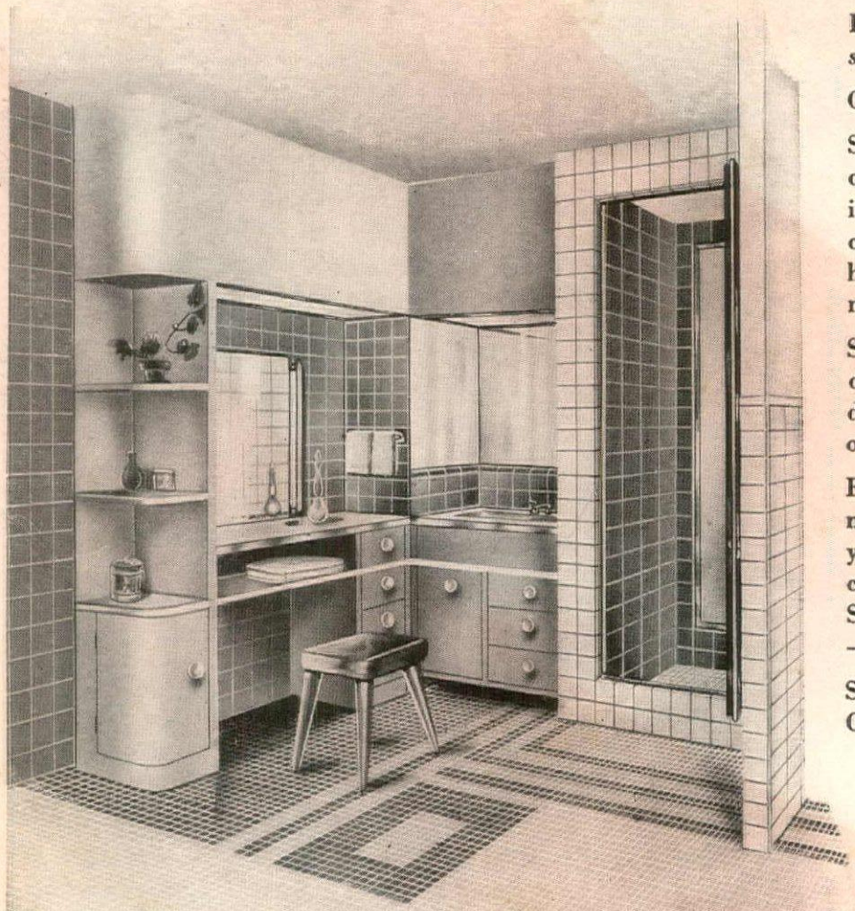
The Architectural **FORUM** Magazine of Building

December 1948

With color-balanced Suntile

you're sure of
- BETTER TILE
- BETTER INSTALLATION



Being *sure* of the tile you select is important. Being *sure* of its installation is equally important.

Color-balanced Suntile offers you assurance of both.

Suntile's *extra quality* in form and finish is the result of rigid manufacturing control. Suntile's *color-balance* is a unique feature developed through years of scientific color measurement and selection. Color-balance permits harmonious blends and smart, distinctive settings for modern-day interiors.

Suntile's *extra quality* in installation is achieved through careful selection and training of authorized Suntile dealers. These men have the *know how* to bring out all of Suntile's inherent qualities.

For better tile—better installations, let us send you the name of an Authorized Suntile Dealer. He can show you real clay Suntile in 16 wall colors. In addition, he can show you impervious unglazed ceramic mosaic Suntile in 15 colors—and Suntile Camargos in 10 colors—both in modular sizes.

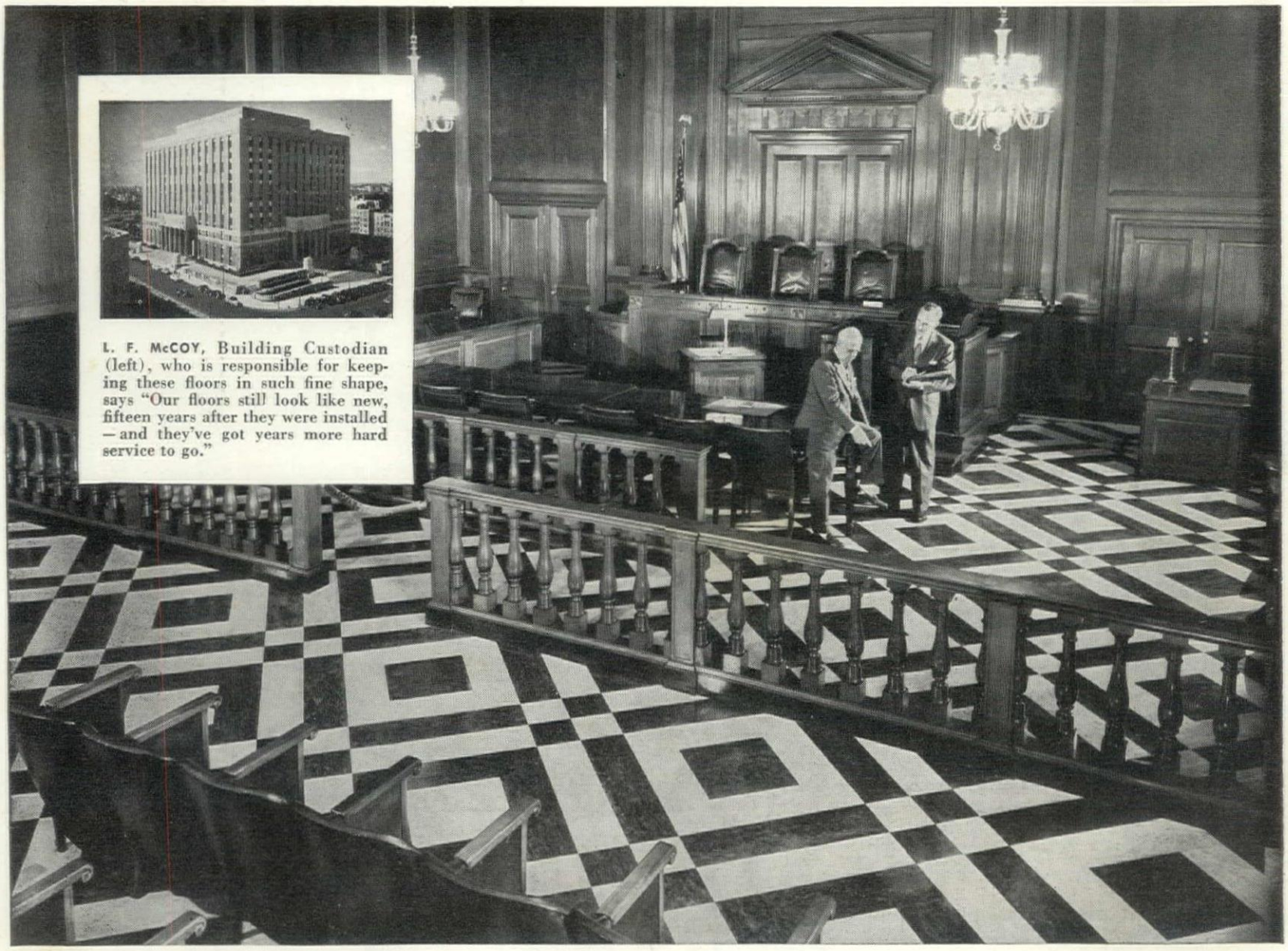
See Sweet's Catalog for complete information. The Cambridge Tile Manufacturing Co., Cincinnati 15, Ohio.

COLOR BALANCED

Suntile

. . . . . A real clay tile
. . . . Bright with color
. . . . . Right for life

Suntile OFFERS YOU BOTH - *Better Tile.... Better Installation*



L. F. McCOY, Building Custodian (left), who is responsible for keeping these floors in such fine shape, says "Our floors still look like new, fifteen years after they were installed — and they've got years more hard service to go."

Fifteen-year veteran floor

and it still looks like new

ONE of the features of New York's multi-million-dollar Bronx County Court House when it was built fifteen years ago was the beauty of its floors. Wingfoot Rubber Flooring by Goodyear — nearly 500,000 square feet of it — was installed in courtrooms, jury rooms, judges' chambers.

The photograph above shows you what the Wingfoot Rubber Floor in the busy Court of Special Sessions room looks like today — after nearly one-and-a-quarter-million people have walked on it, in wet weather and dry — tracking in mud, dust, dirt and grit. Its appearance is typical of other floors in the building — bright, brilliant colors, with a like-new high shine free from scuffs and scratches.

Service like this is usual with this high-quality flooring, even under the most severe conditions, with only ordinary care. You can specify Wingfoot Rubber Flooring for public buildings, stores, offices, homes — anywhere that floor appearance and durability are what you are looking for — with complete confidence.

Wingfoot Rubber Flooring is made by Goodyear in 14 multi-tone and plain colors, to harmonize with any decorative scheme. It comes in tile, and in easily-cut sheets that let you design a wide range of tile, feature strip and patterns in your floor installations.

The colors of Wingfoot go all the way through — won't walk off under heavy traffic or wash off with commercial compounds. It is resistant to fire, alcohol, ink and stains. A damp mop cleans it.

No wonder so many architects are specifying Wingfoot Rubber Flooring for their "prize" projects. They know from experience that it keeps its good looks for years — testifying silently to their good judgment.

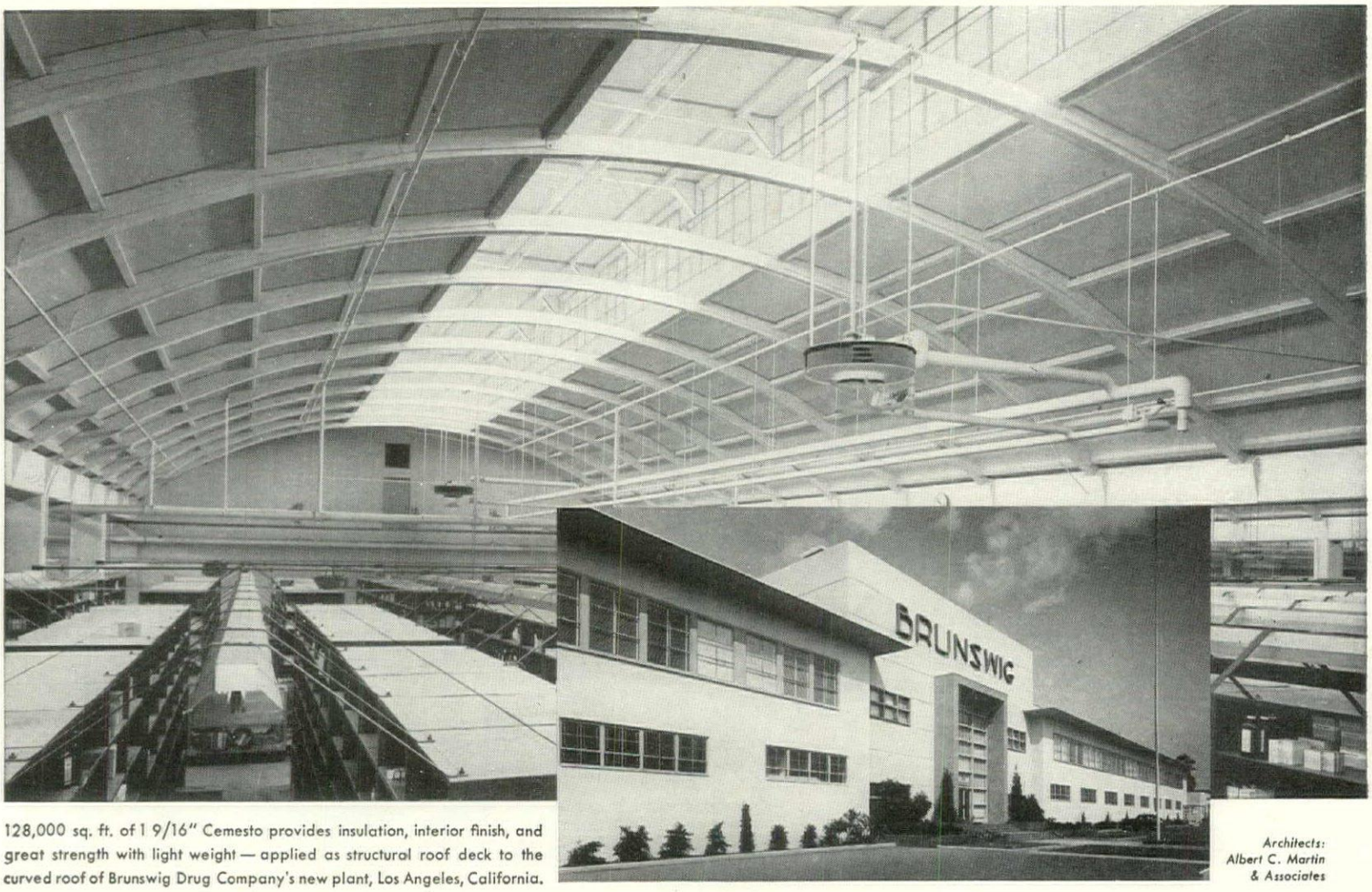
See Sweet's Catalog for complete specifications, or write Goodyear, Builders Supply and Flooring Dept., Akron 16, Ohio.

1898 50 GOODYEAR ANNIVERSARY 1948

WINGFOOT *Rubber* FLOORING { SHEET and TILE

by GOODYEAR

Wingfoot—T.M. The Goodyear Tire & Rubber Company



128,000 sq. ft. of 1 9/16" Cemesto provides insulation, interior finish, and great strength with light weight — applied as structural roof deck to the curved roof of Brunswig Drug Company's new plant, Los Angeles, California.

Architects: Albert C. Martin & Associates

Better Building ...in Less Time ...at Lower Cost

Today, in dozens of big construction jobs across the country, alert architects are demonstrating their skill in coping with rising construction costs, by specifying a material that gives their clients better building...in less time...at lower cost—

CEMESTO REG. U. S. PAT. OFF. *The Multiple-Function Material*

WHAT IT IS... Cemesto is a rigid, insulating, fire- and moisture-resistant building board...composed of a Celotex cane fibre core surfaced on both sides with asbestos cement, bonded with a moistureproof bituminous adhesive.

WHAT IT DOES... Cemesto gives you a superior material for *sidewalls, roof decks,* and *interior partitions.* It combines high thermal insulation with great structural strength in an integrated wall unit that furnishes both interior and exterior finish and requires no painting.

YOU ARE INVITED to write us for details on Cemesto applications in which you are interested. In the meantime, you'll find complete specifications on Cemesto in Sweet's file.

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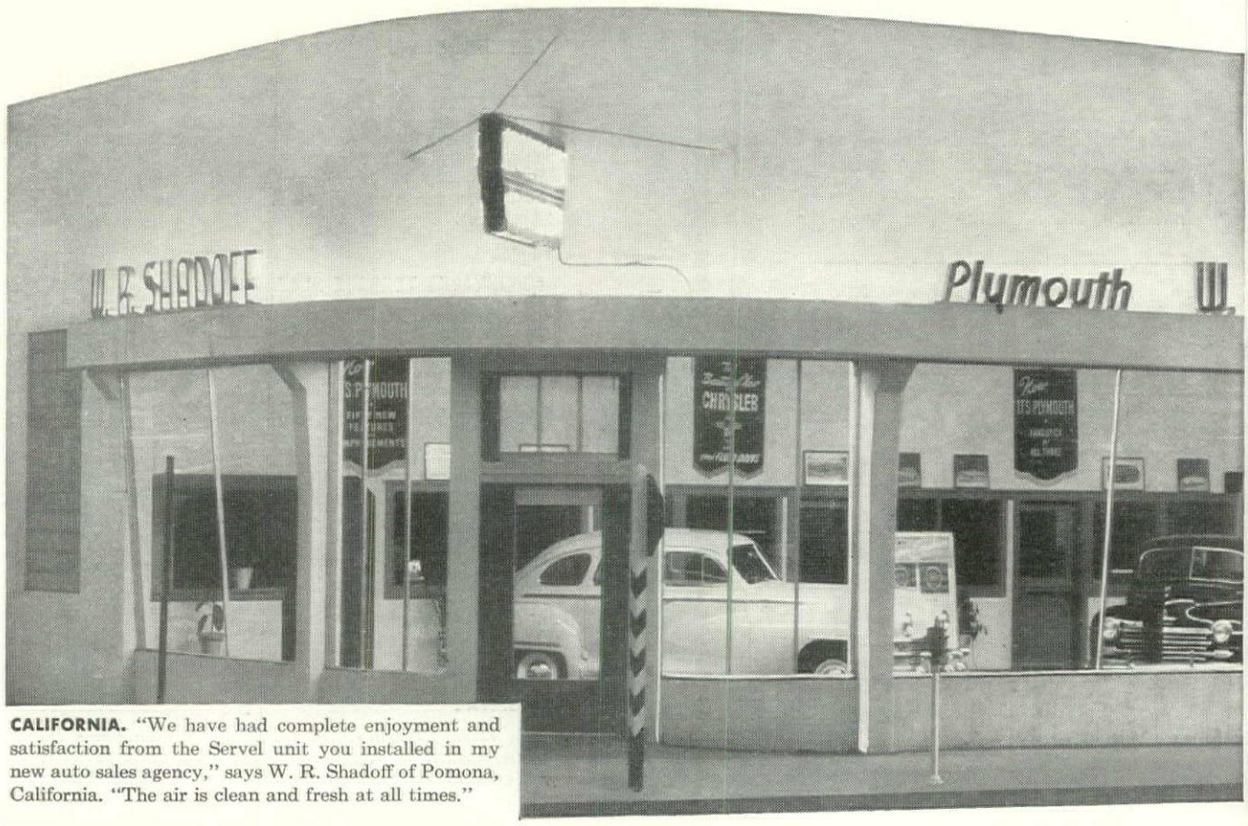
MAGAZINE OF BUILDING

DECEMBER 1948

Cover photo (Terrace Plaza Hotel); Ezra Stoller: Pictorial Services

"Promotes sales, builds



CALIFORNIA. "We have had complete enjoyment and satisfaction from the Servel unit you installed in my new auto sales agency," says W. R. Shadoff of Pomona, California. "The air is clean and fresh at all times."

Servel All-Year Air Conditioning wins praise from store owners the country over

The four stores pictured here have widely varied sales problems and are located in different parts of the country. But the owners are unanimous in their praise of the way Servel *All-Year* Air Conditioning has helped their business. And their statements are typical of hundreds of letters sent in by other business and professional men, testifying to the business-building benefits of this amazing year-round air conditioning system.

With a "flick of the finger," the Servel unit supplies cool, dehumidified air in summer . . . and warm, properly humidified air in winter. In between seasons, the same single unit provides independent air circulation at prevailing temperatures. Year round, it filters dust, dirt and irritating pollen from the air. Every Servel unit is covered by a 5-year factory warranty.

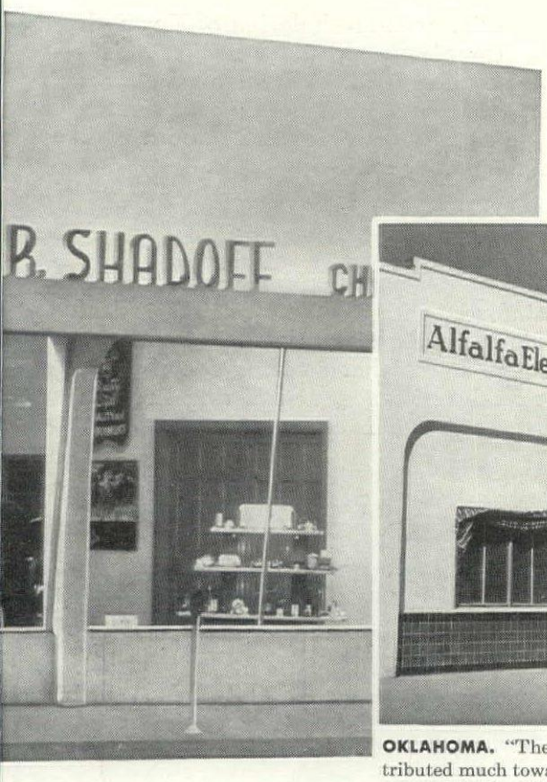
In a Servel-conditioned store, stocks remain fresh and new-looking . . . customers are more comfortable . . . personnel more efficient and energetic. Many merchants feel that the Servel *All-Year* Air Conditioning Unit will "pay for itself" in a very short time through these benefits.

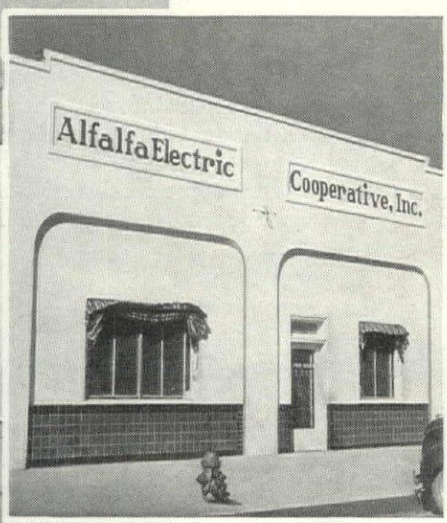
Do you have clients or prospects who would benefit from the year-round comfort and business-building advantages of Servel *All-Year* Air Conditioning? Your local gas company will be glad to give you detailed information on specifications, installation, etc. Or, write direct to Servel, Inc., 4812 Morton Avenue, Evansville 20, Indiana.

profits,"

say business men

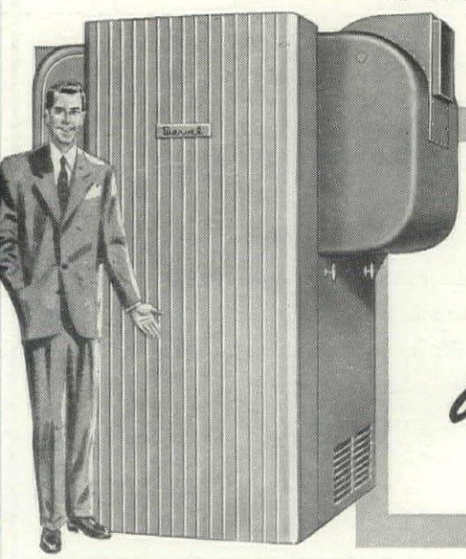
LOUISIANA. "We have used Servel *All-Year* Air Conditioning for more than six years and consider the original cost repaid many times over," writes David C. Silverstein, of Silverstein's Women's Apparel, Monroe, La.





OKLAHOMA. "The Servel installation has contributed much toward the efficiency of our staff," reports Clarence R. Green, Manager of the Alfalfa Electric Cooperative, Inc., of Cherokee, Okla.

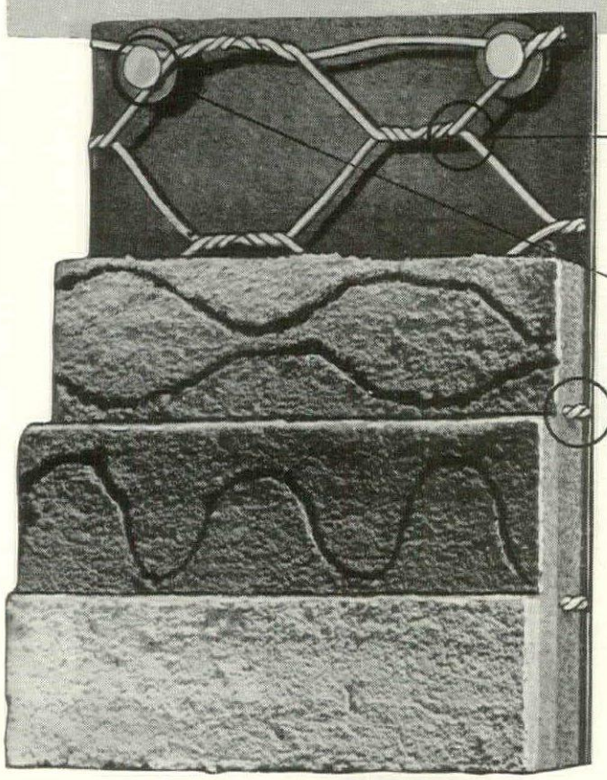
TEXAS. "I am well pleased with my Servel unit," states J. W. Hetherington, jeweler, of Texas City, Texas. "People prefer to shop where the temperature is normal and the air pure and clean."



Servel

All-Year AIR CONDITIONER

WHY *Keymesh* REINFORCING FOR STUCCO AND OVERCOATING Insures a Stronger, More Durable Wall



Actual Section of Stucco Wall, Reinforced with Keymesh

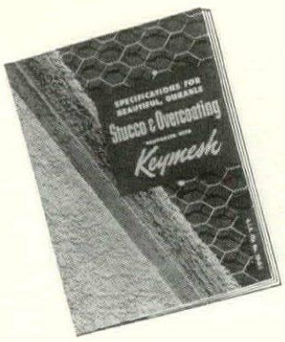
Provides stronger reinforcement—Keymesh is made of strong, copper-bearing steel wire. It is specially woven with a reverse twist—Keymesh lays flat when unrolled. No bumps or bulges to cause uneven thickness of the "scratch" coat. Keymesh is heavily galvanized for lasting protection against corrosion.

Keeps distance from wall—Keymesh is easily furred out with special Keymesh furring nails to keep it at a uniform and proper distance from the wall—to insure full thickness of the scratch coat.

Embeds thoroughly—The special open mesh design of Keymesh allows each steel strand to be completely embedded by the "mud", insuring lasting strength of the stucco wall. Keymesh is the right size for easy troweling, and the right size for holding the scratch coat firmly while setting. Joins easily with compact, smooth laps. No bumps or high spots in the first or following coats.

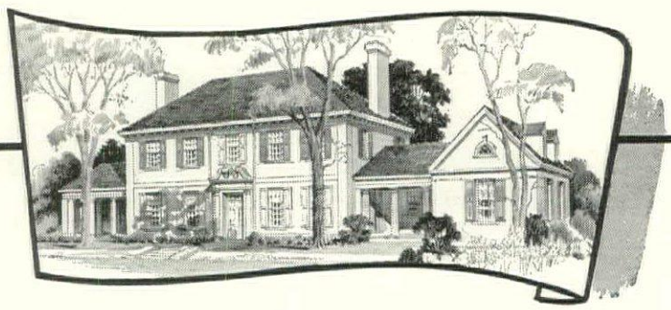
Keymesh-Reinforced Stucco is Good Construction

Portland Cement Stucco, reinforced with Keymesh, is the practical answer to beautiful, durable exteriors, either for new homes or remodeling. Keymesh insures stucco that remains beautiful . . . stucco that has permanent crack-resistance. For lasting strength and beauty, specify Keymesh on your next stucco job.



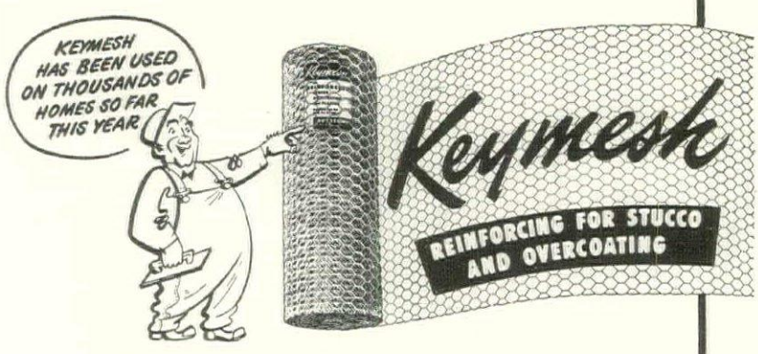
Every architect should have a copy of the new booklet "Specifications For Beautiful, Durable Stucco and Overcoating Reinforced With Keymesh". It's filled with facts of interest—write for your copy today.

Keymesh is shipped in rolls 150′ long by 3′ wide. For stucco and overcoating, specify Keymesh 1½″ hexagon mesh, 17-gauge steel wire, or 1″ hexagon mesh, 18-gauge steel wire. *Both are galvanized.*



TYPICAL GEORGIAN DESIGN

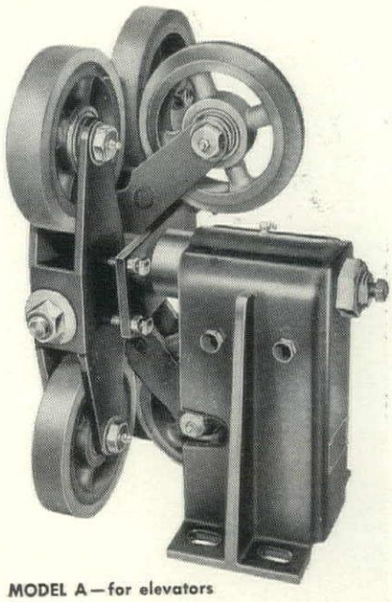
One of the design styles that Architects feel is most appropriate for the use of reinforced stucco.



• Architects interviewed in a recent national survey agree that more stucco will be used on more homes in the future. They consider modern steel-reinforced stucco a strong, durable siding material. And they also feel that stucco lends itself to modern and traditional design—that it is highly appropriate for today's popular home design styles, such as Modern, Ranch-Type, Cape Cod, Colonial and Georgian.

KEYSTONE STEEL & WIRE COMPANY
PEORIA, ILLINOIS

You owe it to your building to install the new ELSCO Safety Roller Guides ON YOUR ELEVATORS



MODEL A—for elevators

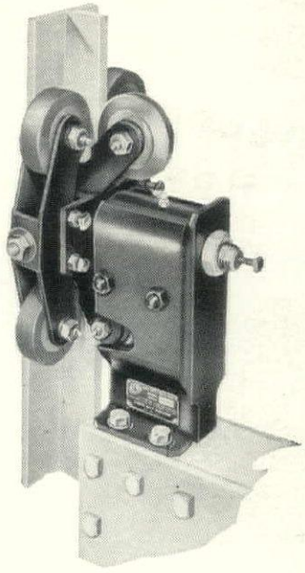
RESULTS HAVE BEEN AMAZING

1. The greatest fire hazard in your building may now be completely eliminated.

2. Savings in electric current approximate 24% to 44% with Elsco Safety Roller Guides and since elevators consume the largest amount of electricity in buildings the amount of savings is tremendous.

3. Hatchways no longer need cleaning to remove grease, resultant dirt and filth.

4. Emergency safety jaws hold much better in the event of an accident.



MODEL C—for counterweight and low rise, low speed elevators

Dry rails and shaftways are now the recognized modern and only proper way of elevator operation. It is common knowledge that in the event of fire, elevator shaftways with inflammable oil and grease act like flues and help the rapid spread of fire. Modernize your elevators so that you may save life, property and money.

Elsco Safety Roller Guides have now been in operation since 1941. They have been approved unanimously by the Board of Standards and Appeals of New York City. They have been installed in leading buildings from coast to coast and abroad. They are the only safety roller guide with oscillation, traction and knee-action.

(Patented and Trade Mark Registered)

For Further Information Inquire of your dealer or

ELEVATOR SAFETY CORPORATION

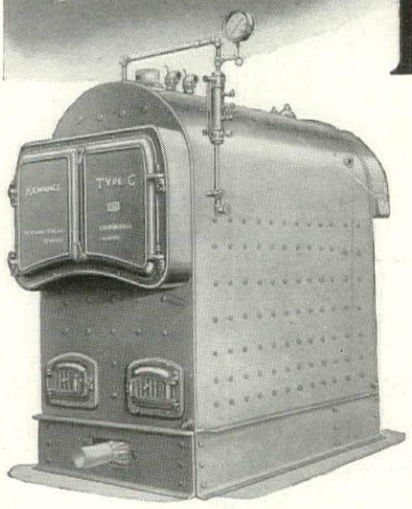
165 Broadway, New York City 6, New York

Northwestern University Apartment Hotel, Evanston, Ill. Holabird and Root, Architects . . . W. A. Pope Company, Heating Contractors. Heated with 3 Oil Fired, Kewanee Type "C" Boilers.

Dependable Heat for a Lifetime

KEWANEE☆

STEEL BOILERS



Such Kewanee features as the Corrugated Crown Sheet which adds strength and heating efficiency have made Type "C" the fastest selling boiler for heating big buildings.

Owners *know* that a Kewanee in the basement means a lifetime of dependable heat and lower fuel bills. *Tenants know* that a Kewanee heated building will be warm and comfortable always, even in zero blasts.

Kewanee boilers increase the selling and renting value of any building. That's why they are so universally used in fine structures of every type.

Whether fired by hand or mechanically there is a Kewanee just right for every heating purpose . . . from small homes to the biggest factory or skyscraper.

☆ REG. U. S. PAT. OFF.

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AT THE TERRACE PLAZA...

beautiful walls of glazed facing tile

FROM STARK

Featured in this issue of this magazine is one of the real architectural achievements of our times —the Terrace Plaza Hotel in Cincinnati, Ohio.

Here, the most modern, scientific methods of building and the finest of materials have been used.

Here, you will see—in corridors, stairwells, kitchens and the hospital infirmary—clear, cream-colored, glazed facing tile from Stark. The equivalent of more than a half-million brick was used.

Stark's structural glazed facing tile was chosen for this modern hotel for several reasons:

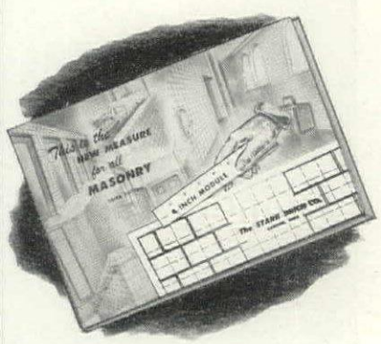
It's a wall and finish in one. Produced in modular sizes, it builds fast, saves construction time and costs. *It's easy to keep clean.* Permanently glazed, it resists acids and grease, saves upkeep and redecorating. *It's an aid to lighting.* The smooth, lustrous cream shade in a tinted clear glaze, used at the Terrace Plaza Hotel, helps create ideal lighting conditions.

• • •

This is but one example of the use of Stark's facing tile to lend colorful beauty, structural strength and economy of maintenance to interior walls. It is also widely used—both for new construction and for refacing old walls—in industrial plants, commercial buildings, schools, hospitals and other types of structures.

For architects, engineers, contractors and plant owners, Stark has prepared a brochure on modular masonry. It contains much valuable information, and will be sent free to you upon request.

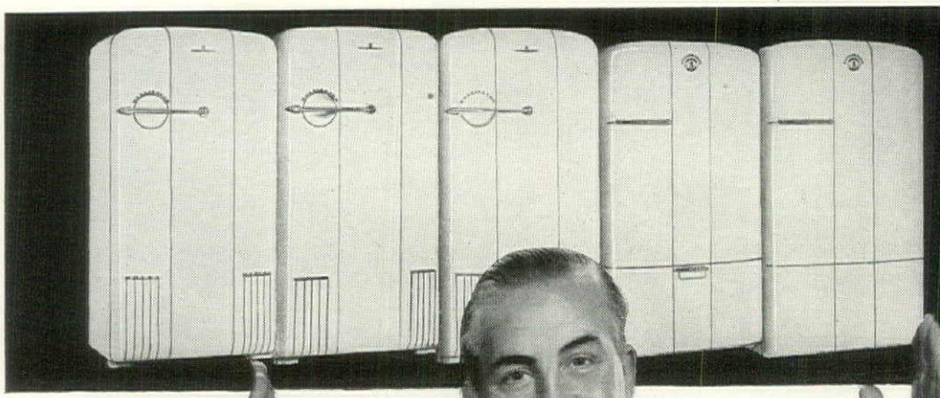
A registered copy of this 1948 brochure on modular masonry sent upon request.



THE STARK BRICK COMPANY

Canton 1, Ohio

14305 Livernois Avenue . . . . . Detroit 4, Michigan
15 East 26th Street . . . . . New York 10, N. Y.



5 Refrigerators 7 cu. ft. and larger all one width!

31¼"

Yes!

ONE-WIDTH Kelvinators make kitchen plans easy!

PICK YOUR MODEL BY BUDGET...
No Changes in Floor Plans Needed!

Choose *any combination* of top-quality Kelvinators. Regardless of capacity, 5 new Kelvinator Refrigerators are all 31¼ in. wide . . . Regardless of model, 4 new Kelvinator Ranges and the new Kelvinator Home Freezer are *all* 39 in. wide.

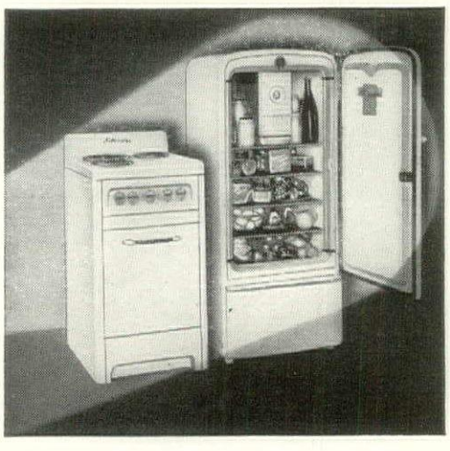
. . .

Only Kelvinator offers the flexibility of uniform widths for easier kitchen planning!

39"

4 Ranges and Home Freezer all one width!

Kelvinator—of Course!



"SPACE-SAVER" PACKAGE BRINGS BIG KITCHEN ADVANTAGES TO SMALL KITCHENS

Get Kelvinator's "Space-Saver" Package . . . "Space-Saver" Refrigerator only 24 in. wide is full 6 cu. ft. . . . companion range is only 21 in. wide, with new design permitting installation flush against wall. Top-of-the-line quality throughout. For further information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit, Michigan.

NEWS

BUILDING MONTH. As the bustling year of 1948 closed, Building could see nothing that would slow it down much in the year ahead. The BLS and Commerce Department forecasters had said 1949 would be another $18 billion Building year. This cheerful estimate had, of course, been accompanied by the sobering footnote that building costs would rise another 5 per cent over the year. It had been qualified by the calculation that private residential and commercial work would drop a little—the drop to be offset by an increase in public building. But, despite all the nervousness over high prices and government policy, industry oracles like the Producers Council joined government forecasters in guessing that 1949 would see at least 850,000 houses started.

Realtors, gathering for their annual meeting in New York, had conceded that old salesmanship was once more necessary to move both new and used houses. October's 12 per cent drop in housebuilding starts had been more than seasonal, and 4 per cent mortgage money had almost disappeared. But, pushing against the inflationary effect of continued high government spending next year, was the welcome news that some building materials might be cheaper soon. Lumber wholesalers had already cut prices, and plywood jobbers in the Pacific northwest were trimming their prices substantially. Many a builder until now busy with luxury housing was recalling his wartime know-how, breaking ground for his first postwar low-cost development.

WASHINGTON

PUBLIC HOUSING AHEAD

It may be timed to balance down swings in private housebuilding

The long-debated and long-flouted T-E-W housing bill had now become the W-E-M-M-S-T-F bill and might even have to add another T. The crowd of Senators who wanted to sponsor it—Wagner, Ellender, Maybank, Myers, Sparkman, Tobey, Flanders and maybe Taft—was a measure of the pressure that seemed certain to blast the housing bill through Congress. Its provisions would be the sections of the general housing bill that Congress had ditched last summer: public housing (500,000 rental units over the next five years), slum clearance, farm housing, a comprehensive federal housing research program.

Housing Boss Raymond Foley had talked things over carefully with the President before he let the press in on the legislative proposal he will place before Congress. When he did, there was little that was unfamiliar. It all boiled down to an old complaint: "Not enough of our housing is priced for the mass market." But Foley made it clear that he recognizes there is no legislative magic that will bring costs down. Along with the public housing and slum clearance legislation, the new Congress would likely extend the FHA 608 rental housing program past its March 31 expiration date and liberalize RFC's secondary market for home mortgages. Foley also promised fuller use of the barrage of FHA-aids provided by Congress last summer (cooperative housing, yield insurance, 30-year loans, prefab loans, etc.). But, in the end, Foley said, only a "voluntary nation-wide program, in cooperation with the national and local governments, by the men who plan, build and finance houses" can push housebuilding into its enormous low-cost market. "We therefore plan to request meetings of all elements of the housing industry to seek their voluntary cooperation."

Timed Public Housing. Senators Flanders and Tobey, Republicans long advocates of public housing, had proposed an anti-inflationary device to reduce the pressure of the new program on building materials and labor. This is an "escalator clause" which would step up yearly volume of public housing when private housebuilding fell below a certain level, decrease public building when the private housing pace quickened. Senator Flanders thinks a good breaking point would be about 800,000 private houses a year. He feels so strongly about this inflation safeguard that he may refuse to sponsor the bill if it is not included. He and Tobey also want to "strengthen the provisions to make certain that no public rental housing shall compete with private enterprise."

Cost Research. While public housing and slum clearance would get the spotlight, the expected research provisions of the new housing bill might eventually take the biggest sock at housebuilding's cost dilemma. The 80th Congress, alarmed by the fear of private enterprise groups that centralized housing research might be used as a bludgeon, had cut the research provisions of the housing bill passed last summer to the bone. The current program provides only for a study to promote standardized building codes and such developments as the industry-engineered house. Foley will ask for a program aimed at reducing house costs by the development of more efficient building methods and materials. He also wants funds for collecting adequate economic and statistical data on needs and markets and making these available to the industry.

VA STANDARDS

They lack enforcement authority

The Veterans Administration finally came out with the set of minimum construction standards for its guaranteed home loan program which it had been talking about for two years. They were almost exactly like those of FHA, with one big exception: they haven't the authority of enforcement behind them that FHA standards have.

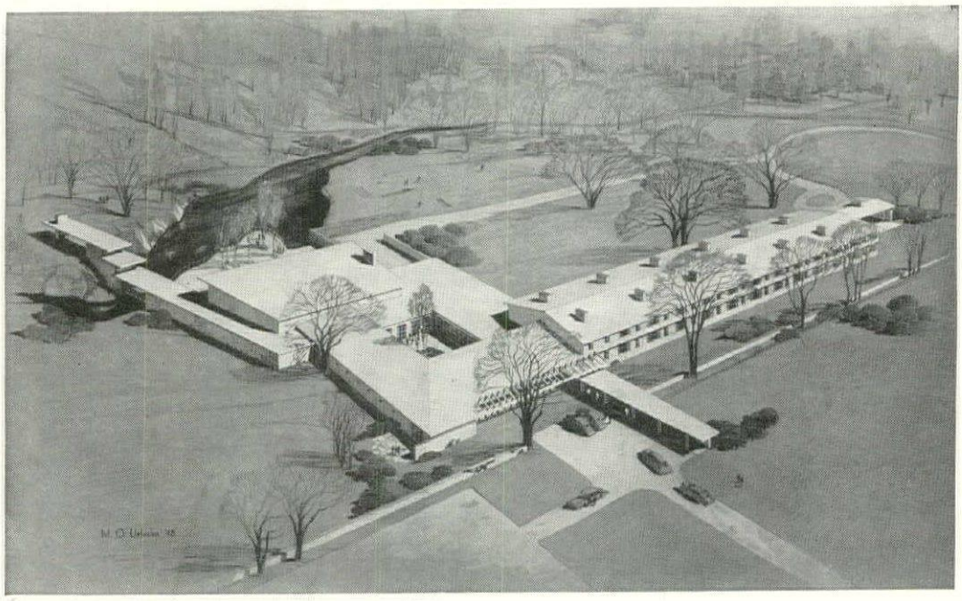
Actually, VA has no authority to impose minimum standards under its program. But for the last year, it has been helping housebuilders stay within the guaranteed loan limit by giving them pre-construction valua-

tions on their proposed houses. Now it will extend that service only to those builders who conform to the minimum standards established. Others will have to go ahead without the pre-construction stamp of approval, and complete their jobs before they can find out how much VA will allow on an appraisal.

The new standards (effective December 15), will encourage better construction and give compliance inspectors something to go by, VA feels. It hastily assured housebuilders, however, that they are free to disregard the standards as much as they choose: a veteran can still buy a house beyond the loan limit by putting up the difference between the limit and the purchase price. But as every housebuilder knows, few GI houses are sold in that manner.

* * *

The GI loan program continued its 12-month decline by dropping 3 per cent in October—53 per cent below the October, 1947 level. T. B. King, director of the VA's loan guarantee division, told the United Savings & Loan League in New York that the "most urgent period of the veterans housing needs is past."



ELLIOTT ROOSEVELT, releasing Reisner & Urbahn plans for a $1 million inn and restaurant across from the Roosevelt Memorial National Park at Hyde Park, said builders "must go to a modern style to get an economic building unit today." The two-story fieldstone and frame structure, to be built on land owned by Elliott and backed by a syndicate in which he has an interest, will contain 48 bedrooms, a presidential suite, dining accommodations for 350 persons. Roosevelt describes it as "a modern design that still manages to blend the features of the type of construction my father was interested in." Also planned for future construction on Roosevelt land is a development of 350 single houses to be handled by Joseph P. Day and sell with FHA insurance for about $15,000. In addition, Elliott will put up an 80-unit motel next summer.

PREFABRICATION

LUSTRON IN, HARMAN OUT

Will the Navy be logical?

Factory house boost-of-the-month came from an unexpected and impressive quarter: the U. S. Navy. The Navy, taking the first bite in its big job of housing married personnel, named the Lustron Corp. winner in a bid competition for 60 houses at the Marine Corps school at Quantico, Va.

To Lustron, which soon will be producing houses in its Columbus plant at the rate of 50 a day, the Navy's order meant a lot more than a $599,379 contract. It meant that Lustron would have the new weight of a national defense job in its life-and-death fight for continued steel allocations. For the infant factory-house industry, the order meant the endorsement of the nation's most critical customer and the promise of a large role in the whacking $208 million worth of housing which the Army and Navy expect to build for their married personnel. (The Army and Air Force have each purchased a standard Lustron house for a try-out in Alaska; the military buyers think a durable packaged house may be a much better bargain than hauling building materials and labor to Alaskan bases.)

When the Quantico job was announced, 17 major housebuilding firms had lined up to bid—seven of them prefabers. At the last minute, all but the prefabers had backed out. The Navy said it gave the award to Lustron on the basis of the "lowest cost per sq. ft. of usable area." Lustron houses measure 1,066 sq. ft. for the 3-bedroom unit; 891 sq. ft. for the 2-bedroom unit. This means that the Lustron bid on 60 houses (30 in each size) amounted to $10.21 per sq. ft. It was also plain that the Navy was sold on the extremely low maintenance cost promised by the enameled steel house.

Long-time backers of the factory house, jubilant at the Navy's nod, had only one gripe: Why was it so hard for the government to grasp the fundamental logic of the factory house and place a mass order? During the war, the Federal Public Housing Authority had never persuaded itself to order prefab on anything but a piecemeal basis. Factory house proponents hoped the military mind might prove more logical.

* * *

Factory house mortality-of-the-month was the Harman Corp., Philadelphia, which turned out its first steel frame and stressed steel panel houses in March, '47. One of the few firms to get a guaranteed market contract (amounting to $38 million) from the RFC under the original Wyatt program, Harman also got a loan from the Chase National Bank and raised over $3 million by a public stock issue. By September of 1947 Harman was in trouble. It called on RFC for cash under its market guarantee, settled for $2,360,000. RFC took as security warehouse receipts covering an undisclosed amount of finished and soon-to-be finished houses.

Last month Harman gave up, filed a bankruptcy petition. William H. Harman spoke the firm's epitaph, all too familiar to the many who have tilted with the fast windmills of the factory house. "Production and consumer acceptance of our houses has never presented a serious problem. In fact, close to 400 have been shipped. . . . We attribute the company's failure to its inability to overcome the complexities of distribution and the difficulties of financing sales and erection."

RENTAL HOUSEBUILDING was moving steadily ahead. One giant sample: Gross-Morton welcomed the 1,000th family to their Glen Oaks Village rental development in Bellerose, Queens. Built on a 175-acre site, this 3,800 family, garden-apartment project has a potential population of 15,000.

Fried-Photo-Aerographic Service

FIRST 609 LOANS

FHA okays steel, concrete prefabs

Although FHA local offices have been prominently named as the villain in the piece by several bankrupt factory house-builders, FHA's Sec. 609 program, designed to open production financing to this new industry and administered in Washington, was moving briskly. Last month FHA approved the first two 609 loans. They went to:

▸ Reliance Homes, Inc., Lester, Pa. (see FORUM, March, '48), which makes an aluminum-sheathed steel house, delivered to the site in seven factory-assembled units. The loan, covering 230 houses, was made by the County Trust Co., Tarrytown, N. Y. Reliance earlier got a $375,000 RFC loan and 2,300 tons of steel under the voluntary allocation program. It quotes a factory price of $5,500 on its 3-bedroom house, which will sell erected for $9,000, including land.

▸ New Jersey Permacrete Corp., Burlington, which molds panels for reinforced concrete house in a demountable plant, set up at the site. The plant also turns out precast sidewalks, curbing, garage aprons. The loan was also made by the County Trust Co., Tarrytown, N. Y. and covers 100 houses, all to be erected in the Burlington area (within commuting distance of Philadelphia). Three-bedroom house, lot and garage will sell for $8,950.

MATERIAL

HEAT REFLECTING HOUSE

The mice multiplied more freely

When Dr. Clarence A. Mills, professor at the University of Cincinnati's College of Medicine, observed that mice lived longer and multiplied more freely in enclosures conditioned by aluminum foil, he wondered if the same principle would apply to human beings.

For ten years Dr. Mills has been demonstrating in a laboratory that comfort can be achieved by controlling heat loss from the skin—by helping people lose heat to, or gain it from objects such as wall and ceiling surfaces. He began making plans to build an experimental house to test further his theory of radiant reflective conditioning. (FORUM, Nov. '48.) Last month, he revealed its details and said that building will start immediately.

Dr. Mills' house (in which he will live) will be built without a heating plant or insulation (thus taking a substantial bite out of ordinary building costs.) Instead, it will have:

▸ Wall and ceiling surfaces of embossed aluminum foil (one of the best heat-ray reflectors known).

▸ Electrical resistance coils in each room to generate heat rays.

▸ Cooling coils, resistance wires for heat, and fluorescent color lighting in a cove near

(Continued on page 14)

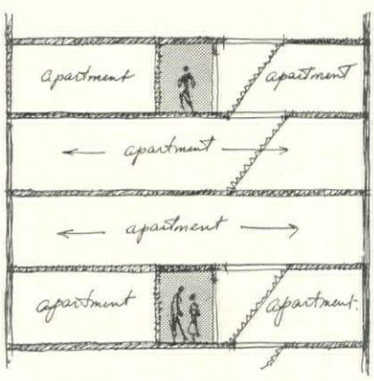
INSURANCE COMPANY'S first housing investment yields modern

Carlton W. Patriquin

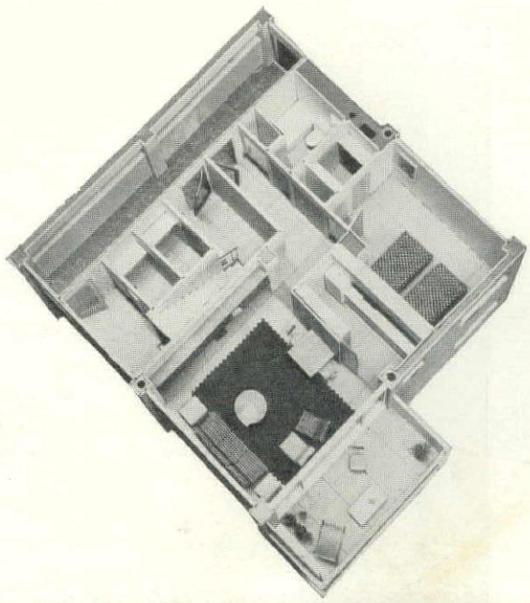
Smith (center) and M.I.T. President James R. Killian, Jr., (left) believe building's high standards will pay off when rental market is competitive. At right is Col. John B. Atkinson, city manager of Cambridge, Mass.

For its first direct housing investment—an apartment building for the faculty of Massachusetts Institute of Technology at Cambridge, the New England Mutual Life Insurance Co. picked an outstanding team of M.I.T. architects: William Hoskins Brown, Robert Woods Kennedy, Carl Koch, Veron Demars and Ralph Rapson, in association with Thomas Worcester, Inc. Explained company president George W. Smith: "Since an extended amortization period was contemplated, this apartment building was to be, both in design and construction, capable of a long productive life, and the architects were directed to produce apartments in advance of current planning practice."

All 216 apartments in 12-story, $3 million structure have river view, private balcony. Smith said "conventional design would have given 50 per cent of the units a dreary outlook over an industrial area."



Corridor floors, where elevators stop, have private stairways leading to apartments above and below. All apartments on non-corridor floors have through ventilation.



the ceiling, giving heat and light and removing radiant heat in hot weather only by indirection.

The University's College of Applied Arts will design the structure from Dr. Mills' specifications. The Frigidaire Corp., of Dayton, Ohio, will supply the heating and cooling engineering; the Reynolds Metals Co., of Richmond, Va., the interior foil surfacing, and the Pease Woodwork Co., of Cincinnati, the house structure.

PEOPLE

OPINIONS

McCormick: FHA a bridegroom's snare; Neutra: hottentots are more secure

Would Wilson Wyatt be back at his old job of Housing Expediter under the new Truman regime? A New York newspaper columnist said that Wyatt, whose break with Washington last year spotlighted the administration's bumbling housing program (FORUM, Jan. '47), could now move back any time he wanted to.

Now working at a private law practice in Louisville, Ky., Wyatt indicated that he wasn't too eager to jump back into the post which had put him in the line of fire of almost all business groups concerned with housebuilding. But he didn't altogether close the door on such a possibility. To FORUM, he admitted that his old friend and Statemate Alben Barkley (whom Wyatt nominated for Vice President at the Democratic Convention) and Democratic Chairman J. Howard McGrath had spoken to him "about several matters."

And he was eager and willing, he declared, to work with the new administration to "help bring about some of the things I'd like to see accomplished"—as a private citizen. As Housing Boss? Said Wyatt: "My definite and firm intention right now is to stay in private life . . ."

(Continued on page 18)

NAREB convention eyes 1949 building market hopefully but anxiously, sw

The National Association of Real Estate Boards had planned its 41st annual convention when it seemed certain that the nation would still be rejoicing a Republican victory. The election results had surprised the nation's realtors as much as any other group—and disturbed them more than many. Still, NAREB delegates were lighthearted — and understandably so — when they checked into New York's Commodore Hotel for a seven-day stand. They responded happily to the welcome signs hanging in every restaurant and shop window in the Grand Central area, pushed imperturbably through a tenant's picket line in front of the hotel, greeted each other as gaily as if this were the victory get-to-gether they had planned. In many ways, it was.

A near-record year of private housebuilding had inflated the realtors' prestige and there were many signs that next year would be almost as good. The Democratic victory wasn't, after all, the social revolution many had excitedly called it on November 3. (As Charles Wilson of General Motors had observed, "People will buy cars no matter who wins.") Said pudgy Cal Snyder, secretary of the Realtor's Washington Committee: "Right after the election we had a lot of pessimistic viewpoints. That was a false picture." About 90 of the 263 Democrats in the 81st Congress, he pointed out, have a record of opposition to New Deal legislation. In league with most Republicans, said Snyder, "these gentlemen will form a coalition which will be sufficient to stop a wholesale New Deal Program."

Snyder laid down the defense which NAREB would use against the new Democratic regime: constant and intensive opposition to every administration act smacking of government-in-housing. Whatever inclination there was in the group to admit federal intervention in certain housing areas as an operating fact-of-life was quickly steamrollered (see below). Snyder admitted that the prospects of doing away with rent controls were dim, but he was sure that legislation for slum clearance and public housing could be defeated.

One uncertainty was obvious, however, after the good-natured hilarity of the first couple of days had subsided, and even through the sustained level of optimism that marked the entire week: no one really knew for sure what to say about next year's real estate market. Many a realtor checked out of the Commodore on Saturday with the uneasy conviction that the convention had been strictly a turkey so far as definitive ideas on the immediate future were concerned.

The most confident view of a continuing firm market appeared at the Society of Industrial Realtors' session. E. M. Boerke, Milwaukee chairman of the S. I. R. financing committee, brought the welcome news that life insurance companies and other big lenders have mellowed considerably on industrial real estate loans. "Some who previously declined all loans of this type are now making carefully selected loans while the larger institutions are actively soliciting this type of business . . . But there has been a definite firming of one-half to one per cent in the interest rate."

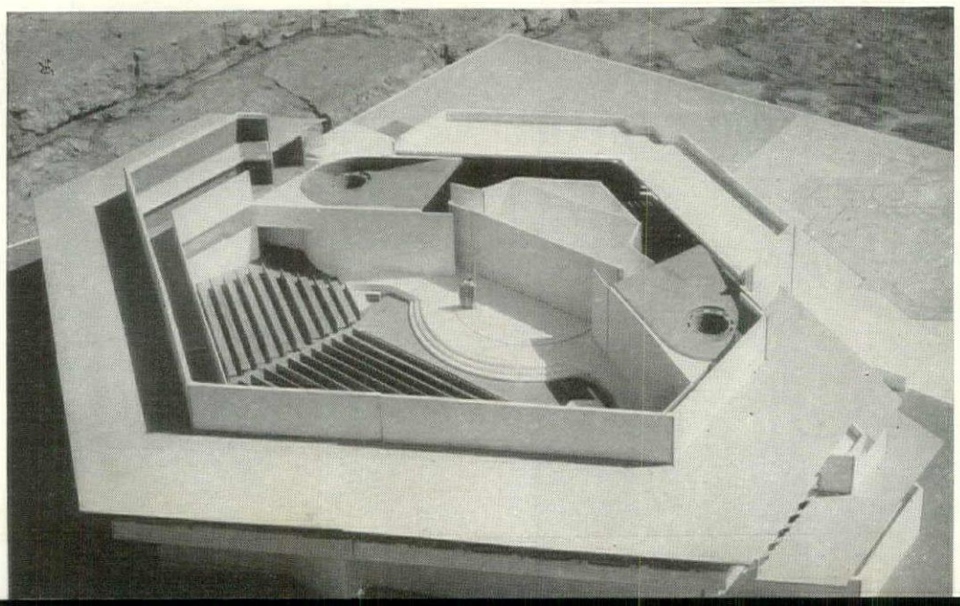
James Hanson of the Alexander Sumner Co. of Newark, N. J. told how this firm operates to offer manufacturers' a one-package industrial location service which starts with the land and includes selection of the architect and contractor, supervision of the entire building job. The industrial broker's specialized knowledge of a plant operator's needs will, Hanson thinks, increase his importance in the control of this whole building operation.

The last day brought the only break in NAREB's united front. The real estate boards of New York City and Westchester county had been pleading with NAREB in committee rooms to "adjust its position" on rent control and, instead of issuing a blanket condemnation, limit its opposition to a request for a 15 per cent increase in rent ceilings. Explained Bronx Real Estate Board President Frank Mazzetti: "We're not for rent control, but we still have a shortage and the tenant needs some form of protection."

But when the resolution vote was called the New Yorkers were denied the floor, and NAREB went on record once more as opposing flatly any control of the nation's rent. The convention also resolved that:

- Congress should work out a program for liquidating all federal public housing, involving 300,000 permanent units and 400,000 temporary units.
- VA should hike its interest rate on GI home loans to 4½ per cent.

FRANK LLOYD WRIGHT has longed to build a theatre ever since, as a young draftsman, he worked with Louis Sullivan on a chain of 51 theaters throughout the Middle West. He designed one in 1920, put it aside, now is "dusting it off" for Experimental Theater Director Paton Price. Wright's unornamented, acoustically perfect "New Theater" does away with proscenium arch, has revolving stage and steeply pitched floor. Says Wright: "The drama here has been dramatized architecturally." Building will begin next spring outside Hartford, Conn.; funds ($100,000) are being raised by local businessmen.



nued warfare on government-in-housing

yron Ehrenberg-Scope

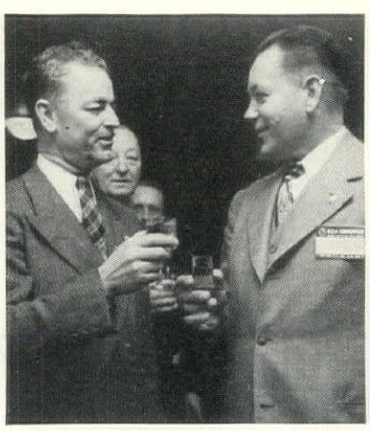
EW NAREB PRESIDENT T. H. Maenner, Omaha, (center) alks things over with Realtors Walter S. Dayton, Bayside, . I. (left), and Joseph Laronge, Cleveland. At convenon's close, Maenner promised NAREB would "fight as ever before" for policies.

SOCIETY OF INDUSTRIAL REALTORS panel members were confident of a firm industrial real estate market next year. Public Houser Roland R. Randall, Philadelphia, was elected S.I.R. president. →

James Hanson, Newark, told members their best brokerage bet lay with small companies outside heavy industrial districts. H. Gifford Till, Dallas, and Hugh January, Houston, (l to r) spotlighted the industrial real estate boom in Texas.

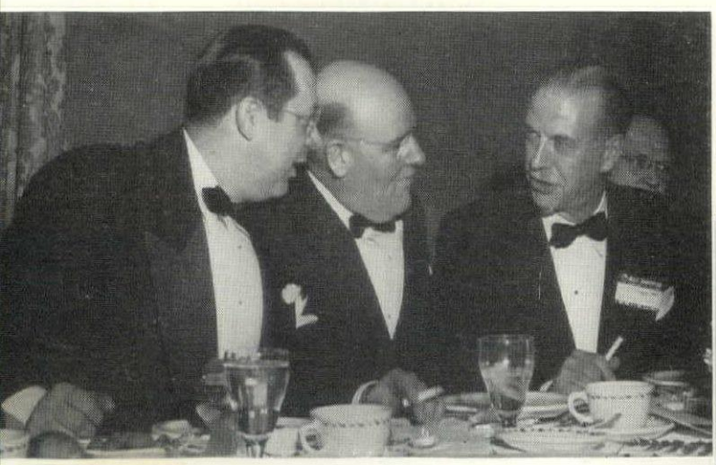
EW YORK REALTOR Robert Dowling (above right) and two convention delegates.

IOUX INDIAN distributed pamphlets describing evils of "paternalism" at board of directors' luncheon. →

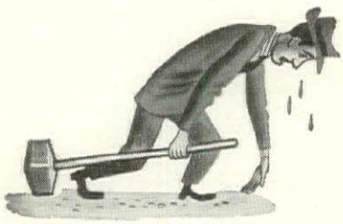


OUTGOING FARM BROKER president Frank L. Huffman, Modesto, Calif., (left) welcomes new president Otto Knudson, Eagle Grove, Iowa. →

Cal Snyder, Wash., said market wouldn't fold because of election.



WO BANQUET GROUPS: above (left to right): E. F. Ireland, Cincinnati; Robert W. Leavitt, Lake George, N. Y.; J. Clydesdale Cushman, New York. Right: Delbert Wenzlick, St. Louis; Housing Expediter Tighe Woods; Outgoing NAREB president Hobart C. Brady, Wichita, Kans.



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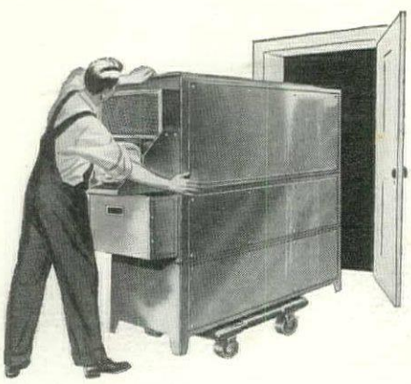

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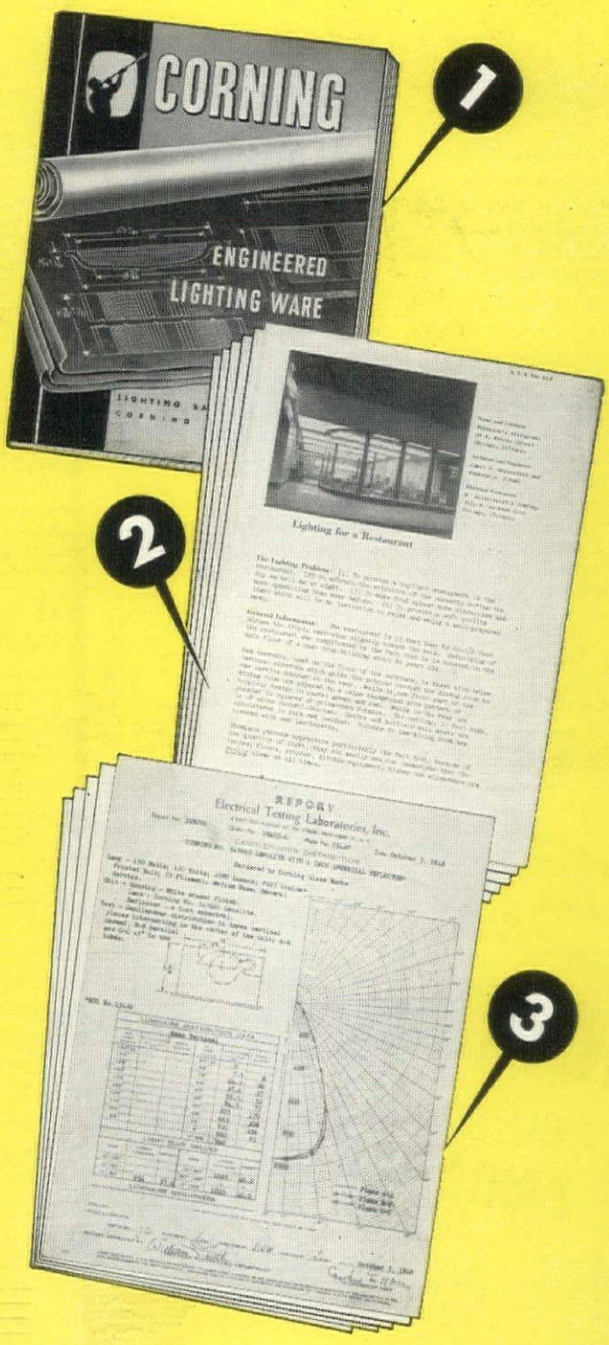

1 Bulletin LS-17, "Corning Engineered Lightingware," just published, describes and shows you how to use Corning's completely balanced line of lightingware to best advantage. It is a condensed handbook that will save you valuable time.

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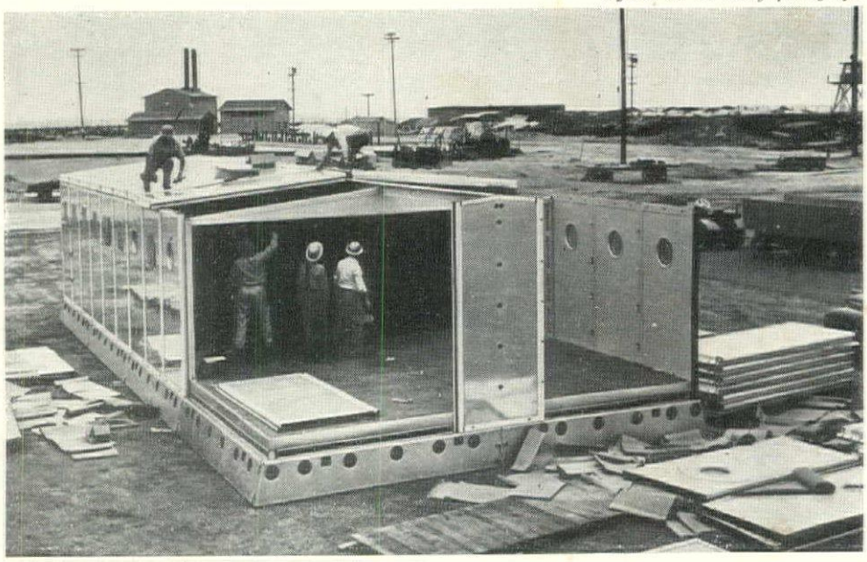


PREFABRICATED NAVY BARRACK for arctic living will be tested in Alaska this winter by 16 Navy Seabees. Douglas Aircraft developed the structure, which is made of thick insulated panels with an outer covering of thin sheet aluminum. Two oil burning space heaters, each with a 50,000 Btu capacity will supply the barrack with an interior temperature of 70° even when the outside temperature hits 65° below zero, if the test is successful. It is designed to withstand 150-mile-an-hour gales and a 13-ft. snowfall on its roof, and can be constructed in one hour and 45 minutes.

New York State Housing Commissioner Herman T. Stichman, only yesterday a likely Housing Czar, was working right on—and happily—at the same old job. Last month he advised New York City to start clearing its slums by setting up a housing court. He proposed a tribunal to concentrate on all violations of health and safety laws, patterned after the City Housing Court which has operated successfully in Baltimore for a year.

The Baltimore Court, selecting entire blocks for inspection, has ordered some houses torn down, more improved. It has supervised installation of plumbing, removal of fences and outhouses. Most important, working with the Health, Police and Fire Departments, it has cracked down severely on all violators. At the same time it has seen to it that landlords would suffer no loss, by permitting rent increases.

New Yorker Stichman, after a tour of Baltimore's made-over slums, said they had been "just as bad" as New York's. But Baltimore "has started a clean-up campaign which is already showing good results . . . We can do the same job in Harlem and other substandard areas and thus make the legal provisions a help in building better communities."

Henry J. Kaiser said he knew how to eliminate steel and other shortages and encourage expansion of basic material production: Let the new Congress enact a system to allow accelerated depreciation on capital investments for income tax purposes.

The wartime law permitting manufacturers to write off certain capital investments for five years instead of the 20 years ordinarily required stimulated $6,500 million worth of industrial development, the Kaiser-Frazer Corp. chairman told an American Finance Conference convention in Chicago. "The plan can work now in peacetime."

Automan Kaiser also had a word of warning on the way to accomplish such congressional action. "No industrialist or businessman can go before Congress and get action on such a proposal," he observed. "It must come from the people."

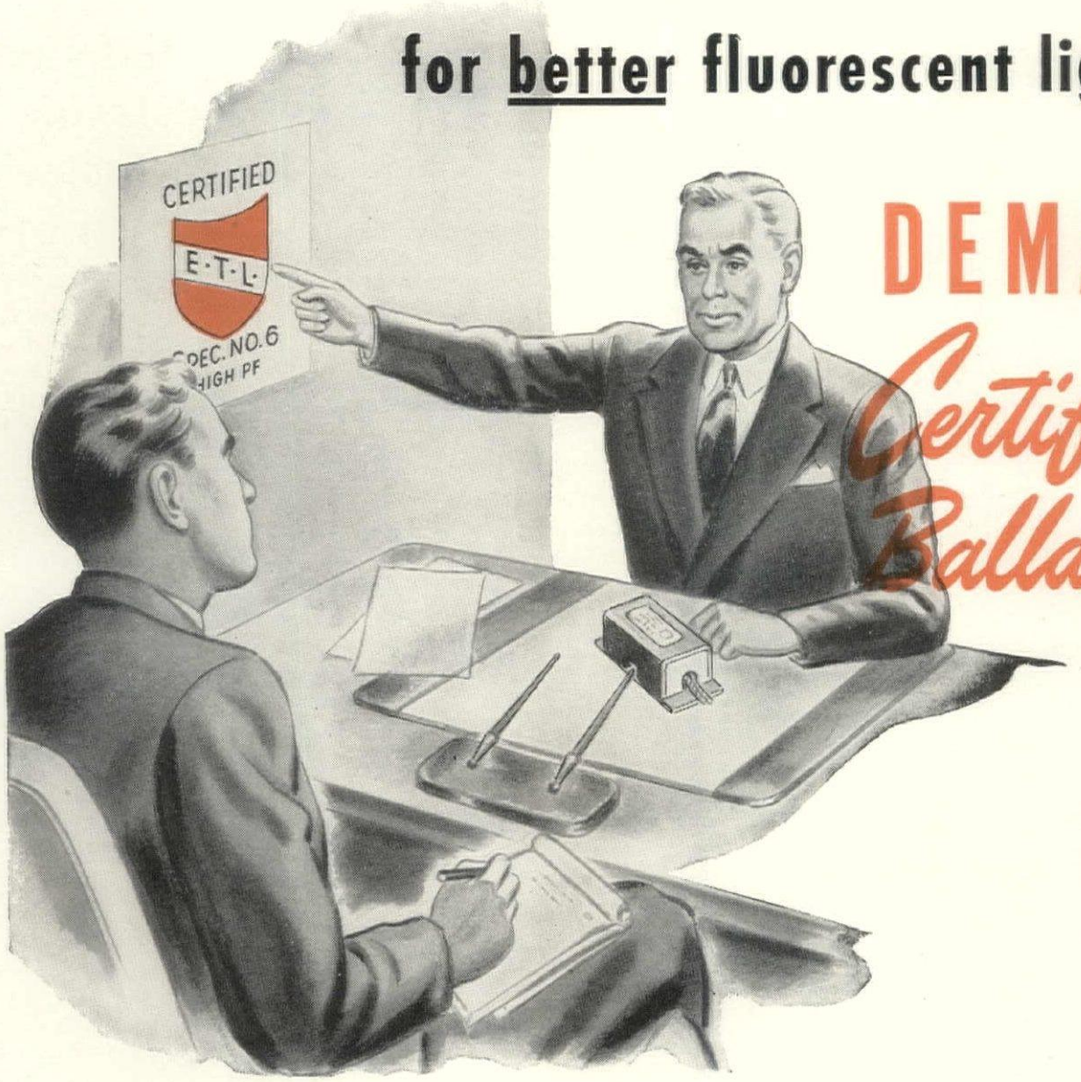
J. C. Nichols, dean of American community builders, called on Builders to "plan for permanence." Speaking to the National Association of Real Estate Boards in New York (see p. 15), he deplored the "unnecessary building up and tearing down of large sections of cities and towns," and the resulting annual loss of billions of dollars. The home of the future, he said, must have "permanent value and desirable, healthful, and inspiring surroundings for many generations."

Architect Richard Neutra, back from a European housing survey, made headlines with a startling pronouncement: the average American city home gives its inhabitants a greater sense of insecurity than a Hottentot kraal. "How can we help feeling insecure living in communities like Los Angeles where our children step out of their schools directly into 60-mile-an-hour highways?"

Architect Neutra also had a good word to say for Great Britain's Labor Government which, in spite of its "cumbersome bureaucracy," is "achieving the sanest balance in Europe between sadly needed small

(Continued on page 20)

for better fluorescent lighting



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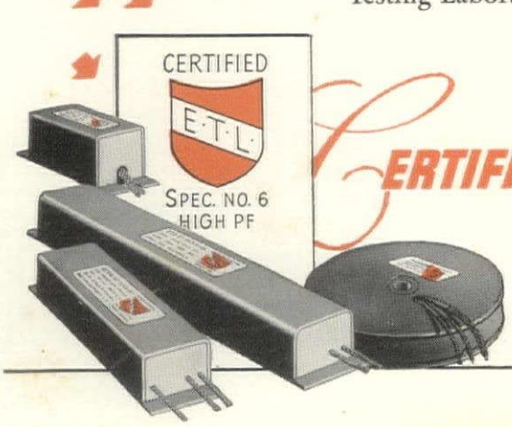

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homes and luxury construction, and . . . getting the job done."

Samuel Dunn, publisher of the *American Builder*, wasn't shedding any tears over the outcome of the election. It wasn't that he had acquired a sudden fondness for President Truman; it was just that defeated candidate Dewey wasn't much better.

As he explained in a plague-on-both-your houses editorial in last month's *American Builder*, "no politician of any party had the courage to support policies" which would "reduce farm prices and workers' wages. No leading politician of any party consistently opposed the socialistic policies involving large, unnecessary government spending which help feed the fires of inflation."

He was particularly shocked by Republican Dewey's campaign support of TVA and a St. Lawrence waterway for New York State. Worse still, "toward the end of the campaign he came out for federal aid to slum clearance and housing construction." Snorted Publisher Dunn: "Some program for a professed believer in private enterprise!"

Sourest critic of Truman housing policies, Col. Robert McCormick of the *Chicago Tribune*, now saw little hope that things would get better. The whole postwar FHA program, according to the *Tribune*, has been nothing but a "plan to persuade young people to go head over heels in debt." Now the *Tribune* happily pointed to the twin prongs of the Administration's housing dilemma. On the one hand, the Democrats are "pledged to let the unions continue their feather-bedding methods." On the other, they have "promised to provide more housing and to bring down the cost of living." Harrumphed the *Tribune*, which has had a close-up view of some of the worst feather-bedding in the U. S.: "It will be nice work if they can do it."

MARKET

ROSY OUTLOOK

Producers' council sees another near-record year for housing

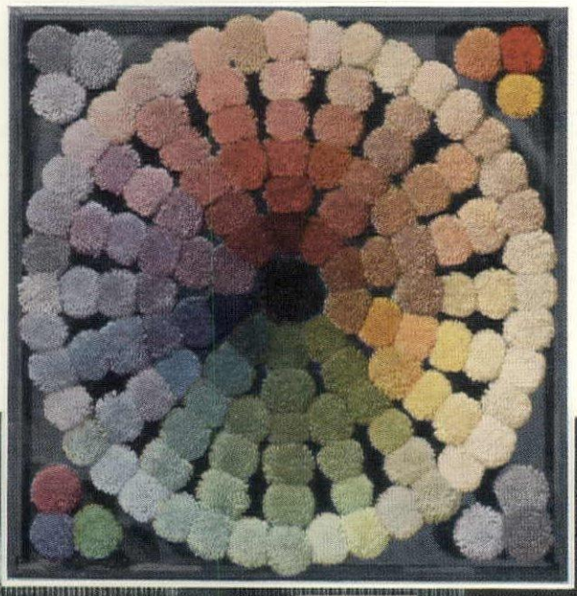
Will 1949 be the year for a construction slump? The men who are probably more interested in that question than any other group—the producers of building materials—think not. All in all, they believe, the 1949 construction picture will be much the same as 1948's near-record one; slight increases in costs, slight decreases in construction will change it only to a degree.

This rosy view was embodied in a forecast issued last month by Miles L. Colean, economic consultant of the Producers' Council, in consultation with the Council's

(Continued on page 22)

Mohawk LAYS 11.5 MILES OF CARPET

in the TERRACE PLAZA HOTEL



Cincinnati's new-idea hotel is carpeted top-to-bottom by MOHAWK. A natural choice. For Mohawk, the only mill making *all* loomed carpet weaves... from luxurious custom-made Wool Chenille to sturdy Wiltons fashion-right in design and color, practical Axminsters, Velvets and Tapestries... has a superlatively-right answer to every problem.

Here, and in following pages, appear some of the beautiful effects created by Mohawk master designers and weavers for the Terrace Plaza...just one more proof that Mohawk leads the field where many kinds of carpets are needed on a single job.

PHOTOS BY SHUTTLEWORTH-RUMAN

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NEWS

Construction Economics Committee. Among its predictions:

▶ Housing starts will hit (but not exceed) 900,000 in 1949 — 4 per cent less than 1948's probable total. Most of them will be houses for modest income groups; higher priced housing ("where the market is generally the weakest") will dip. As in 1948, the bulk of residential construction will be houses-for-sale.

▶ Despite a decrease in construction materials prices, construction costs will increase slightly — because of likely wage and freight rate raises. Therefore, 1949's anticipated $18.175 billion worth of construction will actually represent a reduction in physical volume of 1 to 2 per cent. A probable $7 billion maintenance and repair bill will raise the year's total construction figure to more than $25 billion.

Hansel Meith

COLEAN

▶ Private construction will drop off almost 5 per cent (private residential will fall 11 per cent, industrial 7 per cent, store building 10 per cent, but warehouse and office building will rise 20 per cent); public construction of all kinds will increase as much as 19 per cent.

▶ There will be no serious shortage of building materials. Even iron and steel will be at least as available as they are now ("unless the armament requirement is much over that now anticipated"). Cement supply will probably remain tight but gypsum products will be obtainable.

▶ Next year's labor force will be "more productive" because of the easing of the demand for labor in some types of construction. The probable slight increase in construction workers' hourly wages will be somewhat offset by less need for premium and overtime payments.

The only factor which might destroy the steady level of next year's construction, the report warned, is the factor which could wreck the entire economic climate: a change for the worse in foreign affairs. "Added requirements for armaments and withdrawal of manpower," it pointed out, "could rapidly renew inflationary forces to an extent that would make widespread economic controls inevitable."

But even here the producers were optimistic. Said Consultant Colean: "It seems apparent that every effort will be made to avoid this contingency. The present outlook is that the effort will be successful."

* * *

Dr. Dexter Keezer, chief economist for McGraw-Hill publications, agreed with the Producers' Council's prediction of a sustained level of construction through 1949

(Continued on page 24)

Lesson for Today—

—as taught by the Brunswick Township School Board

J&L STEEL

Right: Tightening the rigid bridging between the Junior Beams in the new Brunswick Township, Ohio, High School. *Below:* Architect's rendering of the new school, now under construction.

Contractor handles and places J&L Junior Beams without aid of mechanical hoist

The lesson that many school boards, contractors and architects are learning today, is that *steel and concrete floor construction with* J&L Junior Beams *saves time and money*. These beams cost less to buy, cost less to erect, yet for many types of "light" structures, they offer all the advantages of heavier structural members.

There are good, sound reasons for the trend to J&L Steel Junior Beams in schools, apartments, residences and other light occupancy buildings.

Mr. H. Joseph Nitchman, of Berea, O., Architectural Engineer for the new Brunswick Township school, specified them because: "—Compared with heavier structurals, Junior Beams are well designed for this type of structure—also well designed for use with metal lath and paper-backed mesh."

Mr. C. E. Karn, of Unit-Way Homes, Inc., Berea, O., the contractor for this school, stated: "These beams require no special handling equipment. Four men without any equipment at all, raised the Junior Beams to the second floor and placed them properly. This is an important point on many jobs."

The Brunswick Township School Board likes J&L Junior Beam floor construction, because it is fire-proof, helps hold down construction and maintenance costs, and minimizes insurance rates.

School Boards! Architects! Contractors!

Check these advantages of J&L Steel Junior Beam Floors: Economical—Fire-proof—Rigid—Shrink-proof—Termite-proof—Easy to install—Low maintenance—Permanent.

J&L Junior Beams are available now through leading steel warehouses including J&L Service Warehouses at Chicago, Cincinnati, Detroit, Memphis, New Orleans, New York and Pittsburgh. Let us send you descriptive literature and engineering data. The coupon below is for your convenience.

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—and even through 1950—but he saw the possibility of a "substantial bust" after that time. He warned a conference of the American Institute of Real Estate Appraisers in New York that after the "desperation" demand for new homes is satisfied, the bust can be avoided in only one way: by bringing down building costs nearer to consumer incomes.

REPLACEMENT

Current building rate could replace U. S. housing in 74 years

How long can the U. S. build one million houses a year? As Building men prepared to close out a record year of house construction, and meet yet another (see above), they could glimpse the end of the superswollen market that had built up during the war years. Government statistics showed that although there were still two million families doubled up (one million of them veterans), fully 75 per cent of them preferred to live that way. Moreover, government economists were predicting that the high rate of new family formations (about a million new families) would level off soon. These figures showed that housebuilders would soon have the "desperation" market cleared out.

If housebuilding remained at its one million mark, then, it would be moving into the replacement market—a market never before reached. For the past 50 years we have been building houses at the average rate of 500,000 per year. Family formation (marriages minus family dissolutions by death and divorce) has averaged about 400,000. Thus the housebuilding margin over new demand has been only about 100,000 houses a year. At this rate, it would take 400 years to replace all U. S. houses.

From now on, according to the statisticians,, new family formation will probably level off at about a half-million a year. Thus if we keep on building houses at the current pace of just under one million, we will have an annual margin of just under 500,000. This would enable the U. S. to replace its existing 37 million housing units every 75 years. And a construction rate of 1½ million, if it were reached and maintained, would cut replacement time to close to 37 years—hardly longer than some mortgages.

This would be a fine thing for everybody. Housebuilding has been less able than any other industry to meet anything more than imperative new demand. Thus it has sharply fluctuated in response to the sharp fluctuations in new family formation. A steady bite into the replacement market would mean a leveling off of housebuilding's boom-bust cycle at a sustained high level of production. It would also mean better houses for more of the U. S.

Whether You Wet Your Whistle At The Bar
Or Write A Letter Home To Mother . . .

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in Cincinnati's Terrace Plaza

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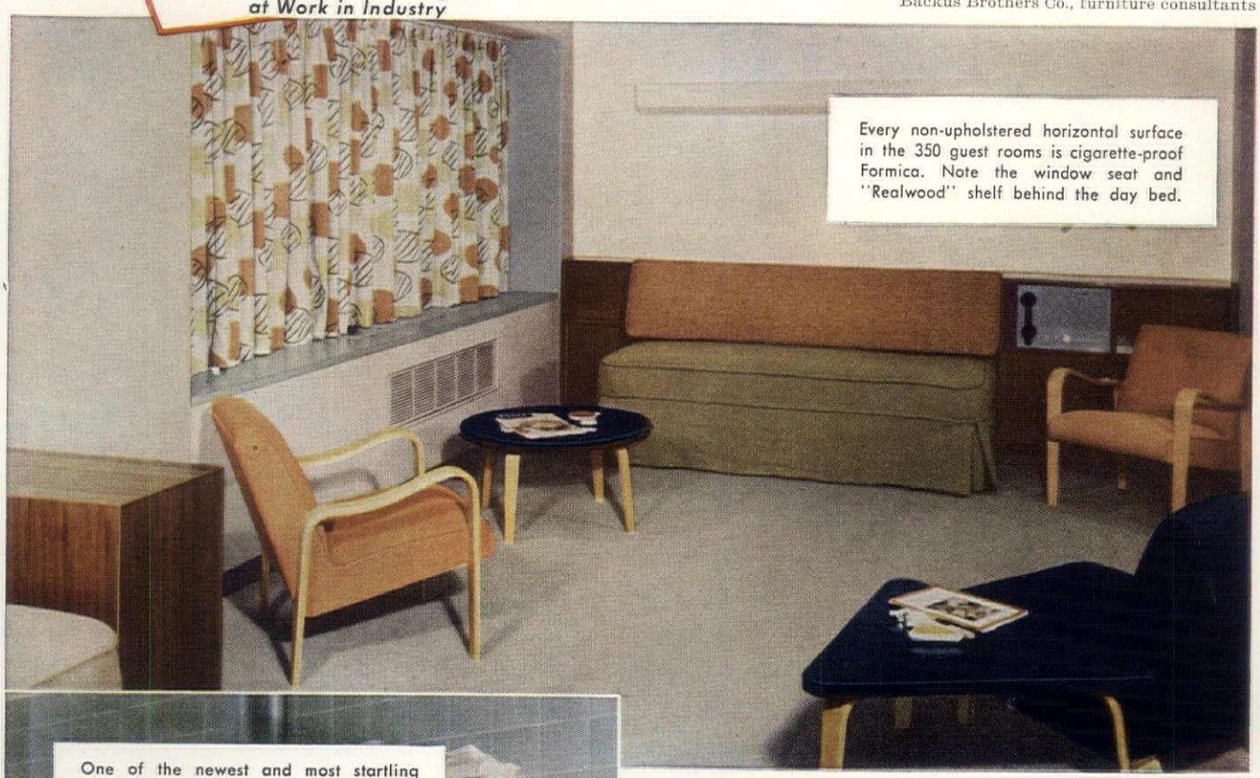
Backus Brothers Co., furniture consultants



Every non-upholstered horizontal surface in the 350 guest rooms is cigarette-proof Formica. Note the window seat and "Realwood" shelf behind the day bed.

One of the newest and most startling uses of Formica is in these colorful wash-stand dressing table combinations. Architects are asking for more information. Pictorial literature is now in preparation. We invite your inquiry for "Beauty Bonded Formica for Bathrooms."

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Every horizontal surface in your private guest room will be cigarette-proof Formica. You'll shave at a Formica lavatory-dressing table in your bathroom. You'll write at a beautiful built-in drop-leaf Formica desk.

In short, the Terrace Plaza is a Formica show-place. Because architectural innovations are so numerous in this finest of all hotels, we are preparing full color literature that will serve as your conducted tour through the building. If you'd like a copy, we'll be happy to furnish it as soon as it comes off the press. Please order today.

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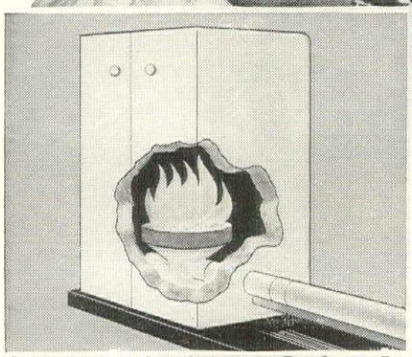
Must Owners of your new houses POLICE THE THERMOSTAT?

Experts predict shortages of some fuels for 3 to 5 more years!



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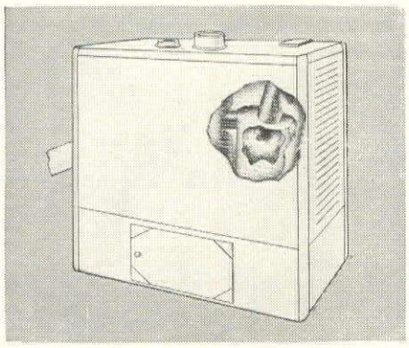

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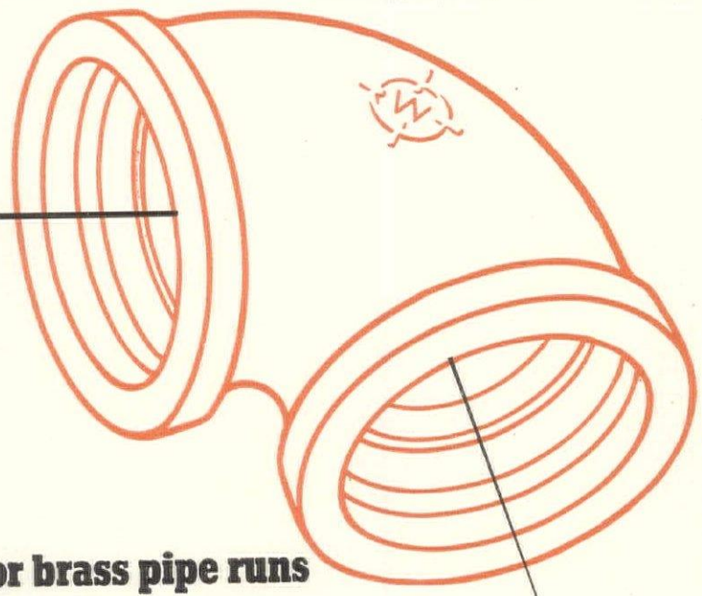

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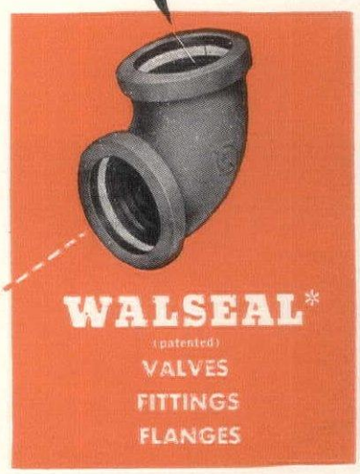

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LETTERS

Revere House grouping . . . Tribute to the Greene Brothers . . . Memorial in Calcutta . . . Further comment on the Branch-Frankel letters . . . More on Community Builders planning.

REVERE HOUSE GROUPING

Forum:

Here is a copy of a letter which I've just mailed to John Callendar which may be of interest to you in connection with our designs for Lamolithic Industries and Revere Institute (FORUM, Oct. '48).

Tiring of cathedrals and even Le Corbusier, I tried some daydreaming and am sending the results (see below). It is the promised suggestion as to how we would group six houses based on our design for the Revere Quality House Institute. We assumed a plot with streets on the north and south sides of the land and of course it would be as flat as the rest of our section in Florida. It may be that some explanations of what we are trying to do are necessary.

There have been acres of plans devoted in recent years to town planning, some of which have been highly developed, alloting splendid colored areas for various functions. Much worthy effort has been spent in finding better relationships between residential areas of all varieties and the town as a whole. However, it seems to us that the detached house, so popular in America and receiving so much attention as an individual unit, has for the most part simply been lined up on each side of the planners' or speculative builders' beautifully located cul-de-sac and that is the end of it. When the houses themselves are identical the results are particularly disastrous. Relationships between one house and its neighbor and devices to relieve the monotony of too much repetition and still keep within economic bounds is a real and urgent architectural problem and to us an exciting one.

Speculative builders and, I fear, too many of our architects attack this problem by the well known changes in fronts, arbitrary changes in materials and textures, and the much more valid interplay in color.

The one tool which is the architect's special weapon, the handling of inner and outer space, has seldom been applied to this problem. Our proposals are fundamentally concerned here with the relationships between the house and its private outdoor living and work spaces. Finally and possibly most important it is a search for means to create a coordinated whole out of the repetition of basically similar elements without creating monotony.

The use of glazed walls in closely grouped detached housing introduces many problems, but strangely enough the solution of these problems suggest many exciting possibilities in handling inner and outer space. While the planting screen at strategic points is one way to obtain privacy between such houses it is often not as satisfactory as the extension of the walls of the houses to form courts, patios, service and play areas. . . . The extension of the walls seemingly enlarge the house and give an element which can easily have endless variations and forms, defining space, make new relationships between inner and outer space and assist in coordinating the houses themselves into one unit. This extension of the walls of the houses should be louvered or perforated in some manner in southern climates.

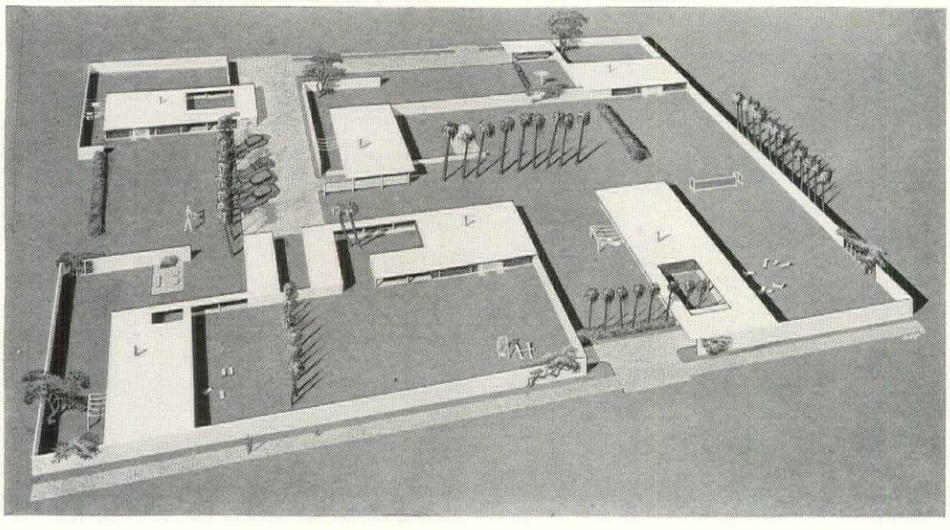
The tendency to concentrate glazed areas and rooms towards the most ideal orientation (in our case towards the south and east) leaves comparatively large areas of unbroken opaque wall areas on the remaining sides of the structure. . . . In group housing it may very well be that economies in land use made possible by arranging all rooms to face in one direction, allowing the "back" wall to form the garden wall of the adjacent house would offset the additional amount of exterior perimeter required in such an arrangement. The concept of the opaque walls of a structure forming the garden walls of the adjacent house violates the usual city regulations of setbacks from the property lines. In order to keep these proposals within this very practical limitation we have compromised and kept the design in a form which would allow setbacks and individual land ownership . . . .

We are not the ones to judge and we haven't been asked, but we're more enthusiastic about this project than any project we have ever proposed. Lamolithic Industries introduced some of these principles, but economy and reluctance of the client prevented us from going any farther in the executed project for them.

PAUL RUDOLPH

Paris, France

REVERE HOUSES, grouped to form new space relationships with each other and still coordinate the houses into one unit, dispells the monotony often created when similar houses are placed side by side.



CALIFORNIA GREENES

Forum:

I have been reading with great interest Jean Murray Bangs' excellent article on the Greene brothers and their contributions to California architecture in the early 1900's (FORUM, Oct. '48). I was particularly interested due to the fact that I have lived for most of my life in the town in which they centered their activities and for 20 years of my childhood and youth I lived across the street from the Blacker house, half a block from the Culbertson house (both illustrated and extensively discussed in the article) and near many other examples of their fine work.

The extensive grounds around the Blacker residence were a great joy to me during my youth since they provided an ideal playground with sweeping lawns, exotic lily ponds and jungle-like areas of rank growth. They complemented the house perfectly and I am surprised to find on reading the article that they, also, were planned by the architects.

It is hard to convey with pictures and

(Continued on page 32)

DOUBLE DUTY

DOUBLE DUTY
INSULITE

Far above all other things to remember when specifying insulation are these two outstanding *facts:* INSULITE *builds* — INSULITE *insulates.* Two things for the cost of one! Insulite (Bildrite) Sheathing provides greater bracing strength than wood sheathing, plus twice the insulating value. Specify Double-Duty Insulite for sheathing, lath or interior finish.

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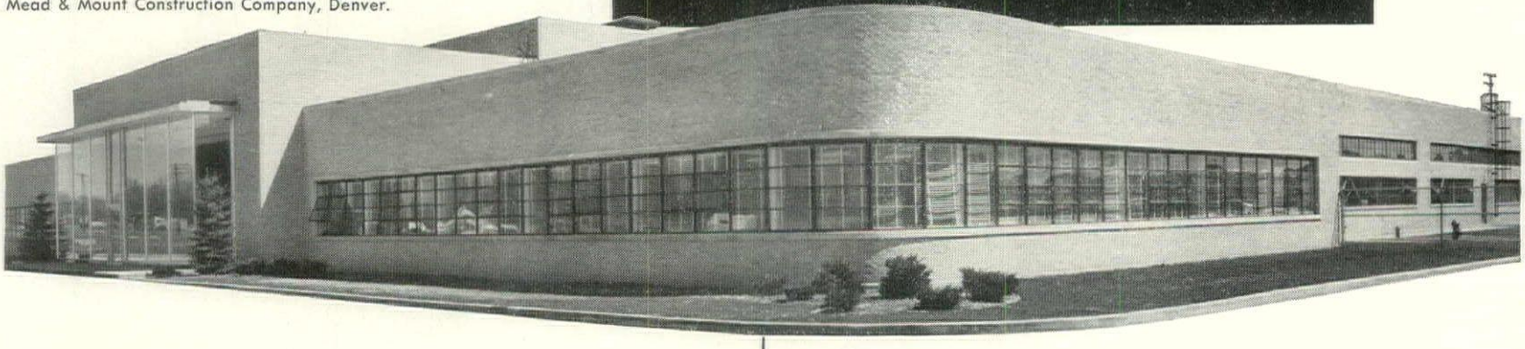

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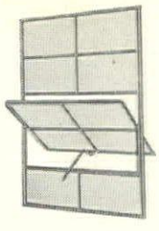

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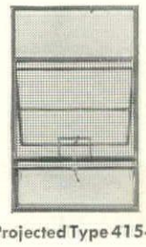

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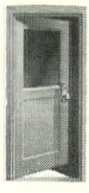

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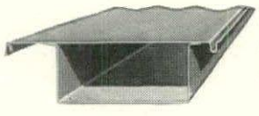

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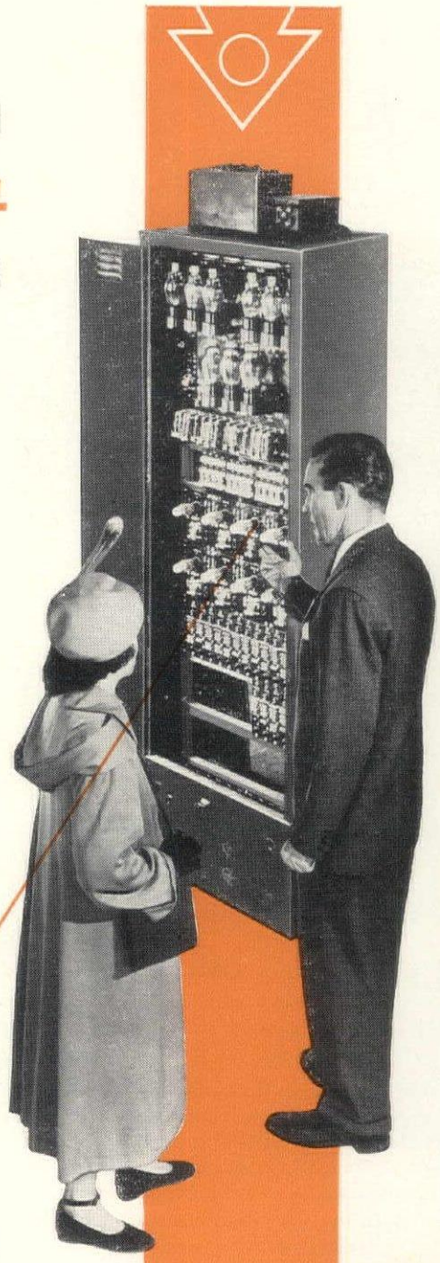

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ELECTRONIC SIGNAL CONTROL

ELEVATORS

AS ALWAYS, OTIS LEADS THE WAY . . . THIS TIME WITH THE MAGIC OF MODERN ELECTRONICS

LETTERS

text how indigenous to the California scene these houses are. Many years before I knew who had designed and executed them, they were great favorites of mine.

I hope that you will find other subjects as interesting as those which you have used in the past for these feature articles. They are an ever welcome part of your journal which I have not found in other architectural magazines.

ARTHUR LAVAGNINO

Pasadena, Calif.

COMMUNITY BUILDERS PLANNING

Forum:

In connection with the article on the American Community Builders town near Chicago (FORUM, Aug. '48), you may be interested in further details as to the way the planning was handled.

Our planner was Elbert Peets of Washington. Peets is not the brief case type of planner; he took a board in the corner of our drafting room and worked closely with us and the members of our staff. At the 400-scale study stage, he did his own drafting—mostly freehand—with a soft pencil on black line prints of the base map. These drawings made excellent and very convenient small-scale photostats.

The overall studies had to be made before our topographic survey was available. Fortunately, there was a good 5 ft. interval U. S. Geological Survey map. The Department of Agriculture air photos, at 100 rods to the inch, were enlarged to supply data on trees and other surface features. From this material, a very workable base map was compiled. Peets tramped all over the site until he knew it like a book.

Shifts in scales and the division of the plan into sections for the 40-scale working drawing were closely controlled by establishing a coordinate system at the very beginning of the operation.

After the plans for the housing development were completed, Peets prepared a master plan for future development showing the non-residential features, a street-and-lot layout for single houses, the treatment of the central park area, etc. It was this plan that was reproduced, in part, in your article.

JERROLD LOEBL
Loebl, Schlossman & Bennett

Chicago, Ill.

GANDHI MEMORIAL

Forum:

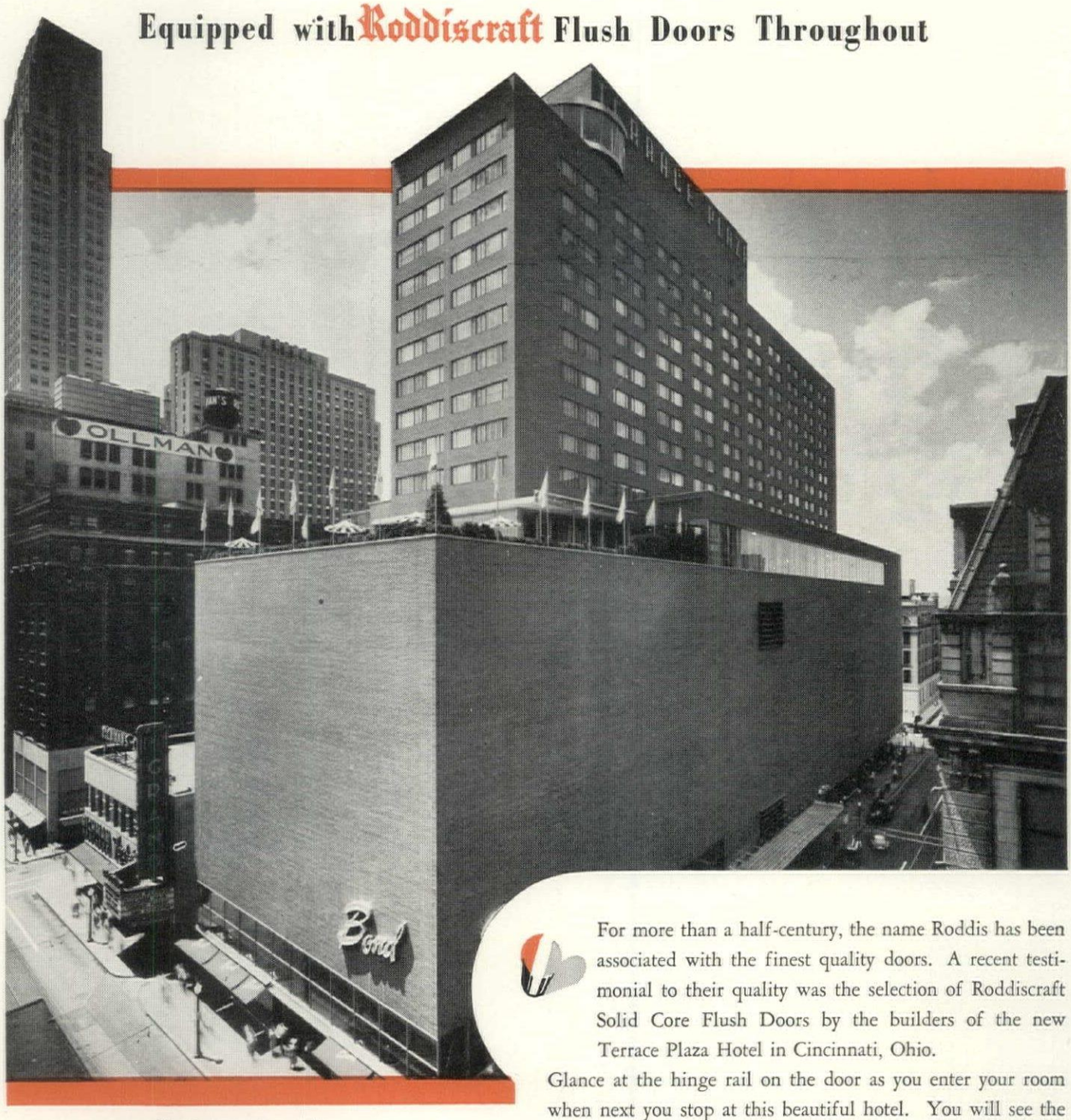
Enclosed is a photograph of the proposed Gandhi Memorial which is already under construction on the bank of the Ganges in

(Continued on page 36)

The New Terrace Plaza Hotel

CINCINNATI, OHIO

Equipped with Roddiscraft Flush Doors Throughout



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Glance at the hinge rail on the door as you enter your room when next you stop at this beautiful hotel. You will see the built-in red-white-and-blue dowel . . . symbol of Roddiscraft Solid Core Flush Doors. The designer of this modern hotel selected Roddiscraft Flush Doors not only to carry out the modern design but because of their combination of beauty and rugged ability to stand up under heavy hotel traffic.

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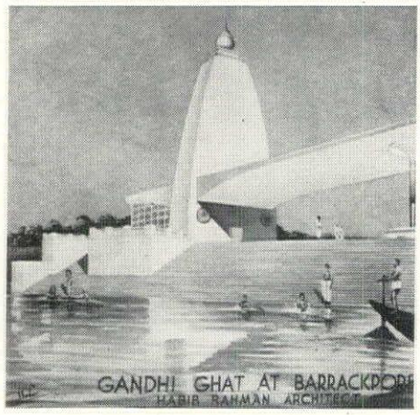
LETTERS

Calcutta. When I was required to design the structure in traditional Indian "style" (Hindu and Moslem), I realized the bankruptcy of our imagination to create a monumental architecture today. Being an admirer and follower of Wright, Corbusier and Gropius, and having been trained at M.I.T., I could not blindly copy a "traditional style." On the other hand, if I attempted to create something imaginative (following Wright's philosophy) the design would never have been accepted by the authorities. A compromise was the result, and the merit of the design remains to be judged by competent critics.

The Ghat will be used for bathing in the sacred river. Inside the 55 ft. high tower



will be placed Gandhiji's ashes. The projecting hood nearly 60 ft. long will be supported by a mushroom column. On the other side of the tower is a changing room enclosed by concrete grill work in arabesque design. The entire structure will be of reinforced concrete. We expect to complete this memorial by next spring.

Architecture in India today is practically dead, and I do not feel that a good modern architecture will be developed here in the near future.

H. RAHMAN

Calcutta, India

HOWE CREDIT LINE

Forum:

". . . William Lescaze, designer of the famed Philadelphia Savings Fund Society Building (FORUM, Dec. '32) and of the Ansonia (Conn.) High School . . ." (FORUM, Oct. '48).

There can be no interpretation of the quoted phrase but the incorrect one that Mr. Lescaze, alone, is the designer of the first work, since he is without question the sole architect of the second. Yet, when in December, 1932, the Philadelphia Savings Fund Society Building was published

(Continued on page 40)

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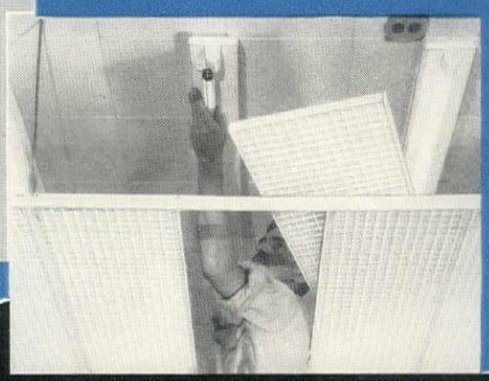

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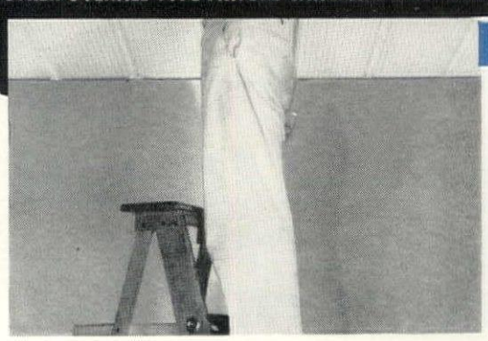

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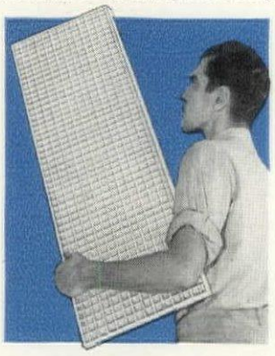

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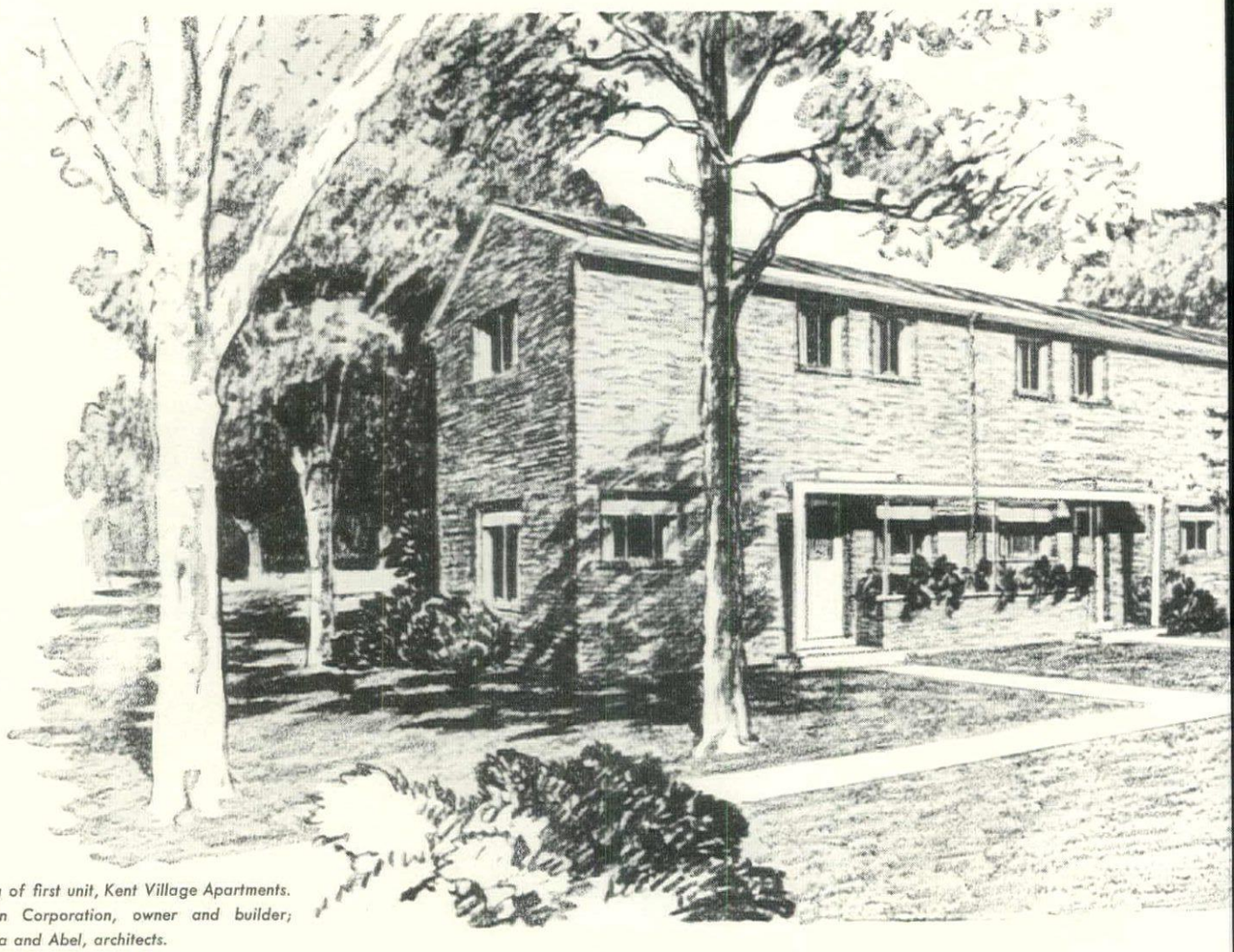
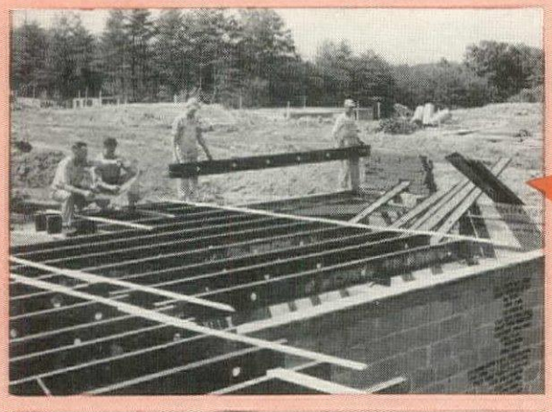


Architect's rendering of first unit, Kent Village Apartments. Roberts Construction Corporation, owner and builder; Berla and Abel, architects.

Kent Village moves

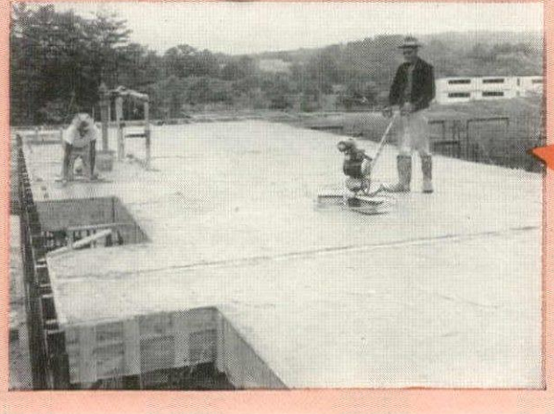


1

First stage of framing construction. Stran-Steel floor joists are placed in position.

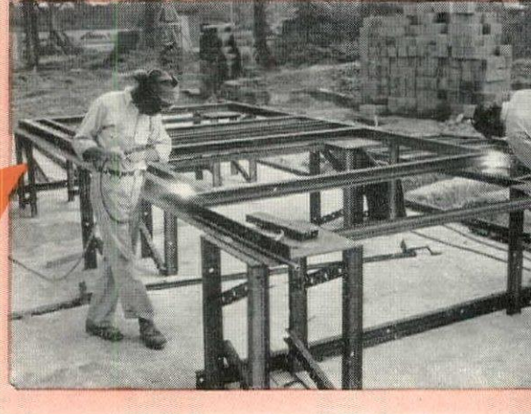
2

Fibre-backed steel mesh is nailed directly to Stran-Steel joists.



3

Two-inch concrete floor has been poured and finishing operations are under way.



4

Accurately-sized Stran-Steel studs are now assembled into wall sections.

Construction is proceeding without a hitch on the first two blocks of the $14,000,000 Kent Village garden-type apartment project now being erected in Prince Georges County, Maryland, near Washington, D. C.

Roberts Construction Corporation, owner and builder, ascribes much of this gratifying progress to Stran-Steel framing. This precision framing is providing greater speed, economy and ease of construction than would have been possible with any other framing material.

Nailable Stran-Steel framing permits economical dry-wall construction with plaster board. Its permanent rigidity eliminates the possibility of subsequent wall movement from warping and shrinking. And an incombustible Stran-Steel framework adds substantially to the fire-safety of the completed building.

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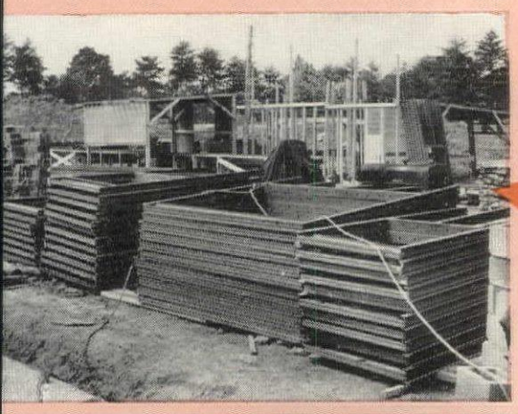
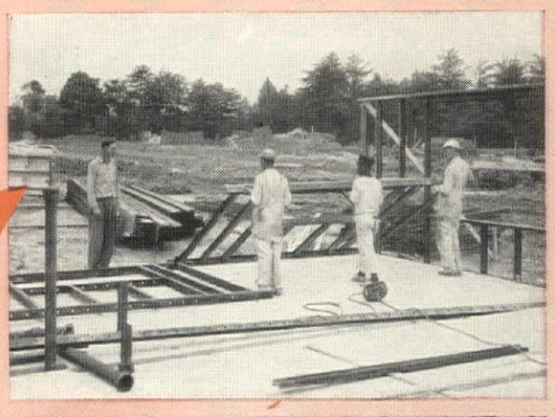


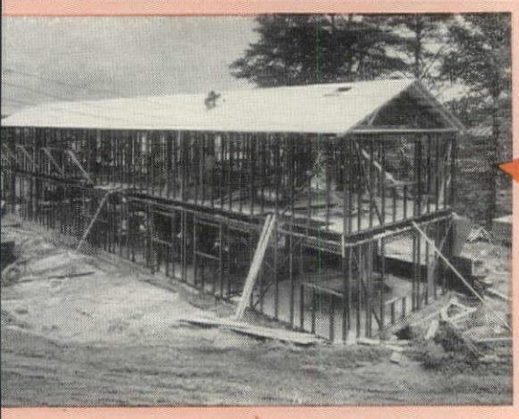
Completed wall panels ready for erection.

5



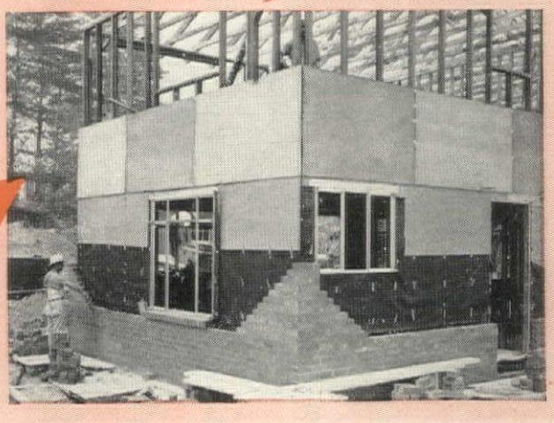
6

Raising a precision Stran-Steel wall panel into position.



Completed exterior framework of first unit ready for close-in.

7



8

Close-in, wallboard is nailed directly to Stran-Steel framework.

LETTERS

by FORUM, it was properly attributed to Howe & Lescaze, Architects.

In the interest of accuracy and fair play, no doubt you will wish to correct your recent statement by crediting George Howe with his portion of the fame due the designers of the Philadelphia Savings Fund Society Building.

F. SPENCER ROACH, Secretary
Pennsylvania Society of Architects
The American Institute of Architects
Pennsylvania Chapter
Philadelphia, Pa.

FORUM, which considered that its readers were aware that Howe & Lescaze designed the well-known Philadelphia Savings Fund Society Building, nevertheless regrets its omission of Architect Howe's name.—ED.

CONTROVERSY CONTINUED

Forum:

Having read Branch versus Neutra and Frankel letters (FORUM, Oct. '48), I cannot resist the urge to add my bit in favor of the able Mr. Neutra.

. . . Transferring from Ohio to St. Louis several months ago, I soon learned that I would have to build a residence if I wanted to have one that was not already antiquated when the foundation was poured. I succeeded in purchasing a beautiful half acre only 25 minutes from the heart of the city, in an excellent, quiet neighborhood, covered with large trees and with a stream running through one corner of the property.

Being a lover of the outdoors, I desired that the living room be placed to face the rear outdoor living room area to take advantage of the view of large trees not only in my yard but stretching across the landscape as far as you can see, also the view of the stream.

One evening while rereading the April FORUM I noted Mr. Neutra's Branch house again, and decided it would fill my needs perfectly by reversing the placement on the property.

After correspondence with Mr. Neutra, I became the owner of the Branch house floor plan and elevations. I set to work on these, reversed the plan, widened the living room by 2 ft., the master bedroom by one and the kitchen by one. An enclosed porch was added between bedroom No. 2 and garage for a recreation and child's winter playroom. Garage entrance was changed to the rear with overhead door and high windows in its north wall corresponding with those in the north living room wall.

To satisfy neighborhood restrictions it was necessary to change the roof to a standard pitch roof but pitch was held to 3½ in. to 1 ft.

(Continued on page 44)

COLOR DYNAMICS

Pittsburgh's new painting system utilizes the *energy in color* to make offices more attractive and efficient.

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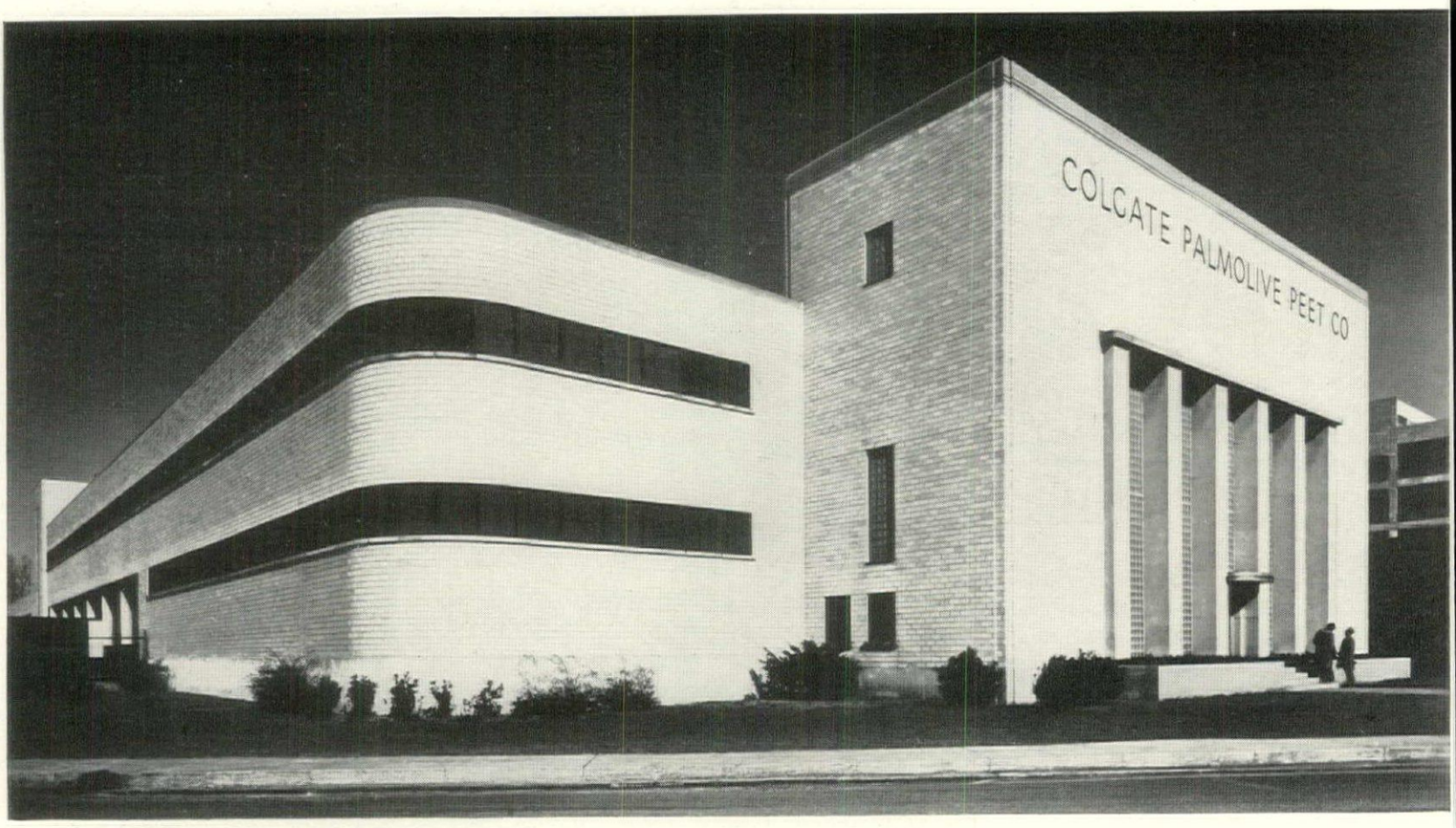

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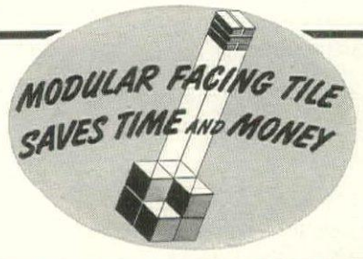

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Today's job of constructing the 2900-foot wharf calls for the following: Concrete deck totalling 142,500 sq. ft. – requiring 4600 cu. yds. of concrete. 677 vertical piles averaging 68 ft. in length. 254 batter piles averaging 73 ft. Resurfacing 70,000 sq. ft. of existing deck. Fender system and mooring bollards along the new face.

Work progressed in 500-foot sections while docking operations continued along the rest of the wharf. This large and complex project demonstrates Raymond's ability to meet special requirements of the client.

THE SCOPE OF RAYMOND'S ACTIVITIES—*includes every recognized type of pile foundation—concrete, composite, precast, steel, pipe and wood. Also caissons, underpinning, construction involving shore protection, shipbuilding facilities, harbor and river improvements, borings for soil investigation.*

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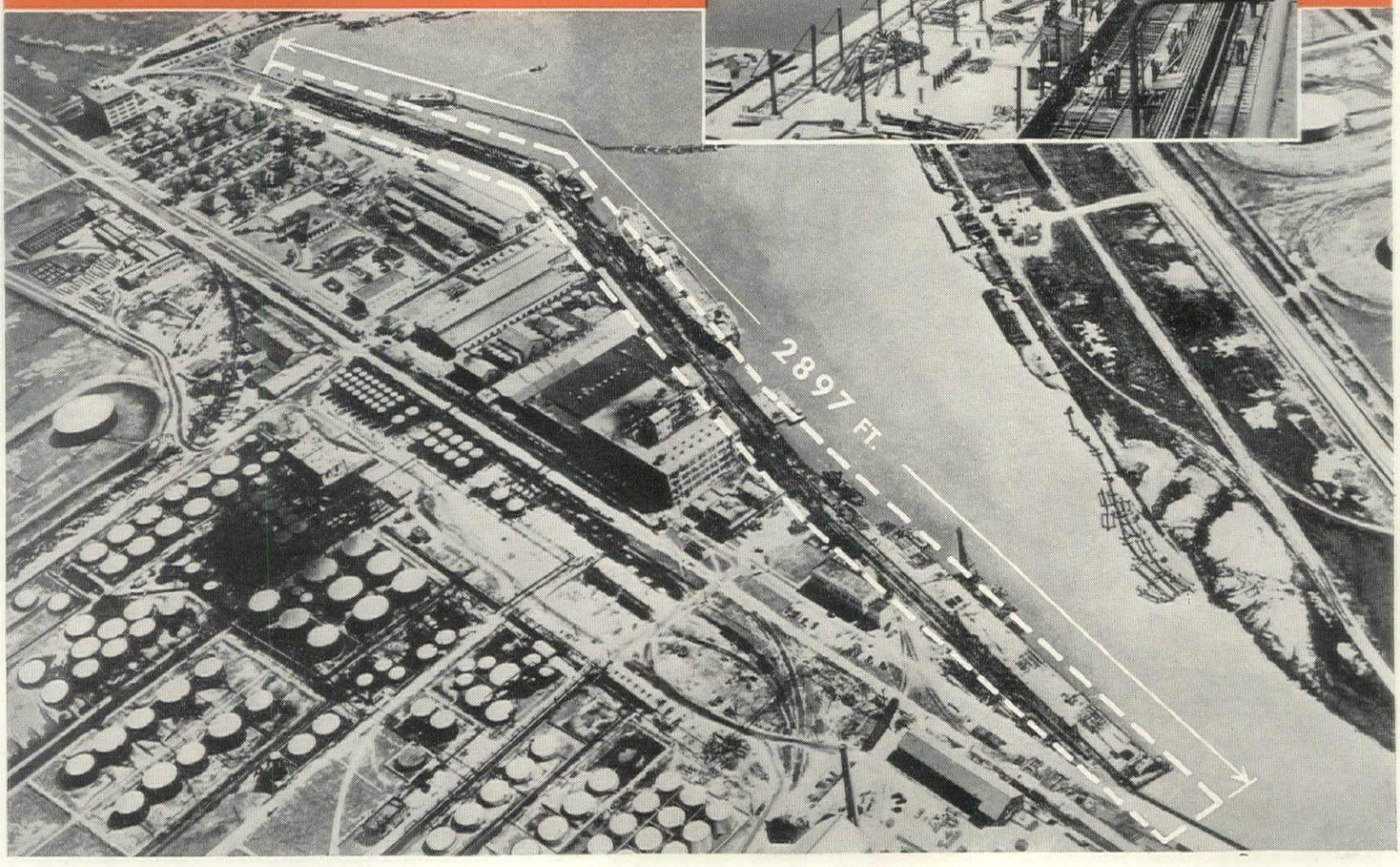


LETTERS

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 OF THE ARCHITECTURAL FORUM, published monthly at New York, N. Y. for October 1, 1948.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Vernon Hitchcock, who, having been duly sworn according to law, deposes and says that he is the Business Manager of THE ARCHITECTURAL FORUM and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), printed on the reverse side of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, P. I. Prentice, Time & Life Building, Rockefeller Center, New York 20, N. Y.; Editor, Henry R. Luce, Time & Life Building, Rockefeller Center, New York 20, N. Y.; Managing Editor, Henry Wright, 350 Fifth Avenue, New York 1, N. Y.; Business Manager, Vernon Hitchcock, 350 Fifth Avenue, New York 1, N. Y.

2. That the owner is: Time Incorporated, Time & Life Building, New York 20, N. Y.; that the names and addresses of stockholders owning or holding one per cent or more of total amount of stock are: William V. Griffin, 20 Exchange Place, 34th Floor, New York 5, N. Y.; Louise H. Ingalls, c/o Mr. J. H. Melcher, 1568 Union Commerce Building, Cleveland 14, Ohio; Irving Trust Company, N. Y. C., Successor Trustee U-W of Briton Hadden for the Benefit of Elizabeth Busch Pool, c/o Irving Trust Company, Custodies Department, 1 Wall Street, New York 15, N. Y.; Robert L. Johnson, Temple University, Philadelphia, Penna.; Margaret Zerbe Larsen, c/o Time Inc., Time & Life Building, Rockefeller Center, New York 20, N. Y.; Roy E. Larsen, c/o Time Inc., Time & Life Building, Rockefeller Center, New York 20, N. Y.; Henry R. Luce, c/o Time Inc., Time & Life Building, Rockefeller Center, New York 20, N. Y.; Samuel W. Meek, c/o Greenwich Trust Company, Greenwich, Conn.; J. P. Morgan & Company, Inc., for the account of Henry P. Davison, P. O. Box 1266, New York, N. Y.

Stock to the extent of more than one per cent is registered in the names of the following companies, but in each case the company is a nominee for a number of stockholders, no one of whom is known to own more than one per cent; Brown Brothers, Harriman & Company, 59 Wall Street, New York 5, N. Y.; Cobb & Company, c/o New York Trust Company, 100 Broadway, New York 15, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) Vernon Hitchcock,
Business Manager.

Sworn to and subscribed before me this 27th day of September, 1948.

(Signed) Jeanne Marie Connolly,
Notary Public.

(My commission expires Mar. 30, 1949)

Because of climate, Mr. Neutra's sliding living room doors were changed to fixed windows and opening casements ending in a standard glass door. The kitchen pantry was made into a central heating plant and water heater room since floor heaters were not considered adequate. However, Mr. Neutra's exterior elevation and floor plans were retained almost in every detail.

Rather than a combination of stucco and redwood siding the entire exterior is in redwood siding. Having completed the revamp of plans I then learned they must either have been drawn by a local registered architect or approved and stamped by one. This was done. Therefore, Robert Elkington, an able modernist in his own right, receives the credit.

I can assure you it was no easy matter to have such a house approved for erection in a neighborhood of "Colonials." I did finally succeed and it is now about half completed. Occupancy is expected sometime in December.

The orientation, view from the many windows, lack of waste floor area and flexibility, are only too apparent and are all that anyone could desire. I can hardly await its completion, that I may be the proud occupant of such a home.

C. J. PROUTY

St. Louis, Mo.

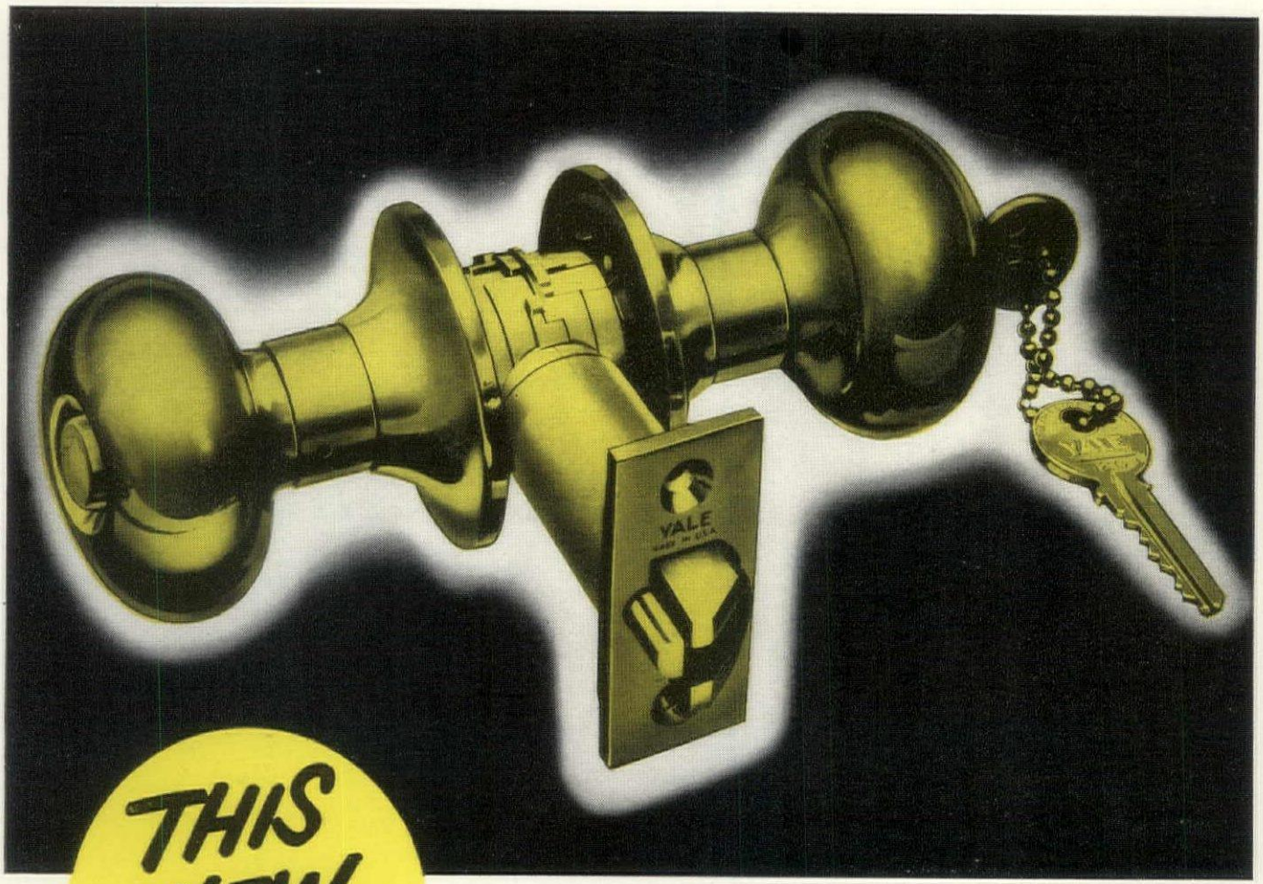
Forum:

. . . Mr. Neutra ought to have mentioned this when he addressed us the other day at the Architectural Association on Architectural Education, as an example of another faculty yet to be developed in the architect of the future, namely a sixth sense as to how a perfectly satisfied client may change his mind in times to come without progress having outstripped the designer's forethought—rather the other way around.

. . . If Mr. Branch prefers to put up with inconvenience to have more space for the same dollars a real barn may serve his purpose even better—more space, desirable as it may be, means longer paths to be covered in any household activities, more cleaning, more maintenance. I feel sure Mr. Neutra could have made provisions for his clients' agricultural ambitions, had he been told. Perhaps in the first place Mr. Branch picked the wrong neighborhood for any farming activities.

The fact that oddments from relatives' attics fit better in the "old shoe" is hardly a criterion of design . . . this is one up for the Neutra house and so is the fact that the display of dirty diapers interferes with the peace of mind of the occupants. Falling

(Continued on page 48)



THIS NEW LOCK is installed in 30 seconds!

We built *speed of installation* into the design of the new YALE Heavy-Duty Tubular Lock.

Timing of actual operations proves that—after the two holes have been bored in the door—this lock can be completely assembled *in 30 seconds.*

Think what that means in terms of total savings of installation cost in a large office building, school, apartment house! It means you can specify YALE security—and save money!

WHAT MAKES THE DIFFERENCE

A clever design of the lock permits the components to be packaged in "exploded" form. Four sub-assemblies are located in their proper relative positions—ready for quick four-step installation.

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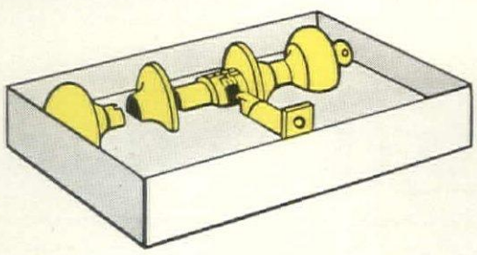
You also have the advantage of a pleasing design—clean, classic lines combined with modern functional beauty—and can promise your customer traditional YALE security and dependable operation.

For any heavy-duty service, specify YALE Heavy-Duty Tubular Lock.

THE YALE & TOWNE MANUFACTURING COMPANY, STAMFORD, CONN.



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THE GREATEST CONTRIBUTION TO LIGHTING SINCE FLUORESCENT!

Fleur-O-Lier Manufacturers proudly present to the lighting industry—the Fleur-O-Lier Index System—a method of specifying, identifying, and classifying fluorescent luminaires—with regard to their illumination characteristics.

There's been a long-felt need for a system of classifying fixtures—some method common to all who make, sell, specify or buy fluorescent fixtures.

This is it. It's simple, practical and basic.

"Why hasn't someone thought of this long ago!" say lighting engineers who have seen the Fleur-O-Lier Index System.

As Simple as ABC

WHAT IS IT?

The Fleur-O-Lier Index System is a simple method of identifying or describing any fluorescent luminaire on the basis of its illuminating performance.

WHY IS IT NEEDED?

Fleur-O-Lier Manufacturers devised the index system to give the "facts of light" about each luminaire. Because this classification quickly indicates the basic illuminating performance of a fixture, it eliminates vague generalities, broad but unfounded claims and gives needed factual data.

WHAT DOES IT ACCOMPLISH?

Its purpose is two-fold:

1. It provides an exact formula which the specification writer may use to

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Fleur-O-Lier is not the name of an individual manufacturer, but of a group of fixtures made by leading manufacturers. Participation in the Fleur-O-Lier program is open to any manufacturer who complies with Fleur-O-Lier requirements.

• For SPECIFYING *Lighting Fixture Performance*

• For IDENTIFYING *Fluorescent Lighting Fixtures*

express the illuminating characteristics and performance he recommends.

2. It supplies a precise formula for fixture identification and classification that allows the buyer to *know* he's getting the illumination recommended.

WHO'LL USE IT?

Architects, lighting engineers, lighting consultants, lighting salesmen, contractors and **utility lighting men** . . . anyone who specifies or recommends lighting fixtures can use this simple, practical and fool-proof method to give an exact definition of the illuminating performance he selects for an installation.

Fixture manufacturers will use the system to indicate the performance characteristics of their fixtures.

Buyers and users will employ this method of indexing to make certain they are getting what the specifier recommends.

HOW DO I GET IT?

The Fleur-O-Lier Manufacturers have prepared a booklet which explains the Fleur-O-Lier Index System completely . . . what it is and how to apply it. It's complete with tables. Use the coupon below to send for your free copy of the new booklet.

AND HERE'S WHY YOU SHOULD INSIST ON THE FLEUR•O•LIER *Label*

The Fleur-O-Lier label means that the fixture was built to exacting specifications—then tested, checked and certified by Electrical Testing Laboratories, Inc. The Fleur-O-Lier label assures you of sound mechanical construction, safe and proper electrical design and materials, and tested, certified lighting performance.

To be sure of precise illumination characteristics, long trouble-free operation and complete user satisfaction—insist on the Fleur-O-Lier label.

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Please send me a free copy of the booklet describing the Fleur-O-Lier Fixture Index System and containing the Fleur-O-Lier Specifications and Testing Procedures.

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LETTERS

in with this is the remark: "In the farmhouse the youngest child runs his greasy hand along the walls as he comes downstairs. Result: no damage." The idea of making dirt inconspicuous by using dark and greasy paints on the walls is by no means new, and neither do I think hygiene-minded people approve of it.

The fact that you brought this complaint out into the open while many similar ones go on smoldering in the shape of gossip among the uninitiated will to my mind have a beneficial influence on the attitude of the more enlightened client and certainly on the methods of research within the profession.

I. E. Orton

London, England

Forum:

. . . One wonders whether Forum appreciates the moral of the very significant Branch-Frankel letters: of course, both Mr. Branch and Mr. Frankel are right. They represent the two broad requirements of men who would sacrifice efficiency for charm, and those who would forego charm for efficiency.

As an educationalist, one assures students that the approach from either end is valid. Our aim might be to combine the two as far as possible. And there must be some balanced individuals.

In Midland, Mich., recently, we (including my 17 fifth-year students) agreed with Alden Dow that we must consider design rather than style.

Perhaps the *Review* is too reactionary, and Forum too modern? Perchance it is too much to ask for an overhaul of Forum's editorial staff, or a change in the mental climate of New York?

I am inclined to settle for . . . a *close-up* study of a Frank Lloyd Wright house per month. Surely everyone would be happy with that. . . .

C. Englesmith

School of Architecture
University of Toronto
Toronto, Canada

Forum:

Publication of letters from the former and present owners of the Neutra dwelling is a revelation.

We recently encountered a situation wherein several clients were undecided in adapting the functional; consequently, the article was shown to them. Results were admirable to the extent that the modern was found desired.

S. Z. Moskowitz

Wilkes-Barre, Pa.

A $10,000 DESIGN CONTEST

conducted
by
THE ARCHITECTURAL FORUM
for
DAVID E. KENNEDY, INC.
manufacturers
of
KENTILE *Asphalt Tile*®

A new national survey reveals a major trend in flooring—the ever increasing and imaginative use of smooth surface asphalt tile floors, laid tile by tile, in all types of interiors, including every room of the home.

Many factors have stimulated this trend. One is the continued technical refinement of asphalt tile itself. For instance, Kentile has introduced a new post-war resilience that considerably increases the opportunities for installation on wood. Concurrently, an improved formulation has made it one of the most easily cleaned and maintained floors. Its precise die-cutting permits the ultimate in tight fitting, virtually seamless installation. Its better marbleizing and coloring set a new standard for floor beauty.

But most important, probably, is the discovery by architects of the unlimited opportunity for *original design* provided by Kentile. They have come to realize that this modular flooring with 23 colors, each available in 6 standard sizes, plus the functional feature strips in 5 colors, offers infinite scope to their creativeness.

This trend, we believe, affects the entire field of architectural designing and is worth more complete investigation. We therefore are sponsoring this competition to further attract the creative attention of architects, designers, draftsmen and students—to stimulate additional exploration of this new interior design potential.

THE PROBLEM: **Given the essential structural elements of a residential or commercial area, design a noteworthy interior that uses a Kentile floor as an element of the decorative scheme.**

Competitors may choose to work on any one or all of three problems — a kitchen-dining area, a living area, or a candy shop — and need submit only a simple plan that includes the Kentile floor design and a perspective sketch demonstrating the entity of the floor design and the decor.

Both plan and sketch should be quick and simple, prizes being awarded primarily for the design thinking, with skill in presentation considered only insofar as it presents the design ideas clearly and concisely. Painstaking and time-consuming renderings are not sought.

Approved by the American Institute of Architects

54 PRIZES—OVER $10,000

	Kitchen-Dining	Living Area	Candy Shop
First prize	$1,500.	$1,500.	$1,500.
Second prize	750.	750.	750.
Third prize	500.	500.	500.
15 Honorable Awards of $50 in each class	750.	750.	750.
	$3,500.	$3,500.	$3,500.

This competition is limited to residents of the continental United States and Canada. Employees of David E. Kennedy, Inc., of The Architectural Forum or of advertising agencies serving the above, are not eligible. Contestants must register in order to receive the program and complete instructions. The competition closes at midnight, January 10, 1949.

C. Theodore Larson, Professional Adviser, c/o The Architectural Forum
Empire State Building, 350 Fifth Avenue, New York 1, N. Y.

I intend to enter the Kentile Design Competition. Please send me the program, including the conditions governing the competition and awards.

Name.....

Firm (if any).....

Address.....

City.....State.....

Check one: Architect..... Designer..... Draftsman..... Student.....

Other Occupation.....

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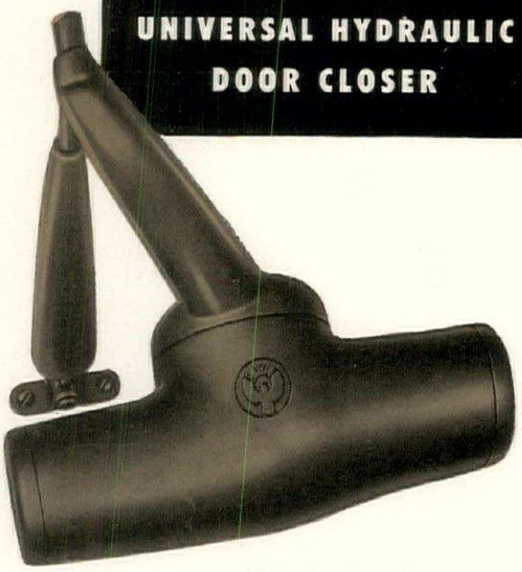

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Engineered housing

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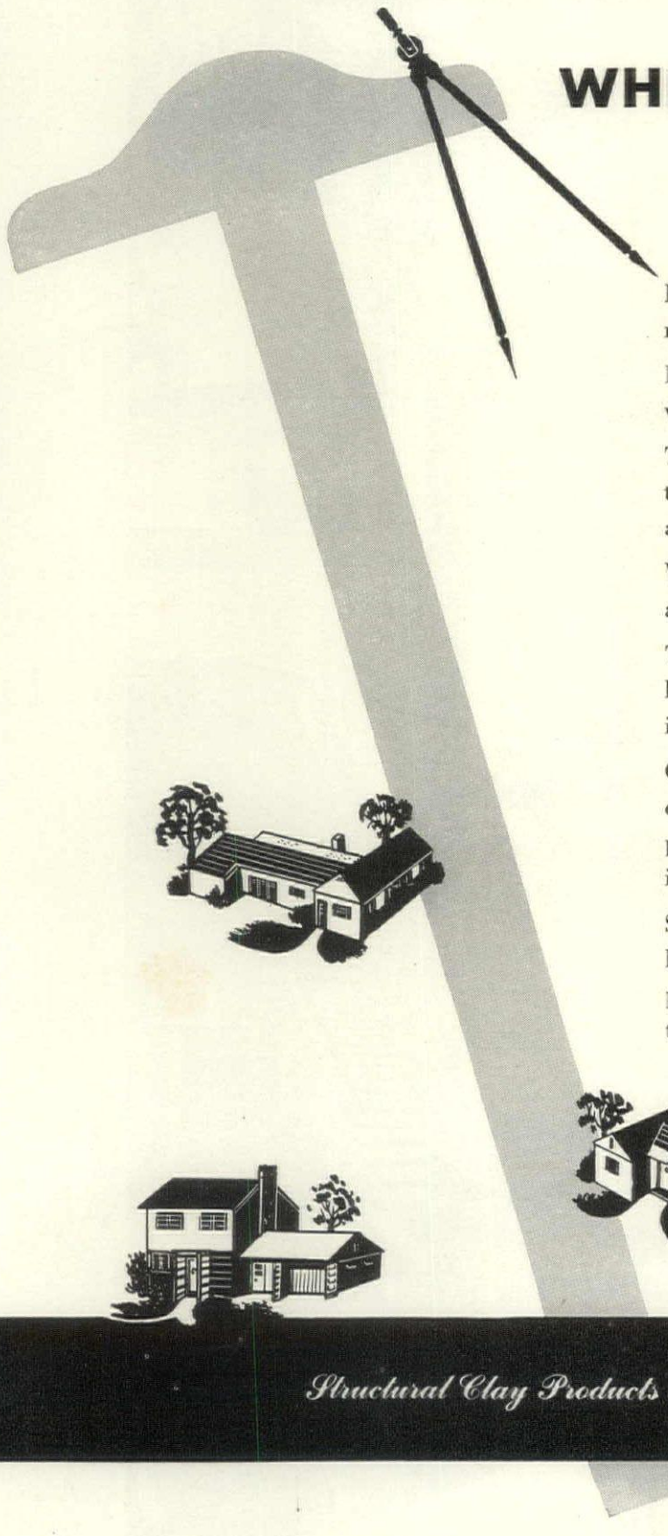

Engineered housing spearheads the trend to a future of more efficient, more economical building.

It makes the theory of modular coordination a practical, workable *fact*.

The manufacturers of brick and tile were among the first to recognize this fact and team up with foresighted builders and architects in developing this new, better way to build.

We were in fact *the first* to accept and support this idea on an industry wide basis.

This means that today you can build *brick* engineered housing . . . with all the additional advantages brick offers in beauty, permanence and all-around desirability.

Our support of engineered housing is typical of SCPI's efforts to increase still further the utility of structural clay products. In other fields we are promoting apprentice training, modular coordination and materials research.

SCPI has developed detailed plans and drawings for six brick engineered homes. For full information about these plans write to Dept. AF-12, Structural Clay Products Institute, 1756 K Street, N. W., Washington 6, D. C.

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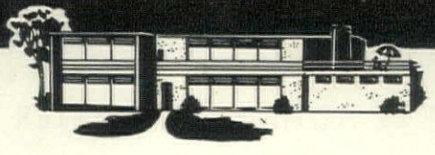

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- *Clos-tite Casements*
- *Carr-dor Garage Doors*
- *Basement Unit Windows*
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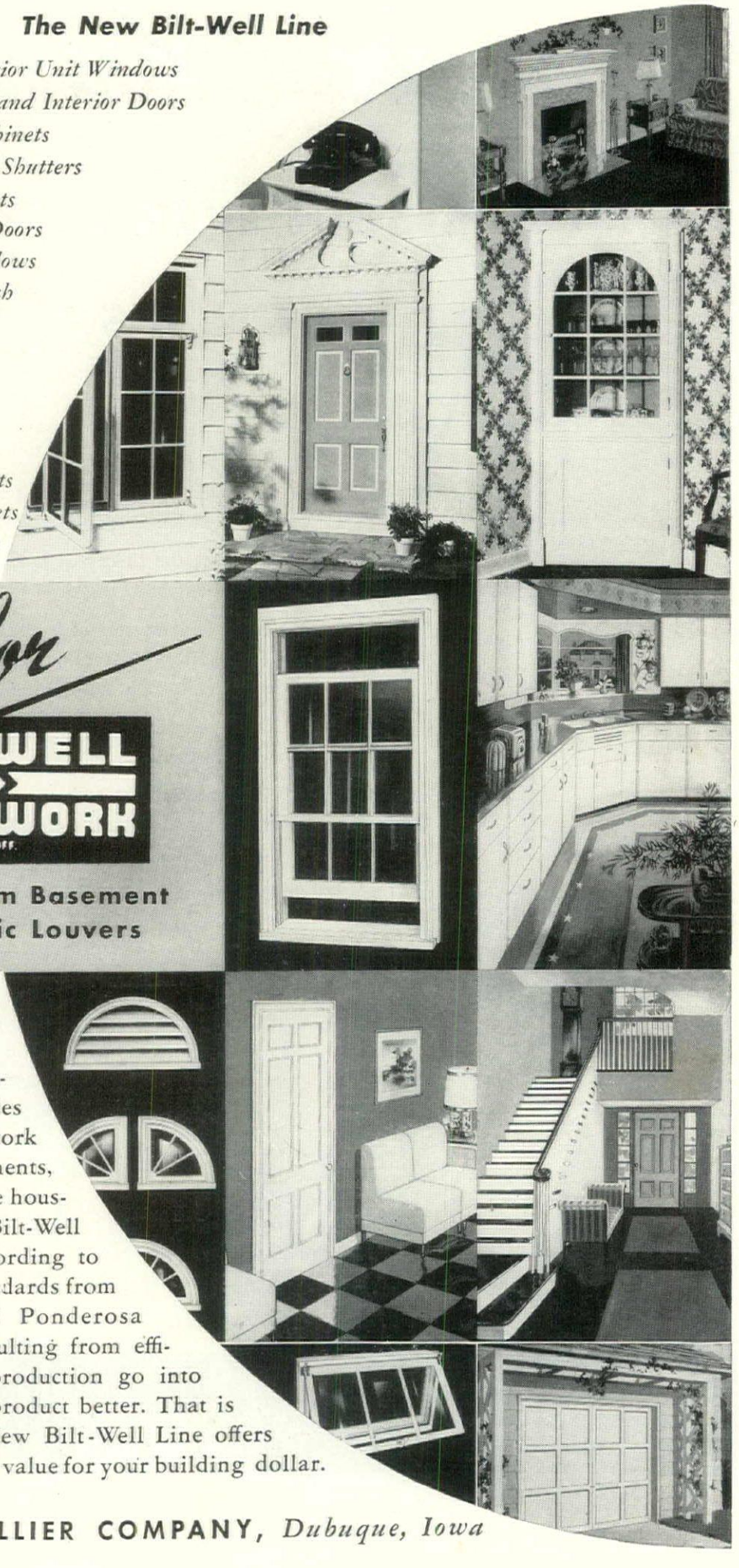
- *Combination Doors*
- *Screens and Storm Sash*
- *Corner (China) Cabinets*
- *Gli-dor Cabinets*
- *Ironing Board Cabinets*
- *Mantels and Telephone Cabinets*
- *Multiple-Use and Linen Cabinets*
- *Breakfast Nooks and Stair Parts*



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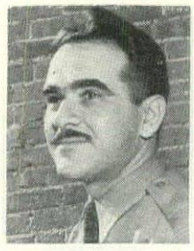

LIONEL FREEDMAN, who photographed the Whitney Lumber Camp Houses (p. 69), is an alumnus of NYU's School of Architecture, and of several New York architects' offices where he spent seven pre-war years as designer and delineator. The war years were spent in the Air Force, part on a B-29, part on Clark Field, Luzon, designing and building chapels and mess halls. He has been a professional photographer since his return from service, is now a member of Pictorial Services, with Ezra Stoller (see below).

ULRIC MEISEL, photographer of the Glass House (p. 73), has been, alternately, law student, copywriter and newspaper reporter. Born in Germany, he studied law at the universities of Berlin, Leipzig and Paris, arrived here in 1930. From newspaper reporting he went, successively, into photography and into the army. In 1946 he organized Photo Associates in Dallas with two other photographers. For the combine, Meisel takes the architectural and industrial photographs, leaves portraits to partners Sylvan Garonzik and Max Plake.

BILL HEDRICH, photographer of the Hough House (p. 78), and youngest of the Hedrich clan, learned architectural photography under the "iron hand" tutelage of brothers Ken and Ed. A University of Illinois graduate, he joined Hedrich-Blessing Studios in 1933. By 1940 his portfolio included the now-classic "Falling Water" House by Frank Lloyd Wright. Bill fought his way through World War II as a Signal Corps photographer, later rejoined Hedrich-Blessing as vice-president. Ken is president, Ed treasurer.

EZRA STOLLER spent 80 anguished hours and two trips to Cincinnati photographing the Terrace Plaza Hotel (p. 81). As background for such travail, he sports an unused degree from NYU's School of Architecture, vintage: 1939, and a pre-war career in documentary films and architectural photography. During the war, he taught photography in the Signal Corps. Stoller is a founding member of Pictorial Services, a group designed "to relieve photographers of routine detail to permit fuller professional utilization of talent."

ROBERT C. LAUTMAN, Tyler Gardens (p. 98) photographer, is a native Montanan whose formal schooling was divided between his home state and Washington, D. C. After Montana State College, he was a photographer for the Norwegian Embassy. He saw World War II as a paratroop combat photographer in the South Pacific. Doffing khaki, he criss-crossed the country with his wife as a writer-photographer team doing free-lance magazine work. A year ago he set up his own photographic studio in Washington, D. C.

ROGER STURTEVANT was born in the Bay Region when that term denoted an area, not an architectural style. Photography was his hobby at 14, his profession after high school, and ever since. Bored with portraiture, he turned to advertising photography, soon received his first important architectural assignment: the buildings of Bernard Maybeck. To the naive photographer, this was no great experience, just a difficult job. Now exclusively an architectural photographer (p. 100), he probably knows more about the "backstairs" facts of applied architecture than anyone else out west.

SHIRLEY C. BURDEN is a renegade Easterner who forsook this bleak coast for sunnier California. Born and schooled in New York, Burden migrated west in 1930 to become a producer-director for RKO. He later organized Tradefilms, Inc., a commercial motion picture company that produced training films for the Army and Navy in World War II. In 1946 he withdrew from Tradefilms to specialize in architectural photography. Two examples: pp. 76, 104.

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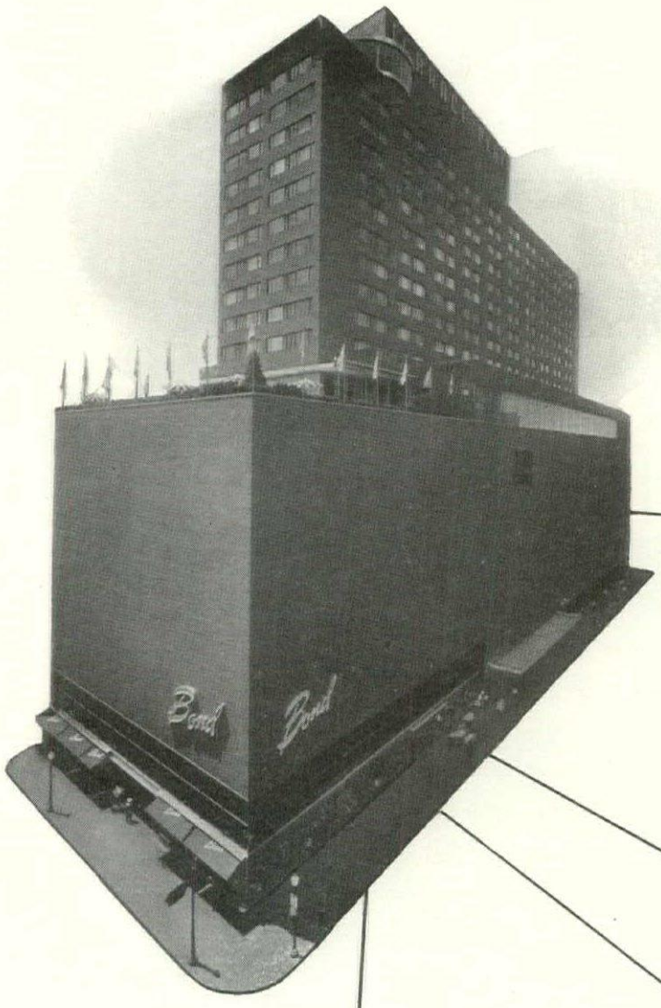
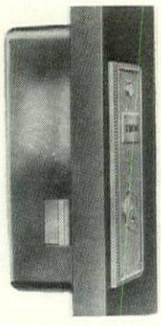


Terrace Plaza Hotel
Cincinnati, Ohio

IBM ATTENDANCE TIME RECORDERS give the Terrace Plaza Hotel accurate, legibly-printed records of hours worked.



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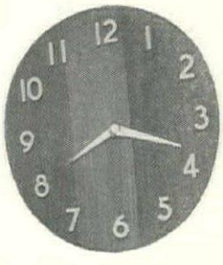

IBM CLOCKS over the Registration Desk, in the Terrace Garden, and throughout the Hotel indicate accurate, uniform time.

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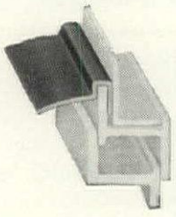
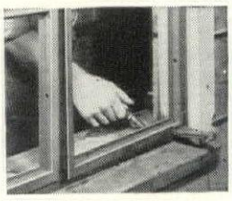
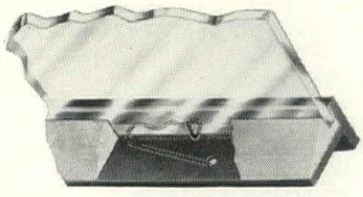
HOW TO ERECT



A Before erecting, apply loose head drip by placing it on top edge of casement frame, tapping it lightly to seat in place. No screws or bolts required. Where ventilators do not extend to casement head, no head drip is necessary.

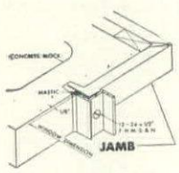


B After erecting, before glazing, test fit of each ventilator by pushing it closed. Ventilator top should touch first while bottom extends about ½" from frame. Later, when hardware is installed, underscreen operator will draw in bottom of ventilator.

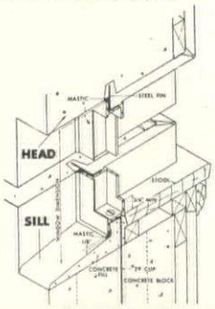


C In glazing, spread steel window putty or compound over glazing rabbets. Push glass firmly into position. Slip glazing clips in place and apply face putty or compound.

ONE OF MANY TYPICAL INSTALLATIONS



Concrete Block Construction with steel fin



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AMERICAN TEXTILES '48, an exhibit of almost 200 U. S. fabrics currently on the market and chosen as outstanding for color, design and weaving, will be on view at the Metropolitan Museum of Art, New York City, through Jan. 9.

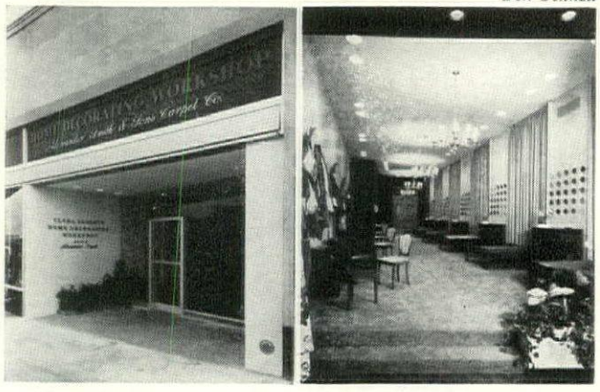
THE HOME SHOW OF ST. LOUIS, sponsored by the Home Builders Association of Greater St. Louis, will be held in Kiel Auditorium, Feb. 12-20.

THE CHICAGO ARCHITECTURAL CLUB, closed during the war, has reopened at 431 N. Clark St.; present officers are Ralph Gross, President; Louis Pirola, Vice President; John Van Balen, Secretary; Roy Anderson, Treasurer.

CHURCHILL-FULMER ASSOCIATES, architects and city planners, 19 W. 44th St., New York, N. Y., have expanded to include the field of school surveys and planning; Ralph Foss will be in charge of this department.

DECORATING — ONE DOLLAR

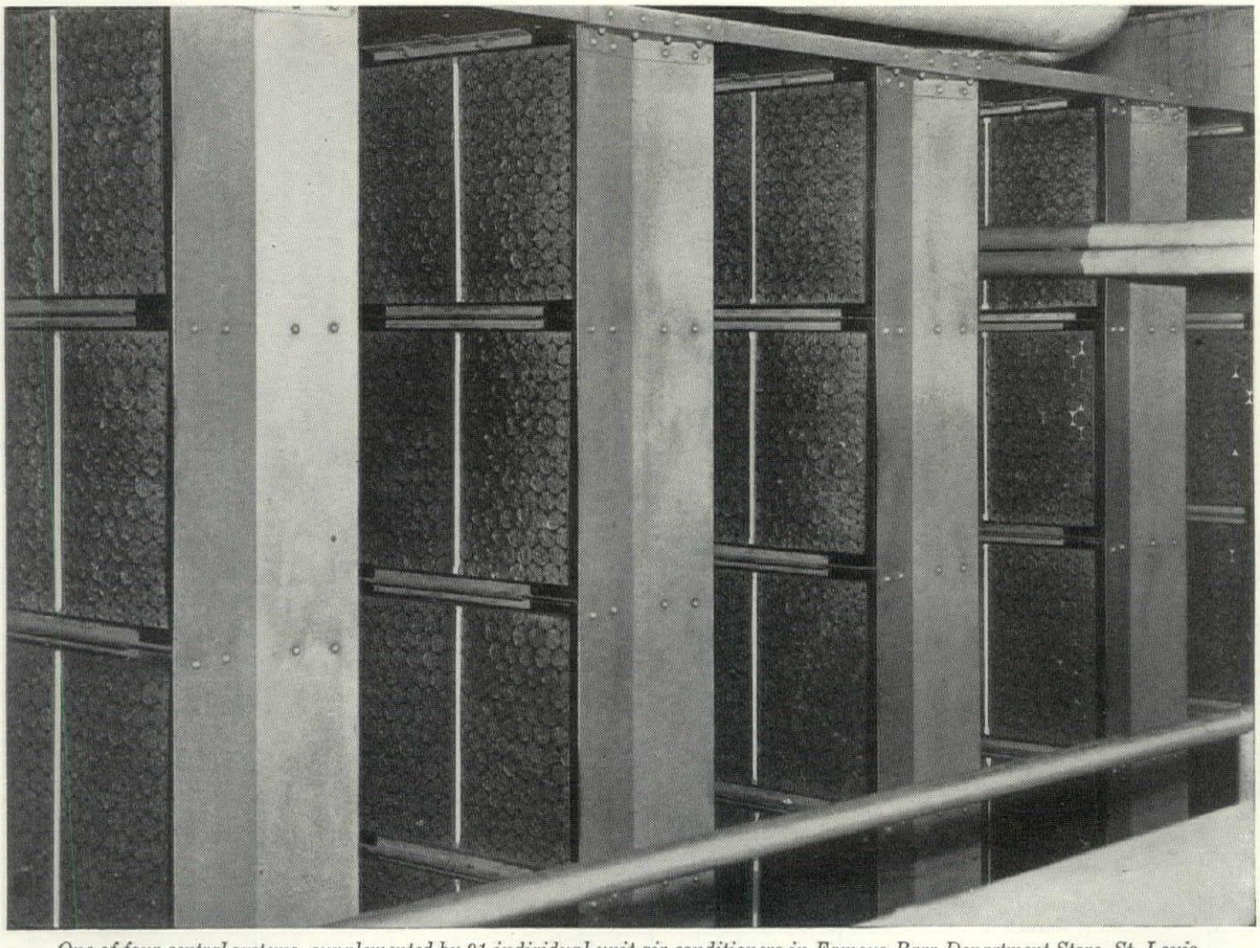
Ben Schnall



"Every time anyone buys a gallon of paint or a pair of new curtains, the market for rugs is increased." This one-world philosophy has induced the Alexander Smith Rug Co. to underwrite Clara Dudley's Home Decorating Workshop in White Plains, N. Y. Ambitious to explore the vast strata of American home-making into which no interior decorator has yet descended, Clara Dudley asks $1 (no more, no less) for her advice. Wary questioners are reassured by the fact that nothing whatever is sold in the Workshop. Clara Dudley representatives base all suggestions on the client's present furniture, floor plan and color preferences (as indicated on specially prepared color charts by the Rahr Color Clinic) in planning rooms—from the rug up. Currently available fabrics, wall-papers and paint colors are suggested, and samples supplied for later reference and possible purchase. Robert Heller, designer of the Clara Dudley showroom (above) as well as of 34 Alexander Smith showrooms throughout the country, provides a setting whose focus is colorful if confused —sleek and antique, both.

COMPETITIONS

A COLLABORATIVE COMPETITION to encourage teamwork among students of painting, sculpture, architecture and landscape architecture is being sponsored by the Alumni of the American Academy in Rome. Two prizes of $200 and $100 will be awarded to the teams (representing three or more of the arts) who submit the best designs for an Island Recreation Center. The contest closes April 1, 1949; awards will be announced not later than June 1st. Information may be obtained from the Association at its headquarters, 101 Park Ave., New York 17, N. Y. *(Continued on page 60)*



One of four central systems, supplemented by 91 individual unit air conditioners in Famous-Barr Department Store, St. Louis. System engineered and units manufactured by Carrier Corporation.

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Low original cost! High dust-catching efficiency! Low maintenance cost! These advantages are outstanding in the use of DUST-STOP* replacement-type air filters in air conditioning the Famous-Barr Department Store in St. Louis.

Shown above is one of the four central filter installations supplying clean air to duct systems. Note how the filters are loaded with dust and dirt that will never have the chance to soil valuable merchandise. Soon they will be replaced with new, clean DUST-STOPS—at low cost.

There are good reasons why DUST-STOPS are specified by heating, ventilating and air-conditioning engineers. The packs of FIBERGLAS† fibers make an exceptionally efficient filter medium. Being glass—and inorganic—the fibers have no odor, nor will they rot or decay. And they do not absorb the non-odorous, non-evaporating adhesive with which they are coated. As a result, each impinged particle of dust is quickly soaked, acting as a wick to catch still more dust—until the DUST-STOP is so heavily loaded that resistance to air flow calls for replacement.

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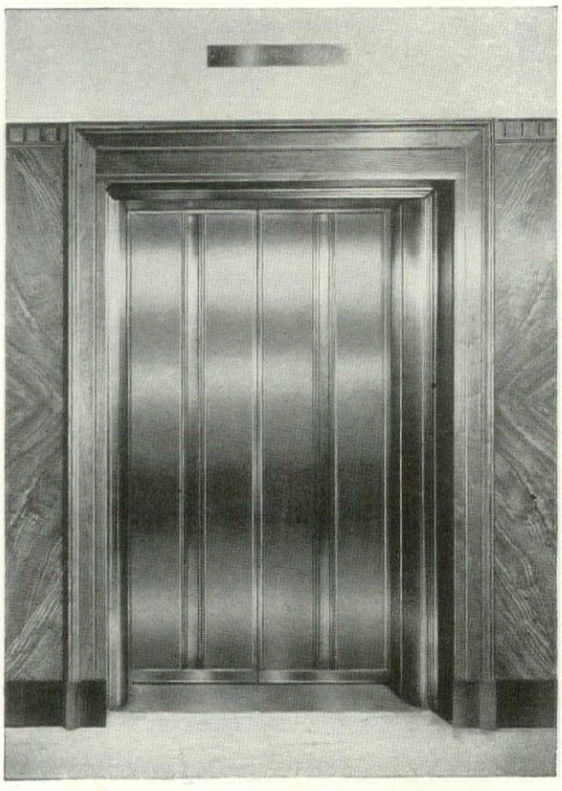
†FIBERGLAS is the trade-mark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.



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Dahlstrom first floor elevator entrances L. L. Berger Inc., Buffalo, N. Y
Duane Lyman & Associates, Architects.

THE exclusive Buffalo, N. Y. style center, L. L. Berger Inc., knows the value of beauty and sleek elegance when modernizing. The Dahlstrom elevator entrance pictured appears on the main floor and is typical of the other Dahlstrom floor entrances throughout the fashionable store. Chrome nickel steel entrances are satin finished with formed-in fluting.

Over 43 years of experience have instilled in Dahlstrom designers and engineers a practical and artistic know-how. Each entrance is built structurally sound and fits the mood and motif of the interior design.

Whether your job as architect or building planner consists of modernizing a department store, an office building, an apartment or auditorium, Dahlstrom manufacturing ingenuity can be counted on for aesthetic correctness and durability.

Without obligation, Dahlstrom makes available to you free color decks, full color sketches and informative booklets on elevator design.

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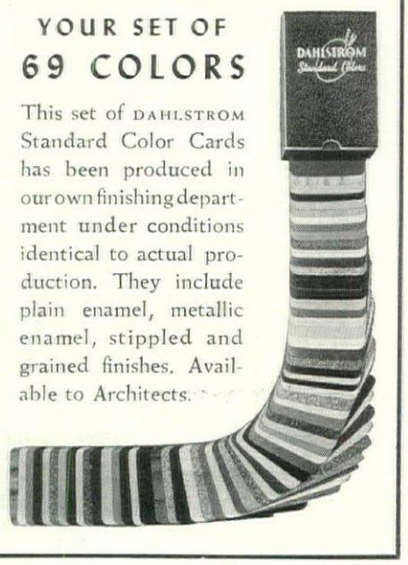

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Cuts installation and maintenance time

Instant Cleaning and Inspection:

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The "B" cone or inner element of the diffuser is secured to the combined suspension and adjustment screws by a springloaded catch which is kept in compression by a slotted washer. The holes in "B" cone pass over the bolt heads. All you do is press up on cone "B" and insert or remove the slotted washers.

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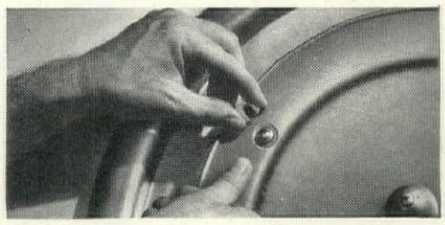
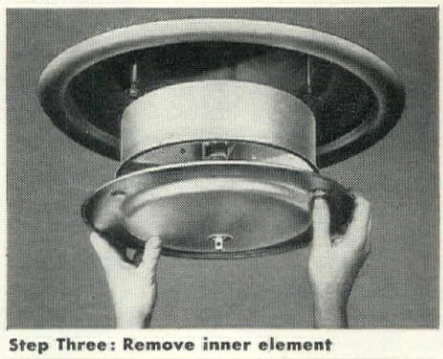
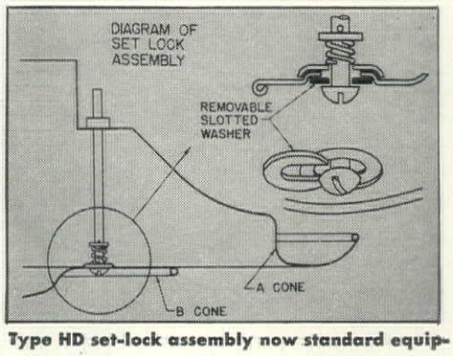
Step One: Remove cover cone (if used)



Step Two: Press "B" cone—slip out washers



Step Three: Remove inner element



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AN EXHIBITION AND COMPETITION of modern architectural rendering and of small sculpture is being held at the Architectural League of New York, February 6-26. The Birch Burdette Long Memorial prize of $200 is offered for the best rendering (by an artist under 40); and the Henry O. Avery prize of $200, for the best piece of sculpture exhibited.

REALISTIC PAINTINGS of any present-day aspect of Minnesota life in oil or water colors by artists working in Minnesota, Wisconsin, Iowa, North and South Dakota, Montana and Upper Michigan (and all artists born in Minnesota) are eligible for submission in the $10,000 contest celebrating the Minnesota Centennial (prizes range from $750 to $250). Sponsoring the contest is The Dayton Co., Minneapolis 2, Minn. Entries must be shipped prepaid between April 1 and 15, 1949.

PLASTIC UPHOLSTERY

Plastics continue to move from the world of tomorrow into today's market. Several lines of Knoll chairs are now being upholstered in Lumite, a fabric woven of plastic threads. This possesses "magic" advantages of being stainproof and colorfast as well as extremely durable. The sometimes unpleasant contact of plastic (clammy in winter, sticky in summer) has been eliminated by the weaving process. This allows the fabric to "breathe," letting the circulation of air do away with excess moisture. Plastic upholstery makes practicable for everyday use the gay clear colors which set off modern informal furniture so well.

APPOINTMENTS

SAMUEL SCOVILLE, A.I.A., executive in the firm of Harrison, Ballard & Allen, New York City housing consultants and planners.

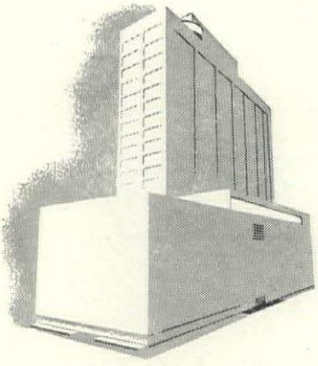
LUDWIC SKOC, Chicago consulting engineer, to membership on the board of trustees of Illinois Institute of Technology.

MICHAEL CZAJA, architect, lecturer at the University of California, Berkeley, Calif.

LIONEL CHADWICK, assistant professor of architecture, University of Florida, Gainesville, Fla.

WILLIAM ALLEN, JR., design staff member, School of Architecture, Tulane University, New Orleans 15, La.

MICHAEL ROSENAUER, A.I.A., Visiting Professor of Interior Decoration, Department of Fine Arts, University of Pennsylvania. *(Continued on page 64)*



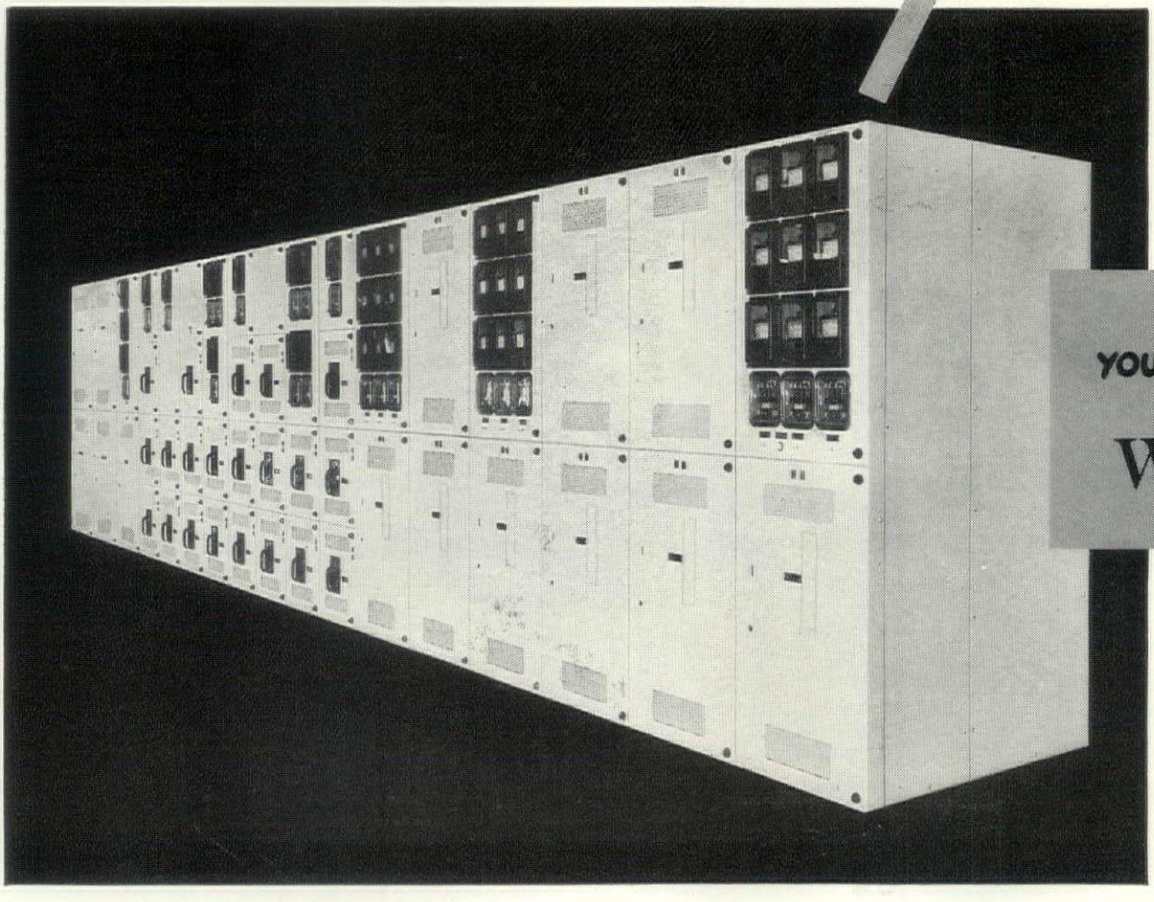
Efficient Service Begins Here

Keynote of Cincinnati's new Terrace Plaza is efficiency—in a setting of modern beauty.

Efficient hotel service is so largely a matter of electrical service—to operate elevators, lighting, radios, signal systems, kitchen equipment, heating and air conditioning—that the electrical control system is truly the functional heart of this fine hotel.

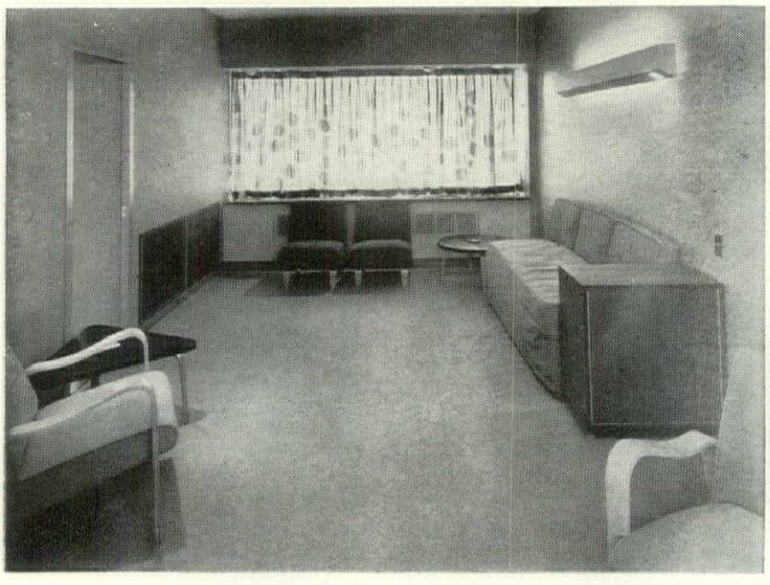
Architect, builder, operator—all had to be *sure* of dependable electrical service for every operating and decorative need. Thus, far removed from the glamour rooms of the Terrace Plaza, you'll find Westinghouse switchboards, control boards, and panelboards distributing and controlling the electrical power that helps make this hotel the last word in efficiency and modern beauty.

So it is with many of America's finest new buildings. Wherever dependable equipment is needed to distribute, control or utilize electrical energy . . . you can be *Sure,* if it's Westinghouse. J-94787



YOU CAN BE **SURE**..
IF IT'S
Westinghouse

This Low-voltage Metal-enclosed Switchgear unit is typical of the Westinghouse control equipment in the Terrace Plaza.



Thonet

AT THE

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From coast to coast Thonet Bros. are serving leading hotels with modern molded plywood furniture that is as functional as it is attractive.

Thonet's most recent contribution to contemporary interiors is found in many of the rooms in the beautiful new Terrace Plaza in Cincinnati—an outstanding hotel that sets a trend in architecture and interior design. The use of specially designed furniture manufactured by Thonet for this exceptional installation is further proof of the wide acceptance and recognition of Thonet workmanship. Write to us or ask your dealer for detailed information on Thonet Bentply and Bentwood Furniture.

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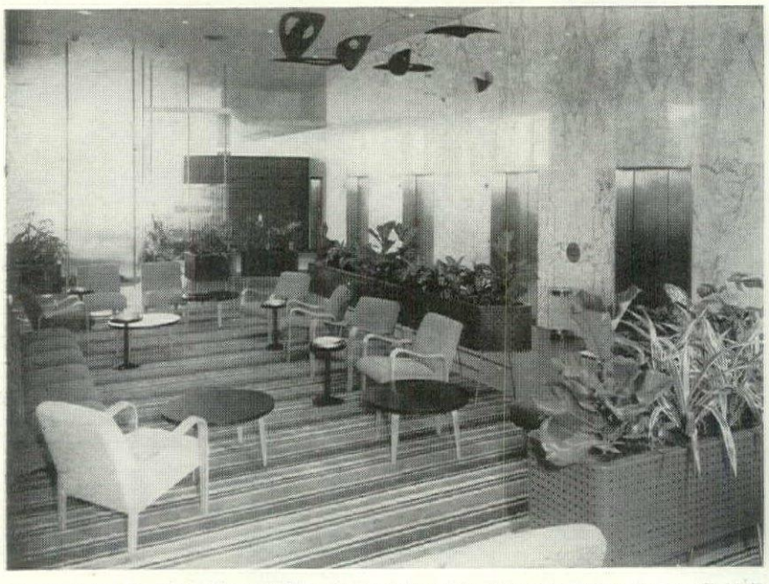

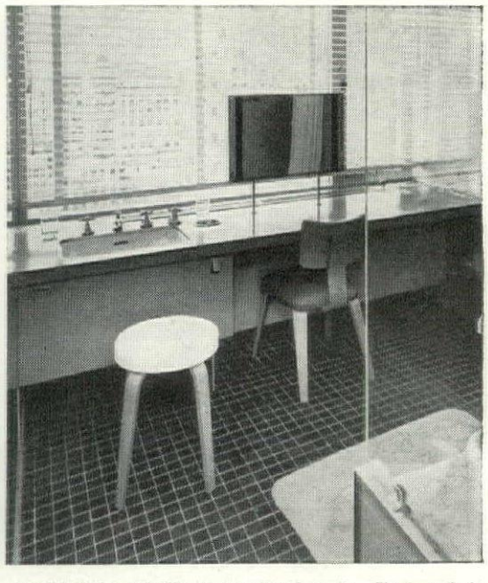

Thonet Furniture at the Terrace Plaza Hotel designed by Skidmore, Owings & Merrill, N. Y., furnished through The Backus Brothers Co., Cincinnati, O.

A MILLION POUNDS OF CHASE RED BRASS PIPE IN METROPOLITAN'S STUYVESANT TOWN AND PETER COOPER VILLAGE!

Tons of Chase Red Brass Pipe have been installed in Stuyvesant Town and Peter Cooper Village (shown above) and also in Riverton, three new developments of Metropolitan Life Insurance Company on Manhattan's East Side. Architect: *Board of Design of the Metropolitan Life Insurance Co.* General Contractor: *Starrett Bros. and Eken, Inc.* Plumbing Contractor: *J. L. Murphy, Inc.* Heating Contractor: *Baker, Smith & Co. Inc.*

THE Metropolitan used over a million pounds of Chase Red Brass Pipe in its latest housing developments, in sizes from ½" to 12" both for hot and cold water supply and for heating lines. Red Brass Pipe was chosen because it gives better all-around service than any other material used for plumbing and heating lines. Due to the increased corrosiveness of most *hot* waters, Chase Red Brass Pipe is recommended especially for hot water lines and circulating hot water heating systems where the very best in plumbing is wanted. It is made to U. S. Government Federal Specifications WW-P-351 for Grade "A" pipe for plumbing.

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VISITING CRITICS at the College of Architecture and Design, University of Michigan, Ann Arbor: Jerrold Loebl, Norman Schlossman, Richard Bennett and K. Lomberg-Holm.

HAROLD VAN DOREN, president of the Society of Industrial Designers, New York City; David Chapman of Chicago, vice president; Egmont Arens, secretary and A. Baker Barnhart, treasurer.

GEORGE SIEGER of Detroit, president for 1948-9 of the American Welding Society.

NEW OFFICES

JAMES PAYNE, architect in general practice, 182 S. Church St., Salem, Ore.

J. THEODORE BLOMQUIST, architect-engineer consultant, in association with FRANK HECKER and EUGENE MANISCALCO, architects, 332 River St., Hackensack, N. J.

CHARLES BOETTCHER, architect specializing in commercial and residential design, 420 Cutler Bldg., Rockford, Ill.

BENJAMIN HOFFMAN, A.I.A., Renshaw Bldg., Ninth St., Pittsburgh 22, Pa.

HOLLOWAY, WEBER & REEVES, architects, 1916½ Hillsboro St., Raleigh, N. C.

ROBERT GUSTAFSON, A.I.A., general practice, 15½ E. Front St., Monroe, Mich.

WILLIAM HIDELL, JR. and HOWARD DECKER, JR., architectural partnership, 2715 Oak Lawn, Dallas 4, Tex.

O. D. PECORA ASSOCIATES, builders specializing in store fronts and interiors, 238 Main St., Hackensack, N. J.

WALTER CHAMBERS and PAUL MORIECE, landscape architecture, 33 Church St., Harvard Square, Cambridge 38, Mass.

H. K. FERGUSON, Chicago branch, 120 S. LaSalle St.; L. Douglas Lacy, manager.

KAGAN DESIGNS, INC., modern furnishings, 130½ E. 65th St., New York 21, N. Y.

TAYLOR-WADHAMS, fabrics and furniture, 140 S. Robertson Blvd., Los Angeles 36, Calif.

CARROLL SAGAR & ASSOCIATES, modern furnishings, 7418 Beverly Blvd., Los Angeles 36, Calif.

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BAIN, OVERTURF, TURNER & ASSOCIATES, A.I.A., 908 Seventh Ave., Seattle 4, Wash.

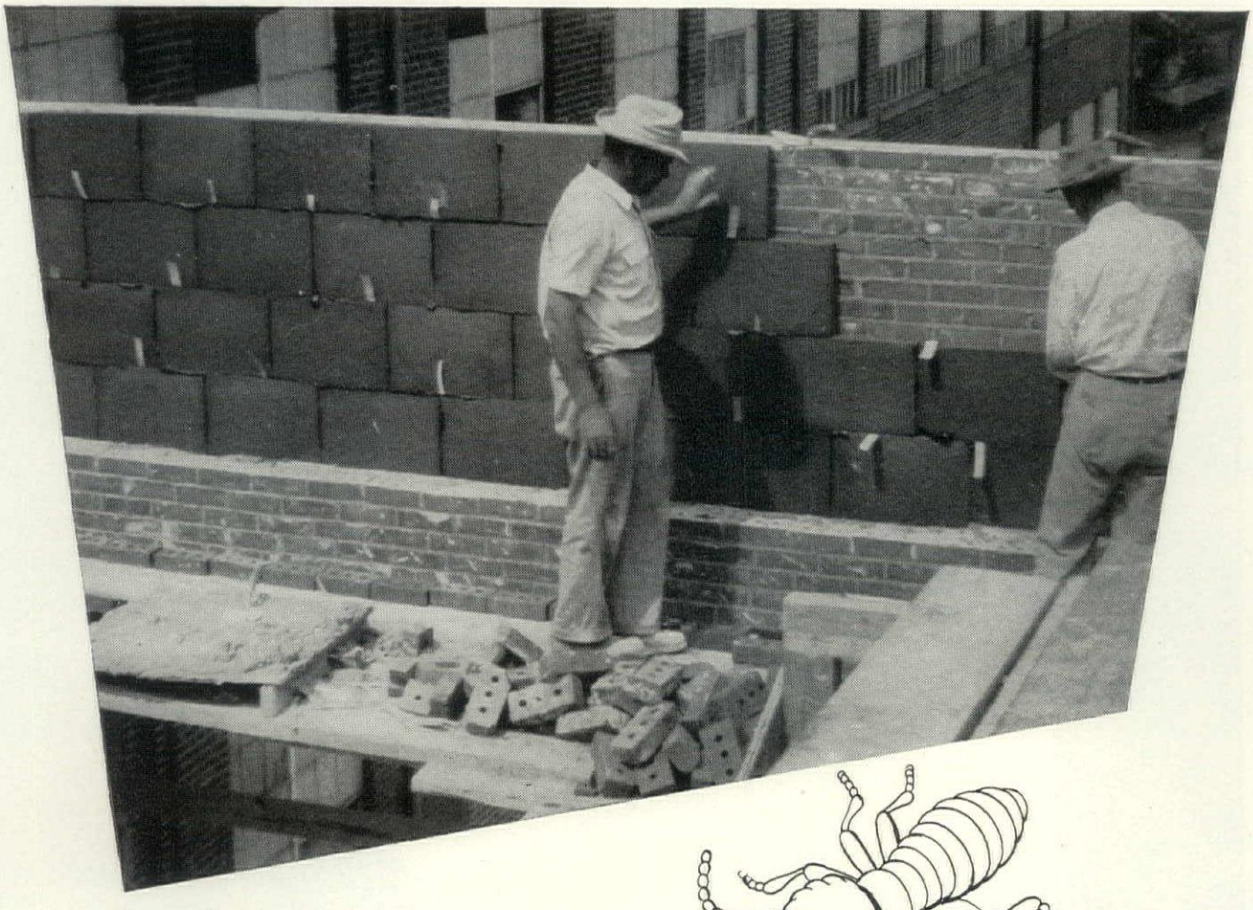
GEORGE WALLING, architect, 304 W. 8th St., Austin, Tex.

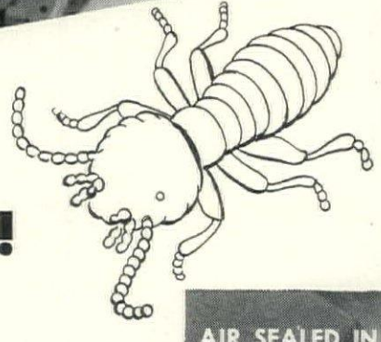
LOUIS H. GERDING, architect, Suite 102-4 Central Life Bldg., Ottawa, Ill.

CORRECTIONS

We regret that the name of NEAL (not Neil) J. CAMPBELL was misspelled in our story on the American Stove Co. building (October '48, FORUM), for which he was structural engineer.

AMBROSE HIGGINS & ASSOCIATES, architects-engineers, are located in Bar Harbor, Me.—not Massachusetts as noted in September issue of The FORUM.





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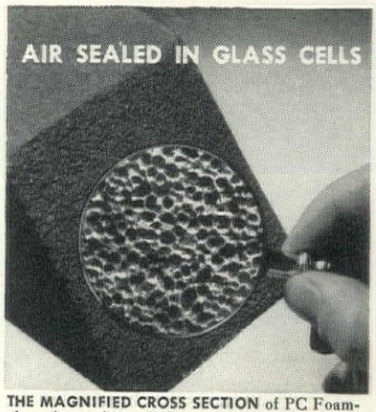

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The Terrace Plaza, a 10-story, 400-room hotel atop a department store, will also appeal to comfort-minded guests with air conditioning in its various dining rooms and other public spaces. As in guest rooms, this air conditioning is furnished by Carrier.

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Carrier offers a complete selection of scientific air conditioning—from complete systems for the entire building to self-contained Weathermakers for private dining rooms and bars, and Room Air Conditioners for individual rooms. Whatever the system or unit, you can count on dependable, low-cost service when it bears the Carrier name. Carrier's skill comes from the longest, widest experience in the field of air conditioning. Write for booklet "Air Conditioning for Hotels." Carrier Corporation, Syracuse, N. Y.

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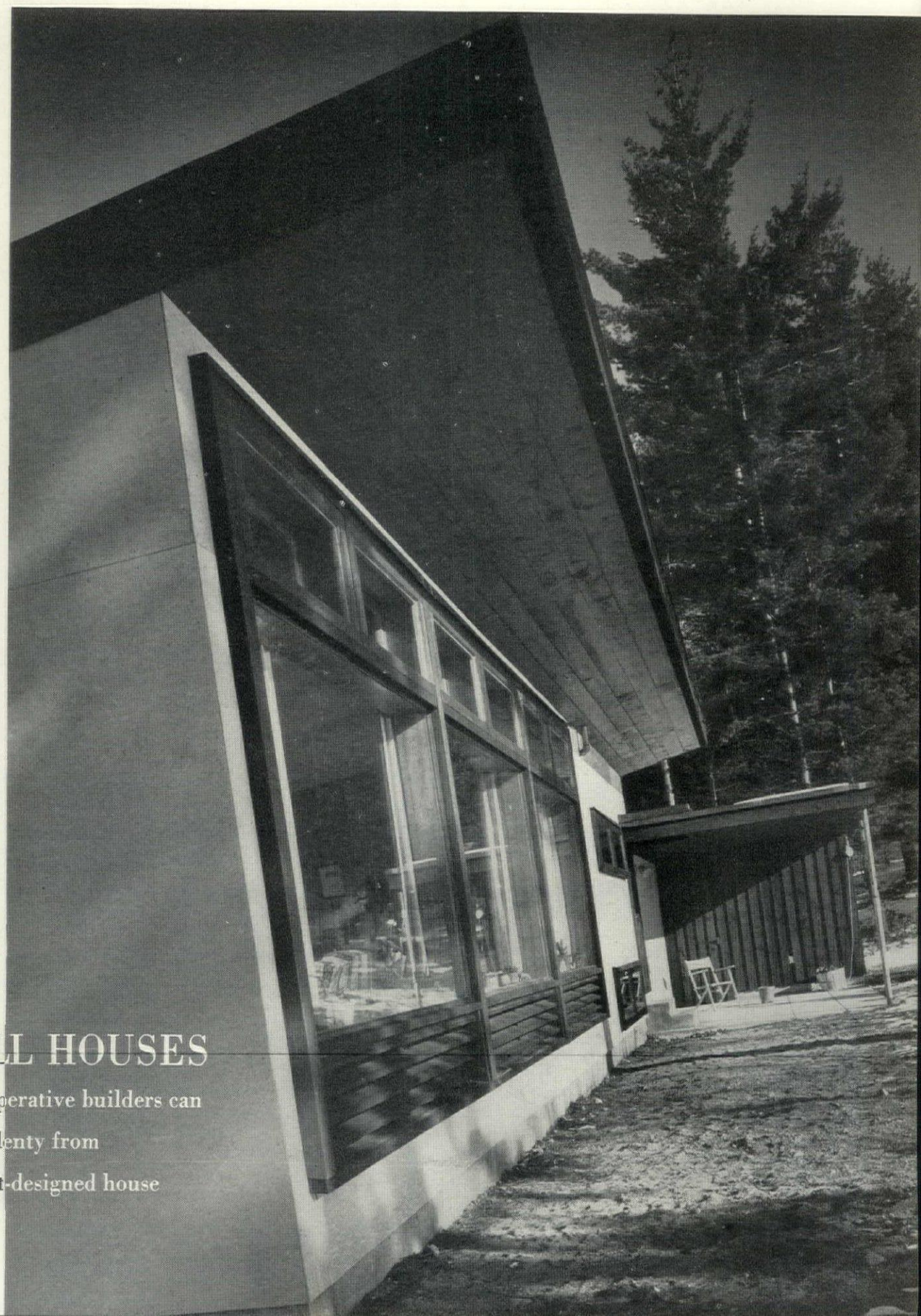
The Architectural FORUM Magazine of Building

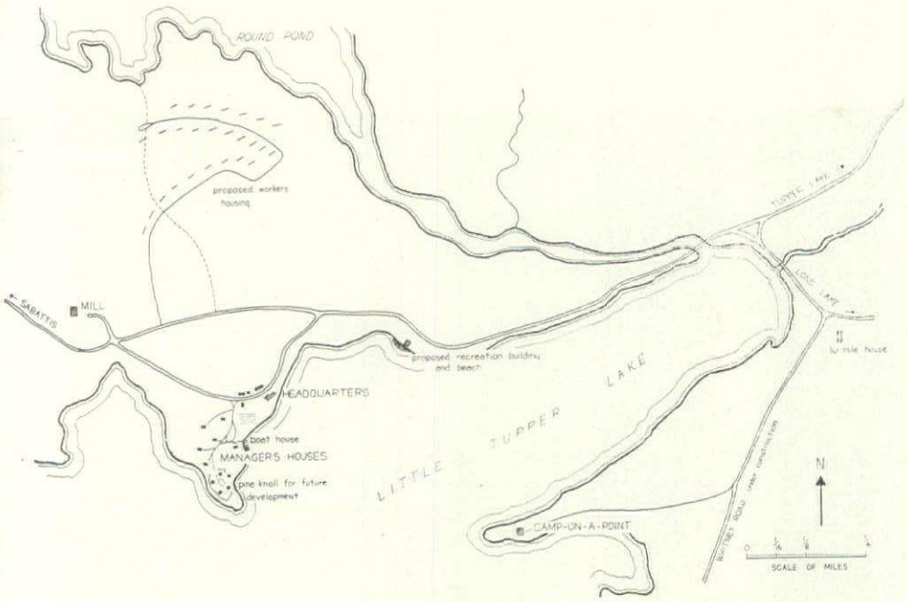


4 SMALL HOUSES

show that operative builders can still learn plenty from the architect-designed house

The well designed small house can offer urbane comfort an

LOCATION: Sabattis, N. Y.
HENRY HEBBELN, Architect
WILLIAM HUNT DIEDERICH, Associate
WHITNEY INDUSTRIES, INC., Owners



One of seven permanent residences for lumber camp managers, this small house is part of an industrial community project which, completed, will include 150 houses for workers' families, three portable logging camps, administration and recreation facilities, all planned in conjunction with the existing lumber mill.

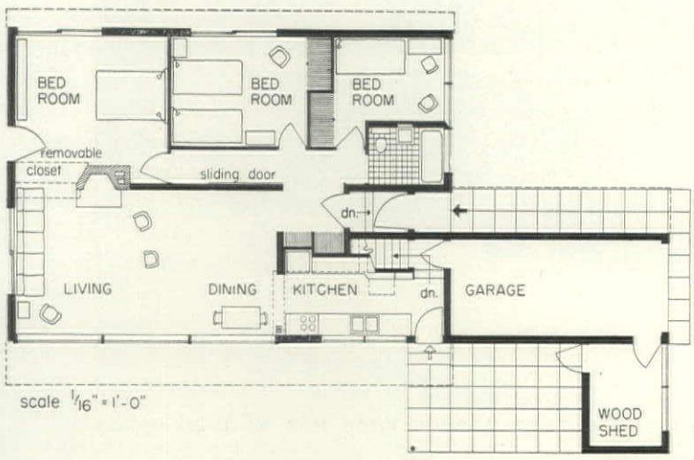
The site is a beautiful pine-wooded knoll. While it is convenient to company headquarters, the surrounding woodland and general elevation create a pleasant, natural isolation.

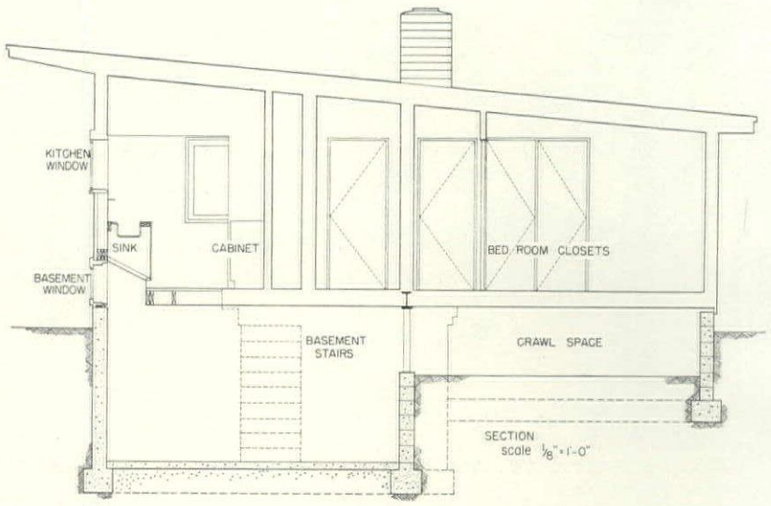
This house, despite certain specific requirements dictated by the climate of the region, is an excellent example of economical first-rate planning and construction. The architect's recommendations, which were carried out with remarkable precision, include wall and ceiling insulation (against cold only, since the locale enjoys unusually cool summer breezes). Due to the rigorous winters, however, there was the old problem of ice blocking and leaking through a conventional shingled roof. This indicated the desirability of using built-up or copper roofing—either flat or with a moderate pitch. This allows the snow to remain on through the winter acting as additional insulation. Built well above grade, hot-air panel heating in the ceiling was recommended but not used.

WELL RELATED TO EACH OTHER AS WELL AS THE SITE, MANAGERS' HOUSES ARE INFORMALLY GROUPED IN WOODED SURROUNDINGS

Pictorial Services, Inc.: Lionel Freedman

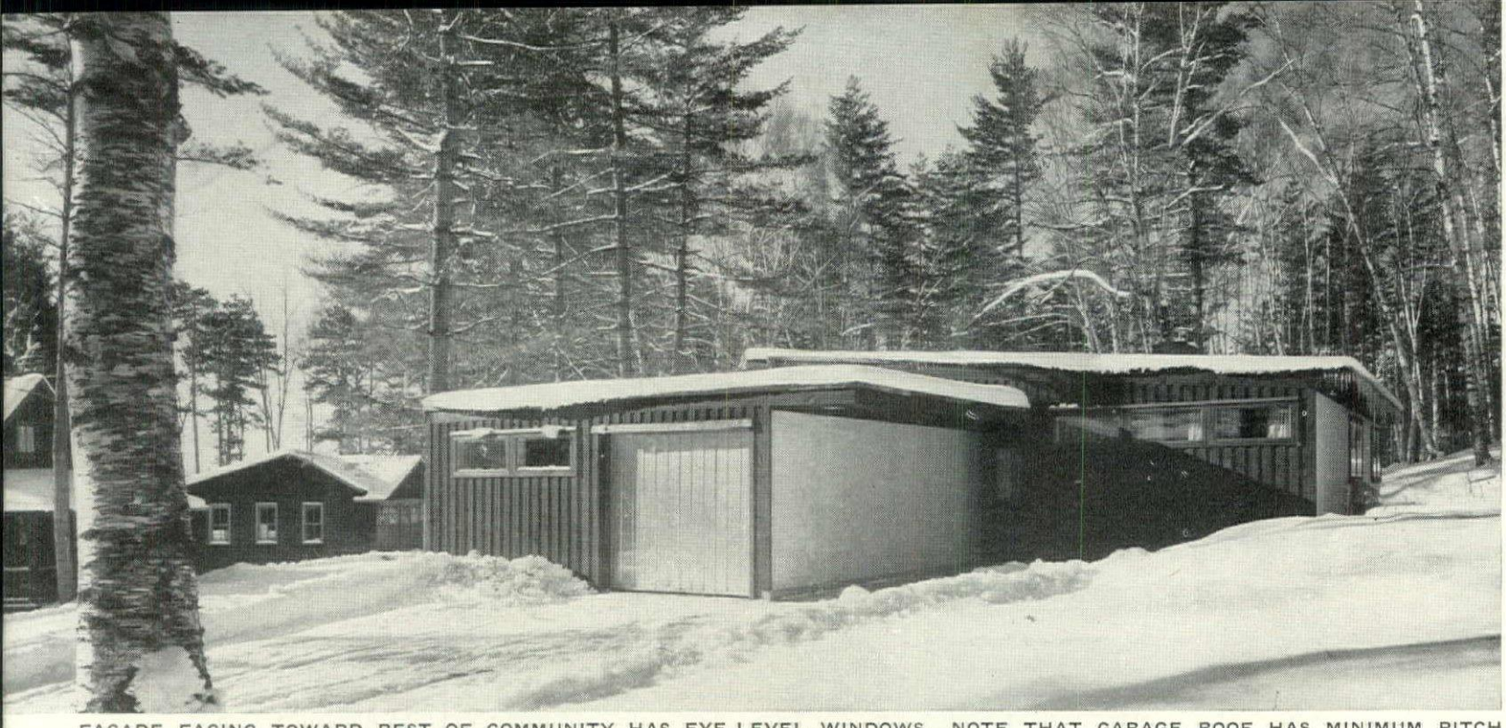
onvenience—even in an Adirondack lumber camp



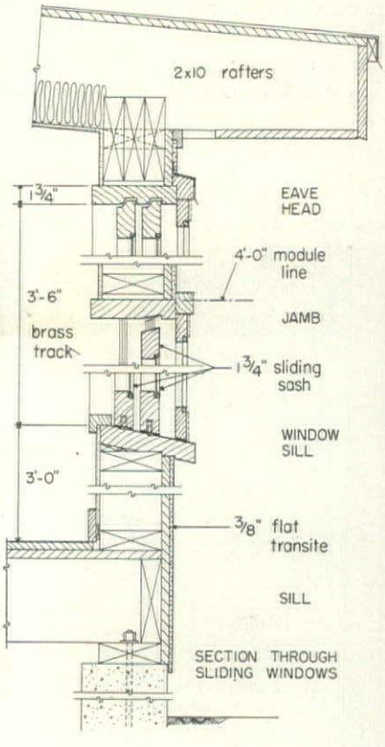


Cross section shows how ceiling, following the pitch of the roof, appears to open the whole house to the view side. Basement which can function as an auxiliary room, is entered through the garage. Note clerestory windows for basement lighting located under the kitchen sink. Plan provides good sound barriers between the living and sleeping areas.

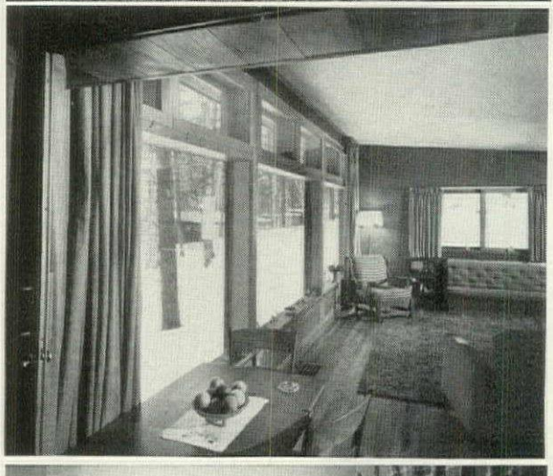
ORIENTED TO TRAP ALL THE WINTER SUN POSSIBLE, PLAN PLACES LIVING, DINING AND KITCHEN AREAS ON SIDE COMMANDING VIEW



FACADE FACING TOWARD REST OF COMMUNITY HAS EYE-LEVEL WINDOWS. NOTE THAT GARAGE ROOF HAS MINIMUM PITCH



SECTION THROUGH SLIDING WINDOWS



The interior, if not ostentatious, has an all-important appearance of warmth and good construction. Solar windows in the living room are doubled glazed with ventilating windows overhead. Fireplace is located on opposite wall. All seven houses were designed to accommodate families of four but, in order to retain flexibility, a removable closet was used between the living room and the northwest bedroom so that the former can serve as a study.

CONSTRUCTION OUTLINE: Foundation—concrete. STRUCTURE: Exterior walls—⅜ in. Transite, Johns-Manville Corp., or pine board and batten, building paper and ¾ in. wood sheathing, 2 in. x 6 in. stud walls with insulation, Sheetrock and taped joints, U. S. Gypsum Co. Floors—wood sub-floor, maple finish. Ceiling—Sheetrock, taped joints, U. S. Gypsum Co. ROOFING—20 yr. built-up Flintkote Co. INSULATION: Outside walls and roof—4 in. Kimsul batts, Kimberly-Clark Corp. FIREPLACE: Damper — Heatilator, Inc. SHEET METAL WORK: Flashing—copper, Ducts—galvanized iron. WINDOWS: Sash—pine. Weatherstripping—copper. Glass—Thermopane, double strength quality A or plate, Libbey-Owens-Ford Glass Co. FLOOR COVERINGS: Kitchen and bathrooms—linoleum. WALL COVERINGS: Main rooms—Sheetrock, U. S. Gypsum Co. and pine boards. Bathrooms—Transite, Johns-Manville Corp. PAINTS — Sherwin-Williams Co. WOODWORK—pine. Garage doors—aluminum, top-hinged, Berry Bros. HARDWARE—Schlage Lock Co., Vincent Whitney Co. and Grant Pulley & Hardware Co. Fixtures—Pittsburgh Reflector Co. and Kurt Versen. KITCHEN EQUIPMENT: Range—bottled gas. Refrigerator—Servel, Inc. BATHROOM EQUIPMENT—Crane Co. HEATING—forced warm air system, International Heater Co. Regulator—Minneapolis-Honeywell Regulator Corp.

An architect builds himself a house answering many desires of would-be buyers

LOCATION: San Antonio, Texas

J. GLASS, Designer

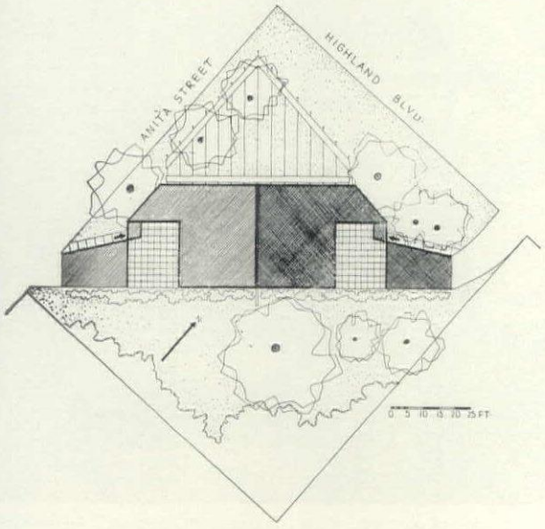
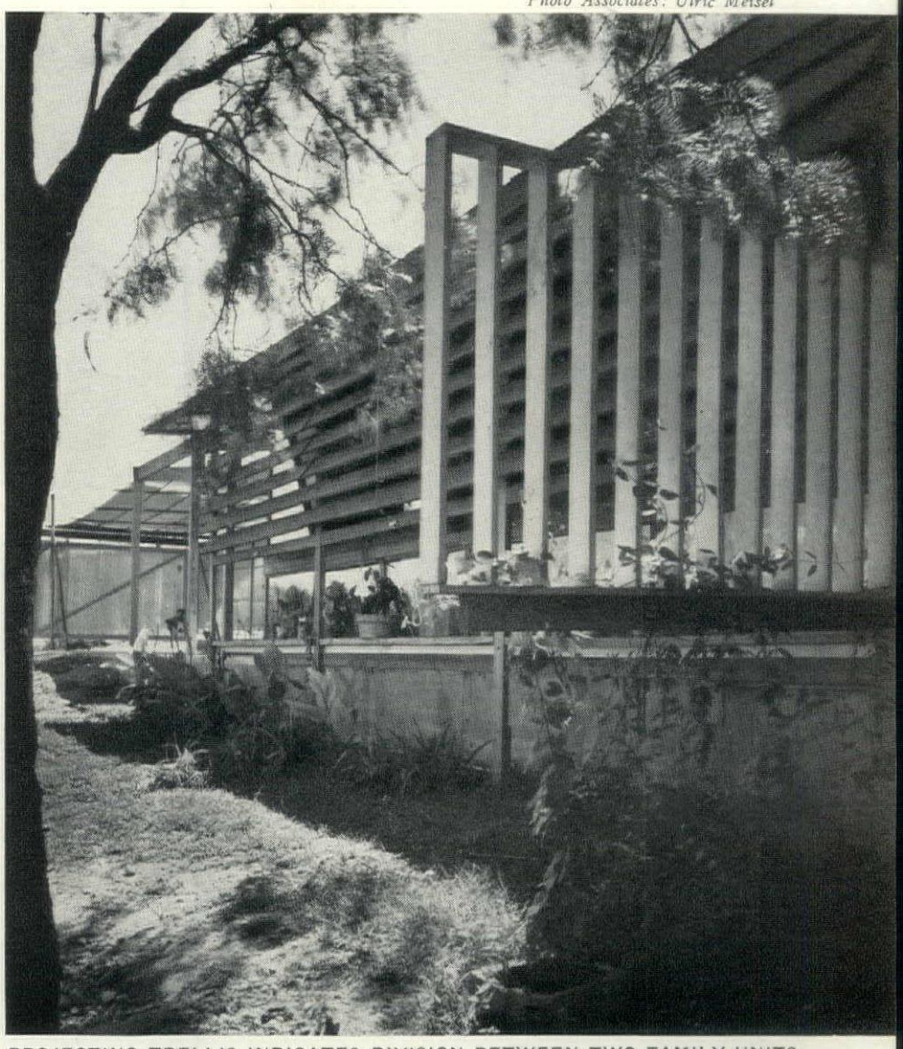
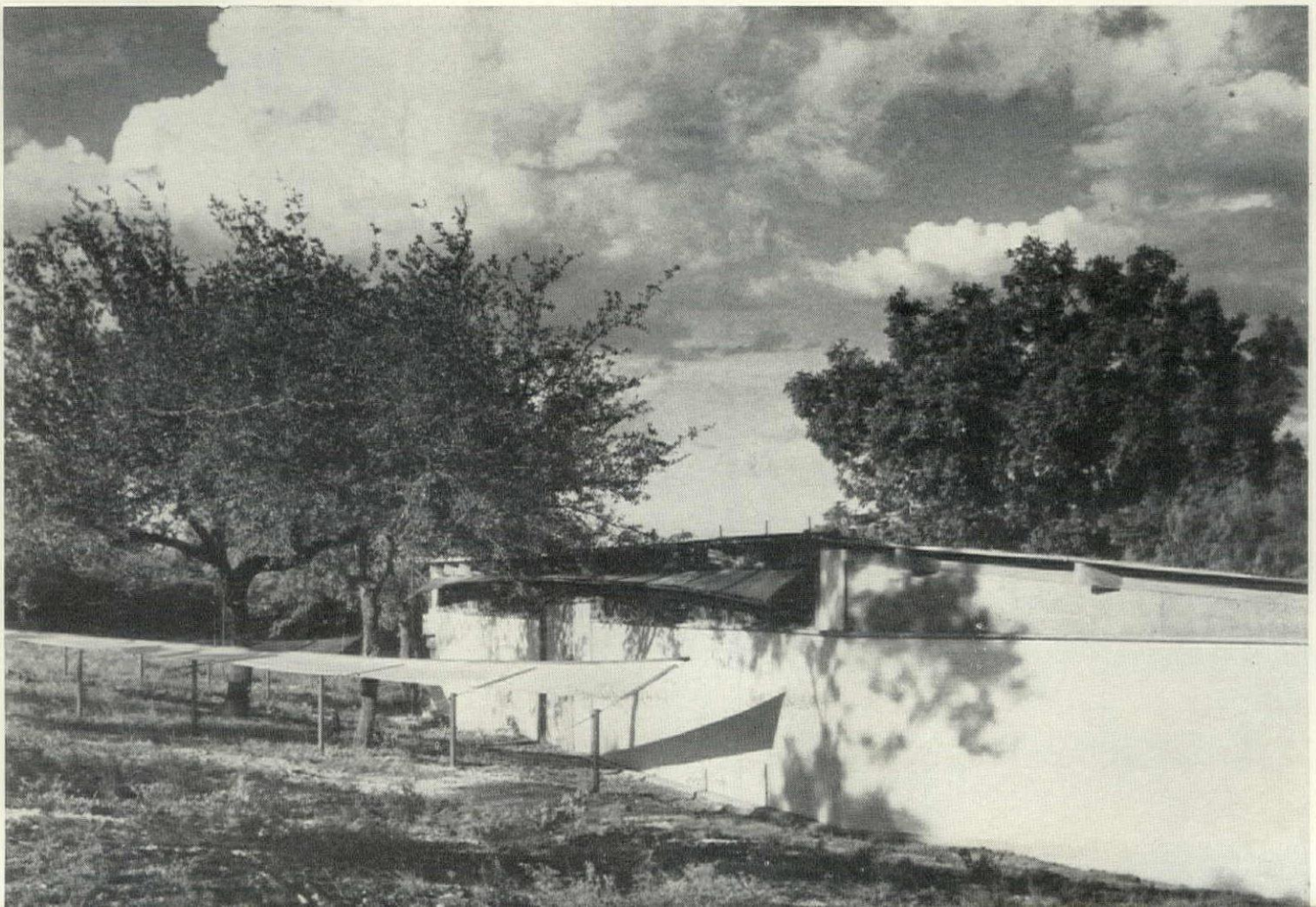


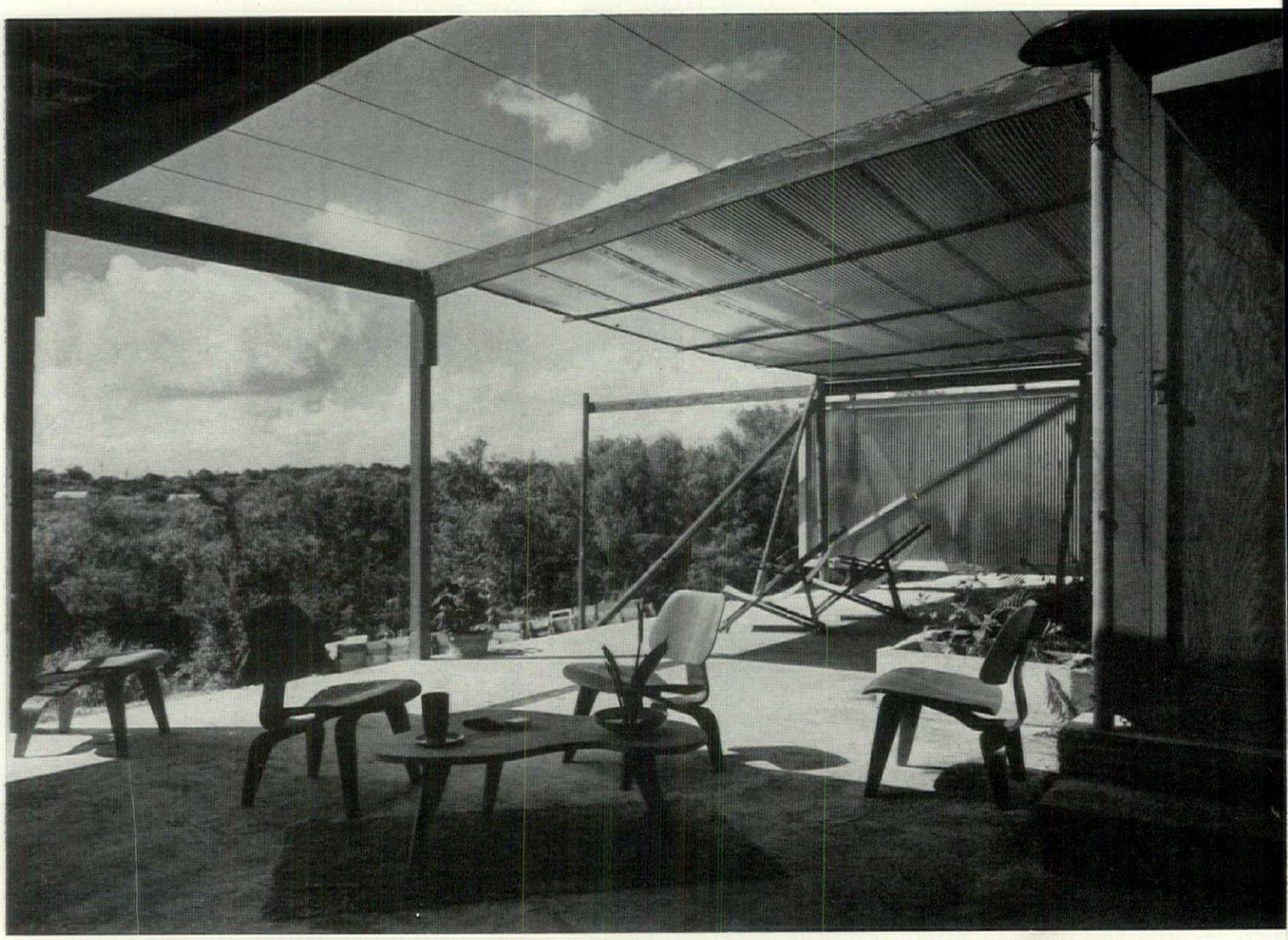
Photo Associates: Ulric Meisel



PROJECTING TRELLIS INDICATES DIVISION BETWEEN TWO FAMILY UNITS

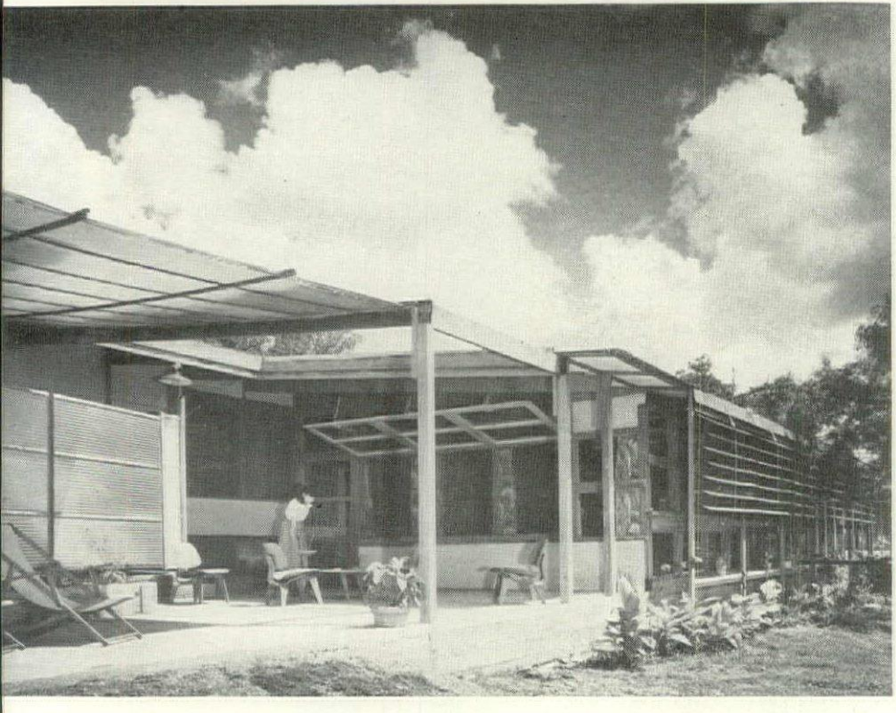
ALUMINUM FENCE SURROUNDS DRYING YARD ON STREET SIDE. AWNING OVER BEDROOM WINDOWS IS SHEET ALUMINUM





WIRES IN TENSION, IN SOME SPOTS BEARING CORRUGATED ALUMINUM SHEETS, SERVE AS AWNING FOR THREE-PURPOSE TERRACE

HORIZONTAL LOUVERS, UPRIGHT MEMBERS, GIVE HOUSE ITS CHARACTER



The reasoning behind the diagonal placement of this two-family house on an ordinary building lot held it important that the two units should be equally benefited by a prevailing southeast breeze. Both also receive winter sunlight by this orientation. On the street side, a high aluminum fence shields the house from winter winds. The slope of the roof in direct relation to the ground creates a natural air flow through the house.

To prevent sound transmission between the units, the center wall is a double one with two sets of studs resting on separate slabs. The feeling of family privacy is further increased by entrances from opposite streets.

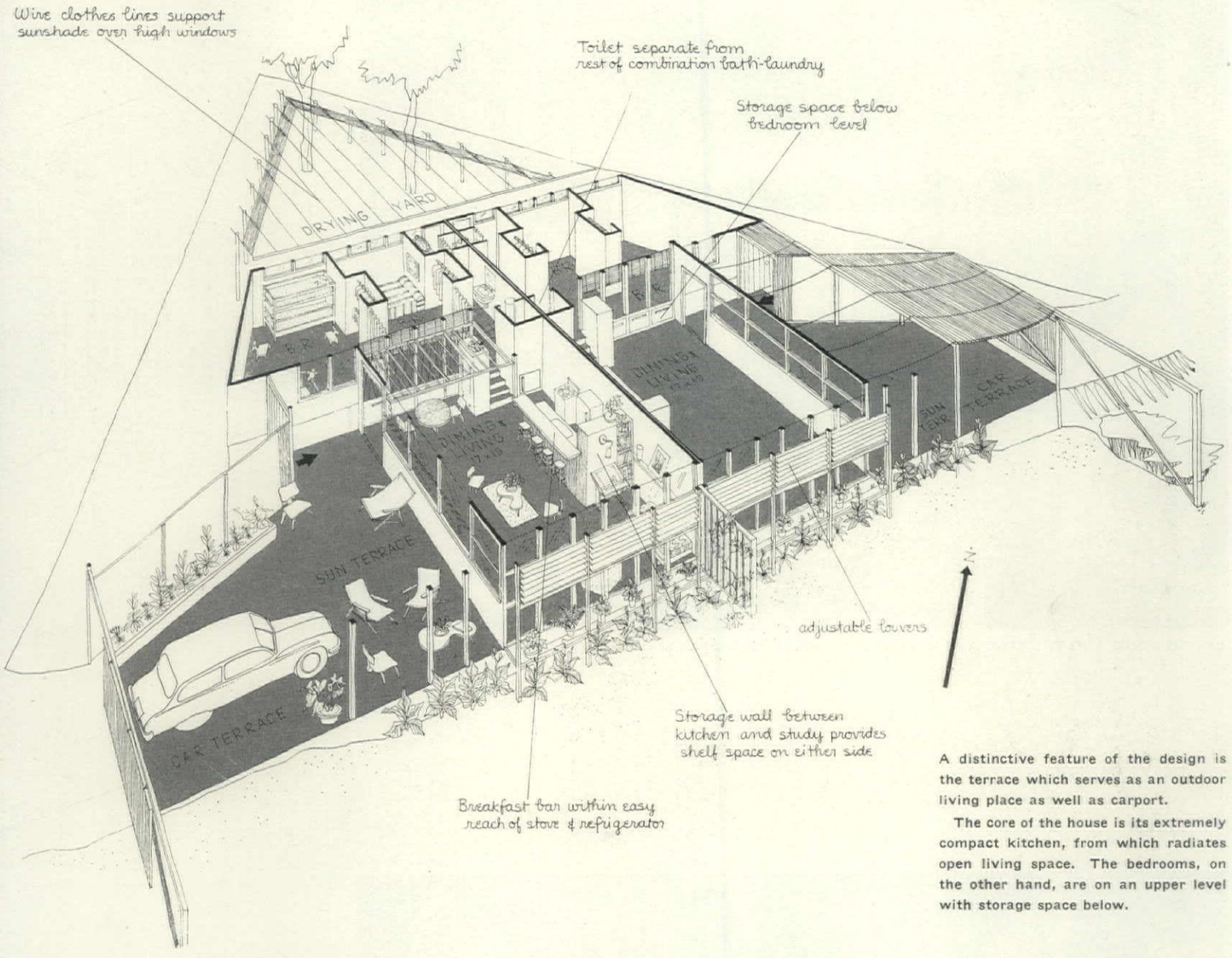
The economic significance of the design is expressed in the light-weight, open construction formula and, where they are used, in the taut wire supporting aluminum roof sections.

Built by the architect himself with never more than one helper, completion of the house presented many problems of lifting, holding, fitting, etc. The result is nothing short of astounding.

Most of the exterior finish is corrugated aluminum, either painted yellow or left natural.

At a glance it may seem that undue prominence has been given the drying yard. It is, however, an integral element of the plan and works well in conjunction with the rather unusual combination of laundry and bath.

Unusual structural articulation produces a thoroughly uncluttered and unconventional house



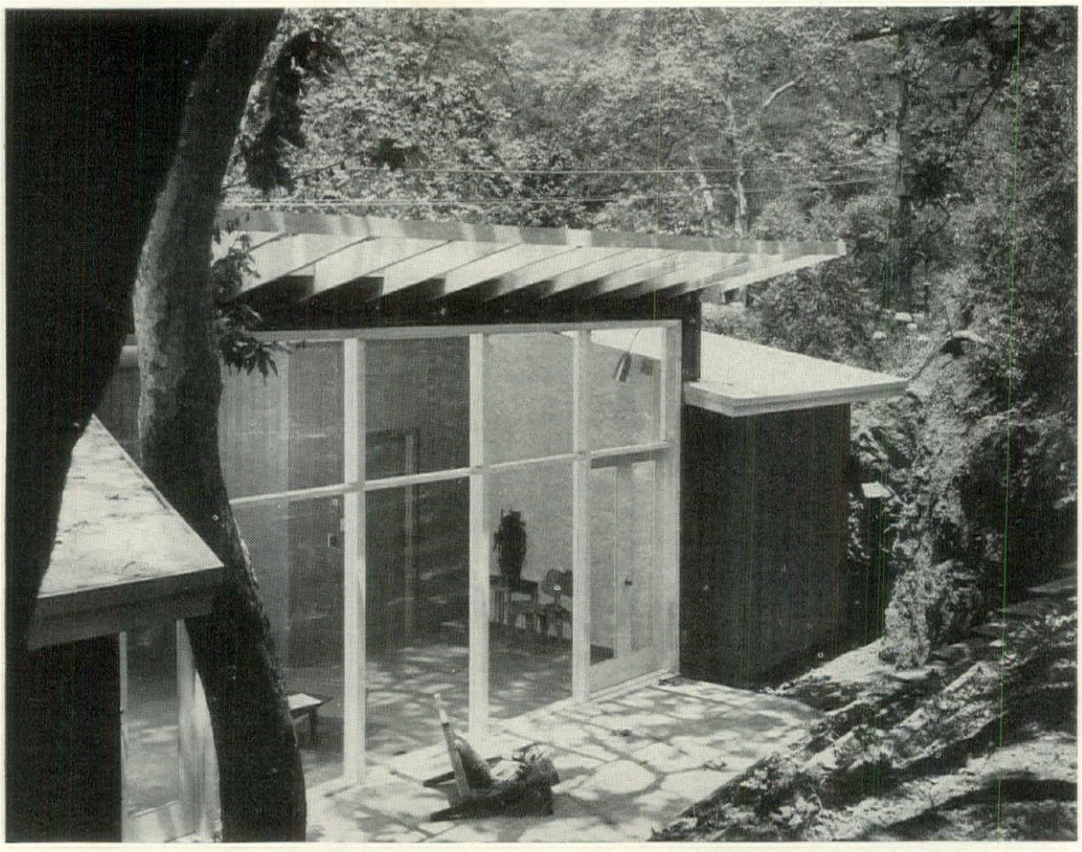
A distinctive feature of the design is the terrace which serves as an outdoor living place as well as carport.

The core of the house is its extremely compact kitchen, from which radiates open living space. The bedrooms, on the other hand, are on an upper level with storage space below.

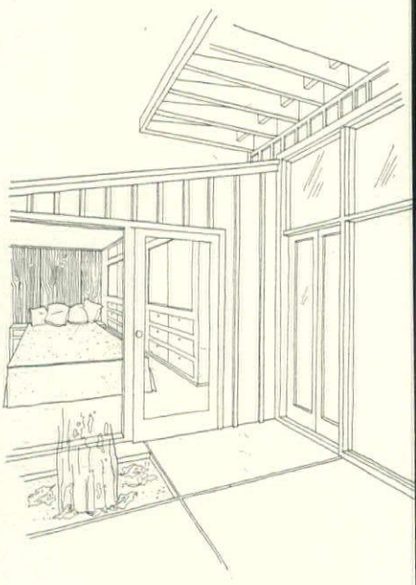
LIKE THE EXTERIOR, THE INTERIOR LEAVES STRUCTURE EXPOSED. NOTE PULLEY-OPERATED WINDOW

CONSTRUCTION OUTLINE: Foundation — concrete beam. STRUCTURE: Exterior walls—corrugated aluminum on horizontal 2 x 2's nailed to studs, ½ in. Celotex, Celotex Corp., on inside between 2 x 4 in. studs. Floors—concrete slab, pine or Armstrong Cork Co.'s asphalt tile. Ceiling finish—Celotex, Celotex Corp. ROOF—covered with corrugated aluminum. INSULATION—Celotex, Celotex Corp. WINDOWS: Sash — white pine. Glass — double strength, Libbey-Owens-Ford Glass Co. WALL COVERINGS: Living room—glass, Celotex, Celotex Corp., rope or plywood, U. S. Plywood Corp. Bedrooms—Celotex, Celotex Corp. Kitchen—corrugated aluminum. Bathrooms—Celotex, Celotex Corp., and corrugated aluminum. PAINTS—Sherwin-Williams Co. and E. I. DuPont de Nemours Corp. Cabinets — plywood, U. S. Plywood Corp. ELECTRICAL INSTALLATION: Wiring system—Romax. Circuit breakers—General Electric Co. Fixtures—General Lighting Co. KITCHEN EQUIPMENT: Range—gas. Exhaust over stove—General Electric Co. Refrigerator — Westinghouse Electric Corp. LAUNDRY EQUIPMENT: Washing machine—electric, Crosley Div., Avco Mfg. Corp. BATHROOM EQUIPMENT—Kohler Co. HEATING—gas gravity heaters. Water heater—gas, 20 gallon, Southwestern Heater Corp.

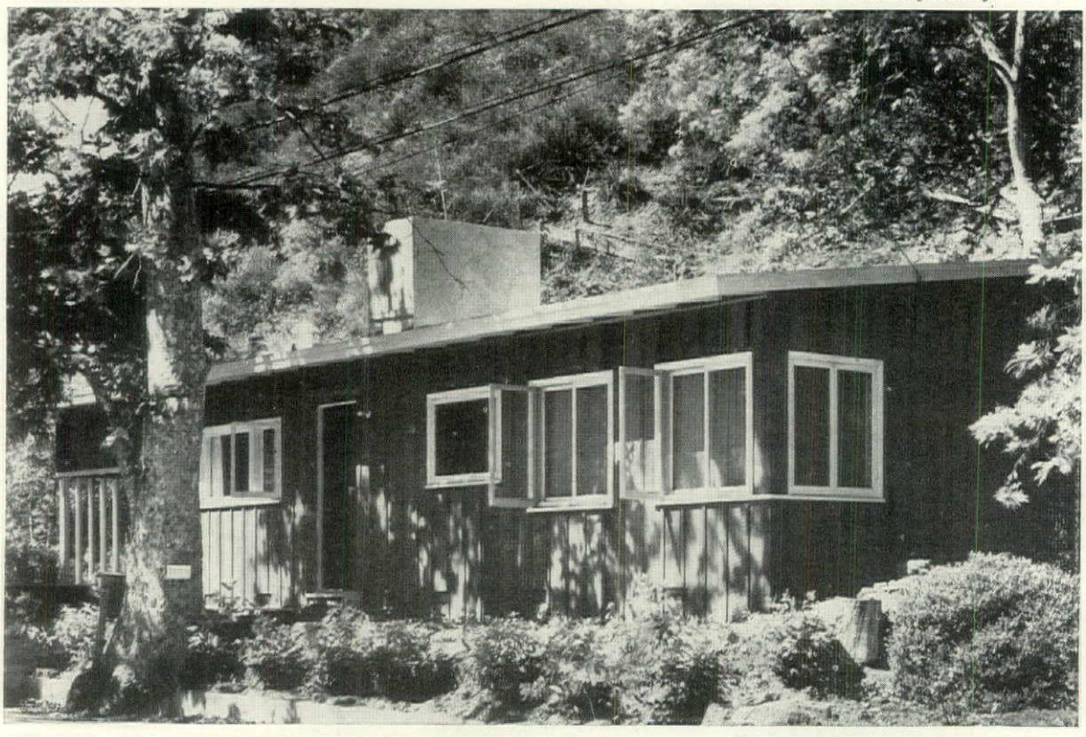
House at the foo



LIVING ROOM AND TERRACE ARE VIRTUALLY ONE. FIXED PANES ARE FLANKED BY DOUBLE DOORS

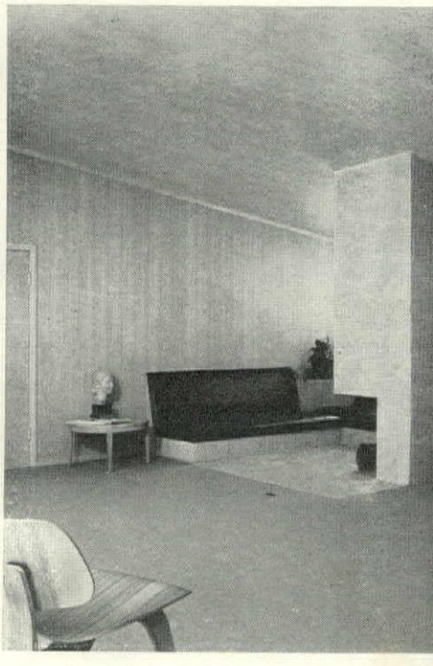


Photos by Shirley C. Burden



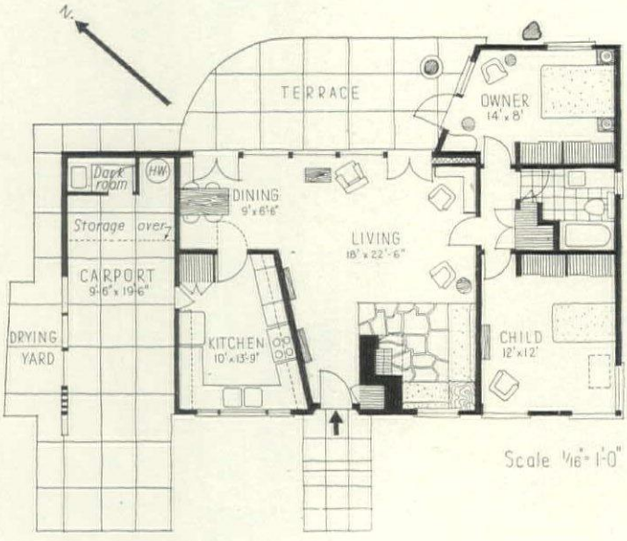
KITCHEN AND SECONDARY BEDROOM ARE LOCATED ON ENTRANCE SIDE. CARPORT IS AT LEFT

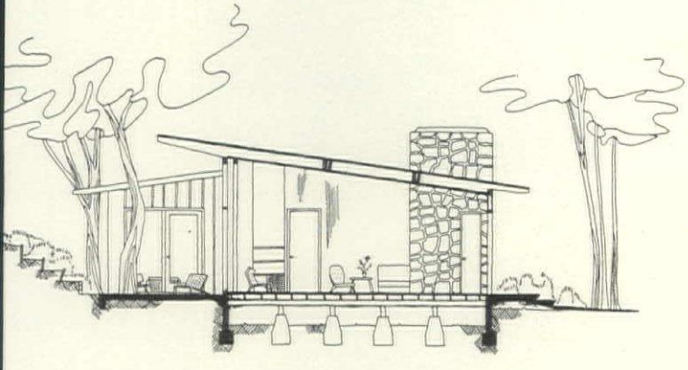
ENTRANCE HALL HAS ANGLED WALL



a mountain makes the most of an extremely difficult site

LOCATION: Beverly Hills, Calif.
ROBERT E. FAXON, Designer
MR. and MRS. C. WILLIAM SMICK, Owners



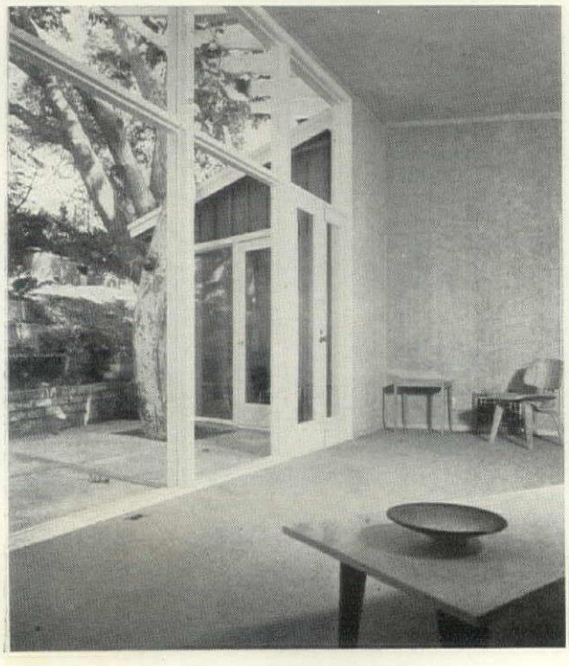


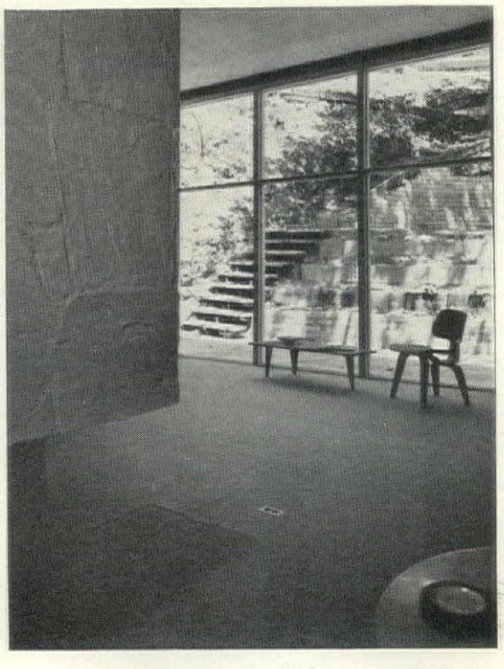
After deducting a 10 ft. setback at the front, 6 ft. setbacks at the sides and reckoning the value of three large old trees, the architect was left with very little level property on which to stake out this house. It was also a tightly budgeted job. His solution for his clients and their one small child is a fine example of compact planning. The handling of space is particularly interesting. The roof and ceiling over the living-dining area slope up toward the steep mountainside to triple advantage: this heightens the glass wall facing the slope, raises the eye level and pulls more of the slope into view. The wall between the living room and kitchen was angled to add to the spatiality with excellent results. Since the kitchen also acts as a service entrance, its asymmetry helps divide the two functions. A glance at the plan proves how much the living room and entrance hall profit by this arrangement. The slanting wall of the bedroom produces much the same feeling of increased spaciousness, indoors as well as on the terrace.

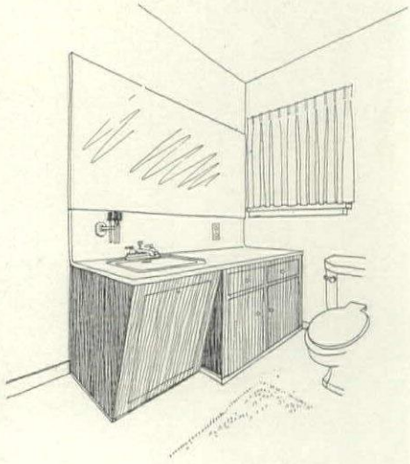
The house is a good example of sensible budgeting of space in proportion to its use. After some study it developed that the master bedroom received less use than the child's bedroom and it was therefore made smaller. Another earmark of good planning is the location of closets on three sides of the bathroom to act as sound barriers. Though the house does not include a study the location of the fire place with its giant hearth creates a pleasantly secluded corner.

CONSTRUCTION OUTLINE: Exterior walls—redwood, 15 lb. felt and studs. Interior—plaster board, U. S. Gypsum Co., with plaster or 3/8 in. Weldtex, U. S. Plywood Corp. Floors—plywood finish. INSULATION—Alfol between rafters, Reflectal Corp. FINISH FLOORING: Main rooms—carpet. Kitchen and bathrooms—linoleum, Armstrong Cork Co. PAINTS—Fuller Paint Co. and National Lead Co. WOODWORK: Trim—Coast Sash & Door Co. Doors—Paine Lumber Co. HARDWARE—Schlage Lock Co. ELECTRICAL INSTALLATION: Wiring system and switches—Bryant Electric Co. Multibreakers and flush meters—Square D Co. KITCHEN EQUIPMENT: Range—Frigidaire Div., General Motors Co. Refrigerator—Freezer Shelf, Gibson Mfg. Co. Ventilating fan—Pryne & Co. BATHROOM EQUIPMENT—American Radiator-Standard Sanitary Corp. HEATING—gas dual floor furnace, Rheem Mfg. Co. Water heater—B. & F. Co.

SIMPLICITY OF INTERIOR DETAIL AND FINISH FOCUSES ATTENTION ON RICH NATURAL SETTING







Architect and builder collaborating on a small suburban hous

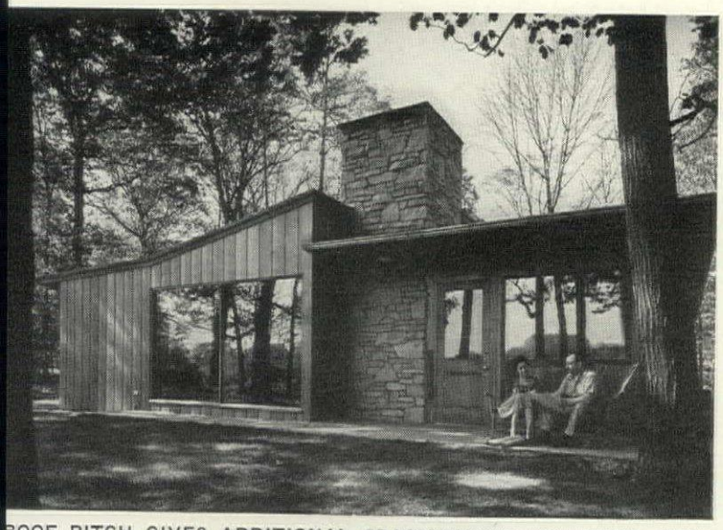
WELL INTEGRATED DESIGN IS CARRIED OUT IN REDWOOD SIDING AND WISCONSIN LANNEN STONE. ENTRANCE FACES WEST

Hedrich-Blessing Studios

LIVING. Guest living room alcove which faces south provides a cheerful spot for reading or study, is used as such most of the time. However it conveniently doubles as a guest bedroom having built-in couches that are easily made up. Curtains separate it from the living room.

hieve a high degree of comfort and efficiency

LOCATION: Glenview, Ill.
DAVID SEARCY BARROW, Architect
SLOAN CONSTRUCTION CO., Contractor
MR. and MRS. RICHARD M. HOUGH, Owners



ROOF PITCH GIVES ADDITIONAL SPACIOUSNESS TO LIVING AREA

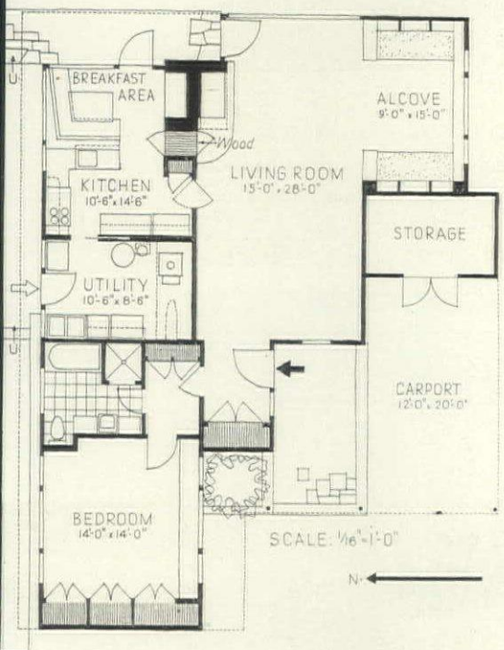
Set well back on a 155 x 240 ft. plot, this house commands a peaceful, intimate view of lawn, meadow and forest. To the east it has a broad view of woods. Both in mass and detail it fits well into its surroundings. A glance at the interior proves that the house is one big custom cabinet making job and that a relatively large sum of money went into its three major rooms. However, the general planning offers many formulae that could be more economically incorporated into any small house and to considerable advantage.

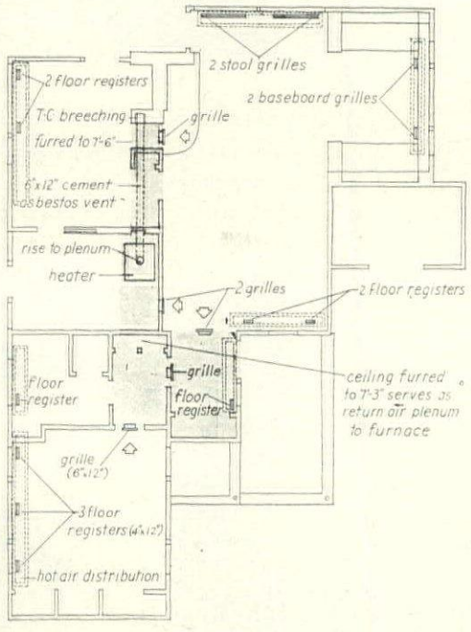
Designed for one couple who occasionally entertain house guests, the plan puts great emphasis on the living and working areas, segregates the master bedroom. Everything has been done to ease the servantless housekeeping and great consideration given to indoor-outdoor living. Note should also be made of the excellent storage and utility facilities.

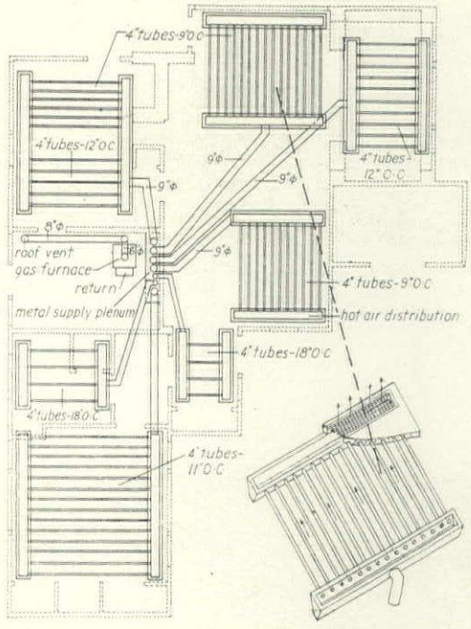
Builder Sloan and Architect Barrow are both sold on the desirability of built-in furniture wherever possible. In this instance it has definitely contributed to the spaciousness and working efficiency of the house.

A continuous overhang shelters the carport and entrance court. The frank location of the former, hard by the front door, is commendable from the standpoint of design as well as practicality.

All sub-assemblies for windows, doors, trusses, etc., were made on the site. The exterior redwood sheathing is highly varnished to retain its color which is complemented by chartreuse paint under the eaves.







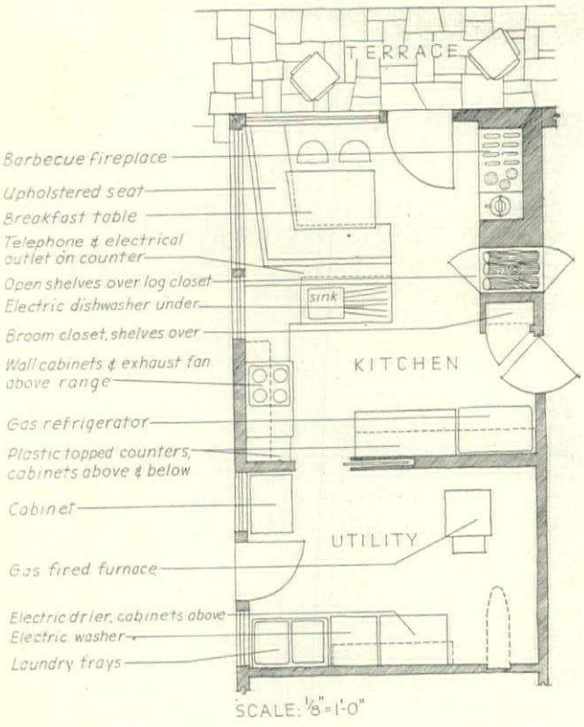
HEATING. A hot air furnace blowing air through a continuous labyrinth of ducts in concrete provides economical radiant heating. Outlet is through floor grilles, return through overhead ducts. Conveyance channels were created on the job by placing 4 x 6 in. timbers on 2 ft. centers and pouring concrete nearly level with them. Over this was placed wire mesh with asphalt paper on one side topped by another 4 in. of concrete.

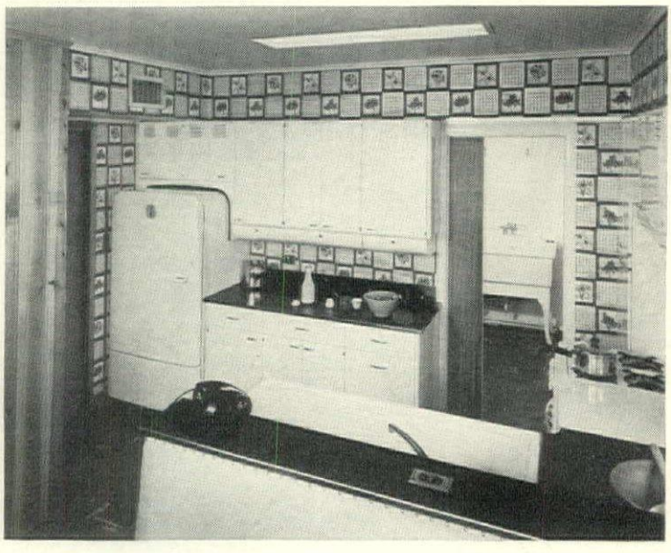
SLEEPING. The master bedroom, in a wing by itself, has north and south exposure. Fixed sash, flanked by double hung windows is used on both sides. As in the rest of the house, all logical furniture items are built-in.

Step-saving work area is beautifully planned, features a number of built-in amenities

BUILT-IN DINETTE SEAT is the only division between the kitchen and the dining area. The sink, backing up to it, permits the table to be cleared with minimum effort. Big picture windows directly relate the working-dining area to the terrace beyond.

BARBECUE FIREPLACE, backing the one in the living room, is no small pride of the owner-chef. Wood for both is stored in the two-way pine cabinet at right. For obvious practical purposes brick is used as the fireplace facing on this side.





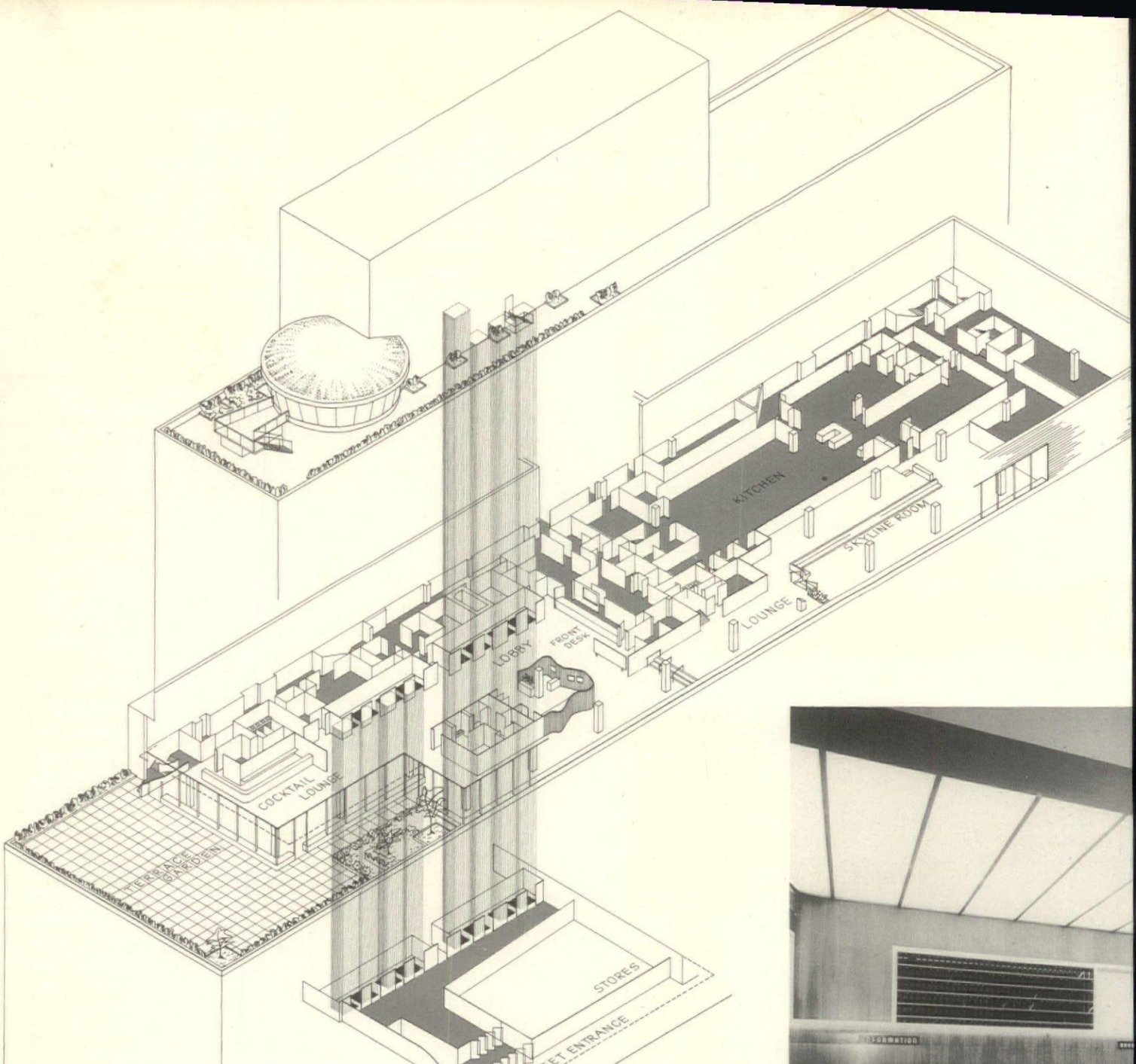
U-SHAPED KITCHEN provides work space on all three sides. A fine utility room is located behind it. The working-dining space has recessed overhead lighting. In the kitchen gay red wallpaper sets off the pristine equipment.

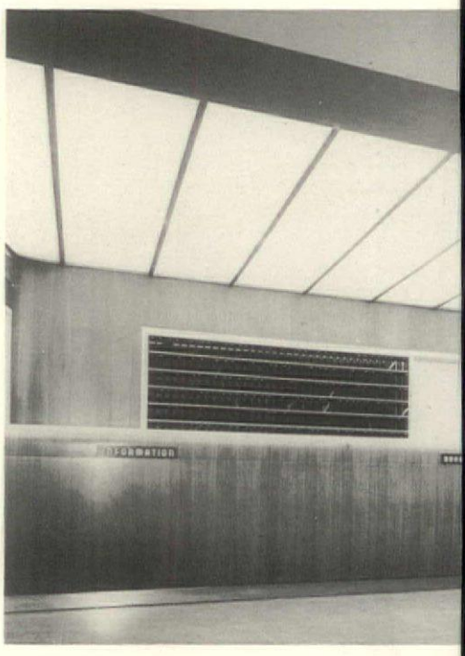
CONSTRUCTION OUTLINE: Structure: Exterior walls—wood frame, ¾ in. fiber board sheathing, vertical redwood exterior; drywall Sheetrock interior, mineral wool insulation, U. S. Gypsum Co. Floors—concrete slab. ROOFING—5-ply, tar and slag. WINDOWS: Sash-double hung red fir. Glass—double Thermopane, Libbey-Owens-Ford Glass Co. FLOOR COVERINGS—carpet and rubber tile. WALL COVERINGS: Living room—vertical redwood. WOODWORK: Trim — birch and redwood. Cabinets — birch. Doors—birch hollow core. HARDWARE—Russell & Erwin Mfg. Co. ELECTRICAL INSTALLATION: Wiring system—conduit, 3-wire S/N, grounded neutral. Switches—Hart Mfg. Co. KITCHEN EQUIPMENT: Range and refrigerator—gas. LAUNDRY EQUIPMENT: Washing machine—Bendix Home Appliances, Inc. BATHROOM FIXTURES—Crane Co. HEATING—combination floor panel heat and forced warm air system, gas fired. Grilles—U. S. Radiator Corp. Thermostat or regulator — Minneapolis-Honeywell Regulator Co. Water heater—Crane Co.

CINCINNATI'S TERRACE PLAZA

is built on the solid economic base of two big stores and the forward-looking concept that thorough research, good modern design and skillful engineering pay off in better profits and increased investment stability

All photographs by Ezra Stoller: Pictorial Services.





CONTINUOUS LIGHTING LEADS FROM A

THE HOTEL BEGINS at the eighth floor. Divided near the center by the elevators, desk and offices, the 90 x 400 ft. "roof" of the two store buildings is big enough to accommodate the main dining room, a cocktail lounge, bar, and the kitchen and still leave room for the east terrace from which the building gets its name.

THOMAS EMERY'S SONS, INC., Owner • SKIDMORE, OWINGS & MERRILL, Architects
WILLIAM S. BROWN, Partner in charge
MORAN, PROCTOR, FREEMAN & MEUSER, Foundation Engineers • WEISKOPF & PICKWORTH, Structural Engineers • JAROS, BAUM & BOLLES, Mechanical Engineers
GUY B. PANERO, ENGINEERS, Electrical Engineers • A. FEDER, Lighting Consultant
MARIANNE STRENGELL, Textile Designer • HENRY FLETCHER KENNEY, Landscape Architect • WALTER J. SMITH, Kitchen Consultant • HARRIS, KERR & FORSTER, Accountants & Hotel Consultants • FRANK MESSER SONS, INC., General Contractors

HOTEL AND STORE FUNCTIONS ARE CLEARLY EXPRESSED

MARQUEE TO ELEVATORS TO THE FRONT DESK, 130 FT. UP

An experienced hotel owner employs the research approach to real estate, engineering and design

The Terrace-Plaza hotel is a radically new solution both in design and financing. It is the result of an integrated planning job in which the architects were given sweeping responsibility that started with calculating the most profitable type of building investment and ended with the hotel soap wrapper. It is also an example of the improved building performance that can be produced by thorough research, conducted by the most systematic collaboration between the architects, engineers, operational specialists and owner.

All this happened because the Terrace-Plaza's owner, Thomas Emery's Sons, Inc., did not specifically set out to build a hotel. The firm simply sold a long-term lease to J. C. Penney for a considerable amount of store space, to be built to fit. Next the Emerys sold a lease to Bond for a somewhat smaller retail area. Then the firm assembled a program of its requirements and sent this to six leading firms of modern architects. The program included a problem which architects are seldom asked to calculate: what would be the most productive investment topping for this solid store base?

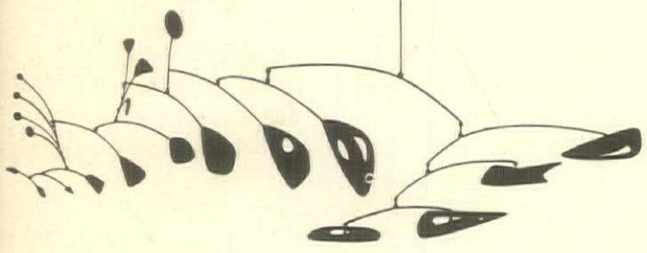
Thomas Emery's Sons, Inc. is a family firm which owns some of the choicest real estate in Cincinnati, by means of which it has comfortably enlarged a fortune originally accumulated in candle-making. Since the firm already owned a profitable building complex, the Netherlands-Plaza hotel and the Carew Tower offices (Cincinnati's Rockefeller Center), it was interested in supplementing either type of facility. They already owned a prime location in the downtown business district, on which some old properties were scarcely paying taxes. With the Penney lease in their pocket, they had moved in 1943 to expand the size of this site to a half-block in optimistic anticipation of their unborn investment. Skidmore, Owings & Merrill's approach to modern design, as well as their estimate of the situation impressed the firm. S-O-M's canny analysis showed that on this site a hotel could earn 2 per cent more than an office building and effectuate an Emery objective by supplementing the non-convention facilities of the Netherland-Plaza. And their ideas on where the hotel should sit were exciting, too. There were two other factors favoring S-O-M, one tangible, one intangible: 1) they had just finished the Oak Ridge atomic town development and so had a large staff and research facilities all set up, and 2) they had never designed a hotel before and seemed to the Emerys "more apt to arrive at original solutions and at the same time be willing to incorporate some ideas the owner had derived from years in the hotel business." The choice was made, and owners and architects repaired to the first of their many mutually informative sessions over a conference table. The owners admittedly learned a great deal about modern art and architecture; the architects say the experience of the owners was "invaluable."

The intensive and collaborative research which preceded design of the Terrace-Plaza promises to pay handsome dividends in reduced operating costs. It produced both a flexible mechanical plant admirably suited to serving the twin character of the building and some carefully studied new equipment for that basic product of the hotel business — the individual guest room. The painstaking program included careful consideration of all materials. Similarly all furniture, the basic guest room, some other rooms were put to the test of use in life-size mock-ups.

The most striking design innovation, which grew naturally out of the store base, was lifting the hotel lobby to the eighth floor level. By taking all the required zoning set-backs at this level, the designers were able to create an attractive roof-top plaza adjoining the lobby, lifted above traffic and street noises and equipped for summer dining, winter-time skating.

Works of top-flight artists extend the decorative theme of lobby

LOBBY HAS A MARBLE WALL AND A CALDER MOBILE



By the integration into the scheme of appropriately "fresh" works of top-flight contemporary artists, and by making every plane, every surface and color, carry its freight of decorative expression, the architects have achieved an atmosphere at once light and refreshing. Despite the use of tons of stainless steel and marble (lobby walls, cocktail lounge tabletops), rich textured fabrics, and leather — all chosen for durability and ease of maintenance — the general effect is of a scale almost domestic, the spirit almost playful.

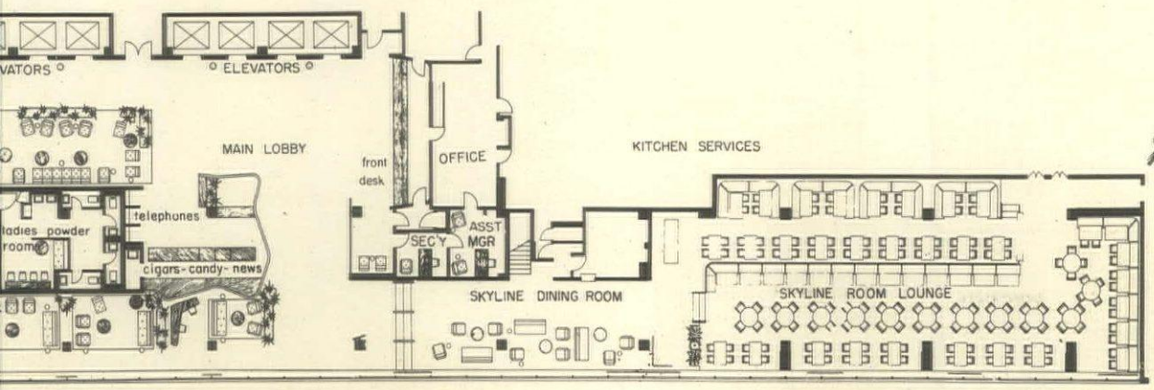
The artists' works—planned as part of the architectural design—are tied into this scheme by their fitness for the space they occupy, and by the lighting. On the white wall behind the bar, colored lights vary the "dynamic volumes" of Jim Davis' bright planes of colored plastics; similarly, on the lobby screen-wall, moving shadows add a dimension to Calder's spot-lit mobile. And Steinberg's tongue-in-cheek line-drawings are just right for the long restaurant where anything heavier would have been oppressive.

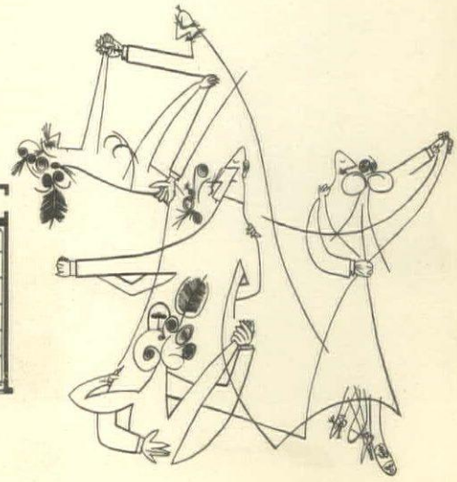
The eighth floor, though divided into small areas by screens and the lighted ceiling over the desk, is treated as one space; continuity is achieved by the "monotony of pattern" of the dimmed down-lights, and an overall scheme of cheerful colors — green, yellow, white, with gray and warm brown—varied in combinations, shades, and textures. In the "quiet lobby" (behind the powder room and fenced off newsstand), diversity is achieved by contrast—rich reds and sumptuous fabrics. In the restaurants, upholstered seats are cradled in light tubular frames.

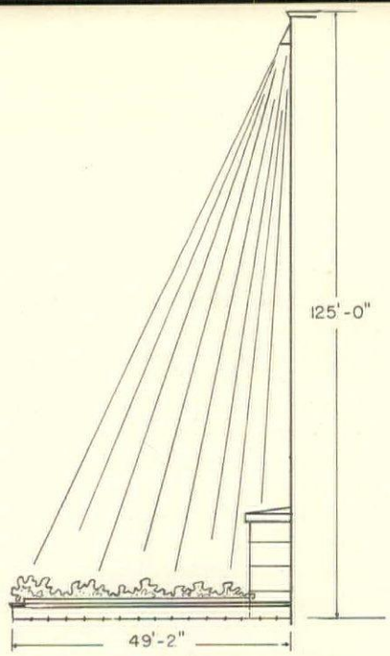
KITCHEN HAS EASY TRAFFIC FLOW, FLUSH CEILING LIGHTS, SHINES WITH STAINLESS STEEL EQUIPMENT

ar and Skyline Restaurant

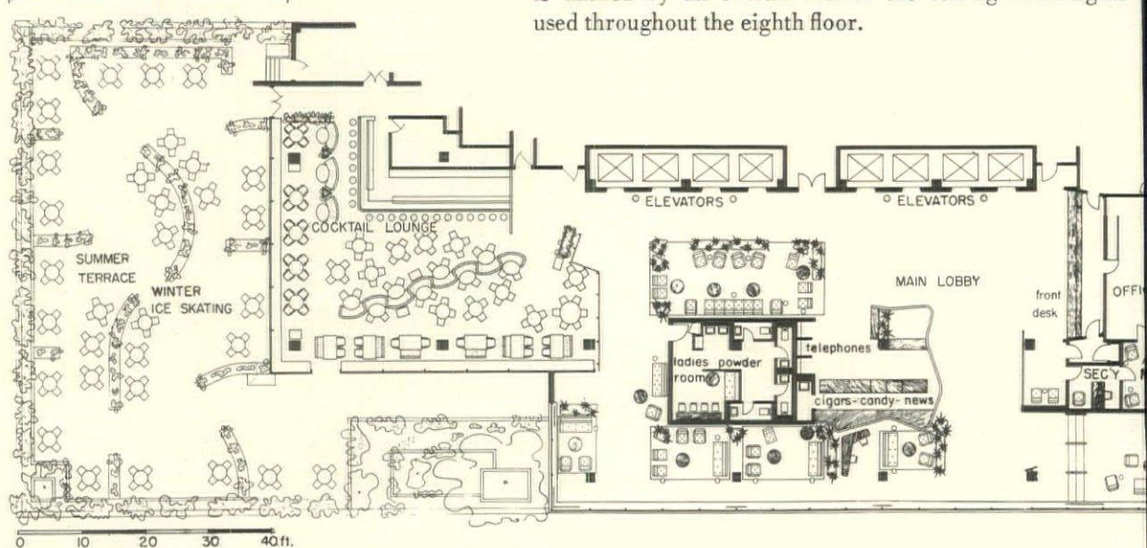
GLASS WALL AND STEINBERG MURAL GIVE SKYLINE-ROOM GUESTS TWO VIEWS OF CINCINNATI







Throughout the hotel light is used for dramatic psychological and architectural effects, with the stress on the light itself, rather than the source, which is often invisible. Monumental shafts of light from huge spots on the 19th floor parapet descend to the terrace at an angle designed to avoid guest room windows, minimize shadows for skaters; dimmers and filters are used to vary the effect from "sunlight" for winter to "moonlight" for summer. Inside, washes of color are thrown on walls and fabrics, from spots on the recessed columns, to give warmth. Troughs of pink light (3,500° white plus peach reflector) are used below the Steinberg mural, and in the sill under curtains to show off their texture, make the plane retreat for greater spaciousness. In the Skyline Room lounge this, plus daylight, gives a luminous splendor to sheer yellow and white curtains, the gray "tiger" marble opposite, and the lush green carpet. This "effect lighting" is unified by an overall theme: the ceiling down-lights used throughout the eighth floor.



COCKTAIL LOUNGE AND BAR OVERLOOKS TERRACE SKATING RINK. "QUIET LOBBY" (RIGHT) SERVES AS READING ROOM, IS RICHLY COLORED

REAL ESTATE: "A good investment," says the Prudential Insurance Co., mortgagor

To qualify for a mortgage loan, a hotel must fulfill the investor's three basic requirements: 1) Good Location; 2) Ground Floor Occupancy of High-Class Retail Outlets; 3) Good Management. Scores given 1 and 2 are influenced by studies of such broader subjects as the city's size and "class," its future, its plan; these are weighed in the balance along with the all-important financial status of the owners, and last but not least, the special nature of the security involved. While the present is dubbed abnormal by some, the Terrace receives an A+ rating on nearly every count.

1) A Good Location in the heart of the commercial district of a convention city of half a million people, the site is good for a hotel-store building. On a target map of Cincinnati, distances are measured from Fountain Square, nearby. Falling also within the circles are Norwood (Pop. 75,000)—a city within the city, and Kentucky towns across the river with a combined population of 175,000—whose dependence on Cincinnati may be gauged by Kentucky's purchase of two bridges to provide free access for commuters. The floods of out-of-towners are mostly contained within the same four-block square as the hotel, an area which also contains the shopping district for the area's 750,000 residents. To house these crowds, the city had 5,700 hotel rooms, could use more, perhaps twice the 360 added by the Terrace Plaza. Designed to dovetail with the Netherlands Plaza (the owners' other hotel, a block away), and not to duplicate its facilities for banquets, etc., the Terrace's rooms are an added attraction for larger conventions.

Nor did the mortgagors need to worry about the "class" of the retail outlets on the ground floor, in scoring No. 2 requirement. The hotel has several small shops, usually the most stable element in the hotel business, but the size and long-term leases of the big stores, provide a much sounder financial base than the earnings of the usual small shops. In addition, their rentals (based on a per cent of sales) are running high, due at least in part to their location in the building. Bond has a flashy sales appeal, is known as the "two pants store;" it faces Vine St., Cincinnati's "Broadway," which a saloon era hangover has made a man's street. Penney, counting on building a solid foundation in a more conservative fashion, and with more women shoppers than men, is all set on Race St., a woman's street. Each also has an entrance on Sixth St., expecting increased traffic there, where the hotel is "bringing up the neighborhood." Thus far, Sixth St., now in its renaissance as a good commercial district, seems a wise choice for big department stores, and for a hotel which caters more to business executives than the carriage trade; but from a long-term investment point of view, the picture is not complete.

There is one caterpillar in this beautiful salad: the creeping traffic which surrounds the Terrace for several blocks on all sides. An early scheme to take guest automobiles up to the eighth floor lobby, and park them on the sixth or seventh floor, was abandoned as consuming too much expensive space in a cube limited by law; adopted instead was a delivery system to the Carew Tower Garage next to the Netherlands Plaza. While passable for the guests (most of whom come by train or plane), the traffic and parking problem for their visitors, restaurant patrons, and shoppers has not been solved.

3) Good Management. It was easy for the mortgagors to score this point. The Emerys have owned and operated hotels since 1872, and they have been successful with their 800-room Netherlands Plaza, which they took over in 1932 from the Starret Corp. Equally easy to score was the Stability of the Owners, long clients of Prudential, and one of the strongest real estate holders in the city. The Emerys knew how to get the best returns from urban properties and had acquired this one gradually, with careful planning and foresight. Back in 1924, when Sixth St. was emerging from its saloon and livery stable atmosphere into a good commercial district, they formulated a plan to sell their scattered holdings elsewhere and convert the funds into downtown real estate. In 1926 they bought the east quarter of the site (they already held the west), but ceased their purchases during the depression as the town contracted, leaving Sixth St. behind. It was not until the late Thirties, when they began buying again, that Sixth St. was restabilized as a commercial district. In 1943 they bought the rest of the site, knowing that Penney was hunting 200,000 sq. ft. of space as a new link for their department store chain. The Bond lease was secured later.

There were, of course, questions about the special nature of the Security, despite its last-word design. Hotels cannot supply good dining rooms for their guests unless they receive sufficient revenue from local patronage, and in this scheme, dining rooms begin on the eighth floor. To counteract this disadvantage, however, care and money were taken to make them unusual places to eat and to feature works of top-flight artists, which lent added prestige to the hotel. These efforts are paying off in business exceeding the original estimates by 300 to 400 per cent. By old rules of thumb (a dollar a day per $1,000 of building cost per room), the room rates should be double the typical $7 single, $10 double charged, but the owners expect "revenue" in savings from the research and durable materials put into their building. Through September, the hotel had averaged 87¾ per cent single, 42 per cent double occupancy; and the windowless offices are now 100 per cent occupied, the stores paying high rentals.

If Prudential was influenced in setting the interest rate (considered high by the Emerys) by what they call the "novelty of the design," they cannot now look at these figures and deny that good modern design has made it easier for management to show high returns on its balance sheet. Until the hotel has had a few good years or bad, it will be impossible to judge whether the exact ratio of spaces allotted to stores, offices, and studio hotel rooms, and their arrangement within the building will be the prototype for future developments, but one thing seems clear, the building is as shrewd an investment as present foresight can make.

ROOM DOORS ARE PAIRED IN ALCOVE TO REDUCE TUNNEL EFFECT OF HALLS

THE ROOM: Designed with care, its greater first cost will pay off in comfort and durability

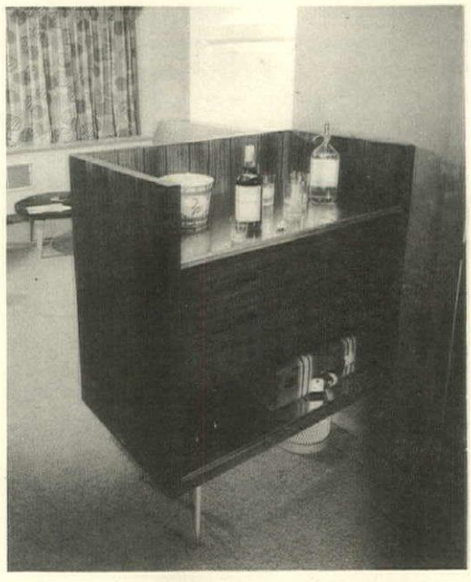
The basic planning unit and the economic yardstick of a hotel is the room. Since the Golden Twenties, when the last group of big hotels was built, living habits and tastes have changed so radically as to make an improved room overdue. Probably the greatest single advance in hotel design has been the development of the room that is livable around the clock. In this example of the trend, furnishings have been designed with special care, with an eye to achieving new savings in space, maintenance and operating costs, and to improving the functioning of the essential couch-bed. To furnish an old fashioned room with its usual collection of burnable, stainable, breakable objects, now runs from $800 to $1,500, including painting, carpets, drapes, etc., as against the $2,100 invested in this room, plus an extra $150 put into the bathroom. Expected savings, however, coupled with an increase in room service (at the present 85 per cent occupancy, room service runs four times the average for a similar, conventionally furnished hotel) may well amortize the expensive furniture in a short time.

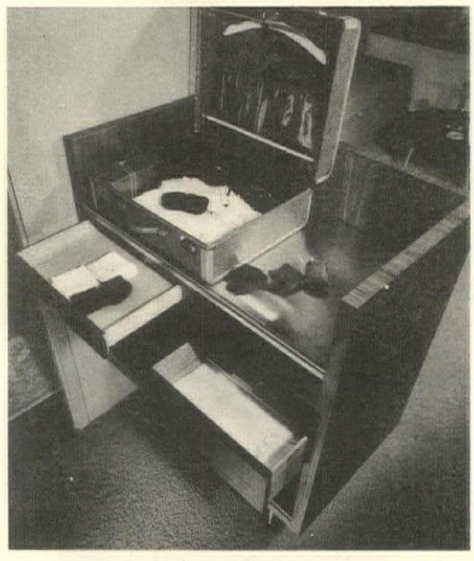
MULTI-PURPOSE UNIT has a desk one side (strong enough to sit on), drawers other side, two stainless steel shelves for luggage or drinks. Unit is raised from floor to maintain open feeling.

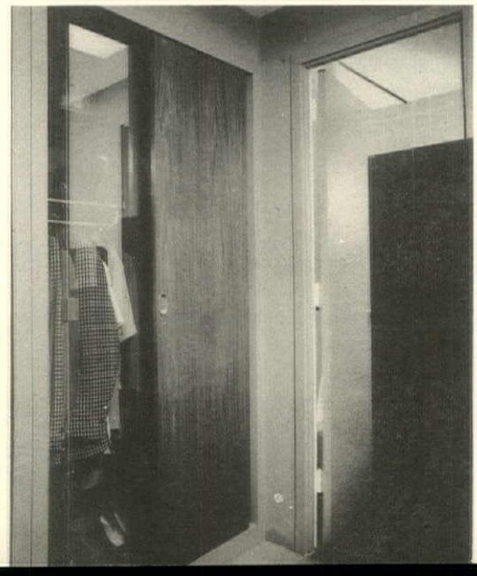
BUILT-IN LIGHTS eliminate dangerous cords, fragile shades. Trough above bed reflects light on a white wall, carries spotlights at ends for reading. Trough light may be switched from room door or from bed.

AIR CONDITIONING CABINET below window has guest control-valve; top and (removable) front sections are laminated plastic to protect it from guests' feet. Adjustable eyeball reading light in window soffit is trained on chair.

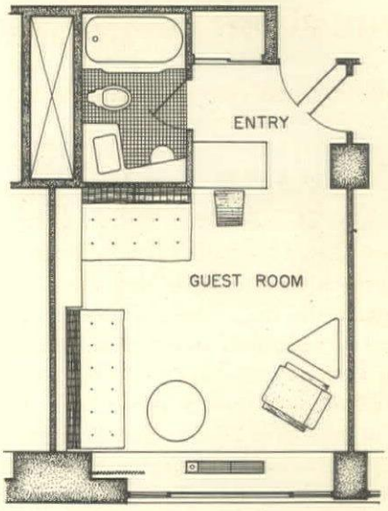
CLOSET has sliding doors, plus a concealed full-length mirror. One side is fitted for women's clothes, the other for men's. Ceiling light above closet unit makes access space a dressing area.

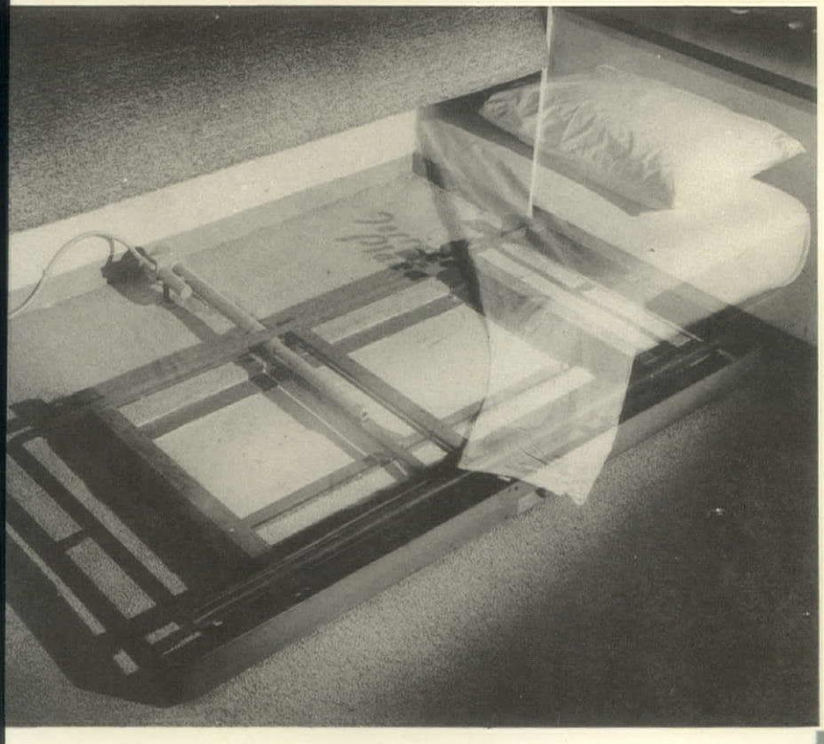




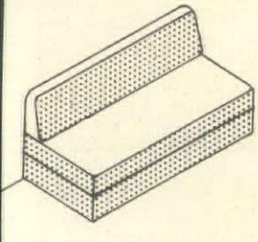


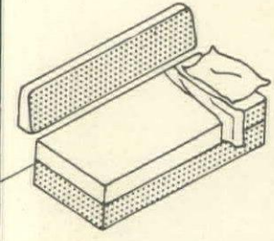
The intensive study given this room and bath will pay dividends to future designers of hotels and small houses, as well as to the owners. Every element of the design was pre-tested by the architects in a mockup in a New York hotel. An effort was made to eliminate dust-catching projections, save space, attain simple lines and good proportions; reduce to a minimum movable furniture, breakable legs, lamps and cords (hotel men are impressed by the latter's lessening of fire hazard), and integrate the lighting with the architecture. Numerous models and samples were made of furniture, fixtures and fabrics. The result: strong compact furniture, topped with burn- and alcohol-proof laminated plastic. The desk, the fixed back of one couch, and the lighting trough are easily removable for repairs. For the upholstery, four tough, part-wool, easily cleaned fabrics in four good colors, were designed (permitting 16 combinations). Warm colors are used in north rooms, cool in the south. One wall, painted a color from the opposite scheme, features a stencil-painted repeat of the abstract curtain-pattern. But the "real achievement," say the owners, "is the bathroom;" new for hotels is the sense of luxury attained in this small room, with its counter lavatory and wall-to-wall mirror.





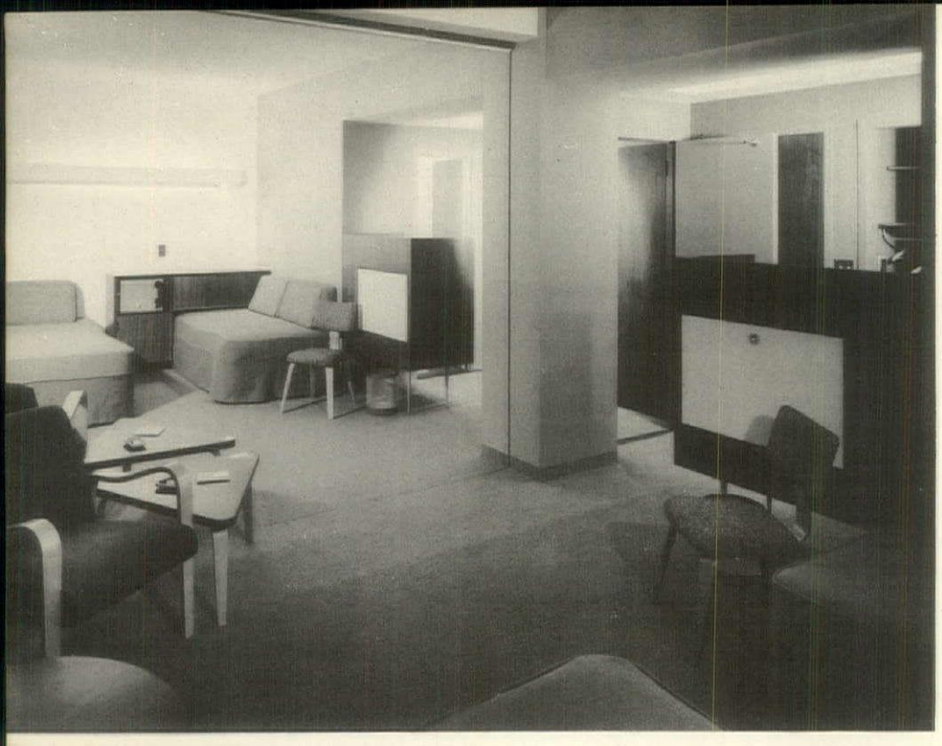
RADIO PANEL is perforated metal, accommodates light switches for trough and reading light, and telephone with handy, retracting cord. Radio switch selects six stations.

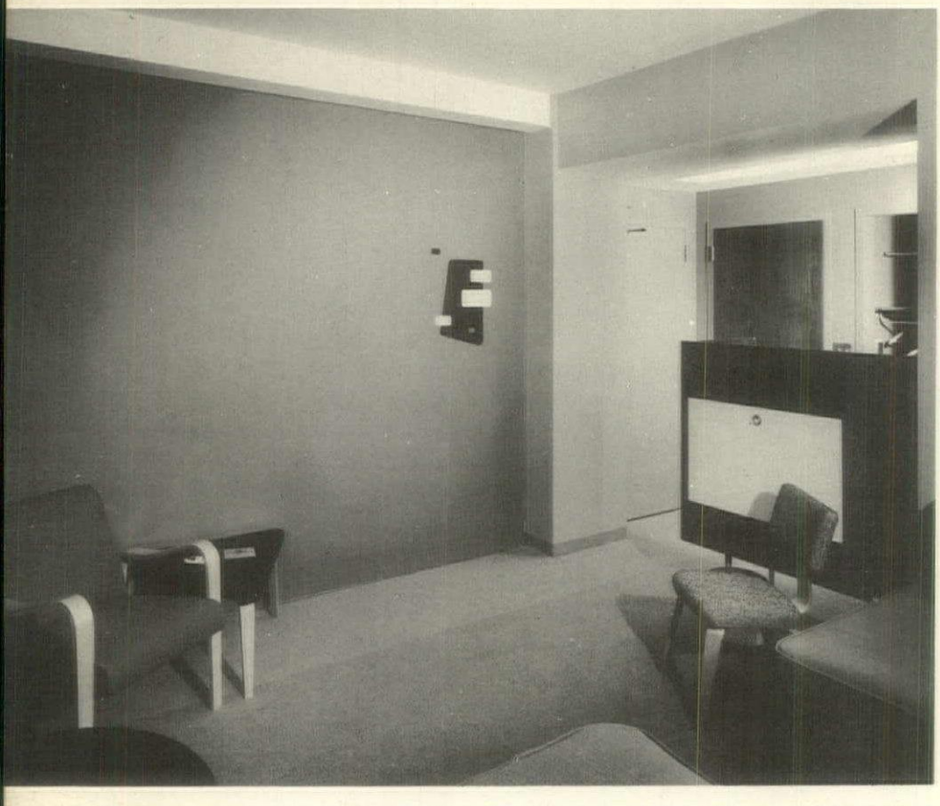




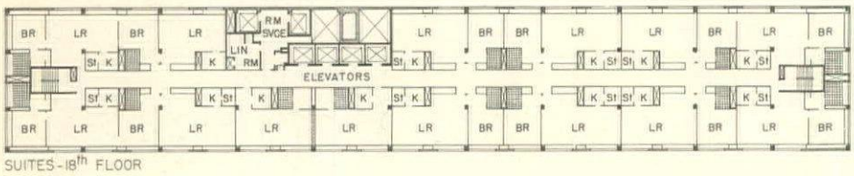
COUCH BEDS, motor operated by guest or maid, move to sleeping position on cantilevered tracks, leaving the carpet undisturbed. Turning a key at the base, the maid can pull it out further when making it up, and cleaning the space behind. Pillows are stored in wall cabinet by the bed.

LUXURIOUS BATHROOM has rose laminated-plastic dressing shelf and basin surround. A rosy glow from tubular lights in the corners flatters feminine guests. The stainless steel cabinet has plastic doors. Ice, cold and hot water come from the same spigot.





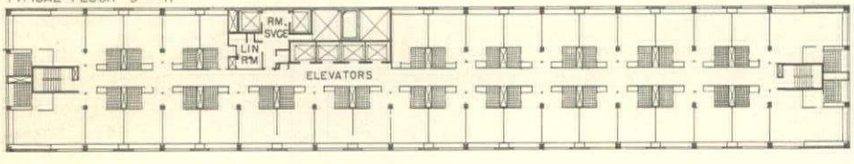
MOTOR-DRIVEN WALL DISAPPEARS INTO DOUBLE PARTITION ON FLOOR ABOVE

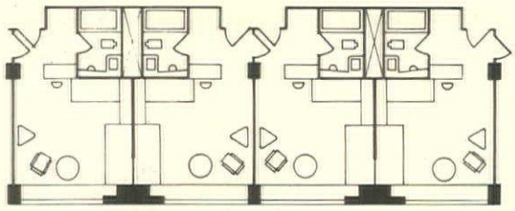


SUITES - 18th FLOOR

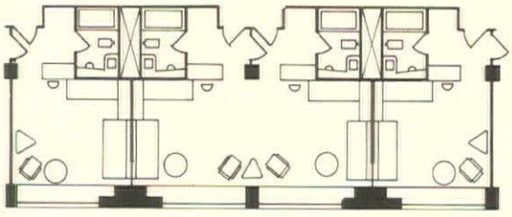
0 25 50 75 100FT

TYPICAL FLOOR 9th - 17th

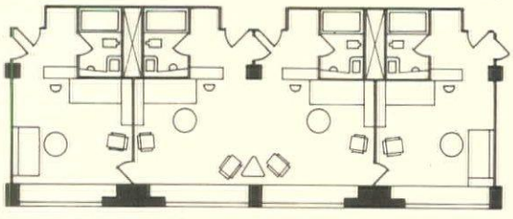




FOUR OF THE SAME



WALL VANISHES, THREE ROOMS



TWO DOORS OPEN, A SUITE

As building and maintenance costs have risen it has become obvious that the old-fashioned hotel suite is not an economical unit since few can afford this type of accommodation, and the space occupied produces less revenue than individual rooms. Although the new-type room offers many amenities of the suite, some flexibility in facilities is essential. In the Terrace Plaza five pairs of typical rooms on alternate floors are equipped with retractable, metal-clad dividing walls (metal). All corner rooms are larger, have daylit baths (below). There are two one-room and 12 two-room apartments, each with kitchenette, on the 19th floor. Color schemes differ from typical room—cool colors are more neutral, warm, more intense.

OUTSIDE LAVATORY HAS FIXED GLASS WALL

ENGINEERING: Multi-purpose design increases economy of mechanical systems, but adds to structural cost

Every mechanical and electrical function is recorded on the huge control board in the engineer's office. Although the chief is still training his "shake-down crew" to understand its 102 lights, the board is constantly feeling the pulse of the neat robot city and every room in the building, making all normal adjustments automatically (one side of the building may be cooled while the other is heated) without human intervention. Air in the conventional air conditioning systems serving the stores and main hotel areas is cleaned by electro-static filters. These reduce the amount of soiled merchandise in the stores and reduce maintenance costs. By means of an auxiliary return air damper one section acts as either a return or outside air filter, thus saving 25 per cent of extra filter area. To reactivate the filters, the chief has installed drains, washes them in place with a hose and hot water; puts in oil with paint spray. In main branches air is cooled by new spray-type coils. (FORUM Dec. '46). Air conditioning of each hotel guest room is individually controlled. Fresh air under high pressure and cold water (hot in winter) are piped to cabinet units beneath the windows where it is cooled or heated according to the setting of the room thermostat. Air escapes through the bathroom exhaust grille—none is recirculated outside the room. With windows generally kept closed, outside dirt and noises are eliminated.

Many savings are realized by supplying both these systems from the same chilled-water heater in the compressor room in the sub-basement; three compressors of different capacities (aggregating 1,500 tons of refrigeration) serve the loop. Various combinations of these three, or any one, can be run at one time, an arrangement made possible by joint operation of the store and hotel systems. Since the load can thus be thrown from the hotel in the evening to the stores in the morning, both the installed tonnage and operation costs were greatly reduced. The compressors deliver chilled water to the cooling units strategically located throughout the building to save expensive space.

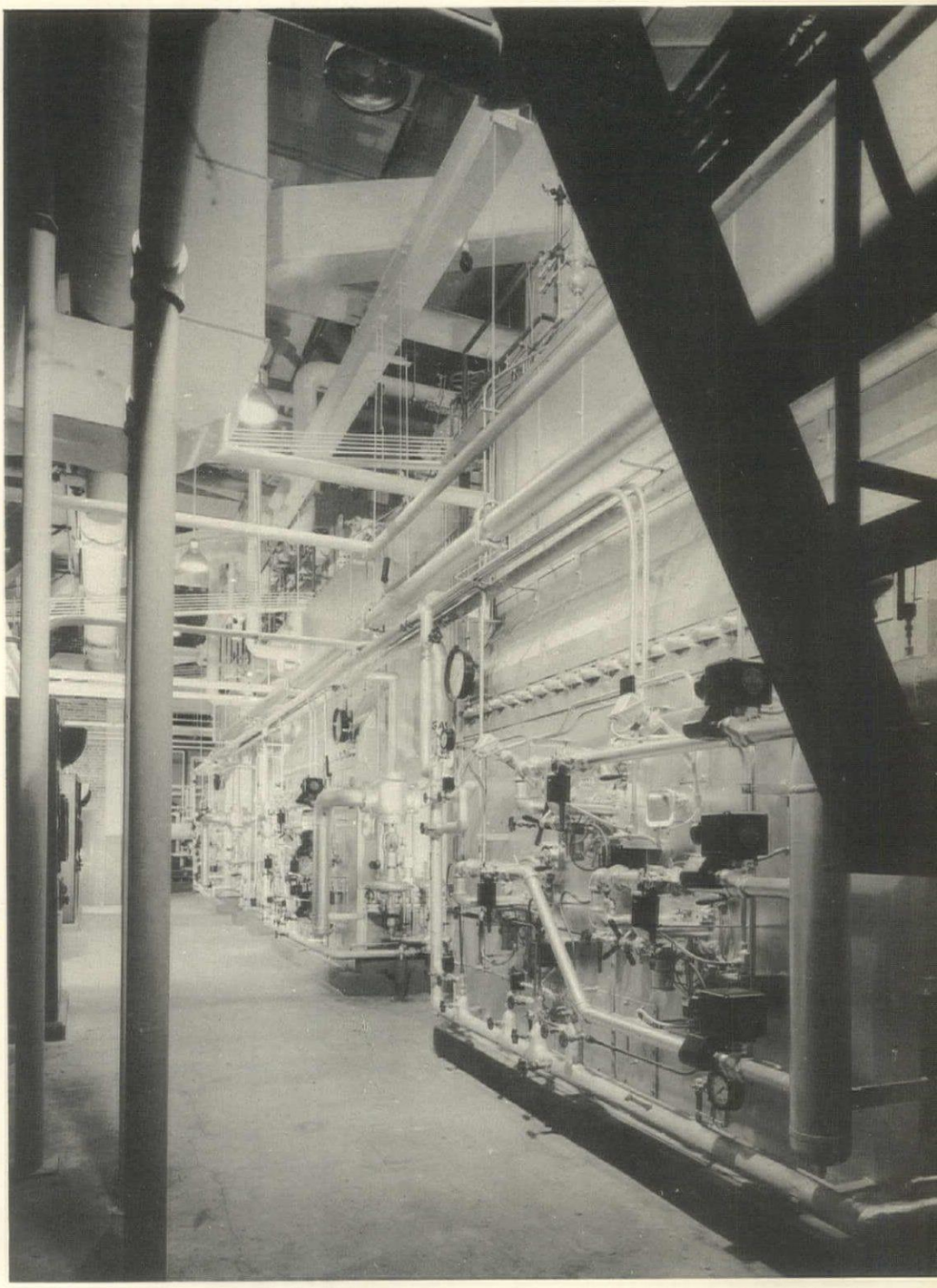
The excellence of the fire protection means low insurance rates for the owners. When heat or smoke closes the contact of any one of the small thermostats in the guest rooms, the room number is registered on a clock-type enunciator in the manager's office and in the engineer's office. By means of a seventh pair of wires installed in the hotel's six-channel radio system, the manager can cut in, and radio speakers and public address outlets become a loudspeaker system carrying his messages. In the stores, smoke from a small fire in one section of the building is prevented from causing panic throughout the entire store by a photo-electric system in the duct work that shuts down the supply fan if smoke or fire appears in the ducts.

Electrical: The terrace is lighted by thirty 3,000-watt lamps located on the parapet of the 19th floor. Motor-driven doors open and light is reflected down from mirrors on the back of the doors so that no light reflects into any of the rooms; the lights go on after the doors are open to prevent heat from breaking the mirrors.

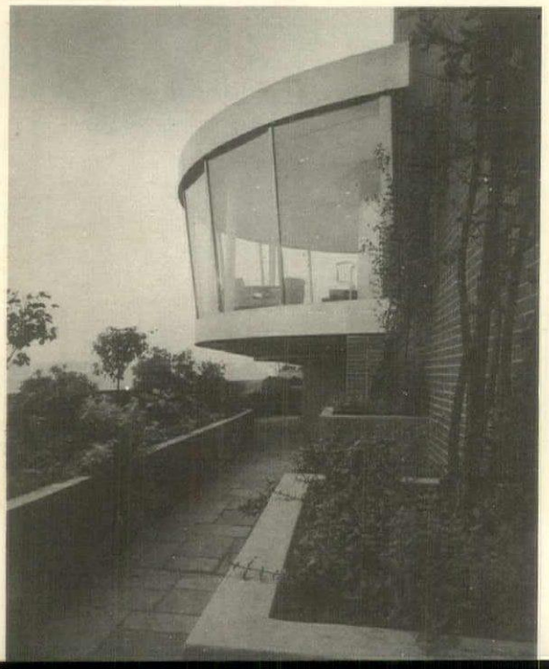
The apartment suites and main dining rooms of the hotel are equipped with television outlets, but there is only empty conduit, to serve future television equipment, in the typical rooms.

The Structure: The special problems of shoring up and underpinning existing buildings and sidewalks to permit deep excavations for foundation construction, as well as the alternative systems studied for the steel frame, have been previously discussed in The FORUM (Dec. '46). The final solution for the column spacing was deemed worth the relatively high estimated cost of 98 cents per sq. ft. since it met better than any of the others the conflicting needs of open selling space for the stores and the small hotel rooms above. Small bays enclose the hotel room on either side of the upper structure, a wider center bay includes corridors and bathrooms. Only two rows of columns are carried down through the lower part of the building, necessitating heavy girders to take care of the column transfer of the other two rows. Store front columns are set back 6 ft. from the building's facade providing a convenient space for merchandise displays and air conditioning ducts. Double beams used to meet wind bracing requirements in this lower structure are cantilevered 10 ft. into the center bay (permitting a light section in the center) and extend out on either side of the facade columns resulting in a more economical solution for the cantilevered roof than would have been possible with single girders.

HUGE BOILERS CAN CHANGE FROM GAS TO OIL WITHOUT INTERRUPTING SERVICE



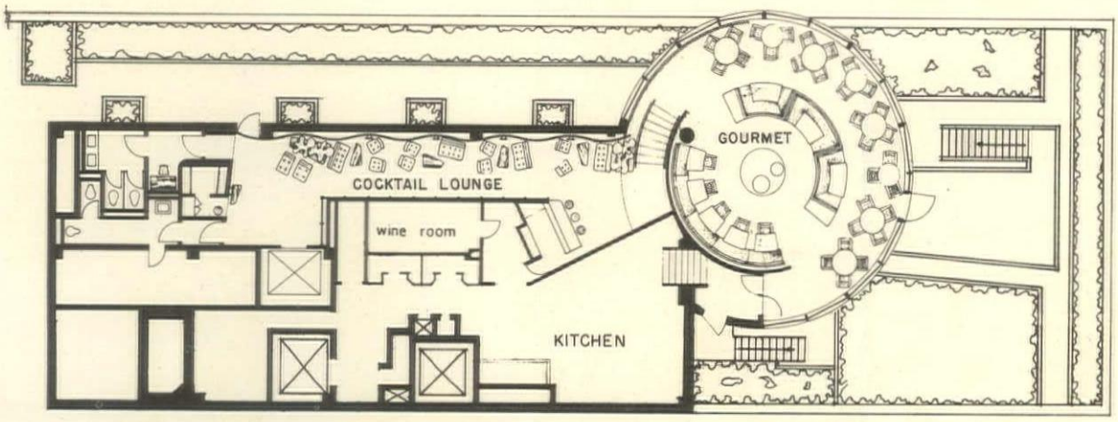
A MURAL BY JOAN MIRO COVERS THE ONLY WALL. ITS CARNIVAL COLORS GIVE A FESTIVE ATMOSPHERE TO THE SMALL ROOM



Cantilevered out from the corner of the utility penthouse atop the hotel, this little restaurant has a view and cuisine unparalleled in the city. It has its own small kitchen, its own garden; from its own elevator guests enter it through a tiny cocktail lounge and bar. The lounge is dimly lit through cut-outs in Ward Bennett's sculptured brass fixtures and tiny lights pick up sparkle of metallic thread in the upholstery. Coming in from here, the well lit Miro mural (32 ft.) which covers the back wall of the restaurant is a bright shock. Miro made the first sketch in a model of the room (not on canvas), painted a terra cotta frame, one swinging door blue, the other green—a cheerful touch later vetoed by the architects.

The outward slope of the double-glazed windows (which also directs view) is supposed to keep sound waves from focusing in odd corners (as they would in a round shape) by reflecting them up toward the acoustically treated ceiling, instead of back into speakers' plane. The roof is a thin-shelled concrete dome, has radiant heating coils embedded in the plaster ceiling. Floor beams taper out from central drum, around the bowl-like bottom runs a track for the window cleaner's cart.

From the tiny Gourmet restaurant, 56 exclusive guests can view the city



SLOPING GLASS WALLS HELP SOLVE DIFFICULT ACOUSTICAL PROBLEM, MINIMIZE REFLECTIONS, AND DIRECT VIEW OF SEVEN HILLS

STORES: Sales appeal differs

MORRIS LAPIDUS, Architect

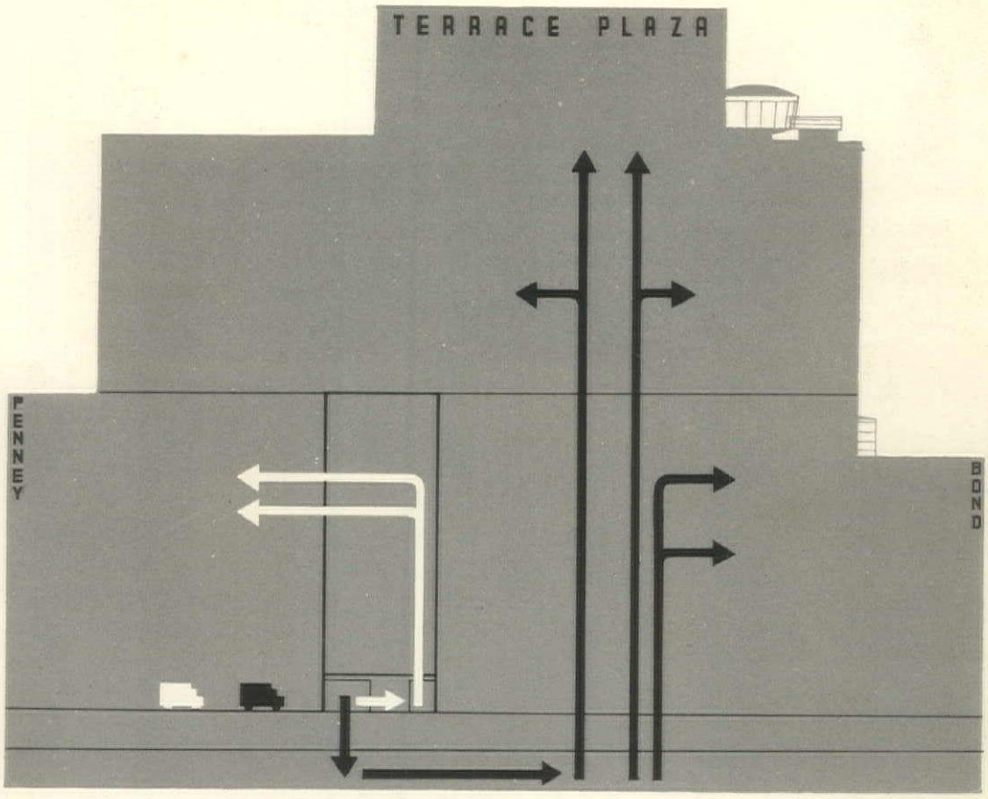
BOND STORE: An obscure glass ceiling, backed by cold cathode, has apertures for incandescent spots and air conditioning fixtures. This luminous expanse cancels reflections from outside on the two-story windows, silhouettes the flying stair designed to give a non-department store look, and is typical of Bond's flare for drama. Heat from the concealed lighting is carried off by ventilating equipment.

J. C. PENNEY CO., Designers

PENNEY STORE: Also selling moderate-priced apparel and furnishings, this store follows a more conventional merchandising pattern. Usually featuring open display conducive to impulse buying, traffic in this store is directed to the elevators by neat rows of glass-enclosed cases. Store interiors can't be seen from the street due to closed-back show windows.

UILDING'S BACK DOOR is an annex carried through to an adjoining street

A small service building located between an existing theater and a variety store is backed up to the windowless building like a huge (82 ft. long) van, its tail-board bridging Thorpe alley, the (47 ft. wide) cab-front facing Opera Place. It ingeniously provides for off-street truck deliveries for hotel and stores. Penney's offices and employee facilities are located above.



"PENNEY ANNEX"—ALSO SERVICES BOND STORE AND THE HOTEL: WHITE TRUCKS SERVE PENNEY'S, BLACK TRUCKS BOND'S AND HOTEL

Those delivering goods to Penney's back into an interior street-level platform and transfer their loads to an elevator which hoists the merchandise up to sixth and seventh floor storage areas in the main building, saving valuable street-level space. Trucks serving Bond's and the hotel are lowered by means of hydraulic elevator (big enough for trailer-trucks) to unloading and storage areas in the sub-basement. Service elevators connect this area with the upper floors; two for the hotel, one for Bond's.

There are no large store rooms, as a large service building, located on less expensive land on Ninth Street, has store rooms for the combined use of the Terrace and the Netherlands Plaza (the owner's other hotel). Also located here are large paint, carpentry and other shops serving all the Emery properties. The sub-basement of the Terrace contains only a paint shop, with provision for emergency repairs on furniture, etc., a quick valet service, and daily food storage.

Of sufficient size to permit the turning of vehicles, the sub-basement truck floor has manholes opening into a coal vault, provided for emergency use in case of a shortage of both gas and fuel oil. But, whereas this conversion might take weeks, the three integral furnace type, high pressure boilers can convert from gas to oil in a matter of minutes without interrupting the service. Fuel oil deliveries will be made at street level. Normally fired by gas (to keep fuel trucks off the congested streets) the boilers earn extra money supplying heat to an adjoining store building, may serve others, since 50 per cent reserve capacity is available.

DELIVERY TRUCKS ARRIVE IN SUB-BASEMENT BY ELEVATOR, BACK UP TO LONG PLATFORM

A FLOOR BELOW HOTEL ENTRANCE, CAFETERIA IS HANDY FOR SHOPPERS, STORE EMPLOYEES

The basement cafeteria, besides providing guests with a low-cost alternative to the hotel's swank dining rooms, does a brisk business with customers and employees of the building's several stores, as well as passers-by. The last word in cafeteria planning and equipment, it features banquettes arranged to cut up the dining area into small, intimate zones. Either of two ells meeting at a central point can be closed off in slack hours. Latest stainless steel equipment and new planning ideas developed in collaboration with hotel and kitchen consultants eliminate back-of-counter traffic; two-way thermotaners and refrigerators supplied from the kitchen are handy for servers; trays suspended into wells on springs keep plates popping up to the counter top. The kitchen also supplies a smaller employees' dining space similarly decorated.

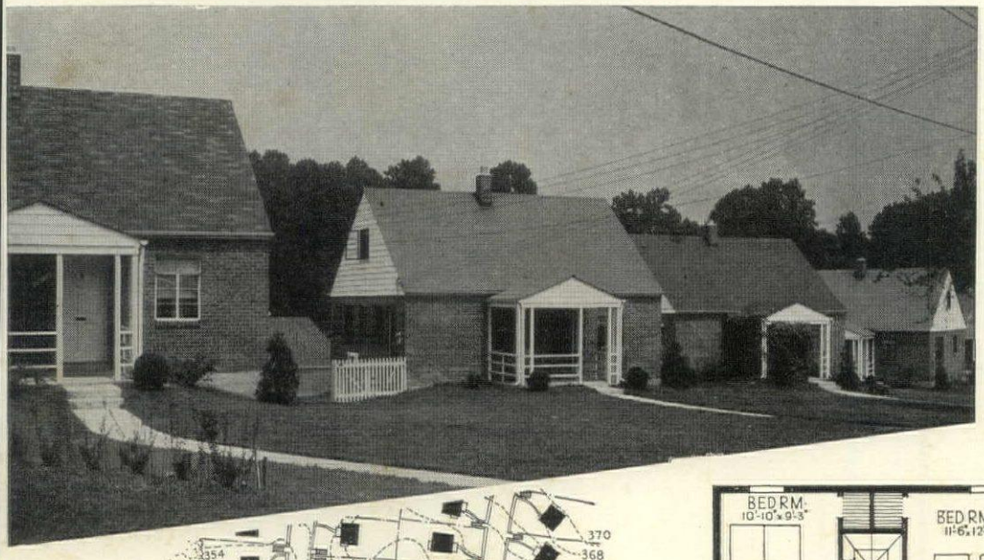
CONSTRUCTION OUTLINE: Structure: Exterior walls—brick, Belden Brick Co. Frame—structural steel, Bethlehem Steel Co. Ornamental iron—The Steelcraft Mfg. Co. Stonework—H. E. Fletcher Co., Taylor Stone Co. and David Hummel Co. Foundations—MacArthur Concrete Pile Co. Interior Walls—masonry and solid plaster, Nickerson Utility Block Co. Interior facing tile—Stark Brick Co. and U. S. Quarry Tile Co. Ceiling finish—U. S. Gypsum Co. and National Gypsum Co. Sliding partitions—Peele Co. Glass partitions—Pittsburgh Plate Glass Co. Calking—Chamberlin Co. of America. ROOFING—built-up, Philip Carey Mfg. Co. INSULATION: Thermal—Fiberglas, Owens-Corning Fiberglas Corp. Acoustical—Acoustone, U. S. Gypsum Co.; Acousti-metal, National Gypsum Co.; acoustical kitchen ceiling, Johns-Manville Corp. WINDOWS—Fenestra, Detroit Steel Products Co. GLASS—Pittsburgh Plate Glass Co. Luminous ceilings—Alba Glass, Corning Glass Works. Store front construction—stainless steel, Superb Bronze Co. STAIRS & ELEVATORS: Stairways—steel, Kerrigan Iron Works. Framework for glass ceilings and stair rails (metal)—Allied Bronze Co. Elevators and Escalators—Otis Elevator Co., W. S. Tyler Co. Freight elevator doors—Security Fire Door Co. FINISH FLOORINGS: Linoleum and rubber tile—Armstrong Cork Co. Quarry tile—Mosaic Tile Co. and Sparta Ceramic Co. CARPETS AND FABRICS—Mohawk Carpet Mills, Inc., Goodall Fabrics, Inc. Wainscot—Armor-Ply steel, U. S. Plywood Co. FURNITURE—Ficks Reed Co. The Formica Co., Thonet Bros., Rohm & Haas, H. H. Turchin Co., John Widdicomb Co., Herman Miller Furniture Co. and Backus Bros. Motors for beds—Delco-Remy Div., General Motors Corp. DOORS—Kinnear Mfg. Co., Aetna Steel Products Co. and Roddis Lumber & Veneer Co. MILLWORK—The Formica Co. HARDWARE—Schlage Lock Co., Yale & Towne Mfg. Co. and Glynn-Johnson Co. PAINT—Pittsburgh Plate Glass Co. ELECTRICAL INSTALLATION: Fixtures—Fullerton Mfg. Corp., Gruber Bros., Kliegl Bros., Reliance Art Metal and General Luminescent Co. Switches—General Electric Co. Floor ducts—Walker Bros. Switch-gear refrigerator power—I.T.E. Circuit Co. Main power distribution and lighting panels—Westinghouse Electric Corp. Special lenses for lighting fixtures — Corning Glass Works. PLUMBING: Fixtures—American Radiator-Standard Sanitary Corp. Shower heads—Speakman Co. Accessories—Charles Parker Co. KITCHEN EQUIPMENT: Hotel equipment—John Van Range Co. Apartment refrigerators—General Electric Co. HEATING & AIR CONDITIONING — Weathermaster control system, Carrier Corp. Boiler and Burner—Babcock & Wilcox Co. Grilles—Pyle-National Co. Automatic temperature and air conditioning controls—Johnson Service Co. Pipe insulation—Johns-Manville Corp. and Philip Carey Mfg. Co. SPECIAL EQUIPMENT: Pneumatic tube system—Lamson Corp. Fountain equipment—Liquid Carbonic Corp. Sprinkler system—Automatic Sprinkler Corp. of America. Fire protection system—American District Telegraph Co. Fire alarm system—Edwards & Co., Inc. Fire pumps—Chicago Pump Co. Radio, television and sound system—Langevin Corp. and Crosley Corp. Skating rink—American Carbonic Engineering Co. and York Corp. Tube ice machine—Henry Vogt Machine Co. Flake ice machine—York Corp. Recording and clocks—International Business Machines Corp. Mail chutes—Cutler Mail Chute Co. Electrical sign displays—Federal Enterprises, Inc. Check room equipment—Vogel-Peterson Co. Lockers and shelves (steel)—Berger Mfg. Co. Safe door front and jewel safe—Mosler Safe Co.

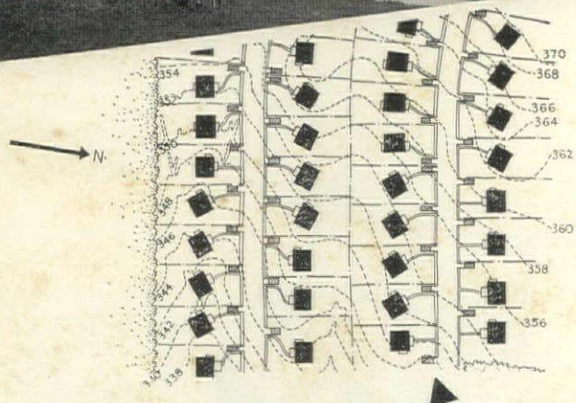
TYLER PARK reaps the bonus of a good site plan: rough land is exploited to give variety to identical houses

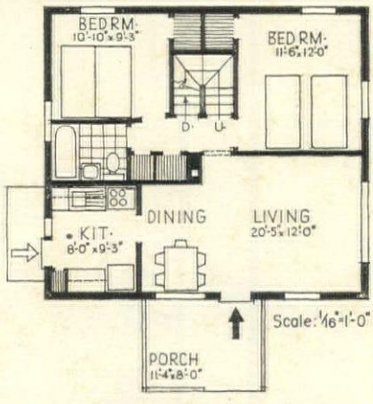
CHURCHILL-FULMER ASSOCIATES, Architects

THE TYLER CORP., Builder

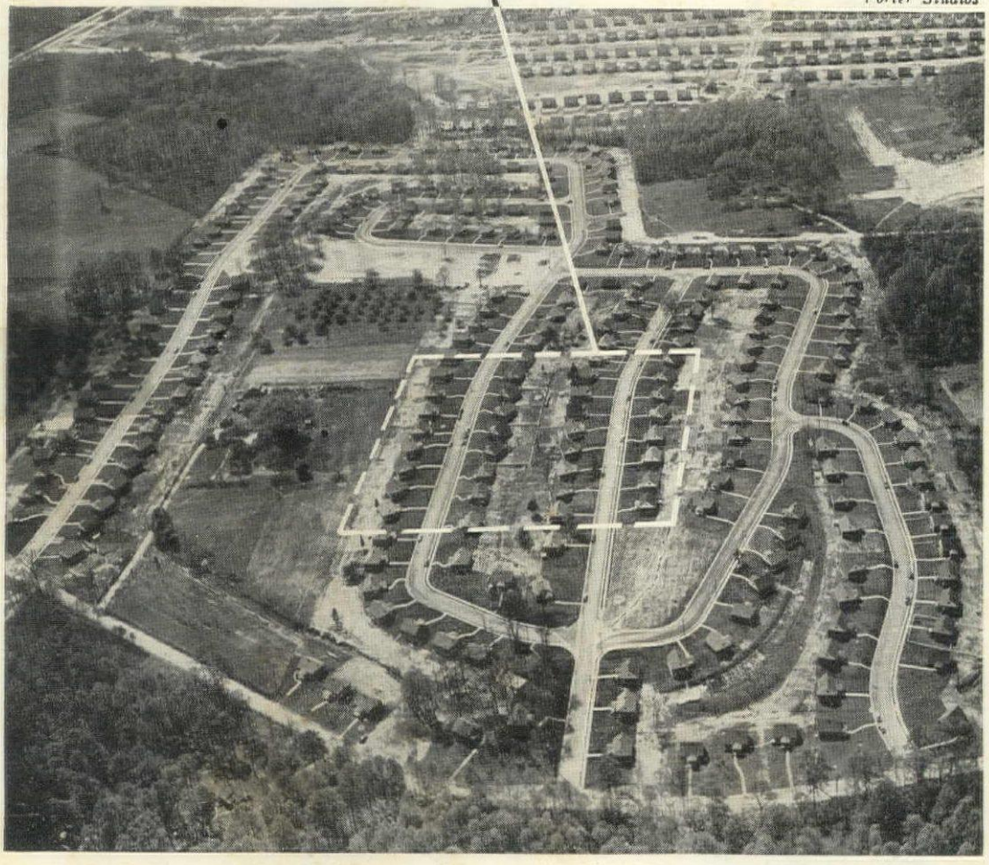
RALPH EBERLIN, Consulting Site Engineer







Porter Studios



The Tyler Corp., which built this 249-house development near Washington, D. C., is an interesting example of the new type of enterprise drawn into the housebuilding field by the boom postwar market. Corporation president Leon Horowitz is a civil engineer with 20 years of experience in heavy construction and a onetime New York City staffer under Robert Moses. During the war, Horowitz met engineer Harry Gaber, now corporation secretary-treasurer, and the two decided to go into the housebuilding business. After the war they toured the country and settled on the Washington area as most promising. Then they picked up a 64-acre tract near Falls Church, Va., whose high rough knolls might have discouraged entrepreneurs less aware of the possibilities of professional site-planning. With an impressive amount of construction, selling and financing know-how already represented in their firm, the partners decided that top-drawer planning talent was the element needed to make their first venture into housebuilding click. Accordingly, their first step was to call in Churchill-Fulmer and give them the job from the raw land up.

Churchill-Fulmer, after a good many miles of hiking through winter snow, developed a site plan which not only utilized every square yard of a tract with elevation ranging from 310 to 390 ft. but actually exploited this rough terrain as a means of giving necessary variety to this identical-house project. Only other antimonotony devices were precise study of relationship of houses and variation of the porch; not a single false dormer or shutter is to be seen.

How well the Tyler Corp.'s investment in comprehensive planning paid off can perhaps be gauged from the fact that within 15 months after the ground was broken all houses were sold under VA loans at prices ranging from $9,550 to $9,880. Houses have full cellars, with gas-fired forced air heating systems. Kitchens are equipped with electric ranges. The efficient plan, identical for all houses, saves space with a turn-about stairway (the unfinished attic can be converted into two bedrooms). "We sweat blood getting the first few stairways laid out," said Kline Fulmer, "but after these patterns were cut, the carpenters put the rest together smoothly." Four acres of the plot have been set aside for park space, and the firm plans to build a shopping center.

TYLER GARDENS takes out turnover insurance by giving each apartment dweller his own private yard a

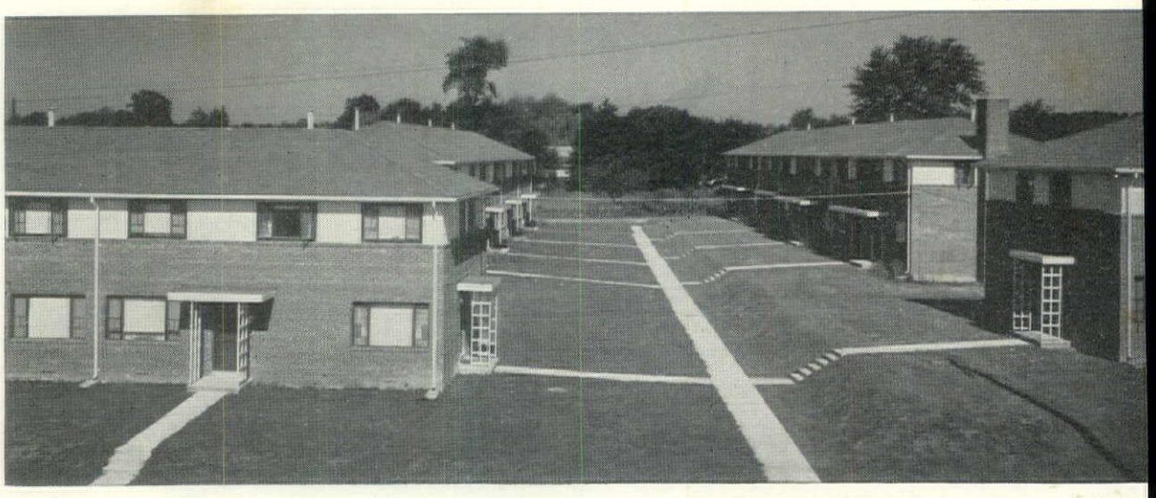
Robert C. Lautman

CHURCHILL-FULMER ASSOCIATES, Architects

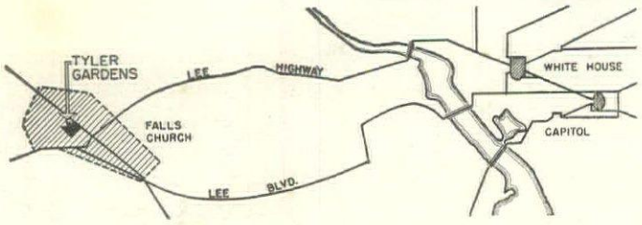
THE TYLER CORP., Builder

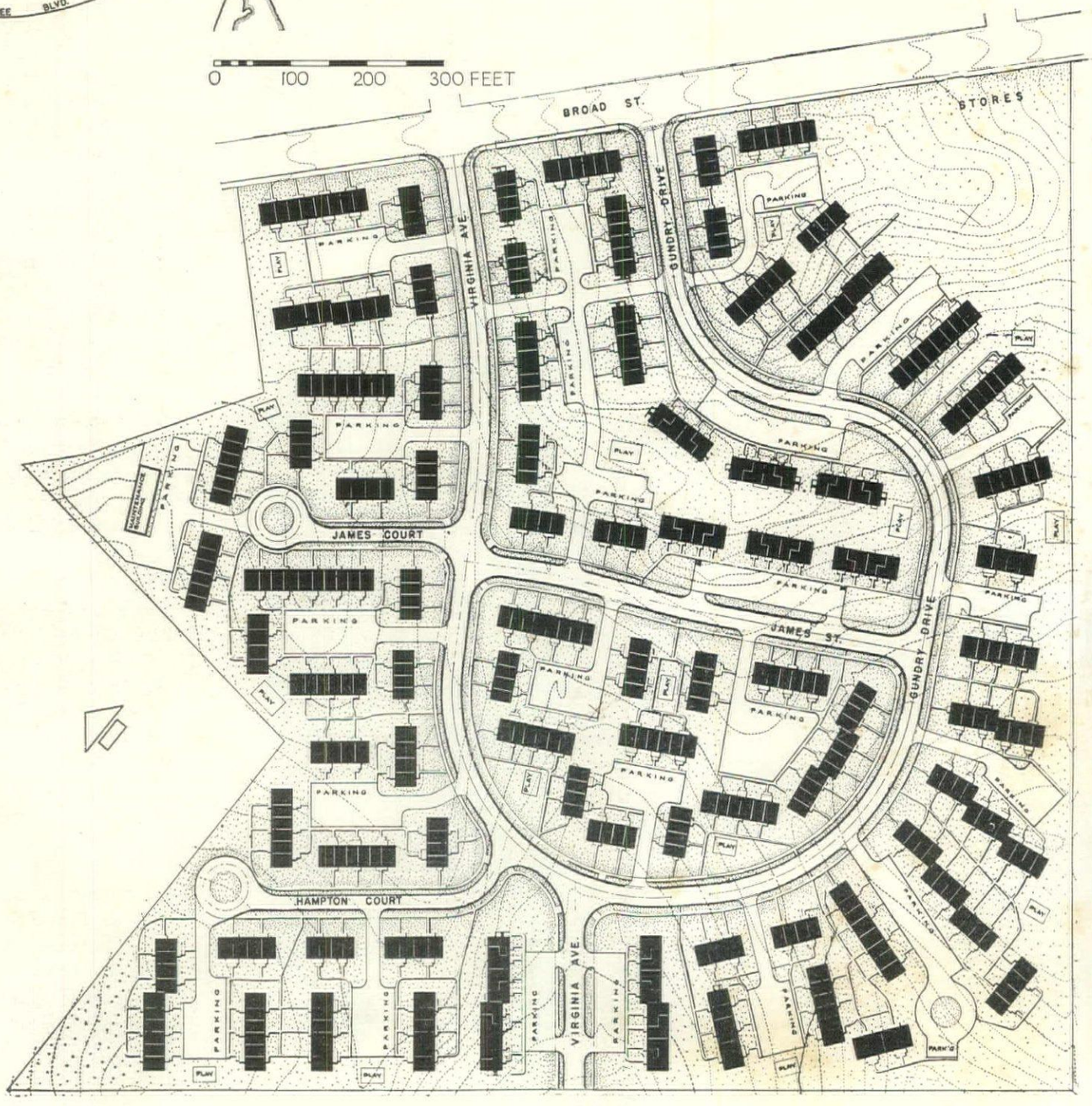
RALPH EBERLIN, Consulting Site Engineer

WILLIAM KREITNER, Consulting Heating Engineer



FOOTPATH IS APPROACH TO APARTMENT FRONT DOORS; BACK PORCHES ADJOIN PARKING COURTS





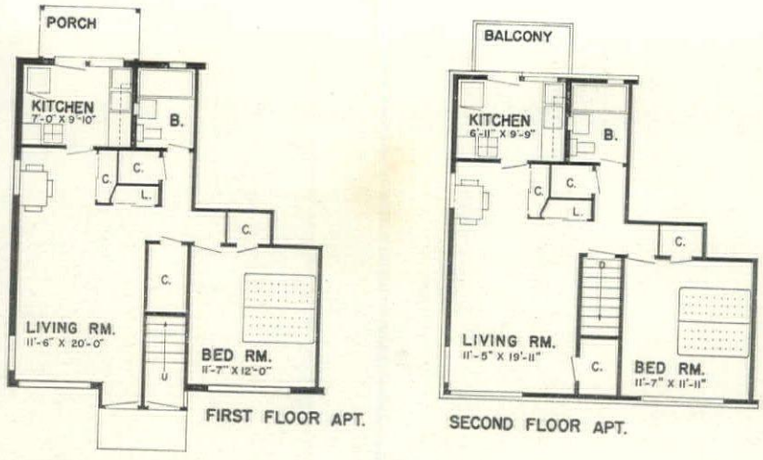
th utility room and locker for storage

After their successful initial venture with the house-for-sale, the Tyler Corp. launched a 478-unit rental project under FHA's 608, in Falls Church, Va. This handsome group of two-story buildings has the low density of 14.5 families per acre. Apartments range from 6 and 4½ room units (two-story attached houses) to 3½ room units (one apartment on first floor, one on the second).

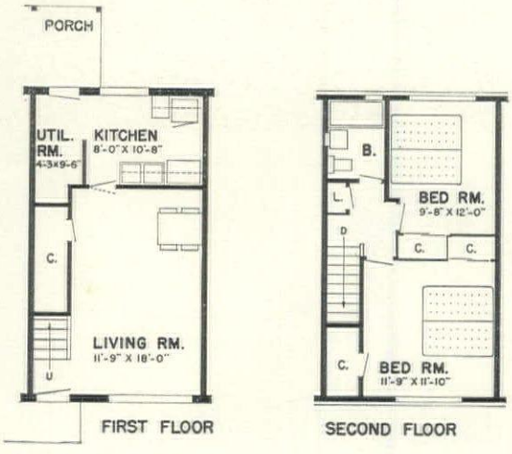
Churchill-Fulmer Associates, who apparently are beginning a long and mutually profitable association with the Tyler Corp., brought to this job the wealth of their Greenbelt experience. They started by analyzing the reasons why apartment dwellers move (while turnover is not a factor in the current tight situation, every apartment owner knows its long-term weight). Churchill-Fulmer came up with these two main reasons: 1) desire of families with young children for their own yard space; 2) lack of storage space. Adequate provision of both these, therefore, became main planning objectives. Every tenant, except occupants of the upstairs 3½ room unit, has his own private yard space, in addition to the community playground. (Since tenants will take care of their own yards, this also cuts maintenance cost.) In the 4½ and 6 room units, the architects have made, in addition to a large living room and dining alcove, space for a commodious utility room. Six community locker rooms are also provided.

Construction cost, including architect's fee but not land, landscaping and furnishings, was $3,321,000. The Prudential Life Insurance Co. made the $3,845,000 FHA-insured mortgage loan. Rents range from $65 for the 3½ room unit to $93 for the 6 room unit.

CONSTRUCTION OUTLINE: Foundation—concrete block. STRUCTURE: Exterior walls—8 in. masonry, 4 in. brick and 4 in. concrete block, asbestos siding, Ruberoid Co.; inside—studs, wood furring, Rocklath and plaster, U. S. Gypsum Co. Structural steel—Bethlehem Steel Co. Floors—oak. ROOFING—asbestos shingles, Ruberoid Co. SHEET METAL WORK—galvanized iron. INSULATION: Walls and roofs—mineral wool, U. S. Gypsum Co. WINDOWS: Sash—steel casement, J. S. Thorn Co. Glass—double strength quality B, Libbey-Owens-Ford Glass Co. STAIRS—oak treads, pine visers, wood strings. FINISH FLOORINGS: Utility rooms—asphalt tile, The Tiletex Co., Inc. Kitchens—linoleum. HARDWARE: Exterior—Schlage Lock Co. Interior—National Brass Co. PAINTS—Texolite, U. S. Gypsum Co. ELECTRICAL FIXTURES—Lightolier Co. PLUMBING: Hot and cold water pipes—copper. KITCHEN EQUIPMENT: Range—gas, Welbilt Stove Co. Refrigerator—electric, General Electric Co. Cabinets—Mullens Mfg. Corp. HEATING—copper coil, Chase Brass & Copper Co., radiant ceiling system. Boiler—York-Shipley, Inc. Thermostats—Minneapolis-Honeywell Regulator Co. Pumps—Bell & Gossett. Water heaters—Rheem Mfg. Co.

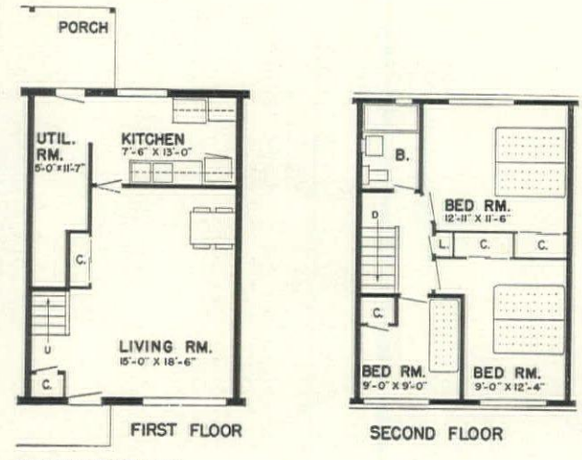


3½ ROOM APARTMENT

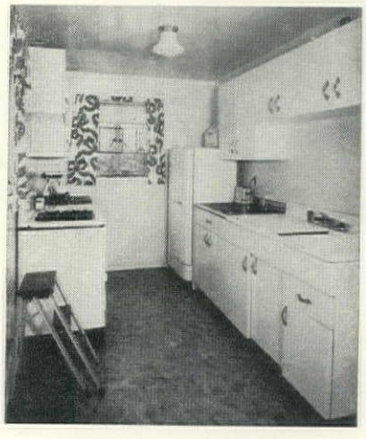


4½ ROOM DUPLEX

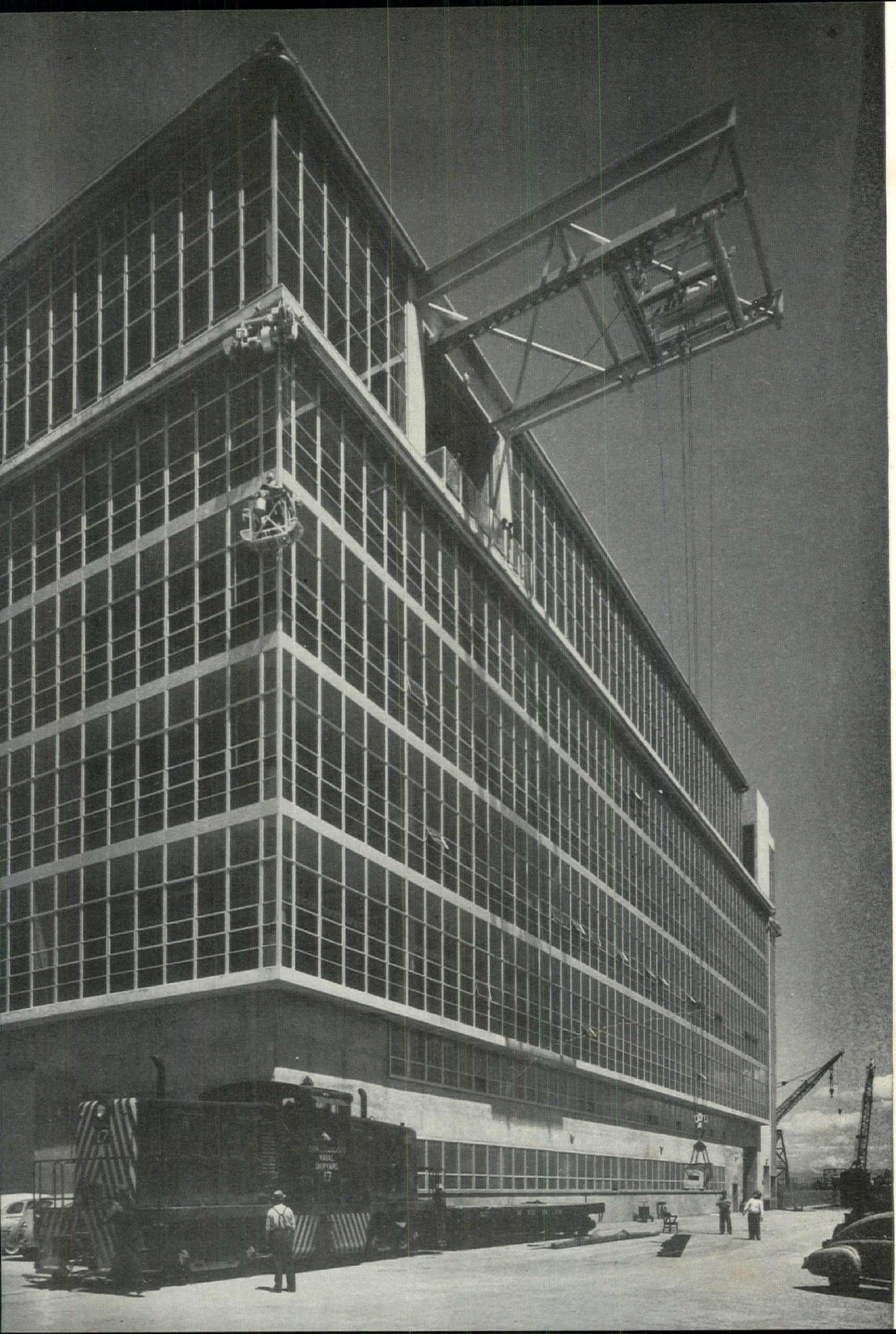
DINING AREA ADJOINS KITCHEN



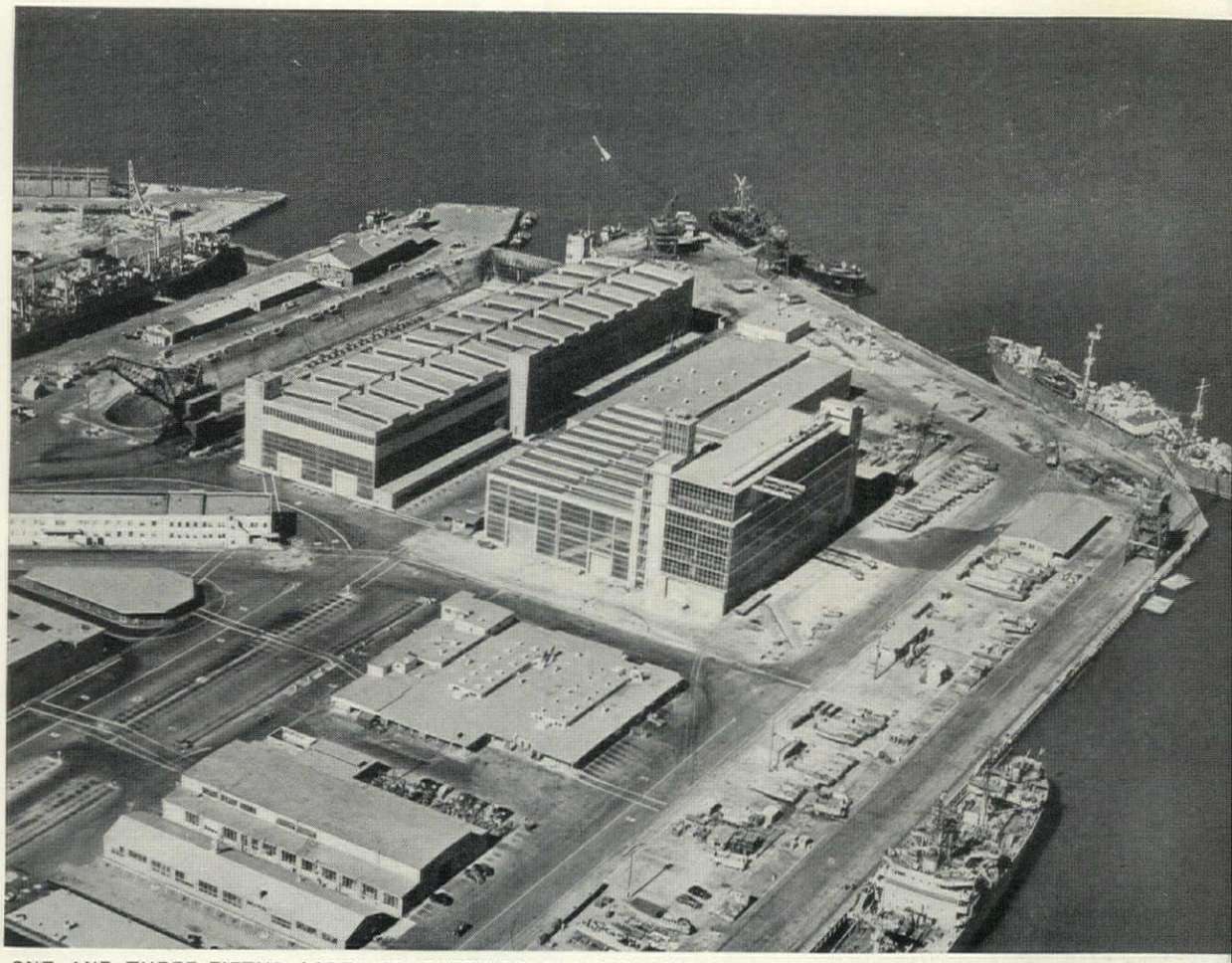
6 ROOM DUPLEX



BRICK-VENEER CONSTRUCTION STANDARD IN AREA IS ENLIVENED BY ASBESTOS SIDING



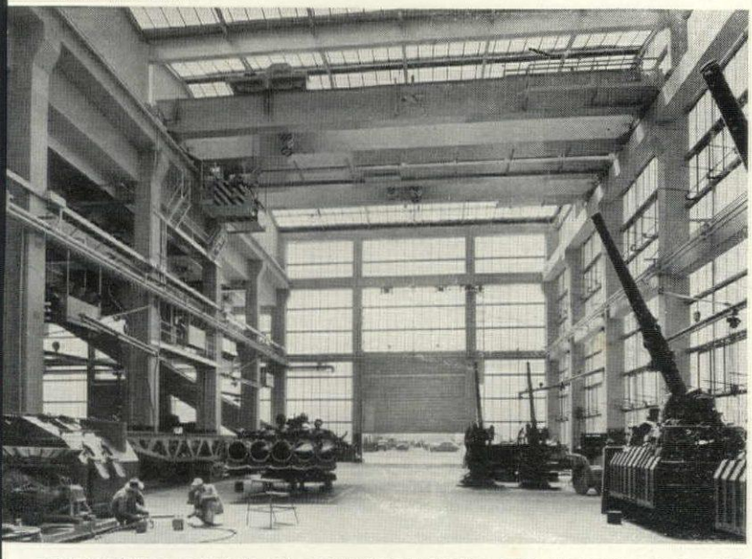
ORDNANCE AND OPTICAL SHOP for U. S. Navy at San Francisco features striking use of corrugated heat absorbing glass, is built on 110 ft. concrete and wood piles



ONE AND THREE-FIFTHS ACRES OF EXTERIOR GLASS ENCOMPASS NAVY ORDNANCE AND OPTICAL SHOP

KUMP & FALK, Architects-Engineers
PETER KIEWET SONS' CO., INC., General Contractors
GUY F. ATKINSON CO., General Contractors, Foundation Work
RAYMOND CONCRETE PILE CO., Pile Driving

Roger Sturtevant



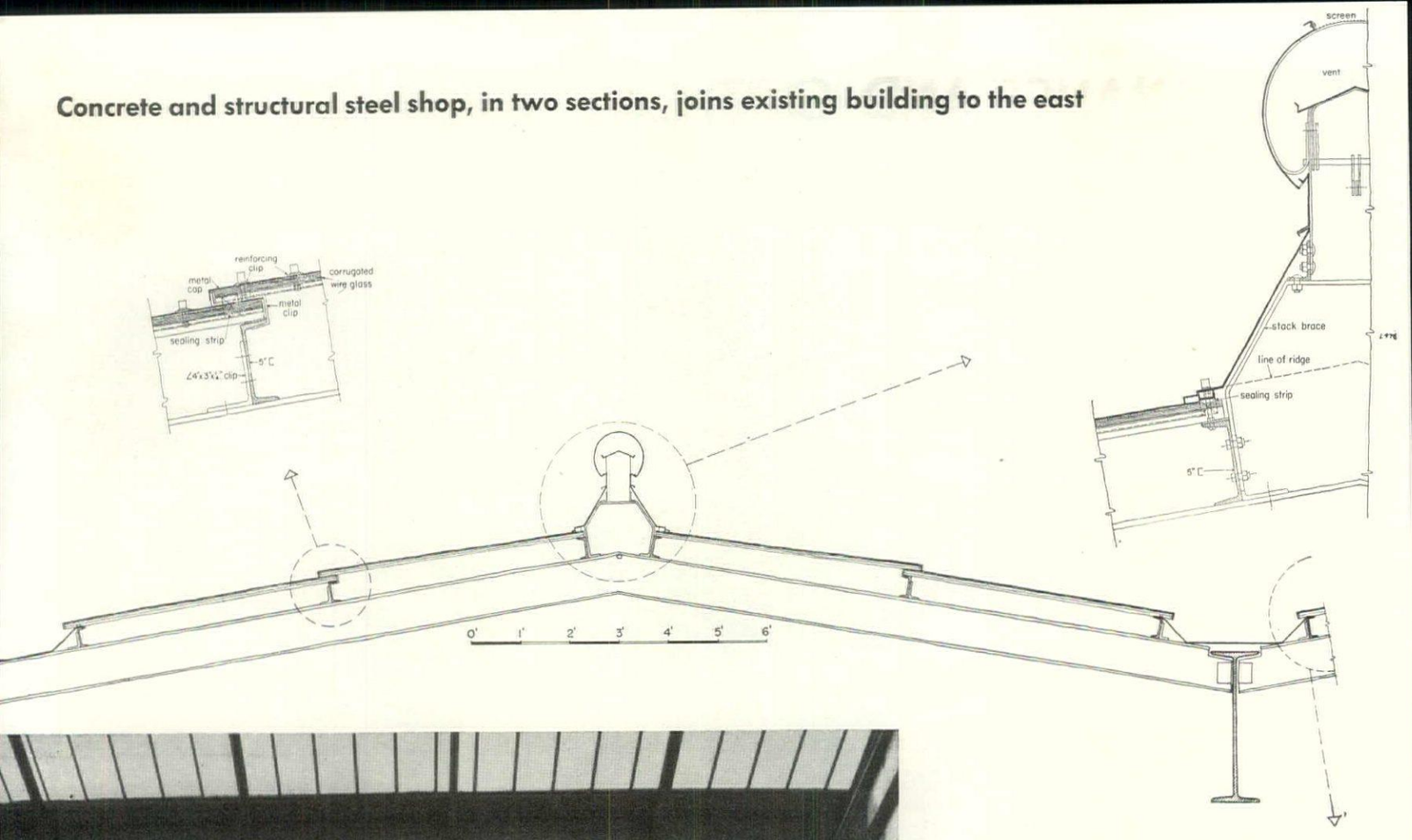
BRIGHTNESS RATIOS IN ORDNANCE LOFT ARE NEARLY PERFECT

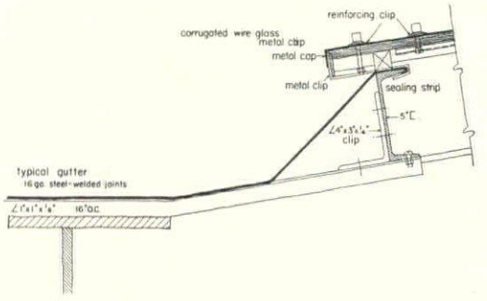
OUTRIGGER CRANE used to lift equipment from flatcar to sixth floor optical shop for calibration, repair. The 15-ton underslung crane inside building has interlocking rail connection with outrigger, runs 200 ft. length of building.

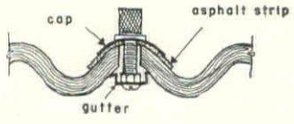
Such specialized tasks as periscope and range-finder calibration, gyro-roto balancing, sonar and radar work, dictated the unusual design of this $2½ million Navy Ordnance and Optical Shop at the San Francisco Naval Shipyard. Heavy ordnance and other equipment must be moved about easily so each floor is equipped with cranes, lifts, hoists or monorails for that purpose. Most interesting feature is the periscope tower on the roof. Submarine periscopes and range finders are lifted from flatcars on the south side railway siding to the sixth floor where repairs and calibrations are made. Then equipment is moved to the tower for sighting distant objects and for checking the accuracy of the setting of parts.

The building is divided into two sections. On the north is a shop crane unit which is 151 x 227 ft. divided into two 75 ft. bays. The northerly bay rises 67 ft. unobstructed to the corrugated wire glass roof while the southerly bay rises 42 ft. to the bottom of the third floor extension of the multi-storied side. The latter measures 89 x 250 ft., is six stories in height. The first floor has six ordnance test pits and the largest cranes. Two of the 74 cranes are 30-ton, cab-controlled bridge cranes which can be operated in tandem through the use of an equalizing beam to provide a 60-ton total capacity lift.

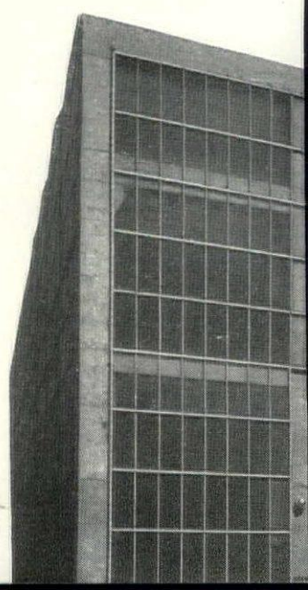
Concrete and structural steel shop, in two sections, joins existing building to the east

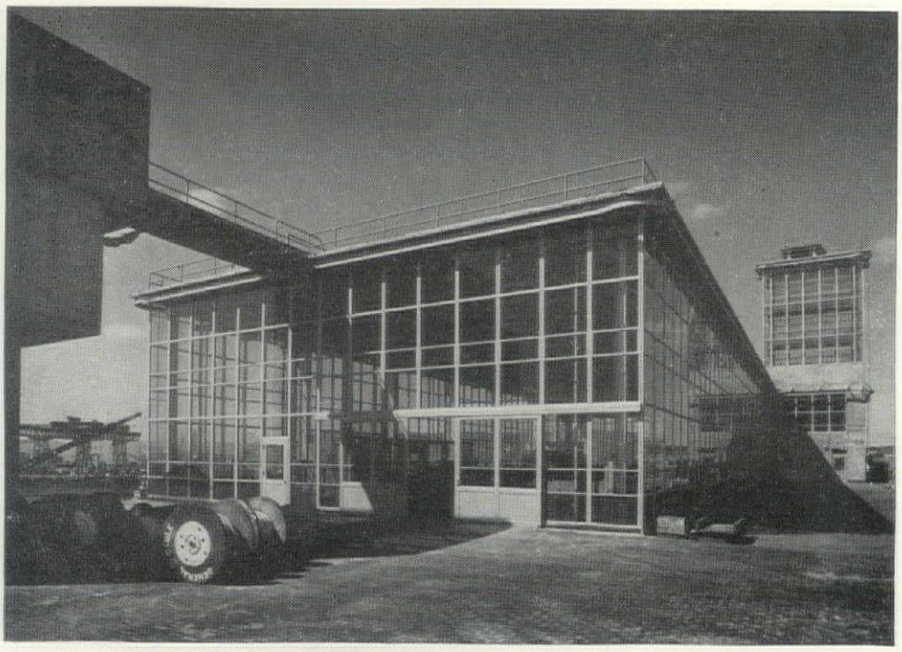






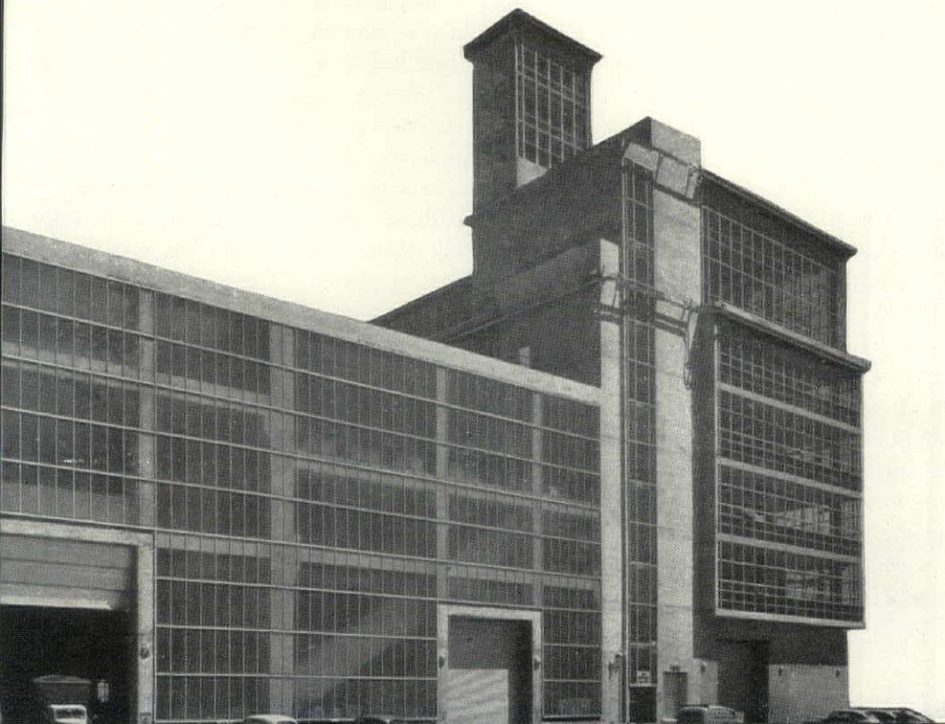
GLASS JOINT
(enlarged)





OPTICAL SHOP IS ON THE SIXTH FLOOR. PERISCOPE TOWER RISES ABOVE, RIGHT

PERISCOPES AND RANGE FINDERS ARE CALIBRATED, REPAIRED IN OPTICAL SHOP



Planning for marked flexibility presaged unusual solutions to technical problems.

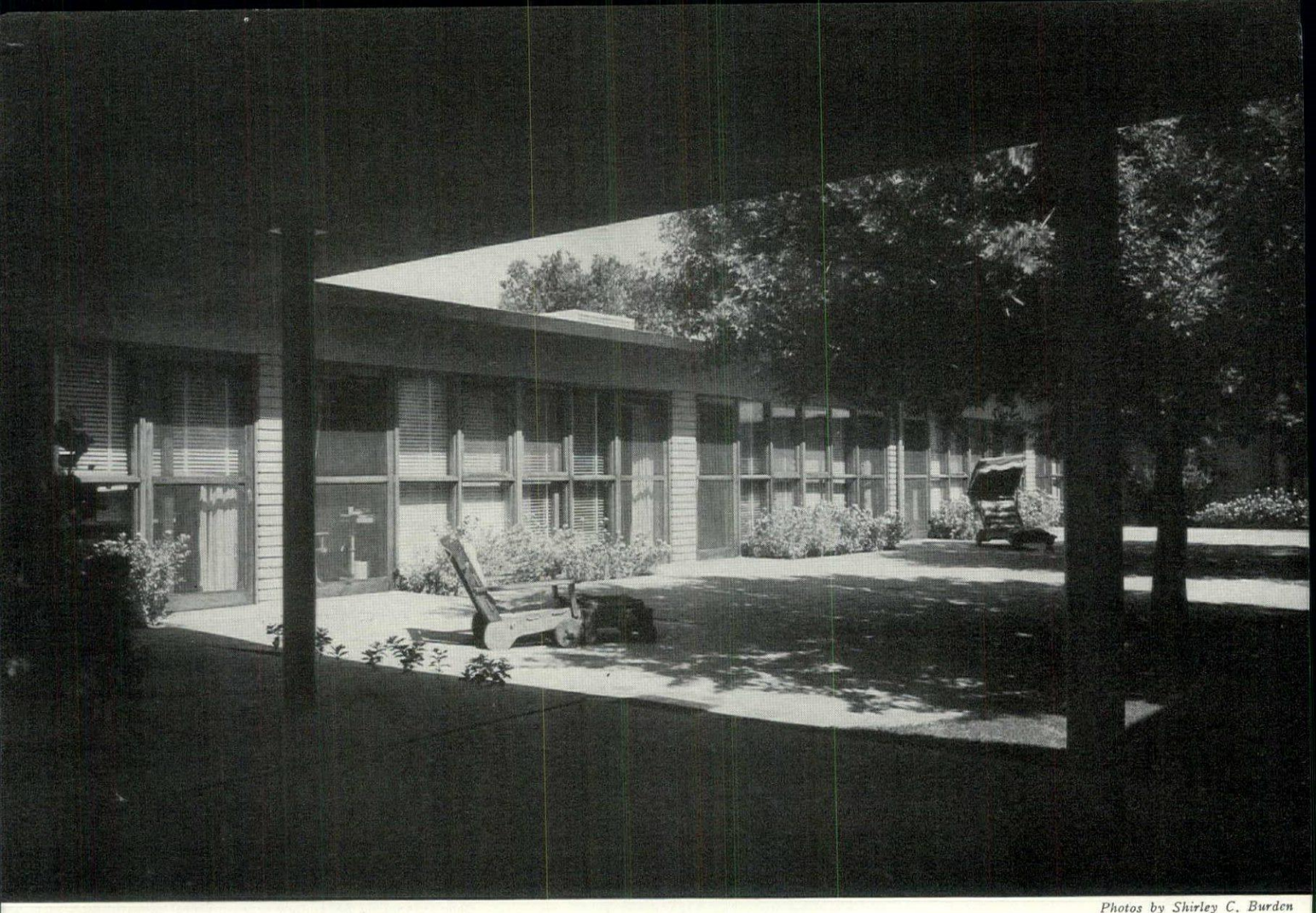
FOUNDATIONS: Cut-off lengths of the 1,830 piles that form the foundation vary from 103 ft. to 111 ft. Therefore the building goes below ground level a distance equal to its height. Pilings in the shop crane bay are on 8 ft. centers. At strategic points such as pillar locations, elevator shafts, etc. pilings are centered every 3 ft. and, in special cases, closer.

HEATING AND VENTILATING: On all floors except the main floor, heat is supplied from air ducts stemming from unit heaters. Main floor has a row of large three-vent heaters overhead down the middle of the shop crane bay. These are suspended from the concrete construction supporting the bridge cranes. Two series of corrugated glass installations on the shop crane bay form movable ventilators which are motor controlled to provide ventilation. Fresh air intakes and exhaust vents are located on the roof. On all floors on the south and west sides, one continuous panel of steel sash is movable. Special exhaust systems were required in the main shop to remove volatile vapor laden air. This is accomplished by a blower with a suction capacity of 2,800 cu. ft. per minute. Painting and cleaning rooms on the second, third, fourth and fifth floors have separate exhausting systems as do toilets, locker rooms.

CONCRETE WORK: Tapering columns, beginning on the main floor with a diameter of 38 in. and stopping at the fifth floor with a diameter of 25 in., are centered every 25 ft. along the length of the building and every 29 ft. across the width of the building. Columns have a strength of 3,750 lbs. per sq. in. Floor slabs are 10 in. and 15 in. thick.

ELECTRICAL WORK: Heart of the power system is a unit substation on a cantilever ledge of the third floor extension. Secondary transformers for both lighting and power are located on the various floors. The Navy requires great flexibility in the electrical system because of the possibilities of new machines requiring connections almost anywhere on the floor area. There are two wiring systems in general use throughout the multi-storied section. One is a complete system of interconnected duct runs, each containing three bus bars with current take-off devices. This system is suspended a few feet from the ceiling and feeds the equipment on the floor above. The second system consists of ducts and conduits encased in the masonry floor slabs. Ducts have not less than five pre-set outlets for every 10 ft. of duct length. Ready means for connecting to the underfloor system is provided by 4 in. diameter metal "cans" at approximately 5 ft. intervals in each direction throughout supported floor areas. Since the cans were tacked to the forms, they may be located readily from the floor below.

CONSTRUCTION OUTLINE: FOUNDATIONS—wood pilings with 8 ft. thick concrete cap; steel form for concrete section spliced to the wooden section and the concrete poured in place. STRUCTURAL STEEL—Bethlehem Steel Co. WINDOWS: Sash—steel, Michel & Pfeffer Iron Works, Inc. Glass—plate, Pittsburgh Plate Glass Co. Corrugated glass—Mississippi Glass Co. STAIRS AND ELEVATORS: Moving stair—Westinghouse Electric Corp. Freight elevators—Atlas Elevator Co. FINISH FLOORINGS—wood block and asphalt tile, The Brookman Co. and National Gypsum Co. DOORS: Exterior—steel rolling, Kinnear Mfg. Co. HARDWARE—Schlage Lock Co., C. Hager & Sons Hinge Mfg. Co. and Sargent & Co. Cranes—Judson Murphy Pacific and Spencer & Morris. Sprinkler—Viking Automatic Sprinkler Co. PAINTS—W. P. Fuller & Co. ELECTRICAL TRANSFORMERS—General Electric Co. HEATING: Heaters and blowers—Buffalo Forge Co. Exhaust fans—Bishop & Babcock.



Photos by Shirley C. Burden

Motion Picture HOME AND HOSPITAL – a growing colony for the assistance of indigent and aged members of the film industry adds new medical facilities

W. L. PEREIRA, Architect
FRANK GRUYS, Associate

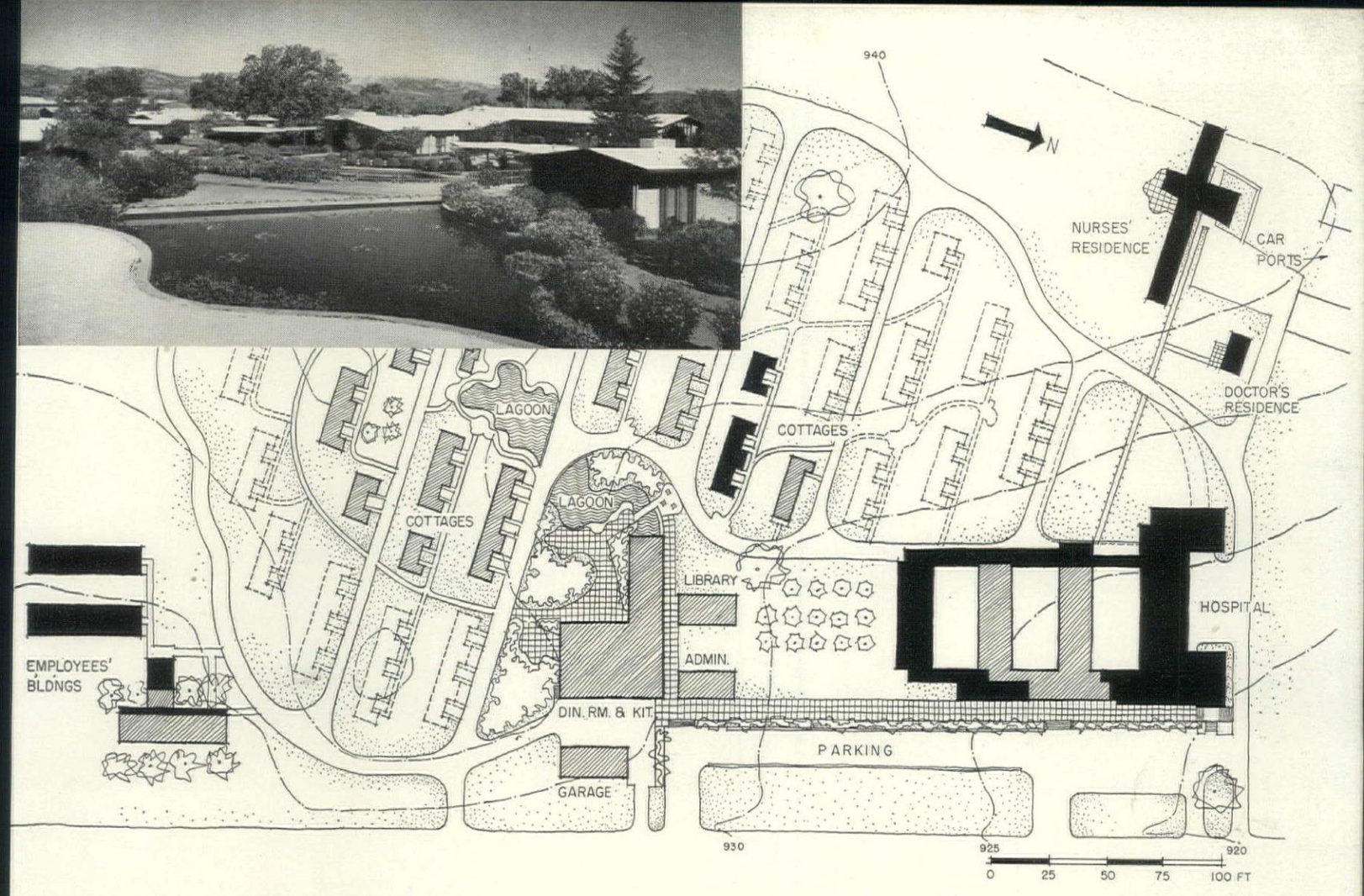
JOSHUA H. MARKS CO., General Contractor
HILLMAN & NOWELL, Structural Engineers

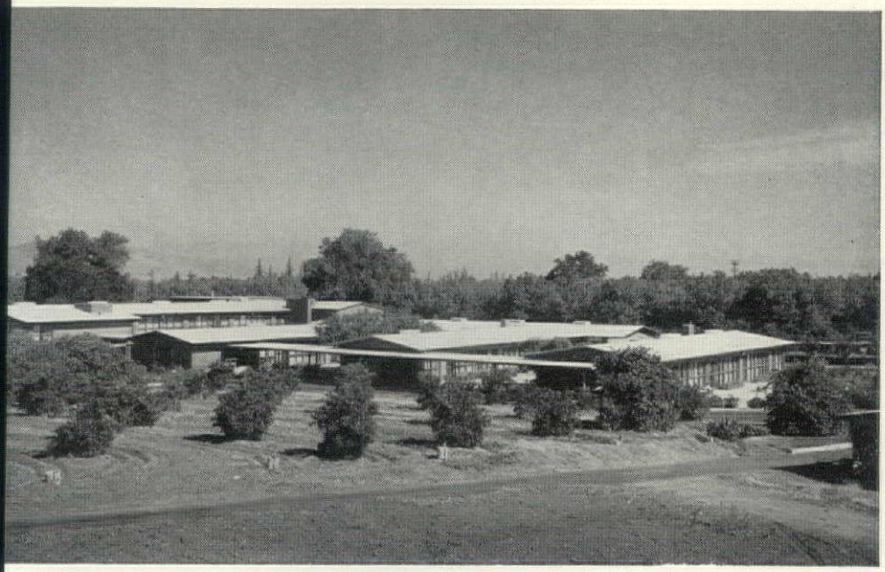
In Hollywood, story endings are always supposed to be happy. The Motion Picture Relief Fund is an offscreen projection of that notion, and the Fund's country house and country hospital pictured here are tangible evidence of the Fund's success. The Fund is a family welfare organization organized to provide food, shelter, clothing and medical attention for indigent members of the motion picture industry. Its ripe old age, 25 years, has inspired some of the more sincere tributes to its often impetuous parent, the motion picture industry, wise enough to establish such a welfare instrument away back in the dumb and cliff-hanging days of the movies.

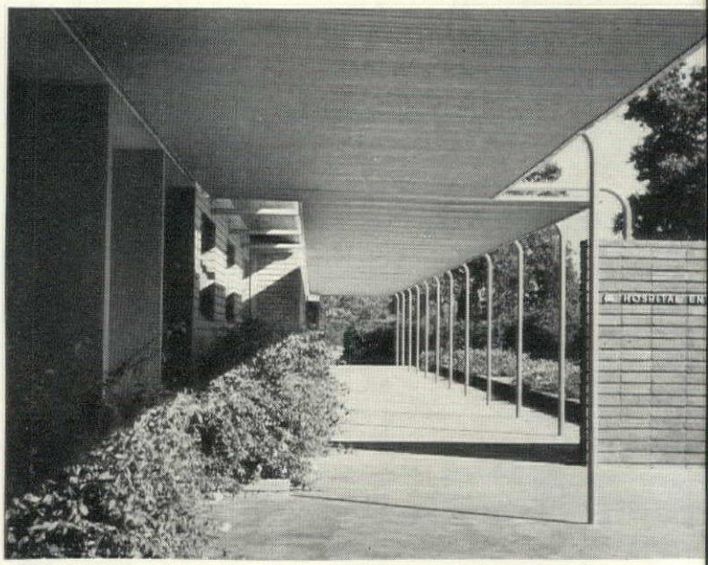
The new hospital at the Fund's country home is a major move toward completion of the unique dwelling and medical care group in Woodland Hills' whose building program was well under way before the war. (FORUM November 1942.) At that time the service buildings, community buildings, a good number of the planned cottage living units, and a convalescent building had been completed. Outstanding in the scheme was the thoughtful treatment of the problem of group housing for the veteran screen actors and technicians who would dwell there in their late years. The new addition has now skillfully expanded the original convalescent building into a small hospital with complete surgical and dental facilities, and a pleasant nurses' residence, and has brought the major structures of the building group near completion. Still more cottages are planned, as indicated on the drawing on opposite page. The whole colony occupies 41 acres well planted with walnut and citrus trees.

Master of the building development of the motion picture colony has been Bill Pereira, a movie man of no mean stature himself (FORUM September 1946) who has long been active in the Motion Picture Building Fund. And when it came to the hospital planning, Pereira's office had ample experience to offer, with a good standing as West Coast hospital specialists. The hospital is clear cut and its horizontal planning with intervening courtyards serves several purposes. A completely standardized room plan could be used, since almost all the bedrooms view south, with pleasant big windows on courts, which also help preserve privacy. The winging out of the building gave opportunity to key the hospital into the general character of the development, the court landscaping helping to soften the institutional aspect of this largest building unit.

Financing of both the country home and the hospital has come mainly from a high priced weekly benefit radio program which has been on the air since 1939. Leading screen actors contribute services each week on the winter radio season to bring in fairly fabulous totals from sponsoring companies, all donated to the completion of this solid achievement in welfare.

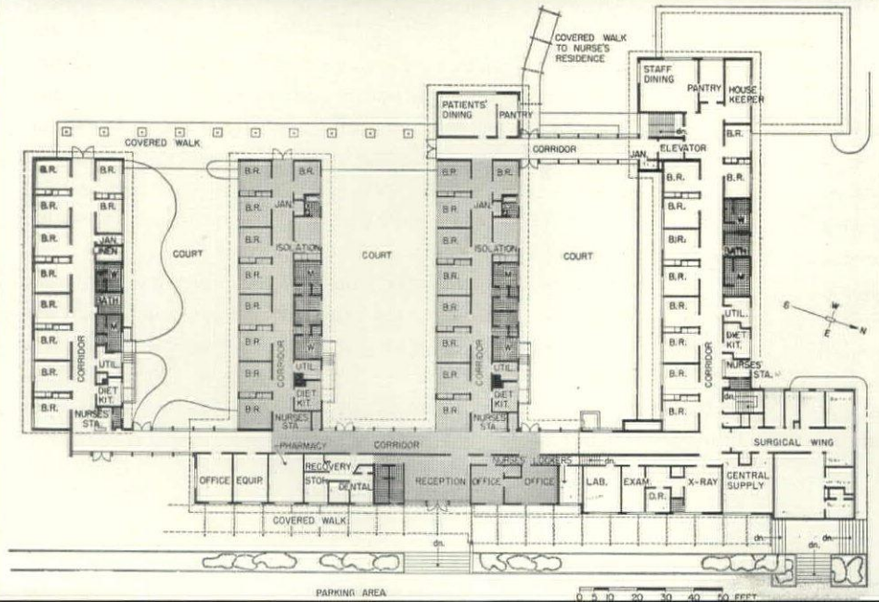


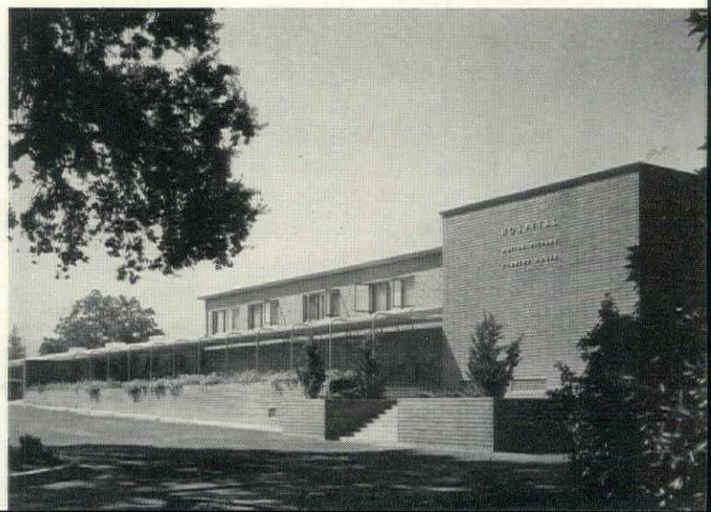


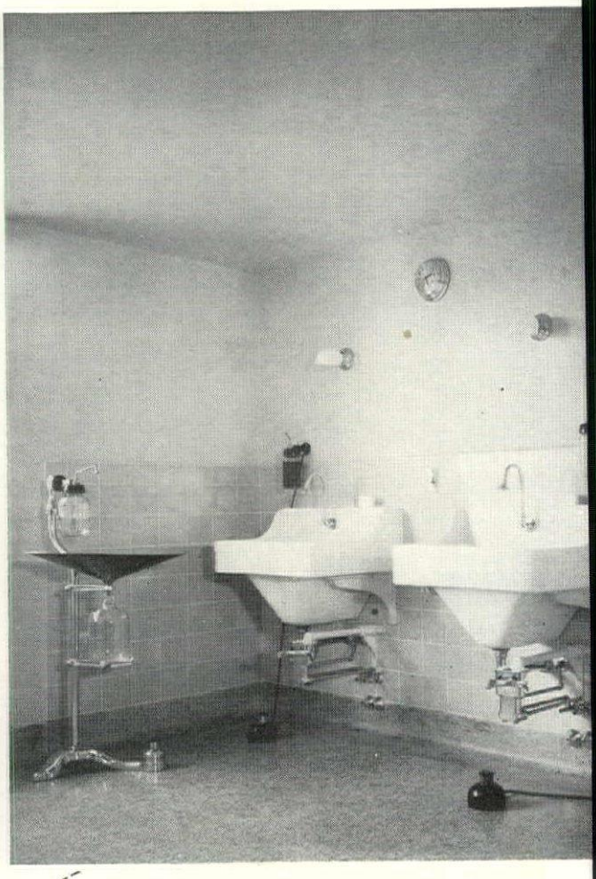


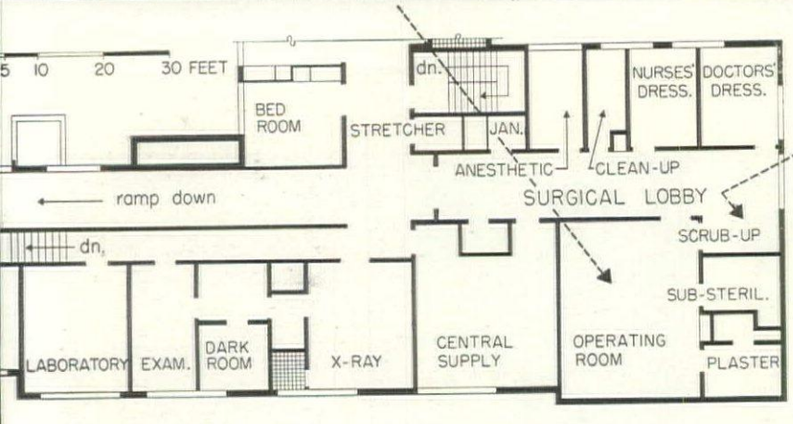
VIEW NORTH ALONG FRONT OF HOSPITAL BUILDING

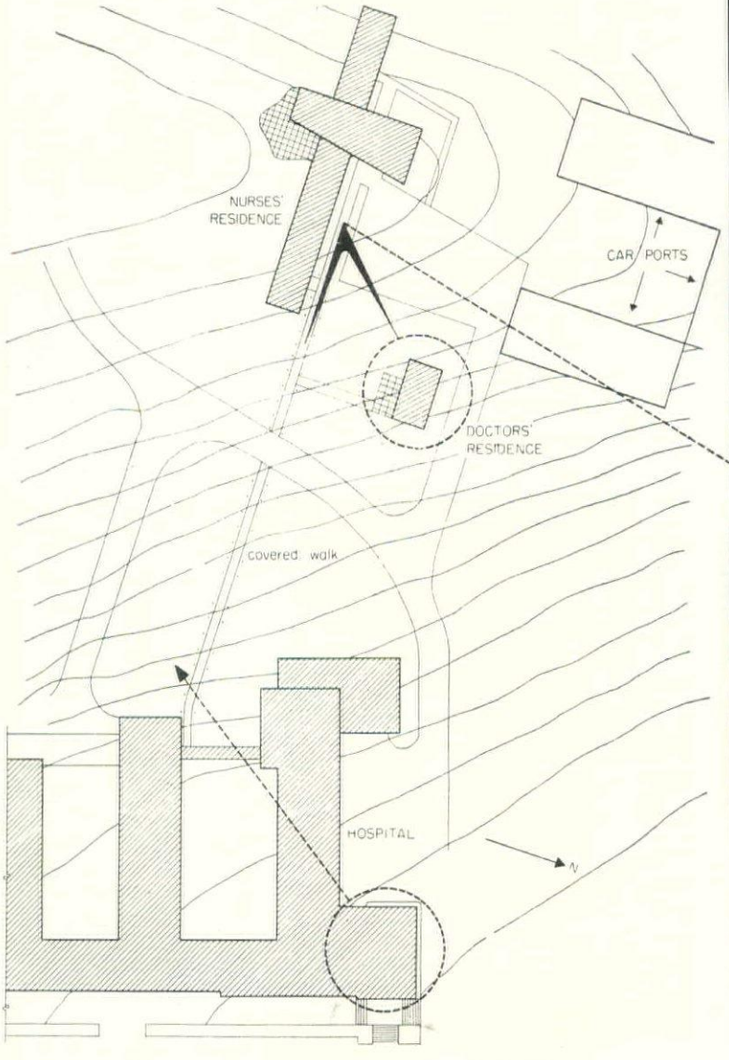
BELOW, FRONT VIEW; ABOVE LEFT, VIEW OF REAR







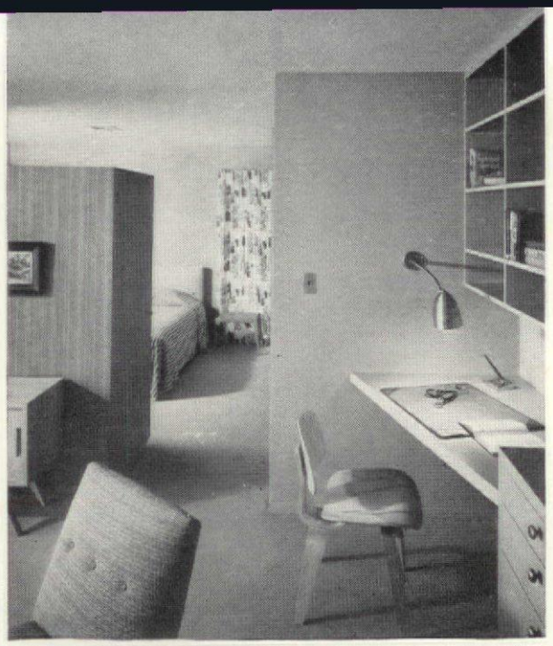


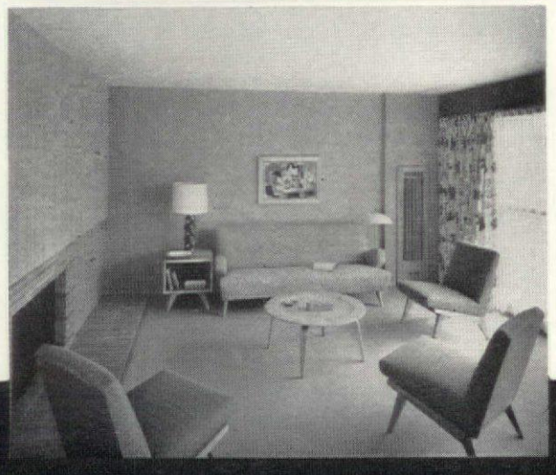


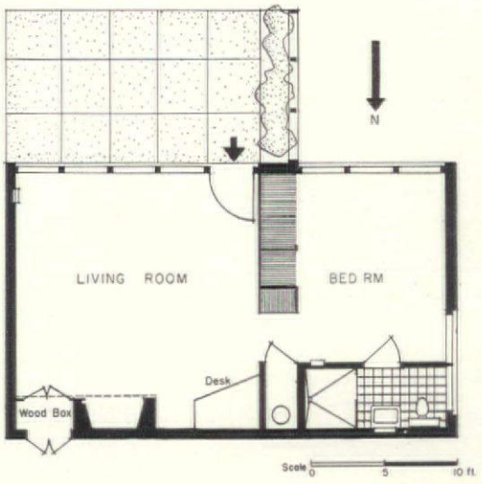
There is nothing expensive about the building of any part of this living park, or its hospital. Construction, examined closely, is simple, almost minimal, with just a few design touches to make the development a happier place at which to stay. Hospital construction is reinforced brick exterior walls, plastered direct inside. Interior partitions are metal lath and plaster on steel studs, with concrete joists and slab floor and roof, topped with composition roofing.

The well equipped surgical lobby jutting from the north corner of the hospital is its main technical branch, and is the essential addition which promoted it from convalescent home to hospital. In its first three months of operation, there were 17 major and 8 minor surgeries performed at the hospital, and 71 patients cared for at a total of 1,749 hospital days—a good indication of how serious was the need for the hospital.

Photographs above are of the operating room, and its *scrubbing up* annex. Sketch to right shows part of old convalascent home, with added new construction in color. Important in the successful operation of the new hospital are the comfortable nurses' quarters, shown further on page 108, and the residence for the presiding physician. Long, slightly pitched overhangs against the California summer sun, with the sharp up-angles formed by their edge gutters, do much to give the whole development its homogenous character, without being conspicuous enough to become monotonous.

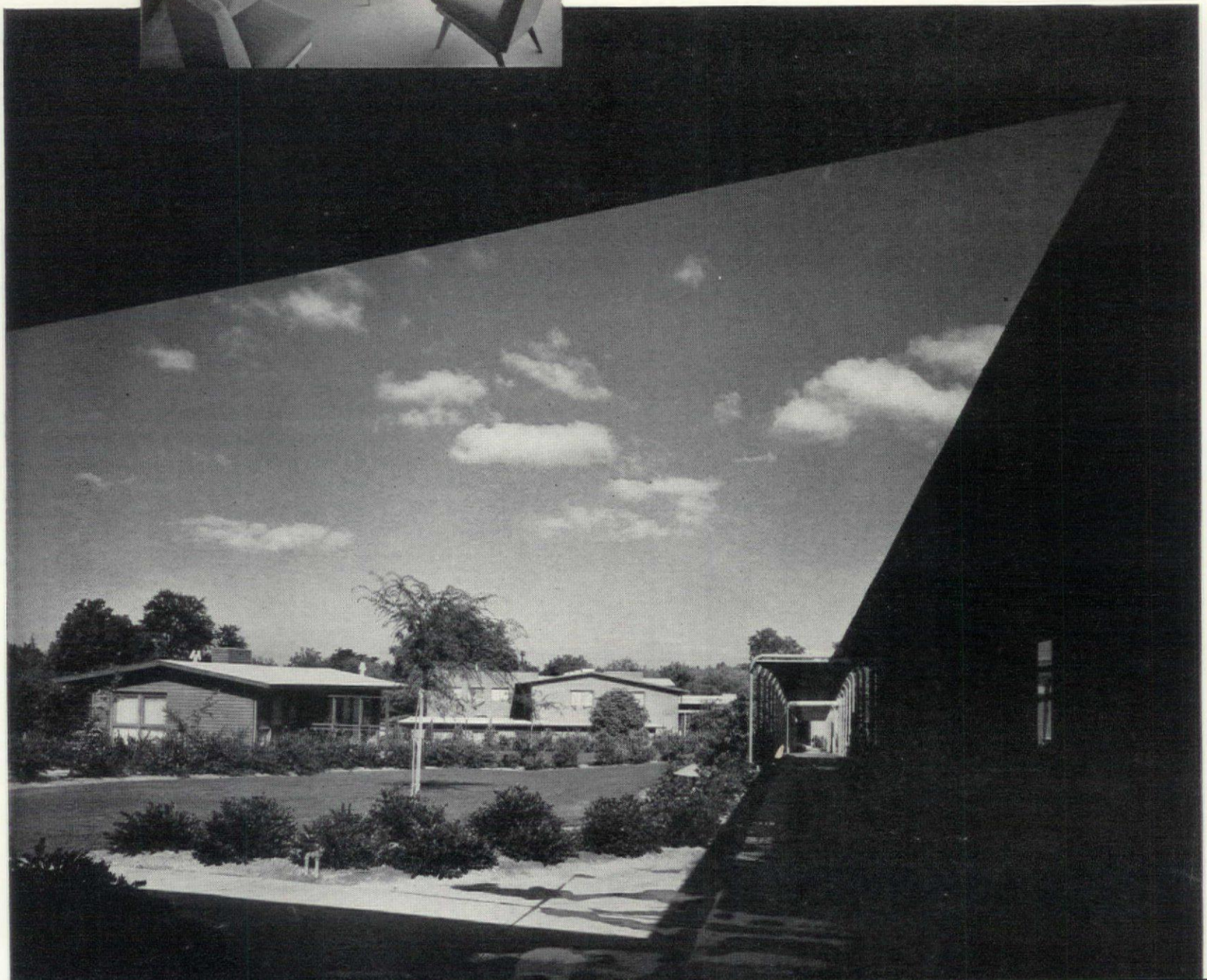


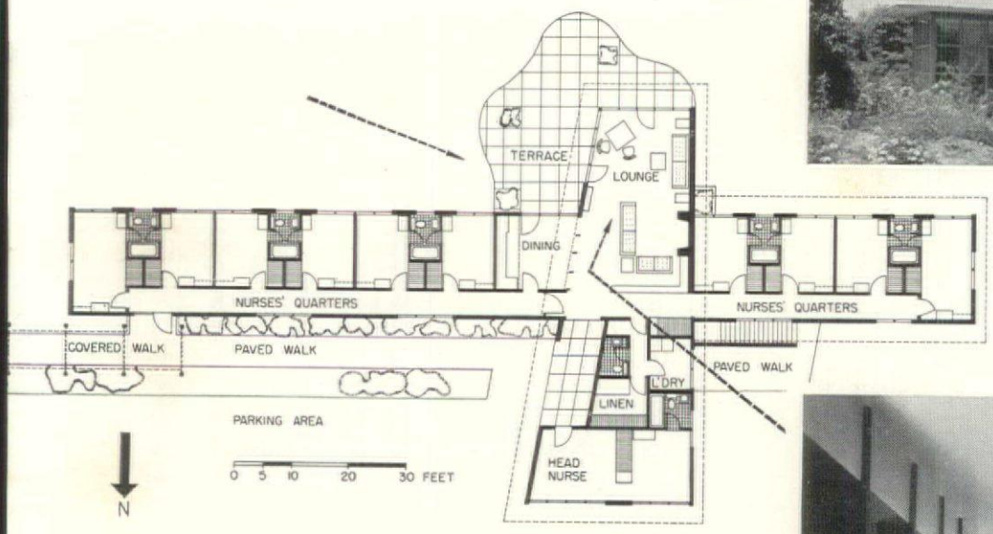




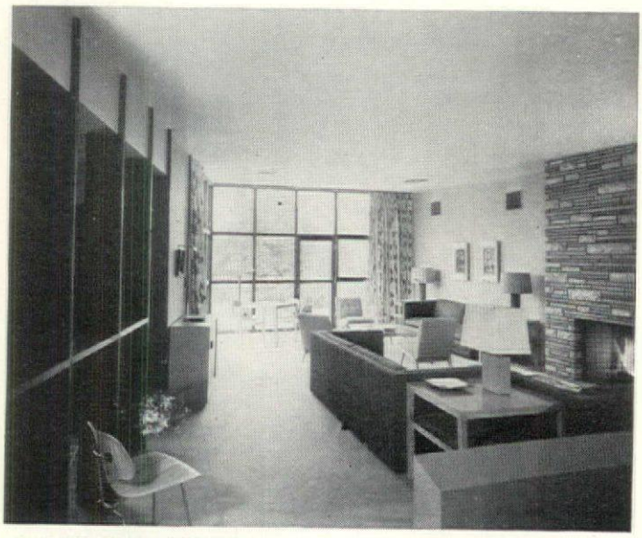
SIMPLE PLANNING OF DOCTOR'S RESIDENCE IS TYPICAL OF ENTIRE JOB. INTERIORS ARE DESIGNED WITH GENEROUSLY GLAZED SOUTH WALLS FOR COMFORT DURING WINTER.

THE DENSE SHADE AND BRIGHT SUN OF CALIFORNIA MAKES DRAMATIC PATTERNS ON THESE QUIET ACRES, AND OPPORTUNITIES FOR EFFECT IN THEIR MANIPULATION HAVE NOT BEEN WASTED.



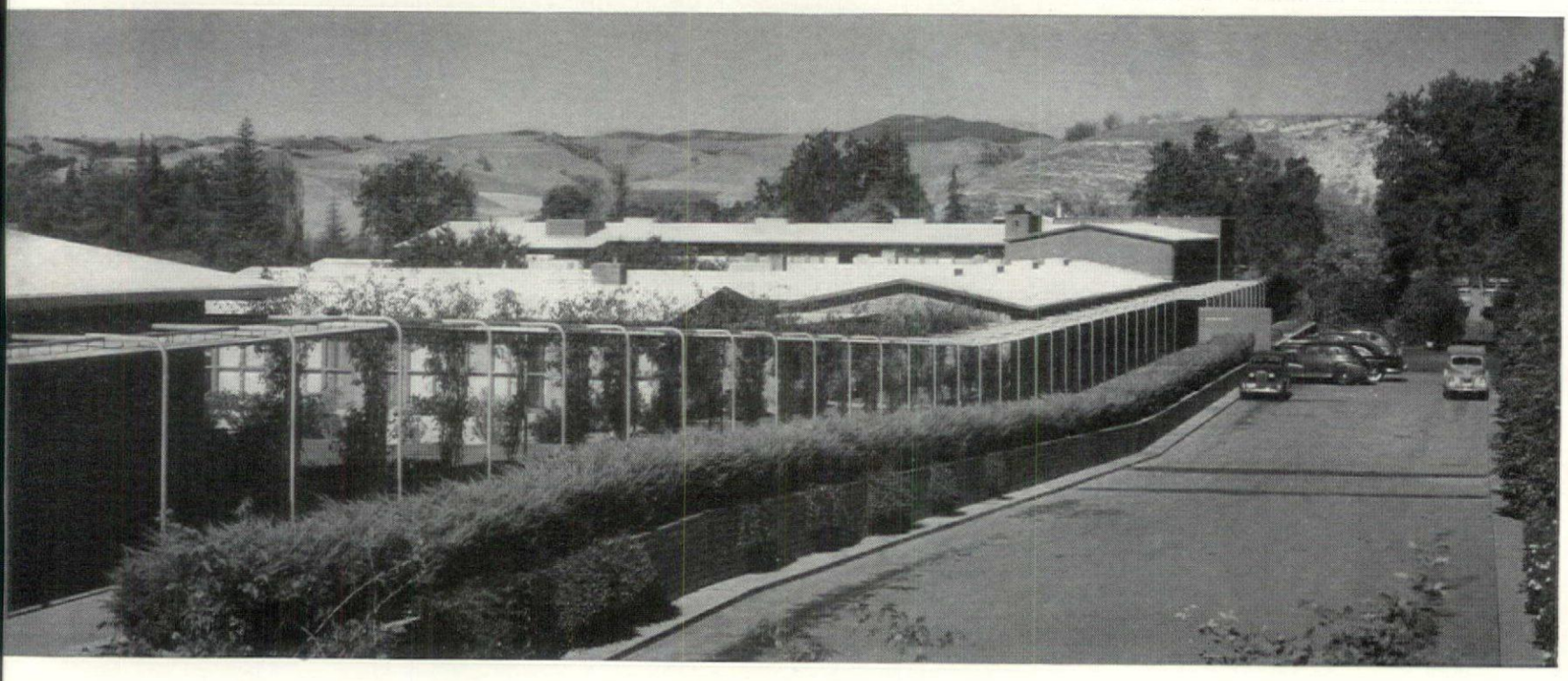


Nurses' quarters are at the end of one of the long sheltered walks which stretch out from the hospital building (similar to the covered walk in the photograph below, from the hospital to the community building). The shelters are built of corrugated metal sheets suspended from frames of 2 in. steel pipe, a handsome as well as inexpensive design. The simple pleasant character of this residence is shown in photographs inside the lounge and from beyond the terrace. Such comfortable living quarters are of vast importance in solving today's problem of staffing hospitals.



BOLD FRAMING PROVIDES ACCENT IN NURSES' LIVING ROOM

MAIN COMMUNITY BUILDING IS UP SLOPE FROM HOSPITAL, CONNECTED BY A LONG COVERED WALK ALONG PRINCIPAL TRAFFIC EXPOSURE



CONSTRUCTION OUTLINE: Foundation—concrete. STRUCTURE: Exterior walls—reinforced brick masonry, plastered inside. Interior—steel studs, metal lath and plaster. Structural steel—Ceco Engineering Co. ROOFING—composition. SHEET METAL WORK: Flashing and gutters—galvanized iron. Ducts—aluminum. WINDOWS: Sash—redwood casement. Glass—double strength quality A. Weatherstripping—Chamberlin Metal Weather Strip Co. Inc. STAIRS AND ELEVATORS: Stairs—steel. Ramps—concrete. Elevator—Elevator Maintenance Corp. FINISH FLOORINGS: Workrooms, operating rooms and toilets—tile, Gladding McBean Co. FURNISHINGS—George Sagar & Sons. TRIM—metal, Aetna Steel Products Corp. INTERIOR DOORS—wood, Roddis Lumber & Veneer Co. HARDWARE—Russell & Erwin Mfg. Co. and L. C. N. Closers, Inc. PAINTS—W. P. Fuller & Co. ELECTRICAL INSTALLATION: Wiring system—rigid conduit. Switches—Square D Co. and Bryant Electric Co. Fixtures—Struckley & Co., Pass & Seymour and Holophane Co. PLUMBING FIXTURES—Crane Co. Laundry equipment—American Laundry Machinery Co. Hot and cold water pipes—copper. KITCHEN EQUIPMENT: Dishwasher—Colts Mfg. Co. Ranges—Hotpoint, Inc. HEATING AND AIR CONDITIONING: Heating—warm air system. Air conditioning (surgery)—Westinghouse Electric Corp. compressor with Drayer-Hanson Co. coils. Grilles—Controlair. Regulators—Powers Regulator Co. Valves—Crane Co. and Walworth Co. Water heater—General Water Heater Co. Pumps—Yeomans Bros. Condensate—Hoffman Specialty Co. SPECIAL EQUIPMENT: Nurses' call system—Connecticut Tel. & Elec. Corp. Sewage Pump—Fairbanks Morse Co. Incinerator—Calcinator Div., Valley Welding & Boiler Co.

NEWLY DEVELOPED LOW VOLTAGE SWITCHING SYSTEMS cut electricity load between outlets and switches, permitting increased flexibility, with economy, in control of artificial illumination

One of this year's most interesting developments in the artificial illumination field came not in improvement of the light sources, or development of new fixtures, but in the marketing of two new low voltage switching systems. General Electric's *Remote Control* wiring system (FORUM, Building Reporter, July '48) and Square D's *Saflex* system (FORUM, Building Reporter, March '48) are similar in principle; both converting the regular activating current for light sources down, respectively, to a 25 volt and 24 volt level for the wiring of control switches. This enables a much more flexible set of lighting controls for several reasons. Most outstanding is the fact that very light wire may be strung from lights to switches, in a system whose load is comparable to that in doorbell wiring. This makes for great economy in wiring, and, correspondingly, makes greatly extended multiple control of any light source economically practical from a number of scattered switches. In many cases it is unnecessary to run heavy conduit insulation over the wires, since the low voltage current being transported can cause no harm if shorted. The light wire may safely be stapled in place.

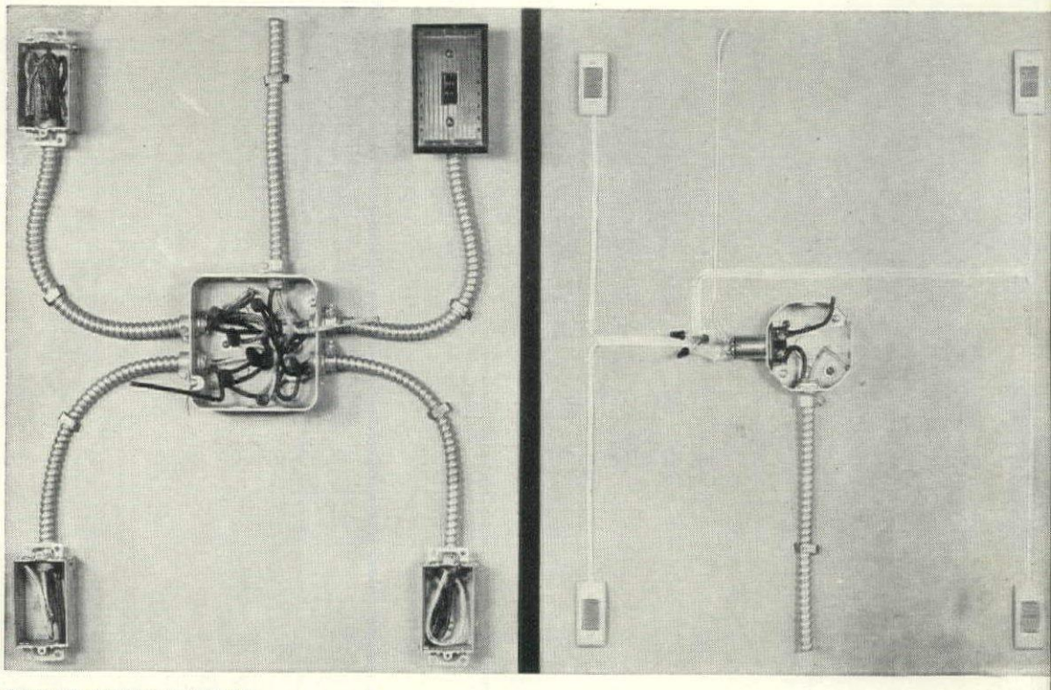
Keys of the two systems are the magnetic relay switches at the light or outlet where the wiring to the wall controls originate. These control the 120 volts of the average lighting circuit, but are activated from the multiple wall switches with the lower voltage, stepped down somewhere in the installation by a small transformer.

Both these relays (see pictures) are small and can be mounted easily in the switch box. General Electric's relay is designed to be inserted in one of the punch-outs and is extremely handy for connections. G. E. also is producing a special new light-weight Flanenol-insulated 22 gauge wire to carry the 3-wire circuit's 25 volts. For easy identification of the cord one of the outer conductors is ribbed, while the others are plain. Finger control switches used in these systems can be very small—and G. E. has brought a special push model (see picture). No large wall plates are needed, and the switches do not have to be mounted in large switch boxes. Another well talked-up advantage in the consumer market is the elimination of the danger of shock at the hand switches, important in bathrooms, laundries and kitchens. There isn't enough current at the hand switch to bother anyone.

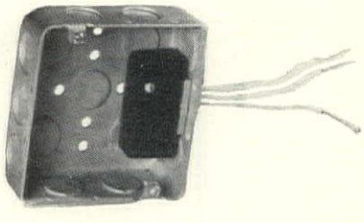
Application possibilities for these new switching systems are great; it is conceivable that they might change the whole conception of lighting controls. Multiple switches for

CONVENTIONAL LIGHT SWITCH with wall plate and box is replaced in General Electric low voltage system by

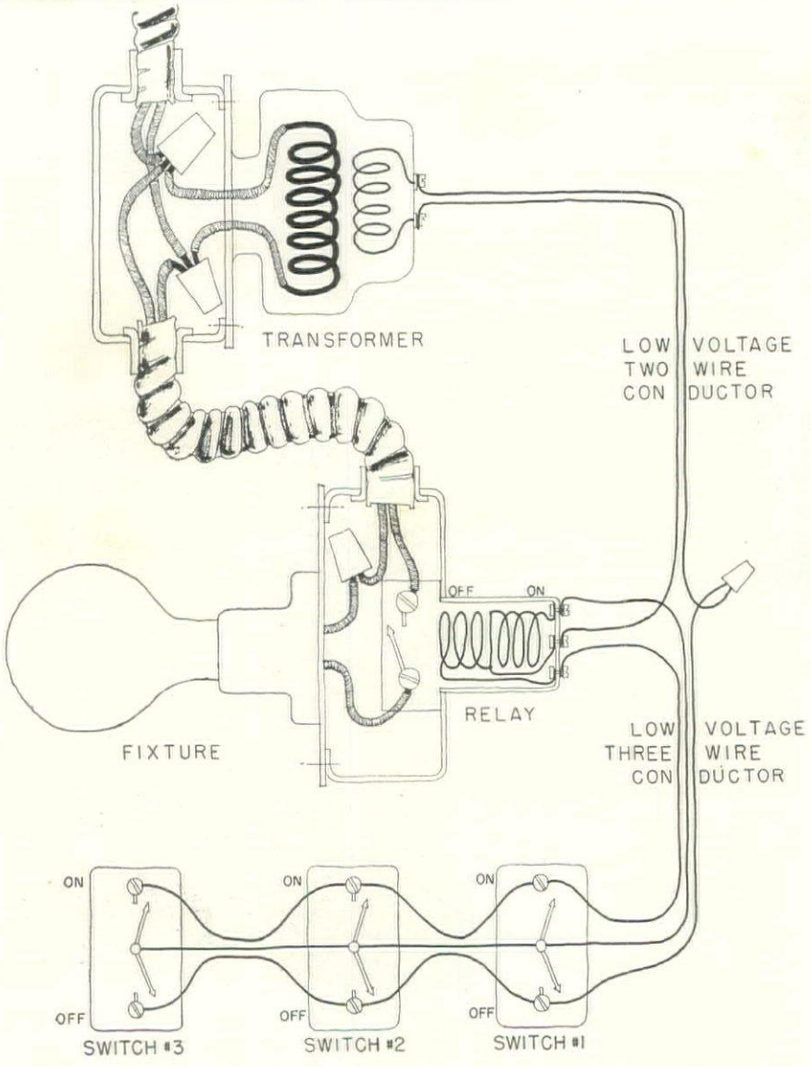
SIMPLE CONTROL which cannot give shock and is attached without plate.

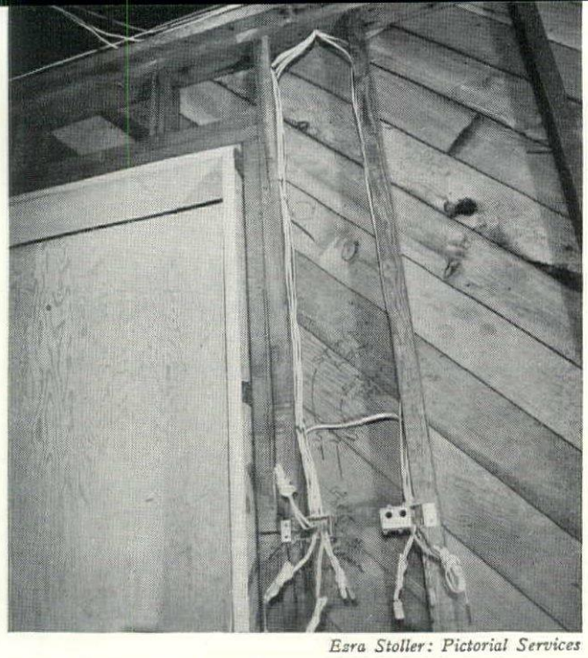


SIMILAR WIRING PROBLEM solved two ways in mockup above: to left is conventional wiring for four-switch control of a single light or outlet; to right is the same problem solved with a low voltage system, eliminating need for expensive BX cable, boxes and other bulky equipment.



LOW VOLTAGE RELAYS shown inserted in switch boxes are the keys to the two systems. Square D's "Saflex" relay, above left, cuts regular house current of 110 volts to 24 volts. General Electric's "Remote Control" relay diminishes switching voltage to 25, mounts in cutout.

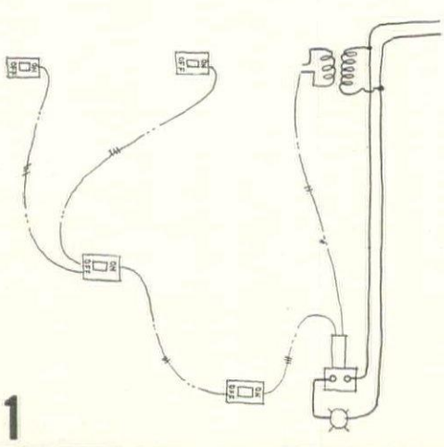


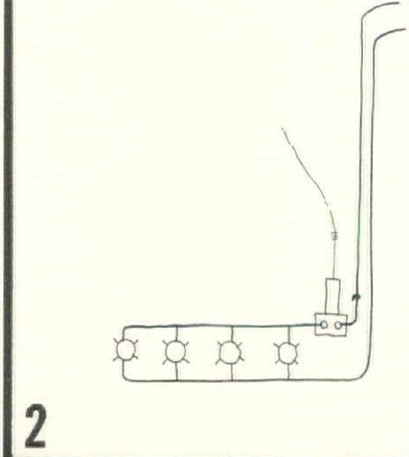


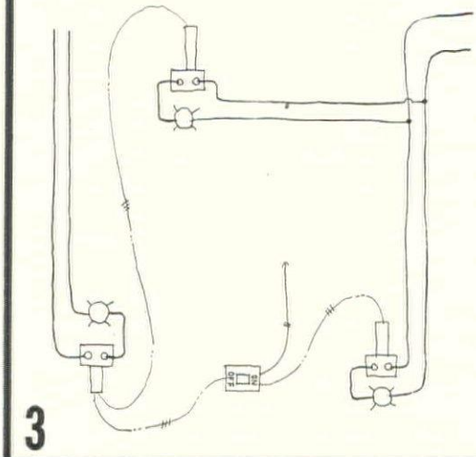
Ezra Stoller: Pictorial Services

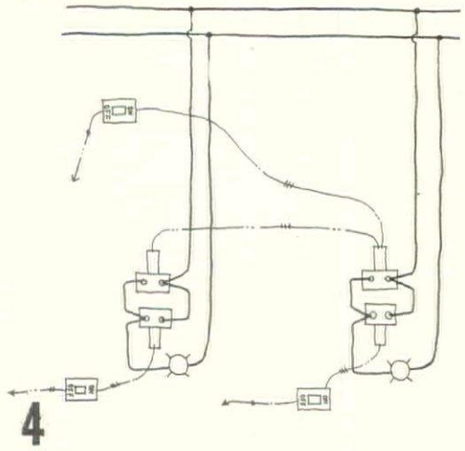
NUMEROUS CONTROLS are practical in a low voltage system, as shown above in construction photograph of wiring to one set of switches beside door. This relatively easy-to-install wire can be stapled in place.

FUNCTION OF RELAY in the low voltage system is shown in diagram to left. Transformer stunts current to low voltage level in the switching circuit. Magnetic relay at fixture is the mechanical mover to open or close the higher voltage lighting circuit. The low voltage which activates this relay can be easily handled, with very light wire unprotected by conduit.









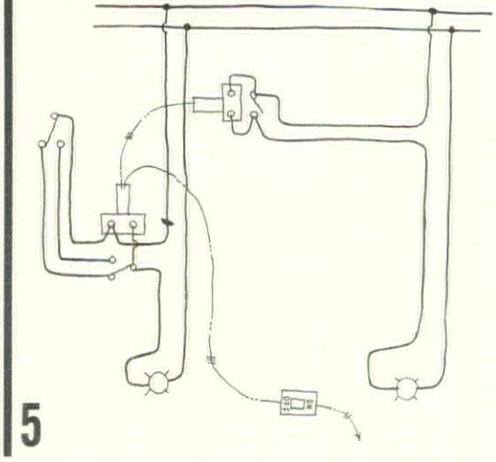
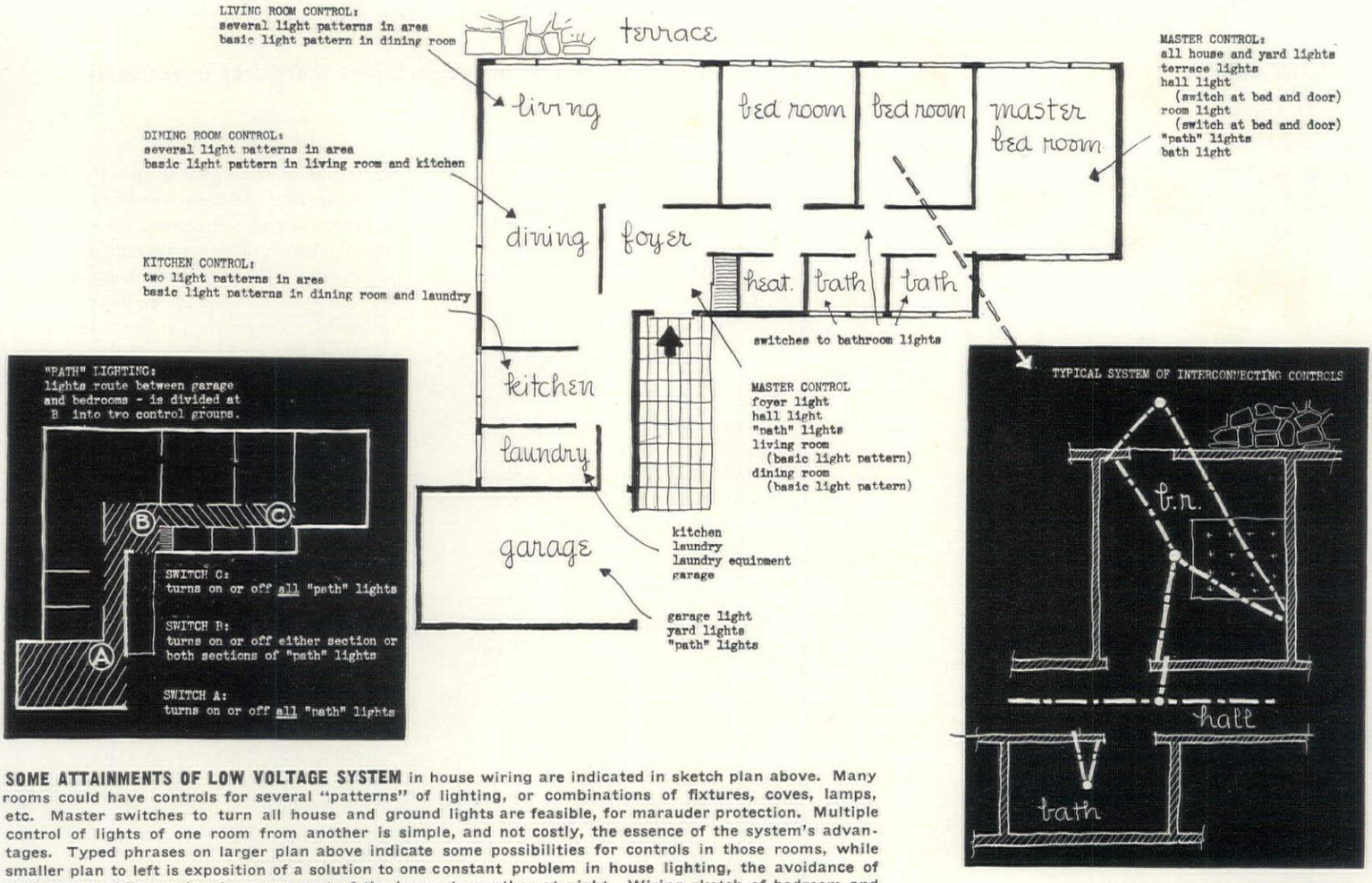


Diagram 1 shows complete wiring for control of a single lighting outlet from a number of points. Diagram 2 demonstrates how a series of multiple connected loads may be controlled from a single remote control relay. In 3 a single switch handles three relays which control loads at widely separated points. Diagram 4 illustrates the application of remote control relays where it is desired to have an independent master switch control. In Diagram 5 low voltage relays are added to conventional system to obtain master switch control.



SOME ATTAINMENTS OF LOW VOLTAGE SYSTEM in house wiring are indicated in sketch plan above. Many rooms could have controls for several "patterns" of lighting, or combinations of fixtures, coves, lamps, etc. Master switches to turn all house and ground lights are feasible, for marauder protection. Multiple control of lights of one room from another is simple, and not costly, the essence of the system's advantages. Typed phrases on larger plan above indicate some possibilities for controls in those rooms, while smaller plan to left is exposition of a solution to one constant problem in house lighting, the avoidance of dark areas while moving from one part of the house to another at night. Wiring sketch of bedroom and bath to right shows plan for multiple control of terrace, bedroom, hall, and bathroom lights.

one light are nothing new in wiring, but this economical method is very new, and its area of application virtually unexplored. An example of some of the switching possibilities in a home is sketched above, but does not even begin to include such great refinements as a telephone switch for the radio, or a bedroom switch to turn on the percolator in the kitchen while dressing.

Main advantages of this system, as projected now, can be placed in several groups. First, long distance control and identical control from many separated points is practical, because the wiring is cheap; also, it is much simpler to have master switches for all the lights in a building and outside floodlights. "Path lighting"—that is, lighting the way ahead into a series of dark rooms—is simplified as well. One switch at the entrance might throw on all the lights along the path; another switch could turn any or all of them off at any other point. Present multiple lighting, common, for example, at the head and foot of cellar stairs, could be extended simply throughout a building. And the annoyance in most present multiple control circuits, that of advancing only a few feet before having to hit a couple of light switches to cut off the light behind and put it on ahead, is removed. A switch at either end could control all the lights, in addition to their individual controls.

Farms and office buildings alike are building types which can well use this advance in control technique. Multiswitch control of lighting in barns is commonly left out because of the long runs of cable necessary to insulate the usual circuit, and its prohibitive cost. Low voltage lines are cheap, with no fire menace. Light control in offices is commonly very awkward, since most wiring is in outside walls, because partitions are expected to be removed and replaced frequently. Low voltage switching systems would be a simple matter to re-rig. Hospitals also are a typical application of the advantages of multiple switching. Where in a bedroom at home bedside and doorside control of the lights might be a welcome luxury, in a hospital room or ward it is almost essential. An application contemplated for oil refineries exploits the practicability of using a number of remote control relays from a single control switch to control lighting or other loads which may be widely separated. More important than the distance factor is the fact that the controlled loads may be energized from separate branch circuits or even on separate feeders in widely separated buildings. In oil refineries, the power supply at each group of tanks is from a separate step down transformer, but despite this difference in power supply a single remote control system can be used to control all lighting (see wiring sketch 3, page 110).

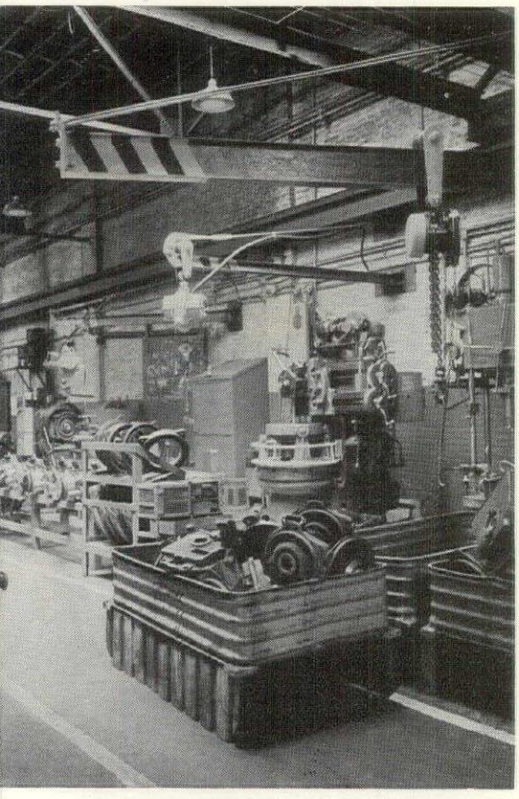
Low voltage systems are not subject to the same restrictions under the National Electric Code as conventional systems, although there has been some confusion in local inspections. Use of automatic staplers to fasten the runs of light wire has been approved in most areas; some inspectors insist on insulated staples. The code defines the remote control system as a class two circuit, where voltage is 15 to 30 volts and current is inherently limited to a maximum of three amperes.

The many refinements possible in home switching have already caused considerable speculation. A problem does exist in rooms with switches governing sets of pattern lighting which include floor and table lamps, which already have switches in their mechanism. These fixtures might possibly be rewired for low voltage switching, or the individual switching function might be removed to a table or wall control. The accumulation of a large number of switches in a room might also lead to some confusion as to the lights they control, a very understandable situation in the house sketched above. Varied coloring of the small plastic switches might help here. The proper location of multiple switches will come in for much study, it is expected, now that they can be had more economically.

So few installations have been made thus far that definite cost figures are difficult to obtain, but the manufacturers are confident of their claim that when several multiple control lights with three or four point control are included in the plan, there is a cost saving over the conventional wiring solution. With increase in number of lights and controls, the proportionate saving rises as well.

On the wiring of a new house on the West Coast with Square D's *Saflex* system, the electrical contractor's comments were, "Using the conventional system to install the 80 outlets in the house would have taken two men between 40 and 44 hours. Using the low voltage system two men take about 30 hours to do the complete job. We found we saved about 50 per cent on conduit; about 50 per cent on heavy wire; and about 35 per cent on heavy materials like boxes."

COLOR CODING SYSTEM for marking hazards in shops of New York City Transit System brings sharp drop in accidents



PROJECTIONS, SHARP EDGES, and safe boundary of aisle are among safety markings in photo of shop section above. Colors used for hazards are perceptible even to most of the color blind people who work in the shop.

ALERTNESS OF WORKMEN in general is believed also to be increased, in addition to straight definition of dangers which exist in all such industrial shops. Vivid colors are continuous reminder of need for care and efficiency.

The influence of color in industrial environment has in recent years been the object of considerable speculation and research, with professional consultants like Faber Birren & Co. of New York taking the lead in extracting information from a combined source of psychological tests and their wide color-designing experience. Color as a means of work impetus and as a means of improving illumination distribution has been proved over the years (*Color in Industry*, FORUM, July '42). Birren's latest report now emphasizes further uses for color, exemplified by the results of a color safety program started by the New York City Transit System in its shops in early 1946.

New York Transit's safety program was preceded by an exhaustive study of facilities, equipment, machines, operations and accident hazards of all shops. Then, together with a supervisory training program and first aid courses for all employees, the Transit Board instituted a uniform color code defining hazards and emergency equipment throughout the shops, with statisticians alerted to follow the progress in accident prevention. The color system chosen was one worked out by Birren in 1943 and adopted in substantial part by the American Standards Association in 1945. It has since been broadly applied in American Industry, and is mandatory in all shore establishments of the U. S. Navy.

The colors used for the closely observed test had been checked scientifically to make allowance for the high frequency of color blindness (about 8 per cent) among men, and mixed in so far as possible to respect already established mental patterns for warning colors, as in the case of red, which was reserved exclusively for fire protection. What Birren calls the most *vital* colors—yellow, orange and blue—were put on the most dangerous spots; yellow for "strike-against" hazards, stumbling and falling, crane hooks, projections, car stanchions, and pit edges; orange for the dangerous parts of cutting and forming devices, exposed rails and wires; blue, as in the railroad industry, for marking equipment cut down for repair, and for switch boxes and controls in general to assure caution. Yellow, red and blue had been found to be readily distinguishable to even the average "color blind" person. Green was used to mark first aid cabinets, stretchers, and gas masks.

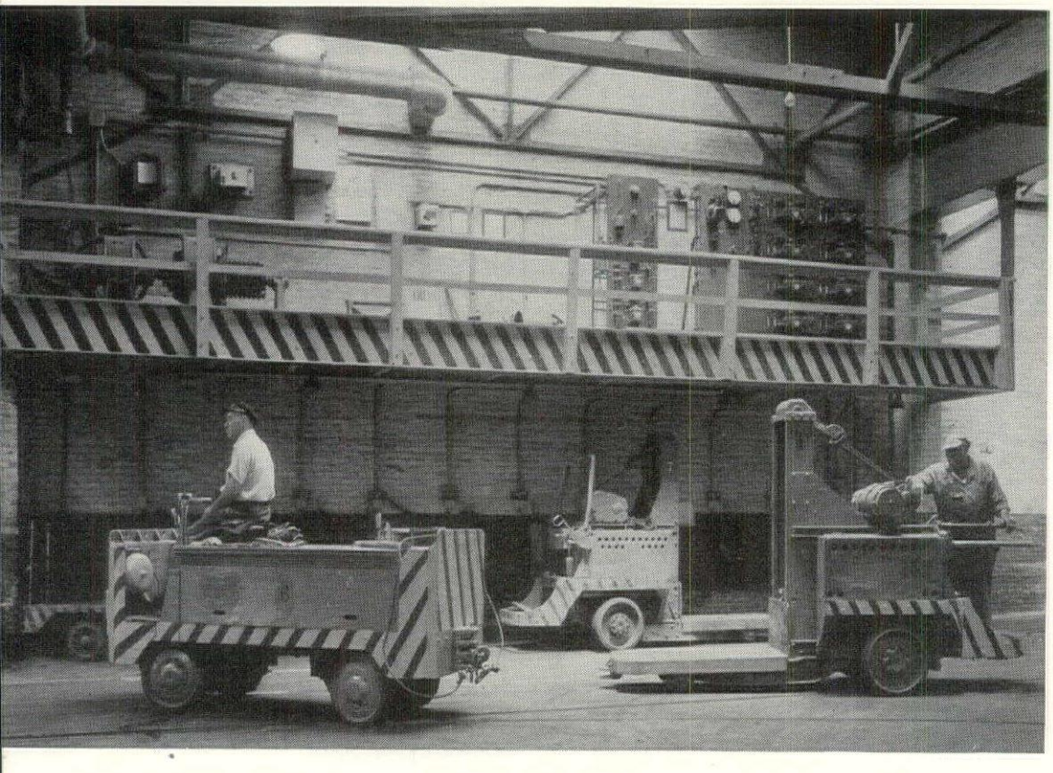
Hazards were marked in the specified paint colors by the workers themselves, with special union permission, so that the test had a definite starting time, and a strong impact on personnel. Men familiar with special equipment and machines and with shop hazards became painters. Careful checking of the work assured consistency.

Not only was the program a marked long-term success, but its savings in injuries were immediate and dramatic. Accidents in the Transit shops began to fall off at once, and 18 months after the introduction of the color code and safety program they had dropped 42.3 per cent.

In addition to its humanitarian aspects in fewer broken bones, sprains, and amputations, the Transit system's safety program paid a bonus far above its cost to management. The federal government values accidents to its civilian employees at $1,044 each. Using these figures, and applying them to the 38,000 employees of the New York City Transit System, the 42.3 per cent reduction in lost-time accidents is equivalent to an annual savings in excess of $500,000.

Full credit in this extraordinary record of safety improvement has not been claimed for the color markings on the various dangers, but these were the essential part of the program, and the novel part. The colors are credited with serving a dual purpose generally in safety programs. They emphasize and delineate specific hazards, and their presence overall is also thought by authorities to foster generally a greater degree of alertness and thus aid in the prevention of large machine accidents.

Says Birren, "The accident problem is not to be solved by color alone. It is no substitute for physical guards . . . yet it creates visible symbols and reminders. The brightness and appeal which it brings into industry makes any hazard a more or less cheerful thing to behold —one which has an emotional impact to it and therefore is not easy to forget. In the New York City demonstration the fact that color has been put to use is apparent on sight. . . . Where it catches the eye it does so with serious meaning. Today safety instruction among supervisors and workers has taken on greater significance, thanks to color . . . a splendid contribution can be made to business economy and to improve industrial and human relations."



From Millwork to Hardware every inch a Ro-Way!

• When Ro-Way Overhead Type Doors leave our plant, they're Ro-Way built in every detail—from millwork to hardware and springs.

• Ro-Way Door sections are made of first-class, kiln-dried lumber. Millwork is done by skilled craftsmen using the most modern production machinery and methods to give you better-looking, better-fitting, longer-lasting doors.

• Hardware, too, is made entirely in our own plant from selected tested steels. Hinges, track and ball-bearing rollers are Ro-Way designed—then Ro-Way built for perfect fit. And one secret of Ro-Way's easier operation is Ro-Way-built power springs—each power-metered to the weight of the door it will lift.

• Remember all this next time you specify doors of the overhead type. A Ro-Way Overhead Type Door is every inch a Ro-Way. Not an assembly of parts from various sources. That's your assurance that no matter where a Ro-Way Door is installed, it's sure to be a Ro-Way product from start to finish.

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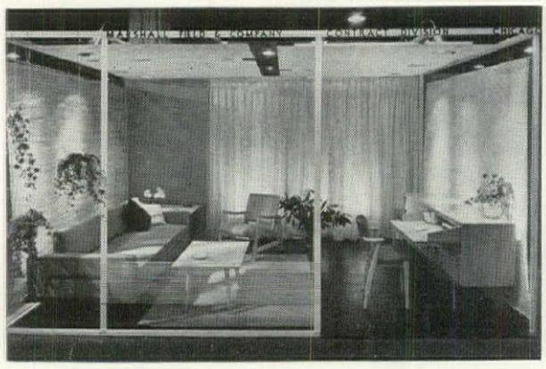
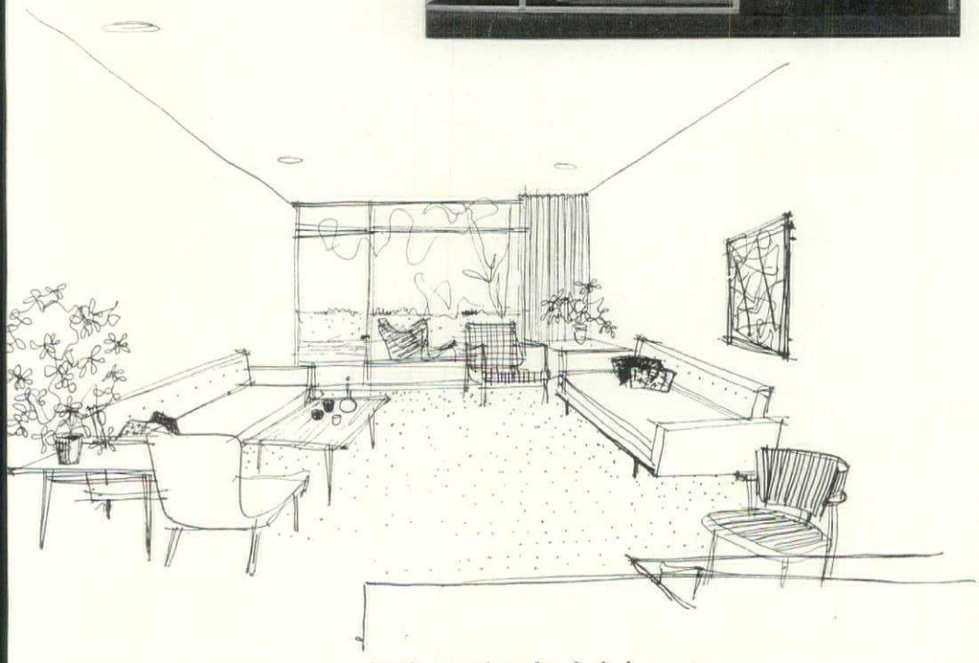
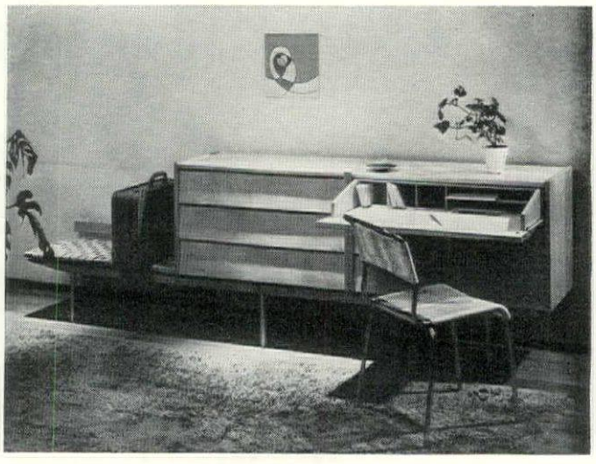


Heaven and a handful of designers are to be thanked for dragging the commercial hotel room out of its sordid background (notable among recent examples: Skidmore, Owings & Merrill's handsome Terrace Plaza, page 88). Another excellent job is this latest design by Knoll Associates, which stresses easy upkeep as well as pleasant surroundings. First seen at the 33rd National Hotel Exhibition and sponsored by Marshall Field & Co., the Convertible Hotel Room indicates a method by which even the tiniest of hotel rooms can be made into comfortable, profitable living space. Due to the tightness of the exhibition proper, it was impossible to arrange individual pieces of furniture in proper relation to closet and bathroom doors, etc. However, the essence of the design is quite plain.

Fabrics as well as furniture are highly durable. Washable walls, floors and rugs are money-saving features. The room introduces a new group of textiles designed by Marianne Strengell using glass fiber yarns. Glass fiber in the upholstery materials gives them high tensile strength. Resistance to abrasion is increased by a vinyl plastic covering of the yarn. Mohair and wool, incorporated in the weave, give texture. Knoll Associates have designed recessed lighting for new installations but do not necessarily recommend it for remodelling jobs. M. S. (*Continued on page* 116)

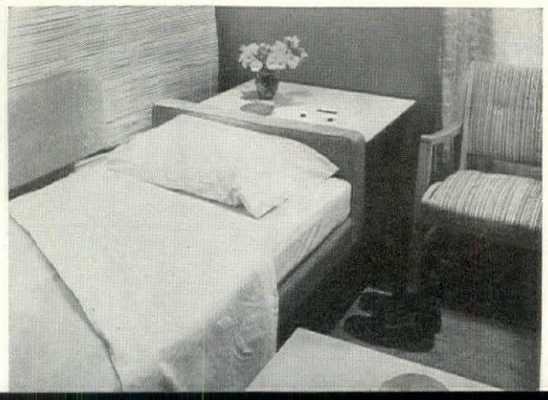


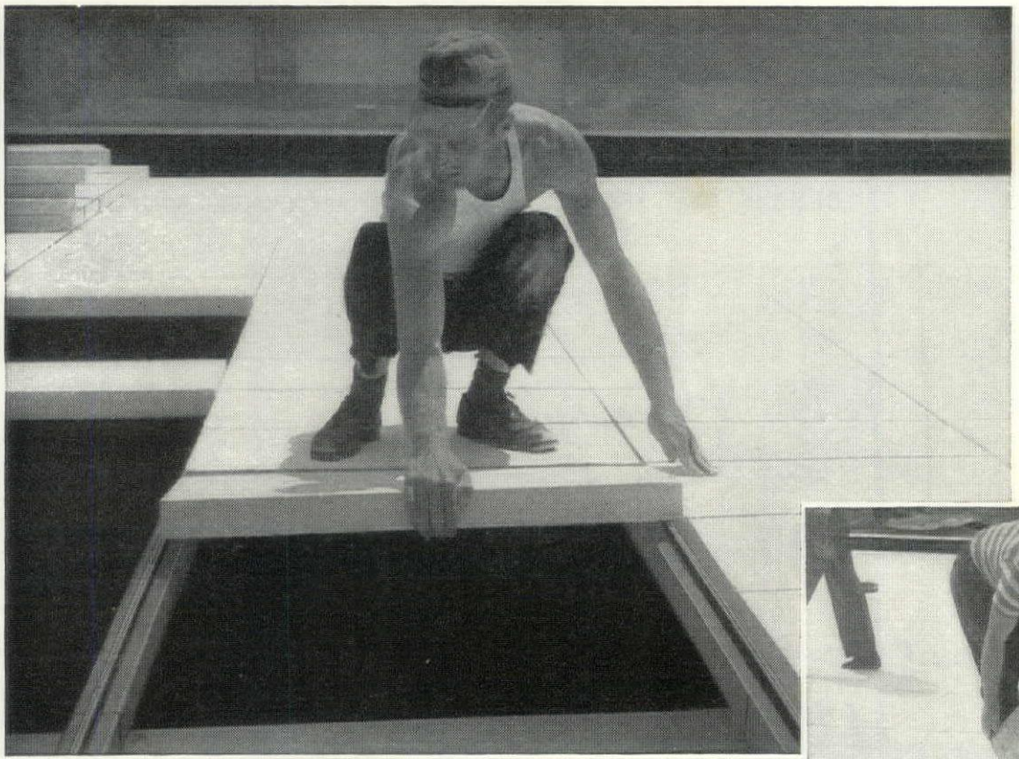
Another version, sketched above, uses two convertible beds, yet, retains living room atmosphere



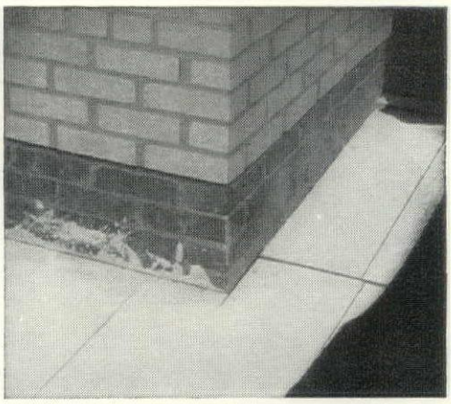
Luggage rack and chests are one unit. Top of one chest lowers to act as desk, the other as a dressing table

Daybed is well off floor for esthetic as well as maintenance purposes. One arm and back, on steel frame, pivot away from mattress

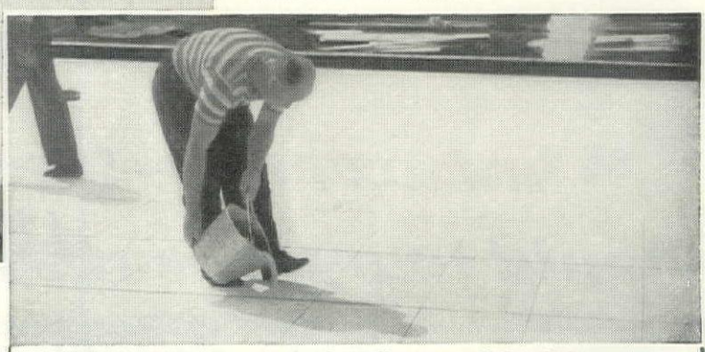




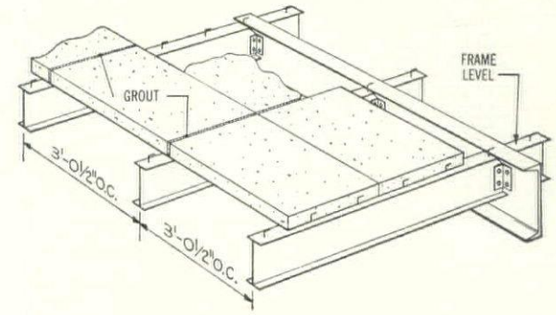
LIGHTWEIGHT. Kaylo Insulating Roof Tile is strong, yet lightweight and easy to handle, as shown above. Each tile is 2⅝ x 18 x 36 inches in size, weighs about 21 pounds.

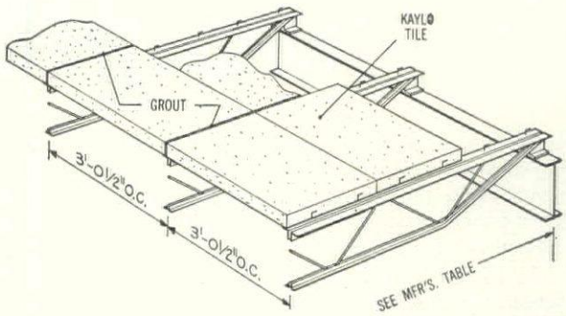


EASY TO FIT. Kaylo Insulating Roof Tile can be cut and fitted with ordinary hand or power tools. Picture above shows example of re-entrant cut made to fit around stack.



WHEN American Structural sub-purlins are used, insulating grout, shown above, provides necessary anchorage by gripping the stem of the sub-purlin. Through the use of bent studs, Kaylo Roof Tile can be applied directly to trussed purlins or standard shapes without the use of sub-purlins, as shown in the drawing below.





Make your roof deck fireproof . . . lightweight and strong

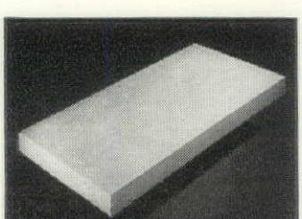
with Kaylo Insulating Roof Tile

STRUCTURAL strength, extreme lightness and high insulating qualities —you can get all these in your roof with one material: Kaylo Insulating Roof Tile.

Kaylo Roof Tile is made of inorganic materials only, and is fireproof.

Whether you're an owner, builder, architect or engineer, Kaylo Roof Tile has many advantages for you. It is easy to install, can be cut to fit right on the job. Its insulating properties reduce fuel costs.

Because Kaylo Roof Tile makes a structural deck that is light in weight, less steel is needed for framing. Get all the facts about Kaylo Insulating Roof Tile . . . send coupon (below) for free illustrated booklet.



KAYLO®
Insulating Roof Tile

AMERICAN STRUCTURAL PRODUCTS COMPANY
Subsidiary of
OWENS-ILLINOIS GLASS COMPANY

All photographs on this page are of the new Morton Hosiery Mills plant in Runnemede, N.J.: Henry Skierski, Owner; Charles C. Duffin, Berlin, N.J., Contractor; W. D. Faint & Company, Pennsauken, N.J., Engineers.

SEND COUPON FOR FACTS

AMERICAN STRUCTURAL PRODUCTS COMPANY
Dept. E-455, P.O. Box 1035
Toledo 1, Ohio

Gentlemen:
Please send me free illustrated booklet, "Kaylo Insulating Roof Tile."

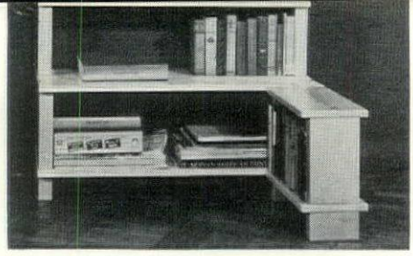
Name_____

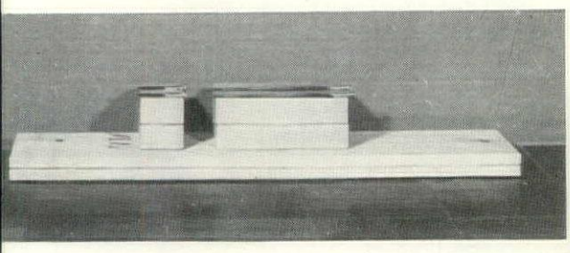
Address_____

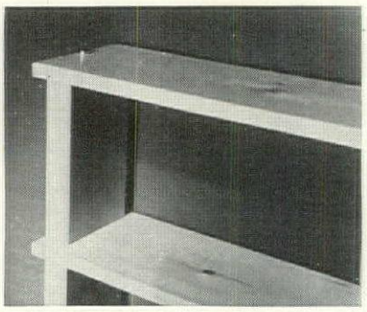
Firm_____

City_____ County_____ State_____

☐ Request for sample is enclosed on company letterhead.





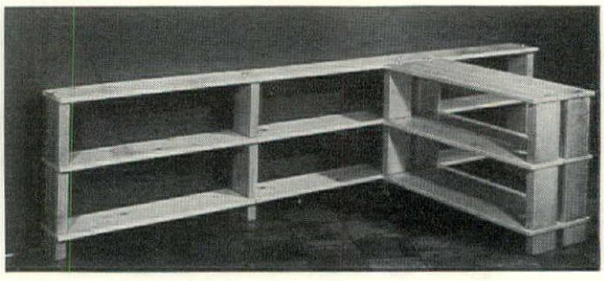


Components of one 36 in. bookshelf are shown unassembled (above). Holes in shelf (right) are for right-angle additions

DEMOUNTABLE SHELVES ideally suited for home and commercial use

Here is one way for the underprivileged, over-milked tenant to fox the omnipotent landlord. Barker Shelves can be collapsed as easily as any nomad tent and as quietly stolen away. Furthermore, they can be put up quickly and easily by the most inexpert of housewives. They were definitely thought up to meet a need—the designer himself wanted more bookshelves and on investigation discovered that almost everyone he knew was dissatisfied with what they had bought or had built along these lines. Guy Barker's solution is a modular system of amazing strength and rigidity that can be added to, shelf by shelf, either upward, endwise, around corners or in depth. Not the least of its attributes is the fact that it can be demounted and reassembled in an entirely new arrangement to meet new conditions. The simple elements that permit this flexibility consist solely of shelves and blocks with tie rods to link them together as each shelf is added. Enough parts for 18 ft. of shelf space can be quite easily carried home under one arm. A small socket wrench sold with each set is the only tool necessary for assembly.

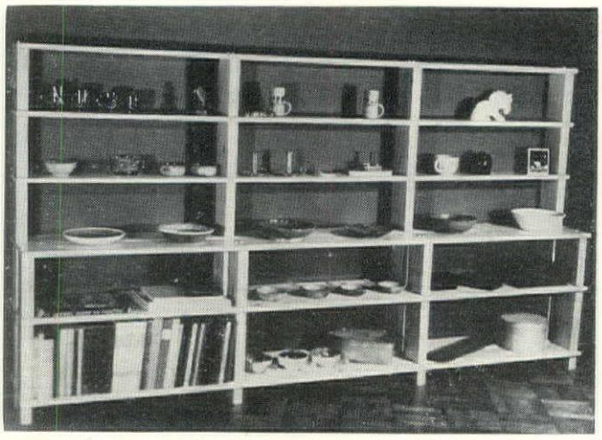
In developing these shelves Mr. Barker had the collaboration of Devon Dennett, noted model maker, as well as the use of his shop where they are now being manufactured. The process is remarkably simple, requires only two shapes of



wood blocks (plus the shelving). All parts are finished in clear, semi-gloss lacquer which shows the natural pine grain. Blocks are slightly darker than the shelves to emphasize the horizontal lines. A de luxe model is available with end blocks finished in gray lacquer, shelves of natural edged birch lumber. Hardware is full-buff lacquered brass.

Since the shelves are backless, they can be used in spur arrangements or as space dividers accessible from both sides—are equally appropriate for home or display use. The shelves are 7⅝ in. wide and come in two lengths: 18 and 36 in. Three heights of separating blocks are available and can be used in any combination though the tallest, 9½ in., accommo-

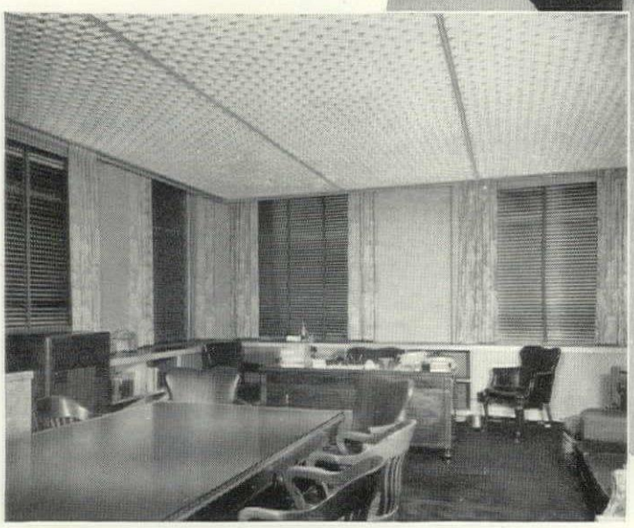
(*Continued on page* 120)

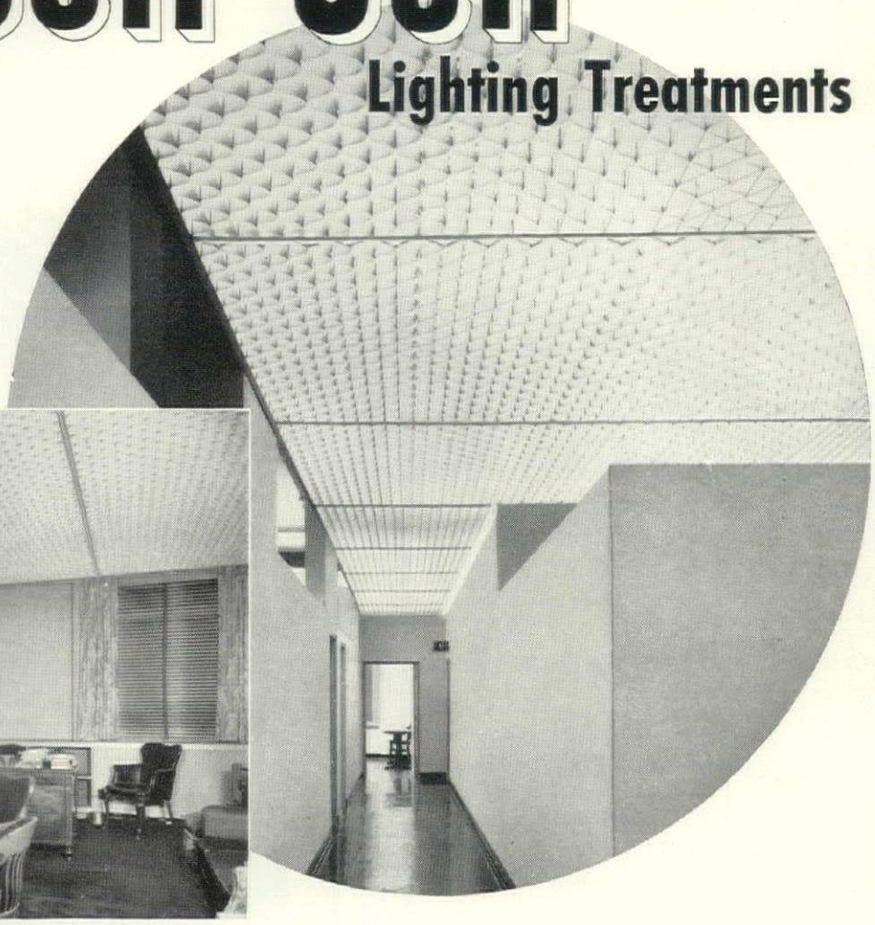


New BEAUTY *with*

FEDERAL Cell-Ceil*

Lighting Treatments





Foyers, display rooms and offices take on new life and glowing beauty with the installation of Federal Cell-Ceil, the most modern lighting treatment.

This beautiful overall ceiling louvering is easy to install. The light-weight sturdy hanging mechanism developed for Cell-Ceil not only speeds up application but provides such easy access for relamping and cleaning that continued satisfaction to the client is assured.

Wherever you specify Federal Cell-Ceil you assure those who work and live under this louvered ceiling a soft diffused light. With all direct glare reduced and bad effect of sharp shadows eliminated, uniform lighting is provided that allows better easier-on-the-eye seeing.

The Federal engineering staff will gladly advise on any installation problem. Our technical bulletin on installation techniques is also available, address Dept. CC-8.

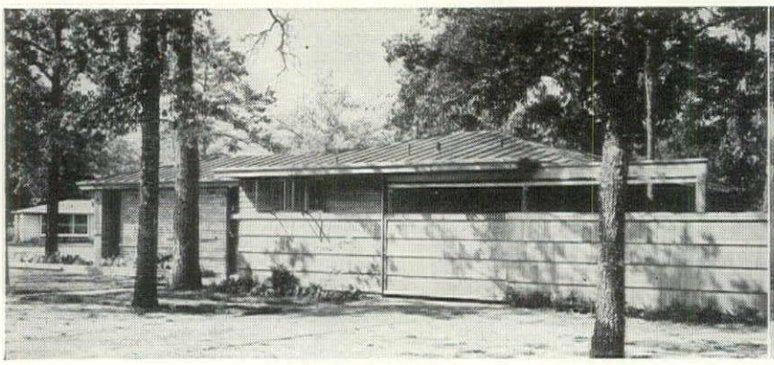
*Trade Mark "Cell-Ceil" applied for.

FEDERAL ENTERPRISES, INC.

Formerly: FEDERAL ELECTRIC COMPANY, INC.

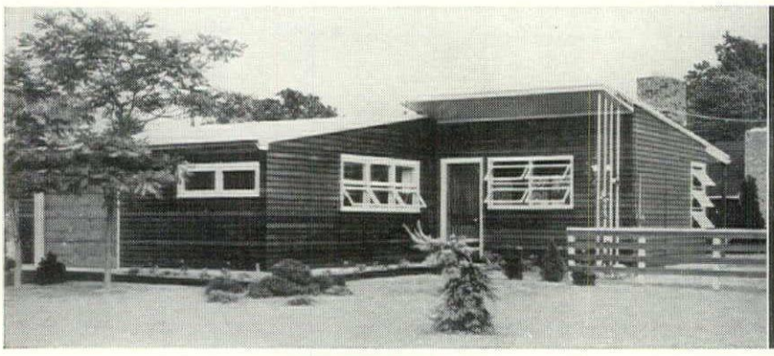
8700 S. STATE STREET • CHICAGO 19, ILLINOIS

Progress report from the

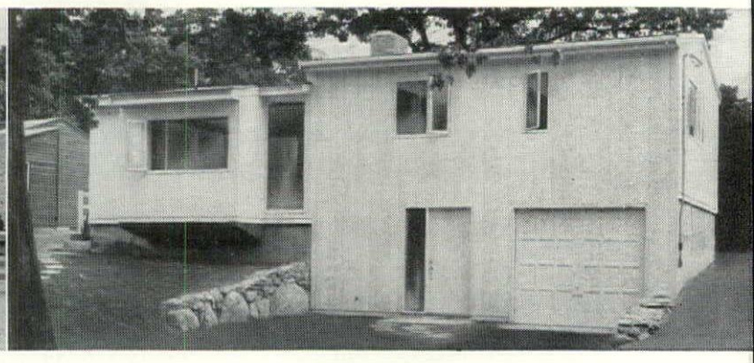


Houston, Texas
Architects, Fred J. MacKie, Jr., Karl Kamrath, MacKie & Kamrath, Houston.
Builder, Frank W. Sharp, Houston.

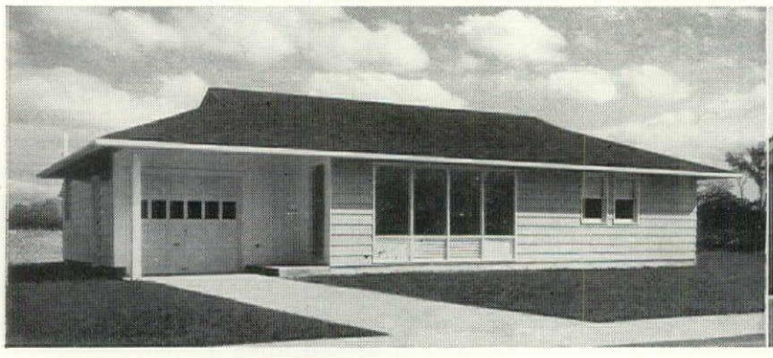
Sarasota, Florida
Architects, Ralph S. Twitchell and Paul M. Rudolph, Siesta Key, Florida.
Builder, J. E. Lambie, Jr., Sarasota.



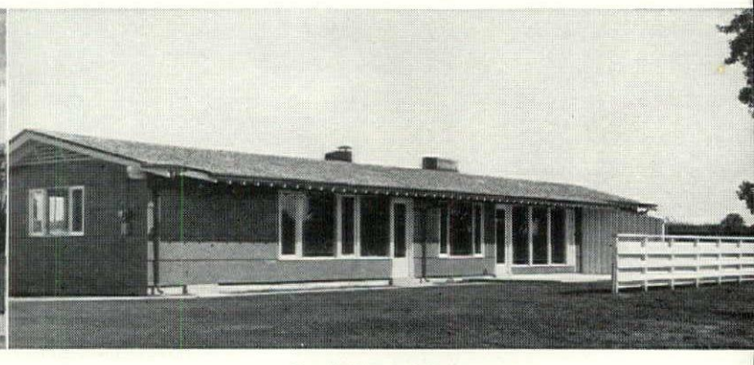
Springfield, N. J.
Architect, Kenneth Kassler, Princeton, N. J.
Builders, Hawley Jaquith, Wm. T. Smith, Jr., Suburban Properties, Inc., Springfield.



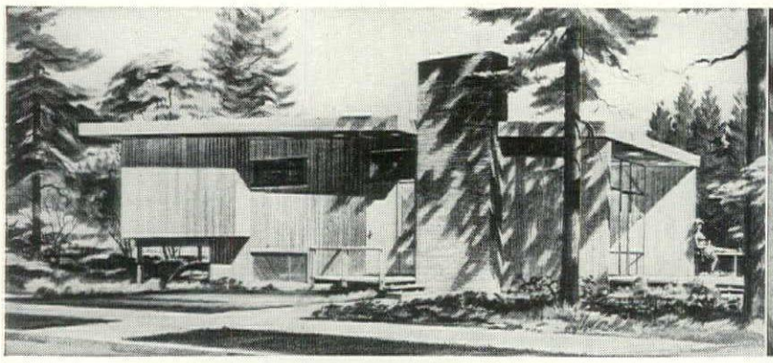
Boston, Mass.
Architect, Samuel Glaser, Boston.
Builder, Arnold Hartmann, Newton Centre, Mass.



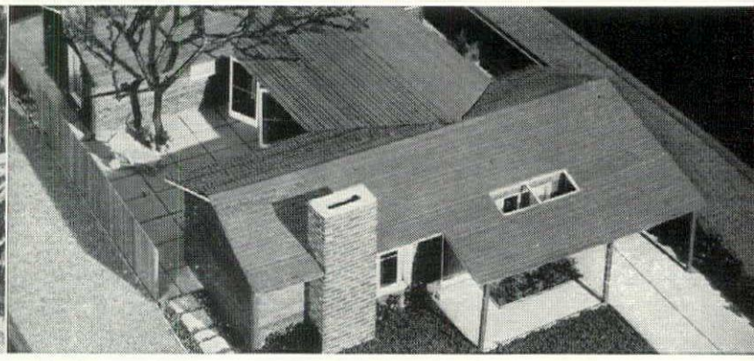
Parma Heights, Ohio (Cleveland)
Architect, W. D. Riddle, Willoughby, Ohio.
Builder, Maurice J. Fishman, Parma Heights.



South Bend, Indiana
Architect, L. Morgan Yost, Kenilworth, Ill.
Builder, Andrew S. Place, Place & Co., Inc., South Bend.



Seattle, Washington
Architects, James J Chiarelli, Paul Hayden Kirk, Chiarelli & Kirk, Seattle.
Builder, Albert Balch, Seattle.



San Francisco, California
Architect, Joseph Esherick, Jr., San Francisco.
Builder, F. F. Burrows, Williams & Burrows, Inc., Burlingame, Calif.

REVERE QUALITY HOUSE INSTITUTE

by John Hancock Callender, A.I.A.

Executive Secretary

THOUGH the Revere Quality House Institute is less than a year old, having begun its activities in March, enough experience has been had with it and its basic idea to indicate that it has already made a place for itself in the architectural profession and the building industry. During 1949 the Institute will operate on a broadened base, further extending our services.

Here is a brief summary of 1948 accomplishments:

1 Eight examples of quality houses were designed and built, in eight different sections of the country. Being made to meet local needs, they vary greatly in design, materials, and price.

2 Though some of the Institute builders at first regarded the matter as a model house project, and intended to put up only the one house, they were so greatly impressed with benefits to them and to the public that they decided to build additional houses. In South Bend there will be 350 Revere Quality Houses. Boston will see ten more in the immediate future. San Francisco has three houses under construction. Cleveland plans for 800, in units of 44 or more. In all, it now appears that some 1200 Revere Quality Houses will be built by the original eight Builder Members of the Institute.

3 Institute promotion has been highly successful. Publicity and advertising did a fine job in attracting and interesting the public. In one instance, 60,000 people visited a Revere Quality House during the month it was open. About 50,000 requests for information from builders, architects, housing officials and prospective home-owners have come in the mail to the Institute. The public is becoming more and more familiar with the Institute, and when seeking houses tends to look for the Institute seal.

Thus the Institute has demonstrated success. However, its activities have made a very small, almost infinitesimal dent in the housing problem of this country. Next year we expect to make a somewhat larger impression. Among our objectives are: an expanded list of architect-builder teams; each project a minimum of 10 houses; rewards for the best projects; more Associate Members, builders who will use Institute plans and supervision and thereby earn the Institute seal; sale of plans to the public where that seems to be the only practicable method of contributing to quality housing; development of a code of quality standards; inclusion of rural housing and landscape architecture among Institute activities.

dates most library books. The foot block, a little over 3½ in. high, raises the bottom shelf to a convenient height for cleaning.

Assembly is simplified by hardware which pulls the various parts together as each shelf is added. A rod passes through the pre-bored shelf and block to screw into the top of the rod of the shelf below. Two lengths of rod, a starter nut and a brass cap are all the hardware that is required.

Because of the simplicity of the manufacturing process it is possible for the Barker Shelves to be marketed considerably more reasonably than comparable finished shelving. Actually they cost just a little more than unfinished department store items. They are currently available at Hansen's. New Design Inc., and the Bertha Schaefer Gallery in New York—will in the near future have nation-wide outlets. M.S.

WINDOWS IN MODERN ARCHITECTURE. By Geoffrey Baker & Bruno Funaro. Architectural Book Publishing Co., 112 West 46th St., New York 19, N. Y. 142 pp. Illus. 10¾ x 8½. $8.50.

It's about time that someone published a worthwhile document on contemporary use of windows which is exactly what authors Baker and Funaro have done. Their book is no mere listing of the various types of commercial windows available. It goes into the physics of luminescence, ventilation, sunshades, the properties of glass, and to a certain extent, esthetics. The first chapter, which deals with the historical background and function of the modern window is just about as concise and sound a bit of advice as one can find on this subject. It is only too true that more often than not "a sweet looking window wall has gone sour." As the authors point out: "Even sealed double glazing has a much greater heat loss than a poorly insulated solid wall. Radiant heat coming through the glass from the sun must be anticipated and controlled, if it is to be turned to advantage. Too much daylight, if it increases the brightness contrast, is more likely to cause discomfort than too little. Yet all these possible disadvantages can be turned to advantage by a designer with knowledge and foresight."

The bulk of the book consists of specific examples of good fenestration, most of them familiar to the average architect. However, no one will deny the convenience of having them assembled in one volume.

One of the authors' most important contributions is the Baker-Funaro Sunfinder, a graph which can be used under any tracing of a building plan. It is invaluable for determining the position of overhangs and projections, for sun louvers and shade trees—serves equally well for locating single windows or for orienting groups of buildings. Furthermore it indicates the length and direction of shadows cast by any object set in the path of the sun's rays. It is to architecture what the pressure cooker is to the culinary art.

Evaluating this book from the professional standpoint, one is forced to the decision that it is as necessary a piece of architectural equipment as *Graphic Standards* and *Sweet's Catalogue*. M.S.

INDIAN ART. Essays by H. G. Rawlinson, K. de B. Codrington, J. V. S. Wilkinson and John Irwin. Edited by Sir Richard Winstedt. Copyrighted in the U. S. in 1948 by Philosophical Library Inc., 15 East 40th Street, New York 16, N. Y. Illus. 4¾ x 7½. $3.75.

This book, by several well-known authorities, is a useful introduction to Indian Art in its major forms which have been consistently and considerably ignored by both European and American artists and connoisseurs. Many of the mural paintings, such as the Ajanta, have been made over a period of hundreds of years but no adequate reproductions have been produced to show how majestic they are in size, nor the degree of detail which combined with an essential rhythmic quality gives them such dramatic expression.

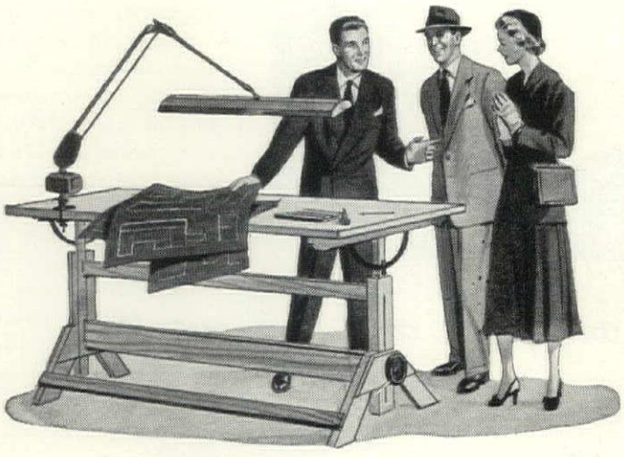
Indian art is a development away from the main stream of the world's art and, although some critics have traced connection with both Chinese and Greek influences as well as the independent Assyrian forms, some of the plates illustrate this very clearly. Illustrated manuscripts, being easily transportable, have received wide acknowledgment although there is still a considerable amount of confusion between the work of Mughal artists and the Persians, doubtless brought about because there was an appreciable movement of painters, poets and men of culture following in their wake after successive Mughal invasions.

Indian art always suffered from extraordinary lack of self criticism, but criticism from those who were not the execu-

(*Continued on page* 124)

A big plus—

THAT COSTS SO LITTLE!



PROGRESSIVE builders and contractors know the powerful appeal which a *pleasant, cool, odorless, smokeless, greaseless* kitchen has for women prospects! A kitchen whose paint, woodwork, and wallpaper will stay fresh longer!

That's why *quiet, clean, effective* kitchen ventilation has become a "must" today!

That's *also* why so many builders and contractors specify a G-E kitchen Ventilating Fan. It's *plain common sense!*

The motor's the heart!

Of course the heart of any ventilating fan is the *motor*. And need we blow the horn for the famous G-E Motor?

Tell your prospects this:

"A G-E Ventilating Fan completely and quietly renews the air in an average-size kitchen many times an hour!

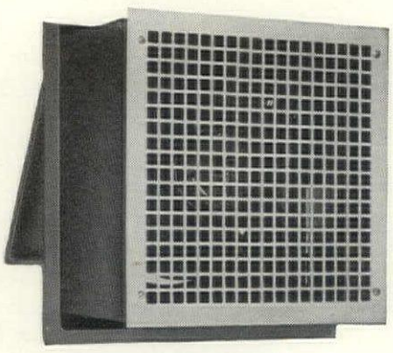
"It provides constant fresh air—without drafts—in kitchens and other rooms where heat, smoke, grease, and odors are likely to accumulate. It makes everyday living infinitely more comfortable." (P. S. And they're *ideal* for laundries!)

HERE'S THE BIG FEATURE

The outstanding feature of G-E kitchen Ventilating Fan (aside from its motor) is the fact that it's *automatic in operation!*

Flip a switch—outside cabinet door opens—blades begin their quiet, efficient spinning.

Flip switch again—fan stops—outside door closes forming a tight seal against weather and insects. AUTOMATIC! No chains to haul on. They're easy to install.

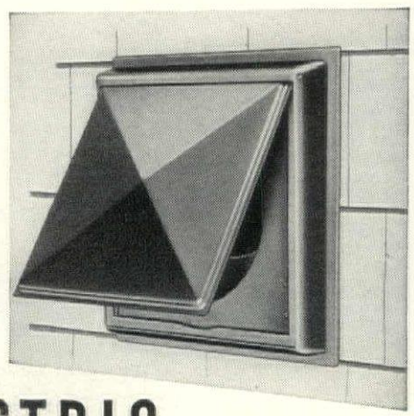


G-E Ventilating Fan:

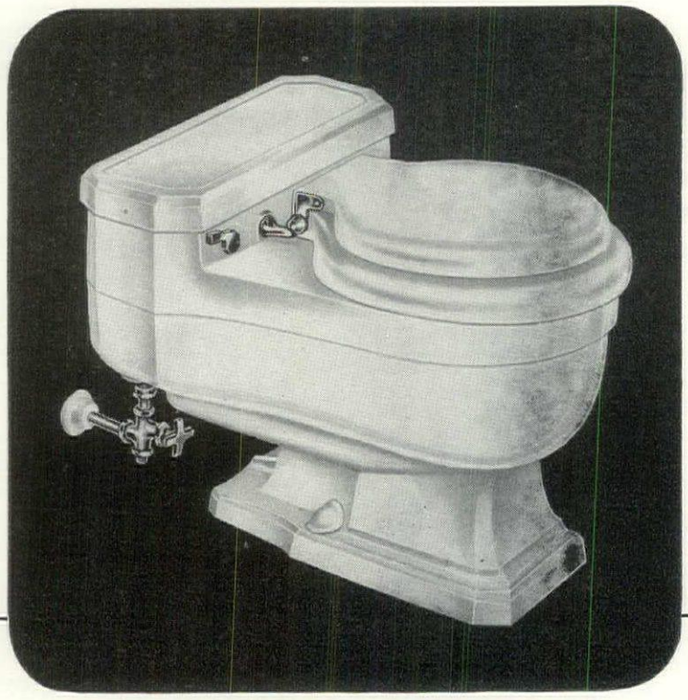
Wall switch controls fan. Outside door opens automatically when fan is ON; shuts when fan is OFF!

Easily installed—adjustable wall box fits walls from 5½ to 11 inches thick.

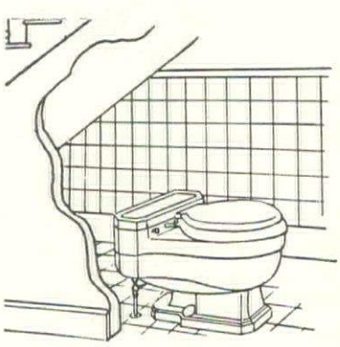
Needs only 12¾ inches square opening in wall. 110/120 volts, 60 cycles. Model FM 10C1. General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.



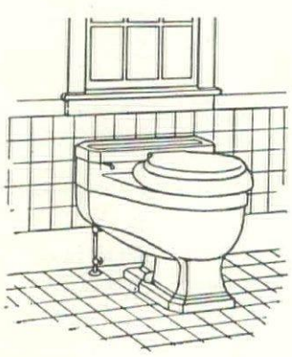
GENERAL ELECTRIC



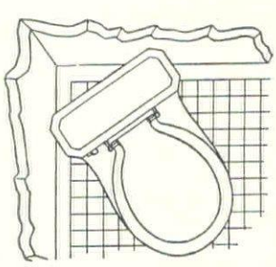
The one and only T/N... one-piece and non-overflow*



Free-standing. No raised tank. Fits close under stairways.



Transforms the area under a window into usable space.



Lends itself to all bathroom plans—including corners.

... the most adaptable water closet ever installed

*PATENTED

Though architects and master plumbers say the Case T/N is in a class by itself for adaptability, this is merely the one feature that makes all its others so easy to suggest to your customers. The original one-piece water closet has a clean design that suits the modern preference. In structure and performance it meets every requirement...notably quiet operation, positive non-overflow, centrifugal flushing with automatic cleansing action. Remind your customers of the Case T/N when they want the best, in appearance, service and value. Distributed nationally by wholesalers listed for your convenience in Classified Telephone Directories. W. A. Case & Son Mfg. Co., Buffalo 3, New York.

1853 • 1948

Case

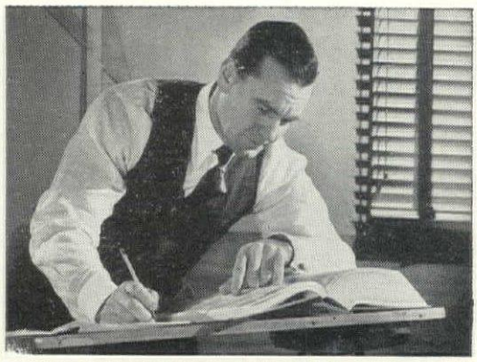
95 YEARS OF SERVICE

Vitreous China Plumbing Fixtures

Why the Barrett* SPECIFICATION* Roof

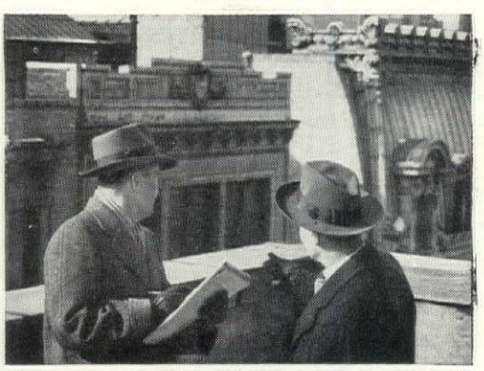
is the toughest, longest-lasting, best-value built-up roof that can be made——

*Reg. U.S. Pat. Off.

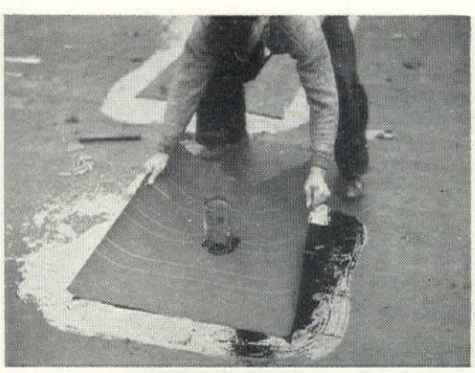


PRECISE ROOFING SPECIFICATIONS which encourage fair bidding practices and truly comparable proposals are welcomed not only by architects and building owners but also by reliable roofing contractors. Such roofing contractors are Barrett Approved Roofers.

THE BARRETT APPROVED ROOFER organization comprises roofing contractors who have been carefully selected on the basis of their experience, ability and integrity.



ARCHITECTS, engineers and builders may rely with confidence upon any Barrett Approved Roofer to apply a Barrett Specification* Roof exactly according to Barrett specifications. Moreover, his work will be carefully inspected by Barrett during installation where bonded guaranty is required.



PAINSTAKING ATTENTION to detail is characteristic of Barrett Approved Roofer workmanship. Flashings, vent connections and other potentially weak spots in any roof are carefully checked to assure perfect protection and prevent future trouble.

1. Barrett Specification* Pitch and Felt
2. Barrett Application Methods
3. The Gravel or Slag Armored Surface
4. **THE BARRETT APPROVED ROOFER**

The superiority of the Barrett Specification* Roof is due to the combination of highest-quality roofing materials, the protective surface of gravel or slag, and scientifically standardized application techniques used by Barrett Approved Roofers. The result is a roof so good that it can be bonded against repair and maintenance expense for periods up to 20 years—a roof so good that it regularly outlasts the bonded period by many years.

Barrett Specification* Roofs

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
36th St. & Gray's Ferry Avenue
Philadelphia 46, Pa.
2800 So. Sacramento Avenue
Chicago 23, Ill.
Birmingham, Alabama
In Canada: The Barrett Company, Ltd.
5551 St. Hubert St., Montreal, P. Q.

tants. This had its origin in two prime causes—most of the pictures were either religious or depicted scenes in which the ruling prince played the major part—and the system of patronage was stultifying in the extreme, since few artists would dare to produce any work that was likely to offend not only the ruling prince but so many influential members of the court. Indian art is likely to receive much more careful attention and critical consideration than hitherto especially since the British have left this subcontinent. Their officials even in early times had little idea at the beauty about them but there was a notable and extremely successful attempt this year in London to remedy the defect by staging an impressive exhibition of all forms of Indian art. *Indian Art* should help to play an important if small part in increasing this belated recognition. M.S.

CHURCHES, THEIR PLAN AND FURNISHING. By Peter F. Anson. The Bruce Publishing Co., Milwaukee, Wis. 236 pp. Illus. 6¾ x 10. $6.50.

This very scholarly document won't captivate the average architect, either by illustration or editorial content, but should one be blessed with a church to design, it would undoubtedly prove highly useful. As Rev. H. A. Reinhold points out in the editor's note, the author, in this book, features the liturgical wing of art, architecture and rubrics. As a former Anglican and then a Catholic monk of Caldey and as a Tertiary of St. Francis, he is well equipped for the job. In view of his approach, the question of "style" does not come in for close scrutiny though Mr. Anson expresses a very sound attitude toward architectural expression. As he puts it: "A church, like a house, *should be evolved* in sequence of design *from the inside outwards*, not from the outside inwards. The building itself is fundamentally just a covered-in space to protect the worshippers from the elements. Provided that it fulfills these requirements it does not matter much whether the covered-in space is left plain or decorated. A church will 'look like a church' if functional needs of the building are put first and foremost, just as in the case of a garage, factory, airport or theater." The illustrations, which are line drawings, bear out this conviction. Though, as might be expected, traditional forms are dominant, all the examples shown are good, honest expressions of the materials and techniques of the eras in which they were built.

There is little question but what this book is one of the outstanding ones in its field despite its very high degree of specialization. Nor does the fact that it is rather British in context and feeling (the author just happens to be a subject) impair its value to the American readership. M.S.

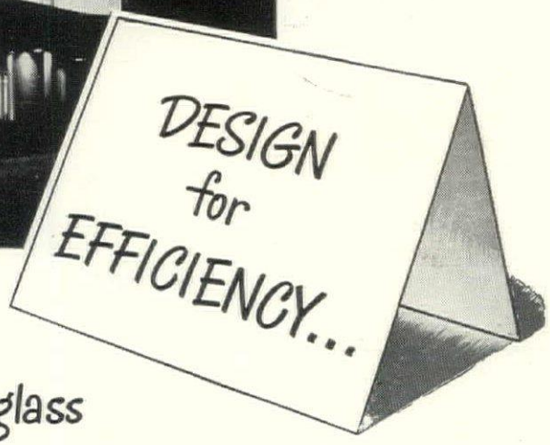
SCULPTURE IN MODERN AMERICA. By Jacques Schnier. University of California Press. 139 pp. Illus. 8 x 11¾. $7.50.

Author Schnier, the publisher's blurb tells, feels that sculpture suffers for lack of treatises to explain and record it. If this reviewer's memory is at all reliable, it would seem that this same adolescent wail has been heeded and discussed in almost every phase of contemporary art. Until today, this reviewer was also convinced that "explaining" art or talking down one's nose to the masses had been outlawed on grounds of hypocrisy and deception. *Sculpture in Modern America* recalls a recent visit to the Metropolitan Museum where a gallery lecturer was overheard explaining: "The animal is thrown into the foreground in a naturalistic pose." To bring up the nauseating patness of this book and a number of similar ones is sheer frustration because it seems that such briefings are to go on and on forever. However, they never

(*Continued on page* 128)

Striking in appearance . . . and practical, too. *Thermopane* permits large areas of glass without worry about excessive heat transfer. View below shows lobby through large units of *Thermopane*.

Architect:
J. Harris Armstrong
Kirkwood, Missouri



walls of *Thermopane* insulating glass

Count on a stove manufacturer to recognize the value of heat control.

For the window walls in their new headquarters, the American Stove Company chose *Thermopane** for trouble-free glass insulation, year-round comfort, lower heating costs, more efficient air conditioning. Where building needs call for transparency for daylighting or display and effective insulation, *Thermopane* is the logical answer.

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L·O·F Glass Distributors have *Thermopane* readily available in more than 70 standard sizes . . . and can assure prompt delivery of special-size units. For more information, including standard sizes and facts on insulation, write for our *Thermopane* book and Data Sheets by Don Graf. Libbey·Owens·Ford Glass Company, 21128 Nicholas Building, Toledo 3, Ohio.

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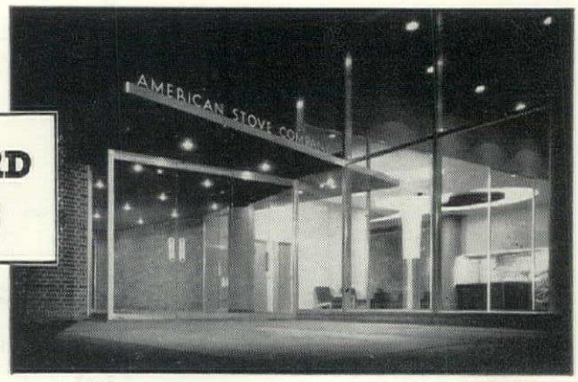

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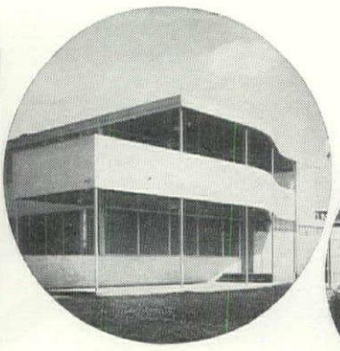

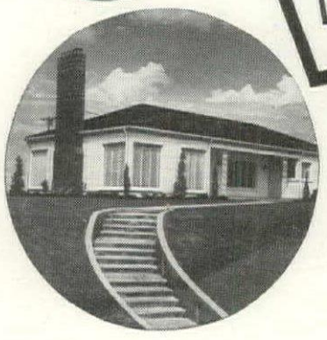

A NEW NAME IN PLYWOOD

. . . this grade-trademark now identifies the most versatile single grade of Exterior-Type DOUGLAS FIR PLYWOOD

PLYSHIELD is the new grade name for the outdoor type plywood panel formerly known as Sound 1 Side Exterior-type (So1S-EXT-DFPA). It has a face of "A" veneer, a back of "C" veneer, and is bonded with completely waterproof resin adhesive.

Versatile? Indeed! PlyShield has a long record of outstanding performance as a preferred material for the exterior siding of homes, garages, stores, warehouses, and commercial and industrial buildings of all kinds. PlyShield is used to great advantage to complement other building materials too—for gable ends, entrance treatments, dormers and bays; for soffits, porch and breezeway ceilings.

PlyShield is a time-tested product with a new, easily identified grade-trademark . . . now manufactured under the more rigid quality requirements of the new U. S. Commercial Standard CS45-48.

If you do not yet have your free copy of the new CS45-48 booklet—which contains complete data on new Douglas fir plywood grades and grademarks—write today to Douglas Fir Plywood Association, Tacoma 2, Washington.

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EXT-DFPA·A-A
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(Sound 1 Side, Solid Back Exterior)

EXT-DFPA·UTILITY·B-C
(Solid 1 Side Exterior)

EXT-DFPA·SHEATHING·C-C
(Exterior Sheathing)

EXT-DFPA·CONCRETE FORM·B-B
(Solid 2 Sides)

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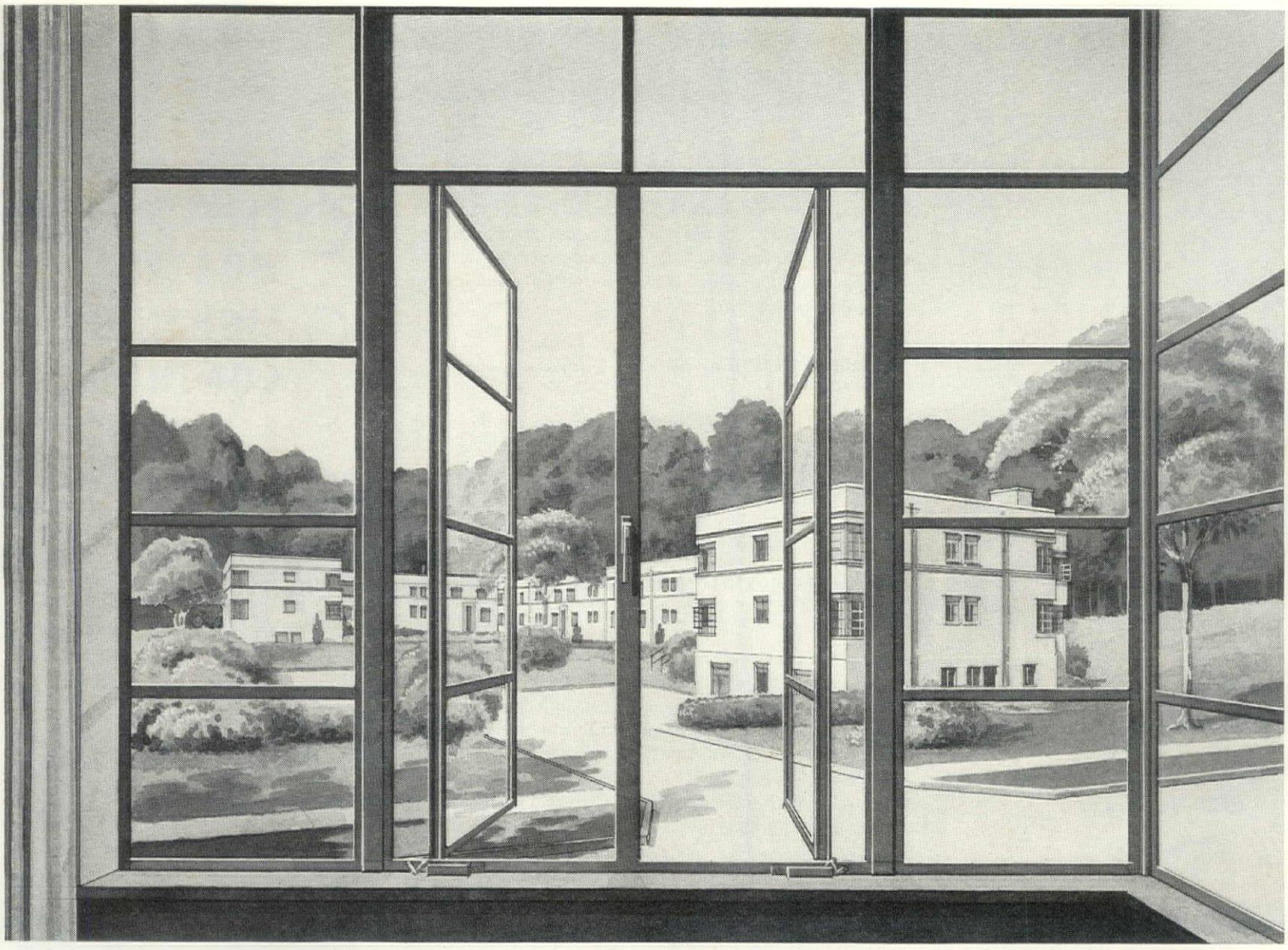

Greendale Manor Apartments, town of Greenburg, N. Y. Architect: Laurence M. Loeb, White Plains, N. Y. Built by Frank J. Filardi Construction Co., Hartsdale, N. Y., for Healy Central Realty Co.

There's bright living ahead for New Yorkers who live in Greendale Manor. In this new garden-type apartment village, large, sun-inviting Lupton Metal Windows provide an abundance of daylight to each dwelling unit. The narrow, graceful frames and smartly-designed operating hardware of Lupton Metal Windows blend perfectly with modern design. Air flow is easily controlled to supply exactly the right amount of ventilation in every room. Economy, a vital feature of large scale building is effected by the long life of Lupton Metal Windows. Lupton Residence Casements can be supplied in a wide range of stock sizes and types. Bronze wire screens are available for all windows. There is a Lupton Metal Window for every type of building. Write for our catalog or see it in Sweet's.

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have and never will contribute toward a real culture. One more aspect of Mr. Schnier's book—it omits, with the exception of Noguchi, the vast majority of contemporary American sculptors that have attracted sincere and informed interest during the past few years. M.S.

THE PAINTER'S CRAFT. By Ralph Mayer. D. Van Nostrand Co., Inc. New York. 209 pp. Illus. 6 x 9½. $5.00.

It is quite obvious that a good many painters have no idea of what they are doing when they perpetrate a canvas. For these, Mr. Mayer's book, is just the thing. It's a firm, if overexhaustive treatise on the techniques of painting taken from the mechanical rather than the esthetic side. M.S.

ENGINEERING CONTRACTS AND SPECIFICATIONS. Second Edition. By Robert W. Abbett. John Wiley & Sons, Inc. New York. 327 pp. 8¼ x 5¼. $3.75.

Architectural, engineering and contracting offices contemplating large scale jobs either for the U. S. government or for private companies must have enough knowledge of contractual law to know what they are letting themselves in for when a contract is signed. Mr. Abbett's book is an expansion on his first edition which was published during the war and, naturally, was primarily concerned with government contracts.

This book starts out by explaining legal terms that turn up in engineering contracts. The author points out the importance of wording in a contract, tells about the various types of contracts in use, gives the advantages of each for specific types of construction. The engineers' or architects' responsibility under various contracts also is explained. There are reproductions of various standard forms such as the U. S. government instructions to bidders, bid forms and construction contracts, others like the standard A.I.A. contract forms, insurance and surety bonds and arbitration agreements which may be included in contracts. *Engineering Contracts and Specifications* takes up the last part of its title by explaining the principles of specification writing and showing sample types of specifications for various kinds of work.

The book is brimming over with information; a careful perusal would be the equivalent of a short course in law as it relates to construction contracts. W.W.A.

SIMPLIFIED DESIGN OF STRUCTURAL TIMBER. By Harry Parker. John Wiley & Sons, Inc., New York. 220 pp. Illus. 7¾ x 5. $3.25.

Though this is primarily a textbook, the author feels it might also be valuable to many young architects and builders who desire a guide for home study. Mr. Parker includes all the formulae and tables necessary to determine wood stresses. He assumes the reader has had no previous training. Design procedures are those commonly used and recommendations are drawn from such organizations as Forest Products Laboratory of the U. S. Department of Agriculture, various lumber manufacturers' associations and the American Institute of Steel Construction.

The subject is a complicated one but Mr. Parker has simplified it in every way possible by such measures as avoiding advanced mathematics, giving examples for each process. Included in each chapter are problems to be worked out by the student. Unfortunately no answer sheet is included by which to check what might be the highly original answers the student is likely to come up with. W.W.A.

It's the *new* way . . . the *better* way to heat the modern apartment, new home, school, office or hospital. Yes, Modine Convectors are functionally styled to complement modern taste in interior design. Modine gives you entirely new installation, control and maintenance features that make it one of the greatest forward steps in radiation. Call your Modine representative. He's listed in the "Where-to-Buy-It" section of your phone book. Or write direct for complete details. Modine Manufacturing Company, 1507 Dekoven Avenue, Racine, Wis.

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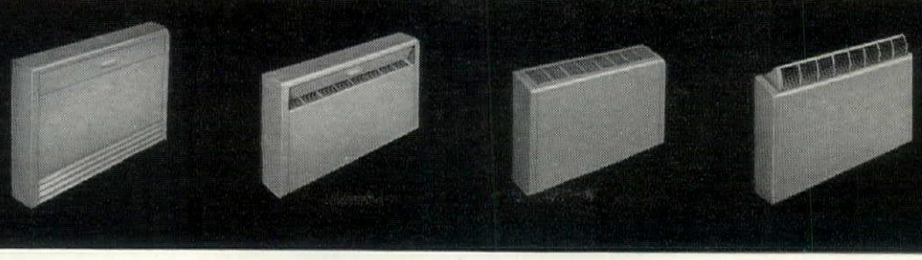

You can sell planned lighting to more store customers if you recommend the unit specifically designed to do an aggressive sales-lighting job. It's the 8-foot Slimline "Merchandiser" that meets store lighting needs in three important ways:

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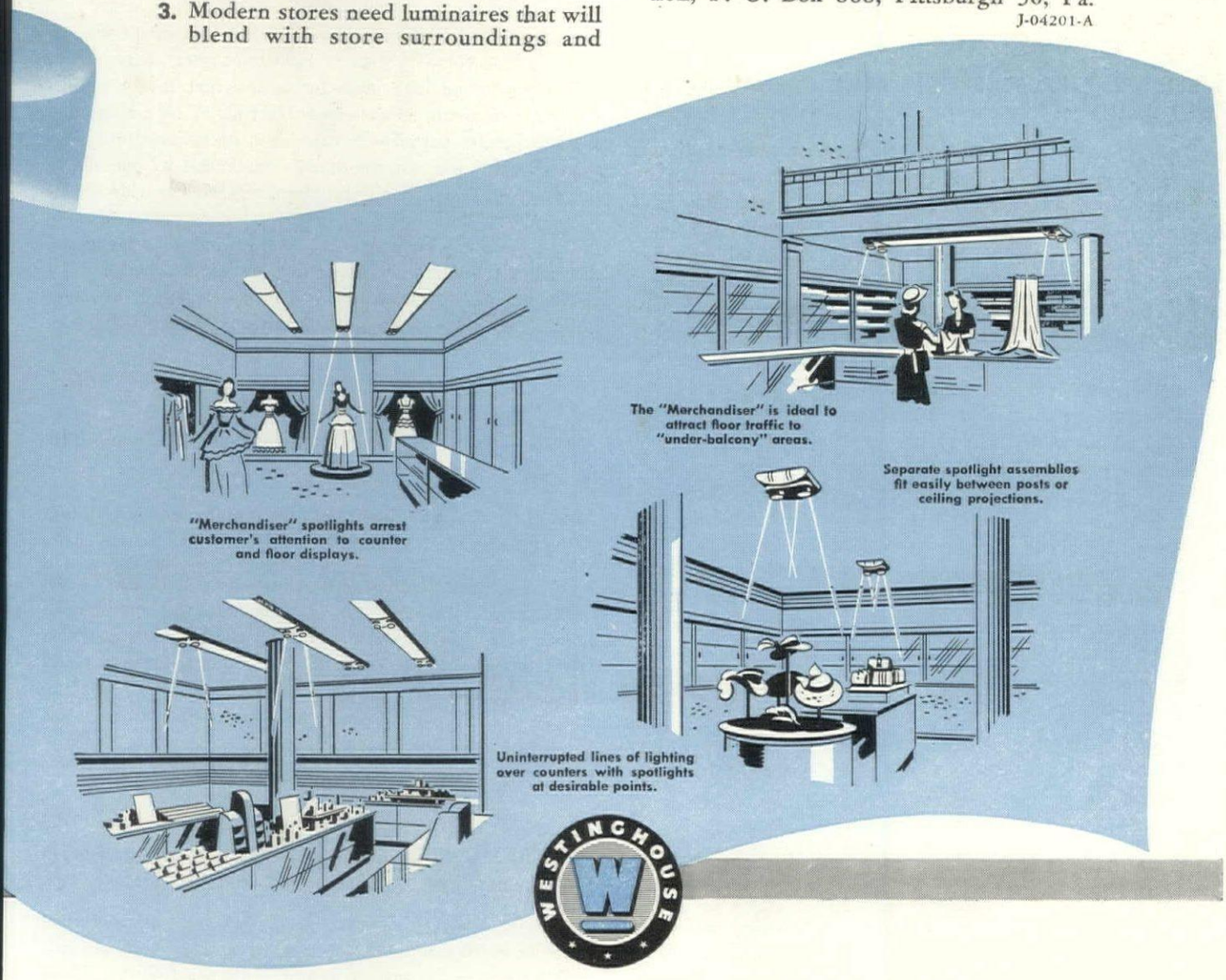

Planned Lighting *Pays*

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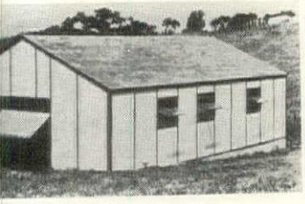


PACKAGED UTILITY BUILDINGS are adaptable for industrial, commercial, agricultural or private use.

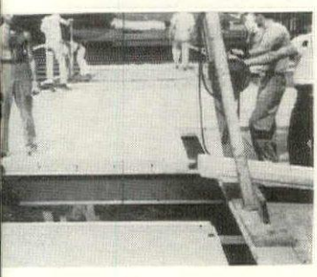
Steel-Bilt Construction Co.'s new line of quickly erected, packaged utility buildings boasts a light thin wall with good insulation properties. Cemesto panels are hung on a sturdy light-gauge steel framework in the single thickness, maintenance-free wall. All of the building's component parts—steel framing and Cemesto panels—are accurately cut to size and numbered for easy assembly. And erection, which is possible with unskilled labor, is reported to be much faster than that of a conventional structure of the same size. The new package is suitable for industrial, commercial, agricultural or private use and is made readily adaptable by its wide variety of sizes and combinations of windows and doors. Engineered for strength and simplicity, it is reported to stay tight in all seasons, to be easily dismantled and reassembled, enlarged and regrouped as needs demand. Mass produced, its cost per square foot is also said to be extremely low.

Manufacturer: Steel-Bilt Construction Co., Inc., Bridgeville, Pa.

BUILT-IN EXHAUST SYSTEM effectively vents carbon monoxide gas from garages.

Designed to remove dangerous carbon monoxide gas from garages and service stations, the Car-Mon permanent exhaust system consists of sets of floor-mounted, retractable car adapters joined to a ventilating duct system below the floor level. The car adapter with its attached flexible tubing withdraws from its hinged, floor-mounted receptacle and attaches onto the automobile's exhaust pipe. The duct system's exhaust fan then draws the poisonous gas from cars being tested within the building to the outside. Each Car-Mon outlet is credited with removing 50 c.f.m. of air while in operation, assuring the removal of carbon monoxide gas from under the car at all times. According to the manufacturer, the Car-Mon exhaust system can be installed in existing buildings as well as in new construction. Floor receptacles and sweep connections, for housing the adapter and its attached retractable flexible tubing, are imbedded in cement or wood floors at proper locations. The receptacle's beveled edges extend ½ in. above the floor to prevent washdown from entering the adapter unit. Metal pipe is used for ducting where the exhaust duct is placed on the ceiling of the floor below. For ground installation, tile pipe is used. Tile sizes vary with the number of Car-Mon outlets as does the exhaust fan which has a c.f.m. capacity equal to 100 c.f.m. per outlet.

Manufacturer: Car-Mon Products Co., 4554 N. Broadway, Chicago, Ill.



REINFORCED ROOF PLANK with thermal and acoustical properties reduces building costs about 20 per cent.

Durisol reinforced roof planks provide a fireproof roof deck for built-up roofing, good insulation and a soundproof ceiling in a single material. In addition, they are credited with reducing similar service over-all roof construction costs approximately 20 per cent. The Durisol plank is molded from chemically-treated wood shavings combined with Portland cement. Reinforced with steel rods, it has a factory-applied ¼ in. cement coat on the topside and is tongue and grooved on the long edges. Planks are available in 16 in. width, in 3¼ in. and 4¼ in. thicknesses and in various lengths up to 8 ft. The 3¼ in. Durisol slab weighs only 14 lbs. per sq. ft. and has a U factor of 0.18 (including 4-ply built-up roofing). The 4¼ in. slab weighs 17 lbs. per sq. ft. and has a U factor of 0.15 (including 4-ply built-up roofing). The Plank's coefficient of sound absorption is 0.87 (at 512 cycles). Durisol panels are easily put in place on steel beams or other framework. For installation galvanized metal clips are wedged to the steel flange and nailed to the plank with 6d nails. Joints are then calked and built-up roofing is applied. According to the manufacturer, the cost of Durisol runs about 45 cents per sq. ft. for the 4¼ in. thickness. Installation cost is estimated at about 7 cents per sq. ft. As the new plank's light weight permits the use of lighter steel construction, the manufacturer claims that a Durisol roof in place costs approximately 20 per cent less than comparable materials or groups of materials.

Manufacturer: Durisol Inc., 420 Lexington Ave., New York, N. Y.

ALUMINUM BASEMENT WINDOW is long lasting and maintenance-free.

Kewanee's new maintenance-free aluminum basement window will not rust, corrode, stick or bind even after years of use. A positive acting cam latch forces the vent firmly against the frame to assure an extremely tight fit. A long aluminum locking handle permits easy window operation from floor level with 100 per cent ventilation obtainable by opening to horizontal position. For installation, wide fins provide secure anchorage while a broad sill and jamb construction prevent fouling of vent with mortar while the window is being set. According to the manufacturer, the new window incorporates the same quality construction features as other Kewanee aluminum windows and permits uniform planning in homes where aluminum windows are preferred for upper-story construction. The new basement unit is available in three standard sizes.

Manufacturer: Kewanee Manufacturing Co., Kewanee, Ill.

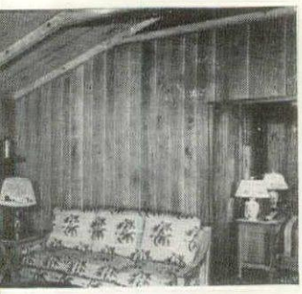
ALL PURPOSE BUILDING PAPER weighs and costs less than standard 15 lb. felt.

A new asphalt impregnated all-purpose building paper, Leatherback, is reported to offer the desirable qualities of standard 15 lb. felt, yet to weigh 50 per cent less and cost approximately $1 less per roll. It is fracture resistant and lightweight, a 500 sq. ft. roll weighing only about 25 lbs., and is easy to handle and install. It is approved by FHA as a Class D breather type paper.

Manufacturer: Protective Papers Inc., Union, Ill.

PREFINISHED WOOD PANELING offers low cost wall finish for homes, and commercial and industrial installations.

Amerwood is a new low-cost, prefinished, raised-grain wood paneling which can be quickly, easily, and reportedly cheaply installed on any flat surface in new or old construction. Made from coarse-grained, low grade lumber that has been processed to remove the soft wood fibers from between the hard grain, the panels are completely prefinished with dry-pigment stain, lacquer and wax, and buffed smooth. The etched finish provides deep shadow lines while the surface treatment eliminates the need for any future refinishing. Amerwood panels are made from pine, oak, chestnut and a number of other woods and their edges are *(Continued on page 134)*



shiplapped for convenient installation. Panels are produced in even widths from 6 to 12 in. and even lengths from 8 to 16 ft.

Manufacturer: Lehwood Corp., 1703 Ironwood Drive, South Bend 14, Ind.

GLASS WALL TILE gives kitchens, bathrooms and dressing rooms a permanent, attractive appearance.

A colorful all-glass wall tile 6 x 11 in. and ⅛ in. thick, Crys-Glas can be applied to any kind of surface—wood, plaster, metal or cement—to provide a permanent, attractive wall finish. The 15 non-fade colors in which it comes are fired directly to the glass to assure permanent coloring. The hard, smooth glass surface is impervious to stain, deterioration, peeling, warping, danger from temperature changes, moisture and penetration of dirt. Installation of Crys-Glas tiles is made in resilient rubber mastic.

Manufacturer: The Dearborn Glass Co., 2414 West 21st St., Chicago 8, Ill.

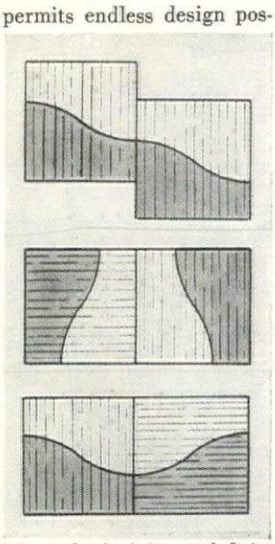
LARGE PLASTIC WALL TILES can be easily installed to provide durable wall finish.

Railite Mirror Tile is a 12 x 18 in. phenolic-melomine laminate with an extremely high luster, for covering walls in bathrooms, kitchens, laboratories, restaurants, food stores, etc. Only 1/32 in. thick, it can be cut with a large shear or saw and easily applied with a special brush cement to practically any fairly smooth surface such as plaster, plywood, cement or wallboard. The tile's large 12 x 18 in. size also speeds installation. Fireproof, waterproof and stainproof as well as chip and abrasion resistant, the new washable wall material will not fade or darken and will withstand heat up to 275° F. Railite Mirror Tiles are available in solid pastel shades, mother of pearl finishes and other patterns.

Manufacturer: Reiss Associates Inc., 718 Beacon St., Boston, Mass.

SPECIALLY PRE-CUT RUBBER FLOOR TILES permit unusual design effects with standard units.

By halving a regular square rubber tile with a diagonal double curve cut, Danbury Rubber Co. has developed a new standard resilient flooring product which permits endless design possibilities. In addition to numerous patterns achievable by shifting and arranging the units in different positions, it offers the curve as a standard design element. The new tile unit, known as Wavedge, is actually simplicity itself. One edge is formed in the shape of an elongated "S." Its mate—the other half of the square tile is exactly the same shape. Thus with the curved edges of the same tile touching, the result is a square. Yet when the curved edges of different colored units are placed together, a wave starts to appear. The new Wavedge units are cut from both 6 in. and 9 in. squares in ⅛ in. thickness only. Both right and left units are available in a choice of 30 colors.



Manufacturer: The Danbury Rubber Co., Inc., Danbury, Conn.

PREFINISHED WOOD BLOCK FLOORING offers new design possibilities for stores, homes, offices and public buildings.

Built-up of multiple plies of hard-wearing northern oak veneers, cross-grained to produce an exceptionally strong and highly inert block, Hasko Block Flooring is said to stand up even under extreme temperature changes and moisture conditions. Each block, measuring *(Continued on page 138)*

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PROOF ADEQUATE— another home-building project featuring Certified Adequate Wiring —the Jacobs development in Salt Lake City.

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What It Means To The Home Buyer: Adequate Wiring makes even a moderate-cost house, or a remodeled home, *modern*. It provides not only for today's electrical needs but for those of tomorrow—including such things as kitchen and laundry appliances which can be covered by a "packaged mortgage."

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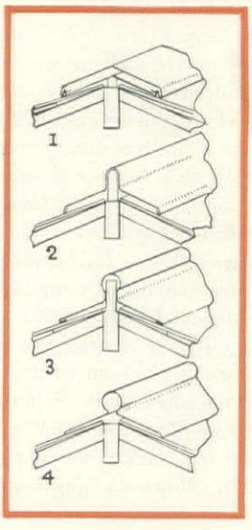


STAINLESS STEEL RIDGE ROLLS

Fig. 1 shows low ridge-flashing without a projection roll. Flashing is nailed to ridge boards with stainless steel nails. Flashing 1″ extension is bent down to roof to shed water and cover nail heads.

Fig. 2 requires specially shaped ridge-piece for flashing roll. Roll is secured by screws in side apron, if more than 4″ wide, should be stiffened against wind by 3/16″ x 1″ stainless steel clamps, or straps, about 30″ apart.

Fig. 3 does not require a special ridge-piece. An excellent way of securing a large ridge roll as board keeps metal in place and stainless steel screws can be fastened to ridge-board, making it unnecessary to drill shingles or slates.

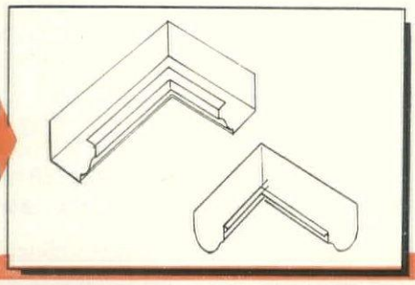
Fig. 4 shows ridge roll used without ridge board. Roll is fastened with stainless steel screws set through washers—with over-sized holes—into holes drilled in the shingles.

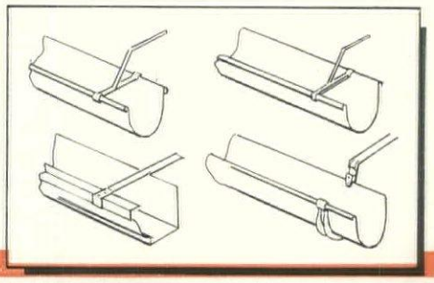
Especially rolled for drainage systems, Sharon Stainless Type 301 fulfills all the requirements for an attractive, everlasting system. The dense, hard surface of Sharon Stainless resists abrasion. It is a solid homogenous metal that is virtually immune to atmospheric corrosion, galvanic action, and patina type corrosion.

Sharon Stainless will not chip, peel, or bleed off to stain surrounding areas. And, perhaps more important, it has a yield strength almost double that of any other material used in home drainage systems today.

Drawing at Left —
STAINLESS STEEL MITRES
(for Inside and Outside Gutters)

Drawing at Right —
STAINLESS STEEL STRAP HANGERS
For single and double bead gutters—Single bead gutters should have strap hanger that helps support gutter. Spacing of hangers should not be over 36″.



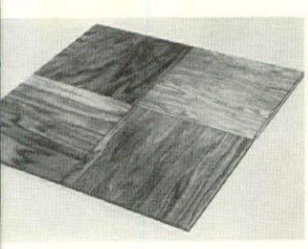


SHARON STEEL CORPORATION

Sharon, Pennsylvania

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, OHIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRAINARD STEEL COMPANY, WARREN, OHIO; SHARONSTEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNSYLVANIA; CARPENTERTOWN COAL & COKE CO., MT. PLEASANT, PENNA.; FAIRMONT COKE WORKS, FAIRMONT, W. VA.; MORGANTOWN COKE WORKS, MORGANTOWN, W. VA. Hot and Cold Rolled Stainless Strip Steel—Alloy Strip Steel—High Carbon Strip Steel—Galvanite Special Coated Products—Cooperage Hoop—Detroit Seamless Steel Tubing—Seamless Steel Tubing in Alloy and Carbon Grades for Mechanical, Pressure and Aircraft Applications—Electrical Steel Sheets—Hot Rolled Annealed and Deoxidized Sheets—Galvanized Sheets—Enameling Grade Steel—Welded Tubing—Galvanized and Fabricated Steel Strip—Steel Strapping, Tools and Accessories.

DISTRICT SALES OFFICES: Chicago, Ill., Cincinnati, O., Cleveland, O., Dayton, O., Detroit, Mich., Indianapolis, Ind., Milwaukee, Wis., New York, N. Y., Philadelphia, Pa., Rochester, N. Y., Los Angeles, Calif., San Francisco, Calif., St. Louis, Mo., Montreal, Que., Toronto, Ont.



12 x 12 in. and 3/8 in. thick, is unconditionally guaranteed against delamination and is completely prefinished at the factory. The blocks are tongue and grooved to interlock with surrounding blocks and are laid so the grain of each alternates with surrounding panels to achieve distinctive patterns. Hasko flooring may be laid directly over concrete with mastic or blind nailed over wood sub-floors and existing wood floors. Since each block comes prefinished, finishing time is eliminated. The flooring's finish requires little maintenance and is chip-proof.

Manufacturer: Haskelite Manufacturing Corp., Grand Rapids 2, Mich.

WIPE-ON PAINT is easily applied, fast-drying and washable. According to the manufacturer, one coat of Palletone, a new wipe-on wall paint, will cover wallpaper, wood, brick, concrete, calcimine, wallboard or plaster. Easily applied with a special 59 cent Palletone wipe-on applier, the oil-base product has no objectionable odor, dries in an hour and is washable. It is available in 13 pastel and deep hue colors and is packaged in quart and gallon sizes, retailing at $1.75 and $5.95 respectively. Although primarily a wipe-on paint, the manufacturer states that Palletone can also be applied by brush or spray if desired.

Manufacturer: Plasti-Kote Inc., 425 Lakeside Ave., N.W., Cleveland, Ohio.

NEW PAINTS, FLOOR COATING and CALKING COMPOUND are introduced by Abesto Manufacturing Corp.

To their established line of cold roofing adhesives and coating materials, Abesto Mfg. Corp. has added five new products: Abesto Portland Cement Paint, White Utility Paint, Master Quality Outside White Paint, Floor Coating and Calking Compound. Made in attractive durable colors, *Abesto Portland Cement Paint* forms a decorative cement-like covering over masonry walls. It has a multiple-ground, Portland cement base and is said to give a smooth, attractive coverage and long service. The paint permeates each pore and bonds to the surface to prevent the entrance of moisture and it is unaffected by alkalis, lime or dampness. *Abesto White Utility Paint,* for use on large outside areas, is a low-cost gleaming white utility paint that remains white. In addition, it contains pentachlorphenol to penetrate and preserve outside surfaces against weathering, water-rot and fungus decay. Oil based with a high per cent of titanium pigments for hiding power and zinc for wearing qualities, it is said to cover well with one coat. *Abesto Master Quality Outside White Paint* is a top grade outside white for fine surfaces. Composed of white lead, titanium and zinc oxide ground in pure linseed oil, it provides beauty and long service for homes, churches, store fronts, etc. *Abesto-Floor Coating* is a liquid floor protection that is designed to withstand heavy traffic punishment and general hard wear. Usable on concrete, wood, linoleum and other composition floors, it gives an easily cleaned, smooth but skid-resistant surface which is impervious to oils, grease, alkalis and acids. *Abesto-Floor Coating* is available in light and medium gray, tile red, dark green and clear. One gal. covers about 500 sq. ft. *Abesto Calking Compound,* the last of the new products, is a natural colored material for all kinds of calking requirements. Packed in standard 16 oz. cartridges it can be used in most calking guns.

Manufacturer: Abesto Mfg. Corp., Michigan City, Ind.

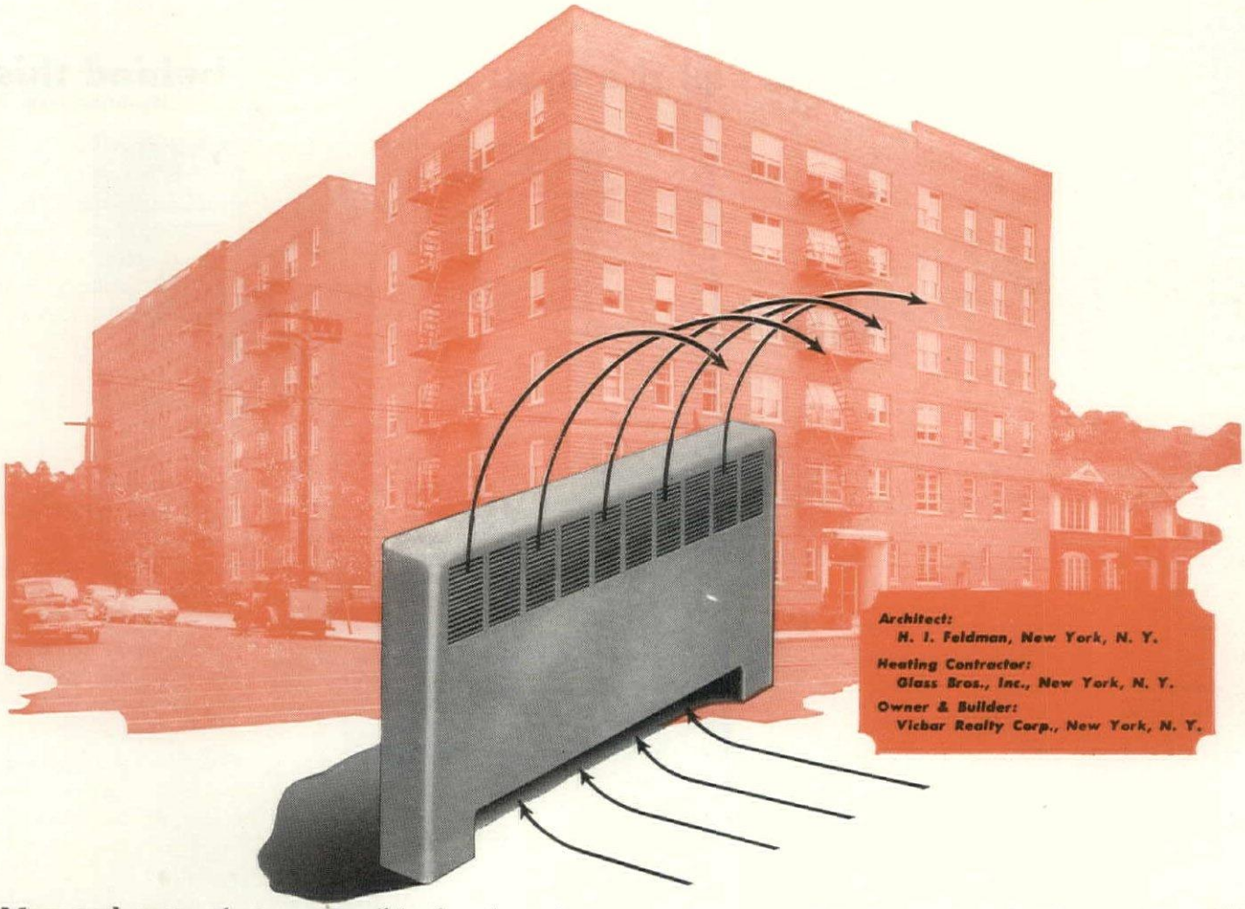
UNIT HEATER for steam or forced hot water heating of corridors, churches, offices, showrooms, etc.

The new Webster-Nesbitt Series R Unit Heater consists essentially of a neat steel cabinet enclosing a heating element and two or more centrifugal fans belt-driven from an electric motor. The V-belt drive with variable pitch motor sheave permits 30 per cent change in fan speed, or allows operation of the fans at a speed suitable for a quiet office, church lobby or other places where low noise levels are essential. Adjusted to a higher speed, the unit produces high heating capacity for any commercial or industrial application. The unit's non-ferrous heating element, suitable for steam or forced hot water systems, consists of copper tubing and aluminum fins and is of the hairpin circuit type. *(Continued on page 142)*

CH* the choice for Heating Comfort — in Brooklyn

*Convection Heating WITH TUTTLE & BAILEY STANDARDIZED COPPER CONVECTORS

. . . again selected as the *right* combination for efficiency, economy, appearance . . . installed in the new 48-unit Victoria Court Apartments, Brooklyn, N. Y.



More and more, those responsible for the selection of heat distribution methods and equipment for modern apartments and homes realize the advantages of CH* with Tuttle & Bailey Convectors . . . the principle of heating by means of air motion that assures efficient heat transmission, real comfort . . . all-copper T & B heating elements that mean economical operation, fuel cost savings . . . trim appearance that harmonizes with modern interiors and furnishings.

Advantages important to building owners and tenants alike that answer the demand for *better* heating from *better-looking* equipment.

ASK YOUR JOBBER TODAY

TUTTLE & BAILEY

Standardized COPPER CONVECTORS

Send today for a copy of Catalog C8R. . complete details for specifying and installing . . . write Tuttle & Bailey, Inc., New Britain, Conn.

17TB48

Need a Sound System that is *really good?*

If you do, call the man behind this sign

A REALLY GOOD Sound System does its job so well that all listeners within its range enjoy the full, natural beauty of the reproduced music and hear every spoken word clearly—without ever being conscious of the location of loudspeakers.

Does your present system pass that test? If not, follow the lead of others who have called on Western Electric to solve their sound distribution problems.

For example, a department store recently called in a Western Electric Sound Dealer to replace its inadequate sound system. He—working with engineers of Graybar Electric and Western Electric—put in a custom-tailored system that met all requirements.

Another case was a church where the Minister's words could not be understood by one-third of the congregation. Acoustic treatment and a conventional loudspeaker system brought no improvement. But Western Electric engineering and equipment solved the problem so well that now all can hear clearly.

Naturally, your Western Electric Sound Dealer can give you the same fine job on an *original* installation. No matter what your exact needs or problems, count on him for a sound system that is "really good."

Look for his name in the Classified Section of your Telephone Directory—under "Sound Systems." If there is no Western Electric Sound Dealer listed in your city, ask Graybar Electric Company, 420 Lexington Avenue, New York 17, N. Y. for the name and address of the one nearest you.

—QUALITY COUNTS—

Western Electric
SOUND SYSTEMS

DISTRIBUTORS: IN THE U.S.A.—Graybar Electric Company. IN CANADA AND NEWFOUNDLAND—Northern Electric Co., Ltd.

"Duty-Designed" means these completely new Timken Silent Automatic heating units are *designed right, built right, priced right* to give small homes the finest in quiet, dependable, economical heat.

Duty-Designed
FOR SMALL HOMES
BY
TIMKEN
Silent Automatic

Right for the architect!
Right for the builder!
Right for the home owner!

Where every foot of cubage counts—and where *quietness plus reliability* count most of all—that's the place for Timken Silent Automatic "Duty-Designed" oil heating equipment for small homes!

It's made specifically to fit the job in every way — *ultra-compact* for vital space conservation; *supremely quiet* for utility room installations; *completely dependable* for long-lasting, trouble-free service; *competitively priced* to provide top-quality equipment at budget cost.

Operating economy is also in keeping with small home needs. This Timken Silent Automatic "Duty-Designed" equipment is fired by the same *wall-flame* type of burner that has a 20-year record for thrifty efficiency. Fuel oil savings up to 25% or more are commonplace.

For full details, write the factory or phone your local Timken Silent Automatic Authorized Dealer! He's listed in the "yellow pages."

Newly created to bring to small homes the finest in winter air conditioning, the Timken Silent Automatic Hi-Furnace combines in one space-saving, fully-integrated unit a wall-flame oil burner, furnace with radiator, blower, air filters, and automatic humidifier (extra optional equipment).

HERE IS THE FAMOUS WALL-FLAME OIL BURNER—HEART OF EVERY TIMKEN SILENT AUTOMATIC "DUTY-DESIGNED" UNIT!

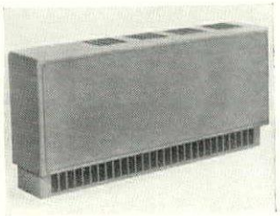
The Timken Silent Automatic Wall-Flame Oil Burner is the only type of power burner capable of operating at *continued high efficiency* at the low oil rates demanded by small homes. And it's whisper-quiet, too—as proved by decibel meter tests.

Other "Duty-Designed" units include Lo-Boilers, Hi-Boilers, Coil and Tank Type Water Heaters, and Standard Oil Furnaces.

TIMKEN
Silent Automatic
OIL HEAT

TIMKEN SILENT AUTOMATIC DIVISION
The Timken-Detroit Axle Company • Jackson, Michigan

Accepted S A Standard

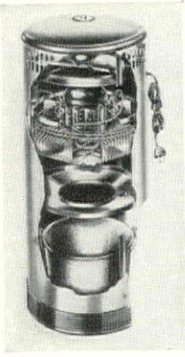


Fans are forward-curved type and are supported from rubber mounted graphite packed sleeve bearings. The motor is resilient-mounted, constant speed type operating at 1,725 r.p.m. The new Type R heater, successor to the prewar Webster-Nesbitt Series F unit heater, is available in four sizes with two, three, four or five fans. Units may be arranged for vertical, horizontal, wall or inverted mounting. An end compartment provides space for motor, supply and return piping and electrical connections.

Manufacturer: John J. Nesbitt, Inc., Philadelphia 36, Pa.
Distributor: Warren Webster & Co., Camden, N. J.

DEHUMIDIFIER reduces dampness in basements and game rooms, also used to help speed construction.

Designed to reduce humidity in basements, libraries, game rooms, new structures and in light commercial applications, Frigidaire's new dehumidifier utilizes a refrigeration principle for the condensation of air moisture. The circular unit's fan draws the moist air over a series of coils which removes the moisture and condenses it into drops of water. These collect in a container or drain. Measuring only 33⅝ in. high and 14 in. in diameter, the new unit can be plugged in for immediate operation wherever there is an electrical outlet. No floor bolting or other connections are required for its continuous operation. Reports indicate that the new dehumidifier, in addition to protecting articles stored in closed areas, can be used successfully in new construction to cut plaster drying time. Price is $149.75.



Manufacturer: Frigidaire Division, General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

PORTABLE VACUUM CLEANER supplies fast cleaning for hotels, schools, stores, theaters and office buildings.

According to the manufacturer, the new Spencer Commercial portable vacuum cleaner is in reality a smaller model with the same high design standards as the larger Spencer models. It features capacity-speed cleaning, and easy portability and uses the same hose and tools employed with the Spencer Stationary system. The new machine is powered by a Universal motor having a continuous rating of 1 h.p. It has a large dirt capacity of .875 cu. ft. and a dirt container which can be removed and rolled on casters to the point of disposal. A large filter bag inside the machine allows long periods of cleaning without loss of vacuum. Without removal from the tank the bag can be cleaned by shaking the dirt into a can below. This can with its built-in casters is easily removed from the

(Continued on page 146)

Home buyers won't be "BUFFALOED"

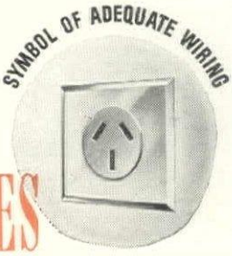
As you know, home buyers won't take just anything; they don't hesitate to tell you what they want. Today the trend is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year over a million more Electric Ranges will be installed.

This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will *stay* modern for years to come!

Electric Range Section
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 East 44th Street
New York 17, N. Y.

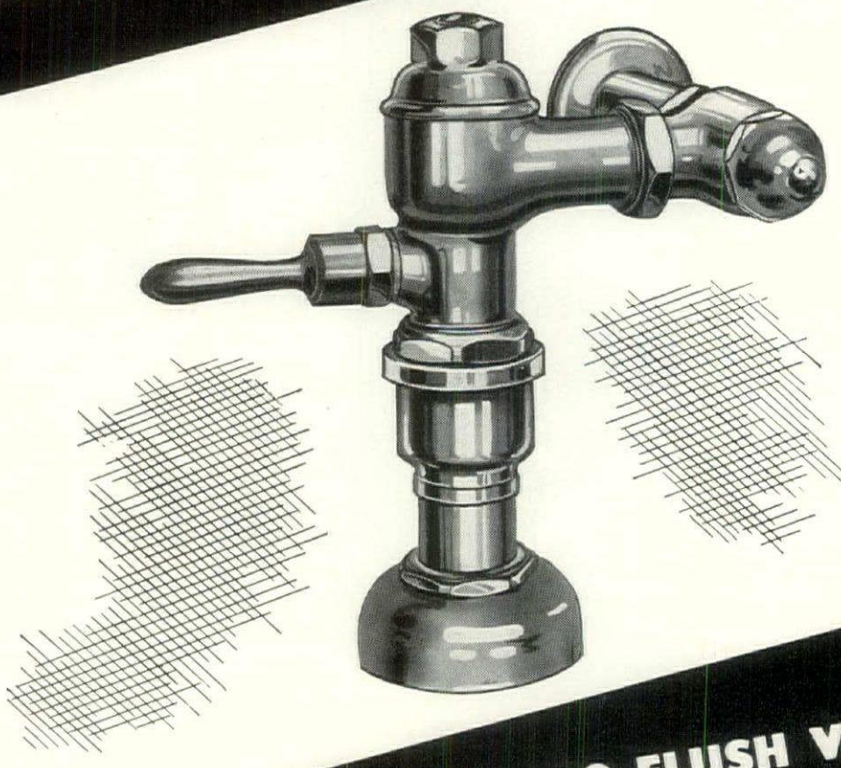
ADMIRAL • CROSLEY • ESTATE HEATROLA • FRIGIDAIRE
GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • LEDO
MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

Follow the trend... **wire YOUR HOUSES FOR ELECTRIC RANGES**



Another 1,000,000 American families switched to Electric Cooking last year

QUIET AS A WHISPER



SPEAKMAN SI-FLO FLUSH VALVE

You'll have no complaints when you recommend and use Speakman *Si-Flo* Flush Valves. *Si-Flo* is quiet operating. There's no water hammer, no line, throttling or closing noises when *Si-Flo* Valves are used.

Even with supply pressures as high as 100 pounds per square inch—*Si-Flo barely whispers!*

Installation of *Si-Flo* Valves in schools insures no more interrupted classes . . . in hotels—no broken rest or slumber for the guests . . . in hospitals—no disturbed or annoyed patients . . . in apartments—no more interrupted conversations or broken sleep . . . and in the home—no more annoyance or embarrassment for host or guest.

There's a *Si-Flo* Flush Valve for every installation. All are designed to give years of quiet economical service . . . adjustable connection between valve and stop—lowers installation cost. The patented long-wearing, easy to replace piston unit reduces maintenance to the absolute minimum.

For complete information on *Si-Flo* Flush Valves for any kind of installation, see our Catalog S-46. If you do not have our catalog, write for one, care of Dept. FV at the address below.

See Sweet's Architectural File for a condensed catalog of Speakman Showers and Fixtures.

"Established in 1869"

SPEAKMAN

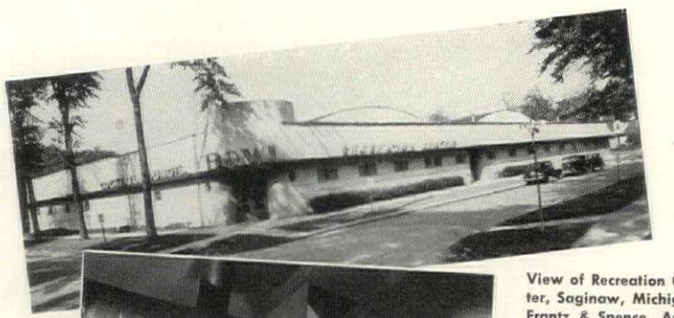
SHOWERS AND FIXTURES

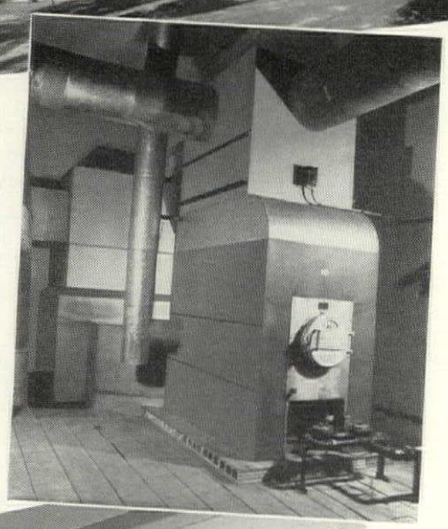
SPEAKMAN COMPANY, WILMINGTON 99, DELAWARE

Mr. Alfred M. Klopf *
of A. C. Klopf & Sons

"I saved 40% for my client...

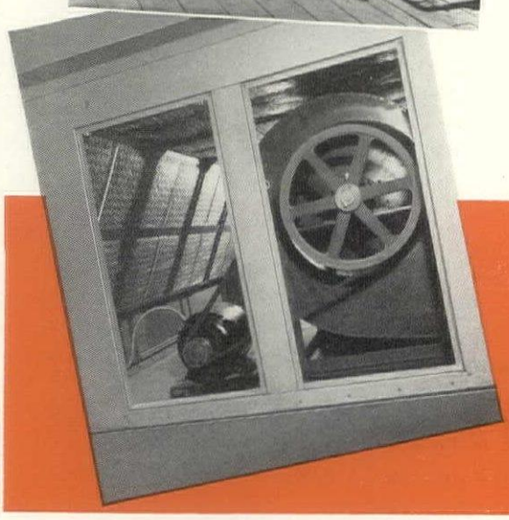
on installation costs by recommending and installing WARM AIR instead of wet heat"





View of Recreation Center, Saginaw, Michigan. Frantz & Spence, Architects, Heating contractor, A. C. Klopf & Sons.

A Jackson & Church "PoweRated" heater is satisfying heat loss of 500,000 Btu's at low cost. This unit is handling 11,000 cfm.



Blower unit equipped with twenty 16" x 25" filters provides four changes of air per hour. Installed in attic space which otherwise would have been unusuable.

"My client. . . .Mr. Frank Anderson, owner of the Recreation Center at Saginaw, Michigan. . . .after a review *of actual warm air as compared to estimated wet heat installation costs. . . .* informed me that warm air was approximately *40% less expensive.*

Besides cutting installation costs to the bone. . . .warm air heating has given my client low cost operation and top performance.

During the summer months, *the blower and ductwork are utilized to provide frequent filtered and humidified air changes* and thus obviate a summer air conditioning system. . . .a definite plus feature. . . .*cost-and-comfort-wise.*

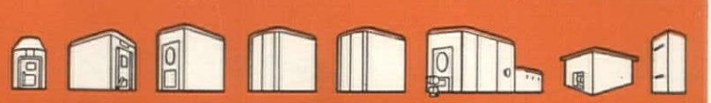
All in all, I have found that warm air heating has so many exclusive combinations of values that it is my first choice every time."

SEE OUR CATALOG IN SWEET'S

* Statement of Mr. Alfred M. Klopf on file with Jackson & Church Company.

J&C .... AMERICA'S LARGEST AND MOST COMPLETE WARM AIR HEATING LINE

INDOOR COMFORT



A PRODUCT OF

JACKSON & CHURCH CO., SAGINAW, MICHIGAN

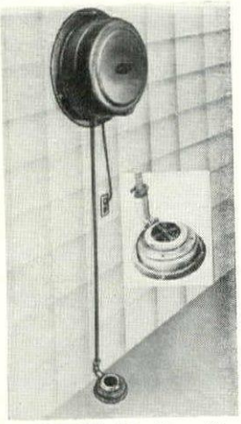
"WORK WELL DONE SINCE '81"

machine by a foot operated bar. Although the new cleaner weighs 188 lbs. it is designed so that it can be moved easily by pulling. The large rubber tired wheels have roller bearings and even the small swivel casters under the motor end are equipped with ball bearings. Other features of the new unit include low maintenance costs and a minimum of operating noise and vibration.

Manufacturer: The Spencer Turbine Co., Hartford 6, Conn.

ELECTRIC HAND DRIER helps maintain clean washrooms, dries hands in approximately 40 seconds.

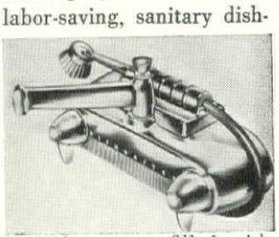
Eliminating the customary washroom litter that accompanies the use of paper towels, the electric Airtowel hand drier supplies instant hot air to dry the hands in about 40 seconds. It functions by means of a platform-mounted foot switch and can, according to the manufacturer, be inexpensively maintained and operated. The unit contains a sturdy universal motor with self-oiling bearings and a statically and dynamically balanced blower. The base is constructed to give trouble-free service and has a drain of 1,000 w., 115 v., AC-DC. Installation is reported to be simple, price is $59.95 f.o.b. Chicago.



Manufacturer: Morici Products Corp., 835 W. Madison St., Chicago, Ill.

SINK FIXTURE with swing spout and flexible spray arm eases dishwashing.

In addition to a swing spout and the usual set of faucets, The Manville Dishmaster features a flexible spray arm with finger-tip soap dispensing control for labor-saving, sanitary dish-washing. This flexible brush-equipped arm can be used to scrape the dishes, soap and wash them with fresh clean suds, and rinse them in clean hot water. To use, one or two tablespoons of a detergent are placed in the Dishmaster's tank which is then filled with water. The hot water is turned on and the diverter valve on the fixture top is lifted. When soap is desired, a push-button on the sprayer handle is pressed. According to the manufacturer, the dishwashing arm not only eliminates the unpopular dishpan, but uses less hot water and soap. The Manville Dishmaster, a permanent chrome fixture which can be installed as easily as a new set of faucets, comes in table or wall type to fit any new or existing sink. Price is $39.50.



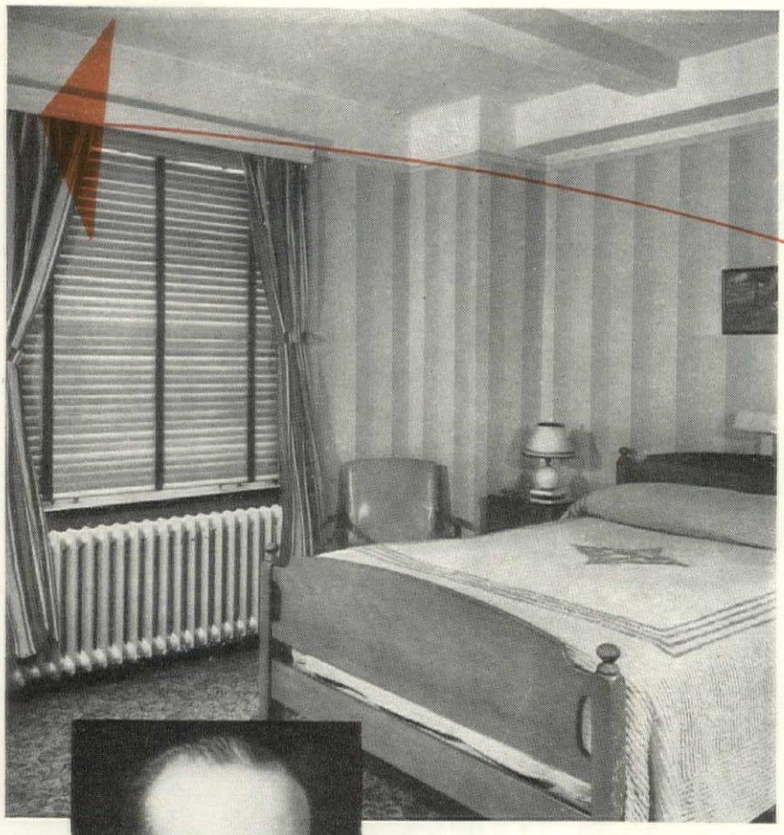
Manufacturer: Gerity-Michigan Corp., Adrian, Mich.

IMPORTED DRAWING PENCILS are again available.

The familiar No. 2886 Mars-Lumograph drawing pencils have again returned to the American market. Imported from Germany, they are available in degrees ranging from 6B to 9H, and are priced at $1.50 per dozen. Also available, as in the past, are the companion lines No. 1018 Mars-Lumograph Artist (Chuck) pencils, priced at $1, and No. 1904 Mars Lumograph Artist Leads ranging from EXB to 6H.

Importer: J. S. Staedtler, Inc., 53 Worth St., New York, N. Y.

(Technical Literature, page 150)



LEVOLOR

Reg. Trade Mark of Lorentzen Hardware Mfg. Corp.

SPECIFIED HERE

Hotel Times Square
Architects: Gronenberg & Lustag

"...cuts Venetian Blind maintenance calls to a minimum"

says Abner Friedman, General Manager, Hotel Times Square, New York

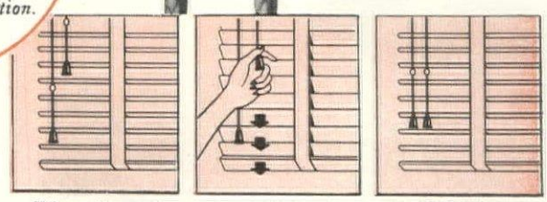
In a recently completed program of renewing and refurbishing all 1000 guest rooms, the Times Square Hotel specified—and installed—LEVOLOR-fitted blinds. Immediately, Venetian blind maintenance calls were cut to a minimum. That's why LEVOLOR self-adjusting tilters on Venetian blinds were welcomed in this hotel, and in thousands of others . . . in commercial buildings, in industrial plants, in schools . . . wherever precise control of light and air, ease of operation, and lifetime efficiency of Venetian blinds are required.

If your first interest is economy and quality in the building you erect, manage, finance or maintain—specify LEVOLOR for all windows, for all Venetian blinds. Insist on LEVOLOR from your Venetian blind manufacturer, or let us furnish you with a list of those qualified in your area.

LEVOLOR is the registered trade mark for self-adjusting tilters made by Lorentzen Hardware Mfg. Corp., New York 12, New York and built into quality Venetian blinds.

"Tilt gear to automatically keep cords level, shall be LEVOLOR as manufactured by the Lorentzen Hardware Mfg. Corp. or approved equal." Quoted from specifications of American Hotel Association.

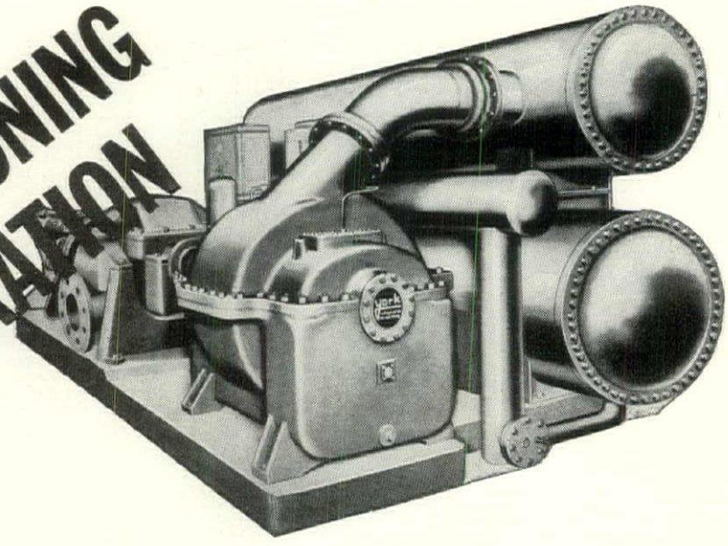
LEVOLOR is a rare achievement in Venetian Blind Hardware. It combines the sturdiest wrought steel for long, dependable service plus contrasting metals where needed to eliminate "freezing"..."sticking" and "jamming".



When tilt-cords "creep"... just PULL the *short* cord . . . and "CLICK!" they come back even

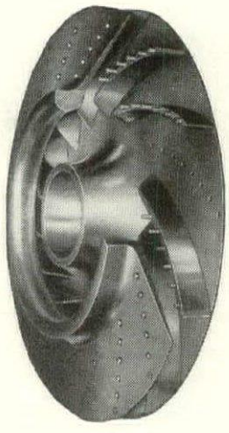
LORENTZEN HARDWARE MFG. CORP., 391 W. BROADWAY, NEW YORK 12, N. Y.

AIR CONDITIONING
REFRIGERATION



ONLY YORK HAS

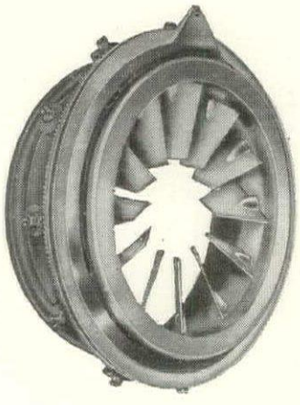
Turbo Compressors with Stainless Steel Impeller Wheels . . .



Available on no other compressor, yet they're standard equipment on York Turbos! Wheels constructed *entirely* of turbine quality stainless steel, corrosion-proof . . . and erosion resistant . . . assure years of operation at initial high efficiency.

ONLY YORK HAS

Pre-Rotation Vane Control . . .



Exclusive with York, a *gradual acting* multi-radial vaned control, constructed of accurately machined non-ferrous materials. Ring and pinion gear movement insures smooth vane opening and closing—multiple vanes give *precise adjustment* of refrigerant flow down to minimum capacities . . . impart a *flow pre-rotation*. Result—inherent *stability of operation* over the widest capacity ranges.

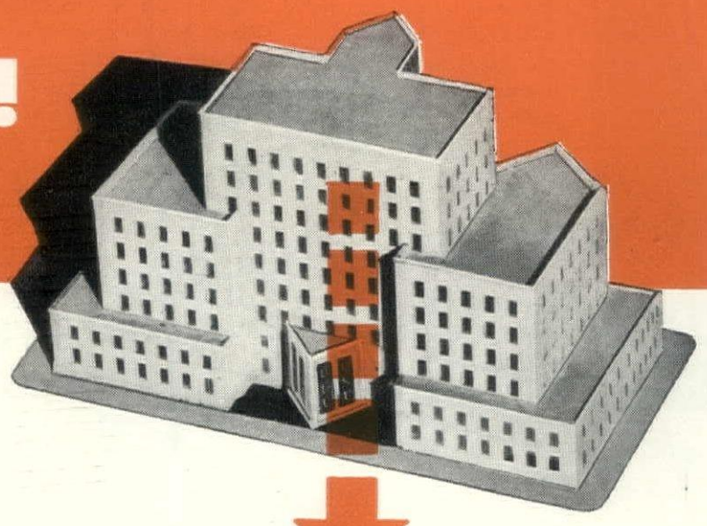
York gives you these 2 exclusive features at no extra cost. They put the York Turbo in a class by itself!

York Corporation, York, Pennsylvania.

YORK *Refrigeration and Air Conditioning*

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

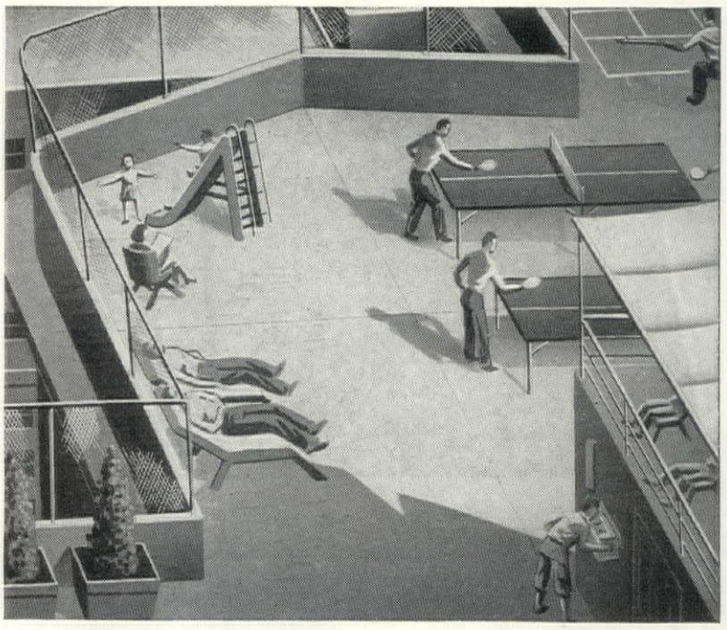
Don't waste the roof!



Like Cinderella, roofs are now blossoming forth after years of menial employment! Gardens grow on apartments and hotels. Factories and warehouses solve many space problems with new heavy duty traffic roofs. Schools, hospitals and office buildings have promenade roofs where fresh air and sunshine can be enjoyed even in the most crowded districts.

Ruberoid built-up roof specifications give the go-ahead signal to full, productive use of this valuable but long-neglected roof area. They provide the solid, workaday basis for making these new developments completely practical.

Let Ruberoid's thoroughly tested specifications help you in your current planning . . . the possibilities opened for creative design are practically unlimited. Complete specifications are available now from any Ruberoid sales office or your local Ruberoid Approved Roofer.



LIFE IS MORE PLEASANT → for everyone in this new building—the carefully planned use of this roof area provides ample recreational facilities for all.

The RUBEROID Co.

BUILT-UP ROOFINGS

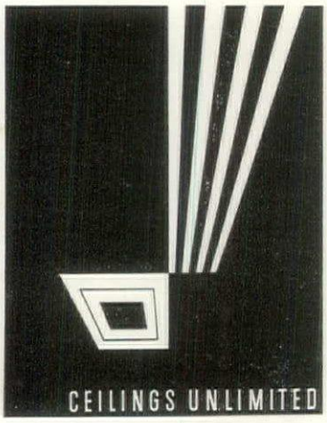
Building Materials for Industry, Home and Farm
Executive Offices: 500 Fifth Avenue, N.Y. 18, N.Y.

The right roof for any job—from ONE source!

Ruberoid makes every type of built-up roof—Smooth Surfaced Asbestos, Coal Tar Pitch with gravel or slag surfacing, or smooth or gravel-and-slag surfaced asphalt . . . in specifications to meet any need. Ruberoid Approved Roofers are not prejudiced in favor of any one type. You are assured of one source for all materials, centralized responsibility, smoother operation, uniform quality!

SALES OFFICES: BALTIMORE, MD. · CHICAGO, ILL. · DALLAS, TEXAS · ERIE, PENN. · MILLIS, MASS. · MINNEAPOLIS, MINN. · MOBILE, ALA. · NEW YORK, N. Y.

TECHNICAL LITERATURE



LIGHTING. Ceilings Unlimited, 1948. The Miller Co., Meriden, Conn. 105 pp. 9¼ x 10⅛ in.

The Miller System of recessed lighting, which combines lighting and ceiling equipment to create numerous attractive ceiling designs, is detailed and illustrated in this 1948 revision of *Ceilings Unlimited*, a well organized and very handsome publication. Divided into three parts, the booklet describes how *Ceilings Unlimited* are specified, how they work and what they look like. Complete engineering and installation details are presented, together with data on luminaire performance. Excellent illustrations are included to show designs and installations which employ the Miller method. This is an exceptionally fine manufacturer's publication, another example by the Miller Co. of the effectiveness of good graphic art in advertising.

FIRE PROTECTION. N.F.P.A. Handbook of Fire Protection, Tenth Edition. National Fire Protection Association International, 60 Batterymarch St., Boston, Mass. 1,544 pp. 5¼ x 7½ in. Price $9.50.

Not just a revision of the 1941 edition, but a completely new book set in easy-to-read type, the 1948 N.F.P.A. *Handbook* features new and up-to-date information on fire prevention and protection. With an additional 14 chapters, it includes significant wartime fire protection developments, and covers in compact, ready reference form both personal safety from fire and the protection of property. There are hundreds of illustrations with 10,000 separate items conveniently indexed. Among the many completely new subjects treated in the handbook are the chemistry and physics of fire and water spray (fog) protection.

The general field of building construction has been revised. Several new chapters give detailed information about the various building types and related matters, including interior finish and insulation, flameproofing treatments, tables of fire resistance ratings of walls, partitions, floors, columns, roofs, etc., as established by laboratory tests. A new chapter on magnesium and other combustible metals outlines fire hazards and methods of protection. Tables of fire causes by occupancy classification, based on an analysis of 50,000 individual fires, are still another feature.

PARKING FACILITIES. Planning The Modern Parking Facility. Ramp Buildings Corp., 230 Park Ave., New York 17, N. Y. 20 pp. 8⅜ x 10⅞ in.

Designed to be of practical assistance to individuals or groups contemplating the development of an off-street parking structure, this publication outlines the problems involved in planning modern parking facilities. Also, it describes how R.B.C. planning services may be applied to such problems. All types of facilities, from multi-floor structures to simple parking lots are included in the survey.

ROOFS. The Design of Insulated Roofs. Owens-Corning Fiberglas Corp., Nicholas Bldg., Toledo 1, Ohio. 36 pp. 8½ x 10⅞ in. Price 50 cents.

This manual is intended to aid those concerned with roof design in solving the problems imposed by heat flow through roof structures. Fiberglas is offered as the solution. The booklet describes the various types of Fiberglas insulation suitable for use above and below roof decks and outlines their proper use in brief specifications. In the section dealing with roof insulation above the deck, the booklet discusses the roof slope, deck material, causes of condensation, importance of vapor barrier, and the required thickness of insulation based on temperature and condensation factors. Material recommendations and application methods follow. The section covering roof insulation below the deck discusses ventilation requirements, roof-ventilation methods, ceiling construction, vapor-barrier requirements, heat losses through metal connectors and methods of calculating insulation thickness.

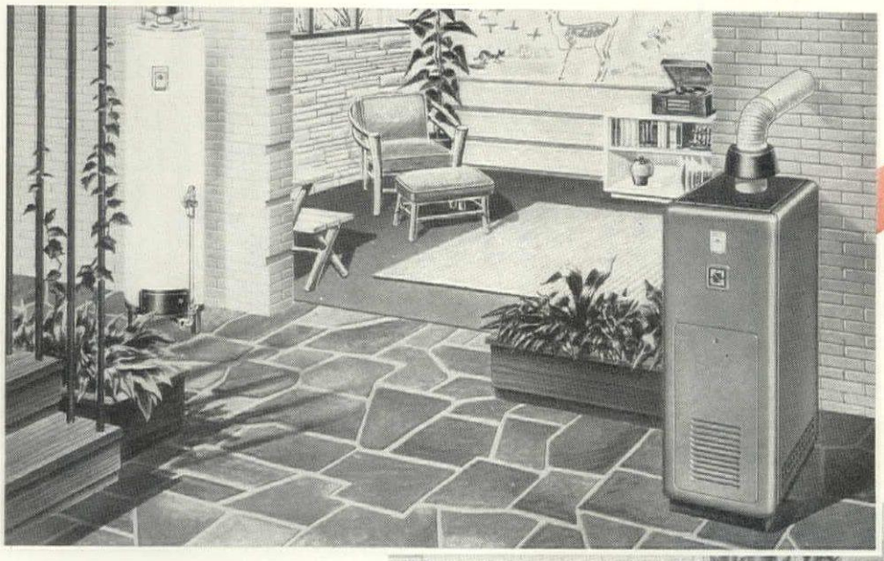
ROOFING. Manufacture, Selection and Application of Asphalt Roofing Products, Revised Edition. Asphalt Roofing Industry Bureau, 2 W. 45th St., New York, N. Y. 83 pp. 8½ x 11 in. Price 35 cents.

A "how-to-do-it" manual, this revised edition of *Manufacture, Selection and Application of Asphalt Roofing Products* serves as a dependable guide to good *(Continued on page 154)*

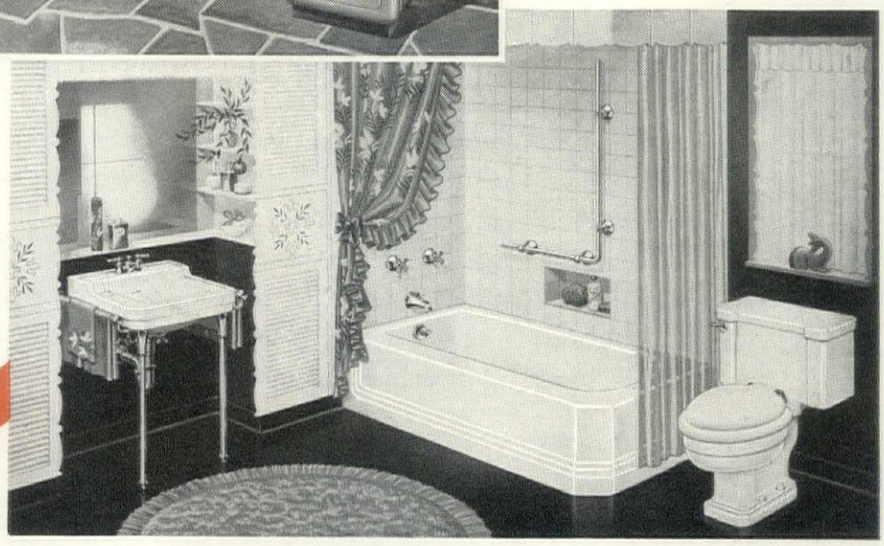
FIRST in heating and plumbing

for any home you plan or build •

. . . (including your own)!



Not all homes would allow for this distinctive basement design. But all of them gain from the efficient performance and economical operation of American-Standard Heating Equipment. Shown here are the **EMPIRE**, a compact but powerful automatic gas-fired boiler, and the always reliable **BUDGET** gas-fired Automatic Storage Water Heater.



Everybody everywhere wants a bathroom that's new as tomorrow. Here the charm of provincial design is combined with the modern conveniences offered by American-Standard Plumbing Fixtures. The roomy bath is the corner model **MASTER PEMBROKE**, the graceful lavatory is the **COMRADE**, and the low, free-standing water closet is the quiet **COMPACT**.

■ You get a real advantage when you choose American-Standard Heating Equipment and Plumbing Fixtures. For they are first in completeness of line, to meet the needs of every size of home. They lead in variety of product, to give you wide flexibility in designing and styling. And they're noted for expert engineering and construction which assures long, satisfactory service.

Whatever the job, you can't beat American-Standard as a single, reliable manufacturing source for heating equipment and plumbing fixtures. For full details, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

AMERICAN-Standard

HEATING · PLUMBING

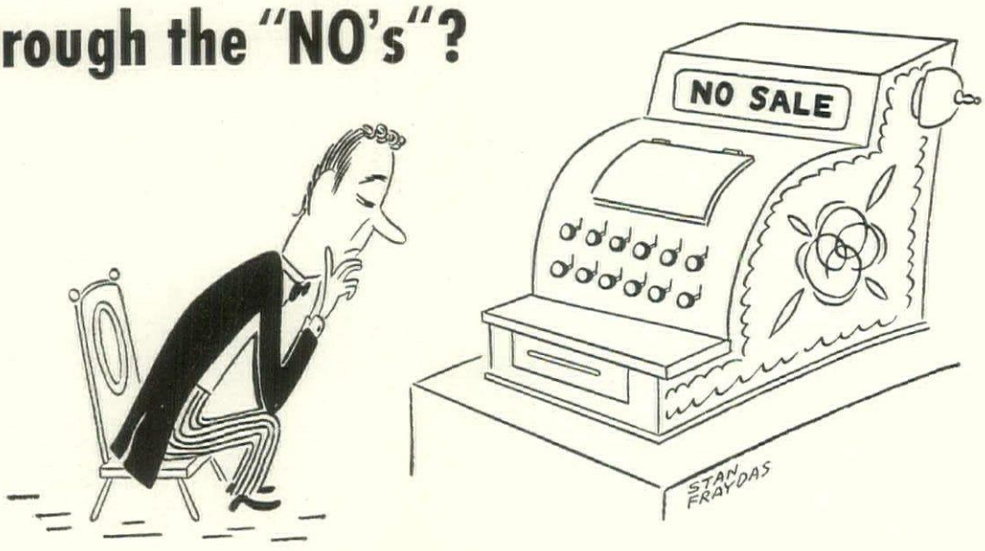
AMERICAN-Standard

First in Heating and Plumbing

Serving home and industry

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON

are you paying through the "NO's"?



People can't buy something they don't know about. And in building, where so much of the total building dollar is spent by so few people, it's imperative to tell the *leaders* your story. Let them know—so they won't say "NO".

Talking to architects... or just builders... or dealers... about mere details of building isn't enough. Today's major building decisions are made around conference tables where a "NO" from any corner can be final. That's why your advertising must influence every man whose word carries weight.

The FORUM is the *only* publication in the building field that horizontally spans every basic subject of vital interest to all decision-makers... that provides horizontal coverage of all common denominators in the entire building business... that is horizontally edited for the widest interests of top level leaders.

These men *are* leaders because they know every phase of the building business. Therefore they need—and read—the FORUM. And the FORUM is the *only* publication, effectively and dollar-wise, for an advertiser who wants to address the most productive segment of America's biggest industry.

The Architectural FORUM

Magazine of Building

Division of TIME, Inc., 350 5th Avenue, New York I, N.Y.

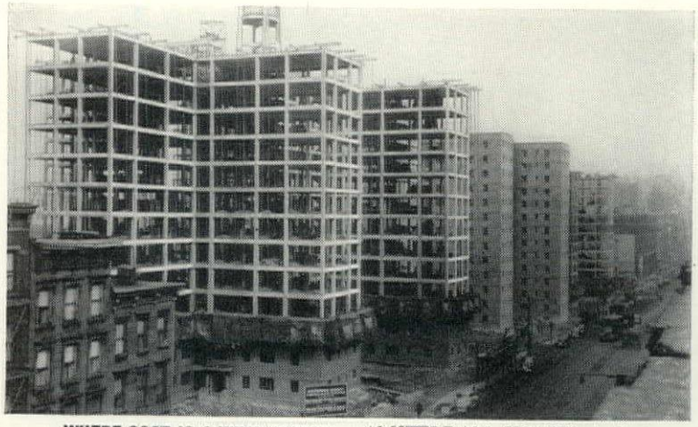
For jobs in
every price range –

LOW COST HOUSING

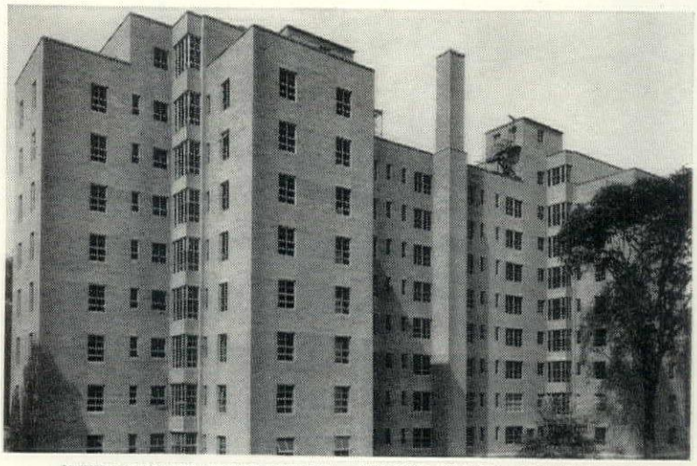
or

DELUXE APARTMENTS

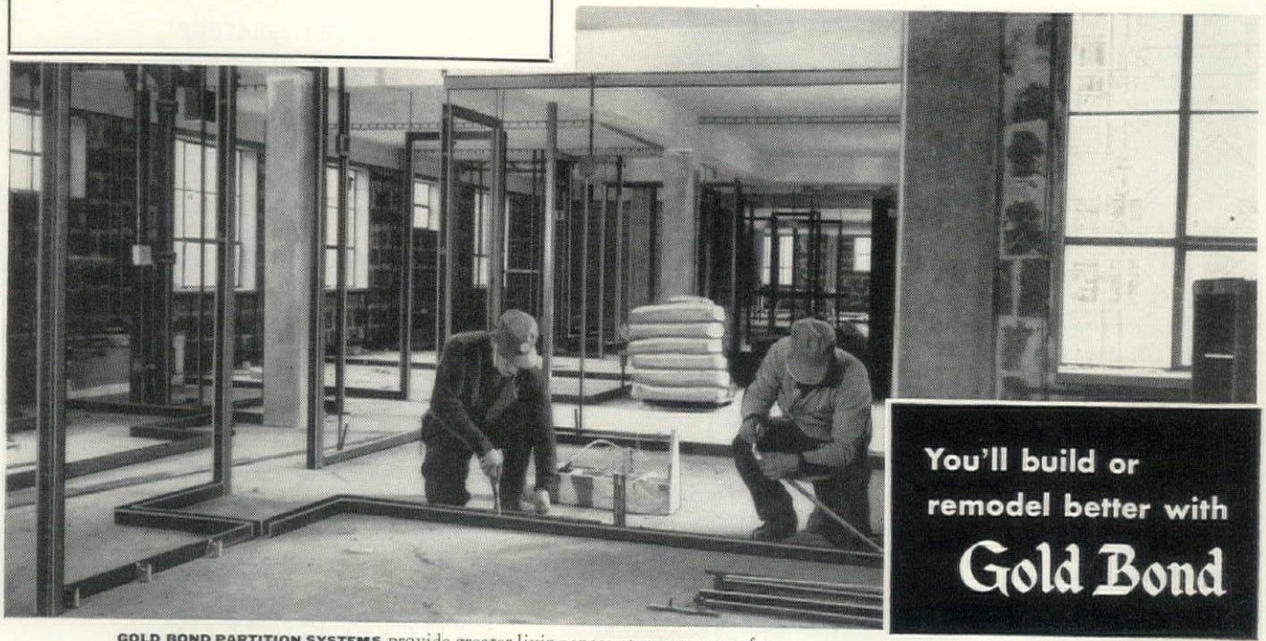
Fireproof GOLD BOND
Partition Systems
offer
best value!



WHERE COST IS A VITAL FACTOR — AMSTERDAM HOUSES had to keep down the cost of 1084 apartments. Gold Bond Solid Partitions met *all* requirements, provided far more living space.



WHERE QUALITY ALONE COUNTS — TUDOR PLAZA APARTMENTS. For this ultra-modern cooperative apartment building in Buffalo, Gold Bond Partition Systems met *all* requirements.



GOLD BOND PARTITION SYSTEMS provide greater living space at no extra cost for *any* job, regardless of size. These partitions, of fireproof gypsum plaster and metal lath save time, labor and space. They're fully described in Sweet's. Or if you'd like a 15 minute demonstration without obligation, just drop us a card.

You'll build or remodel better with **Gold Bond**

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

Over 150 Gold Bond Products including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.

practice in the selection and application of these roofings. Contents include a discussion of the asphalt roofing industry, the basic advantages and manufacture of asphalt roofing, typical types available and product selection information. In addition, 53 pages of authoritative text and illustrations outline good principles in the application of various types of shingles and roll roofings. Coverage and pattern data and how to estimate quantities of roofing also are treated.

PLUMBING FIXTURES. Kohler of Kohler. 75th Anniversary. Catalogue K 48. Kohler Co., Kohler, Wis. 144 pp. 8¾ x 11¼ in.

Numerous Kohler plumbing fixtures and fittings are illustrated and described in this attractive catalogue. Architect-designed bathrooms, washrooms and kitchens are presented in full color complete with floor plans. Matched sets of fixtures, available at various price levels, are featured as complete baths. In the section devoted to products, many enameled iron and vitreous china plumbing fixtures and brass fittings are grouped and organized for ready reference. Kohler heating equipment and electric plants, and the manufacture of Kohler products are also briefly covered.

INCINERATORS. Folder containing six leaflets. Incinerator Products Co., 669 Post Ave., S., Detroit 17, Mich. 11¾ x 9⅜ in.

Providing a wealth of data on incinerators, this folder comprises a group of individual bulletins on various types of incinerators for industrial, commercial, institutional, municipal, residential and special purposes. The incinerator types covered include: commercial retort units; brick-set, flue-fed equipment; packaged units; heavy-duty garbage; heavy-duty rubbish incinerators and special design equipment. Individual bulletins discuss the design, capacities, general construction, flue sizes and required stack areas. Diagrams and photographs illustrate installations.

REQUESTS FOR LITERATURE

B. B. B. IMPIANTI SPECIALI, contractors, Viale dei Mille 19, Milano, Italy.

BODDY-BENJAMIN ASSOCIATES, INC., architects and engineers, 2210 Park Ave., Detroit 1, Mich.

ROBERT F. CLAGHORN, consulting engineer, 570 Merchant St., San Francisco, Calif.

JAMES DARTFORD, architect, 50 Earls Court Square, London, S.W. 5, England.

LEON DEMBROW, architectural student, 9310 Colesville Road, Silver Spring, Md.

ROBERT E. DESLAURIERS, architectural student, 1111 Pearl St., Apt. 2, Boulder, Colo.

B. A. HOFFMAN, architect, 308 Renshaw Bldg., Pittsburgh 22, Pa.

M. S. MALIK, architectural student, 2600 S. Hoover St., Los Angeles 7, Calif.

DONALD E. MCCLANAHAN, architectural-engineering student, 625 North 16th St., Lincoln, Neb.

D. N. MCINTOSH, architect and engineer, 513 Pigott Bldg., Hamilton, Ont.

MELVIN MULL, 1737 Pilgrim Road, Toledo 7, Ohio.

LAWRENCE F. NULTY, architectural student, 25 Stevens St., Woodmont, Conn.

CUT Plant Rearrangement Costs

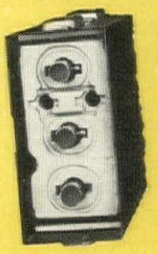
with
SQUARE D's PLUG-IN DUCT

Production capability of the modern plant is directly related to arrangement of machinery and equipment. Rearrangement may be necessary to take full advantage of an improved process or to permit economical manufacture of a new product.

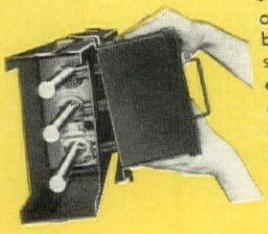
PLUG-IN DUCT can be installed with a minimum of delay and expense near ceilings, along walls, or directly above machinery to provide power where it is needed. It replaces the more conventional panelboards, which have conduit-enclosed feeders, typical of less modern installations.

***Write** for Bulletin 5600. Address Square D Company, 6060 Rivard Street, Detroit 11, Mich. Or call your nearby Square D Field Engineer for help in laying out your duct system.*

GET THESE FEATURES



Round Copper Bus Bars provide greater mechanical strength and resistance to short-circuit stresses. Supports are non-carbonizing porcelain.



Plug-in Units of either circuit breaker or fusible switch types are easily installed at 2-foot intervals along both sides of the duct. Plug-in stabs grip the round bus bars with exceptionally high pressure. A hook-type bracket permits rotation of the unit into place. A single clamp screw at bottom holds it there.

Hanger Brackets of heavy gauge steel are two-piece construction to facilitate assembly around duct enclosure. They are suitable for either edgewise or flat mounting of duct structure.

Flexible Connectors of laminated copper join bus bars between sections to provide for expansion and contraction, permit proper alignment and insure tight joints. All bolt heads face outward.

SQUARE D COMPANY

DETROIT • MILWAUKEE • LOS ANGELES

SQUARE D COMPANY CANADA LTD., TORONTO • SQUARE D de MEXICO, S. A., MEXICO CITY, D. F.

SatUSply

The surfacing applied without mechanical pressure

Applied manually with special cement and no mechanical pressure, SatUSply is available in rolls of various widths up to 48 inches, in continuous lengths or in sheets.

Spruce up table tops, counters, horizontal and vertical surfaces with SatUSply, the surfacing that comes in continuous lengths.

Easy-to-clean SatUSply comes in a wide range of patterns and colors, gives the decorator and contractor wider scope. It can take plenty of hard abuse; permits hotels, hospitals, homes, soda fountains and bars to save the time and expense of repainting.

Ask your local distributor for sample or write SatUSply Dept., United States Rubber Company, 2638 N. Pulaski Rd., Chicago 39, Ill.

DISTRIBUTORS:
New York—William L. Marshall, Ltd., 425-433 East Tenth Street
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Los Angeles—California Board Company, 1855 Industrial Street
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SERVING THROUGH SCIENCE

UNITED STATES
RUBBER COMPANY

SPECIFICATION AND BUYING INDEX

The advertising pages of FORUM *are the recognized market place for those engaged in building. A house or any building could be built completely of products advertised in* THE FORUM. *While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This* THE FORUM *does.*

THERE IS A SIZE AND TYPE SPENCER

For Every Heating Need... For Every Type Fuel...

K—
320 to 550
Net Load Steam
A standout in the Spencer line—compact steel fire tube boiler for the small home . . . easy to install with any type oil burner or stoker—quickly converted to hand-fired operation.

C—
700 to 3000
Net Load Steam
The quality steel boiler for larger homes and small commercial buildings. There are many features to this boiler that aid builder, heating contractor and home owner. Easily converted to any type firing.

Series A, C, K & R
SBI
FULLY APPROVED

R—
320 to 700
Net Load Steam
An all-steel boiler designed especially for automatic firing—includes many features of the larger series boilers.

L 3—
1430 to 4510
EDR Steam
The most economical automatic heat known. Designed for burning small size anthracite fuel. Especially suited for churches, schools and apartment buildings.

A—
1800 to 42,500
EDR Steam
An example of outstanding achievement in the low pressure commercial boiler field. Especially noted as an efficient, quick-steaming unit. Ruggedly constructed throughout of high-quality materials.

All A, C, K & R Steel Boilers Inspected and Stamped By Insurance Inspector

L 2—
690 to 1570
EDR Steam
Another series of the famous line of Spencer's magazine-feed boilers to meet the capacity requirements of the larger homes and small commercial buildings. Always operates at greatest efficiency.

I-B-R
AP FULLY APPROVED

AP—
340 to 1000
Net Steam Ratings
Burns any type of fuel—easily and quickly converted. Year-round service hot water. Attractive jacket . . . modern design door assembly featuring glass observation ports.

F—
290 to 740
EDR Steam
Brings the advantage of automatic heat with solid fuel to the small home. Provides safe, trouble-free, economical performance with long periods between firings.

ASME

All Spencer Steel and Cast Iron Boilers Built In Accordance With SBI Code & Carry Code Seal

Quality of Material and Workmanship

Modern heating specialists are aware of advantages Spencer Boilers offer. No trouble calls—easy to install—Spencer dealers keep their profit . . . make more money. Since 1888 Spencer has made the quality boilers.

IT'S ANOTHER AVCO PRODUCT!

SPENCER HEATER

DIVISION—AVCO MANUFACTURING CORP., DEPT. AA-6, WILLIAMSPORT 2, PA.

ARCHITECTS:

when you specify

ELJER Plumbing Fixtures

your clients

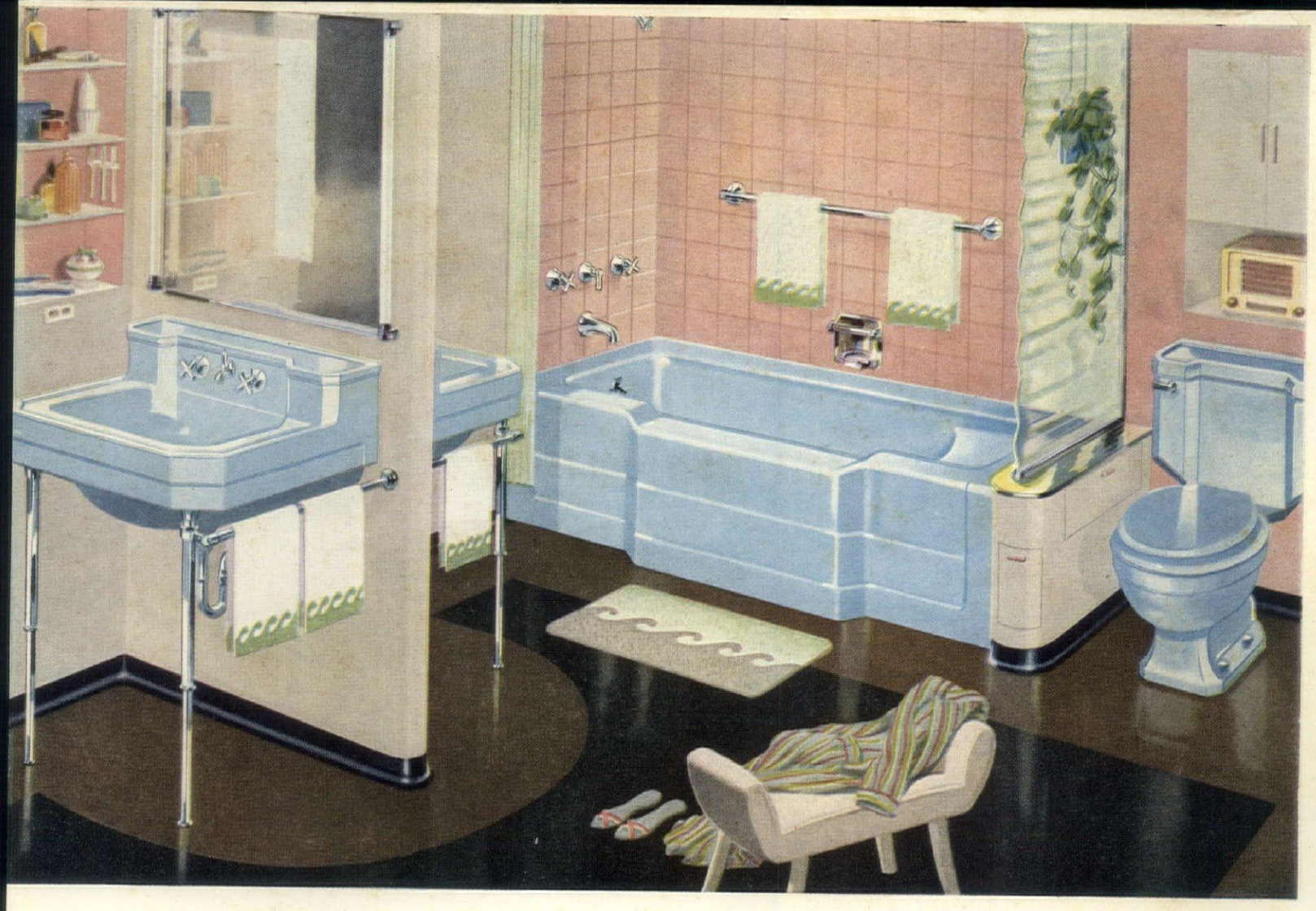
enjoy...

AS ADVERTISED IN THE POST

Eljer advertising in consumer magazines like The Saturday Evening Post will reach 75,000,000 this year. Everywhere, people know Eljer. You can be sure that **your clients** appreciate the long-life styling, superb quality and extra conveniences of Eljer's Fine Plumbing Fixtures, trimmed with Eljer's Quality Brass.

It pays you, it pays us—

because we specialize in Plumbing Fixtures and Brass



AN ELJER BATHROOM . . . *Designed for Life*

Eljer Fixtures are a symbol of pleasant living. They combine easy, immaculate housekeeping with beauty of design and color which will be a joy to your entire family.

Eljer Vitreous China lavatories and closet combinations are easy to keep clean and are impervious to the effects of ordinary acids. Just a swish of a damp cloth keeps the hard, glass-like surface sparkling.

Eljer tubs and kitchen sinks are made of *rugged, rigid* cast iron, to which is fused a thick, lustrous coat of vitreous enamel. With ordinary care, these fixtures will *outlive* the home where you have them installed.

You can select a combination of Eljer Fixtures . . . in white or delightful pastel shades and in a wide range of related, yet distinctive styles . . . that will give you an ensemble you will be proud to own.

Eljer Faucets are fine, chrome-plated brass, and are built for long, trouble-free service. All wearing parts are easily renewable. Their simplicity is a triumph of engineering.

See your Plumbing Contractor or Builder today. He will help you select Eljer Fixtures for bathroom, powder room, laundry or kitchen. Write, for free booklet, to Eljer Co., General Offices, Ford City, Pa.

FORD CITY, PA.

SALEM, OHIO

LOS ANGELES

Plumbing fixtures have been Eljer's exclusive business for nearly half a century. Three modern factories, with most advanced manufacturing methods and equipment, produce a full line of vitreous china and enameled cast iron fixtures, as well as quality brass trim.

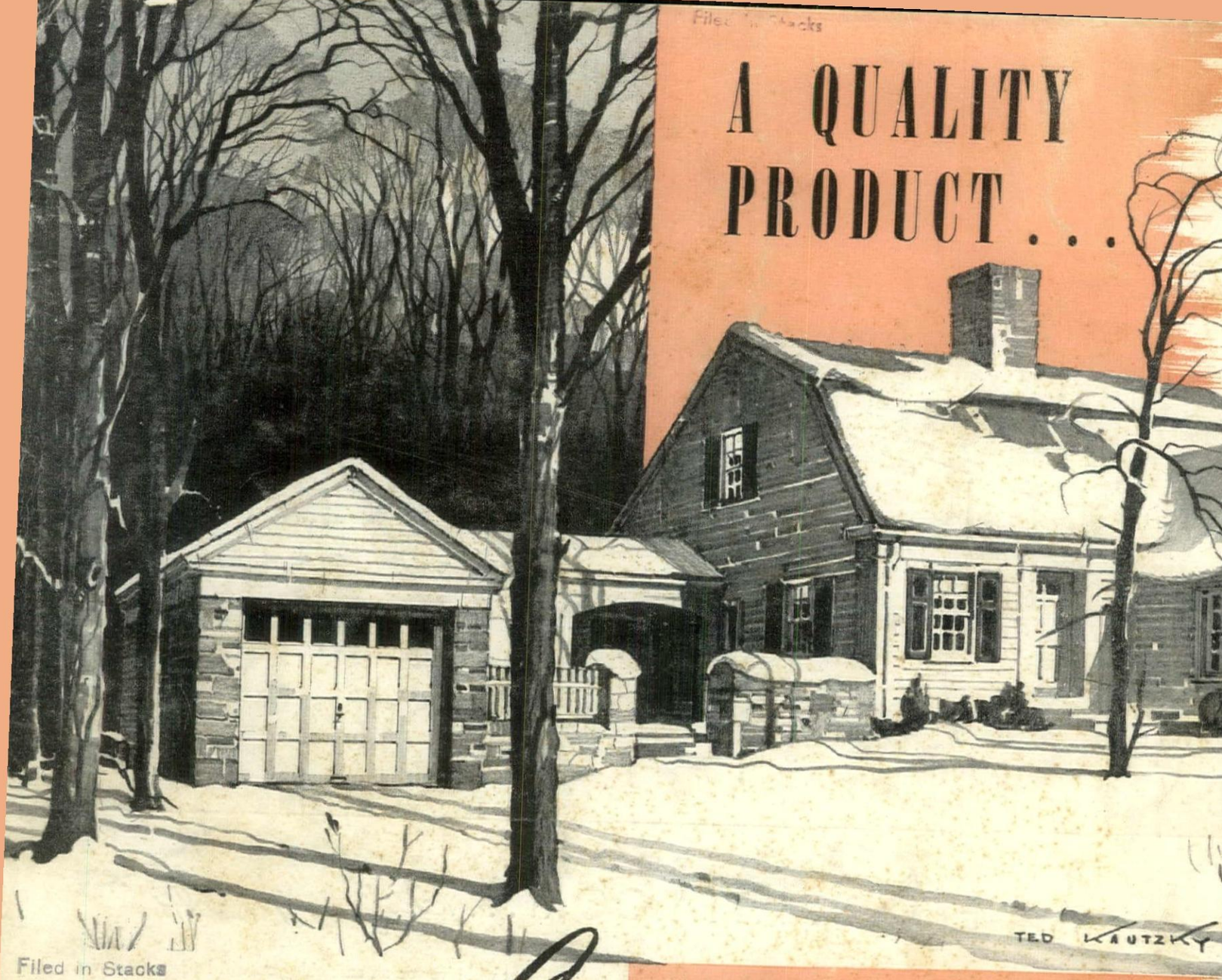
MANUFACTURERS OF FINE PLUMBING FIXTURES SINCE 1904

ELJER

Factories at Ford City, Pa., Salem and Marysville, Ohio and Los Angeles

There are over Ten Million Eljer Fixtures in Use

A QUALITY PRODUCT . . .



. . . for Lasting satisfaction!

Manufacture of The "OVERHEAD DOOR" with the Miracle Wedge combines precision workmanship and finest materials. The result is today's most perfectly performing garage door, a door giving years of uninterrupted service in millions of residential, commercial, and industrial structures. Any "OVERHEAD DOOR" may be manually or electrically operated, with the famous Miracle Wedge insuring weathertight closure and ideal opening and closing action.

TRACKS AND HARDWARE OF SALT SPRAY STEEL

THE "OVERHEAD DOOR"
TRADE MARK
WITH THE
MIRACLE WEDGE

NATION-WIDE SALES INSTALLATION SERVICE

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U. S. A.