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PUBLISHER'S NOTE

On the basis of its per capita investment in urban renewal, Boston is one of the most significant cities in America. To cover this big subject (page 63) the editors sent eight of their staff to the Massachusetts capital for over 100 man-days of on-site research.

All told, this team interviewed over 200 different people—every one they could find who had an important stake or influence in Boston's physical rejuvenation. And, the wide variety of titles and responsibilities of those interviewed underscores the diversity of interest which plays a part in today's building construction industry.

In the notebook of Senior Editor David Carlson, captain for FORUM'S Boston team, are pages reflecting his talks with Mayor John F. Collins, Development Administrator Edward J. Logue, as well as many leading contractors, investors, planners and architects. His notebook is also sprinkled with the comments of 61 Bostonians whose observations could hardly be called expert, but were nontheless pertinent: 17 cab drivers (including one of Boston's five lady cabbies), three barbers, seven bell hops, eight elevator operators, 19 just plain citizens (in places like Charlestown and Washington Park) and—"in line of duty," he says—7 bartenders. Incidentally, his notes indicate that most of these nonexperts are surprisingly well informed on the city's rebuilding program and that they are generally enthusiastic about what is being done.

Technology Editor Bernard Spring was assigned to cover the transportation phase of the Boston renewal story, and in making his dozen interviews he quickly confronted the problem face to face. "At first I went from interview to interview by taxi," he reports, "but street traffic snarls fouled up my schedule and made me late for appointments. Then I tried walking, but pedestrian traffic and sore feet worked against me. Finally, I switched to the MTA and, once underground, made good time."

Senior Editor Walter Mc-Quade, who was working on a Boston story for FORTUNE as well as Forum, alone made 70 personal calls during his 24-day stay Boston. McQuade later wondered if nearly all of the research might not have been accomplished by moving from table to table of the main dining room of the Parker House Hotel across the street from City Hall during lunch hours. "All the real estate men in Boston seem to turn up there almost daily, and most of the pertinent politicians come pretty regularly too."

Associate Editor Philip Herrera literally covered the waterfront (page 94) as well as the Government Center (page 88); Senior Editor Donald Canty covered Boston's institutional explosion (page 114), and Managing Editor Peter Blake spent six days in Boston tying all the subjects together.

Why all the FORUM research into Boston's urban renewal failures and accomplishments? Because, as a late starter, Boston has had an opportunity to capitalize on the redevelopment mistakes of other cities and to improve on the architectural and financial norm of the national program. Boston has not muffed that opportunity, and every other city stands to benefit by studying what Boston is doing.

That is why the FORUM editorial staff spent most of last month in Boston and has devoted the entire issue this month to its findings.—J.C.H. JR.

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SPECIAL ISSUE: BOSTON



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JMBERS DISPUTE OPENS LONG, HOT SUMMER



The four embattled plumbers (I. to r: Jerry Gonzales, Bernard Allman, Jose Rodriguez, and Isaac Borges) wanted to work

Mounting protests hit union "bias"

NEW YORK—On the last day of April, four nonunion plumbers, one a Negro and three Puerto Ricans, walked onto the \$25 million New York City Terminal Market project in the Bronx. Forty-one union plumbers walked off, some reportedly shouting racial epithets.

Before the dispute had run its oddly inconclusive course, it had:

threatened a legal test of the building trades' traditional disregard of Taft-Hartley provisions barring a closed shop;

- ► revealed the extent of the growing breach between civil rights groups and building labor; ► demonstrated the concern of the White House that this breach might endanger passage of the civil rights bill;
- ► made clear that this would indeed be a long, hot, and turbulent summer in the building business.

The confused New York dispute began when the four plumbers were hired at the urging of the City Commission on Human Rights. When the walkout occurred, Plumbers Local 2 stoutly maintained that its sole grievance was that the four were not members. It clung to this position

throughout the dispute and won the support of AFL-CIO head George Meany, who still holds his old Local 2 card.

Civil rights groups insisted that the walkout was a clear case of racial discrimination, and pointed to the fact that only 16 of the local's 4,100 members are non-white. They also were quick to charge that the union's position was an open admission that it sought to maintain a *de facto* closed shop.

Meany and New York Mayor Robert Wagner worked out a compromise plan whereby the four would take a Local 2 qualification test, and, if they passed, would be admitted to membership and put to work on the Bronx project. But the four held that under Taft-Hartley they were eligible to be hired with a 30-day grace period before they had to qualify to join the union. NAACP briefly considered, then dropped, a suit to test the union plumbers' right to refuse to work with nonmembers.

At this point, it was reliably reported that the White House had sought to bring the dispute to an end, fearing it would diminish AFL-CIO enthusiasm for the civil rights bill. Three of the four plumbers were persuaded to take the union test—and failed. There

the matter stood at press time.

This anticlimax was revealing in itself, for even when union membership is opened to minorities, lack of training often keeps them out. Despite top-level labormanagement efforts, few locals have made any real effort to welcome nonwhite apprentices. There are signs, in fact, that the AIA assists Negroes.....

Nile temple funds withheld.

FDR Memorial revised

Mortgage men warned....

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World's Fair report:

so-called "white backlash" to Negro protests is making some building locals increasingly stubborn in what they see as defense of their members' jobs.

The signs are even more emphatic that the civil rights groups are losing any patience they may have had with the building continued on page 7







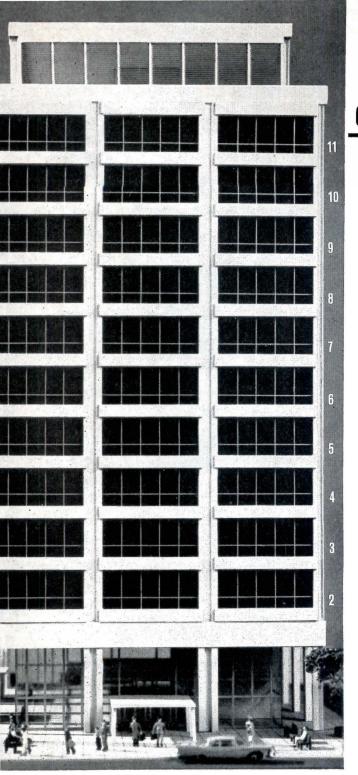




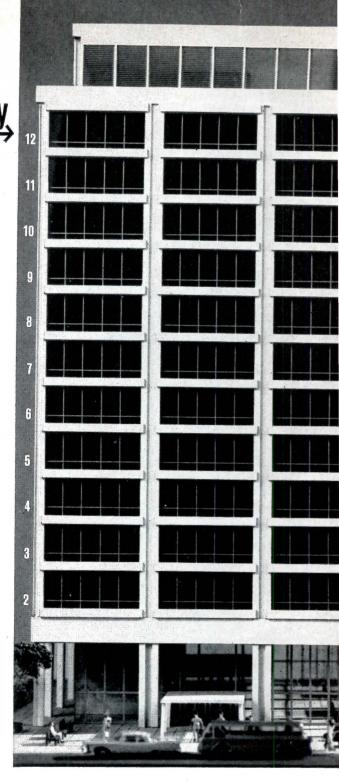


Choice of JFK Library architect near

Half a dozen U.S. architects have been nominated for the country's most prestigious current commission, the John F. Kennedy Memorial Library in Boston, it was reliably reported last month. Those being considered, it was said, are: Philip Johnson, Louis I. Kahn, Mies van der Rohe, I.M. Pei. Paul Rudolph, and John Carl Warnecke. Members of the Kennedy family are interviewing the architects, nominated by an 18-man international advisory panel (News, May '64). Announcement of the final choice is expected shortly.



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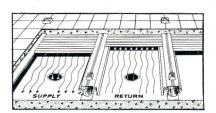
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trades. One was their pressing of the four plumbers' case without first being sure they were qualified. Another was their willingness to brandish Taft-Hartley as a weapon against Local 2. And a third has been the increasing bluntness of the civil rights leaders' public statements.

"The deliberate, systematic, conscious racism which exists in the building trades unions amounts to a great national scandal," Herbert Hill, national labor secretary of NAACP, says angrily. "These unions amount to private sovereignties which have secured immunity from municipal, state, and federal antidiscrimination laws"—laws which provide for cancelation of public contracts where discrimination is involved.

Increasingly, says Hill, public officials will have to choose between the entrenched political power of the building trades and the emerging political power of the Negro protest movement. As summer begins, the movement appears to be entering a new phase in which equal opportunity in employment will be the gut issue—and the booming building industry a prime target. "If they want more demonstrations," says Hill, "then that's exactly what they're going to get."

REALTORS AND RIGHTS

WASHINGTON — The National Association of Real Estate Boards last month went on record in opposition to the civil rights bill now pending in the Senate.

Issuing the standard disclaimer that the association was not opposed to civil rights, NAREB President Ed Mendenhall contended that the bill threatened the right of property owners to "use, rent, and dispose of property" as they saw fit. Mendenhall, whose organization represents most of the country's real estate agents, further claimed that the bill "would result in an unlimited extension of federal power into the civil liberties of every citizen."

One of New York's top realtors replied to NAREB's action last month: "It certainly appears at least as shortsighted as NAREB's opposition back in 1937 to public housing." In Congress, Senate Whip Hubert Humphrey branded the NAREB objections "another in a series of blatant distortions of the actual contents of the proposed legislation." Said Humphrey: "I suggest that the association hire some new lawyers, because its members are being misinformed."

AIA AID TO NEGROES

NEW YORK—The New York Chapter of the American Institute of Architects has announced a local program to insure equal opportunities for Negroes in the architectural profession. It is the first Chapter in the country to develop such a program.

So far the Chapter has raised \$4,000 toward the establishment of an annual \$10,000 scholarship aid fund to help Negroes of high school level and above obtain architectural training. Harold Francis, an 18-year-old freshman at Pratt Institute, received the first grant of \$800. The Chapter

will also urge architectural firms to hire Negroes for apprenticeship training in their offices.

The program was endorsed by the National Urban League as "a far-sighted effort." It was also received enthusiastically by the national AIA in Washington which will recommend adoption of similar programs to other local chapters. Of the 1,400 members in the New York Chapter, three are Negroes. There is a total of 14 registered Negro architects in metropolitan New York.

House denies funds to save Nile temples



JAMES BURKE-LIFE

WASHINGTON-Last month the House vetoed a long-standing Administration proposal to spend \$12 million of counterpart funds as the U.S. contribution toward rescuing the ancient Egyptian temples at Abu Simbel (News, April '63). A \$36 million, UNESCO-sponsored project is underway to save the two temples from the waters of the Nile, which last month began to back up as the first stage of the Aswan Dam was completed. Under the late President Kennedy, the State Department had promised to put up a third of the cost, pending Congressional approval.

At first it seemed that the House opposition was based on what Appropriations Subcommittee Chairman Rooney of New York called the "lopsided" amount of the U.S. donation. But it soon became evident that the congressmen were opposed to any contribution, however small. Said Rooney: "This should be entirely

a matter of private subscription." Having thus ruled out U.S. participation in the rescue. Rooney added gallantly: "I will be the first to contribute \$50."

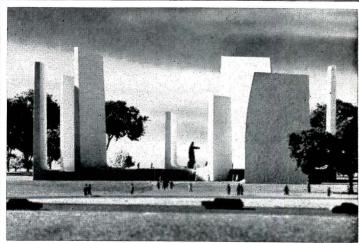
What dismayed proponents of the Abu Simbel project most was that the proposed U.S. contribution was supposed to be made from an idle \$54 million accumulated through the "sale" of surplus grain to the United Arab Republic—money which could not be spent outside the U.A.R.

Should the House viewpoint prevail in the Senate, the scope

of the rescue operation will be severely curtailed. With \$12 million less to spend, the Egyptians will probably still be able to save the façades of both temples but not the insides, according to a UNESCO spokesman.

The House action seemed likely to have loud repercussions in the Middle East (Cairo immediately termed it the result of "a Zionist campaign"). If the Russians should move in and redeem the fallen U.S. pledge, the repercussions could be even louder.

continued on page 9



LOUIS CHECKMAN

Revised FDR Memorial gets new hearing

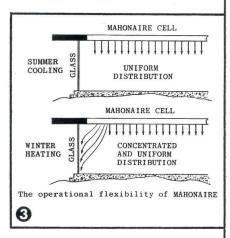
The Fine Arts Commission last month reviewed a revised design of the Franklin Delano Roosevelt Memorial, proposed for the banks of the Potomac. Their decision is expected in June. To meet criticism that the original slabs were too high, Architects Pederson, Tilney, Hoberman, Wasserman and Beer lopped 37 feet off the tallest one, and reduced the size of the other seven accordingly. In the central plaza would be a statue of FDR about 18 feet high. The architects indicated that they still intended to build the slabs out of concrete, but promised to work closely with the Commission in determining the aggregate and color of cement.

Mark of Mahon-INGENUITY





- 1 The just completed, Wickstrom Chevrolet showroom at Roselle, Ill., uses a good-looking MAHONAIRE Ceiling System for year-round comfort conditioning. Architects: Rydbert & Weinert, Chicago. Contractor: Ellington-Miller Co., Chicago.
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MORTGAGE MEN GET WARNING

NEW YORK—The U.S. economy, by all accounts, is moving into an outright boom, some say even a superboom. Yet members of the Mortgage Bankers Association of America, celebrating the organization's fiftieth anniversary in New York last month, heard words of caution from their president, Carey Winston, of Washington, D.C., who saw "a little bit of cloud in our sky."

Winston (shown at right, above, blowing out candles with William J. Gill, president of the New York MBA) said that a part of the problem facing the mortgage bankers stems simply from the recent decline in single-family home building, accompanied by a sharp rise in the construction of apartments and other income-producing properties. "Such shifts," he said, "are bound to be disturbing to an industry which for years has focused its attention on the single-family house."

But Winston also pointed to two more fundamental problems as the source of his uneasiness. One was that artificial incentives, such as favorable tax laws, and the growing availability of funds, have resulted in a building volume in excess of real demand which "may be creating an underlying weakness in the credit structure." Symptom of the trouble: widespread reports of Winston's warm gage bankers. I tremely high I sumer and readded soberly: pression ended been none sin lack the experied furnished by the truth, there has test of mortgage than 25 years."

rising vacancy rates in new apartment buildings, forcing owners to offer liberal rent concessions in order to fill them.

The second set of factors cited by Winston consisted of a persistent rise in foreclosures and the troubles of real estate syndicates and corporations. Foreclosures on single-family homes have risen for four straight years to their current record level of 4.44 per thousand mortgaged homes.

"We have to admit," warned Winston, "that the real estate market and the mortgage structure are vulnerable to adverse economic forces in a way that did not prevail during most of the past decade. They are vulnerable because equity requirements have been reduced to the point where even slight miscalculation may cause trouble."

Franklin Briese, executive vice president of Minnesota Mutual Life Insurance Co., seconded Winston's warning to the mortgage bankers. Pointing to the extremely high level of both consumer and real estate debt, he added soberly: "The Great Depression ended in 1938; there has been none since. Many of you lack the experience and education furnished by the Depression. In truth, there has been no severe test of mortgage credit for more than 25 years."

GSA CHANGES DISPUTED DESIGN

Shifts tower in Philadelphia project

PHILADELPHIA — The General Services Administration has ordered its new \$42 million federal courthouse and office building here redesigned after protests that it would upstage venerable Independence Hall.

Original scheme for the complex (by Architects Carroll, Grisdale & Van Alen; Martin Stewart, Noble & Class; Bellante & Clauss) called for placement of its 22-story office tower smack on Independence Mall. A delegation of Philadelphia citizens and planners headed by Mayor Tate went to Washington with the complaint that the tower would be overwhelming to the mall and to Independence Hall a scant two

blocks away. The Philadelphians also asked that the buildings be of white brick instead of red.

GSA Administrator Bernard L. Boutin ordered the architects to revise their scheme so that the ten-story courthouse would be on the mall and the office tower on the rear of the site. He took the matter of color under advisement; white brick, he said, would cost an additional \$1.5 million.

Boutin said GSA's desire was "to have the government reflect the atmosphere of the local community as much as possible." Commented the *Philadelphia Bulletin* on the design change: "It is good to find the federal government seeing it that way."



Chase Manhattan dedicates its plaza

NEW YORK — Downtown Manhattan got its first major, privately provided open space last month with the opening of the Chase Manhattan Plaza, 2½ acres of pavement broken by a circular pool and fountain designed by Isamu Noguchi. The pool, 60 feet in diameter, rests in a glass-walled well a full story below the plaza. The fountain sends water swirling around black rocks brought by Noguchi from



Kyoto. The opening ceremony was a Wall Street version of a country fair, complete with a band and carnival acts. A crowd that filled the SOM-designed plaza ate 20,000 bags of popcorn, drank 30,000 cups of soda—and stole 2,000 potted plants.

continued on page 10

NEW VERSION OF N. Y. CENTER

NEW YORK—Last month the city's controversial \$150 million Civic Center plan popped up again—way up—then quickly disappeared from public view.

New York newspapers gave their readers a glimpse of a scheme far different from the one drafted in 1962 and subsequently criticized by a committee of prominent architects (News, March '64). This time, instead of departmental and executive offices being in separate buildings, both were shown in a single 54-story skyscraper clad in white marble aggregate (photo below). A blocklong sunken plaza, with a reflecting pool at its center, would link the soaring tower to City Hall. Beneath the plaza would be two levels devoted to parking for 1,400 cars, shops, additional offices, and subway connections.

The new plan is the work of Architects Edward Durell Stone and Eggers & Higgins, retained by the city last November. Since showing the model to the press, (and later to the critics), neither the city nor its architects have released any further details of the revised plan.

Plaza links the tower to City Hall





"HIGHWAYMEN, SPARE THOSE TREES"

Freeway foes arise in defense of Nature

SAN FRANCISCO - This freeway-shy city is again manning the barricades against state road builders, but some of its old enthusiasm is missing. The issue: whether a \$123 million freeway should be allowed to cut through part of Golden Gate Park on its way from Civic Center to the Golden Gate Bridge. The route is the most favored among an unusually wide range of alternatives presented by the state, complete with design studies by Architectural Consultant Lawrence Halprin (FORUM, Oct. '63).

Some do not want the freeway at all. "Since the [Golden Gate] bridge is approaching its capacity, proper planning should be concerned with another crossing rather than with freeways pouring more traffic into a bottleneck," said Author Harold Gilliam. "We need to challenge not merely the particular routes . . . but the entire philosophy of salvation by freeway."

Others challenge the particular route that would plunge eight lanes through the Golden Gate Park "Panhandle," a narrow green strip laid out in the early 1870's as a carriage entrance to the park's east end. Residents of nearby neighborhoods rallied on the grass (photo above) and pinned orange ribbons to 206 trees they said the road would

destroy. The San Francisco Chronicle labeled the route "disastrous" and said it would turn the Panhandle "from a true park into a screen separating two wide ditches."

Last month the Board of Supervisors' streets and highways committee endorsed a more direct route tunneling under the Pacific Heights district. But the Panhandle Freeway probably will prevail: the state wants it (the tunnel alternative, it says, could cost as much as \$521 million); the Chamber of Commerce wants it, on grounds that a dearth of freeways is hurting the city's economy; and Mayor John Shelley is sitting firmly on the fence. San Francisco's antifreeway feelings seem to have softened since it stopped the road builders dead in their tracks five years ago.

Redwood "double cross"

SACRAMENTO — California Governor Edmund G. Brown announced a short time ago: "As long as I am Governor not a single, solitary redwood will be cut down for a freeway." Last month, Brown was in trouble with conservationists screaming "double-cross." Source of their anguish was Brown's subsequent compromise plan to "replace" any redwoods cut down as a result of the highway program. Brown pro-

posed that state highway funds be used to buy privately held redwood stands adjacent to parks stripped of their trees by highways.

Redwood-lovers were not buying any part of the "tree for a tree" program. In an editorial, the freeway-fighting San Francisco Chronicle came up with an alternative proposal: "cut down one highway engineering chieftain for every redwood taken by a freeway—and, in accord with ancient tribal custom, bury him mounted regally upon his favorite bulldozer."

Riot over sycamores

CAMBRIDGE — On the East Coast, it was highways vs. sycamores: local police resorted to dogs to quell obstreperous Harvard students protesting a proposal to widen Memorial Drive and build three underpasses. The plan, under heavy fire from all sides, would destroy some 95 100-year-old sycamores and eat up the grassy banks of the Charles River in front of the Harvard campus.

Paris elms in peril

PARIS—Along the Seine, it was highways vs. elms: Parisians were up in arms over a plan to build a new double motor road on the Right Bank, destroying the ancient trees that border the river.

GSA MAY RELAX ITS BID-LISTING RULES

WASHINGTON—A hint from General Services Administrator Bernard L. Boutin that his agency might relax its sub-bid listing rules has evoked pained objections from specialty contractor groups.

Boutin said he was thinking of giving general contractors "perhaps 24 hours" after submission of bids to GSA to list the subcontractors they intend to use. GSA now requires that the lists of subcontractors accompany the bids.

Specialty contractor spokesmen immediately charged that the change would open the way to a

return of "bid-shopping," with unscrupulous generals using the extra time to shave the subs' prices. ("All they need is time to make a couple of telephone calls," said an official of the National Electrical Contractors Association.) The Associated General Contractors, on the other hand, viewed it as "an improvement."

Boutin said he did not believe allowance of "a reasonable period" would encourage bid-shopping. "We have not yet made a final decision," he said, "but we are giving it very careful thought."



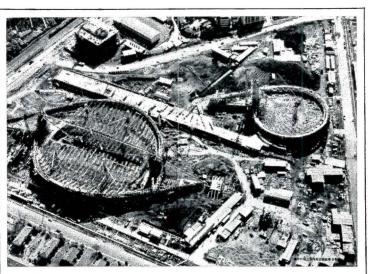
Top TV repairman fixes LBJ's desk

WASHINGTON — The distinguished gentleman shown above intently eyeing the underside of President Johnson's massive wood desk is none other than Dr. Frank Stanton, president of the Columbia Broadcasting System.

On a visit to the White House last winter, the sharp-eyed Stanton noted that the President's desk was literally up on blocks to make it higher. When he suggested gently that such a makeshift arrangement might not be altogether appropriate to the office, the President slapped a long Johnson arm around his shoulder and said, directly: "You fix it."

Stanton, an avid amateur carpenter, did just that one day in February, lengthening the legs properly with the assistance of a threeman crew.

The story came to light when Stanton was honored by the Architectural League of New York with its Michael Friedsam Medal for his role in promoting the arts in industry. In a congratulatory telegram President Johnson paid tribute to Stanton as a world statesman in communications, as a distinguished citizen—and as "a creative craftsman whose talents have even found expression in the 19th-century desk I use."



Tange's Olympic Stadium takes shape

Architect Kenzo Tange's remarkable tour de force, the Japanese national gymnasium in Tokyo, is being hurried to completion for the 1964 Olympics. The 16,000-seat gymnasium, largest suspension-roof structure in the world, will contain swimming and diving pools. The smaller, shell-shaped annex will house basketball and boxing. Yoshikatsu Tsuboi is the structural engineer.

NEWS IN BRIEF

The 1964 R. S. Reynolds Award of \$25,000 will be presented at the AIA Convention this month to Skidmore, Owings & Merill for its controversial U. S. Air Force Academy Chapel (FORUM, Dec. '62). In the award's eight-year history, SOM is only the second American firm to win. Walter A. Netsch, Jr., of SOM's Chicago office was partner in charge and designer, assisted by Ralph P. Youngren.

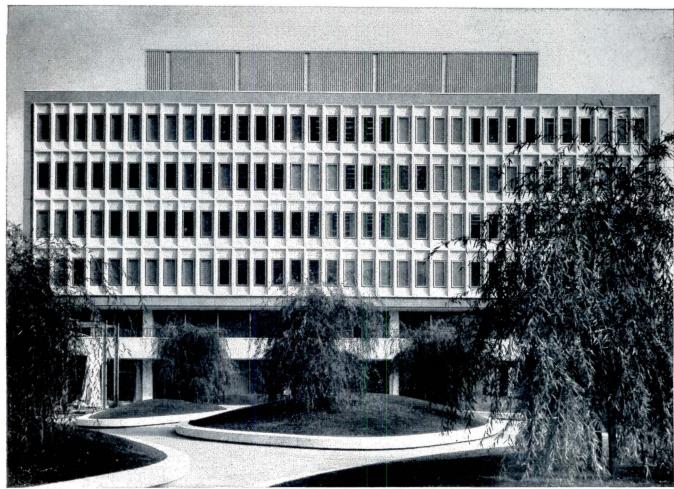
This summer, Architect Max Abramovitz' Philharmonic Hall at Lincoln Center will close for two weeks while an acoustical shell is installed around the stage. The shell is but one of three recommendations made by German Consultant Heinrich Keilholz to improve the orchestra's sound. a subject of fierce debate ever since the hall opened almost two years ago. His other suggestions: filling in the gaps between the acoustical "clouds" to provide a solid ceiling surface, and adding "diffusing elements" along the auditorium's sides.

The University of Arizona at Tucson will elevate its department of architecture to a full-fledged college, headed by Dean Sidney Wahl Little, on July 1. Commissioner William L. Slayton has announced a new URA Awards Program for urban renewal design. The program, part of a much-expanded group of HHFA-sponsored design awards, will be divided into two categories: Redevelopment Design Awards and Local Public Agency Awards. Deadline for entries is July 1.

A site near Mt. Vernon has been found for Frank Lloyd Wright's Pope House, threatened by highway construction in Falls Church, Va. (News, May '64). The National Trust for Historic Preservation agreed to set aside land for the house on the colonial estate of Woodlawn. Cost of the 14-mile move: \$45,000.

The State Department's Agency for International Development has named the Leo A. Daly Co., Omaha-based architects and engineers, to plan and engineer a vast program of school and medical center construction in Brazil. Total cost of the AID program, which will include construction of 6,500 elementary schools, is expected to top \$27 million. Brazilian architects and contractors will design and build the individual projects under Daly's supervision.

continued on page 13



Research Center, Constitution Plaza, Hartford, Conn. Architect: Charles DuBose, Hartford. Contractor: F. H. McGraw & Co., Hartford. Structural Engineer: A. J. Macchi, Hartford. Concrete Panel Manufacturer: Glazon Corp., Precast Division, Talcottville, Conn.

CHARLES DuBOSE specified precast white concrete window units for this new office building at Constitution Plaza, Hartford's 40-million-dollar, 15-acre urban-renewal project. Made with ATLAS WHITE portland cement and an exposed aggregate of light gray granite, the units are 4 feet wide and 12 feet high, weigh more than 2 tons each. Insulation was attached to the inside face of the units after installation. ■ Today, more architects are specifying precast white concrete in projects involving a number of buildings. It can be cast in a great variety of sizes, shapes, colors and textures to provide individual distinction with pleasing over-all unity. Installation is fast, maintenance

costs are low. ■ For specific information, consult your local precast concrete manufacturer. For a 32-page, fully illustrated brochure titled "White Concrete in Architecture," write to Universal Atlas, 100 Park Avenue, New York, N. Y. 10017.



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QUOTE . . . UNQUOTE

"An artist or an architect conceives and creates, but then in the final analysis he's at the mercy of some writer—a man who knows absolutely nothing about what the artist spent his life trying to do—a man who uses up hours and days of his time asking him childish, idiotic, asinine questions and then, as a final irony, assesses him for all time."—Architect (and sometime writer) Philip C. Johnson.

"The Hotel Karachi International is a splendid \$7 million, 300-room hotel with a lovely perforated tile façade in neo-Edward Durell Stone style. Stone is the only living architect I know who is already neo."—Columnist John Crosby.

"In Houston, they don't have a zoning code. There you get a tall, handsome building next to a one-floor hamburger stand with a big sidewalk-overhanging sign, and then a greasy garage. In Atlanta, we have a zoning code. And here you have a tall, handsome building next to a one-floor hamburger joint, adjoined to a greasy garage." — Atlanta Congressman Charles L. Weltner.

"Brasília has no radiance—she feels starved of good red blood, laughs and gentleness."—Author James Morris.

"In an age when everyone is seeking to get everyone else's attention, when a hectic man-made world intrudes more and more upon the orderly and graceful world of nature, respect for superior design seems to me a minimum essential of effective communications and constructive human relationships."—CBS President Dr. Frank Stanton.

"Sometimes [artists] forget the fundamental rules of art. It is difficult to understand what you are trying to say. You yourselves don't understand any longer the language you are using, and it becomes the language of Babel."—Pope Paul VI.



JONES TO PLAN HOUSTON

Houston, famous for having no zoning laws, may be well-wedded to its prospective new Director of City Planning Roscoe Jones, 38. Says Jones: "Zoning is not the only way to build a great city." Educated at the Harvard Graduate School of Design, Jones has resigned his position as the head city planner of Metropolitan Dade County (Greater Miami), Fla. to accept the Houston post, vacated last December by Ralph Ellifrit. Jones will have a dual job, also teaching part-time at the University of Houston, for a combined salary of \$24,000.



BRUNNER PRIZE TO WEESE

The prestigious Arnold W. Brunner Memorial Prize in Architecture of the National Institute of Arts and Letters was awarded this year to HARRY WEESE of Chicago.

ASPEN LISTS SPEAKERS

Twenty-one speakers have been named for the 15th annual International Design Conference in Aspen, Colorado, June 21-27. Participating in the panel on architecture will be: Joseph Passoneau (Dean, Washington Univer-

sity School of Architecture), Philip Johnson, Paul Rudolph (Chairman, Department of Architecture, Yale University), Robin Boyd (Australian architect and critic), Reyner Banham (executive associate editor of London's Architectural Review), and Peter Blake (managing editor, Architectural Forum).

DALY QUITS FULLER

In a surprise move, RAY C. DALY resigned as president and chief executive officer of the George A. Fuller Co. at the age of 56. Taking his place in charge of the giant building construction company was 40-year-old WILLIAM V. LAWSON, previously vice president for Western operations.

SEVEN WIN KOPPERS AWARDS

Winners of the seventh annual Koppers Architectural Student Design Competition are: Charles A. Albanese (University of Illinois), Osvaldo Briceno (University of Houston), Larry W. Hess (Georgia Institute of Technology), Shun R. Kanda and Henry T. Irie (Western Reserve), Robert J. Noah, David Shaw, and Frederick Sun (Penn. State), Luis Perelman (Columbia), and Alexander Purves (Yale). Each of the seven first prizes consists of a \$1,000 grant.

GRAHAM FELLOWS NAMED

Chicago's Graham Foundation for Advanced Studies in Fine Arts has released a partial list of Graham Fellows for 1964: Architect Peter Chermayeff (see page 87), a grant of \$7,500; Critic Reyner Banham, \$10,000; Sculptor Jan de Swart, \$7,750. The foundation has also awarded 15 scholarships of \$500 each to graduate students for summer travel and attendance at the Aspen conference.

BURCHARD "RETIRES"

Retiring this month from his post as Dean of the School of Humanities and Social Science at MIT is John E. Burchard, co-author with Albert Bush-Brown of *The Architecture of America*. Burchard, just made an Officier de l'Ordre des Arts et des Lettres of the French Republic, will be

visiting professor at the College of Environmental Design, University of Califoria, in the autumn, lecturer in the Sloan School of Industrial Management at MIT in the spring. Under a grant by the Carnegie Corp., Burchard also will research and write two books on architectural history.

MULLER HEADS ACTION

Succeeding Albert M. Cole as president of ACTION, Inc., is JOHN H. MULLER, senior vice-president of The Equitable Life Assurance Society of the U.S.

OBITUARIES



OTTO R. EGGERS, cofounder of the New York firm of Eggers & Higgins and a Fellow of the American Institute of Architects, died in New Rochelle at the age of 81. Eggers and his late partner Daniel Paul Higgins were associates of John Russell Pope. On Pope's death in 1937, the firm of Eggers & Higgins was established to carry to completion both the National Gallery of Art and the Jefferson Memorial in Washington, D.C., most famous of the firm's many commissions.

A. Conger Goodyear, noted patron of art and architecture, died on Long Island at age 86. Goodyear was a co-founder of New York's Museum of Modern Art and served as its first president.

H. E. FOREMAN, for 16 years managing director of the Associated General Contractors of America, died in Washington, D.C., at 67.

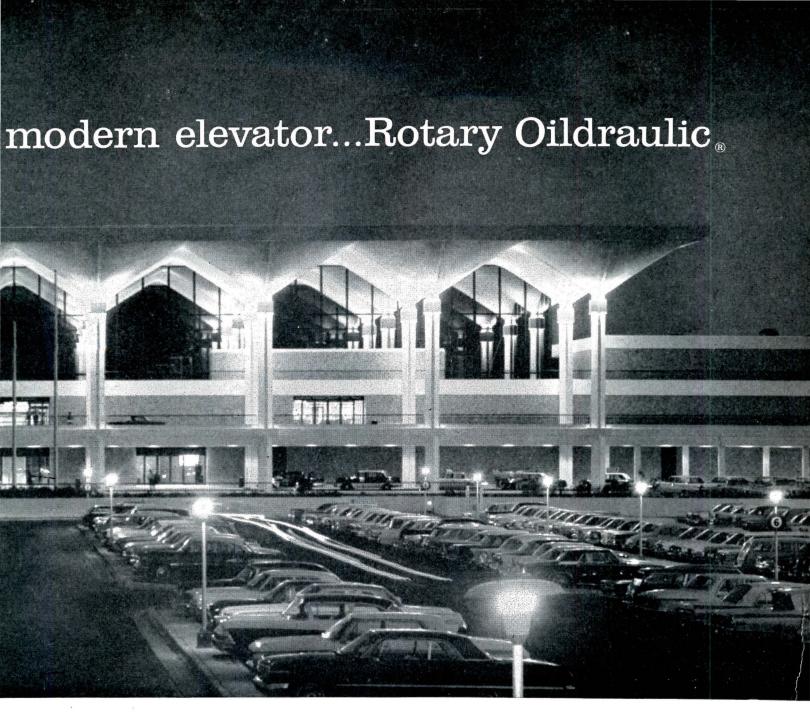
ALFRED BENDINER, Philadelphia architect, caricaturist, and writer, died at 64.

continued on page 16



Memphis Metropolitan Airport, Memphis, Tenn. Architects: Mann & Harrover. Contractor: J. A. Jones Construction Co. Two Rotary Oildraulic Passenger Elevators and two Rotary Oildraulic Freight Elevators sold and installed by Dover Elevator Co.





White columns support a canopy of hyperbolic paraboloids above the new Memphis Metropolitan Airport, suggesting both the romantic past of this area and its modern ambitions. This beautiful building is served by four Rotary Oildraulic Elevators, the most practical elevator for any low-rise structure.

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SPANISH PAVILION: SURPRISE HIT OF THE FAIR

During the third week of the New York World's Fair, the Spanish pavilion started to charge 25 cents for admission. Pavilion officials apologetically said they were not trying to be exclusive, but simply had to charge something to control the traffic.

The device hasn't stopped visitors. People are still flocking to the pavilion, making this largest of the foreign government buildings the surprise public and critical hit of the Fair.

The Spanish pavilion's success may be a surprise, but it is no accident. The Spanish Government, to begin with, conducted an invitational architectural competi-

tion for its design. It then selected paintings from the Prado, purchased three Picassos specifically for the Fair, and commissioned artists to create a notable collection of murals and sculpture. To show off the rest of Spanish culture and life, flamenco dancers and noted Spanish musicians perform in an 800-seat theater that is also used for movies and fashion shows.

The pavilion's exterior (picture, above) gives little hint of what all the excitement is about. Handsome but severe, it rests the eye wearied from the confusion of colors and shapes on all sides. The walls are very nearly blank, with

rough-stuccoed concrete on the lower level and deeply scored and textured precast panels above (detail picture, right).

It is, in fact, like an inner-directed Spanish home, turning its back to the streets and focusing instead on a handsome series of courtyards (picture, below). The architect uses the simile of the granada—the pomegranate—harsh and rough on the outside, with a rich, lush interior.

The pavilion's interior richness is compounded of both space and light. Despite the seeming regularity of the building's form, inside it is broken into a variety of dramatically changing volumes. Some open to the courts, and others have perimeter walls of white stucco washed by light from cold cathode tubes at their tops and bottoms.

Except for these bright walls and the court-facing openings, there is virtually no general illumination in the display spaces. The pavilion's inner reaches are pools of darkness, their surfaces and fixtures predominantly dark brown. Exhibits and artifacts are brilliantly spotlighted so that they gleam like jewels in their serene and stately setting.

Floors of these display areas are intricate Spanish quarry tiles in

warm earth tones, and ceilings are composed of acid-stained blocks of Spanish Flemish pine. Posts of the same wood are clustered together as bases for the display cases. The light sources for the exhibits ingeniously echo both the ceiling blocks and the bases: they are square, aluminum tubular fixtures, also gathered in clusters, anodized brown to match the color of the pine.

Exhibits include historical displays (the sword of El Cid fits in a specially designed niche); handicrafts, both old and new; industrial products; and a section on tourist delights. Architecture has not been neglected: on an upstairs balcony there is a model contemporary house and photographs showing recent buildings and students' projects. Sustenance is offered at a bar and three restaurants, varying in price range.

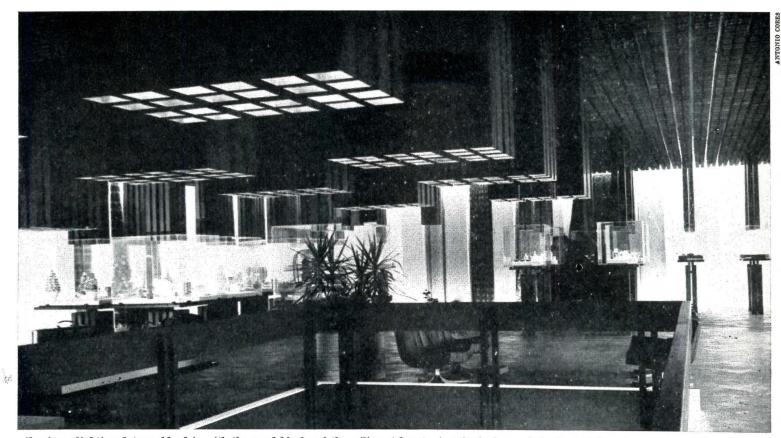
The architect of this stunning pavilion is Javier Carvajal, a young (35) professor of architecture in Madrid. Kelly & Gruzen were consulting architects, with Lloyd H. Siegel as associate-incharge, and Rolland D. Thompson as project architect. Structural

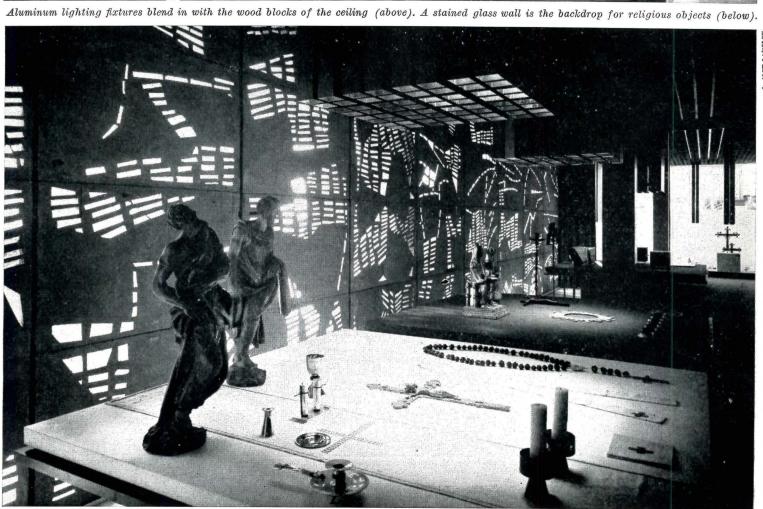


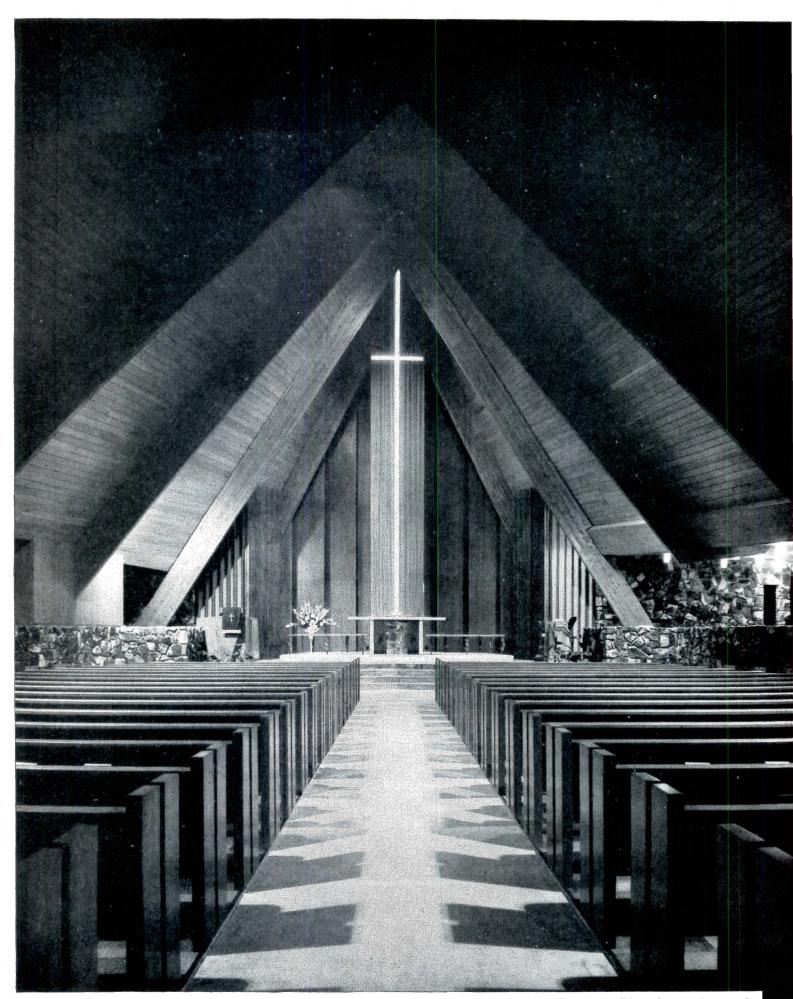
engineers were Heredia & Moreno of Madrid and Lev Zetlin of New York. Joseph Loring was mechanical and electrical engineer. Landscape architects were Jorge Ortiz and Paul Friedberg. Contractor was the Paul Tishman Co.

When the Fair is over, there are plans to demount the \$6.6 million building and rebuild it as a museum in a park in Valencia.



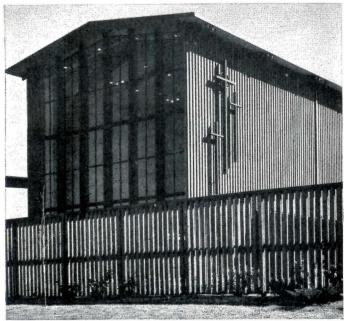






The Calvary Lutheran Church, San Diego, features three species of wood in beautiful combination with a rough-hewn stone wall. Architect: Des Lauriers-Sigurdson, A.I.A., La Mesa, California.

For citadels of religious freedom design with the freedom of WOOD



Imposing, yet inviting, St. Michael's Lutheran Church, Portland, Oregon, displays the working-togetherness of wood and windows. Architect: Oliver W. Olson & Associates, A.I.A., Seattle, Wash.

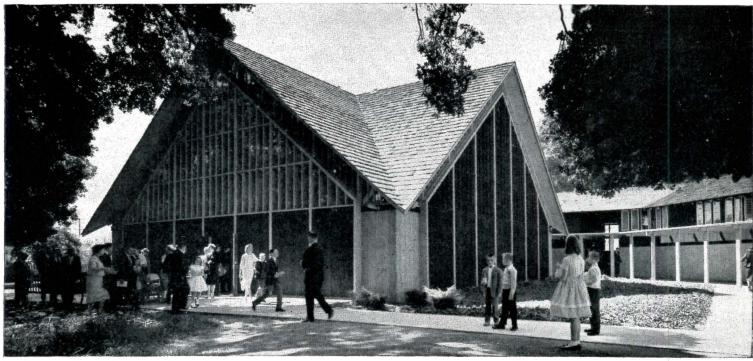
UNICOM MANUALS 1 & 2: "Design Principles" (122 pages) and "Fabrication of Components" (248 pages), graphically detailing the UNICOM method of house construction, are available at nominal cost to those associated with or supplying the home building industry. For free booklet describing UNICOM, write to: National Lumber Manufacturers Association, 1619 Massachusetts Avenue, N.W., Washington, D.C. 20036.

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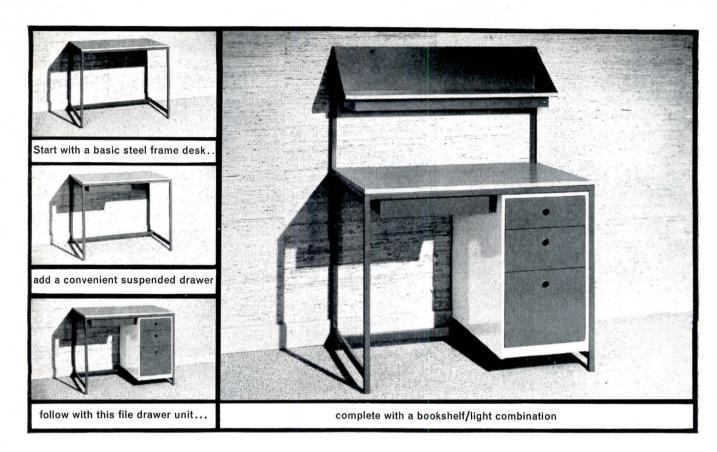
Consider the acoustical qualities of wood; it keeps outside noise to a minimum . . . sets the mood for meditation. Consider the insulation qualities of wood . . . it comforts the congregation from outside heat or cold. Consider the inspirational qualities of wood . . . its many species, tones and textures show the wondrous hand of its Creator. And, consider wood's remarkable, rapid remodelability . . . it lets a church grow with its congregation. For more information on designing with the freedom of wood, write:

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find the better way with WOOd



In the Ladera Community Church, near Palo Alto, young and old alike find comfort and companionship amid the wonders of wood. Architects: Thompson and Peterson, Palo Alto, California.



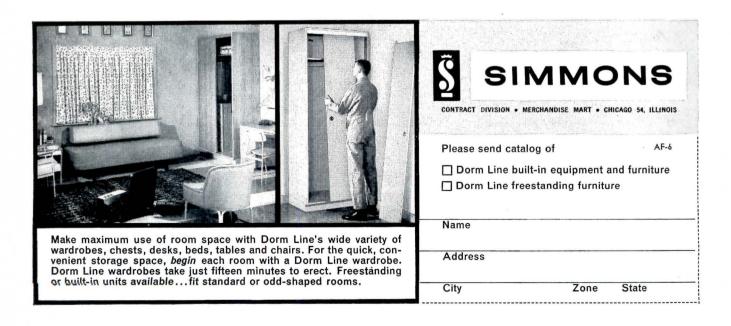
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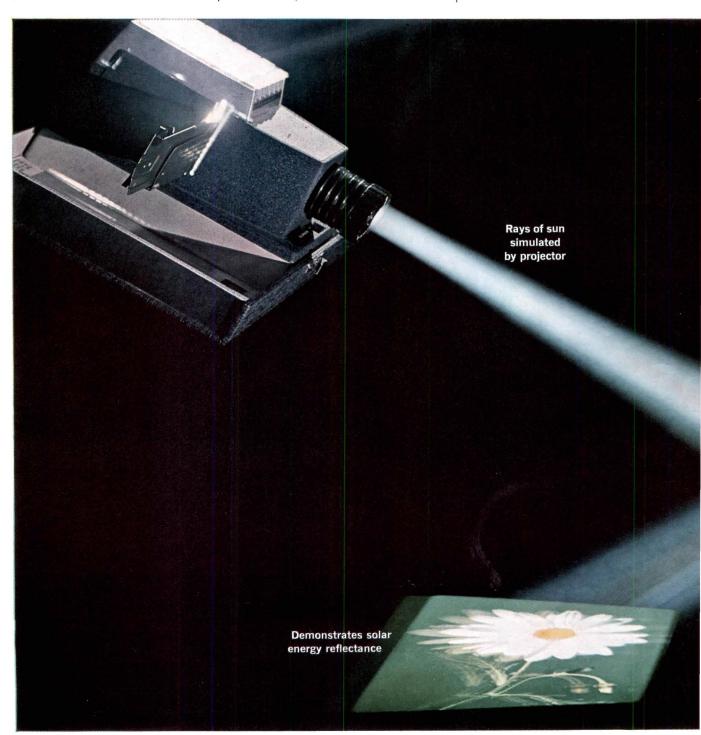
In this simple demonstration, a 500-watt projector is used to simulate the rays of the sun. It projects a color transparency through an LHRTM SOLAR-GRAY® TWINDOW unit. The image to the left of the unit demonstrates the reflectance characteristics of the LHR coating.

Glass Conditioning with LHR TWIN-DOW. Because it reflects considerable light and heat toward the outside, LHR coated glass substantially reduces the rate of solar heat flow to interiors. Thus, interior temperatures are easier to control. And, while LHR glass allows for plenty of daylight, it reduces sun and sky brightness to a comfortable level.

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control properties allow greater latitude in building design and orientation.

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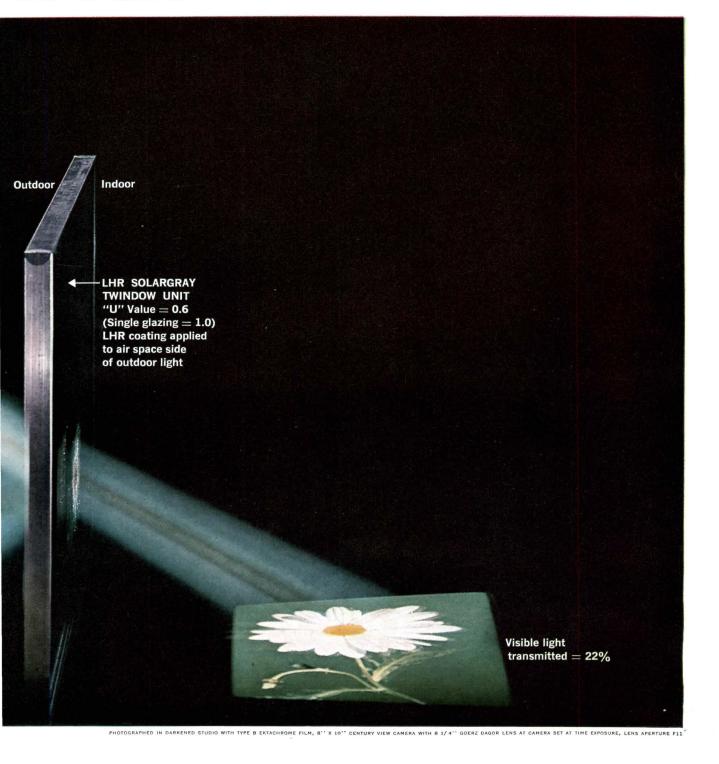
Glass Conditioning[†]...a new idea from PPG

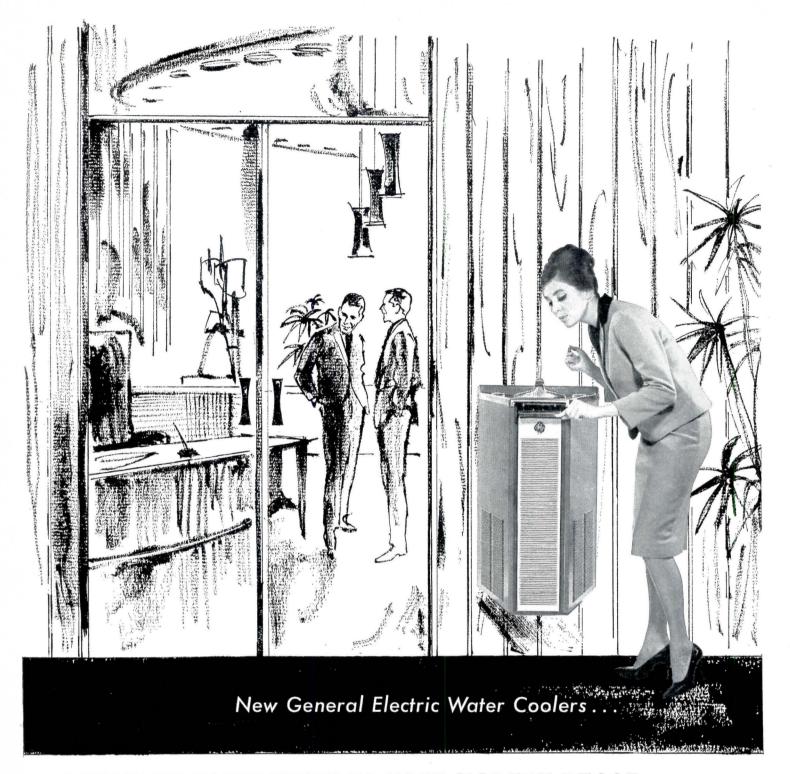
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With LHR Solarbronze, one sid	le 25	0.40	90
With Solex, one side	65	0.54	115
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RENAISSANCE IN BOSTON...

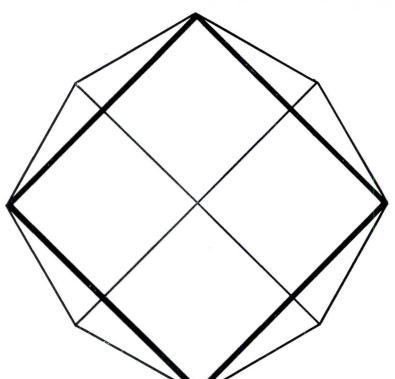
WINNING DESIGN FOR CITY HALL Rising above historic old Scollay Square, the striking facade of this new city hall EXPRESSES DARING AND VITALITY marks the rebirth of Boston's core city. The unique design, chosen from 256 entries in a nationwide competition, presents dramatically the structural and decorative potential of modern concrete.

The 9-story building locates spacious public areas at lower levels, offices on the top floors. In between, ceremonial chambers of varying sizes and shapes are suspended at random levels. The massive concrete columns are cast in place. Their patterned surface texture, derived from the formwork, contrasts effectively with the smooth faces of precast trusses and the frieze of right-angled precast panels.

Today, the versatility of modern concrete provides unlimited scope for creativity. In the Boston competition, 7 of the 8 finalists had chosen concrete to express their design concepts. Portland Cement Association An organization to improve and extend the uses of concrete



Architects and Engineers for the Boston City Hall, a joint venture, include the following firms: Architects: Kallmann, McKinnell & Knowles (design team) and Campbell & Aldrich. Structural Engineers: Wm. J. LeMessurier & Assoc., Inc.





STEEL ROOF DECK FORMS HYPERBOLIC PARABOLOID



The owners of Frisch's Restaurant, Cincinnati, wanted a striking structure, a square open floor plan, and moderate cost. These requirements were fully satisfied with an economical thin-shell hyperbolic paraboloid roof of steel deck.

Here's how it was done: two layers of steel deck were placed at right angles to each other and welded together to form a hyperbolic paraboloid quadrant. The roof structure consists of four quadrants, each 33'6" square having a common column in the center and four corner buttresses. Each paraboloid has a tapered overhang with a maximum cantilever of 9'6" at the peaks. $\hfill\square$ The design load analysis considered the basic square quadrant acting alone and computed the overhang as a simple beam between the edge beam and the fascia beam. The dead load was 22 psf and the live load 25 psf. Design of

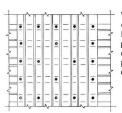
the decking followed the AISI Manual on Design of Light Gage Formed Steel.

The cost of the completed roof structure, deck, insulation and built-up marble chip roofing was slightly over \$3 per square foot. Similar structures in steel have since been built for about \$2 per square foot.

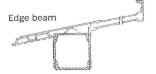
For more information on the USS Family of Steels for design, write United States Steel, Room 7284, 525 William Penn Place, Pittsburgh, Pa. 15230.

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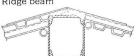
PHOTO: Frisch's Restaurant, Cincinnati, Ohio Architects: Woodie Garber & Associates, Cincinnati, Ohio Structural Engineers: Hanley and Young (now Truman P. Young & Associates), Cincinnati, Ohio General Contractor: William Guentter & Son, Inc., Cincinnati, Ohio Roof Deck Contractor: Imbus Roofing Company, Cincinnati, Ohio Structural Steel Fabricator: George Rehm Company, Inc., Cincinnati, Ohio Roof Deck: H. H. Robertson Company, Pittsburgh, Pa.



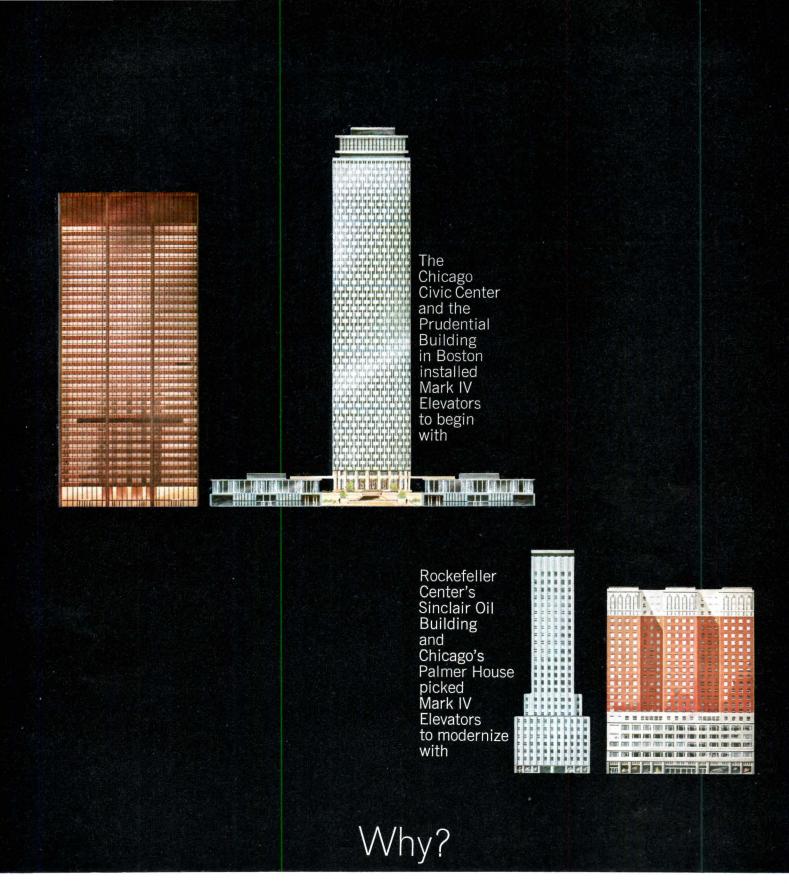
Weld pattern for decking. 18 gage lower layer, 20 gage upper layer of $1\frac{1}{2}$ " steel decking, plug welded at each intersection.



Ridge beam



Edge members and ridge members were made of channels and plates to form box sections. The decking was connected at the beams by welding to pipe sections and angles which formed easy-to-weld seats.



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Turner Construction Company, Contractor

Bethlehem Steel's extensive research facilities, once scattered in several different locations, are now consolidated in this complex of modern buildings on a mountaintop overlooking the city of Bethlehem, Pennsylvania.

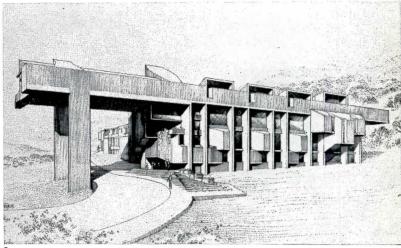
Hope's engineering staff worked closely with the architects in planning and installing Hope's Windows and Window Wall units.

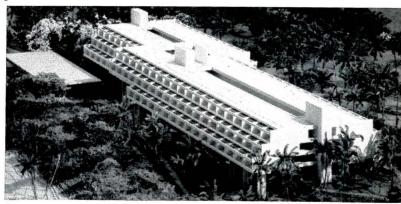
The fenestration was designed to provide the most suitable combination of optimum working environment with a pleasing exterior facade. Many unusually large custom window units made the matter of installation a major consideration. Hope's skilled erection crews, in keeping with Hope's policy of complete service and undivided responsibility, provided a completely satisfactory installation.

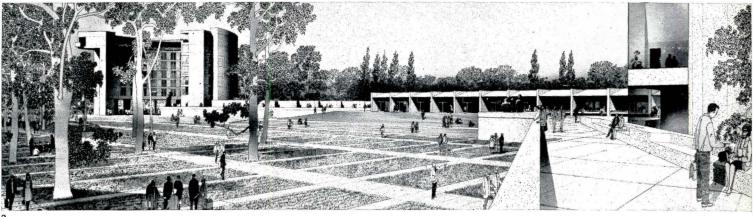
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1. TORONTO SKYSCRAPERS. To include the tallest office buildings in the world outside of New York City (55 and 44 stories), the \$125 million Toronto-Dominion Centre will upgrade the city's financial district, adding well over a million square feet of office space. The towers' resemblance to Manhattan's Seagram Building is not surprising: the consulting architect is Ludwig Mies van der Rohe and the co-developer is a company owned by the Bronfmans of Distillers Corp.-Seagrams, Ltd. The other developer, the Toronto-Do-

minion Bank, will be the prime tenant of the larger tower and the plaza pavilion. All three buildings will have black steel frames and bronze-tinted glass set in stainless steel. Architects: John B. Parkin Associates, Bregman & Hamman. 2. NEW YORK CAMPUS. Expanding from its present nucleus, the State University at Fredonia, N.Y. will swing out in a wide arc, a sculptured plan by I.M. Pei & Associates, who also designed the first buildings shown above. Left to right: a semicircular administration building on stilts; a low,

broad-stepped library; and a corner of the lecture hall.

3. COLGATE ART CENTER. Colgate University, which requires work in music and the visual arts for a degree, commissioned Paul Rudolph to design this \$1.2 million center for the creative arts on its Hamilton, N.Y. campus. Rudolph's design, like his other recent work, is an intricate arrangement of interlocking spaces. To the right of a tall campus "gateway" are wedge-shaped offices and studios, expressed on the exterior, and a clutch of galleries protrud-

ing from the third floor. Behind these will be the 400-seat auditorium and stage.

4. HAWAIIAN HOTEL. Laurence Rockefeller's first resort in Hawaii, the Mauna Kea Beach Hotel, will open in March, 1965. The hotel is taking shape on a ridge commanding views of the sea and of Mauna Kea, tallest mountain in Hawaii. Floors step down from the ridge to provide open lanais for outside rooms; inside rooms face galleries around open courts. Architects: Skidmore, Owings & Merrill. continued on page 37



EFFICIENT PLANT, KANSAS—International Harvester, Wichita. *Architect:* Campbell Engineering Company. *Prime Contractor:* A. W. Soderberg Construction Company. *Masonry Contractor:* Kenneth D. King. *Masonry Cement:* United Cement Products Company. *Concrete:* Dolese Bros. Company.

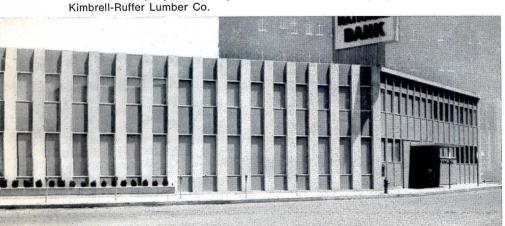
QUIET CONVENT AND CHAPEL, NEW YORK—St. Theresa's, Ossining. *Architect:* Ferrenz & Taylor. *General Contractor:* Margotta Construction Company, Inc. *Lone Star Masonry Dealer:* Hudson River Yards Corporation. "*Incor*" Concrete Block: Castle Blocks, Inc.





AIR-CONDITIONED SCHOOL, ALABAMA—Central High School, Phenix City. *Architect:* Ted Sztowitz, A.I.A. *Prime Contractor:* Williams Construction Company. *Masonry Cement:* The Raiford Coal Company.

MODERN BANK, MISSISSIPPI—First National Bank of Meridian. Architect: Bank Building and Equipment Co. General Contractor: B. L. Knost. Concrete: Ready Mix Concrete: Company. Block: Lyles Concrete Block Company. Masonry Cement: Kimbrell-Buffer Lumber Co.



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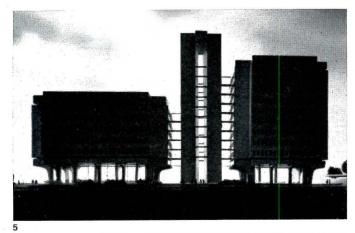
Lone Star Masonry Cement helps masons do just that. With only sand and water to add, they easily mix mortar to exactly the right consistency for good workmanship. They get uniform color, strength and workability in every bag. Lone Star Masonry has been used to assure quality results in the buildings shown here and in thousands of other buildings from coast to coast. For better craftsmanship, greater economy, and durable, uniform joints, specify Lone Star Masonry Cement.

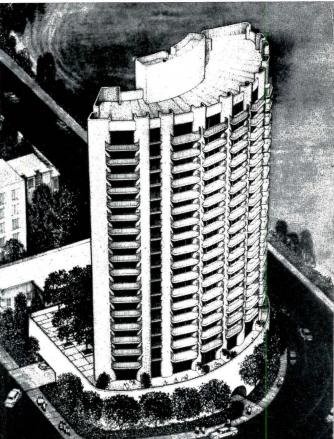
LONE STAR CEMENT CORPORATION New York 17, New York



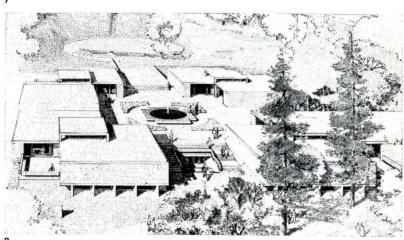
RETRAINING CENTER, WASHINGTON—Yakima County Juvenile Detention Home, Yakima. Architect: Cowan & Paddock, General Contractor: Hills Construction Company. Masonry Contractor: Burl Thomas.













5. DETROIT TRADE CENTER. Two office buildings, one of six stories and the other ten, share an elevator tower in this design by Smith, Hinchman & Grylls Associates, Inc. for the Detroit Trade Center. Developer Albert Nelson's idea is to devote one tower to automotive suppliers and the other to general wholesale offices, leaving the ground floors open for displays. Cost: \$8 million.

6. OAKLAND APARTMENTS. Curved surfaces everywhere will greet the 126 tenants in Eichler Homes' new Oakland, Calif. apartments.

Eichler's architect, Claude Oakland, started off with a curved site, then bent the walls out from the service shaft to give every apartment a balcony overlooking Lake Merritt. The concrete bearing walls will be slip-formed.

7. NEW HAVEN HOUSING. The Dixwell Avenue Renewal Area in New Haven is to have a new public square as its focal point, and the apartments above are to line one side of the square. Architect Gilbert Switzer designed them for Dr. Fred Smith, to house moderate-income families. There are to

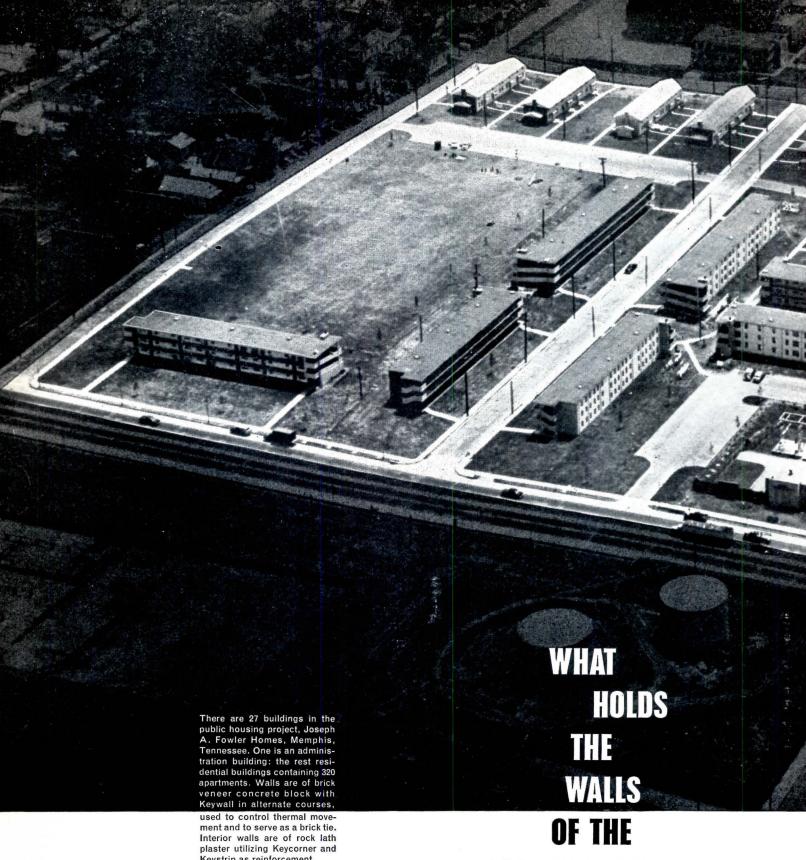
be 20 units of one and two bedrooms and three doctors' offices.

8. CALIFORNIA CIVIC CENTER. Winning a competition for the Los Gatos, Calif. Civic Center enabled Architects Charles D. Stickney and William Hull to set up their own practice in Berkeley with a definite commission. Their design, to be built in increments from the center out, is shown in its ultimate form. Municipal departments are grouped around an open court above the council chamber.

9. NEW YORK GARDEN. With the passing of Pennsylvania Station,

New Yorkers can look forward to the new Madison Square Garden that will replace it, considerably revamped from the first version (Forum, Sept. '61). The new garden is a ribbed drum with a cable-suspended roof 425 feet in diameter, to cost \$66 million. Entering through a separate 29-story office tower, armies of sports fans (up to 22,000 at a time) will cross an enclosed bridge and ride to their seats on banks of escalators in exterior glass cages. Architects: Charles Luckman Associates,

continued on page 40



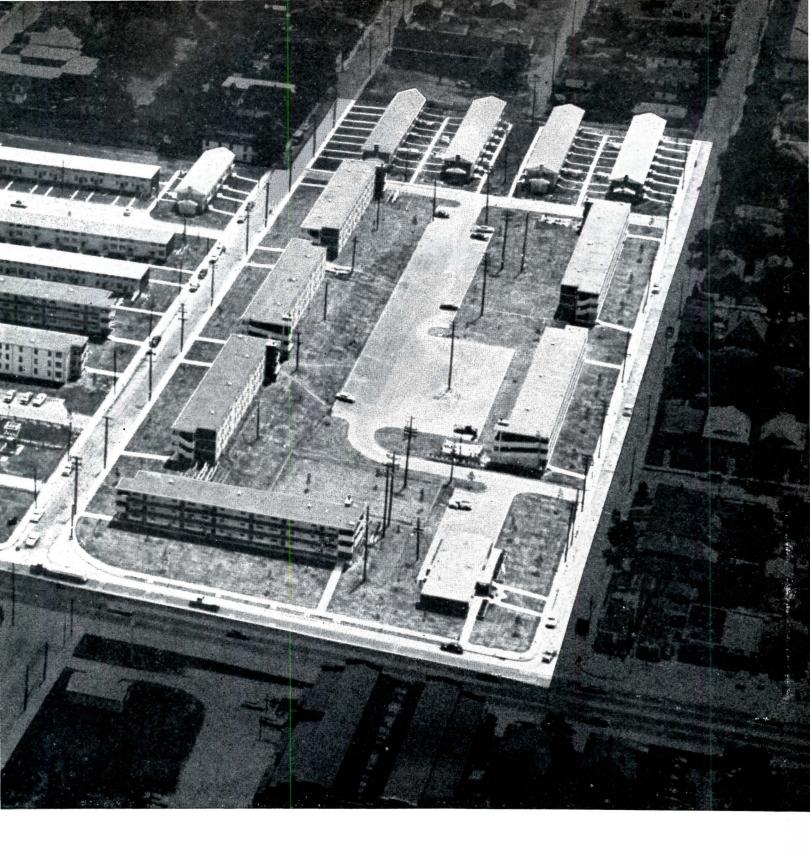
Keystrip as reinforcement.

ARCHITECT: Charles S. Peete & Associates, Memphis

GENERAL CONTRACTOR: McDonough Construction Co. of Atlanta, Georgia

MASONRY CONTRACTOR:
Memphis Masonry Company, Memphis
PLASTERING CONTRACTOR:
F. M. Gravier Plastering Co., Atlanta

JOSEPH A. FOWLER HOMES TOGETHER?



It's a coincidence you should ask about the advantages of Keywall. You can see from the tight pattern that it gives you more mortar locks with block (and/or brick).

you more mortar locks with block (and/or brick). Which in turn controls shrinkage and thermal movement better, resulting in greater crack resistance.

And because Keywall comes in rolls, masons lay Keywall in place more easily and quickly.

You might think that you would have to pay more for a masonry reinforcement with such advantages. Not so.



MORE LOCKS TO THE BLOCK with Keywall ... because of the tight-woven pattern, it is impossible for any one strand of Keywall to be subject to the strain of more than two square inches of a block's thermal movement or shrinkage. By dividing the strain into such small segments, Keywall provides greater crack resistance.

(what else?)

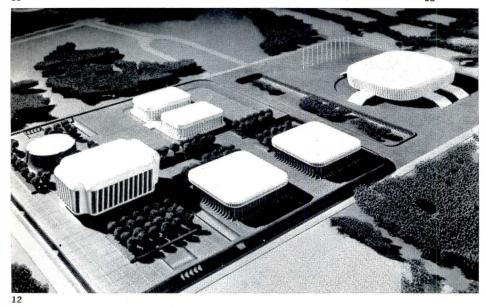
Keywall

PROJECTS











10. CALIFORNIA LIBRARY. The first new building in the Pomona, Calif. Civic Center will be this public library, part of Welton Becket & Associates' plan to orient public buildings around a square. Closely spaced columns on the lower level support the main floor, leaving it entirely open. Associate architect: Everett Tozier.

11. ILLINOIS HIGH SCHOOL. Three academic wings extend from an administrative-library hub (center) in the design of the New Trier Township High School, West Division, in Northfield, Ill.

Main entrances to all buildings are at the second floors; bridges on the third level connect wings to the main building. The Perkins & Will Partnership and The Architects Collaborative specified face brick and sand-blasted concrete for the exteriors.

12. NEW YORK ART CENTER. Among the newest plans for memorials to the late President (see News, May '64) is this huge \$45.5 million John F. Kennedy Educational, Civic and Cultural Center for Nassau County, N.Y. A 2,100-seat concert hall (left), a round

theater, twin museums of art and science, and a paired social center and library (foreground) will stand on a granite podium covering parking for 1,000 cars. Across a sunken garden is the biggest element in the complex, a 10,000-seat coliseum for sports events. Architects for the master plan are Welton Becket & Associates.

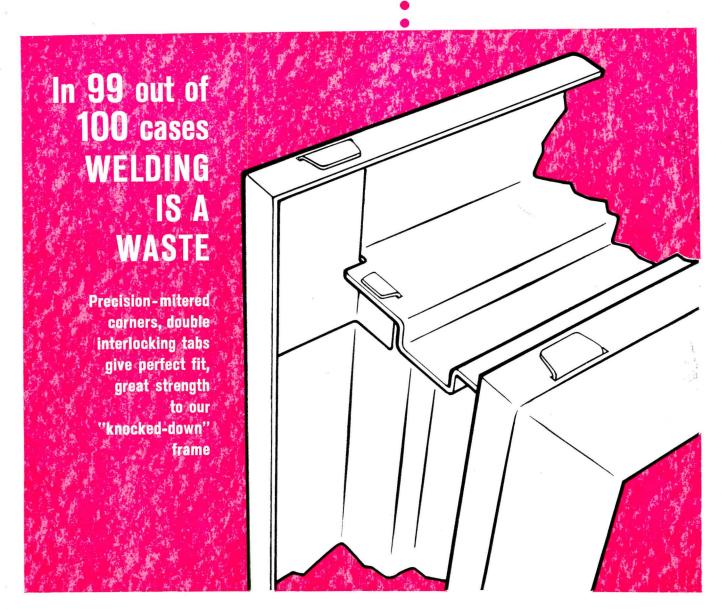
13. NEWARK CAMPUS. A new campus for Rutgers University will be built on a cleared site in downtown Newark, N. J. First up will be Ackerson Hall, a law center with an attached auditorium

(foreground); next will be a library centered on a superblock plaza (background), followed by science and humanities buildings. All are designed by Architects Kelly and Gruzen of similar precast wall panels.

14. PRINCETON OFFICES. New quarters for the Princeton University comptroller's office are to be of exposed concrete, the offices shaded by overhangs and bronzecolored glass. Air-conditioning risers fill the corner columns from the second to sixth floors. Architect: Edward L. Barnes.

steelcraft metal door frame idea 🖁 no.





Insist on Steelcraft machine-mitered door frames



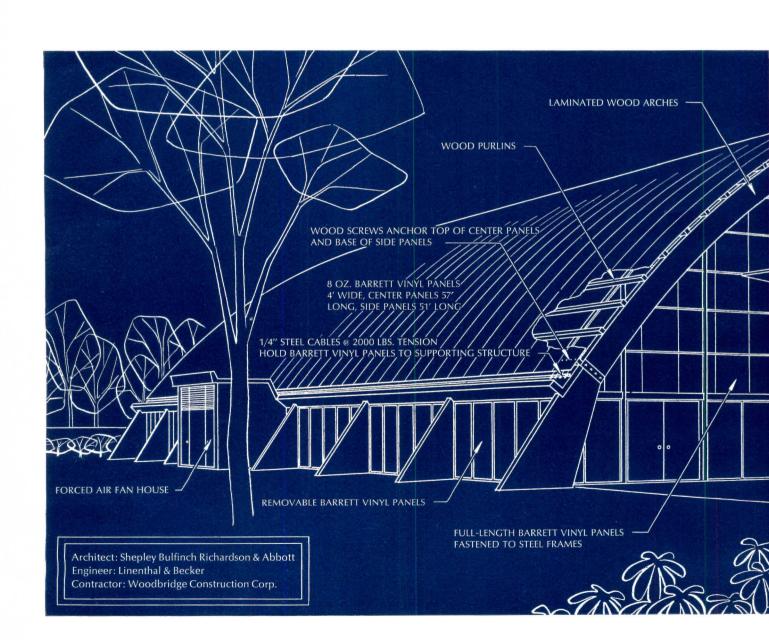
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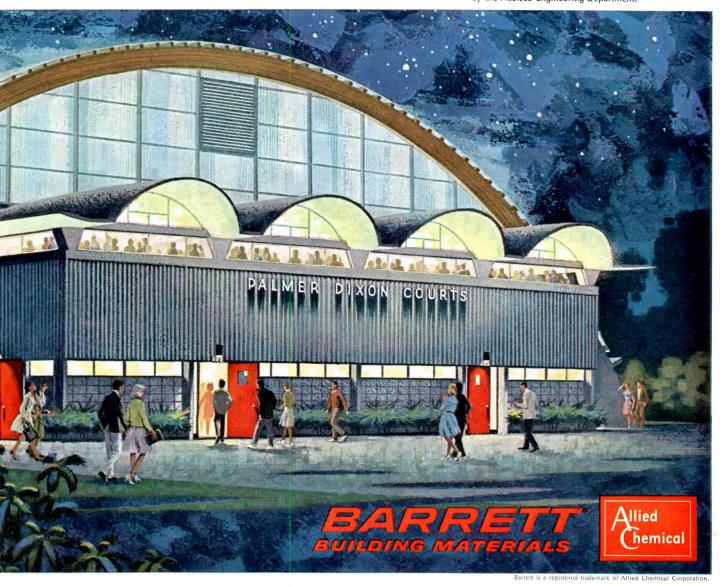
Summed up: Barrett vinyl panels offer architects complete design freedom because of their flexibility, strength and attractive colorability. Call your Barrett representative for full data on Barrett panels and on our complete line of quality building materials developed through chemistry. Barrett Division, Allied Chemical Corp., Dept. AF-6, 40 Rector St., N. Y., N. Y. 10006

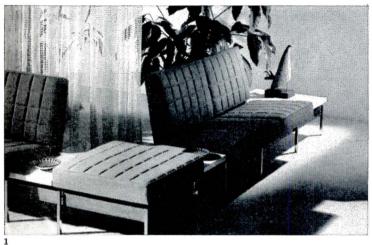


Resilient Barrett urethane insulation follows the contours of the "dish" roof on the Carson's O'Hare Airport restaurant in Chicago. Architect: C. F. Murphy Associates.



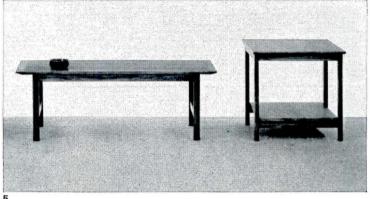
Winter and summer, Barrett built-up roofing products protect the new Nabisco Bakery in Fair Lawn, N. J. Designed by the Nabisco Engineering Department.







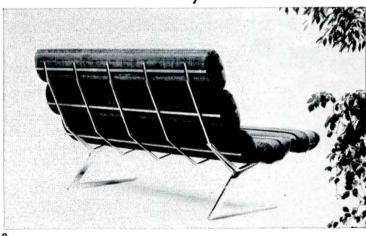












1. RECEPTION GROUP. Architect Charles Deaton's seating group for the Taylor Chair Co. of Bedford, Ohio, rests on a modular base whose dimensions account for the name of the collection—Tuba II. Hinged legs on the base units mesh with rings in rail extenders to build combinations of chairs, tables, and planters. The group shown costs about \$1,150 list, including upholstery.

2. DESK ACCESSORIES. Rosewood canisters complete the "look" of a Knoll Planning Unit* office. Cost of the set, which includes a "Unless otherwise noted, all firms are in New York City."

pencil holder, a paper clip or cigarette cup, and a lighter: \$30.

3. FINNISH SHELL. International Contract Furnishings Inc. imports

Contract Furnishings Inc. imports this slender swivel chair designed by Esko Pajamies and Toivo Korhonen. Net price: \$72.

4. BOAT-SHAPED DESK. This double-pedestal executive desk from John Stuart Inc. is all walnut except for legs and drawer pulls of chrome-plated aluminum. Length: 84 inches. Cost: \$759

5. WALNUT TABLES. Reception-room tables of oiled walnut match the new La Salle Street collection by

the Domore Chair Co. of Elkhart, Ind., and Marshall Field. Costs: \$134 for the magazine table; \$123.50 for the lamp table.

6. TOUGH FABRIC. Dux, Inc. of San Francisco has a new fabric, Atlas, which is a blend of three parts nylon to one of New England wool. Dux says it will resist flame, soil, and sun and even heal itself when pierced. Atlas is available only on Dux furniture.

7. UPHOLSTERED BUCKET. This deep bucket chair by Nicos Zographos for the Albano Contract Division swivels atop a stainless steel base

that snaps back to its original position when unoccupied. Costs: \$480 in fabric, \$510 in leather, not including the fabric.

8. TORSION SOFA. Designer Hugh Acton engineered this torsion sofa to adjust to each occupant. Not only does it adapt to different-sized people, but each section of the human back gets a separate cushion pivoting from a spine attached to the steel frame. The sofa is 72 inches long and costs \$800, not including upholstery, from Hugh Acton Co., Birmingham, Mich.

Chichester Senior High adds a fourth " ""

Top photo: The floor tile in the heavily trafficked lobby is Ruberoid Vinyl Asbestos 3001.

Center photo: Building exterior is in harmony with the wooded, rolling countryside.

Bottom photo: Sunlit corridors enhance the beauty of the floors in this 800 pupil school.



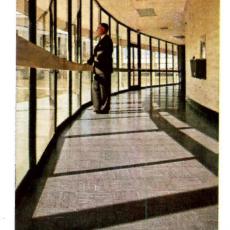
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School floors take a beating. That's why Ruberoid floor tile was used for the new Chichester, Pa. Senior High School, Boothwyn, Pa. Ruberoid Vinyl Asbestos has all the qualities you look for: easy installation and maintenance—beauty and harmony of design—longer life—resistance to indentations, scuffing, stains—moderate cost. Ask your Ruberoid representative to show you the wide range of patterns and colors available to complement every decorative theme and architectural style. See or call your Ruberoid sales representative, or write directly to the company.



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Meet the Jet Set

Eljer's new look in) siphon jet fixtures) Where maximum quietness is a necessity specify either the new Elvortex or Walvortex. Both feature quiet siphon jet action coupled with whirlpool flow that cleanses as it swirls and flushes... either model is particularly appropriate for hospitals, convalescent homes, hotels, motels or luxury apartments.





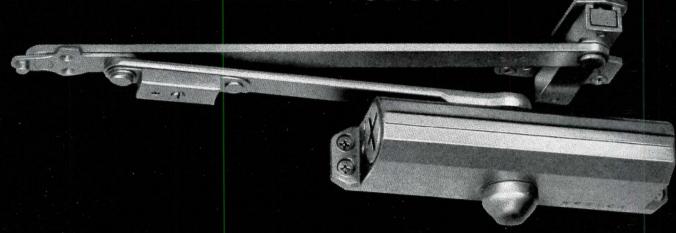
There are more (One is specifically designed for your next building project)

Eljer offers a wide choice of closets at a price that's practical, a shape that's functional, a style that's specially suitable for office workers, factory hands, apartment dwellers, prison inmates, store shoppers, auto tourists, school students, theater goers and diner-outers. Whatever your plans, be sure to get complete information about Eljer fixtures before proceeding. Discuss your requirements with your Eljer representative. The Murray Corporation of America, Eljer Plumbingware Division, Dept. AF, P.O. Box 836, Pittsburgh, Pa. 15230.



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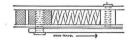
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COMPLETE COORDINATION OF ALL FIVE DOOR CONTROL FUNCTIONS

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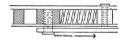
At almost full open, the arm engages a spring in the shock absorber mounted to the soffit plate. Opening momentum is absorbed.



(2) Stops the door



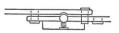
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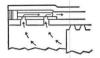
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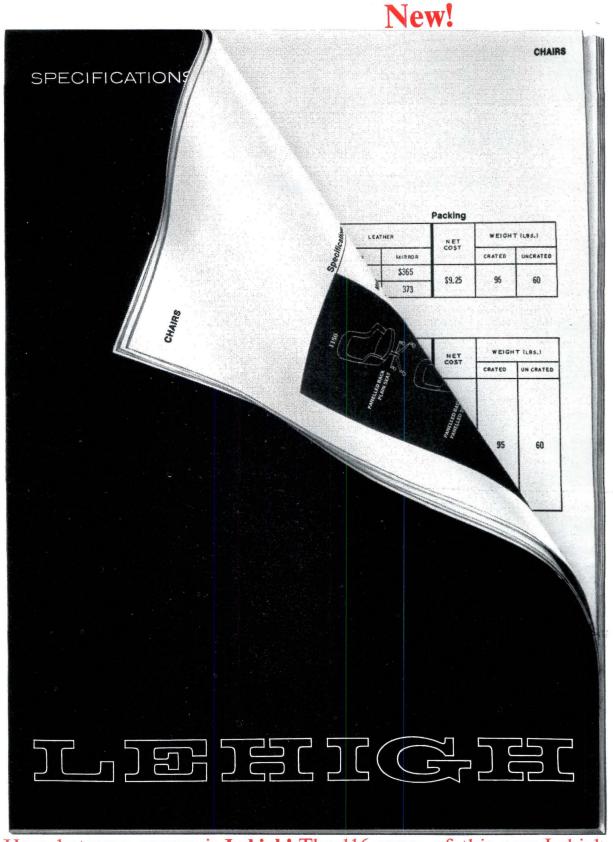
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 Seat swivels 45° left-right, slides foreaft for easy entry/exit. Amerex® plastic table top won't warp, split, dent or
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 (shown) and book boxes are optional.



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ANOTHER LOOK AT PSFS

Forum: Thanks for putting PSFS (May '64) in the good company of Sullivan's buildings of the 1890's and the Seagram building of 60 years later. Henry Wright and Professor Jordy did a very good job.

I did not know that it still was a mystery who had been the first to suggest a second floor location for the banking room. It was the architects, and the bankers resisted the idea until we convinced them that an escalator plus stairs plus two little elevators would be sure to bring them all the customers they desired.

WILLIAM LESCAZE
Architect

New York City

MAILER-SCULLY DEBATE

Forum: It strikes me as odd that Scully is a brittle and interesting writer whereas Mailer displays salient competence in architecture ("Mailer vs Scully," April '64). I vote for Mailer when he relates architecture to the emotional needs of human beings, as architecture today (at least in New York) seems to be for architects only. To me, a layman, it is just dull.

Scully attempts to win his point by comically ridiculing Mailer, and he is not convincing.

> R. J. CUSHMAN New York City

Forum: The great debate between Mailer and Scully reveals Mailer's sad comprehension of the total scope of modern architecture. While he rightly decries the insipid architecture being foisted upon many communities he should be severely scored for blaming much of it on LeCorbusier, Wright, and "all the particular giants of the Bauhaus." A realization that Gropius, Mies, Corbu, et al., are not responsible for what is built in their shadow may relieve Mailer from a severe case of tunnel vision.

Thus, while Mailer may be correct in assailing poor-mouth copies of the International Style, his attack on the parents of modern architecture is an invitation to take a turn on the perennial 'go-round that has each generation rejecting the work of the one previous merely because it is old.

School of Architecture
Brooklyn, N.Y. Pratt Institute

Forum: Norman Mailer judges modern architecture by the average of the buildings he sees, and it is difficult not to agree with much of his disapproval.

Vincent Scully judges modern architecture by the work of its best practitioners, and it is difficult not to share much of his enthusiasm.

Norman Mailer needs to be reminded of the state of contemporary writing if judged on the basis of all that is being written.

Architects need to be reminded that,

while books can mercifully remain unread, all buildings are seen.

Associate Professor of Architecture Troy, N.Y. Rensselaer Polytechnic Institute

Forum: Enjoyed every minute of the Mailer vs. Scully bout. This ringside observer awards one round each to Mailer for criticism and to Scully for writing.

A return match for the title should be a thriller.

New York City

ULRICH FRANZEN
Architect

■ The return match will be fought in iambic pentameter, and the winner will be given a crack at Cassius Clay.—ED.

HOUSING LEGISLATION

Forum: I must take exception to your comments about housing legislation introduced in Congress by Representative William Widnall of New Jersey (*Editorial*, April '64).

Rep. Widnall's bill (HR 9771) differs drastically, not slightly, in approach from the Administration's legislation and has as its end the curtailment, if not the elimination, of programs designed to eliminate and prevent urban slums and blight.

The proposed requirement of a favorable referendum prior to the undertaking of each and every project financed with loans and grants available under his proposed act is perhaps the most insidious part of his bill. However, there are other sections that would also severely restrict and limit urban renewal and low rent housing programs as we know them today.

RAYMOND A. ANDERSON
Executive Secretary
Evansville, Ind. Redevelopment Commission

CUBA'S ARCHITECTURE

Forum: I would like to offer some additional information vital to the understanding of Diana Rowntree's "The New Architecture of Castro's Cuba" (April '64).

It is a pity that "the speed, realism, and sense of infinite possibility" that still remain in Cuba's architecture could not have been appreciated when it was in full bloom five or six years ago. Then Cuba had a school of architecture at the University of Havana that fostered a truly new and advanced architecture. Cienfuegos and Porro were able to obtain their architectural training during these democratic years. Unfortunately for the Communists, they do not represent the best of their graduating class.

The skilled labor required to make any architectural effort possible, some of which still remains in Cuba, was painstakingly trained by many Cuban architects now being wasted in exile. It is this product of someone else's work that the Communists have stolen to call their own. The interplay of negative and positive forms, the use of reinforced concrete in ways that take advan-

tage of its plasticity, and the artistic expression of architecture through the use of exposed materials were introduced in Cuba and proficiently used by Cuban architects before the arrival of these plagiarists.

ALICIA P. MORA

Ft. Lauderdale, Fla. Exiled Cuban Architect

Forum: Diana Rowntree's article fails to take into consideration the fact that there are two Castro's Cuba(s)—the first one a Cuba of free men; the present Cuba, one of men walled in.

During the first year after Batista, men of deep conscience like Manolo Ray, then the minister of public works, produced abundantly in a free society. Since the take-over by Communism the result is a different one.

So, a half-truth becomes propaganda for the aggressors. Although FORUM obviously did not intend to get into matters of ideology, it has done so, and, by omission, badly.

CHESTER NAGEL

Cambridge, Mass.

Architect

YALE'S ARCHITECTURE SCHOOL

Forum: As a Yale architecture alumnus, I feel mingled pride and shame in relation to the new school (Editor's Note, April '64): pride in its beauty and force, and shame in its failure in program. It is a disturbingly artificial building because it has not solved fundamental problems of this kind of school. The concept of the jury room as a great showplace and theater set is archaic. The important elements-the work rooms for student architects, city planners, painters, sculptors, and graphic designers-are not fully developed. I have the feeling that few architects of magnanimity will be nurtured in this building. Rather, it is an environment for elegant young gentlemen in tweed jackets lounging in the orange-carpeted jury room delighting in the intricacies of their own conversation.

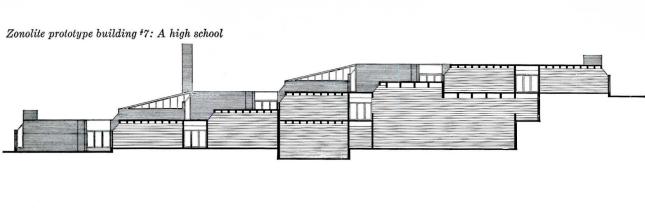
HERBERT L. BOGAN
Architect

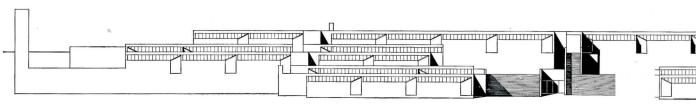
Boston

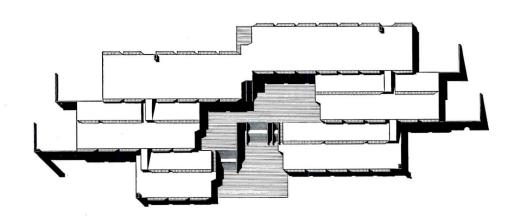
MORE ON ST. GALLEN

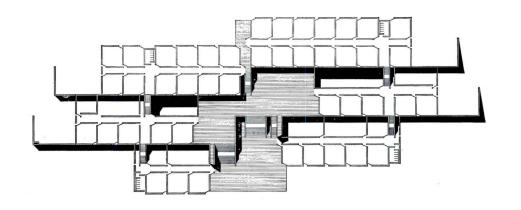
Forum: I am amazed that Romaldo Giurgola and Valerius L. Michelson, despite their recognition of the architecture of the St. Gallen School, are disturbed by its concrete technology (*Letters*, April '64). Mr. Giurgola speaks of the "skin" expression of the concrete and "the prefabrication of the parts of the building strongly recalling steel or timber technology." In the same vein, Mr. Michelson sees precision appropriate only to precast concrete, but holds that *le béton brut* implies a continuous structure of rough finish.

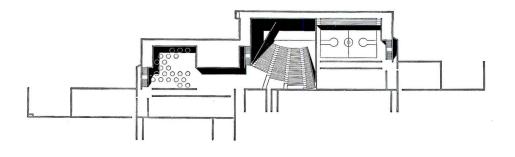
If both correspondents agree that the rectangular reinforced elements are structurally sound, then the architect as an artist has his right to emphasize those elements, especially when the matching lines correspond to the continued on page 60

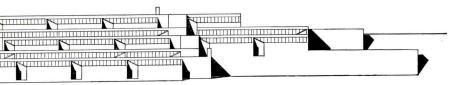












Martin Price designs a high school.

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comfortable. It is also quieter, because of the insulation's sound absorption characteristics.

Additional facts worth investigating are contained in our Bulletin MF-83. Write Dept. AF-64, Zonolite, 135 South LaSalle Street, Chicago 3, Illinois.

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Walls (above grade)	4" Face Brick Air Space 8" Concrete Block	4". Face Brick 2½" Fill 8" Concrete Block	495,000	187,000	120,000	45,000
Walls (below grade)	8" Poured Concrete		39,000	39,000	_	_
Roof	Roofing, 4" Concrete, 2" Insulation		600,000	600,000	345,000	345,000
Floor	4" Concrete on Grade		369,000	369,000	_	_
Glass: Solar & Transmission			650,000	650,000	1,225,000	1,225,000
Ventilation	23,000 Cubic Feet per Minute		2,389,000	2,389,000	810,000	810,000
Lights	340 Kilowatt		_	_	1,150,000	1,150,000
People	1750		_	_	780,000	780,000
Totals			4,542,000	4,234,000	4,430,500	4,355,000
% Savings with Masonry Fill $\frac{4,542,000 \cdot 4,234,000}{4,542,000} \times 100 = 6.8\%$			4,430,500-4,355,500 x 100= 1.7%			

NOTES: FUEL: No. 6 oil @ 7.5¢ per gallon. DEGREE DAYS: 4989 per year.
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pouring sequences of the concrete as at St. Gallen.

To mention vaguely the name of Le Corbusier in opposition to the St. Gallen team is not only unfair, but misleading. Le Corbusier uses concrete to express his cubist credo. He is far from submitting his design to the structural idiom of reinforced concrete. Look at his pilotis supporting huge drums; they must have sufficient reinforcing to respond to the law of gravity. You do not see it, but the slab becomes a capital in reverse. Perhaps you are surprised and delighted by the juxtaposition of a bulky "cube" above a slender column. If you like it, that is fine; but do not preach to those who look differently at concrete technology about the understanding of forms.

> ADAM M. KAAS Architect

ONE MAN'S DISASTER . . .

New Haven, Conn.

Forum: I note that the March editorial condoned the placement of a "New York is an architectural disaster" label on the Pan Am Building.

For my money, the greatest architectural civic improvements in New York City in the past three years have been the Chase Manhattan Plaza and the first five floors of the Pan Am building.

Why do all critics feel obliged to follow a party line condemning the Pan Am building? As I recall, the castigation of Mr. Wolfson was based on the thesis that too many people would be "officed" there with no provision for increased transportation or other facilities.

There is crowding, but it is not as bad as expected. The escalators and general circulation seem to have been so well planned that the project really works.

GEORGE COOPER RUDOLPH Architect

New York City

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Apparently architect readers appreciate the editors' efforts to win for them —and for architecture—the respect of those who commission, pay for, and occupy buildings.

FORUM's long-standing regard for the building client seems more pertinent each booming year—as more and more clients gain experience or become almost continuous participants in building. Their growing construction experience and their understanding of architecture bode well for the building of a better America.

> -From Publisher's Note: FORUM, June 1963

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N 1911 Arnold Bennett, one of that long procession of Englishmen who have toured Boston in the last three centuries, made a considered judgment: "What primarily differentiates Boston from all the other American cities is this: It is finished; I mean complete. Of the other cities, one would say: They will be. Boston is."

But in the ensuing half century Boston learned that no city can stand still on the steep slope of American history. Either there is an advance, or a slide. No matter how gracious, how pleasant, how evocative its charm, every American city in this century has had so many diverse and brutal forces acting upon it that it cannot survive merely by resisting. It must do its best to reshape and to rejuvenate itself to deal with these forces.

Boston discovered this frightening truth the hard way in the first half of the present century.

And so, in 1960, the year that the old seaport saw one youthful Bostonian win the presidency of the U.S., Boston swore in another youthful son, 39 year old John F. Collins as mayor. And then Boston got moving again. Having hit bottom economically with the departure of the textile mills and other large factories, the city turned to one of its oldest resources—its brains, the universities—and began to regard them as a major economic potential. The universities themselves had already begun ambitious building programs, but this was not enough. The leaders of the city proper—not only the politicians, but the professionals, the real estate fraternity and the businessmen—also picked up the legend of historic gentility which enveloped the city and threw it out. Boston, lover of the past, was pushed into a passionate affair with a new swain, urban renewal. When this happens to the cherished old aunt of American cities, it is time to devote an issue of Architectural Forum to it. Herewith we do.

BOSTON

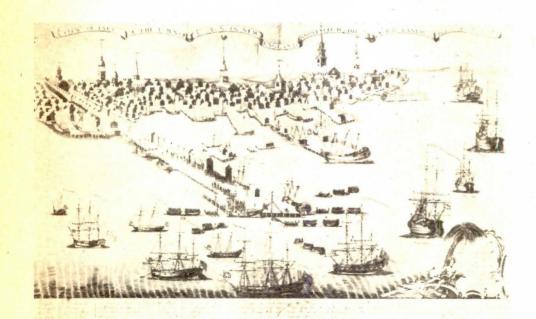
What have been the specifics of the Boston urban legend? First a negative view: "I avoid going there," a young professor in Cambridge, across the river, said recently. "It's too depressing. Even dinner at the Ritz, or Locke-Ober's, isn't worth it. Not even living on beautiful old Beacon Hill. No. The city is just a great sullen moribund beast, grazing in a grassless meadow. It's a slow strangler. It's the city of Curley, not Emerson."

But Edward Weeks, editor of Atlantic Monthly, does choose to live in Beacon Hill's reserved elegance, and he uses an ancient office across the Common: "I walk to work of a morning through the loveliest garden in North America. . . . Within 30 miles is the sea, the deep woods, and the open country; wild deer, the striper, trout, and wild ducks; the Gloucester wharves, the Marblehead fleet, Chestnut Street in Salem, Walden Pond, Hugo's oysters. Ipswich clams . . . [and within Boston] is the best orchestra in the world, the best hospital . . . the historic hospitality of Beacon Hill and the leadership of great universities . . ."

The melancholy fact is that the cost of such culture is terribly high—high enough to have paralyzed other kinds of progress. For one example, a total of

42 per cent of all of Boston's real estate is tax exempt, owned by churches, colleges, hospitals, etc. The real estate tax rate in Boston is also far and away the highest of any major city in the nation. (In 1960, the year of Mayor Collins' inauguration, it hit \$101.20 per thousand of assessed valuation.) Not only that, but assessments historically have been unsound-many of them well above market value. Other reasons for Boston's gradual decline from its peak of prosperity in the last century are related on subsequent pages, but the basic one was lack of a reason or an ability to build new buildings. True, some urban renewal was begun in Boston in the 1950's by a previous mayor, but it displayed the same shallow opportunism common to many cities' earlier essays into renewal: basically it was a real estate speculation—which did not help the economic fever Boston was running, but merely added physical wounds. What Mayor Collins in 1960 decided to do for his old city was to attempt to use urban renewal to bring Boston back to economic health.

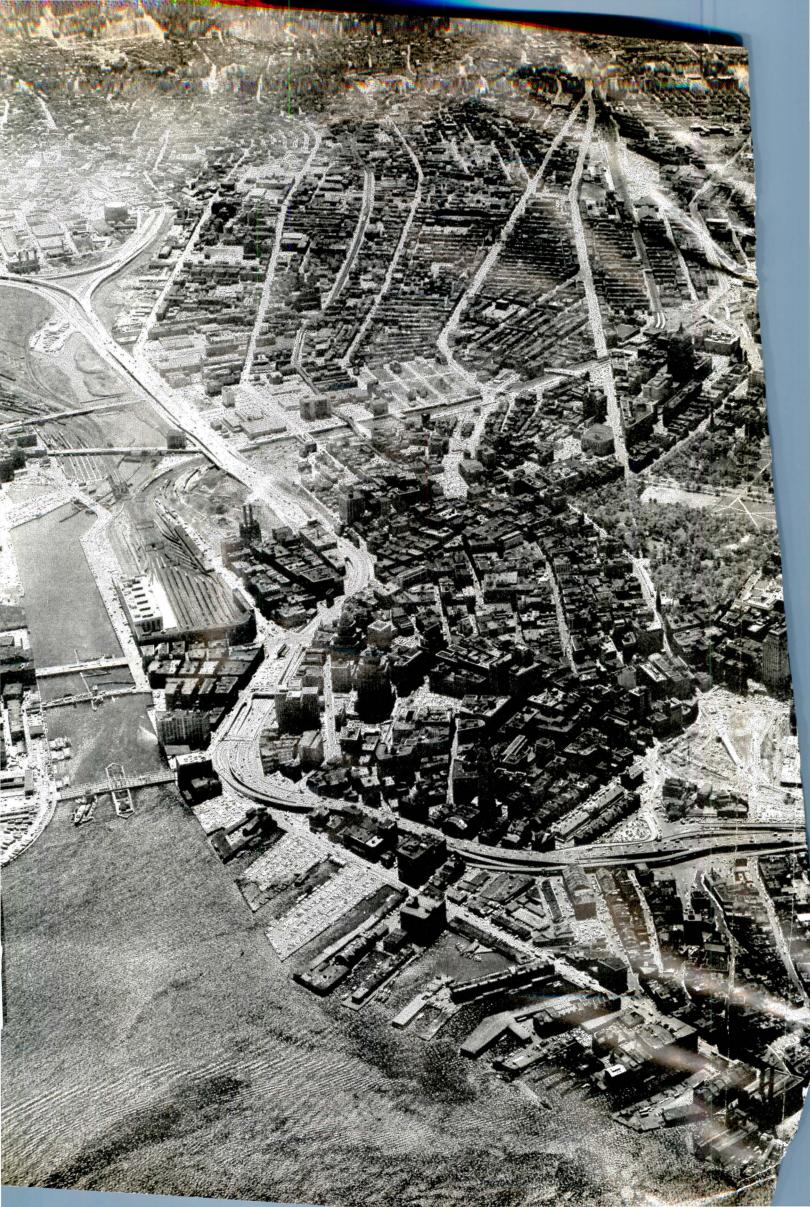
The process has not been easy—nor is there any guarantee it will work in Boston. There is still considerable resistance within the city itself. But the vision and vigor—and inventiveness—with which Collins and his Development Administrator Edward J. Logue, have begun, have already turned Boston into the busiest renewal city for its size in the country. The amount of city, state, and federal money which presently is committed just to the purchase and clearing of sites for official renewal areas within the city of Boston is about \$180 million, and very little of this considerable sum represents actual construction dollars. It in effect is seed money. It is significant that Boston, a city of people whose shrewdness and investing acumen is widely renowned, is getting a very good bargain by playing the federal participation in urban renewal to the hilt. The Commonwealth of Massachusetts is one of those states which lends assistance too, which ends up making Boston's own contribution to this massive renewal program only about \$30 million. There are lessons to be learned here. The title Collins and Logue have given their program is Boston -City of Ideas. The ideas are there, and in this issue we report their impact on old Boston.



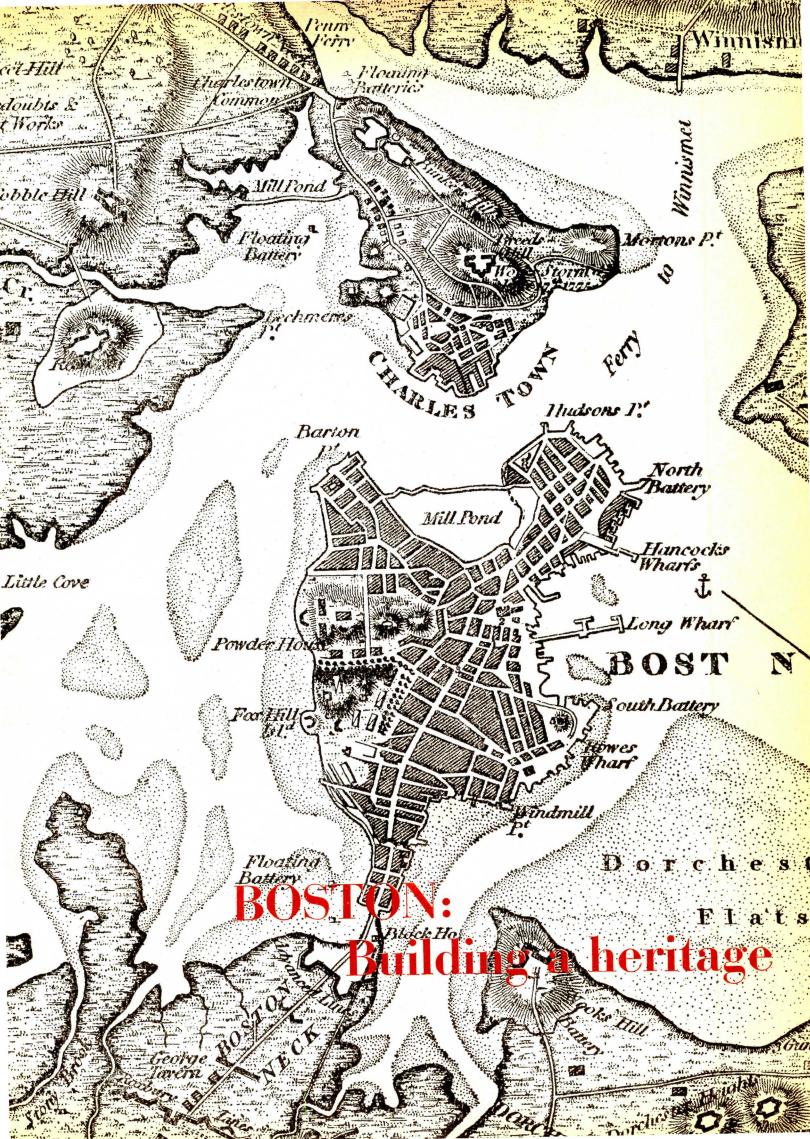


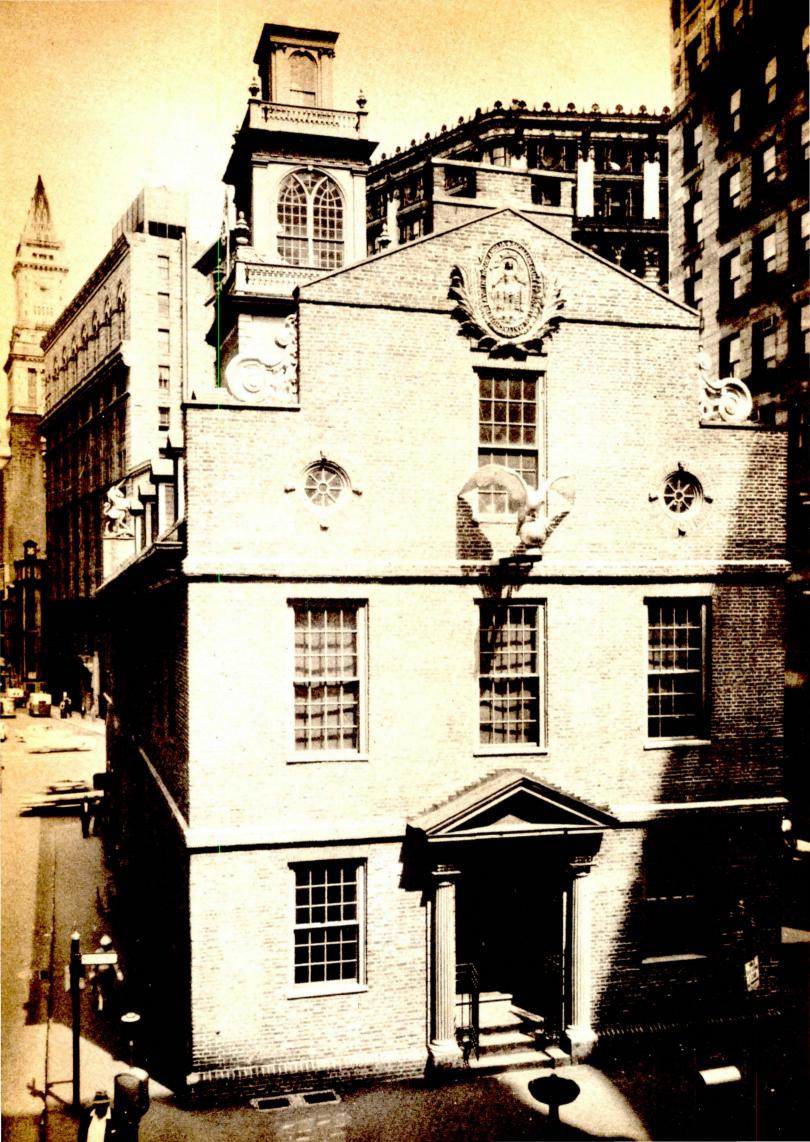
Boston's map is acquiring some new designations, as well as a good many new landmarks. Here are some of both new and old in the compact old city and its inner outskirts.

- 1. State House
- 2. The Common
- 3. Public Garden
- 4. Beacon Hill
- 5. Government Center
- 6. West End
- 7. North End
- 8. Waterfront
- 9. Central Artery 10. Financial District
- 11. Downtown
- 12. Turnpike Extension
- 13. Southeast Expressway
- 14. Columbus Ave.
- 15. South End
- 16. Prudential Center
- 17. Back Bay 18. Boston University
- 19. Harvard Bridge
- 20. MIT
- 21. Charles River 22. Longfellow Bridge
- 23. Cambridge
- 24. Charlestown

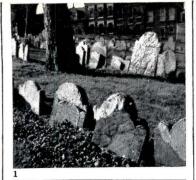




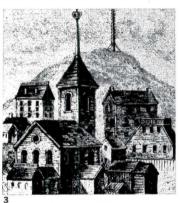


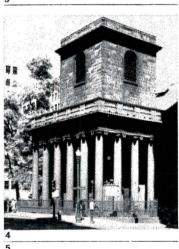


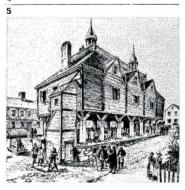
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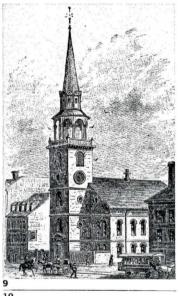














Boston was actually founded by mistake: the early 17th century settlers mistook the Charles River for a great inland route—without investigating its measly upper reaches. However, once they had settled on the Charles, they stayed.

This stubbornness, shown early, even in the face of such inflexible aspects of nature as geography, was to take the Bostonians a long way up in the world through the next 300 years. There were few natural resources on the hard coast of Massachusetts, so the Bostonians learned to depend upon their most valuable personal resource: Yankee shrewdness.

Architecturally, Boston's first century is best recalled in the inscriptions found on old tombstones. Right next to the present City Hall (designed in the Empire manner about the time of the Civil War) is a pleasant little grove of those lean, beautiful, old gravestones, dated back as far as 1630. In 1689, Kings Chapel was built beside this graveyard, and it survives as remodeled later. In addition to the Boston Common, these old graveyards continue to exist as a minor park system in the central city.

The Common itself, North America's first city park—and still one of its very best—goes back to 1634, when 45 acres were bought and set aside "for common use." It was used for grazing cattle, and for drilling the militia—and, in the latter part of the 17th century (when the British under Gage were besieged in Boston by those militiamen) as an enemy encampment. Under the Common today is a large parking garage.

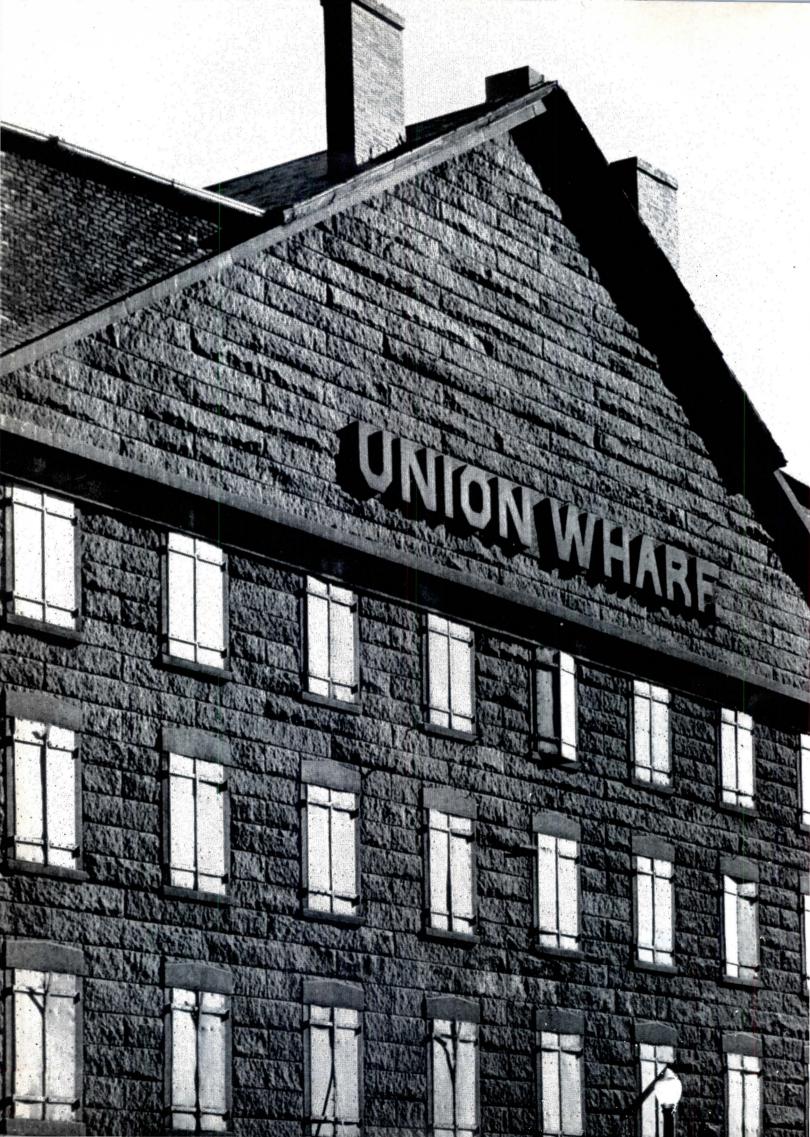
Very few buildings survive from early Colonial times because wooden Boston was subject to periodic fires—the first instigators of urban renewal. By 1711, eight major conflagrations had swept the little city.

One of the few frame houses existing is one in which Paul Revere lived for about ten years—but he didn't own it until the house was almost 100 years old. The structure that first occupied its site was a parish house inhabited by no less than Increase Mather, Cotton's father, but it probably burned in 1676. Another large house replaced it, and Revere bought that one in 1770. The famous silversmith needed space; he was a mighty father as well, with 16 children.

Another of the elder landmarks polished and preserved in the Bos-

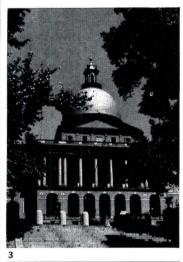
Old State House (left), typically Boston brick, was built in 1711, and is now used as the headquarters of the Bostonian Society. At right, from the top: 1. Old Granary Burying Ground; 2. Judge Sam Sewall, dispenser of early justice; 3. First King's Chapel, 1688, with the beacon pole on Beacon Hill in the background; 4. The slightly newer King's Chapel, begun in 1749; 5. Boston's first Town-house, or State House, built in 1657, destroyed in 1711; 6. House, built in 1681, owned for a period by Paul Revere; 7. Revere himself, on his famous ride; 8. Faneuil Hall, as originally built in 1789 (later Charles Bulfinch enlarged it); 9. Old South Meetinghouse at the intersection of Washington and Milk Streets, built in 1729; 10. Clergyman Cotton Mather, another severe Bostonian.

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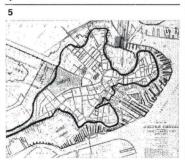




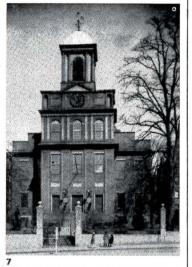
















ton downtown is the Old State House (page 70). However, the one now standing (and here shown) was built in 1712. Its predecessor, the Old Old State House, was of timber construction, and despite "No Smoking" signs posted as early as 1659, it too burned down in 1711. A drawing of the original is shown on page 71, complete with a town official wielding a cat over a sinner's bared back.

In an essay entitled Crime and Punishment, written by John Dunton in 1686, some idea of the sternness of the early Bostonians, in theory at least, is to be learned: "Their laws for Reformation of Manners are very severe, yet but little regarded by the People, so at least to make 'em better or cause 'em to mend their manners. For being drunk, they either whip or impose a Fine of Five shillings . . . For Cursing and Swearing they bore through the Tongue with a hot iron. For kissing a woman in the Street, though but in way of Civil Salute, Whipping or a Fine . . . For adultery they are put to Death . . ."

Physically, Boston began almost as an island, a steep one, connected to the mainland by a thin strand of land. There were three hills named Pemberton, Beacon and Mt. Vernon, the highest about 168 feet above sea level. Walter Muir Whitehill, Boston's famous historian (and Director of The Athenaeum, a distinguished old Boston institution almost impenetrable to outsiders) notes that one of these hills had, for some reason or other, the rather unpuritanical early name of Mount Whoredom.

The hills have mainly disappeared, however, except for what is left of Beacon Hill. Bostonians began early to enlarge their waterfront by dumping the hills endlessly into the harbor as fill. Today, 60 per cent of downtown Boston is man-made land. The first filling took place in the late 17th century.

Among the most significant buildings of the early American nation was Faneuil Hall, known as "The Cradle of Liberty" because of the meetings it contained of angry colonists who became revolutionaries. There were enough of these pesky people so that in 1761 they had to move over to the larger Old South Meeting House, where the Boston Tea Party was planned. Both these buildings still stand in Boston. Faneuil Hall—

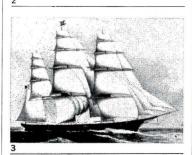
Left: one of the old granite warehouses on the waterfront, as stony as the famous Boston traders who used them. Right: 1. Fan light over Beacon Hill doorway; 2. Samuel Adams; 3. The State House, by Charles Bulfinch, built 1795-1798; 4. St. Stephen's Roman Catholic Church (formerly New North Church), the only Bulfinch church still standing, built in 1805; 5. Map showing the filling in of Boston harbor and the Charles Riverheavy line defines the original land area of the peninsula; 6. Park Street Church, 1809, designed by Peter Banner; 7. Old West Church, 1806, designed by Asher Benjamin; 8. John Hancock; 9. Beacon Street houses.

Photos: 1, 9, & opp. Clemens Kalischer 2. Brown Bros. 3. Charles Phelps Cushing 4. From The Book of Boston, the Federal Period by Marjorie Drake Ross. ©1961, Hastings House 6. Bettmann Archive 7. From Boston Landmarks by M.A. De Wolfe Howe, ©1946, Hastings House 8. Courtesy Museum of Fine Arts, Boston.























enlarged later by the great Charles Bulfinch—is still the scene of community meetings, including public meetings sponsored by the Boston Redevelopment Authority. Administrator Ed Logue does not wear a powdered wig when addressing these gatherings, but his hair has been going just a little gray at the temples in his Boston years.

Bulfinch was born in 1763 of aristocratic lineage, attended the Boston Latin School, graduated from Harvard College, and travelled in Europe for two subsequent years. His period of architecture is known as "early Federal" and his commissions ranged from a monument on top of Beacon Hill to such remodelings as Faneuil (pronounced Funnel by proper Bostonians) plus the design, from scratch, of warehouses, wharves, stores, numerous elegant houses-and more significantly, groupings of houses and street layouts-and, of course, of the State House, under whose golden dome many indictments are still being invited by various statesmen. In 1818 Bulfinch, bankrupt, departed for Washington to apply his great talents there.

Another architectural practitioner who left his mark on the city (and, unlike Bulfinch, prospered as a result) was Asher Benjamin. He did not arrive in Boston until 1803, having first worked in other parts of New England. His outstanding, surviving monuments are West Church and the Charles Street Meetinghouse. But Benjamin's widest influence was through his publications, the style books which spawned so many beautiful Federal churches throughout New England's countryside. Many think the most beautiful of them all is, however, the Park Street Church, built in 1809, designed by an English architect, Peter Banner.

Through the centuries Boston has been home to numerous notable American architects, and her great schools-Harvard and MIT graduate about a hundred architects and planners onto the national scene each year. However, the most significant designer in the true Boston tradition may have been Donald McKay, genius of the clipper ships. McKay's clipper ships were objects of astonishment all around the world -fantastically graceful creations, marvelously fast. His most famous, Flying Cloud, once logged 374 miles in a single day. In the period preceding the Civil War, Bos-

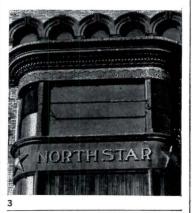
Left: old Commercial Building on Milk Street, exhibiting the pomp of a prosperous Boston. Right: 1. Bunker Hill Monument - Solomon Willard designed it; Lafayette laid the cornerstone in 1824; and Daniel Webster gave the oration; 2. The first air view of Boston, taken from a balloon in 1860; 3. One of Donald McKay's great clipper ships, The Flying Cloud; 4. Iron work on Beacon Street; 5. Louisa May Alcott, author of Little Women; 6. Architect H. H. Richardson, and 7. his Trinity Church; 8. H. D. Thoreau; 9. The Christian Science Mother Church, begun in 1895, enlarged in 1904; 10. Abolitionist, writer, clergyman, soldier, bicyclist Thomas Wentworth Higginson and his daughter Margaret.

Photos: 1, 4 & opp. Clemens Kalischer 2. William Black 3. Bettmann Archive 5, 6. Culver 7. Ewing Galloway 8. Brown Bros. 9. Christian Science Board of Directors.

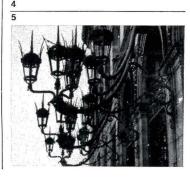




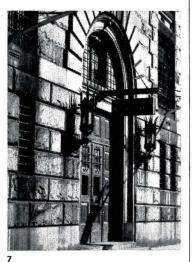




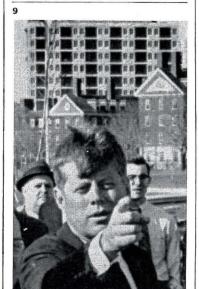












tonians, steering these ships, were unbeaten on the trading routes to the Orient. Even the first steamships could not keep up.

The man who may be the most famous of all past Boston architects, Henry Hobson Richardson, in his brief but mighty career, contradicted the gentility of form and puritanical fastidiousness of finish of the Federal architects. The bearded Richardson's most notable surviving work in Boston itself is Trinity Church, on Copley Square, which Walter Whitehill has described as a blend of "the Romanesque masses of Auvergne . . . with the Torre del Gallo of Salamanca and the portal of St. Giles,"

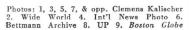
One of the saddest architectural losses suffered in recent years by Bostonians is the old S. S. Pierce building, a burly old pile by S. E. Tobey which once abetted Trinity Church's mood, standing across the square from it. But Pierce, the famous old Boston purveyor of provisions, decided finally to move to more modern surroundings and the mighty old structure was demolished. It is now a parking lot, but the architectural cavity still aches. Nearby is McKim, Mead & White's Boston Library which Whitehill regards as the city's finest structure. It is in no danger of destruction; in fact, Architect Philip C. Johnson is to add a new wing.

Today, the Back Bay area is the newest, as well as the oldestlooking part of Boston. The old buildings maintain their spell, but there has been an influx of smart specialty shops into the old section (Bonwit Teller is housed smashingly in what was once the Boston Museum of Natural History); and these shops give the area something of the air of upper Fifth Avenue in New York. Big insurance companies have also been gravitating to this side of the Common recently, creating rivalry with the older downtown and financial districts on the far side of the Common. With the completion of the mighty Pru complex on the old Boston & Albany trackyard in the Back Bay, the old downtown may appear very passé

What downtown does retain, however, is the best location on the subway system, which, at that, is another valuable old Boston antique. It was the nation's first subway, built about the turn of the twentieth century. Last year, one

Left: detail of an elderly fire house, when Boston fire houses followed Ruskin Romanesque. Right:

1. Window overlooking Commonwealth Avenue; 2. Christian Scientist Mary Baker Eddy; 3. The North Market Building; 4. Justice Louis D. Brandeis; 5. McKim, Mead & White's Boston Public Library, built 1888-95; 6. Suffragette Susan B. Anthony; 7. The Suffolk County Jail; 8. Lawyer Joseph N. Welch; 9. President John F. Kennedy picking the site of the Kennedy Memorial Library.



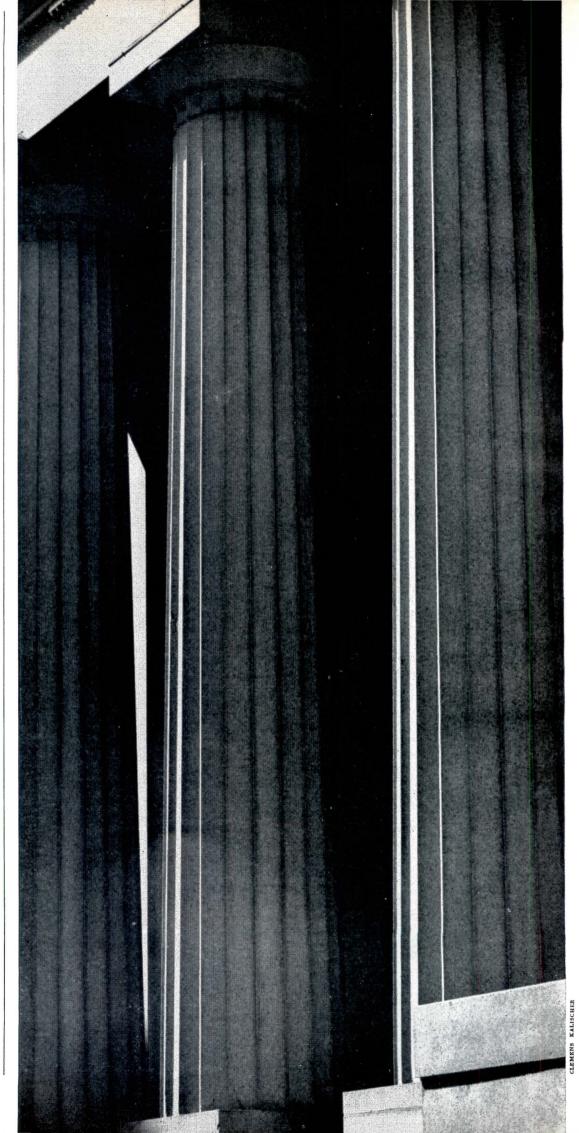
of its kiosks was declared by the Congress of the U.S. to be a national historic monument.

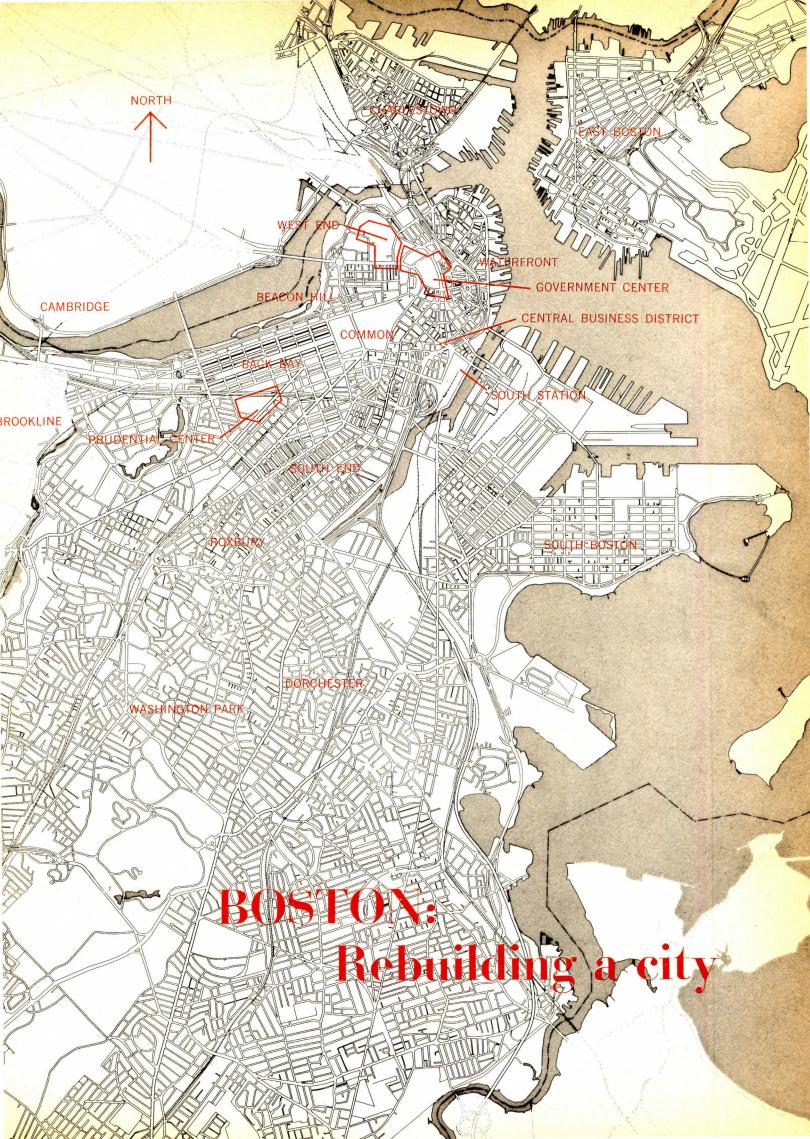
The defenders of the past in Boston know where the next battle line will be. It will be Commonwealth Avenue, that avenue without peer which begins at the public gardens and runs back into history. Like the rest of the Back Bay, it was once mere marshland; but in 1859 filling operations were begun on a noble scale. Particularly noble was the stipulation that Commonwealth should be 200 feet wide (with a park running down its center) and that all buildings along it should be set back another 20 fect from their front property lines. If ever the effect of intelligent and ambitious planning was proved, it was in the conception and execution of Commonwealth, which became a great residential street of substantial brick houses.

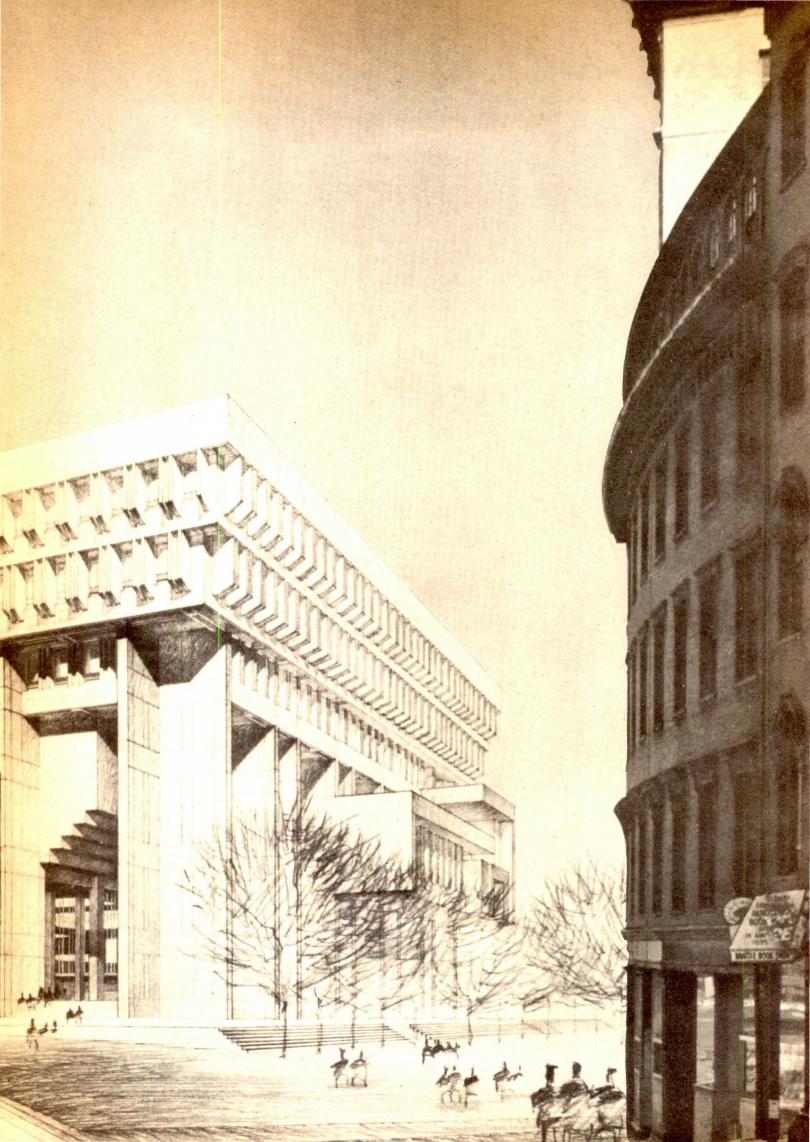
Unfortunately, many of the houses lining Commonwealth have recently gone off the Boston tax rolls-some of them becoming dormitories for Boston University, still others homes of various cultural groups-and Mayor Collins has been grumbling ominously about this situation. The mayor would like to see a few tall taxpaying new buildings among the brick houses on Commonwealth. But how could they be held to just a few? And look what became of Park Avenue in New York City.

Practicality is deep in the trading history of Boston, but so successful were the 18th and 19th century Boston traders that they could afford great gestures of civilization such as Commonwealth. Under the guise of conservatism and tradition-or, perhaps, because of the self-assurance that comes with the latter-Bostonians have often delighted in doing the bold and unexpected. The late President John F. Kennedy left a note of directions to the architects keying the design of a building which will soon join the historical ranks of Boston architecture-the John F. Kennedy Memorial Library-and his thought continued this same tradition. The words he used were ancient, a paraphrase by Thucydides of Pericles' words to the Athenians: "We do not imitate, for we are an example to the others." The accent was Bostonian. WALTER McQUADE

Columns of the Custom House, designed in 1838 by Ammi B. Young.







THE NEW BOSTON: MEN, PROJECTS AND AN END TO DESPAIR

Back in 1836, abolitionist William Ellery Channing said, "We are a city too much given to croaking. I have been told that we were on the brink of ruin ever since I knew the place."

Channing can rest easier, for the men who are building the New Boston are certainly not showing signs of despair. The days of croaking are over, and largely because of the energies and talents of the two men shown at right and the others who

are portrayed on the following pages.

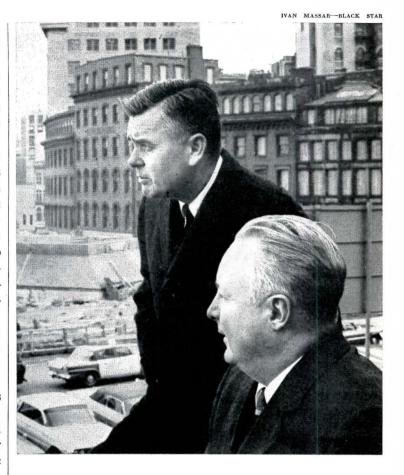
Mayor John F. Collins (at bottom of picture, right) and Development Administrator Ed Logue are the prime movers in the creation of the New Boston. They are shown near the site of the \$20 million City Hall (left) which will soon be the main attraction in the \$200 million Government Center. Collins has been a revelation in the city of James M. Curley. In bringing responsible and honest municipal government to scandal-scarred Boston, he has so far managed to inspire a surprising amount of confidence within the Yankee business community. The latter, in fact, has even been enticed into the renewal of the waterfront and the central business district.

Collins and Logue are determined to haul the whole city out of its century-long slough. They are doing it with considerable aid from Uncle Sam and even the state, which is usually reluctant to do more than keep its foot on the city's neck. And they are accomplishing the job with an élan that almost matches the dynamism of that other Revolution that shook the old city nearly two centuries ago. There are still plenty of unanswered questions about Logue's brand of renewal (e.g., the need for low-cost housing and the feasibility of rehabilitation) but the drive for the answers is at least being pressed.

Collins' most remarkable achievement so far has been to reduce the infamous Boston property tax. Without this, the New Boston could never have got away from the starting gate. In four years, Collins made good on the sort of campaign promise that is conveniently forgotten by most politicians: he chopped the tax from \$101 to \$96 per \$1,000 of assessed valuation. Collins also threw his full weight into the fight to get the Prudential Center built, and moved quickly after his election in 1959 to insure the participation of both the federal and state governments in the Government Center.

Although Collins and Logue get top billing in this drama, they are far from being the whole show. The other personalities described on the following pages are all vital to the New Boston not only for the functions they perform (e.g., Councilman Foley and Chamber of Commerce President McCormack) but also for the individual style each brings to his particular mission. Richard Wood, Frederick Stahl, and the talented young architects of the "Cambridge Seven" typify the sort of vigorous proficiency in building that greatly profits the city these days. In Monsignor Francis J. Lally, an Irish Catholic priest, Charles Coolidge, a Brahmin lawyer, and Joseph S. Slavet, an energetic intellectual and reformer, there is a sturdy cross-section of the diverse forces which make Boston such a highly seasoned experience. Gerald Blakeley, a vigorous businessman who has helped pull the city apart (with the development of Route 128 as the region's new manufacturing center), now is helping to get it back together.

If old Boston has plenty of new drama and excitement today, it is because of men like these.



The first team: COLLINS AND LOGUE

In less than four years, Mayor John F. Collins and Development Administrator Edward J. Logue have just about turned Boston upside down in their efforts to rebuild the place. Over one-third of the city's land area is already deeply involved in the renewal process, and new projects are on the boards. More than half the population of Boston is affected by these plans. And since Logue arrived on the Boston scene, the federal government's renewal commitment to the city has gone from \$13 million to \$120 million.

Such an accomplishment would do credit to any city. In Boston, it is nothing short of miraculous: for at least half a century, Boston has had a fantastic record of civic scandal. Sheriffs have run jails like resort hotels (at fancy rates), and mayors have run the city from their jail cells.

The image of Boston as a den of iniquity was not the only cloud John F. Collins had to dispel when he became mayor in 1960. The city's tax rate was another blot on the city's record: the rate had boomed to over \$100 per \$1,000 and was threatening to rise even higher. At the same time, the city had lost more than \$500 million in asssessments through deterioration of properties and through land being taken off the tax roll.

Why anyone in his right mind would want to be the mayor of such a city seems a mystery. But Collins not only loves Boston; he also loves the idea of running it. He is ambitious and honest—a rare combination, especially in Boston. If there was ever the right man for the right job at the right time it was Collins in 1959.

Yet Collins' victory that year was a startling upset. His opponent, State Senate leader John E. Powers, had the support of the Republican press, most of the local businessmen and politicoes, and of the Kennedy family. At a \$100 a plate fund-raising dinner for Powers' campaign, His Eminence, the Archbishop of Boston,

sat next to the favored candidate. Meanwhile Collins, for his part, played the role of the underdog, denounced his opponent as a boss, and cast himself in the role of a David battling Goliath. It seemed to no avail, for Powers whipped Collins in the primary.

On election day, however, it was Collins. He had gained strong support from Boston's women. (Collins' wife became well-known when she ran his winning campaign for the City Council in 1955, after her husband and three of their children were stricken by polio.) But he had obviously also struck a responsive chord with his campaign against bossism. An unexpected boost also came four days before the election via a raid on an East Boston bookie establishment, which had a large "Powers for Mayor" banner in its window.

Next, Collins reached out to New Haven for the man he wanted to guide Boston's renewal effort—Ed Logue. As Mayor Richard E. Lee's Development Administrator (and, in effect, deputy mayor), Logue had proved an ingenious and energetic expert. As Lee says, "Logue is talented and enormously imaginative—and he has great courage."

Logue also had a reputation for being something of a bull in the municipal china shop. During his New Haven days, Mayor Lee was kept pretty busy sweeping up the political breakage left over from Logue triumphs, and some of Collins' advisers were not so sure that Collins would be as helpful to Logue as Lee had been. However, Collins was willing to take the chance. Logue, for his part, ran true to form from the outset when he demanded, and got, the most massively centralized planning and renewal powers that any large city has ever voted to one man (other than New York's Robert Moses).

When Logue arrived in Boston in early 1960, he came as a consultant. This was not only because the city had an incumbent who would not allow himself to be removed, or that Logue still had a job in New Haven. It was also because Logue insisted that he should be at the mercy of the



The politician and the expert outline some urban renewal strategy.

mayor at any time. Even after his consulting days were over and he was asked to take the job full-time, he told Collins he would only come on a 90-day trial basis—if either wanted out after that time, all bets were off.

Today, Logue says of this peculiar agreement, "No one understood how I could take chances with a \$30,000 job, but I felt that if this were going to be my show, it had to be pretty much my way."

Logue's way has been dramatic from the start and, in most cases, effective. In his nine months of consulting, Logue spent most of each week in Boston and did his New Haven work on weekends. While in Boston, he lived much of the time at the Tavern Club, and toured the city by bus, trolley and on foot. "I scoured just about every inch of the city—and came to love it. But it was also easy to see that the problems were tremendous."

Out of his investigations, Logue drafted a \$90 million development program. When Collins saw it, he said, "Why it's so simple I could have done it myself." The program's obviousness is one of the things that made it palatable to the City Council—the seat of most of Logue's opposition. (A

problem is that many would-be mayors emerge out of the Council, and so the incumbent is always subject to partisan fire. Collins lets Logue draw most of this fire on renewal issues.) The program emphasized rehabilitation throughout the city, including the downtown area, Back Bay and seven Inner City neighborhoods.

When Logue had got the green light for his program and for the administrative organization he felt it demanded, he set about collecting a staff. His successes in this regard have been striking—today the BRA has 480 employees, probably the largest planning-renewal team in the nation. More important, Logue has attracted the sort of young talent that such a program demands. Logue's bumptious style, while often bruising to sensitive young egos, usually commands great loyalty.

Logue has called 1963 "the roughest year yet" and guesses that this year won't be a picnic either. What Mayor Lee calls Logue's "truculence" has helped make hot issues out of the Government Center (an urban renewal effort which somehow goes forward despite absence of the legally required City Council approval), out of housing in Washington Park and Charlestown

(page 102), and even the administration of the BRA itself. (Last year, State Auditor Buckley accused the BRA of waste and extravagance. Logue later was cleared of the charges by the federal government—the "feds" as he calls them.)

Logue's relationships with the five-man Authority itself have never been completely smooth. He can generally count on the support of Chairman Lally and on that of two other members (one of whom, John Ryan, has just resigned); but Stephen Mc-Closkey has been an arch foe, and member James Colbert is far from enthusiastic about the Logue style. (Colbert believes Logue has too much power. He voted against the original centralization of agencies to create the BRA, and still expresses strong reservations about the effectiveness of the "Logue brand of renewal.") Besides the vacancy created by Ryan's resignation, McCloskey is due to be replaced, so Logue may soon have a more friendly Authority.

Logue throws himself willingly into politics-he worked hard on Collins' immensely successful campaign last year, drumming up votes, and making talks to select groups. "I don't believe in being neutral in these things," Logue says, "and I believe in fighting to win. I won't sit back, as some of my colleagues in renewal do, and let my political support go down the drain." It is Boston's politics, in fact, which make the city such an attractive experience for Logue, who thrives on conflict and adversity. "Boston's politics are what really make it unique . . . what is happening here right now is the most exciting thing in the world."

Boston's leadership firmly believes that if Collins had not won in 1959, the New Boston would never have gotten underway. And most are now convinced that without Logue's energy and expertise, the intricate, ambitious renewal program would be nowhere near as far advanced as it is. Collins and Logue have said that "restoring confidence was the number one need in the city." This need has largely been filled—now comes the easy part.



Hardworking Brahmin: CHARLES COOLIDGE

In Boston, the name of Charles A. Coolidge keeps coming up. When Mayor John Hynes, in 1958, was trying to get a tax formula through to entice the Prudential Insurance Co. to begin its Back Bay tower, Coolidge was quietly helping. When Mayor Collins, in 1960, needed to reorganize city administrative departments, Coolidge was glad to assist. Later that year, as president of the Greater Boston Chamber of Commerce, Coolidge accepted a new challenge from Collins and led his businessmen deep into actual redevelopment, taking the job of planning and promoting the waterfront project off the city's hands (see page 95). The job well along, Mr. Coolidge in 1962 accepted chairmanship of the downtown business district's renewal committee.

But for all this lifting of heavy civic burdens, Mr. Coolidge is anything but the booster type. He remains a shrewd Yankee lawyer—senior partner in the ancient firm of Ropes & Gray, which occupies deliberately plain offices on the top floor of 50 Federal Street. Of an old New England family (Architect Charles Coolidge was his father, and Calvin Coolidge budded from a minor branch), he went to Groton, Harvard, and

Harvard Law, of course, and since 1935 Coolidge has been one of the five Fellows who help govern Harvard College. He has lent a hand in Washington too, as Assistant Secretary of Defense from 1951 to 1955 and special assistant to Secretary of Defense, 1955 to 1958. Worn smooth and polished by much use, Coolidge's sagacity is less aggressive than John Collins' but the Brahmin treasures the Boston Irish politician as mayor.

Charles Coolidge is a plainspoken, humorous, friendly elder, an aristocrat without austerity. Sitting in his comfortably rundown office behind his grandfather's desk, he reminds a visitor of Ol' Mr. Possum in a children's book-smart old Mr. Possum in his legal kitchen. Now 69, he lives out in Belmont, drives as far as Cambridge every day, parks near the Yard, then gets on the MTA subway for the final lap. On days when he doesn't make it, he is likely to be in southern New Hampshire taking careful aim at grouse or perhaps taking a week off to shoot some quail in South Carolina-in season, of course. But his season for bettering Boston never appears to end. The appointments are still coming up. The latest is that the mayor chose Coolidge last month as one of his four nominees to a committee of seven who will be entrusted with one of the knottiest of problems in renewal as it operates day to day, the selection of a developer to undertake the construction of a private office building in "Parcel 8" of Government Center. (Also involved in this ticklish situation are two of the other Bostonians profiled in brief on the next several pages-William Foley of the City Council and Gerald Blakeley of the real estate firm of Cabot, Cabot and Forbes.)

Says Mayor Collins, Coolidge's antithesis in so many important Boston ways (background, age, education, wealth): "When Charley Coolidge takes on an interest he sees it all the way through. I sometimes worry if there are any more Charley Coolidges coming along."



Energetic reformer: JOSEPH SLAVET

It is unlikely that many Bostonians know the name of Joseph S. Slavet. Yet in a quiet way, this man has been making a considerable impact on the city.

Joe Slavet is director of a young (three years) agency called Action for Boston Community Development, Inc. (ABCD). The agency is in the business of "social planning" or "human renewal," which means that it helps people in trouble. In Boston, there are plenty of these, whether they are among the several thousand high school dropouts, the unemployed, the elderly, or the nearly 65,000 Boston Negroes, many of whom must endure the city's poorest housing and oldest schools.

ABCD operates with some local funds, some federal money (grants to combat juvenile delinquency and to retrain workers), and a \$1.9 million grant from the Ford Foundation's Gray Areas Program (FORUM, Jan. '64). The agency was formed in 1961, largely because of the conviction of Edward J. Logue, the mayor's Development Administrator, that Boston had to have social renewal if physical renewal were to work. Logue and Slavet had, in those early days of Boston's revival, a close relationship. In fact, it was Slavet, then head of the Boston Municipal Research Bureau, who had been instrumental in bringing Logue to Boston from New Haven. After Collins' election in 1959, Slavet worked closely with the new mayor, advising him on the intricacies of a broad-gauge renewal approach.

Collins followed many of Slavet's suggestions, including the hiring of Logue. And Logue, for his part, knew the man he wanted to head up Boston's efforts in social renewal—Joe Slavet. By September 1962, ABCD had its Ford Foundation grant (less than a year after Logue had helped secure such a grant for New Haven) and Slavet was underway.

The idea of ABCD initially was to run interference for Logue's renewal program. Residents of Boston's older neighborhoods were pretty thin-skinned about renewal by this time, because of massive dislocations of people out of the old West End and other areas. Logue's feeling was that if ABCD first tackled some of each community's major social ills, physical renewal might be easier.

The Ford Foundation and the federal government, however, did not feel their funds should be concentrated only in renewal areas. And there was some justi-

fiable uneasiness that if ABCD and renewal were allied too closely, ABCD could be suffocated should renewal get into trouble.

So Slavet shifted to a series of city-wide demonstration programs, handled almost entirely through existing agencies and on an experimental basis. The emphasis has been on educational programs (e. g., pre-kindergarten training, remedial reading and writing) and on youth employment.

"Today," Slavet says, "ABCD is not a service agency. It helps design programs and provides partial financing for them. It strengthens public and private agencies which carry them out. It is a pump-primer intended to encourage the flow of new money into these programs."

Neighborhood employment and training centers are being operated by existing settlement houses and private vocational services are providing special skills.

Logue vigorously disagrees with the divorcement of ABCD from the physical renewal program. He feels that ABCD now represents a "buck-shot" approach to social difficulties, and contends that it makes more sense to launch a massive attack on both the social and physical problems in smaller project areas. The dispute over a proper approach threatened to split ABCD and BRA far apart, but now Logue and Slavet are resolving their differences.

Energy is a Slavet trait, and he combines it with a shrewd understanding of this aging city. As a former adviser to both the business community and Mayor Collins, and a perceptive observer of the factors that make the city work, Slavet knows full well the narrow range of attitudes and animosities that prevail in Boston. He soon hopes to bring his energy and understanding to bear on Boston's problems on an even broader basis-his was one of the first applications to the federal government for a "poverty war" grant (of \$21 million) to extend ABCD's life and to make its mission even more effective. If Congress passes the antipoverty bill. more Bostonians will soon know Joe Slavet's name. D.B.C.



Young promoters: WOOD AND STAHL

Two hundred years ago, a daring handful of Yankees dumped several boatloads of British tea into Boston harbor. Today, on the very site of the Boston Tea Party (now filled in), a British investment group, with the aid of the two young Yankees shown above, has turned the tables. They have brazenly intruded into Boston's decaying financial district with the first major new building seen downtown in 40 years—and set an example that is making some Yankees fidget.

Richard R. Wood (left) and Frederick A. Stahl (right) are standing on the site of the new 30-story, \$30 million State Street Bank Building, named for the building's principal tenant. Stahl is the architect, and Wood, of the venerable firm of Hunneman & Co., is the broker who put the site together and found the major tenants. Both are young (Wood is 41; Stahl, 34), and nothing whets their appetites so much as being told that something can't be done.

In this case, what couldn't be done was to build an office building in Boston. The Prudential had been trying to do it for over a decade and by 1960 was still not getting anywhere. The principal



Boston's new \$20 million, 30-story State Street Bank building (above) is now under construction at a downtown site (below) it will open next year.



obstacle was Boston's staggeringly high real estate tax rate—by 1960 it was over \$100 per \$1,000 of assessed valuation, the highest in the nation.

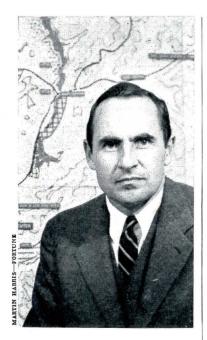
At about this time, young Tad Stahl was in London, where a post-war building boom was beginning to run down. Sites were hard to find and incredibly expensive and British investment capital was looking increasingly toward the New World, particularly New York. Stahl returned to Boston, and looked up his friend Dick Wood, who suggested a site in the heart of the graying financial district. The largest land parcel in the site was a city-owned parking lot.

Stahl, meanwhile, had talked London financier Alec Coleman into coming to Boston. Coleman came, and met Mayor John F. Collins. Says Wood: "Collins was our best salesman—he was just tremendous." After the Mayor's sales talk on Boston's future, the building was assured.

To make the building possible, the city had to sell the parking lot; but under the law, it had to auction the land. Competition inevitably showed up for the site, and the price was driven up to a stiff \$800,000 before the British-American group took it.

Wood tried to line up tenants. He finally signed one of the city's major banks, State Street Trust, for nearly half the building's projected 800,000 square feet. The bank, however, wanted to make Stahl's design more easily identifiable as a corporate headquarters. Architect Hugh Stubbins was called in to lend a hand, and the result is a 28-story tower rising from a five-story platform, which will house most of the bank's functions (see rendering).

The State Street Bank Building is now about 70 per cent rented, and will open in 1965. Real estate developer Wood, inspired by his success, now says that if he could find another suitable financial district site he could lease out another 800,000 square feet, even in the slow Boston market. Architect Stahl, who started his career with a \$30 million tower, is wondering: "Where do I go from here?"



Civic-minded developer: GERALD BLAKELEY

Mention the name of Gerald W. Blakeley, Jr. in Boston and you are sure to get a response.

"A genius," say his friends. They may be referring to Blakeley's transformation of the conservative old real estate management firm of Cabot, Cabot & Forbes into a dynamic company that packages real estate, architecture, and construction, and has introduced modern industrial parks to Boston. Or they may simply be praising the quick intelligence and darting energy of the man himself.

"He bled downtown," growl others, particularly real estate men who have watched Blakeley entice 104 businesses from central Boston to shiny new sites on the suburban belt highway of Route 128. What these critics overlook is that the same businesses (and others) might well have relocated much farther from Boston if Blakeley hadn't been around.

Jerry Blakeley's involvement with Boston, however, goes beyond real estate and industrial parks. He serves on the boards of no less than 16 community organizations, ranging from the Harvard Medical School Visiting Committee to the Boston Boys Club. Socially, he has become as Brahmin as the firm he has headed since 1957.

(He was born in Newton, Mass. 44 years ago.) Deftly dividing his time between business and community service, Blakely has come to know the city inside out.

He was, for example, one of the five founders of the Coordinating Committee, a little known but potent group of key businessmen (now 16) who took it upon themselves in 1958 to provide a means of constructive communication between business and City Hall. Ever since John F. Collins became Mayor in 1960, he and the Committee have kept this line of communications wide open—and all Boston has benefited from it.

Cabot, Cabot & Forbes, too, has turned its attention back to the city it is accused of deserting. In 1959 CC&F began building the Technology Square office project right beside M.I.T. in Cambridge (with the university as coventurer). And last year the firm indicated to the Boston Redevelopment Authority that it would be willing to put up a 35-story office tower on "Parcel 8" in the Government Center. This latter foray into downtown Boston has been blocked by the City Council, which blasted the BRA for not allowing all developers to compete openly for the project. (The City Council twice voted against the development—and the whole Government Center plan.) As a result, an open competition will be held later this summerand CC&F is a good bet to win it.

Blakeley is enthusiastic about Boston's potential. "It has the best raw material for a transit system," he says, "and the storeswith reorganized transit-can give us one of the best downtown centers in the nation." A recent \$35,-000 real estate study for CC&F reveals that there is an excellent market for middle income apartments near the business district. "They can bring the brains back into town," Blakeley explains. Just what CC&F plans to do about the opportunity is unknown at present, but Jerry Blakeley has started to back up precept with example: he recently moved from a 109-acre estate in Weston, Mass. to a home in Cambridge, nearer the heart of things.



Urbane general: JAMES McCORMACK

James R. McCormack, Jr. might be the very model of the modern major general (he is just that, USAF, ret.), but he is certainly not like most models of Chamber of Commerce presidents. McCormack is not only an ex-general, but also a vice-president of a great university (M.I.T.), a member of a five-man advisory committee to NASA on manned space flight, and a Rhodes scholar.

At 53, McCormack is a specialist in what might be called "vital links." Today, he is a vital link between Cambridge's great institutional complex and Boston's business community. His presence puts greater steam behind Boston's drive to create a new city image—A City of Ideas. (Back in 1947, McCormack was forging a vital link between the military and civilian leaders of the atomic energy establishment; a job for which he won the Distinguished Service Medal.)

The presence of McCormack's intellect on the Boston scene is itself a tremendous asset. As a vice-president of M.I.T., his duties range from supervising such scientific powerhouses as the Lincoln Labs to playing middleman between M.I.T. and industry and M.I.T. and government, He had a major role in the development

of Technology Square, with Gerald Blakeley (left and page 120).

Despite his incredible schedule (he is still an adviser to the U.S. government on a plethora of policy matters), McCormack devotes considerable time to Boston and its future. He is an optimist in this regard, although he grants there are plenty of problems. One of these is the very strength that M.I.T. and its sister institutions bring to the area. "Boston is too dependent on federal contracts," says McCormack. "Any substantial disarmament program would cause a lot of gear-shifting."

McCormack, his soft moccasins resting easily on the window ledge, worries about the city's tangle of governments, too: "Although we don't have the usual upstate-downstate hassle that New York and Chicago have, the state is too involved in city affairs."

Despite the fast-growing electronics and science industries which McCormack himself is helping to attract to the Boston area, he recognizes that the city has deep-rooted social problems which won't be helped too much by an influx of this sort of industry. "For one thing," he says, "we have a labor force which is not nearly ready to shift from heavy manufacturing to research."



Young old pol: WILLIAM FOLEY

Even the opponents of City Councilor William J. Foley, Jr. do not deprecate his brains or political cunning. Some of them are afraid of him; others are oddly fond of him as a manifestation of Boston political folklore. "Bill is a very smart guy," says one friendly enemy. "It is just that he somehow has become utterly unreasonable on the subject of urban renewal." Bill Foley's "unreasonableness" may be shrewdness: there surely is political capital in fighting Ed Logue, an outlander brought in to redo Boston, And there is real resentment as well within the City Council, several members of which think both Collins and Logue have tried to use them as a rubber stamp. (The Council has nine members, none of which represent particular wards within the city; all are elected at large by all the voters. Foley is typical of most of the other Councilors in that his ancestry is Irish.)

Whatever the reason, Foley is a cutting critic of the drastic renewal approach of "that Philadelphia Irishman," Logue. And Foley has won several rounds of his long slugging match with the Development Administrator. The biggest has been the blocking of the private office buildings for

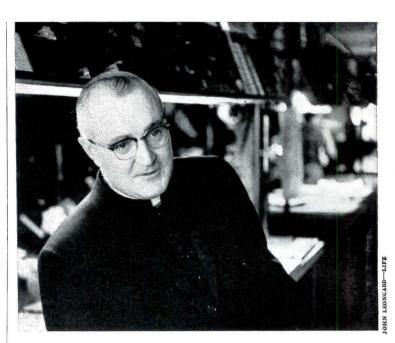
"Parcel 8" which the mayor and Logue want to put into Government Center.

Foley, 40, has been a member of the City Council for 12 years and some think he is bitter because his political career has not thrust him further. (His father was a long-time district attorney of Suffolk County). In Boston a councilor is not normally a powerful political figure. But neither, actually, is a mayor of Boston in the breadth of his power, nor is a development administrator. What makes the present incumbents the exception to the rule is the kind of people they are: Collins, Logue, and Foley have turned their jobs into seats of considerable power.

The newspapers cannot overlook the kind of accusations Foley throws at the renewal plans of the first two; Foley is good copy. He also is a rallying point for the downtrodden Bostonians who wonder if renewal is not just another way of victimizing them for the profit of real estate speculators. A good many of the Great Washed, as well, particularly the college professors across the Charles River, hold there is much to be said for Foley's position.

The Councilor has two specific points he hammers away at: A. the poorer residents of Boston's renewal areas cannot afford even the rents of the "221d3" relocation projects (and Foley is 85 per cent right in Boston's Washington Park renewal project—see page 102). B. The renewal of the business areas is not adding sufficiently to Boston's tax base.

But Foley also displays a working politician's scorn for the whole approach of the BRA: "Do you perhaps think that gigantic federal, state and municipal expenditures will inevitably bring adequate results simply because of the size of the effort? I suggest you study the performance of George Brinton McClellan, commanding the Army of the Potomac in the early years of the Civil War. I have never believed in reincarnation, but I must confess lately my resistance has been weakening." Foley means Logue, and he means business.



Churchly chairman: MONSIGNOR LALLY

Boston is not only the most Irish city in the nation but the most Irish Catholic. Where else would the chairman of the redevelopment board be a priest?

Monsignor Francis J. Lally, 45, is the appointed, unsalaried chairman of the Boston Redevelopment Authority. But this unusual part-time job is not the only focus of his extra-religious activities. The monsignor says Mass every morning in Charlestown, then commutes downtown where he edits *The Pilot*, oldest Catholic newsweekly in America.

Monsignor Lally is one of Richard Cardinal Cushing's closest aides; the monsignor's deft, diplomatic, humorous touch is a fine treble to the thumping bass of the outspoken Archbishop of Boston. (Cushing, with his late-blooming liberalism, constantly surprises not only his own flock but also the rest of the community of Protestants and Jews, many of whom these days are astonished to find themselves admiring His Eminence thoroughly). Monsignor Lally is also vice-president of the American Academy of Arts and Sciences, has been vice-chairman of the U.S. National Commission for UNESCO, and is a board member of Robert Hutchins' Fund for the Republic.

As chairman of the BRA, Monsignor Lally is among other things a valuable buffer. When he presents a redevelopment plan to a hostile audience-whether it is the City Council or a neighborhood gathering-they are likely to listen to him more respectfully than to Ed Logue. There is a polite quickness to this chairman's chairing, too: his meetings move. The monsignor was persuaded reluctantly to become a board member before Logue arrived in Boston, but he generally votes on Logue's side in split ballots.

Lally's own conviction about renewal in Boston is that it must succeed as an instrument of social-and racial-progress in the neighborhoods. He realizes it cannot be measured solely in the lofty glory of Government Center downtown. But typical of Lally's breadth is his feeling that the plaza of Government Center should not eventually be named Central Plaza, as it is presently known. "That could be in any city," he says. "But Boston is not any city." He thinks the plaza should be named instead after those eminent old Boston Protestants, the Adams family. The monsignor respects all the subtle, involved elements of this complex city. And they him. w. MCQ

New design talent: CAMBRIDGE SEVEN

The Cambridge Seven Associates (actually the Cambridge Six, since one partner has left to teach) represent the kind of young design talent that flourishes around Greater Boston. It and similar small new offices seem continually to be springing up in the area—and a surprising number of them take root and grow.

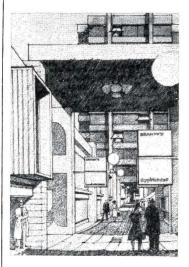
In part, the encouraging atmosphere is due to the existence of top-notch design schools like Harvard's and M.I.T.'s, and the lively atmosphere such schools create. But perhaps more important are the opportunities that have come along with the building of the New Boston.

The opportunities include plenty of local architectural competitions, which have brought new names into prominence with startling regularity. Cambridge Seven became one such name a year ago when it won first prize in a hotly contested BRA competition for a shopping center project in the Washington Park renewal area.

experienced of the Most "Seven" are Paul Dietrich and Terry Rankine, both of whom were established architects at The Architects Collaborative before joining up with three recent Harvard Design School graduates, Peter Chermayeff (son of Architect-Educator Serge Chermayeff), Alden Christie, and Lewis Bakanowsky (now an associate professor at Harvard). Rounding out the group are Ivan Chermayeff (Peter's brother) and Tom Geismar, who run a successful graphics and exhibits office in New York. Among them, these young men present a design package covering everything from master planning to letterheads.

Boston clients appear to have found the new collaboration attractive; Cambridge Seven has landed five major projects in its year and a half of life. The Washington Park Shopping Center will be the first to be built. The second will be the New England Aquarium on a wharf in the downtown waterfront renewal area (see

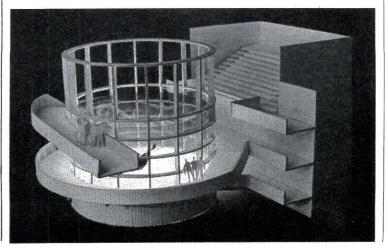




Reading clockwise from lower left hand corner: Paul Dietrich, Terry Rankine, Alden Christie, Peter Chermayeff, Ivan Chermayeff, and Tom Geismar (with glasses).

The "Seven's" competition-winning shopping center emphasizes its urban setting with intimate alleys and small display windows.

Model of the huge central tank in the Aquarium shows how visitors will see the fish in it from different angles on the ramp system.



page 95). For the Franklin Park Zoo, the firm has developed an experimental building combining biological research and public exhibition, and another ingenious building to house unspecified "small mammals." For a typical shopping area in Brookline, the "Seven" have proposed a refurbishing plan which includes organizing signs and street furniture.

It all started with an opportunity to introduce themselves to the board of the Aquarium Corp. As the "Seven" knew little about fish, they discussed instead an approach to the problems of public aquariums. They rejected the typical, massive, low hall with exhibits on either side, brought up new (for such buildings) ideas like three dimensional planning, an orderly matrix for mechanical systems, special exhibits-all with an emphasis on the fun people could have in an aquarium. Result: the directors were impressed and selected the brash, imaginative designers to develop the \$2.5 million building.

This offbeat start reveals some of the characteristics of Cambridge Seven. In their search for appropriate solutions, they follow an analytical process in sorting out organizing principles, objectives, and design concepts. Another characteristic is a determined sense of originality-often salted with humor-which expresses itself in such touches as using a forest of flags to enliven the Aquarium's plaza and proposing to paint the back wall of a Brookline bank to resemble a piece of a dollar bill.

The new firm has not cornered the market on enthusiasm or talent by a long shot. But it has started unusually well, helped in no small part just by being in Boston. Says Peter Chermayeff: "Suddenly everyone here is aware of the importance of design. BRA has helped; but the architects themselves have also begun to play a major role at a public level. Every day somebody seems to come up with the kind of design job that no one has ever done before. Boston always has been an urbane place. Now it's electric too."



GOVERNMENT CENTER: SYMBOLIC SHOWPIECE OF A NEW BOSTON

In downtown Boston, all streets lead to the Government Center. They almost burst out of the cramped quarters of the old city into 60 leveled acres of rubble, excavations, and teetering scaffolds. To the startled visitor, the boundaries of what will soon be the Government Center appear more clearly defined today than they will ever be again (see panoramic view left). The project is at the hub of downtown, surrounded by the Central Business District (center background in photo), Beacon Hill (right middleground), the West End's residential towers (off photo's right foreground), the North Station commercial district (left foreground), the Central Artery (left), and some of Boston's historic landmarks (the Blackstone Block, Faneuil Hall, and Quincy Market—all between the Artery

and the project area in left middleground).

From this 60-acre wasteland a remarkable plan is beginning to emerge (see sketch and model below). Foundations have been laid for the new 600,000-square-foot City Hall by Architects Kallman, McKinnell & Knowles (with Campbell & Aldrich as associated architects). The 26-story John F. Kennedy federal office building by The Architects Collaborative (with Samuel Glaser & Associates) is rising almost as fast as the Emery Roth & Sons (with Hoyle, Doran & Berry)-designed State Office Building (a 22-story structure not, strictly speaking, within the project area). The State Service Center, a 23-story tower and connected low buildings, by four local firms and Paul Rudolph, rounds out the proposed public office buildings, but construction will not begin until early next year.

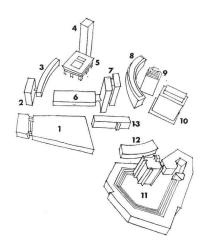
Welton Becket & Associates have designed a long, curved private office building, which will soon start construction. The architects for a Roman Catholic Chapel and a 2,000-car municipal parking garage have not yet been announced, but the names, respectively, of José Luis Sert and the City Hall designers have been mentioned as front-running candidates. And the remodeling of Sears Crescent has been prepared, on paper-by TAC and Glaser, -but work has not been started on that either. A private office tower, a curved office-motel structure, and a few minor buildings have not yet been designed.

A project of this size, involving so much creative talent, is bound to arouse controversy. At the Harvard Graduate School of Design's Urban Design Conference last month, participants fired questions at the creators of the Center: what would it do to Boston? Would it permanently fix the location of downtown, thus resisting the pull of the big development at Prudential Center in Back Bay? Would the project be a lifeless monument? Might the Center have been better executed or better financed?

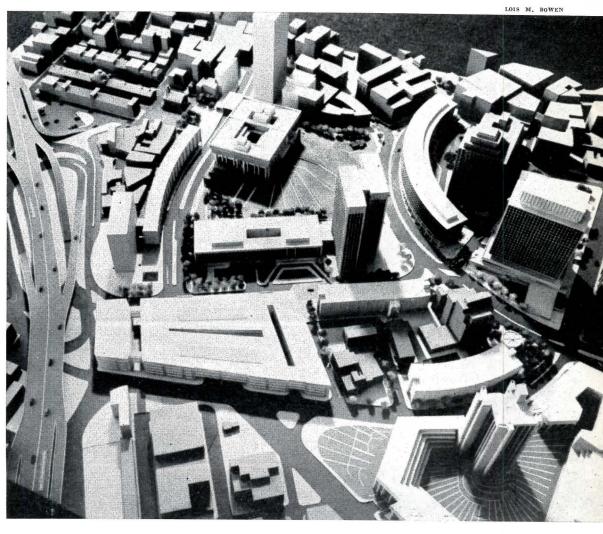
Planning for renewal

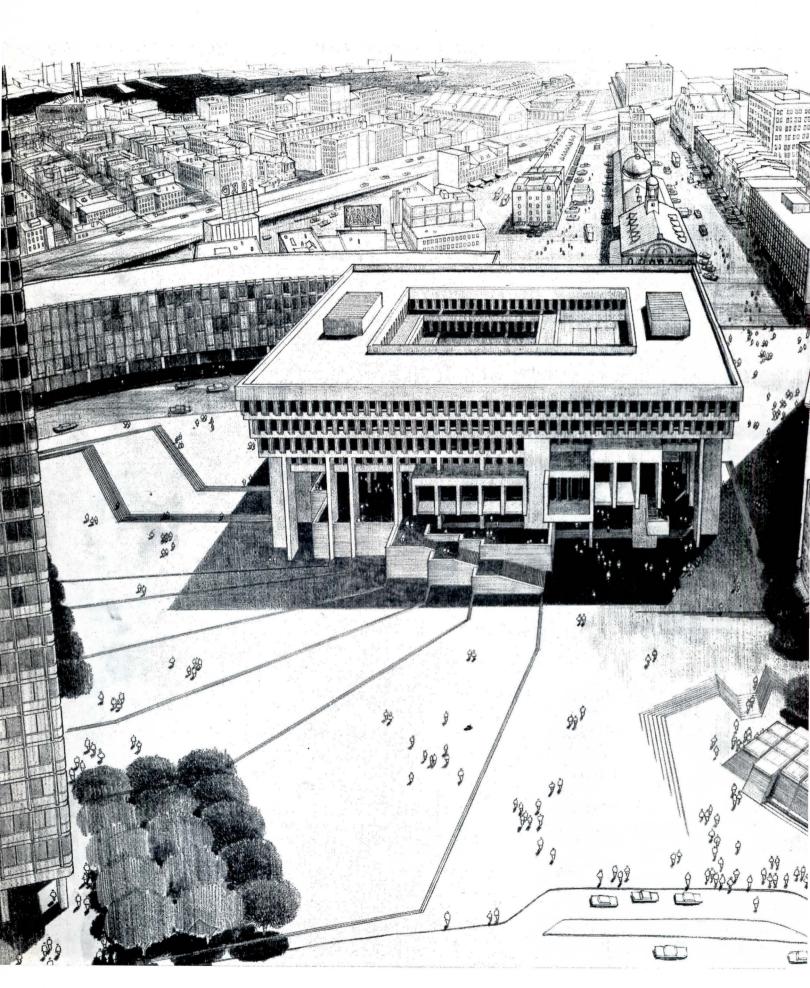
To answer these and other questions, it is necessary, first, to tell the story of how and why the Center was planned, and how these plans were brought to their present point of near-realization.

The Government Center is being built on what was once Scollay Square, Boston's honky tonk and Skid Row. Scollay contained most of Boston's flophouses and count-

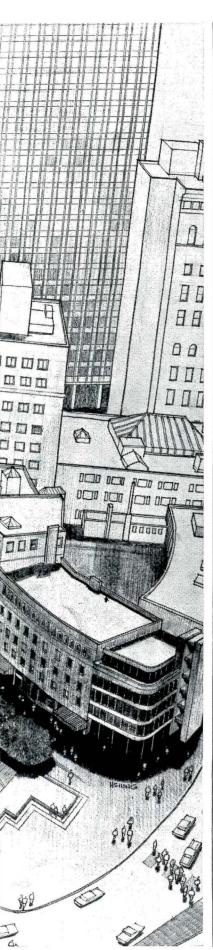


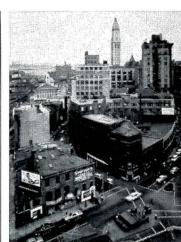
The numbers on the sketch above correlate with the model photo: (1) is the parking garage; (2) and (3) form a motel-office complex. A private office tower (4) faces City Hall (5), which is separated from the federal building (6-7) by a large plaza. Along the southern border runs a private office building (8), backed by the County Courthouse (9), and the State Office Building (10). The State Service Center is (11), and fronts a private office building and police station (12). (13) is another proposed office building.





The Government Center is planned as a fulcrum for all downtown's renewal





This rendering looks east over the monumental plaza to City Hall and the Waterfront project. The low structure in the foreground is a new subway kiosk (by Kallman, McKinnell & Knowles), and to its right is Sears Crescent, also shown in photo of Scollay Square (above).

less bars, along with small commercial enterprises and some light industry. Decrepit as Scollay was, it was centrally located, served by no fewer than three subway lines at five stations, and near City Hall and the State House.

By the mid-1950's, when the possibilities of urban renewal were becoming apparent, the Scollay area kept being discussed—always with an eye on clearing it to rebuild it as some sort of government center. It had become just too difficult to try to run a city, a state, and coordinate with the federal government from offices scattered widely all over town.

Between 1954 and 1959, the project was often discussed, gaining, in the process, considerable support. In 1959, the City Planning Board released a plan for the area (by Planners Adams, Howard & Greeley). This plan was generally praised and did not involve federal renewal funds.

When newly elected Mayor John F. Collins came on the scene in 1960, he knew that Boston needed a sweeping, federally assisted renewal program to stop its deterioration. With his Development Administrator, Edward J. Logue, he started his plans with the Government Center.

Collins and Logue liked the Government Center project for several reasons: (1) because it would boost what was then Boston's only growth industry, government; (2) because it would symbolize the New Boston which Collins had promised to build; (3) it would be strategically located to help revitalize all of downtown; and (4) because it could be realized at little cost to a financially pinched city.

(As it turned out under urban renewal in this project, the federal government has provided a cash grant of \$25.2 million—plus another \$2.3 million for relocation payments. Boston itself does not make a cash contribution, but receives credit for its one-third of the project by building the 2,000-car parking garage and putting in the City Hall plaza and landscaping. The Commonwealth of Massachusetts pays one half of Boston's share over a 20-year

period, so that the city—aside from paying for the \$20 million City Hall—ends up hardly straining its budget to get the Government Center.)

One of the first things Logue needed was a master plan for the whole site, showing the most important buildings and open spaces. He called in Architect-Planner I. M. Pei who proposed to reduce the 22 existing streets to six: four would run from north to south; two, Cambridge Street and New Congress Street, would sweep in a broad arc from east to west.

Next, Pei decided to preserve all historic buildings in the area. Boston Historian Walter Muir Whitehill helped him in this, and Whitehill's interpretation of "historic" included buildings with a long, local tradition of special usage. For example, the old Sears Crescent is not a very distinguished, curved, brick building (built in 1841). But it has been a book selling area for over a century and its street, Cornhill, has always been the way Bostonians chose to get to Faneuil Hall. So Sears Crescent will be rehabilitated for offices-and the book shops will remain.

A truly monumental City Hall

More important, Pei defined the new City Hall as the "keystone" of the project. Set in a broad plaza, it would occupy a pivotal site, in view from many angles, and near to two cherished old seats of government, Faneuil Hall and the Old State House on Court Street. To fulfill its pivotal function, City Hall would have to be a very special building; and to get a building adequate to that task, Boston held a national design competition. The program of the competition was written with strict limitations on the building to make sure it would relate properly to its surroundings.

From some 250 entries, eight finalists were chosen; and from these, a team of three young and relatively unknown architects—Kallman, McKinnell & Knowles—was selected for the first prize and commissioned to proceed with their design (FORUM, May '63).

Pei also set height limits for

"We're kind of tickled; whoever thought Old Lady Boston could do it?"

each parcel within the Government Center project area and strict rules for setbacks and plazas. He proposed a new office building on a site ("Parcel 8") bordering the CBD and occupied by two perfectly serviceable buildings. Pei marked the two existing buildings for demolition for four reasons. The proposed new tower would more than double the tax yield of the site. It and its plaza would also provide a spacious and attractive setting for the Old State House, and symbolize the regeneration of downtown. Moreover, it would block off Washington Street, thereby simplifying and improving the traffic circulation in the area.

Getting the "stake with a tail"

Pei's final plan was changed in only one respect: on the tract planned for three separate state office buildings, one building has been designed instead (FORUM, Feb. '64). BRA's Project Designer Charles Hilgenhurst tells the story this way: "The Boston firm of Desmond & Lord (with Paul Rudolph as consultant) was retained to design the Mental Health Building; Shepley, Bulfinch, Richardson & Abbott were retained for the Employment Security Division headquarters; and M.A. Dyer and Pedersen & Tilney were commissioned to design the Health, Welfare and Education Building. Under Ed Logue's and the State Government Center Commission's prodding, the five firms tried to come up with a comprehensive scheme for the whole complex, and arrived at a solution which looked like an Italian town, full of small buildings. None of the firms was completely satisfied, though the BRA and State Commission tentatively accepted the plan. Then one day, at a meeting of the architects. Rudolph walked in with what he called a 'stake with a tail.' Everybody became enthusiastic about the tower (though it exceeded Pei's height limits) and the low buildings enclosing a plaza; Rudolph was named design coordinator for the project. All the firms collaborated from then on, producing three buildings merged into one monolithic, monumental entity."

Meanwhile Ed Logue was wasting no time getting the project under way. He used the early land acquisition provisions of the 1959 Housing Act to take possession of most of the land and to clear it -even before the plan had been approved. He convinced the Metropolitan Transit Authority to straighten out a screeching turn in a subway line, and to rebuild the old station to serve the Government Center. (This may have constituted the first use of federal renewal funds for a rapid transit project.) He also asked for, and obtained, help in BRA design matters from a five-man Design Advisory Commission (consisting of Hugh Stubbins, Pietro Belluschi, José Luis Sert, Nelson Aldrich, and the late Henry Shepley, later replaced by Lawrence B. Anderson).

Getting private developers who were financially responsible, experienced in renewal, and willing to build handsome buildings was not so easy. Only two developers expressed interest in the 875-footlong office building on the southern border of the project. Center Associates, headed by Norman Leventhal, got the \$15-20 million job with Architects Welton Becket & Associates. For the office building on the edge of the CBD, Logue announced last summer that Cabot, Cabot & Forbes (with Edward Larrabee Barnes as architect) had indicated its willingness to build the tower.

This touched off the project's only major controversy. Logue's real problem was that he had not held an open competition for the tower and seemed to have just handed the project to C C & F. For this reason the City Council voted against the tower on two occasions last summer-and thereby against the whole Government Center plan. This summer, however, the open competition will be held among the eight developers who have expressed some interest in building the tower. The winner will be picked by a seven-man jury including Lawyers Charles Coolidge, and Robert Meserve, Episcopal Bishop Anson Phelps Stokes, and Publisher Harold Kern, with Architects Pietro Belluschi, Benjamin Thompson, and Philip Bourne.

High hopes—and some fears

Other parts of the Government Center have a long way to go. The three existing buildings slated to remain standing have to be refurbished, and five of the 15 parcels have yet to come on the market. But the Center is well along—and for a renewal project, it has moved ahead very fast. "We're kind of tickled," Ed Logue said recently, "whoever thought that Old Lady Boston could do it?"

Critics do not bother to answer that question. They concentrate instead on what has been done. They contend that the Government Center will be a lifeless, though handsome, place and that its "animation" will be dependent on the stores on the ground floors of the office buildings.

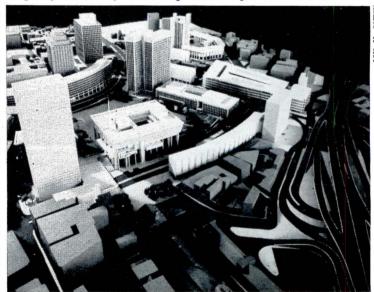
The Center's enthusiasts reply that there will be plenty of people around. Not only will they work in the offices, but they will come into the Center from surrounding districts. The planners are attempting to devise workable connections with the CBD, the West End apartments (along a broadened, tree-lined Cambridge Street), the waterfront redevelop-

ment area (down State Street or over a pedestrian bridge from City Hall to Faneuil Hall), and Beacon Hill (through two 60-footwide portals piercing the Leventhal building). No good link with the North End exists because of the Central Artery, but such attractions as the Salem Street Peddlers' Market have drawn people into the North End and will help join the two districts.

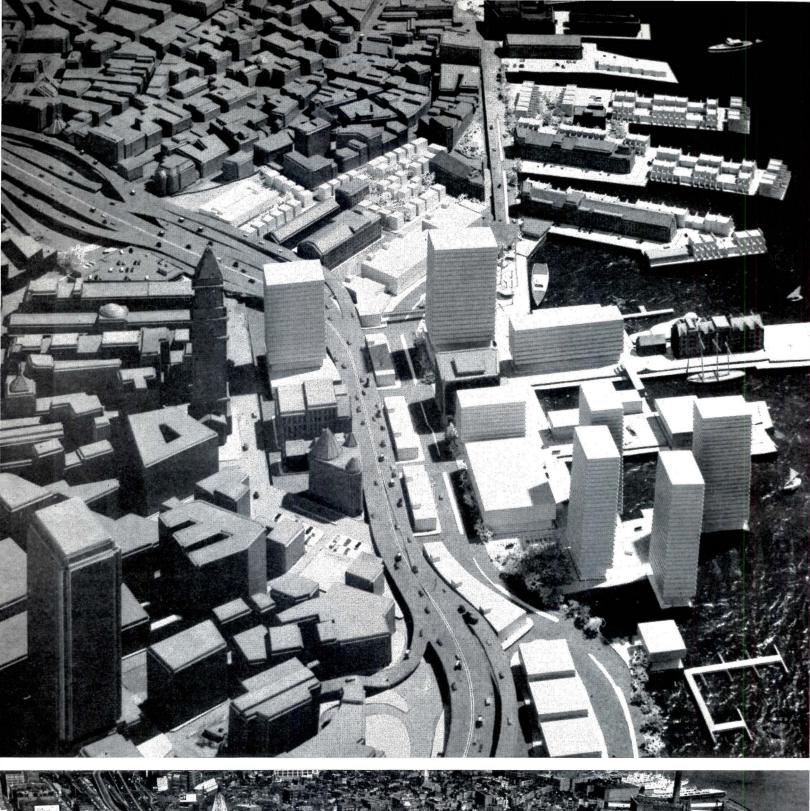
One larger question has been raised: has the purpose of the Government Center been vitiated by other developments? The Government Center will eventually supply about 1.7 million square feet of private office space; the Prudential Center adds 1 million more; and the British Properties Building, another 800,000. This means that new buildings in other developments may glut the market. (The first private office building for the Center is several months late in getting started because no major tenants have been signed up to date.)

In short, the Prudential Center might well draw businesses from downtown and the new Government Center. Logue disagrees; he remains confident of downtown's greater appeal. "We have the place where people like to walk," he says. "It's better than up there at the Pru." Philip Herrera

The gigantic scale of the Government Center project can be grasped by comparing the view of virtual emptiness at right with the model below.



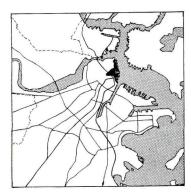






PHOTOS OPP.; ABOVE, ALESSANDRO MACONE; BELOW, AERIAL PHOTOS OF NEW ENGLAND

THE OLD SEAPORT: PLANNING A WINDOW ON THE WORLD



The Waterfront is everybody's favorite renewal project. Redevelopment Chief Ed Logue likes it because it has been relatively easy to get under way. The business community likes it because it produced the plan-and helped pay for it. The Mayor likes it because the plan involves no relocation of people, and thus fits into his "planning with people" theme. (After all, even businessmen are "people.") And the citizens of Boston like it (or should, anyway) because it will give them a sparkling new waterfront to enjoy.

There is nothing very enjoyable about Boston's waterfront at present. The area earmarked for renewal (see map above) takes in almost a mile of wharves, from Constitution Wharf to the north, to Fosters Wharf to the south. In addition, the renewal area comprises about 65 acres to the west of Atlantic Avenue, and extending almost to the steps of the new City Hall now under construction. It is a part of the city characterized by half-vacant buildings, haphazard parking, and more fires than the Fire Department would like to remember. It is thus an area that cried out for redevelopment-and the "Downtown Waterfront-Faneuil Hall Urban Renewal Plan" is the answer.

To date, the plan has been approved by the Boston Redevelopment Authority and the City Council, and now awaits the blessing of the federal Urban Redevelopment Agency. If every-

Opposite: Project area as it looks today and (above) what the planners propose to do with it. Note the ambitious development on wharves used for parking and the new route for the littoral avenue.

thing goes as expected (and there are still a few knotty problems to unravel), downtown Boston will have a lively \$100 million show-piece to complement the monumental Government Center.

On the drawing boards are luxury apartment towers, a 1,500-car garage, a motel, an office building (all by I. M. Pei), as well as a public aquarium, acres of new and rehabilitated residences, restaurants, marine facilities, shops and public open spaces. Their purpose: to revitalize—and anchor—the downtown area. Hopefully, the proposals will bring back suburbanites to live in the city, bring in tourists, and boost property values.

A challenge to the Chamber

It all began over three years ago when newly elected Mayor John F. Collins approached the Greater Boston Chamber of Commerce. Collins' purpose: to ask the Chamber to develop an action program aimed at rebuilding and redeveloping the Waterfront area, which "should again become Boston's window on the world." If Collins' request was unprecedented in Boston's recent history (for years, businessmen had regarded City Hall with wellfounded suspicion), it was also well directed.

Businessmen knew the area. It directly abuts their own Central Business District (CBD) and the Government Center. They could see unmistakable blight at their back door in the shape of vacated wharf buildings, traffic congestion, inefficient wholesaling activity, and over-all shabbiness.

Yet the area, obviously, had many possibilities—mainly because it has the harbor.

In Boston, where history is revered, the Waterfront has the added attraction of containing some of the most highly cherished historic land in the city, including such famous structures as Long Wharf (from which the British troops were evacuated in 1776). Faneuil Hall, Quincy Market, and John Hancock House.

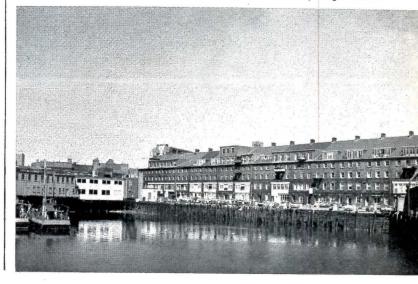
In January 1961, the Greater Boston Chamber accepted the



Above is the biggest problem the planners had to face: the Central Artery which forms a "Chinese Wall" between the city and the harbor.



Above: two landmarks in project area, Faneuil Hall and Quincy Market. Below: Commercial Wharf buildings already rehabilitated for apartments.



Waterfront redevelopment brought together City Hall and big business

Mayor's challenge, and established its Waterfront Redevelopment Division (WRD) under Frank S. Christian, a dynamic, well-known vice-president of the New England Merchants National Bank. The WRD soon gained support. both in donations totaling \$150,-000 and in top management's time. Christian lined up assistance from such leading corporations as Gillette Safety Razor Co., John Hancock Mutual Life Insurance, First National Bank of Boston, Cabot, Cabot & Forbes and many others. For its staff, the Division picked Daniel J. Ahern, the thoughtful former head of the Chamber's Urban Development Department, with a gifted, energetic young architect-planner named Samuel E. Mintz as his assistant.

Before the \$150,000 could be spent for preliminary studies in planning, traffic, engineering and real estate market trends, however, a general decision had to be made: should WRD call on a famous consultant to prepare the plan, thus lending it initial prestige? Or should the Chamber hire its own talent and local consultants, thus keeping it in the thick of things? With many businessmen growing increasingly enthusiastic about the project, the WRD chose the latter course in June, 1961, and hired a design staff and a set of distinguished consultants.*

This group immediately discovered that the Mayor's vision of a "window of the world" bordered on wishful thinking. For, unhappily, the "window" between the harbor and the rest of Boston was partly blacked out by the \$110 million John F. Fitzgerald Expressway. This six-lane elevated highway, known to Bostonians as the Central Artery, made the Mayor's "window" at best a window with the shade half down. So one specific problem was how to raise that shade.

"The WRD staff worked as a team with its consultants," says Mintz. "All of us put our ideas

*Consultants include Planner Kevin Lynch, Architect John R. Myer, Engineers Metcalf & Eddy, Traffic Engineers Bruce Campbell & Associates, and real estate and urban renewal expert John R. White. on the table, and the best idea was selected—regardless of whether it came from Kevin Lynch, Dan Ahern, or one of our own designers (Fernando Migliassi, Roderick Freebairn-Smith, and Robert Loverud)." In addition, the Waterfront plan received the cooperation of such diverse groups as the BRA, the residents of the North End, and the existing property owners and merchants, plus help from interested architects and preservationists.

In June of 1962, the Greater Boston Chamber released its plan: office and general business buildings and residential towers were located near the CBD; middle-income housing units bordered the North End; full use was made of the wharves for new and rehabilitated apartments, and other such attractions as the aquarium, motel, commercial fishing, and public open areas. The key proposals included the following:

The broad, littoral road, Atlantic Avenue, was to be bent inland to create a large, developable parcel uncut by a major throughway. Equally important, the relocation of the Avenue would minimize the difficulty of seeing the water from downtown,

Dealing with existing structures

That other physical—and psychological—barrier, the Central Artery, had to remain where it was. But the planners attempted to mitigate its effect by: 1) eliminating one of the two Expressway ramps altogether, and moving the other one further north; and 2) replacing the roadway underneath the elevated Artery with gaily lighted stores and shopping arcades. This second proposal was aimed at distracting people, lured on by the sight of open water, while they pass under the Artery.

Some 2,200 new units of housing were provided, many by rehabilitation. (In all, 222 of the existing 433 buildings in the area are earmarked for rehabilitation.) This manner of renewal conforms to BRA policy, but a private waterfront precedent also exists: the refurbished apartments in an unlikely building, the old granite warehouse on Commercial Wharf.

Rehabilitator Neil Tillotson boasts a waiting list four families deep for each of his 60 units.

The planners went out of their way, too, to preserve all important historic buildings so that the area's tourist appeal would be enhanced, and the city would retain a sense of continuity between past and future. Also, the scheme carefully tried to integrate the project with the adjacent North End. All new buildings bordering the North End were to be low-rise and sited so that there would be a clear connection between the homogeneous community and the water.

More problems—and answers

Both the BRA and the City Council were pleased with the plan, and approved filing an application for some \$284,000 from the URA for further survey planning. As was previously agreed, the BRA absorbed the project into its own program, but retained the Chamber and the WRD staff to finish the job.

Much was left to be done before this past April, when public hearings began.

The Massachusetts Department of Public Works, for example, had to approve all the recommendations concerning the Central Artery. It did, in 1963, thus allowing the basic form of the waterfront area to be established.

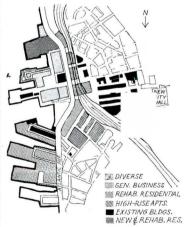
The 250 food and fish whole-salers now operating out of the area had to be convinced to move to a new site. (Five possible locations with adequate space and transportation facilities have been found, but only one lies in Boston proper.) Surprisingly enough, the wholesalers want to move. Their reason: it costs them about \$92 to handle one ton of meat; in a new market, such as that in Philadelphia, the same ton is being handled for only \$38.

Finally, the legal question of who has title to that area lying under water only at high tide had to be resolved. At present, the Commonwealth can reclaim all land and buildings built on this area—which is one reason why private owners have allowed their properties to deteriorate. In April, however, a committee of the Leg-

islature gave a favorable report on a "tidelands" bill (drawn up by the Chamber and BRA to give irrevocable titles to waterfront developers). The outlook for enactment is considered good.

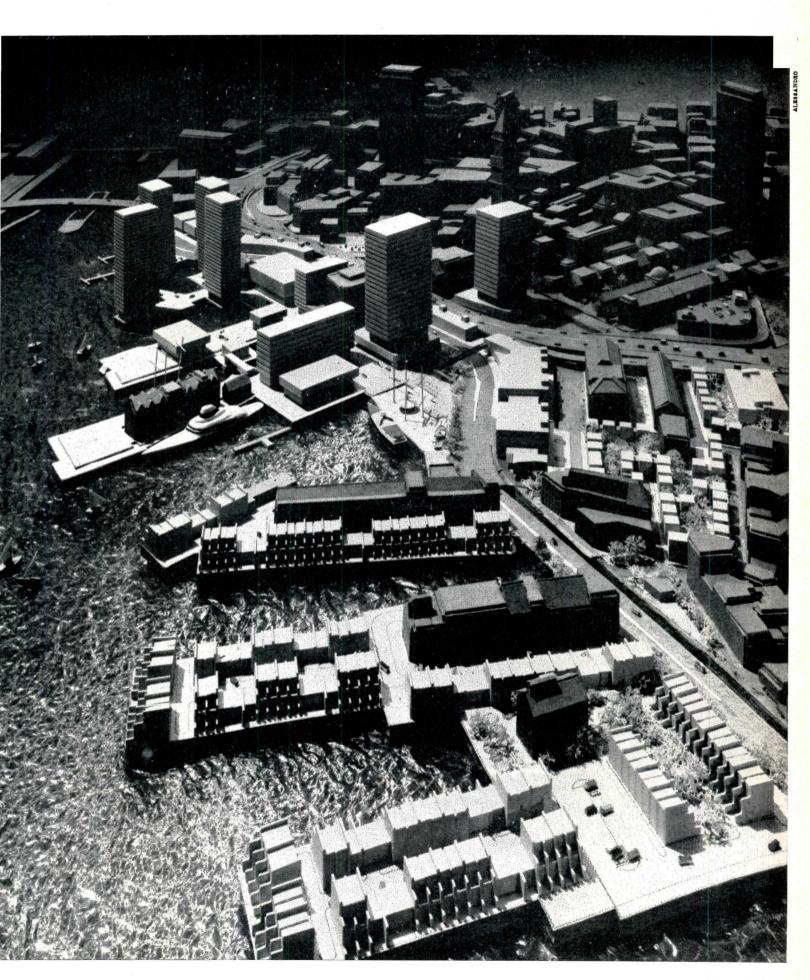
The waterfront provides Collins and Logue with a fine opportunity to do something really well. In the absence of the snarl of residential relocation and other problems plaguing other projects, Collins and Logue might be able to accomplish it rather neatly. Already, the developers have indicated that they are willing to abide by BRA rules in executing their own ambitious plans. Dreyfus Properties, owners of the land and wharves within the bend of Atlantic Avenue, have retained I. M. Pei as architect for their \$40 million project. The New England Aquarium Corp. has signed up the Cambridge Seven (see page 87) to design their \$2.5 million aquarium on Central Wharf. The New England Telegraph Co. plans to build a new 400,000-square-foot, \$12 million office building near Long Wharf. Neil Tillotson has started to rehabilitate the building on Lewis Wharf for apartments.

In short, Boston's favorite project is nearing realization. P.H.



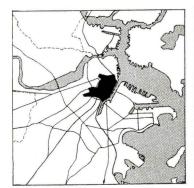
Above: the proposed land use map.

At right: rehabilitated and new housing in foreground, Dreyfus, apartment towers in background.





THE DOWNTOWN AREA: HOW TO CLEAN IT UP— AND MAKE IT PAY



Downtown Boston is at once the most charming, the most dilapidated, the most delightful and the most frustrating collection of urban real estate in the whole United States. In its 158 acres are several of the nation's historic buildings (e.g., Old South Meeting House, King's Chapel, Old State House), a great deal of its fine architecture (including buildings by Richardson and Bulfinch), two of the nation's great department stores (Jordan Marsh and Filene's), and an oversupply of narrow, congested streets. Downtown borders on the Common and the Public Gardens, one of the handsomest urban parks anywhere. Despite its assets, downtown, paradoxically, is a mess.

In the first place, downtown is old and has deteriorated badly. And this fact is reflected most painfully in the steady decline in the value of downtown properties—and declining tax payments to the city. In Boston, where 42 per cent of all land and buildings are tax-exempt, you have to get a lot of tax mileage out of downtown—and the city hasn't been getting it in recent years.

Mayor Collins and Development Administrator Logue are determined to prevent any further downtown decline. And their plans at the moment indicate that, with the help of a \$29 million urban renewal program, which might in turn generate \$200 million of private building, downtown might even grow a bit.

To provide major guidelines for a new downtown, Logue hired

Narrow, crowded streets like Winter St. (left) between Tremont and Washington might be closed to cars, creating a pedestrian mall.

Architect Victor Gruen, who has been submitting proposals to the Committee for the Central Business District (CCBD) and to Logue's Boston Redevelopment Authority (BRA). (Both are Gruen's clients in this process.) The final downtown plan is not settled yet, but the broad outlines of it—and the fascinating process from which they grew—are worth examining.

The decline of downtown

Downtown Boston's economic balance sheet is even more depressing than the view down lower Washington Street (picture below). Since the end of World War II, downtown Boston has:

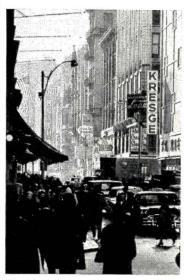
- ► Lost nearly 15,000 jobs, most of them in manufacturing, wholesale and retail employment.
- ► Lost over \$20 million in retail sales, less than some big cities but enough to drop Central Business District (CBD) sales down below 50 per cent of the metropolitan region total for the first time.
- Lost nearly 50 per cent of its residential population—i.e., the main support of hundreds of small shops in the downtown area. As a consequence, many shops have gone, or are going, out of business.

All these dismal downward trends have occurred while the areas outside downtown-particularly the suburbs-have been growing fast. But downtown has also suffered from the competition of close-in areas like Boylston Street, in Back Bay, which has become the choice location for high fashion and specialty shops. Today, downtown faces its gravest challenge of all, from the new Prudential Center, designed by Charles Luckman Associates. Already real estate developers are becoming more interested in Back Bay sites near the Pru than they are in downtown. Some offices, stores and apartments are moving toward the Pru (with its 1 million square feet of office space, 1000room Hotel America and a new city auditorium) and away from the old Boylston Street locations.

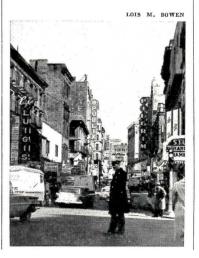
Before planning started on the downtown project, Ed Logue called in Washington Economist Robert Gladstone to appraise



THREE PROBLEMS: There must be a better physical link on Washington Street, between the main shopping area and the new Government Center.



Washington Street's tangle of cars and people has to be unscrambled —and the honky-tonk area a few blocks away near Stuart St. (below) made more attractive.



downtown's future. Surprisingly, Gladstone concluded that the old downtown area could not only brake its decline but could even show some growth. Given the right sort of treatment, that is. The right sort of treatment, according to Gladstone, might result in something like this:

► Office building: Although there has been little new office space built downtown, Gladstone says "the potential is outstanding." One reason: only about 25 per cent of the existing space is really first class-and that firstclass space is about 100 per cent occupied. Gladstone predicts a 25 per cent increase (about 5.5 million square feet) of new office space in or near downtown by 1975, assuming that "major obstacles are overcome." One of these obstacles, the problem of high property taxes, has been partially met by the so-called "Pru law" which permits corporations to be taxed on their gross receipts (about 20 per cent) rather than on an ad valorem basis. And now plans are afoot to deal with some of the other obstacles, e.g., transit, traffic, and parking.

Downtown itself, Gladstone estimates, would get only about 1.2 million square feet of new office space, but even this is substantial. At the moment, the biggest new office building, State Street Bank (see page 000) is renting well. Although developers of that building estimate that they could rent out another 800,000 square feet in the financial district, other developers in downtown are not so sure. They are watching the experience of Developer Norman Leventhal, who has the first private office building in the Government Center-he has had trouble lining up tenants.

► Retail Sales: The only way to halt the decline in CBD sales, says Gladstone, is to "overhaul the retail core, build new apartments to support shopping, get more daytime workers, more tourist attractions, and better transit." If all of these things happen, the city can expect 1 million additional square feet of new retail space constructed downtown (not

The motorist will be served—but not allowed to jam the works

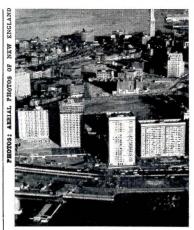
all a net gain), and a 15 per cent gain (to \$465 million annually) in CBD retail sales. (Even this growth won't be enough to keep up with the region. By 1975, Boston's CBD will account for no more than 42 per cent of the region's sales.)

► Apartment construction: At least 20,000 new downtown jobs are expected to come from the new Government Center, and additional jobs will be created by private office construction. But this is additional daytime population; and new apartments are a different matter. The chief hope for more downtown residents lies in the waterfront project (page 95), where at least 2,200 new units are planned. Another 3,000 apartments, approximately (counting in the 2,400 units planned for the West End), should help reverse the steady population decline that, since 1930, has sapped downtown's economic strength.

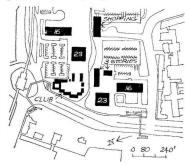
Most of the new units will be high-rent (particularly the first new apartment on Tremont Street, unfortunately a typical speculative job), and they will be aimed at childless families. The West End apartments for example, have very few children so far. Some moderate-income housing (500–700) units) is also scheduled in nearby Chinatown and as part of the expansion of the Tufts-New England Medical Center.

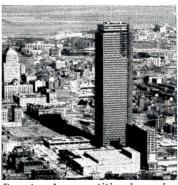
► Hotels: Almost all of Boston's new hotel rooms are in motels outside the city. The first new major hotel will be the America, at Pru Center. And despite better than U.S. average occupancy rates (70 per cent vs. 62 per cent) there is not much inclination to build additional conventional hotel space in or near downtown. Gladstone foresees a maximum 3,700 new hotel rooms by 1975—including the America and a couple of new, large motor hotels within the city.

Many Bostonians think that Economist Gladstone is wildly optimistic in his predictions, but the important businessmen—namely those on the CCBD—are beginning to believe that some of these things could happen. The hitch is—and here they all agree

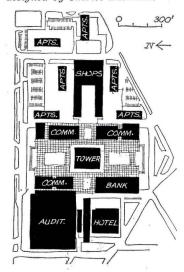


The only new housing near downtown is the controversial West End project (above) by Victor Gruen.





Downtown's competition is coming principally from Prudential Center, designed by Charles Luckman.



with Gladstone—that a first step must be the improvement of rapid transit. As Gladstone himself says, "failure to carry through a strong program of transit improvements . . . would leave only two alternatives—either a static downtown at best, or a drastically expanded highway and terminal parking system downtown. The latter, many planners contend, would be disastrous."

Even assuming that rapid transit were greatly improved to bring more suburbanites into the CBD quickly and cheaply there would still remain the problem of sorting out the hodgepodge that is Boston's downtown.

Logue picked Gruen to do the sorting out, but meanwhile he and his staff have been doing considerable work on the problem, too. The result has been one of the most sophisticated planning exercises in recent U.S. history.

Mallsmanship—and traffic

Gruen looked at downtown, its economic and physical decline, and decided the area should be sorted out into a series of seven "nuclei." A vast pedestrian mall, running up Washington Street from Boylston to State Streets, would tie the nuclei together. This mall, in turn, would be crossed by another one running from Tremont down Winter and Summer Streets all the way to South Station (map, page 101).

The idea behind Gruen's proposal was to tie the weaker elements of downtown into the stronger ones. But both the BRA planners and the CBD businessmen objected to the length of the mall and to some other parts of the plan, as well—such as the proposed widening of Tremont Street (to make it two-way) and the double-decking of Tremont with an arcade.

In response to Gruen's first proposals, made early in 1963, the BRA began its "counterplanning" (as Gruen sourly calls it) which led to the delineation of three major areas of weakness, and to possible solutions. These are:

► The South Station area and Summer Street. The traffic pattern around the station is about the most chaotic in the city, rivaled only by the tangle at Park Square.

► Park Square, and the nearby intersection of Washington and Stuart Streets, including the lower Washington Street honky tonk.

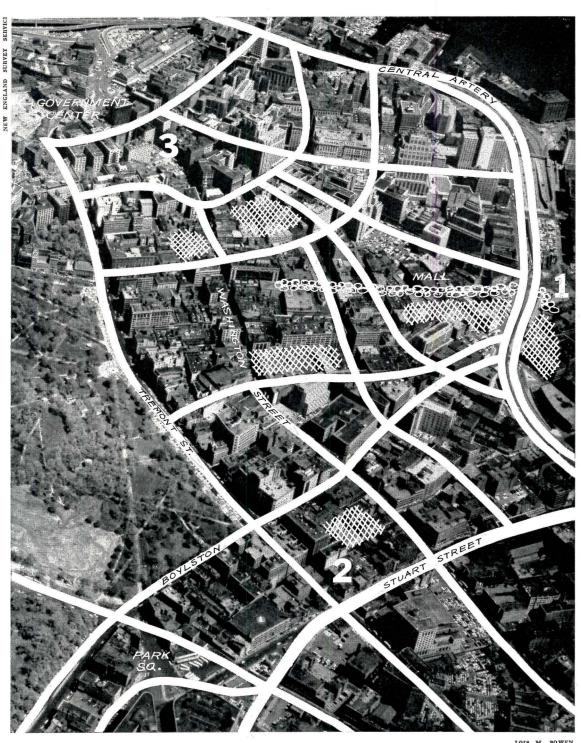
► Upper Washington Street, which must provide the link between the Government Center, where most of the new jobs will be concentrated, and the CBD, where (hopefully) the job-holders will spend most of their money.

First, the Washington Street, Park Square and South Station snarls have to be combed out. Next, the serpentine streets and the untouchable historic landmarks need to be restudied. The latter usually stand in the middle of a street (as does the Old State House), or create weird doglegs (as does the Old South Meeting House). To improve vehicular traffic, the main circulation patterns were first laid out; next some new streets were created while others were closed.

For the three problem areas, the planners and Gruen agreed on these solutions (map, opposite page):

►At South Station, a huge, 5,000-car parking garage will be built, and another 2,000 cars will be parked in smaller garages serving a possible multilevel mall up Summer Street to Jordan's and Filene's. Motorists will be able to enter the garages directly from the Central Artery. The mall would be lined with shops, and served by rapid transit underground and by small minibuses on the surface.

► For lower Washington Street, a new cultural/entertainment center, with a small hotel and new theaters, is proposed. This new area would be designed as a critical link between CBD and Park Square-and as the gateway to the commercial and apartment developments which are moving toward the Pru in Back Bay. It would also tie into the \$25 million new developments planned by the Tufts-New England Medical complex nearby. The latter development promises to be one of downtown's future strengths. Expansion plans are being carefully worked



A POSSIBLE SOLUTION to downtown's tangled traffic is shown in the map above. The large numbers refer to specific areas of weakness: (1) South Station, which will be a 5,000-car garage (cross-hatch); (2) Lower Washington-Stuart Sts., proposed as a cultural/entertainment center, with parking; and (3) a new link proposed between downtown and the Government Center. A key to the proposed plan would be a mall up Summer St. (right) from South Station to Jordan Marsh and Filene's.



out with a blue-ribbon design panel, and programed to fit neatly into the CBD plan itself.

For upper Washington Street, some new office space is planned, plus a strengthening of the small shops now in the area.

These steps are generally agreed upon. Still under discussion are the validity and extent of a mall on Washington Street, the main shopping street. Gruen at first insisted on a major Washington Street mall, which he believes downtown needs badly. The BRA and the retail merchants trimmed the mall proposal back to the areas between Tremont and Washington, creating a vehiclefree area of about 4,000 square feet. This would remove cars from Washington Street and necessitate a substantial rearrangement of Boston's street patterns (map). And, as discussions continue, the planners are even considering limiting the mall to the Tremont/Washington blocks and maintaining traffic on Washington Street. The Tremont Street mall might then be linked to the major department stores by pedestrian bridges at second floor levels.

The success or failure of any mall depends upon the success or failure of the downtown traffic plan. Despite the emphasis on rapid transit (only about 45 per cent of downtown workers and visitors now enter by rapid transit), Gruen and the BRA agree that the auto must be served—but not allowed to jam the works.

Although the final shape of New Boston's downtown is still unsettled, these things are sure: downtown will, as a result of the renewal program, be easier to get into (by transit or car), to move around in and to park in. And it will undoubtedly be a livelier, more attractive place than it is now. It will certainly generate more tax revenues. If, in the process, CCBD, Logue, the BRA staff, and Consultant Gruen can preserve those elements which today make downtown Boston such a diverting experience, they will have forged a rare achievement-to get the New Boston to match the qualities of the old.

DAVID B. CARLSON



THE NEIGHBORHOODS: CAN URBAN RENEWAL

MAKE EVERYBODY HAPPY?

Boston's old neighborhoods are rich in history but impoverished by decay. Charlestown was said to be aging gracefully thirty years ago; but today its brick and frame rows betray neglect and hard wear. The South End, once one of the city's best residential addresses, today harbors most of Boston's vice and almost one quarter of Boston's blighted housing. In nearby Roxbury and North Dorchester, the housing conditions are as bad as they are in every Negro ghetto.

These three areas—Charlestown, the South End, and Roxbury/ North Dorchester-are now the primary targets of the Redevelopment Authority's neighborhood renewal program. These are the areas which over 70,000 Bostonians chose to abandon between 1950 and 1960. Says Mayor Collins: "The ultimate success of this whole program depends on whether or not we can bring back these old neighborhoods."

The inner city of Boston is really a collection of ethnic "islands," almost all of them now in poor physical shape. Charlestown and South Boston are predominantly Irish-Catholic; East Boston and the North End are predominantly Italian - Catholic; and over 90 per cent of Boston's 63,000 Negroes live in the South End, Roxbury/North Dorchester.

Although housing conditions are about as bad in parts of South Boston and Jamaica Plain as they are in Roxbury or Charlestown, the former areas are not in the active renewal program. One reason is that people in these areas are not enthusiastic about renewal. And the BRA presumably would like to achieve success somewhere else before tackling them.

But the Negro area of Roxbury, where residents have no other place to move to at present, has pleaded for renewal action and cooperated fully with Ed Logue's planners. This is not true of the white residents of Charlestown,

of the Italian-Americans of East Boston and the North End, many of whom were dispossessed by the clearance of the old West End. The Boston program stresses

planning with people's consent; conversely, seems to ignore many areas which could use some attention. Charlestown will be the real test of Boston's program-residents there vetoed early land taking (largely because they were not fully informed about what that step might mean), and soon they will have to vote on a new plan. Administrator Logue has come up with a revised plan, calling for clearance of only 10 per cent of existing residential units, despite the deep-rooted blight in the area: If Charlestowners veto the new plan, Logue's chances of success in neighborhood renewal will wane considerably.

whose housing choice, despite low

incomes, is somewhat broader, or

Saving what you can

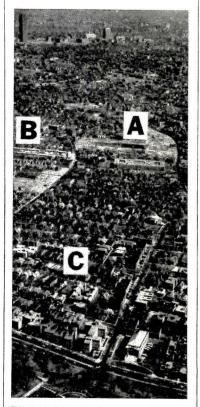
In the early, pre-Logue days of Boston's renewal program, the emphasis was on clearance, and the first large target was the West End, the declining Italian neighborhood at the foot of Beacon Hill. Its fringes were falling apart yet older Italian residents, whose families had lived there for several generations, were still firmly committed to the West End. Younger people, however, had been leaving for the suburbs ever since the end of World War II. In any case, the West End was bulldozed to make way for a group of undistinguished high-rise, high-rent apartments; and many charged that renewal meant poor man's removal.

Ed Logue arrived in Boston in 1960, flushed with the success of his New Haven program, part of which involved the rehabilitation of old housing. His program for Boston stressed residential rehabilitation, with a minimum of clearance. Moreover, Logue promised that residents of each target area would be closely consulted along every step of the way.

Not all of Logue's initial experiences in the Boston neighborhoods were encouraging. In the Harvard-



Residents of area not far from site of proposed Kennedy library have raised this defiant sign.



Washington Park renewal area. part of which is shown here, will have a new neighborhood shopping center (A) not far from the area's first new housing, Marksdale Gardens (B). A new elementary school will be built near the existing high school (just below A). Meanwhile, most of the residential rehabilitation is taking place nearer Franklin Park in area (C).

Allston area, for example, near the Harvard Business School, a few outspoken residents erected a sign that reads "To Hell with Urban Renewal." Only in the Negro areas did planning proceed, and today the Washington Park renewal project is further along than any other neighborhood project in the city.

Planning in the ghetto

The 502-acre Washington Park project is the heart of Boston's Negro ghetto and in many respects the heart of Ed Logue's renewal program. If he doesn't make it in Washington Park, he may not make it anywhere.

The Washington Park section of Roxbury is really two neighborhoods. The northernmost one, north of Townsend Street, is the original project area; it comprises 186 acres. Some 25 per cent of the existing housing is unsalvageable, and all but one per cent of the rest needs rehabilitation. The area was two-thirds white in 1950, and now is almost entirely Negro. Average family income is \$4,000 and 40 per cent of families earn less than \$3,000 a year.

From Townsend Street south to Franklin Park lies Boston's equivalent of Harlem's "Sugar Hill," where almost all of Boston's upper-income Negro families live. Here the housing is in much better condition, and there has been some rehabilitation.

The wealthier families have little to do with the lower-income families to the north. Most of the latter are newcomers to Boston. which adds to their isolation. In the upper-income area there are sturdy community organizations, while to the north there is growing disorganization.

It wasn't until Ed Logue drew up Boston's \$90 million development program in 1960 that the Roxbury project really came to life. Mayor Collins wanted to get going, and Washington Park, where community leaders were eager for renewal, was the likeliest place to start. One of the first things Logue did was to extend the small project to Franklin Park, thus adding the strength, economic and social, of the middle-class Negro families.

This extension of the project



Plans are underway in three innercity neighborhoods- (1) Charlestown, (2) South End, and the Washington Park area (4) of Roxbury-North Dorchester (3).

Adequate housing for the lowest-income groups is still unsolved

provided a chance of showing some success early in the game: for the game was residential rehabilitation and it has proved the trickiest one in renewal.

The biggest uncertainty about rehabilitation is how much it adds to the cost of housing. Further, if rehabilitation doesn't achieve its chief objective—i.e., reducing the number of families to be relocated —would it not be simpler (and cheaper) to clear the area and get some new housing? The answers may come in Washington Park where Logue hopes to rehabilitate about 75 per cent of the existing units and clear the rest.

In theory, at least, the Boston Redevelopment Authority has licked two obstacles to rehabilitation encountered in the past: shortage of mortgage money, and lack of FHA cooperation. BRA now has a pool of mortgage money, pledged by a group of Boston banks. And it has received assurance of FHA's cooperation.

Logue hired a big enough staff (82 for the Washington Park project alone) not only to sell rehabilitation to the residents of a target area, but also to guide them every step of the way, offer architectural advice, and help them in selecting materials and in setting up the financing.

The experience, to date, has been disappointing. Whereas BRA hoped to process 50 applications each month, it is currently getting only about six. One problem is that neither the banks nor FHA have been able to discard their time-honored notions of what constitutes a good risk. An even bigger problem is the reluctance of older homeowners to get involved. They see no reason for taking out long-term loans and increasing their monthly carrying charges.

New housing-for whom?

If rehabilitation is uncertain, the new housing to be provided in Washington Park has some elements of certainty. It is sure that at least two-thirds of the 1,700 families who are being relocated can *not* afford the new 221d3 housing being built. Perhaps some of these will be able to move

into homes left by those going to the new housing. But neither rehabilitation nor new construction is solving the problem of providing safe and sanitary housing for families that must be moved. BRA is considering two possibilities to get around the dilemma: (1) a special rent supplement experiment, under which the Boston Housing Authority would pay the difference between the rents low-income families can afford and the 221d3 level (about 10 per cent of the first 221d3 units will be used for this experiment); (2) moving the families out of the area completely, to decent housing in close-in suburbs. The latter approach is limited by a narrow market for inexpensive integrated suburban housing.

Logue's deputy director Ellis Ash, who now heads up the Boston Housing Authority, says that "there is a tremendous need in all the older neighborhoods for housing costing less than 221d3. And if we can't rehabilitate existing homes and still economically house low-income families, then we are really stymied."

Low-income housing needed

The Washington Park program has yet to prove that it can provide a supply of low-cost housing adequate to meeting the needs of a majority of the area's residents. Public housing remains a very limited resource, for only a few hundred new units are still authorized but unbuilt, and new applications currently run double the annual turnover. Ash hopes to use rehabilitated homes for public housing, but this program will be limited, too.

Logue is far from ready to admit that he has been licked, but he is increasingly restless about the slow progress in Washington Park. Some facilities are being built (a new YMCA, designed by TAC and the new shopping center, by the Cambridge Seven—see page 87) and the hope is that as these and the new housing get finished, perhaps more residents will get on the rehabilitation bandwagon. But the problem of housing the lowest-income families remains unsolved on anything

like the necessary scale. And Logue faces a relocation load in the city of at least 7,000 families (and some guesses put it as high as 25,000) over the next six years, many of them to be displaced by new highway construction.

Similar problems crop up in Charlestown, where a new plan will be shown to residents soon, and the South End, where a plan is almost ready for release. The latter area particularly, which needs at least 40 per cent clearance, presents many difficulties because so many of the families being relocated have low incomes. A great deal of 221d3 housing is scheduled for the area, but the need is for rents far lower than 221d3 can offer.

The South End, with only 5 per cent of the city's population, seems to have 95 per cent of its problems. It is still the city's chief point-of-entry for low-income Negroes new to the city, and it has the highest incidence of social disorders.

Despite its problems, the South End could be one of Boston's choice areas for middle-income families. Several have already moved into the pleasant block known as Union Park, buying old houses, 10-rooms (and bigger) for less than \$10,000, and fixing them up. The result is fine, spacious housing within a short walk of the Prudential Center or Copley Square. The BRA is working hard to keep this small influx of pioneers coming into the area, and it is beginning to meet with success, at least in the part of the South End nearest the Pru.

The newcomers are attracted by the South End's diversity—its lively small shops, restaurants and the graying grace of many of its residential streets. The biggest stumbling blocks continue to be the high incidence of crime and disorder—and the absence of decent public schools.

The battle for schools

Two years ago, the BRA hired consultant Cyril Sargent of the Ford Foundation to study Boston's schools. He recommended that at least 71 aged elementary schools

be torn down, and that 55 new elementary schools, plus 12 additions, be built. Sargent also proposed a new city-wide high school for 5,500 pupils and coordination of the school building program with urban renewal. Total cost: \$132 million.

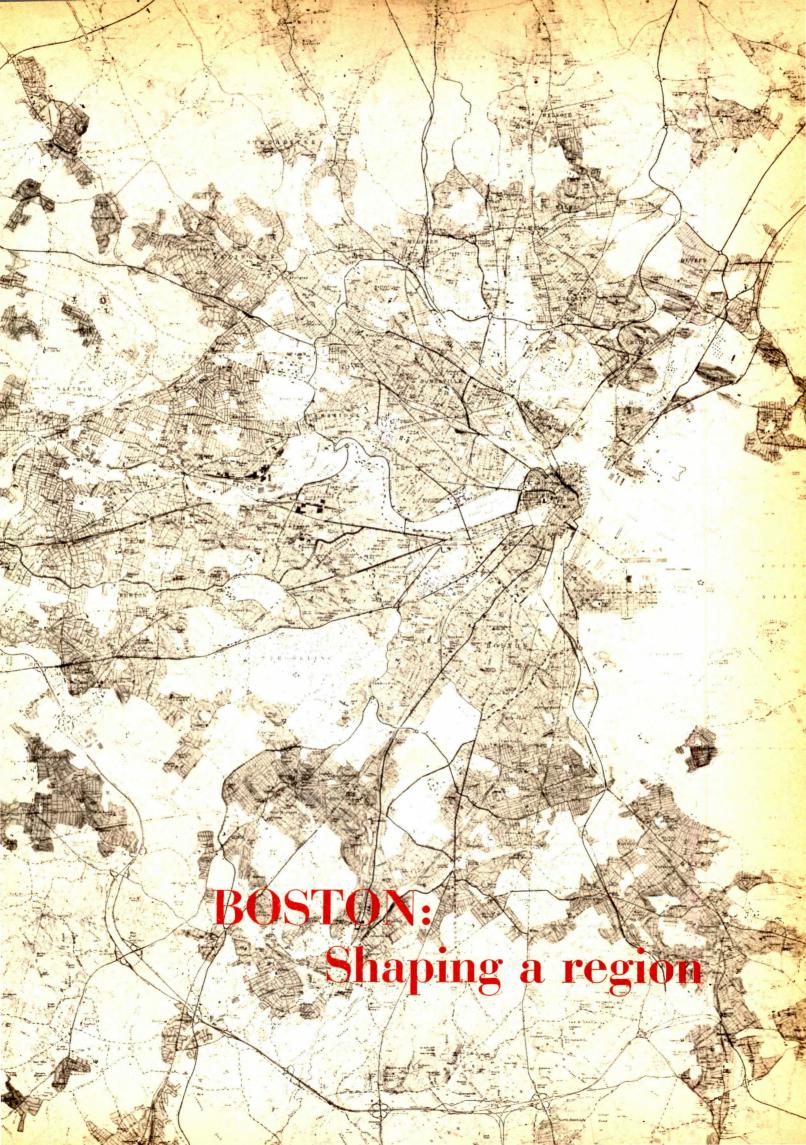
Mayor Collins endorsed the program, but it is still bogged down between the elected School Committee and the School Buildings Commission (which builds the schools upon the Committee's recommendations). And while enrollments continue to rise, and 40 per cent of the pupils attend schools more than 50 years old, the program dawdles. The first new schools slated for Washington Park and Charlestown are far behind schedule. Until the school program makes real headway, Collins and Logue don't stand a chance of getting middle-income families to move back into Boston.

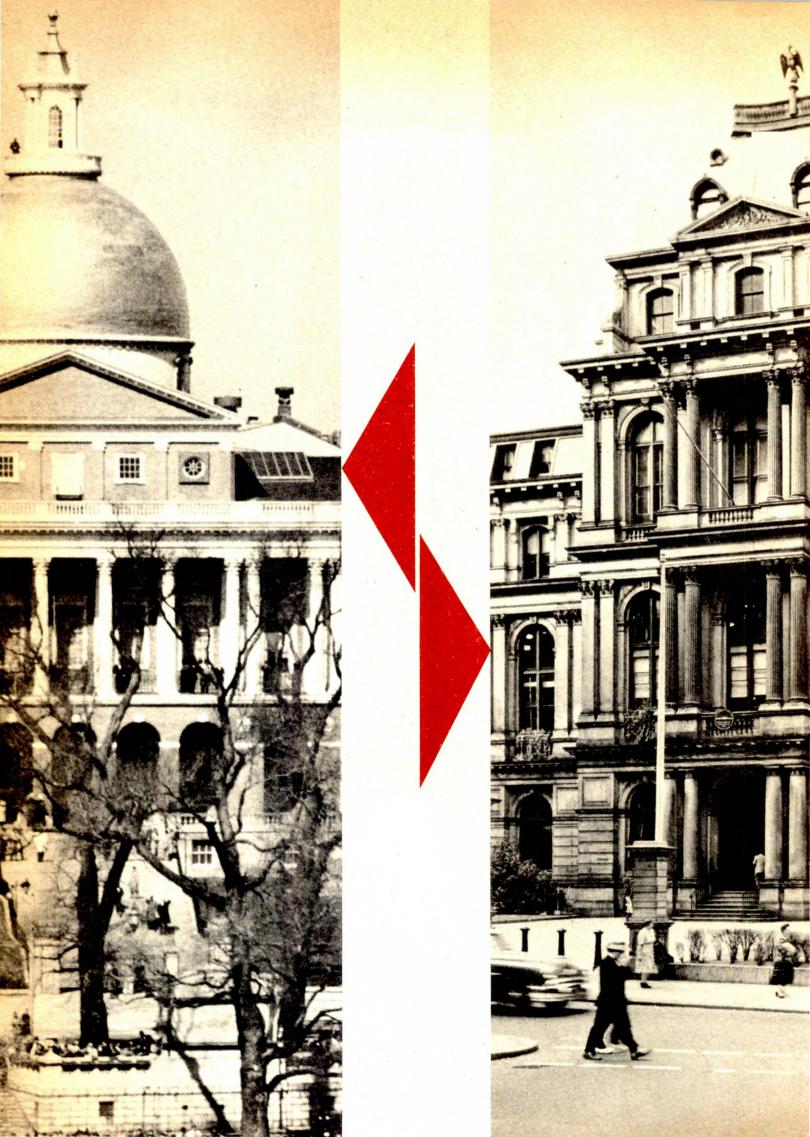
The outlook is uncertain

There is still a great deal that is charming about parts of Charlestown and the South End. Some rehabilitation occurs despite the absence of a big push in those two neighborhoods. But most of the early vigor disappeared when the young families headed for the suburbs, leaving the hard-core problems to those determined to stay. The latter are often in the forefront of Logue's opposition.

If energy and ingenuity are enough to save Boston's neighborhoods, they will probably be saved, for the Collins/Logue team has plenty of both. But, as BRA member James Colbert, an old Boston hand says, "people aren't sold on renewal yet."

In "planning for people," one cannot move until the people want him to do something. Logue can suggest, cajole and persuade, but he cannot jam renewal down their throats. This is the political reality of renewal in Boston, where politics is a way of life and every mistake is long remembered. Until Bostonians become convinced that renewal is worthwhile, the program will continue to move too slowly for the leaders now doing the persuading.—D.B.C.





STATE VS. THE CITY: THE PAINFUL POLITICS OF OBSTRUCTION

Early this year, Boston's Mayor John F. Collins declared war on the Commonwealth of Massachusetts. He called for a "massive citizens' assault on the minds of our elected state officials, so that they may be made to realize that our state and local administrations are not two competitive systems of government. . . ."

If such a beachhead can be established on the minds of the state lawmakers, it will be the greatest single achievement since the British were driven from the city in 1775. For the fact is that the state and the city have been fighting a sort of guerilla warfare for many years. What makes this war so painful now is that the city of Boston, with its huge urban renewal program and increasing public services, is trying hard to catch up to the 20th century, while the state has done its utmost to keep the city in the 18th.

The city's crisis is economic. The infamous Boston property tax has been hammered down to below \$100 for the past four years, mostly because Collins trimmed 1,300 jobs out of city government-a painful job for any politician. Now the Mayor says he has gone as far as he can in that direction; and the state must give the city new taxing powers or else the city's sole source of revenue, the property tax, will soar to new records. The problem is aggravated by the fact that 42 per cent of the city's land and buildings are tax-exempt property. Higher property taxes are sure to put a severe crimp in any new investment in the New Boston. What makes the city's situation so critical is the ever mounting demand for more services. And most pressing of these is transportation. The story on pages 108-113 tells of the efforts to achieve a comprehensive, regional transportation system-and this in a region beset not only by fiscal chaos but by severe sectionalism, inertia and distrust. The suburbs have refused to follow Collins' (and the planners') suggestion that the publicly owned transit system (MTA) be extended into the suburbs on existing rail rights-of-way. Their argument is that suburbanites don't want to share the MTA's \$20 million annual deficit (which the city covers now to a great extent).

The citizens distrust their government

While the city presses the state for better transit (and more money to pay for it), the suburbs seem to figure that more and better highways will do the job. Either way, the city gets stuck with the bill, it seems. For when the state builds more highways into the city, it simultaneously refuses authorization for city bond issues to build parking garages (as the State Senate did last session). And even though Gov. Endicott Peabody's new transportation proposals call for MTA extension, Mayor Collins, who has been begging for such action, says sadly that the city can't afford to pay for it. The state, it seems, hasn't been paying its fair share of MTA expenditures up to now, and any further burdens would bankrupt the city.

This whole snarl has an Alice-in-Wonderland quality which must be unique in American politics. While most citizens seem to blame the "self-seeking politicians" for the mess, the politicians have started to blame the people. A Cambridge representative, John J. Toomey, says, "The people want more services but they don't want to pay for them." And Boston

University professor George Blackwood, an adviser to Gov. Peabody, is even more emphatic: "The plain fact is that the citizens of Massachusetts distrust their government . . . they are reluctant to pay sufficient taxes to support a modern society. . . ."*

There certainly has been a history of fraud and waste in Massachusetts, but under Mayor Collins this image has been shattered. The facts are that the city desperately needs more tax revenues—and from sources other than real property—to meet the needs of today.

The most distressing need: schools

If transportation is the most obvious of these needs, then education is the most distressing. Despite its world-famed collection of universities (see pages 114–123), Boston's school plant is ancient, decrepit and lacking in almost every modern facility, as was indicated in a study done two years ago (page 102). And now, despite a general population loss, the school population is rising—from around 95,000 today to an expected 106,000 by 1970. School costs are rising much faster than any other major element of the city's budget, and will continue to climb. Yet the state pays only 8 per cent of general city school costs, compared to a national average for all states of 40 per cent. In fact, Massachusets, with its glorious tradition of pioneering in education, today ranks 46th in state contributions to education.

Former Tax Commissioner Robert T. Capeless has said that the state must provide new tax sources to meet the problems of Boston and of other cities, but this isn't so easy: Former Gov. Foster Furcolo fruitlessly backed a sales tax on three different occasions—and he failed to get re-elected as a result. And Gov. Peabody has called for increases in the state income tax, and has been rebuffed.

Yet Capeless believes that if the voters understand how much the state needs additional services, and realize that it can afford them (Massachusetts is the ninth richest state in the U.S.), then perhaps their antitax attitudes will change. A key point for the public to understand is that new tax resources are needed as much to replace part of the burdensome property tax as to provide revenues for new and expanded services. The property tax must be cut by at least 17 per cent, Capeless believes—and Collins would like to cut it more.

If Boston's current fiscal problems are largely the result of a state of mind, then that state of mind had better change if the city is to realize the goals Collins has set for it. The renewal program cannot work without schools, and the schools are presently at the mercy of the hard-eyed state legislature. Nor can there be a viable New Boston without a comprehensive transportation program—and that program is at the mercy of the suspicious and already tax-burdened suburbs. Unhappily, the governor, who might be in a key position to bring about the needed changes, is usually hamstrung (as Peabody and Furcolo have been) by the state legislature. Perhaps Boston's best hope lies in extending the governor's term (from two years to four—now he spends most of his time running for office) and getting a man in the State House who is sympathetic to the city's problems.—D.B.C.

^{*} Writing in the Boston Junior Chamber of Commerce magazine.



1010 OFF.; RICHARD BIELINS

TRANSPORTATION: "IF IT GETS ANY WORSE, IT MAY NEVER GET BETTER"

Last December 30, nearly every one of Boston's narrow streets and major arteries looked like the view of Storrow Drive at left. On that day, now known as Black Monday, traffic in the city's core stood virtually frozen for 12 hours. Thus Boston's transportation crisis is one step ahead of other cities, where a complete transportation breakdown has only been predicted. In Boston it has already happened.

But Black Monday may still turn out to be a blessing, for it has pushed transportation to the forefront of the turbulent Massachusetts political scene. Among other things, it prompted Governor Peabody to introduce a farreaching transportation program to the state leigslature in April—and to say in the preamble: "If things get much worse in the field of transportation, they may never get better."

What brought about Black Monday? In part it was the general movement from core to suburbs so painfully familiar to all of America's older cities. But in their migration, Bostonians took to the automobile with a passion rarely seen outside of Los Angeles: vehicle travel per person increased at double the national rate in the decade of the 1950's.

Wealth of wasted mileage

Unlike Los Angeles, however, the Boston area is richly endowed with public transportation. The Metropolitan Transit Authority's lines would cost \$1.5 billion to replace, and the suburban commuter railroad mileage is second only to New York's.

Much of this mileage is going unused, to the point where MTA's mounting deficits are a major political issue. The railroads want out of the commuter business, and many private bus lines are on the brink of bankruptcy. Between 1949 and 1962, MTA passenger volume dropped 58 per cent, from 433 million per year to 180 million, and the railroads' volume dropped 75 per cent, from 80,000 per day to 20,000.

Meanwhile, new highways have been built at an annual rate of \$90 million—and have consistently lagged behind demand. Their only visible effect has been to transfer more Bostonians from public transit to private cars.

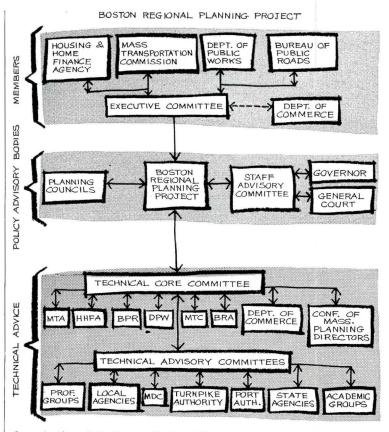
Nor is a chronic lack of capacity Boston's only highway problem. Four separate agencies build its roads: the State Department of Public Works, the Massachusetts Turnpike Authority, the Port Authority, and the Metropolitan District Commission. Not only do the four fail to coordinate plans with each other (much less with the public transportation people), but they often have actually been rivals. All they have in common is a master plan based on traffic counts taken in 1945, when Boston was a far different city from what it is today.

Well-funded programs

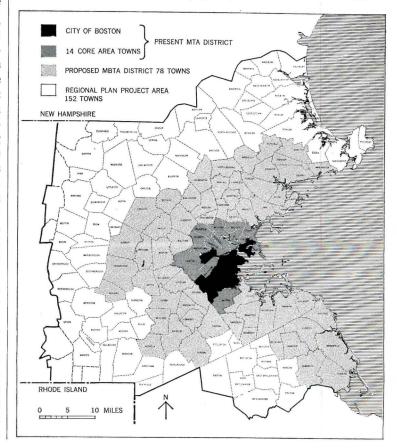
The easing of Boston's transportation crisis obviously will take some doing—arousing as it does all of the deep-seated animosities between state, city, and suburbs (see page 107). But even before Black Monday, some well-funded programs had been set up to try.

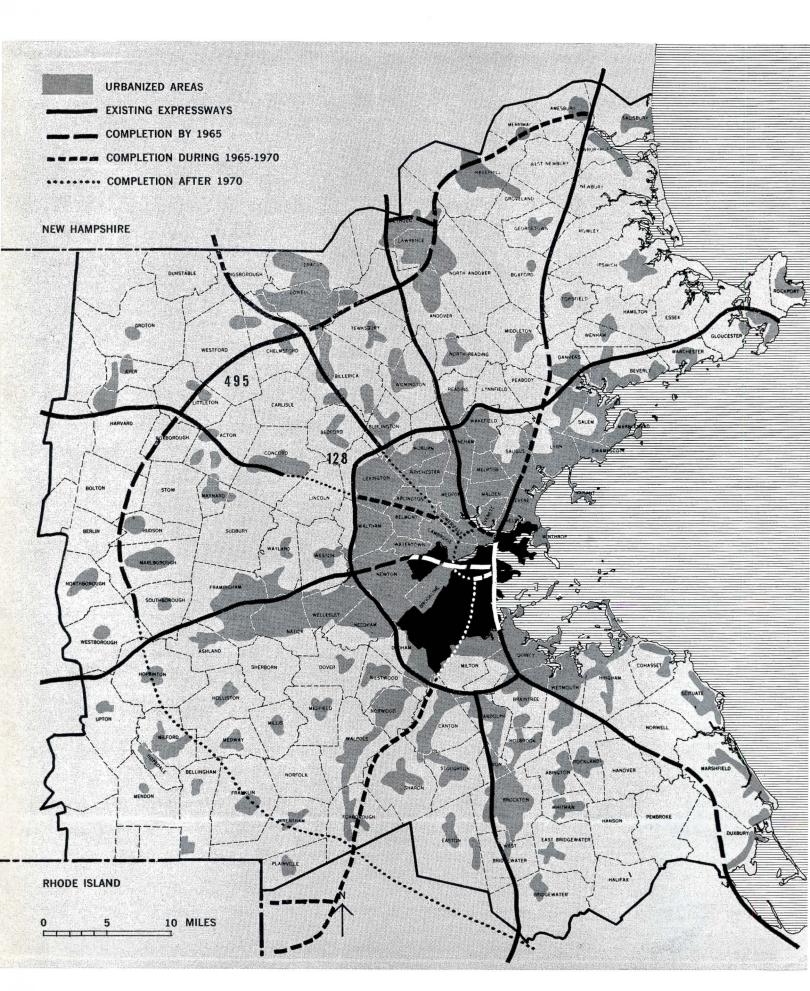
The first was the Mass Transportation Commission's \$5.4 million demonstration program of subsidies to public transportation, (see page 112). Next came the \$5 million, three-year Boston Regional Planning Project (BRPP); its aim is to bring together all of the agencies shown on the diagram at right, gather up-to-date data on land use and travel for 152 municipalities, and feed everything into computers to predict the probable consequences of various over-all transportation policies. Finally, a permanent Metropolitan Area Planning Council was established last year, bringing 46 communities directly into the regional planning process to act on BRPP's findings.

Governor Peabody, however, was unwilling to wait for the results of BRPP's intensive study. His state-wide transportation program calls for a complete reorganization of the public transportation system serving 78 communities in the Boston area. At least as significant as the governor's specific proposal is the fact that he brought the subject up at all.



Organization of the Boston Regional Plan Project (above) pulls together all agencies responsible for transportation planning and provides arena for resolution of longstanding conflicts. Map below shows growth of region considered in transportation plans from 14 towns of old MTA district to 78 towns in Governor's proposal, 152 towns in BRPP area.





Boston's highway plan is a case study in putting last things first

On paper, the Boston region's current highway building program (left) seems a model of logic and clarity. In 1948, when it was drafted by the State Department of Public Works and the Metropolitan District Commission, the evenly spaced network of radial and circumferential roads promised casy access to the region's every corner.

In actuality, the program has been a constant source of chaos and uncertainty for the motorized Bostonians. What the planners of the 1940's failed to realize was the importance of the *sequence* in which the program was carried out.

The Department of Public Works chose to build the easy parts first, out where land was cheapest. It can point to a seemingly substantial record of progress: two-thirds of the network completed at a cost of \$700 million. The remaining one-third, however, is mostly in densely built-up areas near the core, will cost another \$700 million, and has been brought almost to a complete standstill by an increasingly effective opposition.

Route 128: classic example

The priority given the farther out highways, moreover, helped to reshape the region's basic character. The clearest example of this—and a classic demonstration of the interaction of highway planning and land use—was Route 128, the first major circumferential road built around a U.S. city.

Route 128, circling Boston at a distance of about 12 miles from the city's center, had already been started when the 1948 plan was drawn, so its completion appeared a logical first step in the program. Route 128 turned out to be an ideal location for the reséarch and electronic firms that were being drawn to the Boston region by its resources of brainpower. The road became the Space Highway, feeding a vast crescent of land which provides one-eighth of the jobs in the entire Boston area.

As such, Route 128 did a great deal to introduce a motor-cen-

tered way of life to the Boston region. Now the state is at work on Route 495, the Outer Belt on the highway plan, to be built at a cost of \$120 million. Whether it will pull the region still further outward, creating more low density development, depends in part on what is done to ease the strangling traffic at the Boston core.

The answer contained in the master plan (and shown in detail at right) is the Inner Belt, which got off to a most unfortunate start. Its first leg, completed in 1959, was the Central Artery (photo right), which harshly and mercilessly severed the Boston business district from the waterfront. Since then the Inner Belt has been stalled by controversy.

It's fine-somewhere else

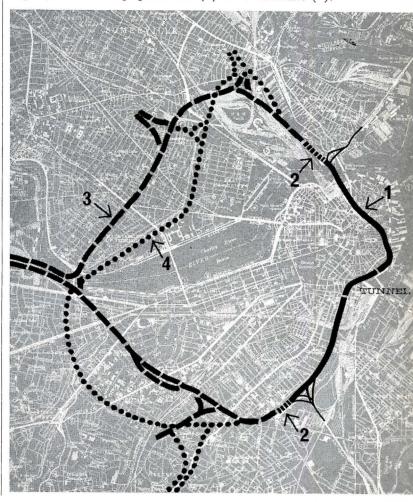
Actually, the state is now using a more sophisticated form of planning for the rest of the Inner Belt, measuring community impact as well as cost and studying a wide variety of alternative routes. So far this has been to no avail. Everyone agrees that the Inner Belt is a good idea—just so long as it goes through somebody else's neighborhood.

It may turn out that design will help break the stalemate. Near the Museum of Fine Arts, where the proposed route of the Inner Belt has been called "the rape of the Back Bay Fens," the Boston Redevelopment Agency has suggested that there be a demonstration of what architecture can do to tame an urban highway. And in Cambridge, which has been equally opposed to all of the Inner Belt routes so far suggested, a Citizens Advisory Committee has proposed to design one itself. (Cambridge also has an attempted rape on its hands: the state wants to build underpasses on Memorial Drive along the river, destroying some of its handsome stand of sycamores and threatening to convert it into a high-speed expressway.)

Meanwhile, the highway building bottleneck is making people think of other ways besides their autos for getting to and through the city core. One of them is Boston's until-now-neglected network of rail transportation.



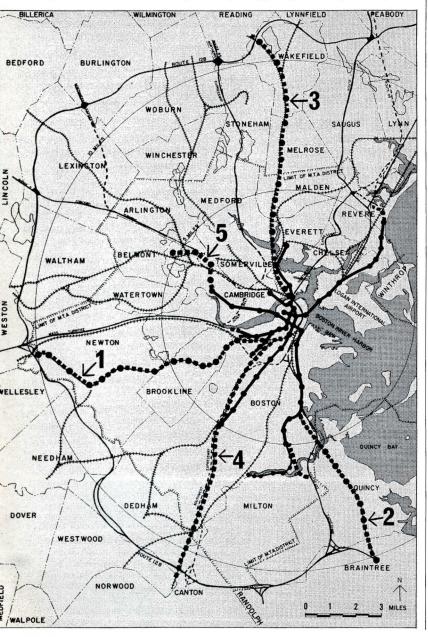
Opposition to the Inner Belt was aroused by the disruptive effects of its first segment, the Central Artery (above and 1 in map below). Only two short extensions (2) are going ahead. The balance is stalled by township objections to the proposed route (3) and an alternate (4).



Peabody's transit plan is an attempt to pry people from their cars



Above, under-used rails run by clogged highway. MTA wants to expand its system along existing railroad rights of way (below) as it did two years ago with the successful Highland Branch (1). The governor proposes two more extensions (2 and 3) now, perhaps others (4 and 5) later.



The empty tracks at left, running past the cars piled up at the entrance to the Longfellow Bridge across the Charles, belong to MTA's main line into Boston. The line was recently equipped with shiny (and expensive) new cars. At rush hour, it operates at 33 per cent of its capacity.

Public transportation is caught in a vicious downward spiral. It is deserted by passengers who complain of bad service, bringing losses of revenue which cause further cuts in service, bringing further losses of passengers, and so on down. Eighteen months ago, the Boston area was chosen for the most significant experiment yet tried in reversing the spiral.

The Mass Transportation Commission gave \$3.6 million of federal money and \$1.8 million provided by the state to MTA and commuter rail and bus lines to improve service and lower rates. Passenger volumes increased as much as 40 per cent and were still growing when the program ended in April. But even though the experiment proved that people could be lured from roads to rails, it left the problem of the public transportation deficit unchanged. By April the lines were just reaching the break-even point on the cost of the extra service.

Rapid transit to the suburbs

MTA feels that the only way to cut its operating deficit is to extend its lines to the suburbs to follow the region's shifting population. MTA has a carefully worked out expansion plan (see map at left), taking several lines all the way out to Route 128 along existing railroad rights of way.

The expansion of MTA, however, has drawn violent opposition from most of the suburban towns, and for a very simple reason: they want no part of the \$22 million annual deficit now shouldered by the 14 towns in the MTA district. In South Shore, the only place where the matter has come to a vote, MTA was rejected six to one.

This is where Governor Peabody's program comes in. His move was an act of political daring as well as leadership, because the last two governors are generally agreed to have lost votes every time they touched the transportation issue.

The governor proposed a \$200 million bond issue, to be financed by an additional two-cent-a-pack cigarette tax. It would provide \$15 million for bus and trolley aid, \$5 million for the railroads, \$30 million for purchase of MTA, \$50 million for expansion of rail rapid transit to 78 communities through a new Massachusetts Bay Transit Authority, and another \$100 million later for further expansion of rail and bus service. Significantly, it contains an elaborate formula to keep the newly served towns' share of the transit deficit to a minimum.

Township rivalries are too deep to expect the state legislature to swallow the package whole. But initial voter reaction was favorable, and it seems likely that some parts will be passed.

What kind of region?

The difficulty is that no one is really in a position to say with certainty whether the Peabody approach is the answer. Some, like Martin Wohl of Harvard's Transportation Research Program, believe that people are too committed to highways to buy an improved rail transit system. Wohl advocates high-speed bus lines instead. Others see rails as the city's only hope for survival. (Among the most vocal is Robert Jenney, who, despite the fact that he is president of a gasoline company, has been running a telling series of full-page advertisements in the Boston newspapers calling for improvement of the rail network.)

In the end, the choice is really what kind of a region Boston wants to be: it can either continue to follow a pattern of widespread low-density development encouraged by the rings of highways, or use rail transit to achieve once again a strong orientation to the high-density, center city. It had better face this choice quickly, before new roads like the Massachusetts Turnpike Extension (right) pour many more cars into Boston's choking core.

BERNARD SPRING



Architectural Forum / June 1964

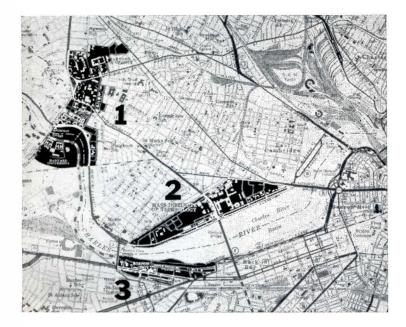
THE UNIVERSITIES: TALL NEW SYMBOLS OF THEIR SIGNIFICANCE

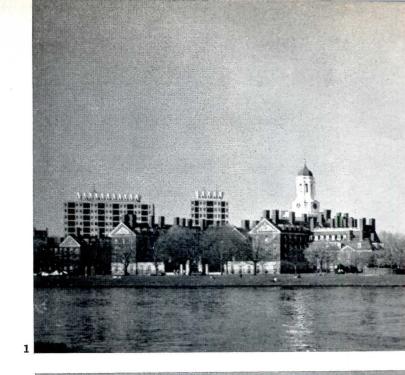
The 60-odd colleges and universities in the Boston region are more than a cultural resource. They are the economic promise of the region's continued growth. And they have become, with construction of the riverfront towers opposite, a prominent part of the Boston panorama. The academic community on the Charles—Harvard (1) and Massachusetts Institute of Technology (2) on one side, Boston University (3) on the other—is suddenly and strikingly visible.

It is this community, in particular its Cambridge branch, which has generated the growth of the region's brainpower industry—research organizations and the makers of space and defense hardware—to fill some of the gaps left by its manufacturing decline. At first such firms went to Route 128 on the region's fringes, but now Technology Square is being built to lure some of them back to Cambridge and the National Aeronautics and Space Administration plans a \$60 million center close to the Boston core. Future elements of the in-city redevelopment program are based on the vision of Boston as a "City of Ideas," and thus on the magnetic force of the universities.

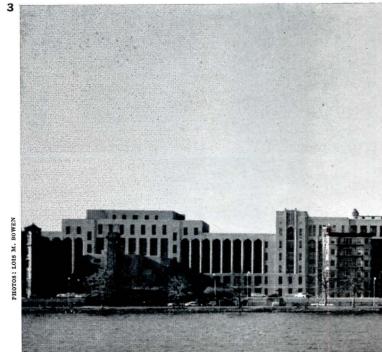
All three of the campuses along the river are growing, and growing in a fashion that is spectacular even for the booming world of U. S. higher education. The combined total of the development programs in which they are engaged may reach between \$150 to \$180 million in new construction. And some of the biggest names in American architecture have been called on to do the work.

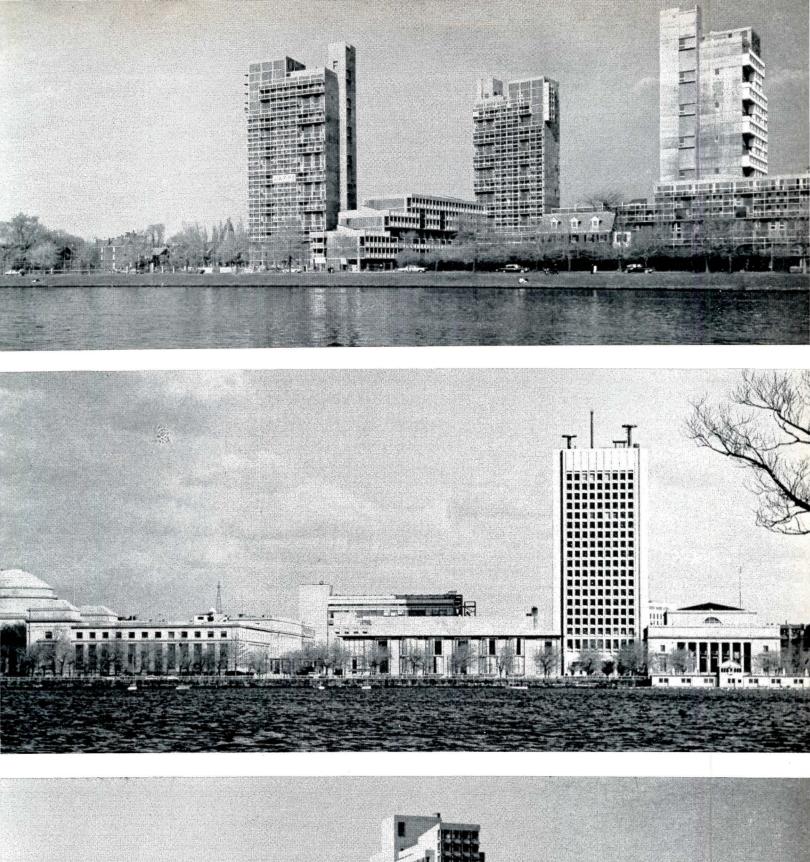
This last point relates to still another role which the universities play (or should play) in the development of the Boston region. The urban campus, Harvard's José Luis Sert has said, "should set an example of good planning and good design. It is, in a way, a micro-city and its urbanity is the expression of a better, more civilized way of life." The following pages examine the kind of example which the campuses along the Charles are setting for the New Boston.



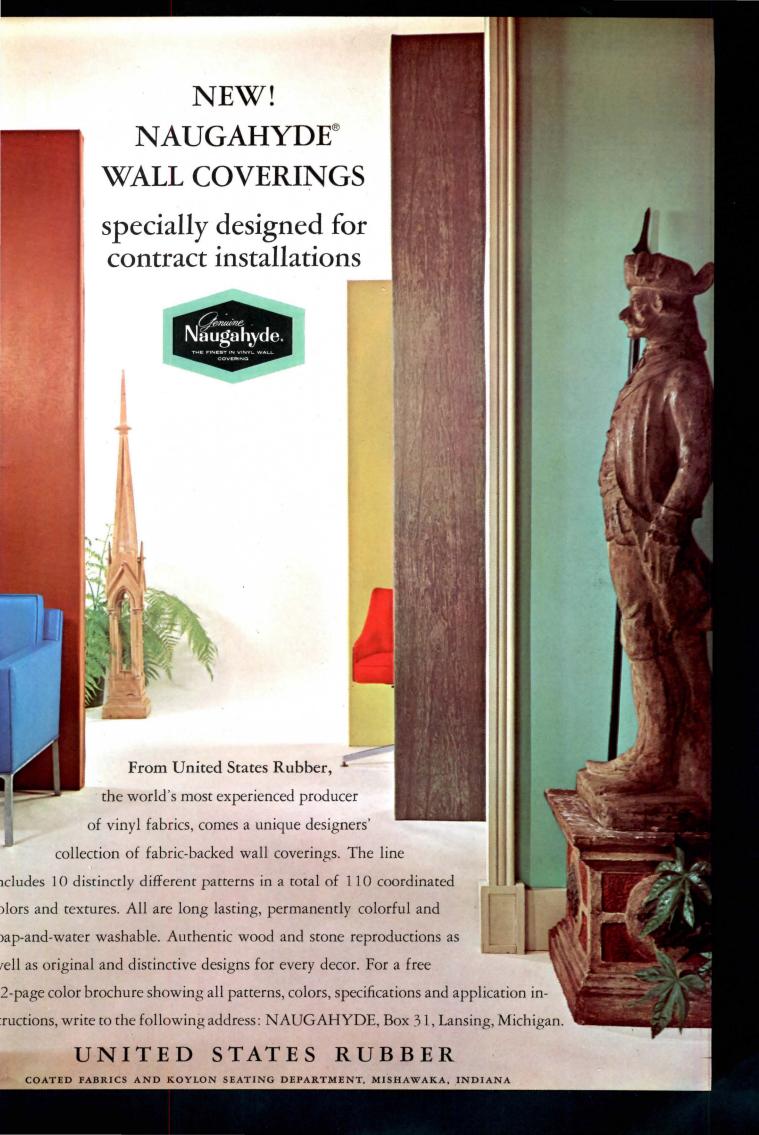














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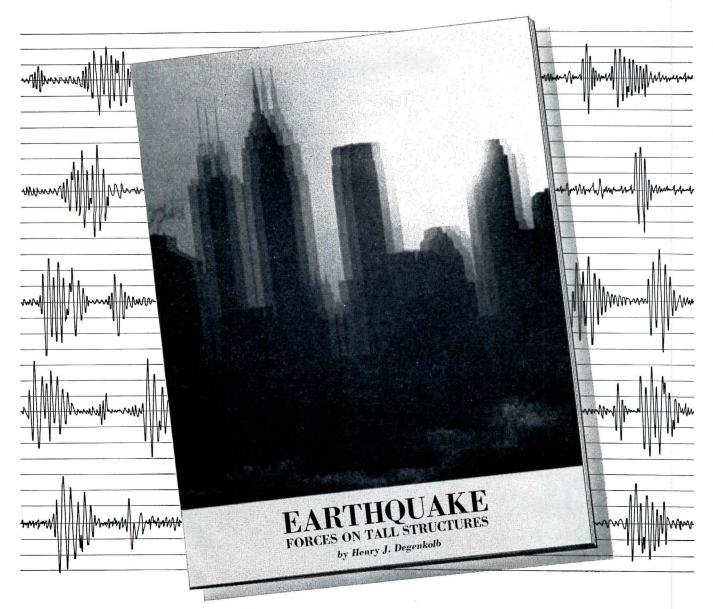
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About the Author: HENRY J. DEGENKOLB

Mr. Degenkolb, H. J. Degenkolb & Associates, San Francisco, California, is a lecturer in the University of California's Engineering Extension program and in the University's College of Engineering.

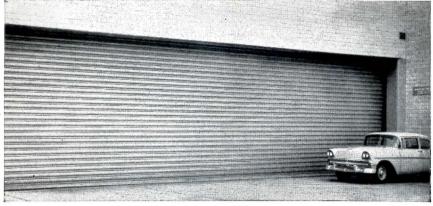
He is a member of the American Society of Civil Engineers, the Earthquake Engineering Research Institute, the Seismological Society of America, the Society of American Military Engineers, Tau Beta Pi, and Chi Epsilon. He is a member and past-president of the Structural Engineers Association of Northern California, and the Structural Engineers Association of California. He is active on the Building Code Section of the San Francisco Chamber of Commerce, and has served as its chairman.

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1640-60 Fields Ave., Columbus 16, Ohio 1742 Yosemite Ave., San Francisco 24, Calif. Offices and Representatives in All Principal Cities WORLD ARCHITECTURE TODAY. Edited by John Donat. Published by Studio Books, London, and The Viking Press, 625 Madison Ave., New York 22, N.Y. 255 pp. 9" x $11\frac{1}{2}$ ". Illus. \$15.

As John Donat says in his introduction, "good modern architecture is a rare bird. It takes interest, patience, and knowledge to track down." Good books on modern architecture are also rare; they too take interest, patience, knowledge, and, above all, a good editor. Happily, Donat is such an editor.

Donat asked 27 people from 22 countries around the world to write short essays about the architecture around them, illustrating with pictures. The result is one of the liveliest and most readable world views of architecture in years. Donat wisely let the personalities and persuasions of the diverse contributors come through. In some cases the contributors are architects and they show the building's closest to their hearts, i.e., their own. Other contributors take a broader approach, such as John Lloyd on Norway, who gives three pages of the history of the esthetic fights against the harsh landscape and war's desolation and shows representatives of three distinct styles. Both approaches are valid and, more important, both are in-

Through most of the book, the contributors have not been content just to describe; there are short critiques, often accompanied by rebuttals from the architects whose work is criticized. There are examples of town planning, both real and proposed; philosophic statements; and a scathing and amusing attack by a Canadian on the "good life" in North America. There are buildings by prominent architects and by architects who are little known outside their own countries.

And one of the nicest things about this book is that it is the first number of an annual review.—J.R.

MODERN SCANDINAVIAN FURNITURE. By Ulf Hard af Segerstad. Published by the Bedminster Press. Vreeland Ave., Totowa, N. J. 131 pp. 8" \times 10½". Illus. \$7.50.

This interesting book, illustrated in blackand-white and color, displays a wide selection of Scandinavian furniture of both the hand-crafted and mass-produced varieties. It includes background chapters on the history of modern furniture design in Denmark, Finland, Norway, and Sweden; a helpful list of woods commonly used, together with their distinctive characteristics; and a buyers' guide that provides handy information on what to look for in workmanship, compatible sizes, and solid comfort. The author singles out several pieces to illustrate with close-ups showing how joints and curves follow the wood's grain. There are also a number of room settings-mockups for exhibits and actual homes-most of them a blend of several designers' pieces.

Among the most interesting sections are those on children's furniture and vacation houses. The children's collection (photo) is Stefan Gip's BA series for Skrivit, surprisingly lighthearted in view of the fact



that the design was based on recommendations from the child psychology department of the pedagogical institute at Stockholm University.—M.E.A.

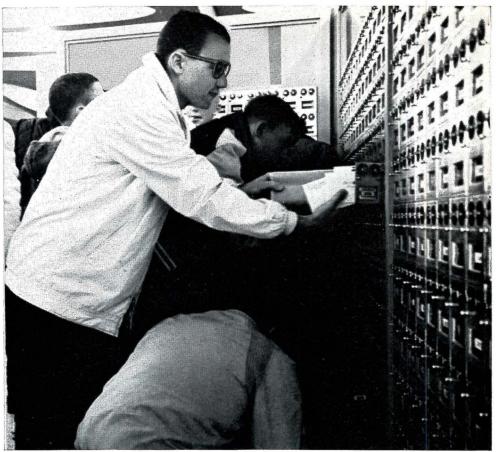
METROPOLIS: VALUES IN CONFLICT. Editors: C. E. Elias Jr., James Gillies, Svend Riemer. Published by Wadsworth Publishing Co. Inc., Belmont, California. Paperback. 326 pp. 6" x 8". \$3.50.

The literature of the city is getting out of hand. Each month come new titles examining urban problems from a multiplicity of viewpoints—planning, design, economics, government, and, increasingly, the social sciences. Some open new fields, but most add a bit to the store of knowledge and viewpoints on the classic issues of urban life in this most peculiar century.

The value of this book, a collection of brief writings on the city and its surroundings, is twofold: it sharpens these issues by emphasizing conflicting schools of urban thought; and it summarizes the stands of the most influential of urban writers. To be sure, many, even most of the editors' selections will be familiar to those concerned with the city. But they are worth review, especially when placed, as here, in direct contention.

BUILDING CONSTRUCTION: Information Sources. By Howard B. Bentley. Published by Gale Research Co., Book Tower, Detroit, Mich. 181 pp. 51/2" x 71/2". \$8.75.

Mr. Bentley heads the building reference library of Time Inc., and has guided many a FORUM editor through the often frustrating search for information about the sprawling building industry. Now his guidcontinued on page 148



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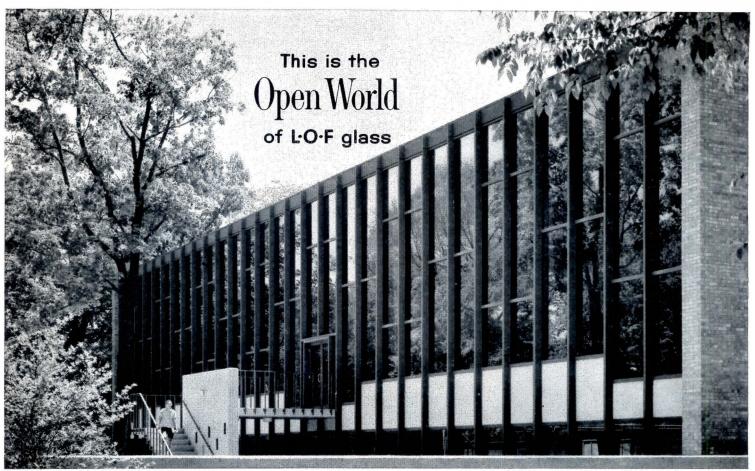
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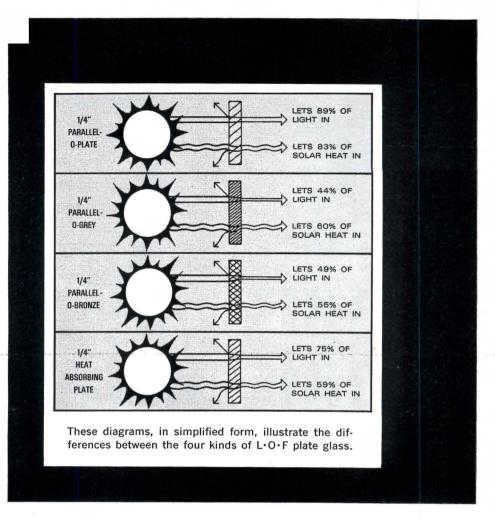
Parallel-O-Grey® plate glass (1¾4" and ¼") in windows helps control outside glare. ¼" Parallel-O-Grey excludes approximately 40% of solar energy (heat)—1¾4" approximately 36.4%. They respectively transmit 44% and 50% of average daylight. Colors seen from the inside are not adversely affected.

Parallel-O-Bronze® plate glass, available in the same thicknesses as grey plate, excludes more solar heat and admits more daylight. (See diagram.)

L.O.F Heat Absorbing Plate, pale bluish-green in color, excludes more than 40% of solar energy to keep interiors cooler. Heat Absorbing Plate transmits approximately 75% of the visual daylight for abundant daylighting of rooms.



Parallel-O-Grey plate glass was used to glaze the Norton Building, Seattle, Wash. Architects: Bindon & Wright. Associate Architects: Skidmore, Owings & Merrill.



ss to give you design freedom

L.O.F Heavy-Duty regular plate glass is available in 5/16" to 1" thicknesses, Parallel-O-Grey and Parallel-O-Bronze in 3/8" and 1/2", and Heat Absorbing in 3/8". Heavy-Duty plate glass provides greater strength, less sound transmission and more glare reduction.

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For complete information on these and other L·O·F products, refer to Sweet's Architectural File, MADE IN U.S.A. or call your L·O·F distributor or dealer, listed under "Glass" in the Yellow Pages. Or write to Libbey Owens Ford Glass Company, 811



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Toledo, Ohio 43624

Thermopane insulating glass with Heat Absorbing plate as outer pane reduces draft and glare in Library at Michigan State University, East Lansing, Mich. Architects: Ralph R. Calder & Associates, Detroit, Mich.



Madison Avenue, Toledo, Ohio 43624.



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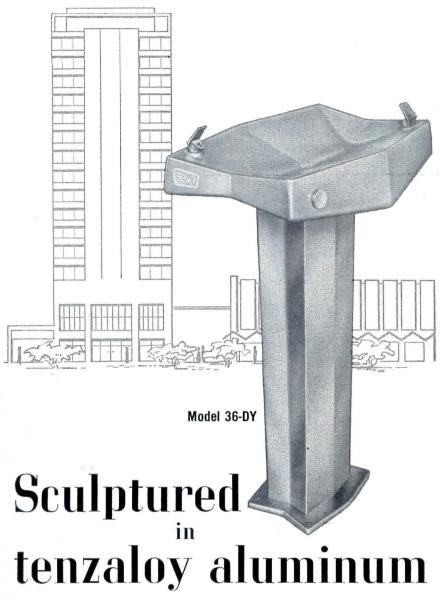
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ance is available to others in (or planning to get into) the building field-whether as a manager, engineer, architect, or librarian -through this book. Suddenly they will find their life made easier, simply because Mr. Bentley collects in one place hitherto widely scattered sources of information. This where-to-look book is broken down into such chapters as "Periodicals," "Government Publications," and "Statistics," and each category is lucidly subdivided into component categories. Under "Government Publications," for example, fall those by FHA, URA, PHA, as well as others by the UN and state, county and city agencies. Bentley provides a simple introduction to each section and sub-section. The book has both an author-title and a subject index. Prefatory comments are by Miles Colean, economist and FORUM consultant-P.H.



MONASTIC ARCHITECTURE IN FRANCE FROM THE RENAISSANCE TO THE REVOLUTION. By Joan Evans. Published by Cambridge University Press, 32 East 57th Street, New York 22, N.Y. 149 pp. text; 414 pp. plates. $7\frac{3}{4}$ " x 11". \$27.50. The plates are the thing here. There are 822 in all, and a great many of them are very good indeed. They are preceded by a scholarly history of the building achievements of eight orders: Benedictines, Cistercians, Augustinians, Carthusians, Carmelites, Dominicans, Franciscans, and Jesuits.

THE WORLD OF ARCHITECTURE. By Lionel Brett. Published by Thomas Nelson & Sons, 18 East 41st Street, New York 17, N.Y. 119 pp. 5'' x 7%. Illus. \$3.

This is an especially readable short account of architecture, written with young people in mind, and it makes an excellent introduction to the subject. Its author is a British architect and planner of Hatfield New Town. END



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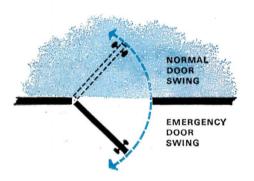
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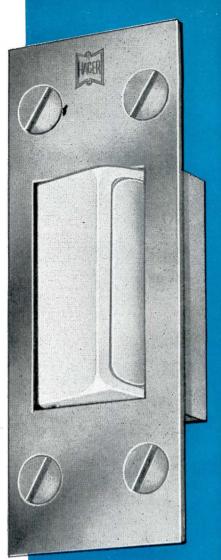
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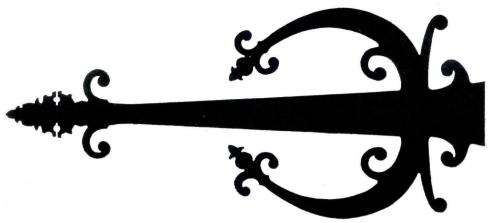


Stackingchair 3107, Stacking-armchair 3207: chromium-plated steel, oak, teak, palisander, black, upholstered. Alignement-device. Matching swivelchairs with hight-adjustment and rollers. Design: Arne Jacobsen.

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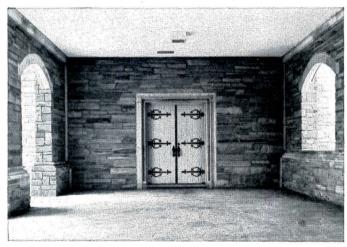
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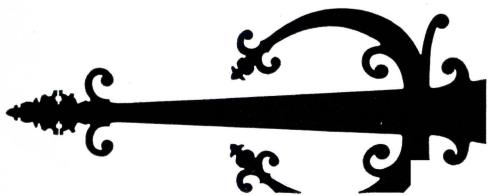
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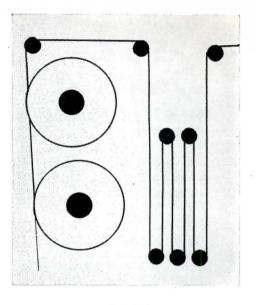
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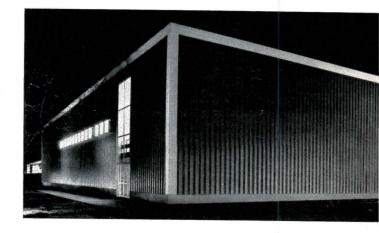
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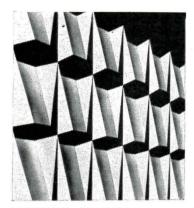




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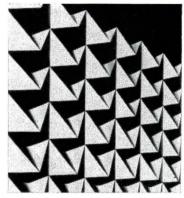
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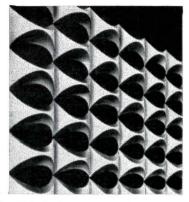
PATTERNED FACADES

Bigger and bolder patterns in new aluminum façades have been introduced by Alcoa to the commercial remodeling market. Their big scale makes them particularly suitable for wrapping groups of small buildings into a unified whole. Besides resurfacing old buildings, Sol-Dec II can be used as a screen around mechanical equipment on rooftops and as a windbreak for swimming pools.

The six patterns in the new



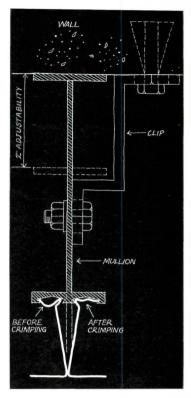
series (three are shown above) have been engineered to provide from 2.3 to 49 per cent of open area, offering a wide spread of decorative effects and degrees of sun protection. All patterns are 24 inches wide (three times the width of Sol-Dec I, introduced several years ago); depth varies from 18 to 42 inches. Like the earlier series, the new Sol-Decs are applied over old surfaces, fastened to a grid of lacing bars and mullions by a hand crimper



which locks the shaped panels in place (drawing).

Alcoa supplies the system in mill or painted finishes; regional jobber-erectors will provide anodized or porcelain finishes. Erected costs, Alcoa says, start at about \$3 per square foot, depending on local labor rates, quantity specified, and the condition of the existing building.

Manufacturer: Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 15219.



THERMOELECTRIC COOLERS

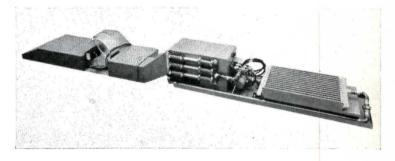
Thermoelectric cooling is not new—there are small refrigerators, ice-cube makers, and water coolers on the market—yet Carrier has made a significant advance by putting thermoelectric air conditioning into a commercial building for the first time.

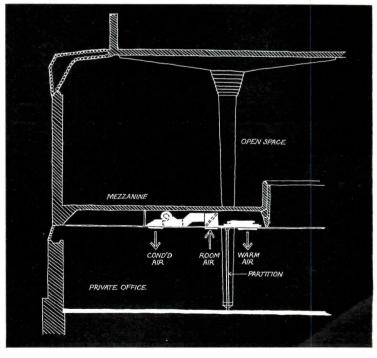
The installation, admittedly, is a special one: S. C. Johnson & Son, Inc., in Racine, Wis. needed to air condition 28 small perimeter offices without carving up the interior paneling or the exterior masonry of their landmark building, designed by Frank Lloyd Wright and occupied in 1939. In this case, thermoelectric air conditioning proved to be the least expensive solution, although each unit cost close to \$3,500 for about a third of a ton of cooling capacity. At this price, Carrier sug-

gests that, for the present, thermoelectricity replace conventional systems only in very special installations where its advantages outweigh its cost.

The Johnson's Wax units were built to fit into a shallow ceiling plenum: the highest point of the system is 13 inches, and it is only 15 inches wide. Room air enters the grille above the middle arrow in the diagram, passes through a filter (dotted line), and then is cooled or heated by a package of 12 thermoelectric panels (left). A small fan draws conditioned air out through another grille (left arrow). In the Johnson building, where cooling is required almost exclusively, recirculating water removes the heat (right) and dissipates it in the open workroom.

Manufacturer: Carrier Corp., Carrier Parkway, Syracuse 1, N.Y.





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size of the building, also allows for later changes in capacity. The first major installation will be in the 43-story Wells Fargo Building in San Francisco.

Elevators in existing buildings can be updated with the new controls without adding any more cars.

Manufacturer: Otis Elevator Co., 260 Eleventh Ave., New York 1001. continued on page 162



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looks: this bench is made of glassfiber-reinforced plastic and weighs only 50 pounds, a lightweight as outdoor seating goes. Compound curves underneath strengthen the bench so that it won't tip over if a single person sits on one end. Douglas Deeds, who designed it for Architectural Pottery, curved the seat for comfort and dipped the ends a bit for rain runoff. For fixed installations in concrete, the manufacturer will supply studs on the legs at no additional cost.

Benches come in two whites, sand brown, gray-green, bluegray, and warm gray. Dimensions: 72 inches long, 24 inches deep, and 161/2 inches high. Net cost: \$150 f.o.b. Los Angeles.

Manufacturer: Architectural Fiberglass Division, Architectural Pottery, 2020 S. Robertson Blvd., Los Angeles 34.

FLEXIBLE LIGHT

The glowing ribbons in the photograph are not the output of some futuristic noodle factory, but Sylvania's newest electroluminescent product, Panelescent Tape-Lites. intended for use in traffic control, special interior lighting, and outdoor signs, and other decorative uses. The loops being inspected demonstrate some of their flexibility: they can also be twisted, coiled and bent even when the current is on. Built up in layers over aluminum foil, the tape has a layer of phosphors and a transparent conductive coating sealed into a clear plastic outer shield, resulting in a sandwich only 1/32inch thick. The tapes' light output is 5 foot-lamberts, the brightest Panelescents yet.

Those shown here are 13/4 inches wide; new tapes, soon to be in production, will be in widths up to 12 inches. Colors currently made are green, yellow, white, and blue. Costs run \$1 to \$4 per foot, depending on the quantity ordered.

Manufacturer: Sylvania Electric Products Inc., General Telephone & Electronics, 730 Third Ave., New York 10017.



continued on page 164