THE TECH

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TUESDAY, FEB. 7, 1950
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VOL. LXX NO. 3

THE OFFICIAL NEWSPAPER
OF THE M.I.T. UNDERGRADUATES

KILLIAN ON SECRECY POLICY—

"As a citizen I welcome the vigorous discussion now taking place about our national and international policies in handling the Hydrogen bomb development. Here again we are up against the hard necessity of protecting our weapons' secrets, but of trying at the same time to give the public the maximum opportunity to debate and appraise policies and disisions which affect the national welfare and which involve moral considerations best resolved by the open procedures of democracy. The only satisfactory solution of this dilemna is the ultimate achievement of international control and the consequent disappearance of any need for secrecy."

WEISSKOPF HITS H-BOMB PANIC

Songs, Dances, Numbers Set As Tech Show '50 Rehearses; Title Is "Stranger In Town"

Photo by Astrachan

Stars of the 1950 Tech Show, "There's A Stranger In Town," to be presented March 17 and 18 in the Cambridge High and Latin auditorium, are standing: James C. Bresse, G., left, and Joseph S. Gottlieb '50. Seated in the same order are Dotty Liftig and Gwen Downhill, the feminine leads.

"Stranger In Town" has been selected as the title for the 1950 Tech Show to be presented March 17 and 18 at the Cambridge High and Latin School auditorium. Ticket prices have been set at $1.20, $1.80 and $2.40.

Several previews of "Stranger In Town" to be held at Technology and other colleges in the Boston area are under consideration by the managing board. Also intermission entertainment by members of the cast is being planned for various social events to be held here in the next few weeks.

Final Rehearsals

The cast and chorus have been rehearsing regularly since early November and an intensive rehearsal schedule is planned for the remaining few weeks before the show.

Among the fifteen numbers in the musical score are "There's A Stranger In Town," the opening choral number, and "(I Love Him) Any Old Way" and "Don't Say" which will be sung by Gwen Downhill in the role of Jenny. "I'm A Very Striking Viking" will be delivered by Joe Gottlieb '50, who will portray Lief Erickson's ghost. "Beware (Of That Ghost)" is a big production number that will close the first of the two acts in the show. Dorothy Liftig in the role

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Explanation of Absences By Medical Excuse Ends

Beginning with the opening of the second semester, February 6, the present system of securing medical explanations for absence will be eliminated, Dr. Dana L. Farnsworth, Director of the Medical Department, announced earlier this week.

Henceforth each department will handle the question of absence from assigned exercises in its own way, making little if any distinction between the various causes of absences.

Any student who is seriously ill and who must thereby miss a large amount of work will be under treatment either at the Infirmary, or by his private physician, who will inform the Medical Department, and thus his interests are protected in case of any disagreement of opinion between the student and the department concerned.

Dr. Farnsworth believes that this step marks an advance in freedom and self-responsibility on the part of the student, and that the new system will result in increased efficiency on the part of the physicians in the Medical Department who will be free from paper work that has served no useful purpose.

Campbell Soup Co. Gives One Million For Food Research

Development Fund Now Totals $8,800,000 As Industry Gives Half

With the grant of $1,000,000 by Campbell Soup Company to the Institute the total in the development fund has climbed to $8,800,000. Marshall B. Dalton, chairman of the program, announced the latest figures at the mid-winter dinner of the alumni last Saturday.

"The grant is one of a group of industrial grants to the Institute now totaling over $4,000,000 under a plan whereby the Institute extends to the companies full opportunities to keep abreast of new developments and trends in science and technology," Dalton said.

"This grant," he continued, "is an impressive example of the growing conviction on the part of industry that it has both an opportunity and an obligation to support basic research and education in the fields of importance to industry. The Campbell Company president, James McGowan, Jr., specified that the grant was for the purpose of supporting the Institute's research program in Biology, Food Technology, and related fields.

Dr. James B. Killian, Jr., president, announced that the Institute had decided, as a part of the Development Program, to construct a new building to house the Departments of Biology and Food Technology. Campbell Soup Company has thus duplicated an earlier grant from Alfred P. Sloan, Jr., which was made last June at the time the Development Program was launched.

Eight Appointments Made In M. S. Dept.

Appointment of eight members to the faculty and instructing staff at the Institute has been announced by Dr. James R. Killian, Jr., President.

The new faculty members are Edward Woiccak, Junior Grade Warrant Officer, promoted to Assistant Professor of Military Science and Tactics, and Roy O. Enemark recently made Junior Grade Warrant Officer, promoted to Assistant Professor of Military Science and Tactics.

Instructors of the Military Science Department who have recently joined the Institute's staff are Master Sergeants Clarence W. Blackadar, William F. Dennen, Samuel Fine, Sumner E. Howard, Charles W. Ingalls, Eric J. LaCouture, and Forrest Prince, Sergeant First Class Edward McCabe, and Sergeant Winfred N. Smith.

Prevention of H-bomb Use Justifies Its Manufacture Say M.I.T.'s Top Physicists

"Although work on the hydrogen bomb has proceeded beyond the stage of mere theory, there is no certainty that such a bomb can be produced," stated Doctor Victor F. Weisskopf, Professor of Physics here at the Institute.

Professor Weisskopf made his statement in connection with the formal declaration which twelve of America's top A-bomb men made at Columbia University last Saturday. Dr. Weisskopf and Dr. Bruno B. Rossi, also Professor of Physics here at the Institute, joined the ten other physicists in signing the declaration.

Professor Weisskopf, commenting on the meeting, went on to say, "We were quite disquieted about the publicity which the H-bomb has been receiving. Statements are being made by people who know little or nothing about the bomb, while those who actually know about it are pledged to secrecy."

Emphasizing the stand which the twelve men made in regard to the manufacture of hydrogen bombs, Dr. Weisskopf quoted the formal declaration. "There can be only one justification for our development of the hydrogen bomb, and that is to prevent its use." The declaration continued, "Its use would be a betrayal of all standards of morality and of Christian civilization itself."

The twelve physicists confirmed for the first time that a bomb was potentially possible which would have one thousand times the destructive power of the atomic bomb. They were attending the New York meeting of the American Physical Society.

Phosphorous Fire Doused In Dorms

Three freshmen who have apparently not yet learned the law of evaporation were saved from a return to a charcoal room by the alertness of a Course VIII senior last Wednesday night

It seems that the freshmen had left three sticks of phosphorus in a jar of water over the vacation. The water gradually evaporated so that by Wednesday the sticks were dry enough to catch fire spontaneously. Smoke was first noticed coming from room Holman 203 about 10:45 p.m., Wednesday, by Guy C. Bell, Jr., while on his way out of his room across the hall. He promptly called the fire department.

Before the firemen arrived, a blanket was thrown on the phosphorus to smother the flames. The firemen finally arrived, replete with gas masks, and doused the fire. Only damage sustained was to the wall, rugs, floor and a few dollar bills pinned to the wall above the fire.

Darkness Envelops Technology As Cambridge Elec. Power Fails

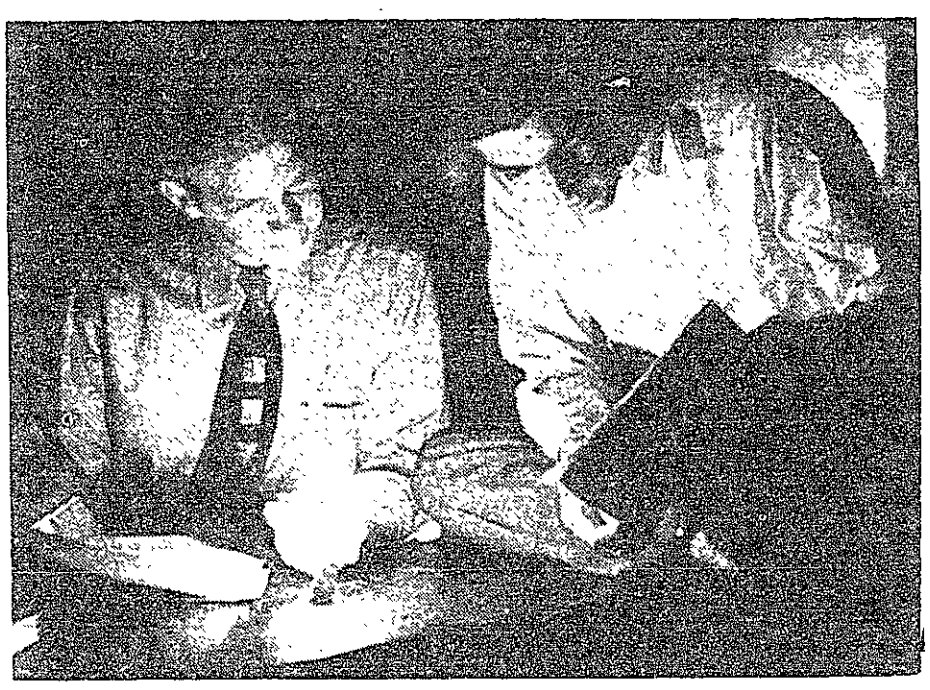

Photo by Astrachan

Charles Beaudette (left) and Parker Gay "putting the paper to bed" during the Sunday-night power failure.

Darkness reigned at Technology for almost an hour last Sunday night. At 6:10 p.m. a 13 kilovolt transformer at the Cambridge Electric Company broke down, cutting the power supply to the main building group here and plunging Westgate, the New Dorm, the Old Dorms and other outlying Institute buildings into darkness.

Steam turbines at the Institute power house were started as soon as the failure occurred but it was almost 7:00 p.m. before they were warmed up and the emergency generators thrown into service.

Repairs on the Cambridge Electric branch feeder to Technology were completed by 7:25 p.m., and the entire surrounding area underwent a blackout lasting about three minutes as the emergency supply was shut off and complete service restored by Cambridge Electric.

As soon as the failure occurred, calls were sent out and Boston radio stations made spot announcements asking all individuals in charge of susceptible projects here to report at once to the Institute. Most of these men reached their

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Synchrotron Passes Tests

Work Already Started On New Accelerators

The 300 million volt synchrotron, under construction since 1946 in the Laboratory for Nuclear Science and Engineering at the Institute, has recently completed its first operation tests. The announcement of the synchrotron's completion was made by Professor Jerrold R. Zacharias, Director of the laboratory. Construction of the super-energy electron accelerator was under the direction of Dr. Ivan A. Getting, professor of electrical engineering, and was supported in part by the Office of Naval Research.

Will Produce Mesons

With the synchrotron, physicists should be able to probe further in the realm of nuclear physics and eventually come nearer to an understanding of the strongest forces known to science — those which bind together the particles of the atomic nucleus. The synchrotron's approach to this problem will be made through a study of cosmic ray phenomenon, which includes many nuclear processes. Of particular interest are the particles called mesons. According to Prof. Zacharias, "The Institute's synchrotron is powerful enough to produce mesons artificially, and it

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CALENDAR OF EVENTS

FEBRUARY 8 TO FEBRUARY 14

WEDNESDAY, FEBRUARY 8

Staff Players of M.I.T. Supper meeting. Emma Rogers Room, 6:00 p.m.

THURSDAY, FEBRUARY 9

Acoustics Laboratory and Modern Languages Department. "Phonetics and Speech Analysis." Professor John Lotz, Columbia University. First of a series of six talks and discussions. Room 24-213, 4:00 p.m.

Physics Department. Colloquium: "Thermodynamic Theory of the Origin of the Elements." Professor O. Klein, Stockholm. Room 6-120, 4:30 p.m.

Dramashop. General meeting. Refreshments. Litchfield Lounge, Walker Memorial, 5:00 p.m.

FRIDAY, FEBRUARY 10

Faculty. Meeting. Room 6-120, 3:05 p.m.

Acoustics Laboratory and Modern Languages Department. "Phonetics and Speech Analysis." Professor John Lotz. Room 24-213, 4:00 p.m.

Mechanical Engineering Department. Seminar: "Condensation Phenomena in Wind Tunnels and Nozzles." Dr. H. Guyford Stever. Room 3-470, 4:00 p.m. Coffee will be served in Headquarters from 3:00 to 4:00 p.m.

SUNDAY, FEBRUARY 12

Society of Arts. Popular Science Lecture. "The Problem of Weather Forecasting." Professor James M. Austin. Room 10-250, 4:00 p.m.

MONDAY, FEBRUARY 13

Technology Matrons. The Book Club. Mrs. Clem A. Ferguson will speak on orchid culture and will have various specimens of orchids from her greenhouse. Emma Rogers Room, 2:45 p.m.

Aeronautical Engineering Department. Seminar: "The Continuous Supersonic Wind Tunnel." Professor Michael Witunski. Room 33-319. Coffee and tea will be served in the du Pont Room from 3:30 to 4:00 p.m.

TUESDAY, FEBRUARY 14

Acoustics Laboratory. "The Mean Pressure and Velocity in a Plane Progressive Sound Wave." Peter Westervelt. Room 20E-121, 4:00 p.m.

The Student-Faculty Committee. Forum: "Is Your Instructor Conscious of You?" Moderator: President James R. Killian, Jr. Speakers: Dr. Warren K. Lewis, Professor John T. Rule, C. John Jacoby, 3rd, and Joseph S. Gottlieb, Room 10-250, 5 p.m.

EXHIBITIONS

"Visual Education for Architects," the exhibition demonstrating basic laws governing visual structure, will be on display in lobby of Building 7 until February 10.

An exhibition of technical photography of the Photographic Society of America will be shown in Basement of Building 11 until February 14. Of particular interest are several photographs taken with the new 200-inch telescope at Mt. Palomar Observatory; there are also pictures looking the other way, from the sky to the earth, made from rocket traveling into the stratosphere.

CALENDAR OF EVENTS

The Calendar of Events is published weekly on Tuesday in THE TECH and contains announcements for the following week. It is sent without charge to all members of the staff, heads of D.I.C. projects, as well as to the leaders of various organizations. A separate listing of the Calendar of Events will be mailed to others for one dollar a year, payable in advance at Room 7-204.

Announcements, typewritten and signed, must be in the Office of the Editor, Room 7-204, **not later than noon on Thursday**, prior to publication date. Material for the Calendar, February 15-21, is due February 9.

Synchrotron

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should produce enough of them so that we can study their behavior."

The synchrotron will draw its energy from one of the largest banks of capacitors in the world. The power drawn from this reservoir during the process of electron accelerations is equivalent to 1000 large broadcasting stations. The capacitors were built by the General Electric Company.

Employs Betatron-Type Accelerator

The synchrotron itself is a circular doughnut-shaped machine approximately 12 feet in diameter.

In its first phase, the machine releases pulses of electrons from what is known as a betatron-type accelerator. In this device a single magnetic field is used both to speed up the electrons and to keep them moving in the proper path.

Constantly Increasing Magnetic Field Used

At the completion of this phase, the synchrotron action begins. A high-frequency alternating voltage is applied across an acceleration gap. The electrons pass this gap once during every trip around the circle. Each time they pass it, they receive a push from the high-frequency voltage. These successive pushes boost the electrons up to their final energy.

During the entire process the electrons are held in the same circular path by a constantly increasing magnetic field. Each group of electrons is pushed around the doughnut 250,000 times before it is thrown out, ready to perform experimental work. Up to six such groups of electrons can be handled every second.

Electrons Show Increase in Mass.

When they leave the betatron section of the machine, the electrons are moving at essentially the speed of light. Their increase in energy during the synchrotron action makes them 700 times heavier than when they started.

The principle of the synchrotron which makes feasible for the first time electron acceleration to these super-voltages, was first announced in 1945 independently by Dr. V. I. Veksler in Russia and Dr. E. M. McMillan in this country.

Many Contributed Toward Completion

The magnet for the synchrotron was designed by Dr. Getting and Mr. Joe S. Clark, in collaboration with the Allis Chalmers Manufacturing Co., which built this part of the synchrotron. Others who

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Geology Dept. Working To Determine Evolutionary Stages Of Petroleum

By MARION MANDERSON

Throughout the passing years the world demand for petroleum products has become greater and greater. As a consequence it is becoming increasingly difficult to locate new oil domains to supplement the present depleting ones. Scientists have been called upon to devise new and better techniques not in oil refining alone but in oil prospecting as well.

The American Petroleum Institute under the joint sponsorship of several oil corporations, set out in 1942 on a project to study the evolutional stages of petroleum. By learning the step-by-step processes and environmental conditions which are necessary for hydrocarbon formations, it was hoped that the search for petroleum sources would be made easier.

Still a Mystery

To speed up work, the project was subdivided into different phases and sent to various laboratories throughout the country. Although some possibilities have been eliminated, after seven years, the mystery of the evolution of oil is yet unsolved. Thus far, approximately two million dollars have been expended on the project.

At present the Geology Department at the Institute is concerned with two parts of the undertaking: (1) effect of catalytic agents on petroleum formation, and (2) radioactive decomposition of organic compounds.

Oil Associated with Limestone Deposits

From qualitative tests of mud and rock surrounding various oil fields in the Gulf Coast, California, and Oklahoma, it was found that a high percentage of organic matter was present. Furthermore, each of these locations contained evidence of marine formations which had once lain at the bottom of prehistoric seas. In conjunction with this analysis it became apparent that certain physical features were necessary for providing subterranean oil chambers. Most oil recesses are located in the presence of limestone deposits.

Formed from Organic Soils

The general stages in oil formation are not difficult to understand. First, dead marine plants and animals form rich layers of organic topsoil. As centuries pass by, these layers are covered by others and pressure is exerted on them. As the pressure increases, organic oils are squeezed from the decayed material. These oils change into hydrocarbons and then seep down through permeable strata until a layer of rock stops their descent.

The question of how organic oils change into hydrocarbons is the problem which this project has attempted to answer, for in effect it will solve the mystery of petroleum evolution. The four possibilities which have been given major consideration are:

(1) Low temperature cracking
(2) Radioactive bombardment
(3) Catalytic effect
(4) Bacteriological effect

Oil Fields Show High Radioactivity

Today the bacteria effect on organic compounds has been more or less discounted. It has been found that under low temperatures of about 120 degrees Fahrenheit for prolonged periods of time, organic compounds will gradually decompose to give less complicated molecular structures. From experiments of alpha particle bombardment on fatty acids such as stearic and buteric, it has been revealed that hydrocarbons, water, and carbon dioxide are the principal resultants. This possibility is being explored because radioactivity in oil field regions is more than sixty times that in normal rock formations. Thus far, the study of catalytic effects in clay and limestone on organic material has not yet yielded anything conclusive.

Viewing these results from a practical standpoint one naturally asks if all this effort is really worth the money and time involved. The question is debatable. But perhaps there is more to be gained than what lies on the surface. If we definitely find the way Mother Nature manufactures this indispensable liquid, then perhaps we can learn something from her recipe.

Synchrotron

(Continued from Page 2)

played a prominent part in the development of the high energy accelerator were Dr. J. Earl Thomas, Jr., assistant professor of electrical engineering, who directed the design of the high-frequency oscillator and timing circuits; Mr. Isaac G. Swope, who supervised the construction of the excitation equipment; and Dr. M. L. Sands, assistant professor of physics, who developed the magnetic correction coil.

The completion of the synchrotron is one step in an extensive nuclear program now under way at the Institute. Through the Laboratory for Nuclear Science and Engineering, a high degree of cooperation has been reached between all Institute departments working on construction projects such as the synchrotron.

Other Accelerators Planned

The synchrotron is the seventh accelerator of over a million volts to be set into operation at the Institute. Work has already begun on an eighth and ninth such device. One of these of only 1,000,000 volts energy will make measurements of heretofore unattained precision.

Says Dr. Zacharias, "No single accelerator will give physicists all the answers, but the synchrotron is sure to give us quite a few."

Churchill Repairs English Language

The dictating instrument which the Hon. Winston Churchill used in recording his memoirs and many of his important addresses was presented to the Massachusetts Institute of Technology February 2 by Herbert Gfroerer, Chairman of the Sound-Scriber Corporation of New Haven, Conn.

In presenting the dictating machine Mr. Gfroerer described its use by Mr. Churchill to record his memoirs. This instrument was later replaced by a specially designed model which by means of a voice relay starts recording the instant Mr. Churchill begins speaking. It was on the machine that was presented to the Institute that Mr. Churchill sent his famous message to members of the staff of the SoundScriber Corporation thanking them for making it possible for him to dictate his memoirs rapidly. The message ended: "This is me, Winston Churchill, speaking to you, and I am so glad to be able to thank you in this remarkable way." Mr. Churchill's violation of the rules of grammar in using "me" instead of "I" was hailed by many authorities as a wholesome trend in the evolution of the English language.

Courtmen Beaten By Trinity, 57-56 In Garden Contest

Lose To Brown, Top WPI In Other Games

Battling a favored Trinity five to a near standstill in their Boston Garden debut last month the Engineers finally bowed 57-56 in the closing minutes of the game. After trailing by as much as 17 points during the first period, the Beavers fought back into contention, and the capacity crowd was treated to an exciting second half.

The Beavers out-rebounding and out-fighting the Hilltoppers most of the way could be listed as victims of the much-discussed two-minute rule almost as much as of their opposition. However, the looseness of the defense, especially early in the game, contributed most of all to the loss.

Early in the first half the visitors pulled ahead to a 29-12 advantage as the Engineers seemed baffled by the Garden court and displayed almost no offense. After a change of platoons the Tech squad began to click and narrowed the margin to six points by half time.

As the second half opened the fast Technology-set pace kept up, and the Hilltoppers gradually began to slow down. It was here that the Technology defense began to click, as the visitors were forced to take almost all of their shots from outside.

The first real break came when Hohorst's two-pointer knotted the count at 45-all. From then on the game see-sawed back and forth until a foul, called on Honkalehto, in the last two minutes, gave the Hilltoppers two vital points as well as possession of the ball. Seconds later, however, a stolen pass by Captain Lou Morton and Ed Corrie's lay-up put the Beavers on top again.

Then disaster struck. Two Technology fouls, one highly disputed, within three seconds of each other, gave the 'Toppers two points and continuous possession of the ball, and the game as a bonus. After a basket by Corrie narrowed the margin to one point the Trinityites easily stalled the ball for the few remaining seconds.

High point man for the game was Trinity's Larry Hutnick with 15 points. Next, and top man for the Beavers, was Herb Glantz with 14.

In other pre-vacation activity, Ted Heuchling's men were trounced by Brown on the latter's court, and then came back to top Worcester Polytech in a game played at Walker Gym.

In the Worcester game the Engineers overcame a sluggish first half to win handily, 59-51. Shooting percentage for both teams went way up in the second half as Herb Glantz set the pace with five consecutive baskets. Brown of the visitors was high scorer in the game with 23 points.

Indoor Season Opens As Mile Team Wins 2; Frosh Top Huntington

Beaver Pucksters Win Two Lose One Before Vacation

In a pre-vacation sprint, the Tech icemen swept two out of three games within the space of five days to bring their season record to four wins and four losses. The game with Colby, also scheduled to be played within this period, was called off due to lack of ice.

In the first contest of the series, on Friday, Jan. 13, the pucksters crushed Bowdoin, 8-5, in a game featuring some good shots by both sides. Don Lea, team captain and New England League high scorer, was outstanding, making three of the Beaver goals, one of them a rarely seen shot from a faceoff.

Continuing their winning ways, the icemen went on to defeat Tufts 5-3 on the following Monday. Although outstanding in all three of the contests, goalie Burt Woodward was especially effective in this game, frustrating almost all the enemy assaults.

The final contest, which took place on Tuesday, Jan. 17, saw the tired Techmen go down in defeat before a much-improved Northeastern six, to the tune of 10-4.

The Tech indoor track team racked up two first places over the last three Saturdays to initiate a season which may prove to be one of the most successful in recent years. The big victory came in the Millrose Ivy League mile relay at Madison Square Garden in New York where the Techmen beat Harvard, Yale and Princeton. Jerry Lewi, Ken Childs, Ed Olney and Al Dell 'Isola teamed up to turn in a 3:25.4 mile.

Matched against the same teams in the Boston Athletic Asociation Meet last Saturday night at the Boston Garden, the mile team ran third behind Princeton and Harvard. The time for the race was 3:22.2. In the same meet the two mile relay team of Bill Nicholson, Charlie Vickers, Gordon Hunt and Carol Belton lost in a photo finish to Tufts. The Techmen were one-tenth of a second off the winning time of 8:01.6. Providence College was third.

In the Boston Knights of Columbus games at the Garden the varsity mile team won over Boston College and Holy Cross in 3:27.6. The two mile team was third behind Brown and Tufts.

The Freshman Indoor team won its only meet so far this season, beating Huntington Prep School 41-31. The Frosh piled up their margin by sweeping the field events. Highlight of the meet was a new Freshman indoor 12-pound shot put record by George Hooper.

Saturday night the indoor scene moves back to New York for the New York Athletic Club Meet at Madison Square Garden.

Maryland, USMA Beat Tech In Rifle

Champeny, Voelcker Shine For Engineers

In a match fired at the Marine Range of the Navy's Fargo Building on Saturday, January fourteenth, the University of Maryland, the United States Military Academy, MIT, and Cornell took first, second, third, and fourth places respectively.

With all teams firing under extreme pressure on a strange range, the issue was in doubt to the very end. Because of these adverse circumstances all four teams fired considerably below their average scores attained in this year's matches.

Outstanding for Tech was John Champeny who, firing on the last order, came through with a 279. Herb Voelcker, a course II Co-op student who has not fired in intercollegiate competition since April of 1949, also counted heavily with a 276.

The Scores:

M.I.T.		WEST POINT	1388
J. Champeny	279	U. of Maryland	1385
A. Tanner	277	CORNELL	1336
H. Voelcker	276		
C. MacDonald	272		
D. Hartung	270		
Total	1374		

Tech World Student Service Fund Will Try For 1949 Goal

More books will be the cry of solicitors for the World Student Service Fund Drive to be conducted at Technology under the sponsorship of Institute Committee between February 14 and 21, inclusive. Every student will be asked to buy at least one book, at a cost of one dollar, for the most needy students overseas.

The steering committee of the drive, realizing the great need for education among the peoples in the underdeveloped areas of the world, decided to allot the money raised by the campaign to the following countries; Burma, India, Indonesia, Japan, Philippines, Siam, Vietnam, Austria, Bulgaria, Germany, and Rumania. The largest gift, 30 per cent of the total contributed, will be given to libraries and universities in India. Not over five per cent will be given to any of the Eastern European countries.

Delivery Assured

Gus Rath, '52, who is chairman of the drive, emphasized that assurance has come to the committee from headquarters in Geneva, Switzerland, that all contributions to the above-named nations will be properly delivered. Poland was originally assigned a small quota but was removed from the list when it was learned from Geneva that delivery of books could not be guaranteed.

The WSSF drive last year resulted in contributions totalling $3,422 from the student body. National sponsors of WSSF are the following: B'nai B'rith Hillel Foundations, Newman Club Federation, U. S. National Student Association, and the United Student Christian Council. Another activity of WSSF is the placement of Displaced Persons in American schools; four DP's are now attending the Institute, under the WSSF program.

M.I.T. Bookplate

Rath also announced that an M.I.T. bookplate will be placed in each book bought with contributions to the fund.

Reason enough for such a drive to raise money for needed books is contained in the preamble to the constitution of UNESCO: Since wars began in the minds of men, it is in the minds of men that the defenses of peace must be constructed."

Five Scientists Get Fellowship

Five promising young scientists were named by Bell Telephone Laboratories to receive the 1950-51 Frank B. Jewett postdoctoral fellowships. The awards, for research in the physical sciences, grant $3,000 to the recipient and $1,500 to the institution at which he chooses to do his research.

Winners of this year's awards are: Dr. James Bruce French of the Massachusetts Institute of Technology, Cambridge, Mass.; Dr. Ilse Lisl Novak of Wellesley College and New York City; Mr. Robert Frank Steimer of Harvard University and Coral Gables, Florida; Dr. David Emerson Mann of the University of Minnesota, Minneapolis, Minn.; and Dr. Roy J. Glauber of the Institute for Advanced Study, Princeton, N. J., and New York City. Two of the winners are chemists, two are physicists and one a mathematician was also among the award winners last year.

Grants for the fellowships were established in 1944 by the American Telephone and Telegraph Company, upon the retirement of the late Dr. Jewett as Vice-President in charge of Development and Research. Since that time 33 fellowships have been awarded.

The fellowships are designed to stimulate and assist research in the fundamental physical sciences and particularly to provide the holders with opportunities for individual growth and development as creative scientists. Jewett fellows have conducted research at ten of the country's leading universities and institutes. Each recipient is free to select the institution at which he will do his research.

Tech Show

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of Toni will sing "Summer In Maine" and "Two Enchanted Children."

"It Takes Four To Pot A Lobster," a fishermen's quartet number, will feature Paul Zorn '50, Craig Hood '50, Jerry Beushausen '52, and Art Wasserman '51. "Song Of Census" will be performed by George Marcou '52, who portrays the census taker. James Bresee who plays John and Dorothy Liftig will sing a love duet, "Believe," and the comedy duet, "Why Is The Beach So Near The Water."

Blackout

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labs and were making checks by 8:00 p.m.

Caught in the middle of make-up for this issue the staff of **The Tech** worked by candlelight until power was resumed. Shortly after the failure, the Harvard Crimson called, asking to be informed if it's "anything serious, like sabotage."

Reporters and photographers from Boston and Cambridge papers assembled for a short conference in the office of Dean Bunker after service had been resumed. He stated that it is quite possible that serious damage may have been done to research projects and experiments requiring a continuous availability of power. It was later determined that the Institute Cyclotron had been interrupted in an operational run. Further reports on these possible difficulties were not available on Sunday night.

One undergraduate was heard to remark that he pitied "those poor guys in the Dorms that're 'entertaining' in their rooms."