes the subjects covered by President Walker's course and additional subjects on scientific methods of thinking and writing.

As knowledge increased and industrial problems became more complex.

(Continued on Page 8)

Debate Today At 3 P.M. With Tufts; Room 4-370

Members of the Technology debating Society and a Tufts debating team will debate upon the United States Foreign Policy at 3:00 P.M. today in Room 4-370. The debate is open to all who wish to attend.

(Continued on Page 8)

Dr. Karl Compton Completes Decade As Institute Head

When Dr. Karl T. Compton became president of the Massachusetts Institute of Technology in 1930, he brought with him a new conception of the values of science and engineering in their application to the advancement of civilization. Believing that the aim of all education is a culture based on a sympathetic understanding and appreciation of life, Dr. Compton, during the decade of his administration, has sought to combine the precise knowledge of the professions with studies of broad human significance. Guided by this principle the Institute has experienced an era of fruitful research and valuable progress in science and technology.

Dr. Compton was born in Wooster, Ohio, on September 14, 1887. He is the eldest of three sons of Elias and Otelia Augspurger Compton. His father was a Presbyterian clergyman and professor of Philosophy at the College of Wooster. One of his brothers, Dr. Arthur H. Compton, is professor of physics at the University of Chicago and winner of the Nobel Prize in Physics for 1927. Another brother, Dr. Wilson M. Compton, is secretary and manager of the National Lumber Manufacturers Association. In recognition of her achievement as the mother of this notable family, Mrs. Elias Compton, in 1932, was awarded an honorary degree of Doctor of Laws by Western College. Dr. Karl T. Compton is married and has three children, Mary Evelyn, Jean Corrin, and Charles Arthur. Mrs. Compton is a daughter of Professor J. Corrin Hutchinson, emeritus professor of Greek at the University of Minnesota.

As president of the Massachusetts Institute of Technology, Dr. Compton has greatly enriched the curriculum, adding many new courses and rearranging others to suit the needs of

(Continued on Page 8)

Technology Marks Eightieth Year Of Charter

Rogers Founded Institute In 1861; Classes Began 1865

The history of the Massachusetts Institute of Technology is directly associated with the lives of three great men, William Barton Rogers, Francis Amasa Walker, and Richard Cockburn MacLaurin. Eighty years ago, in 1860, Rogers prepared a memorial asking that certain land in Back Bay be set apart for a polytechnic college, and in the following a charter was granted for its foundation.

However because of the Civil War, it was not until 1865 that the first class, a small group of fifteen students met in rented rooms in the Mercantile Building in Boston.

Moves to Own Building

In 1868, the Institute moved to the Rogers building on Boylston Street in Boston. Here the entire Institute carried on for a period of eighteen years.

In 1870, President Rogers was compelled to resign because of ill health, and Doctor John D. Runkle undertook the duties of acting president until 1878. When despite his rapidly fail-

(Continued on Page 8)

Glee Club Gives Concert In Building Seven Today

An informal concert will be presented today by the M.I.T. Glee Club on the second floor of Building 7 at 2:30 P.M.

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Institute History

(Continued from Page 7)

ing health, President Rogers again undertook the duties of the presidency. Death came to him upon the platform in Huntington Hall of the old Rogers building, while he was addressing the graduating class of 1882.

Gen. Walker Establishes Technology
General Francis Amasa Walker was inaugurated as president in 1881, and during his seven year administration the Institute grew from a struggling technical school to a great scientific university. In 1897, Walker died, like Rogers, at his post.

With the Inauguration in 1909 of Professor Richard C. MacLaurin, of the department of Physics at Columbia University, Technology entered a new era. It was Dr. MacLaurin's role to raise the funds necessary for a new Technology, and less than five years from the day he took office, the first buildings on the present site along the Charles River Basin were under construction.

This vast project was made possible by the generosity of the late George Eastman, who for many years was known only as the mysterious benefactor, "Mr. Smith". His gifts to the Institute totalled nearly \$20,000,000.

Dr. Stratton Next President

With the inauguration in June, 1923, of Dr. Stratton, the new Institute continued to advance. Under his guidance, the physical equipment of the Institute's plant was expanded.

Dr. Compton Takes Helm in 1931

In March 1930, President Stratton resigned to become chairman of the corporation, and Dr. Karl T. Compton, chairman of the department of Physics at Princeton, was elected to succeed him. This dual leadership came to an end in October, 1931, with the sudden death of Dr. Stratton.

In the fall of 1938, the William Barton Rogers Architecture Building was dedicated, and for the first time in thirty years the entire student body were housed under the same roof.

Calabi, '43; Loud, '42, Win Mathematics Test

The results of the mathematics competition held Saturday, April 13, were announced by the M.I.T. Mathematical Society Thursday night. In the freshman division Eugene D. Calabi, John J. Hess, Jr., took first and second place respectively. Li Fook Chu and Raymond Redheffer tied for third place. Warren S. Loud took first in the Sophomore division with Joseph R. McHugh and Robert I. Jacobson second and third.

Technology Pioneers

(Continued from Page 7)

the need for engineers expertly trained in specialized fields arose. The Institute, quickly realizing that this need must be satisfied, established new curricula which supplied the special instruction. These included the first school of Architecture in America, the first department of Electrical Engineering, and the first courses in Aeronautical Engineering, Sanitary Engineering, Chemical Engineering, Naval Architecture, Industrial Biology, Public Health Engineering, Ceramics, and Electro-Chemical Engineering.

Laboratories Stressed

In order to acquaint the student early in his career with the practical problems that he would later meet in industry, the Institute applied Rogers' theory of laboratory instruction to more advanced subjects.

Among the more recent innovations the development of a method for teaching descriptive geometry with the aid of stereoscopic drawings by Professor John T. Rule; and a course in preparation for marriage given by Professor F. Alexander Magoun.

New York Club To Meet May 6

The Technology Club of New York will elect its officers for the coming year at its annual meeting to be held at 7:00 P.M. on Monday, May 6, at the Club, 24 East 39th Street, New York City.

Nominations for offices designated by the nominating committee are as follows: president: Charles G. Dandrow, '22; vice-president: Dr. Edwin S. Burdell, '20, Alexis R. Wiren, '19, and William P. Winsor, '27; vice-president and treasurer: Elmer C. Hughes, '31; and secretary: John J. Murphy, '23.

Governors Nominated

Alfred T. Glassett, '20, James G. Walker, '26, and Page Golsan, '12, are to be voted on for the positions of governors serving until 1943. William H. Mueser, '22, is the only candidate for the office of governor serving until 1942, recently left vacant.

The following previously elected governors will continue to serve with the officers to be chosen: governors serving to 1942: Allen B. Bassett, '26, and Robert M. Emery, '34; governors serving to 1941: Constantine S. Dakakis, '34, R. S. Wilson, '16, and William H. Latham, '26.

Dr. Karl Compton

(Continued from Page 7)

industry in a changing world. He has encouraged the formation of a well-developed Division of Humanities, designed to add to the student's education those studies which will fit him to take an intelligent part in the social and economic development of the country. One of his most notable achievements is the establishment of the Institute's Graduate School, which has been called the "most notable advance of its kind in education."

The Tech History

(Continued from Page 7)

peared on the same pages as the news. Because of the large volume of news now available the paper changed to newspaper form in Volume XXIV. This change created the need for a much larger personnel, which proved to be quite a handicap for many years.

Personnel A Problem

By Volume XXXII the Managing Board was forced to temporarily suspend publication. Following a mass meeting in Huntington Hall many candidates came out, but, to prevent a recurrence of this problem, the Tech was given representation on the Institute Committee, and the Advisory Council was formed.

Volume XXXVI, 1916-1917, marked the dedication of the new buildings and the entrance of the United States into the great war. Until the end of the war the Alumni published the paper. It was of a sensational nature,

often called the "wartime Tech." After the war the Tech was important in rebuilding activities. In 1918 the staff of the Tech published the Tech Engineering News.

The last twenty years have witnessed a radical change in the Tech. Instead, been chiefly notable for the influence of its editorial policies, the Institute expanding rapidly. Tech has become very important, the chief means for the expression of student opinion.

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Walker Memorial Building

BEAT HARVARD

BEAVER SPORTS

BEAT HARVARD

Lacrosse Team Will Play Game With Indians

Beavers Will Be Out To Avenge Defeat At Hands Of Wildcats

SQUAD SHOWS PROMISE

Beaver lacrosse men will take the field against Springfield on Coop field at 1:00 P.M. today, fighting to avenge their defeat at the hands of New Hampshire's Wildcats on Wednesday afternoon.

The Institute squad has had a fairly successful season to date, and should be in even better shape today, after the extra experience gained in the game played Wednesday. Schuchard, Soim, and Halstead, in the midfield, ably backed in the second string by Sibley, Seeley, and Augusterfer, all game fighters, should be better at their combination play, while the defense should improve at the art of keeping their men well marked.

Springfield New

Springfield has not played lacrosse for the past three years. This season marks its comeback to the intercollegiate league. In the first match, against Harvard, Springfield went down badly, while Harvard went down to Stevens, who had previously just bested the Cardinal and Gray. This seems to indicate a Tech vic-

(Continued on Page 10)

Field Day Sports Settle Class Wars

Relays, Football, Tug-of-War, Dinghys, Glove Fight Number Contests

Supremacy between the freshman and Sophomore classes at Technology is decided by an annual Field Day sports carnival. Field Day is usually scheduled for the last Friday in October, with afternoon classes on that day suspended. This setup was inaugurated in 1901 to displace the former dangerous cane rushes and free-falls in which the two lower classes had participated during the early years of the Institute.

Five events determine the struggle, included are the relay race, tug of war, football game, dinghy race, and glove fight. The glove fight is the most important and most spectacular event of the day. In the thirty-nine Field Days that have been held since 1901 the sophomores have won thirty-one times.

Major Briggs Advocated Many Of Modern Athletic Practices

Major Frank Harrison Briggs '81, founder of the Advisory Council on Athletics at Technology, was also the first advocate of the freshman rule, intramural competition, and many other practices commonplace in college athletics today.

A great supporter of amateur athletics, Major Briggs made many attempts to advance such competition. He believed in spirited athletic contests for the love of playing rather than for the love of winning—intramural sports rather than showy intercollegiate affairs.

Finances Organized

As chairman of the Advisory Council on Athletics from 1897 to 1910 when he became General Treasurer of the M.I.T.A.A., Major Briggs undertook the job of straightening out Technology's muddled athletic condi-

Table with 2 columns: Event, Time/Location. Includes Lacrosse vs. Springfield (1:00 P.M.—Briggs Field), Soccer vs. Harvard (2:00 P.M.—Harvard), Track vs. Colby (2:00 P.M.—Waterville), Rowe Cup Regatta (4:00 P.M.—Charles River).

Special Practice Prepare Boatmen For Harvard Tilt

Captain Fred Herzog To Lead Experienced Varsity Eleven Today

Training sessions during this past week indicate that a well-balanced soccer team will oppose Harvard in today's practice game. Whereas these practices had started off on a specialized note, with instruction for the various members of the team in new tricks for their respective positions, the sessions lately have taken the form of scrimmages.

All members of the team have had previous experience at Tech, and many were on last year's first string team. In goal will be Fred Herzog, the captain of the sport, who has improved over even his fine form of last year. Herzog was out of the game for the last half of last season with a broken wrist, but playing basketball this past winter has kept him in good condition, and his saving should be well above par.

Forward Line

Leading the line will be Josefowitz, at center, forward, another of last year's regulars, who has been shaping up well this spring, especially in the all-essential shooting end of the game. Fonseca, who played inside left last season, will be left wing today. He has turned out to be a really good man in that berth. The other members of the forward line, Fenman, McCorra and Guernsey, are all strong players and should complete a powerful line.

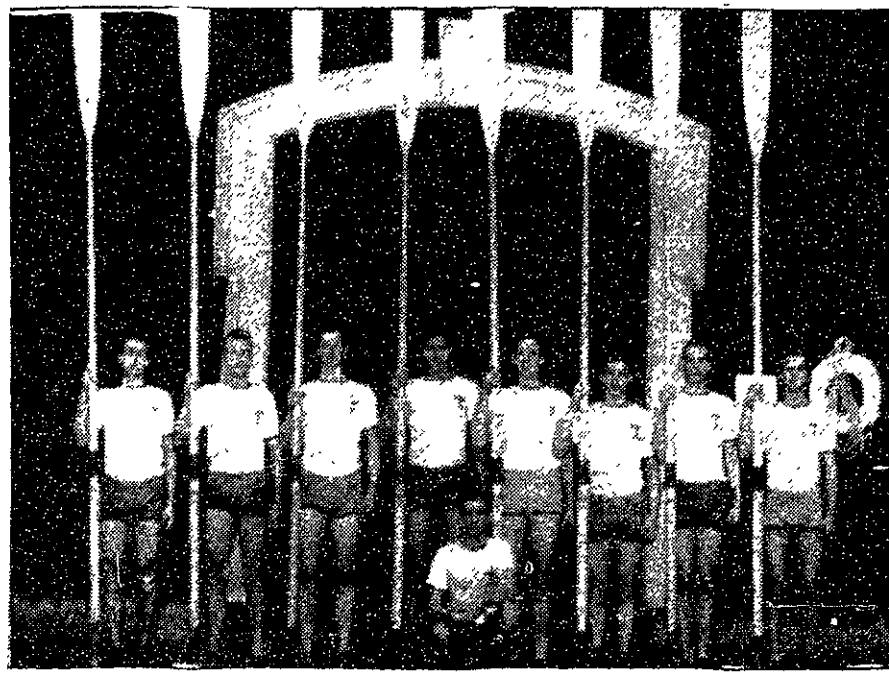
The half backs headed by Howie Samuels, are also all experienced, tried men, and they should be well up to help the forwards on the attack, and well back with aid for the full backs on defense, as a good half back combination should be. The full backs are the only weak link in the team, due to their lack of practice and bad condition after laying off during the winter. This position requires men well in the swing of the game.

Previous Games Close

Harvard has never yet beaten the Engineers badly. The games have always been close fights in the past and indications are that this will be another like them.

Technology Crews Inaugurate 1940 Racing Season Today In Rowe Regatta On Charles

BEAVER HEAVIES IN REGATTA TODAY



Staff Photo

Driving the varsity boat down the Charles in the Rowe Cup Races today will be Gavin, Church, Mueller, Guething, Howard, Phaneuf, Folberth, (Capt.), Shaw, Biancardi (cox).

Syracuse, B. U., Harvard To Row Against Varsity

Harvard Boating Crew Which Won On Thames In England Last Year

Beaver oarsmen open their 1940 rowing campaign this afternoon on the Charles in the fifth Rowe Memorial Cup races against crews from Harvard, Boston University, and Syracuse. Seven races will make up the day's program.

These will be the first races for Tech crews under the tutelage of Bob Moch and Jim McMillan, championship Olympic crew members. Moch, head coach, stated before the race, "I don't want to make any predictions, but I do think the races this year will be much better from a standpoint of competition than they have been in the past."

Harvard Is Favorite

Boating the same crew, with the exception of one man which won the Henley race on the Thames in England last year, the Harvard crew rules an outstanding favorite for the race. Notwithstanding, spirit ran high in the Tech boathouse, and the varsity crew expects to make a close race of it.

Dark horse in the struggle is the Syracuse varsity, of which nothing is known. They have had only nine days of practice on open water. B.U., the fourth boat in the race, is not

(Continued on Page 11)

Eleven Will Play Outside Schedule

Competition Restricted To Upper Two Classes; Wray Will Coach Team

Pigskin interest at Technology reached a peak this year with the formation of a football team, the first since 1903 to be authorized to play an outside schedule. The team is not an official varsity, however, because competition for positions is restricted to Juniors and Seniors.

Thirty-seven years ago, football was abolished as a Varsity sport. Interest

(Continued on Page 10)

22 Year-Old Cinders Cover New Track Oval

The new track on Briggs Field contains cinders that have been run on since 1916. A good track should have cinders that are fine and which have thoroughly settled, the fact that these have already been ground up eliminated the necessity of waiting for the track to settle. The new track also has the longest high-jump take-off in the country.

Netmen Win, 7-0 Over W. P. I. Team In Opener There

Millar, Braunlich, Katz, And Kaneb Top Opponents In Straight Sets

Technology's tennis team made a clean sweep (7-0) of its match with Worcester Polytechnic Institute Wednesday afternoon at Jarvis Field. In the number one slot, Bob Millar downed his opponent 7-5, 6-0.

Dick Braunlich, captain of the M.I.T. squad, won his match in straight sets, and in the third position, Phil Freeman beat his man two sets to one. The remaining two matches went to Technology in straight sets, won by George Kaneb and Maury Katz.

Crimson Today

The team had planned to meet Dartmouth this weekend, but due to considerable snow in Hanover, the match has been postponed. This afternoon, they come up against a strong team from Harvard, and next Tuesday, April 30, Brown. During May, the postponed Dartmouth match and several others will make up a heavy schedule.

Trackmen Open At Colby Today

Twenty-Eight Varsity Travel To Waterville Despite Snow, Cold

Technology's varsity track team opens its 1940 spring season this afternoon against Colby College on the Waterville, Maine, cinders.

Twenty-eight men are making the trip following announcement from Colby that despite Sunday's heavy snowfall, the track is to be in shape for running.

Varsity Men on Trip

Those competing today are Hensel, Mengel, Jester, Booth, McBride, Kylonen, Brady, Smith, Corsa, Kelly, Crosby, Rhode, Turnock, Gow, Gott, Taylor, Schultz, Nagle, Madwed, Van Greenby, Morehouse, Koss, Baresel, Wilson, Ford, Eberhard, Judd, Sexton, and Welch.

Last year Institute tracksters defeated the Mules, 80 1/2-54 1/2. Adverse weather conditions this spring have prevented real outdoor training by either team.

Twenty Teams Compete In Beaver Key Baseball

Over twenty teams from fraternities, dormitories, and commuter groups are playing in the baseball tournament being sponsored by Beaver Key, Junior honorary society.

Beaver Key is a society composed of outstanding men of the Junior class, chosen from athletics and activities, and elected from the class at large. The society acts as official host to visiting teams, and runs the intramural athletic tourneys. This year they have sponsored six contests: football, tennis, basketball, volleyball, track and baseball.

Many Of Technology's Coaches Have Been Olympic Champions

Olympic champions, world-record holders, and national professional and amateur champions are counted among the men who coach athletics at Technology.

Among the Olympic participants who coach at Tech are Bob Moch, Jim McMillan, Joe Levis, and Oscar F. Hedlund. Oscar, as he is commonly known, finished sixth in the 1500 meter race in the 1912 Olympics at Stockholm. In 1913 he held the world's indoor record for the mile run—4.18.8. His teams have been uniformly successful, losing only a single dual meet through the 1938 and 1939 seasons.

Champ Five Times

Joe Levis, fencing coach, and a Tech graduate in the Class of 1926,

has been national fencing champion five times, and was a member of the last three Olympic teams.

Two of the three crew coaches, Bob Moch and Jim McMillan, who started this year to school the varsity and frosh crews respectively, are the Olympic champions who coach at Tech. Both were in the University of Washington shell which won the 1936 Olympic championship at Berlin. Bob coxed the crew, while 6'6" Jim rowed in the number five position. Pat Manning's 150 lb. charges, through the years, have been the most successful of all Tech crews.

Director of physical training at the Institute and also basketball coach is H. P. McCarthy. His many years of

(Continued on Page 10)

BEAVER TALES

By Jack Quinn



Listed on Open House Day calendar among a mass of scientific and academic exhibitions are two varsity athletic events, the crew race and the lacrosse game. Many other sports, throughout the entire year, are likewise fitted into the lives of Tech men who are pursuing scientific and engineering studies. With persons who are called upon to work with the brain rather than the hands, it is particularly necessary for some balance to be maintained in the human mechanism. That is the reason why participation in sports is so valuable to the Tech man.

CAMPUS LEADERS EXERCISE

Realizing that physical exercise is of so much benefit to them, many of our students make certain to work out on the varsity squads, exercise in the squash courts, or at least turn out for intramural competition. The percentage of campus leaders that are sports' participants is surprisingly large. These men are usually well up on the Dean's List. Granted, some men have no particular difficulty with constant brain work as their college diet, but, will they be the men who will distinguish themselves in later life?

ALL STUDENTS HAVE CHANCE

That the Institute believes its students should exercise their bodies as well as their minds is brought out forcibly by the athletic policy now in effect. Freshmen are required either to take part in sports or to report to physical training classes, during their first year at Technology. Large squads, with the emphasis being placed on an unlimited amount of individual participation, are the general order.

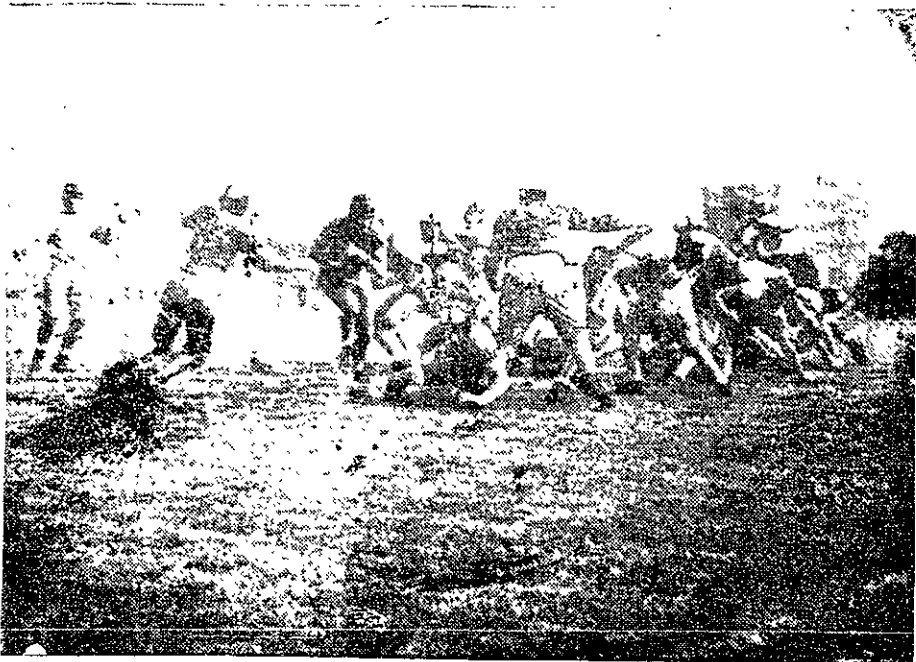
ATHLETICS BUILD PERSONALITY

These same students who will be the engineers of tomorrow in the future will be on constant display before the world as examples of products turned out by the Massachusetts Institute of Technology. Just as the Institute finds its biennial Open House program an invaluable asset in expressing to the general public, by means of exhibits, the way in which work here progresses with the ultimate purpose of making the world a better place in which to live, so Technology graduates have found that athletic participation during their undergraduate days has given them a personality that is much better suited to deal with the problems in human relations arising in their daily work.

SPORTS DEVELOP COOPERATION

Athletic participation, therefore, benefits the student while at Technology by supplying that physical exercise which balances the mental efforts exacted from him and thus effects a balance in the complex system that is the human body. Since the very purpose of our stay here at Tech is to prepare us for success in later life, does it not seem logical to take advantage of every opportunity to attain this end. Participation in Beaver sports, because it develops techniques of cooperation and team spirit, will give the man who takes advantage of it, just that extra edge which should enable him to shine above his rivals in industry and science.

INTERCLASS FOOTBALLERS IN ACTION



Staff Photo

When uniforms for the Junior and Senior teams, who are shown playing above, were obtained, the first step in the formation of a Junior-Senior team was taken. Next fall the team will have a full schedule of outside games.

Football

(Continued from Page 9)

in the sport has never died out, however; during past years intramural competition has been fostered by Beaver Key, the honorary society which conducts intramural sports tournaments. The movement for a football team at the Institute has been gaining impetus lately, reaching another high level last September when 260 students voiced their opinions in its favor at a rally held in Huntington Hall.

Three days later on September 29, the Institute Committee approved a grant of \$1,000 to equip 22 Juniors and 22 Seniors to represent their classes in interclass competition. Will Compton, manager of this year's team, has thus far lined up four games this season.

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Coaches

(Continued from Page 9)

play at college and on champion professional teams have stood him in good stead.

Among the other Tech coaches are Jack Summers, the national open squash champion; Tom Rawson, who held the national amateur lightweight boxing crown; John Jarosh, a former swimming captain at Tech; and Herb Forsell, one-time Olympic gymnastics coach.

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STICKMAN LEAPS



Staff Photo
Walter Schuchard shown polishing his stickwork for today's game.

Lacrosse

(Continued from Page 9)

tory, but the famous Springfield fighting spirit and the good condition of their men will make them a difficult team to beat.

In Wednesday's game, New Hampshire was definitely on top until near the end of the second quarter when they were leading 7-0. During the last four minutes before the half, however, the Engineers hit back, with Gander scoring two, and Leghorn and Browning one goal each. During the third period Tech was on top, but only managed to put one goal in, when Sibley brought the score up to 7-5, near the end of the quarter.

Athletic Facilities Improving Rapidly

Technology Undertakes Building Of Unexcelled Collegiate Athletic Unit

Athletic facilities at Technology are beginning to come into their own with rapid strides. The Institute, following its policy of doing the best it can in anything it undertakes, has planned a huge athletic unit, to be unsurpassed in any other institution.

The first step was the building of the Briggs Field House. In it are housed lockers for the track, soccer, and lacrosse teams. Also included in this building is a sun roof for those desiring sun baths, and a large showcase for displaying athletic trophies.

Indoor Track

The Barbour Field House, also recently constructed, takes care of other sports not in the Briggs Field House. It houses the squash courts, indoor track, and more lockers.

Walker Memorial is a beautiful modern plant, housing not only sports, but other activities as well. In it is a well-fitted, although small, gymnasium, two four-wall handball courts, and bowling alleys, besides the various activity offices.

(Continued on Page 11)

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BASKETBALL

Basketball, under the directorship of H. P. McCarthy, who is also in charge of the Department of Physical Training, is one of the oldest sports at Technology, and it also claims one of the most creditable records. During the last two years only four losses per season were recorded. The first string team of last year will lose only two men by graduation, with four very able men left to form the nucleus of next season's team, in the persons of Artz, Glick, Samuels and Herzog, all experienced players.

BOXING

Boxing at Technology is not an intercollegiate sport. Main pugilistic interest lies in the annual championship competition called the Golden Gloves Tournament. Training for this competition is under the direction of Tommy Rawson, who this year had twenty-seven men out.

CROSS COUNTRY

The Cross Country team, under the coaching of Oscar Hedlund, onetime holder of the world indoor mile record, is one of the leading Beaver fall sports. The unusually large varsity and frosh squad generally perform quite creditably against stiff competition.

FENCING

The swordsmen at present have the best record of all Institute teams. During the past season, which has been the best in years, they completed a schedule of nine matches against some of the best competition in the east, bowing only to Columbia by a small margin.

At present there are about ninety men out for the sport, under the sharp eye of Joe Levis, '26, who is a past Olympic team member, and seven times national champion. Because only one man of this year's varsity, Johnny Bech, will be lost by graduation, next year looks bright.

GOLF

Golf is one of the smaller sports at Technology, due to the fact that time and equipment are not sufficient to teach beginners the game. A squad exists, however, for those who have learned the game previous to their arrival at Tech.

GYMNASTICS

Beaver gymnasts, under the coaching of Herb Forsell, have met some of the strongest teams in the east. The only achievement of the past season, however, was a decisive victory against Dartmouth. The coach is a recognized expert at the sport, having been a trainer for three Olympic teams.

HOCKEY

Hockey had its most successful season in seventeen years. The highlight was the fine showing in the Lake Placid Intercollegiate Tournament, where the Beavers placed second after being beaten by Colgate in a strenuous game which was dropped only at the end of an overtime period.

The team has done particularly well in the New England Intercollegiate League, even holding the champion Boston College team to an even tally through three periods and losing out only in the overtime.

PISTOL

Pistol, under Major K. B. Lawton, is relatively new. This year's team won ten matches and tied one out of a total of fifteen shot, which gives them an all high record of 70%. High score was a 1364 put up by a team consisting of McKee, Murdock, Johnny Cantlin, Henry, and Clark.

RIFLE

The rifle team, under the directorship of Sgt. Harold McDonnell, is at present one of the leading teams in New England, winning most of its sixteen scheduled matches and a large number of the posts. The team is a long-standing member of the National Rifle Association.

SQUASH

In Squash, Jack Summers's services as coach are available to anyone wishing to play the game, whether he be out for a team or not. The courts are open every day and evening, to all who wish to use them. The sport supports three student teams.

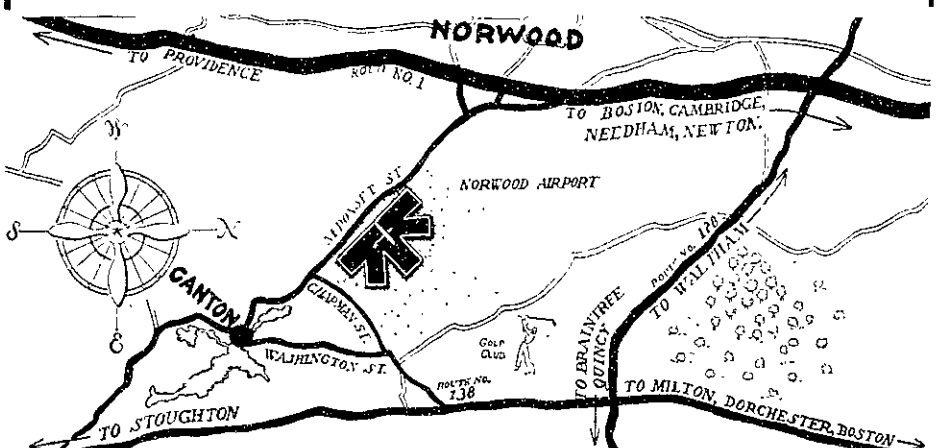
SWIMMING

Fighting spirit among the swimmers, however, enabled John Jarosh, present president of the New England Intercollegiate Swimming Association, and coach of the sport at Tech, to build up a fairly good squad this past season.

WRESTLING

The wrestling team at Technology, has come forward tremendously during the past year under the able coaching of Joe Rivers, at present a graduate student in chemistry at the Institute.

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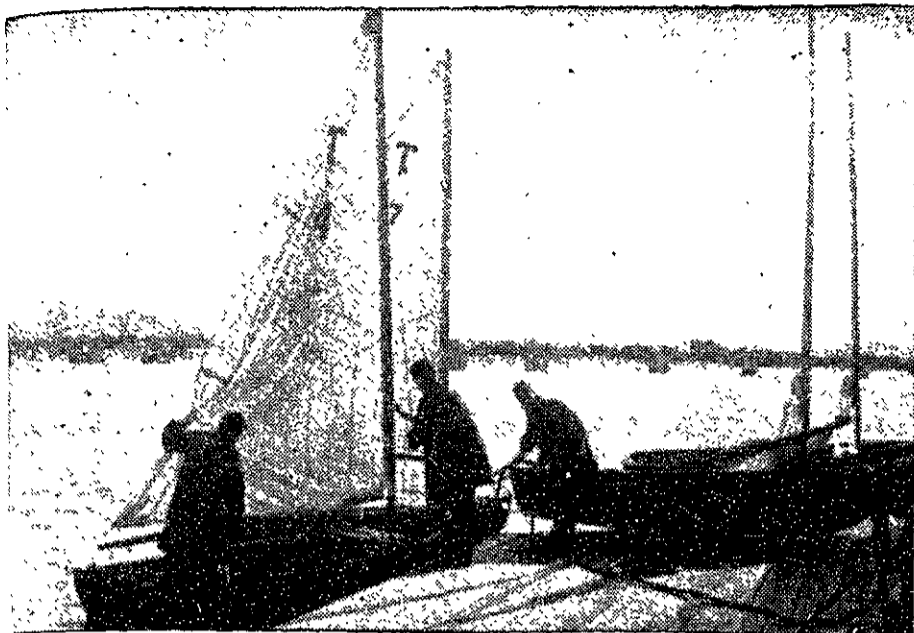
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SAILORS BUCK WEATHER TO GAIN VICTORY



Staff Photo

Beaver dinghy men have, in the four years of their existence, gained a high place for themselves in the esteem of sailors throughout the country, by their fine display of seamanship in regattas.

M.I.T. Nautical Association Is Well Known In Yachting Circles

Flying from the staff of the sailing pavilion is the pennant of the M.I.T. Nautical Association, one of the best known and most highly respected flags in intercollegiate yachting circles.

The Association came into official being on April 1, 1936, when President Compton sailed the first dinghy in a parade of 42 boats to the opening of the Sailing Pavilion, after extensive campaigning among the alumni.

Boost League

Since then the Beaver Sailors have gone forward together with the sport in intercollegiate competition. On their entry into the Intercollegiate League, a greater interest began to appear in the sport throughout the college world, until the membership of the league has increased to its present number of 31.

The record of Engineer dinghy teams during their four years of existence has been outstanding. Every year Cardinal teams are high on the lists of award winners, and the team of Colie, Hanson and Olsen has snared the Intercollegiate championship for the past three years.

Climb Ladder

The organization of the Association is simple in comparison with that of similar bodies, and consists in a ladder-like arrangement of its members according to their ability. Members climb the ladder by passing of tests or when their experience justifies a raise in position. At the base of the great number of members, are those with the rank of crew. These men have satisfied the association as to

their competence as yachtsmen, by the passing of certain fundamental tests.

After practice at sailing, and instruction in launching and storing a boat, crew members gain the status of helmsmen. Next on the list are the racing skippers, who must have a thorough knowledge of sailing and the finer points of racing. After spending some time instructing members, and after they are considered capable of fine handling of a boat, a racing skipper may be elected to the Bo'suns Club, the top ranking section of the Nautical Association.

Beaver Golfers Defeat Bowdoin

Opening their season on an auspicious note, Tech's golf team overcame a strong Bowdoin six, 6-3, on Wednesday afternoon. Bowdoin is one of the most powerful teams in the league, and their defeat at the hands of the Engineers augurs well for a very successful Beaver season.

The squad journeyed to Providence to play Brown yesterday, while they will be busy today and Monday with scheduled games against B.U. and Tufts, both at the Oakley Country Club in Belmont.

The team for these two games will be the same as represented Tech against Bowdoin and Brown and will consist of: J. C. Jeffries, captain; D. Follansbee, R. C. Wynne, J. P. McEvoy, C. A. Trexel and J. B. Wuhrman.

M.I.T.A.A. Is Run For And By Students

Captains And Managers Are In Complete Charge Of Athletic Association

In accordance with Technology's system of democratic student government, the M.I.T. Athletic Association is operated exclusively under the direction of the elected representatives of the men on the athletic squads, in the form of the captains and managers of the recognized teams at the Institute.

These men have complete control of athletic policy at Technology, except where they are limited on budgetary matters and general policy by the Institute Committee and by the Advisory Board on Athletics. The latter body is made up of three alumni and three undergraduate representatives.

Promotes Interest

The function of the A.A., as expressed in its constitution, is to promote and supervise athletic interests at Technology. Inasmuch as this body has supervision over athletics, all managers and assistant managers are directly responsible to it. Anyone in the school is eligible to compete for managerial posts, with the chance of being elected after 1½ to 2 years' service.

In carrying out their object, the M.I.T.A.A. has powers of veto over the actions of various teams. It awards all class numerals and letters, upon receipt of reports from the various managers. Sanction of all schedules must come from this source before they become official.

Crew

(Continued from Page 9)

expected to furnish much competition.

Jayvees Race

The same conditions stand for the jayvee race, except that B.U. will not enter a crew. In the 150 lb. varsity race, a close contest is predicted between Tech and Harvard. The fourth Cup race finds the Tech, Harvard, and B.U. freshmen shells at the starting mark. Jim McMillan's charges have been working very hard, and competition between the Crimson and Beaver frosh should be close. Thursday evening, the '43 crew elected stroke Al Meyers as their captain for the coming season.

In the preliminary races which take place at one o'clock the freshman 150 lb. crews will meet Brown and Nichols' second crew; the second freshman heavies compete against the Brown and Nichols' varsity; and the jayvee fifties will meet the Harvard 150 lb. junior varsity.

Tech Sports

By Harvey Kram



Today thousands of visitors will have explained to them the work and the aims of the Massachusetts Institute of Technology. Various technical exhibits and demonstrations throughout the day will provide the visitors with a rather clear picture of the Institute and the work done in it. However, in addition to this program, there will be four intercollegiate sporting events today in which Tech athletes will participate. This will help give the public an idea of the Technology undergraduate.

Athletics of all forms are generally associated with any modern college for young men, and many colleges maintain their reputation solely by athletic achievements. In many ways athletic competition has become a symbol of American youth, and the Technology student is no exception to this. We have at the Institute numerous forms of athletic activities in which many of the undergraduates participate. However, though M.I.T. stands very high in the world of science, many may feel that the Beaver has never obtained the sport limelight. If this is true it is only because of the high ideals governing the athletic policy of our Institute.

The benefits derived by a student participating in athletic competition has become a generally accepted fact, and at Technology the value of sports has not been lost in the maze of scientific research and technical training. Instead the quality of athletic recreation has been closely guarded by a policy which has remained steadfast through the history of athletics at Technology. Sports at M.I.T. are designed for the purpose of giving every man a chance to participate in some healthful recreation and to spend as much time with it as the individual case may warrant. The object is not, as it seems to be at so many other colleges, primarily to produce winning teams, although every Tech man does like to see the Beaver team on top.

The traditional Beaver spirit in intercollegiate athletic competition has not been one of "victory at any costs" but instead it has been one of playing the game hard for the fun of competition and the enjoyment of playing. The ideal Tech athlete is not one who breaks records but one who exemplifies sportsmanship in its highest sense. In order to provide the opportunity of athletic competition to as many students as possible there has been developed at Technology a great interest in intra-mural sports. Through this means many of the Institute undergraduates can spend part of their spare time in healthful recreation and enjoying the tang of athletic competition.

Technology may not lead the sporting world in victories, but we can be proud of the high standard of Beaver athletic policy. Basically, the value of athletics lies not in the art of being a winner but rather in the art of good sportsmanship, and in the enjoyment derived from keen competition and healthful recreation. In this way Massachusetts Institute of Technology is a great leader in the athletic world.

Athletic Facilities

(Continued from Page 10)

The latest step in the huge athletic expansion is the new swimming pool, not yet opened. It is to be the most modern and well-equipped pool in the world. The entire south side of the building is glass-walled to admit heat and sunlight in the winter and to admit only the light in the summer.

The unit contains a small beginners' pool, 20 by 40 feet, as well as a regulation intercollegiate pool, 45 to 75 feet. Seats are provided on the north side for 340 spectators. Included on

the first floor are showers and locker rooms for students and offices for the coaches. Showers and locker rooms for women are located on the second floor. The pool will be connected to the Barbour Field House by a corridor.

Observation Window

For purposes of observation and coaching, a large window has been placed in one end of the pool under water so that the swimmer's style may be checked. The pool unit, like the Briggs Field House, and the rest of the athletic-center-to-be, was built entirely with funds donated by the alumni.

Physics

Chemistry

Mathematics

Thermodynamics

Applied Mechanics

Electrical Engineering

THE ASSOCIATED TUTORS

410 Memorial Drive, Cambridge

KIRKland 4990

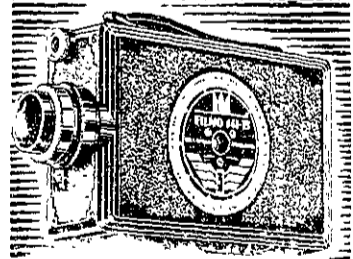
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DIRECTORY OF EXHIBITS

ACTIVITY EXHIBITS

Publications, 5-147
Boys' Work (T.C.A.), 8-132
Glee Club Sing, Building 7 Floor 2
Hobby Shop, 2-051
Radio Society, Radio Shack
Debating Society, 4-370
The Tech, Main Lobby and Walker Memorial

AERONAUTICAL ENGINEERING
Wind tunnel in operation; blind landing exhibit; instruments, Bldg 35

ARCHITECTURE
City Planning; research; sun machine, Bldg. 7

BIOLOGY
Food; water and air analysis; microbiology; biochemistry; antiseptics; Reaction time measurement, Bldg. 10—floor 4

BUILDING ENGINEERING
Live termite colony, 5-310
Weatherometer; Concrete extrusion machines; Absorptometer; accelerated weathering tests, 5-008

BUSINESS AND ENGINEERING ADMINISTRATION
Motion study-Technique exhibit, 1-150
Thorne-Loomis films, 1-146
Salesmanship films, 1-136
American Industry progress films, 1-143
Foremanship training, 1-147

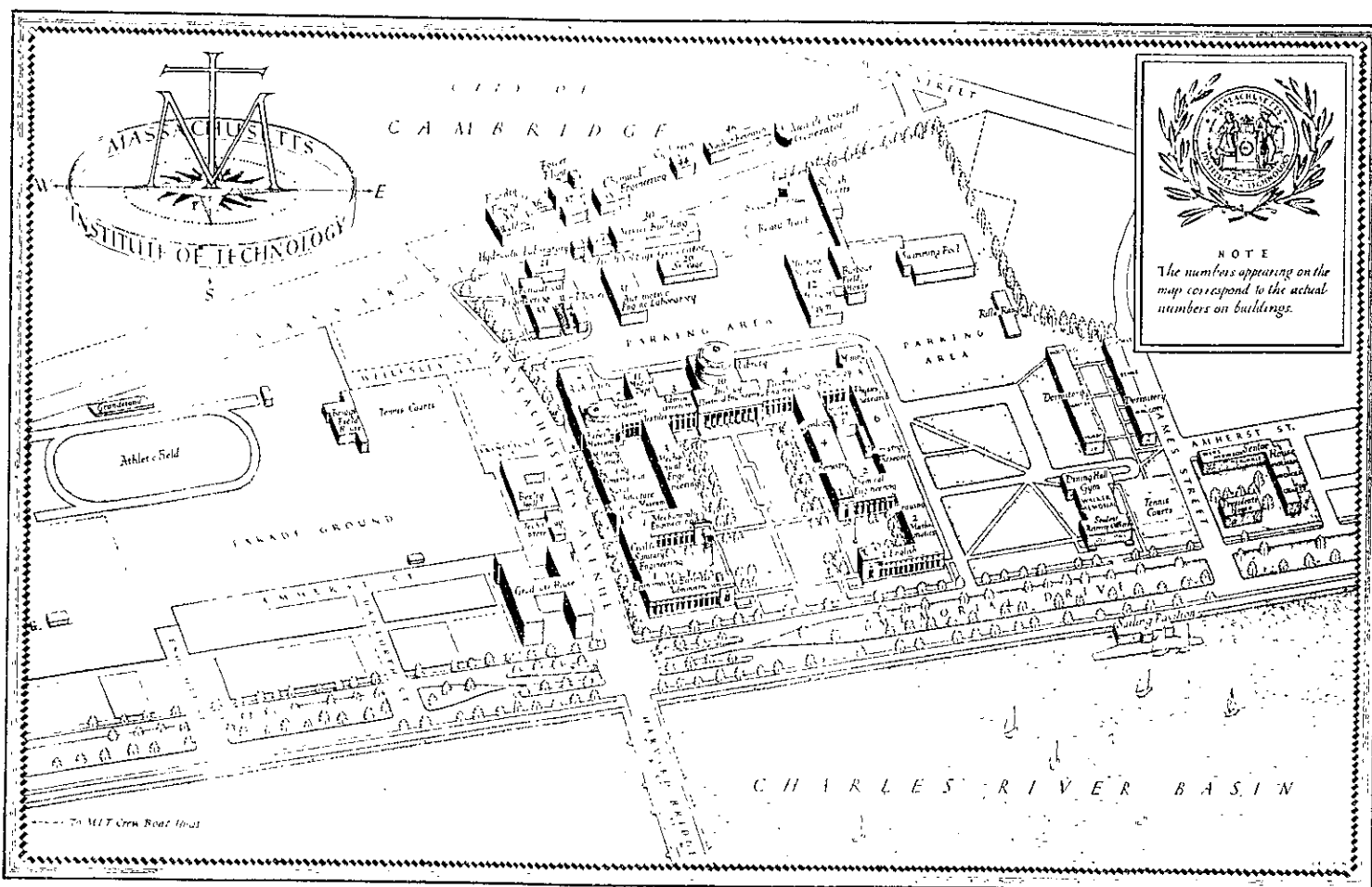
CHEMICAL ENGINEERING
Manufacture of rayon; Distillation; Safety glass exhibit; Pilot plant in operation; Absorption tower; Manufacture of Nitric Acid, 2-110
Solar Energy research, Bldg. 34
Colloidal exhibits; Electroflux model, 4-270
Colored Movies, 2-033

CHEMISTRY
"The Approach to Absolute Zero," 10-250 at 11:00 A.M.; 2:00 P.M.; 4:00 P.M.
Glass Blowing, 6-120 at 11:15 A.M.; 2:00 P.M.; 4:30 P.M.
Organic laboratory, 4-440
Inorganic laboratory, 6-422

CIVIL ENGINEERING
Modern Railroad Model, 1-345
Soil mechanics, 1-333 and 1-334
Hydraulic Demonstration, 1-390
Structural Analysis, 1-235
Sanitary Engineering, Lab 1-045
Surveying, 1-375
Miscellaneous displays, 1-345

DRAWING
Graphics; engineering drawing; stereoscopic work, 2-335

Plan Of Institute Together With Room Numbering System



Courtesy Technology Review

Indicated in the map are the location and number of Institute buildings. The designations of room numbers in the Directory and Campus are in two parts. The part before the hyphen indicates the building in which the room is located, the first number after hyphen indicates the number. Thus 2-190 is 90 in Building 2 on the floor.

- ECONOMICS**
Economics department films, 1-132, 1-135
Counterfeit Money Display, Basement, Bldg. 11
- ELECTRICAL ENGINEERING**
High voltage laboratory, 4-237
Illuminating engineering, 10-271; 10-082; 10-023
Communications laboratory, 10-303
Dynamo laboratory, 10-050
Measurements laboratory, 4-317
- ENGLISH**
Three scene play "Liliom", 2-190 at 2:00 P.M.
- GEOLOGY**
Paleontology, 4-365
Geophysics, 4-345
Mineralogy, Bldg. 4—floor 3
- MATHEMATICS**
Statistical random sampling machines; cycloharmonograph; slide rule exhibit; angle trisecting devices; mathematical games; computing machines; analysis of pi, 2-170, 2-147, 2-151
- MECHANICAL ENGINEERING**
Steam laboratory, 3-150
Testing materials laboratory, 1-110
Machine tool laboratory, 3-350
Textile laboratory, 3-315; 3-329; 3-311
Refrigeration laboratory, 5-017
Air Conditioning laboratory, 5-007
Heat measurements laboratory, 7-038
Photoelasticity laboratory, 1-321
- METALLURGY**
"Modern Applications in Metallography," 8-434 at 1:00; 2:00; 3:00; 4:00 P. M.
Demonstrations of Metallography, 8-434
Heat treatment laboratory, 8-410
Damping capacity apparatus, 8-417
X-ray equipment, 8-405
Lead-lined room, 4-041
Copper blast furnace, 8-010
Ceramics display, 4-039
Fire assaying, 8-329
Ore dressing laboratory, 8-205
- MILITARY SCIENCE**
Anti-aircraft gun, Hangar Gym
Gas masks, Mortar, Bldg. 5—floor 2
Gun Exhibit, 5-212
Signal corps exhibit — Campus adjacent undergraduate dormitories
- MUSEUM**
Dard Hunter Paper Museum, 7-321
- NAVAL ARCHITECTURE**
Nautical Museum 5-190
Model cutting shop 5-220
- PHYSICS**
Electrostatic generator, Bldg 44
X-ray laboratories, 6-412, 6-414, 6-416
Color analyzer, 4-239
Physical society exhibits, 6-215
- Plastic Flow research laboratory, 1-312
Automotive laboratory, Bldg. 31
Foundry, Bldg. 35
Welding laboratory, Bldg. 35
Power Plant

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- 332 Massachusetts Avenue
- 19 School Street
- 437 Boylston Street

- 1080 Boylston Street
- 24 Bromfield Street
- 540 Commonwealth Avenue
- 202 Dartmouth Street
- 105 Causeway Street
- 655 Tremont Street
- 7 Pemberton Square
- 78 Mass. Ave.; Cambridge
- 1215 Commonwealth Ave., Allston
- 1016 Commonwealth Ave., Brookline