#### Massachusetts Institute of Technology



September 1, 1971 Volume 16 Number 9



Spectators examine the deflated covering of the Carr Indoor Tennis -- Photo by Dave Searls, '73

## Tennis Structure Collapses After Damage from Storm

set back the construction of the J.B. Carr Indoor Tennis Center when it jostled Cambridge Saturday afternoon.

The Center's air-supported shell had been inflated just two days earlier, but the storm promptly deflated it when winds tore a split in the plastic exterior. No one was inside at the time. An undetermined failure in the material is thought to have caused the collapse.

Walter Bird, '34, president of the Birdair Structures Company, which built the bubble, came to Boston Sunday to look at the bubble. The next day it was shipped back to Buffalo, where Birdair engineers are examining it for the defect which caused its breakdown. The bubble will be brought back here to be inflated again in two or three weeks.

The construction itself went off Thursday without a hitch. Mr. Carr. '16, was here to dedicate the new athletic facility that will bear his name. After workmen had anchored down the structure, he

Hurricane Doria temporarily flipped a switch and two gigantic pumps began filling the new building with air. After 40 minutes the process was completed and the tennis center towered some 40 feet high on Briggs Field near Burton House.

The Center is a gift from Mr. Carr and his family. He began donating money for it five years ago at the Class of 1916's 50-year reunion. "I play tennis three or four times a week," says Mr. Carr, who is well into his seventies, "and I am deeply interested in seeing this fine sport flourish at

Many innovative features will make the Carr Center an enjoyable place to play tennis. A dark green band 15 feet high extends all around the shell's interior to insure good visibility for the players. The old hard court surfaces will be covered with Uni-Turf, a synthetic material that will insure true bounces. When the indirect lighting system is installed, "this will be the best-lighted indoor tennis center you ever saw," says (Continued on page 2)

## Modigliani Proposes Reforms Worldwide Fiscal Procedures

Reforms aimed at eliminating conditions such as those President Nixon responded to with his "floating dollar" decision this week have been proposed by a professor of economics and finance at the Sloan School.

Dr. Franco Modigliani is an Institute Professor and an expert in domestic and international finance who has consulted for the Federal Reserve, the US Treasury and the Bank of Italy. He offers his reform proposal in an essay to be published at the end of this month by the International Finance Section of Princeton University in its series of Essays in International Finance. The essay is co-authored by Hossein Askari, assistant professor at Tufts Uni-

The reform centers on mechanisms that would permit the controlled floating of the value of the dollar relative to other currencies and relative to paper gold (Special Drawing Rights or SDR).

President Nixon's decision to float the dollar is viewed by most economists as a short-term emergency measure but not a sound long-term solution to many of the ills that trouble the international monetary system and many of the domestic monetary systems of the world. Some believe the present action to be a preamble to negotiations for broad permanent re-

In the essay, entitled "The Reform of the International Payments System," Professors Modigliani and Askari note that while the shortcomings of the present system are widely recognized, no "economically and politically acceptable" solution has previously been offered. The essay is offered as such a solution.

The major reform steps pro-

posed are:

1. Broaden the band of permissible fluctuations in market ex-

change rates around parity. Currently a 2 percent fluctuation is permissible before central banks are required to intervene (in practice this is held at 1½ percent). The reform calls for an increase to "at least 4 percent."

2. Provide for a gradual adjustment in all official parities. This would be accomplished by setting the official parity of any currency with the dollar (on any given date) at the average value of market rates prevailing over a stated previous period. This provision, in combination with provision 1, would allow official parities to inch up or down as required by economic conditions for the coun-

try. But there would always be a limit on the maximum permissible rate of change.

3. Provide for gradual changes in the official parity of the dollar to paper gold in accordance with an "appropriately constructed index" of the dollar price of internationally traded commodities. Whenever the index increased by a given percentage, the parity between the dollar and paper gold would be reduced by the same percentage. If that index decreased, the parity would be increased.

Only the parity between paper gold and reserve gold would re-(Continued on page 3)

## Joint Observatory to Study Effects in Upper Atmosphere

MIT has joined with five other universities in a proposal to build an Upper Atmosphere Observatory to study the relations of energy miles above the earth to weather, radio communications and other phenomena.

A site for the observatory will be chosen near the central or eastern US-Canadian border. Because of the earth's magnetic field, ionized layers of the upper atmosphere form a low-density "trough" in the area. The trough offers opportunity for a variety of research not possible elsewhere.

The other universities include the University of Illinois at Urbana-Champaign, Rice University, the University of Pittsburgh, Pennsylvania State University and the University of Western Ontario. The universities are organized as the Upper Atmosphere Research Corporation

Professor William E. Gordon, dean of engineering and science at Rice, heads the UARC, and John

V. Evans of Lincoln Laboratory is the project director. Preliminary studies were carried out by Professor Sidney A. Bowhill at Illinois under a grant from the National Science Foundation. Funding for the \$13 million facility is being sought from the NSF and from the National Research Council of Canada.

The Observatory will study phenomena such as electric fields, winds and the ionosphere at heights of 50 to 6,000 miles above the earth. The upper atmosphere has been sampled and charted with satellites, radar and other devices, but an understanding of what goes on there requires a facility capable of making a continuous record. The observatory will provide such data.

Support and use of the Observatory is planned to be international, with a strong research and educational program involving resident and visiting scientists and

## Vellucci Hosts Festive Party in Wiesner's Honor

"You're in Italy right now," Dr. Jerome B. Wiesner's host boomed across a foot-high platter of homemade pizza.

were Italian cheeses and sausages, dents. A month ago Harvard's new picy olive and pepper salad, long loaves of anisette-spiced bread, and fresh shrimp generously stationed along the ribbon of tables in the courtvard.

The shape of the yard-a corridor between two wooden houses-seemed appropriate for bocci ball.

Gallon jugs of smooth, homemade wine were tipped frequently toward empty glasses.

Italian-sounding phrases often punctuated by laughter were all around.

But President Wiesner and Walter Milne, assistant to the MIT Corporation chairman, were there after only a 5-minute drive north from the Institute campus. So it wasn't Italy, despite the claims of the host, a fellow who dropped out of the sixth grade of Wellington Grammar School to take a job as a Western Union messenger and

who is now the mayor of Cambridge.

This was the second of Mayor Alfred E. Vellucci's galas in honor Convincingly enough there of Cambridge university presipresident, Derek C. Bok, had his exposure to the eat-drink-and-bemerry hospitality in which this East Cambridge neighborhood takes so much pride.

The Wiesner evening last Wednesday included much handshaking as Vellucci introduced the MIT president to his friends and Porter Street neighbors who dropped in and out of the freewheeling party. "This is my friend Jerry Wiesner from MIT," he said often.

And when Cambridge dog officer Joseph Thomas arrived on his motorcycle with his guitar slung over his shoulder, it was music time.

Thomas played and sang several Italian verses in which most of the 30 or so people present joined in. And then there was an incongruous but most pleasant interlude: the mayor's secretary, former nightclub Irish tenor Paul Morris, sang "Galway Bay," and the group's hushed attention was the evening's only quiet moment.

Often throughout the evening vellucci and wiesner were engaged in repartee, several times with the mayor trying to launch a good-humored argument about the merits of MIT over Harvard or vice versa. But Wiesner insisted both were great institutions filling different sorts of roles, and he offered as evidence a study he had seen recently that ranked both schools among the top six in the

Vellucci confessed that he has always been more partial to MIT than Harvard-"MIT is more in our section of town.'

"Tell me," Vellucci said, "don't you consider yourself more important than Derek?"

"Not yet," said Wiesner, smiling behind his cigar.

In the same vein, the Cambridge mayor asked, "If they can (Continued on page 2)



The mayor and Dr. Wiesner examine some loaves of Italian bread freshly baked by Mrs. Vellucci. -- Photo by Margo Foote



Left to right: Warren Seamans, India Thompson, John Mack and Howard Plunkett have a quiet conversation at the picnic last Thursday which formally closed the Summer Job Program at the Institute. Through the Program some 50 local teenagers were recruited for a variety of jobs through Cambridge Summer Jobs and the Neighborhood Youth -- Photo by Margo Foote

## MIT Clarifies Freeze Rules on Room, Board, Medical Fees

Subsequent rulings by the Cost of Living Council have clarified President Nixon's executive order freezing prices, rents, wages and salaries in areas in which MIT is affected.

After a period of some initial uncertainty, the regulations and guidelines issued by the Office of Emergency Preparedness have indicated that the freeze is not applicable to 1971-72 MIT rates for tuition, room, board and medical fees which were announced before August 14, 1971. Therefore, the announced rates remain in effect.

Although tuition payments are not exempt from controls, among the guidelines in the Economic Stabilization Circular No. 1, it is stated that, "Increased school tuition rates for the 1971-72 school year announced on or before August 14th, are permitted because such rates are considered to be in effect at the time of the announcement."

The Cost of Living Council has indicated that college room and board payments are to be handled like tuition, although conditioned on some commitments having been made at the new rates. That condition, insofar as it may be applicable, has been met in MIT's situation. Medical fee increases remain in effect based upon the same principles.

The rulings concerning wages and salary have not substantially altered the information given in the last issue of Tech Talk, i.e. merit and longevity increases are not permitted during the 90-day period nor may they be made

retroactive to cover the period of the freeze. A ruling has been made, however, that a new employee may be paid any salary within the range that his qualifications justify, as long as the average wage paid by the firm in this job classification doesn't increase.

This ruling has been interpreted to apply to new appointments to all positions at MIT, including faculty and staff. Procedures are being worked out in the Office of Personnel Relations and the Academic Staff Records Office to assure compliance with this ruling. In general, the approach being taken is that the application of average salary control to all staff members would best be met by determining these averages within the same areas of comparison that would normally be considered pertinent for purposes of salary determination. Within the campus, for example, each department, laboratory, center, etc. will be treated as a separate unit, except where the number of personnel in the unit is considered insufficient to be representative. In that case, such wider area of comparison as may be appropriate and consistent with past practice will be used.

To help clarify the application of the freeze to salary and wage administration at MIT, administrative officers were invited yesterday to a meeting in the Bush Room at which John M. Wynne, Vice President for Administration and Personnel, and Robert J. Davis, Director of the Office of Personnel Relations, discussed the procedure the Institute will use.



Cheryl and Lynn Winstead romp in KLH playground.

## For Winstead Family MIT Is Total Living Experience

Richard Winstead and his family have the unusual distinction of being a "total MIT family." He and his wife, Wilma, and their two daughters study, work, live and play within the MIT community.

A graduate student in economics, Richard brought his family to Cambridge from Nashville, Tennessee, in July 1970. At that time the family's only connection with the Institute was through Richard. Since then, however, their lives have become more and more immersed in the MIT community.

Wilma had worked in a Nashville health center and hoped to find a similar job in the Boston area. When she was job-hunting, Wilma filed an application with the Institute's Personnel Office and before she knew it, she had accepted a secretarial position in the Department of Political Science. She says, "It's not what I had planned to do, but now I'm really glad I took the job. Richard spends more time studying and going to class than he does at home. If I didn't work right around the corner from the economics department, I'd probably never get to see him.'

The little Winsteads, 5-year-old Cheryl and 3-year-old Lynn, became full-fledged members of the MIT community when they were enrolled in the KLH Day Care Center. They spend weekdays playing and going to school with other MIT children as well as children from KLH and Polaroid families. Their mother says, "Cheryl and Lynn really enjoy going to school. They've learned a

#### Reports Available

The following reports and publications are now available in the renovated Information Center (Room 7-111):

-A list of the Undergraduate Policy Seminars offered during the fall semester, complete with descriptions.

-A report to the Commission from the Working Group on the Format of Undergraduate Educa-

-Knowledge and Values, a colloquium prepared by Thomas Kuhn for the Commission.

lot in the past year and have made many new friends. Cheryl is particularly excited about learning to write. When the other children are taking their naps, she sits up and practices printing. She's always printing people's names and asking how to spell different words." Both girls love the arts and crafts classes and recently made their father a clay pipe and ashtray.

Last March the Winsteads took the final step in their transition to becoming the "total MIT family." They moved into an Eastgate apartment. Richard says they were a little hesitant about moving onto campus, but they couldn't resist the convenience of living in Eastgate.

Despite their close association with MIT, the Winsteads have not limited their activities to the campus. They are deeply involved with the Charles Street AME Church. Wilma spends a great deal of time working with the church choir, the parents advisory board and several young people's programs. She says, "I'd go crazy if I had to limit myself to a job and keeping house. I love working with children and being involved in the church and other community groups."

Moving from the warm climate of Nashville to Boston's unpredictable weather conditions took a bit of adjustment for the Winsteads. Like many New England natives, Richard and Wilma could do without the cold, snowy winters, but they've learned to grin and bear it. The girls, on the other hand, think the snow is great. Wilma says, "We had some snow in Nashville, but it never lasted very long. Up here winter seems to go on forever, so the girls can build snowmen and go sledding to their hearts' content."

The Winstead family will be in Cambridge for at least another two years. Richard is completing graduate study in economics under a grant from the Ford Foundation, but his future plans are indefinite. He says, "I may go back to Fiske University where I did my undergraduate work and teach, but that's just a thought at this point."

## Vellucci Hosts Festive Party for Wiesner

(Continued from page 1)

name a bunch of hot dog stands after the previous president of MIT, why can't they name something after Enrico Fermi?" Wiesner responded that there is a statue of the Nobel Prize-winning Italian atomic physicist somewhere in East Boston.

At one point Vellucci handed Wiesner a hunk of sausage and said, "I would like you to have this pepperoni sausage taken on Apollo 16 and planted on the moon for the people of Cambridge."

Wiesner maintained the bantering spirit with: "Well, we'll probably have to dehydrate it, but we will see what we can do."

And moving frequently through the mostly-male group was Mrs. Jurina Vellucci, the mayor's wife, who busied herself seeing that the food and drinks didn't run out. Mrs. Vellucci had prepared the giant spread by herself, a feat she said she was used to. However, there was speculation that the mayor had prepared the olive and pepper salad. "It's his speciality," a friend insisted, "and it's got him more votes than any five speeches or political favors."

Wiesner appeared to enjoy himself, and once he asked the mayor, "Shall I call Derek Bok and tell him I found a good party?"

"I got a tip he might try to crash this one about 9pm," said Vellucci.

"By 9pm there won't be any-one left," Wiesner said.

However, shortly after 9, when Wiesner and Milne said their thank-yous and left, there were no signs that the party might break

But Bok didn't crash it.

#### **TECH TALK**

Volume 16, Number 9

September 1, 1971

Editor Joanne Miller

Staff Writers Robert M. Byers Peter M. Clos Steve Grant Linda Omohundro Ty Rabe

**Business Manager** Paul E. Johnson

Tech Talk is published 50 times a year by the Institute Information Services, 77 Massachusetts Avenue, Cambridge, Mass. 02139 and distributed free to all members of the MIT community. Additional copies are available in the Information Office, Room 7-111, or in the News Office, Room 5-105. Mail subscriptions are \$7.50 per year. Please address news and comment to the Editor, Room 5-111, Ext. 2701.

## Storm Damages Tennis Center

(Continued from page 1)

Physical Plant engineer George West, who supervised the erection of the building.

To hold the structure up, the air pressure within is kept slightly higher than that outside. A special system of revolving doors has been incorporated into the design to guard against the loss of the extra pressure. The building also has emergency exits.

The new center will be completed in October and formally dedicated. "I want to come back and play in here when it's finished," says Mr. Carr, who has also donated money for the construction of four new courts. His gift will help the Institute fulfill one of its most obvious needs for athletic facilities.



The Carr Tennis Center before the arrival of Doria.

-- Photo by Margo Foote



#### September 1 through September 10, 1971

Send notices for September 8 through 17 to the Calendar Editor, Room 5-111, Ext. 2701 by noon Friday, September 3.

### Modigliani Offers Monetary Reforms

(Continued from page 1)

main fixed indefinitely, but the two-tier system would be continued and strictly enforced.

4. Give foreign officials the option of denominating their dollar reserves in paper gold which would take the form of a claim against the US Treasury-Federal Reserve and would earn a rate of interest equal to that paid on paper gold balances by the International Monetary Fund.

In return for making this option available, the US would be relieved of the obligation of buying or selling dollars in exchange for gold or paper gold upon demand of foreign official holders.

The essay points out that this obligation is now one of theory not fact, because it is widely recognized that the US could not possibly honor all the demands the present system could yield, and that a chaotic "run on the bank" is a threat to world economic stability under this existing obligation.

5. Acceptance by the US of the obligation to reduce its deficit when "excessive" and to increase it when it is "insufficient." The appropriateness of the US deficit would be determined by established criteria involving the behavior of market exchange rates (with the dollar) of the other participating countries relative to the parity limits as well as to changes in their reserves.

The plan also provides criteria for determining the appropriate amount of paper gold to be created in any given year in terms of a stipulated relation between the portion of reserves taking the form of paper gold and gold and the portion taking the form of claims on the US.

The authors note that under the proposed reform the dollar would retain its functions as the international medium of exchange and as the reserve asset medium. But the dollar's present role as numeraire would "be endowed with the valuable property of retaining a stable purchasing power" over internationally traded commodities.

The essay points out that a major desirable outcome of the proposed reform would be the achievement of "managed, limited float of the dollar with the power of management entrusted to foreign central banks." This power would permit the rest of the world "to control the creation of reserves in the form of dollars and to provide an objective criterion for the creation of SDRs" (paper gold).

The limits placed on the float mean that changes would occur in currency values when economic conditions dictate, but the changes would be slow and thus minimize the impact of speculative profiteering, which is a concern of those opposed to changing parities.

The other frequently mentioned drawback of changing parities--that it reduces international capital movements by increasing their risk--is minimized in the re-

#### MIT Club Notes

Baker House SPAZ Jogging Club \*\*

Jogging around BU and Harvard Bridges. Daily 10:45pm. Baker House, Second Floor West.

Science Fiction Society \*

Every Friday, 5pm. Student Center, Room 421.

Classical Guitar Society \*\*

Summer classical guitar classes every Monday and Thursday, 5pm. Room 1-132.

Outing Club \*

Every Monday and Thursday, 5pm. Student Center, Room 473.

Nautical Association \*\*

Basic Sailing Shore School. Repeated every Wednesday throughout the summer, 5:15pm. MIT Sailing Pavilion.

MIT/DL Duplicate Bridge Club \*\*

Every Tuesday, 6pm. Student Center, Room 473.

#### Movies

The Blob \*\*

Alpha Phi Omega, Monday, September 6, 7 and 9:30pm, Room 10-250. Admission 50 cents.

1984 \*\*

Alpha Phi Omega. Wednesday, September 8, 7 and 9:30pm. Room 10-250. Admission 50 cents.

#### Theatre and Shows

Coffeehouse Theater \*

MIT Community Players. "Day Work" and "Antony and Cleopatra" by Floyd Barbour and "A Slight Ache" by Harold Pinter. Music and refreshments. Thursday, September 9, and Friday, September 10, 8pm. Ashdown House. Admission \$1.50. For information and tickets call Ext. 4720.

#### **Dance**

Modern Dance Class \*\*

MIT Dance Workshop, Intermediate/Advanced, Every Thursday, 7pm. McCormick Gym.

Israeli Folk Dancing \*

MIT Folk Dance Club, Every Thursday; party last week of each month. 7:30-11pm. Student Center, Room 407. Basics taught from 7:30-8pm.

form, the authors say, because contracting parties would have the option of denominating their contracts in units of paper gold with its stable purchasing power.

The authors say that another important feature of the proposal is that it provides the US with greater freedom in managing its economy. They point out that provisions 2 and 3 mean that changes in the US price level would no longer necessarily spread to other countries or affect the purchasing power of their reserves.

Finally, Professors Modigliani and Askari consider this a key accomplishment of their proposal: by formalizing the non-convertibility of the dollar "a major component of uncertainty and anxiety in the present system" is eliminated, and "the risk of a run on the bank is banned forever."

They contend that this step would actually enhance the value of the dollar as a reserve asset, because "once the uncertainty about the status of the dollar is removed, it will be more freely accepted by all central banks."

The authors recognize that "any one of these features could probably be achieved by means other than our plan. But our plan

achieves them all simultaneously in the most convenient fashion."

They conclude: "From a strictly economic point of view, we regard this reform as less advantageous—or more onerous—for the United States than the present system" because it obligates the US to denominate in paper gold any portion of the official reserves of a participating country (provision 3) and to tailor its surplus or deficit to the requirements of the rest of the world.

"But this is, in our view, a small price for the United States to pay to have the moral right to a greater independence in monetary policy and the management of the price level and for the advantage of a stable, livable system, which minimizes the scope for political conflicts."

Friday Afternoon Dance Break \*

MIT Folk Dance Club. International Folk Dancing on the oval lawn in front of Kresge Auditorium. Every Friday, 12-1pm.

International Folk Dancing \*

MIT Folk Dance Club. Every Sunday, 7:30pm. Student Center, Sala de Puerto Rico.

Balkan Dancing \*

MIT Folk Dance Club. Basic, Intermediate, Advanced. Every Tuesday; party first week of each month. 7:30pm. Student Center, Room 407. For more information call Jane Weiman, 876-5609.

Square Dance Club \*

Every Tuesday, 8pm. Student Center, Room 491. For information call x6213.

Folk Dance Practice \*

New England Turkish Students Association. Every Wednesday at 8pm and every Sunday at 6pm. Student Center, Room 407. For more information call Y. Ayasli, 864-8276.

Modern Dance Technique Class \*\*

Elementary/Intermediate. Every Monday, Wednesday, and Friday, 5:15pm. McCormick Gym.

#### **Exhibitions**

Seymour Lipton: Recent Sculpture \*

20 sculptures from the past five years, of nickel, silver or bronze on Monel metal. Sponsored by the MIT Committee on the Visual Arts, courtesy of Marlborough Gallery, NY. Drawings by Seymour Lipton are on exhibit in the Hayden Lobby. 1-5pm daily through the summer. Hayden Gallery and Courtyard, through September 19.

Steamboat Design \*

Details of Robert Fulton's steamboat "North River" and other early American steamboats. Hart Nautical Museum, Building 5, First Floor.

Deep-Ocean Mining \*

Material from Sea Grant Project Office. Hart Nautical Museum, Building 5, First Floor.

Main Corridor Exhibitions \*

Presented by students and departments. Buildings 7, 3, 4, 8.

#### **Athletics**

Summer Rugby \*

Every Tuesday and Thursday, 5pm. Briggs Field.

## Religious Services and Activies

Christian Bible Discussion Group \*

For details contact Professor Schimmel, x6739. Every Thursday, 12:15pm. Room 20B-031.

Christian Worship Service \*

Every Sunday, 11am. MIT Chapel.

Islamic Society Prayers

Every Friday, 12noon. Student Center, Room 473.

Roman Catholic Mass

Every Sunday, 9:15am, 12:15 and 5:15pm, MIT Chapel.

The Chapel is open for private meditation from 7am to 11pm every day.

Don't Forget

Approximately 45 awards are available for postdoctoral study in NATO countries and countries cooperating with NATO. Candidates must be US citizens or nationals as of January 15, 1972, and must have doctoral degrees or equivalent research training and experience by the beginning of the fellowship tenures. Fields covered are mathematics, physics, medicine, biology, engineering, social sciences, the history and philosophy of science, and some interdisciplinary subjects. The stipend is \$6,500 for 12 months and \$4,875 for nine months. Application materials are available from the Division of Graduate Education in Science, National Science Foundation, 1800 G Street NW, Washington, D.C. 20550. Application deadline is October 18, 1971.

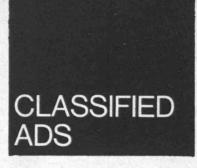
Join your friends at the Muddy Charles Pub, 110 Walker Memorial, 11:30am to 7:30pm daily. Ext. 2158. \*\*

\*Open to the Public

\*\*Open to the MIT Community Only

\*\*\*Open to Members Only

†Freshmen interested in departmental program encouraged to attend.



Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and extension or room number. Ads may be telephoned to Ext. 2707 or mailed to Room 5-105. The deadline is 5pm Friday.

# Cape Playhouse Has Contingent from Dramashop

The fabled Provincetown Playhouse has drawn several of its cast and crew this summer from the MIT Dramashop.

Of the 24 people working at the theater, seven are from MIT and two more from Wellesley. "It may not be the backbone of the company," says Bruce Schwartz, '72, a member of the MIT contingent, "but it's a large representation—certainly the largest here from any one theater group."

Robert Campbell, '63, is the theater's technical director. Formerly a systems programmer at Project MAC, he has designed and built sets for Dramashop since his undergraduate days. This summer he is in charge of all set construction and maintenance for the Provincetown group. "Bob appeared in Barnstable County court recently where he was found not guilty of charges of stolen property in connection with the disappearance of several feet of fencing from a Provincetown motel," Schwartz reports. "The fencing, in a slightly revised edition, is appearing in Tennessee William's Orpheus Descending.

Stage Manager Bob Scanlan, '71, oversees each production, coordinates schedules and calls most of the shows. "In other words," says Schwartz, "while the curtain is up, he's boss." His wife Nora minds the office, sells tickets and handles the programs and publicity work.

The others include Robert Burke, Linda Martin and Bill Roberts, in addition to Schwartz.

Burke, a special student, helps build and move sets and does some acting. Miss Martin, the costume designer for Dramashop, is handling the same job in Provincetown. Roberts has designed most of the sets for the summer's productions and has directed two. During the year he is design advisor to Professor Joseph Everingham, MIT's director of drama.

Schwartz describes his own job as "mostly coolie labor-building and hauling sets, operating lights and so forth." But he has also acted in three of the plays and is trying his hand at writing some.

The company does five plays in repertory. In addition to the Williams play they are More Stately Mansions, Colette, The Star Spangled Girl and a pair of oneact plays by Terrence McNally. "All have been well-received critically," notes Schwartz, "except "Mansions' which got mixed reviews." The season opened June 24 and will close September 12.

It has been a busy and not entirely satisfactory summer for the troupe. "We are having financial headaches," Schwartz reports, "because attendance-related to tourism-is off. As a result we have gone from a six- to a seven-night-a-week production schedule. We work long hours, often 14 a day, including breaks for lunch and dinner."

#### For Sale, Etc.

Metal bk shelves 3x3, bl & gold, \$15; floor lamps, \$5. Alan, x5309.

J Meyer midi coat, br & wh tweed, worn 2 mos, size 10, best offer. Diane, x2994.

Human hair wiglit, br, never worn, \$10. x4897.

Snows (2), \$30; elec heaters (2), \$20 ea; rugs (2), \$40 ea; chests (2), \$15 & \$20. Call 876-4160.

Lrg refrig, \$25; office size desk, \$15. x7558 or 876-5961 evgs.

Glass top tbl, 72" around w/4 match high bk chrs w/leather seat pads, exc cond. Donna, x3233 or Diran, x3835 or 354-1885 evgs.

Casette tprecorder, \$25; draftsman's lamp, \$10; '65 MIT class ring, \$10; course 6 bks. Mike, 864-6335.

Polaroid 100 camera w/portrait lens, close-up, self-timer, 2 filters, flash, & case, \$50. Gilbert, x6301 or x6305.

Elec can opener, baby basinet, elec knife, file cabinets (4) w/wood top, 80"x24". Call 354-3985.

Royal elec port typwrtr, offer. Call 482-0359 evgs.

Girl's new stride-rite shoes, 12½ C, \$5; Sears light wt stroller, \$8. Call 861-0418.

Magnovox 21" TV, B&W, \$25. Call 926-1685 evgs.

Antique cedar lined dresser & wardrobe. x3914.

Music rolls for pianola & aloean grand. Call 484-3017.

Sgl bed w/frame, matt & box spr, \$30; unfin bureau, \$10. x6616.

Bl engl carriage, exc cond, \$25; Singer port sew mach, gd cond, \$40; ductless range hood, \$20 or best. Call 667-7070 (Billerica).

Old refrig, full size, gd cond, \$30. Steve, 661-0399.

Symphony ½ season tickets, 10 Sat evg concert, 2 seats, \$140. Karl, 484-4760.

Kenmore wash/dry, noisey but works, \$75. Herbert, x401 Linc.

Royal ultronic typwrtr all elec, pwr, less than yr old, \$75. David, 491-3274.

Wood K chrs (4), \$12; iron board, \$3. x312 Draper 7 or x7765.

VW tires (2) continentals, \$15 ea, exc cond. Fred, x6827 or x6834 or 491-0493 evgs.

Tensor steel tennis racket, used 1 season, cover inclu, \$25 or best. Call 864-3914 evgs.

Den set, 3 piece, rose color, \$50. Call 484-6853 evgs.

Brass 5 arm DR chandelier w/wh glass globes, chain drop light, round 10" K ceiling fixture, all almost new & cheap

Bell star helmet, new 7¼, \$43. Dan, x303 Draper 7 or 926-2298.

Console stereo, exc cond, \$50; vinyl reclin chr, exc cond, \$40; frpl equip, \$40. Call 298-7310.

Couch/chr, \$15; tbls, \$2 ea; TV, \$25; dresser, \$20; etc or best offer. Call 783-3155 evgs.

Camera equip: Exacta camera, 58mm Meyer Gerlitz preset lens & 100mm auto lens, filters, etc. Call 665-8703.

Tires (2) 8.15x15 w/rims, \$15. Dick Foster, x1955.

Mandolin, 1 string missing, best offer.

Child dresser, gd cond, \$8; draft tbl w/parallel rule, \$8; ladies figure skates, 7½, \$5; wicker rock chr, \$3. Call 354-7215.

Rd mah coffee tbl, gd cond, \$30; lvr chrs (3) mahog, \$6 ea. Aleco, 492-2826.

Dan mod chr w/rd cushion, \$25; grocery cart, \$5; back pk, \$7. Call

Kelvinator refrig, gd for play rm or summer home, \$30. Call 646-1552 evgs.

Kenmore canister vacuum, best offer. Call 491-2394.

Old but comfort sofa, make offer. Call 536-6210 evgs.

Twin bed w/box, frame, matt, yr old, \$40. Leon, x4363 or 868-9380.

Brand new \$7 short-sleeve R size 16½ Arrow shirt, \$5. Archie Eliot, x5656.

Couch, \$30; sofa/chr, \$15; 4 din chrs, \$24; box spr & matt, \$10; etc. Yupo Chan, x1761 or 262-4529 evgs.

King Silver sonic trumpet, used 1 yr, like new, \$200. x6589 or 963-1063.

Dirty gas range w/4 burners, \$15; stainless dbl sink, \$6. Marty, x3544.

Twin bed, box, frame, \$40. Rich, x6752 or 261-3039.

Frigidare refrig, 12 cu ft, \$60; Formica K tbl, \$10; lady's dresser, \$10. Call 547-5991.

Sears tire, 8.25x14, tubeless, ww, nylon, new, \$25; tire, 8.15x15, custom ww tubeless, 2K, \$25. x5315 Linc.

Snows (2) mount on whis, 7.75x14, wi fit Ford, \$25. x460 Linc.

Sylvania 19" port TV w/stand, B&W, UHF, \$75. Call 438-6134.

Akai taperecorder, M-9, best offer over \$150. David, x286 Draper 7.

Zenith TV, gd cond, B&W, \$45; aquarium, 20x26, 12" D plexi glass, \$12. Doris Pong, x5785.

Refrig, \$15; typwrtr, \$15; king size roaster, \$25; rcd player, \$20; couch \$30. Call 489-3785 evgs.

GE refrig, \$25; Adm elec range, \$25. Jin, x305 Linc or 851-6132 evgs.

Lined drapes, 72x84, 2 pr bl/gr, 2 pr gr/bl, \$8 pr; cafe curtains, 24x60, 2 pr or 30x60, 2 pr, \$3 pr. Carl, x376 Draper 7.

Bed w/frame, spr & matt, gd cond, \$15. Call 267-7036.

Sony transister FM-AM R, exc cond, \$30, x5323.

Maine land, 10 acres. Fred or John,

868-9338.

Exc queen size bed; Singer sew mach, \$50; vacuum cleaner, \$14; men's & women's ice skates, size 7; assorted household items. x4510 or 926-2195.

Ricoh 35mm camera, f2.8 w/lens, access & case, \$60. Greg, Dl 9861.

KLH mod 24 w/FM tuner, best offer; Zenith port TV w/UHF, 10½, \$40; GE clock R, AM-FM, \$8. Call 354-7215.

Ski rack, \$10; avacado gr drapes, silk lined, \$60. x5020 or 646-8406 evgs.

Grundig TK-1 port tperecorder, exc cond, \$30. Call 646-5818 evgs.

Must sell: new farber ware elec skillet, \$35; elec toaster, \$14, like new. Betty, 782-8774 or 536-4064 evgs.

New 4-ply Atlas, 6.50x13 tire, on rim, \$15; Miracord 620 U record changer, 8 mos old, \$60. Call 354-6433 evgs.

#### Vehicles

'56 Olds 88, \$25 runs, gd for local driving. x7644 Linc or VO2-6970 evgs.

'59 VW Dunebuggy, wood body, nds work, runs w/lights, \$75. x5845 Linc.

'59 Olds 98, exc cond, dual speak R, nds windshield, 88K, \$100 negotiable. Albert Lee, x1916 or 492-0643.

'60 VW new batt, runs gd, \$175 or best. Call 332-3293 evgs.

'61 VW snrf, R, extra tires, batt, \$60. Call 491-2638 evgs.

'64 Ford, 2 dr hdtop, body dent, new auto, R & batt, 2 new tires: 2 snows, \$200. Tom, x7180 or 354-0871 evgs.

'64 Volvo 122 S, 2 dr, new gen, shocks, gd mech cond, \$450 or best. Tunney Lee, x7294 or 527-6521.

'65 Riviera, gd cond, \$900. Carol, x6121 or 442-7034 evgs.

'65 Chevy Impala, compl, selling for parts. Ralph, x7320 Linc or 665-4511

'65 Chevy wgn, 75K, pwr st, R, mech sound, new clutch, body rough, best offer. x6673 or 729-7646 evgs.

'66 Volvo, 5 gd tires, pr stds, new batt, new br, exc cond, \$1000. Sue, x5171 or 663-2486.

'67 Datsun sedan, exc cond, 45K, \$400. Kal, x7333.

'67 MGB-GT, gd cond, \$1200 or best. Call 263-8606 evgs (Acton).

'67 Triumph GT 6, exc cond, \$1200. Call 482-0359 evgs.

'67 Chevy Impala wgn V8, pwr st, trailer hitch, alarm system, eng overhaul, access, \$1350 or best. x7803 or 442-9772.

'68 Ford Fairlane wgn, std, 65K, \$950. Call 862-3515.

'69 Ramb, 2 dr sedan, 22K, new batt, 1 owner, exc cond, \$1100. Call

'69 Chevelle sup sp 396, 35K, exc cond, \$1890. x2447 or 245-7488.

'70 Chevelle malibu V8, air cond & other goodies, \$2600 or best. Steve, x2440 or 491-4985 evgs.

'71 Triumph TR6, 2 mos old, exc cond, \$3500. Donna, x2575.

'70 Honda 350 CV, exc cond, \$600. Call 354-4984 evgs.

'70 Honda CL350, 23K, exc cond, \$600. x8250 or 887-8379.

'70 Honda CB350, luggage rack, chain & lock, \$600. x6888 or Dl 0409 evgs.'71 650 Yamaha incl 2 helmets, extras.

x3708.

'71 Bridgestone 350cc, 2.9K, exc cond, 12" rises, 3'sissy bar, \$695 or best. David, x465 Linc.

'70 Scott trailer, 15', used only twice. Call 471-7749.

Snipe 16' class sailboat, fiberglassed wood hull, alum mast, \$400. Box, x7115 Linc.

#### Housing

Bk Bay 1 & 2 BR apts, from \$170. Call 536-2526 evgs.

Camb nr Central sq unfurn mod 2 BR apt w/air cond, \$225, \$15 more for park, avail 10/1 or sooner. x6836 or 868-5659.

Camb: 2 BR apt, quiet st near Radcliffe Observ, \$260 w/H, gd for couple, 9/1. Call 325-6370 evgs.

Lex: sm house, basement, mod B & K, gd size bkyd. Call 862-2435 evgs.

Littleton: 4 BR furn mod log house, wdy 1½ acre, 2 car gar, 2 B, frpl, avail now for rent, \$350-400. Call 486-4278.

Mobile home 10'x55', 2 BR, must be moved, \$3000. Call 887-2522 evgs.

#### Animals

Free: Kittens, 3, angora/alley cat. Cheri, x6711.

\$1 to Jimmy fund in return for ½ Persian M & F kittens, 6 wks, trained. Call 332-7482.

Free: 4 yr old spayed F dog, part

Palamino mare, 10 yrs old, can be ridden w/ or w/out western saddle, \$285 or best. x7263 or 251-8207.

Free: loving beau kittens. Tessmans, 332-9778.

#### Wanted

Mother or woman to share 7 rm apt in Peabody Sch area w/mother w/6 & 10 yr old daughters, share exp & child care. Dorothy, x1534.

Ham R and operator who wl contact family abroad. Audrey, x1942.

Place to live in Brookl, Camb or Allston, in exchange for keeping your home or apt in order, ref, small salary nded also. Call 277-4737 evgs.

Banjo, 5 string, any cond. x5023 Draper 5.

Refrig, cheap. Pervez, x4626.

F rmmate for 9/1 in Brookl, own rm, on T line, free park, \$112.50. Margaret, x4737 or 731-1059 evgs.

Elec hand drill, 24 camera. Dan, x3819 or 547-8462.

Babysitter for 5 mo old baby, Mon-Fri

8-2:30, x6024 or 492-4391.

M rmmates (1 or 2) for Brookl apt, 5 BR, K, 2 B, LR, \$80 incl H, nr T line. Paul, x5775 Draper 7.

F to share 2 BR apt on Spy Pond, air

cond, free park, \$90. Cheryl, 646-2960 evgs.

M rmmate for furn apt on Beacon St, park, around \$90. Call 261-8813 evgs.

park, around \$90. Call 261-8813 evgs.

Frmmate for 3 rm apt \$100, inclu util.

Call 825-4557.

Babies, 3½-4½ mos, for perception study in Psychology dept, several visits,

½ hr ea, compensation. x5764.

Used door, 32"x79". Avi, x3788 or

261-1759.

M rmmate to share 3 BR apt, LR, K, \$80. Beno, x2944 or x2461 or 648-8541 evgs.

Ride to Mass Ave, Arl-Lex Line to & from MIT 8-5 or 9-5. Marion, x7882.

Refrig w/gd size freezer, wl pay up to \$80. Norma, x4519.

F rmmate to share mod 3 BR apt nr Porter Sq, \$93.75, avail now. Norma, x3570 or Cathy, x6002.

Babysitter for 16 mo old child on Upland Rd, 20 hrs/wk, \$1.60/hr. Signer, x7003 or 491-4828.

#### Miscellaneous

Will swap my 71-72 Monroe pkg sticker for East, West, Kresge or Albany-anything closer to bldg 5. Linda, x2701.

Coverd garage for sm car nr Cool Corner, Brkl, \$16/mo. x6997 or 734-3930 evgs.

Responsible professional young married couple will housesit your home for 6 mos or longer. Call 492-1775 evgs.

WI swap Albany sticker for East Garage. Ray, x7235.

dog, pa