MASSACHUSETTS INSTITUTE OF TECHNOLOGY



Dome gets a bath

ONE IN A MILI-ON

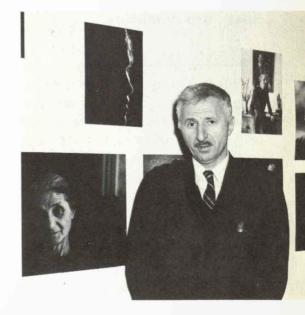
TINKER TOY

Having acquired a new skylight in October, the dome in Bldg. 7 has just received its first bath in twenty years (and, in fact, in its history). Since no glue-footed fly fleet was handy, the main problem was to get acrobats from the Arro Contracting Co. into a working position about 80 feet in the air. This was accomplished by a tower of staging, weighing between 8 and 10 thousand pounds, which took three days to build. Dome was then doused with detergent (800 lbs.) and after seven days of scrubbing suddenly emerged looking twenty years younger.

Which reminds us of another conundrum in M.I.T. housekeeping. When Photo Service was emptied out to make way for a new ceiling, smudges of sawdust around the pine panelling led to discovery of a very different brand of workman busy behind the walls. Termites, it turns out, have been regular visitors to the M.I.T. basement. This because the marshy ground and wooden piles on which the buildings rest are a real mecca for the moisture-seeking insects. The situation is being continually remedied by substituting cement for wood baseboards where and when the termites come to light.

Gjon Mili, a great artist with camera and one of the world's top stroboscopic (multiple flash) photographers, is having his first one-man show. Place: the New Gallery in Hayden Library. Born in Albania, Mili first headed for engineering, graduated from M.I.T. in 1923. He became interested in photography while working at Westinghouse, and later ran into Doc Edgerton who gave Mili some of his newly-developed high-speed camera equipment to try out. Experiment was a huge success.

One of his most notable assignments took Mili to Europe in 1949 to get pictures of the reputedly temperamental Pablo Picasso. "I thought up a little gag for him," says Mili. "Gave him a flashlight and asked him to draw with it in thin air." The result: Mili's now-famous series of photographs showing Picasso at his charcteristic and brilliant best.



For a change, Mili becomes subject

From the President's Office comes notice of three appointments. Hugh Darden, Executive Secretary of Educational Council, is already busy making plans for getting acquainted with M.I.T.'s 700 educational counselors -- alumni whose job it is to keep schools, communities and highschoolers posted on M.I.T. "I figure I should be able to meet most of them in three years or so," says Mr. Darden cheerfully, and he will be hopping from seaboard to seaboard to do it. Mr. Darden, who comes to M.I.T. from admissions work at New York University (student body: plus 30,000), was raised and schooled in Alabama, did graduate work in legal history at N.Y.U. Outside interests: music (listening), horseback riding, architecture.

Winston Hindle, hailing from South Dartmouth, has joined M.I.T. as Industrial Liaison Officer. A graduate of Amherst in physics, Mr. Hindle spent one summer helping out in the meteorology project at Round Hill, received his M.S. in Industrial Management from M.I.T. in 1954. Since then he has been shuffling figures in the Pentagon for the Navy's Office of the Comptroller. Mr. Hindle reports that he dabbles in music and woodworking in his spare time, recently combined these two interests in a home-made phonograph which he modestly calls "medium-hi-fi."

Filling the new post of Planning Officer is Malcolm Rivkin. With its current population of over 13,000, M.I.T. needs as much long-range planning as any good-sized town, and it will be Mr. Rivkin's job "to coordinate and initiate plans and studies concerned with the future physical and environmental development of the Institute." This in relation to surrounding communities, especially the City of Cambridge. A graduate of Roxbury Latin, Harvard (A.B., Social Relations) and M.I.T. (Master of City Planning), Mr. Rivkin spent a year as a Fulbright scholar in Holland and as resident planner on a big "cultural center" project in Cleveland. Sidelines: writing (several feature articles for the <u>Boston Globe</u>), debating (which should be put to good use as planning chief), and dramatics.

THE EYES HAVE IT

Medical Department reminds M.I.T. personnel that there is one important exception to their general policy of treating all injuries in the Department. That is eye injuries. Says Dr. Faulkner: "In any instance in which chemicals (and this includes plaster) enter the eye -- or are suspected of doing so -- the eye, with lids open, must be rinsed immediately for five full minutes or longer." Any water source, "pure or not," is satisfactory, and only after this bath should the injured party report to Medical.

Dr. Faulkner adds that Medical's policy of discouraging first aid treatment in outlying parts of the buildings is based on past experience with industrial accidents that have sometimes gone unreported or have turned out to be more serious than at first appeared. The Medical Department is open -- with doctors on the premises -- from 8:30 to 5. In the off hours, doctors remain on call and there is at least one nurse on duty in the Infirmary (Ext. 4485 or Department elevator from basement of Building 7). In addition, the M.I.T. Security Force, on duty around the clock, has an ambulance on deck to take emergency cases to local hospitals.

Thanks to Prof. Carleton Tucker (Elec. Eng.), there is another sure-fire method of reporting accidents. Four or five years ago Prof. Tucker added to the M.I.T. switchboard a special unit

NEW







which ties in to both the manual and dial systems. The magic number is "100," and anyone who dials it any time, day or night, will be instantly connected by M.I.T. operators to whatever department is needed -- Fire, Police, or Medical.

INVENTION BEYOND NECESSITY

The first patents issued by the U.S. Patent Office in 1790 had to do mostly with "improvements" on spinning wheels, windmills, horseshoe nails, "the making of breeches or trowsers," and such. In 1911 U.S. Patent #1,000,000 was issued for a gadget called the "vehicle-tire." In 1956 Prof. Jay Forrester (S.I.M.) received Patent #2,736,880 for his "multicoordinate digital information storage device" -- an invention better known as the magnetic memory core which has greatly expanded the mental capacity of ingenious robots like the IBM 704.



Patent personnel: Cammann, Stevens, Ahearn

To unearth and keep track of inventions sprouting from M.I.T.'s spraddling research programs is the task of the Patent Section. Unlike industry, where patents are pursued in breakneck competition, M.I.T. looks at patents as a means of encouraging "research and development," of assuring that what is invented at M.I.T. is not used "in a manner contrary to the public interest," and of giving kudos where it is due to the people who do the inventing.

The two main criteria for deciding whether something is patentable are newness and usefulness. In a country as big and busy as the U.S., it is hard enough to make sure an invention is new. Deciding whether it is useful is harder still. There are things like the "dough tester" in Food Technology, which was a valid invention in itself but limited in use to a highly specialized field of research. This was eventually held to be unpatentable. There are things like the Draper Mark XIV gunsight (used extensively during World War II) which had such mighty military applications that a whole series of patents were taken out to cover different phases of the



development.

The first patent handled by the M.I.T. Patent Section was for "telephonic telegraphy." A method of sending copy by wire, it was invented by the venerable Vannevar Bush himself in 1930. (Dr. Bush, says patent secretary Catherine Ahearn, was "sprouting with inventions" in those days.) Bush telegraphy was followed in 1931 by a contribution from Dr. Van de Graaf -- a generator which has since made history as the world's first real atom smasher.

Whatever the invention may be, it is up to the Patent Section to track it down and obtain the necessary evaluations. In this they work with two experts in the field, Patent Attorneys Melvin Jenney and Richard Hildreth. The actual prosecution of patents -- a sticky business sometimes taking as long as five years -- is generally administered by Research Corporation, a New York foundation which handles patents for 89 colleges and universities.

On the Cambridge end of things (there is also a special patent section at Lincoln Lab), patent officers Malcolm Stevens and Oswald Cammann estimate that their office receives "about a dozen inventions a month." Sometimes these come directly from the inventor. More often they are the result of visiting research projects (300 in DSR alone), pinpointing promising research, and following through to the potential invention itself. When an application for a patent does finally take shape, it is seldom a matter of a few well-chosen sentences. Received a few weeks ago in the Patent Section: an application consisting of 165 pages of specifications, 26 drawings, and 4 pages of "claims."

RECOMMENDED

Vannevar Bush, as interviewed by James Kelso (President's Office), will turn up on the NBC-TV series "Wisdom" on Jan. 19 at 2:30 p.m. The show will be carried simultaneously on WBGH-TV, Channel 2.

Musical offerings: America's #l string quartet, the Juilliard, will give a concert in Kresge on Jan. 19 (3 p.m.). On Feb. 3, Kresge will be cooled by Dave Brubeck and his jazz quartet, to be followed on Feb. 14 by Marais and Miranda, internationally famous balladeers. (These two concerts are being sponsored by the M.I.T. Choral Society. Tickets: Miss Morin, Ext. 2921.)

The M.I.T. Dames are saving Jan. 20 for a lecture by heart specialist Paul Dudley White. Dr. White, whose clients have included real Leviathans (whales) as well as Mr. Eisenhower, will speak on the alluring subject of "Positive Health vs. Absence of Disease." All invited.

Center for International Studies will be represented in force at a public forum on "The Middle East: Today and Tomorrow" in the Arlington Street Church on Jan. 28 (8 p.m.). Speakers will include Daniel Lerner, Ford Professor of International Communications, and these M.I.T. visitors: Nejat Gengul (Turkey), Michael Gurevitch (Israel), and Sari Nasir (Jordan).

FOR SALE ETC.

Typewriter. Royal quiet deluxe portable. New condition. Touch control, Magic Margin, tab stops. \$50. Mrs. Peters, Ext. 2747.

6'6" North Star skis, bindings, and poles. Also Austriantype ski boots (size $9-9\frac{1}{2}$). Wexler, UN4-0711.

For sale: Monitor hi-fidelity recordings. Voted two out of ten as the best recordings in 1957 Time magazine. Judith Cohen, Ext. 2110.

Full size German violin, about 100 years old which has just been completely reconditioned by John Gould Sons, violin craftsmen in Boston. \$125. Miss Margaret B. Milliken, 29 Reservoir Street, Cambridge, or KI7-9242.

Golden retriever puppies, 5 weeks old. AKC reg. litter, 20 champions in five generation pedigree. \$100. May be seen by appt. Ext. 145 or VO2-9473.

Rabbits, 8-10 weeks old. Three breeds -- Dutch, Champagne, Mixed. \$1.25 to \$1.75. Tom Stewart, Ext. 2113.

Journal of Chemical Physics, Vols 24-27 (1956-57), \$18. J.S. Hyde, Ext. 3695.

RCA portable radio (battery/AC), leather case, \$28. Baruch-Lang speaker: 4 5" alnico magnet speakers, \$24. Heathkit FM tuner, \$35. Mandolin, \$18. Anne L. Smalley, Ext. 5571 (Lincoln).

'51 Chrysler 4-door. R & H. Full power equipment. New shocks and front end. Excellent engine with Mallory ignition system. Very clean. \$400 or best.offer. Tony Turano, Ext. 2942 or LI2-4981 (evgs).

'52 Pontiac 4-door. R & H, hydromatic. Excellent condition. One owner. Asking \$500. Ext. 3235. For rent: extra fine 3 room apartment. Completely furnished. 25 Marlboro St., Newton. Dr. M.Udin, BI4-8535.

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For rent. Brookline--Cool. Corner. Nice furnished, heated room for 1 or 2. Kitchen privileges, parking. Mrs. Lehrberger, BE2-2705.

For rent. Cambridge. 5-rm apt. with K & B. OK for 3. 10min.walk from M.I.T. Avail.at end of term or sooner. Jack L'Hommedieu, Ext. 2617.

For rent. Oak Sq., Brighton. 4 room apt., 2nd floor. Cab. kitchen, porch, parking. Heated by tenant. \$55/mo. Mrs. Kallmes, Ext. 4241 or BE2-5067 (after 7 p.m.).

For rent: weekends or monthly basis. Private hunting lodge with kitchen efficiency in South Wardsboro, Vt., 8 miles from Mt. Snow. Accommodates party of 6. Rates: \$5/person weekends, or \$50/party/month. Cam or Don, Ext. 7148 (Lincoln).

House for sale. Belmont. 6-rm. Garrison colonial. Panelled playroom, lg. garden, quiet neighborhood. Excellent for children. Ext. 135 or IV4-4707.

5 MIT grad. students in 7-rm. furn. apt. (Boylston St.) need 2 roommates to stay at least until Sept. \$50/person. B. Kastarlak, CO7-3833 (evgs).

Wanted: car-pool arrangement or rider from Sudbury. Hours: 8 a.m. to 4 p.m. daily. R. M. Ross, Ext. 685.

For sale: '57 latest model deluxe Lambretta 150 L.D. motor scooter. 3500 miles. 100 miles per gallon, 2 seats, spare tire, luggage rack. New \$469, asking \$350. Wexler, UN4-0711.

For sale. '49 Dodge 2-door sedan. Good running cond. R & . \$150. Gladys Ridlon, Ext. 3454 or MA4-5875 (evgs).

Tech Talk is published every two weeks. Send news and ads to Miss Richardson, Room 3-339, Ext. 2709. Next Deadline: Jan 22.