THE ARCHITECTURAL FORUM

THE ARCHITECTURAL FORUM

BUILDING PREVIEW

NOVEMBER 1945

THE ARCHITECTURAL FORUM

THE ARCHITECTURAL FORUM

THE ARCHITECTURAL FORUM

THE ARCHITECTURAL FORUM

Smart, Modern
COMMERCIAL INTERIOR

. . . *another* example of the economy and *adaptability* of Celotex Building Materials!

• More and more, progressive architects specify *Celotex* building materials when they want beautiful and practical interiors at moderate cost.

This exclusive metropolitan shoe salon is a case in point. The architect's plan emphasized clean, sweeping lines . . . adequate display areas for merchandise . . . plus a quality atmosphere. Celotex Building Board No. 94 met all three needs inexpensively.

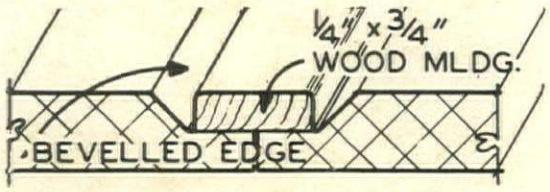
Pre-cut squares of the board were applied to the ceiling, using an inset wood moulding joint. Note the smart decorative design achieved.

The background of the illuminated display niches is Celotex Building Board in its original warm white finish. The wall areas surrounding the niches are also of building board, painted green, with some panels reeded to create an interesting decorative effect. The lower sections of the walls are of Celotex Wainscot, painted buff. Note the interesting curvatures which are easily achieved with these Celotex wall materials.

Celotex Building Board is only one of the complete line of Interior Finish products that enable you to create smart, modern interiors at low cost . . . for stores, restaurants, offices, schools and churches.

The new line of Interior Finishes also includes Celotex Tile Board and Finish Plank—Smooth White finish—Textured White finish—as well as an interesting four color blend of four softly graduated tones of tan. A countless variety of design effects can be achieved with Tile and Plank alone or in combination with Building Board and Wainscot.

The new Celotex Wainscot is dark brown in color, and has a specially hardened wear-resisting surface. For full details as to how Celotex Interior Finishes may be applied to *your* problem, write: The Celotex Corporation, Dept. AF-1145, Chicago 3, Illinois, or see Sweet's File.



Cutaway view shows the anatomy of the Inset Wood Moulding Joint which achieved the distinctive design in the shoe salon's ceiling.

CELOTEX
REG. U.S. PAT. OFF.
BUILDING PRODUCTS

THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

Published by TIME Incorporated

EDITOR-IN-CHIEF.....Henry R. Luce
PRESIDENT.....Roy E. Larsen
EDITORIAL DIRECTOR.....John Shaw Billings

THE ARCHITECTURAL FORUM

MANAGING EDITOR
Henry Wright

ASSOCIATES: Leslie Cheek, Jr., Louise Cooper, James M. Fitch, Jr., Mary Mix, Mary Sanders, Richard Saunders (Washington), Madelaine Thatcher.

ASSISTANTS: Eleanor Bittermann, Martha Howard, Mary Jane Lightbown, Lawrence W. Mester (Production), Charlotte Speight.

ART DIRECTOR: Paul Grotz.

CONSULTANTS: Miles L. Colean, George Nelson.

BUSINESS MANAGER: Vernon Hitchcock.

CIRCULATION MANAGER: George Seufert.

ADVERTISING MANAGER:
GEORGE P. SHUTT

PUBLISHER
HOWARD MYERS

THE ARCHITECTURAL FORUM is published monthly by TIME Inc., 350 Fifth Ave., N. Y. 1, N. Y. Subscription may be sent to publisher's office or to 330 East 22nd Street, Chicago 16, Ill. Address all editorial correspondence to 350 Fifth Ave., N. Y. 1, N. Y. Yearly subscription payable in advance. U. S. and Possessions, Canada, Mexico, South America, $4.00. Elsewhere $6.00. Single issues, including Reference Numbers, $1.00. All copies mailed flat. Entered as Second Class Matter July 17, 1944 at the Post Office at New York, N. Y., under the act of March 3, 1879.

TIME Inc., Time and Life Bldg., Rockefeller Center, New York 20, N. Y., also publishes TIME, LIFE and FORTUNE. Chairman, Maurice T. Moore; President, Roy E. Larsen; Vice President & Treasurer, Charles L. Stillman; Vice President & Sales Director, Howard Black; Vice Presidents, Allen Grover, Eric Hodgins, C. D. Jackson, P. I. Prentice; Comptroller & Secretary, D. W. Brumbaugh; Production Manager, N. L. Wallace; Circulation Director, F. DeW. Pratt. Producer, THE MARCH OF TIME, Richard de Rochemont; Director, Radio Programs Department, Frank Norris.

VOLUME 83, NUMBER 5

THE ARCHITECTURAL FORUM

NOVEMBER 1945

DECEMBER: Gallery, Associated American Artists . . . remodeled offices . . . What's Wrong With Our Airports . . . employee facilities . . . building previews . . . houses.

"POST WAR" IS HERE

and we are READY with— "PACKAGED MORTGAGE"

We didn't share the secret of the "Manhattan Project", the atomic bomb. It is just a lucky break that three months before the war's sudden end, National Life of Vermont had a post-war project of its own—"Packaged Mortgage".

This novel plan of home financing couldn't have been better timed. National Life of Vermont with its $300,000,000 assets and 95-years' experience in mortgage lending, is now ready to fit its lending facilities into the post war picture.

Under the "Packaged Mortgage" the house and all major kitchen appliances—gas and electric ranges, home laundries, refrigerators, deep-freeze units, dish-washing machines and such—are financed under one loan from one lender at lower interest rate than through the old time installment buying. The total monthly payments are uniform over the life of the loan instead of being heavy during the first few years.

Fortunately we offer this "Packaged Mortgage" on the threshold of the greatest home-building and home-buying era probably America has known.

Send for folder and name of nearest loan correspondent. Inquire today addressing Packaged Mortgage Supervisor, National Life Insurance Company, Montpelier, Vermont.

NATIONAL LIFE
INSURANCE COMPANY
HOME OFFICE— MONTPELIER, VERMONT

Plans for planes stored in **Tenite** tubing

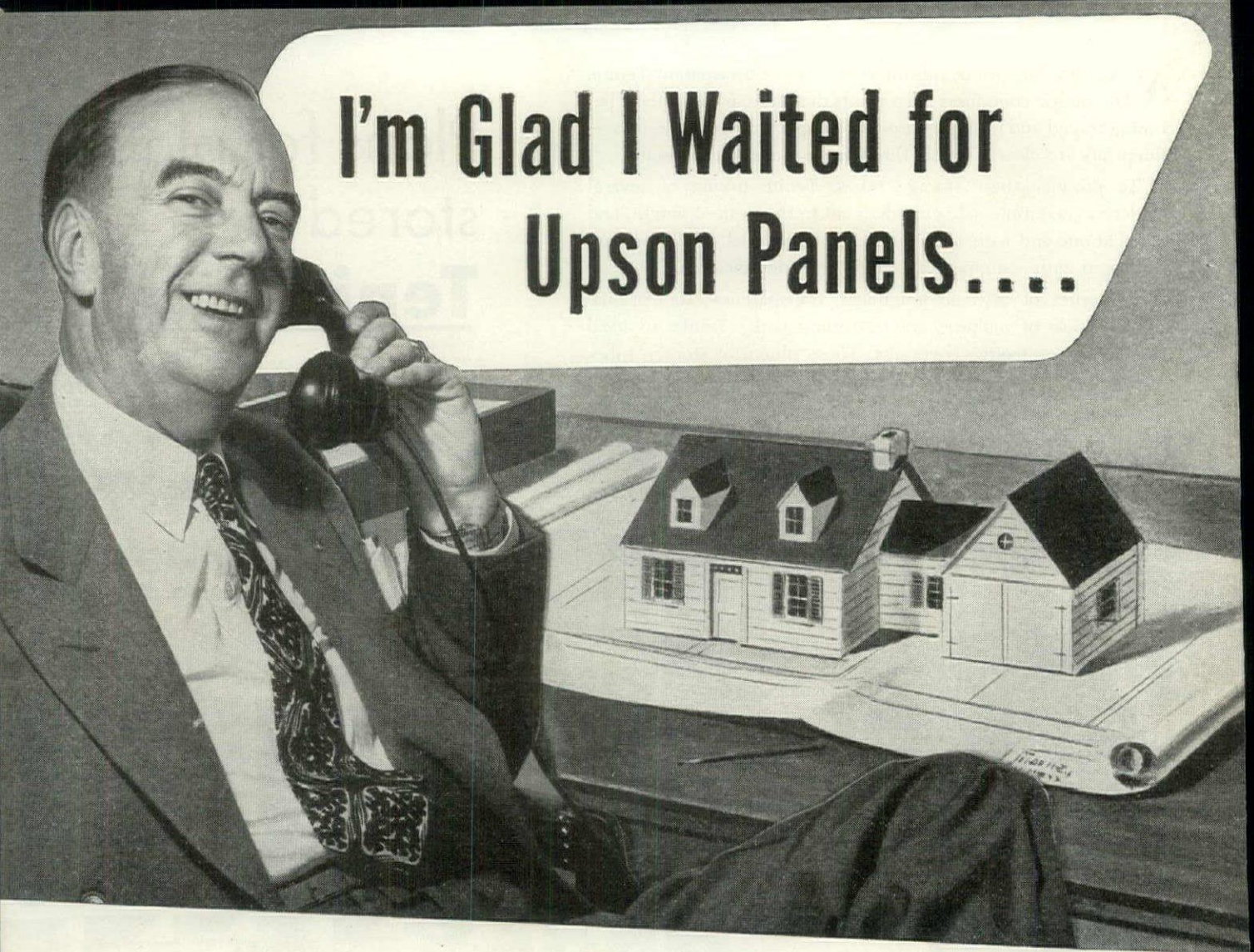
AVIATION blueprints are stored in tubes of transparent Tenite. The plastic containers keep prints dust-free, prevent their becoming frayed and torn, and provide compact and orderly storage. Blueprints are clearly visible through the transparent Tenite.

To produce these storage tubes, Tenite tubing of several diameters is continuously extruded, cut to the desired length, and sealed at one end with a disc of the same material. The other end is plugged with a stopper and labeled for identification.

Properties of extreme toughness, transparency, dimensional stability, ease of molding and extruding make Tenite an ideal material for protective coverings. These blueprint storage tubes presage the use of Tenite tubing for other containers of this type—for example, cases for fishing rods and fly rods, tripod cases, map cases for yachts. Further information about Tenite may be obtained from the TENNESSEE EASTMAN CORPORATION (Subsidiary of Eastman Kodak Company), KINGSPORT, TENNESSEE.

Storage tubes extruded by Extruded Plastics, Inc., for Curtiss-Wright Corp.

An Eastman Plastic



I'm Glad I Waited for Upson Panels....

"I can bank my reputation on Upson quality"

"I WANTED to be sure of *permanently crack-proof* walls and ceilings that my clients can be proud of—that will remain beautiful with a minimum of maintenance cost down through the years. Now, I'm glad I insisted on Upson products."

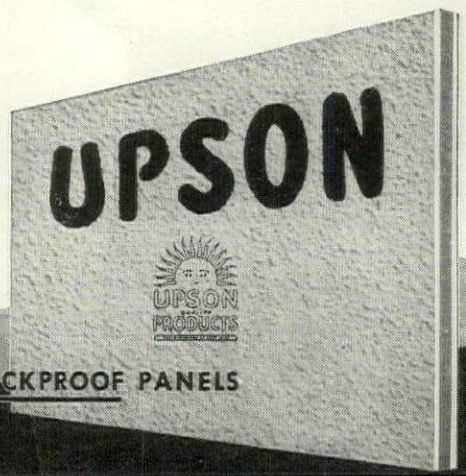
Upson realizes that many of its loyal architect-friends patiently awaited shipments of Upson Panels into their localities.

Soon, we hope, unlimited supplies of Upson Panels can begin to roll and delayed construction will be a thing of the past.

Meanwhile, you can be assured Upson products will be of the same fine quality which was so heavily in demand for military purposes.

No other panel will meet your peacetime needs so well . . . for beauty of finish, permanently *crack-proof* surface, high insulation value, ease of application and speed of construction so important today. The Upson Company, Lockport, New York.

Upson Products are Easily Identified By the Famous Blue-Center



PACEMAKER IN CRACKPROOF PANELS

NEWS... Long on cash and customers, short on materials and men, Building stalls as Government vacillates (this page) . . . Costs zoom, bottlenecks multiply (page 8) . . . War housing sales start (page 12) . . . Dewey vetoes spot housing (page 16) . . . Traffic-snarled cities get federal boost (page 24).

THE BUILDING START

Last month Building for the first time in more than three years could start without priorities. But not much did. Builders were in a hornet's nest of troubles. It was harder to get materials even than during the war. Strikes jammed lumber mills, closed brick plants, delayed equipment plant reconversions. Excavations waited for concrete blocks, foundations waited for lumber, houses waited for bathtubs, and builders waited for labor. Skilled tradesmen were harder to find than in the biggest war year, and common labor was in many areas almost unobtainable. In a month of heartbreaking shortages, there were only two plentiful commodities: building money and building customers. But over every segment of the industry hung a frightening question: would spurting costs raise an insurmountable barrier between Building and its hungry market?

This is way Building started the road back:

Chicago. "My lumberman—one of the biggest in Chicago—told me that he had just three-weeks supply left for the industry. Dealers won't even talk to you unless you know the right people." It was like that for almost anything you could name. William F. Krahl, an industrial builder who had $37 million worth of plans in hand, summed it up. "I've been 53 years in the business and I've never seen it as bad as now. I had a millwork order the other day and the mill-man told me that it was the last order he'd take—not another for six months. I'm getting the same tale from steel men, lighting fixtures suppliers and everyone else down the line."

But the worst pinch was labor shortage—and labor prices. An industry-labor agreement had limited the workweek to 40 hours. Increases granted a few months ago had raised the rate for skilled mechanics to $1.85 an hour, for common labor to $1.20. But builders charged that, even with higher rates, labor was being "pirated" by premium bonuses. Said one contractor sourly: "If a man walks straight with the wheelbarrow he gets $1.20. If he leans forward, he gets $1.50." In Elgin, work at a Majestic Radio plant stalled on the local wage scale. For a trolley ride to Chicago, skilled workers could make the difference between $1.50 and $1.85 an hour.

The worst of it was that labor supply would not soon get better. There were 125,000 skilled mechanics in Cook County in 1939; there are 58,000 today. Even when all war absentees come back, the AFofL Building Trades Council said, there will not be more than 72,000.

But while Building stumbled, building plans boomed higher than ever. September permits registered over $5 million, biggest month in the last 15 years except for 1939. In prospect: a new airport, a municipal sewage disposal plant, telephone and automotive plants, a half-dozen buildings at Standard Oil's Whiting refineries, expansions for Marshall Field and Mandel department stores, new building at Northwestern and the University of Chicago.

While in one October week the Cook County marriage bureau registered an all time high and thousands of veterans joined the housing line-up, some builders lugubriously forecast the area-wide output as not more than 10,000 houses for 1946. Optimists said the total might reach 40,000. Even this would be less than half what the city urgently needs, said real estate analyst James C. Downs, estimating current shortage at 100,000 units.

Many a housebuilder planned to move into the high-priced field. Martin H. Braun hopes to have $2 million worth of $10,000-$12,000 homes underway by spring. After that, he will build for the $30,000 market. Said Arthur E. Fossier: "I'm making a serious effort to stay in the low cost field because that's where the real volume can be struck. But from the look of things I think we're going to be stressing higher priced offerings." Biggest promise of low-cost homes came from Nathan Manilow (Harris Homes) who plans to start 600 medium-priced homes over the next year.

Miami. There was, builders complained, a booming black market in building labor. Hotel owners, happily taking back their property from the Army, were willing to pay any price to get hotels in shape for what promises to be the biggest winter in Miami history. Carpenters, under a $1.37 an hour ceiling, could get $2.25 at the beach. A dozen new hotels would start as soon as

NEWS

materials were in sight.

Housebuilders said they had to get their money out of war housing before they could start more. And war housing, packed with tenants, was hard to sell. Griped builder-owners: Many Miamians had sold their own homes for $14,000-$20,000, banked the big profits, moved into war houses at $52.50 a month. Last month Taylor Construction Co. moved to sell 1,200 war houses, under a 3-month eviction notice.

Miami figured it would build 8,000 houses over the next five years. There were plenty in sight: Taylor plans 150 houses. Emil Gould will build 100. Kenneth L. Dunning scheduled 500-600. Almost nobody will start before January. Only one big job got underway last month: C. F. Wheeler began 150 houses. Climbing costs had made even Miami cautious. Said Dunning: "People may get discouraged if prices don't come down, and big builders may be caught. We've been caught before."

Houston. Building an $8,500,000 hospital with top priority, the Navy drained almost all skilled building workers, preempted the area's concrete supply. Few builders could find enough concrete to lay a foundation. Eyeing the big bulge of projected commercial and industrial building, housebuilders worried about being crowded out of the materials and labor market for a long time.

Among the big jobs waiting in Houston for materials and labor: oilman Glenn McCarthy's $16 million hotel-apartment building; Shell Oil's $6 million aviation gasoline plant; Sears Roebuck's $1,200,000 new store; a $6 million store for Foley Bros.; two tunnels under Ship Channel—$10 million; $7,500,000 worth of school expansion; a 22-story building for the City National Bank; a new court house.

Not counting big wartime jump in population and figuring only normal growth, Houston is now 21,200 houses short. Builders figure that by the end of 1946 they will have whittled down this back-log by 7,000 houses. Seven big builders will account for half of these, 22 smaller firms for the rest.

Robert Anderson

HOUSEBUILDING PICTURE for the month was not encouraging. It looked like this. All over the U. S. empty excavations waited for concrete blocks, while building started in dribbles.

LUMBER released by the Army was still in the woods, still drying at the mills. Strikes on the West Coast, floods in the South halted shipments last month. Unfilled orders totalled 672 million ft.

Buying land in the River Oaks area, Frank Sharp hoped to start 150 houses by March. The whole job calls for 350 houses—200 to sell at $25,000, the rest for $8,000. If FHA arranges for 95 per cent mortgage insurance on low-cost houses, Sharp plans to build 250 $5,000 houses in industrial areas where he built several hundred during the war. Another big builder, Dow Zabolio (San Jacinto Homes) plans 500 houses to sell from $3,750-$4,000. Zabolio won't start until bathtubs are in sight. His last finished batch of 60 units waited 15 weeks for bathtubs.

Indianapolis. Every warehouse was bulging with stored-away household goods. But the city's housebuilders could not offer much immediate hope to war-scrambled families. Only big industries, who could afford to pay premium prices for materials, were going ahead with construction.

Fred Palmer, for instance, hoped to get 25 houses underway by spring—only a token of his usual output—but couldn't find enough concrete blocks last month to start the first six foundations. A. H. M. Graves, who wants to build several hundred houses next year, has only the first 39 under construction. But there were almost no starts. Most housebuilders agreed: it was foolhardy to gamble on precarious materials supply.

Meantime, ground was broken for new buildings at the Chevrolet plant—first job to get started in the area's programmed $250 million worth of industrial construction. The industrial contractors had their troubles, too—mostly steel delivery. Said Carl Geupel: "All we can do on any new job now is to put in the foundations and wait for the materials to come along."

Los Angeles. Last month Ray A. Myers built construction offices on two big sites—one for 500 $6,500-$10,000 houses, the other for 200. But at month's end management personnel still sat in the new offices. Said Myers: "I don't have even the lumber for foundation forms. If we don't get lumber soon, we're going to close down, and so will most of the others."

While the strike-bound mills in Oregon and Washington idled, many a builder trucked his lumber 600 miles from Northern California mills. Even before the strike there had been plenty of lumber headaches. Housebuilder H. Cedric Roberts, who has an order back-log for 100 houses, blamed OPA. "Because of the OPA price ceiling, we can't get 2 x 4's. Our millers have been sending us 2 x 12 planks because the ceiling price is most profitable to them. As a result, we've got to re-saw the stuff down to the sizes we need, boosting our cost above sensible proportion."

Ben Schnall

BRICKS from strike-bound Hudson Valley came into New York for first time in a month on this barge. Builders' queue quickly formed. Stuyvesant Town builders vainly looked for 80 million bricks.

Also stalled were Griffith-Walker & Lee, developers of Lakewood, who have lots for 575 houses. The houses, John Griffith said, will be priced from $8,500-$15,000—but they won't be "luxury" homes. "People don't want luxurious homes. They want larger homes, and that's what we're going to build for them."

There were plenty of building customers. Said Fred Marlowe: "Industry is looking for someplace to go. The textile industry, for one, must have a place

to live, instead of hanging its hat wherever there's a vacant loft. The Los Angeles Municipal Airport is going to expand to five times its present size soon. The land around there is just ripe for warehouses and factories." The Marlowe-Burns Co. is busy subdividing an industrial tract of 200 acres, but can do no building until the logjam of lumber, plumbing and labor is broken.

Threat of long-time labor shortage overhung the building picture. Apprentices were scanty, and old-time skilled carpenters and pinsetters and electricians were not being replaced. Common labor was currently almost impossible to find—even at 95 cents per hour. But there were no local strikes. Last month the Associated General Contractors and the AFofL Building Trades Council signed an agreement calling for an over-all seven per cent raise.

Milwaukee. One anxious customer moved into a house without a stairway, clambered up a step-ladder. Reason: millwork employees have been on strike since September 19. Hundreds of houses stood finished except for millwork, while workers battled for a 20-cent hourly increase. With no settlement in sight, building waited.

Almost nobody could find enough labor. One desperate day, builder James R. Baer, in a neat blue business suit, drove a truck to the plant, loaded his own concrete blocks. The labor pinch would get tighter. While older men were leaving the trades, builders complained, AFofL refused to put on more than one apprentice for every five journeymen.

Denver. While in most cities apartment investors balked at rent ceilings, Denver optimistically reported early prospects of 280 new apartments. Herbert A. Writer, with plans for a 120-unit job, had already put in foundations for 24 apartments, hoped to finish 19 by February, build 60 more by spring. Writer figures a selling price for the development at about 50 cents per cubic foot. E. S. Boerstler expects to build and sell a 160-unit, $1 million development, also plans an early start on houses.

Materials—especially brick, required by Denver's housing code—were the only real problem. Labor supply was generally good: only lathers and plasterers (out shopping, some builders complained, for over-scale rates) were short.

Boerstler spoke for many a Denver builder: "We've got 400 lots in the best section of town plus money, inclination and plans to put up homes in the $12,000—$25,000 class. But we just don't have the materials."

San Francisco. The Federal Public Housing Authority scurried to move away a trailer camp from the 20-acre site near Hunter's Point. Ground-breaking at Apparel City, a $4 million home for San Francisco's garment industry, would start in December. Also close to a start: a new Bethlehem Steel mill depot, Columbia Steel expansion across the bay, a 33-acre plant for the West Crown Cork and Seal Corp. Three large public housing jobs were in the offing, including Ping Yuen (Tranquil Gardens) first U. S. housing project built exclusively for Chinese and first six-story housing project west of Chicago.

But public housers and private housebuilders alike worried about climbing wage scales and other costs. Although an estimated 200,000 citizens desperately need housing, almost no new housebuilding started last month. For the last two months contractors and building tradesmen have been dickering over postwar wage scales. Carpenters, plumbers, painters, and others sought "cost-of-living" increases, asked the same pay for 40 hours as for the 48-hour war work week.

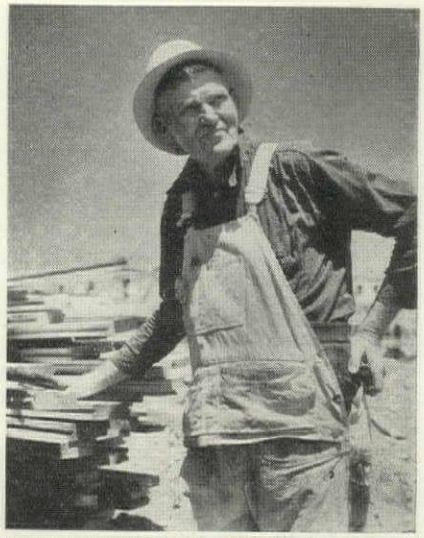
But there were big plans ahead. Henry Doelger had 780 San Mateo acres, planned 4,000 ranch-type houses ($8,000—$25,000). Standard Building Co. scheduled 2,000 houses. Stoneson Brothers will build at least 1,000.

Detroit. Huge auto plant expansions, going briskly ahead under priorities, monopolized most of the city's big contracting firms. Among them: a 252,000 sq. ft. assembly plant and a sheet metal plant at Flint for Buick, first in a $50 million building program; an $18 million plant addition for Chrysler in Detroit; 1,500,000 sq. ft. of General Motors Truck space at Pontiac.

But labor was scarce and building pace lagged 25 per cent slower than normal. J. R. Utley, at work on the Chrysler plant, had snapped up crews of carpenters and ironworkers when they finished at the Tennessee atom bomb plants, brought them to Detroit. Others were not so lucky. Housebuilders Cox & Baker imported carpenters from Kentucky, only to have them leave for commercial jobs paying above the union scale. Most of the area's plumbers were at work in the auto plants as pipe fitters. Housebuilders worried: would plumbers come back to their own trade? Last month one plumbing contractor tried to draw already-employed plumbers with an offer of $31 a day for Saturday and Sunday work. There were no takers.

Nine out of ten housebuilders were refusing contracts for custom-built houses. Reason: fear of unwitting violation of what they called the "vague" stipulations of OPA price ceilings on contract building services (MPR-251).

There were many operative housebuilding starts in prospect. Miller Homes will start 75 $8,000—$12,000 houses before the year's end, 500 more by spring. Cox & Baker were developing a 45-acre site in Grosse Point for about 100 houses, but thought only one-fourth of these would start by spring. C. H. Harrison has already started 20 $8,000 houses, plans to build 100 next year.



THIS WAS THE MAN Building most wanted to see last month. Almost nobody had enough labor. New York builders traded crews. Things would get worse. Far too few apprentices were being trained under A F of L rules.

Seattle. In addition to the shortages everybody else had—lumber, brick, gypsum lath, soil pipe, plumbing—Seattle had an extra headache: a worrying shortage of building inspectors. Complained Architect Clyde Grainger, chairman of an A.I.A. committee organized to break this bottleneck: It took six weeks to get building plans approved. Seattle, which must build for a half-million population, can count only two or three building plan inspectors. One reason: inspectors are paid only $250 a month as compared to architects' draftsmen earning $400.

Big jobs were stacking up: Henry Kaiser started a $400,000 gypsum plant to produce for his housebuilding program. Sears-Roebuck planned a $700,000 expansion. Frederick & Nelson and Bon Marche department stores scheduled big additions.

Last month F. R. McAbee graded enough land for 700 houses, hoped to start building by spring. Although McAbee faced increased costs all along the line (his union contract calls for a 6½ per cent increase in January), he expects to sell homes from $6,000—$8,000. Albert Balch put in watermains and sewers for three developments, expects to produce 300 houses over the next year priced at $8,000—$10,000. Over the winter Lou Hykes will put in basements for 380 houses, look for the materials to finish them by spring.

NEWS

PRICES

DILEMMA

In Seattle and in Miami, some housebuilders said their costs were up 70 per cent over prewar levels. From all over the U. S. pieces of the doleful story came: Common brick, which sold before the war at $10.50 per 1,000, is now $20.50. Dimension lumber, once $35 per 1,000 ft., today sells for $75 —when you can get it. Bathtubs were almost unobtainable, and jobbers lucky enough to have them in stock were getting any price they wished to name. Common labor could scarcely be found—even at the record level of $60 a week. To get skilled labor, many a builder paid a premium over regular rates. Even Kentucky blue grass seed, one developer complained, had tripled in price.

BOWLES: a clamp

Not all of the cost boost was black market. OPA had found it necessary to increase many price ceilings to get building items back into production, and there had been many authorized wage increases. Nor was the cost climb just a temporary matter, directly traceable to material shortages. All signs pointed to an unpleasant fact: building costs would go higher still.

While the rise in housebuilding prices got the most public attention, every part of the building industry felt the effect of stiffened costs, now climbing more rapidly than at any time since the war began. The Austin Co.'s index showed that industrial building costs rose more than 5½ per cent over the last three months. Municipal engineers reported that bids for street paving and sewage excavation are running from 30-50 per cent higher than prewar estimates. New York City rejected bids for dam construction—up 70 per cent over 1939.

Building's hungry market wavered, waited. Said Raymond V. Long, executive director of Virginia's State Planning Board: Costs are too high to justify widespread public building. Said Fowler McCormick, chairman of the board, International Harvester: Needed new plant construction is blocked because contractors, facing price uncertainties, won't make firm bids. Many an eager house customer looked at what was happening, decided to stick to his lease. Would building, long-promised and desperately needed, stumble now on costs which nobody could control?

WASHINGTON'S ANSWER

There was, as the worried men in Washington knew, no simple answer to the knotty problem of mounting house prices. So far reconversion officials at a long series of desk-thumping sessions had failed to agree on what, if anything, the government should try to do about it. Already market pressure threatened to wash out OPA ceilings on building materials and services, and there was no way to keep cost increases all along the line from being passed on to building customers.

When L-41 expired on October 15, building became the only major U. S. industry whose output is free from reconversion price controls. At this prospect, a substantial part of the U. S. public registered an alarmed protest. From Drew Pearson to conservative Mark Sullivan, the columnists viewed housebuilding's future with an almost unanimous alarm. Said the sober *Christian Science Monitor:* "Building is going up and up and up, but not the way it has been pictured in the last four years by home-hungry soldiers." Congressman Wright Patman (Dem. Tex.) voiced the public dismay: "Veterans are now throwing away war-time savings in exorbitant prices for second-rate shelter, while we sit here in Washington letting them be fed to the profit-hungry real estate speculators."

On the other hand, every trade group concerned with housebuilding determinedly fought for freedom to reach volume production. Real estate boards in 300 cities predicted that house price control would paralyze new building, encourage shoddy construction, make a black market in housing inevitable.

Last month OPA Administrator Chester Bowles still fought stubbornly for ceiling prices on houses, but asked that some agency other than OPA be placed in charge of administering them. To Senator Tom Stewart (Dem., Tenn.) and an inquiring committee, Bowles outlined his plan:

PREWAR $6,000 HOUSE WILL COST AT LEAST $8,000 IN MOST CITIES

The scramble for scarce materials had scarcely started, the foundations for long-promised housebuilding had not yet even been laid—and already building costs were leaping beyond their already high war levels. Last month in St. Louis methodical real estate analyst Roy Wenzlick, who has estimated the cost of building a standard six-room house for the last two decades, checked his current figures and howled with dismay. In the last three months, the cost of his standard house had jumped $1,300. Wenzlick's exact records show that in 1940 this house would have cost $6,005. Right now it could not be built for less than $9,375. From all over the U. S. came reports that showed how fast building costs are climbing. Last month a FORUM survey found the following increases over 1940 housebuilding costs:

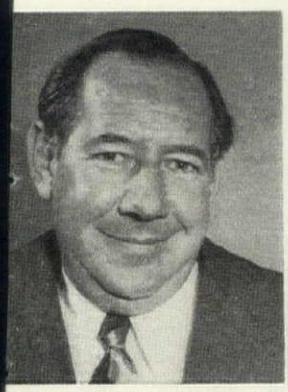
	%		%
Atlanta	50	Kansas City, Mo.	40
Birmingham, Ala.	35	Los Angeles	45
Boston	35	Miami	50
Charleston, S. C.	50	Milwaukee	35
Charlotte, N. C.	53	New York	40-50
Chicago	32	Norfolk	53
Cincinnati	30-40	Philadelphia	33
Cleveland	35	Pittsburgh	35
Denver	40	St. Louis	50
Detroit	40	San Francisco	45
Houston	35	Seattle	35
Indianapolis	35	Washington, D. C.	50

Ceiling price on new houses would be based on legal price ceilings for materials and services plus a generous profit margin. Profits would be calculated on the basis of recent prewar earnings.

Ceiling price on older houses would be determined by first sale after passage of legislation. Bowles thinks speculative re-sale accounts for most of the inflation in older homes.

WHAT TO DO?

New York's plight was typical. Returned veterans slept in automobiles. Civic groups warned that tents in Central Park might be the next step. Over the year, brisk property sales had evicted some 10,000 families. Already 30,000 families are doubling up. But, while Building's market panted with anticipation, apartment investors balked at rent ceilings and housebuilders in suburban areas doubted that even the most eager customers can afford to pay what it now costs to build a house.



GROSS: a plan

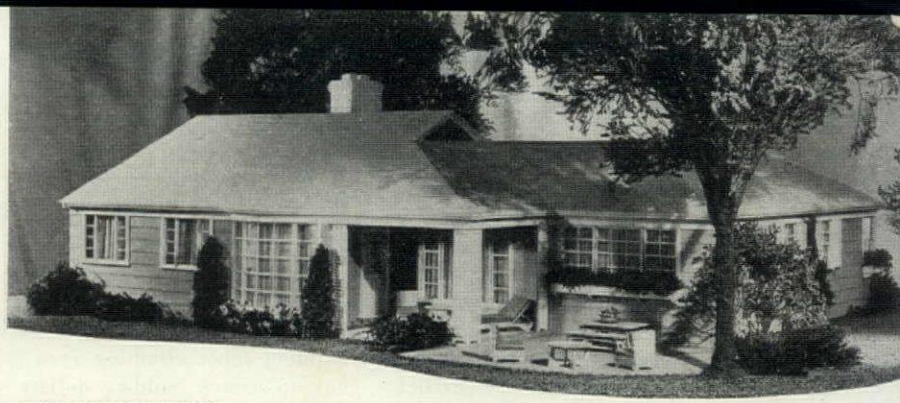
In Queens, only New York borough where land costs are low enough for building the single-family house, housebuilders took a cold, clear look at what they are up against. In the decade before the war, Queens drew close to one million tenants from crowded New York neighborhoods because its operative builders were producing, typically, what the moderate-income family needed and could afford: a six-room house, usually brick, selling for $6,000. Last month Queens builders agreed: this prewar house cannot be built for less than $8,000 today.

To builder Alfred Gross it was plain that selling houses at today's cost levels means finding some way for the great bulk of moderate-income customers to pay for them. Gross-Morton, which before the war built enough houses to take care of a fair-sized city, has land for 4,000 houses and every intention of selling them. To put higher-priced houses within the reach of his customers, Alfred Gross made two proposals, which are likely to be echoed in many another housing-short city:

- A 30-year mortgage.
- $5,000 worth of tax exemption until 1956 for every new house built during the next three years.

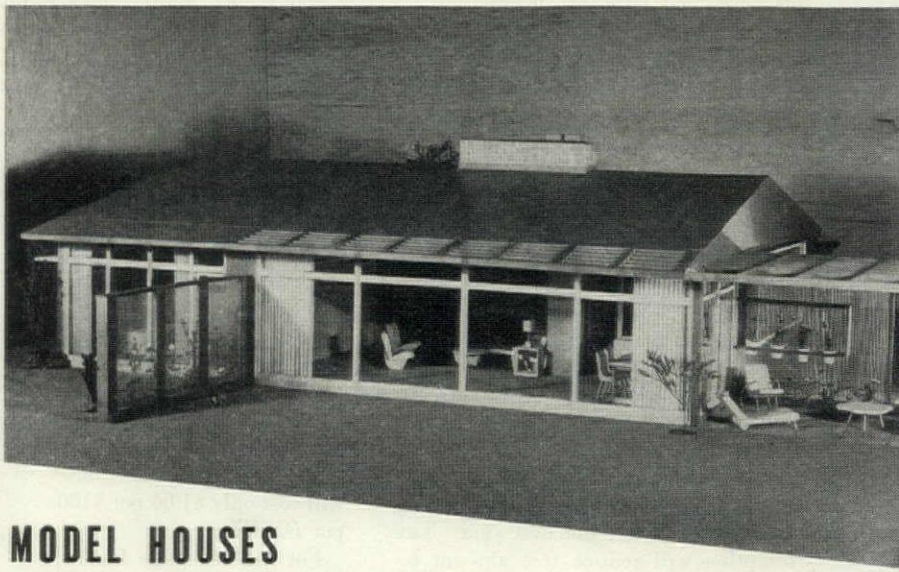
When thousands of outraged citizens entrained for Albany just after World

(Continued on page 10)



GOOD HOUSEKEEPING plugged modified modern as designed by leading architects.

PITTSBURGH PLATE GLASS models were prize-winners in recent competition.



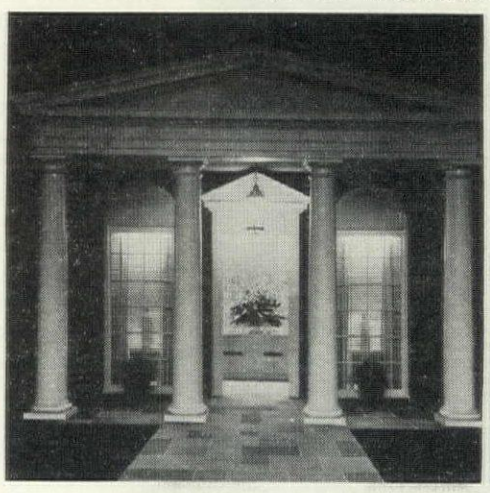
MODEL HOUSES

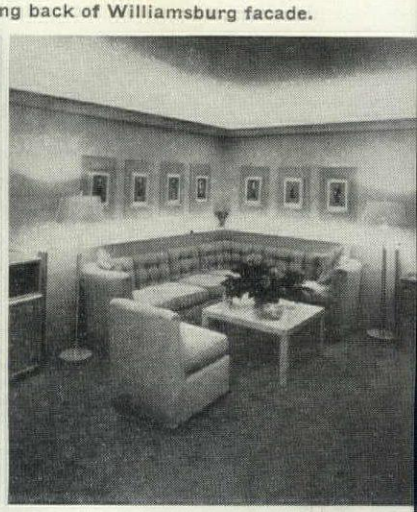
Building's customers flock to see how the postwar house will be different from the prewar house.

In the first month of building freedom, the long-promised housebuilding boom showed up only in a rash of department store models. While not many of Building's customers would get a chance to see a large-as-life house before next spring, thousands of them whetted their appetites by viewing the elaborate displays. For Libby-Owens-Ford and Pittsburgh Plate Glass, the models marked the first ambitious merchandising courtship of department store clientele. Except for Westinghouse, the demonstrators voted against Cape Coddling the public.

LIBBY-OWENS-FORD showed glassy interiors

WESTINGHOUSE ELECTRIC put streamlined lighting back of Williamsburg facade.





War I to protest New York's acute housing crisis, the state legislature voted a $5,000 tax exemption for housebuilding. Wrote the late, great houser, Edith Elmer Wood: "There is no doubt that tax exemption broke the postwar building deadlock in New York City and brought about great activity earlier than it would otherwise have occurred*." It was easy to see that there will be increasing pressure for adoption of this once-tried building incentive.

Alfred Gross argued that a lengthened mortgage term, plus tax exemption, would mean that the customer could buy today's $8,000 house for a monthly payment somewhat less than that of the prewar $6,000-house customer. For the big block of G.I. customers, the plan would mean the biggest boost. Under the GI home loan plan, a veteran need make no down payment. If he got the added advantage of a 30-year mortgage, his monthly payments would be appreciably reduced. Gross figured it this way:

"At a purchase price of $8,000, the house under today's set-up costs the veteran $81.50 a month, with the Veterans' Administration contributing $6.66 toward it for the first year. Tax exemption will reduce this amount by $12.50 a month. A 30-year mortgage will reduce it another $10 a month. Herein lies the only solution of the housing problem for the average family of modest means. It would mean a home for the veteran with no down payment for $59 per month—and a home for the non-veteran with a 20 per cent down payment for $50.50 a month. Where necessary, the owner can forego automatic heat and save $5.00 per month by using coal until his circumstances improve."

LENDER Backstrom

Gross did not deny that his plan might cost the city some revenue. "But a housing shortage is a municipal problem the same as transit or health when such an emergency exists." The plan, he thought, would go far to "allow those who are unhoused the same right of ownership as more fortunate citizens already under comfortable roofs. Present owners now enjoy a considerable increase in value. We do not wish to deprive them of it, but the right and necessity of home ownership is not vested solely in the present owners of homes."

* But Mrs. Wood and many another houser believed that tax exemption should have been limited to the low-cost house. Argued housing economist Charles Abrams: "Tax exemption would only sky-rocket sales prices, hasten inflation. We need materials and labor, not subsidies."

BUILDING MONEY

CREDIT FOR MODERNIZATION

With the cost of building material and building labor climbing (see page 8), how to stretch building dollars became a matter of urgent interest to everybody concerned with housebuilding. One way, long backed by progressive lenders, is a plan for additional advances under the original mortgage to cover home modernization and repairs.

For the borrower, additional advances mean substantially easier credit terms. Suppose John Doe needs $500 to put on a new roof or make other long-delayed repairs. If he borrows at the usual terms (a three-year loan at a 5 per cent discount rate) he will pay $3.19 in interest per $100 per month. But if he can get an additional advance under his mortgage at 5 per cent, the extra credit, spread over 10 years, will cost only $1.06 per $100 per month.

ECONOMIST Westerfield

For the mortgage lender, additional advances mean that the properties in which he has a stake will be well-maintained throughout the life of the mortgage. They offer an opportunity to put more money to work with borrowers whose credit is well established, without much increase in monthly payments. They are the best possible protection against portfolio raiding. They give amply funded institutional lenders a big advantage over small, non-institutional lenders who own about one-third of all home mortgages. These small investors can seldom afford to make additional advances.

Main disadvantage of using realty mortgage credit for modernization is that in some states it requires re-writing the mortgage, re-appraisal and a re-search of title. But progressive lending policy is swinging more and more in the direction of a simple agreement in incorporating the advance in the mortgage, which makes unnecessary a long, costly title search, other charges.

The First Federal Savings & Loan Association of New Haven, Conn., early to offer a simple credit plan for repairs, believes that making these extra loans without title search is an ordinary business risk. In ten thriving years of business, First Federal has not yet lost any money on its additional advance plan, which it regularly advertises to borrowers. In fact, the firm counts this plan as an important part of its security. Says executive vice-president Frederick T. Backstrom:

"Our collateral is not safe if the owner is dissatisfied with his house. The owner who can borrow additional funds to keep his property in a good state of repair makes a much better risk."

For this among other reasons, First Federal can point proudly to not more than 44 foreclosures in a decade. This enterprising New Haven institution got its start in the lean year of 1934 on a shoestring capital of $10,000. Today its assets amount to over $12 million.

First Federal's up-to-date lending practices were outlined at the beginning of its career by a top-notch economist — Ray B. Westerfield who doubles as professor of banking at Yale University and as the Association's president. Westerfield, who has trained a good share of the nation's bankers, has an economist's interest in expanding consumer buying power and believes the mortgage instrument provides one safe way to do it. Last month Westerfield and Backstrom got ready to announce to their customers a packaged mortgage, which will include basic home equipment and appliances.

The additional advance plan got a big push ahead from a recent amendment of the G. I. Bill of Rights. The amendment approves an additional realty loan up to $500 for repairs or improvements without the necessity of a title search, permits an affidavit instead.

A recent FORUM survey indicated that in nearly every state it is possible to draw up a mortgage that provides for additional advances to the home owner for repair and modernization. In several states, legislation has been enacted, or proposed, granting lending institutions the specific right to make advances (in these states mortgagees had previously hesitated to make advances even though court decisions often indicated they were permissible). In a number of states, savings and loan associations have recently changed their mortgage forms to permit additional advances to their present borrowers with a negligible amount of cost. The procedure usually

followed in making the advance is:

(1) A short, relatively inexpensive title search to guard the advance against priority of intervening claims.

(2) An agreement to modify monthly payments or extend the payout period beyond the original mortgage.

(3) Recording the advance.

A number of lending institutions dispense with the title search, require instead an affidavit from the borrower stating that there are no liens against the property.

EQUIPMENT

BATHTUBS WILL COME LAST

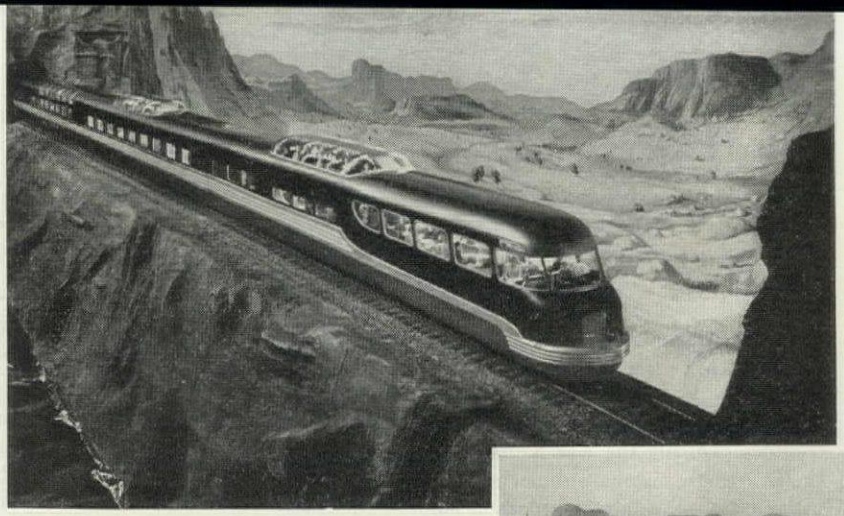
In the month of the worst housing pinch in Manhattan's history, 41 brand-new houses stood empty in Long Island, waiting for bathtubs. Everywhere in the U. S. the story was the same. Builders who had scraped together enough lumber and gypsum lath and soil pipe to build H-2 houses looked vainly for bathtubs—or oil burners—or stoves. Would supply lines be replenished by spring? Manufacturers feared not. Lack of labor, they said, was their biggest block. Many said that OPA price ceilings were too low to permit wages—especially for common labor—that would compete with unemployment insurance.

Last month the outlook for home equipment looked like this: gas ranges and oil burners will be fairly easy to get by spring. Refrigerators and electric ranges will be available in quantities above prewar levels by mid-summer. Kitchen cabinet manufacturers expect to reach peak production by July. Plumbing fixtures—especially bathtubs—will be scarce throughout 1946.

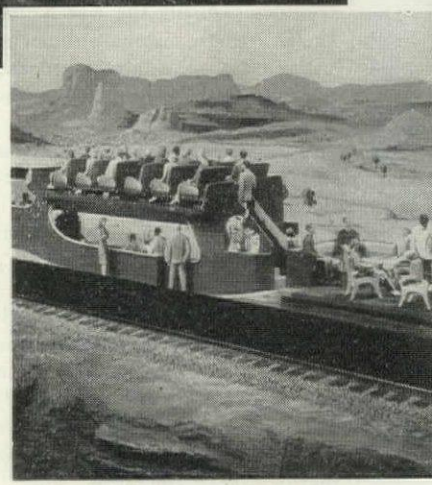
Plumbing equipment manufacturers, hit hard by shortage of foundry help and other common labor, seemed to be having the most trouble. Many builders were looking to quickly-made Briggs steel fixtures as a short-cut, but Briggs, waiting for steel, was not yet in production. Hoping to start by late November, Briggs expected to reach capacity output by January.

Big American Radiator & Standard Sanitary Corp. used to make 3,000 bathtubs a day, now is lucky if it turns out 3,000 a week. American Radiator would like to run three shifts—if it could find the labor. Right now, working a 40-hour, one-shift week, it is producing 35 per cent of capacity on cast iron enameled ware, 70 per cent on brass trim, and 75 per cent on vitreous china ware. Said American Radiator: "When we will reach capacity production depends entirely on manpower. Supply of our products will definitely not be sufficient to meet demand this spring."

(Continued on page 12)



ASTRA-DOME observation car has glass-enclosed upper deck, placed in center of roof. Domes increase height over present standard car only 18 in., give view of scenery from all directions.

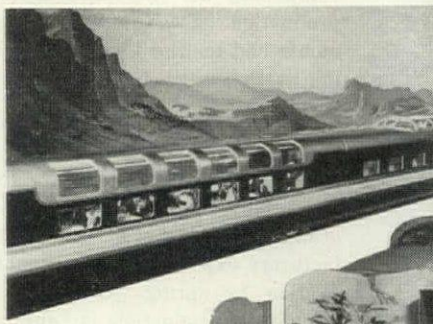


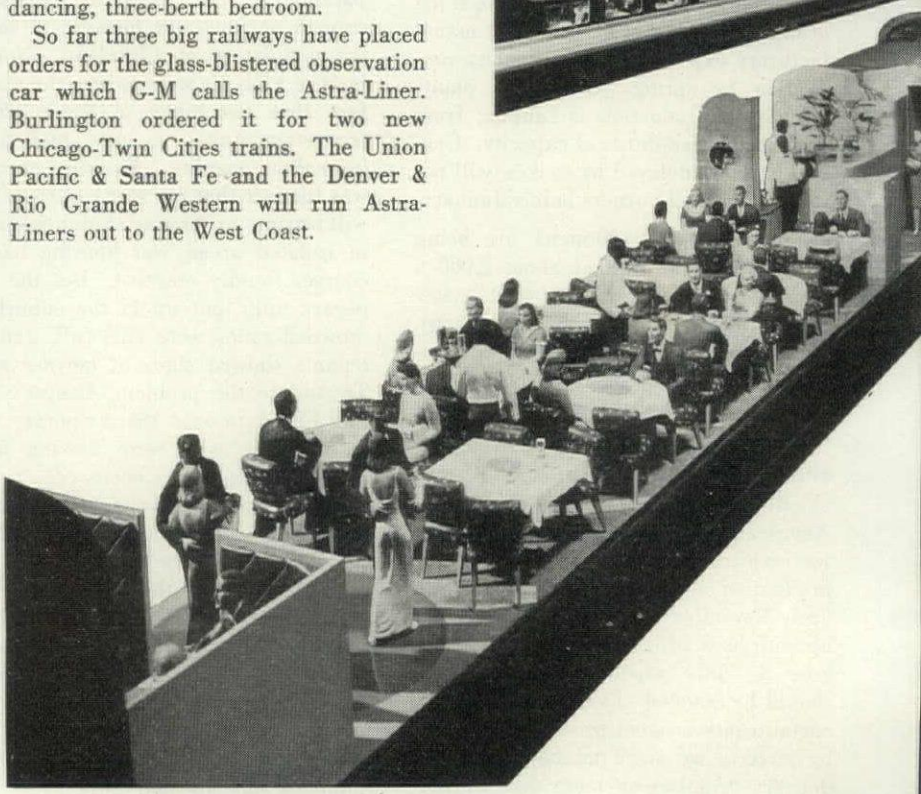
DOUBLE-DECK car gives each passenger a seat on upper level, sleeping accommodations below. Diner (below) with rounded roof of Thermopane glass is not yet in production.

GLAMOR FOR RAILWAYS

Rail travelers to the West Coast will soon view the scenery from glass-domed, double-deck Pullmans designed by General-Motors Electro-Motive engineers. This General-Motors division does not make railway cars, but has a profound interest in a continuing market for diesel-electric locomotives, which it does make. The glass-domed observation cars, which provide 360-degree horizontal and 180-degree vertical visibility, are a design contribution which G-M hopes will help to make railway travel glamorous enough to compete with newly reduced air rates. Other innovations thought up by G-M designers: two-level cocktail lounge, diner with space for dancing, three-berth bedroom.

So far three big railways have placed orders for the glass-blistered observation car which G-M calls the Astra-Liner. Burlington ordered it for two new Chicago-Twin Cities trains. The Union Pacific & Santa Fe and the Denver & Rio Grande Western will run Astra-Liners out to the West Coast.





NEWS

Said the Eljer Co.: "It is unlikely that we will reach full production of plumbing fixtures until well into next year. Variety of styles will be limited during this period to allow greater production. Demand for fixtures will probably greatly exceed supply during most of 1946."

Kohler Co. had the least manpower troubles. During the war Kohler made shell castings, pistons, submarine valves without any substantial increase in labor force—and reconverted without any labor shift. So far, Kohler has put six sink sizes on the market and the standard 5-foot-recess tub, which it is producing at the rate of about 500 a day.

Said Fiat Metal Manufacturing Co.: "We are operating at about 40 per cent capacity on shower cabinets. So far, we have produced one model of a line that would normally include five models at various price ranges. We are unable to produce the other, lower-priced models at the prewar price, and are having difficulty in securing clearance for price increases from the OPA."

Refrigerator production will probably reach 460,000 units monthly by June. Average prewar output was about 316,000 units per month. Of the 12 leading companies, all but three are back in production. Two more will start this month and the third hopes to be producing by December.

Oil burning furnaces will be scarce for several months while plants are changing over and distribution lines are being filled. No stock is on hand, and back-log of orders is substantial. But most manufacturers expect to reach capacity production by spring. Output of plants already in production is ranging from one-third to two-thirds of capacity. General Electric, delayed by strikes, will not start making oil burners before January.

Coal-fired furnaces (20-inch) are being produced at the rate of about 2,000 a month. Manufacturers say that a low OPA price ceiling is holding down production, estimate that a 15 per cent increase would be necessary to get volume production. Few believe that labor is a limiting factor.

Kitchen equipment manufacturers are chiefly impeded by lack of steel. The American Central Mfg. Corp.'s report was typical: "We do not expect first production on kitchen sinks and cabinets until November 1. We expect to catch up with back orders to a reasonable degree by July when peak production should be reached. Even before current curtailments in steel production caused by strikes, we were unable to obtain delivery promises on more than 50 per cent of our requirements for the balance of the year and less than 50 per cent of our requirements for the first quarter of next year."

WASHINGTON

DOLLARS FOR REBUILDING

While the Senate Banking Committee got ready to go to work on the Wagner-Ellender housing bill (S. 1342, see FORUM, Sept. '45), embattled factions of the housing front squared off for a major fight. Three powerful trade associations had written an alternative bill, which, among other things, sought to break up the wartime consolidation of the government's housing functions represented by NHA.

Main emphasis in the trade association bill was on federal aid for private enterprise rebuilding. Their plan: the RFC would boss the job, make loans and grants to cities for land acquisition. Grants would be limited to one-half the redevelopment write-down. No redevelopment project would be eligible for assistance unless it could earn enough to carry the remaining half of the write-down in land cost. The municipal redevelopment agency would be required to look for private enterprise customers for one year before it could turn over the slum land acquired for public housing.

SURPLUS SOLUTION

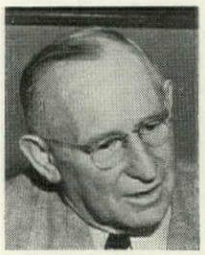
While most U. S. cities wrestled with housing famine, the Federal Public Housing Authority contemplated its paradoxical job: how to dispose of enough surplus war housing to shelter the population of Cleveland. Not the least of FPHA's worries was the glaring fact that not many of these 320,000 temporary units can now realistically be called surplus. Equally apparent was the fact that not many of them soon will become so. Around shut-down plants in isolated areas, war housing had, of course, rapidly emptied. But the temporary units put up in the suburbs of crowded cities were still full, and few tenants showed signs of moving away. To add to the problem, Congress had told FPHA to open the temporary units to veterans, who were moving in as rapidly as vacancies occurred.

FPHA's problem was a double-header: (1) closing up the units as rapidly as possible to comply with Lanham Act requirements and the demand of local communities who fear they will linger as eyesores and (2) finding a way to sell the units that will rescue some of the government's $760 million investment.

While only new housebuilding could eliminate shortage and close up the temporaries, last month FPHA happily said it had thought of a good way to sell them. When war need shifted from one area to another, FPHA discovered that it was possible to shift temporary housing, too. Some 10,000 units were sawed into panels, moved as much as 1,000 miles and re-assembled. FPHA hopes to interest buyers who will want to re-erect the houses as summer cottages, farm houses or buildings, airplane hangars, garages or a dozen other uses. If enough buyers go to work sawing up and removing the units, FPHA will save the cost of demolition. But if FPHA is obliged to tear down the houses itself, demolition cost (about $50 million) will amount to more than it could get for the salvaged material.

Reni

KLUTZNICK



CRAVENS

Last month Commissioner Philip M. Klutznick and disposal chief C. Russell Cravens were as busy as any big-time merchandiser plotting their sales campaign, had hired advertising agency Campbell-Ewald to help. Principal come-on: a 20-acre Washington showcase full of bright and demonstrated ideas for re-using the temporary units.

POST OFFICE MODERN?

Up in front in the rush toward a quick building start, the Public Buildings Administration sought Congressional approval of a fat ($193 million) program. If Congress says yes, several hundred U. S. towns can expect to get a new post office. If PBA goes through with its plan to shop out at least half the work to private architects, the towns may possibly be treated to a break from Postoffice Federal, a style that has threatened to overwhelm public building.

PBA does not expect to launch its whole program—which in addition to a multitude of post offices includes some hospitals, courthouses and office buildings—immediately. Urgently needed projects will be selected for immediate construction and planning will be started for the rest. This means, as Commissioner W. E. Reynolds pointed out, that "in case it is judged in the public interest to undertake a large-scale federal building program to combat a recession, the government will be able to do so."

(Continued on page 16)

Rembrandt is smiling

Wherever departed geniuses go, it must be some place aloft. And, if that is the case, Rembrandt van Rijn certainly is smiling.

For he can look down and note (with great relief) the roof protecting his masterpieces in New York's Metropolitan Museum of Art.

120,000 square feet of Monel sheet went into that roof!* Gutters, flashings, hold-down nails and skylight accessories were also made of non-rusting, corrosion-resistant Monel.

Roofs represent one of the big uses of Monel in the architectural field, but there are plenty of other places where Monel in some form is used as insurance for long, trouble-free service.

There's Monel tie-wire used to secure partitions, metal lath and roofing tiles . . . Monel gaskets for steam joints . . . Monel spray nozzles and brine tanks for air-conditioning . . . Monel food-service, laundry and hospital equipment . . . and many more jobs where rustless strength is a "must."

In private homes, too, you'll find Monel fighting rust and corrosion. Ask a homeowner how much he values the clean water always on tap from his Monel hot water tank. Speak to housewives, and you'll hear high praise for their ever-bright Monel sinks and work surfaces.

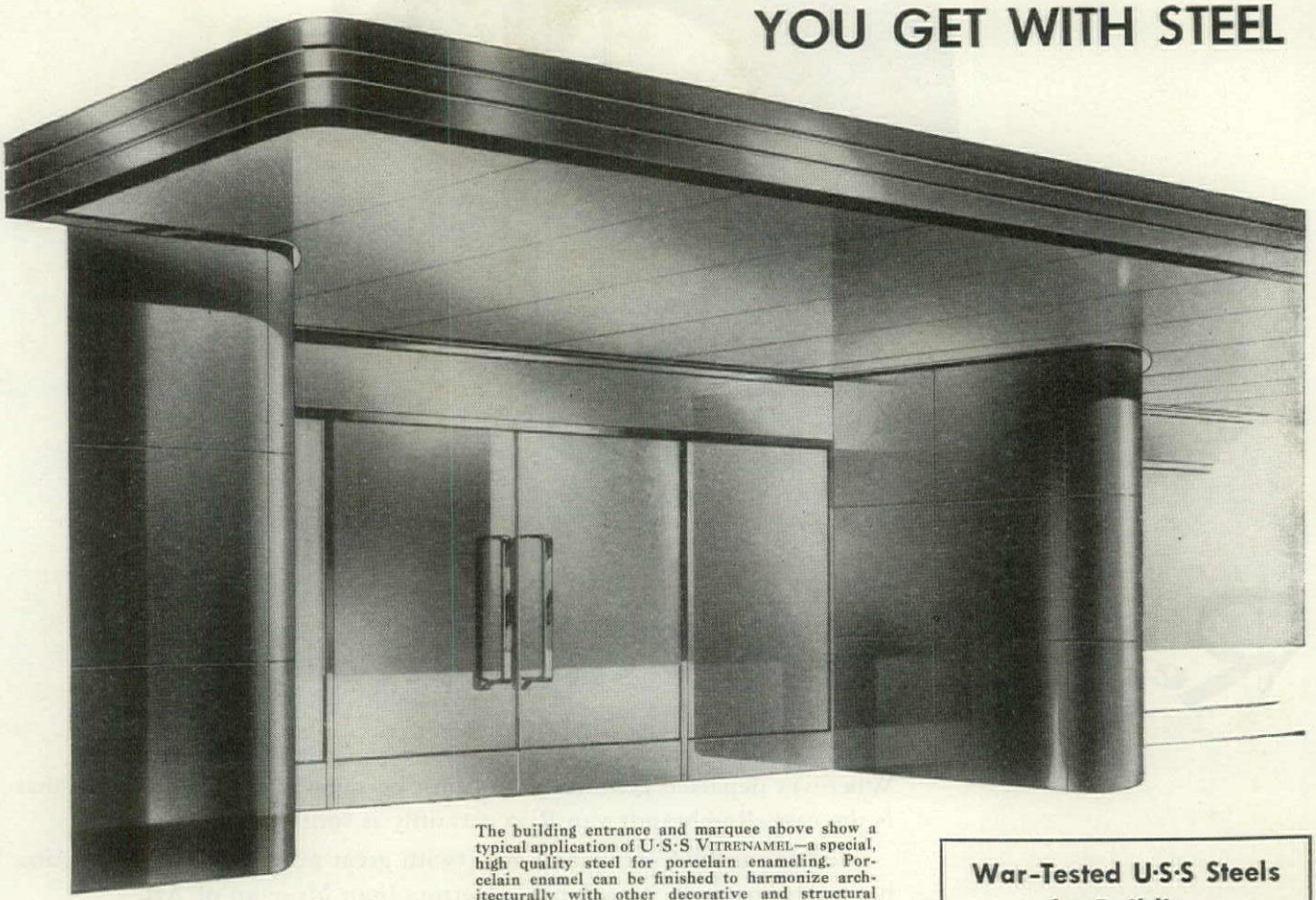
Naturally, there's no room here to list *all* the Monel applications of interest to architects and builders. But here's a good general rule to follow: *"If it's made of Monel, it will last."*

*Reg. U.S. Pat. Off.

THE INTERNATIONAL NICKEL COMPANY, INC., 67 Wall St., New York 5, N. Y.

MONEL . . . for minimum maintenance

Greater Eye-Appeal... A PLUS VALUE YOU GET WITH STEEL



The building entrance and marquee above show a typical application of U·S·S VITRENAMEL—a special, high quality steel for porcelain enameling. Porcelain enamel can be finished to harmonize architecturally with other decorative and structural materials.

MODERN architecture employs steel decoratively, as well as structurally. Strikingly *artistic* effects can be achieved with the wide range of U·S·S Steel Sheets now available for building purposes.

Long recognized for its long life, great strength, fire-resistance, low upkeep, and ease of installation, steel's decorative possibilities make it a material of almost limitless uses.

Whether you're designing store fronts, interior walls, ceilings, doors, floors, stairways, escalators, counter tops, air conditioning systems, it will be to your advantage to specify U·S·S Steel Sheets. They will make any commercial building smarter in appearance, more efficient and practical, more economical.

Listed at the right are a few of the well-known U·S·S Building Steels. Note how their special properties fit in with your requirements. And, remember, the familiar U·S·S Label, besides covering the widest variety of steel building products, is the most extensively advertised and best-known symbol of quality steel in the entire country.

War-Tested U·S·S Steels for Building

U·S·S STAINLESS AND HEAT-RESISTING STEELS *to provide permanent beauty, assure high resistance to corrosion and heat, and to reduce weight.*

U·S·S VITRENAMEL—*A special, high quality steel base for colorful, permanently beautiful porcelain enamel.*

U·S·S GALVANIZED SHEETS *to provide easy formability, workmanlike appearance and long life.*

U·S·S COPPER STEEL *to give at least twice the atmospheric corrosion resistance of regular steel at little additional cost.*

U·S·S COR-TEN—*A high-strength steel with two to three times the resistance to atmospheric corrosion of Copper Steel.*

U·S·S DUL-KOTE—*A dull-surfaced galvanized sheet and* U·S·S PAINTBOND *—a Bonderized galvanized sheet, both specially prepared for immediate painting and better paint adherence.*

U·S·S STEEL ROOFING AND SIDING *in every wanted form for residential, industrial and farm applications.*

U·S·S STRUCTURAL SECTIONS — *A complete range of sections and sizes to meet every building requirement.*

UNITED STATES STEEL *Presents* The Theatre Guild On The Air *Every* SUNDAY EVENING AMERICAN Network (Blue)

CARNEGIE-ILLINOIS STEEL CORPORATION, *Pittsburgh and Chicago*
COLUMBIA STEEL COMPANY, *San Francisco*
TENNESSEE COAL, IRON & RAILROAD COMPANY, *Birmingham*
United States Steel Supply Company, Chicago, *Warehouse Distributors*
United States Steel Export Company, New York

USS STEEL UNITED STATES STEEL

UNITED STATES STEEL

AVAILABLE NOW!

LUMITE

PLASTIC SCREEN CLOTH

Lumite has already made old-fashioned metal screening OBSOLETE! Lumite is no "postwar baby." It's HERE . . . now . . . to STAY! Cash in on it!

Lumite has been tested for three years under the toughest possible conditions of climate and rough use . . . in damp Pacific jungles where even metal can corrode almost overnight! *Yet there hasn't been one single case of corrosion or deterioration where Lumite has been used!*

Lumite offers qualities never before found in *any* window screen. Here are ten hard-boiled, logical reasons why YOU cannot pass up this "hot" item:

1 RUSTPROOF Lumite cannot rust under *any* condition: salt air, acid fumes, smoke, rain, snow, fog, extreme heat or extreme cold. In other words, Lumite cannot wear out through natural causes!

2 WON'T BULGE Because it is highly resilient under pressure or impact, Lumite "gives" without breaking a strand! It *instantly* snaps back to its original shape . . . without a trace of bulge, dent or sag!

3 CAN'T STAIN When Lumite is used, ugly streaking of window sills or sidewalls is impossible . . . eliminating forever the need to repaint "eyesore" stains or streaks around windows.

4 NO PAINTING Lumite is not painted, in the first place. Furthermore, it never will need painting at *any* time. That tiresome, messy "annual" repaint job is at last a thing of the inefficient past!

5 CLEANS EASILY Should Lumite ever become soiled by exposure to excessive soot or dirt, a few quick whisks of an ordinary damp cloth or moist brush will keep Lumite fresh and new-looking at all seasons . . . year after year.

6 EASY TO HANDLE Lumite weighs about one-third as much as metal! It is light to handle in rolls . . . simple to cut to desired length . . . and easy to frame, with no sharp points to stick hands or tear clothes.

7 HOW TO FRAME Nothing to it! For best results, just stretch tight and place tacks every 2 or 3 inches. In the case of cut edges, fold over about ½" before tacking.

8 NON-INFLAMMABLE Lumite is absolutely *flameproof*. Like most household equipment, it can be destroyed by fire . . . but Lumite itself *can not burn* under any circumstances!

9 TESTED COLOR A rich dark green is Lumite's standard color, determined by many scientific tests as not only attractive to look *at* and easy to look *through*, but inconspicuous as well. Lumite cannot run or fade.

10 OUTLASTS METAL Because Lumite is unaffected by natural causes, can't bag, bulge or warp, and can take unusual abuse without wearing out . . . properly-framed Lumite gives years more wear than the best types of wire screens. Yes . . . Lumite screens *can* be left up all year without damage.

SEND FOR SAMPLES!

Send *today* for FREE SAMPLES of Lumite Plastic Screen. You will also receive description and full specifications, as outlined in our new folder A.I.A. 35P.

CHICOPEE MANUFACTURING CORPORATION

LUMITE DIVISION
47 Worth St., New York 13, N. Y.

CHICOPEE PRODUCT

World's Largest Makers of Plastic Screen Cloth

MONTH IN BUILDING: NEWS

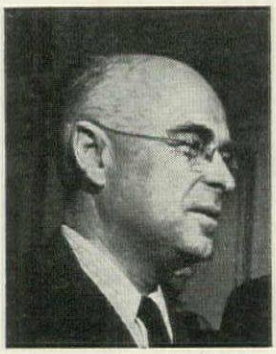
(Continued from page 12)

TIMED PUBLIC WORKS

Old Man Building, as everybody knows, regularly races up the hill of market demand so fast that he runs completely out of breath. Not until he has slid painfully down the other side is he ready for another spurt of activity.

Last month Senator James E. Murray (Dem., Mont.), whose Small Business Committee has been pondering the whole matter for many months, thought he had found the way to slow down the Old Man's frantic run to a brisk but sustained trot. To the Senate went his proposal (S. 1449) for timing public works in a way that would level off the violent fluctuations of the construction cycle. On the sidelines Beardsley Ruml led a large cheering section of economists who know that taking the bumps out of building will go far to keep the whole U. S. economy clicking along at an even level.

While almost everybody thinks that it would be dandy to switch Building from a boom-and-bust cycle to a sustained high level of production, not many can agree on how to do it. To some, a proposal to manipulate public construction to this end has all the odium of "make-work" defeatism. To others, such a plan looks like a step towards regimentation of an industry whose many inefficiencies make it more sensitive than most to the threat of government control. But Senator Murray, unconfused by any of these theoretical thickets, said simply: Whether it likes it or not, the federal government cannot help but influence the construction cycle by its works expenditures. Why not plan in advance to spend federal building dollars when private building is slack and to defer federal construction in periods when it would compete with private enterprise for materials and labor?



DRAPER steps out

The Senator's plan would put the power to speed up or slow down federal works expenditures in the hands of the President. But he would be expected to take advice from a Construction Policy Board composed of the Secretary of Commerce as chairman, the Secretary of Labor and the Secretary of Agriculture. This top policy board would in turn be advised by:

(1) a Public Works Stabilization Committee, representing the federal agencies concerned and state and local governments.

(2) a Construction Industry Advisory Committee, representing labor, builders and contractors, architects and engineers, manufacturers and distributors of material, the public.

To assist in advance planning of local public works the Murray bill would also provide a $150 million revolving fund from which non-interest-bearing loans for planning would be made to state and local governments.

The Senator made it clear that his plan would abridge no Congressional powers. Nor would the federal government be "given authority to ride herd over state and local governments or to compel private enterprise to conform to any bureaucratic program." On the contrary, the Senator hoped, it would "for the first time provide machinery for fostering close cooperation between the industry and the government."

PEOPLE

NEW JOB

Earle S. Draper, the man who can call more housebuilders by their first names than any other Washington official, has resigned his five-year-long post as Deputy Commissioner of the Federal Housing Administration to re-enter private business. When red tape threatened to stall war housing, Draper was known as one man who could keep things operating. He now becomes a private consultant in city and land planing, housing construction and housing finance. Before he joined FHA, Draper was with the Tennessee Valley Authority for seven years, first as director of land planning and housing, later as director of TVA regional planning studies where his responsibilities included coordination of all architectural work for dams, powerhouses and TVA communities. Since 1943 he has been in charge of all FHA field offices and mortgage insurance operations.

DEWEY DROPS IN

Bronx dwellers and the U. S. housing front got a surprise visitor last month. Accompanied by Herman T. Stichman, State Commissioner of Housing, and a full complement of newspaper photographers, Governor Thomas E. Dewey inspected and approved the site for a new state-financed housing project.

Governor Dewey spent an hour plodding through alleys, peering up tene-

(Continued on page 20)

FORMICA

Fits a Thousand Surfaces!

Formica laminated plastic surfacing materials are very versatile and adaptable—they are appropriate for any interior surface.

Their deep limpid colors and smooth modern texture add atmosphere and personality to any arrangement—and such surfaces need never be **refinished.** Their service is **uninterrupted.**

Counters, wainscot, doors, elevator interiors, column covering, window stools, every place where the finishing material must take a beating, is the right place for Formica.

Exact details on applications and data from which specifications can be written is yours for the asking.

FORMICA

THE FORMICA INSULATION CO.
4620 Spring Grove Ave., Cincinnati 32, Ohio

ARCHITECTURAL METALS

for *the mark of distinction!*

Large or small . . . commercial or residential . . . modern or traditional . . . architectural metals can add to the beauty as well as the utility of any building you design.

Because of their great versatility and extreme adaptability, you can use Architectural Metals to achieve almost any effect you want. In both ferrous and nonferrous metals you have a wide selection of materials, qualities, colors and characteristics.

Use architectural metals for stairs, doors, windows, grilles and all types of exterior and interior decorations. Use them, too, for structural and protective building devices, fire escapes, and other service equipment items.

For a Directory of Leading Architectural Metal Fabricators who are ready and anxious to serve you, write today to Dept. F-11.

NATIONAL ASSOCIATION OF

ORNAMENTAL METAL MANUFACTURERS

209 CEDAR AVENUE TAKOMA PARK WASHINGTON 12, D.C.

(Continued from page 16)

ment hallways, and exchanging greetings with startled residents. His observation: "Most of the buildings are not fit for human habitation. There are a great number of firetraps here—a greater number than I have ever seen in any area."

The project that will replace the three crowded slum blocks at which the Governor looked is the eleventh state-financed housing development to be announced for New York City. It will cost $7,930,000 and house 1,160 families at an average rent of $7 a room. Governor Dewey and Commissioner Stichman unite in the fervent hope that private investment will be attracted around the periphery of the state's slum clearance job. Said the Governor:

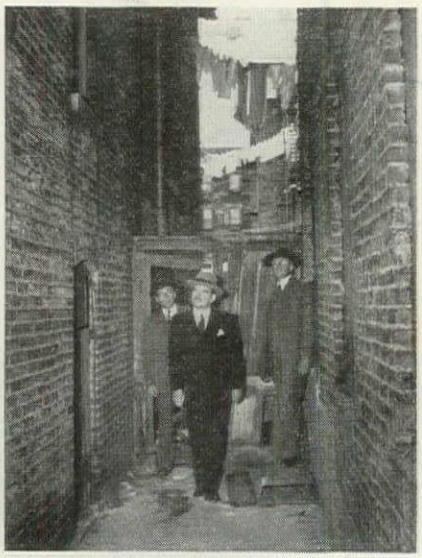
"Our big problem is to see that we get area clearance, not just slum clearance. It does only half the job if we just clear a spot, build new buildings on it and do nothing about the surrounding area."

To accelerate new development on a community scale, Commissioner Stichman recently appointed nine top-flight architects as a Panel of Community Consultants. Members:

Arthur C. Holden, chairman; Henry S. Churchill, Ely Jacques Kahn, William Lescaze, Ralph Walker (all of New York City); Lemuel C. Dillenback, dean, School of Architecture, Syracuse University; William Kaelber, chairman, Rochester City Planning Commission; James W. Kideney, Buffalo; George Bain Cummings, member, Binghamton City Planning Commission.

VISITING Bronx housing site, Governor Dewey (foreground) skipped no alleys. State Housing Commissioner Stichman (left) accompanied the Governor.

Acme



KAHN CHIEF

Twenty years ago the late Albert Kahn called in the key members of his firm, gave them an interest in the business and a seat at the conference table. The great industrial architect made careful plans to insure the continuity of the great design organization he had painstakingly built, finally incorporated as Albert Kahn Associated Architects and Engineers. Last month one of Albert Kahn's key men moved up to the head of the conference table as president. George J. Miehls succeeds the late Louis Kahn as head of the organization which can spot its plant designs on five continents. Project manager for the Curtiss-Wright expansion program and some of the biggest U. S. war plants, Miehls went to work for Albert Kahn as a construction engineer in 1919—or just about the time the architect was demonstrating for Henry Ford how to house all production processes in a single steel-and-concrete sheaf.

Robert Anderson

PRESIDENT MIEHLS

LABOR

CIO WAY

Several hundred militant representatives of the U. S. housebuilding market met in New York last month to speak their minds about the way things are going. These potential housebuilding customers were all members of CIO unions. Their meeting made it abundantly clear that (1) they do not like the way things are going and (2) they will use their measurable political power, on both a local and national basis, to start things going in the direction of more housing for the moderate- and low-income buyer and renter. One step the unionists think jam-packed New York should take immediately: commandeering of vacant dwellings or levying a tax on excess rooms.

Setting a pattern for other meetings to be held throughout the country, the conference urged all union locals to form housing committees, sent off a batch of telegrams stating their housing objectives to President Truman, Congressmen, Mayor Fiorello LaGuardia. They also passed a bevy of resolutions. Samples:

▶ Extension of price and rent controls on new and existing buildings until an ade-

(Continued on page 24)

Survey after Survey shows the SWING is to *Electric Ranges*

Wire Your Homes For Electric Ranges— That's What Women Want!

THERE'S no doubt about it; women *prefer* the convenience, cleanliness, dependability and economy of *modern* electric cooking. And *you* can cash in on this preference by wiring your homes for Electric Ranges. Here's proof of the overwhelming trend toward electric cooking:

- WOMAN'S HOME COMPANION survey shows that *more* women plan to buy an Electric Range than *any other type!*
- McCALL'S MAGAZINE readers made the Electric Range their 2-to-1 "must have" choice in a recent contest.
- HOUSEHOLD MAGAZINE survey indicates that 3 times as many women want Electric Ranges as now have them.
- SUCCESSFUL FARMING survey shows that nearly twice as many REA consumers will buy an Electric Range *in first two postwar years* as now have one.
- COUNTRY GENTLEMAN survey shows that among the upper two-thirds of white farmers, the Electric Range is the 2-to-1 choice!

And prewar sales figures further emphasize the trend; between 1933 and 1941, sales of Electric Ranges increased over 900%!

Cash in on this growing demand. Wire your postwar homes for Electric Ranges. Built-in, the cost of such wiring is negligible—the selling power tremendous.

Electric Range Section
National Electrical Manufacturers Association

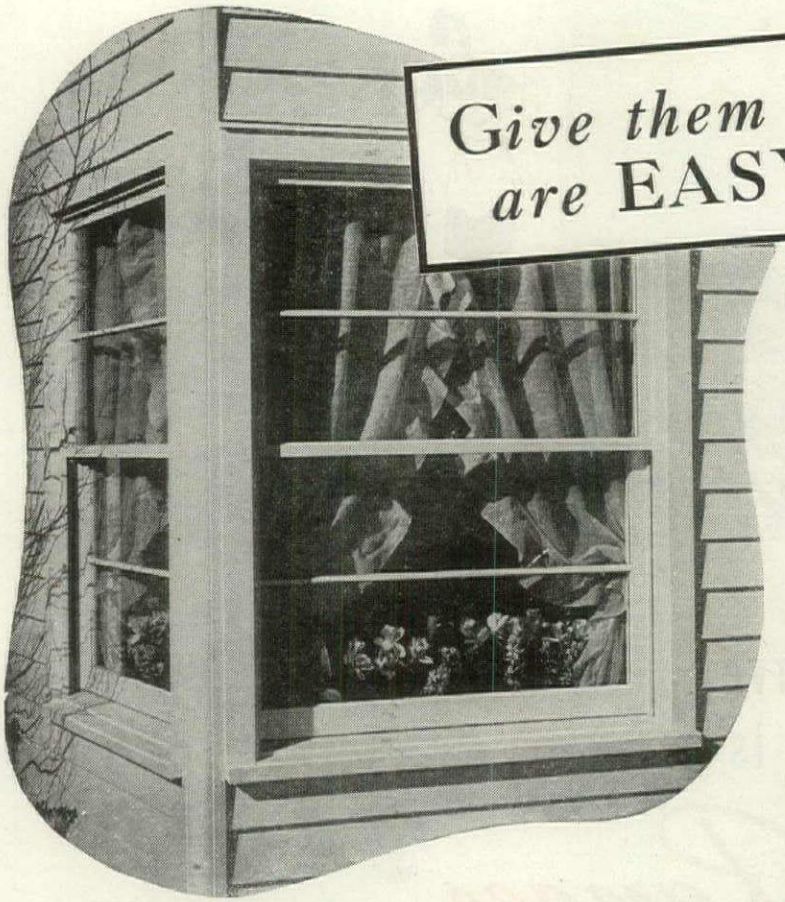
A-B STOVES · ADMIRAL · ELECTROMASTER · ESTATE HEATROLA · FRIGIDAIRE · GENERAL ELECTRIC · GIBSON · HOTPOINT
KELVINATOR · MONARCH · NORGE · QUALITY · UNIVERSAL · WESTINGHOUSE

FOR EASIER SALES

Wire your houses

FOR ELECTRIC RANGES

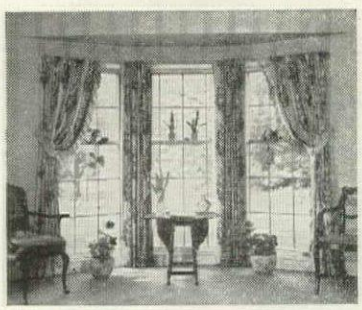
Give them windows that are EASY to operate!



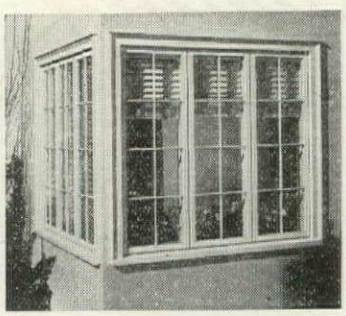
● One sure way of pleasing Mr. and Mrs. Homeowner is to give them windows that open easily, smoothly—yet won't "rattle" or leak heat. Curtis Silentite is the answer—the first major window improvement in 300 years.

This famous line meets every other requirement of home builders—in smart, modern design . . . in weathertightness . . . in low maintenance. Curtis Silentite windows are available in stock sizes to fit every type house plan—are easy on the budget.

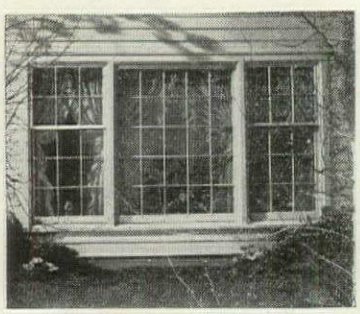
When you specify Curtis Silentite windows, you are sure of pleasing the most critical client. For over 79 years of woodworking experience and research are behind them. This, added to Curtis' modern production methods, assures windows of greater dimensional accuracy for quicker, easier installation—windows that satisfy on *every* quarter—architect, builder and home-owner. Let us keep you up to date on Curtis window and stock woodwork plans—mail the coupon for complete information.



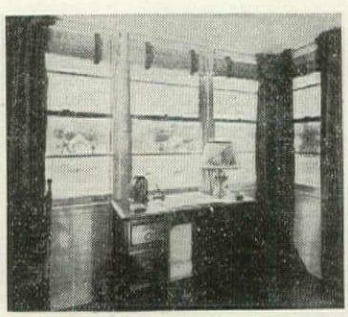
Bay windows need not be luxuries—if you specify Curtis Silentite stock units. Such bays provide a means of "stretching" floor space—and add to exterior interest as well. Several Curtis designs will be available for the home you plan.



Casement groups such as this are practical from a fuel-saving standpoint when you specify Silentite Casements. For the Silentite Casement is especially designed for weather-tightness and economy, as well as for beauty.



Better design is one reason why Silentite windows are so popular. Note lightness and grace which Curtis gives to Silentite window design. Several sizes of view sash will be available for use with stock Silentite units.



"More windows" is the demand of post-war home builders—and Silentite stock units enable you to satisfy that demand with economy. Weathertight, easy to operate, Silentite windows are made in several sash styles and in numerous sizes.

1866 CURTIS WOODWORK SILENTITE PRE-FIT the "Insulated" window

CURTIS COMPANIES SERVICE BUREAU
Dept. AF-11S Curtis Building
Clinton, Iowa

Please send me free literature on Silentite windows and Curtis Stock Architectural Woodwork.

Name.....

Address.....

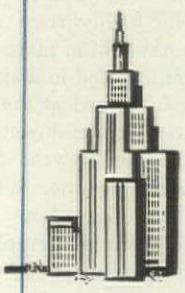
City.....*State*.....

design

for lasting appreciation

In design and decoration, in functional capacities—plastics have earned a place in modern architecture. Their uses—many subject to development—offer new flexibility to the designer of future buildings.

with DOW PLASTICS



SARAN

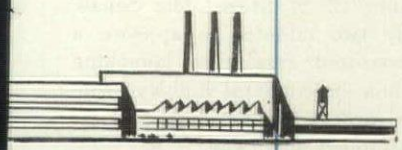
Present and Potential Uses: Non-rusting screen; plumbing parts and equipment; insulation; name plates; wire coating; pipe and tubing for installations requiring chemical and corrosion resistance; paint brush handles; monofilament for textiles; plating masks; valve and valve parts; chemical apparatus; pump parts; meter parts; bottles; closures.

Properties: Resistant to chemicals, abrasion, corrosion, water, and moisture; good electrical insulator; excellent thermal insulator; non-flammable; tough; flexible; dimensionally stable; not recommended for installations requiring temperature resistance above 170° Fahrenheit; tends to brittleness at extremely low temperatures.

STYRON

Present and Potential Uses: Lighting fixtures; escutcheons; decorative objects and trim; insulators; battery cases; food handling equipment; refrigerator parts; chemical apparatus; pharmaceutical, cosmetic and jewelry containers; lenses, dishes, pens, pencils; hydrometers; funnels; closures; costume jewelry; novelties of many kinds.

Properties: Crystal, translucent or opaque; broad color range; excellent high frequency electrical insulator; can "pipe" light through rod at angles, and around bends; resistant to most acids and alkalies; low water absorption; light weight; good stability at low temperatures; limited solvent resistance; available only in rigid forms.



ETHOCEL

Present and Potential Uses: Modern window blinds; special extruded shapes for kitchen trim; rods, tubes and bars; radio cabinets; housings; tool handles; escutcheons; insulators; automotive and aircraft window frames; aircraft parts; tape and wire coating; automotive parts; containers; flashlights; refrigerator parts.

Properties: Extra tough, even at low temperatures; attractive colors; pleasant to handle; transparent or translucent; dimensionally stable to varying climatic conditions and temperatures; light in weight; available in wide range of flow; not available in crystal color; limited chemical and solvent resistance.

STYRALOY 22

Present and Potential Uses: Scuff plates; floor mats; handles for tools of many kinds, as well as household appliances; communication cables, gaskets; bushings; coil forms; and many other applications still to be ascertained. Ideally suited to extrusion of complex cross sections and readily fabricated by other molding techniques.

Properties: High dielectric strength, low power loss over all frequencies. Power factor only .005 at 100-300 megacycles. Flexible and shock resistant from −90° F. to 212° F. Specific gravity less than 1. Water absorption only .2 to .5%. Resists heat, ozone, and most chemicals. Resists permanent indentation and abrasion. Easily machined.

High accomplishment with plastics in architecture will result only when designer, fabricator and raw materials producer put their skills together, working as a team. In the interests of achievement, therefore, Dow urges you to save time and money by putting its experts to work on *your* problem. They'll do their part.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

New York • Boston • Philadelphia • Washington • Cleveland • Detroit • Chicago
St. Louis • Houston • San Francisco • Los Angeles • Seattle

DOW

PLASTICS

STYRON • STYRALOY • ETHOCEL • ETHOCEL SHEETING
SARAN • SARAN FILM

MONTH IN BUILDING: NEWS

(Continued on page 20)

quate supply of housing is available.

- Appropriation of Lanham Act (war housing) funds to build housing for veterans.
- Amendment of the G.I. Bill of Rights to extend the time limit for veterans' home loans from two to ten years and extension of similar aid to merchant seamen.
- Liberalization of FHA insurance coverage to protect the home owner and reduction of interest rates.
- Representation of CIO on the City Planning Commission and the N. Y. Housing Authority.

Discussion groups hotly canvassed housing need, zooming house prices, tenant discrimination, many another sore spot. UAW's R. J. Thomas told approving conferees that the effort of real estate and housebuilding groups "to get a bigger slice of the housing melon" led them to oppose a housing program that would in the long run be to their own advantage. Reminded Thomas: "Housing has never been related to need. We must think in terms of families with incomes of less than $2,000 per year, since almost half the population earns that amount. We must stir public recognition of this fact."

LOG-JAM

The Army, everybody reminded, had released enormous amounts of lumber. But the lumber made available by cancelation of military orders was still growing in the woods. How fast the lumber mills work this year will, more than anything else, determine how many houses the U. S. builds (see page 7).

From Washington to Northern California no timber was cut last month. Some 470 logging camps and lumber mills were profoundly quiet. Still on strike were 60,000 AFofL workers who are asking for $1.10 hourly pay. Only 17 small mills have agreed to the AFofL demand and gone back to work. Some 7,500 additional workers may go back if management-labor negotiators representing three districts in Oregon and Idaho reach an agreement. But from the bulk of the giant West Coast lumber industry there came no sign of mediation.

Karly Larsen, president of the Northern Washington District Council, International Woodworkers of America (CIO), publicly spoke what many an anxious builder privately muttered: the lumber owners are more anxious to freeze out small competitors than to pay any more excess profits tax this year. The Office of Price Administration pointed to the industry's 1944 profits which showed a 1,065 per cent increase over the average during the 1936-1939 period.

At the month's end, Washington's advisory commission on reconversion urged Governor Mon C. Wallgren to try for a settlement.

CITIES

TRAFFIC SOLUTION

Scarcely had the automobiles come back in prewar numbers when many a city dweller wished they hadn't. New York figured the traffic knots in its narrow streets cost business $1 million a day. Nowhere could New York see a real answer, feebly tried a parking crackdown, thought of more midtown garages. Boston, snarled in a similar traffic deadlock, shuddered at the prospect of loosing its last big downtown parking lot: a huge site between Stuart Street and St. James Avenue. While a dozen firms with building plans dickered for the site, Boston contemplated the doleful prospect of more downtown customers and almost no parking space.

But the traffic-clotted cities may soon get some federal help for basic surgery. Last month, for the first time in history, federal road-building dollars began to trickle into U. S. cities. The Senate took only two minutes to approve a House-sponsored resolution launching a $3 billion state-federal highway construction program, first big postwar works job to get underway.

Under the plan earlier approved by Congress, a three-year building program will provide a 40,000-mile master network of highways connecting all principal metropolitan areas and a greatly improved series of secondary roads. Federal aid over the three-year period will amount to $500 million yearly and will be matched by the states. One-fourth of the federal funds are earmarked for highways in urban areas.

Major objective of the urban expenditures will be elimination of traffic bottlenecks in and around cities. Divided multiple-lane highways will bypass and bridge busy cross streets. For many a traffic-jammed city, the new road plan will mean the first separation of through and local traffic. Alert city planners noted that the building program also promised another way to clean up blighted neighborhoods, looked for ways to link the new highway routes to slum sections in need of attention.

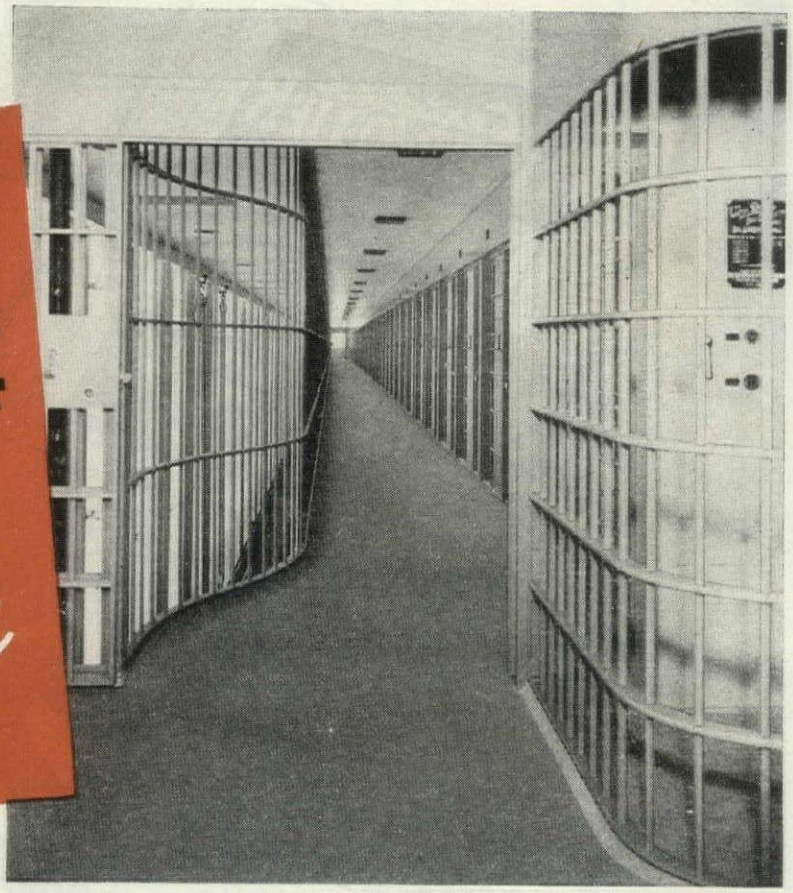
END OF MANHATTAN?

Amid the frenzied attempts to forecast the awful, unknowable shape of the Atomic Age one clear professorial voice stood out. William Fielding Ogburn, distinguished service professor

(Continued on page 28)

Consult VAN DORN...

...WHEN PLANNING CONSTRUCTION AND EQUIPMENT OF *Modern Prisons*



● If you are planning a prison project you can obtain from Van Dorn engineers the most authentic, up-to-the-minute information on modern prison design and construction.

When constructing a new prison or remodeling an old one, Van Dorn has the manufacturing facilities and the erection skill to do an outstanding job. This is evidenced by the fact that Van Dorn has helped develop and build more prison projects than any other organization in America.

For 68 years the Van Dorn Iron Works Company has originated, designed and built prison and jail equipment and accessories. Among the improvements pioneered and developed by Van Dorn are the Fully Selective Keyless Locking Devices, the Van Dorn Interlocked Cell Bar Construction and Tool-resisting Steel.

A Van Dorn prison specialist will gladly call at your request. He will be helpful in many ways . . . and there is no obligation.

THE VAN DORN IRON WORKS CO.

2685 EAST 79TH STREET • CLEVELAND 4, OHIO

The famous Fleur-O-Lier Label makes it easy for you.

And this is one time when the easiest way is the best. To get utmost fluorescent lighting fixture quality, merely specify that the fixtures bear the Fleur-O-Lier Label. You can select from scores of types and styles made by more than thirty leading manufacturers.

Then you'll have an easy mind regarding the best interests of your client. Before a fixture is permitted to bear the Fleur-O-Lier Label, it must be built to rigid electrical, mechanical, and performance specifications, and then pass exacting tests by Electrical Testing Laboratories, Inc.

Specify Fleur-O-Lier—be sure of continued satisfaction.

Naturally, Certified Ballasts and Starters are a key part of Fleur-O-Lier Certification.

Fleur-O-Lier Manufacturers, 2116 Keith Building, Cleveland 15, Ohio

FLEUR·O·LIER *Manufacturers*

CERTIFIED FIXTURES FOR FLUORESCENT LIGHTING

Participation in the FLEUR-O-LIER MANUFACTURERS' program is open to any manufacturer who complies with FLEUR-O-LIER requirements

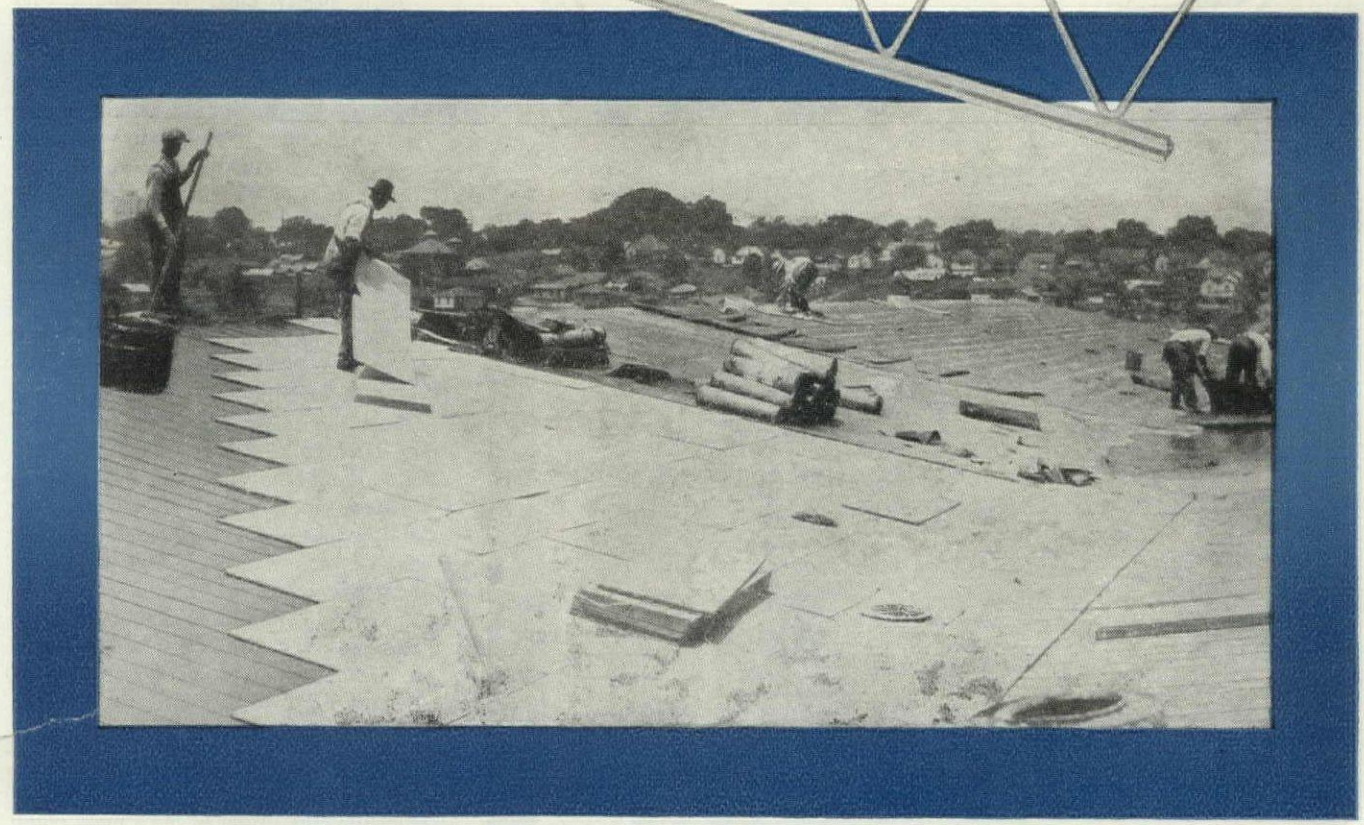
TRUSCON
FERROBORD STEELDECK ROOFS

Reg. U. S. Pat. Off.

Quick to Install

•

Long, Long Life



Because of the efficiency of design embodied in Truscon "Ferrobord" Steeldeck Roofs, and the exceptional quality of their materials, they offer unusual opportunities to secure economical, long-lasting, dependable roof construction.

Truscon "Ferrobord" Steeldeck Roofs are particularly adaptable to theatres, gymnasiums, schools, auditoriums, public halls and industrial buildings requiring large areas free from supports and obstructions.

Truscon Steeldeck has the advantages of being light in weight and fire-resistant. It can be insulated and waterproofed to any degree required.

Plan on Truscon "Ferrobord" Steeldeck Roofs for your current structures, and ask our experienced engineers for assistance in helping you develop efficient, long-lived roofs.

TRUSCON STEEL COMPANY · Youngstown 1, Ohio
Subsidiary of Republic Steel Corporation

TRUSCON
Reg. U. S. Pat. Off.

STEELDECK ROOFS
• *Cover the Continent* •

(Continued from page 24)

of sociology, matter-of-factly recommended that the U. S. start to break up its cities.

From Manhattan's canyons to San Francisco's Telegraph Hill, the city dwellers themselves had begun to grasp the terrible truth: They are living in the most dangerous spots on earth. There was nothing to reassure them in Ogburn's assumption that there will "almost surely be a rocket atomic bomb that will cross the Atlantic, the Arctic or even the Pacific in less than 15 minutes, traveling at a height of over 500 miles."

It is pretty clear to Ogburn that unless they are dispersed, the cities face obliteration. He thinks Chicago should be made into 100 towns of 40,000 population each. Manhattan Island should be turned back to the Indians. Washington, D. C. should be broken into fragments and distributed around the country.

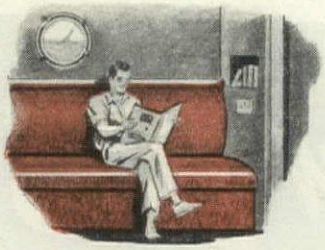
In realistic terms, he estimated the size of the job. "There are 200 cities larger than 50,000 with a total population of 50 million. The task would then be to make 200 cities into 1,000. The value of buildings is probably around $150 billion. To this would be added the land values. How much the land value would be shrunken in breaking up large cities we do not know, for new land values would be created in the making of new cities. Then there are the moving charges . . . Suppose the cost runs up to $250 billion. That is still less than the cost of the most recent world war, and perhaps a smaller fraction of the cost of World War III."

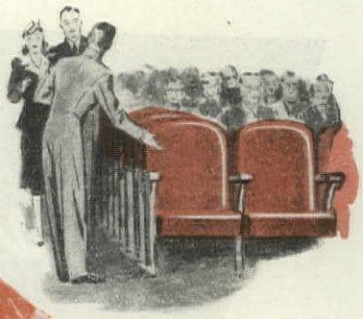
Could manufacturing plants and labor supply be adapted to the small centers? "Even if reduction in size meant loss in efficiency, the threat of the atomic bomb would dictate smaller industrial centers."

Who would plan and carry out this mass decentralization? "A strong central government with wartime powers."

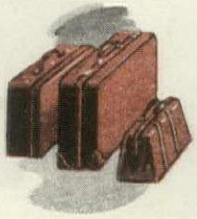
Ogburn believes that modern transportation would make the urban breakup feasible. "Helicopter buses driven by tangential jets on the tips of the blades might travel several hundred miles an hour." The dispersed urban pattern might be a collection of small supermarkets, connected by fast transportation and each specializing in a certain type of product or activity just as big city neighborhoods now tend to be functionally specialized. An alternative: ribbon cities stretched along highways.

(Continued on page 32)





"u.s." Naugahyde now available at these fine houses



AUTHORIZED DISTRIBUTORS

ATLANTA, GA.—Erikson Co.; La France Industries.

BALTIMORE, MD.—La France Industries.

BOSTON, MASS.—Andrew Dutton Co.; La France Industries.

BUFFALO, N. Y.—La France Industries.

CHARLOTTE, N. C.—Mill Remnants Co.

CHICAGO, ILL.—La France Industries; Lite Products Corp.; Lussky, White & Coolidge, Inc.; Reliable Textile Co.

CINCINNATI, OHIO—B. H Irvin Co.; Miami Rubber Co.

CLEVELAND, OHIO—B. Berger Company; La France Industries.

DALLAS, TEXAS—Marshall & Moore.

DAYTON, OHIO—Payne & Co.

DENVER, COLO.—The Pawley Co.

DETROIT, MICH.—La France Industries.

FT. WAYNE, IND.—Mossman, Yarnelle Co.

FORT WORTH, TEXAS—La France Industries.

GRAND RAPIDS, MICH.—La France Industries.

HIGH POINT, N. C.—Carolyn Fabrics.

HOUSTON, TEXAS—Higbee & Mitchell.

JACKSONVILLE, FLA.—Excelsior Mills Corp.

LOS ANGELES, CALIF.—Boething & Dunlap; La France Industries; Pacific Hide & Leather Co.

LOUISVILLE, KY.—Fulton, Conway & Co.

MINNEAPOLIS, MINN.—La France Industries.

NEW HAVEN, CONN.—Roberts, Crozier & Ballou.

NEW ORLEANS, LA.—C. V. Harold Rubber Co.

NEW YORK, N. Y.—Abeles-Lewit Co., Inc.; Asher & Boretz, Inc.; La France Industries; J. Rosenheim & Co.; F. Schumacher & Co.

OKLAHOMA CITY, OKLA.—S. & J. Supply Co.

PHILADELPHIA, PA.—Gerhab & Ludlam Co.; La France Industries.

PHOENIX, ARIZ.—Keyston Bros.

PITTSBURGH, PA.—La France Industries.

PORTLAND, OREGON—Ballou & Wright.

ST. LOUIS, MO.—La France Industries; Sligo Iron Store Company; Specialty Fabrics & Supply Co.

ST. PAUL, MINN.—Farwell, Ozmun, Kirk & Co.

SAN FRANCISCO, CALIF.—Keyston Bros.; La France Industries.

SEATTLE, WASHINGTON—Ballou & Wright; La France Industries.

SPARTANBURG, S. C.—Connor & Gregory.

TORONTO, CANADA—Anthony Foster & Sons.

WASHINGTON, D. C.—Bedell Mfg. Co.; Savarese Fabrics, Inc.

"u.s." Naugahyde

REG. U. S. PAT. OFF.

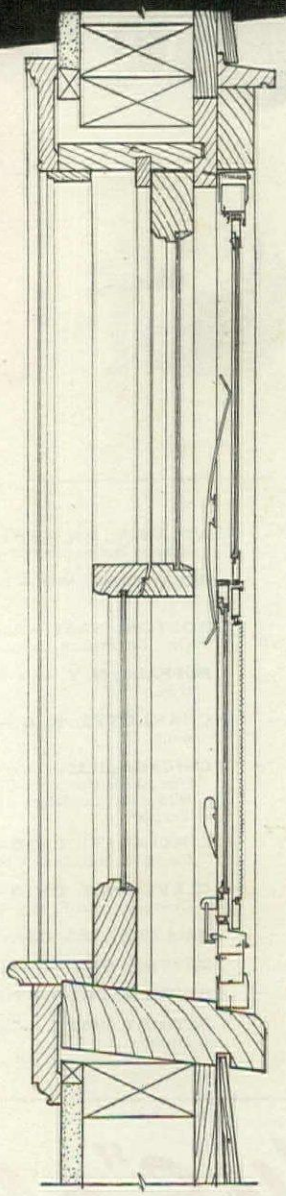
SERVING THROUGH SCIENCE

UNITED STATES RUBBER COMPANY

COATED FABRICS DIVISION, MISHAWAKA, INDIANA

Specify RUSCO

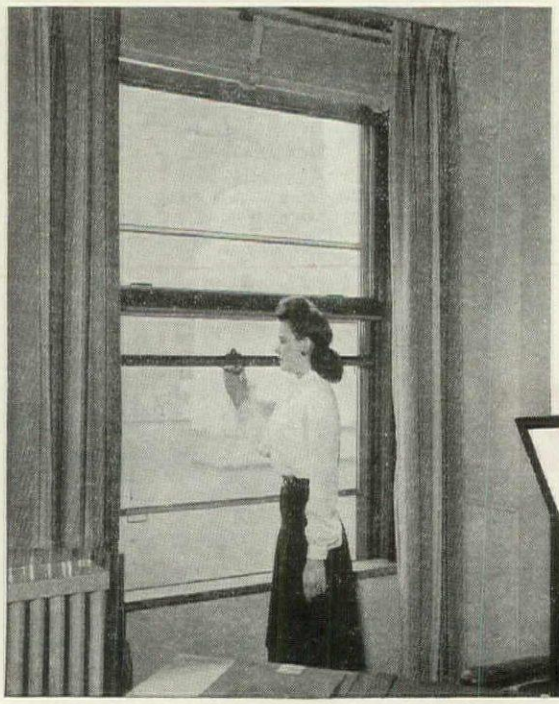
It's your first opportunity to give clients All-Metal Self-Storing Combination Windows!



Nothing to change—nothing to store—seasonal window-work ended forever—RUSCO is the only word you can write into your plans that will give your clients these exclusive, permanent advantages!

Put RUSCO into specifications for homes, hospitals, schools, institutions, office and industrial buildings—and give your clients all these modern benefits:

- patented adjustable closure frame assures tight permanent seal against air leakage
- permanent fuel savings up to ⅓ of annual winter fuel bills
- year 'round rain-proof, draft-free ventilation—even during storms
- self storage that eliminates all changing and storing of insulating sash
- safe, easy operation from *inside*
- light glass and screen inserts that are easily removed for cleaning—from inside
- increased efficiency of air-conditioning systems
- lower maintenance cost



Rusco has served as the first practical Insulating Sash for large buildings since 1937. Now, vastly improved it offers more permanent benefits than ever before. For specifications see Sweet's 18a-7, or write direct for free booklet and name of nearest distributor.

Product of

The F. C. Russell Company

1836-AF Euclid Avenue • Cleveland 15, Ohio

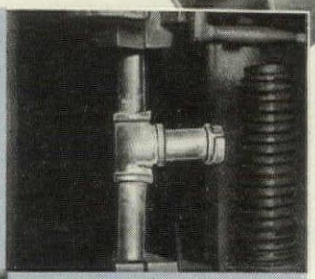
RUSCO

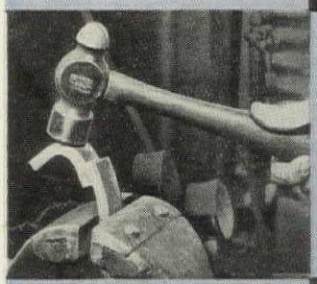
PATENTED ALL-METAL *Self-Storing* COMBINATION WINDOWS

THE SIL-FOS RING..

MAKES THE BOND IN THE *Silbraz** JOINT!

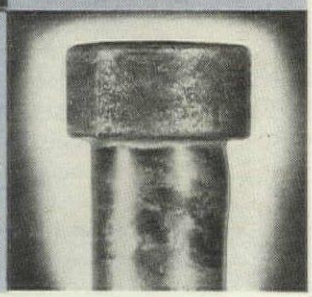
STRENGTH →
Thousands of tensile tests prove that SIL-FOS makes Silbraz joints stronger than the metals joined.





← DUCTILITY
The silver content of SIL-FOS gives Silbraz joints exceptional ductility to withstand severe vibration, shocks and temperature changes.

LEAK-TIGHTNESS →
Exacting pressure tests demonstrate the leak-tight quality of Silbraz joints — the result of the complete penetration and alloying action of SIL-FOS.



The **Silbraz joint** is the basic factor in the success of this modern, threadless method of constructing copper and brass pipe and tubing systems.

And an important feature of this strong, leak-tight, time-tested joint, is the **ring of SIL-FOS** inserted in the bores of fittings, flanges and valves developed for installations of this type.

SIL-FOS is the same low-temperature silver brazing alloy whose outstanding strength, speed, reliability and economy have won such wide acceptance throughout industry in joining non-ferrous metals.

It provides you with this exclusive combination of properties—**low flow point** (1300°F.) that saves heat and time and safeguards metals against heat damage—**exceptional fluidity** that gives instant penetration throughout the joint area and an alloying action with metals that assures high strength—**silver content** that results in vibration and shock defying ductility and strong corrosion resistance.

It's these SIL-FOS properties that assure you a permanently leak-tight, maintenance-free installation when you specify Silbraz-Joined pipe and tubing.

*Reg. U. S. Pat. Off.

ARMY E NAVY
HANDY & HARMAN
FOUNDED 1867
QUALITY SERVICE

HANDY & HARMAN

82 FULTON ST., NEW YORK 7, N. Y.

Bridgeport, Conn. • Chicago, Ill. • Los Angeles, Cal. • Providence, R. I. • Toronto, Canada

Agents in Principal Cities

MONTH IN BUILDING: NEWS

(Continued from page 28)

To architect Frank Lloyd Wright, who has long preached urban decentralization, the current furor about breaking up the cities was welcome news. The cities might yet have to choose between Wright's way and some advice they got last month from Congresswoman Clare Boothe Luce: go underground.

SURPLUS STAKE

Want to buy an airport? Can you use a torpedo plant? Maybe you'd prefer a pleasant tract, suitable for building lots, carved from one of the Army's target ranges?

All these real estate novelties and more are among the plums—and the prunes—in the vast amount of war-acquired property now becoming part of the government's surplus offerings. Now being moved over little by little to the surplus lists are six million acres of land including every type of property. Among the items up for sale: $18 billion worth of government-financed war plants; some 600 airports valued at about $1 billion; 320,000 units of temporary war housing (see page 12); docks, shipyards, army camps, farm and forest lands.

How and for what use this property is sold will change the shape of almost every U. S. city. Last month the Surplus Property Administration took a smart first step towards the right kind of market. Deputy Administrator for Real Estate Frederick M. Babcock called upon the communities themselves to propose how surplus real estate should be turned to new use.

Community groups are invited, not only to recommend a new use, but also to name a specific purchaser. On the basis of their recommendations, SPA will classify surplus properties and turn them over to the following disposal agencies:

National Housing Agency (Real Estate and Disposition Branch, Federal Public Housing Authority): Residential real estate and housing.

Federal Works Agency (Surplus Property Office, Public Buildings Administration): Commercial real estate, institutional, governmental, roads, streets, and local transportation real estate.

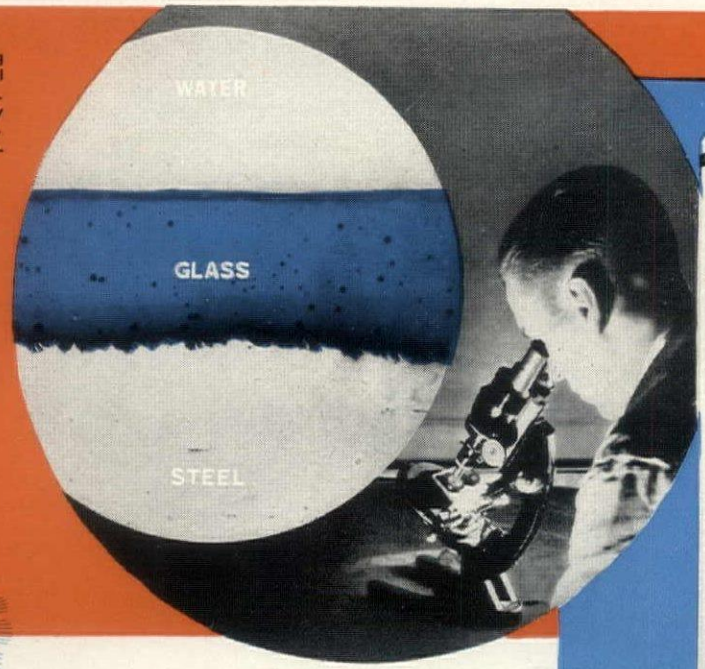
Reconstruction Finance Corporation: Industrial real estate, railway, shipping, pipeline, utility, power line, and communications real estate.

Department of Agriculture (Farm Credit Administration): Farm and forest lands.

Department of the Interior (Surplus Property Division, General Land Office): Grazing, mineral, and waste land.

Maritime Commission: Shipyards.

Microscopic view showing how *Permaglas* and steel are fused together. Smooth, lustrous, sanitary as a clean drinking glass, *Permaglas* resists *all* corroding.



There's Only ONE *Permaglas*

Now You Can Specify Sparkling Clean Hot Water

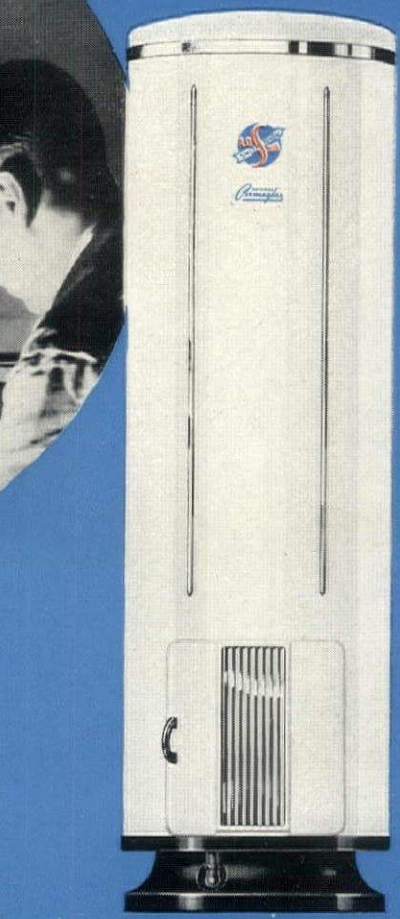
Now . . . with the water heater *lined with glass* . . . you can specify a hot water supply as modern and convenient as the kitchen and bath it serves. Water as clean as its source, free of all storage-tank rust or corrosion!

For the SMITHway Automatic Water Heater, lined with *Permaglas,* resists all rusting and corroding due to *any* kind of water. Sparkling blue, mirror-smooth *Permaglas* is glass-fused-to-steel—a triumph of home-appliance engineering proved in 23,000 test-years with the waters of every state of the Union.

As modern in appearance as it is in performance, the SMITHway *Permaglas* Water Heater is finished in gleaming white, long-lasting Neotone. A thick, fuel-saving blanket of Fiberglas insulation locks in stored heat . . . cuts heating costs to a minimum.

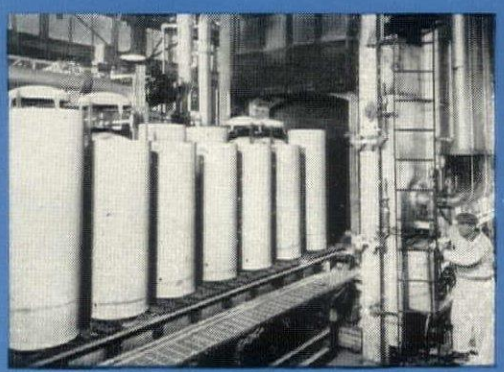
Fully automatic heating units—gas or electric—are dependable, trouble-free, efficient.

Before you specify any domestic water heater, send for the full story, "The Inside Story of Permaglas," today!



The SMITHway Automatic Water Heater, lined with fused-to-steel *Permaglas*—designed for the homes of today.

In liquid form, glass is applied inside the welded steel tank by a special flooding method.



In a controlled-oxidation type furnace, the glass is fused to the steel and becomes *Permaglas* . . . the lining that cannot rust or corrode.

A.O. SMITH AUTOMATIC WATER HEATERS
Gas or Electric
LINED WITH Permaglas
GLASS-FUSED-TO-STEEL

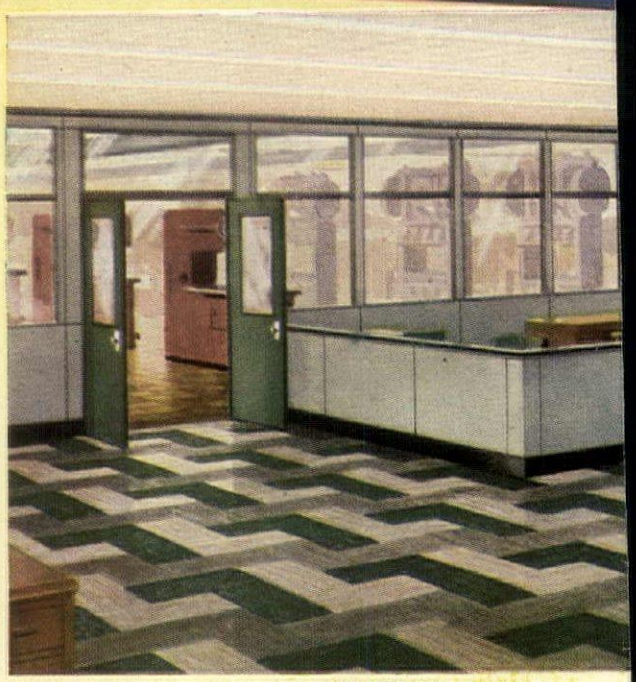
A. O. SMITH Corporation

NEW YORK 17 • PITTSBURGH 19 • CHICAGO 4 • TULSA 3
HOUSTON 2 • DALLAS 1 • LOS ANGELES 14 • SEATTLE 1

INTERNATIONAL DIVISION: MILWAUKEE 1 • *In Canada: JOHN INGLIS CO., LIMITED*

UNIT OFFICE SYSTEM

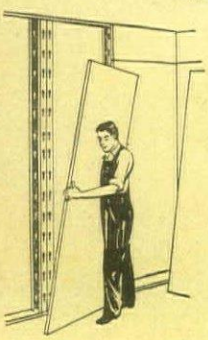
PRIVATE OFFICES



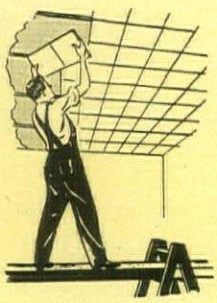
FACTORY OFFICES

RECEPTION LOBBIES

GENERAL OFFICES



MOVABLE WALLS—The keystone of flexibility in Unit Construction is the J-M Transite Wall. It can be disassembled and relocated whenever new requirements call for a change in layout. Made of fireproof asbestos and cement, practically indestructible materials, the movable panels are used to form rigid, double-faced partitions 4" thick. They can also be used as the interior finish of the outside walls.



ACOUSTICAL CEILINGS—Helping to overcome the handicap of excessive noise, Johns-Manville Acoustical Ceilings are beneficial to health and working efficiency. They help eliminate the unnecessary fatigue and nervousness produced by reverberating noise. An exclusive J-M patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical ceiling units.

provides Flexibility for entire building interior

Johns-Manville Unit Construction—Walls—Ceilings—Floors,

meets every requirement of the ideal modern office

WHEREVER your plans call for *offices*, consider the unique advantages of Johns-Manville Unit Construction . . . whether you're thinking of a private office, a suite of offices, or an *entire office building*.

J-M Unit Construction is designed to give offices *complete flexibility*, along with modern beauty and attractiveness.

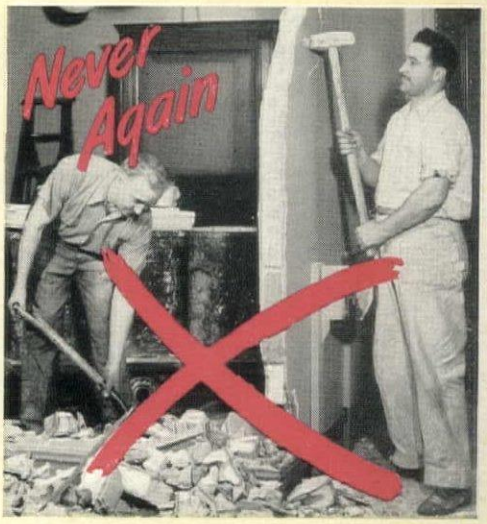
Not only does this development apply to offices, but to many other types of building interiors—factories, schools, hospitals . . . in fact, wherever rooms might need to be enlarged, made smaller, rearranged, or relocated to meet the ever-changing needs of the future.

Here's what the system consists of . . . and it's all under a single specification . . . a single manufacturer's responsibility:

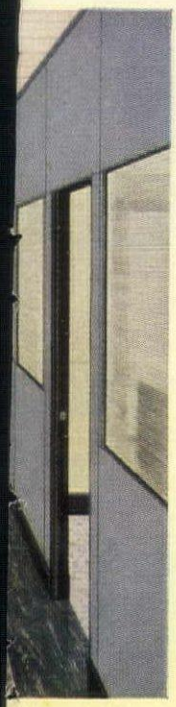
1. **Movable Walls** . . . 100% salvageable. Made of asbestos-cement Transite panels, easily erected or dismantled, yet combining all the qualities of permanent construction.
2. **Acoustical Ceilings** . . . reduce distracting noise. Demountable units can be easily taken down and relocated.
3. **Colorful, Resilient Floors** . . . quiet, comfortable underfoot. Small units permit easy extension.

The constituent parts of J-M Unit Construction are *built to last* as an integral part of the structure. They're hard-to-mar . . . shock-proof . . . economical to maintain.

A new brochure showing the many and varied uses of this remarkable development is available to architects and engineers. Write Johns-Manville, 22 E. 40th St., New York 16, N. Y.



You can have clients say good by to heaps of rubble and rubbish . . . good by to offices and rooms that have to be hauled off to a dump heap whenever business requirements call for a change in layout. Johns-Manville Unit Construction . . . with Movable Walls, Asphalt Tile Floors, and Acoustical Ceilings of demountable units . . . offers an entirely new conception of flexibility, styling, and comfort.



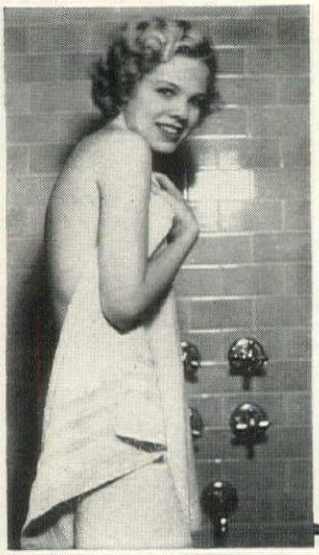
ASPHALT TILE FLOORS—J-M Asphalt Tile Flooring completes the Unit Construction System. Made of asbestos and asphalt, the units are hard-wearing, easy to clean, attractively colorful. They are restful underfoot, and their resilience frequently reduces damage to articles accidentally dropped. Individual units permit easy alteration or repairs. Made in a wide variety of plain and marbleized colors.

Johns-Manville Unit Office Construction

WALLS . . . CEILINGS . . . FLOORS

combining PERMANENCE

with *Flexibility*



ALL THE HOT WATER A BUSY HOUSEHOLD CAN USE

B & G Hydro-Flo Heat not only provides supreme comfort, but also an all-year 'round supply of domestic hot water—no separately fired heater needed. For kitchen, laundry and bath there's an ever-ready supply on hand—low in cost and in ample quantities for labor-saving dish and clothes washers.

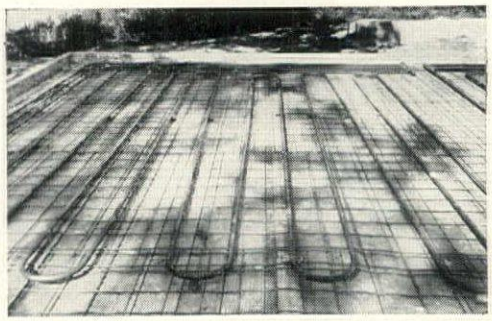
Mr. G. A. Mezger, home builder and developer of Roslyn Heights, N. Y., puts his finger squarely on the reasons for the sensational rise in popularity of B & G Hydro-Flo (*forced hot water*) Heat. He writes—

"In the nearly one hundred homes we have built at our new development, we have installed hot water heating systems which are equipped exclusively with Bell & Gossett equipment.

"We have had no trouble whatever with this equipment, and it has given a high degree of satisfaction both to us and to the owners to whom we have sold.

"One thing which no busy developer can afford to do is to install equipment which will constantly get out of order, which requires a lot of attention and servicing and which is apt to create ill will, rather than good will among his purchasers. *Your equipment has certainly met all tests and we recommend it without any hesitation or reservations whatsoever to any builder, developer or person contemplating the construction of a home.*"

For full information on B & G Hydro-Flo Heat and its application to every type of building, write today.



IDEAL FOR RADIANT PANEL HEATING

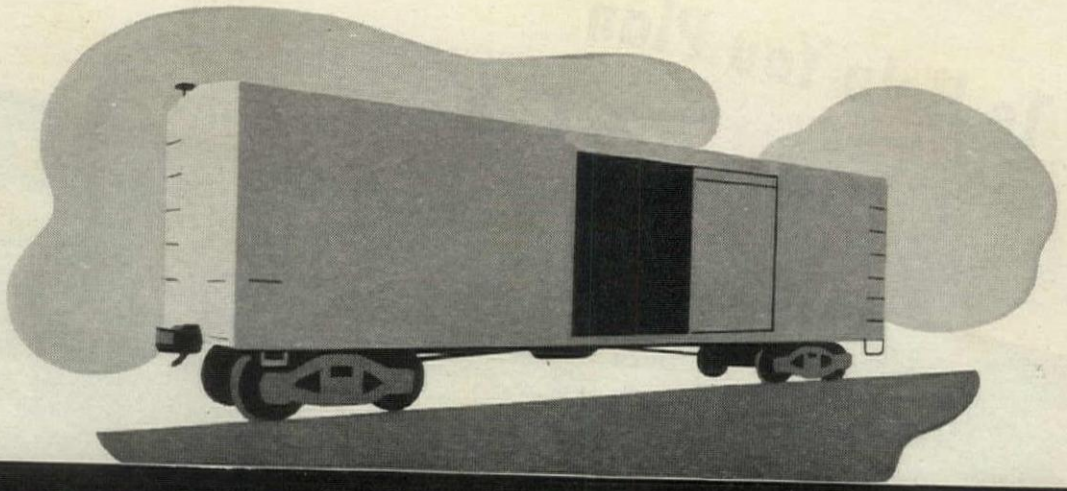
The smooth accuracy with which a B&G Hydro-Flo System controls the flow and temperature of heated water makes it the preferred system for modern Radiant Panel Heating.

BELL & GOSSETT CO.

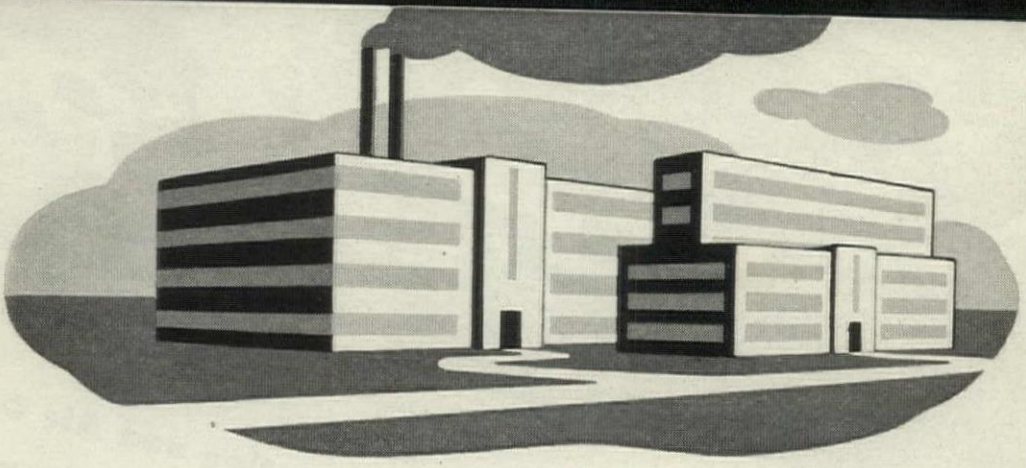
Dept. G-10 · Morton Grove, Ill.

Hydro-Flo HEAT

FORCED HOT WATER HEATING FOR RADIATOR, CONVECTOR, UNIT HEATER AND RADIANT PANEL SYSTEMS



Whether you build Freight Cars or Design Factories . . .



..... your product can be improved with a Kimpreg* Surface

A revolutionary new alloy-like material is achieved by fusing to plywood's surface a cured plastic skin of KIMPREG. This resultant material is not a plywood in the ordinary sense, not a conventional plastic laminate. It is a brand new, better structural medium with countless applications in many products—including, very probably, those *you* plan for post-war production.

With KIMPREG, plywood is converted into an improved substance which can be machined, formed and fastened like ordinary wood—yet has a plastic's smooth, tough surface and beautiful, permanent, paintless finish.

KIMPREG adds the following advantages to plywood: 1) increases durability and flexural strength; 2) provides resistance to moisture and vapor; 3) armor-plates against extreme abrasion; 4) diminishes grain-raising effects; 5) makes the material scuffproof, splinterproof, snag-resistant; 6) affords a stainproof, washable, "wipe clean" surface; 7) creates resistance to chemical action, decay, temperature-extremes, fire, vermin, and mold. Moreover, it is warm to the touch, does not have the chill "feel" of metal surfaces.

Used for airborne "pre-fab" huts, glass-smooth tables for packing parachutes, water-proof ammunition boxes and scores of other uses, KIMPREG has distinguished itself on the vigorous proving-ground of wartime. Soon it will be offered in a variety of appealing hues.

Now is the time to investigate the possibilities of KIMPREG-surfaced materials for your *peacetime* requirements.

Write us for further information and names of those plywood manufacturers who are currently using KIMPREG plastic surfacing material.

*TRADE MARK

Send Coupon for FREE KIMPREG Book to: Kimberly-Clark Corporation, Neenah, Wisconsin

AF-1145

Name _____

Firm _____

Type of Business _____

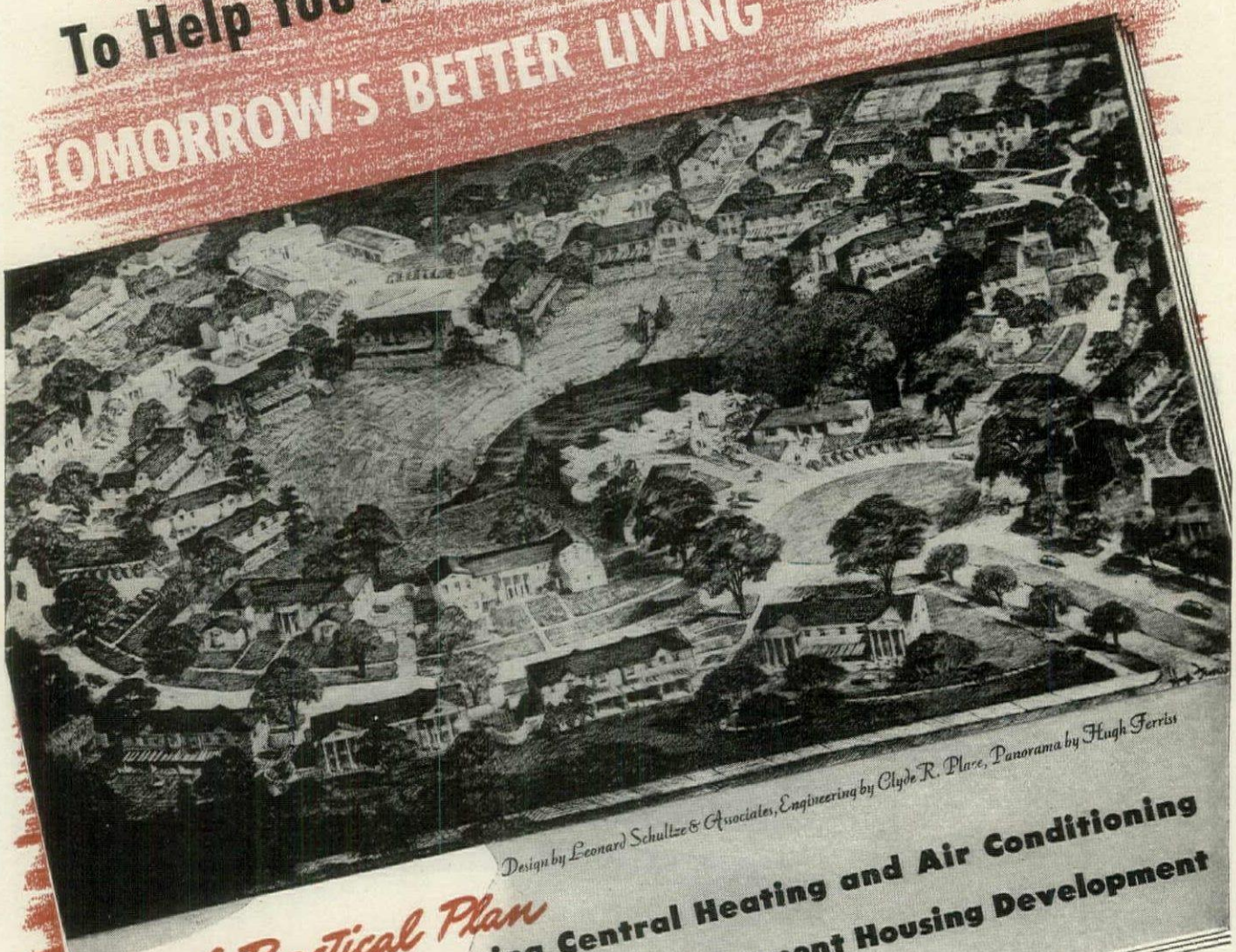
Address _____

City _____ State _____

Kimpreg
REG. U.S. PAT. OFF.

A PRODUCT OF Kimberly Clark RESEARCH

To Help You Plan TOMORROW'S BETTER LIVING



Design by Leonard Schultze & Associates, Engineering by Clyde R. Place, Panorama by Hugh Ferriss

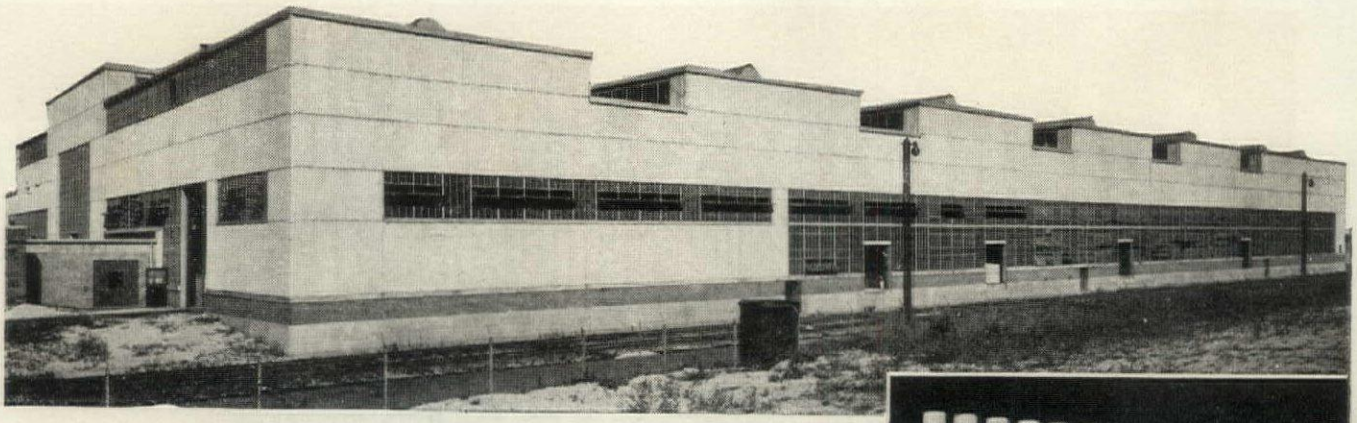
A Practical Plan
for incorporating Central Heating and Air Conditioning in a proposed Suburban Apartment Housing Development

This is the first in a series of project studies presented by the Ric-wiL Company, to demonstrate the possibilities and advantages of Central Heating. It discusses in detail—with blue prints, cost figures, etc., the practicability of heating, cooling and supplying other services from a Central Plant. Designed by Leonard Schultze and Associates. Engineering is by Clyde R. Place. The cover illustration is a four color rendering of the project by Hugh Ferriss, noted architectural artist.

Any architect, engineer, contractor, realtor, city commissioner or property owner interested in planning better living conditions for the future will find this book stimulating, inspiring, and completely factual. In addition to the hypothetical apartment community described in detail, it contains actual case histories where Central Heating has proved its many economic and other advantages. This book is our contribution to help you plan tomorrow's better living conditions.

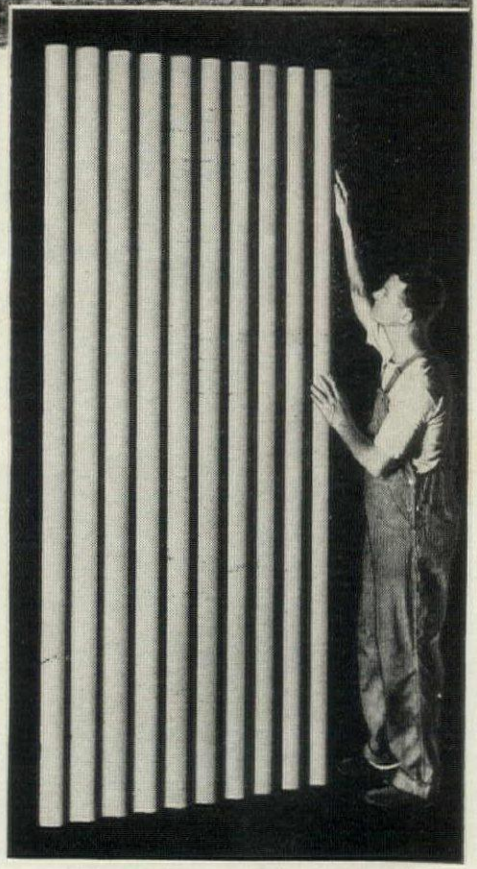
Write for your copy of this Book Today!

RIC-WIL INSULATED PIPE CONDUIT SYSTEMS
THE RIC-WIL COMPANY · CLEVELAND, OHIO
AGENTS IN PRINCIPAL CITIES



BETTER ROOFS AND SIDEWALLS

with CORRUGATED TRANSITE



FIREPROOF, ROTPROOF, RUSTPROOF . . . low in cost and attractive in appearance . . . that's Johns-Manville Corrugated Transite . . . one of the most *lasting* and *economical* materials you can use for the roof and exterior walls of any building.

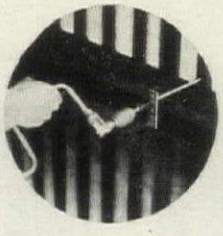
Corrugated Transite is unaffected by the weather . . . is highly resistant to acids, fumes and severe temperatures . . . requires no painting . . . no preservative treatment . . . little or no upkeep. It's *asbestos.*

And note above how successfully these durable sheets are now being used in modern design . . . expressing the trend toward streamlined simplicity.

Natural stone-gray in color, Corrugated Transite can be used alone or in combination with other materials. And when the building must be altered to meet changing industrial needs, the sheets are practically 100% salvageable.

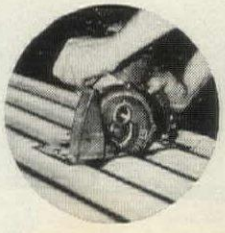
For more facts showing how *J-M Corrugated Transite* will solve your construction problems, call or write for our illustrated brochure. Johns-Manville, 22 East 40th Street, New York 16, N. Y.

QUICKER, EASIER CONSTRUCTION, TOO . . . . .

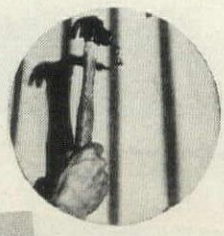


Easy TO BOLT TO STEEL

Easy TO DRILL



Easy TO SAW



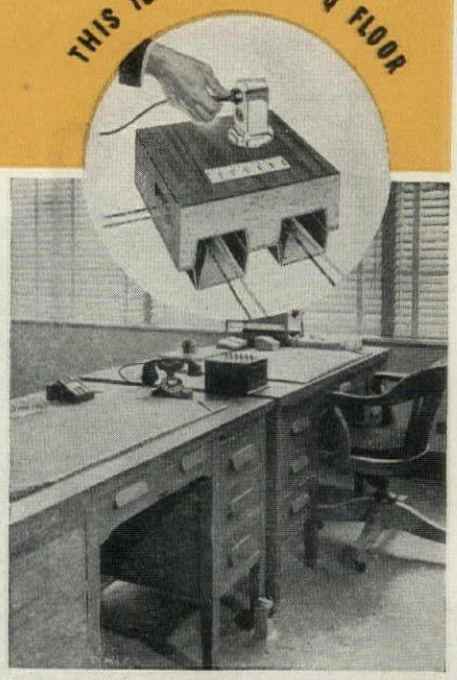
Easy TO NAIL TO WOOD

Johns-Manville *Asbestos* **CORRUGATED TRANSITE**

built with Q · FLOORS because..

ARCHITECT, EARL HEITSCHMIDT, WANTED THE BUILDING

to stay electrically adequate



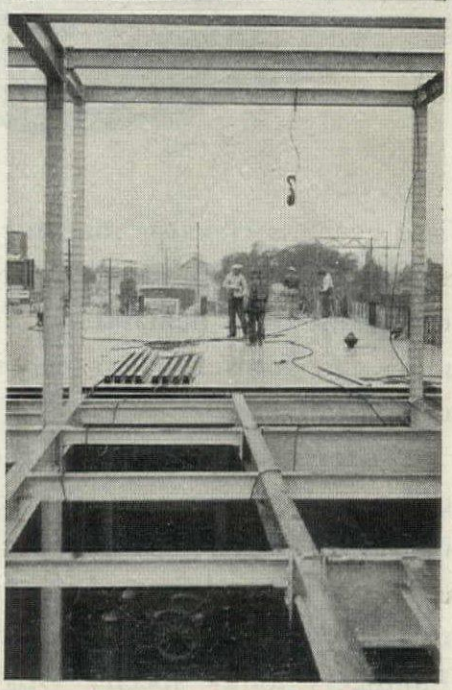
The buildings you design now have to meet the unknown electrical demands of 10 years from now. To keep from electrical obsolescence, floor plans must be capable of quick, easy change.

With Q-Floors you don't give a second thought to floor plans. Partitions can be rearranged weekly. New outlets can be demanded by the dozen. Q-Floors are steel cells, crossed over by electrical raceways. An electrician can drill in any six-inch area to establish a new outlet. And he doesn't dig a trench to do it. The whole job, from drilling to plugging-in, is over in a matter of minutes.

If you specify Q-Floors, you specify unlimited electrical availability, right now and as long as your building lasts. With Q-Floors —change is built in.

AND P. J. WALKER CO., CONTRACTORS,

cut building time and saved Columbia money



Q-Floors have a lot of construction advantages. They reduce building time from 20 to 30%. This is money in pocket to your client. His income starts that much sooner from his investment.

Q-Floors come to the job cut to fit and two men can lay 32 sq. ft. in 30 seconds. Q-Floors go in—dry, fireproof, clean and quiet—practically as fast as the frame goes up. They become a platform immediately for all other trades. Everybody keeps going at full speed and this makes a whale of a difference in construction time.

Don't have any hesitation about price because Q-Floors look so good. They're built to sell and the price is right in line. Robertson has thousands of installations.

For details, call a Robertson representative or write for Q-Floor literature. Q-Floor Fittings may be seen at any General Electric construction materials distributor.

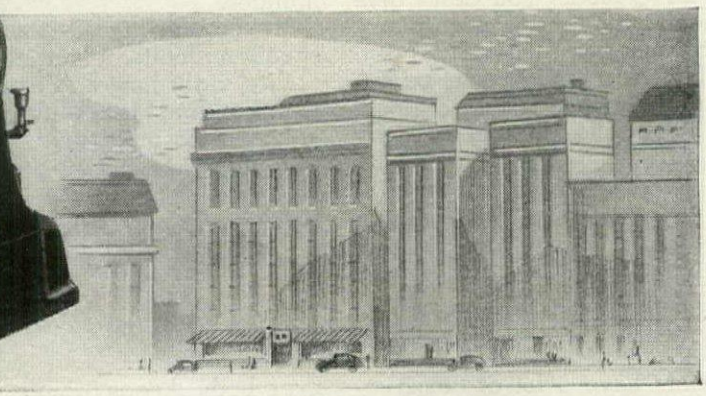
H. H. ROBERTSON COMPANY

2403 Farmers Bank Building
Pittsburgh 22, Pennsylvania

Offices in 49 Principal Cities
World-Wide Building Service

Q · FLOORS

the machine that helped make skylines . . .



now serves small buildings, too

The gearless elevator machine, first designed by Otis Elevator Company, was the result of a demand for faster and more efficient vertical transportation in tall buildings.

During the past 43 years, the smooth, quiet performance, and the economical operation of this machine have earned it universal recognition and acceptance. For these reasons, many Architects and Engineers today specify Otis Gearless Elevators *for smaller buildings* — whenever performance of outstanding quality is required.

Stores, Hospitals, Hotels, and many other buildings—whether of a few stories or many — can now benefit by the life-long operating smoothness and efficiency of Otis Gearless Elevators.

Otis representatives are ready now to cooperate with Architects and building owners . . . to recommend the equipment best suited to individual needs. For the finest in vertical transportation tomorrow, call your Otis representative TODAY.

Otis ELEVATOR COMPANY
OFFICES IN ALL PRINCIPAL CITIES

The choice of 54% who get home loans through financial institutions

Architects, builders and realtors get loans for their clients through Savings and Loan Associations because they benefit by the superior home financing facilities of these institutions.

There is flexibility to meet the financial needs of all types of borrowers. Maximum loans are available at most favorable rates. Quick commitments on loans are possible because these institutions are locally owned and managed. There are no delays in dispersing funds.

Borrowers appreciate the friendly attention given to their loan application and prefer the mortgage contract and loan policy which permits easy adjustment in future years.

It will pay you to discuss your home financing needs with a local member of this League.

UNITED STATES SAVINGS AND LOAN LEAGUE

221 N. La Salle Street **Chicago, Illinois**

COMPOSED OF 3600 SAVINGS AND LOAN ASSOCIATIONS AND CO-OPERATIVE BANKS

LETTERS

Latest report from the Parker house . . . More blasts at Baldwin . . . College programs for veterans.

THE HOUSE THAT AL BUILT

Forum:

You might be interested in seeing some further work on our house (FORUM, Feb., '45). The enclosed are photographs of a built-in living room reading bench. The small door at the lower right leads to wood storage for the fireplace. The wood used in the construction is "Horseflesh" (Lysiloma sabicu) a tropical hardwood, native of Cuba. The strapping is made from a grade of cheap leather known to the bookbinding trade as skivers or skivings.

Parker-made bench

You will notice the tile floors in the photo, and, as I wrote one friend, that ain't hay to lay.

ALFRED BROWNING PARKER, *architect*
Miami, Fla.

TEST TUBE HOUSING

Forum:

I was tremendously pleased to see a story about the General Motors Technical Center in the August FORUM. General Motors has advertised this development widely in newspapers throughout the country. I should like to pose a question: What would happen if we had a single laboratory like this for housing research?

Most people take research and product development for granted as the dominant force in our most progressive mass production industries. In these industries, research has given the American people low cost quality products in ever-increasing volume.

It is just this kind of approach that we need in housing. Research can be the motivating force to create a dynamic new industry in housing—cutting costs, improving quality, and permitting production of a million or more houses a year as a normal thing.

If it works in automobiles—why not in housing? The new General Motors Technical Center is more eloquent than anything I can say in urging a similar aggressive approach in housing to develop better products at lower cost.

R. HAROLD DENTON
Chief Industrial Economist, N.H.A.
Washington, D. C.

BRICKBATS FOR BALDWIN

Added comments on Architect Baldwin's letters (FORUM Aug. '45, Oct. '45). Mr. Baldwin does not like the FORUM.—ED.

Forum:

When Kewchester was struck by the tidal wave, Mrs. Imabelle Grummage brought out her trustworthy broom, resolute to sweep the sea from the threshold of her cottage. Mrs. Grummage swept valiantly for eight hours before yielding her soul to the urgency of the waters.

I commend this story to your correspondent, Guy H. Baldwin, who, in the August number of the FORUM, has invited you to assume the role of Mrs. Grummage.

JOSEPH HUDNUT
Harvard University
Cambridge, Mass.

Forum:

Who is this Guy Baldwin who feels so painfully let down by the FORUM'S independence of what he considers architecture? Why does he feel so certain that one has to have a diploma to have ideas or discernment? He sounds like someone who, at great pains, has scaled a rock, far out, at low tide, and now that the tide is in, feels cut off—because he has learned the wrong thing. But perhaps this is unfortunate as a metaphor because Mr. Baldwin may think he can wait till the tide goes out. Let him be assured that it will not. It's too bad Mr. Baldwin didn't do a little reading and looking during his 15 years of comparative inactivity. He would have found that some very fine things had been done in modern architecture, particularly in Europe. But, of course, he might not have appreciated it.

He seems to wish the FORUM to present in its pages the kind of house *he* would build, so that his possible clients will be impressed by the handsome presentation of plans similar to those he is capable of conjuring up.

The object of the FORUM is to broaden the knowledge of the architect, not to substantiate him in a business deal.

ALEXANDER CALDER
Roxbury, Conn.

Forum:

Mr. Baldwin's unhappy letter exposes his antipathies, but gives no clear idea of what he wants. The material he would appear to prefer can be better studied in the original, or in archeological publications. There is no reason why architects who have minds of their own should be irked by editorial comments, so long as the policy remains progressive and newsworthy; and it would be better to consign the nice architectural compromises to the limbo of desuetude so lovingly suggested for Mr. Myers.

ALFRED SHAW
Chicago, Ill.

Forum:

LINES WRITTEN IN A BUS, DIRECTLY AFTER READING (A MONTH LATE) THE AUGUST 1945 "LETTERS" SECTION OF THE FORUM.

With Guy H. Baldwin building fyers
Beneath the handsome hide of Myers,
  And Greville Rickard kicking dat
  Ole devil *Journal* in the Pratt,

Someone should hasten, at top speed,
To immolate that fellow Reid.
  Don't look at me; I am not mad
  At anybody. Ain't you glad?

ROGER ALLEN
Grand Rapids, Mich.

Allen, please make up your mind,
Are you before—or just behind?—ED.

Forum:

Mr. Baldwin refers to the bizarre architecture you publish. Well, let's look at your August issue. What's bizarre about Bill Wurster's United Nations Center and for that matter the house of his you published or Tommy Church's landscape treatments, or Julius Gregory's (a traditionalist)

(Continued on page 44)

Kawneer is rolling again!

WRITE FOR STORE-FRONT CONSTRUCTION DETAILS!

THE Kawneer MAN

KAWNEER is rolling again—we're producing store-front construction with all the facilities at our command.

Production is being stepped up and shipments are going out daily—soon ample stocks of Kawneer store-front construction will be available from distributors located in every principal city in the United States.

If you do not have details of the complete line of standard store-front construction, write Kawneer today.

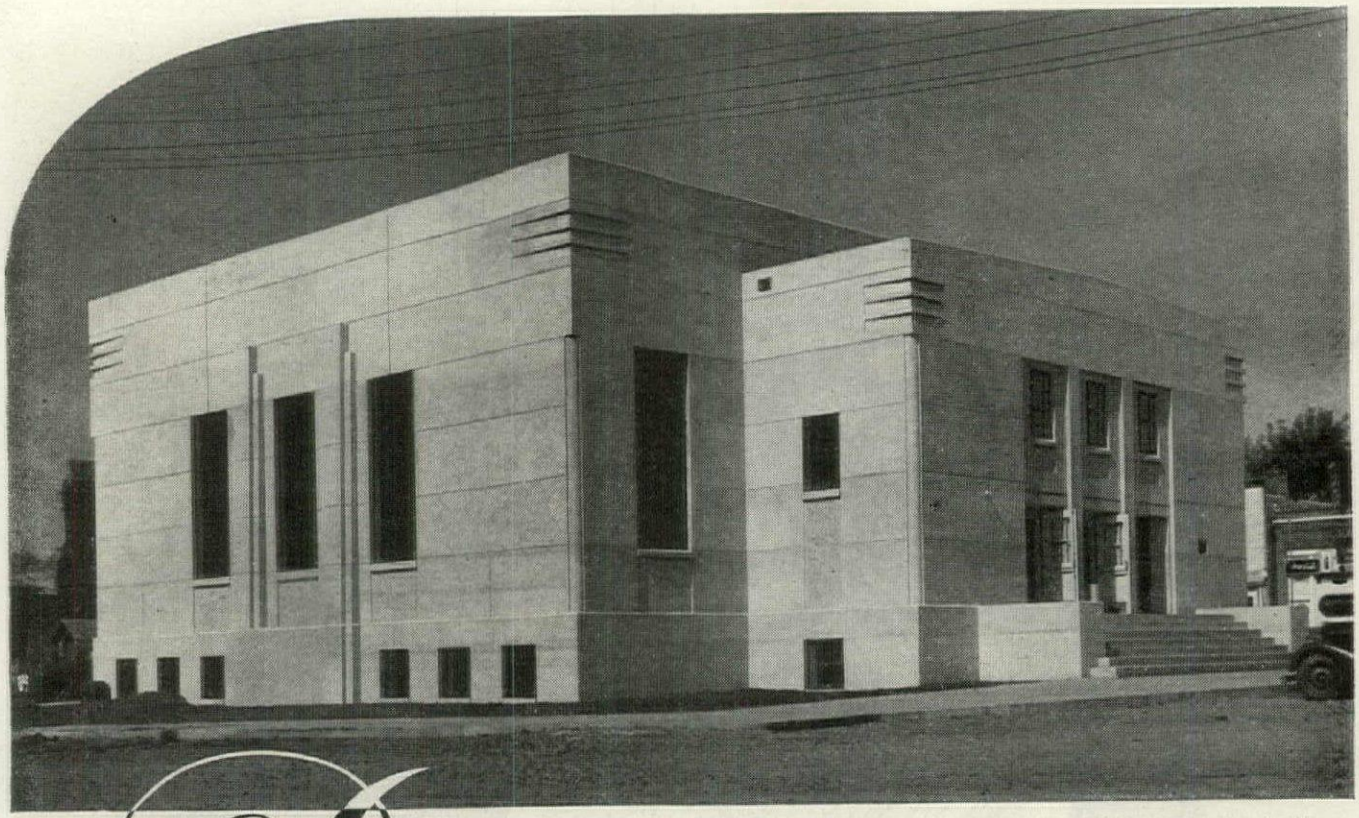
It will pay you also to find out more about the new Kawneer Program. A booklet—graphically illustrating the opportunities available in store modernization—has been prepared for architects. Write for your copy. The Kawneer Company, 211 Front Street, Niles, Michigan.

THERE'S NEW OPPORTUNITY FOR ARCHITECTS IN THE STORE-FRONT FIELD!

Kawneer

STORE-FRONTS

MACHINES FOR SELLING!



Community Building, Waverly, Minn., designed in architectural concrete by Walter Dennis, Minneapolis architect. Pilasters, recessed spandrels and all ornamentation cast integrally in wall forms.

Distinguished Appearance

with economy in

ARCHITECTURAL CONCRETE

Public buildings designed to express dignity, permanence and community pride can be constructed economically with fire-safe architectural concrete.

Substantial saving in first cost is obtained because architectural concrete combines both architectural and structural functions in one material.

The proved strength, firesafety and weather resistance of concrete insures a building which will serve the community for many years at low maintenance cost.

The low first cost, low maintenance expense and long life of concrete construction assures *low annual cost,* the true measure of economy in buildings.

Our literature on design and construction practice with architectural concrete will be helpful to designers of postwar public, industrial and commercial buildings. Free in the United States and Canada. See Sweet's Catalog 4F/3.

PORTLAND CEMENT ASSOCIATION

Dept. A11-7, 33 West Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

BUY VICTORY BONDS

Factories you might see!

Factories tomorrow will utilize to full advantage the new lighting techniques—the advancements in air conditioning, ventilation and design. The light metals—aluminum and magnesium—will play a prominent part, both in construction and for decorative effect, as they will in the things these factories produce. If you plan on re-designing your products to gain the manifold advantages these light metals make possible, our organization will be glad to discuss your plans with you.

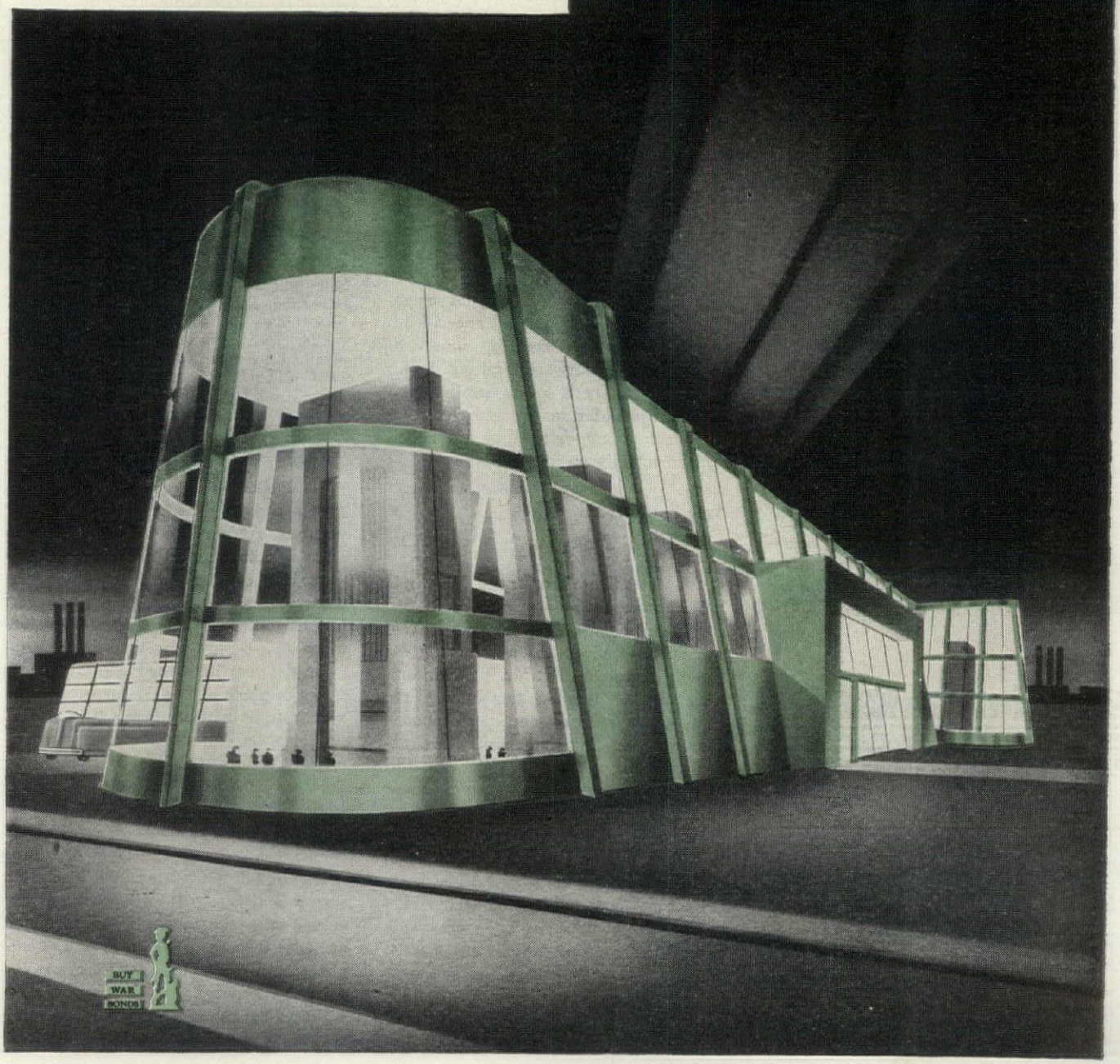
BOHN ALUMINUM & BRASS CORPORATION

GENERAL OFFICES—LAFAYETTE BUILDING • DETROIT 26, MICH.

Designers and Fabricators

ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT TYPE BEARINGS

BOHN



LETTERS

(Continued from page 40)

house at Dobbs Ferry, or Louis Kahn's (a modernist) in Pennsylvania, or the article on living memorials to replace men on horseback or for goodness sakes the T.V.A. work! ! ! It is evident to me that our Rip Van Winkle from Buffalo has not even awakened from his dream. When he does, if he does, which I doubt, he had better have on hand a good dose of insulin to bring him out of shock.

He says to bear this out further that "only in isloated instances will the prospective architect's client accept the product shown here." That is to laugh! If there were only isolated instances our own office, as well as plenty of others I know of, would be starving and I am happy to say that said offices are getting along comfortably. Doesn't Mr. Baldwin know that his love for fuddy-duddy architecture is not shared by an increasing (altho insufficient) number of architects and clients?

In closing, I really believe that what Mr. Baldwin says about "consigning Howard Myers to innocuous desuetude" applies beautifully to himself.

ROBERT ALLAN JACOBS

New York, N. Y.

Forum:

I was astounded to read the letter by Mr. Guy Baldwin attacking FORUM policies. For many years, your magazine, under skillful and advanced leadership, has been a constant source of inspiration to forward-thinking architects. It has been an interesting and accurate job of research and reporting and has, in my opinion, strengthened and enriched American architecture.

ROBERT CARSON, *architect*

New York, N. Y.

Forum:

The letter from Mr. Guy H. Baldwin in the August, 1945 issue of the FORUM, constitutes a lot of misstatements, from my point of view. As a "working designer" I protest what Mr. Baldwin outlines in his treatise denouncing the FORUM, its policies and performance. The designers of the country are dependent on architectural guidance, and many, many designers whom I know and with whom I work have demurred also over this particular expression of thought, and feel that no magazine on earth has been more practical and helpful to us. Naturally most design is a dependent expression and the wide gamut of material which the FORUM has given us all thru' these past war years has been particularly constructive. Those of us who are doing textile design for architecture, have been able to follow the trend through this magazine as through no other single source. In fact, the FORUM is a "must" for all textile designers.

The integrity with which this material is presented, the diligence with which the dragnets have been placed on all of America to gather in the best creative thinking and the best examples of good architecture (and no other should be tolerated) is indeed inspiring . . .

DOROTHY W. LIEBES

San Francisco, Calif.

Forum:

. . . As I read it I was reminded of William Blake's *Marriage of Heaven and Hell*—for no very good reason, since I don't know what the title means, except that Mr. Baldwin evidently doesn't think FORUM has consummated an ideal architectural union—also, perhaps, because of the passage, *the man who never alters his opinion is like standing water, and breeds reptiles in the mind.*

GEORGE HOWE

Washington, D. C.

EDUCATION FOR VETERANS

Not long ago a Naval Ensign wrote: "If the FORUM would make a survey of the postwar educational system, I'm sure it would prove invaluable to us embryo architects and of interest to other readers. We want to know if there are any radical changes being made, what the general trends are, how much formal education is advisable, specifically what programs are being offered by the schools, what part acceleration, night and summer schools will play, and so on." To answer this and many similar letters, the FORUM has therefore obtained statements from leading architectural schools concerning their new programs.—ED.

Georgia Tech.

Forum:

. . . In answer to some of the questions raised in your letter: for returning veterans, refresher courses will be offered when, as, and if needed and everything is being done to meet special cases and conditions without, however, lowering standards for the requirements for a degree. In our accelerated program the year is divided into three semesters in place of two, as formerly. This synchronizes with the Navy V-12 ROTC program, our terms beginning approximately November 1, March 1, and July 1. This will continue for the present. Under this system it is possible for a student to complete a regular 4-year course in 2-2/3 years. In the near future it is probable we shall go on a quarter system and this will still permit of acceleration — those taking the summer term for 3 summers being able to complete the 4-year course in 3 years.

It is expected that we shall again offer night school courses in architecture and

(Continued on page 48)

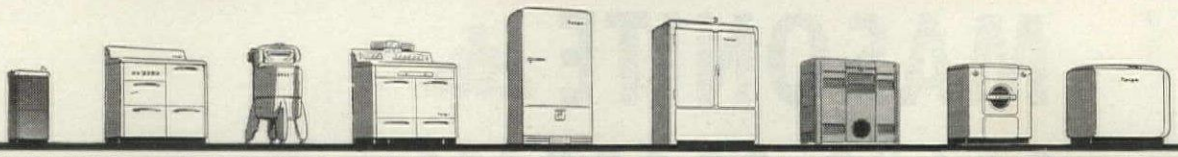
—and in Latonia, Kentucky!

Another example of "professional" approval of Norge household appliances and reliance on Norge quality is found in the Latonia Terrace Housing Project at Latonia, Kentucky. There are 400 apartments in the development, each equipped with a Norge gas range. Latonia Terrace is under the jurisdiction of the Covington Housing Authority.

See NORGE Before You Buy

NORGE DIVISION, BORG-WARNER CORPORATION, DETROIT 26, MICH.

NORGE HOUSEHOLD APPLIANCES



WATER COOLERS • GAS RANGES • RO-TA-TOR WASHERS • ELECTRIC RANGES • ROLLATOR REFRIGERATORS
COMMERCIAL REFRIGERATION • HOME HEATERS • AUTOMATIC CYCLE WASHERS • HOME AND FARM FREEZERS

ROOM is your business!

Your remodeling business—in its simplest form—is to supply the additional room that a growing family needs. Most people can't afford to move into larger quarters. They are the ones your planning and experience can help most.

Do they need another bathroom? A few square feet of now-unused space will do. A space-saving shower makes room for a dressing table. Walls and ceilings of Masonite* Presdwood provide handsome, easy-to-clean surfaces, water and wear resistant. They are easily finished for any desired effect. They make sturdy built-in pieces, too—and come in both smooth and tile patterns.

More and better planned closet space is always needed. Take a deep old closet, the end of a hall or corner of a room . . . your planning — and Masonite Presdwoods — can provide drawers, shelves, cupboards—maybe an inner storage closet, too. Splinterless and snag-proof, these widely useful hardboards can save precious inches all around. They're smooth, hard and grainless—and made literally from exploded wood!

Write for complete data on all the Masonite building products to Masonite Corporation, Dept. AF-11, 111 West Washington Street, Chicago 2, Illinois.

*"Masonite" is a trade-mark registered in the U. S. Pat. Off., and signifies that Masonite Corporation is the source of the product.

MASONITE

BRAND PRODUCTS

PRODUCTS OF THE STATE OF MISSISSIPPI

...no job for an amateur

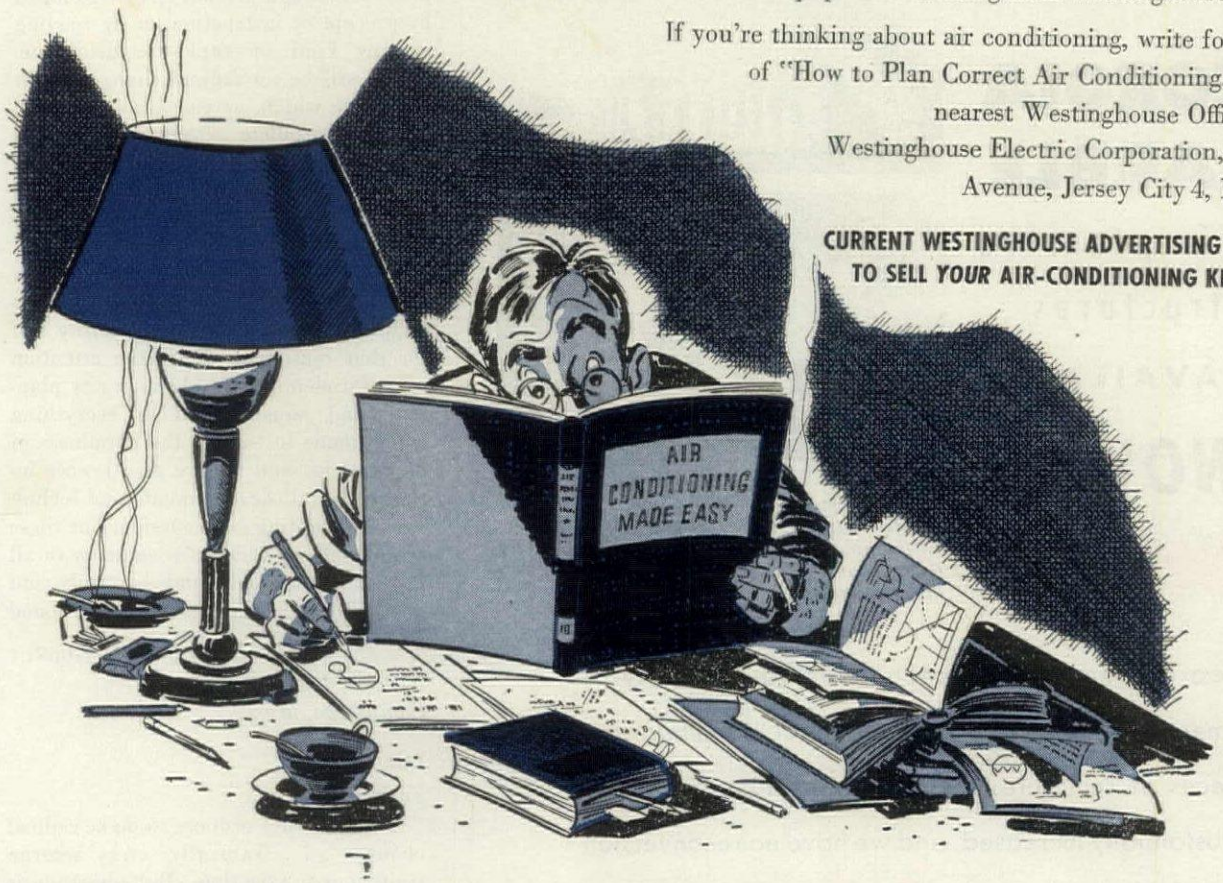
The best way to avoid a lot of "blind alley" figuring when planning an air conditioning installation is to call on the experience of a qualified expert—right from the start. That's the sure way to arrive at *correct* air conditioning.

By *correct* air conditioning Westinghouse means the scientific blending of correct temperature, humidity, circulation, ventilation and air cleanliness.

Consider these advantages of Westinghouse *correct* Air Conditioning: First, an air conditioning plant which will provide exactly the conditioned air you want to "live" with. Second, an installation which can be depended upon to give continued trouble-free and economical service. Third, correctly engineered equipment resulting from Westinghouse know-how.

If you're thinking about air conditioning, write for your copy of "How to Plan Correct Air Conditioning." Call your nearest Westinghouse Office, or write Westinghouse Electric Corporation, 150 Pacific Avenue, Jersey City 4, New Jersey.

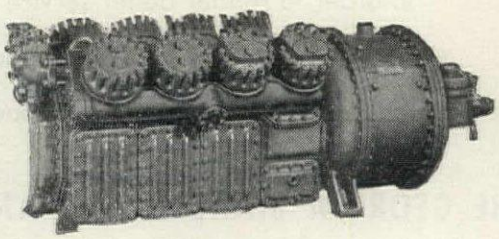
CURRENT WESTINGHOUSE ADVERTISING IS DESIGNED TO SELL *YOUR* AIR-CONDITIONING KNOW-HOW



The Heart of Correct Air Conditioning

WESTINGHOUSE HERMETICALLY-SEALED COMPRESSOR

The entire mechanism of the Westinghouse Hermetically-Sealed Compressor—including its motor—is sealed gas-tight. This feature means sealed-in *power and* sealed-out *trouble . . . has been* service-proved *in thousands of Westinghouse installations. Compact and lightweight for easy installation. Low operating costs.*



Westinghouse presents John Charles Thomas—Sunday, 2:30 E.W.T., N.B.C. Tune in Ted Malone, Monday through Friday, 11:45 A.M., E.W.T., Blue Network.

Westinghouse CORRECT Air Conditioning

PLANTS IN 25 CITIES OFFICES EVERYWHERE

LETTERS

(Continued from page 44)

it is sometimes possible in exceptional cases to schedule a part-time list of day courses for those who have to work part time, although this is not recommended.

HAROLD BUSH-BROWN
Georgia School of Technology
Atlanta, Ga.

Harvard

Forum:

At Harvard we are not in sympathy with the idea of an accelerated professional course. There is no field of study in which time plays so important a part as in the study of architecture. The aptitudes for design are not to be developed by precept or instruction, or by reading or any kind of rapid-fire discipline. There will be no radical change in our discipline which, as you know, is based upon the problem system developed in the Ecole des Beaux-Arts in Paris with many adaptations to fit this tradition to the American Scene. We do not try to indoctrinate our students in any kind of architecture. Naturally we are deeply in sympathy with a desire to give architecture a wider social serviceability and for that reason we direct the attention of our students to problems in city planning and housing and to everything which tends to sustain the happiness of populations, and we are also keenly interested in all developments and techniques of building construction, but these are tendencies which are common to all progressive schools and certainly did not arise out of any changes occasioned by the war.

JOSEPH HUDNUT
Harvard University
Cambridge, Mass.

Yale

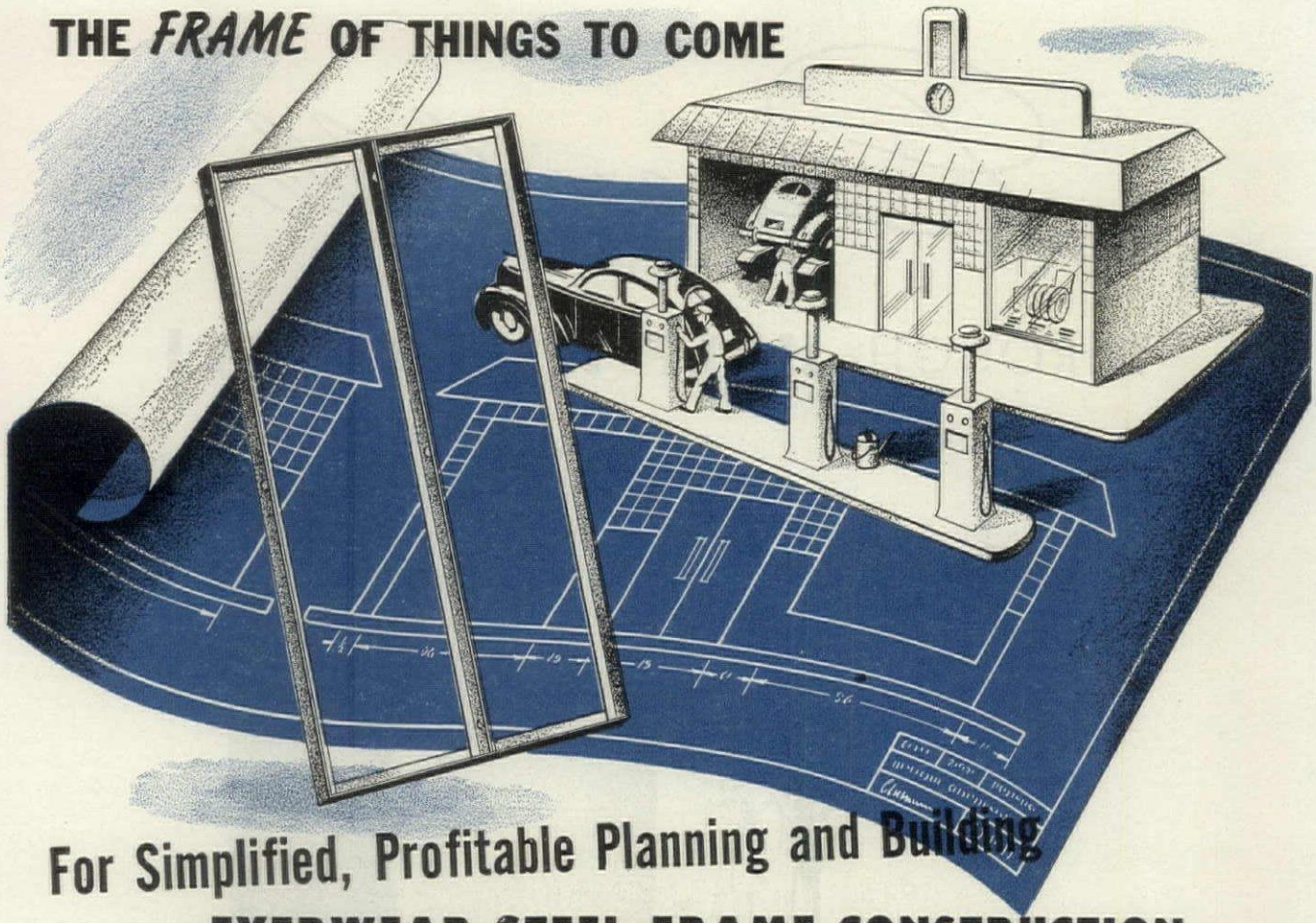
Forum:

Yale does not propose to make radical changes . . . Naturally, every veteran is anxious to save time. But education is a process which cannot be concentrated like vitamins, in pills. Adjustments to shorten the time, as demanded by some veterans, should be achieved by quicker assimilation and harder work on his part, not by condensation, which would result in the lowering of standards. The veteran himself, when the matter is presented in this light, does not want something inferior to the education enjoyed by his older rivals.

Yale will give every credit possible for military education and military experience. In design the student will be allowed to enter at the stage of design in which he feels qualified, but his further advancement will depend, as always, on performance. In other fields where his attainment can be measured,

(Continued on page 52)

THE *FRAME* OF THINGS TO COME



For Simplified, Profitable Planning and Building

...EVERWEAR STEEL-FRAME CONSTRUCTION

Behind the dam of war, a huge potential of *building-power* was collected. Now, peace has opened the gates. Just as a river seeks the ocean, so does this building-power seek the answers to its problems . . . answers that "Southern States" EVERWEAR Steel-Frame construction can supply, most satisfactorily.

Southern States Iron Roofing Company—famous for its EVERWEAR "Lock-Tight" Interlocking Steel Roofing, Steel Shingles, Asphalt Roofing, and other building-materials—will help you find a place in your post-war plans for Steel-Frame construction.

This simplified method of building-construction, proved by war-time testing in the four corners of the world, will bring you, the architect, builder, contractor, or building-supply dealer, a flexibility of design unlimited in application.

With Steel Frames, your building-plans are no longer hampered by standard lumber-lengths. Homes, farm-buildings, industrial plants, or additions thereto, can be built economically, quickly, even though Steel Frames were not originally used.

Steel-Frame construction employs patented, welded-steel channels in the form of quickly-erected steel panel-frames in standard arrangements to fit wall-surfaces, door-openings, or window-spaces. No special skill is needed to assemble Steel-Frame construction . . . any one can do it with screwdriver, hammer, and wrench.

Steel-Frame construction permits better insulation of your buildings . . . provides termite-proof foundations and framing. Any conventional building-material can be used in combination with Steel Frames . . . and the cost of this better method of building-construction is comparable to that of good frame construction.

Let this modern way of building-construction simplify your post-war planning and erection . . . at a profit to you. Although we will not be able to deliver Steel-Frame construction for at least six months, we invite your inquiries *NOW*. Write today for our new booklet:

"PREFABRICATED STEEL BUILDINGS"

Portable Barracks-Type Building! All-steel, easily erected buildings suitable for garages, warehouses, small shops, emergency schools, and other public buildings. Basic building size: 20 ft. wide x 48 ft. deep. Depth can be increased in multiples of 8 ft. Two buildings can be joined for greater width. Write for information.

Southern States

IRON ROOFING COMPANY

General Offices: SAVANNAH, GA.

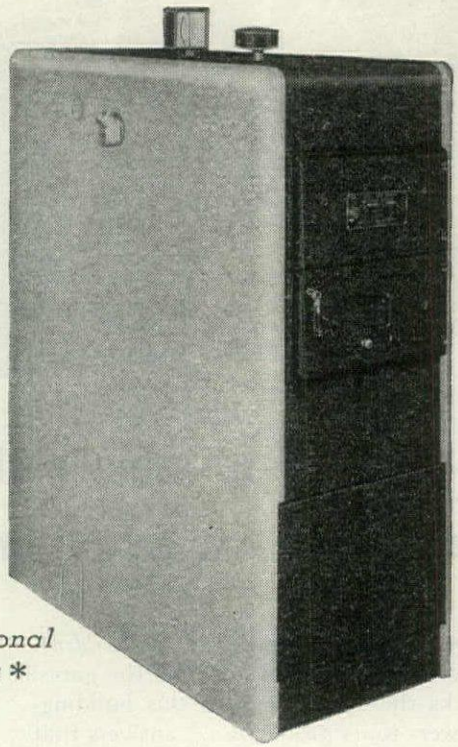
Factory-Warehouses in Principal Southern Cities

Dependable

THROUGH **HALF A CENTURY!**

1894

1945



*No. 1 of a Series of National Heat Extractor Boilers **

There's a husky, dependable heating plant concealed beneath the modern, colorful jackets of National Heat Extractor boilers. An efficient heating plant developed through more than fifty years of constant research and improvement.

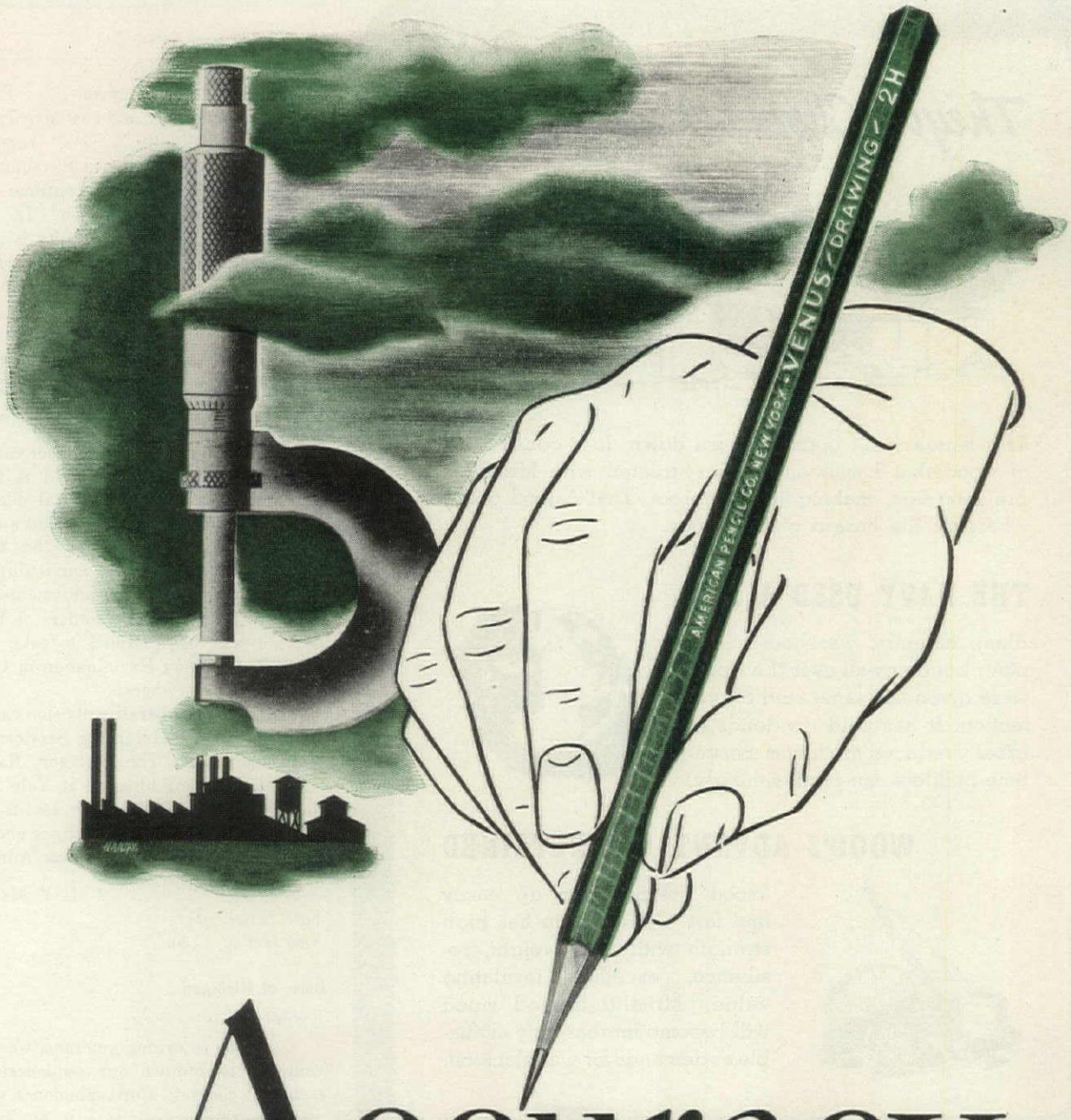
The No. 1 Series Heat Extractor illustrated has, as one of its features, a water-cooled safety base for installation in kitchen or utility room. Compact and dependable, the No. 1 series is especially designed for smaller homes.

** There's an NRC product to fit every building need.*

NRC

The NATIONAL RADIATOR Company

JOHNSTOWN, PENNSYLVANIA



Accuracy

LINKED closely to the precision jobs coming off the boards are the tools that assure accuracy of detail. One of these is the seemingly small pencil which looms large in the mind of a craftsman, as an important instrument of accuracy.

VENUS Drawing Pencils are engineered to give you drafting perfection without failure: accurately *graded* to assure uniformity in all 17 degrees . . . *strong* in performance . . . *smooth* and *clean* in action.

Put VENUS to the test on your drawing board. Send us a postcard or a note for two free samples. Specify degrees wanted.

VENUS *DRAWING PENCILS*

AMERICAN LEAD PENCIL COMPANY, HOBOKEN, NEW JERSEY

LETTERS

(Continued from page 48)

examinations will be given . . . Each case will necessarily and customarily be studied individually. Some regular courses will be available in the summer so that the veteran may continue his studies without interruption. In the field of construction the faculty is prepared to advise on all recent developments. During the war the faculty have either been in active practice in the armed services, or, as in one case, have been specifically commissioned to survey and digest current developments in the use of the newer building materials and structural assemblies . . .

A further development to meet conditions in the construction field is that candidates for the architectural degree have the option to concentrate on architectural engineering during the final part of their course. This curriculum is pointed toward new developments in practical building. The holders of Yale degrees will be qualified to take the State Registration Examination in Connecticut and elsewhere.

A special administrative division called Yale Studies for Returning Servicemen is in operation. The Director, Ralph Gabriel, may be addressed at Yale Station, New Haven. His office assists the veteran in arranging his courses and in his relations with the Veterans Administration.

C. L. V. MEEKS

Yale University
New Haven, Conn.

Univ. of Michigan

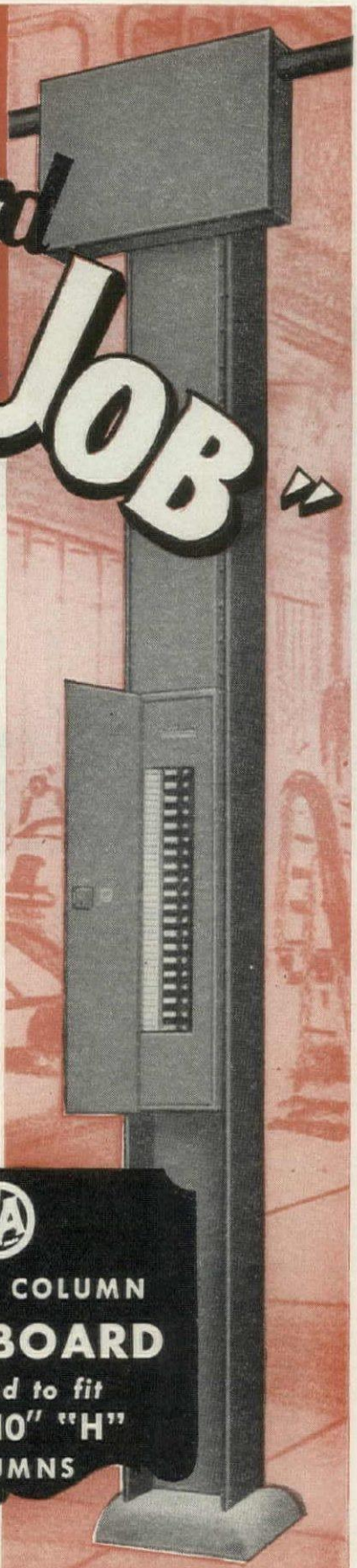
Forum:

. . . As to returning veterans, we will continue to require our sequences of technical courses. Correspondence with men in the armed forces, at home and overseas, indicates that these men who will be coming to us desire to obtain the full measure of professional training. Our curriculum requires a considerable block of cultural elective courses since we believe that the architect must have at least some general education, particularly in the social science. There will be a considerable allowance of credit for military training and special courses demanded by the armed forces. This credit can be substituted for some of the cultural courses just mentioned. Perhaps the veteran's experience will provide a compensating maturity of outlook. The allowances made for such military courses will help to shorten the training period for the returning veteran.

As to ways in which we can help the veteran to get along as rapidly as possible with his education, we forsee two

(Continued on page 56)

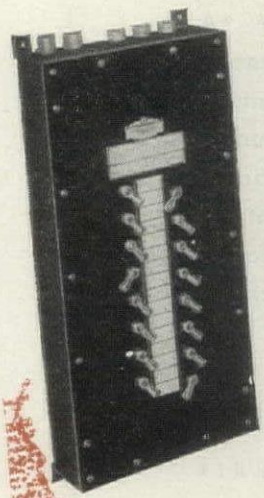
Put your Panelboard "ON THE JOB"



Locate your panelboard in the center of the facilities it serves. Make it work for you by being accessible *when* and *where* you want it. It's more economical, too! Shorter electrical runs to lighting and receptacle outlets mean less wiring and lower voltage drop.

The (FA) Type AC THERMAG Circuit Breaker Column Type Panelboard is designed to fit 8", 9", or 10" H columns, or the narrow space between windows. This is the same (FA) THERMAG unit found in all (FA) Type AC Circuit Breaker Panelboards. The panelboard with the THERmal MAGnetic "brain" for double protection.

Available with 4 to 40 branches, with individual 15 to 50 ampere breakers, for single phase, 3-wire, 115-230 volts, or three phase, 4-wire, 120/208 volts solid neutral service. Tested by Underwriters' Laboratories for ten thousand complete operations.



Dust-Laden Atmospheres need (FA)

DUST-TIGHT PANELBOARDS

Wherever coal dust, grain dust or volatile materials fill the air, electrical circuits must be spark-proof. If you need new equipment get it now. *Don't wait for trouble.*

The (FA) Dust-tight Panelboard for lighting branch circuits of 50 amperes or less, and power panels from 50 to 600 amperes, 250 volts AC or DC, 600 volts AC, is Underwriters' approved for Class II, Groups F and G hazardous locations.

(FA)

NARROW COLUMN

PANELBOARD

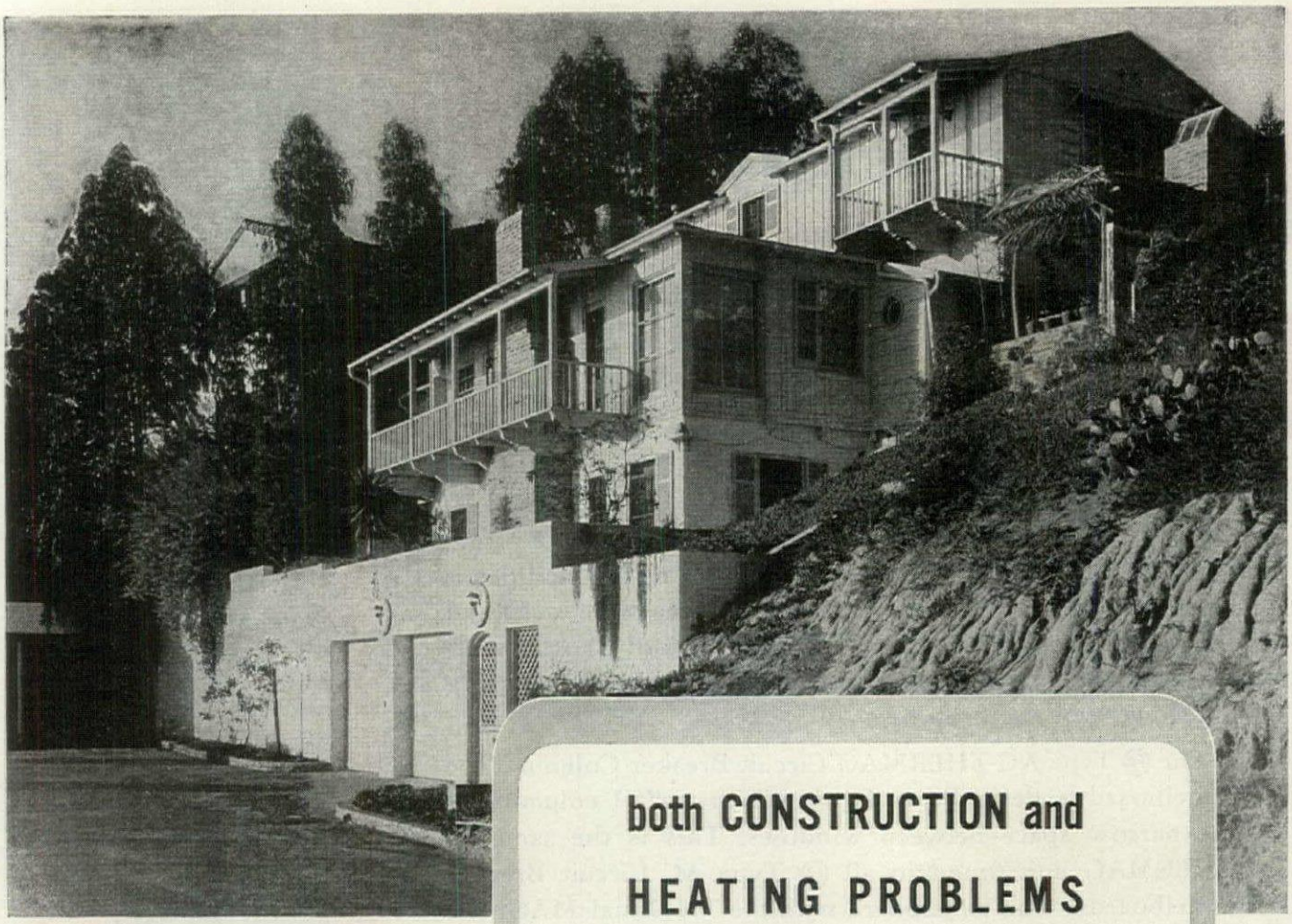
Designed to fit

8", 9", 10" "H" COLUMNS

Frank Adam

ELECTRIC COMPANY

ST. LOUIS



Residence, Mr. W. R. Brent
Laguna Beach, Calif.
Architect: Aubrey St. Clair
Builder: Smith Construction Co.

★

both CONSTRUCTION and HEATING PROBLEMS happily solved . . . .

Fitted "like a glove" to its sharply-sloping lot . . . designed to afford maximum enjoyment of a magnificent marine view . . . this seaside home is as comfortable *inside* as it is attractive *outside.* *A time-tested PAYNE gas-fired heating installation provides "zoned" comfort. Two PAYNE furnaces, plus smaller units, separately controlled, assure *flexibility* unobtainable with a single "central" furnace. *Consult a PAYNE Dealer or the Factory Engineering Department on *your* next job.

PAYNE FURNACE COMPANY
(One of the DRESSER Industries)
BEVERLY HILLS, CALIFORNIA

INVESTIGATE PAYNE ZONE-CONDITIONING

Successor to old-fashioned central heating! Circulated winter warmth . . . cooling summer ventilation with forced-air models . . . *controlled by zones, rooms or apartments.*

Zone-Conditioning Booklet sent free on request

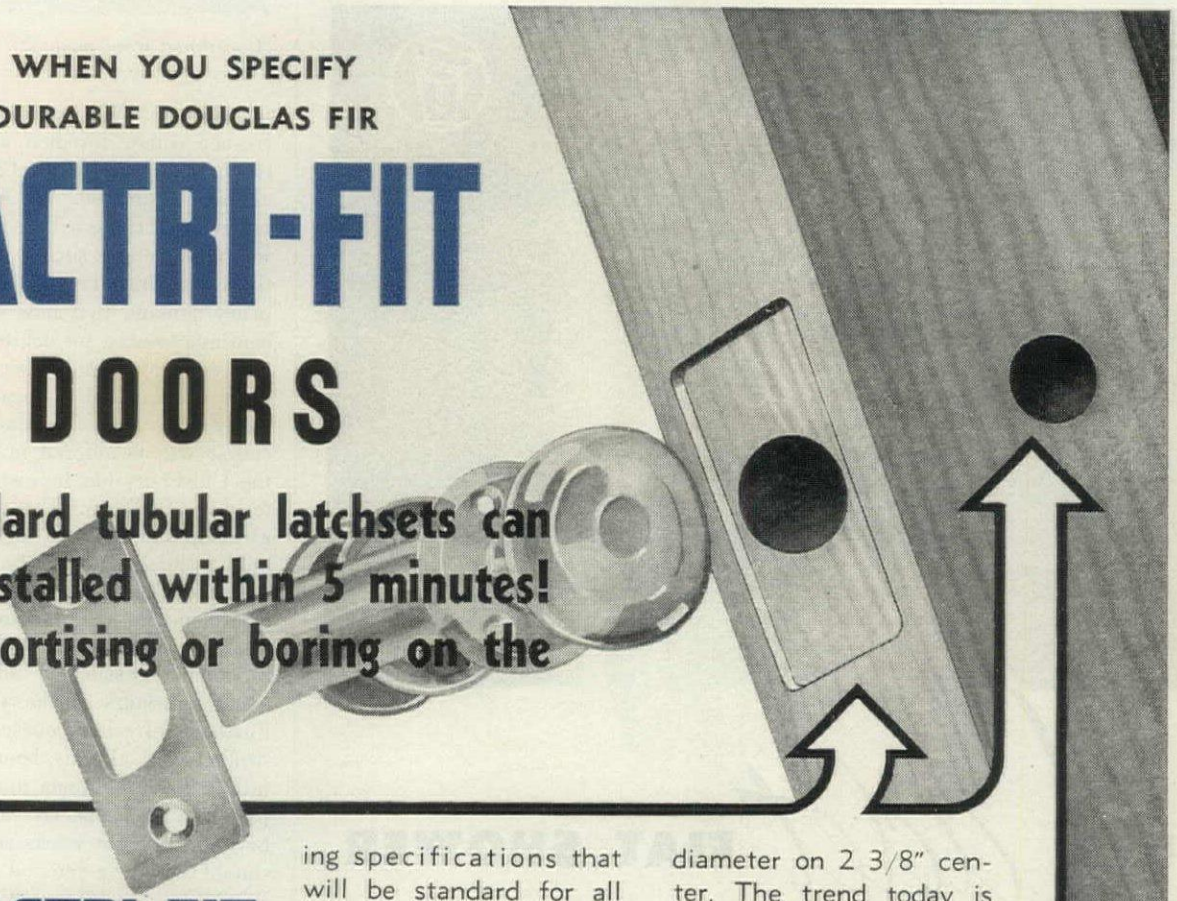
PAYNEHEAT
OVER 30 YEARS OF LEADERSHIP

GAS FUEL (HAS) EVERYTHING

WHEN YOU SPECIFY
DURABLE DOUGLAS FIR

FACTRI-FIT DOORS

Standard tubular latchsets can be installed within 5 minutes! No mortising or boring on the job!



FACTRI-FIT

LOCK BORE SPECIFICATIONS

All boring for locks to center of knob 36" from bottom of door. Machining specifications that will be standard for all completely - machined FACTRI-FIT doors unless otherwise specified: diameter of bore-in, 15/16"; length of bore-in, 3 3/4" from edge; face plate, 1"x 2 1/4"x1/16", square shape; cross-bore, 5/8" diameter on 2 3/8" center. The trend today is toward bored-in locks, and virtually all nationally-distributed locks of this type will fit these specifications. Doors can be furnished mortised or machined to other specifications on special order.

ARCHITECTS Better installations are assured when you specify Douglas Fir FACTRI-FIT doors. All trimming, gaining, mortising and boring is done **at the mill** by clean-cutting precision tools. The hardware fits correctly; there's far less chance of on-the-job marring or "butchering." That means fewer worries for you—a better, more attractive installation for your client.

•

Send for Catalog -

Showing complete line of Douglas fir interior doors, Tru-Fit entrance doors, and new specialty items. Sent free to any point within the United States.

FACTRI-FIT GAINING

Standard FACTRI-FIT gaining is 7" from top of door, 11" from bottom. Standard butt on 1 3/8" doors is 3 1/2" x 3 1/2" —on 1 3/4" doors, 4" x 4"; with square corners. Center gaining, recommended for heavy construction, is equi-distant between other two. In routing, lips are left on to be knocked out by carpenter for right or left hand swing.

FACTRI-FIT SIZES

Doors are prefit to exact net book standard stock sizes listed in U. S. Commercial Standard 73-43. This means, for instance, that a 2'8" x 6'8" FACTRI-FIT door is furnished exactly to the specified width and length. Scuff-stripped for protection, grade-marked for easy identification. Included in the line are basic 3-panel layouts adaptable to all types of building.

Douglas Fir DOORS

FIR DOOR INSTITUTE

Tacoma 2, Washington

Remember! NATURE MAKES DOUGLAS FIR *Durable!*

Durable Douglas Fir Doors are made from all-heart-wood, vertical-grain, soft, old-growth Douglas Fir.

THE NATIONAL ASSOCIATION OF FIR DOOR MANUFACTURERS

LETTERS

(Continued from page 52)

possibilities. We expect to offer a refresher course for men who are nearly through the architectural school or have already graduated. We have reason to believe that there will be many men who will wish to have such a program to put them back into the running for the very heavy demand that now exists and will continue to exist for achitects and architectural draftsmen, at least in the areas where our school is located. It seems likely that this advanced refresher course will be offered in Detroit where the University has its own building and teaching facilities. The courses will be given in the evening so that men may hold positions during the day.

For beginners and returning underclassmen who will need to take full professional training, this College will offer a summer session in addition to the usual semesters of the academic year. Further, refresher courses for entering students are already being offered this fall in basic subjects and we are prepared to offer special summer courses beyond the eight weeks summer session should there be a demand . . .

WELLS BENNETT

Univ. of Michigan
Ann Arbor, Mich.

Carnegie Tech.

Forum:

Our postwar plans involve both veterans and other embryo architects with special provisions for the former. Returning service men will be given individual opportunities for training fitted to their needs. They may enroll during the term on a limited schedule including the major subject, or at the beginning of the term with a normal schedule. Evening school will be offered as well as a six weeks summer course. No provisions have been made to date for acceleration for older men, partly because of the uncertainty of demand. The five year degree courses are recommended to veterans and required of other students . . .

W. F. HITCHENS

Carnegie Institute of Technology
Pittsburgh, Pa.

Univ. of Oklahoma

Forum:

The new curricula which we intend to submit for revision is not a result of attempting to meet a need for returning veterans but merely one which we feel desirable to secure good courses. You will note that we propose a new course especially intended for real estate, lumber dealers, building inspectors and material salesmen. It does not lead to a

(Continued on page 60)

COLOR STRENGTH:

Ask how colors are affected by Light—Soaps—Alkali. Be sure colors are not just on wearing surface, but go right through to back—as in Kentile.

GREASE RESISTANCE:

Ask whether grease will soften or stain the material. Tiles that are *absolutely* greaseproof are available in 17 Kentile colors (except when war shortages prevent).

MOISTURE—ALKALI:

Few floor coverings can withstand moisture and alkali but Kentile is so resistant to these destructive elements it can even be laid right on concrete in direct contact with earth.

MAINTENANCE:

Watch for these advantages:

1. Simple mopping with mild soap and water should *speedily* and *easily* remove most dirt. Occasional waxing, of course, improves the appearance of any smooth surface floor covering.

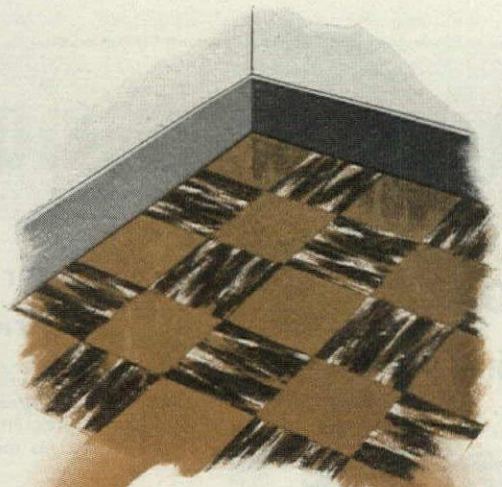
2. The material should be delivered with a factory-applied wax coating. Kentile is factory waxed as made, resulting in a coating "soaked" into the tile and easily maintained.

UNDERFOOT SAFETY:

Floors that are too smooth surfaced or do not absorb wax can be dangerously slippery. Kentile has an invisible surface granulation, so it is *never* slippery when properly waxed.

QUIET AND COMFORT:

These two factors are allied. When a floor is too hard it is both noisy and tiring. Kentile is resilient—it cushions sounds and is comfortable underfoot.



what to check when buying FLOORS

Save this check list for reference when buying flooring.

KENTILE *Asphalt Tile* Trade Mark Reg.

DURABILITY:

Most manufacturers claim durability. Kentile has *proved* unsurpassed durability by years of wear in such traffic-busy areas as in A & P and Woolworth stores, Rockefeller Center corridors, etc. Many 17 year old installations are still perfect.

COLORS—PATTERNS:

War conditions limit all lines, though even today hundreds of fine patterns can be created with Kentile.

Normally you should be unlimited in pattern choice. Kentile is usually offered in 26 tile sizes, each available in 44 colors. The number of patterns possible reach infinity.

ALTERABILITY:

If you ever move walls or fixtures, how much of the floor will have to be replaced? Kentile can be altered tile by tile.

ODORS:

Kentile has no odor, nothing can make it odorous, it is so close-textured it can't absorb odorous substances.

FIRE SAFETY:

Kentile meets all requirements of every fire underwriting board in the country.

COST:

Compare. Ask your local Kentile dealer to give you an estimate on *your* floor requirements. If you don't know his name, we'll gladly send it to you. Just drop a post card to the nearest office of

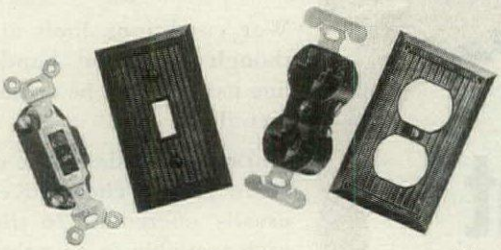
DAVID E. KENNEDY, INC.

Brooklyn 15, N. Y.
80 Second Avenue
(Home Office)

Chicago 2, Ill. . . . . 30 No. Michigan Ave.
Atlanta 3, Ga. . . . . 208 Bona Allen Bldg.
Cleveland 14, Ohio . . . . . 1211 Nat'l Broadcasting Co. Bldg.
Boston 16, Mass. . . . . 452 Statler Bldg.
San Francisco 16, Cal. . . 2000 Ulloa Street
Pittsburgh 11, Pa. . . . . 614 Olympia Rd.

G-E Wiring Material News

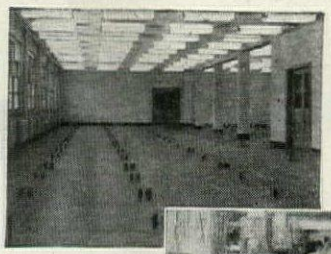
Specify G-E High Quality Wiring Devices



The G-E wiring device line includes many different switches, outlets, lampholders, etc. for use in all types of buildings. These wiring devices are dependable, neat appearing and will give long service. Your clients will like them. Specify G-E high quality wiring devices for wiring systems in new buildings and in buildings for which you are planning modernization.

For Underfloor Electrical Distribution

General Electric offers two types of underfloor wiring. Both give great flexibility to factories, office buildings, stores, etc. Electrical outlets can be preset or added later as needed.

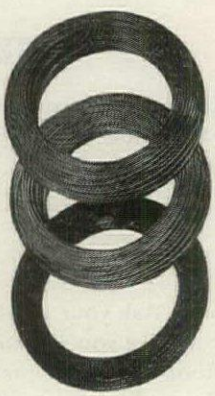


Specify G-E Fiberduct for masonry and wood type construction.

Specify G-E Q-Floor Wiring with Robertson cellular steel Q-Floors.

Specify FLAMENOL* BUILDING WIRE

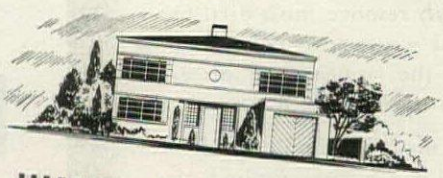
(Small Diameter — Thermo-plastic Insulated)



For Complete Wiring Systems

Flamenol Building Wire is ideal for use in all locations: Type T for general purpose wiring; Type TW for wiring in wet locations. The insulation of both types has long life, is flame retarding and resistant to oils, acids, etc. Type TW insulation also has a low moisture absorption rate. Specify this wire both for new wiring and for modernization wiring.

* Reg. U. S. Pat. Off.



WIRE ADEQUATELY

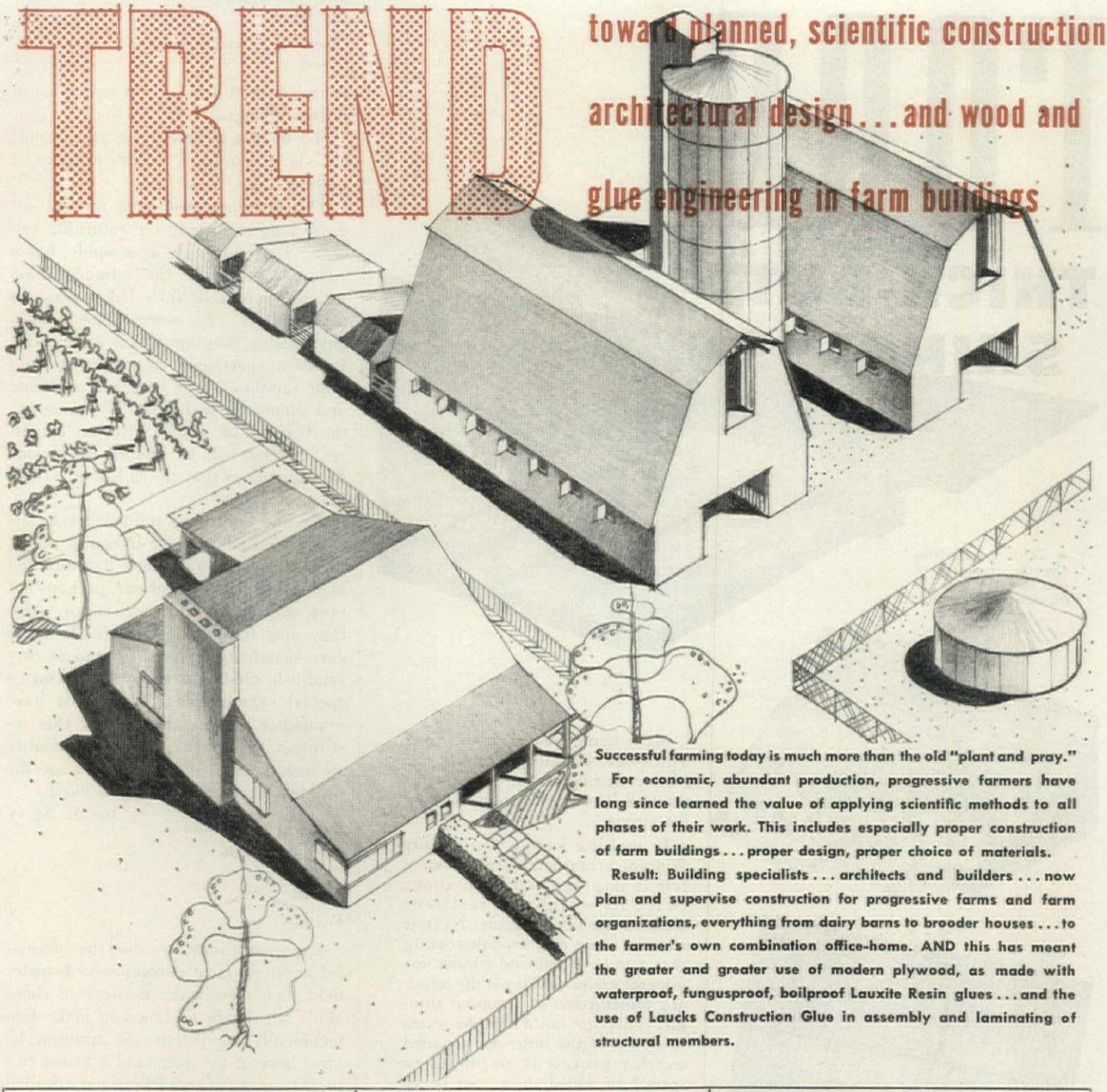
B. A. McDonald, electrical supt., N. Y. Fire Insurance Rating Organization, Rochester, N. Y. says, "Wire for tomorrow and wire adequately. Advances in the use of electricity demand that we provide a safe, convenient, adequate outlet for such use."

ADEQUATE WIRING SERVES AND SAVES — THE KEY TO THE HOME OF TOMORROW

GENERAL ELECTRIC

TREND

toward planned, scientific construction, architectural design . . . and wood and glue engineering in farm buildings



Successful farming today is much more than the old "plant and pray."

For economic, abundant production, progressive farmers have long since learned the value of applying scientific methods to all phases of their work. This includes especially proper construction of farm buildings . . . proper design, proper choice of materials.

Result: Building specialists . . . architects and builders . . . now plan and supervise construction for progressive farms and farm organizations, everything from dairy barns to brooder houses . . . to the farmer's own combination office-home. AND this has meant the greater and greater use of modern plywood, as made with waterproof, fungusproof, boilproof Lauxite Resin glues . . . and the use of Laucks Construction Glue in assembly and laminating of structural members.

Where is glue used in modern farm construction?

In plywood for houses, barns, brooder houses, hog houses, fruit dryers, range shelters, grain bins . . . in all kinds of buildings, prefabricated or conventionally built . . . wherever strong, lightweight, rigid, rackproof, durable and economical construction and better shelter and particularly better insulation are desired.

In laminated arches and beams for stronger, sturdier, wind-resistant barns and buildings, free of interfering supports.

In affixing wallboards (exterior or interior) for greater strength and better appearance in dry-built (plasterless), stressed-cover or prefabricated construction.

For more information on the use of modern plywood and glues for farm construction, address, "America's Glue Headquarters":

Consult

I. F. LAUCKS, INC.

A Subsidiary of Monsanto Chemical Company

AMERICA'S GLUE HEADQUARTERS

In the West:
Seattle 4, Wash.
Los Angeles 1, Calif.

In the East:
Lockport, N. Y.
Portsmouth, Va.

In Canada:
Laucks Ltd.: Vancouver, B. C., Stanbridge, Que.

LETTERS

(Continued from page 56)

degree in architecture but to a general degree in engineering.

We do not believe there is a "short cut" to preparation for the practice of architecture.

This does not mean that we will not go to lengths to help the returning veteran. The University as a whole, has a veterans set-up in the administration which is especially intended to consider their welfare. We contemplate a veterans housing program which will furnish low-cost apartments for veterans and their families. Fees here are moderate and come well within the allowances in the G.I. Bill of Rights. Review or survey courses will be offered by various department so that the G.I. can refresh his memory . . .

We find that many returning veterans will work under a very irregular schedule. This is because they have studied at various other institutions, perhaps not even with an architectural major. Also they may have taken certain Army or correspondence courses. A student may establish credit in these by taking a special examination. We already have a number of veterans here at this institution. With the present flexibility we have been able to meet each specific problem as it has presented itself . . .

JOE E. SMAY
Univ. of Oklahoma
Norman, Okla.

Cornell

Forum:

Experience indicates that the successful architect must encompass a broader field than merely the mastery of those skills which are designed to make him technically competent; in addition he must have at his command a broad cultural training. The background afforded by a broad education is most likely to produce, later on in life, the impetus for sustained creative work in architecture . . .

In the postwar period we shall adhere to the principle that ten sixteen-week terms, two terms a year for five years, constitutes the minimum period for the training of an architect.

Since July 1, 1942, and continuing for the duration of the war, the curriculum has been shortened from ten to eight terms, with three sixteen-week terms each year. This accelerated curriculum will be continued in the postwar period for those students who left this College before graduation and who may desire to complete their studies and receive the degree at as early a date as possible following their return to the University. This same privilege will be afforded

(Continued on page 64)

"The biggest scoop here will be Spencer Heaters!"

"You can tell a smart architect is behind *this* job! He's specified Spencer Heaters. He figures that Spencer's half a century of heating experience, teamed up with the vast wartime production knowledge of The Aviation Corporation, is bound to deliver the best heating units money can buy. And, brother, is he right! Those post-war Spencers will be mechanical masterpieces of design, utility and economy—outstanding products you'll be proud to specify. Look into Spencer . . . and score a real heating scoop in the buildings you design. A note to us will bring the happy details."

SPENCER HEATER

Division— The Aviation Corporation, Williamsport, Pa.

Production of Spencer Heaters is being increased as rapidly as materials become available.

FOR **KW's** THAT SHIFT AND GROW

SPECIFY THE INHERENT *Flexibility* OF THE PLANT NETWORK SYSTEM — AND THE WESTINGHOUSE AIR-COOLED NETWORK UNITS

ordered—installed—operated as a unit

When you need a power distribution system which can supply growing or shifting loads with a minimum of system change . . . the Westinghouse Plant Network System is the answer. Standard Westinghouse Network Unit Substations, factory built, meet your needs . . . they arrive at your plant as complete power packages . . . ready to be connected and operated.

The Westinghouse Air-Cooled Network Unit can be located anywhere indoors . . . without a vault, because it is substantially fire and explosion-proof.

When loads grow or shift, simply order and add additional load feeder sections, or install complete new units in the secondary loop as required . . . without changing the existing system. This flexibility results in substantial savings in materials and labor, and in service interruptions, with consequent production losses.

The Westinghouse Air-Cooled Network Unit is only one item of the electrical apparatus Westinghouse can supply. Others are: control centers, switches, breakers, capacitors, protective devices, switchgear . . . in fact, all the equipment needed for any power distribution system. By ordering from one source, you place responsibility in one place . . . save time, and co-ordination and installation expense.

Plan now for postwar construction. Phone your nearest Westinghouse office, or write Westinghouse Electric Corporation, P.O. Box 868, Pittsburgh 30, Pa.

J-94695

Westinghouse

PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

INDUSTRIAL

Typical Comments From Users

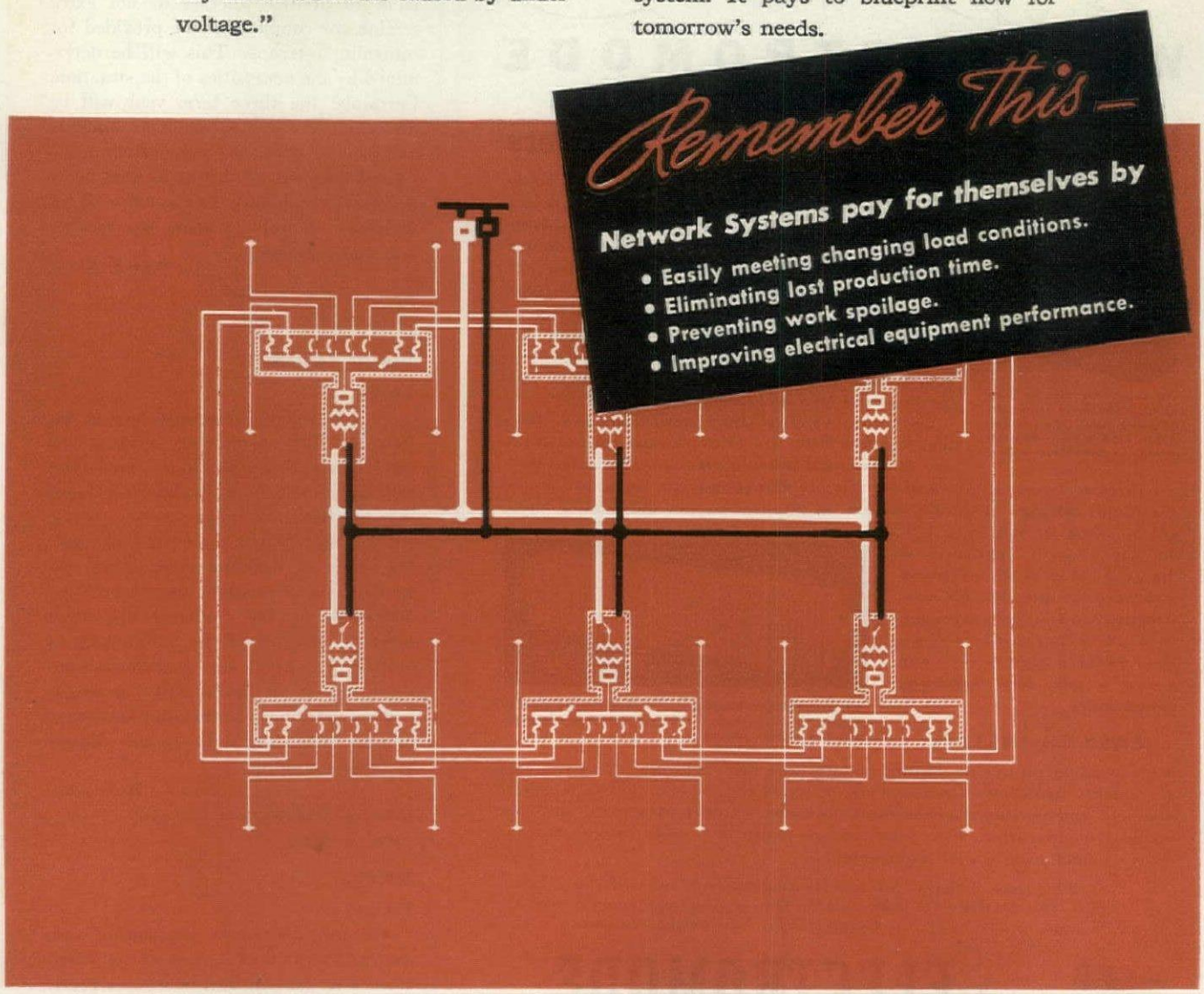
Since the first Westinghouse Industrial Plant Network Systems were installed (five years ago), we have been receiving comments like these:

- "because it assures uninterrupted service, we figure your network system has completely paid for itself by eliminating loss of production time caused by electric power interruptions."
- "light flicker has been entirely eliminated . . . improving working conditions and efficiency."
- "Production has been increased because our motors are now getting the right voltage at all times . . . no longer any motor burnouts caused by undervoltage."
- "addition of new electrical facilities for critical work production was made in 50% less time . . . without disturbing any of the previous facilities."

We sincerely believe that wherever the highest degree of flexibility—reliability — and voltage regulations are "musts", the Westinghouse Network System is best suited for tomorrow's profitable production of peacetime goods.

However, Westinghouse supplies all types of electrical distribution systems, and will recommend the one best suited to your needs.

Call your Westinghouse representative today for advice and practical help in laying out your postwar distribution system. It pays to blueprint now for tomorrow's needs.



PLANT NETWORK SYSTEMS

LETTERS

(Continued from page 60)

students who have attended other colleges and universities and who have served in the Armed Forces.

GILMORE D. CLARKE

Cornell University
Ithaca, N. Y.

Univ. of Pennsylvania

Forum:

We do not contemplate any drastic changes or programs other than those given at the present time. As far as the young men returning from service are concerned, every one is being considered as a separate case — especially those who are on leave of absence from our own school. Veterans or students who will begin their education at Pennsylvania will be given the thorough training for which the degree of Bachelor of Architecture at Pennsylvania stands. It is too early at the moment to predict whether or not extra sessions or courses may be provided for returning veterans. This will be determined by the necessities of the situation. Certainly, the three term year will be discontinued for the benefit of students and faculty alike; the summer being the logical time for a student to gain some practical experience in the office of an architect as well as some measure of rest and recreation.

GEORGE S. KOYL

Univ. of Pennsylvania
Philadelphia, Penn.

Alabama Polytech.

Forum:

. . . Two new developments here at Auburn may be of interest. First is the establishment of a four-year curriculum leading to the degree, Bachelor of Building Construction. This course is intended for students planning to enter the fields of building contracting, the preparation or distribution of building materials, or the building inspection services maintained by municipalities and fire insurance rating organizations.

Second is a four-quarter graduate course open to architects and landscape architects, leading to the degree Master in Town Planning . . .

TURPIN C. BANNISTER

Alabama Polytechnic Institute
Auburn, Ala.

Columbia

Forum:

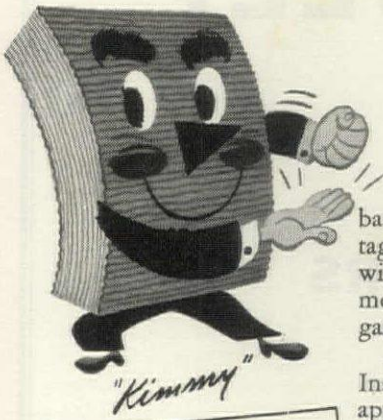
The information in our catalog written in 1939 should answer all questions since our general aim continues pretty much unchanged.

LEOPOLD ARNAUD

Columbia University
New York, N. Y.

(Continued on page 70)

"Postwar home buyers will want quality that's more than just 'skin-deep' . . ."



And that's why you'll want to weigh the many merits of KIMSUL*— its functional worth — its quality appeal

Yes, people will still buy homes on the basis of eye appeal. But, if you are planning cottages, castles, or prefabricated homes, it will be wise to remember that postwar buyers will be more quality-conscious than ever before—regardless of the price range in which they'll buy.

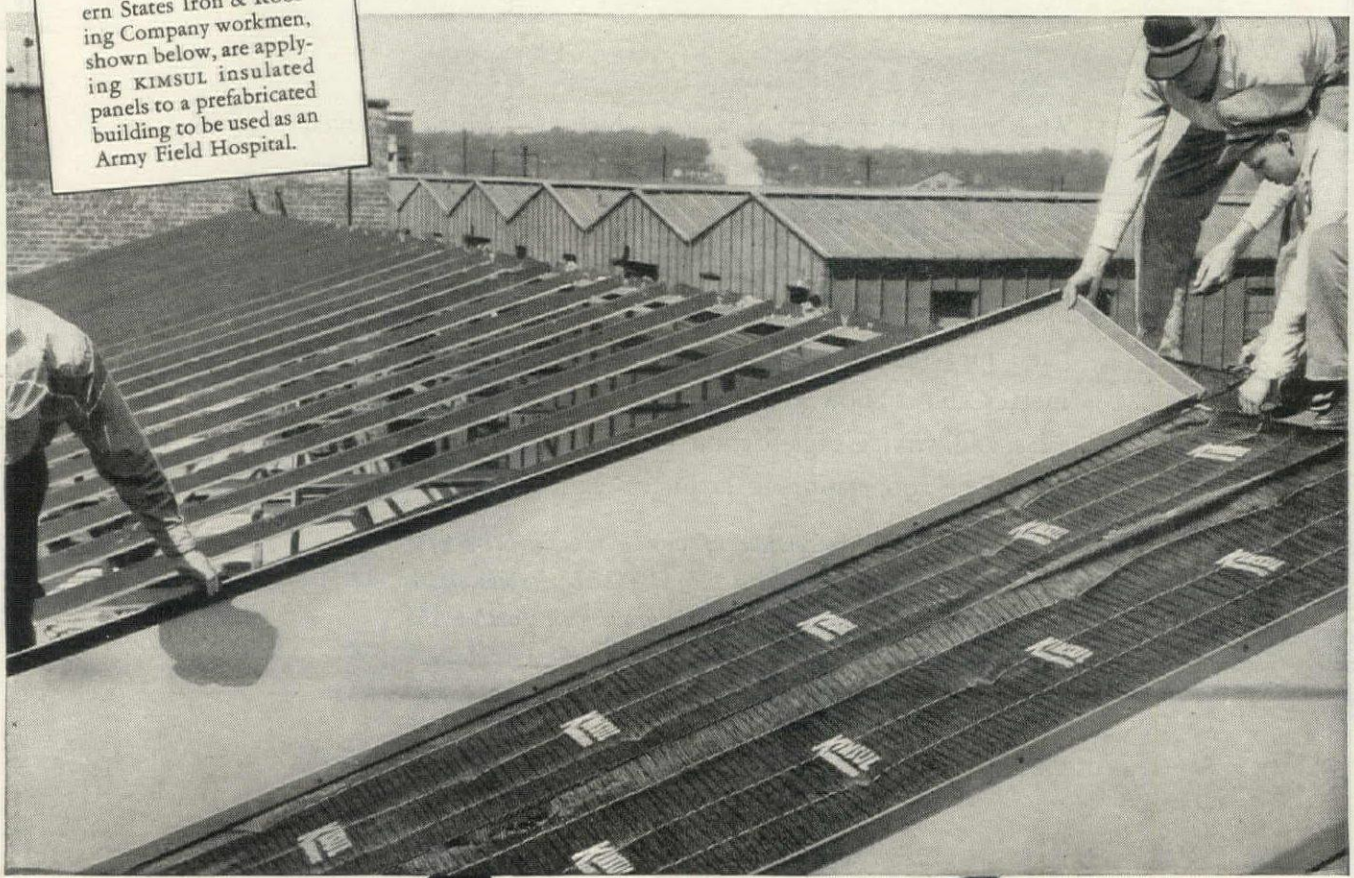
And the architect who specifies KIMSUL Insulation will not only render an extra, client-appreciated service, but also one that will pay dividends over the years. Here's why:

1. KIMSUL has a "K" Factor of .27. It is superior in principle—the *only* many-layer insulation.
2. KIMSUL is fire resistant.
3. KIMSUL provides permanent uniform insulation. It won't sag, shift, or settle.
4. KIMSUL will last the life of the structure in which it's installed.
5. KIMSUL is quickly and simply installed.
6. KIMSUL costs relatively little when the dominant factor of quality is considered.

KIMSUL is a name that's known widely and favorably to home buyers. Extensive national advertising, plus "performance," have earned it public acceptance.

For complete technical data on KIMSUL Insulation, refer to Sweet's 1945 Catalog, or write to Kimberly-Clark Corporation, Neenah, Wisconsin.

KIMSUL has proved its effectiveness through use on thousands of metal and wood buildings—serving our armed forces in Arctic cold and Tropic heat. The Southern States Iron & Roofing Company workmen, shown below, are applying KIMSUL insulated panels to a prefabricated building to be used as an Army Field Hospital.



WRAP THE POSTWAR HOME IN A KIMSUL BLANKET

KIMSUL
REG. U.S. & CAN. PAT. OFF.
INSULATION

A PRODUCT OF
Kimberly Clark
RESEARCH

*KIMSUL (*trade-mark*) means Kimberly-Clark Insulation

NOW AVAILABLE!

Weisway

METAL CABINET SHOWERS

WEISTEEL

METAL COMPARTMENTS

TOILET, SHOWER, DRESSING ROOM ENCLOSURES...HOSPITAL CUBICLES

After nearly four years of war production — which involved precision manufacture for the Army Air Forces — our factory is now fully reconverted.

Materials which assure the same high quality that has marked our peace-time products for 68 years are now on hand in sufficient quantity for us to resume manufacture of metal Cabinet Showers and metal partitions. Our engineering, sales and service organization is prepared to give our usual peace-time cooperation to architects and contractors.

In the reconversion of our plant facilities new equipment has been added which enables us to increase efficiency and improve still further the quality standards which have always characterized Weis products.

Write for detailed information on these peace-time products.

HENRY WEIS MFG. CO., INC., 1102 OAK STREET, ELKHART, INDIANA

"I build with the APPROVED INSULITE WALL OF PROTECTION"

says:

E. J. SULLIVAN

DOUBLE INSULATION plus VAPOR CONTROL

That's What the Approved Insulite Wall of Protection Gives You

On outer-walls, Insulite Bildrite Sheathing builds a wind-proofed, weather-tight wall of high insulation efficiency, superior bracing strength, and a wall free from open cracks or knotholes.

On inner-walls, Insulite Sealed Lok-Joint Lath builds a second wall of insulation, a strong, rigid plastering surface. Lath marks are eliminated, plaster cracks reduced to a minimum.

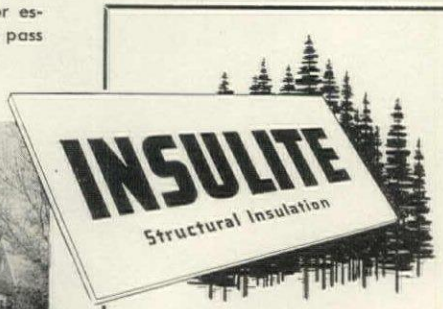
Sealed Lok-Joint Lath, with asphalt barrier against the studs, retards vapor travel. Bildrite Sheathing, being permeable to vapor, permits what little vapor escapes the barrier to pass towards the outside.

These homes, in the beautiful Ivanhoe division of Riverdale, Illinois, were built by Mr. Sullivan, and all are constructed with the Approved Insulite Wall of Protection.

E. J. SULLIVAN, prominent home builder of Riverdale, Illinois has built more than 225 homes in the past ten years, most of them with the Approved Insulite Wall of Protection.

"I find the Insulite Wall of Protection a big selling point," Mr. Sullivan says. "When I point out the wall's advantages, particularly in reference to protection against moisture condensation within the wall, my customers are greatly impressed."

The detailed drawings to the left explain, in general terms, the scientific principles of the Approved Insulite Wall of Protection. For complete details, of importance to every builder, send coupon today for free "Scientific Facts" booklet.



INSULITE

MANDO

Minneapolis 2, Minn.

Made Exclusively From Wood

INSULITE, Dept. AF11-5, Minneapolis 2, Minn.
Please send me your free booklet, "Scientific Facts."

Name.....

Address.....

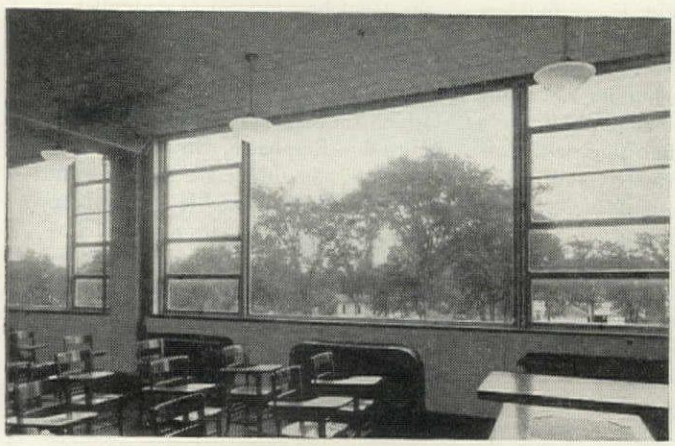
City.....*State*.....


NOW for the return to civilian building
Count as fully as ever upon the dependability of Wheeling Sheet Steel and Wire Products:
Wheeling LONG-SPAN Steel Floor and TRI-RIB Roof Deck
Wheeling Metal Lath and Accessories
Bar-X Partitions
Steelcrete Expanded Metal
Specify "Wheeling"
WHEELING CORRUGATING COMPANY
Wheeling, West Virginia
NEW YORK PHILADELPHIA CHICAGO ST. LOUIS
RICHMOND ATLANTA KANSAS CITY MINNEAPOLIS
BUFFALO LOUISVILLE DETROIT BOSTON NEW ORLEANS
CLEVELAND PITTSBURGH HOUSTON
Wheeling
CORRUGATING COMPANY
Steelcrete

Practical Suggestions on Glass

FOR SCHOOLS

Modern glass is far more versatile than sometimes is realized. It's thoroughly practical for many school building uses. The lustrous, sparkling surfaces of glass clean easily, and require no refinishing. Glass defies weather, commonplace chemicals, abrasion, time. Use it clear, translucent, or opaque—according to your needs. Libbey·Owens·Ford Glass Company, 15115 Nicholas Building, Toledo 3, Ohio.



ARCHITECTS: Boyum, Schubert & Sorenson, La Crosse, Wisconsin.

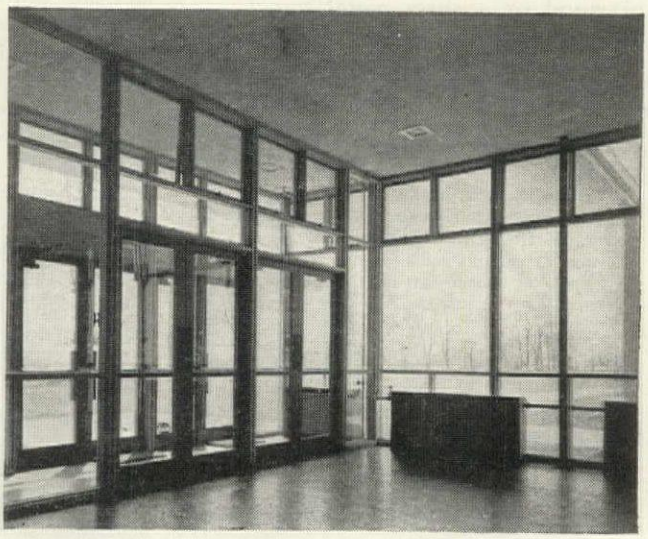
DAYLIGHT ENGINEERING . . . Large windows make classrooms more pleasant. They provide good daylighting, so essential to keeping young eyes healthy.

KICK PLATES of *Tuf-flex**, the plate glass that's tempered for extra toughness and greater resistance to impact, are a unique feature for protecting doors.

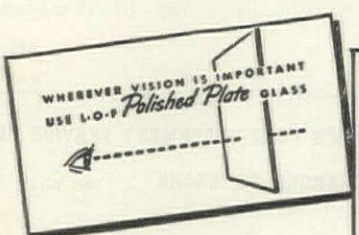
HALLWAY PARTITION of handsome, translucent glass, borrows light from a classroom. Here's a splendid way to screen one section or room from another, without shutting out the light.

CHEERY VESTIBULE utilizes "walls of glass" to make transition easier from outdoor play to indoor study.

ARCHITECTS: O'Dell, Hewlett & Luckenbach, Detroit, Michigan.



*Reg. U. S. Pat. Off.



LIBBEY·OWENS·FORD
a Great Name in **GLASS**

A LETTER FROM THE PUBLISHER

Dear Reader:

The private home building business will be in the spotlight—and on the spot next year.

The demand for houses is great. You know that the supply of materials and equipment is uneven—but does the public? You know the supply of skilled labor may prove inadequate—but does the public? You know that the cost of everything which enters into building a house is up—but does the public? The one thing the public does know is that government restrictions have been removed. That is why home builders are in the spotlight—and on the spot.

Once again the builder operating in what appears to the public as a free market will find himself the object of both government and public scrutiny. Home building, having gained the elimination of controls, has assumed a large measure of public responsibility.

Thus, the problem will become one of retaining public goodwill. The easiest way to do so would be to build a very large number of good, low-cost houses. That is what the public wants and what the public expects. But the prospect of doing so in the early future is not realistic.

Home building is, therefore, faced not with public goodwill, but ill will, and the recurring threat of government regulation.

Obviously, building needs to be interpreted to the public. Its problems need to be stated clearly, interpreted convincingly and repeatedly.

This cannot be done nationally as the situation in Philadelphia will differ from the situation in Seattle. It is not the same as between Philadelphia and Pittsburgh or even nearby Lancaster.

This is a major problem in public relations. One possible solution lies in inviting a citizen committee, made up of respected people whose objectivity is beyond question, to meet with the builders periodically and hear their side of the story. Reports on such meetings would be widely publicized in the local press and on the radio. Such a committee might have for its chairman the president of a college, and its personnel might include a leading churchman, the head of the most important women's organization, the president of the local chapter of the American Institute of Architects, the president of the Chamber of Commerce, the head of the American Legion. Whether or not these committeemen represent organizations is less important than that they clearly represent the public.

The committee's first function should be to survey and report on the local housing need in number of units and by price class. The builders would then present to the committee their program of building on which they are prepared to be committed. Emphasis, in so far as possible, should be on medium and lower priced houses. If the builders find it impossible to produce low-price houses, that should be stated with a documented list of the reasons. Such statements would then be turned over to the committee for release to the public. The committee should continue to function while the emergency lasts; conceivably it might prove sufficiently useful to become a permanent advisory group.

It seems unnecessary to list all of the matters which such a committee might explore. Already mentioned are material supply, skilled labor supply and market determination. It might also explore, from time to time, building codes, zoning, city planning, correlation of private with government building, etc., etc. Whether or not such a committee should be continued will be determined by experience.

The important fact is that we are in a period when housing has become the subject of urgent public interest. Because of the unique difficulties which beset the builders of 1946 houses, it is most important that the public not only understand, but also believe, the facts. Since the spotlight is on, let us be sure it is operated impartially and knowingly and not by well intentioned but uninformed people, or worse, by demagogues.

—H. M.

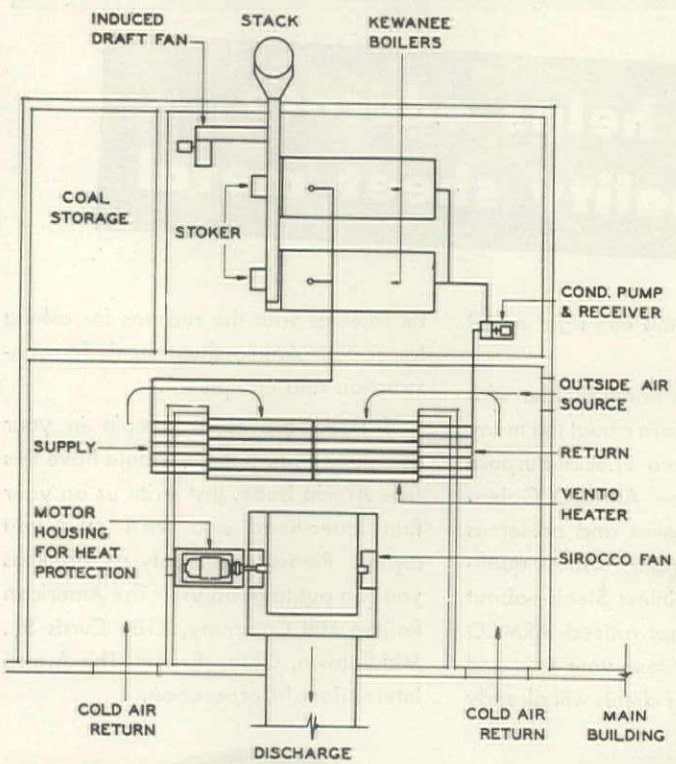
G.I. JOBS

FORUM'S FREE PLACEMENT SERVICE FOR DISCHARGED VETERANS see page 198

FOR BETTER HEATING OF AIRCRAFT HANGARS

One of many Kewanee Heated Hangars

KEWANEE Steel Firebox BOILERS



Comparable in price with that of other systems . . . yet offering additional important advantages . . . Kewanee Engineers have prepared a Basic Design for heating Aircraft Hangars by steam.

A PLAN FOR HEATING AIRCRAFT HANGARS

The diagram at left shows a typical hangar boiler room layout with two Kewanee Boilers, stoker fired. The same basic idea can be used with hand-fired coal, oil or gas . . . offering such important advantages as . . .

1. Reduced fuel costs because of higher efficiency. 2. A reduction in fire hazard. 3. A flexible heating system that responds immediately to calls for heat. 4. Elimination of the need for more than one boiler room, even in the largest hangars.

ASK FOR BULLETIN 2166-3 WITH ACCOMPANYING DIAGRAMS

ARMY E NAVY
Won for 5th Time

KEWANEE BOILER CORPORATION

KEWANEE, ILLINOIS

Branches in 60 Cities—Eastern District Office: 40 West 40th Street, New York City 18

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

75 YEARS BOILERMAKERS

This new book helps educate your clients on quality sheet metal

Here's a brand-new book by Armco to make it easier for you to specify "quality work with quality sheet steels." Thousands of copies are being mailed to people who are now planning to remodel their present homes or to build new ones.

"Know Your Steel . . ." is crammed with sound advice about *where* and *when* to use special-purpose sheet steels. It will help your clients understand the importance of *quality steels* . . . and of having the *one right metal* in the right place.

Every prospective home builder who gets this book will learn about the many advantages of Armco Special-Purpose Sheet Steels—of how ARMCO Galvanized PAINTGRIP takes and preserves paint—about the bright, rustless qualities of ARMCO Stainless Steels—about the durability of galvanized ARMCO Ingot Iron. This will save your time and energy because your clients will already be familiar with the reasons for asking for certain Armco sheet steels for construction and equipment.

If there are some people in your community you believe should have this free Armco book, just write us on your firm letter-head and we'll send you copies. Please order only as many as you can put to good use. The American Rolling Mill Company, 2181 Curtis St., Middletown, Ohio. Export: The Armco International Corporation.

THE AMERICAN ROLLING MILL CO.

SPECIAL-PURPOSE SHEET STEELS

NAMES THAT MAKE DREAM KITCHENS..

...REAL KITCHENS!

Grand

CLARE BROS.

Gurney

GARLAND

TAPPAN

HARDWICK

ESTATE

DETROIT JEWEL

O'KEEFE & MERRITT

Magic Chef

L&H

UNIVERSAL

Glenwood

ORIOLE

Western-Holly

ROPER

CALORIC

WEDGEWOOD

MOFFAT

Quality

A-B

cp

TRADE MARK

ASSOCIATION OF GAS APPLIANCE & EQUIPMENT MANUFACTURERS

- How salable is a home without a modern, streamlined kitchen? And how modern is a kitchen, without an automatic gas range built to "CP" specifications? Women will look for the famous "CP" trade mark, in addition to the manufacturers brand name on the gas ranges in the homes you design and build. The famous "CP" seal on a gas range is the only *unbiased* buying guide of its kind in the major appliance field. That's why you will want to specify and install gas ranges built to "CP" specifications in your homes.

For full information on gas ranges built to "CP" specifications, write to Association of Gas Appliance and Equipment Manufacturers, 60 East 42nd Street, New York 17, N. Y.

YOUR CERTIFIED BUYING GUIDE

1. Gas ranges bearing the "CP" trade mark in addition to their own brand names, are built to rigid standards set by 20 gas range manufacturers aided by 1,200 gas utilities, home economists, and home-makers.

2. To these standards, each manufacturer adds distinctive features developed in his own test kitchens.

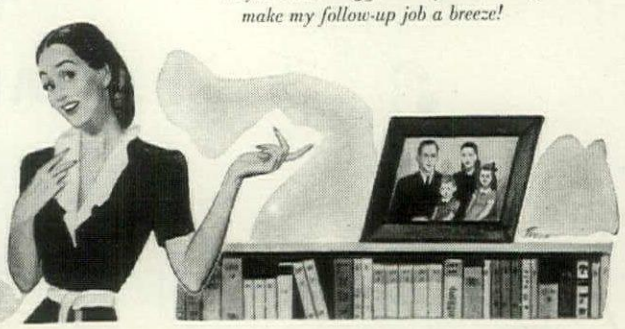
3. Then for your double protection, these ranges are pre-tested by world-famous laboratories, to make sure they meet the rigid "CP" requirements.

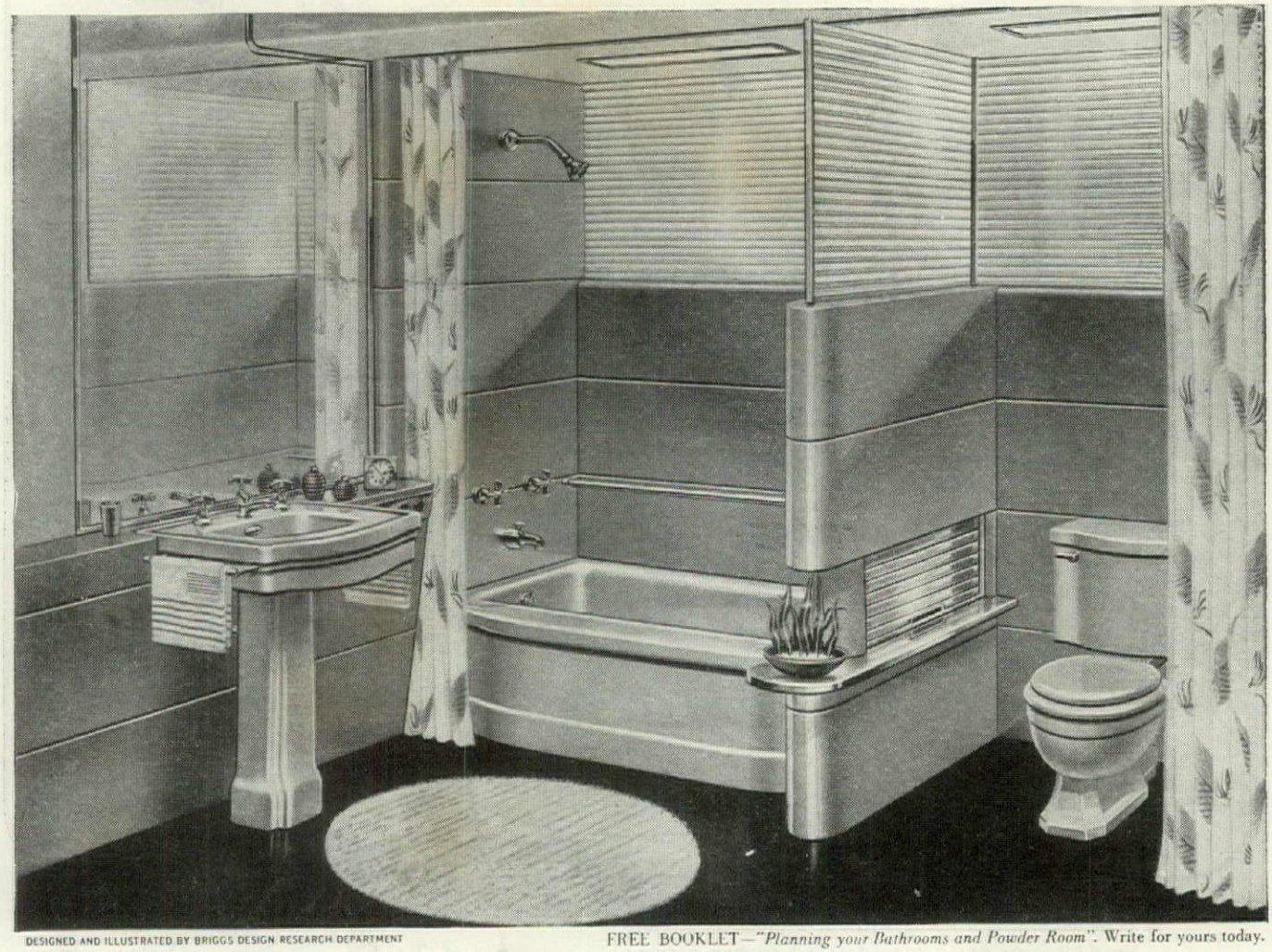
GAS—THE WONDER FLAME FOR MATCH-LESS COOKING

Beautiful Bath . . . jam-packed with bright ideas!

"AT LAST! *The inspiration I've been needing to modernize our family 'horror'. For instance, that ceiling-high mirror over the towel-rack lavatory . . . and the fluted glass top over the 'privacy' partition . . . would be a real start on a bathroom I'd be proud-as-punch to own!*

"WHAT A LAYOUT *for a growing family! Built-in fixtures so there's plenty of 'dressing' room on chilly mornings . . . a wonderful safety-bottom bathtub to protect my pair of roughnecks . . . and easy-to-clean Briggs Beautyware throughout, to make my follow-up job a breeze!*





DESIGNED AND ILLUSTRATED BY BRIGGS DESIGN RESEARCH DEPARTMENT

FREE BOOKLET—*"Planning your Bathrooms and Powder Room"*. Write for yours today.

"CUSTOM-MADE LOOK *at ready-made cost . . . that's what gets me! Furthermore, my local plumbing contractor tells me that the smartly styled Briggs Beautyware designs come in a variety of decorator-colors! Um-m! I'm going to start planning my new bathroom, today!"*

YOU CAN START PLANNING, TODAY. For Briggs designers are already planning for *you*. They're working on the slickest . . . swankiest . . . most *durable* and *convenient* fixtures that ever glamorized a new—or re-newed—bathroom! And what's more . . . they're going to offer Briggs Beautyware plumbing fixtures in both formed metal and vitreous china. Two very good reasons why you can count on Briggs Beautyware to fit-like-a-glove into any blueprint or budget!

BRIGGS *Beautyware*

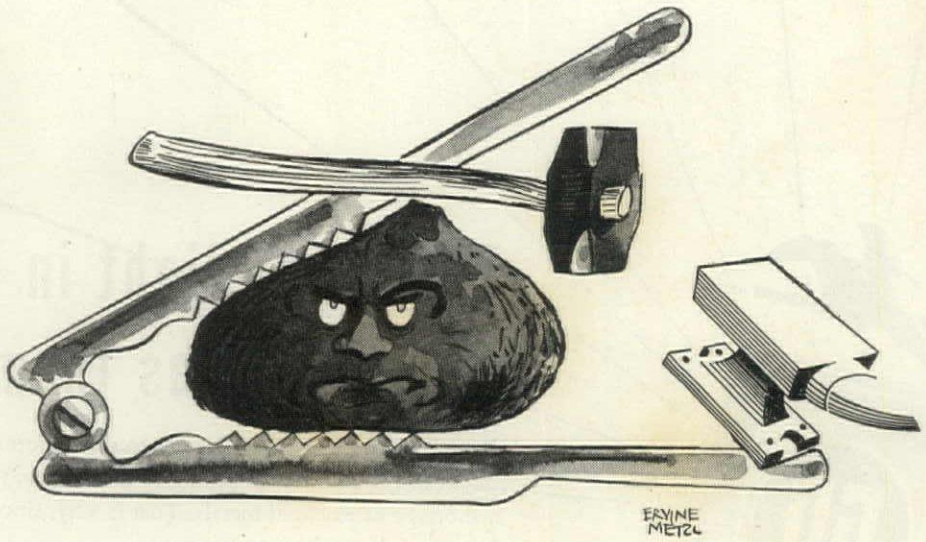
BRIGGS MANUFACTURING COMPANY, PLUMBING WARE DIVISION, DETROIT 11, MICHIGAN

"PLAN FOR TOMORROW—BUY MORE WAR BONDS TODAY"

This advertisement, in full color, appears in:

Saturday Evening Post, October 6 — American Home, November — Better Homes and Gardens, October

QUICK QUIZ:



Do you have a hard nut to crack?

Is the problem:

Being sure the air conditioning system selected will keep operating and maintenance expenses at a minimum?

Selecting equipment that uses minimum space for air distributing systems?

Obtaining air conditioning or refrigeration equipment that fits the exact requirements of the job?

Selecting a system for individual room control?

Obtaining uniform distribution of conditioned air to all areas?

Being certain that air conditions can be controlled with dependability?

EASY ANSWER:

THE SOLUTION, in a nut shell, is better air conditioning — Carrier Air Conditioning. Carrier — with 43 years of specialized experience, is prepared to provide remarkable new developments. You can depend on a Carrier installation for effective results, highly efficient operation, long life and low maintenance costs. Write today for information on Carrier Air Conditioning, Refrigeration or Unit Heating.

Carrier Corporation, Syracuse, N.Y.

Carrier

AIR CONDITIONING • REFRIGERATION

INDUSTRIAL HEATING

Listen to the Human Adventure on the Mutual Network every Sunday evening, 9 to 9:30 P. M., Eastern Time.

The green light in metals... Revere has them NOW

Revere knows well how precious to the nation each of these post-war days can be, and how crippling to industry and employment could be a shortage of essential metals. That is why, since V-J Day, Revere has been in full production for peace.

Fortunately, Revere metals can serve the needs of creating as well as those of destroying, can make as fine bathroom fixtures as bomb fuses, as excellent radiators for automobiles as for half-tracks. No difficult reconversion problems have stifled the outpouring of Revere metals.

Revere copper, brass, bronze, aluminum, magnesium, steel, are ready *now*, are already busy in thousands of plants helping shorten the period of reconversion for industry and for the nation.

We are able and eager to do more. One inevitable result of Revere's war effort has been that not only our ability to produce, but our ability to give service, have been expanded many times. Revere research has probed further and deeper. Revere Technical Advisors are armed with greater knowledge and experience. New methods, metals and machines may save precious time or cut all-important cost for users of our metals.

In all these ways Revere is ready *now* to serve the manufacturing and building industries to help you prove *immediately* that America is even greater in peace than she proved to be in war. In the same way Revere is ready to serve home owners with its building products which are stocked by Revere Distributors in all parts of the country.

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

Executive Offices: 230 Park Avenue, New York 17, N. Y.

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y.

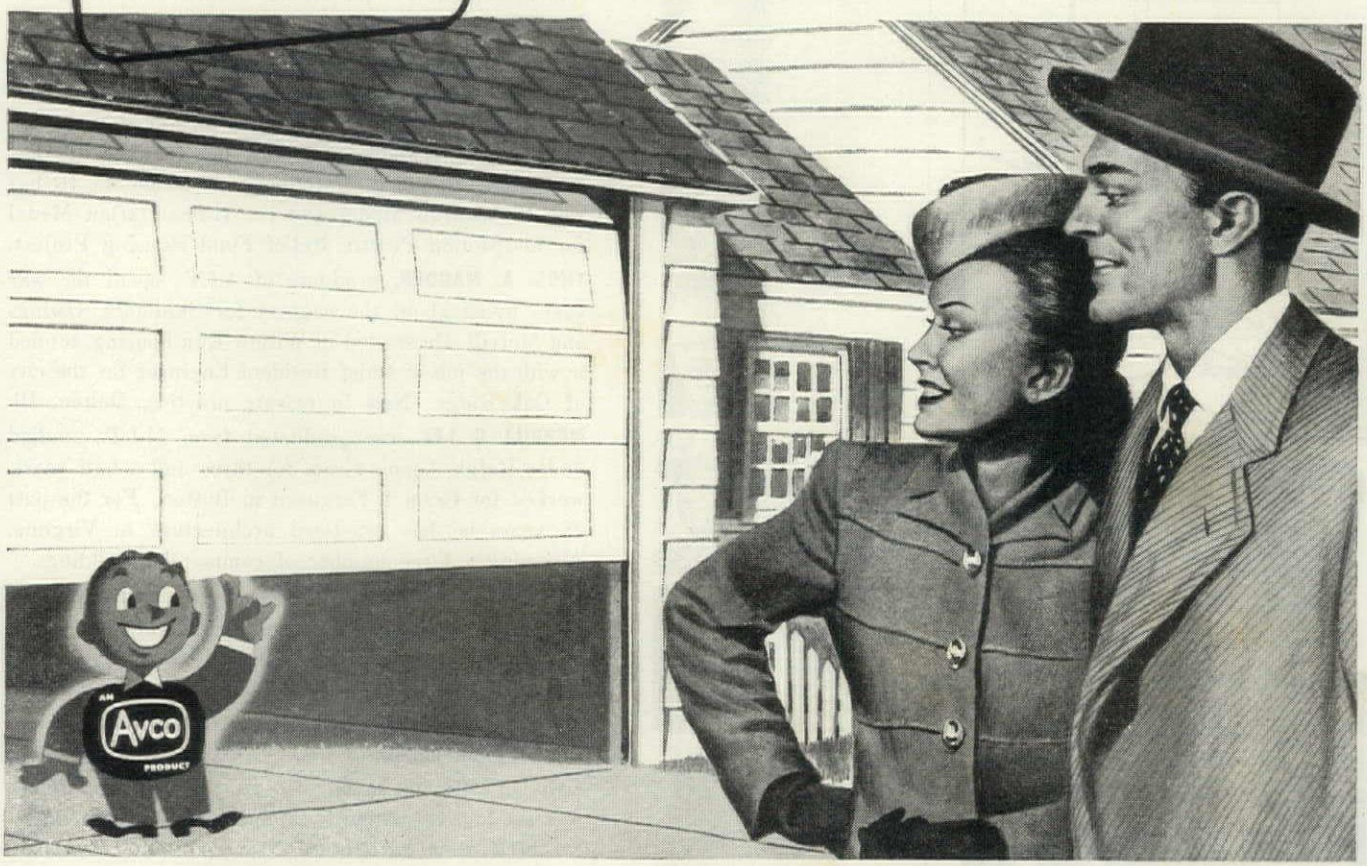
Sales Offices in principal cities, Distributors everywhere

Revere District Sales Offices are located in the following cities:

Atlanta, Ga.	Boston, Mass.	Buffalo, N. Y.
Cincinnati, O.	Cleveland, O.	Dallas, Texas
Dayton, O.	Grand Rapids, Mich.	Hartford, Conn.
Houston, Texas	Indianapolis, Ind.	Los Angeles, Calif.
Milwaukee, Wis.	Minneapolis, Minn.	New York, N. Y.
Philadelphia, Pa.	Pittsburgh, Pa.	Providence, R. I.
St. Louis, Mo.	San Francisco, Calif.	Seattle, Wash.

The Revere Office nearest you is at your service.

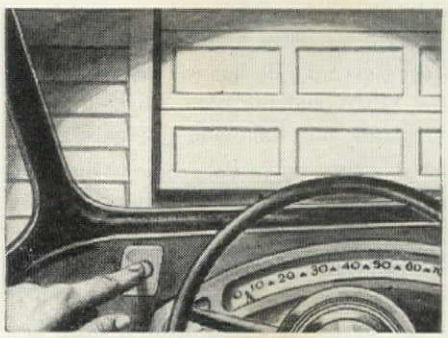
NOW! AVCO opens the door to a Great New Home Feature!

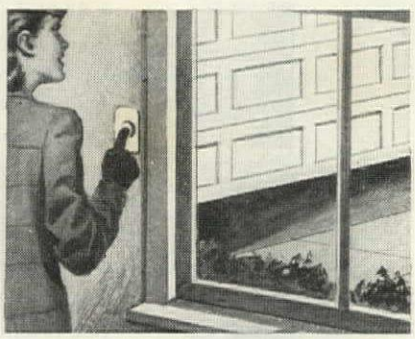


The modern AVCO Automatic Door Operator can now be ordered.

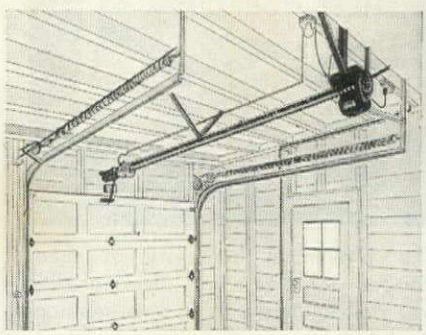
Because modern homes call for modern magic...because new home buyers will want the best...the AVCO Automatic Door Operator is a "must" installation to give the homes you plan and build that important *extra* sales appeal! And it costs so little to install!

AVCO Automatic Door Operators will be available soon...so learn all about them right away...full details on request...and *get your orders in!*





PRESS THE BUTTON in your car and the garage doors open automatically and the garage lights go on. (Yard flood lights and house entrance lights can also be on the same circuit) ...Press another button inside your house or in your garage and the garage doors close and lock themselves and the garage lights go out! By turning a daily chore into a pleasant surprise, the AVCO Automatic Door Operator will have great sales appeal to the modern home buyer!



INEXPENSIVE AND EASY TO INSTALL, the AVCO Automatic Door Operator can be attached to any standard type garage door. It is controlled by three buttons...one in your car, one in your house, and one in your garage.

AVCO *Automatic* DOOR OPERATOR

Horton Manufacturing Division
The Aviation Corporation,
2486 Scotten Ave., Detroit 9, Mich.

IN THE FORUM

BOB CUTLER, chief architect of the Bellevue Hospital for Skidmore, Owings & Merrill, has worked in that office since 1936 and is now a junior partner. He got his training at Syracuse University, practical experience with Shultz & Weaver and Bottomley, Wagner & White.

FREDERICK G. FROST, JR., is half of a father-son partnership instituted in 1936. He has studied at the Art Students' League, Yale School of Fine Arts and holds an M.F.A. in architecture from Princeton. He spent a summer studying Hillside Housing with Henry Wright, Sr.

WILLIAM L. PEREIRA specialist in theater design, was called to Hollywood to do a studio for M.G.M., has taken up motion picture production as a sideline. He has won the Scarab Medal and the Humanitarian Medal for his Motion Picture Relief Fund Housing Project.

THOS. A. MADDEN, graduate of A.I.T., spent the war years flying about the country for Skidmore, Owings and Merrill. He started in Willow Run housing, topped it with the job of Chief Resident Engineer for the city of Oak Ridge. Now in private practice, Dolton, Ill.

MERRILL C. LEE was graduated from M.I.T., studied under Ralph Adams Cram for three and a half years, worked for Cram & Ferguson in Boston. For the past 25 years he has practiced architecture in Virginia, designing a large number of commercial buildings.

CARROLL and PAUL COLETTI formed a partnership as soon as younger brother Carroll finished at Yale School of Architecture. Carroll won the Rome Prize in 1931 and the Rotch Travelling Fellowship. Paul is a graduate of Harvard, lecturer at University Extension.

J. CLARENCE FELCIANO was graduated from the U. of Calif. in 1931 and engaged in private practice until the war set him to planning Japanese Relocation Centers for the Dept. of Agriculture. Now back in his own office, he does both residential and commercial design.

LA VERN J. NELSEN absorbed architecture as apprentice in a local office where he learned "to be humble, to come to work on time and to worship the classics—but eventually overcame all three." During the war he has been associated with Fargo Engineering Co. of Jackson, Mich.

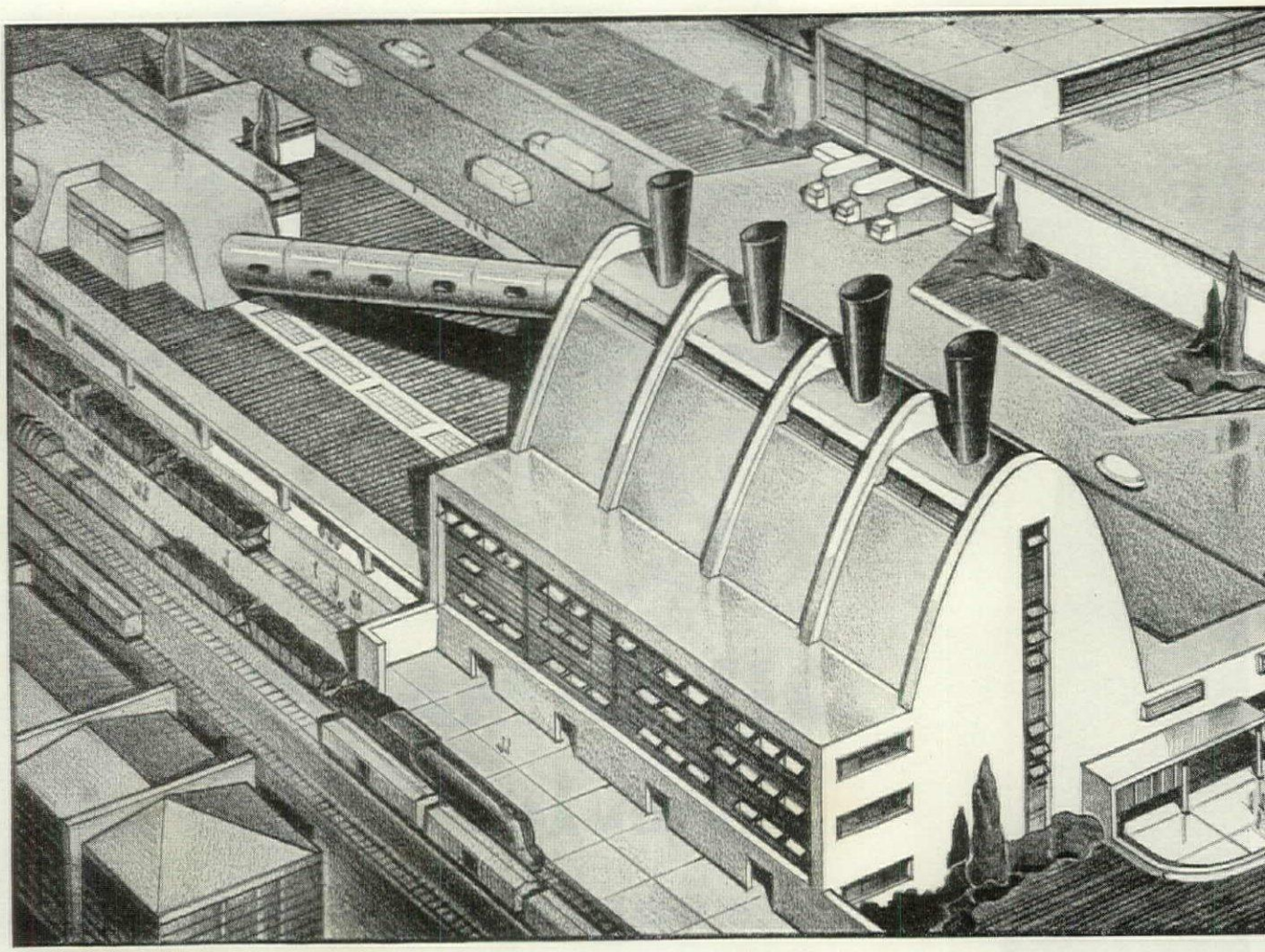
WM. H. DEITRICK established his own practice in Raleigh, N. C. after attending Columbia School of Architecture and working for the late Raymond Hood in New York. Until 1938 his office designed in the traditional style, since then has switched to modern wherever possible.

ALONZO J. HARRIMAN got his B.S. in Mechanical Engineering from the University of Maine and his M.A. in architecture from Harvard. He has executed five housing projects for FPHA and the navy, plus shipyards, airports, power plants, hospitals, and residences.

SUREN PILAFIAN was born in Turkey, came to the U. S. at the age of two. He has studied at N.Y.U., worked for Cass Gilbert; Shreve, Lamb and Harmon; Norman Bel Geddes. In 1935 he and partner Leon Barton won the International Competition for a Bourse in Teheran.

VAN EVERA BAILEY started his career as draftsman in a shipyard, worked with a dredging company and in the Texas oil fields before being discovered by Wm. Gray Purcell, an architect of the Sullivan School. He soon qualified for a license, has specialized in house design.

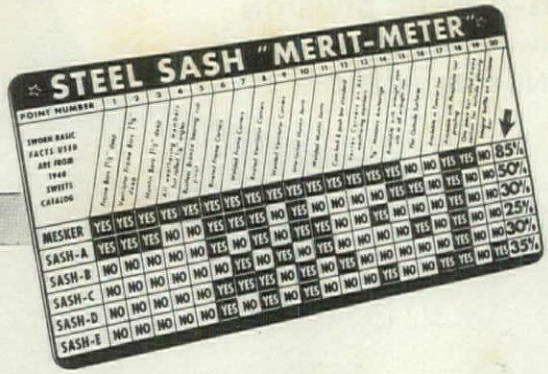
(Continued on page 82)



Specify MESKER HEAVY DUTY STEEL

Industrial buildings all over America are testimonials to the quality and functional supremacy of Mesker Industrial Windows. The superior strength of these *heavy duty* steel windows is due to their 1⅝" deep ventilator bars, interlocked muntin bars and unexcelled craftsmanship throughout. Tighter closing is provided by cam locks with push bars.

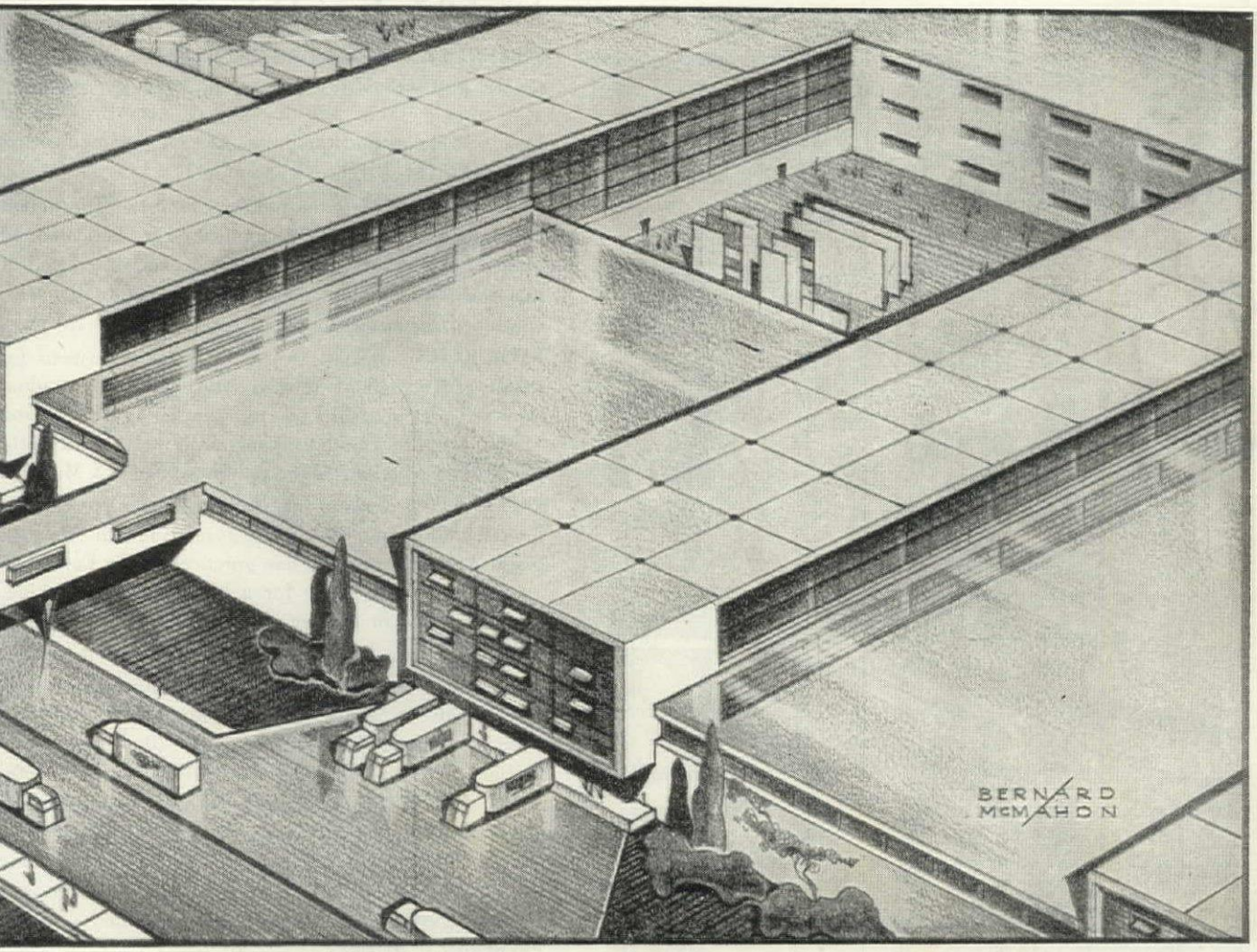
Mesker Industrial Windows also come equipped with the famous patented "cup pivot" which prevents ventilators from sagging. Other special features insuring more weathertightness are weathering bars all ⅛" thick hot rolled angles with vertex profiles. Full ¼" weather contact!



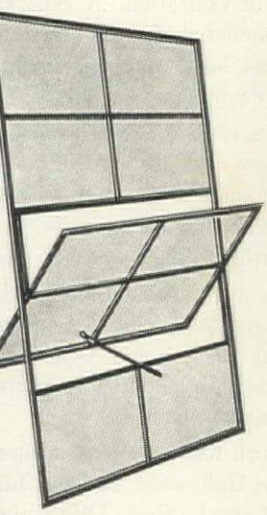
These windows can be supplied with rust resisting wrought iron sill members. If desired, they can also be furnished with outside putty glazing—an additional safeguard against rusting and re-painting a means of reducing maintenance costs.

Get all these superiorities of quality, construction and function by specifying Mesker Heavy Duty Steel Windows for your industrial buildings.

• *Shown above is the Mesker Merit Meter, a point by point comparison of the leading brands of steel windows. The Merit Meter has time and time again proved the "Quality Supremacy" of Mesker Steel Windows.*

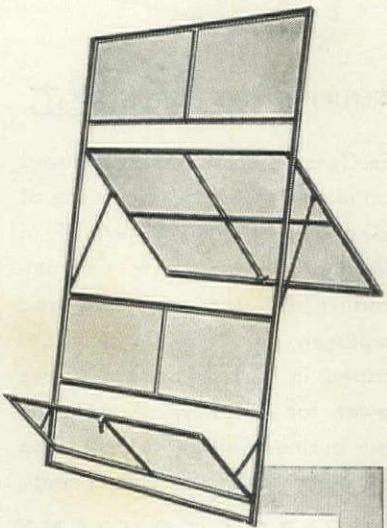


WINDOWS FOR INDUSTRIAL BUILDINGS



Mesker Windows for Industrial Buildings

Mesker Heavy Duty Steel Windows for Industrial Buildings provide maximum daylight . . . can easily be combined into veritable window walls. Easily operated by remote control, they never stick or swell . . . provide better, draftless ventilation. Also economical, they can be easily removed and reused if factory or building is remodeled.



Mesker

STEEL WINDOWS

MESKER BROTHERS • 426 SOUTH 7th STREET (2) SAINT LOUIS

IN THE FORUM

SEBASTIAN J. TAURIELLO was born, brought up and now practices in Buffalo, N. Y., straying afield only to study at Carnegie Tech. and the Beaux Arts Institute of Design. During the war he worked on the engineering staff of Curtiss-Wright Airplane Co.

MARSHALL M. FOSS is the power behind the Thorncrest Development Co. Ltd., Canadian firm dedicated to planned community building. He became interested in this work when doing merchandising before the war, continued his research while serving in the R.C.A.F.

DAVID BAKER collected awards both at the Armour Institute of Technology (Beaux Arts) and after graduation (AIA scholarship award, Charles L. Hutchinson Medal, Kendall graduate scholarship at Harvard). He has worked with Sam Marx and Shaw, Naess & Murphy.

ERNEST PAYER came to this country from Vienna where he had studied under architect Josef Hoffman. He took his M.A. at Harvard and has practiced in the East since 1939. To get know-how for a hobby, cabinet-making, he has worked in lumber camps and saw mills.

PAUL LASZLO was born in Hungary, studied in that country, Vienna, Germany and France; designed houses, furniture, fabrics, wallpapers, refrigerators, stoves and stage sets throughout Central Europe. In 1936 he came to the U. S. and opened his present Hollywood office.

MARIO CORBETT is a second-generation architect who went to work as his father's office boy at the age of thirteen, spent holidays from school inching his way up to a stool at the drafting board. Now boss of his own California office, he concentrates on small house design.

FREDERICK H. REIMERS received his architectural degree from the U. of Calif. in 1915, has since specialized in residential building in the San Francisco Bay Area. He has served on the State Board of Architectural Examiners under three governors.

ADRIAN WILSON was graduated from Washington University, licensed in the state of California. A general practice there since 1930 has included 15 years research in prefabrication methods; has been weighted during the war with Navy work and emergency housing.

IGOR B. POLEVITSKY was born in Leningrad, came to this country during the turbulent days of the revolution. Son of an electrical engineer, he started to study his father's profession, but switched to architecture because he had read all the textbooks at the age of ten.

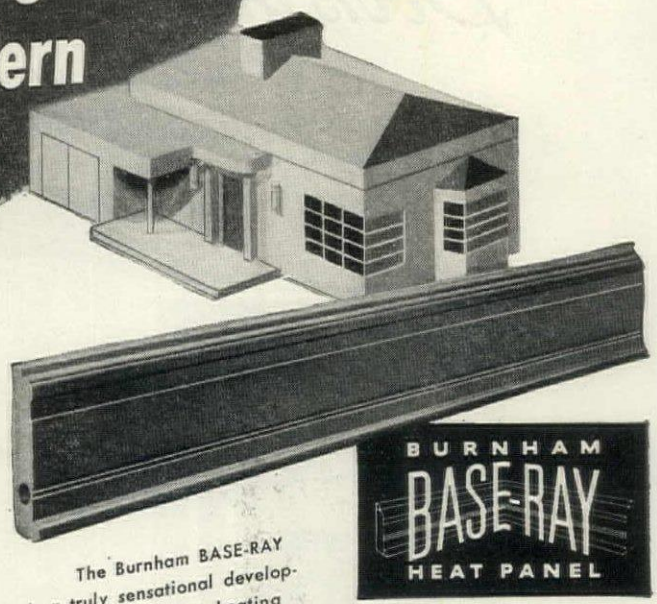
TISHMAN REALTY CO. has built over $100 million worth of construction since its start in 1910 as Julius Tishman & Sons. Now sons David, Paul, Norman and Alexander run the business which follows through from property purchase to managing the finished structure.

HENRY L. EGGERS, designer with Kaufmann Associates of the Earl Carroll Theater in Hollywood, received his architectural education at Cornell Univ. With the Bureau of Reclamation from 1933 to 1936, he worked on the design of Boulder, Norris and Grand Coulee dams.

JULIEN E. BERLA and JOSEPH H. ABEL have been in partnership in Washington, D. C. since 1942. Mr. Berla studied at George Washington University night school while designing the Shoreham Hotel during the day. Mr. Abel is a graduate of M.I.T., studied housing in Europe.

(Continued on page 86)

Install BASE-RAY to give Post-War Homes modern RADIANT heating



The Burnham BASE-RAY is a truly sensational development in Radiant heating offering obvious advantages both decoratively and functionally.

With the war over, we're facing a building boom surpassing anything this country has ever seen.

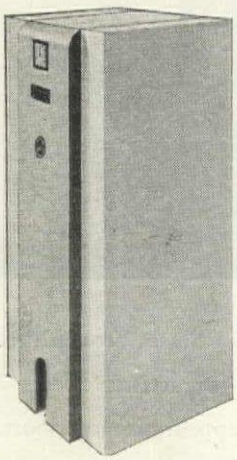
What an opportunity for you to clinch a handsome share of this business by selling your customers a Burnham BASE-RAY installation — the most important development in *Radiant* heating in years.

BASE-RAY is a hollow, cast-iron unit (for hot water, 2 pipe steam or vapor) which replaces the conventional wooden baseboard on outside walls. BASE-RAY Heat Panels are only 7" deep and 1¾" wide—and provide a room-long source of heat with floor-to-ceiling temperature differentials of less than 3 degrees even in sub-zero weather.

You'll find BASE-RAY heating has a wonderful appeal to your customers because of its decorative advantages. Here at last is a heat source which gives home owners an entirely free hand in the arrangement of draperies, furniture, etc.

BASE-RAY is nationally advertised in leading magazines. Be up-to-date. Be progressive. Be ready, when your customers ask about BASE-RAY. Write *now* for our illustrated folder which gives further facts on BASE-RAY, including detailed information on installation procedure.

. . . You can build Business and Prestige with this *quality* Boiler



For maximum comfort and economical, trouble-free service, nothing surpasses this ALL-FUEL Burnham YELLO-JACKET Boiler.

The Burnham YELLO-JACKET is an all-fuel boiler. It burns coal, oil or gas with but minor changes. In light of the painful experience so many of your customers have had with War-Time Fuel Shortages, this is today — and will for many years, continue to be a most effective selling point.

And remember, every YELLO-JACKET Boiler is backed by the Burnham name and Burnham guarantee. Burnham's reputation for quality is second to none . . . with the Buying Public . . . with Heating Engineers and Architects . . . and with leading Contractors throughout the country.

Burnham Boiler Corporation

IRVINGTON, N. Y., Dept. J115

Export Department

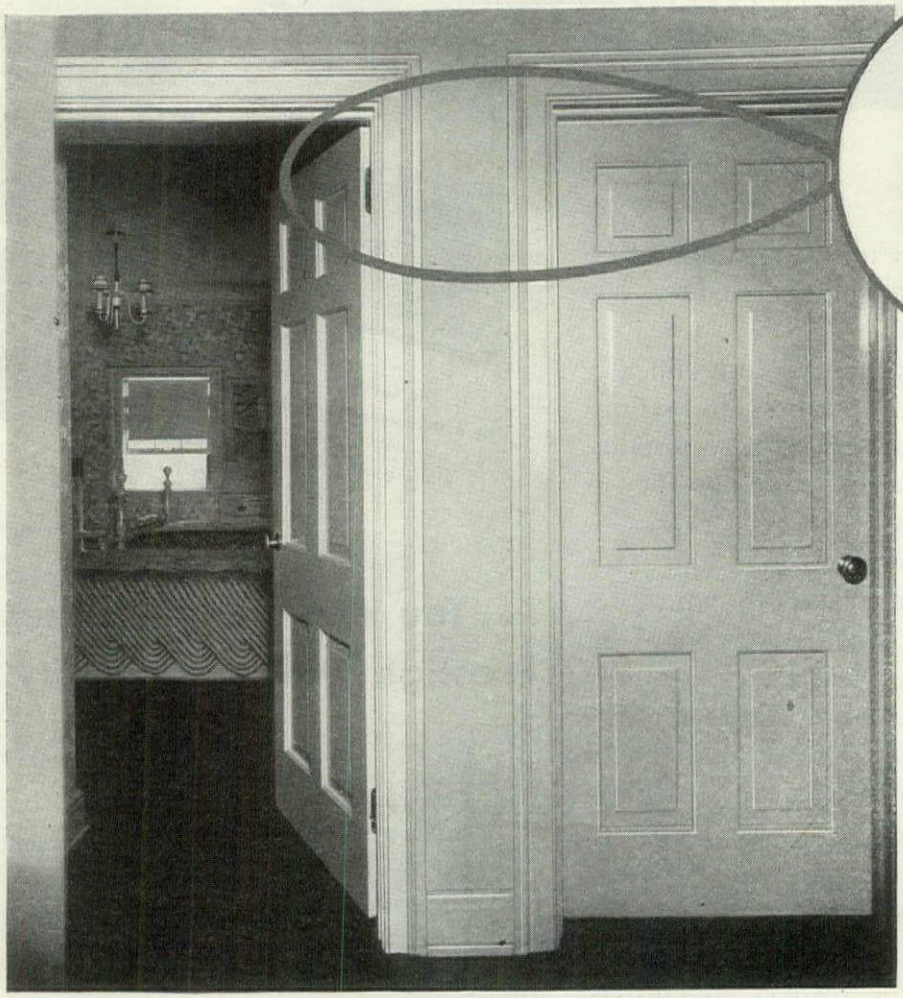
50 CHURCH ST., NEW YORK 7, N. Y.

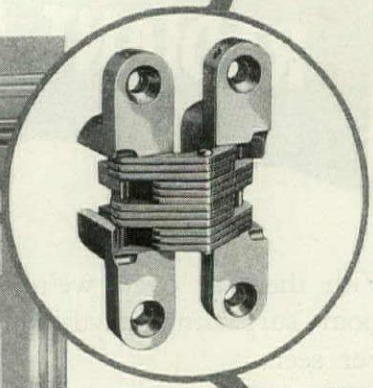
I.B.R. — Institute of Boiler and Radiator Manufacturers — Member

Burnham — Radiant Warmth — Since 1873

Doors that give Distinction

TO THE MODERN HOME! *Invisible* Hinges by — SOSS





● Modern design calls for flush, streamlined surfaces. Such surfaces offer far greater opportunities for artistic effects. They also permit the pleasing and the unusual in the appearance of doors, cupboards and secret panels. SOSS INVISIBLE HINGES are an outstanding contribution to this modern trend—doing away entirely with "broken surfaces" and protruding butts. When SOSS INVISIBLE HINGES are used, hinges are placed in their proper location — *hidden* from view.

Write for the Soss "Blue-Print Catalog." This catalog gives full details for the many applications of this modern hinge. It will be sent free to you on request.

SEE OUR CATALOG IN SWEET'S

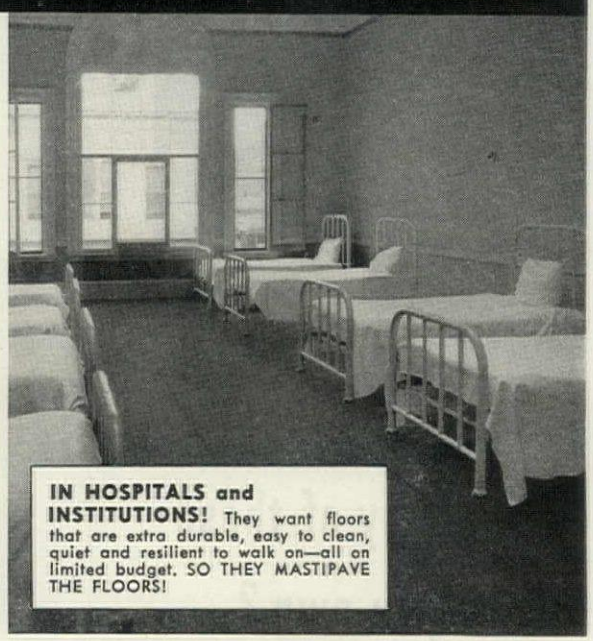
SOSS MANUFACTURING COMPANY
21767 HOOVER ROAD, DETROIT 13, MICH.

SOSS Invisible **HINGES**

The Hallmark
OF TOMORROW'S HOME

"So they MASTIPAVED the floor!"

IN CHAIN STORES and SUPER-MARKETS! Bare floors are both ugly and expensive to maintain. SO THEY MASTIPAVE THE FLOORS AT LOW COST—and get unbelievable wear plus improved appearance and easy maintenance!



IN HOSPITALS and INSTITUTIONS! They want floors that are extra durable, easy to clean, quiet and resilient to walk on—all on limited budget. SO THEY MASTIPAVE THE FLOORS!

MILLIONS of Square Feet in use! MORE MILLIONS being specified *BECAUSE* Pabco Mastipave Is The Low Cost Floor With a 21-Year Record of Amazing Durability and Easy Upkeep!

★Extra economical to buy, install, maintain!

★Wears, wears, WEARS! Actually consolidates under heavy foot-traffic and light trucking instead of wearing down from abrasion.

★Heals self if cut.

★Improves appearance of any bare floor.

★Quiet, resilient and safe.

★Resists water, rot, vermin, stains, disinfectants, even inorganic acids.

★Easy to wash, wax or "dry mop."

★Simply and successfully laid on almost every type of floor, including below-grade concrete.

★ALSO . . . "GRIP-TREAD" MASTIPAVE for EXTRA floor-safety . . . non-slip wet or dry.

IN SCHOOLS, UNIVERSITIES! Many a large-area, heavily traveled floor must be laid and maintained at minimum cost! SO THEY MASTIPAVE THE FLOORS — and get every advantage they want.

IN FACTORIES, WAREHOUSES! They need low-cost floors that can take the constant beating from rough-shod feet and light trucks without chipping, splintering or raising dust. SO THEY MASTIPAVE THE FLOORS! And . . . around machinery, also on stair-treads and ramps, etc., they use "GRIP-TREAD" MASTIPAVE for extra safety—non-slip wet or dry.

PABCO MASTIPAVE

The Low Cost, Long Life FLOOR COVERING

THE PARAFFINE COMPANIES • INC.

NEW YORK 16 • CHICAGO 54 • SAN FRANCISCO 19

Makers, also, of Pabco Linoleums, Grip-Dek and Sani-Grip Floor Coverings; Pabco Paints, Roofings and Building Materials

IN THE FORUM

JOSEPH W. HOLMAN of Marr and Holman was hired for $2.50 a week at the age of 14 by his best Sat. Eve. Post customer—Thomas Marr. From that beginning came a partnership eight years later, recent work for Consolidated Vultee, Republic Aviation Corp., Servel and G.E.

PAUL THIRY started life in Nome, Alaska, reached his present office in Seattle, Wash. by way of the Univ. of Wash., Ecole des Beaux Arts, study in Japan, China, India, Egypt and Europe. In practice since 1929, he has done housing and community work during the war.

KENNETH W. DALZELL studied architecture at Columbia University Extension classes while working in the office of Edward Dunn. He has conducted a general practice since 1915, recently organized the building industry of his community for improvement of local codes.

MORRIS KETCHUM, a graduate of Columbia School of Architecture and Ecole des Beaux Arts, is most famous for his shop designs. Now a member of Ketchum, Gina and Sharp, he has worked for several New York architects including Ed Stone, and York & Sawyer.

OTHO McCRACKIN and RUSSEL HIETT have been a practicing partnership in Hutchinson, Kan. for the past twelve years, doing the varied jobs required by a small community. During the war they branched out into emergency projects, including work at Oak Ridge, Tenn.

GRAYSON GILL doubles in brass with registration as both architect and engineer. His rolling stone career includes study at Ohio State and Mich. Univ., teaching at Texas A. & M., working in Toledo, Chicago, Pencoyd, Pa. and, last stop, Dallas, Tex.

JOHN M. GRAY, JR. was reared in the staid environment of Colonial architecture, came face to face with modern design at M.I.T. After graduation he concentrated on bringing modern to New England; during the war has been chief engineer at a Naval Air Station in Maine.

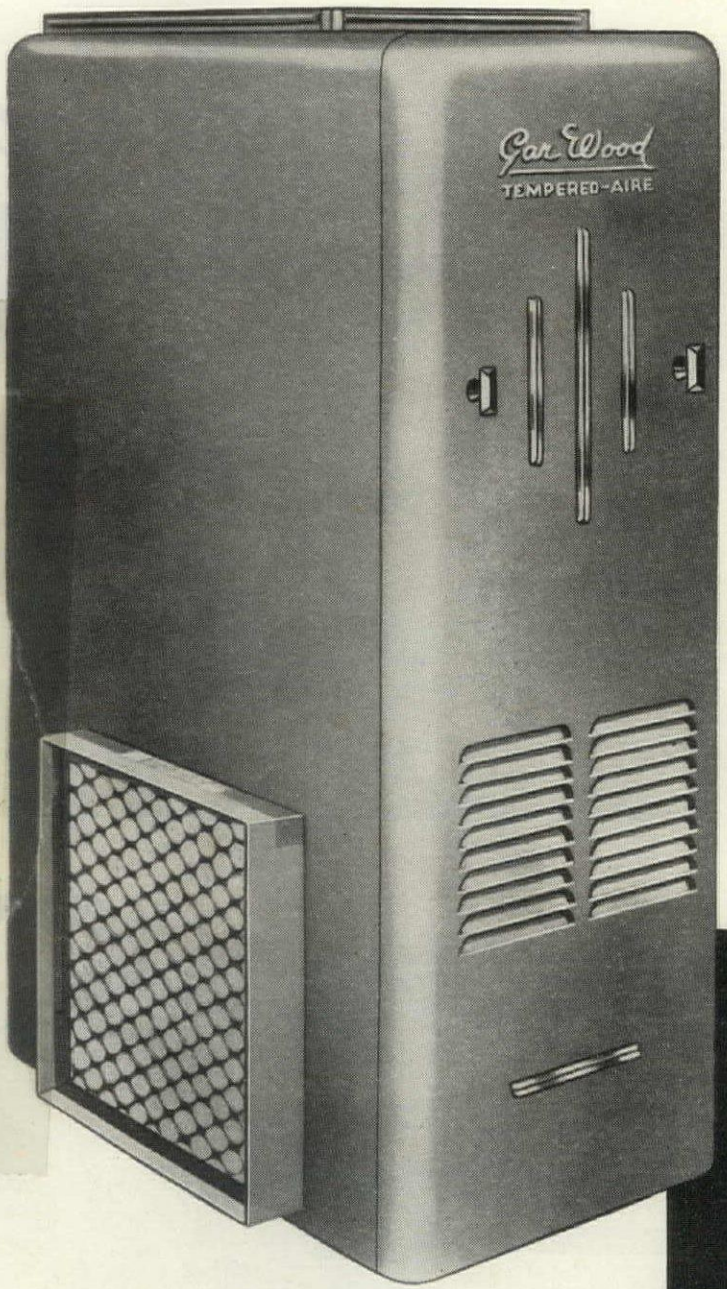
THORNTON M. ABELL started work with March, Smith and Powell in the '20's while studying at U.S.C., continued after graduation. His recent jobs have been with Northrop Aircraft, Sumner Spaulding and a period with Adrian Wilson consulting on Naval Air Bases.

ROBERT E. FAXON, a comparative newcomer to the profession, received his degree from the Univ. of Southern California in 1940, already has his own office. Before college most of his life was spent in Europe where he attended various schools in Switzerland and Italy.

RAPHAEL SORIANO, born on the Island of Rhodes in the Aegean Sea, came to America as an immigrant in 1924 and worked his way through U.S.C. After a period with Richard Neutra, he opened his own office, exhibited his first house at the Paris Exposition of 1937.

ROI L. MORIN studied Civil Engineering at the Worcester Polytechnic Institute, later attended the Beaux Arts Institute of Design in New York. After working for several architectural offices, he established his own in 1928, has done numerous jobs for USHA and FPHA.

WILLIAM WURSTER, of Wurster and Bernardi, now operates with his San Francisco partner by remote control from a recently acquired post as Dean of M.I.T.'s School of Architecture. Wurster still finds time from academic duties to turn out his inimitable houses.



Tried... Proved... READY FOR PRODUCTION

Gar Wood TEMPERED-AIRE Home Heating Units

THE PIONEER BURNER UNIT

At the present time, due to urgent requests for delivery, Gar Wood facilities are devoted to the production of prewar model Tempered-Aire Units. However, the new models are perfected and will be in production very soon. Look for many new features that will add to Tempered-Aire's reputation for efficient, economical performance. Specify oil-fired or gas-fired Tempered-Aire in the homes you are planning or building and place your orders RIGHT NOW. DeLuxe models with washable cloth filters will also be available. Other Gar Wood Heating Units include: Boiler-Burner Units, Conversion Burners and Water Heaters.

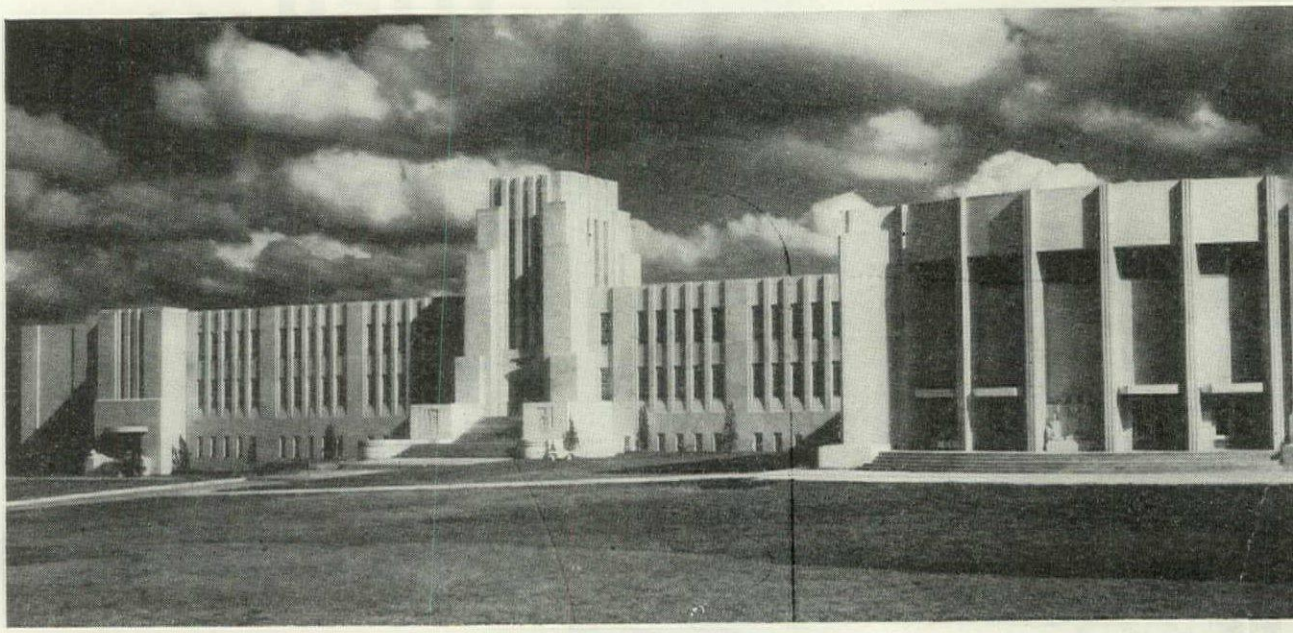
GAR WOOD INDUSTRIES, INC., HEATING DIVISION

7924 RIOPELLE STREET DETROIT 11, MICHIGAN

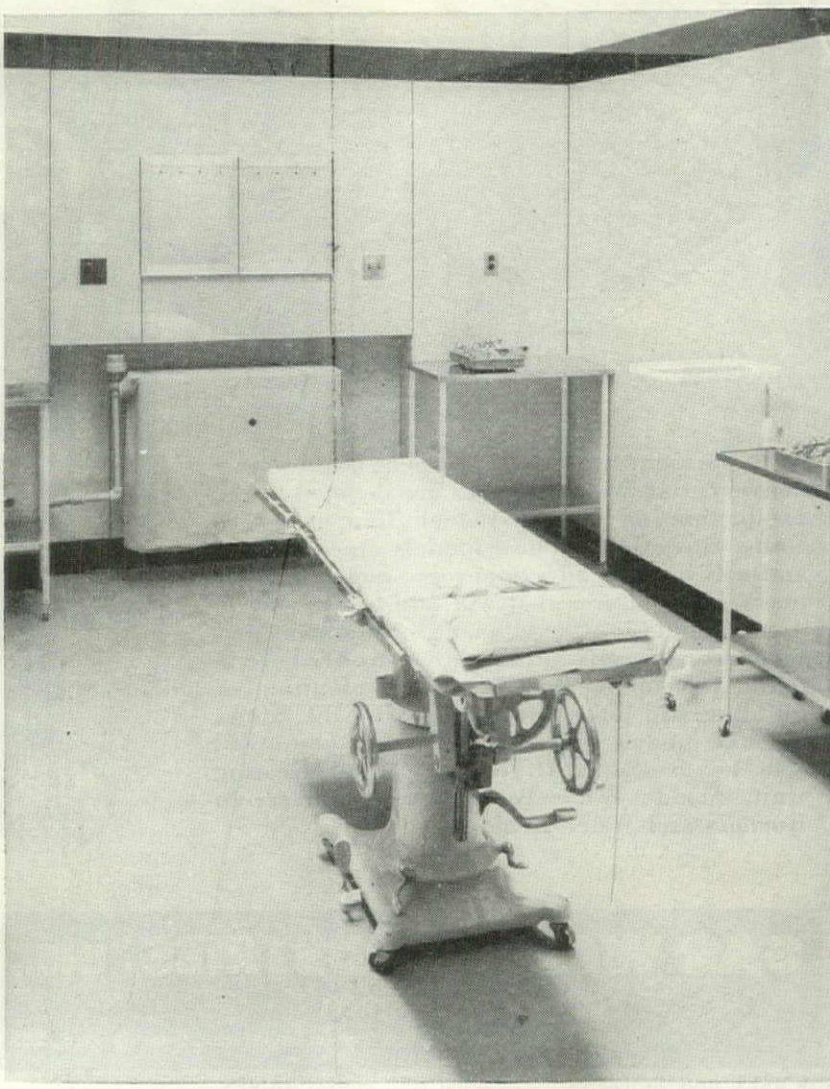
Canadian Distributors: Engineering Industries, Ltd., 282 Dupont St., Toronto, Ont.

HOISTS and BODIES . . . WINCHES and CRANES . . . TANKS . . . ROAD MACHINERY . . . MOTOR BOATS

Distinctive uses of Glass

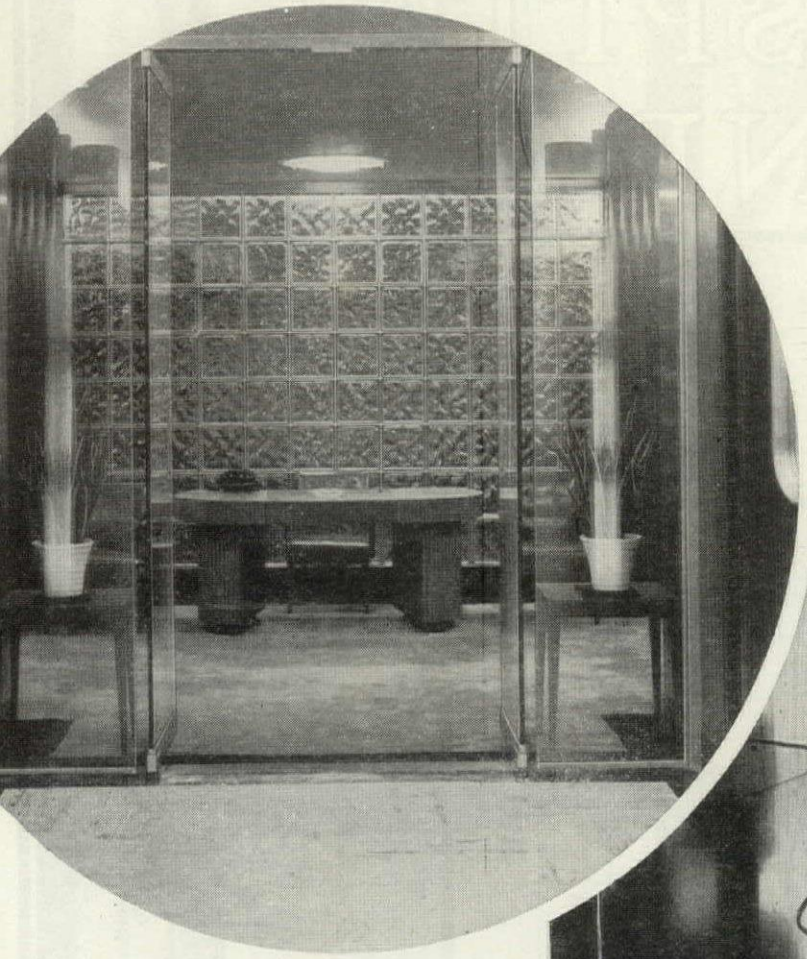


MORE LIGHT, better fenestration are becoming increasingly important in planning schools and office buildings. In the planning of such modern structures as this junior high school, Pennvernon Window Glass assures quality windows —windows which provide good, clear vision, a high degree of reflective beauty, and plenty of daylight for interiors. *Architects: Overstreet and Town.*

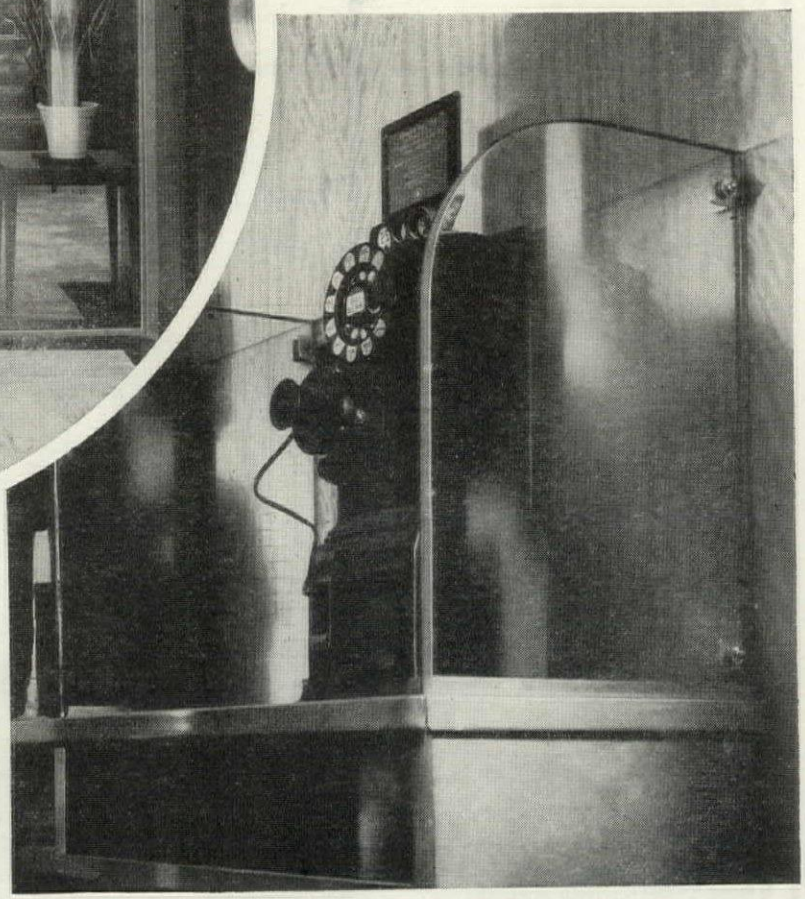


IN HOSPITALS, interior walls are an important factor in sanitation. Carrara Structural Glass is particularly well-suited for walls of operating rooms, washrooms, kitchens, and corridors of hospitals because it successfully combines exceptional beauty and permanence with unusual sanitary qualities. It will not check, craze, stain, fade, nor absorb odors. It is impervious to water, chemicals, and pencil marks. It is easy to clean, and it offers the architect unlimited design possibilities. *Architects: Kidd and Kidd.*

in Public Buildings



ONE OF THE MOST VERSATILE members of the glass family is Pittsburgh Heavy Plate Glass. Its mirror-like reflections, flawless transparency, and sturdy strength make it ideal for use in partitions of all kinds, in skylights, entrance doors, marquees, and innumerable other applications.



RECEPTION ROOMS, lounges, and entrance lobbies gain distinction when designed with a combination of Herculite Glass and PC Glass Blocks. Herculite Doors and panels permit vision, create an impression of luxurious elegance. And PC Glass Blocks have good looks, generous light transmission properties, insulation values to recommend them. *Architect: Morris Lapidus.*

Design it better with products of

Pittsburgh Plate Glass Company

"PITTSBURGH" *stands for Quality Glass and Paint*

We believe you will find much to interest you in our new illustrated booklet of ideas concerning the use of Pittsburgh Glass in building design. Send the coupon for your free copy.

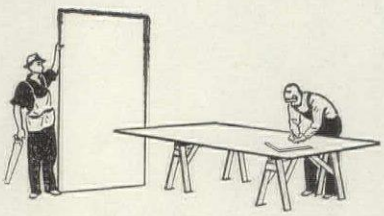
Pittsburgh Plate Glass Company
2329-3 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, your new booklet entitled: "Ideas for the Use of Pittsburgh Glass in Building Design."

Name.....

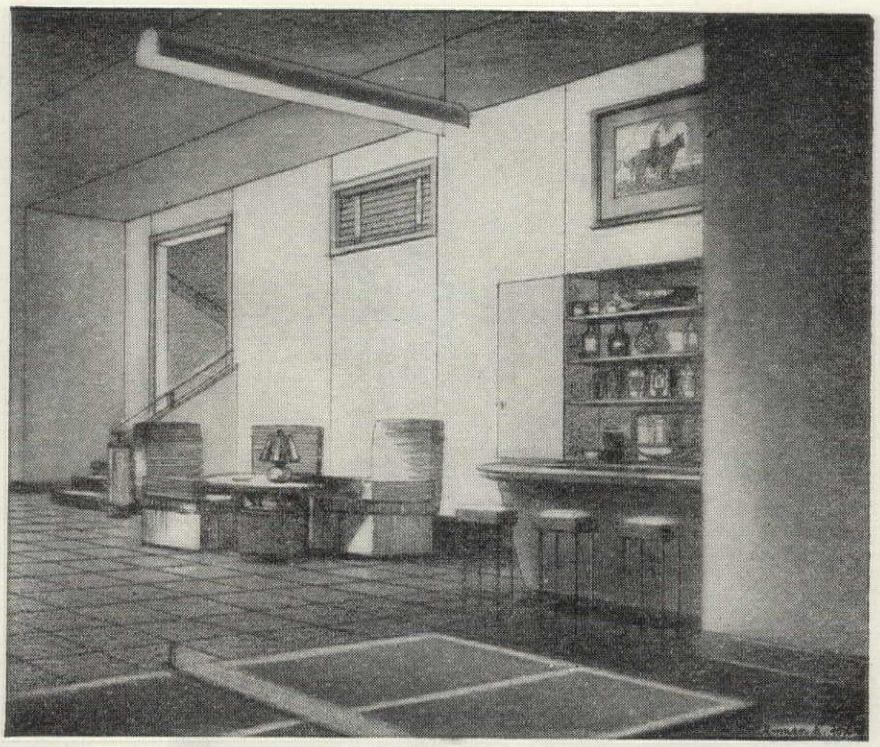
Address.....

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



There are three grades of Douglas fir plywood panels made especially for various phases of wall construction. PLYWALL is made especially for standard wallboard use; PLYPANEL is a premium panel used for quality interior work; PLYSCORD is a utility panel made for wall and roof sheathing.

Walls of Douglas Fir Plywood... easy to plan, easy to apply!



Follow these Simple Suggestions in Planning Wall Designs with Large, Durable Plywood Panels!

There is no special or complex planning necessary in designing a wall treatment with Douglas fir plywood. Just follow a few basic suggestions—and the variation of finished design is almost endless.

One of many possibilities is illustrated here. In this case, the panels of Douglas fir plywood have been placed so that the vertical joints lend a pleasing design and at the same time give the basement playroom an illusion of extra height. As in all cases, the architect started with the openings and divided the plain wall spaces in an orderly pattern for the most pleasing effect. This particular basic design treatment is diagramed at the right.

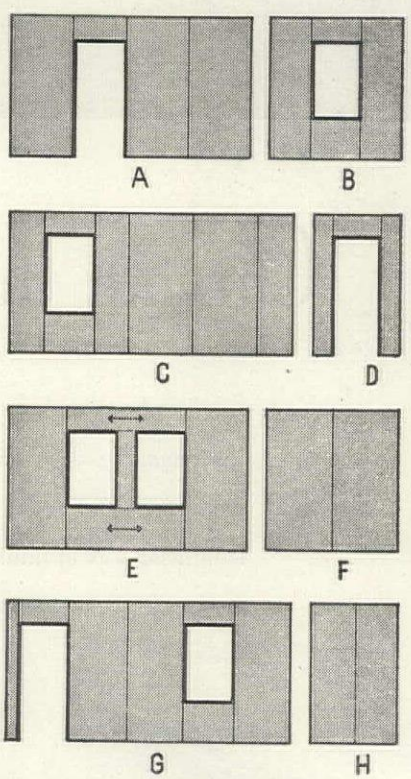
Douglas fir plywood is an ideal material for walls — strong, rigid, kick-proof and puncture-proof. No matter what design treatment is used, the large, light-weight panels go up quickly and easily. They can be worked by hand or with power tools and they hold nails or screws right at the edge without danger of splitting.

Remember — the variety of wall design treatments is limited only by the architectural plan and the ingenuity of the designer. For more detailed information about plywood for wall construction, write the Douglas Fir Plywood Association.

DOUGLAS FIR PLYWOOD
LARGE. LIGHT. STRONG.
Real Wood PANELS

No. 6 of a Series

Vertical Treatment of Panels For an Attractive Wall Design

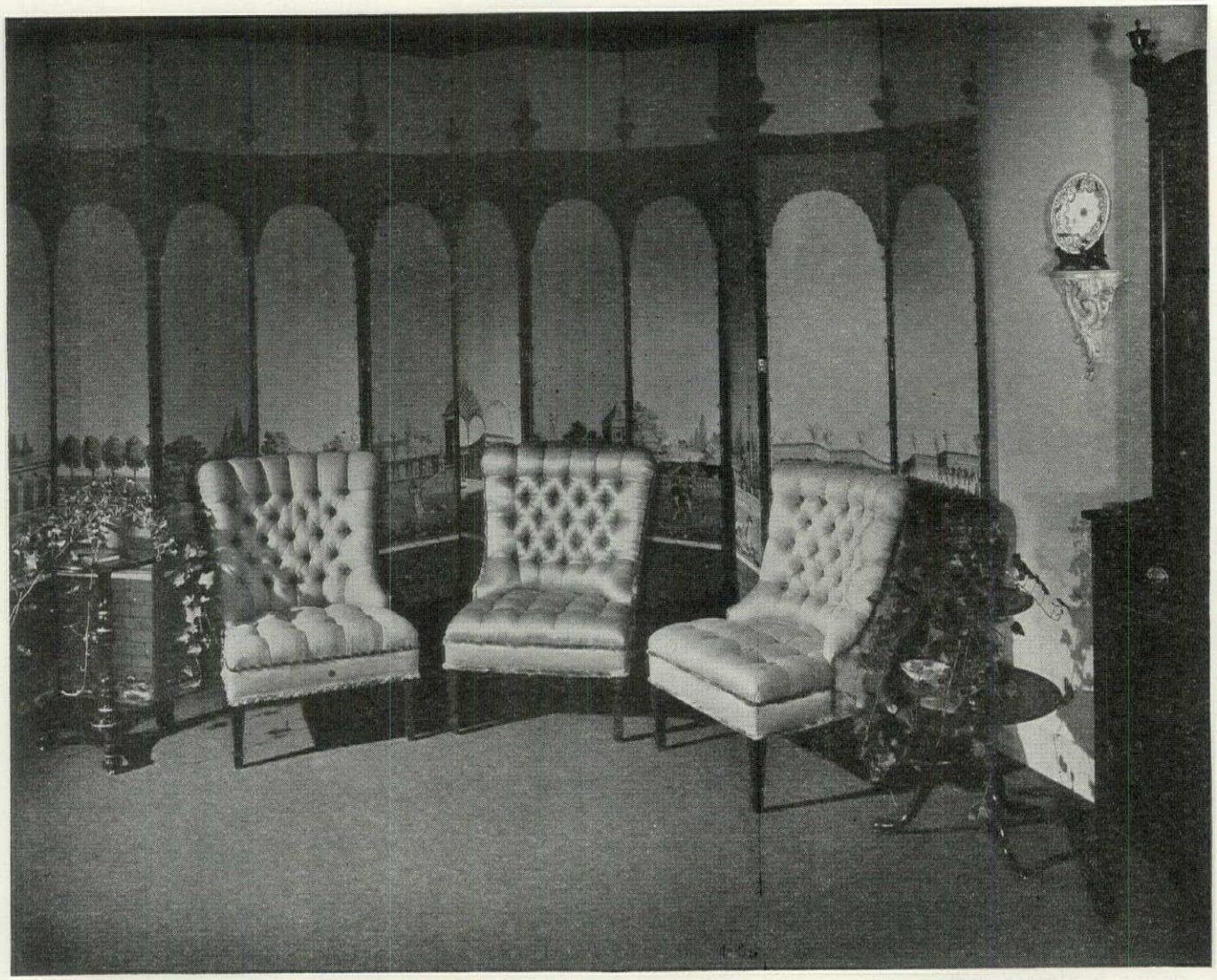


CAN PLYWOOD BE SPECIFIED NOW FOR POSTWAR USES?

The increased capacity of the industry will make MORE Douglas fir plywood available for civilian consumption THAN EVER BEFORE, as soon as the needs of the armed services lessen or war restrictions are lifted. There will be no reconversion delays; the same types and grades of Douglas fir plywood that are now being made can flow immediately into peace-time building and construction.

DOUGLAS FIR PLYWOOD ASSOCIATION

Tacoma 2, Washington



Curving the Corner . . .

With a sofa along the window wall, this engaging decorative corner arrangement of screen and chairs makes for a delightful surprise in compact rooms. It is typical of the Tomlinson way of thinking in today's way of living. This is the imaginative touch, the contemporary flair you find in Furniture by Tomlinson.

EXHIBITS

IN NEW YORK:
385 MADISON AVENUE

IN CHICAGO:
1666 MERCHANDISE MART

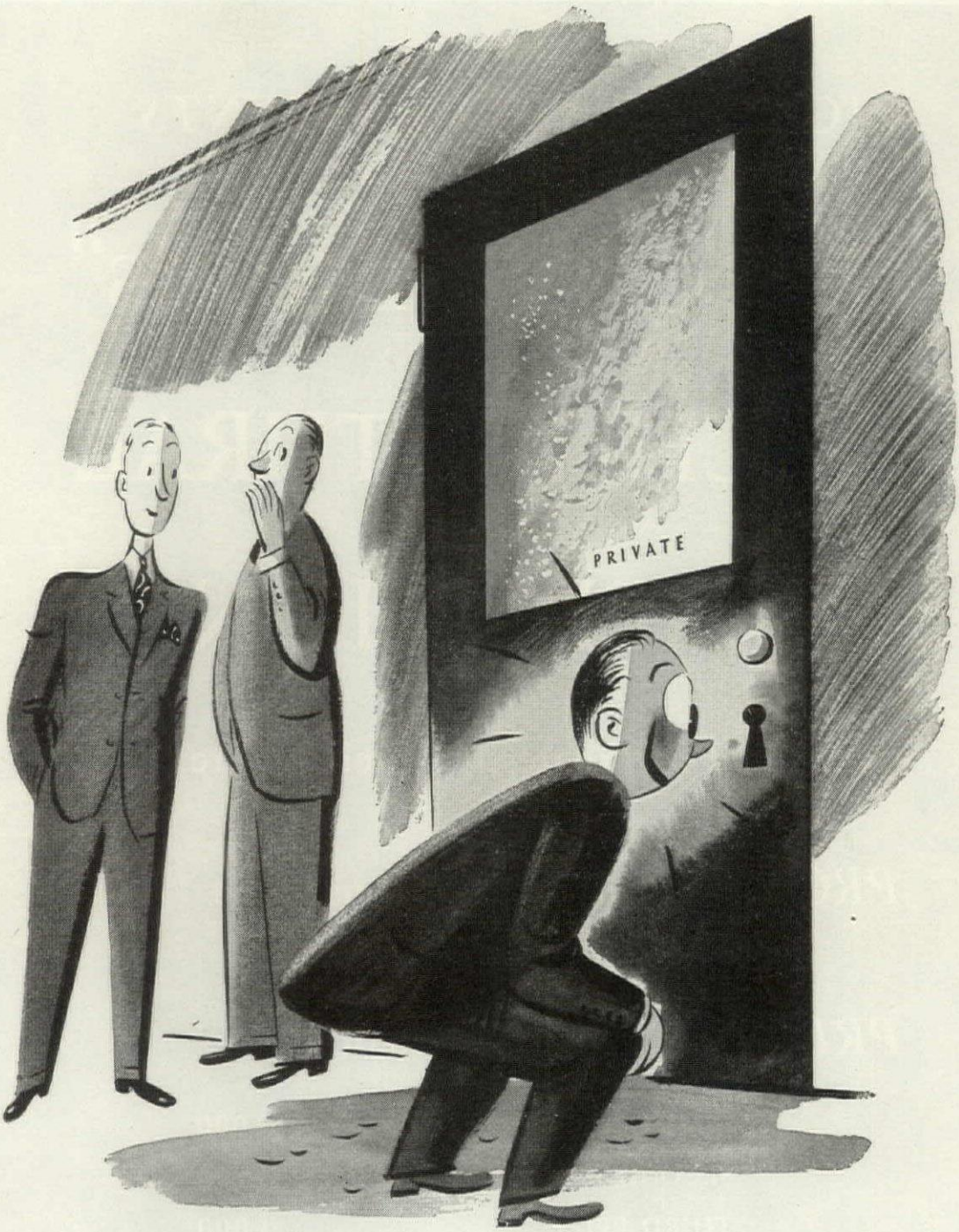
IN PITTSBURGH:
907 PENN AVENUE

AND IN HIGH POINT,
NORTH CAROLINA

Furniture by TOMLINSON

Furniture by

TOMLINSON



"He's looking at the Chief's new Columbia Blinds"

rowds always gather and gape whenever new Columbia Venetian inds appear. Why? Well, because they're so good to look at, the first place. And because their smoothly operating mechan- m can be relied on to stay in top working order. In short, olumbia blinds are the best quality you can get for the money!

Right now, supplies are still limited, so your present blinds may have to do for awhile. But when materials are available again, you'll find a wide selection of fine styles. And, when you consult your Columbia dealer, you can be assured of satisfaction, for every Columbia dealer is carefully chosen to handle installation and service.

See Sweet's Architectural Catalogue for more complete information on Columbia products.

Columbia WINDOW SHADES AND VENETIAN BLINDS

THE COLUMBIA MILLS, INC. • 225 FIFTH AVENUE, NEW YORK 10, N. Y.

RICH'S-ATLANTA *PRESENTS*

"Georgia Builds" ARCHITECTURAL COMPETITION

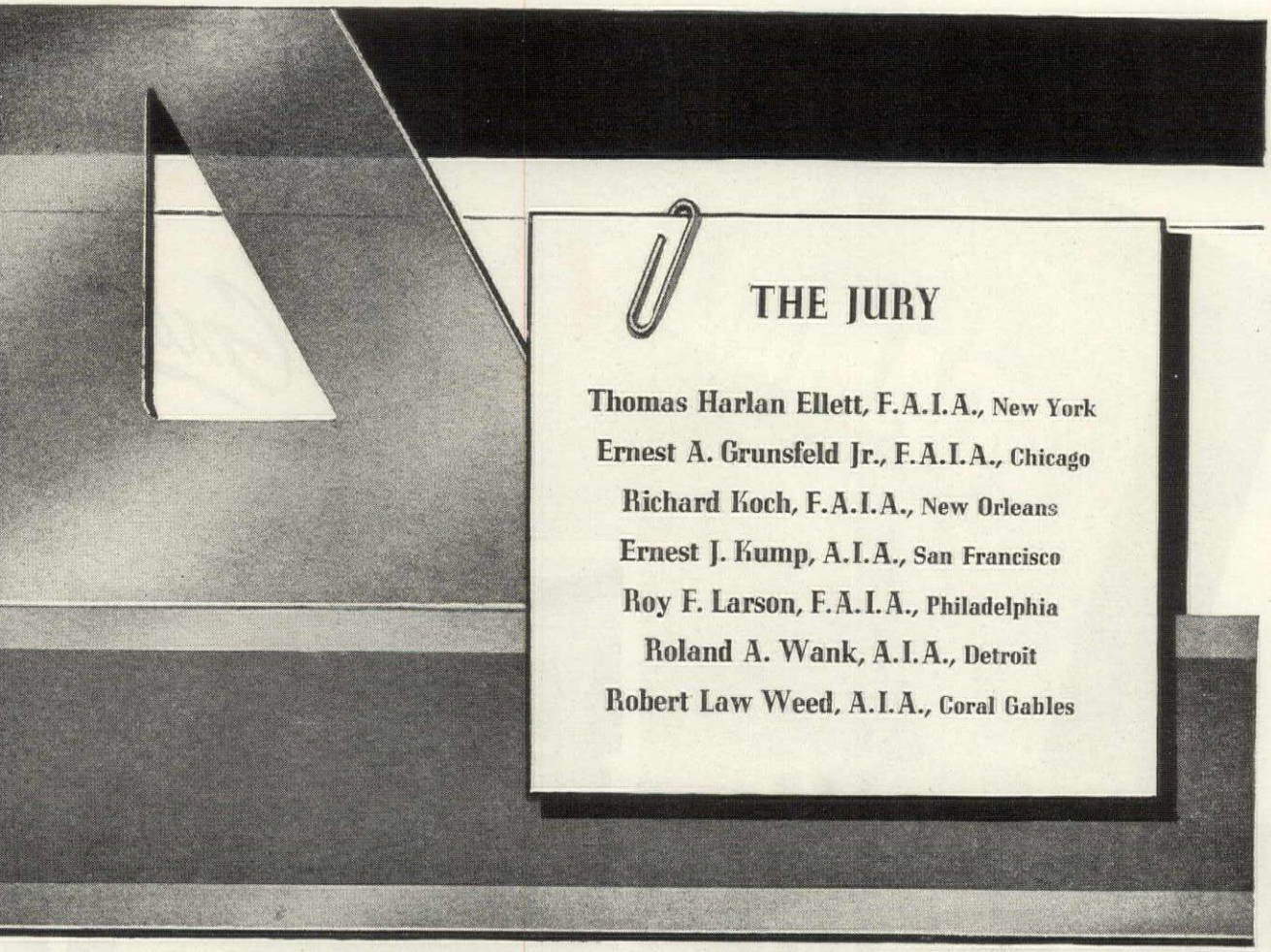
conducted by Progressive Architecture

PROBLEM: A realistic house for a family in Georgia

PRIZES: Totaling $10,000

FIRST PRIZE	$3,000
SECOND PRIZE	1,500
THIRD PRIZE	1,000
FOURTH PRIZE	500
25 MENTIONS $100 EACH	2,500
SPECIAL GEORGIA PRIZE	1,500
	$10,000

The Official Program of the Progressive Architecture—Rich's, Inc., Architectural Competition was published in the October issue and is reprinted in the November issue of Progressive Architecture.



THE JURY

Thomas Harlan Ellett, F.A.I.A., New York
Ernest A. Grunsfeld Jr., F.A.I.A., Chicago
Richard Koch, F.A.I.A., New Orleans
Ernest J. Kump, A.I.A., San Francisco
Roy F. Larson, F.A.I.A., Philadelphia
Roland A. Wank, A.I.A., Detroit
Robert Law Weed, A.I.A., Coral Gables

CH'S, Inc. of Atlanta, largest department store in the South, takes pride in sponsoring this on-wide Architectural Competition in aboration with Progressive Architecture — cil Points with prizes totaling $10,000.

The problem calls for a small house for a ly living in Georgia. Consideration must be n to the climate, the topography and the e of living in the South. The materials be anything that will benefit your design. Henry J. Toombs, A.I.A. of Atlanta and neth Reid, A.I.A., Editor of Progressive Archi- ure are the professional advisers. The com- ion meets the code set by the American tute of Architects. The competition started the publication of the Official Program e October issue of Progressive Architec- and closes January 21, 1946. No entry ks, no fees, no material limitations.

Mail the coupon at once and get your copy e Official Program reprint.

RICH'S

ATLANTA

KENNETH REID, A.I.A.
Progressive Architecture, 330 W. 42nd Street, New York 18, N.Y.

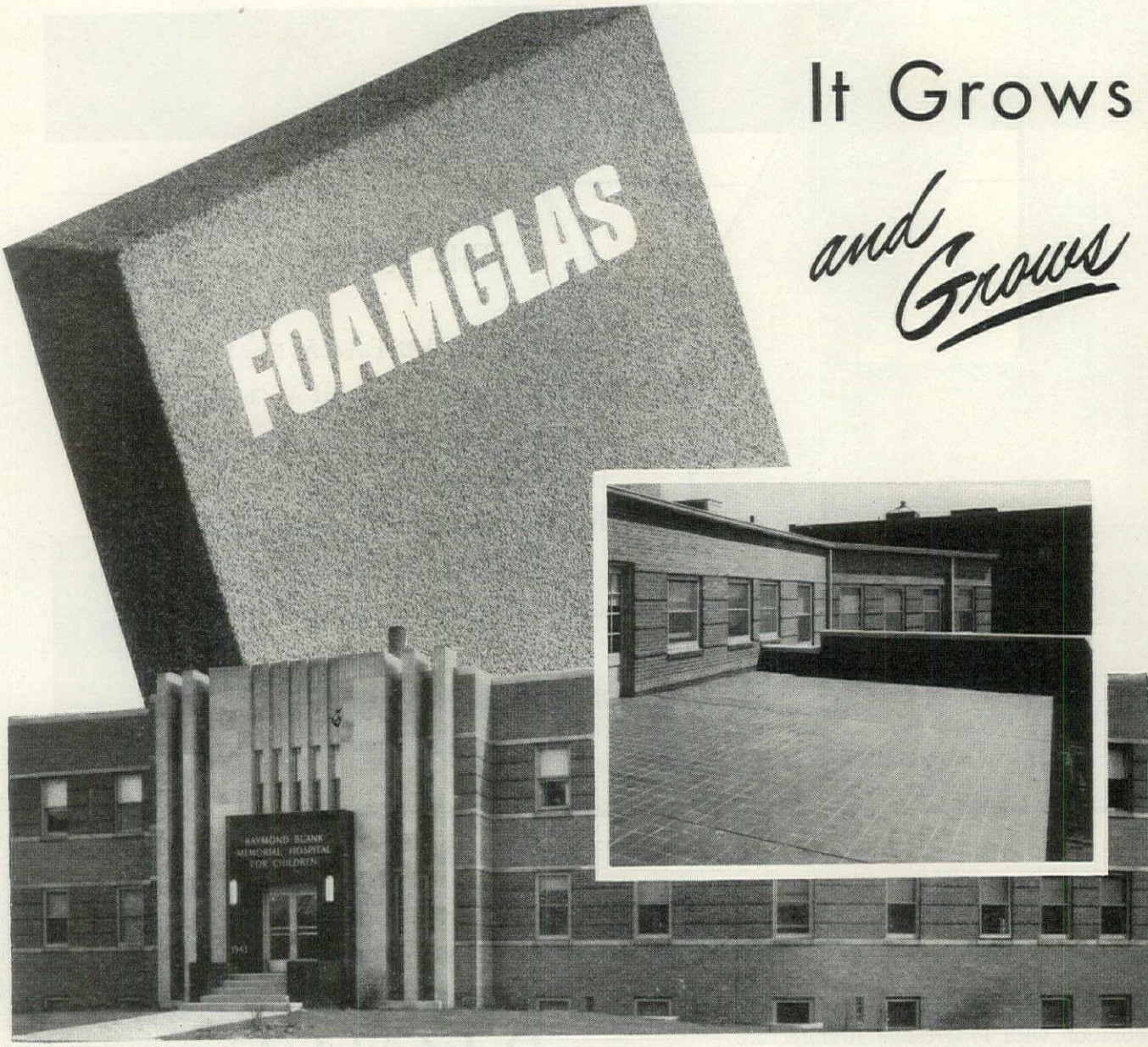
Please send me without obligation, a reprint of the Official Program for the Progressive Architecture—Rich's, Inc. Architectural Competition.

NAME_____

ADDRESS_____

CITY AND ZONE_____ STATE_____

It Grows and Grows



In the new Raymond Blank Memorial Hospital for Children, at Des Moines, Iowa, a wide expanse of roof promenade, or sun deck, is insulated with PC Foamglas. Under the red tile wearing surface PC Foamglas retards travel of the intense heat of the sun to rooms below. Light in weight, rigid, strong, PC Foamglas does not crack or crush under floor loads heavier than are usually encountered. (General Contractor, Kucharo Construction Co., Des Moines, Iowa.—Architect, Wetherell and Kanison, Des Moines, Iowa—Roofer, Barrick and Sons, Des Moines, Iowa.)

Among your clients and prospects, the use of PC Foamglas, the new cellular glass insulating material, keeps growing and growing. Plant owners all over the country are using it to insulate roofs, floors, walls, tanks and equipment.

PC Foamglas helps maintain temperature and humidity levels. It is impervious to acid fumes, moisture, vapor. It's verminproof and fireproof. Best of all, its insulation value is *permanent* . . . lasts as long as the building stands. Check these advantages against other insulating materials you are now using and note the difference.

You can recommend PC Foamglas to your clients with full confidence in its satisfactory service. *Send the convenient coupon today for free booklets describing this insulating material that stays new.* Pittsburgh Corning Corporation, Room 690, 632 Duquesne Way, Pittsburgh 22, Pa.

· *Also manufacturers of PC Glass Blocks* ·

PC FOAMGLAS *Waterproof Fireproof* **INSULATION**

T. M. REG. U. S. PAT. OFF.

MAIL COUPON TODAY

Pittsburgh Corning Corporation
Room 690, 632 Duquesne Way
Pittsburgh 22, Pa.

Please send along my free copies of the booklets checked below.

_____Roofs _____Walls _____Floors

*Name*_____

*Address*_____

*City*_____ _____ *State*_____

BUILDING PREVIEW

THE consuming curiosity of the public to see the world of tomorrow is one thing, the minute examination which building professionals now give to projected structures quite another. Theirs is not a superficial concern with external appearances. Rather it is a keen appraisal of what representative architects and those who will build, finance and operate these buildings have evolved as a new and progressively acceptable standard.

Despite preoccupation with its war job, the building industry has at the same time had to ponder and prepare for its busy future. A measure of its preparation is found in the following pages on which are presented a great variety of structures committed for early building. To assemble this material THE FORUM addressed almost 30,000 people. The projects represent a national cross section and cover almost the whole range of building.

As might be expected, current uncertainties were reflected in many of the responses—the availability and price of materials, the demands of labor, the possibility of government controls, the question of financing at today's higher prices. How quickly these and thousands of other buildings will move from drafting boards onto foundations will be decided as rapidly as these problems are favorably met. But there is overwhelming evidence that Building is preparing for a vast program and at an unprecedented rate. The offices of architects and engineers have never been more busy.

As might be expected, commercial structures, first to take advantage of the functional approach to architecture, now lead the field in

contemporary design. No longer are traditional forms even considered for such construction. Institutional buildings have thrown off their staid Georgian jackets and are following this trend to an ever-increasing extent. Residential structures lag, as always, but even here there is no dearth of straightforward livable designs.

Another factor which crops up repeatedly in the current material is the conception of unified rather than fragmentary design—a relating of the function of buildings to their existing environment or the concurrent planning of an entire area. Instead of an isolated store or office building, good in itself, many of the new designs are thought out as part of an integrated scheme. The new Bellevue Hospital extension in New York (page 99) is an excellent example of this method of design, representing as it does a synthesis of clinical facilities with the needs of N.Y.U. college of medicine. The shopping center in the desert (page 164) and another far from town in the middle of a superhighway (page 156) are other illustrations of this kind of thinking. Like formerly published work such as the remodeled Main Street in Niles, Mich. (FORUM, Oct. '44) and Linda Vista Shopping Center (Sept. '44), all are indicative of an over-all scale which is becoming the new approach to design. New techniques developed during and just before the war, such as radiant heating, prefabricated storage units, solar windows, built-in summer sun-proofiing, etc., occur in so many instances that they are made conspicuous only by omission. What a few years ago was a matter of isolated experimentation has now become both more widespread and integrated into over-all designs of real maturity. Even more important, such assured handling of new concepts is no longer reserved for the gifted few.

In future months THE FORUM will continue the policy, instituted here, of sampling the best current work definitely ready for construction. Although the number of plans scheduled to go ahead is enormous, this knowledge should not prove heady to an industry used to absorbing the shocks of a capricious economy. It will be evident to realistic thinkers that the much-touted postwar building boom will become a fact only when many present difficulties are resolved.

Meanwhile, study of these pages helps clear design uncertainties, points the new direction building will take. Important to recall is the historic fact that design standards established at the start of a building cycle persist through that cycle. Clearly the trend is forward. Progress is being made.

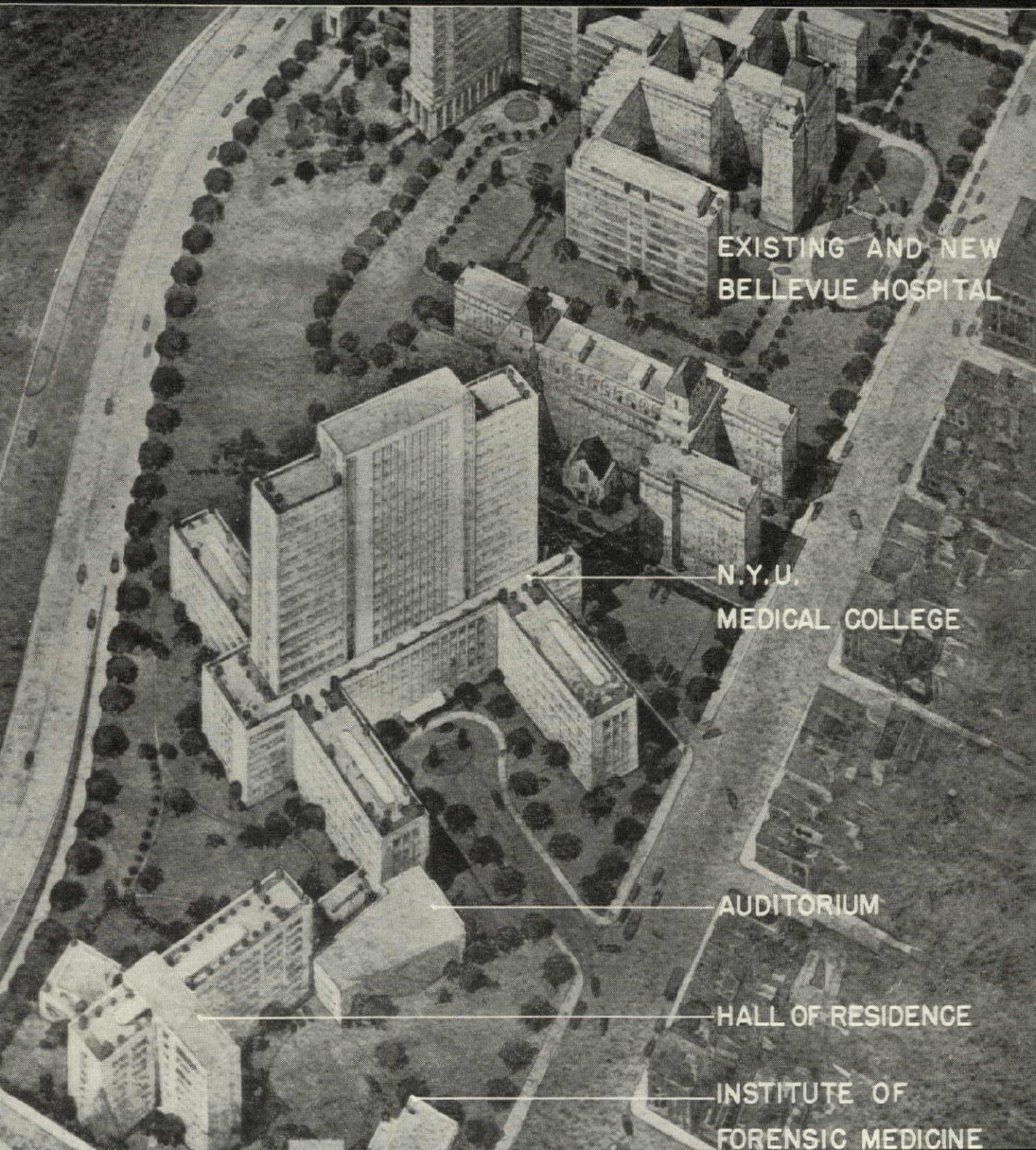
I. MEDICAL COLLEGE

A complete new school in six units forms part of planned Bellevue Hospital Medical Center.

NEW YORK UNIVERSITY, Owners

SKIDMORE, OWINGS & MERRILL, Architects

INSTITUTIONAL



MEDICAL COLLEGE AND HOSPITAL

"An organization for medical education, research and community care" is the faculty's own way of describing the new plant of New York University's College of Medicine. The description is apt and significant, for in its final layout the sharp lines which ordinarily separate school, laboratory, clinic and hospital have largely disappeared. This is partly due to the fact that the 6-unit plant is designed as an organic part of the huge Bellevue Hospital with which the College has been identified for over a century. But, to a much larger extent, the building is merely the architectural expression of profound changes taking place in the medical world. These changes, according to Dr. Donal Sheehan, Acting Dean of the College of Medicine, involve new attitudes towards patient, doctor and student.

For the patient this implies a physical plant where he can get total, life-long medical service—periodic check-ups, access to specialists, diagnoses and laboratory tests, out-patient treatment and full hospitalization—all under one roof. Such a service is provided in the 19-story main building.

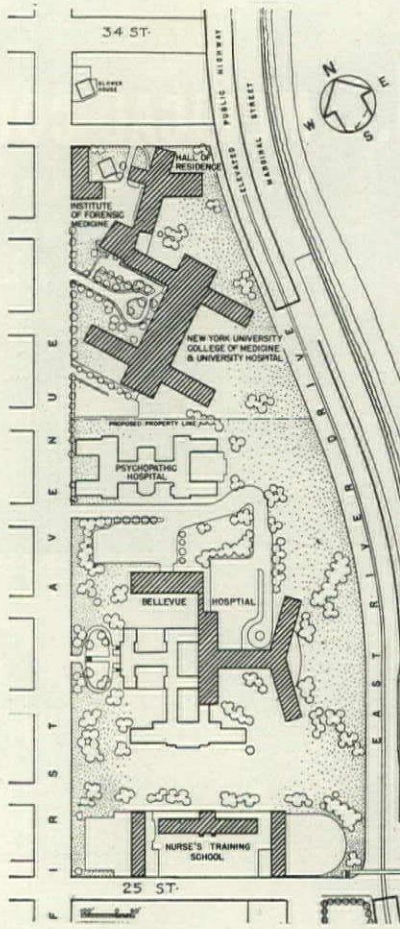
For the doctor-teacher a totally different problem—that of "making the school the *geographic* center of his professional life"—is involved. Few medical schools can pay the salaries necessary to hold first-rate men on the faculty on a full time basis. Hence they use other hospitals, maintain offices elsewhere, etc. To partly compensate such faculty members and to enable them to shift their geographic center of gravity to the College, the new project will include a 450-bed hospital to which they can bring their patients, and private offices in the clinic to which they can bring their out-patients.

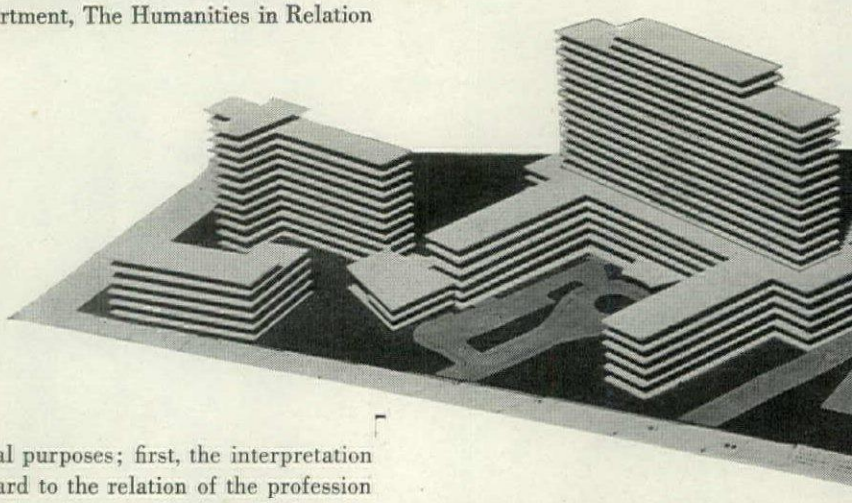
For the student still other problems are posed. The rapidly changing character of medical science as a whole is forcing the revamping of medical curricula. At New York University this involves not only new concepts of what to teach but how to teach it. "One of the great needs in medical education," says Dr. Sheehan, "is to give the future doctor a sense of social responsibility." To orient the student, the College has decided to organize a new department, The Humanities in Relation to Medicine. This department will serve several purposes; first, the interpretation of the history of medicine, with particular regard to the relation of the profession to society; second, the guidance of the medical student, so that he will learn to respect his profession's past and to dedicate himself to its future; and third, the continued education of the practicing physician in the area of the school so that, in the press of earning a living, he will not lose sight of the great aims of his profession.

The architects* are enthusiastic about their group work with the Steering Committee and the faculty at large. "We went right down and lived with them," says Mr. Robert Cutler, firm member in charge of the project. "We set up our drafting room in the faculty office and, for 6 to 8 months, actually lived at the school." It was months before a pencil was put to paper. First came a survey of the Bellevue area; then an analysis of five possible sites; finally, research into the detailed requirements of the school which included a physical survey of the present buildings and how well (or badly) they functioned. Meanwhile, a thorough research of each department was made and a functional outline of its operation and requirements.

Only then did the plans begin, and even these were called "space diagrams" and not plans. These were studied and restudied until the best possible organization was achieved. On the basis of this, architectural plans were begun, site planning determined and the general character of the exteriors determined.

* Skidmore, Owings and Merrill under the consulting direction of Edwin A. Salmon.





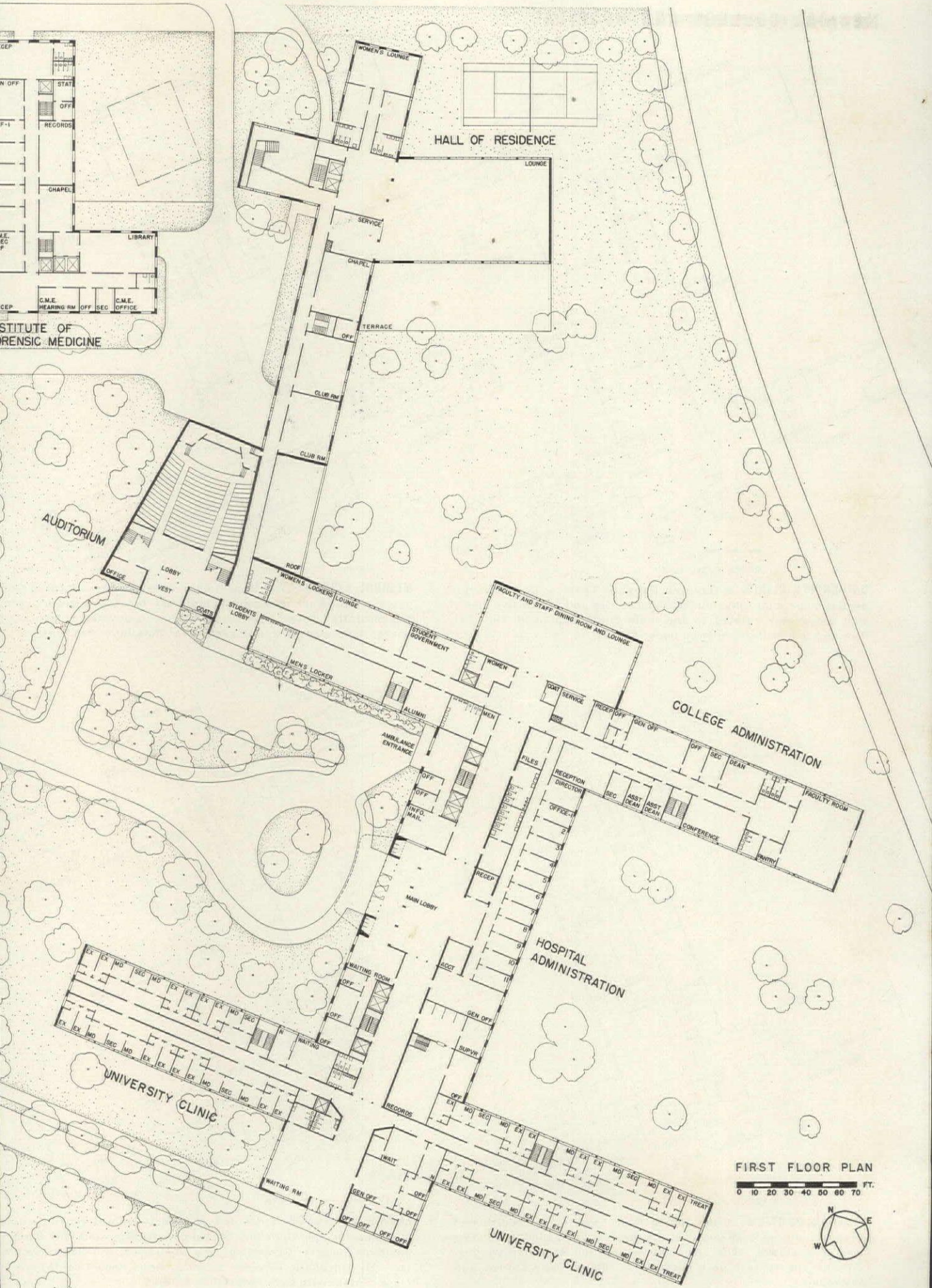
THREE-DIMENSIONAL MODEL proved valuable in visualizing vertical relationships after space diagrams had been worked out for each department. In it, from left to right, are shown:

DEPARTMENT OF FORENSIC MEDICINE. First to be built, this unit will house the City's criminal detection laboratories and morgue. Here students will study all aspects of medical criminology.

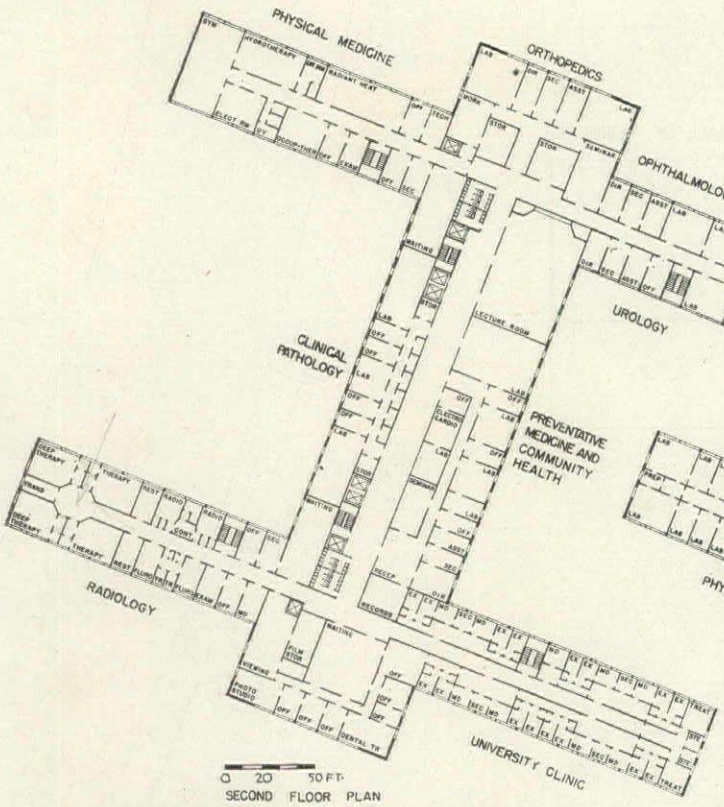
HALL OF RESIDENCE provides complete living facilities for a portion of the College's students, internes, graduate nurses and technicians. All main rooms face south.

AUDITORIUM seating 500 will serve both college and profession.

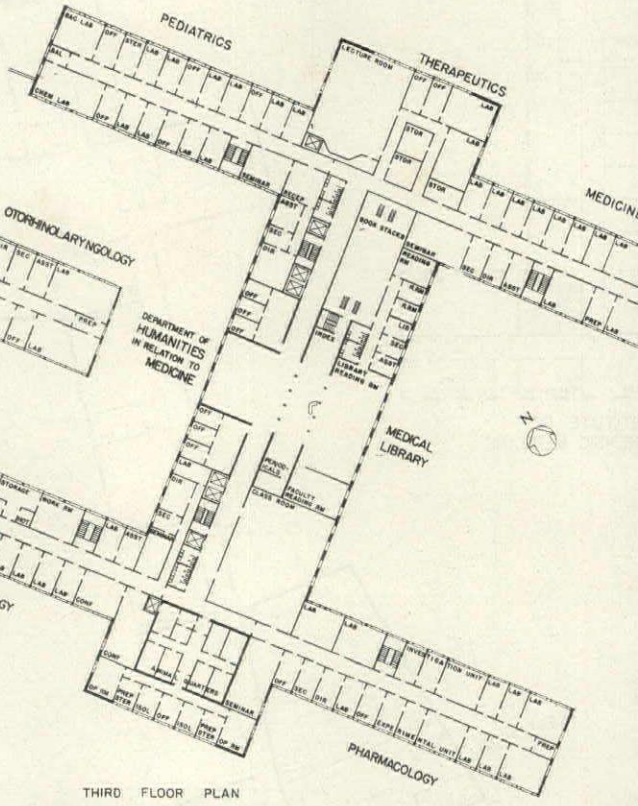
MAIN BUILDING houses College of Medicine and University Clinic in 5-story H-shaped base. The University Hospital occupies the 14-story tower above.


HALL OF RESIDENCE
WOMEN'S LOUNGE
LOUNGE
SERVICE
CHAPEL
TERRACE
OFF
CLUB RM
CLUB RM
ROOF
AUDITORIUM
OFFICE
LOBBY
VEST
COAT
STUDENTS LOBBY
WOMEN'S LOCKERS
LOUNGE
STUDENT GOVERNMENT
MEN'S LOCKER
FACULTY AND STAFF DINING ROOM AND LOUNGE
WOMEN
ALUMNI
MEN
AMBULANCE ENTRANCE
COLLEGE ADMINISTRATION
COAT
SERVICE
RECEP
OFF
GEN OFF
SEC
DEAN
FACULTY ROOM
PANTRY
CONFERENCE
ASST DEAN
ASST DEAN
RECEPTION
DIRECTOR
OFFICE
FILES
INFO. MAIL
MAIN LOBBY
RECEP
HOSPITAL ADMINISTRATION
ACCT
SUPVR
GEN OFF
RECORDS
WAITING ROOM
WAITING
UNIVERSITY CLINIC
WAITING RM
GEN OFF
UNIVERSITY CLINIC
STAT
OFF
RECORDS
CHAPEL
LIBRARY
C.M.E. HEARING RM
OFF
SEC
C.M.E. OFFICE
STITUTE OF
ORENSIC MEDICINE
FIRST FLOOR PLAN
0 10 20 30 40 50 60 70 FT.
N
E
W

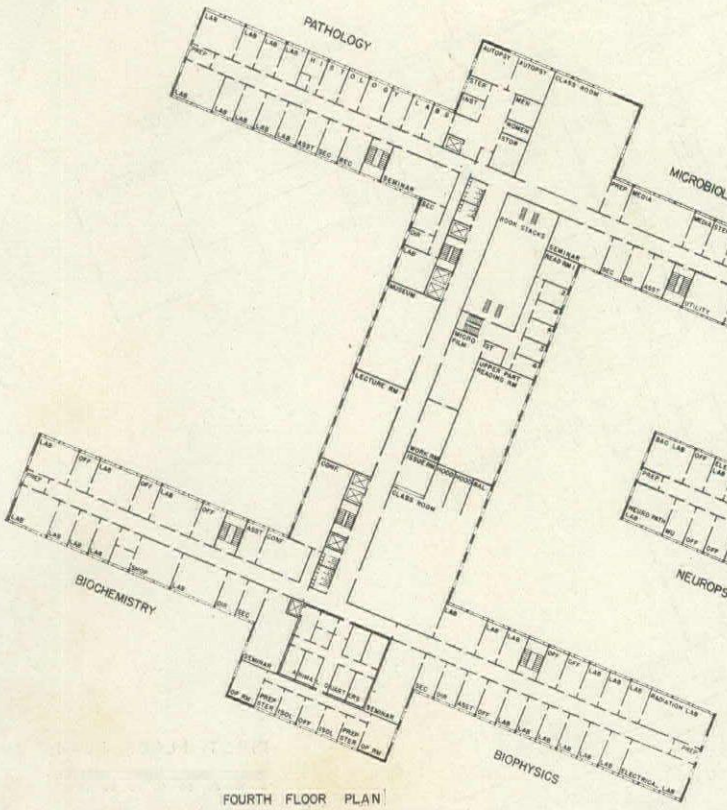
MEDICAL COLLEGE AND HOSPITAL



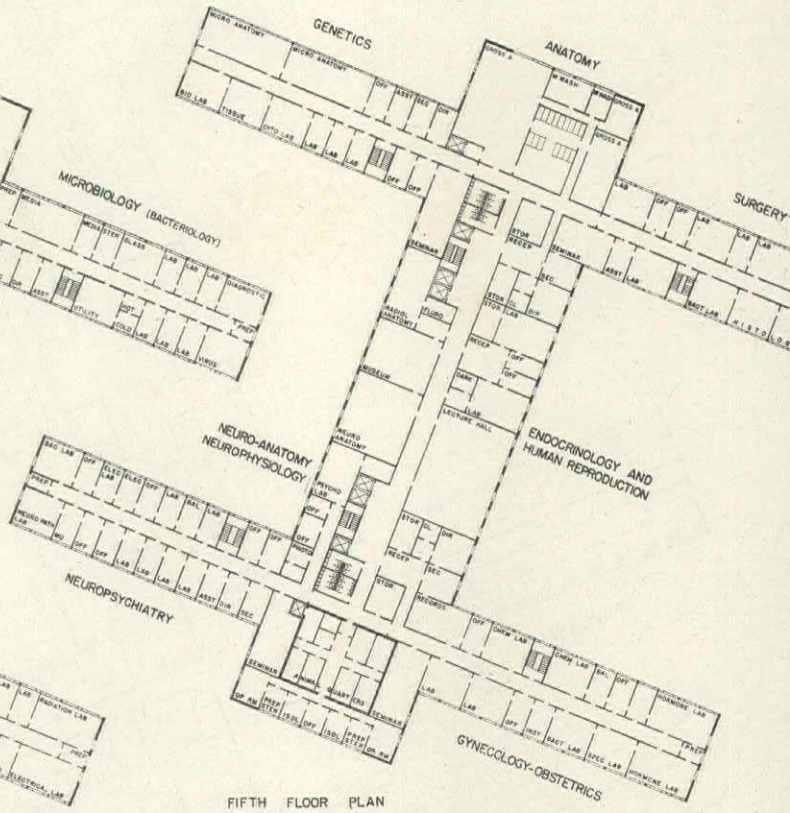
UNIVERSITY CLINIC, X-Ray and Physical Therapy Departments, dentistry, photography, clinical laboratories and preventive medicine are closely related to the main clinic section on the first floor and to hospital proper on upper floors.



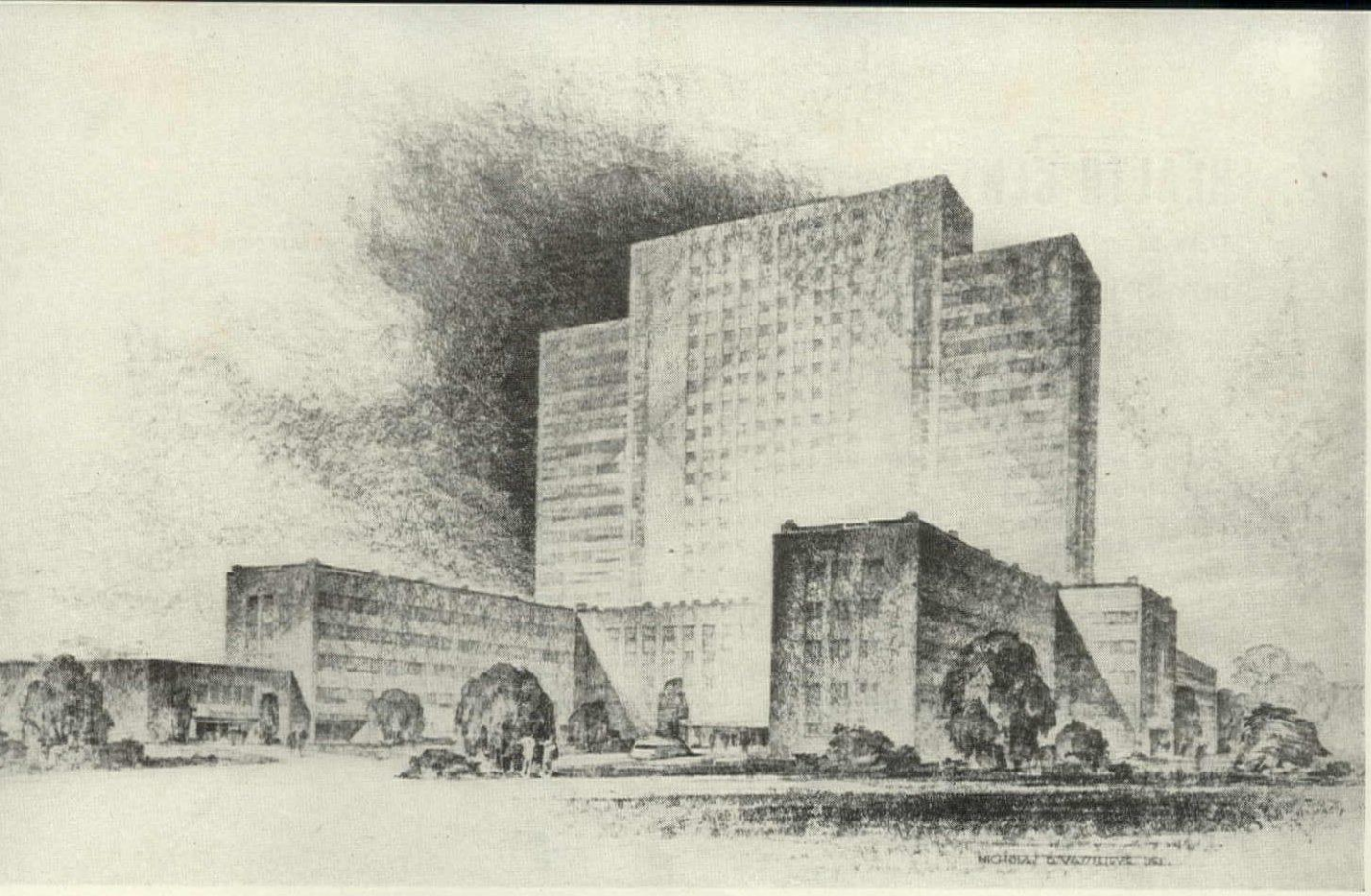
MEDICAL LIBRARY and Department of Humanities form a foca point of cultural and scientific interest for entire group: they are centrally located. Remainder of floor is devoted to laboratory space, developed on a unit system for maximum flexibility.



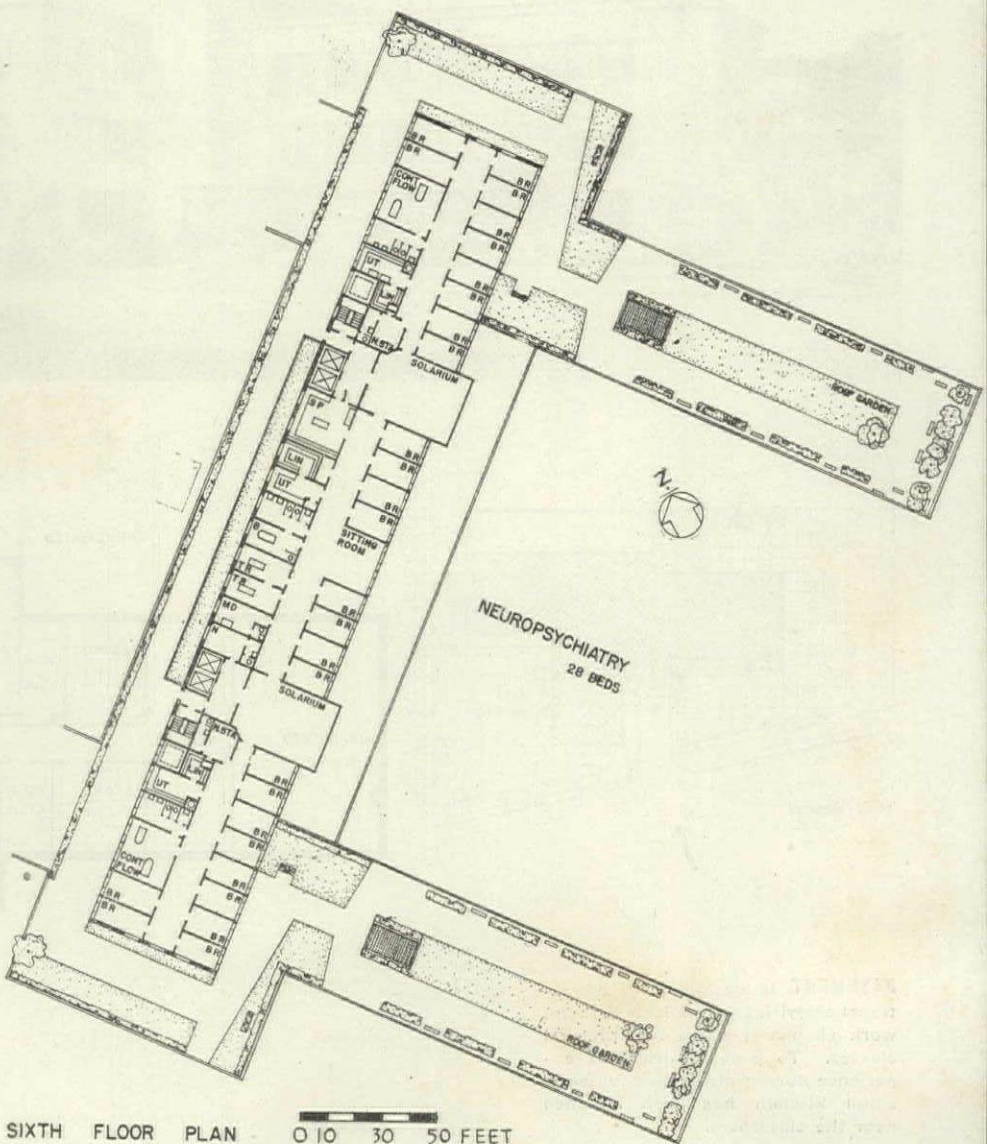
CENTRAL PORTION of the fourth floor provides, in addition to elevators and general services, the upper part of Library reading room and stacks. The remainder—including the four wings—contains the typical unit system for offices, laboratories and classrooms.



ENTIRE 5TH FLOOR is devoted to general laboratory and specia facilities for the Divisions of Human Biology and the Depart ments of Surgery, Gynecology and Obstetrics, and Neuropsychia try. By adequate elevator service these departments are i close contact with both hospital and clinic.



THE UNIVERSITY HOSPITAL, aside from its administration and reception facilities on the first floor, begins at the 6th floor (right). In general, this floor is typical of 12 floors above. There are no wards. Private and semi-private rooms face southeast, with all service areas banked along the northwest. Operating rooms are located on the 18th floor. All improvements in air conditioning, lighting, acoustics and scientific equipment will be incorporated in this floor. The 19th floor is devoted to solaria and sun decks, while the 20th floor houses elevator and mecanical equipment.



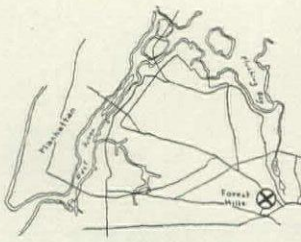
2. HEALTH CENTER

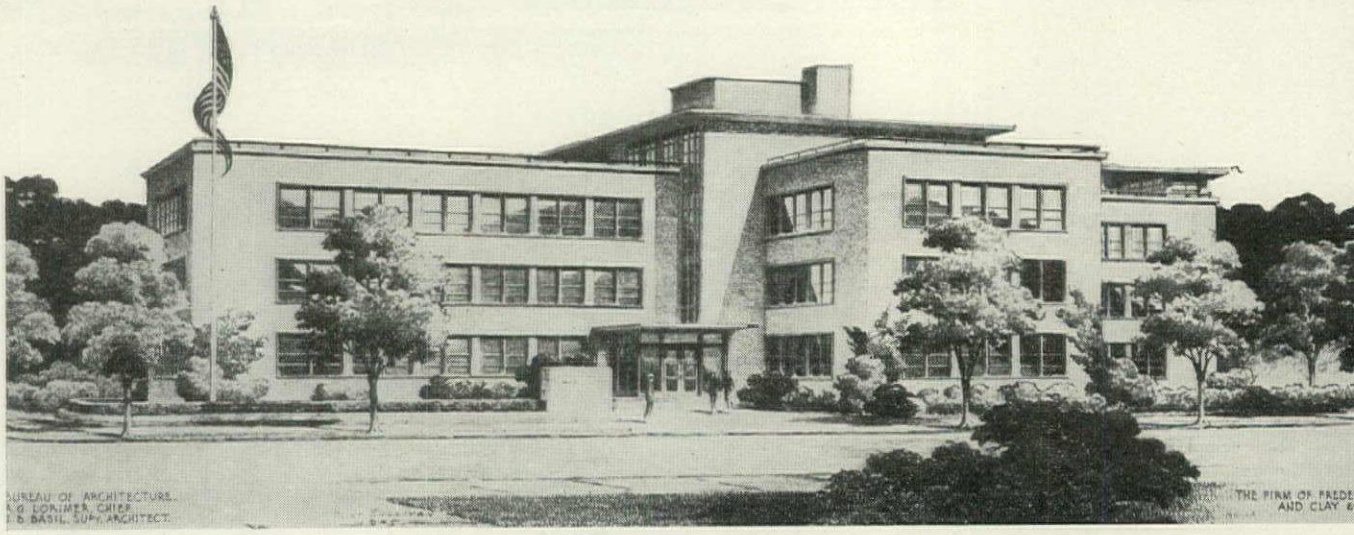
T-shaped unit provides excellent segregation of public areas and administrative workrooms.

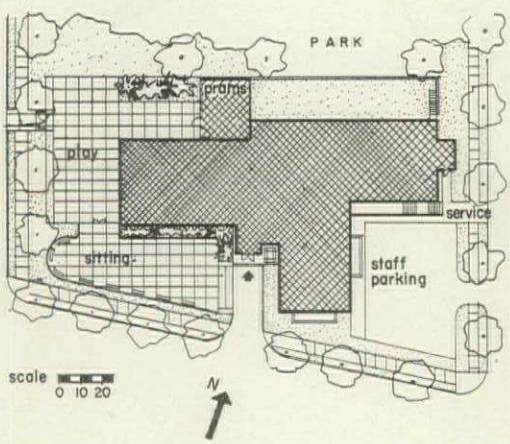
DEPARTMENT OF PUBLIC WORKS, Owner

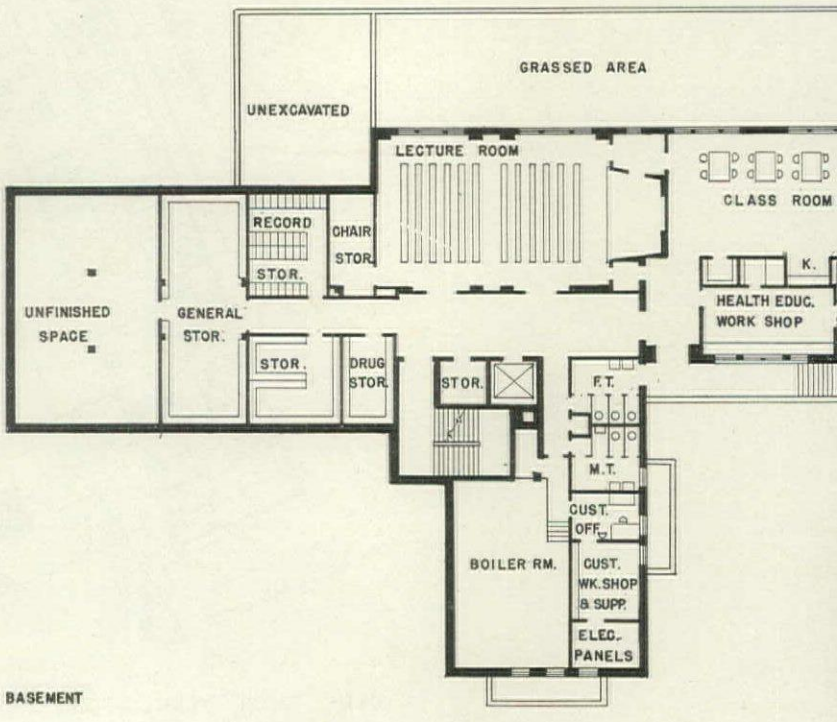
FREDERICK G. FROST and CLAY & CORRIGILL, Architects

In line with the growing emphasis on preventive medicine, the N. Y. Department of Health has authorized plans for a citywide network of examination and educational centers devoted to eliminating the causes of disease. Already 15 designs for such institutions have been completed and approved by the Department of Public Works under whose auspices construction will be carried out. The simple, clean-cut building shown here will serve both the Maspeth and Forest Hills sections of Long Island. Although the site chosen is of necessity in a densely built-up area serviced by fast transportation lines, a small park scheduled for the adjacent space will provide insulation against city noise and crowds. The plot itself will be landscaped to provide outdoor seating, a small playground and parking spaces for staff cars and perambulators.



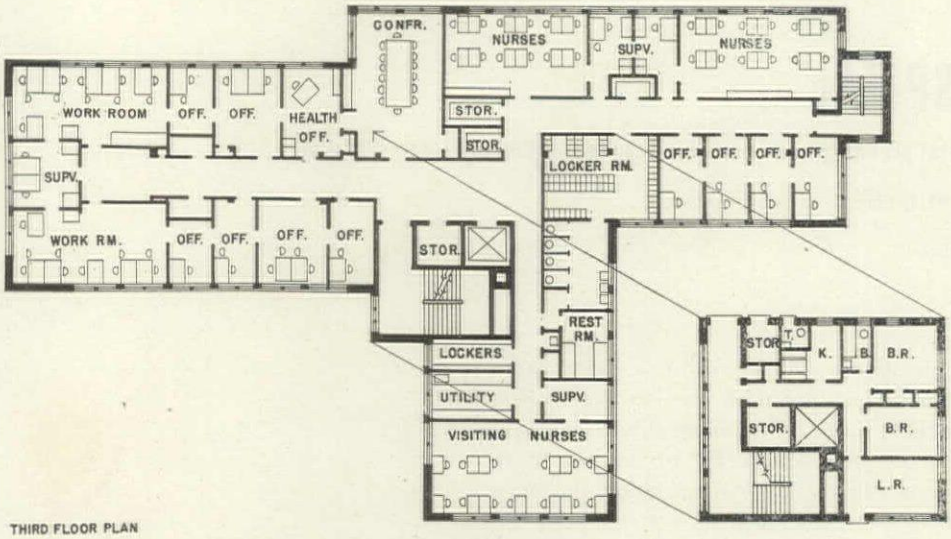






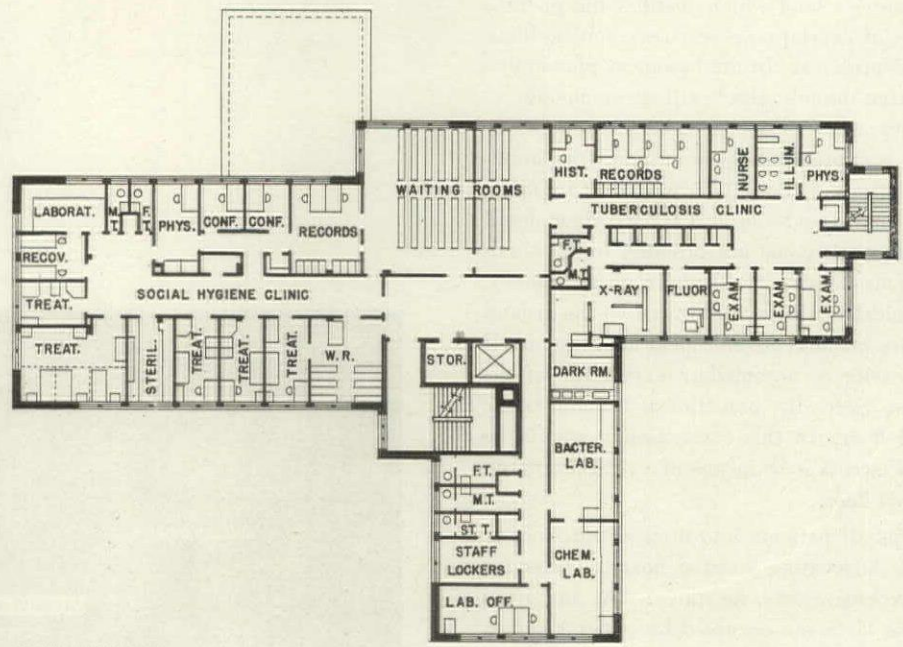
BASEMENT is designed for educational activities with a lecture room, work shop and space for informal classes. To provide practical experience during nutrition courses, a small kitchen has been included near the classroom.

BASEMENT



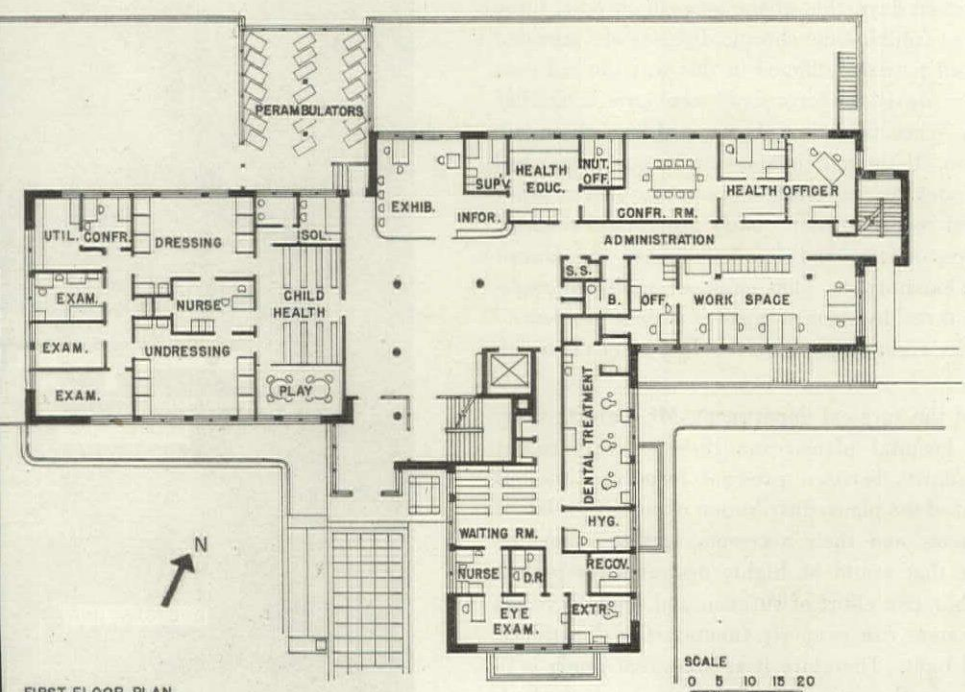
THIRD FLOOR PLAN

THIRD FLOOR is divided into offices and work rooms for the exclusive use of nurses. Penthouse at right includes a janitor's apartment and serves an open sundeck for patients.



SECOND FLOOR PLAN

SECOND FLOOR is an adult examination clinic emphasizing tuberculosis and social hygiene. Testing laboratories for on-the-spot analyses are an important feature.



FIRST FLOOR PLAN

FIRST FLOOR is devoted to child health and pre-natal care. Offices are also provided for general information and interviews and for administration of the building.

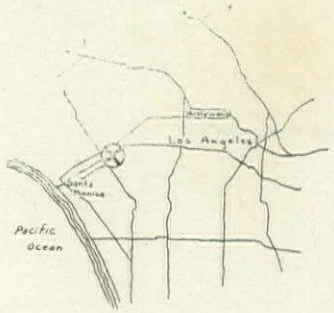
3. MEMORIAL HOSPITAL

An unusual analysis of hospital planning and operation resulted in this impressive design.

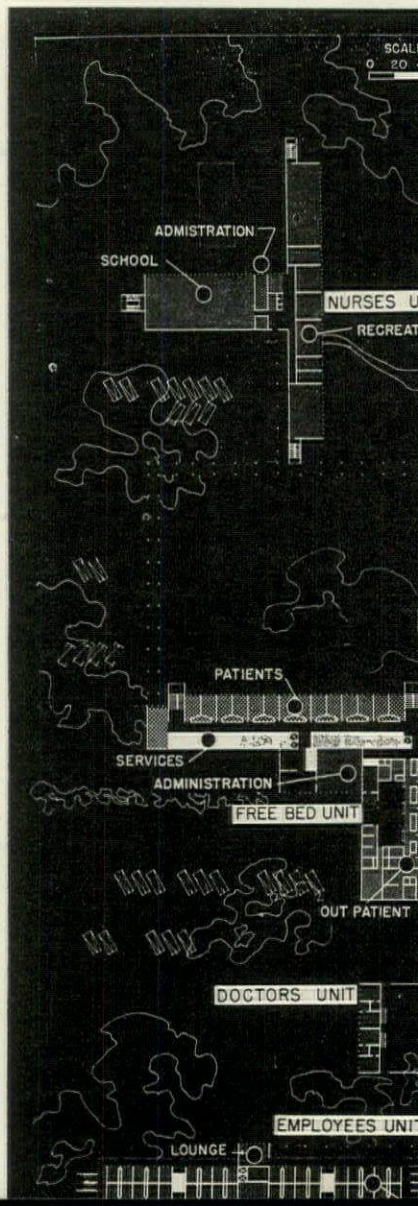
MEDICAL MEMORIAL OF SOUTHERN CALIF., Owner

WILLIAM L. PEREIRA, Architect

After a one-man study of hospital planning that would do credit to a major market research organization, architect William Pereira produced this striking building group which will be erected in Beverly Hills, Calif. While many of his conclusions reject generally accepted principles of hospital design, all are backed by exhaustive statistics and an admirable knowledge of hospital operation and maintenance. A number of his most inventive ideas developed from a state-wide poll of practicing physicians which the architect himself conducted.



The Los Angeles area is rich in unoccupied land which justifies the openess of the plot plan. By a careful elimination of overlapping services each building functions as a self-sustained unit so far as is practical. In the basement plan dotted lines connecting the buildings represent large tunnels which will accommodate all utilities and handle pedestrian and service traffic when necessary. Completely equipped, the estimated cost of the project is approximately $5 million. The buildings are laid out horizontally and vertically on a 4 ft. module arrived at by using a 4 ft. by 8 ft. plywood form and taking into consideration a typical door detail large enough to wheel a bed through. Patients' rooms are oriented to the south and all private rooms are large enough to accomodate two beds in an emergency. In the main building or acute bed unit, clinical facilities are located on the ground floor. This has two distinct advantages: since medical advancement manifests itself in new clinical departments it is much easier to accomodate expansion on the ground floor level than on the upper floors. Secondly, non-clinical hospital traffic is completely eliminated from the clinical floor. In this connection it should be noted that while the ambulance and doctors' access is by means of a road at ground level, visitors' ingress and egress is on the first floor.

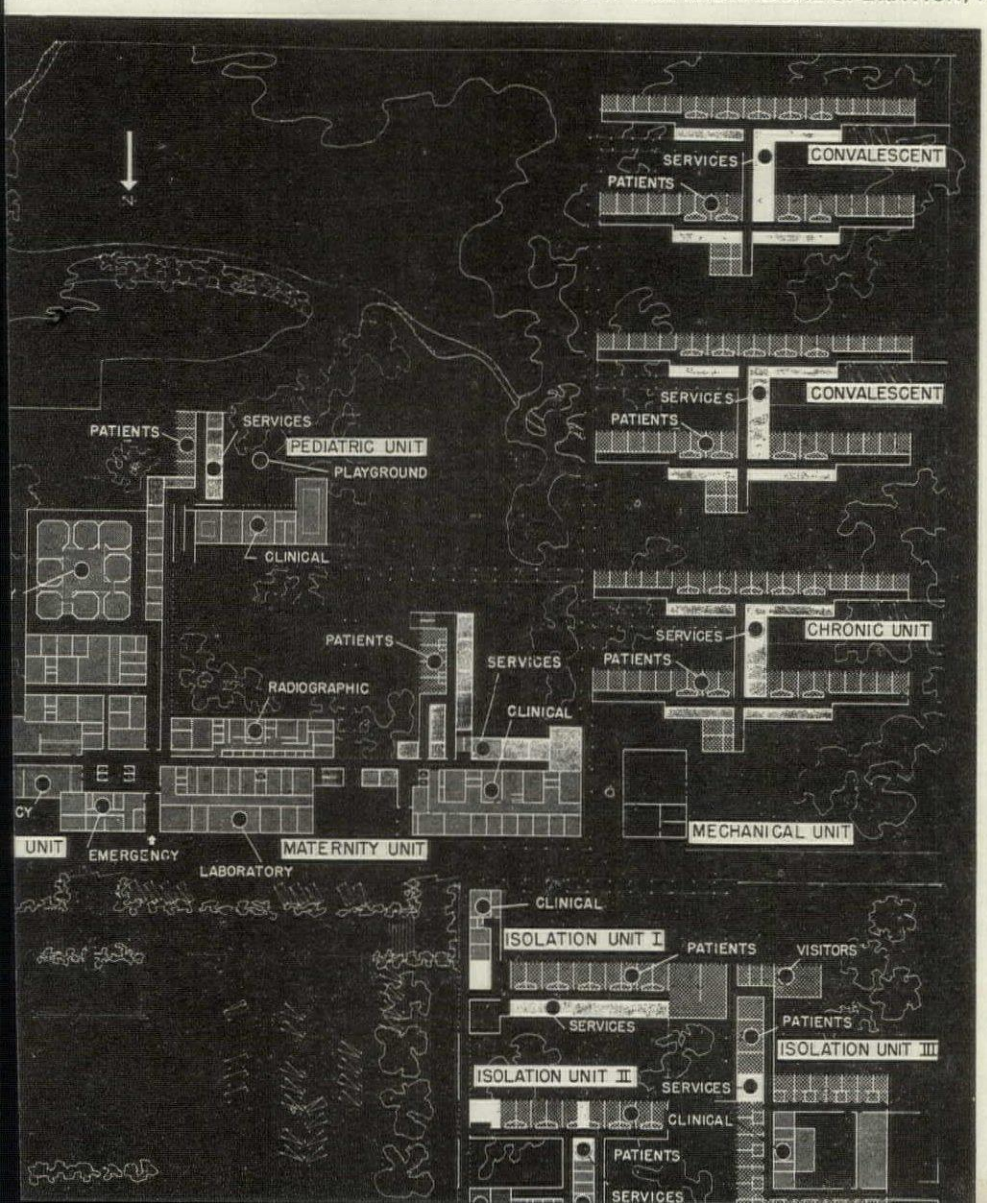


In the general plan, the architect groups all patients into three distinct classifications: acute, chronic and convalescent. Advocating lowered hospital rates for the two latter groups which require less expensive care, he states: "At any given time 50 per cent of the hospital beds in the U. S. are occupied by patients suffering from chronic physical and mental disorders. The average length of stay of an acute patient is from twelve to fourteen days, that of the average chronic, three months. Most existing beds for the most troublesome chronic diseases are provided in state institutions, therefore among all patients afflicted in this way the indigent are least neglected. The inadequacy in provisions for convalescent care is another factor that taxes the general hospital. When there is a shortage of beds there is a tendency to discharge patients too soon. If the patient stays on he occupies a bed needed by an acute patient. If special convalescent facilities were provided at lower cost the patient would be happier and recover faster. Such provisions which of necessity require less construction, less service and less equipment are almost identical with those required for a rest sanatorium. Thus on paper a modern hospital should recognize and plan for these three divisions in types of patient problems." The three, simple H shaped units to the right of the plan resulted from the architect's reasoning on this score.

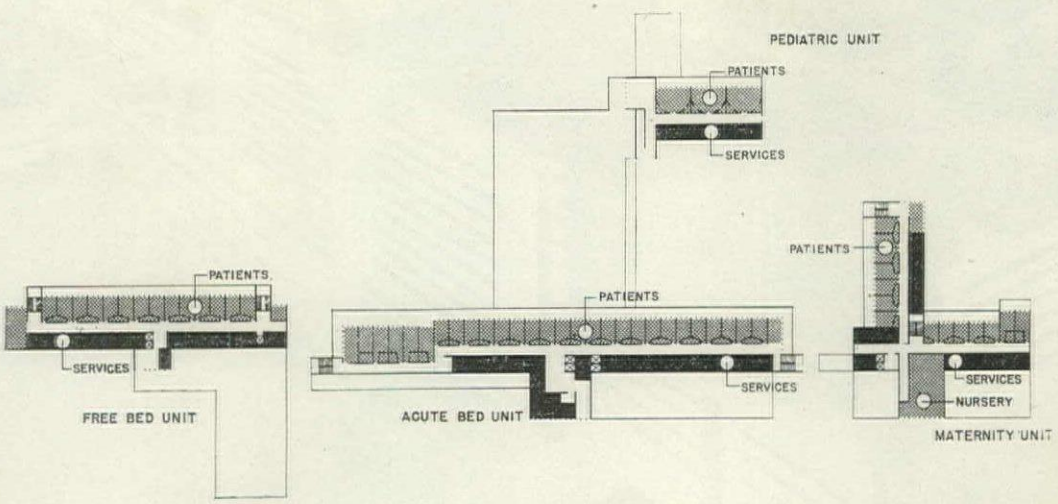
Of the unique form and location of the surgical department, Mr. Pereira says: "A comparative analysis of general hospital plans, even those of very recent origin, reveals a very marked dissimilarity between external form and internal arrangement . . . In perhaps 95 per cent of the plans, distribution of services is based on the assumption that operating rooms and their accessory facilities must be located on the upper floors—in space that would be highly desirable for patient accomodations . . . Through the collaborative effort of surgeon and scientist it has been demonstrated that operating theaters can properly function under artificial light to the total exclusion of natural light. Therefore it appears that much is to be gained by locating operating rooms on the ground floor, not the least of which

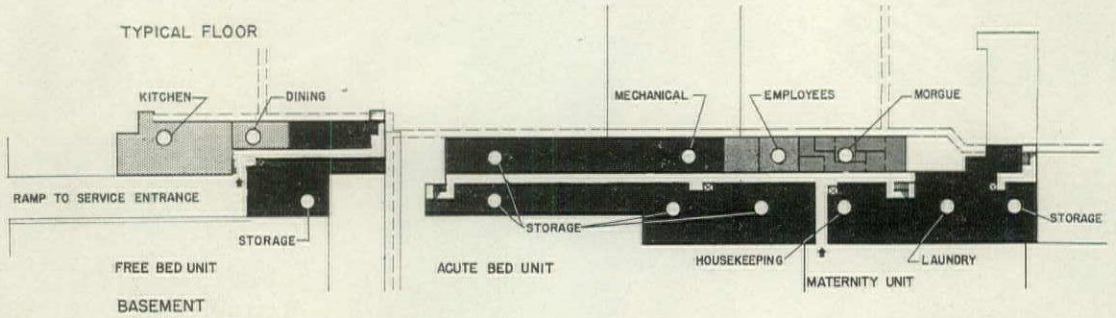
(Continued on page 109)

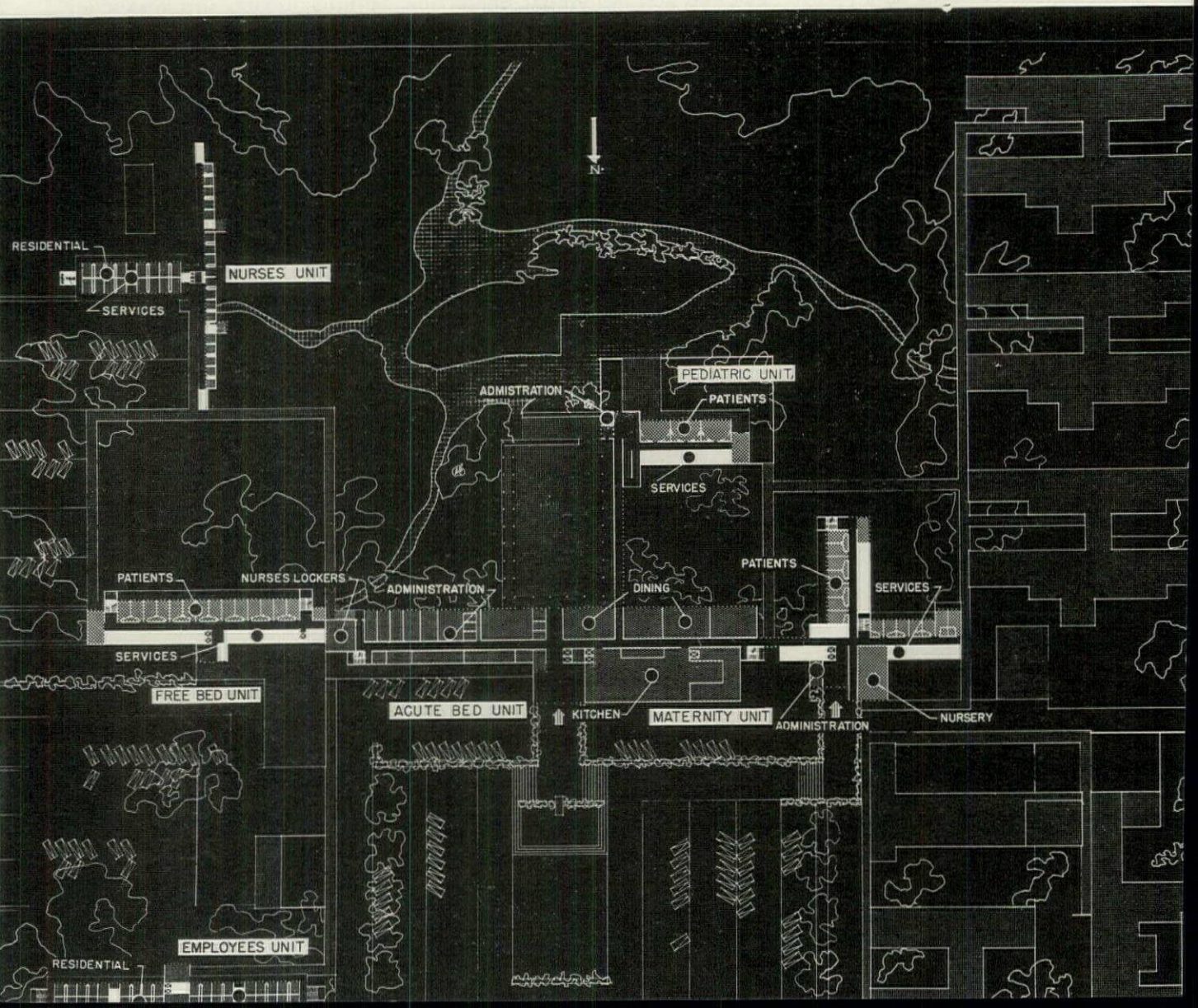
BED UNIT AT LEFT OF MAIN BUILDING IS DESIGNED FOR INDIVIDUAL OPERATION, ADMINISTRATION AND FINANCING

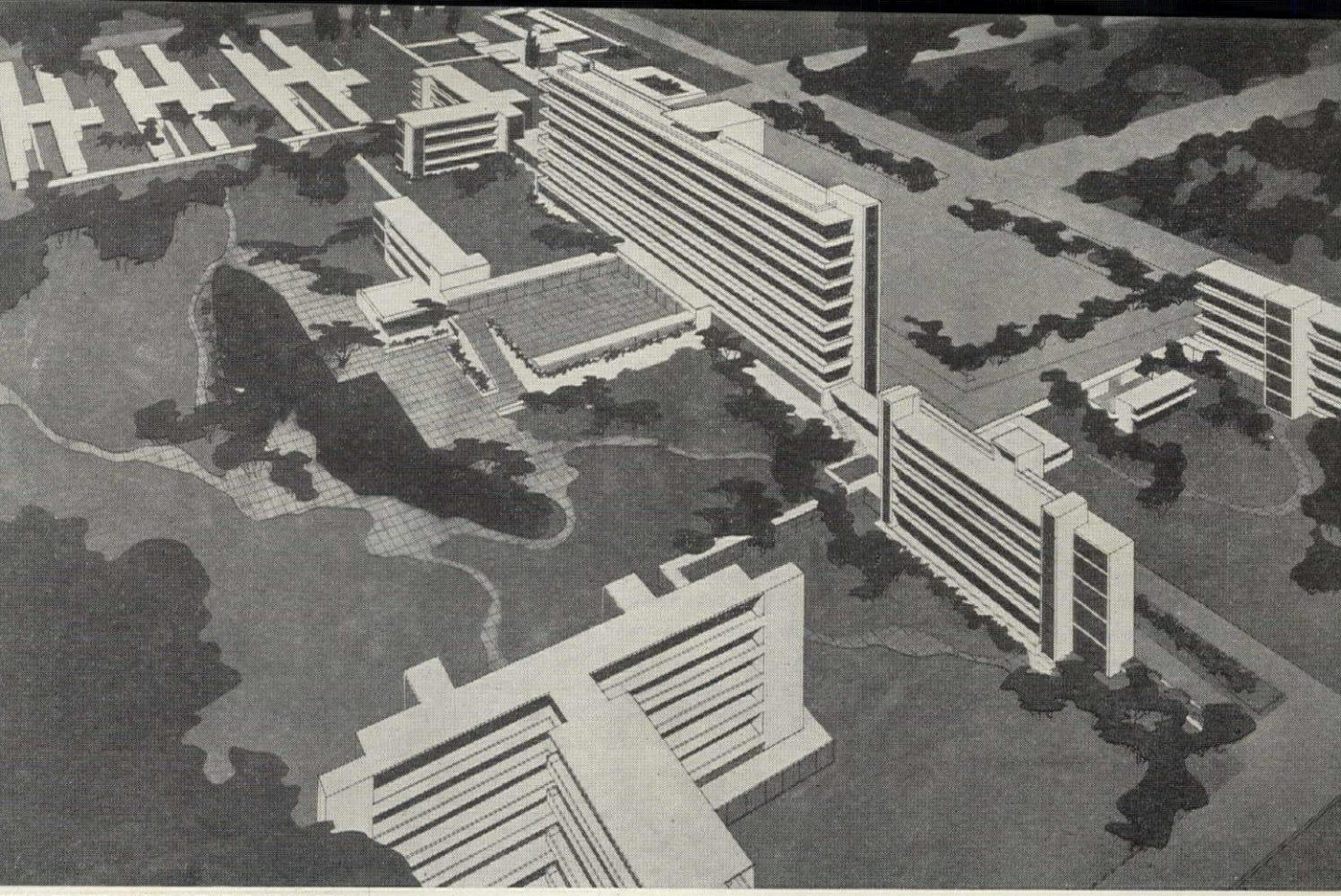


HOSPITAL


PEDIATRIC UNIT
PATIENTS
SERVICES
PATIENTS
SERVICES
FREE BED UNIT
PATIENTS
SERVICES
ACUTE BED UNIT
PATIENTS
SERVICES
NURSERY
MATERNITY UNIT


TYPICAL FLOOR
KITCHEN
DINING
RAMP TO SERVICE ENTRANCE
STORAGE
FREE BED UNIT
BASEMENT
MECHANICAL
EMPLOYEES
MORGUE
STORAGE
STORAGE
ACUTE BED UNIT
HOUSEKEEPING
LAUNDRY
MATERNITY UNIT


N
RESIDENTIAL
NURSES UNIT
SERVICES
ADMISTRATION
PEDIATRIC UNIT
PATIENTS
SERVICES
PATIENTS
NURSES LOCKERS
ADMINISTRATION
DINING
PATIENTS
SERVICES
SERVICES
FREE BED UNIT
ACUTE BED UNIT
KITCHEN
MATERNITY UNIT
ADMINISTRATION
NURSERY
EMPLOYEES UNIT
RESIDENTIAL



OR'S ENTRANCE AT FIRST FLOOR LEVEL IS THROUGH AN OPEN COURT LOCATED ABOVE THE SURGICAL DEPARTMENT

is solving the problem of how to lay out an efficient surgery within the confines of the patient areas below. At ground level the structural barriers no longer exist, the spatial limits become expansible and flexible, to be determined solely by the physical requirements of the working area."

Another unusual feature of the plan is the structural segregation of the maternity unit which the architect explains as follows: "I believe that no one will disagree that enemy Number 1. of the obstetrical department is infection. To reduce the danger to a minimum, rules are not enough—physical barriers are better plus the elimination of interchange of supplies, linens and personnel so far as possible. Actual separation of the obstetrical department can be real without paying a penalty in cost worth considering. Intelligent and modern planning can produce the ideal—a separate shaft with all the advantages normally obtained in a separate building. One more real separation is mandatory: the delivery rooms should not be in the same unit with the operating rooms as is frequently planned."

While Mr. Pereira's working conditions on this project were certainly the architect's dream, credit is as much due him as his clients since it was his exhaustive research work and sound application of imaginative thinking that convinced them. In his paper read before the local medical society he sums up his theories in the following words: "Cost is important but in a theoretical approach to hospital planning mere cost of construction cannot be accepted as a ruling factor. The size or mass of a correctly planned institution and the character and extent of its equipment, which basically determine the cost, are not deduced from a report on potentially available funds, but from functional needs. A logically conceived hospital plan is not one in which a given space or mass is arbitrarily assumed and then subdivided to the best of the architect's ability, but one in which the requirements of various hospital functions are first studied separately, the forms and space allowances thus ideally conceived for individual departments, and afterwards put together in the least disadvantageous combination possible."

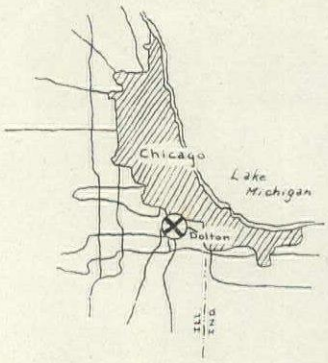
4. CLINIC

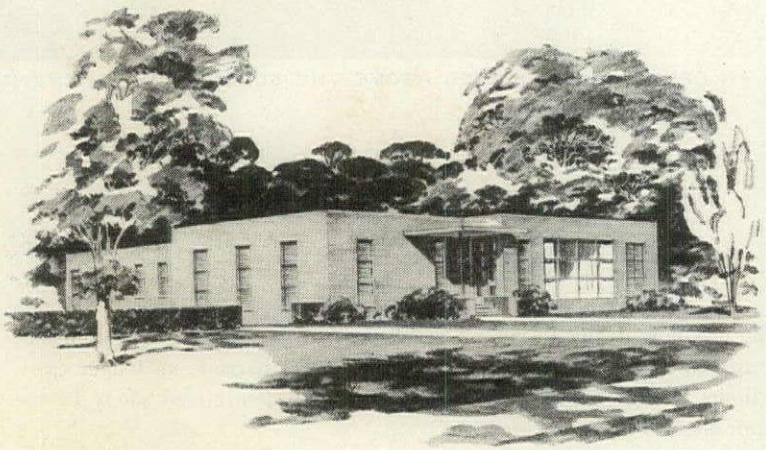
A small medical and dental clinic designed for efficient handling of a large volume of patients.

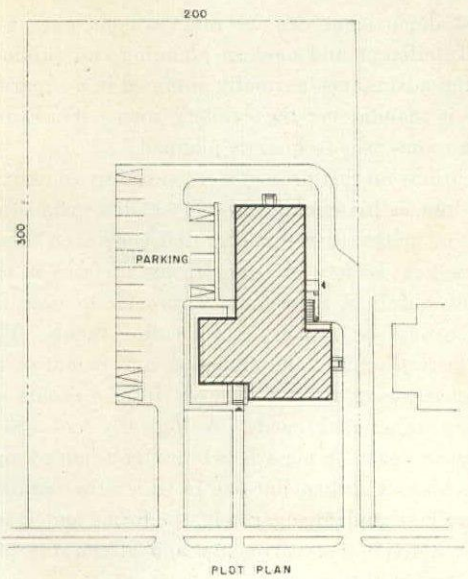
PHILIP G. THOMSEN, M.D., Owner

THOMAS A. MADDEN, Architect

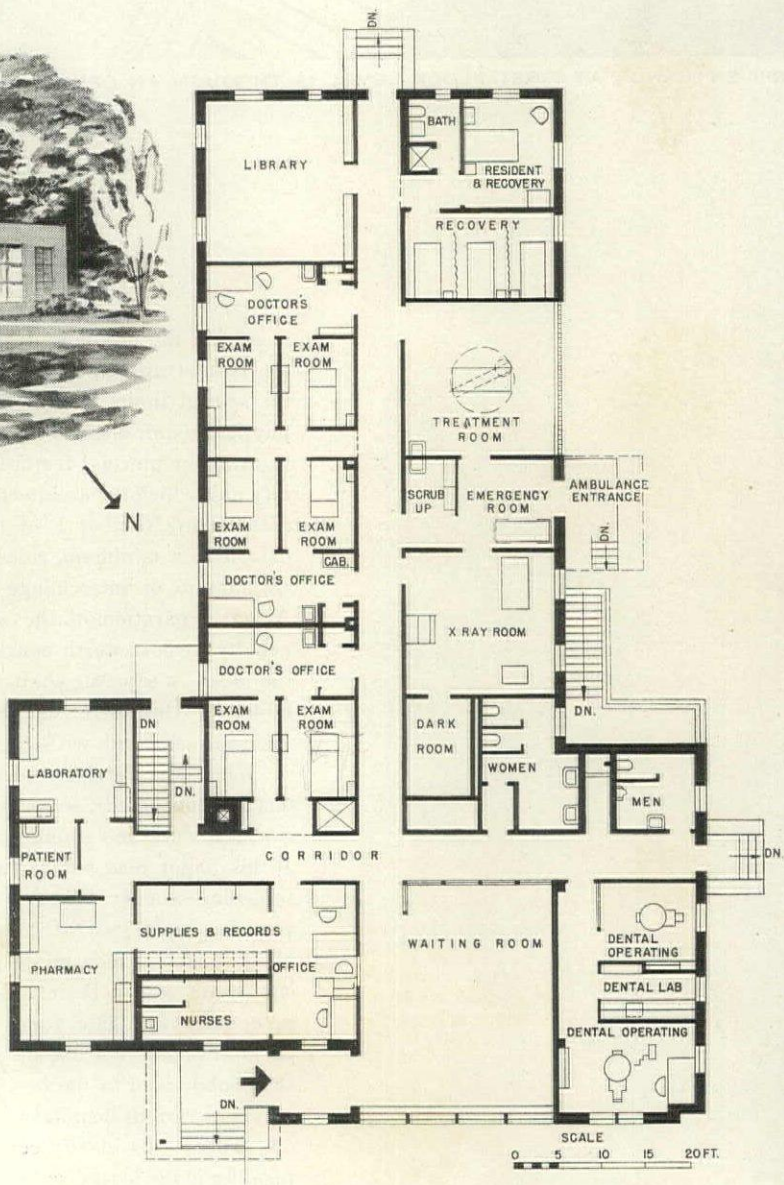
The small, individual clinic building, still relatively unfamiliar in the East, is steadily growing in favor throughout the Middle and Far West. This clinic was designed to serve a community of 25,000, many of whom are industrial workers. The plan places treatment and recovery rooms to the northwest away from the noise of the parking space. On the other side of the corridor, two examination rooms for alternate use adjoin each doctor's office, permitting a steady flow of patients. Oral surgery, with its own laboratory, occupies the west wing at the front. Although the function of the various areas has been made as self sufficient as possible, circulation is always a problem in a small building of this type where some patients stop only to pick up a prescription while others require full use of treatment and operating rooms — hence the generous proportions of the waiting room where one nurse can maintain full control over all movement with easy accessibility to the laboratory and pharmacy. Space for future hydrotherapy treatment has been provided in the basement. The ample site can easily accommodate expansion of the present plan.







PLOT PLAN



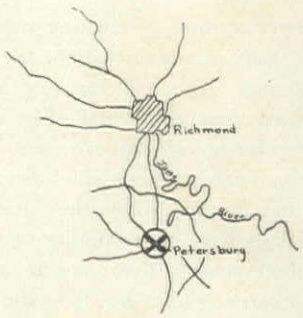
5. FIRE STATION

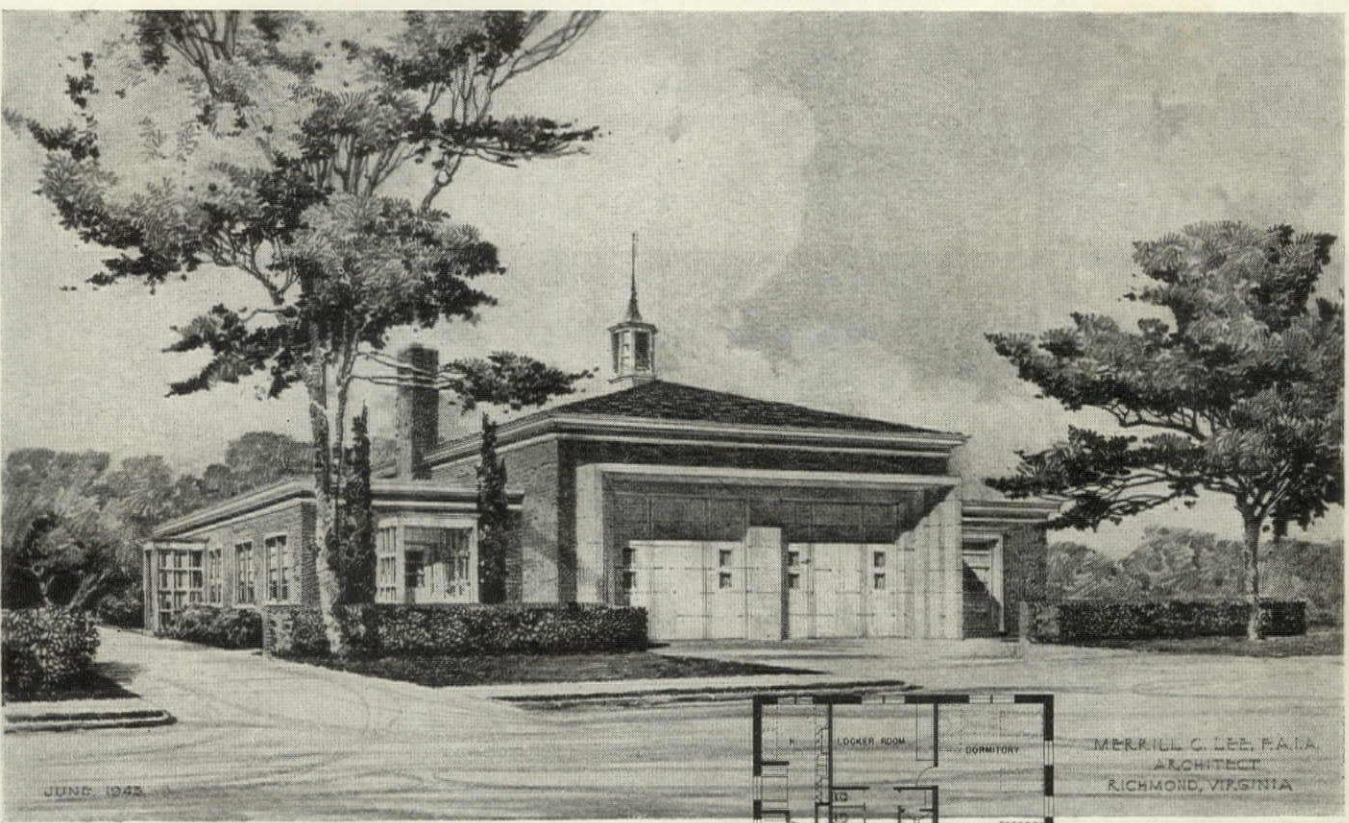
Past and present meet without fighting in this clean-cut design for a small fire house.

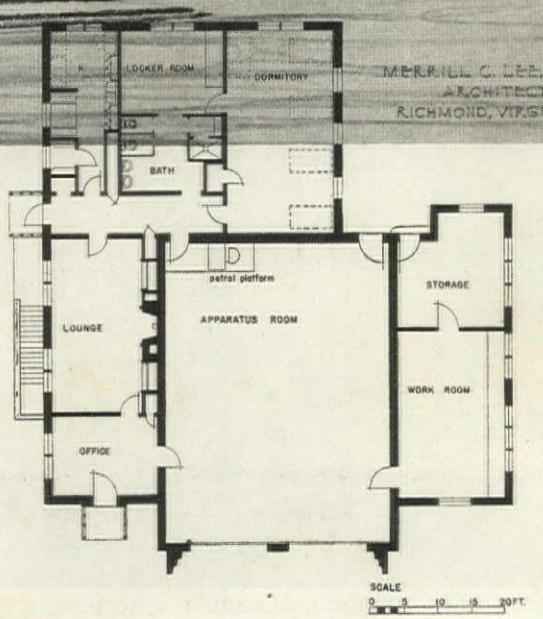
WALNUT HILL FIRE STATION, Owner

MERRILL C. LEE, Architect

With a bow to prevailing Colonial construction in Petersburg, Va., the architect has designed a neighborhood fire station neither blatantly modern nor nostalgically traditional. Red brick, a graded slate roof and white wood trim provide a link with existing buildings while the accentuated entrance and flat-roofed wings label it a contemporary structure. Only discordant note in the effective compromise solution is its small spired tower which bears little relation to the trim lines of the building as a whole. The floor plan arranges recreation, rest and work rooms around three sides of the large central area where fire engines are housed when not in use. The work shop, directly adjacent to this apparatus room, handles all fire station repairs and serves as an additional recreation room for wood-working in leisure hours. The dormitory is placed at the rear, as far as possible from noisy activities.







FIRE STATION DESIGN is influenced by the fact that firemen must be on call at every hour of the day or night. An efficient kitchen is a necessity and this one includes also a small dining alcove. The lounge is planned as a comfortable reading and study room and sleeping quarters are pared down to a minimum dormitory. The locker room adjoining the bath furnishes compact but adequate space for dressing.

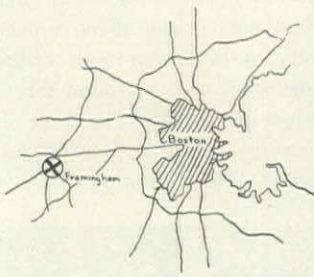
6. REFORMATORY

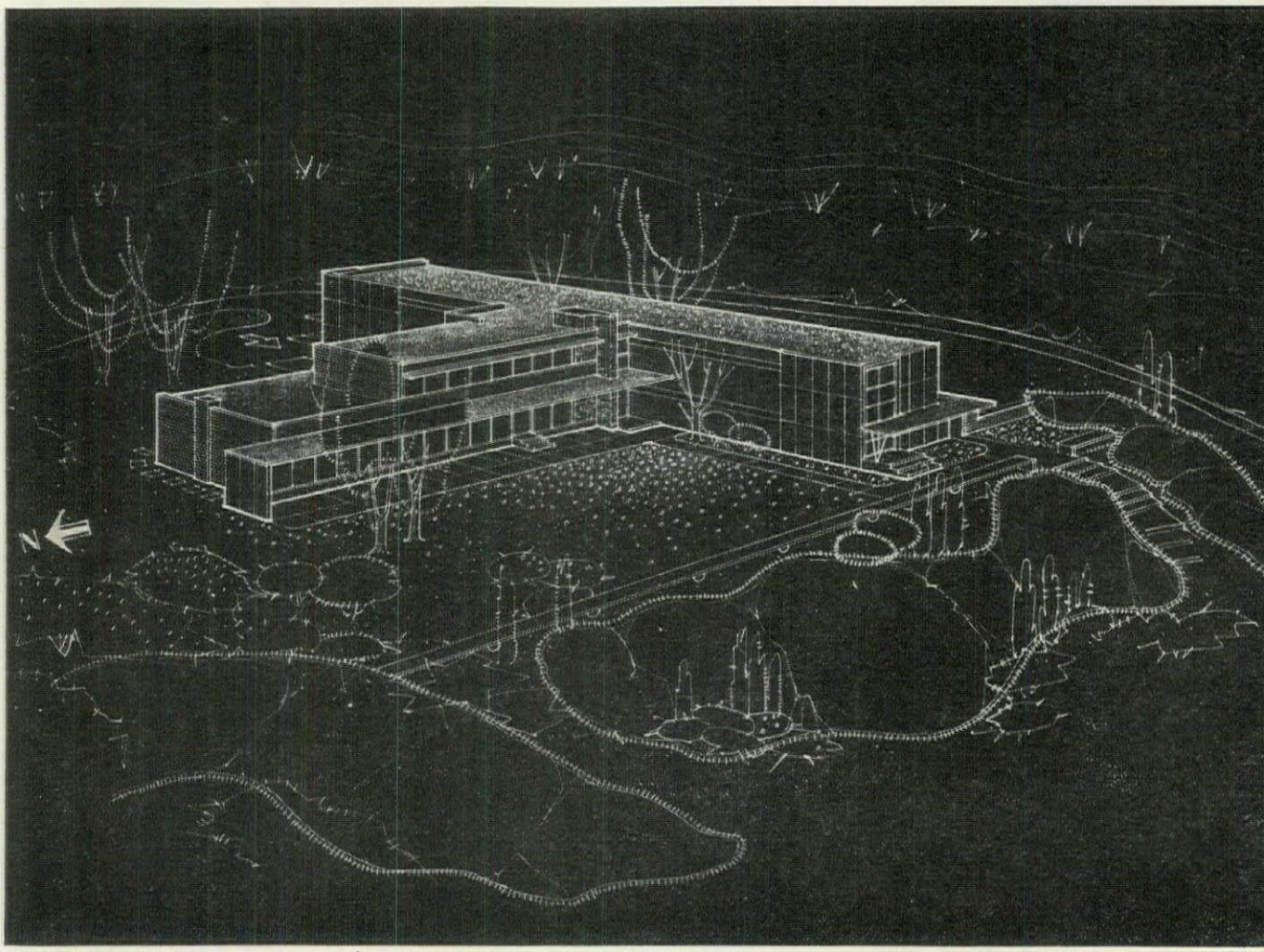
Forbidding stone walls and iron bars are replaced by a simple, homelike atmosphere.

FRAMINGHAM REFORMATORY, Owner

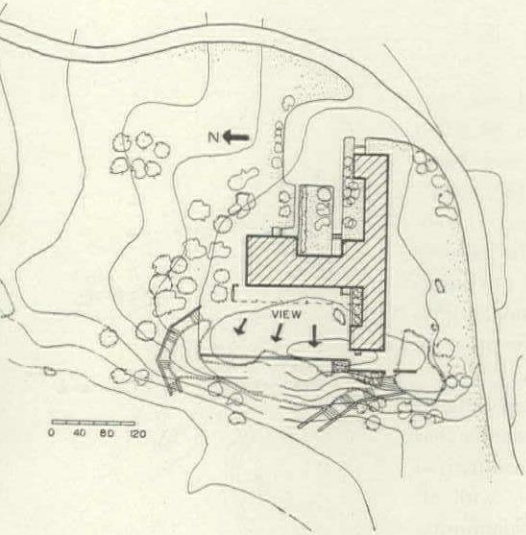
CARROLL & PAUL COLETTI, Architects

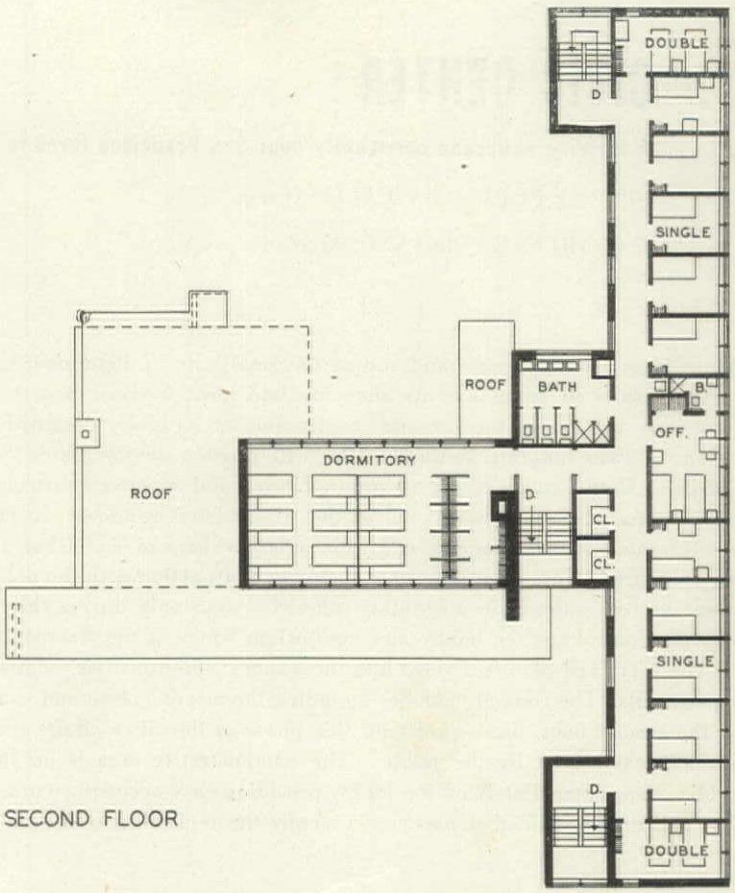
Since attitudes regarding treatment of criminals have shifted from the idea of punishment to that of rehabilitation, the architectural approach to prisons has undergone a similar change. Typical of the new thinking on this subject is the custodial cottage shown here, provided to separate first offenders from the habitual criminals who might be encountered in regular houses of correction. Located away from the main institution in a rural setting of broad fields, woods and hills, this house will be the background for retraining girls in social fundamentals while they are provided with healthy, outdoor work. All traces of prison design have been eliminated and the warm, congenial atmsophere of a modern home substituted instead. Bedrooms are placed on the southern side of the T-shaped plan to utilize solar radiation while the living-dining room takes advantage of a picturesque view to the west. Fenestration on the northern exposure has been eliminated except for a few narrow windows which light the corridors. Officers' quarters, placed at the center of the bedroom section, maintain control of all activities including supervision of rooms, corridors, linen closets, bathrooms, exits and entrances. Modern treatment throughout was made possible by cooperation of the Emergency Public Works Commission of the Commonwealth of Massachusetts, under whose jurisdiction the project was executed.



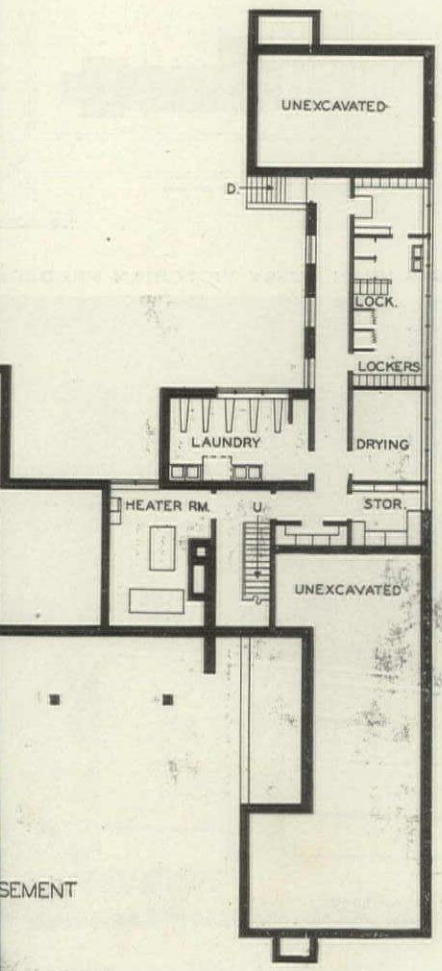


VIEW FROM WEST REVEALS GLAZED LIVING-DINING ROOM SHADED BY WIDE OVERHANG. MAIN ENTRANCE FACE

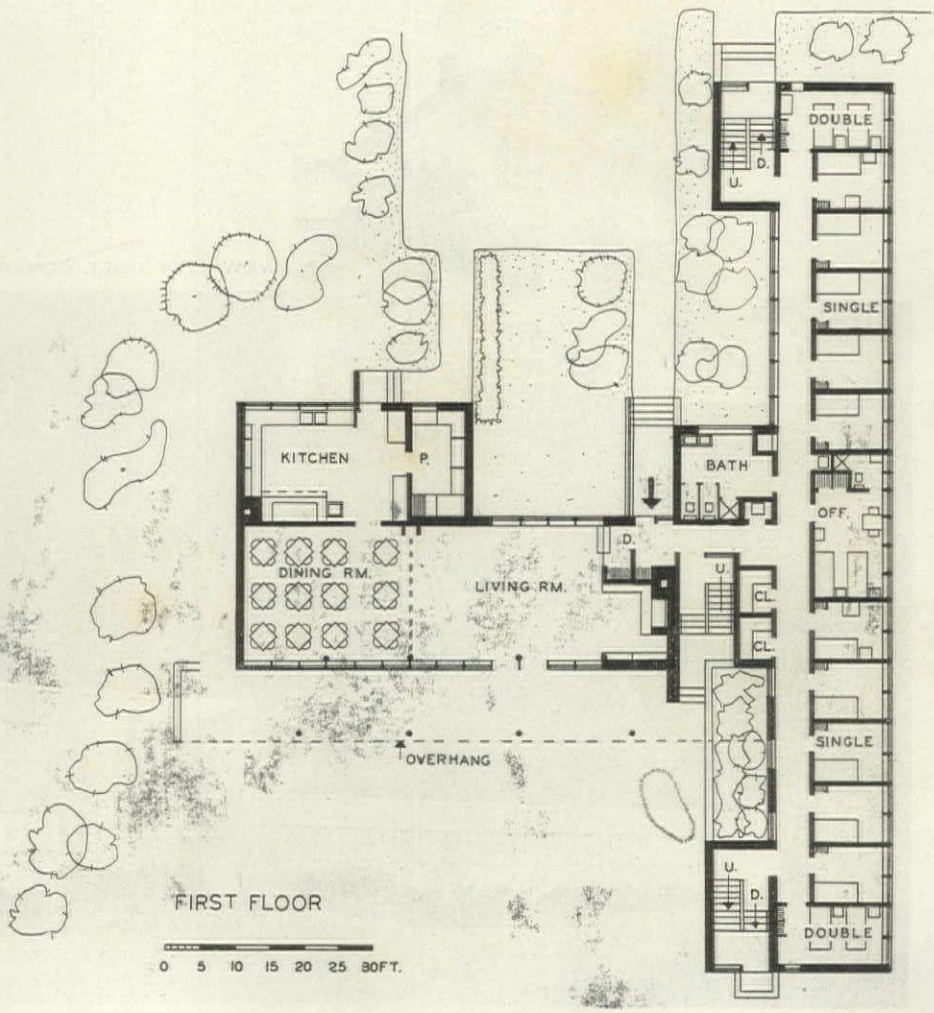




SECOND FLOOR



SEMENT



7. CIVIC CENTER

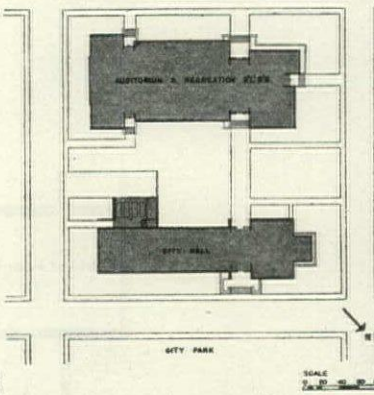
A thriving suburban community near San Francisco turns to modern design for its newest municipal buildings.

CITY OF PETALUMA, CALIF., Owner

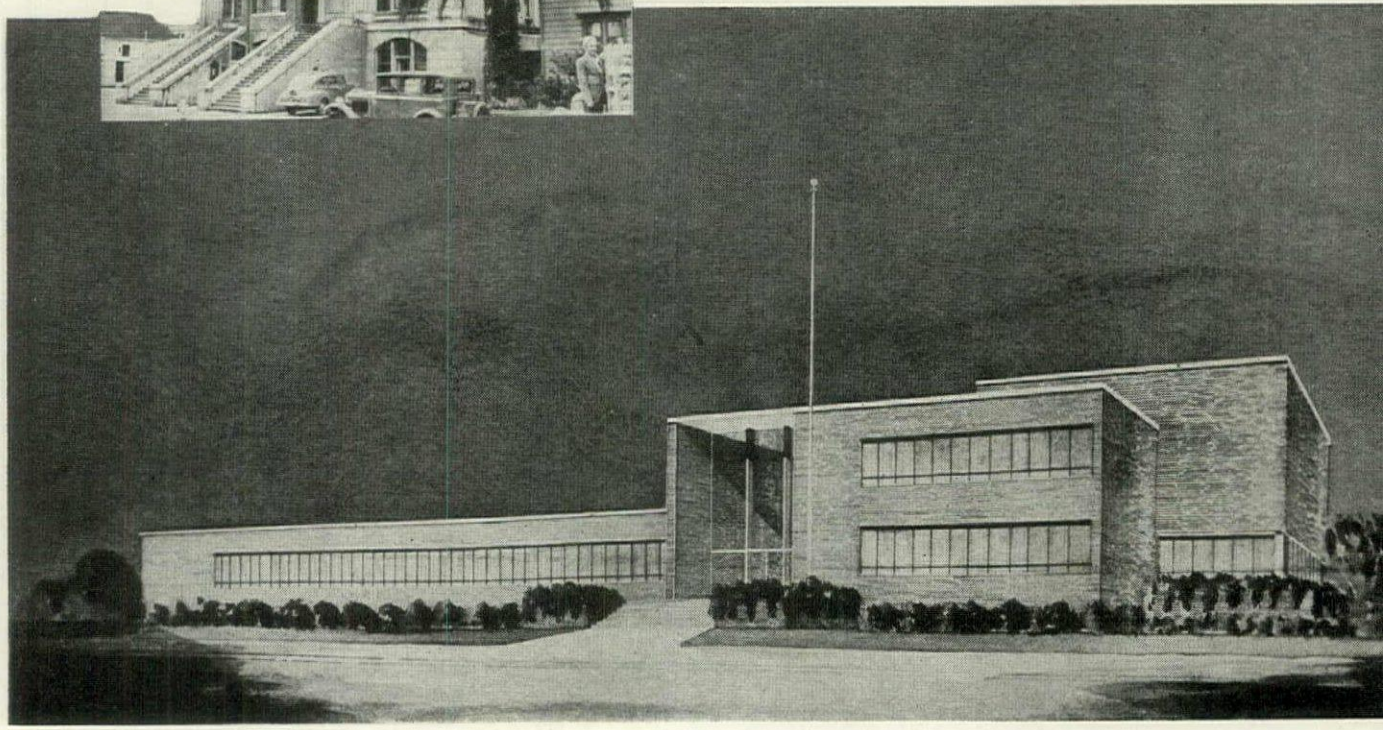
J. CLARENCE FELCIANO, Architect

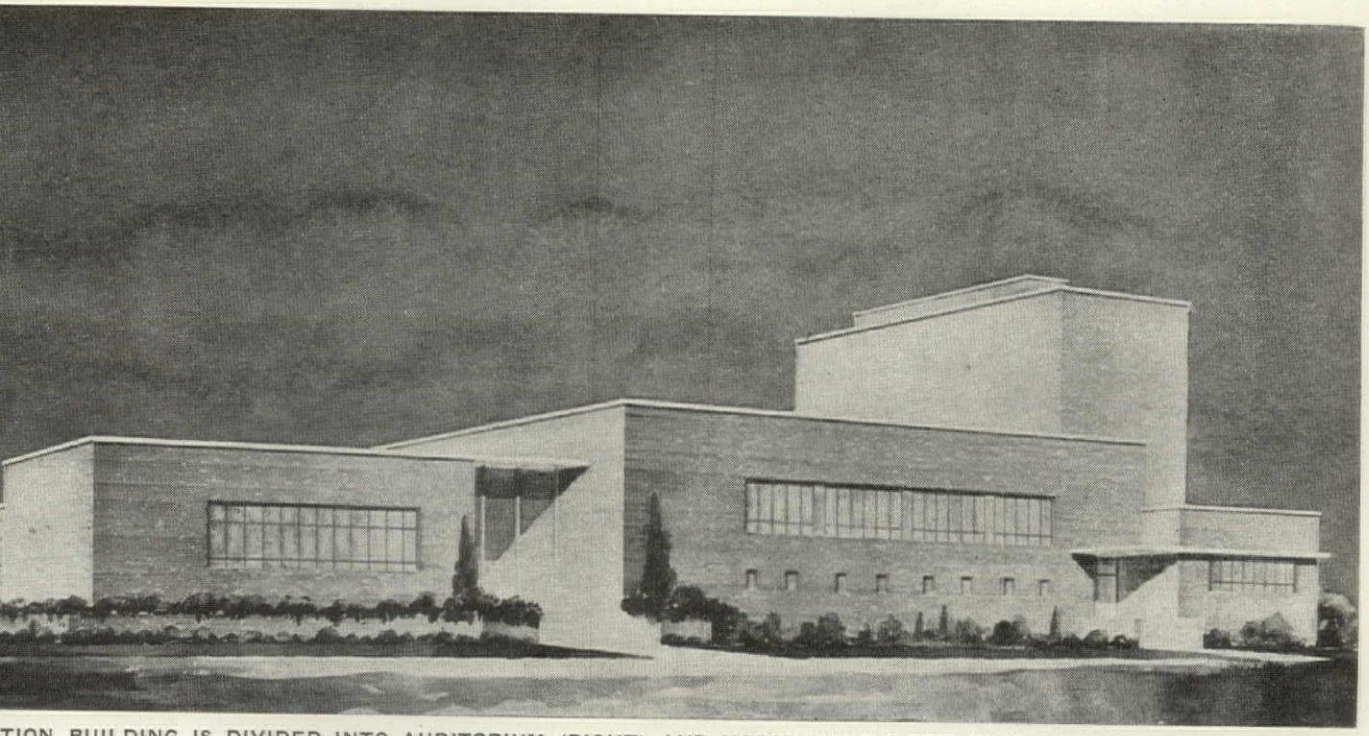
While larger towns debate and waver, the small city of Petaluma, Calif. has already put its civic plans on paper and its financing into law. A recent vote established a $420,000 bond issue to pay for the site and construction of its newly designed City Hall and Auditorium, a twin building venture which will provide an integrated center for the town's activities. Both structures are of fireproof brick and concrete construction and make lavish use of glass at entranceways and in the wide ribbon windows. In each case the heating plant, located in the basement, is a split system which can heat all or a portion of the building as desired. This is an important factor in conjunction with the police department which functions continuously in a building otherwise used only during the day. It also provides separate control for the hobby and auditorium wings of the Recreation Building.

The City Hall plan is divided into three zones: the executive, administrative and judicial departments. The council chamber including the mayor's office and caucus room are located on the second floor, thus separating this phase of the city's affairs from normal municipal business carried on by the public. The administrative area is on the first floor with all public offices immediately off the lobby, providing easy access for citizens of the community. The police and judicial departments occupy the remaining portion of the building.

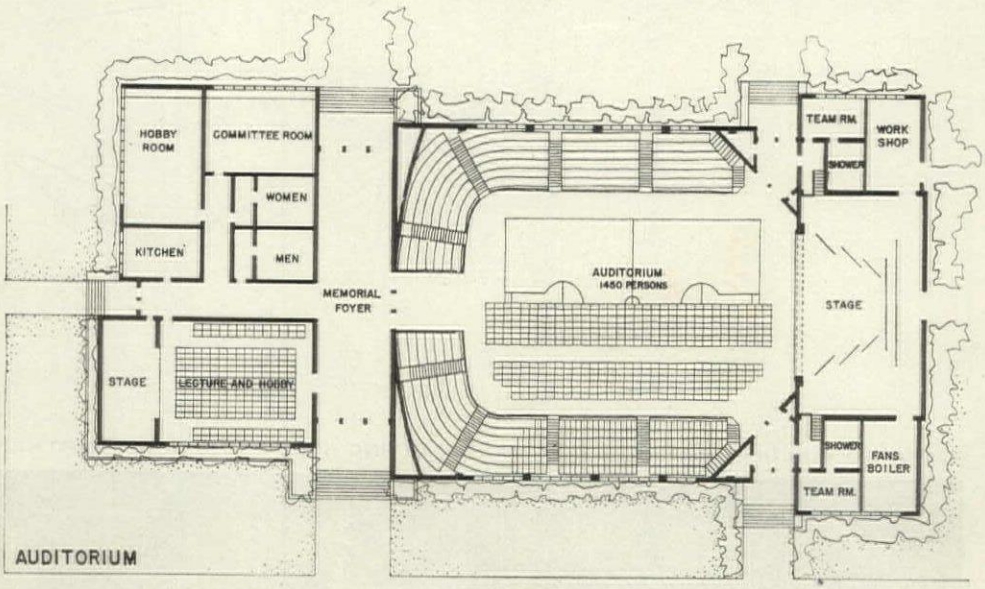


NEW CITY HALL CONTRASTS WITH FUSSY VICTORIAN PREDECE



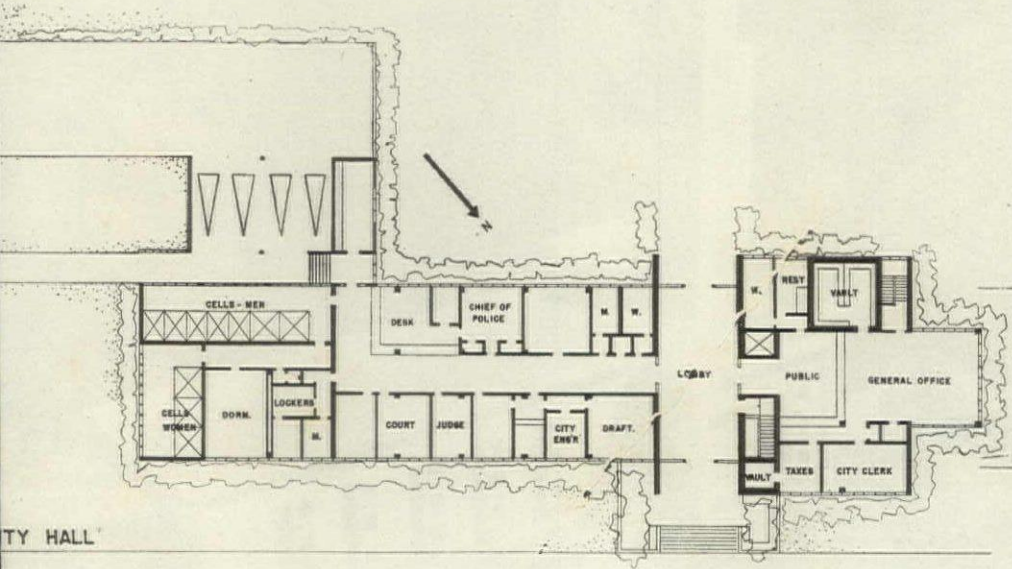


TION BUILDING IS DIVIDED INTO AUDITORIUM (RIGHT) AND HOBBY WING (LEFT) BY A CENTRAL MEMORIAL FOYER

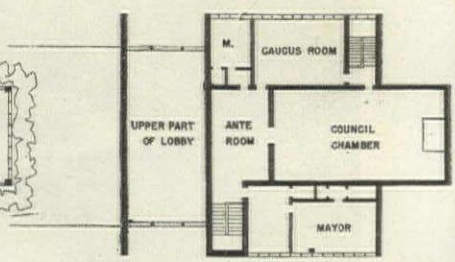


AUDITORIUM

SCALE IN FEET
0 10 20 30 40 50



TY HALL



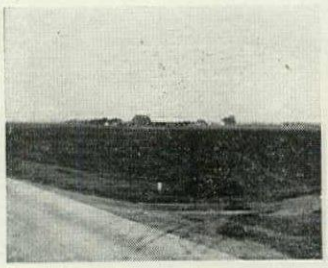
SECOND FLOOR

8. LUTHERAN CHURCH

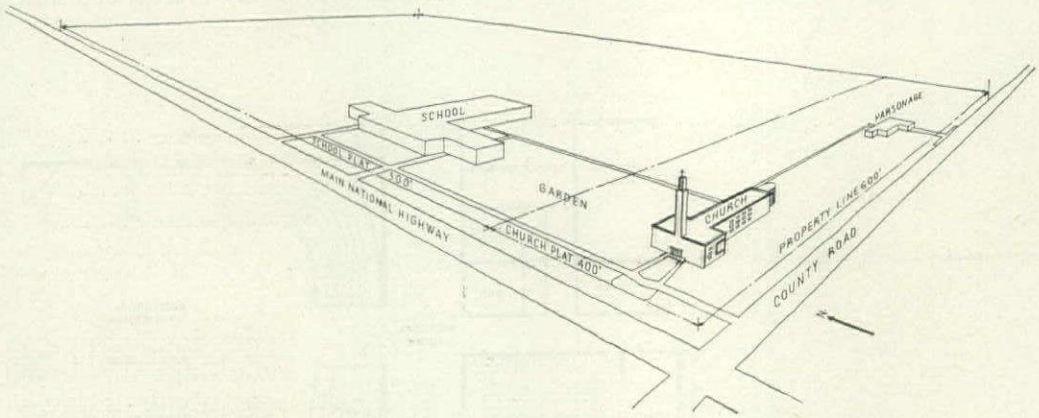
Straightforward design creates an atmosphere of worship minus soaring spires and ornamental tracery.

LAVERN J. NELSON, Architect

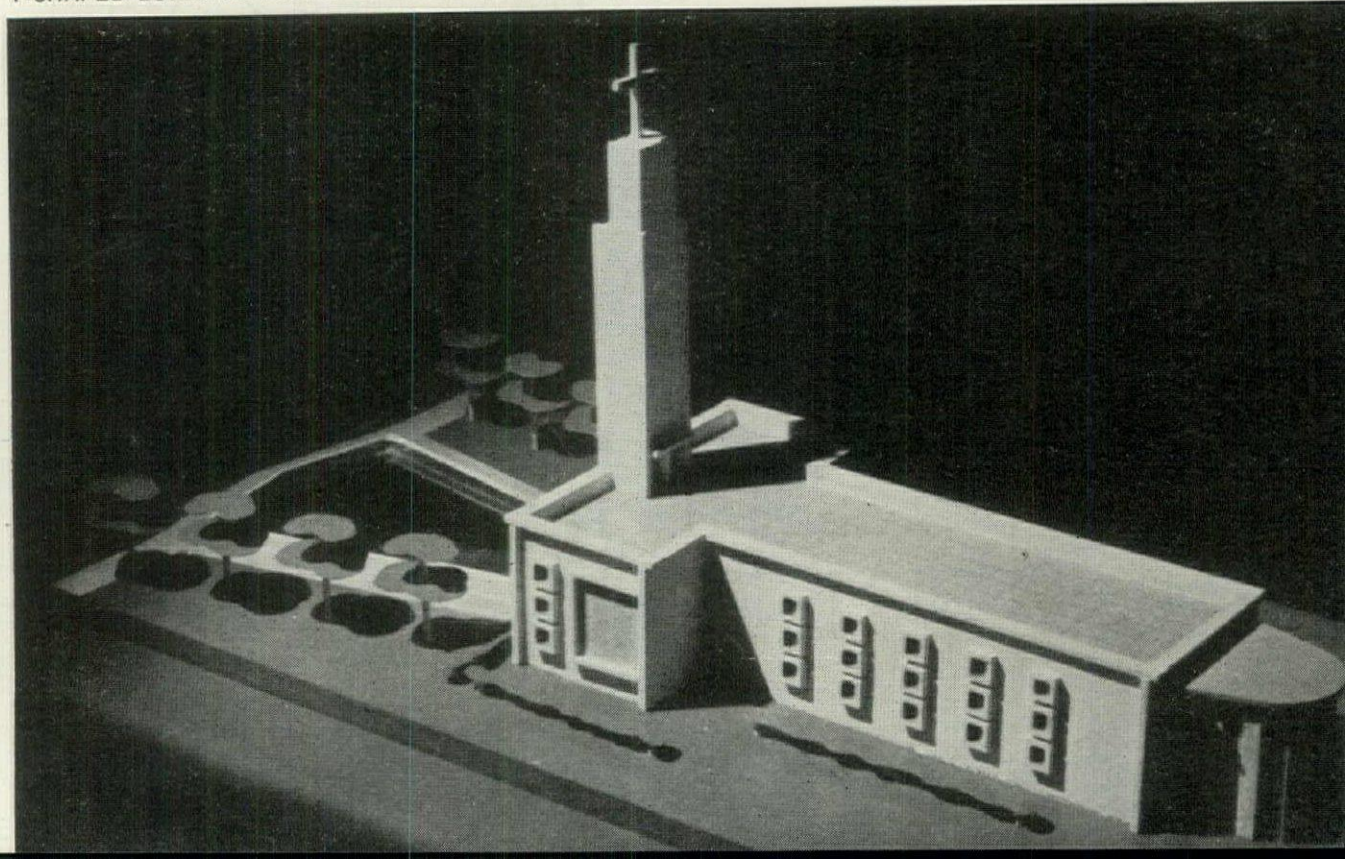
Church architecture is surrounded by mysterious taboos and mumbo jumbo which make its objective discussion extremely difficult. Defenders of the Gothic style as the only valid expression of spirituality label churches built in the modern idiom "gymnasiums" or "warehouses" while those who disagree refer scornfully to fake flying buttresses on modern steel frames. The small contemporary church, an example of which is shown on these pages, should do much to dispel the idea that modern design is incompatible with a feeling of reverence and worship. Simple, clean-cut and scaled to human size, it nevertheless is unmistakably a church. The carillon tower topped by a cross and the traditional T-shaped arrangement of nave and alter in apposition to the narthex contribute much to this ecclesiastical atmosphere. A reflection pool which one must pass to reach the entrance adds dignity to the unpretentious design.

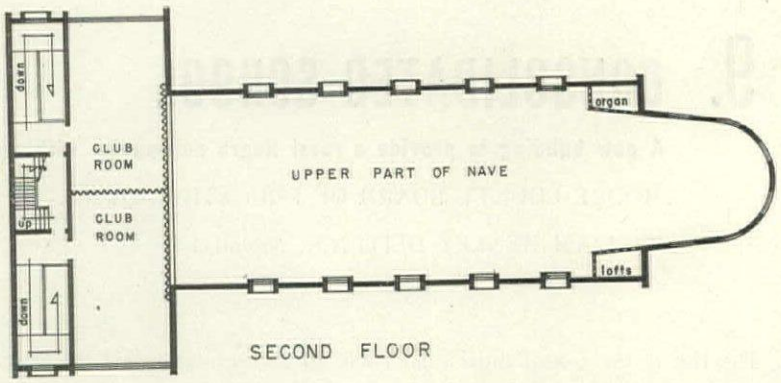


FLAT SITE AT CROSSROADS

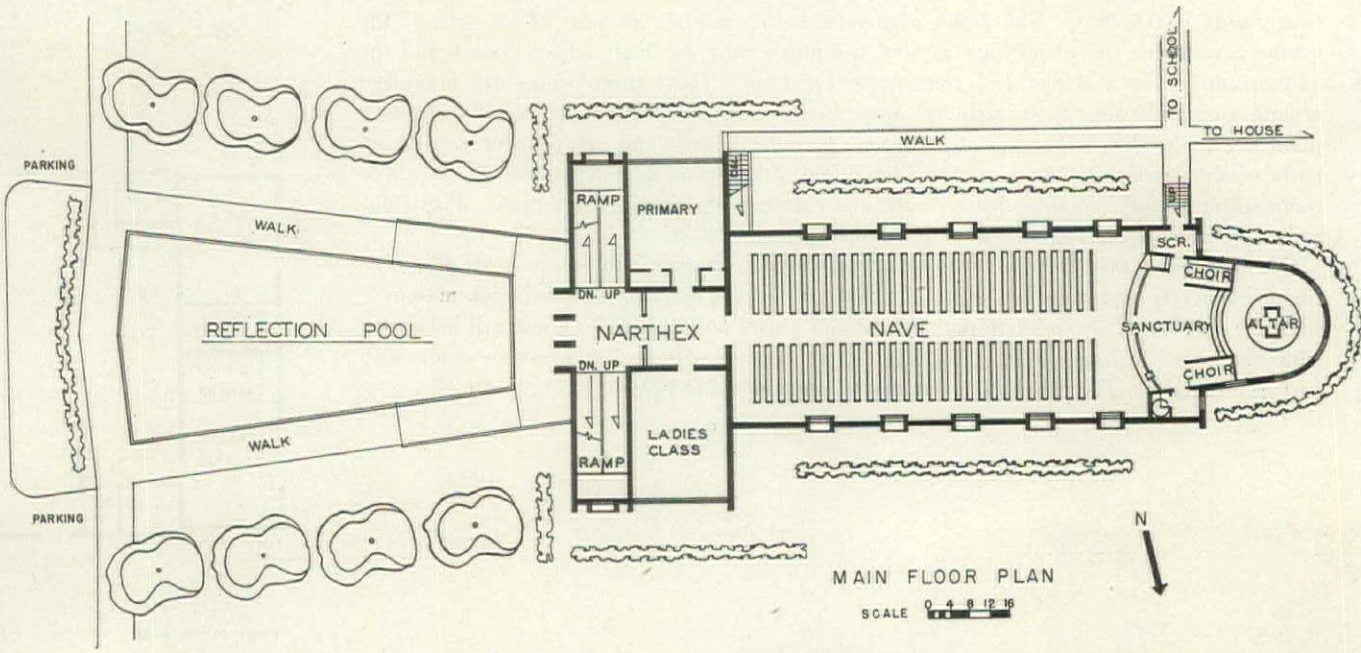


T-SHAPED BUILDING PROVIDES SPACE FOR MEETING ROOMS ADJOINING NARTHEX, CENTRAL TOWER HOUSES CARI





SECOND FLOOR

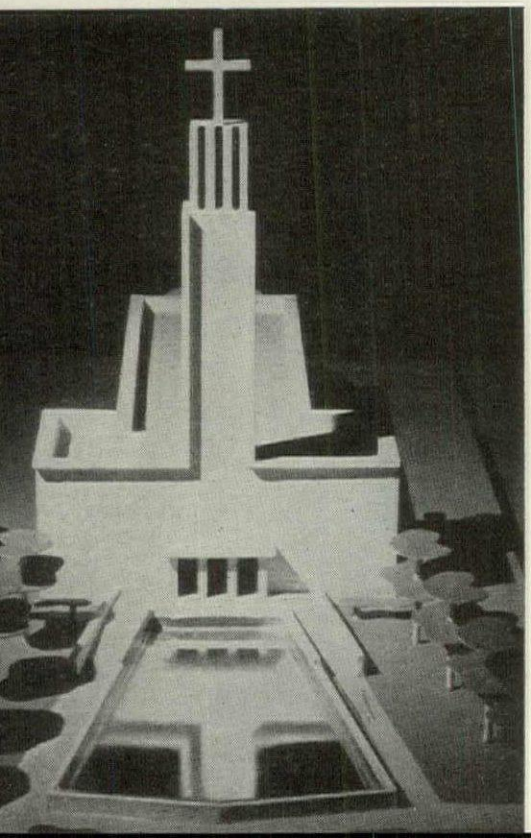


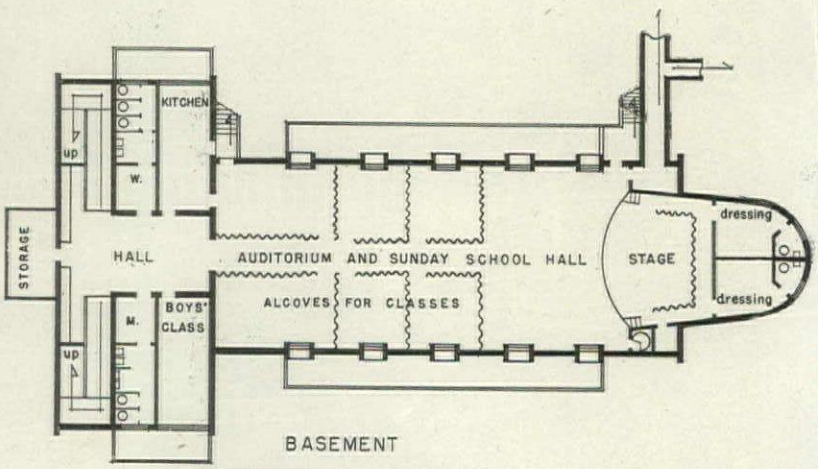
MAIN FLOOR PLAN

SCALE 0 4 8 12 16

MAIN FLOOR PLAN reveals a compact church interior with sanctuary and altar clearly visible from every pew in the nave. Classrooms flank the center vestibule; ramps near the entrance lead up to clubrooms on the second floor and down to a social hall in the basement.

FRONT ELEVATION AND REFLECTING POOL





BASEMENT

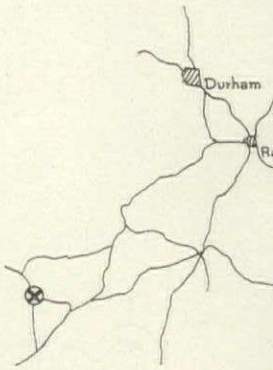
BASEMENT PLAN is essentially an auditorium with stage and dressing rooms below the altar area of the upper floor. Collapsible panels divide the seating space into classroom alcoves when desired and a kitchen has been included for church suppers.

9. CONSOLIDATED SCHOOL

A new building to provide a rural Negro community with modern educational facilities.

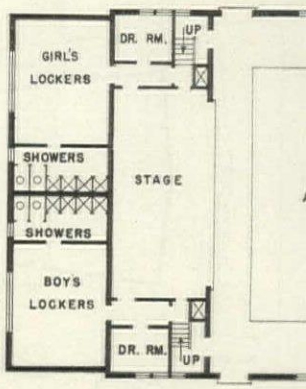
MOORE COUNTY BOARD OF EDUCATION, Owners

WILLIAM HENLEY DEITRICK, Architect



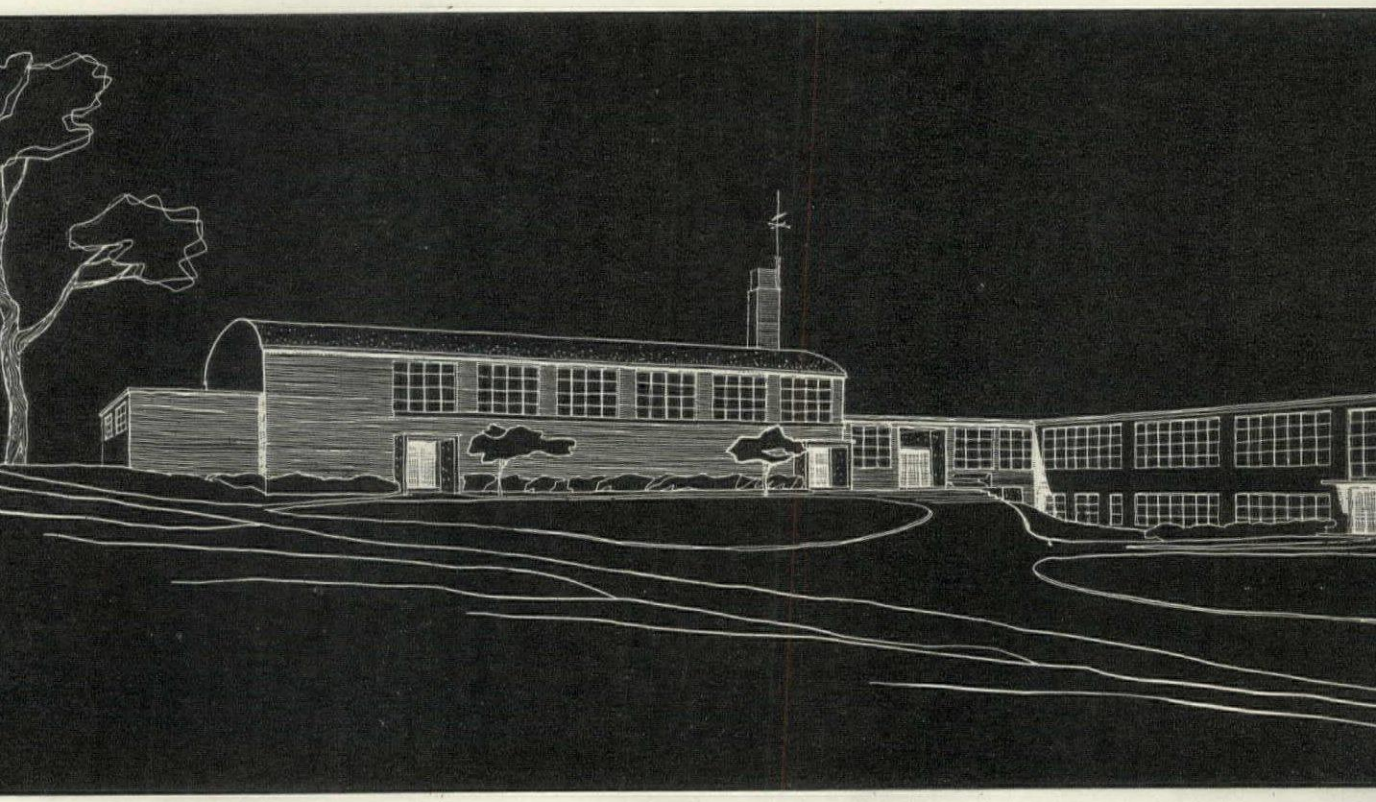
The rise of the consolidated school has all but revolutionized the educational plant of the rural community. It has made possible buildings which—in their facilities for both school children and the community at large—at least approach the standards obtaining in urban areas. This trend is exemplified in the new plant to be built for a rural Negro community near Sandy Forks, N. C. The 3-unit plan reflects the multiple purpose of the school: the southern wing for the elementary grades, the north wing for high school classes and the auditorium for both school and community functions. These three wings are organized around a central core which facilitates administrative and mechanical control. The heating plant is also located here, under the library, permitting short and independent runs to all parts of the building. Access to the library and auditorium is independent of the classroom section, while the agricultural shops and cafeteria are entered from grade. Provisions are made for expansion of both elementary and high school units.

Construction is fire-resistant throughout: reinforced concrete slab on stone fill with continuous concrete pipe trenches adjacent to exterior walls; exterior walls of brick masonry; bar joist roof with 2 in. concrete slab and tar and gravel finish. Interior finish will be plaster with fiberboard ceilings; sash, projecting steel; heating will be low pressure steam with cast iron radiation. Cost, including equipment, is estimated at $99,000.

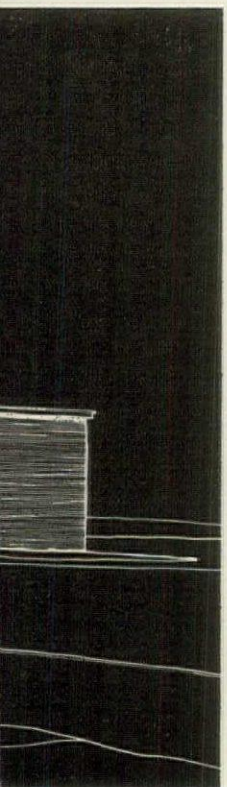


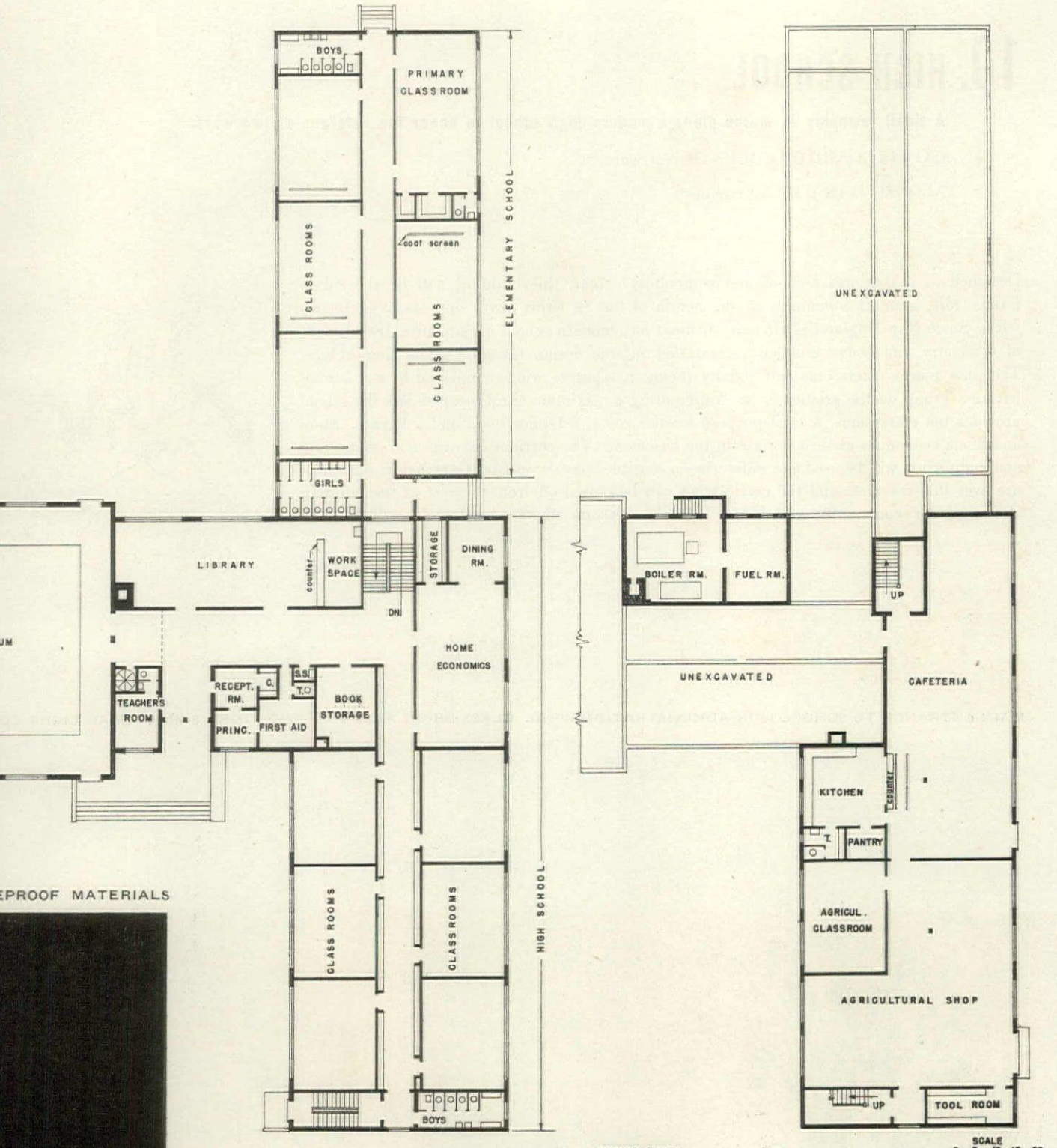
FIRST FLOOR PLAN

THE BUILDING DEPENDS FOR EFFECT UPON ITS MASS AND SITEING, TOGETHER WITH A STRAIGHTFORWARD HA

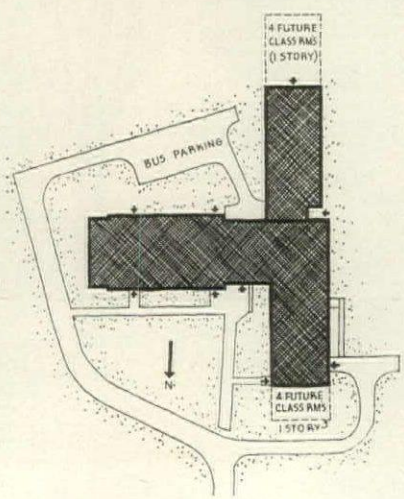


EPROOF MATERIALS





GROUND FLOOR



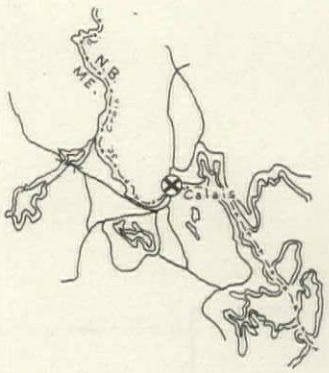
10. HIGH SCHOOL

A small township in Maine plans a modern high school to honor the veterans of two wars.

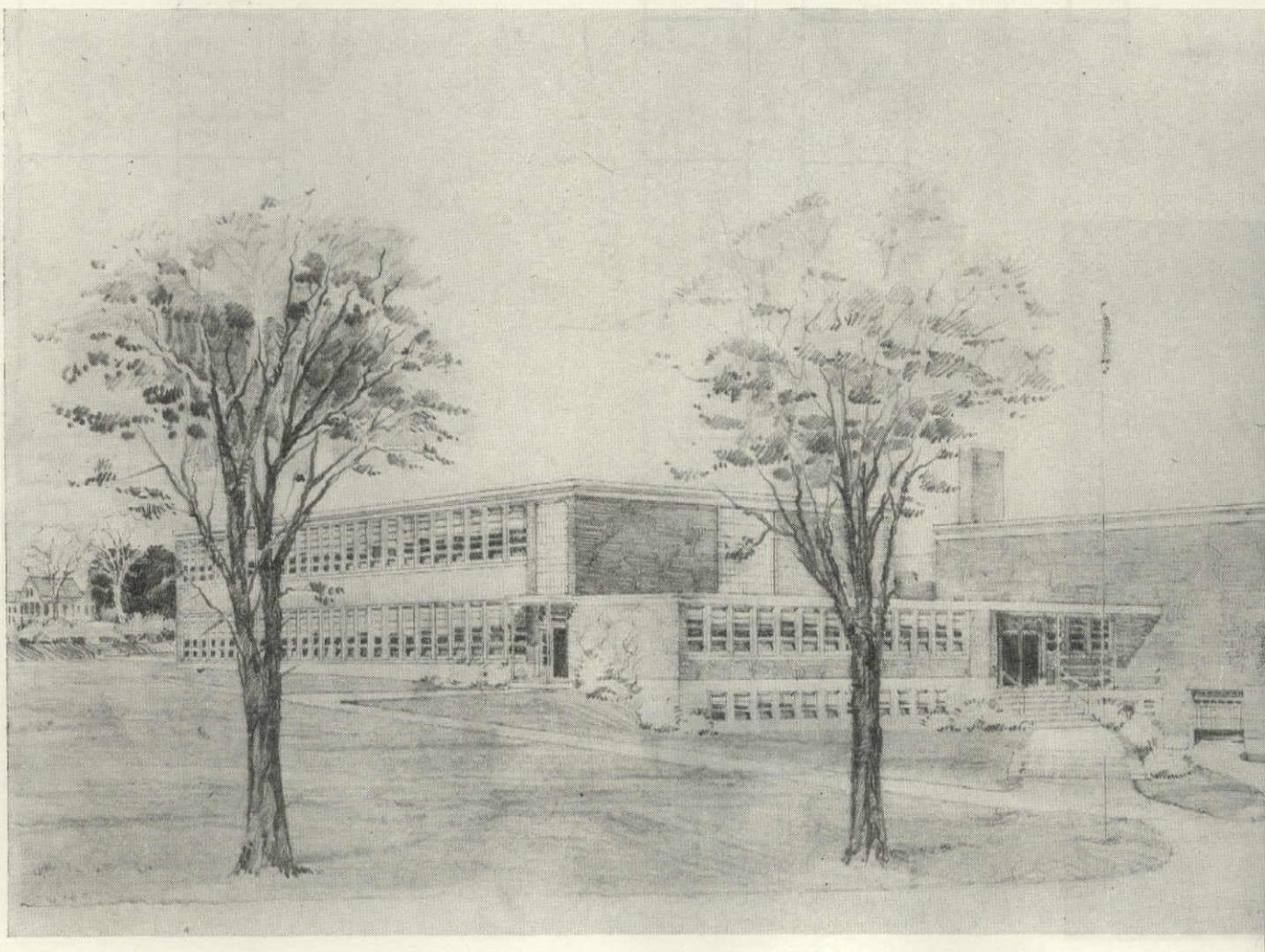
CALAIS BOARD OF EDUCATION, Owner

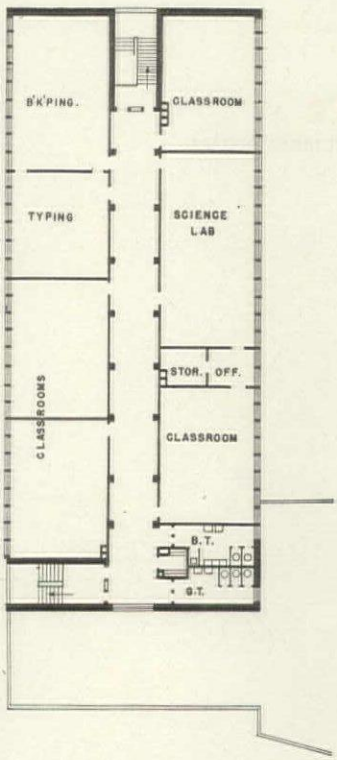
ALONZO HARRIMAN, Architect

Designed as a combined school and community center, this building will be erected in Calais, Me., a small community at the mouth of the St. Croix River opposite New Brunswick. Since New England is virtually without any modern school architecture, the absence of symmetry and conventional ornamentation in this design takes on added importance. The plan places classrooms and activity rooms in separate wings connected by the administration group on the ground floor. Anticipating a maximum enrollment of 300, the school provides ten classrooms, a dual purpose science room, a typing room and a library. Shop and home economics classrooms are in the basement. The corridor between the gymnasium and auditorium will be used as a cafeteria—a sensible space economy. Gymnasium bleachers are over this corridor, and the entire wing can be closed off from the rest of the building and used for community gatherings. Seating capacity of the auditorium will be 700.

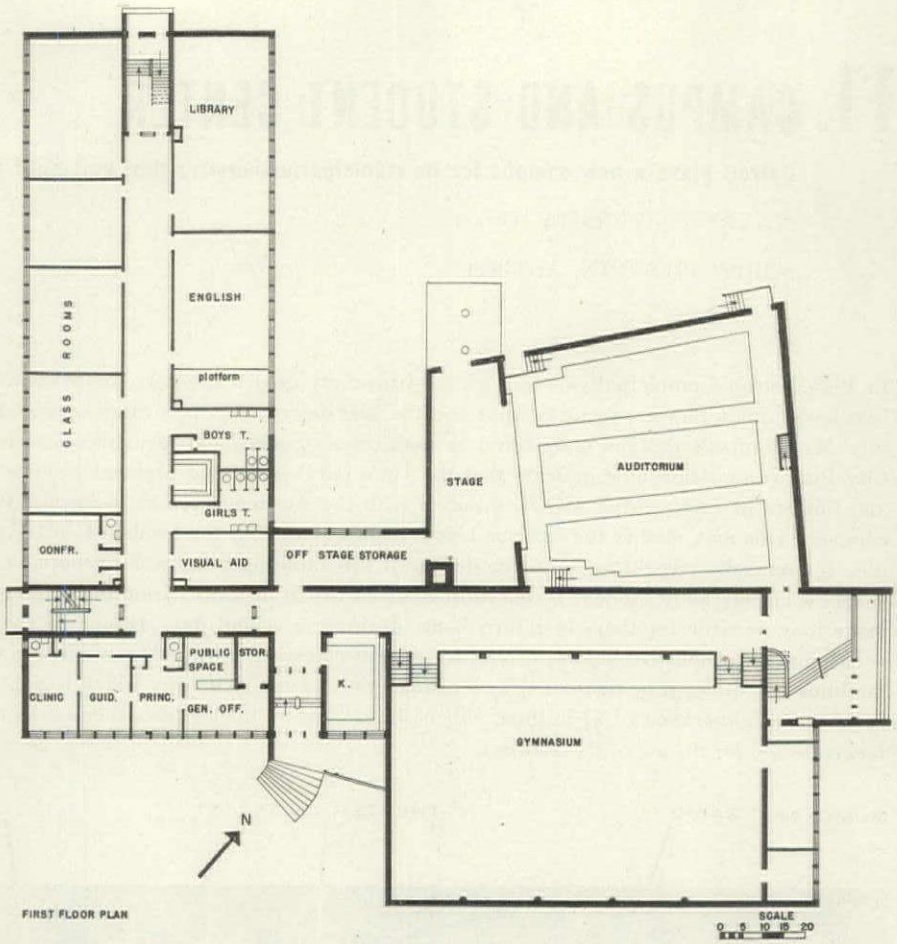


MAIN ENTRANCE TO SCHOOL IS IN ADMINISTRATION WING. GLASS BRICK AREAS IN TWO STORY STRUCTURAL LIGHT CO



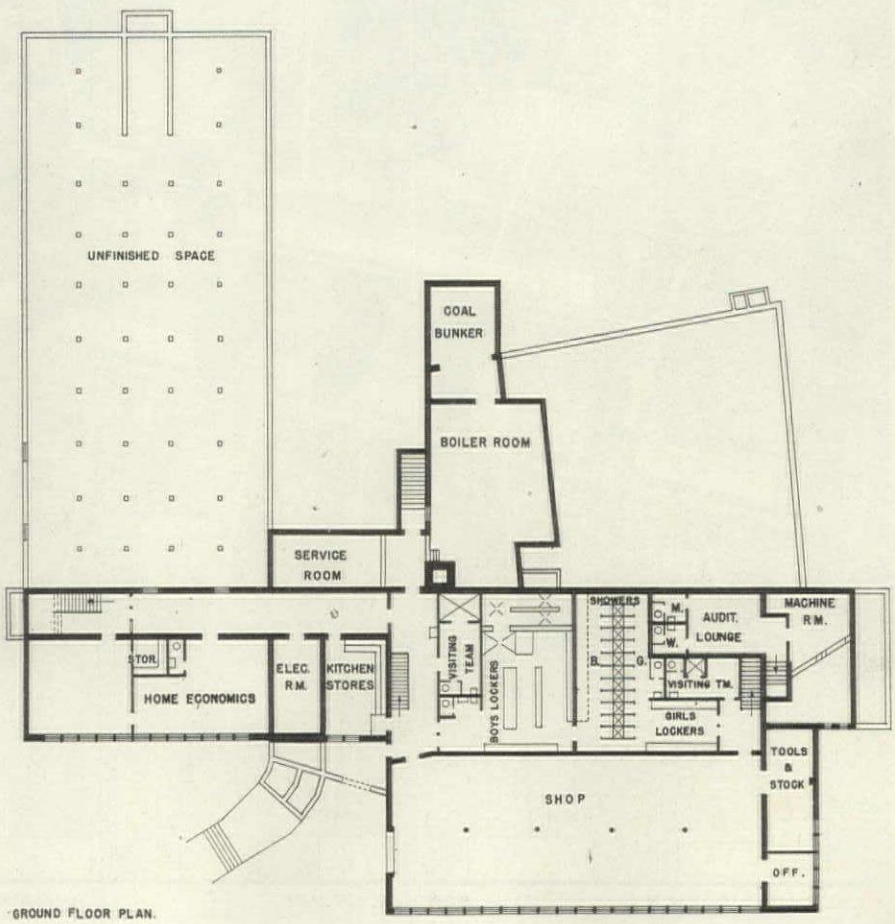


SECOND FLOOR PLAN



FIRST FLOOR PLAN

ASSROOM AND STAIRWELL



GROUND FLOOR PLAN.

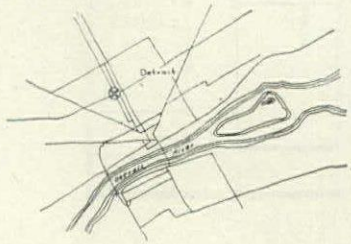
11. CAMPUS AND STUDENT CENTER

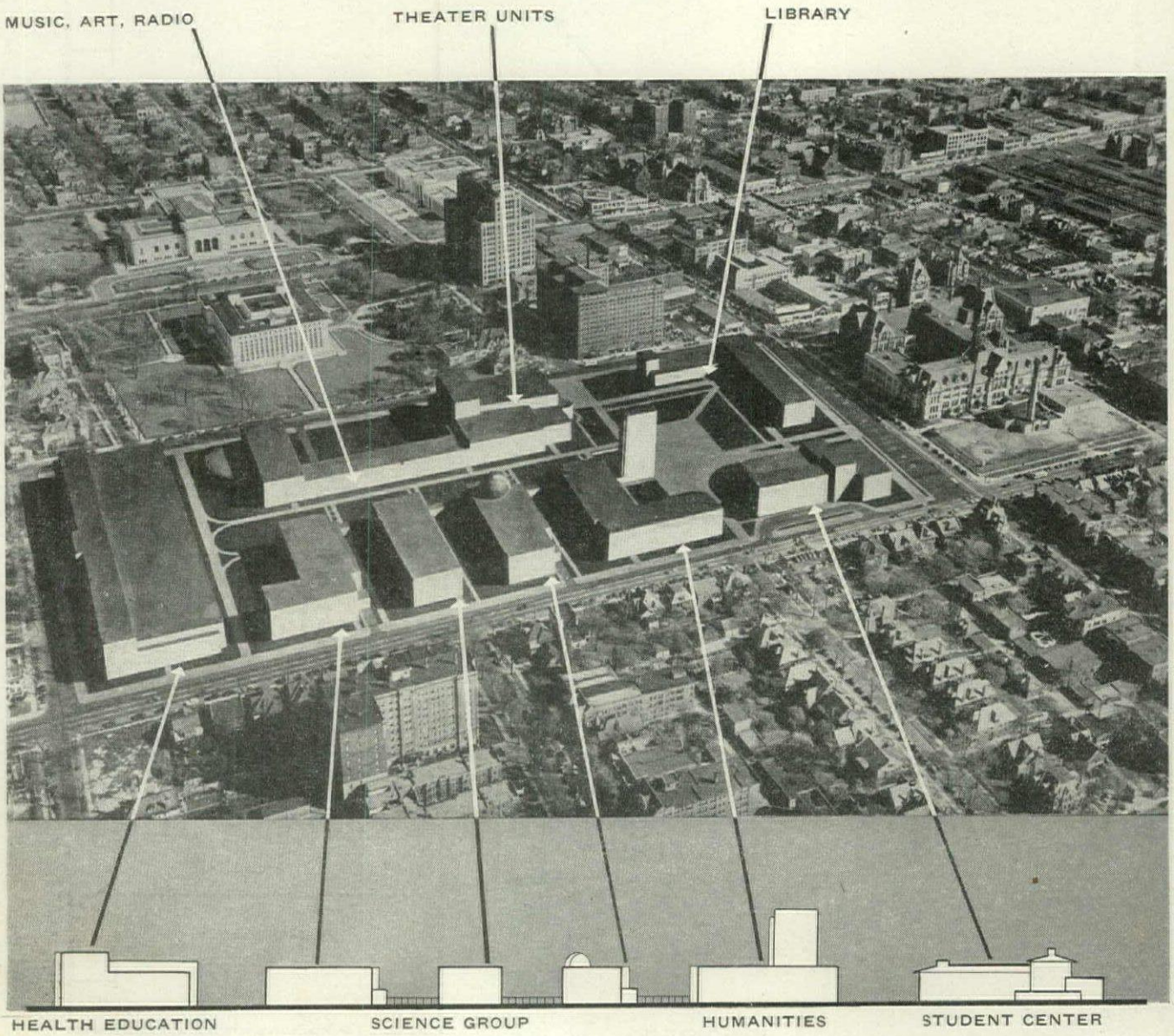
Detroit plans a new campus for its municipal university: first unit built will be a student center.

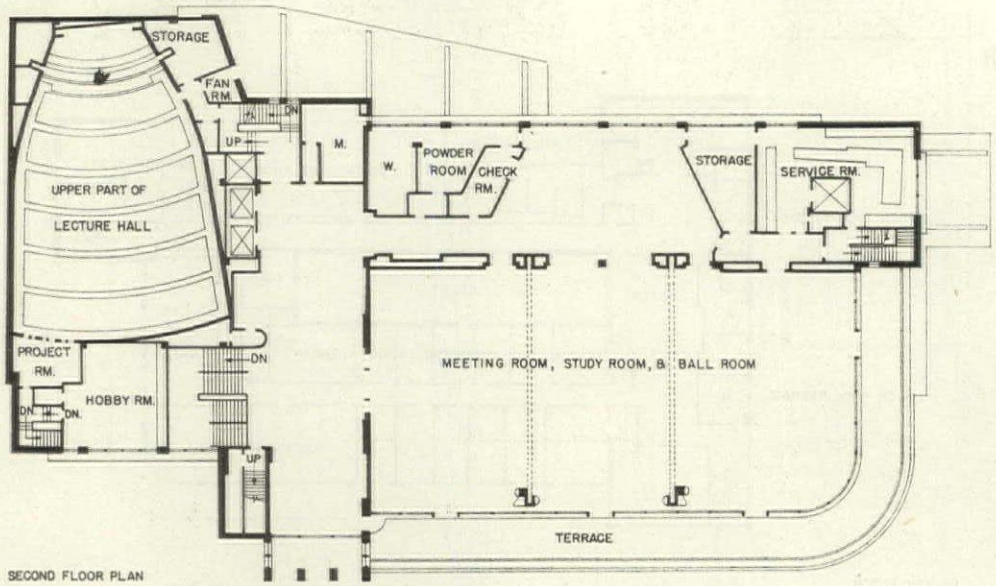
WAYNE UNIVERSITY, Owner

SUREN PILAFIAN, Architect

In 1943 Detroit's municipally-owned Wayne University held a two-part competition for the best layout for a new academic campus and the best design for a new Student Center building. Mr. Pilafian's designs placed first in both cases. Subsequent recommendations of the City Plan commission now indicate that the University's proposed Medical Science Center and College of Engineering will be grouped with the Academic center to form a 100 acre campus. This may modify the campus layout shown below but the Student Center is scheduled for immediate construction. The design of this building reflects the peculiar needs of Wayne's largely adult student body. Most of them live at distances from the campus which make it impossible for them to return home during the school day. Design of the Center —based upon exhaustive studies of faculty-student committees—provides large and flexible facilities for study, rest, recreation and eating. Cost of the structure, which is expected to be in the neighborhood of $1 million, will be liquidated by the students themselves through fees collected for the use of its facilities.

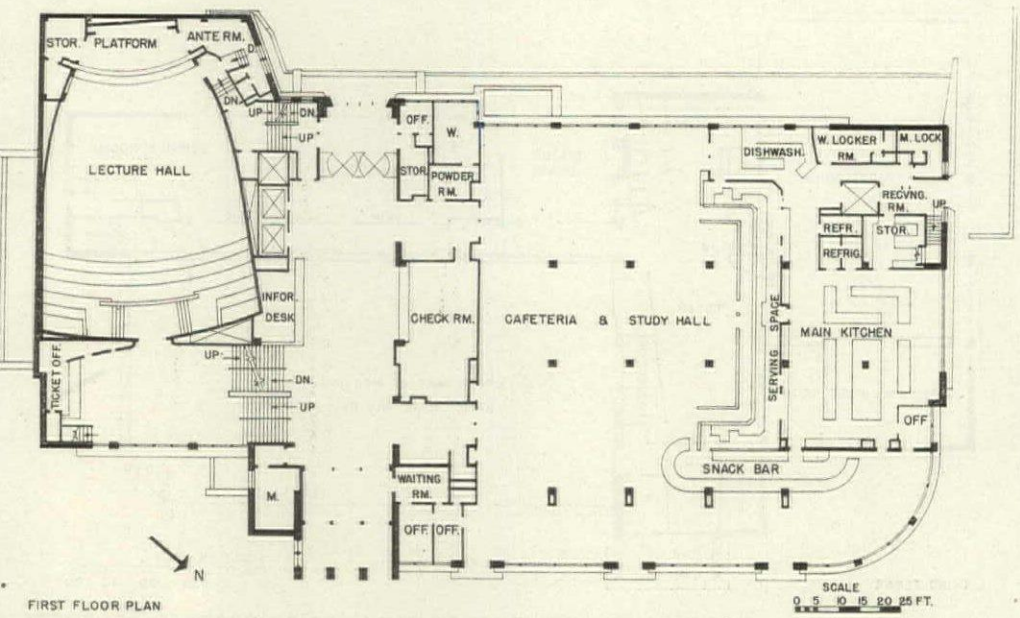






SECOND FLOOR PLAN

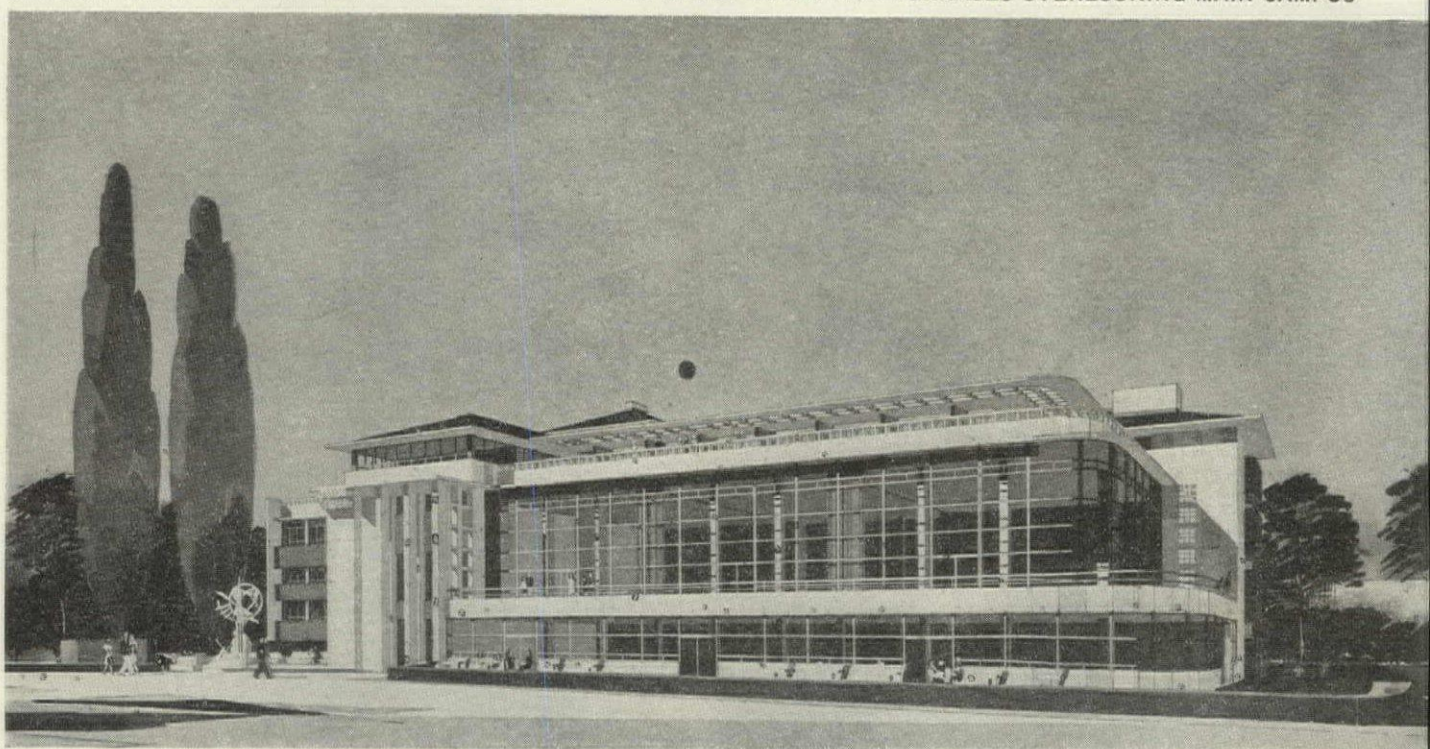
SECOND FLOOR contains large two-story ballroom with service facilities for banquets for 570 persons. Folding soundproof doors permit subdivision into smaller rooms, while storage space is provided for changes in furnishings.



FIRST FLOOR PLAN

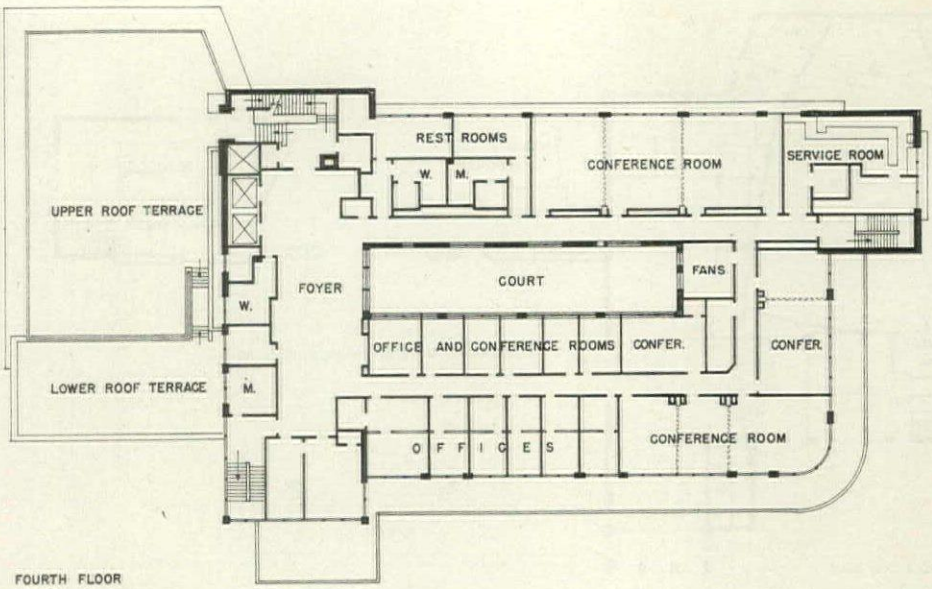
FIRST FLOOR contains lecture hall, a cafeteria seating 500 which can double as study hall, and a kitchen which also serves a ballroom on the second floor. Windows of cafeteria overlook terrace and campus beyond.

STUDENT CENTER'S CAFETERIA AND BALLROOM HAVE GLASS WALLS AND TERRACES OVERLOOKING MAIN CAMPUS



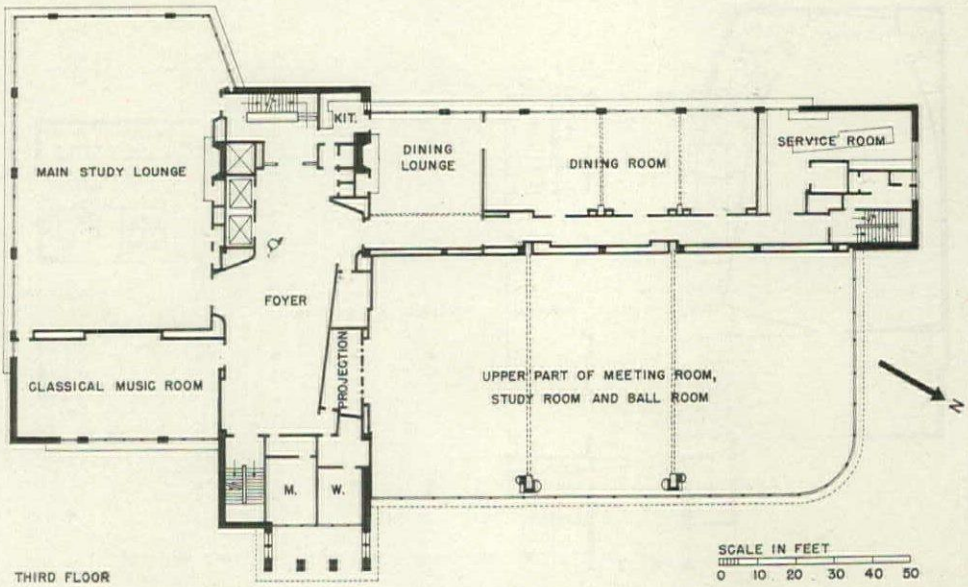
CAMPUS AND STUDENT CENTER

FOURTH FLOOR is devoted to a suite of 22 offices for various student organizations and activities; four conference rooms which can be subdivided by folding partitions; restrooms for men and women.



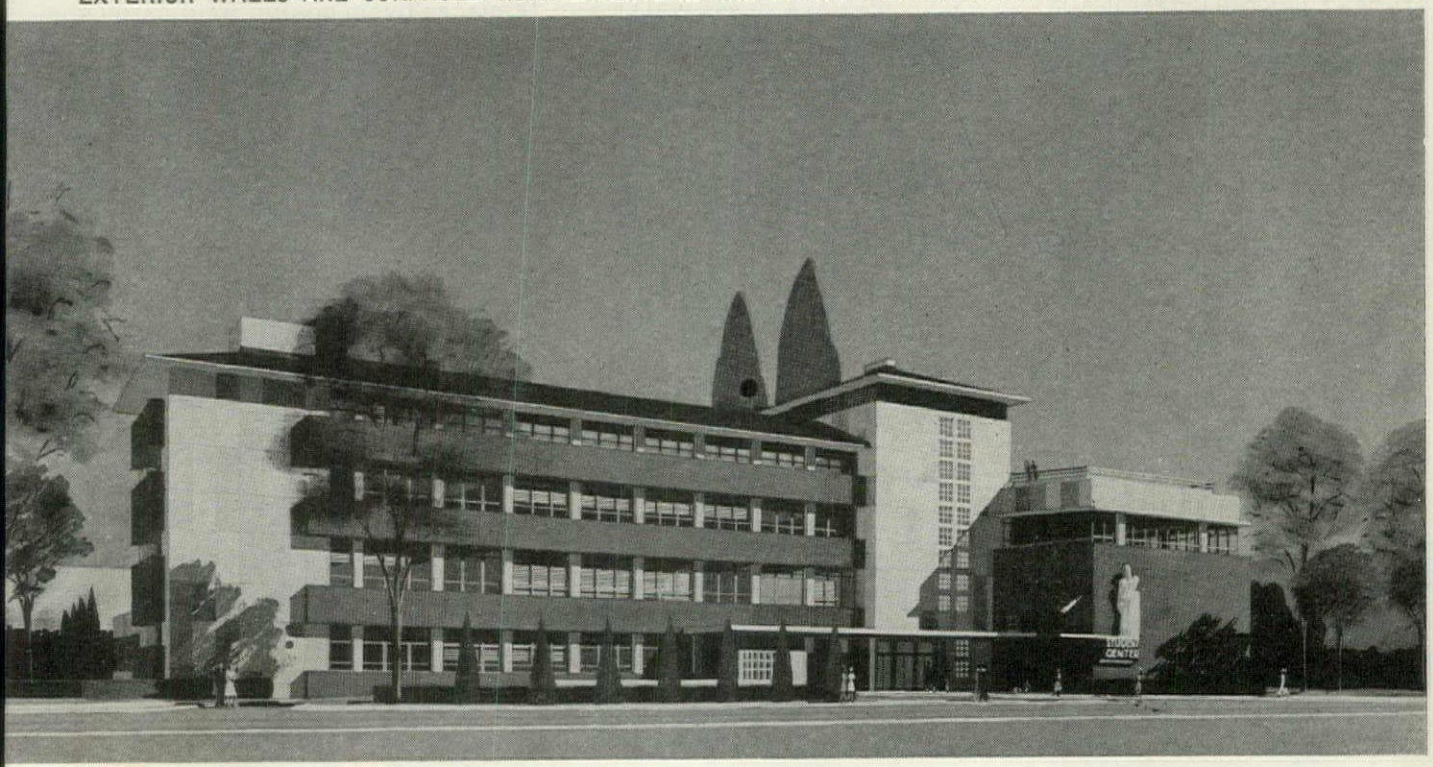
FOURTH FLOOR

THIRD FLOOR includes a large and sunny lounge with a fireplace; a soundproofed music room with apparatus for playing and storing records; a dining room with capacity for 160 diners.



THIRD FLOOR

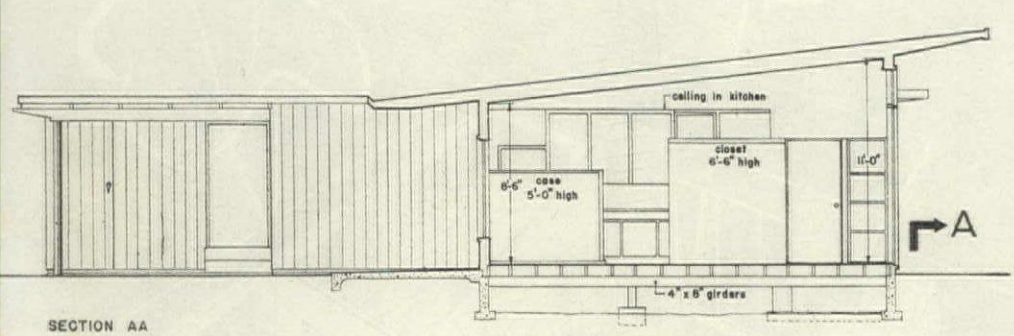
EXTERIOR WALLS ARE SURFACED WITH LIMESTONE AND BRICK. BUILDING FRAME IS OF REINFORCED CONCRETE



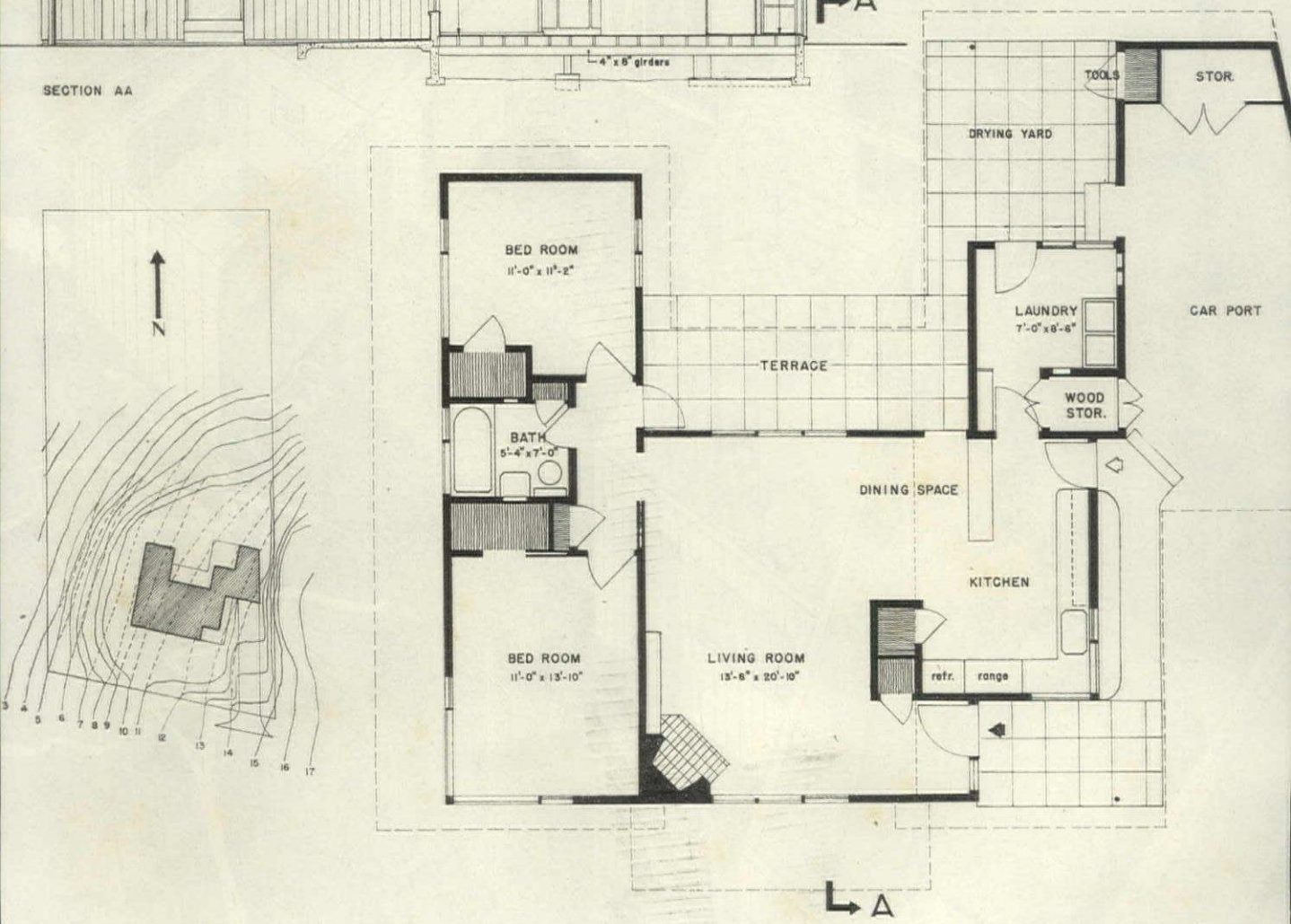
G. I. HOUSE

The most pleasing aspect of this small house is its economy in a number of clever, unobtrusive ways and the priority given to openness. In plan, the most striking of these is the extra length and splayed wall of the carport which provides good storage space and a covered service entrance without sacrifice to the comfortable ingress and egress of the car. Located in Oregon, which has a mild climate but many rainy days, it is logical to have outdoor living space sheltered. Therefore the architect has extended the eaves to cover the terrace, drying yard and front entrance.

Structurally speaking, the most interesting saving lies in the roof treatment. Ceiling and roofing are applied directly to the rafters. Eliminating the usual cricket required to keep water from collecting between the roof slopes, the architect has accepted the centers of the spans as natural drains and connected these to a single downspout with but a slight manipulation of the slope between the center of one span and the center of the next. As was often seen in war housing, single sub- and finish-flooring are used over the joists with insulation underneath. Electric panel heating is planned by installing resistance wire in the ceiling plaster to be controlled thermostatically.



SECTION AA



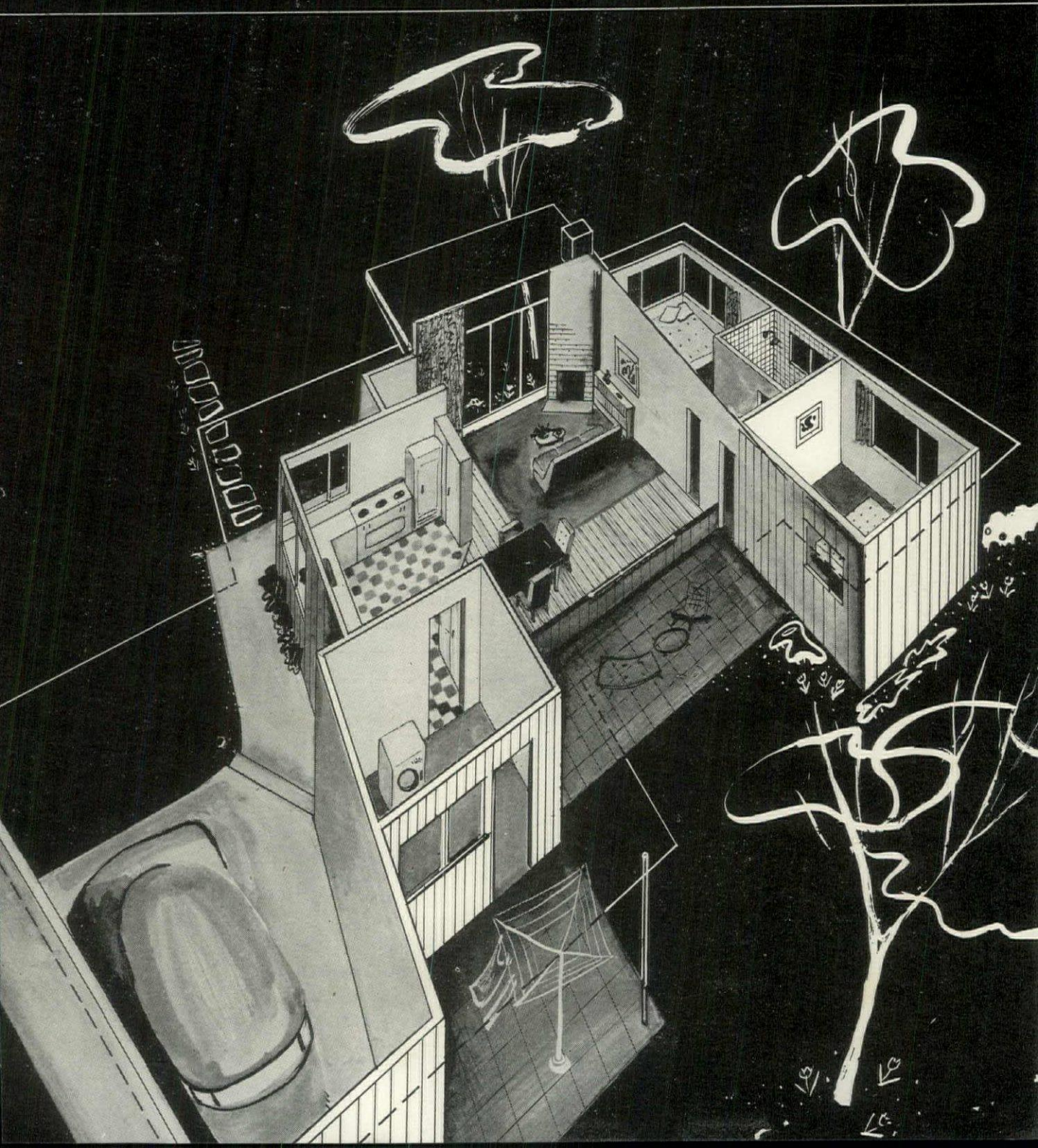
2. G. I. HOUSE

Economies learned through wartime housing work are applied to a postwar private home.

MR. AND MRS. JAMES W. BAYLESS, Owners

VAN EVERA BAILEY, Architect

RESIDENTIAL



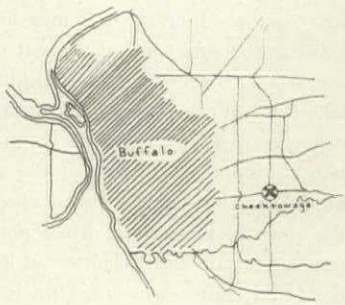
13. SMALL HOUSE

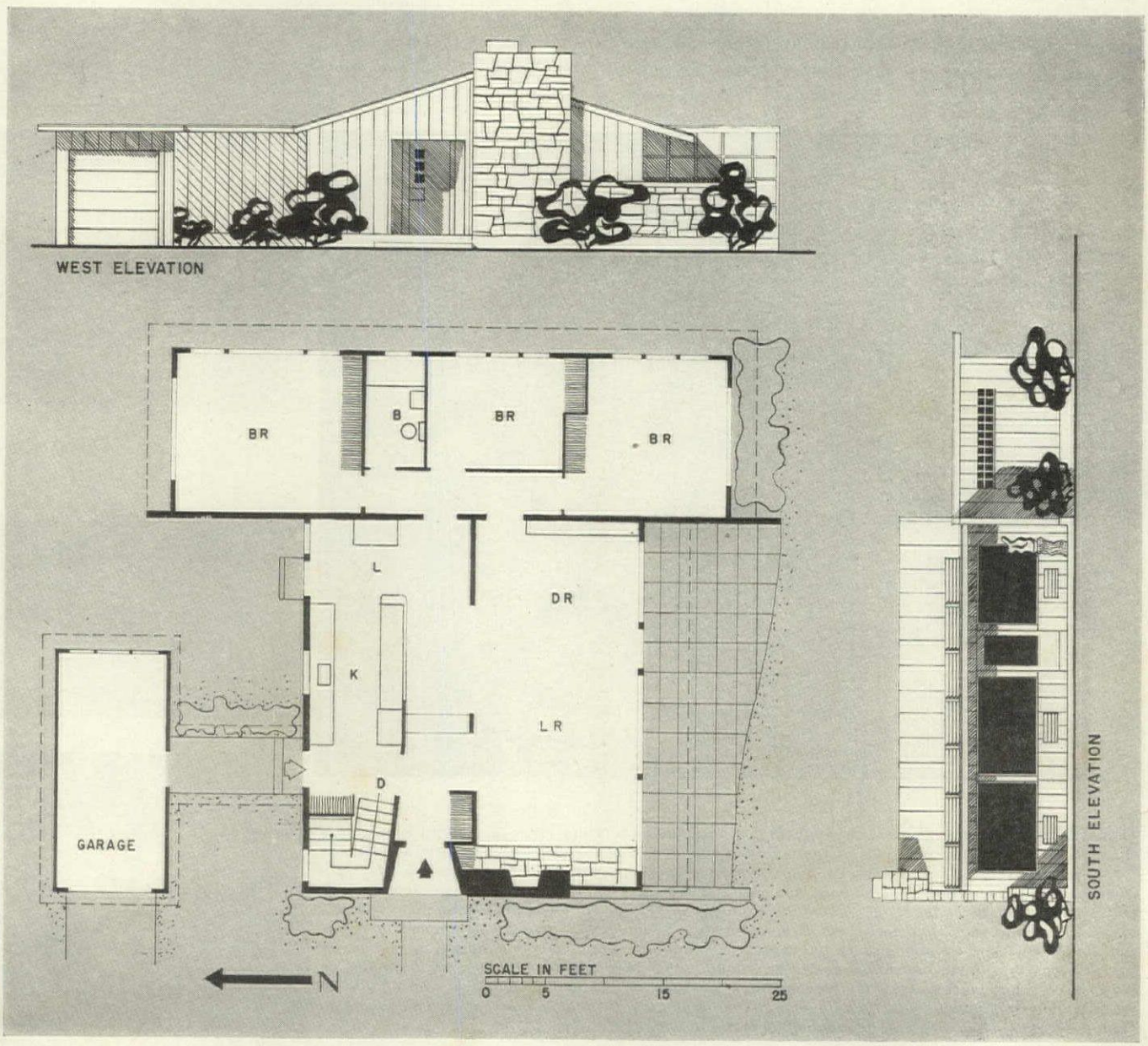
Among Buffalo's first modern houses, this plan expresses imagination and progressive thinking.

P. RIZZO, Owner

SEBASTIAN J. TAURIELLO, Architect

Scheduled for construction in upper New York State, this one-story residence will be among the first modern houses to invade that area. The plan, which departs in many ways from conventional small house design as it is known in the East, is more open than most, puts more emphasis on outdoor living. Service and living areas run parallel through the depth of the house with three bedrooms at the rear forming a T. A blank wall incorporating a stone chimney faces the street and extends out to create a sheltered terrace at the right. By splaying the partition between the stairwell and entrance hall the architect achieved an extra sense of spaciousness and added a definite point of design interest. Conforming to the current trend, much space is given to storage and a number of prefabricated closets have been used. Obviously designed for easy maintenance without servants, the kitchen opens wide into the main part of the house and features an ample service bar. The dining table can be set in either the alcove or the living room.





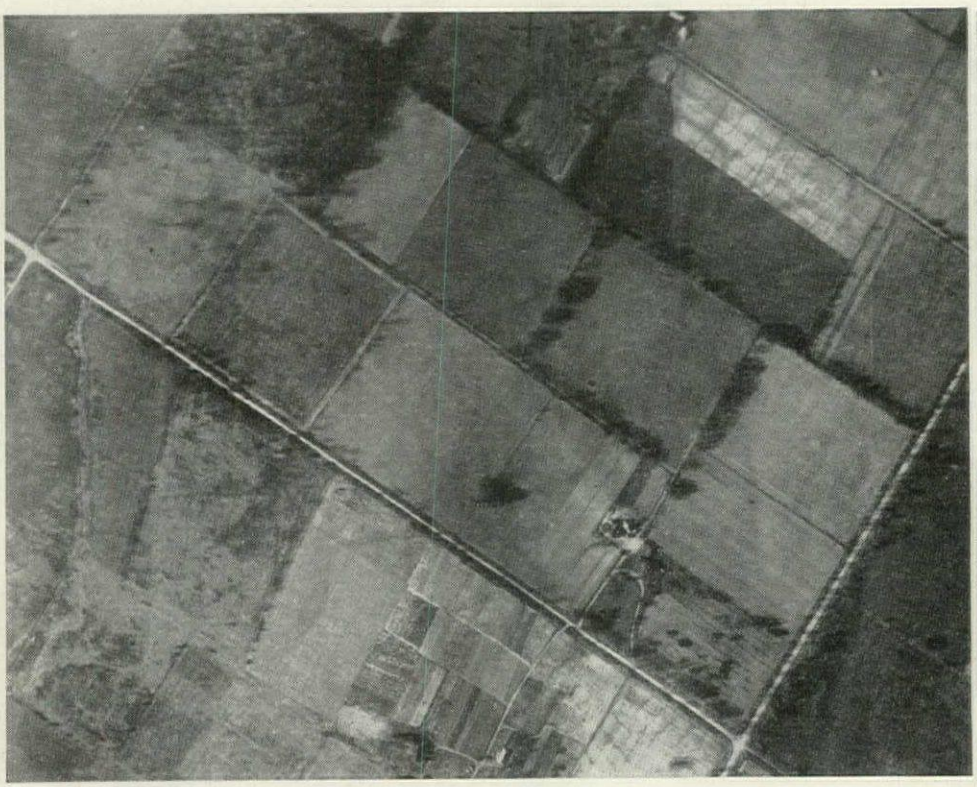
14. RESIDENTIAL COMMUNITY

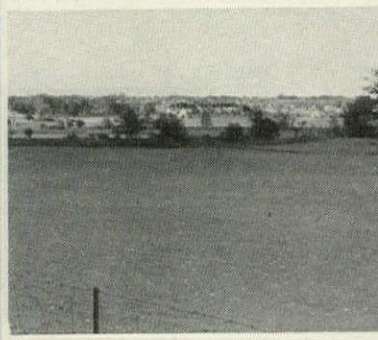
Planned neighborhood offers mass purchase and building economy, owner association protection.

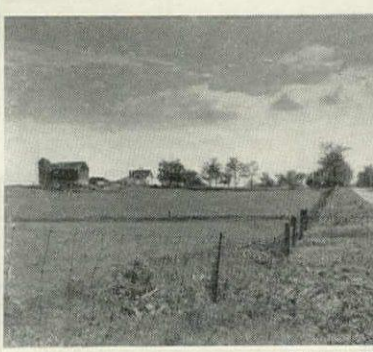
THORNCREST DEVELOPMENT CO., LTD., Owners

TOWN PLANNING CONSULTANTS, LTD., Planners, E. C. S. COX, Architect

Several years before World War II, Marshall M. Foss had run "plump into the incredible fact that production of homes had never been organized," and as it was apparent that "a home is the sum total of a great many factors of which a house and a lot are two of the least important, it seemed that it might be a good field for somebody to do something about." So, when Mr. Foss recently got out of the RCAF, he lost no time in buying a plot of land, organizing a development company, and putting forth his ideas for a properly planned neighborhood. Selection of the actual site and its complete layout was left to Town Planning Consultants, Ltd., who chose a 100 acre plot nine miles northwest of Toronto, near the town of Ishington. Road patterns run predominantly east and west, to obtain southern exposures for the majority of houses. Speeding is controlled by constantly curving and dead-end routes, and parking is provided for in a series of neighborhood parking centers. A shopping center occupies the southeast corner, adjacent to the intersection of the main through highways. Centrally located is a small park for the neighborhood club and day nursery, while a larger wooded area at the northeast corner of the site is reserved for recreational use. Control of these community facilities, as well as admission of other families to the neighborhood, resides in a Homes Association, in which each resident has one vote.

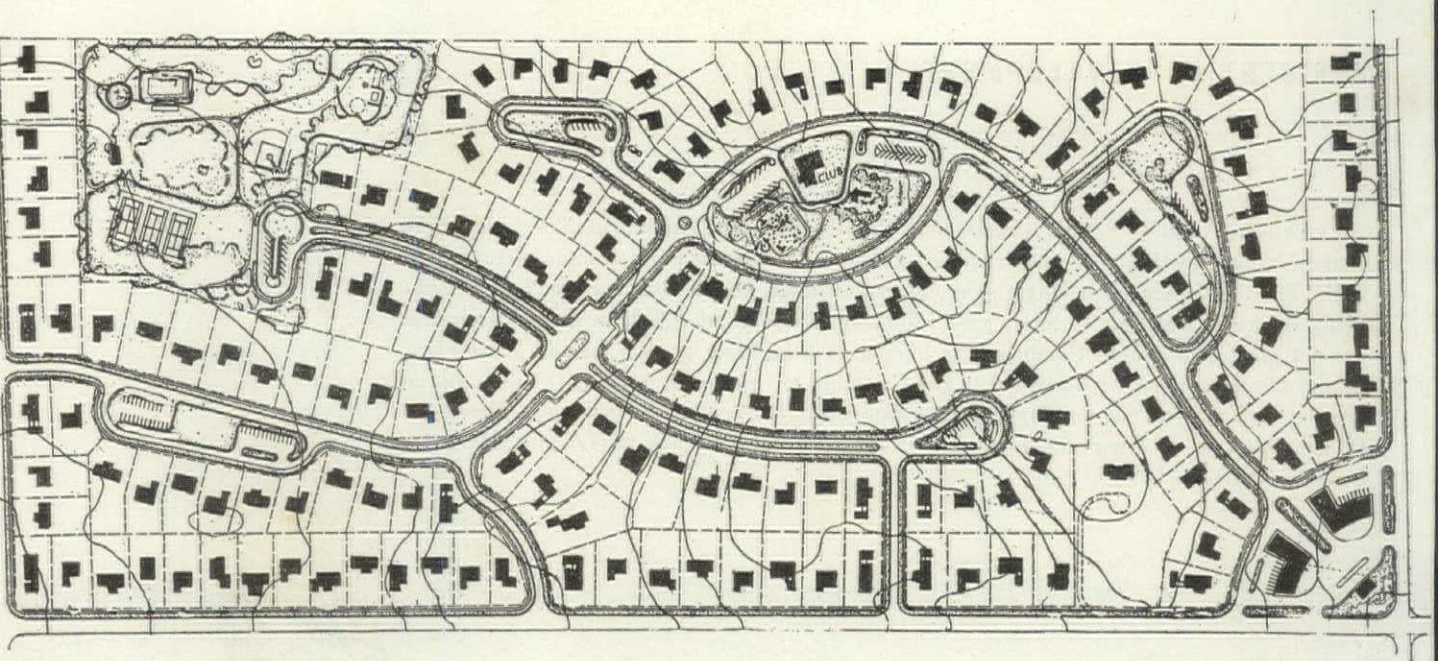




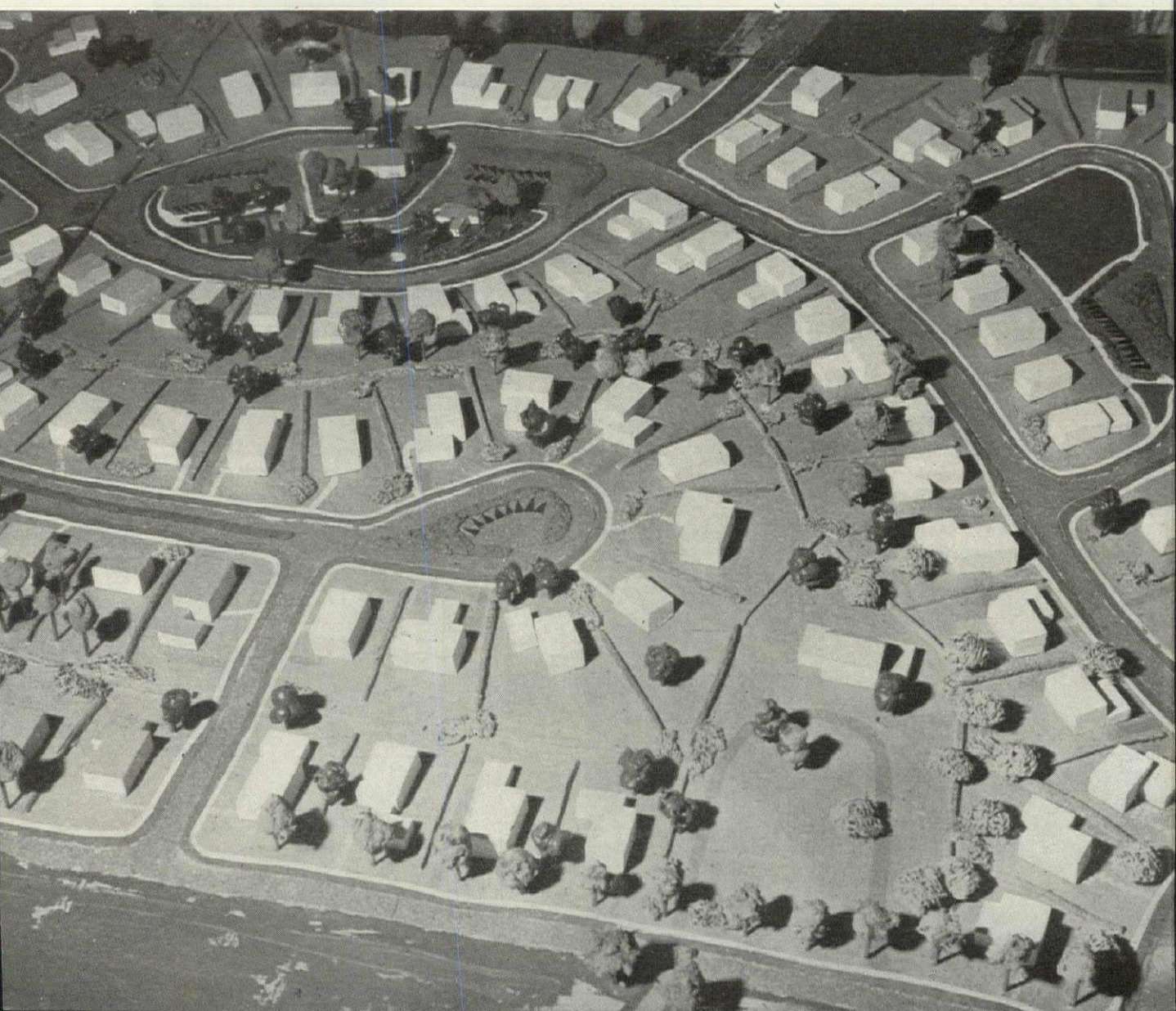


THE SITE for the development consists of 100 acres of undulating farm land, with some quite handsome trees. After purchase of the land and completion of the development plan, a mortgage was secured from a U. S. insurance company, the proceeds of which would be available for services and improvements. The acreage has been divided into 180 lots, each with a minimum width of 75 ft. and depth of 180 ft. Prices range from $15 to $20 per ft. Of the 100 acres in the development, 77 have been used for home sites, 16 for recreational areas, and the remainder for roads, parking and shops. Roads are to be kept to a minimum width, all parking being in private garages, or in the special lots provided throughout the development. Electric services will be carried on poles placed along lot juncture lines in the rear. Schools, churches, and additional recreational and shopping facilities are available in the township of Etobicoke, one mile distant, and the center of Toronto may be reached by motor in 20 to 30 minutes.

Photos: T

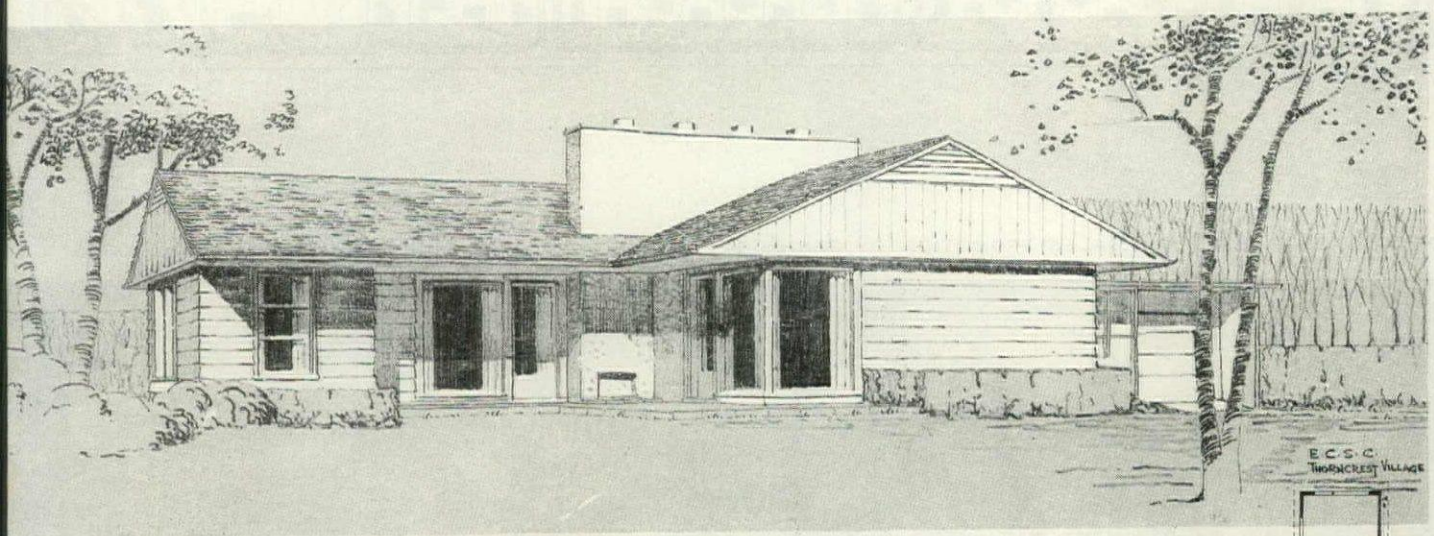


OF VILLAGE IS USED FOR SALES PROMOTION BY SERIES OF TWO-WEEK DISPLAYS IN VARIOUS TORONTO STORES

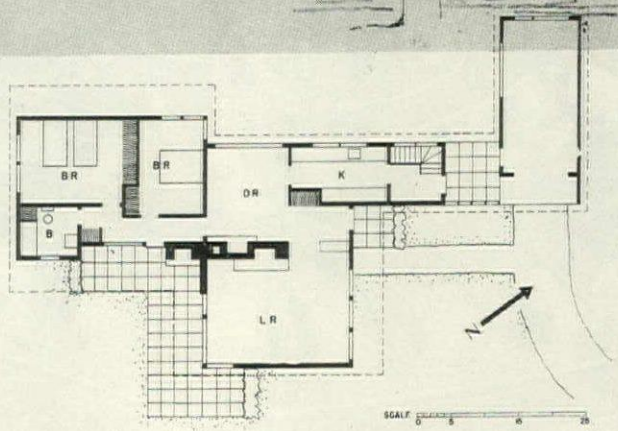


RESIDENTIAL DEVELOPMENT

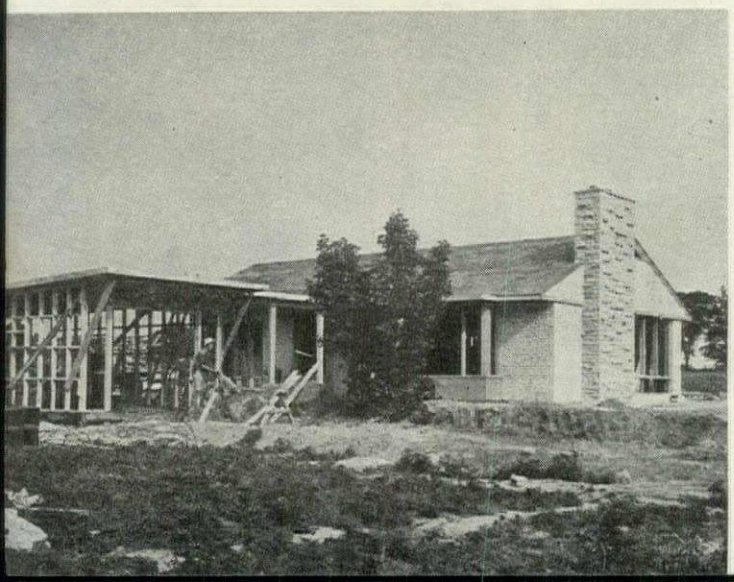
An architect, Mr. E. C. S. Cox, is retained by the Development Company to take charge of its own building activities, and, when required, those of its associated Construction Company as well. The developers favor single story, large-windowed houses that are "modern without being freakish," and able to relate gracefully to more traditional designs. Land purchasers are not pressed to use the Company's architectural or building services, but all house plans by outside firms must be submitted to the Company for approval, in order to maintain the architectural unity of the development. To date, only four homes have been completed, due to the shortages of labor and materials. Costs have ranged from $8,000 to $10,000 per house, exclusive of land.

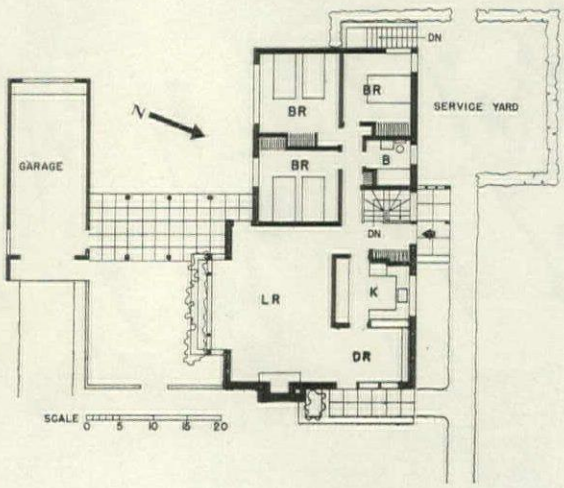


TYPICAL HOUSE IS ONE-STORY, MODERATELY MODERN



BUILDING MATERIALS FOLLOW THE LOCAL TRADITION





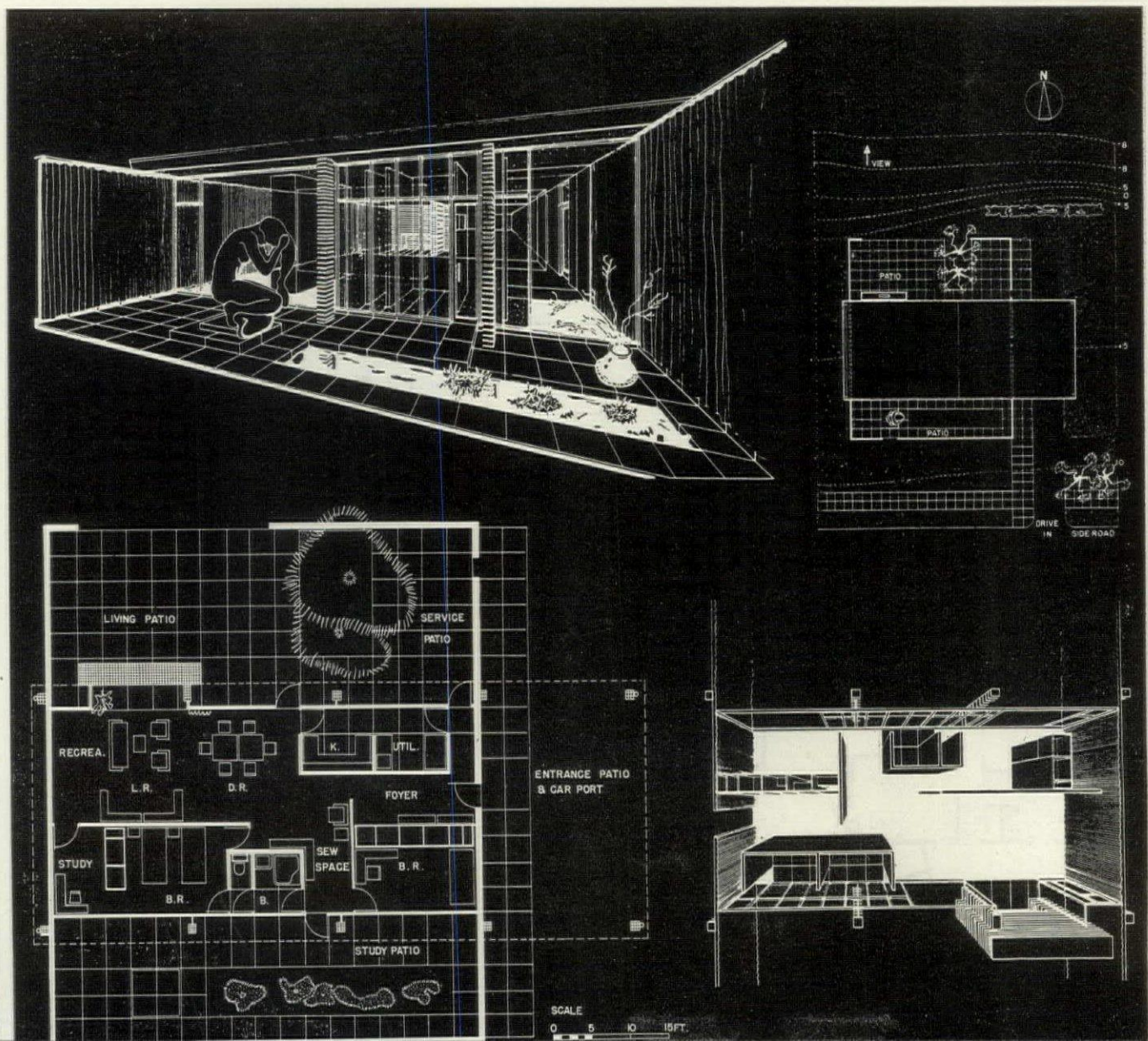
15. SOLAR HOUSE

A garden wall incorporates outdoor and indoor spaces into a unit for year-round living.

LT. MANNY BAKER, AUS, Owner

DAVID BAKER, Architect

This unusual house is scheduled to be completed by March 1946 to receive a returning war hero and his bride, and has been designed "to incorporate all the latest planning theory and equipment." Almost the entire lot has been encompassed by a high wall with the exception of a view opening to the north, and small entrances to the east and south. The house itself has been placed across the middle of this walled space with all-glass walls opening on two sides into the patios thus created. Such a scheme provides many of the advantages of indoor-outdoor living without the lack of privacy typical of surburban lots. Brick piers outside the house walls support the slab roof, which extends to the east to form a combination entrance porch and car port. All interior walls are thus relieved from roof-supporting functions, and can be arranged freely to suit the requirements of the family. Living and service functions have been placed to the north, and sleeping and study to the south. Interior features include a service space divided into kitchen and laundry units, a storage wall between the foyer and guest room, and a departmentalized bath. Circulation to indoor and outdoor spaces is unusually convenient.



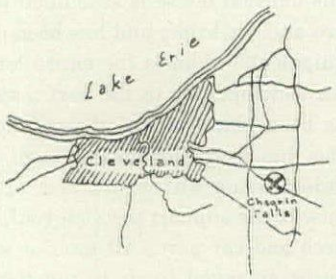
16. HILLSIDE HOUSE

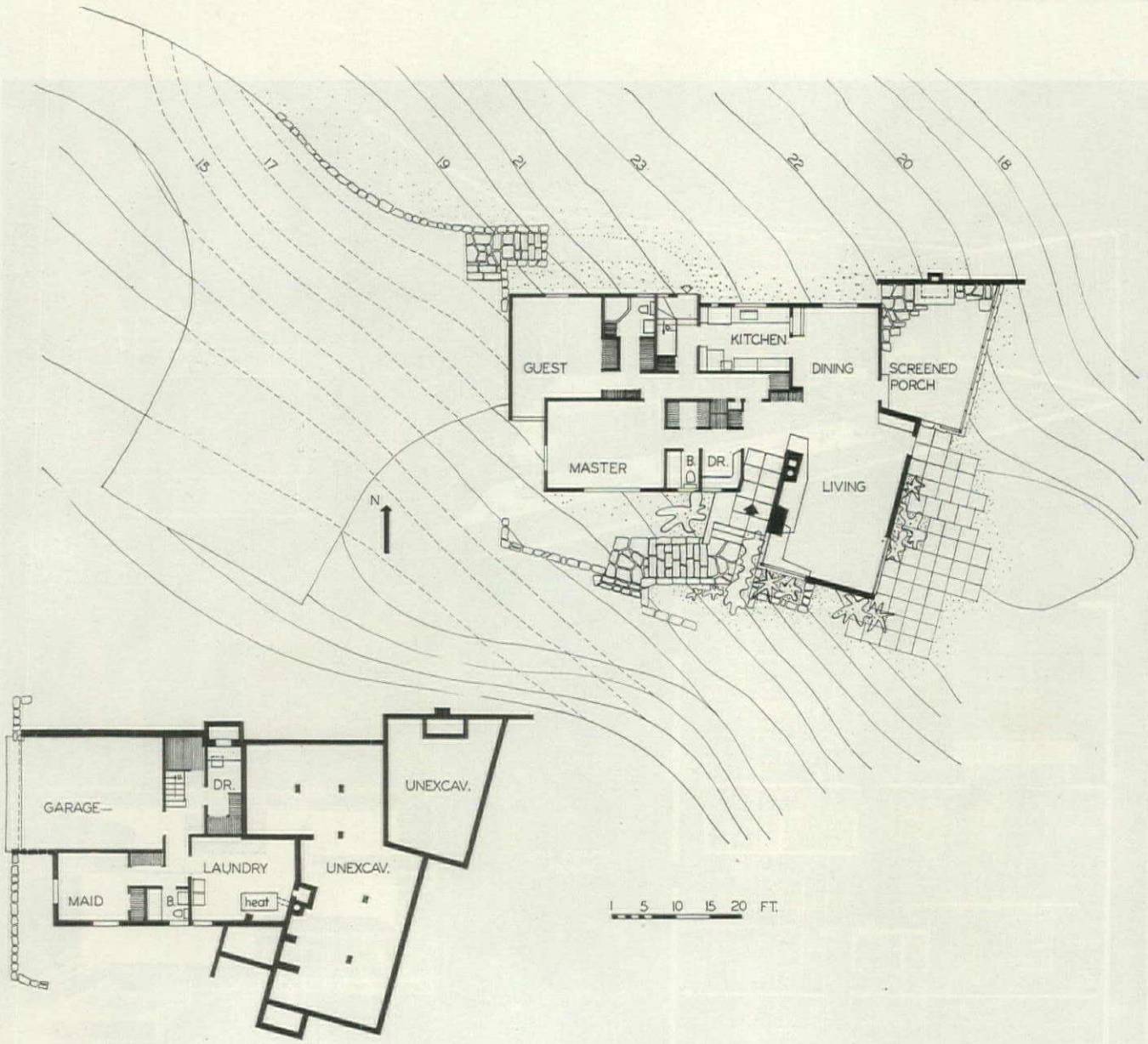
A small Ohio house achieves distinction with careful siteing and a compact interior layout.

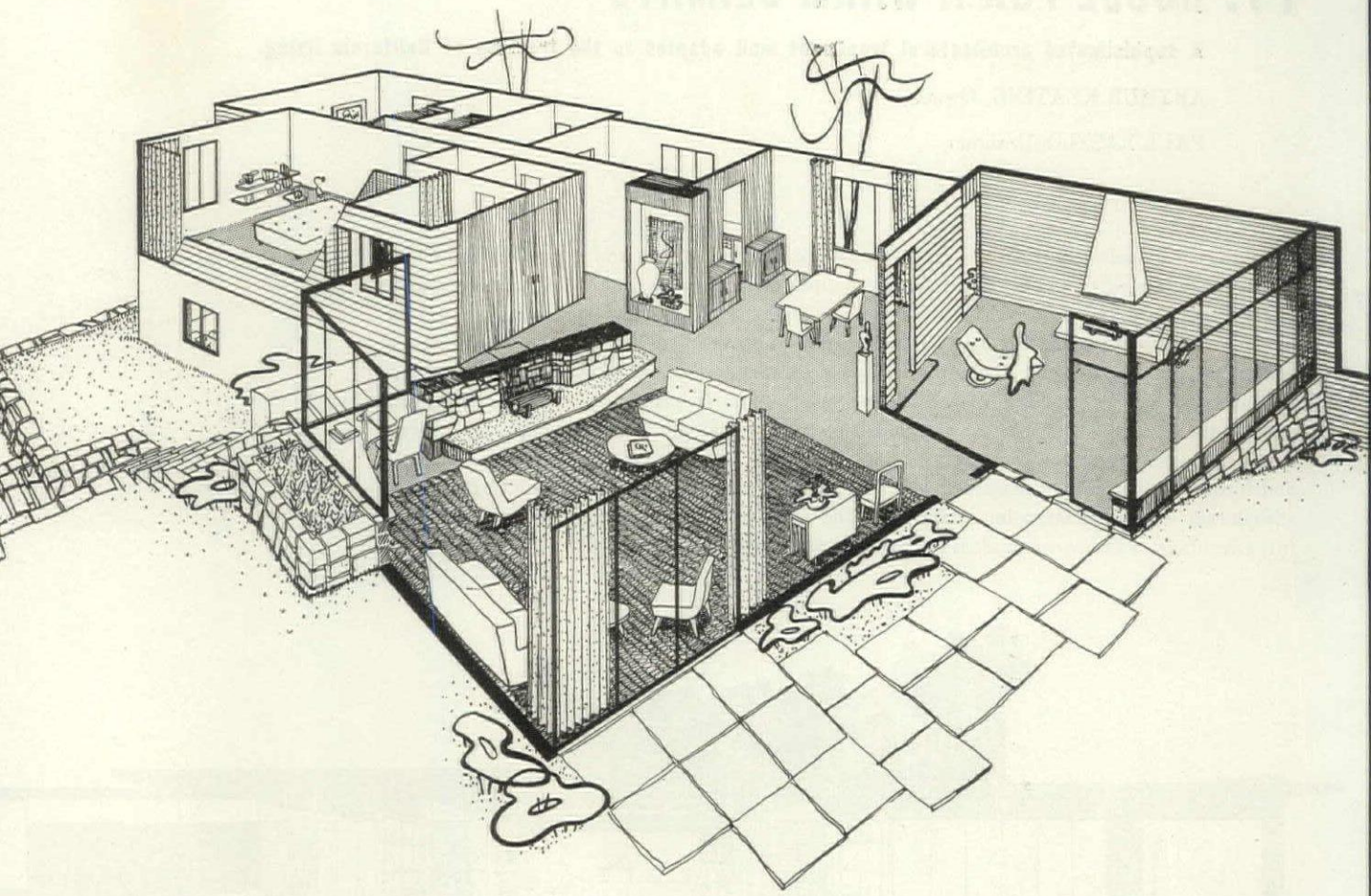
MR. & MRS. CLARK T. McCONNELL, Owners

RIDEOUT & PAYER, ERNST PAYER, Architects

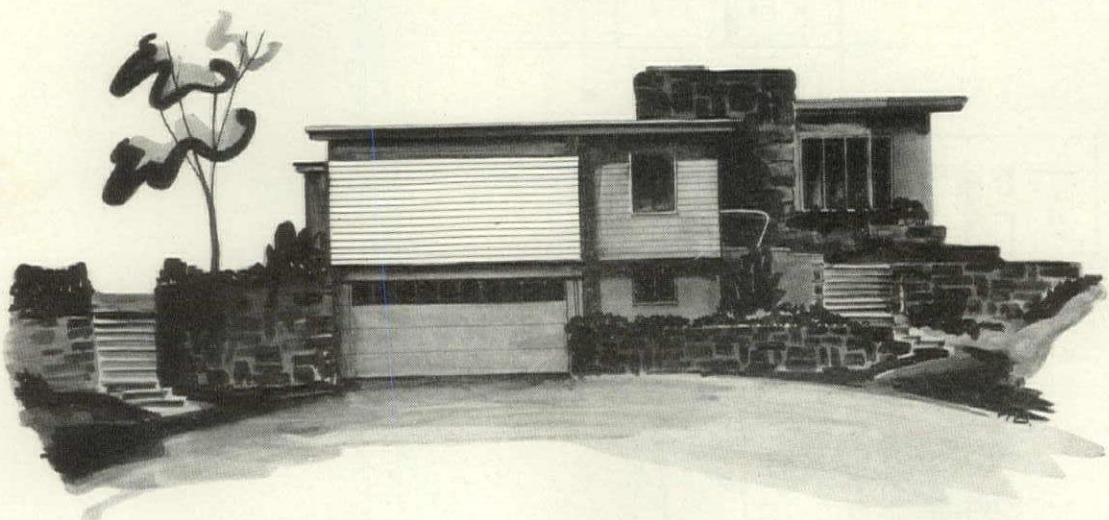
A fortunate combination of slope, exposure and view — all to the south — forms the basis for the design of this hillside house near Chagrin Falls, Ohio. Both its site and interior planning circumvent many of the limitations commonly associated with a five room house. The living area is open and closely related to both summer porch and flagged terrace. Front and service entrances are so located as to hold traffic to a minimum through the principal rooms. Storage space is more than adequate and well placed with reference to the various rooms. The house has, in addition, several features which spring from the owners' special requirements: the master bath is split to furnish a powder room off the entry; there is a dressing room in the basement for the owners, both of whom ride horses a great deal and need space for boots, saddles, etc.; there is no garden in the accepted sense but a number of planting beds, all of them off the walks and terrace. Construction is of frame and concrete block, stuccoed.







LARGE PORCH with fireplace suitable for barbecues and a large paved terrace commanding best exposure and view add greatly to the space and flexibility of the summertime living area. The large living and dining room windows will be glazed with sealed double glass.



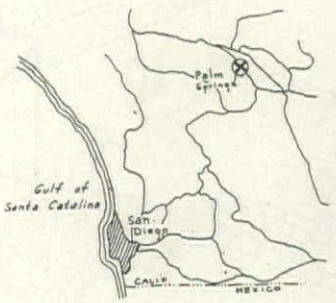
17. HOUSE FOR A WARM CLIMATE

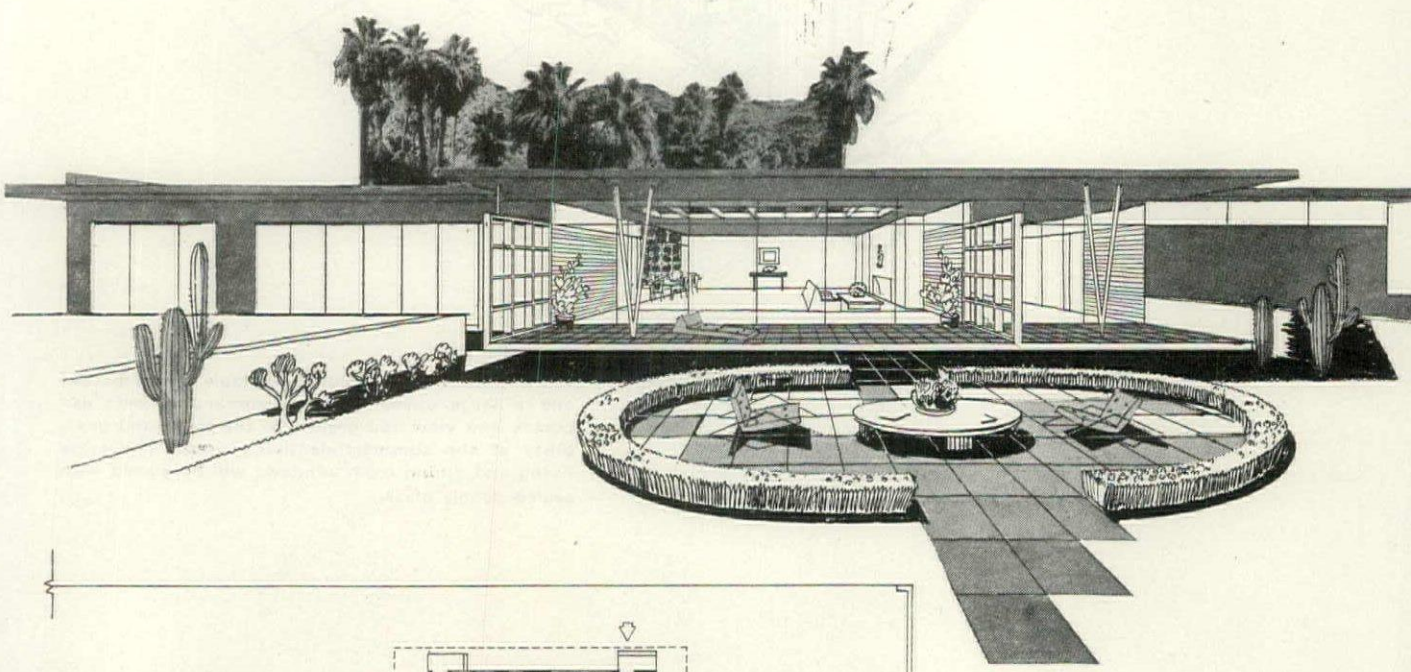
A sophisticated architectural treatment well adapted to the freedom of California living.

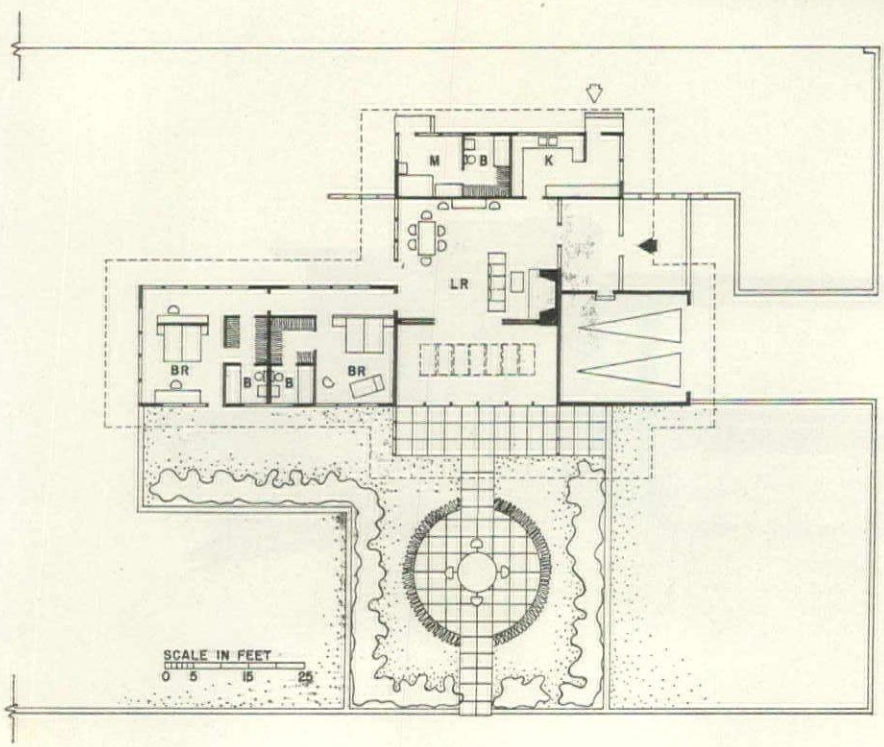
ARTHUR KEATING, Owner

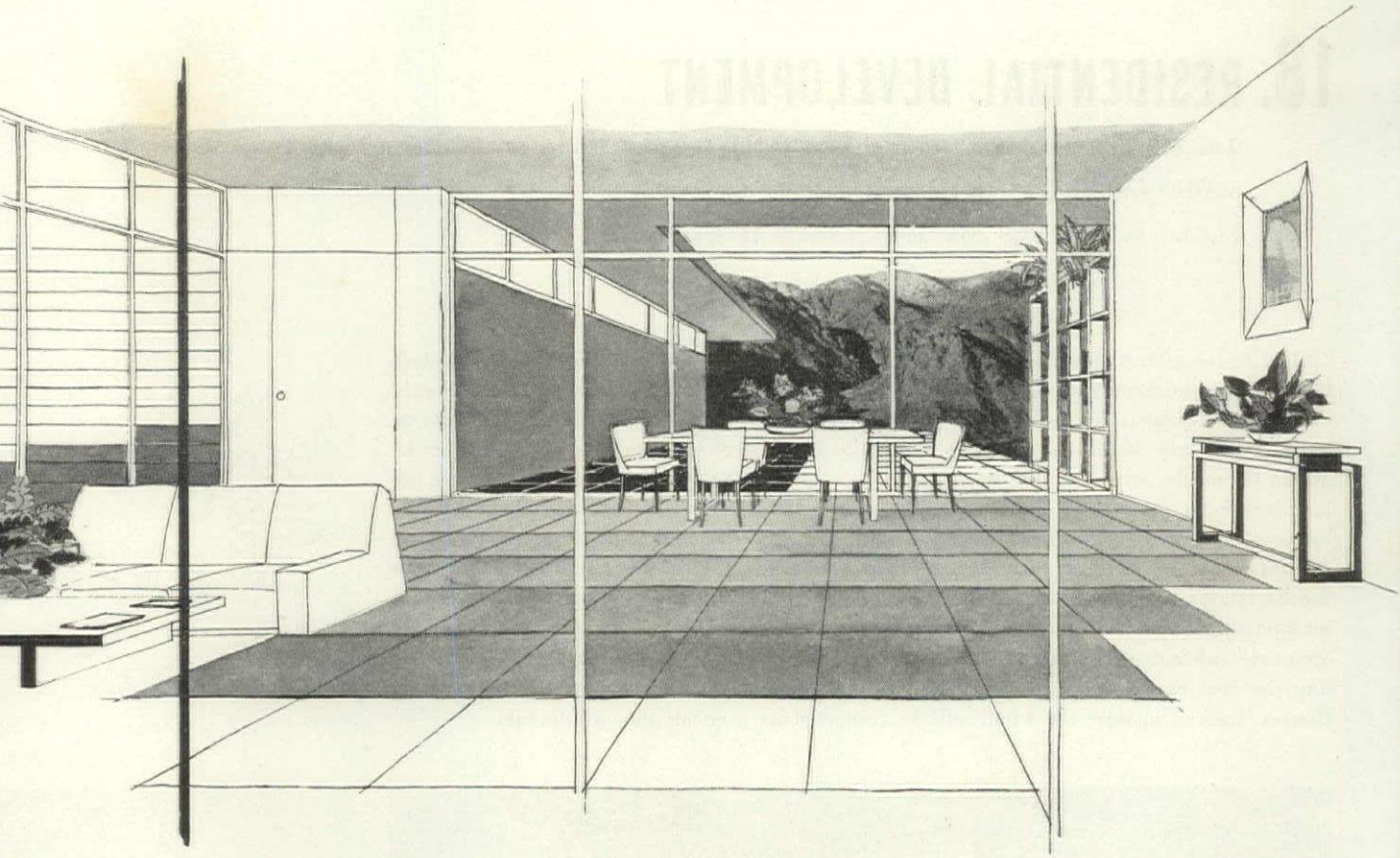
PAUL LASZLO, Designer

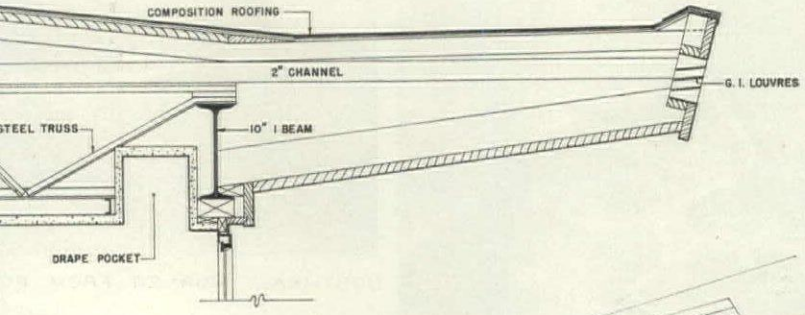
Enjoying an unusual contrast of rugged landscape in the distance and intimately cultivated land at close range, this house faces rolling mountains to the west and overlooks the grounds of the Palm Springs country club to the south. Since the prevailing desert wind is from the northeast, the principal living space is oriented to the south, relying on wide overhangs as protection against the sun. Living-dining space comprises the core of the plan with service and sleeping areas located in clearly defined wings. As is customary in many California houses, the servants' quarters are reached through a private entrance. Though in reality a small house, the generous proportions and openness of the plan coupled with fine materials and formal architectural treatment produce a sense of dignity and luxury usually associated with larger and more imposing buildings. The patio and porch with its pierced roof take full advantage of California's ideal indoor-outdoor living conditions.



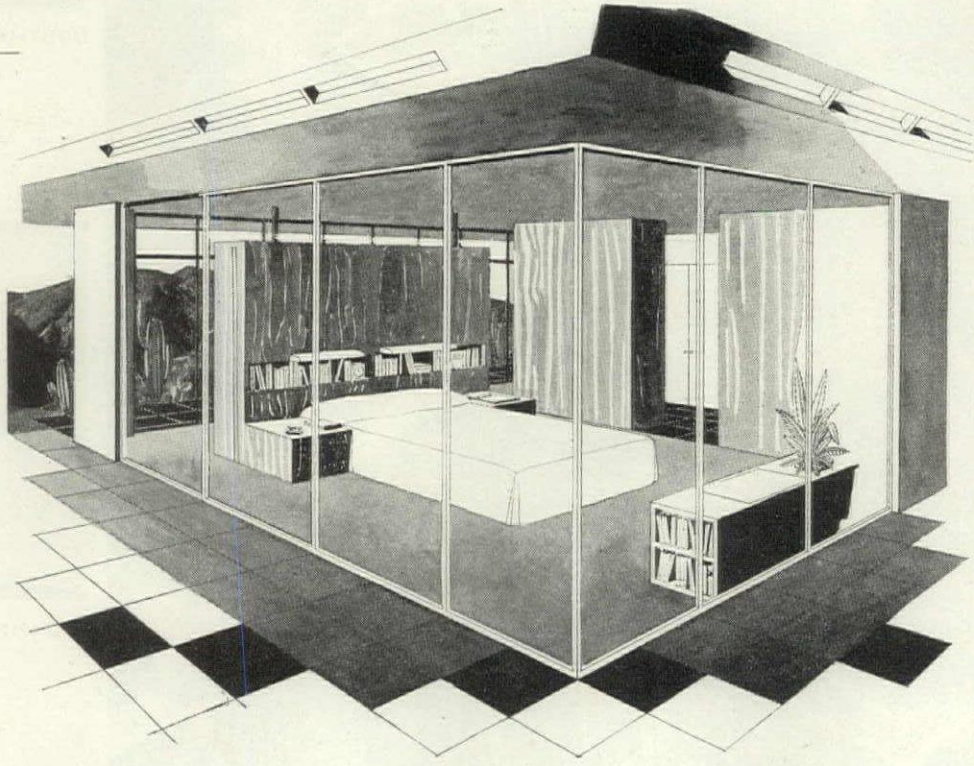








AN AMPLE LOT (125 ft. by 225 ft.), walled in where necessary and carefully planted, permits privacy despite lavish use of floor-to-ceiling glass panels. A combined heating and air conditioning system provides temperature control. West windows in dining area frame a dramatic mountain view. Built-in wardrobes in corner bedroom alleviate the startling openness of three glass walls, serve as partitions between the bedroom and hall.



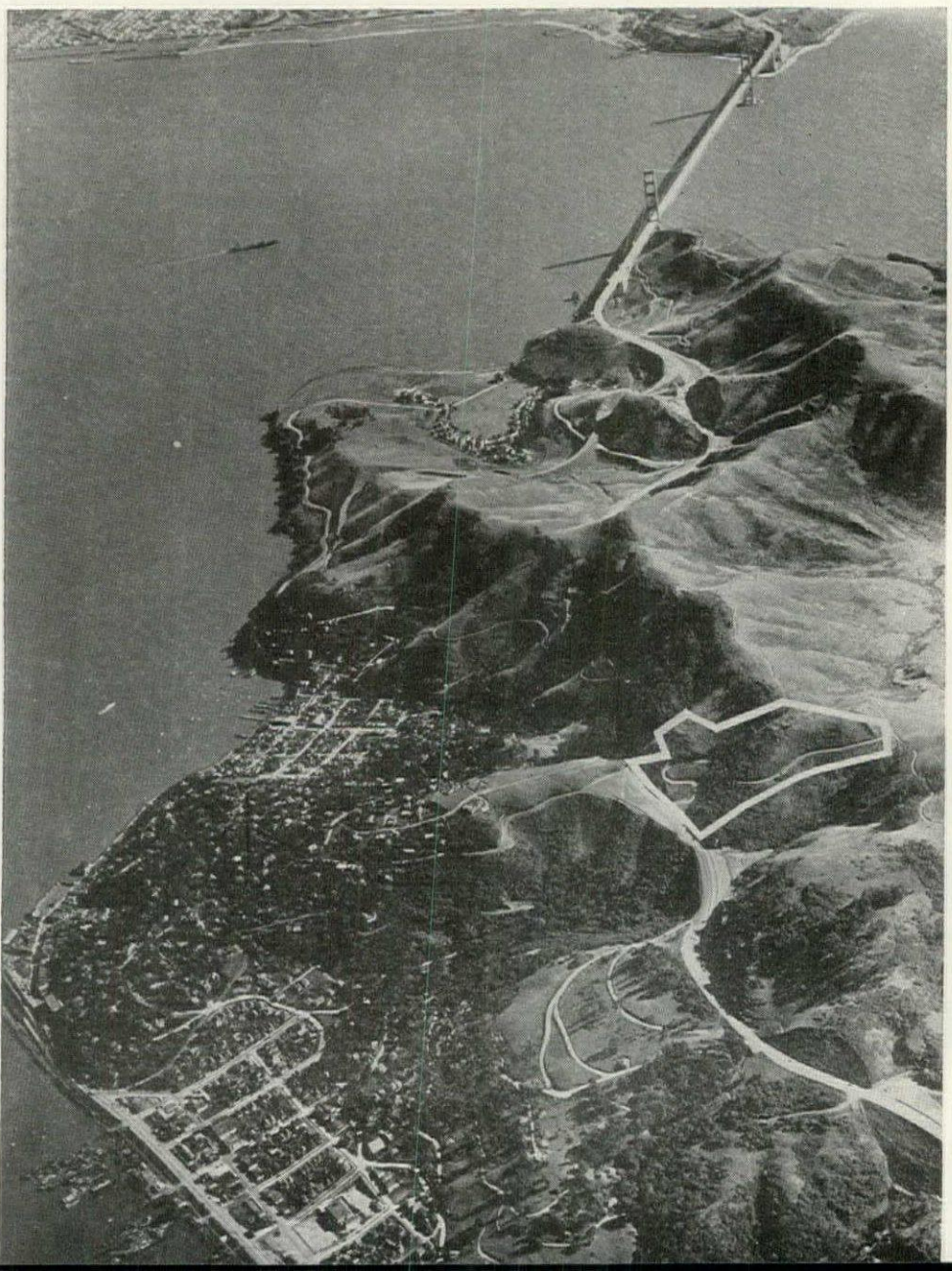
18. RESIDENTIAL DEVELOPMENT

Two San Francisco designers pool their talents to get a skillful solution for a tricky site.

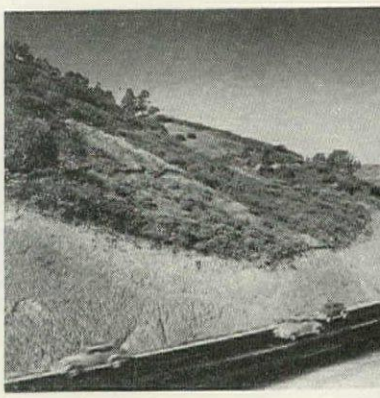
MARIO CORBETT, Owner and Architect

ECKBO & WILLIAMS, Site and Landscape Designers

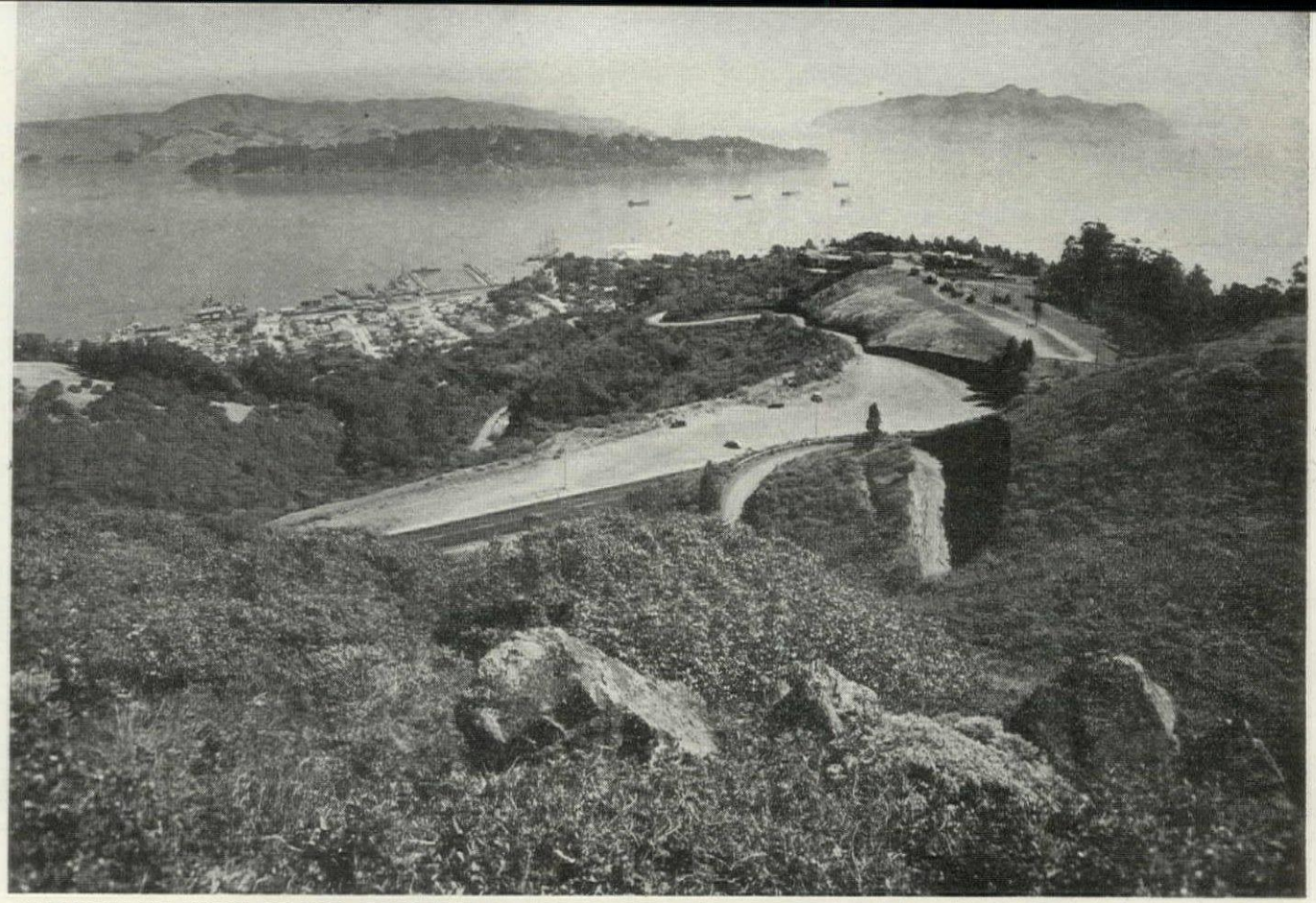
"Filled to the gills with other people's theories and orders on how to develop other people's land," this project represents the architect's own declaration of independence. He has bought the land and for it is going to design "the kind of house I want to build, the way it should be built." Certainly, his 20 acre plot is challenging. Magnificently located at the tip of the Marin Peninsula, seven minutes from San Francisco and overlooking the whole Bay area, the land is difficult. It is tilted to the east at an average slope of 50 per cent and exposed, along its western crest, to fog-bearing winds off the Pacific. Both site and house plans indicate a skillful resolution of these difficulties. New streets follow the contours, and the majority of the 27 houses are located under the brow of the hill. Since fills on so steep a slope are impractical, the houses are placed on cut terraces parallel with the slope. Glass and living areas are concentrated along the south and east sides, thereby exploiting the view and getting the best exposure. Privacy is obtained by staggering the houses on the steep slope. Houses, banked against the wind, will be protected by a eucalyptus windbreak.



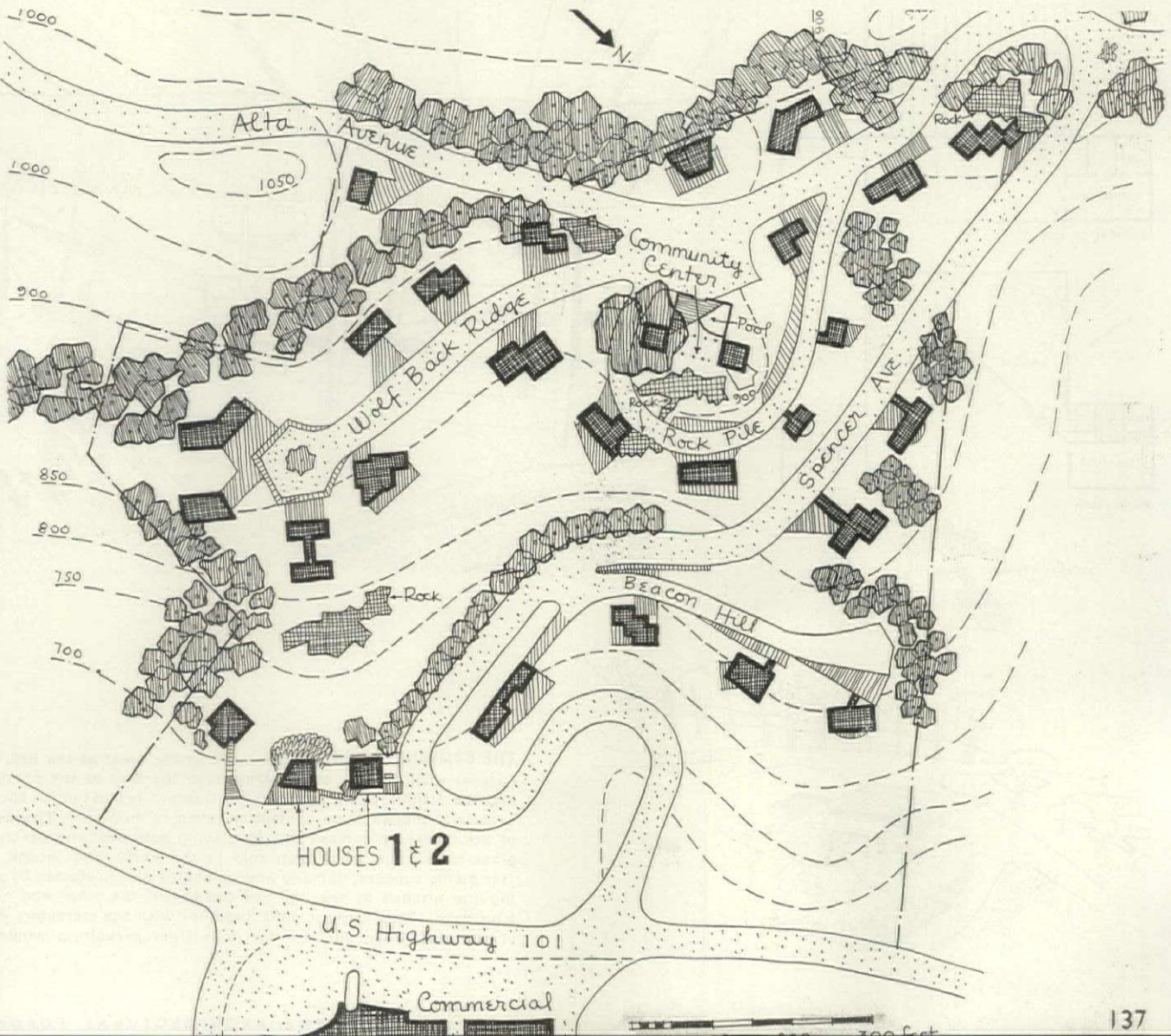
NORTHEAST CORNER FROM RO



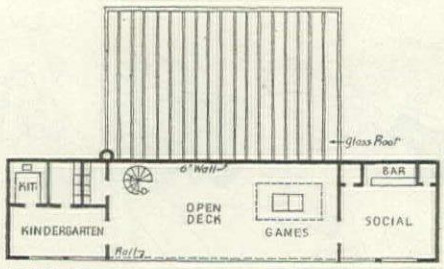
SHOPPING CENTER AT LOWER LE

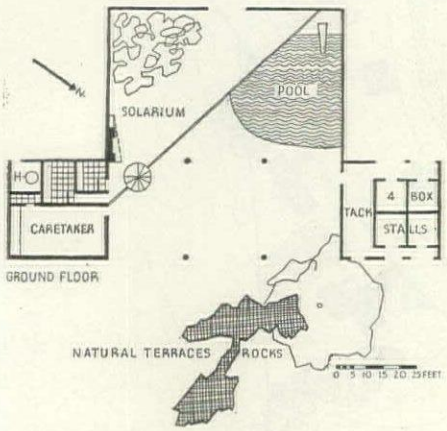


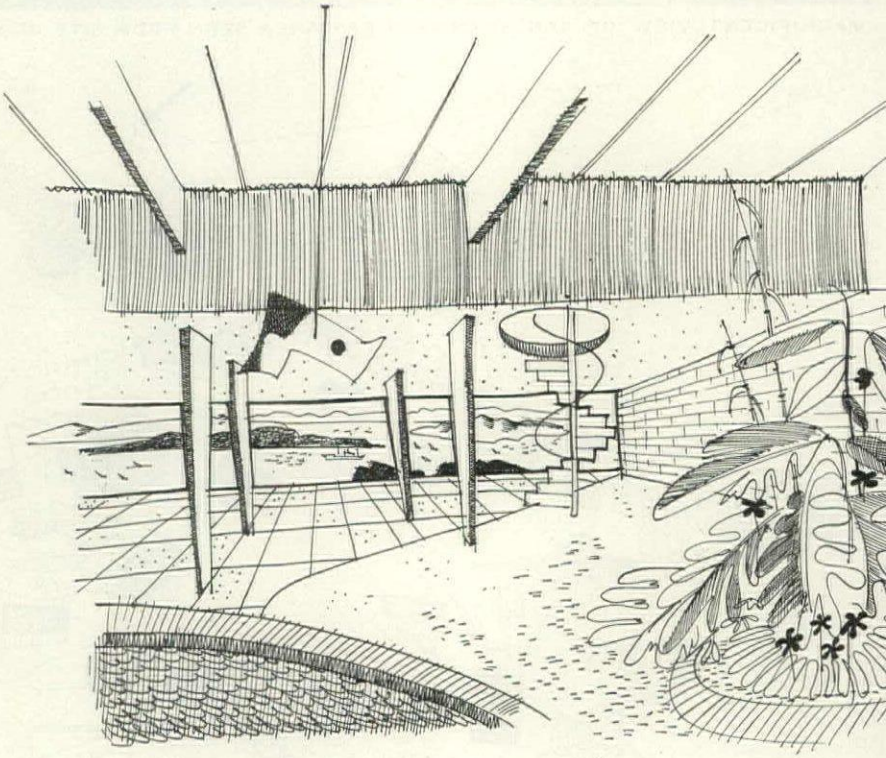
MAGNIFICENT VIEW OF SAN FRANCISCO BAY AREA SEEN FROM SITE OF COMMUNITY CENTER AT TOP OF PROJECT



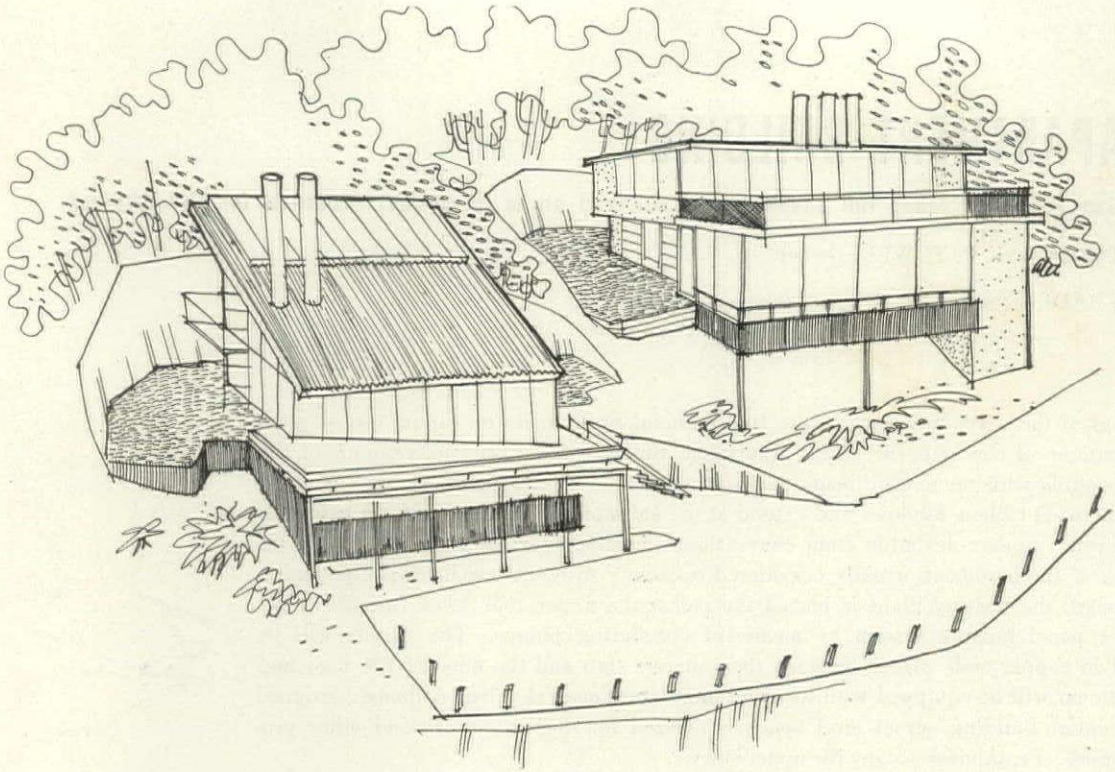
LOCATION OF HOUSES NO. 1 AND 2, AND SITE OF PROPOSED COMMUNITY CENTER, SEEN FROM EAST BOUNDARY OF PR

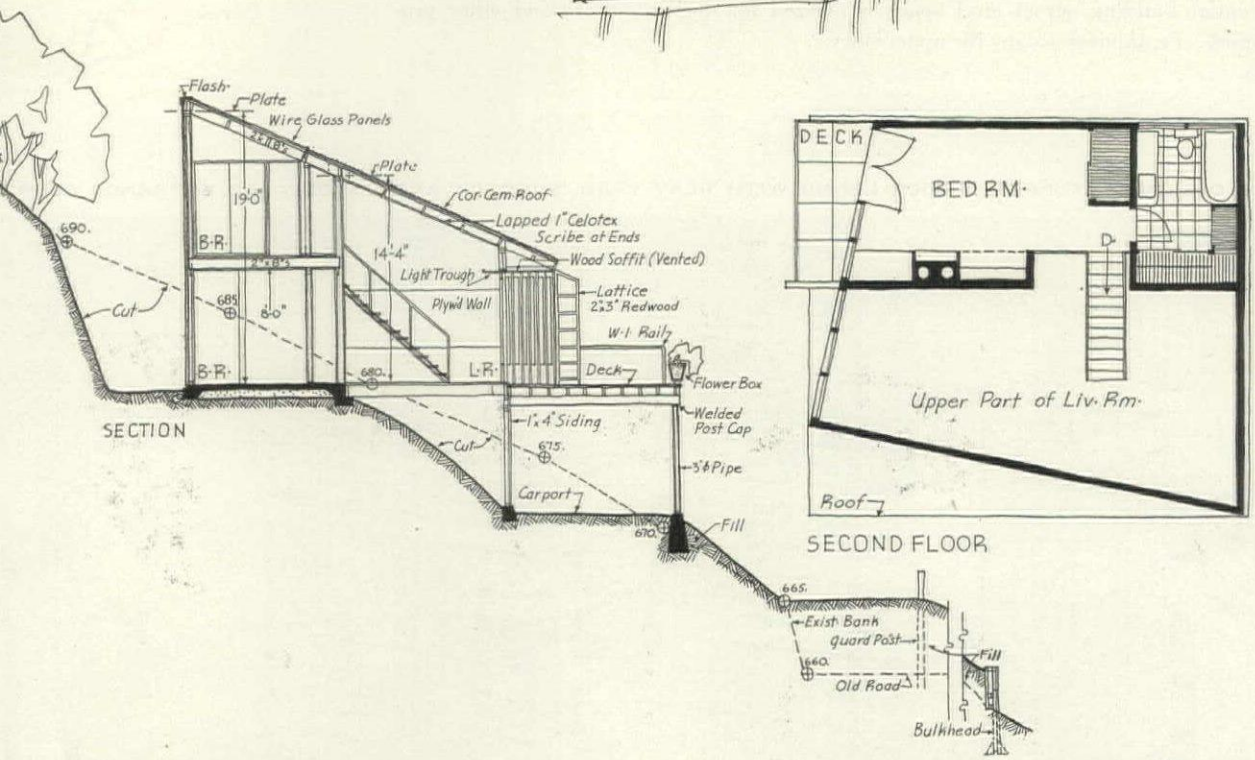


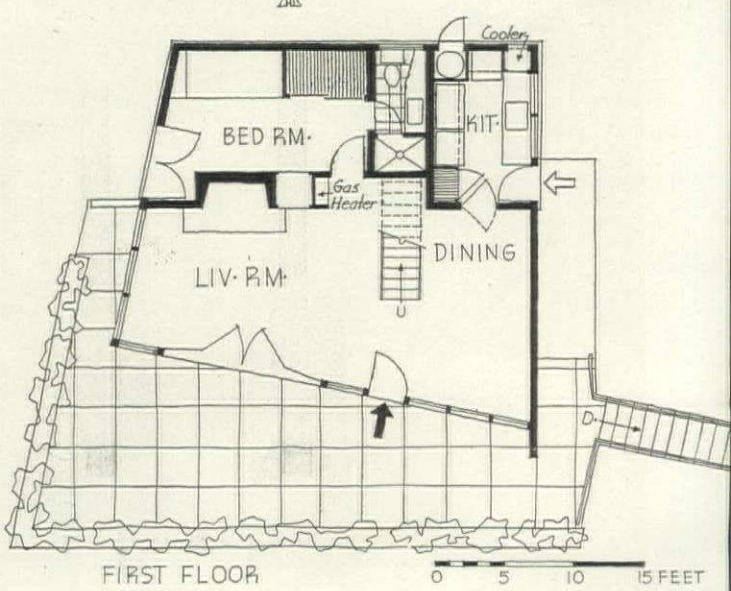




THE COMMUNITY CENTER is located at the crest of the hill, on natural rock terrace overlooking both the Bay to the northeas and the Pacific to the southwest. Outdoor recreation in such a exposure implies some protection, even in summer. The desig of the center recognizes this by placing both pool and beach in glass-roofed sun trap, open only to the east. The second floo (for picnic suppers, dancing and games) is also protected by plac ing the kitchen at one end and the bar at the other end of th long deck. This arrangement, together with the clerestory effec of the glass roof, shelters the deck from prevailing winds.







OUSES NO. 1 AND 2 are already underway. Their design takes to account both the natural peculiarities of the site and the mporary shortages of building materials. House No. 2 illus- ates how—in siteing, plan and construction—these limitations ve been circumvented. North and west walls are largely blank, hile glass-walled living areas and open terraces are concen- ated on the southeast, where view and exposure are best. or maximum sunshine, second story bedroom and bath have re glass roofs. Excavation and fill are held to a minimum by acing the house near the access drive and the carport under a ck. In construction, the house makes a maximum use of cur- ntly plentiful materials—corrugated asbestos cement, plywood, re and plate glass, asphalt tile, etc. Subsequent houses will, course, employ whatever materials are available. But in their neral design, these two houses will serve as prototypes for e 25 other units to follow.

19. APARTMENT BUILDING

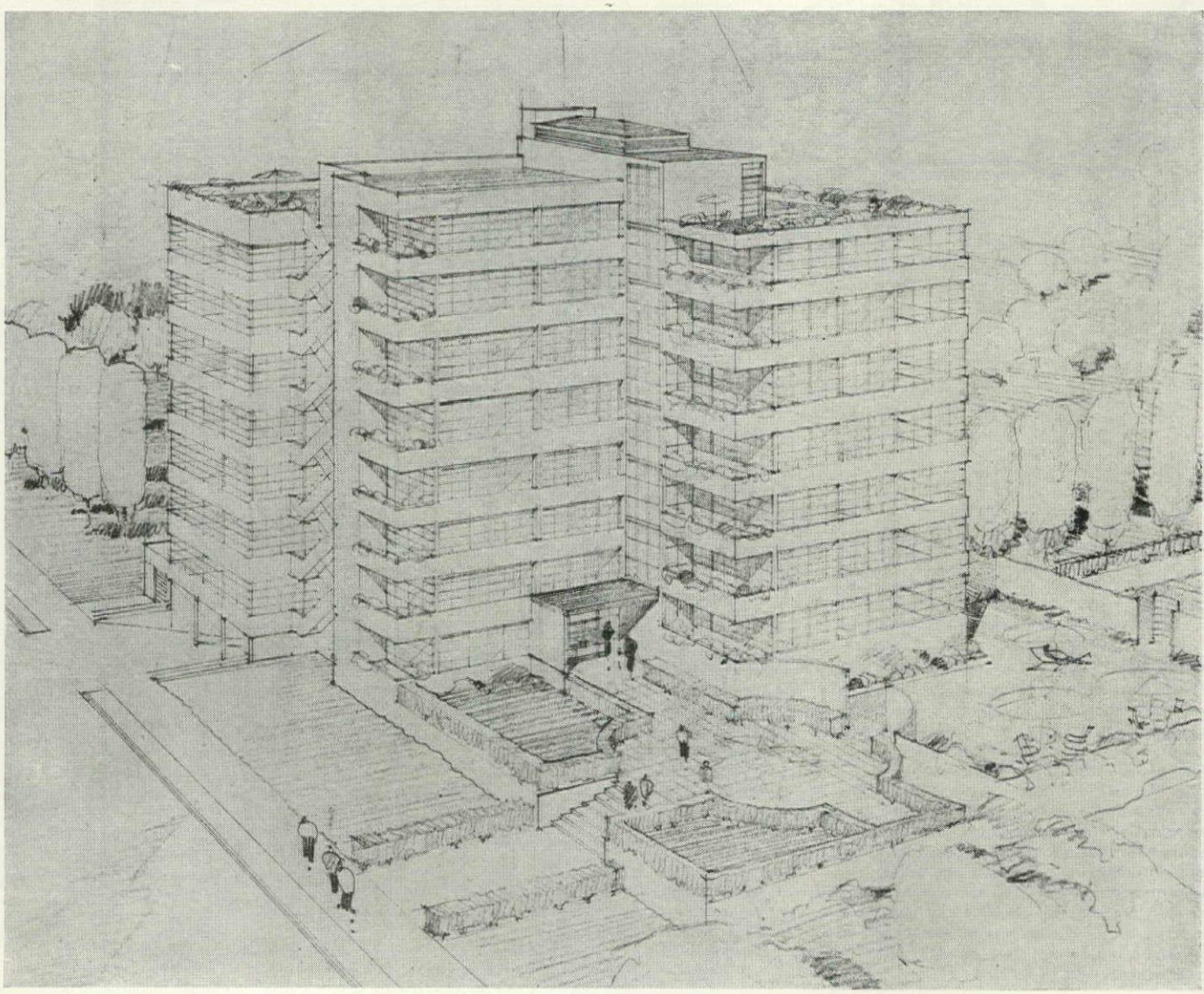
San Francisco takes full advantage of sun and air in its newest residence for city dwellers.

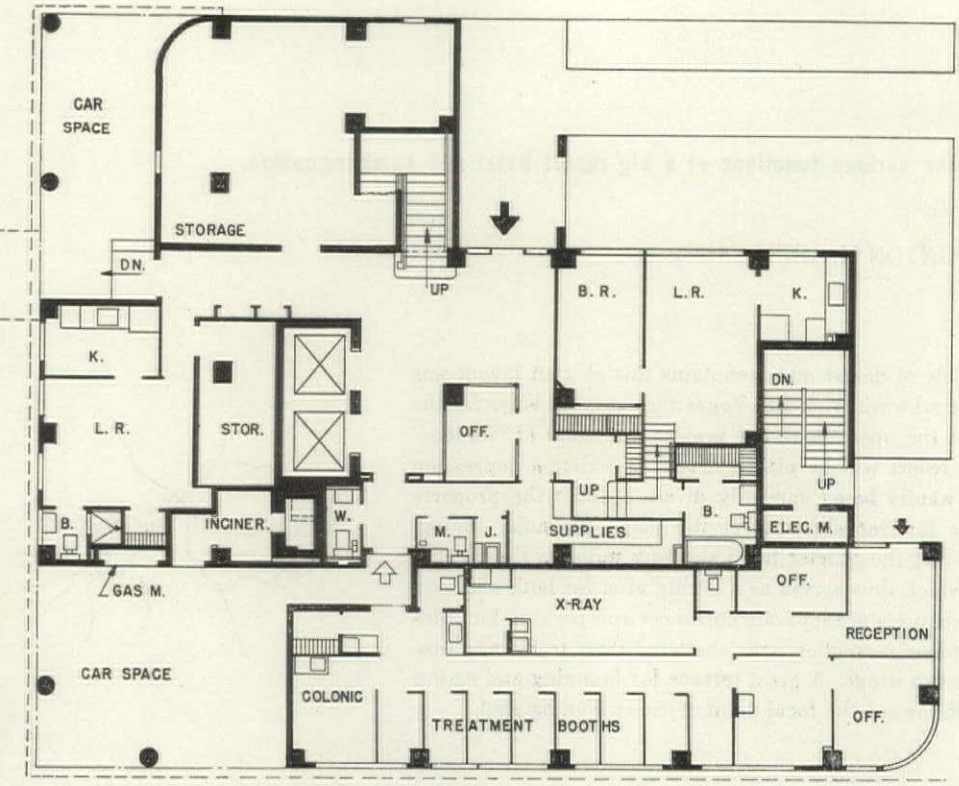
DR. FRANK B. TOWER, Owner

FREDERICK H. REIMERS, Architect

Reminiscent of the early buildings of the International Style in its maximum use of glass with a minimum of concrete, the Tower Apartment Building is an unusual example of the delicacy possible with monolithic beam and slab construction. Narrow concrete spandrels separate the wide ribbon windows and extend at the sides of the building to form balconies on each level. Another deviation from conventional massive apartment construction is the elimination of the basement, usually considered necessary to house mechanical equipment. In this design, the heating plant is placed instead at the upper roof level, furnishing hot water to a panel heating system by means of circulating pumps. The panels will be assembled in copper coils placed between the concrete slab and the finished tile floor and each apartment will be equipped with its own temperature control valve. Although designed as a residential building, street level space is utilized for doctors' offices and other professional suites. Penthouses occupy the upper story.

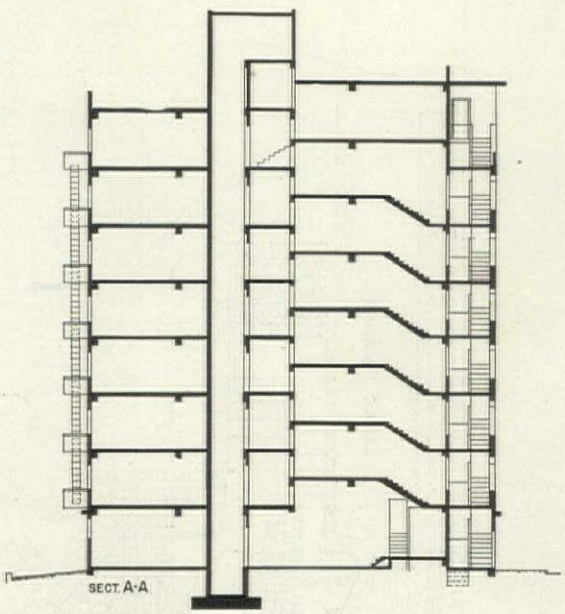
INFORMAL DESIGN FEATURES OUTDOOR LIVING WITH PLAY YARD, SUNDECK AND LANDSCAPED ENTRANCE COURT

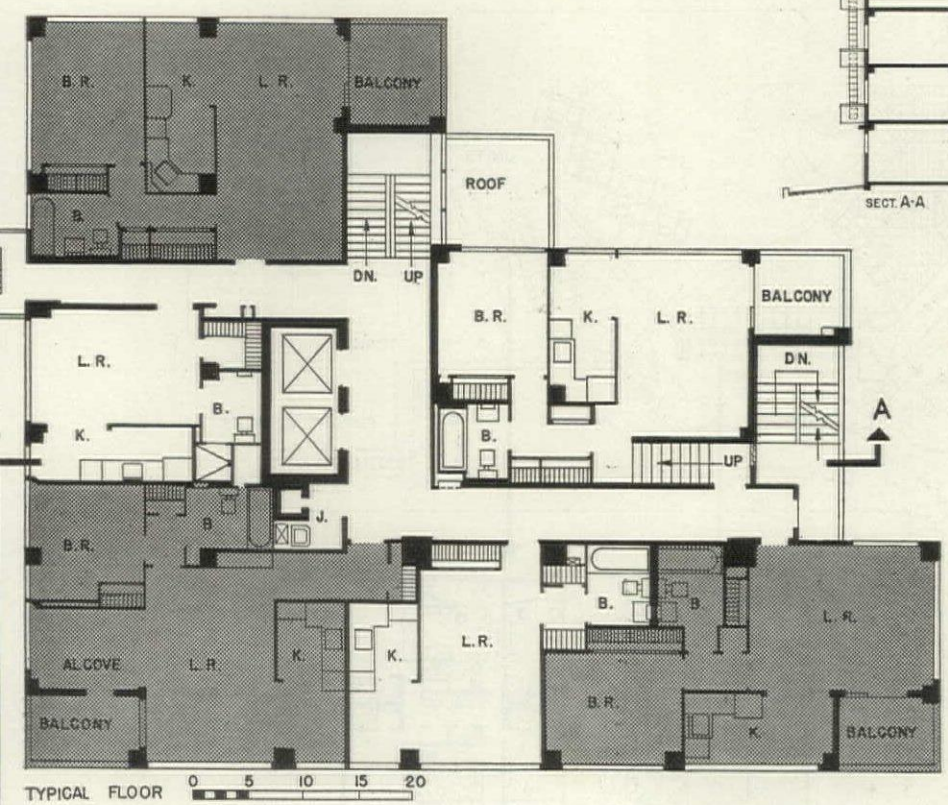




FIRST FLOOR

THE PLAN is separated into three distinct units by placing the central core of floors one-half story above those on either side. Needed ground floor height is thus provided to make up for a rise in grade at the central section. This split-level condition in the center bay necessitates half-flight entrance stairways for each apartment.





TYPICAL FLOOR

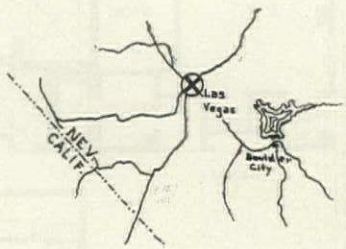
20. DESERT HOTEL

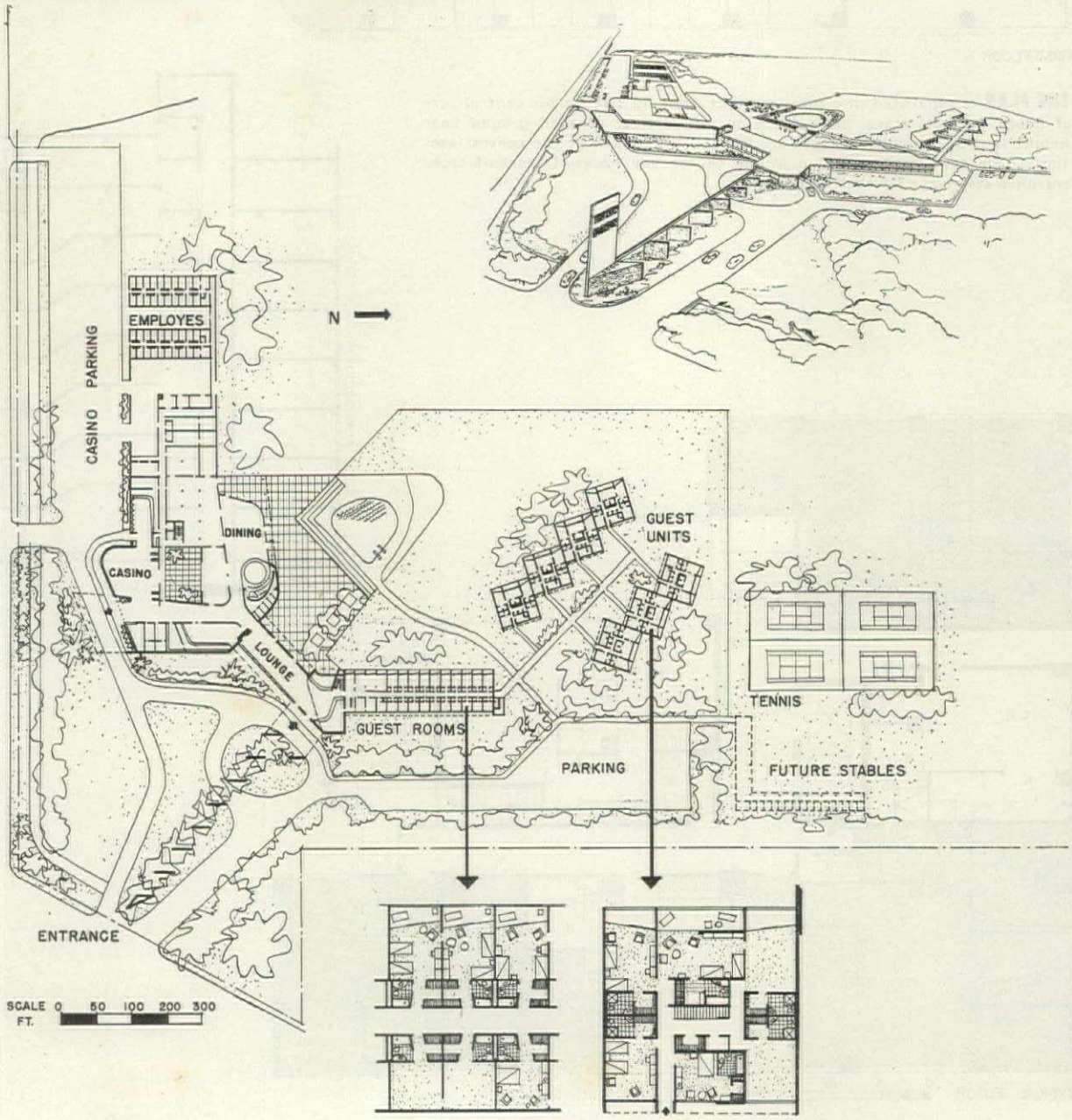
A luxurious plan segregates the various functions of a big resort hotel and gambling casino.

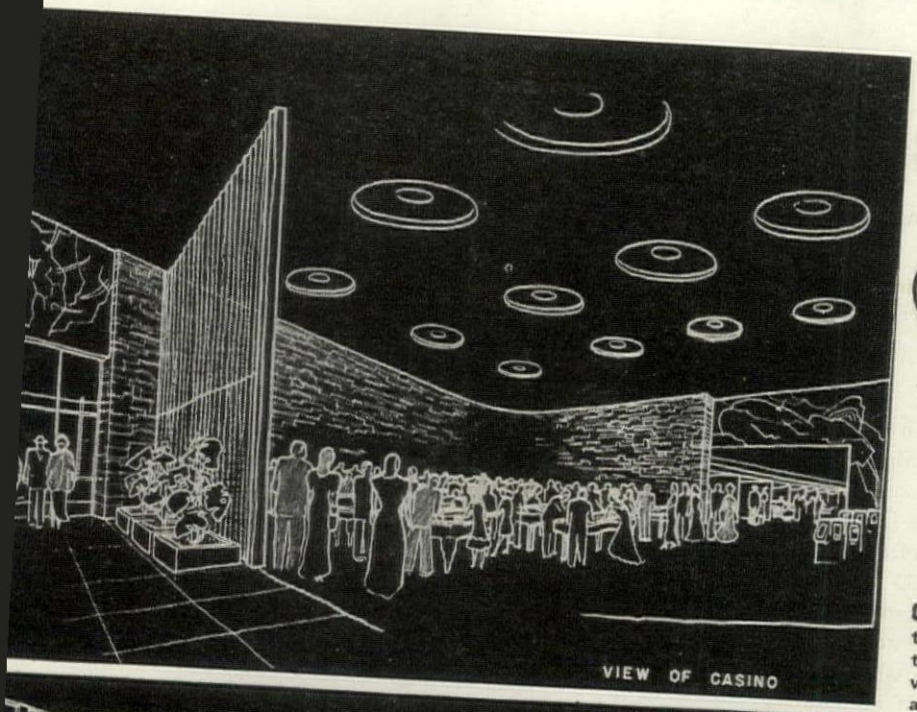
NEW HORIZON HOTEL, Owner

ADRIAN WILSON AND THORNTON M. ABELL, Architects

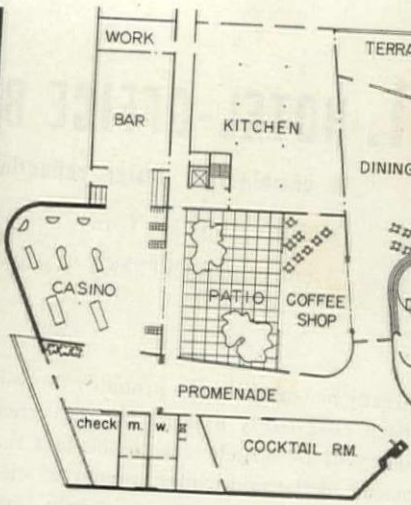
For a site commanding a picturesque view of desert and mountains this elegant layout was designed to house "an exclusive clientele who will visit Las Vegas for extended stays for the express purpose of taking advantage of the open gambling laws in the state of Nevada." The group of buildings making up the resort will be placed across an existing depression to minimize excavation, periodic flood waters being carefully diverted about the property by dikes and culverts. The two basic interior elements of the plan—the noisy dining, gambling and service units on the left, and the quieter hotel sleeping units on the right—are joined only by the central lounge, which thus serves as a sitting area for both and as a sound buffer between the two. Exterior features are separate entrances and parking facilities for hotel, casino and service, and an outdoor recreation area sheltered from traffic and prevailing winds in the angle formed by the two wings. A great terrace for lounging and eating leads out from the lobby and dining room toward the focal point of the swimming pool.



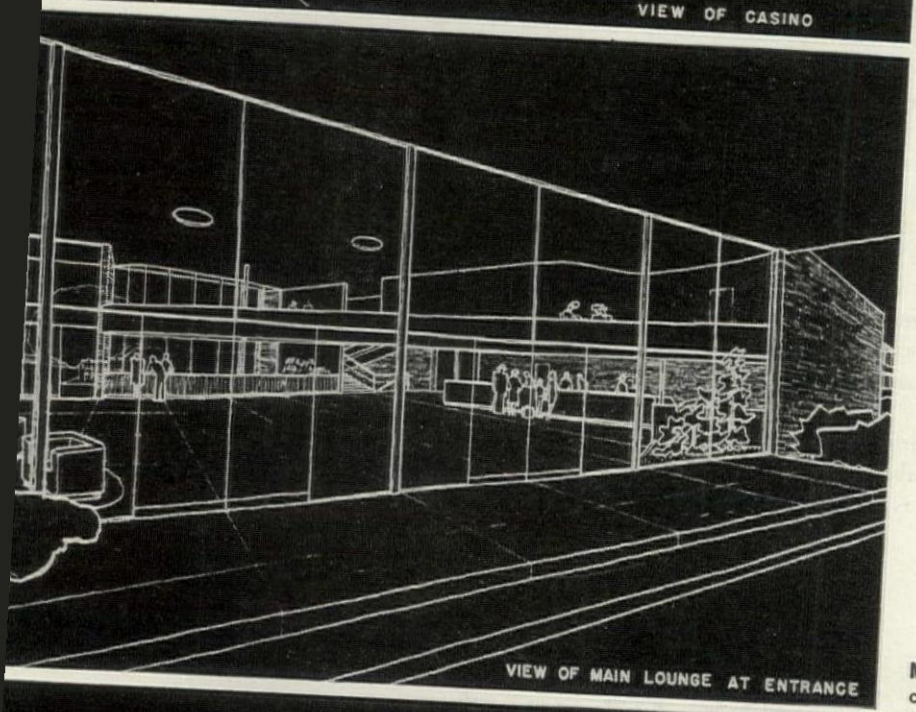




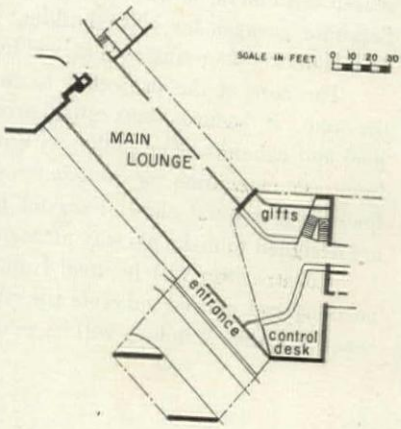
VIEW OF CASINO



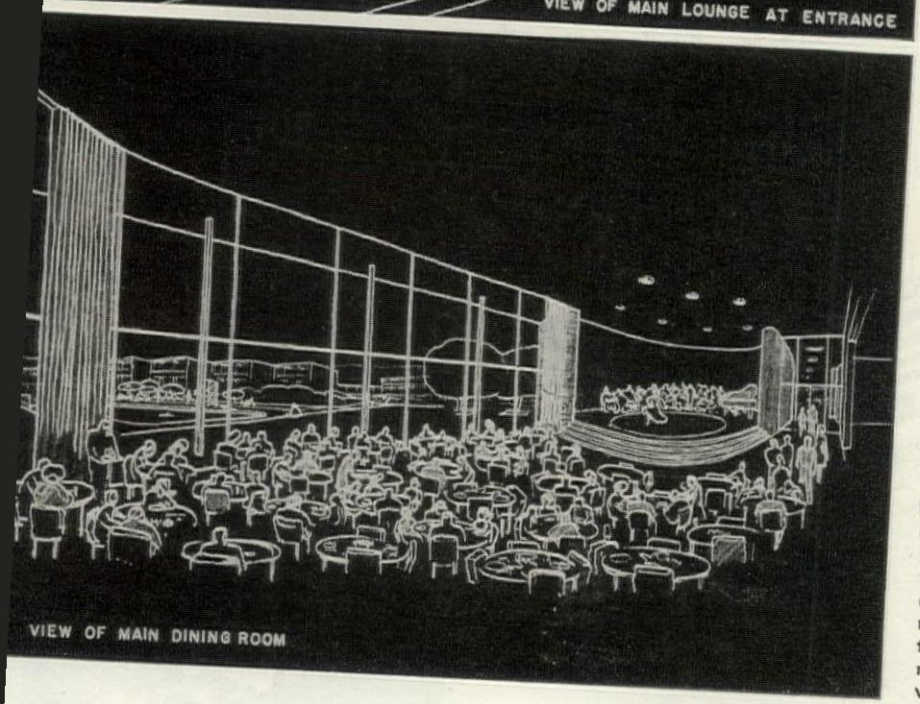
CASINO patrons may use a special en trance at the left and proceed directly t the gaming room—a dramatically lighted windowless interior fitted with the usua ancient games tricked out in modern dress. Sorrows of the losers may be drowned in the thoughtfully placed bar next to the casino.



VIEW OF MAIN LOUNGE AT ENTRANCE



MAIN LOUNGE offers this spacious welcome to arriving guests. Hotel control desk and gift counter are below the special women's lounge on the balcony, reached by steps at center. Walls and doors of glass permit view through to terrace, pool and distant scenery.



VIEW OF MAIN DINING ROOM

DINING ROOM opens upon terrace at left and coffee shop at right, with dance floor and orchestra stand flanked by lounge entrance at center. Location and height of dance floor allows guests in the dining room, coffee shop and casino and those on the terrace to view cabaret entertainment. Note semi-detached hotel units visible through windows.

21. HOTEL-OFFICE BUILDING

A combination design reflecting an important trend toward year-round use of Florida hotels.

HARRY SERKIN, Owner

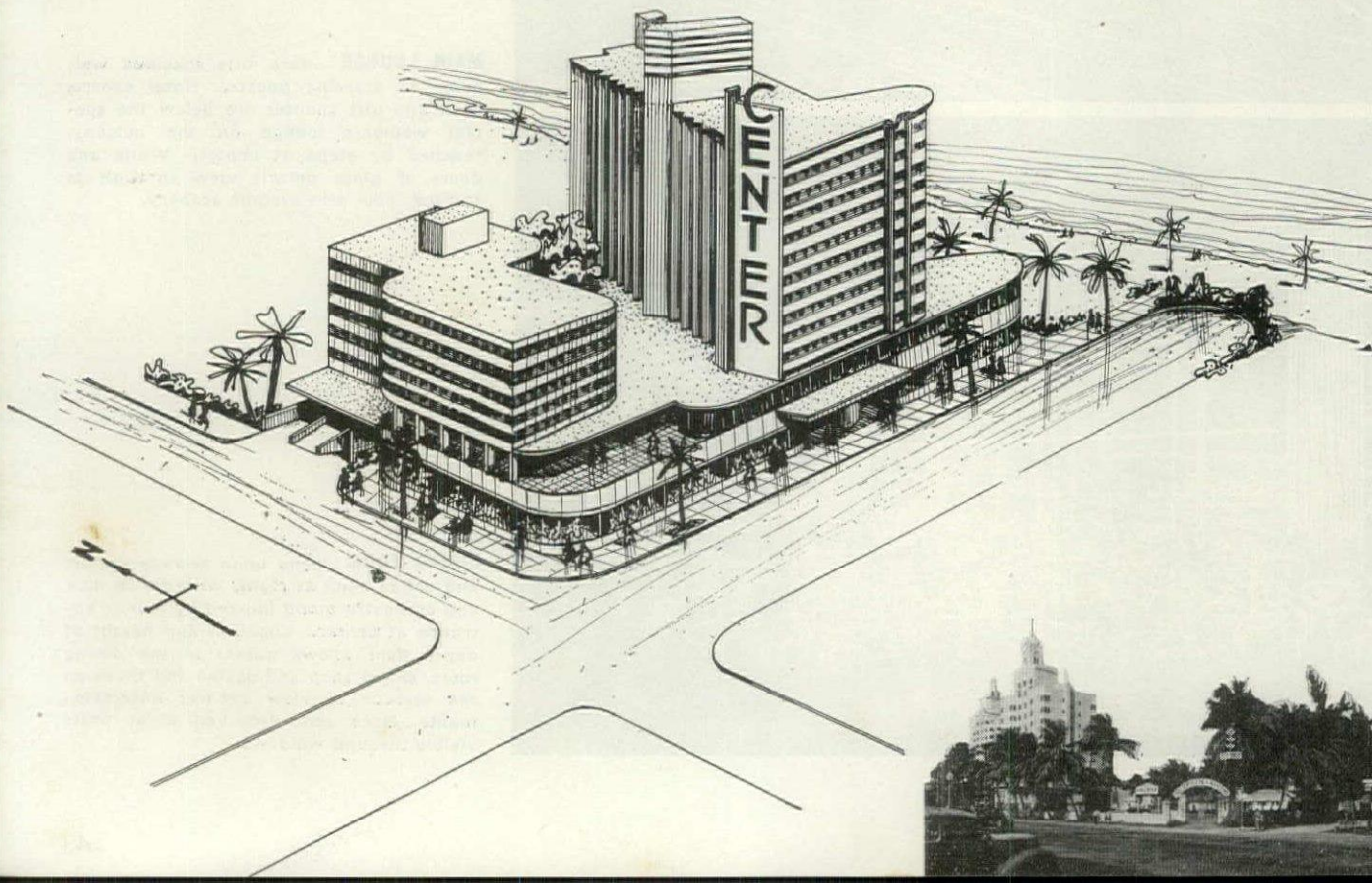
IGOR B. POLEVITZKY, Architect

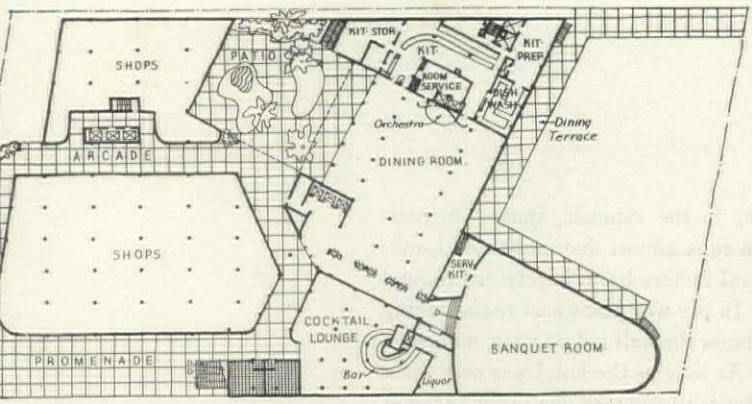
Already boasting what is probably the world's greatest concentration of luxury hotels, Miami Beach confidently expects an even greater postwar expansion. If it comes, this development will be largely due to the fact that the Beach has become a year-round resort area instead of the mid-winter wonder of the past decades. What impact such a shift will have upon its building design is clearly forecast in the design for the new Center Hotel. In many important respects, this $3,500,000 project differs from its pre-war predecessors. To carry the load of one of the most expensive locations in Miami Beach, it represents an unusually intensive development of an unusually large plot: a complete 16-story hotel, a double-deck shopping center, a 5-story office building and two separate garages.

Complex as the scheme is, each of its many features flows directly from the shrewd analyses by architect and owner of the special characteristics of Florida's luxury hotel business. Thus to make a bid for year-round business it will be completely air conditioned —the first project of comparable size on the Beach. And to broaden its appeal for out-of-season customers, it will include facilities for conventions—another novelty for the Beach. Separate garages for office building and hotel are another feature of this type, as is the double-decker shopping area served by escalators from the sidewalk.

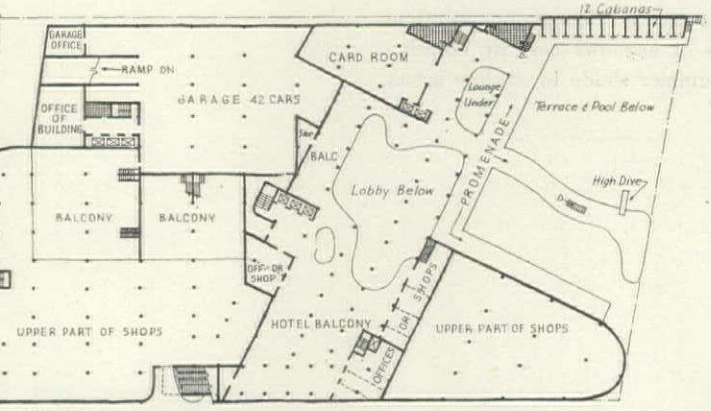
The core of the project is of course the hotel. By its location at the eastern end of the plot, it secures maximum privacy and in turn encloses the ocean front terrace, pool and cabanas. The lobby, with its two story glass wall towards the ocean and dramatic free-form mezzanine, is designed for maximum impact on the arriving guest; while such features as special elevator service for bathers and room service installations on each floor are designed to make his stay pleasant.

Construction will be steel frame throughout, with steel deck floors in office and shop portions and poured concrete tile-rib slabs elsewhere. Exterior surfacing will be in precast concrete slabs. Windows will be awning type aluminum casements.

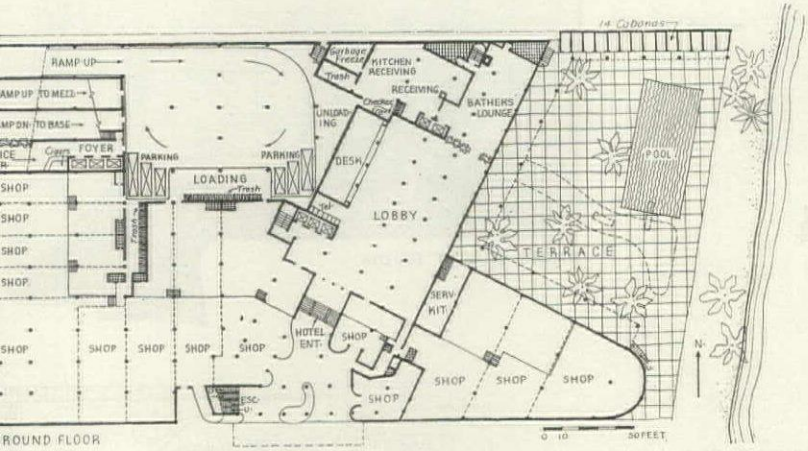




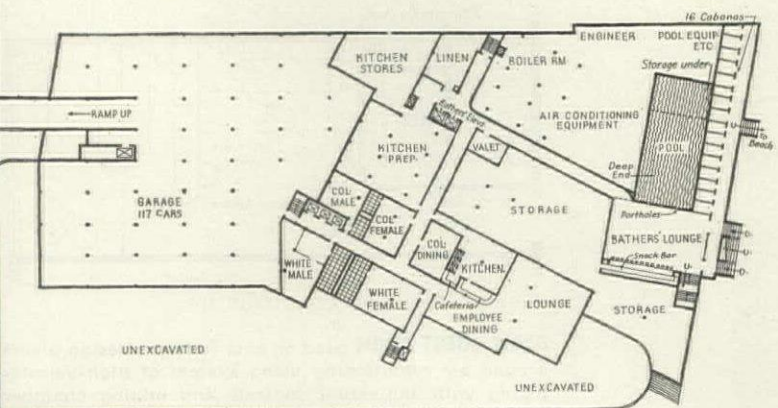
SECOND FLOOR



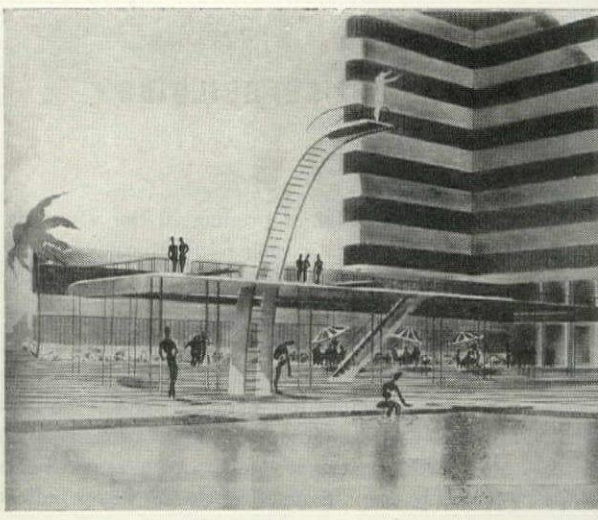
MEZZANINE



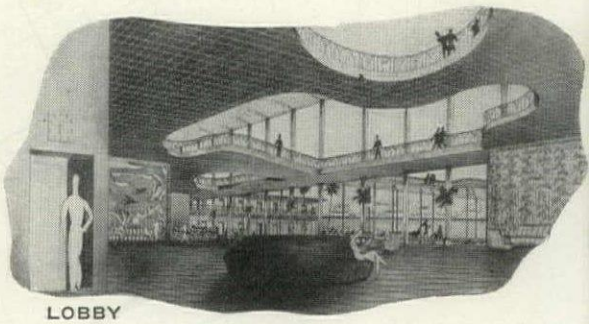
GROUND FLOOR



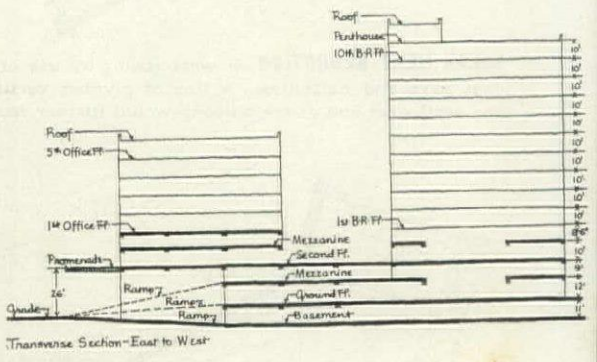
BASEMENT



TILTED 27° EAST OF NORTH, the hotel unit achieves more ocean frontage, better exposure, more sun for pool and terrace in winter, than if it were parallel to waterline. Bathers' access to pool is from mezzanine cat walk, while access to cabanas and beach is from basement level under terrace.



LOBBY

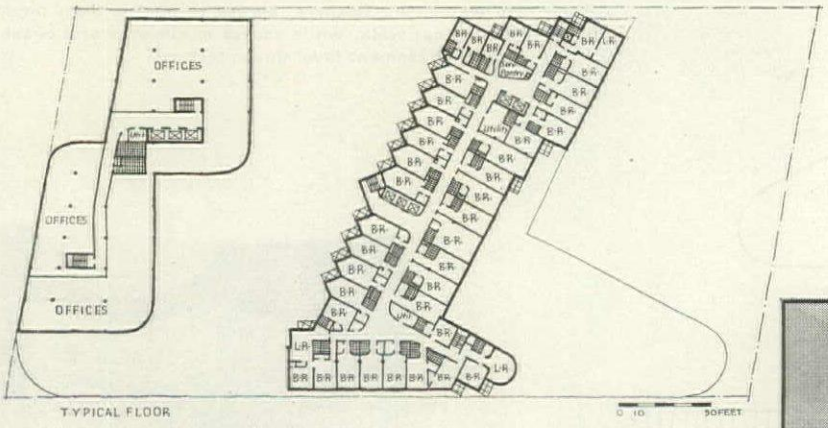


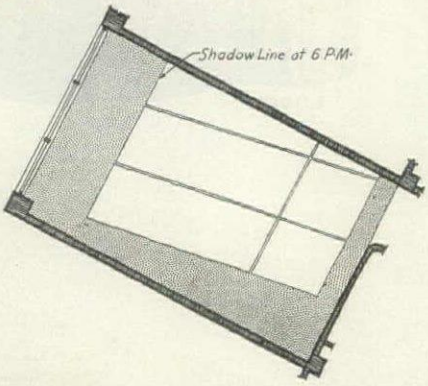
Transverse Section—East to West

TWO SEPARATE GARAGES—one for the office building and one for the hotel—as well as an interior service court for shops, hotel and office building form a core along the north side around which the whole project is efficiently organized.

HOTEL-OFFICE BUILDING

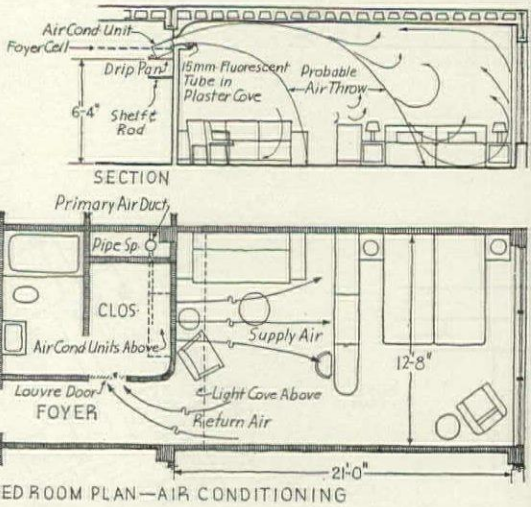
Miami Beach's chief product in the winter is sunshine; in the summer, shade. A year round hotel must exploit both. But how? The coast line runs almost due north and south. Summer breezes are from the southeast. These two natural factors have largely determined the development of the ocean front and every hotel on it. In pre-war plans east rooms facing the ocean got ideal view and exposure; but west rooms across the hall got no view, no breeze and the full brutal impact of the summer afternoon sun. As long as the hotel was only open during the winter, this paradox was not too important. But with summertime use it becomes critical. Air conditioning could obviously make the west rooms comfortable; but to keep from working the system to death, it was necessary to reduce solar heat gain on the west facade to a minimum. The studies below indicate some of the architect's ingenious solutions to this complex problem. Not shown here are his studies of shadows cast by building silhouette to determine distribution of winter sunlight and summer shade in outdoor areas.

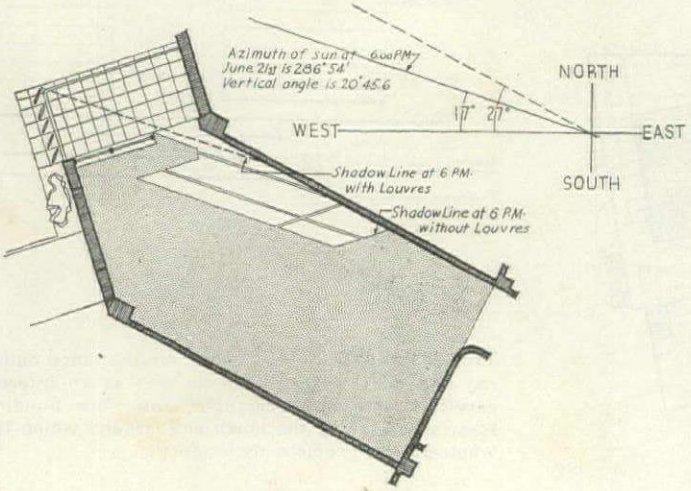




SOLAR HEAT REDUCTION in west rooms by use of staggered, diagonal bays and balconies. A line of pivoted vertical louvers along the northwest end of the balcony would further reduce "insolation."

BASIC GUEST ROOM





BASIC GUEST ROOM used on east facade. Design pivots around air conditioning using system of high-velocity piping with individual controls and mixing chamber built in to light cove over closet.

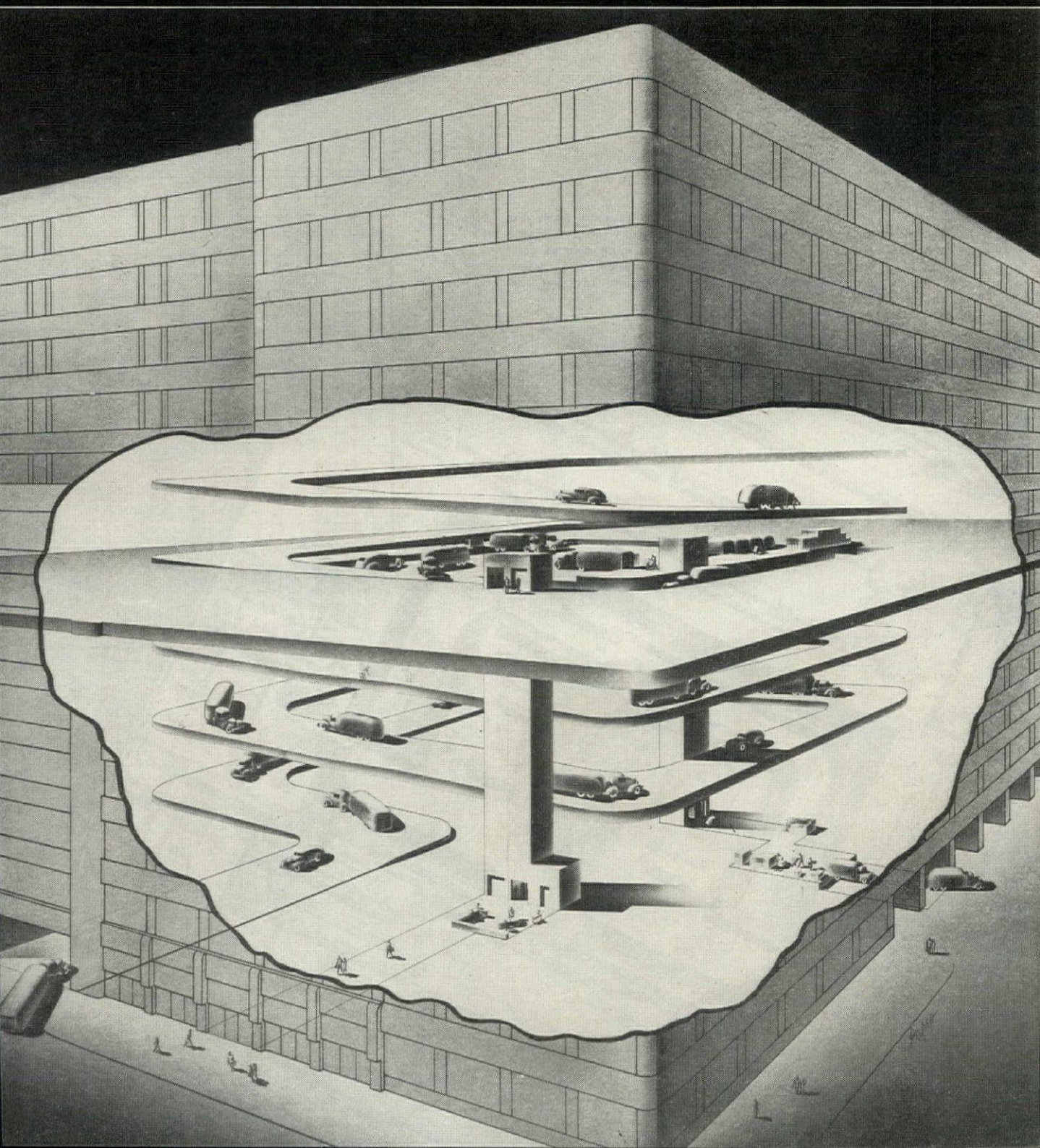
22. INTERSTATE COMMERCE CENTER

50 acres of floor space organized vertically around a spiral highway and 36 elevators.

TISHMAN REALTY & CONSTRUCTION CO., Owners

VICTOR MAYPER, Engineer

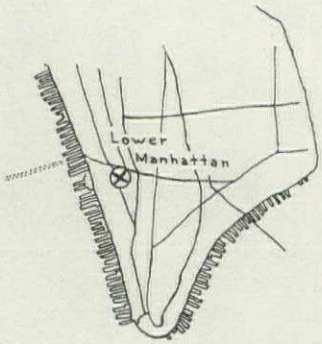
COMMERCIAL



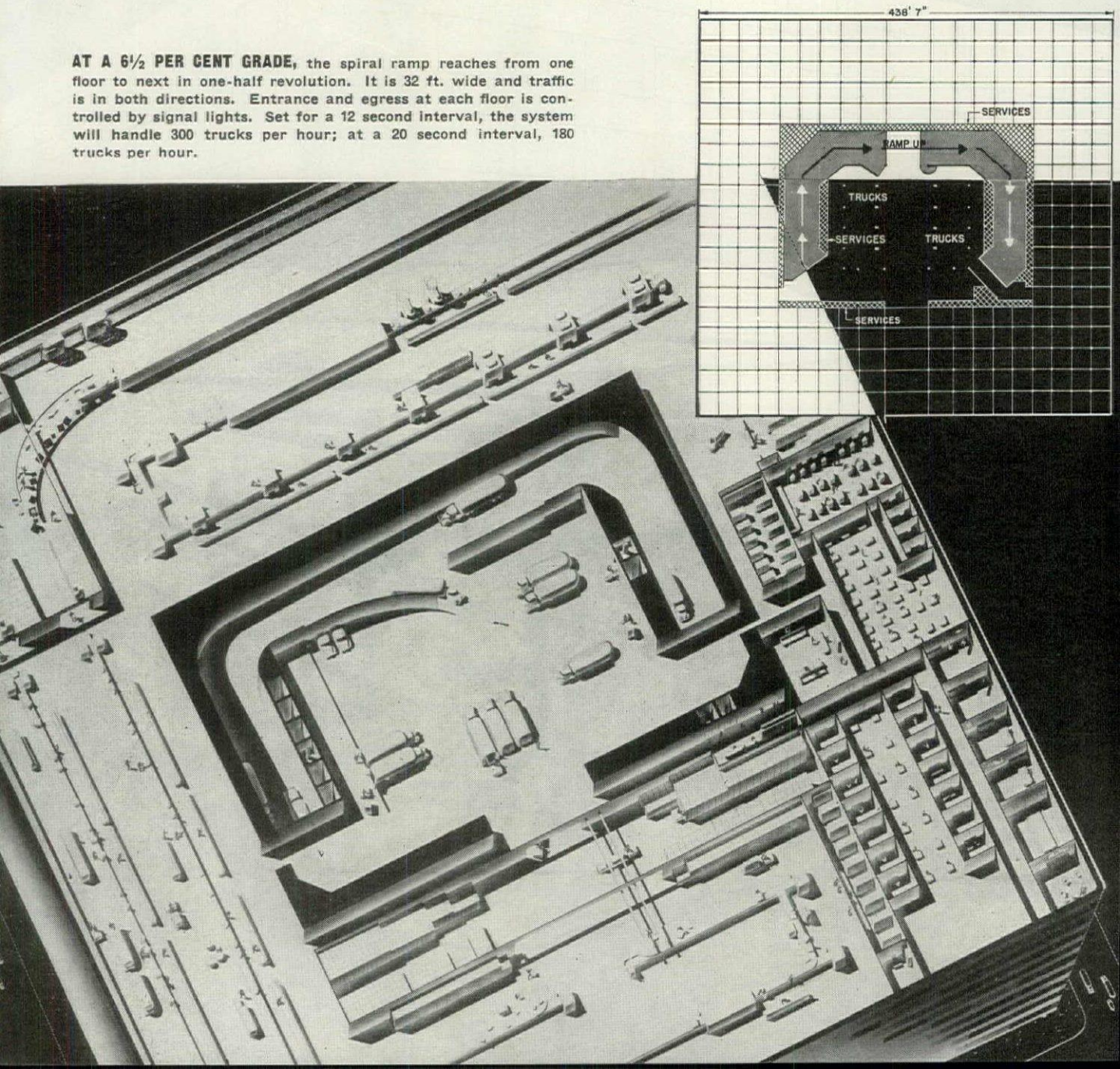
INTERSTATE COMMERCE CENTER

The distinguishing feature of this new center for downtown New York is not so much its size as its system of circulation. This forms a vertical core in the center of the 12-story structure and consists of a spiral, two-way highway surrounded by a ring of freight and passenger elevators. The center of the spiral ramp is a loading platform with a capacity of 18 trucks; into this area also open the 12 freight elevators. Around the outer periphery of the ramp are arranged the 24 passenger elevators as well as toilets and services. Assuming one tenant to a floor, this provides a two-cab express service direct from street floor, where each tenant will have a private street entrance and reception area. Hence passenger traffic will be completely isolated from vehicular. The central core of ramps and loading platforms will have its own high-speed ventilating system along the lines of those used in vehicular tunnels. Street level access and egress to the spiral highway will be from opposite sides of the building. Street doors will be operated by electric treadles in the pavement.

Construction will be of reinforced concrete, using 21 ft. by 21 ft. bays except in loading platforms, where column spacing will be 60 ft.; story heights are 15 ft. 6 in. Cost is expected to run to $15 million.



AT A 6½ PER CENT GRADE, the spiral ramp reaches from one floor to next in one-half revolution. It is 32 ft. wide and traffic is in both directions. Entrance and egress at each floor is controlled by signal lights. Set for a 12 second interval, the system will handle 300 trucks per hour; at a 20 second interval, 180 trucks per hour.



23. PLAYHOUSE

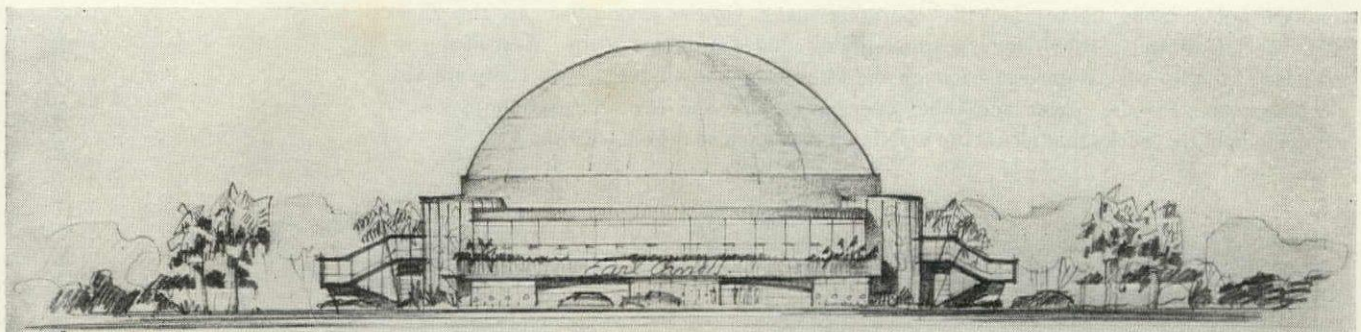
A legitimate theater for the motion picture capitol utilizes war-developed welded ship construction.

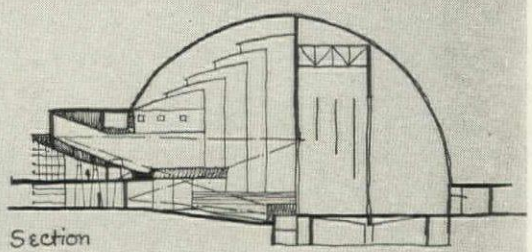
EARL CARROLL, Owner

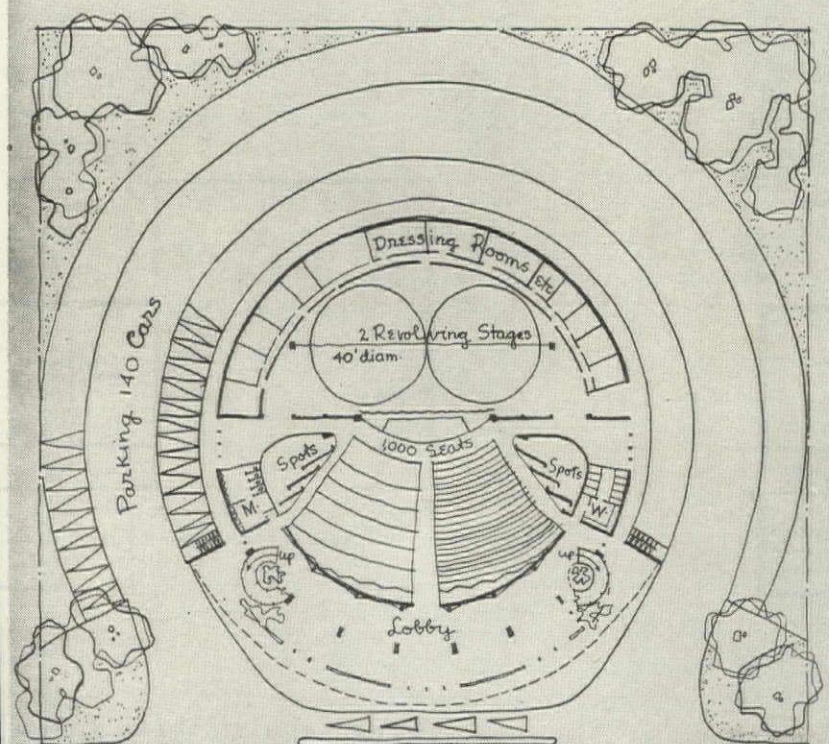
KAUFMANN, LIPPINCOTT & EGGERS, Architects

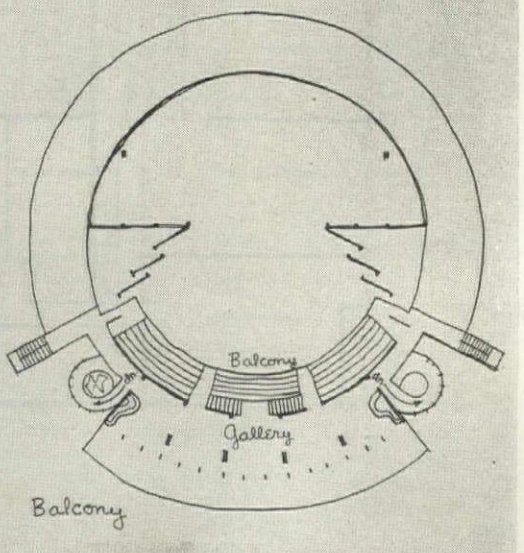
In Hollywood where buildings are designed in the form of derby hats, a spheroid theater is hardly a thing to goggle at. Compared with the majority of conventional structures throughout the country, however, this new playhouse for the corner of Sunset and Vine offers unusual architectural qualifications. Composed essentially of a welded, ribless steel dome resting on a reinforced concrete ring, it represents the first application of welded shell-construction to the theater field. The dome will be laid out and fabricated by the recently busy Los Angeles shipyards. Air conditioning and lighting equipment is to be placed inside the concrete ring wall. Since the dome will support only itself, the balcony and fly gallery have been designed as independent structures.

Although small in contrast to motion picture palaces, a seating capacity of 2,000 makes this theater one of the largest ever planned for the legitimate stage. Latest venture of showman Earl Carroll, it will adjoin his present theater-restaurant dedicated to extravaganzas featuring "the most beautiful girls in the world." The proposed structure will be equipped with twin revolving turntables set into the main stage. Dressing rooms are placed in a semicircle following the rear line of the stage and connect with it by means of five entrances. Such a scheme allows compact space use and convenient access from all backstage quarters.









24. TELEVISION TRANSMITTER STATION

New structure, warmed by waste heat from vacuum tubes, will be first to serve the Capitol area.

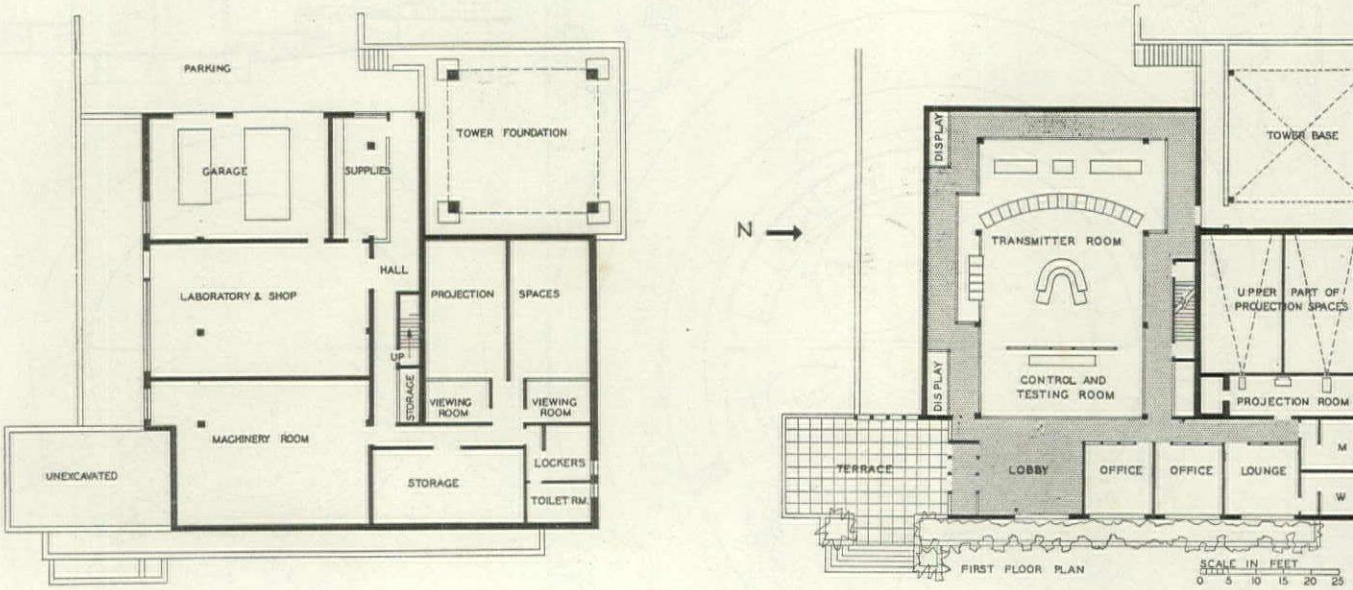
BAMBERGER BROADCASTING SERVICE, INC., Owners

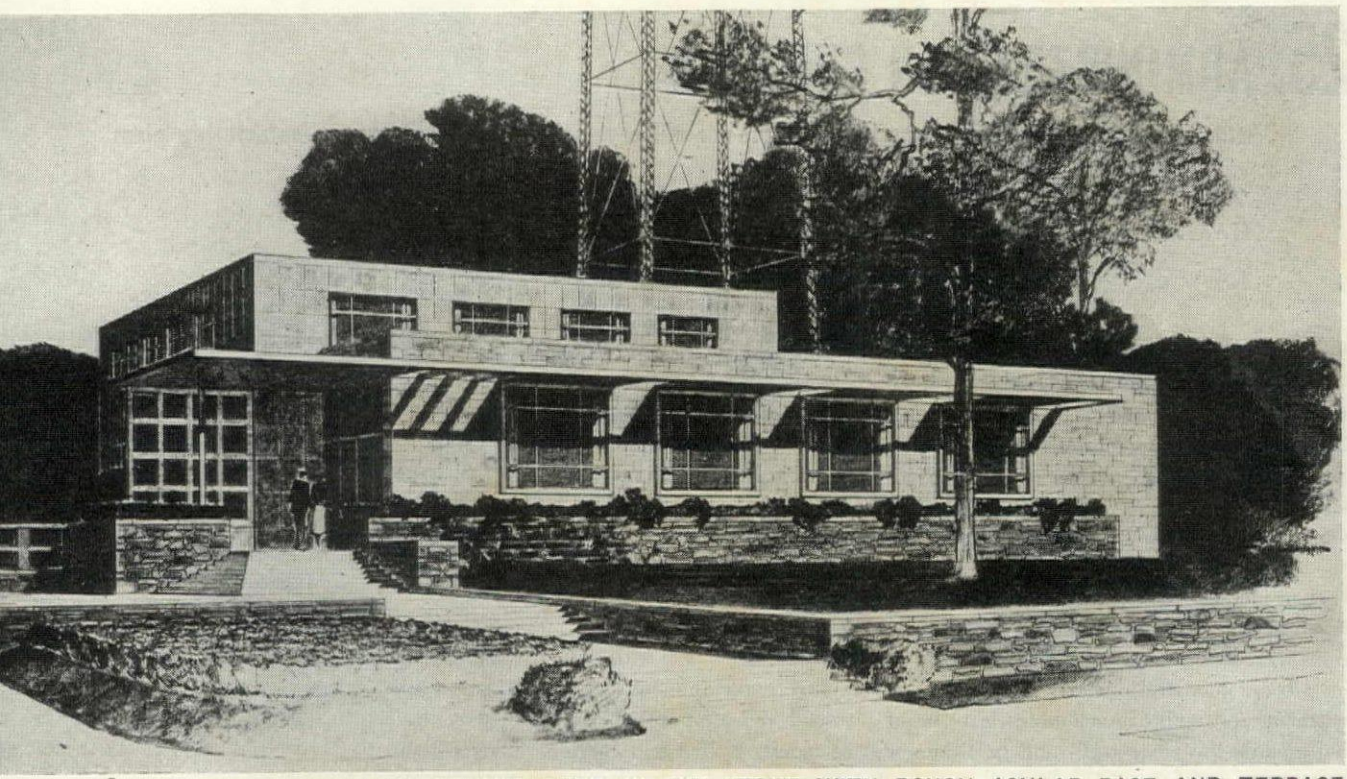
BERLA AND ABEL, Architects

Architects who have comfortably mastered the radio broadcast technique and feel like relaxing are in for another grueling course of study when it comes to television. Such at least is the experience of the designers of this new transmitter station in Washington, D. C. Broadcasts will, for the time being, originate in the downtown radio broadcast studios of the company and be wired out to the station for broadcast. But even without studios, the problem was sufficiently complex: for example, excess heat generated by the vacuum tubes is very great and—since it has to be removed anyway—is to be used to warm the building in winter.

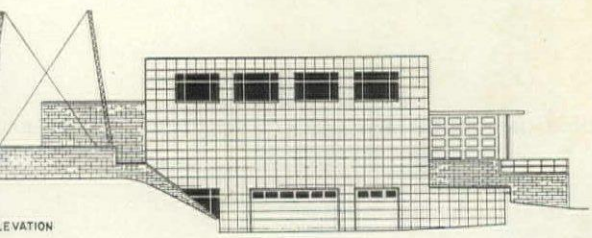
The site is the highest part of the highest ridge in the District, an extremely desirable location as the video signals travel in a straight line, requiring unobstructed space between points of sending and receiving. Intervening hills would produce "shadow" areas in which reception would be impossible. The proposed Bamberger tower is to be 300 ft. high on an elevation of approximately 400 ft. above sea level and will serve an effective range of approximately fifteen miles in radius.

On the first floor the transmitting apparatus occupies the most area. The U-shaped operations desk faces the curved bank of audio and video units — the five units on the side being for emergency use. The control and testing room is for experimental work in monitoring, electrical measurement, etc. Glass walls surround the operations area as it is intended to conduct visitors through the circulation corridor. Two management offices are located behind the public lobby and overlook the operating space. On the second floor are the offices of the technical and clerical staffs, a small library and conference room. Most of the remainder of the floor is assigned to a lounge and kitchen for the off-duty crew. There are also sleeping rooms for the porter and relief operator, repair and experimental shops and a garage to hold the trucks that mount the mobile units used in spot broadcasting.

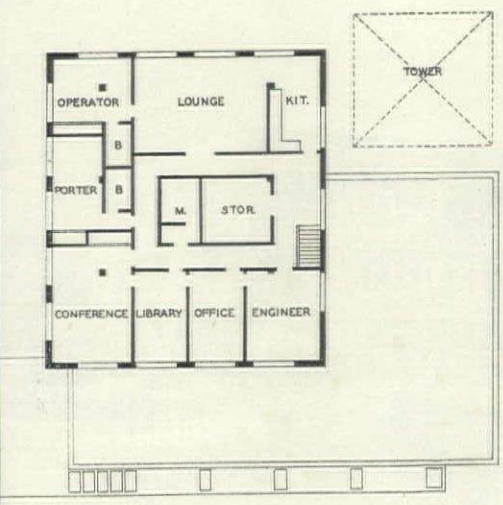




RCED CONCRETE STRUCTURE WILL BE SHEATHED IN CUT STONE WITH ROUGH ASHLAR BASE AND TERRACE

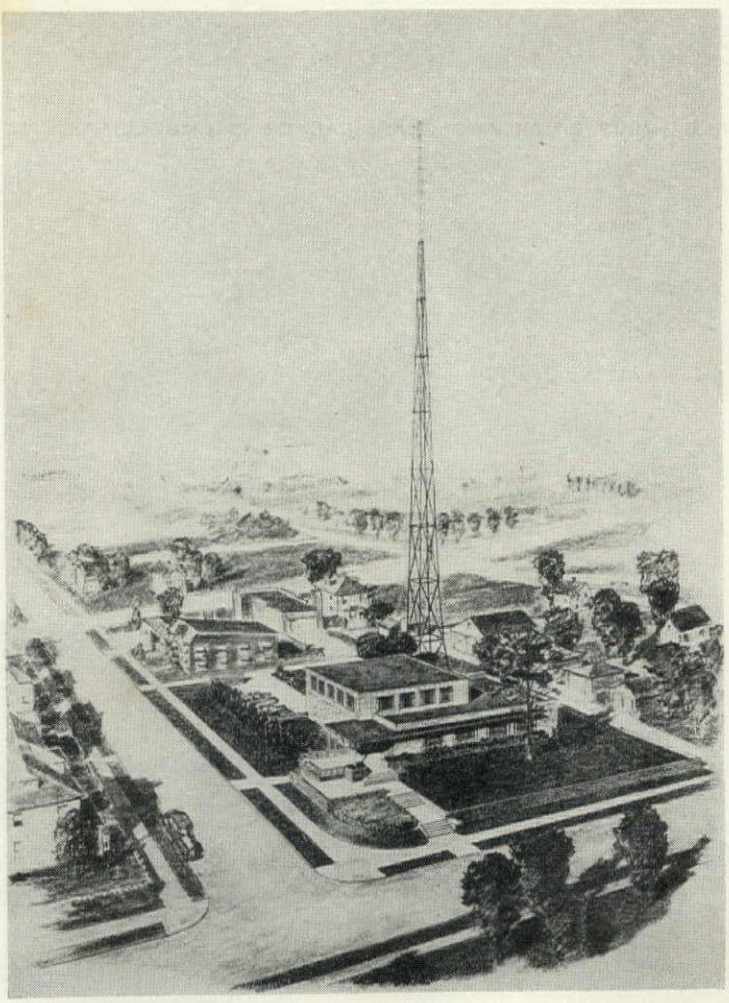


LEVATION



SECOND FLOOR PLAN

400 FOOT TOWER HAS EFFECTIVE RADIUS OF FIFTEEN MILES



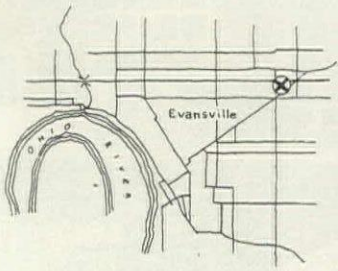
25. ADMINISTRATION BUILDING

Middle-western corporation plans headquarters for office personnel separated from manufacturing plant.

SERVEL INC., Owners

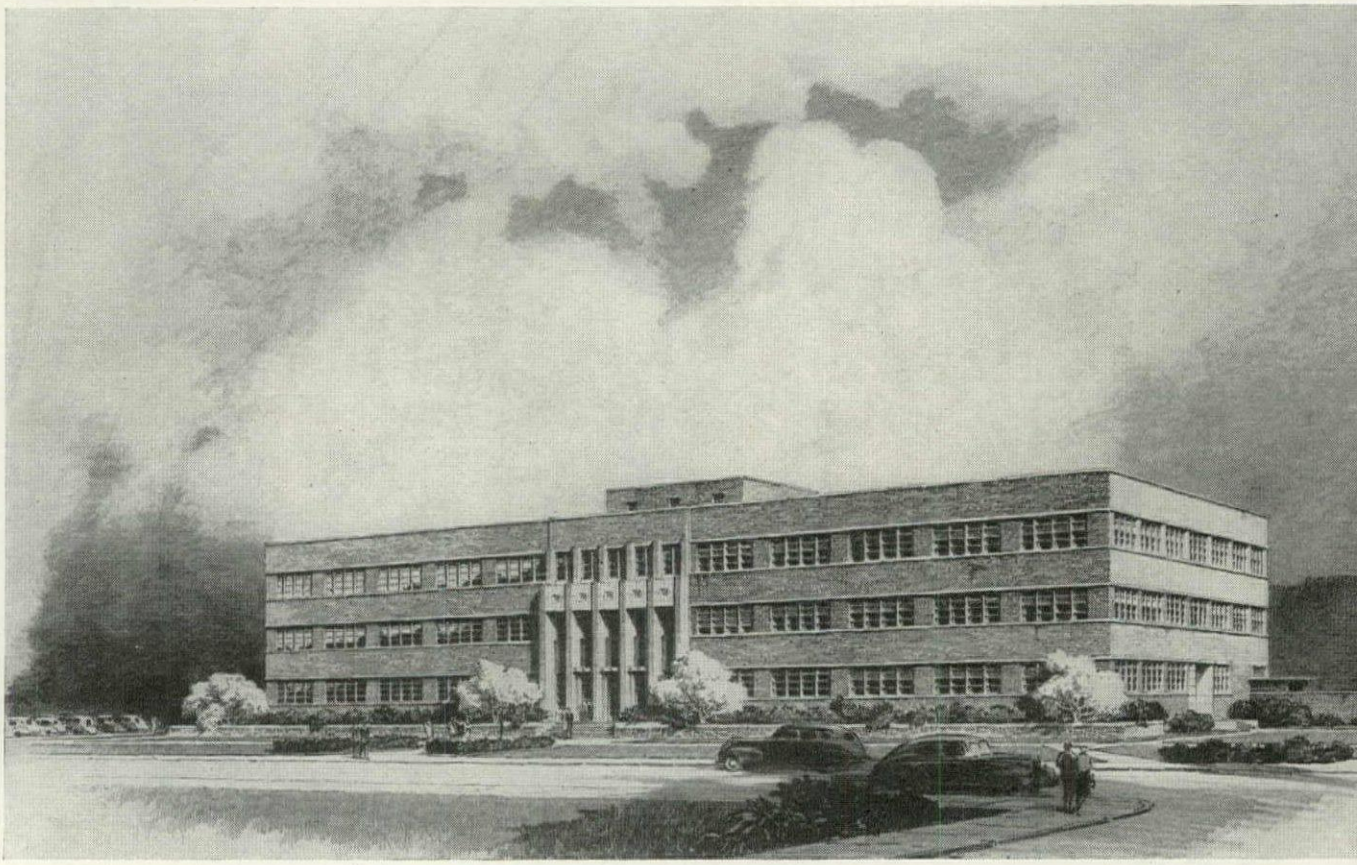
MARR AND HOLMAN, Architects

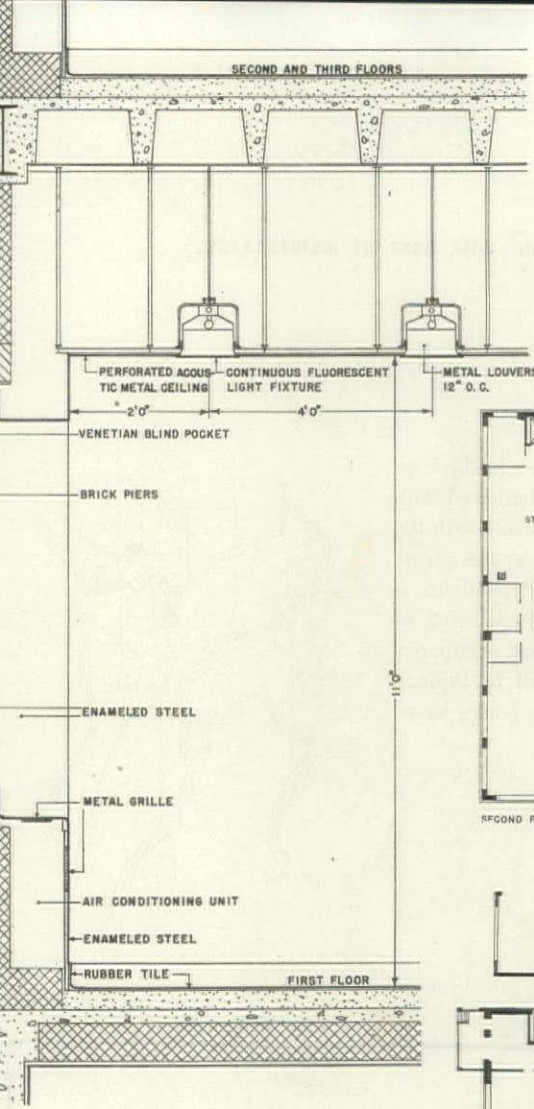
Servel Inc., makers of Electrolux refrigerators and all-year heating and air conditioning systems, is one of the many manufacturers who have planned peacetime expansion awaiting the release of materials. Their proposed three-story building, designed to house executive and office personnel, utilizes a site adjacent to the existing plant and will be landscaped as a unit with the old buildings. Because flexibility of space was a major requirement, unobstructed office areas of 54 ft. by 300 ft. (the entire length of the building) have been provided. A typical floor plan places this open space on the south side, separated from rest rooms, vaults, filing and tabulating cubicles by a central corridor. Movable office partitions further increase the adaptability of interior space.

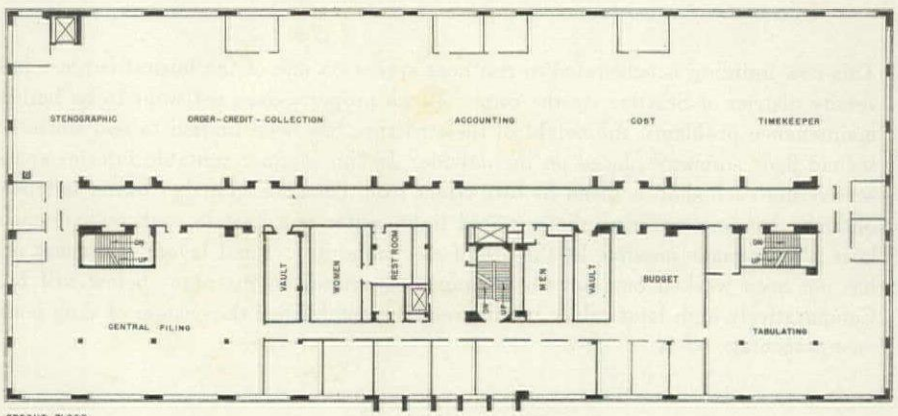


In addition to typical office floors, the ground floor of the building includes a small theater, a lounge and company cafeteria. The theater, equipped with a full stage, will be used for demonstrations, sales meetings and employe entertainment. Interior finish of the entrance and auditorium lobbies is to be of plywood veneered with bubinga and ebonized holly while the office walls and partitions will be metal. Lobby and corridor floors will be terrazzo and the floors in all work spaces of rubber tile to reduce clatter. Throughout the building artificial illumination will be achieved by fluorescent tubing recessed in troffers in a suspended acoustical ceiling.

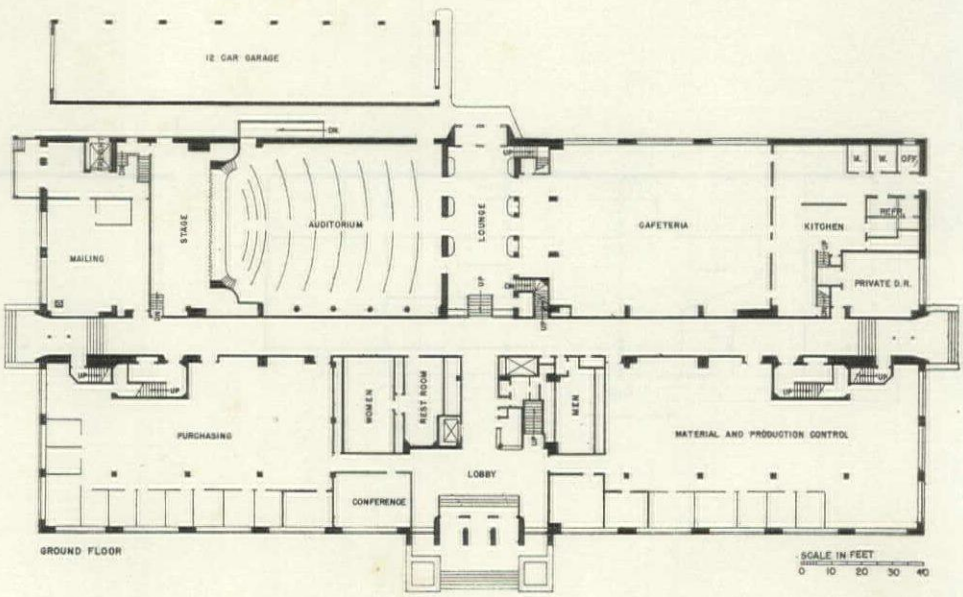
CLEAN-CUT BRICK AND GLASS FACADE IS EMBELLISHED BUT NOT IMPROVED BY GOTHIC-INSPIRED STONE EN







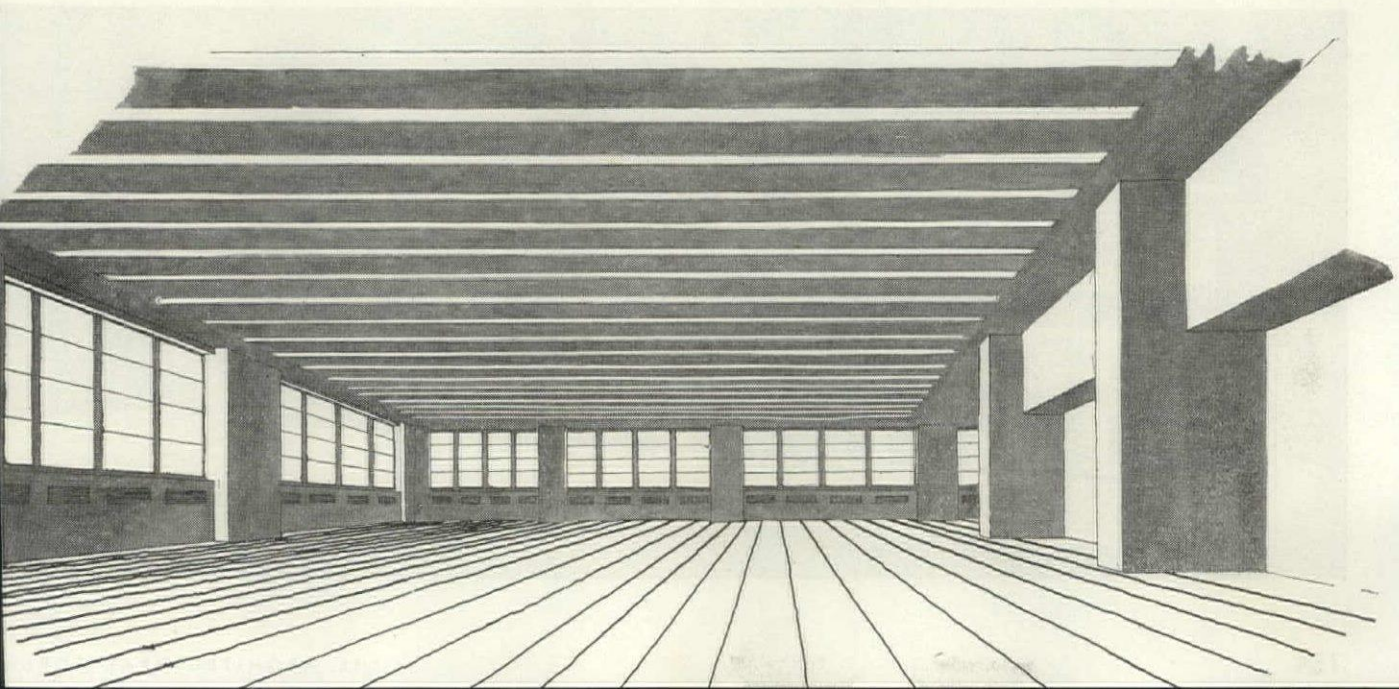
SECOND FLOOR



GROUND FLOOR

SCALE IN FEET
0 10 20 30 40

CLEAR SPAN construction provides unbroken space for pool of workers. Ribbon windows give excellent natural illumination supplemented by recessed fluorescent tubing.



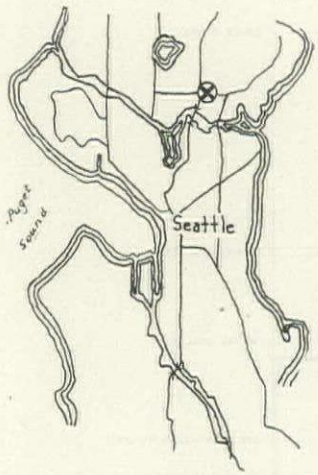
26. TAXPAYER

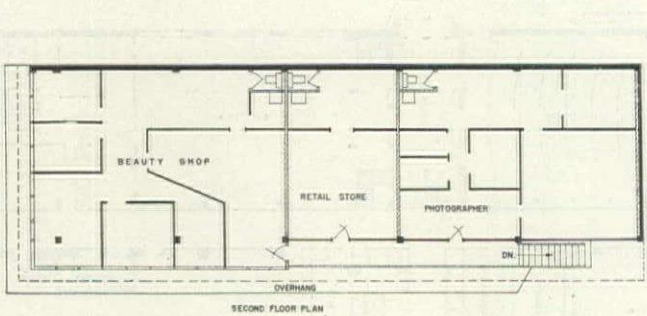
Glass and concrete structure combines flexibility of arrangement with ease of maintenance.

C. D. STIMSON CO., Owners

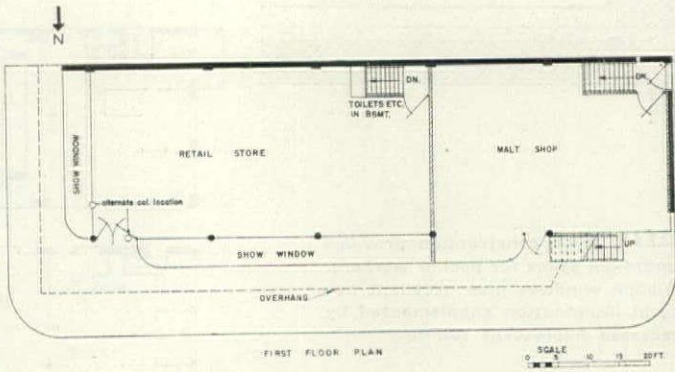
PAUL THIRY, Architect

This new building is scheduled to rise next spring on one of the busiest corners in the University district of Seattle. As the owner of the property does not want to be bothered with maintenance problems, the height of the structure has been limited to two stories, with the second floor stairway placed on the outside. In this manner rentable interior space is conserved and each shop is given its own street front entrance. Further owner independence is obtained by zone metering the required light, water and heat to each tenant (metering of heat is to be made possible by the use of electric units). Final layout for tenant occupancy has not been worked out, but the arrangement shown on the plans below will be typical. Comparatively high land values in the area have established the custom of shop leases based on a percentage basis.



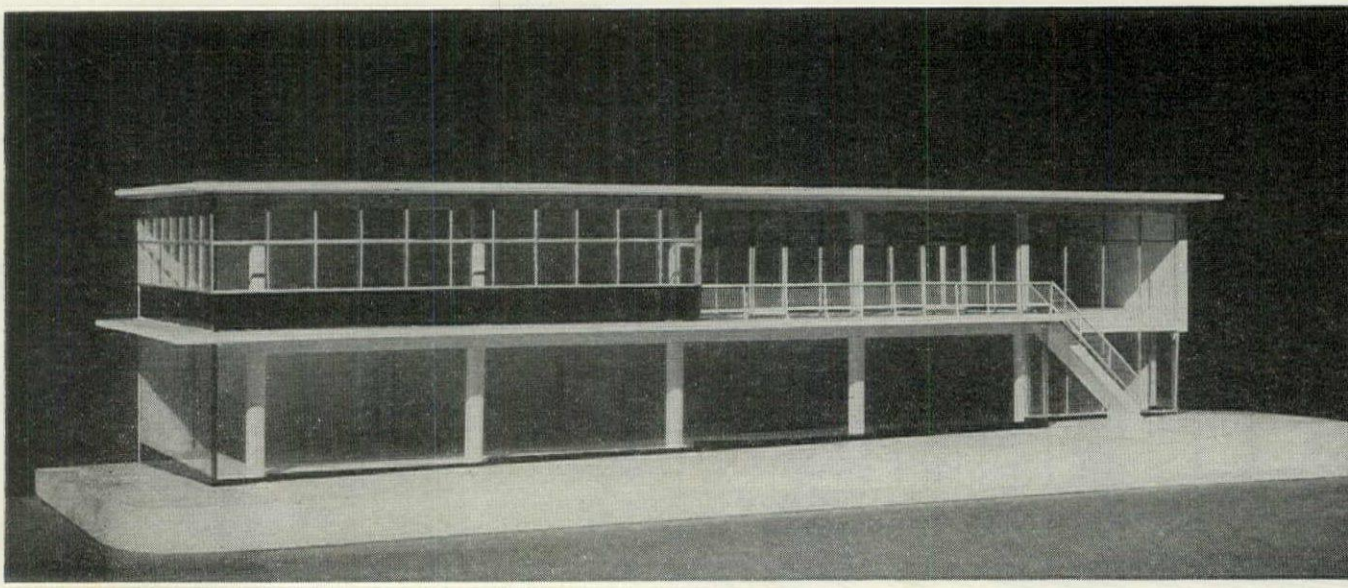


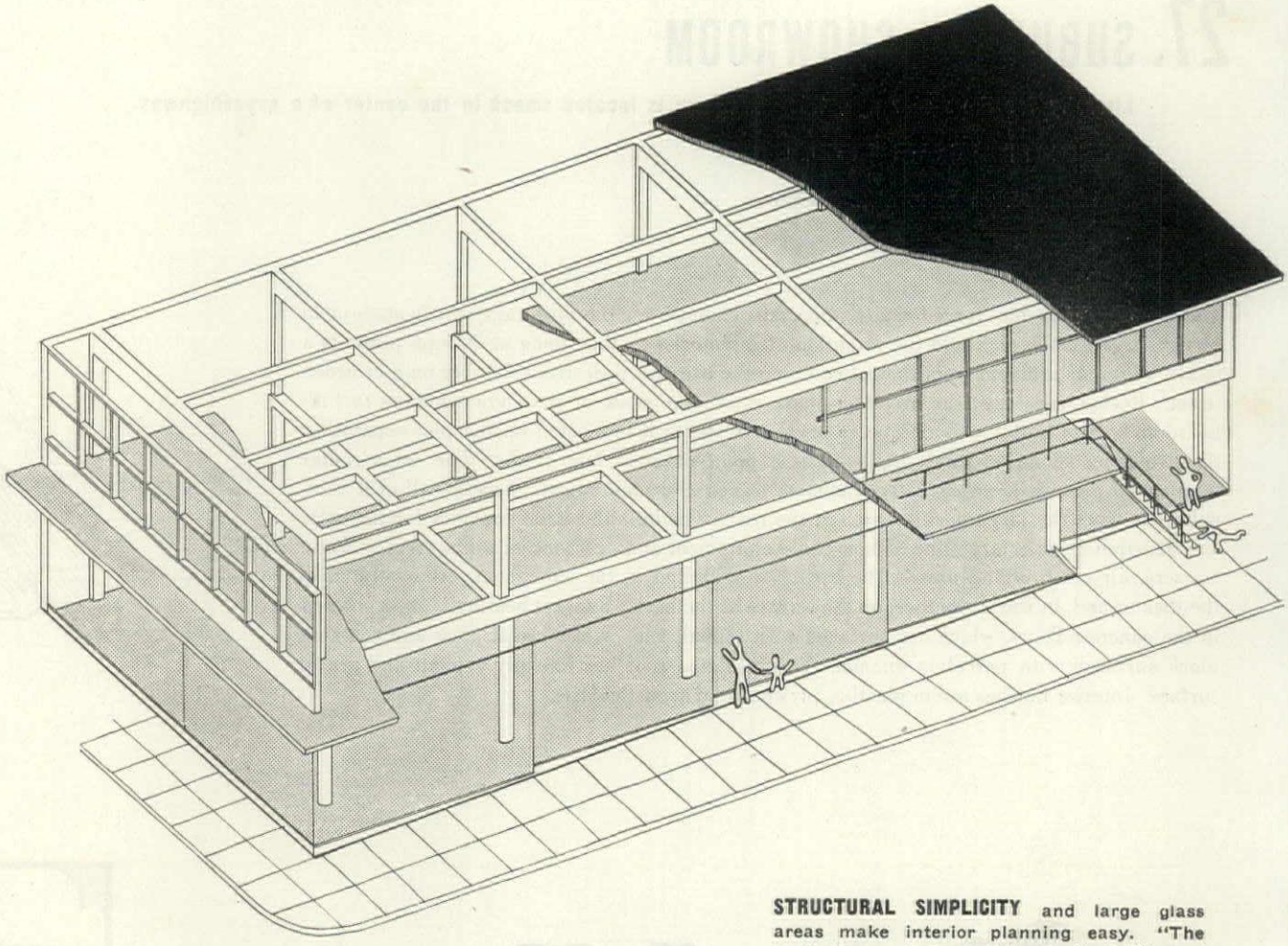
SECOND FLOOR PLAN



FIRST FLOOR PLAN

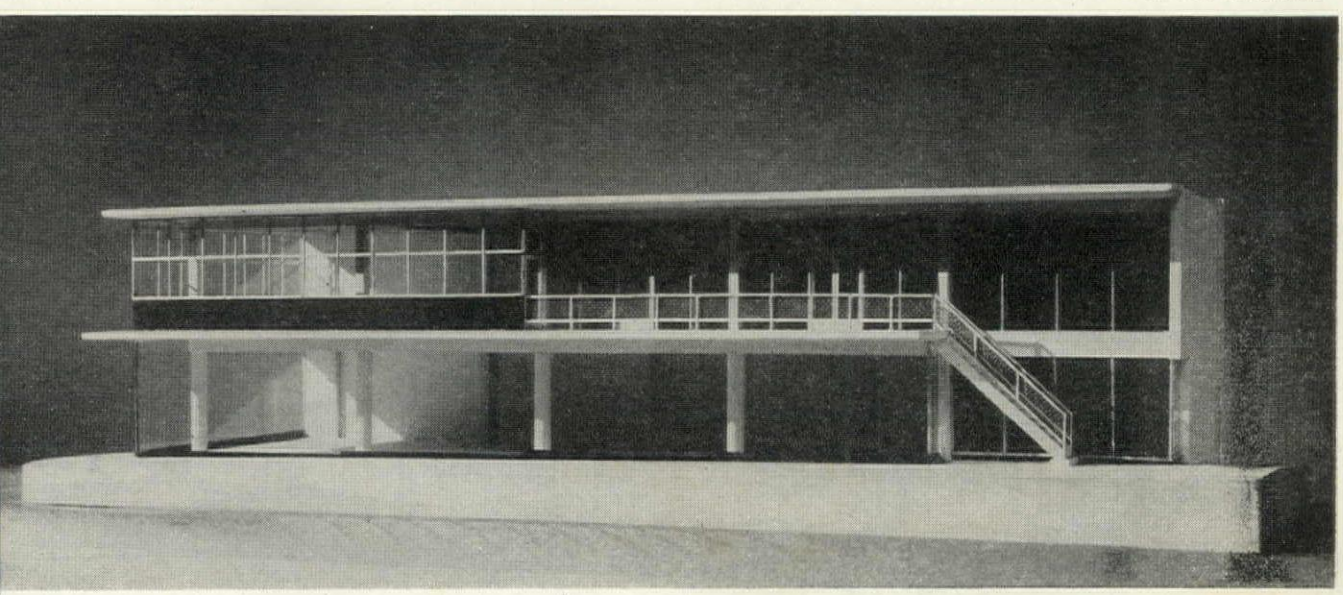
MODEL OF BUILDING IS FOR STUDY OF DESIGN AND EXHIBITION TO PROSPECTIVE TENANTS. FRONTS ARE REMOVABLE





STRUCTURAL SIMPLICITY and large glass areas make interior planning easy. "The basic theme of the building is flexibility and free front. A lease can be made on the basis of square feet instead of column space," says the architect.

ASIC STRUCTURE IS REINFORCED CONCRETE WITH ALUMINUM TRIM AND COLORED STRUCTURAL GLASS FACINGS



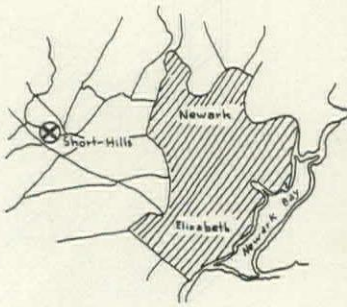
27. SUBURBAN SHOWROOM

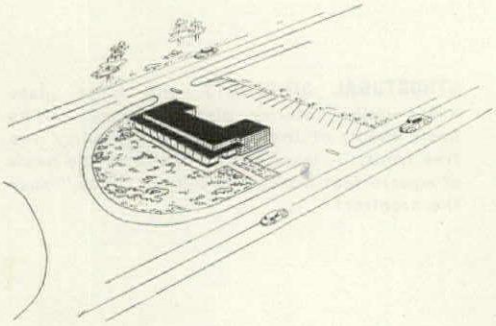
Literally for the motor age, this showroom is located smack in the center of a superhighway.

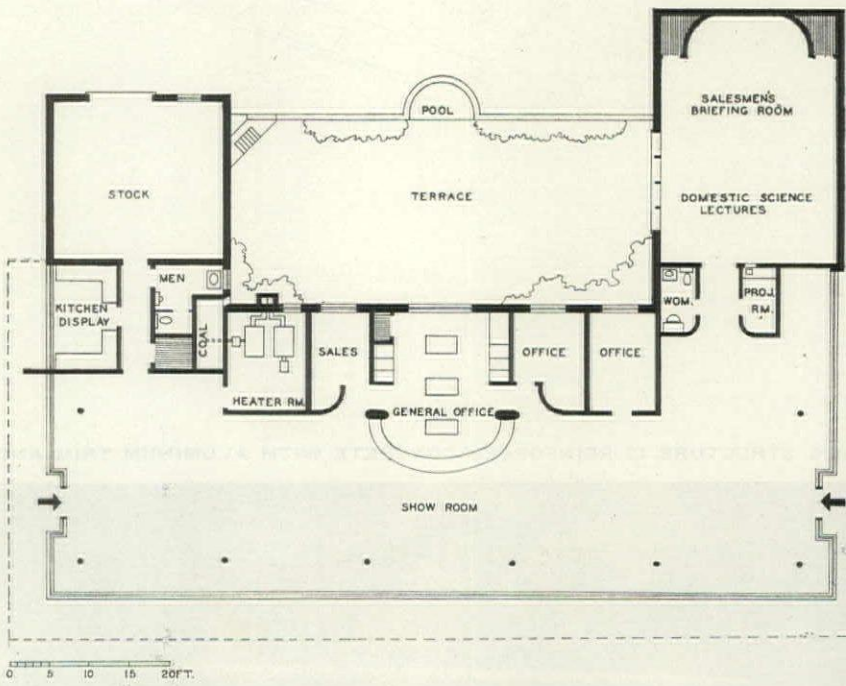
WESTCOTT ALEXANDER CO., Owners

DALZELL AND DALZELL, Architects

The superhighway has forced many important changes on the buildings which attempt to service it. To catch and hold the attention of a motorist tooling along at 50 mph presents a totally different problem from that of catching the eye of a pedestrian shopper on a crowded street. Recognizing this, the architects have raised the scale of the show windows to billboard size. The building is unique in another respect: it is located on the plot separating the two lanes of an east-west highway at a point of cross lane traffic. The semicircular landscaped plot upon which it faces is state owned and maintained. Access—all of it vehicular—is from the large parking area at the rear. The building itself provides for the sales and distribution of a large line of household equipment and appliances: oil burners, stokers, freezers, air conditioning units. These will be exhibited in the showroom, demonstrated in the theater and, in warm weather, on the terrace at the back. Radiant heating is incorporated in the concrete floors, which are surfaced with asphalt tile. Walls are of glass and concrete block surfaced with porcelain enamel. The insulated roof has four-ply asphalt and gravel surface. Interior finishes are in plastics, plywood and acoustical tile.







28. FURNITURE STORE

Open design provides excellent display space for a variety of household items in a small area.

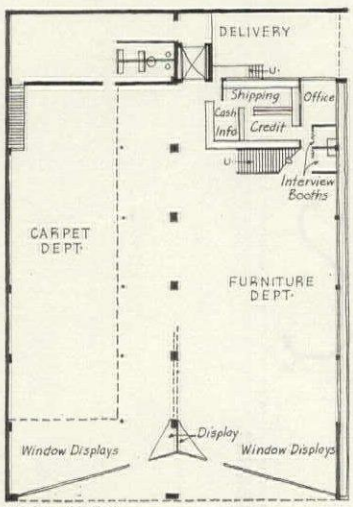
HOLLYWOOD STAR FURNITURE CO., Owner

RAPHAEL SORIANO, Architect

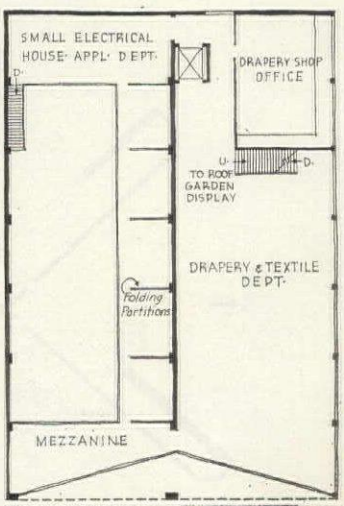
The problem of designing a suitable new building to be connected with an older one on the same plot of ground is admirably solved by the two-story furniture display store shown here. Although the existing structure is of brick and the future one of concrete and glass on a steel frame, this divergence of materials does not produce the lack of harmony which might be expected. A certain amount of remodeling will be necessary on the old building as an aid to conformity, however. Most difficult aspect of the job was incorporation of a center column which could not be removed, but in the new plans this has been utilized as a base for advertising display. The roof area, partly sheltered and partly open, will provide the main display space for outdoor furniture, one of the major commodities of the store, which will feature a variety of household appurtenances from carpets to refrigerators. Since it is fundamentally a salesroom for decorators, buyer's booths will be included on the ground floor.

OLD HOUSE will be demolished, new store will connect with existing commercial structure at left.

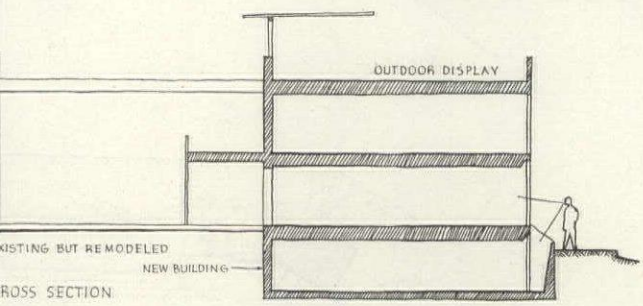
BASEMENT

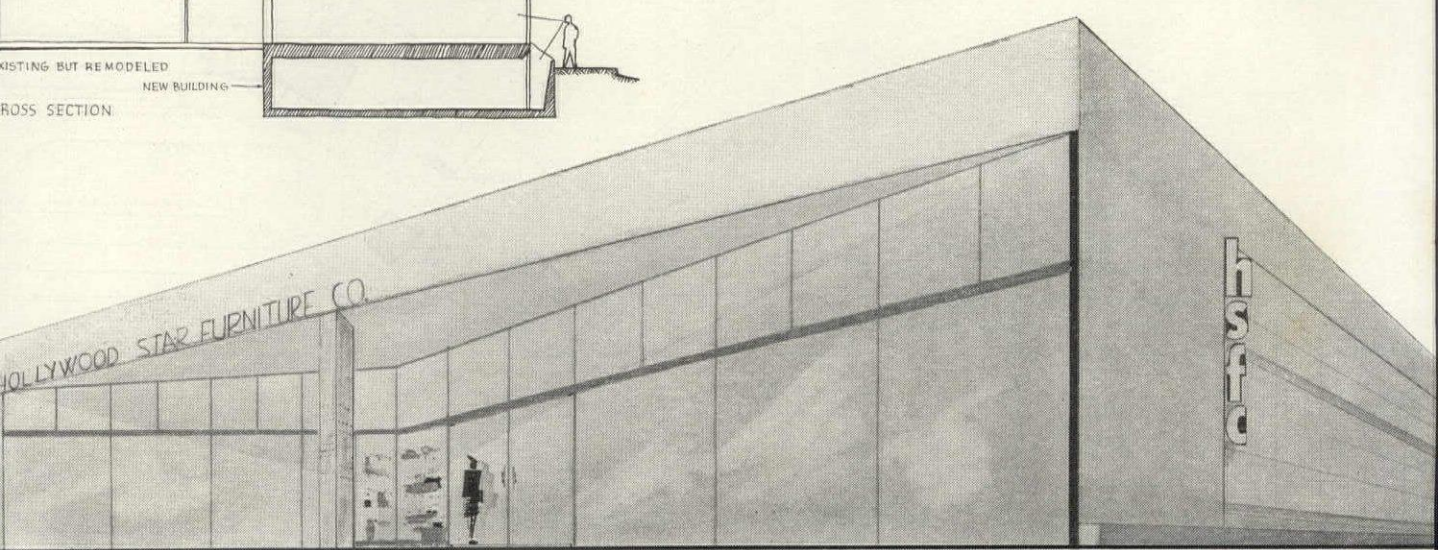


FIRST FLOOR



SECOND FLOOR 0 5 10 20 30 FEET



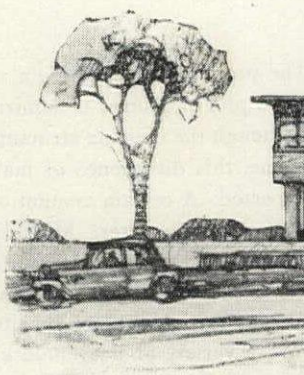


29. MUNICIPAL AIRPORT

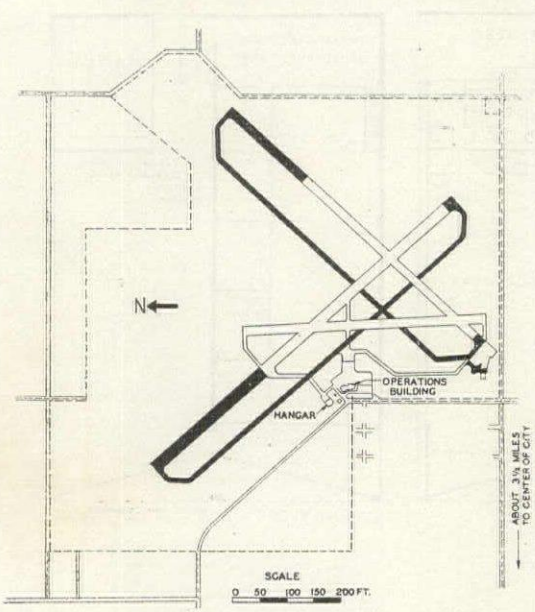
Terminal building for a small community provides for adequate future expansion.

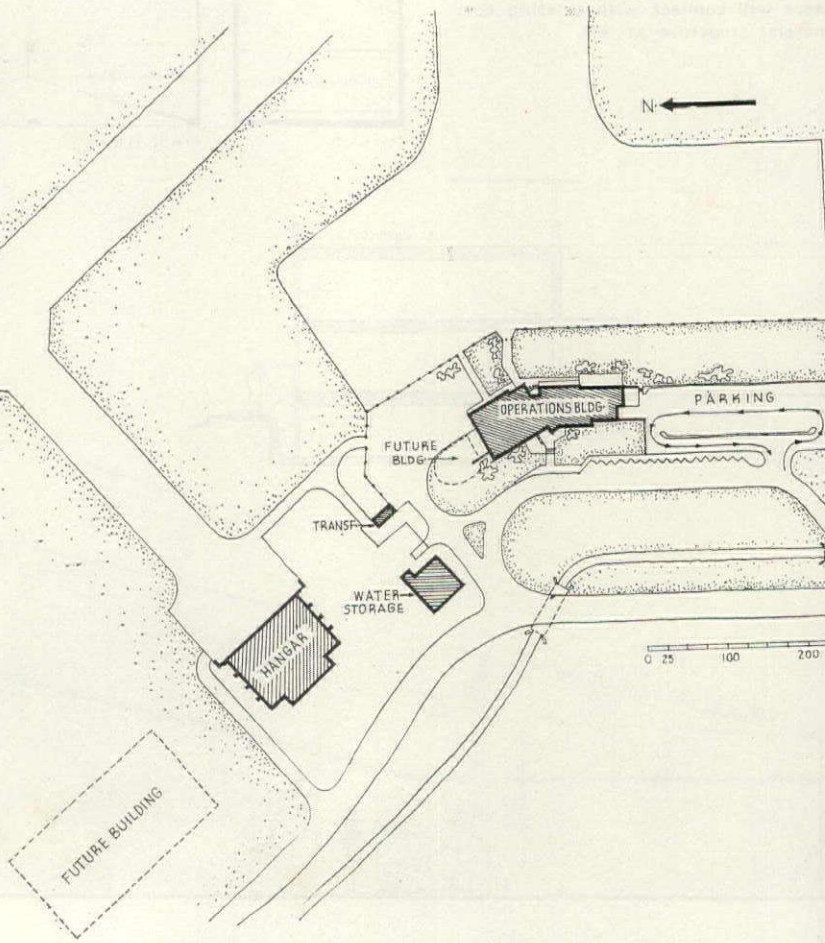
CITY OF HUTCHINSON, KAN., Owner

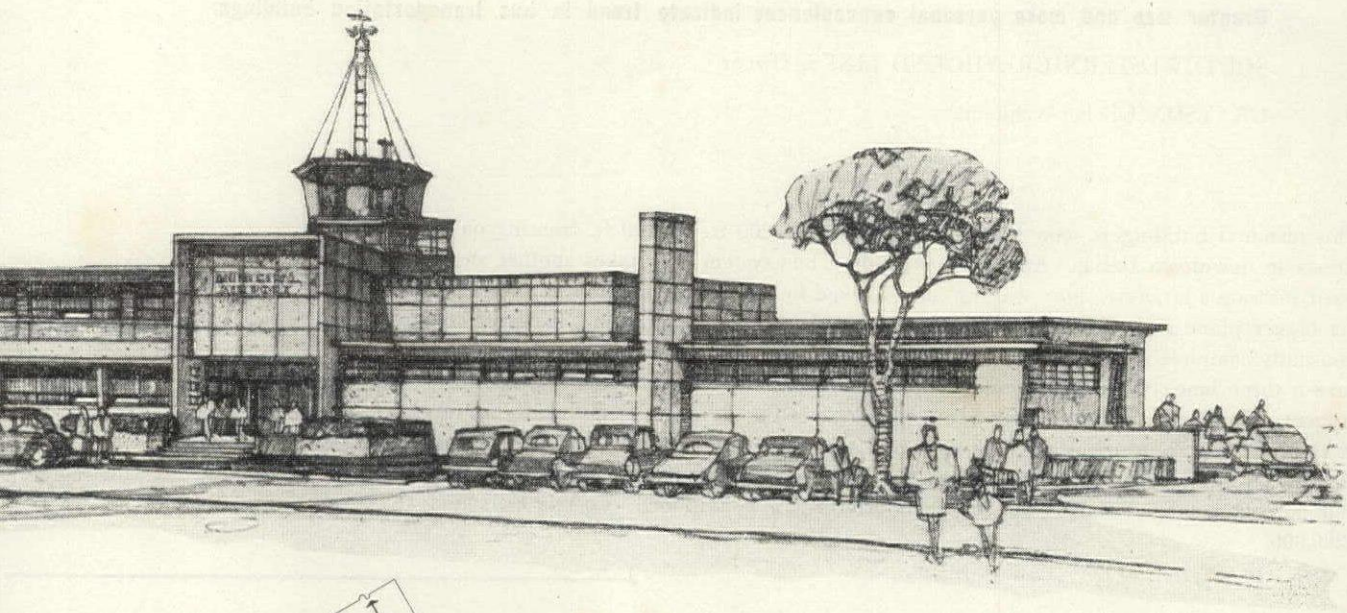
McCRACKIN and HIETT, Architects

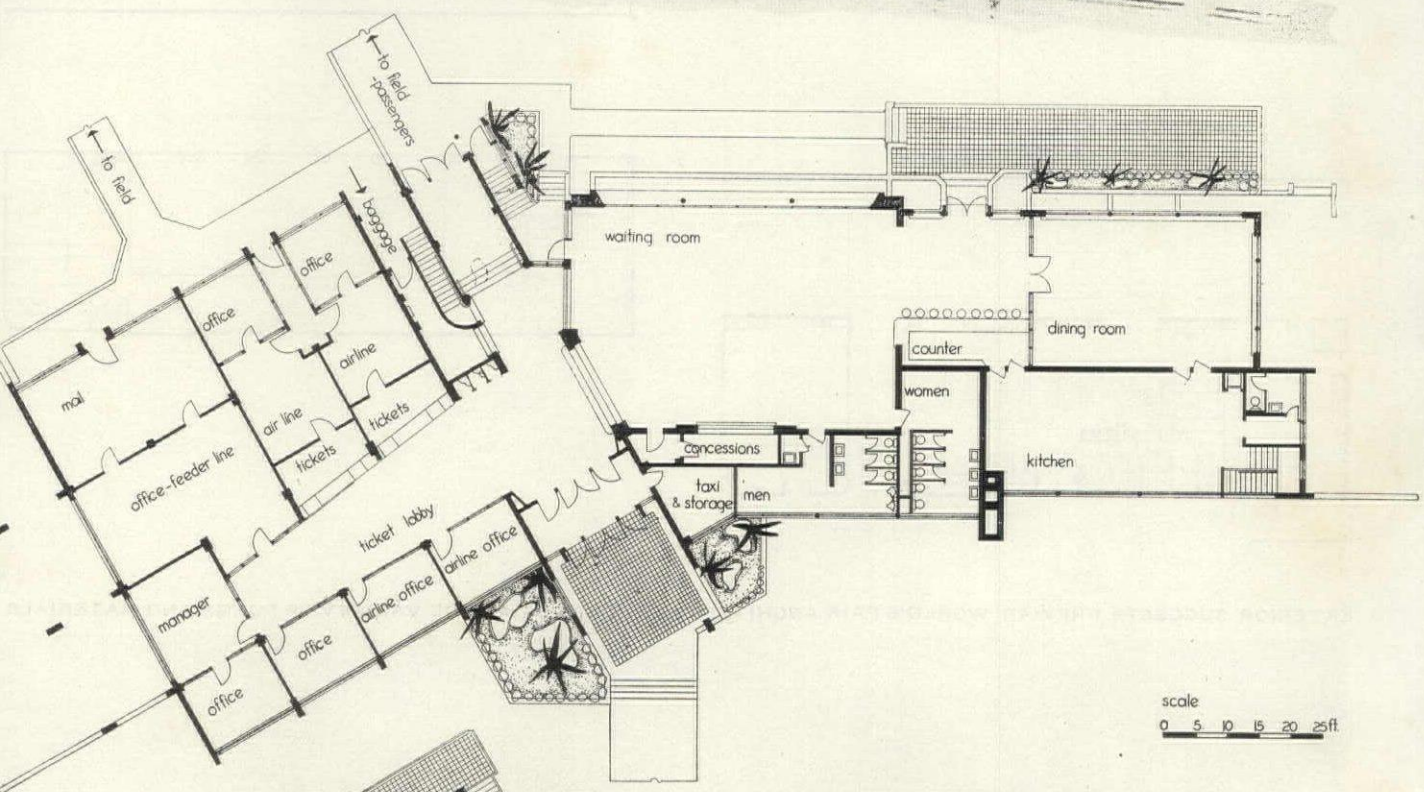


A wartime Naval training program added to the facilities of the local airport and greatly increased interest in aviation among the 35,000 citizens of Hutchinson, Kan., with this design for a new municipal terminal building as the result. The architects, realizing the uncertainty of the future needs of the community, wisely created a plan capable of expansion in two directions. A permanent main axis passage dominates the layout, and directly connects motor car and airplane parking areas. To the left of this passage are grouped the ticket and operations offices of the airlines; and to the right, the waiting room, restaurants and toilet facilities for passengers and sightseers. Both left and right wings may be added to as extra space is required. Circulation for sightseers to the deck overlooking the field and for employes to the second floor offices is segregated from that of plane passengers by separate stairways. Estimated cost is $250,000.

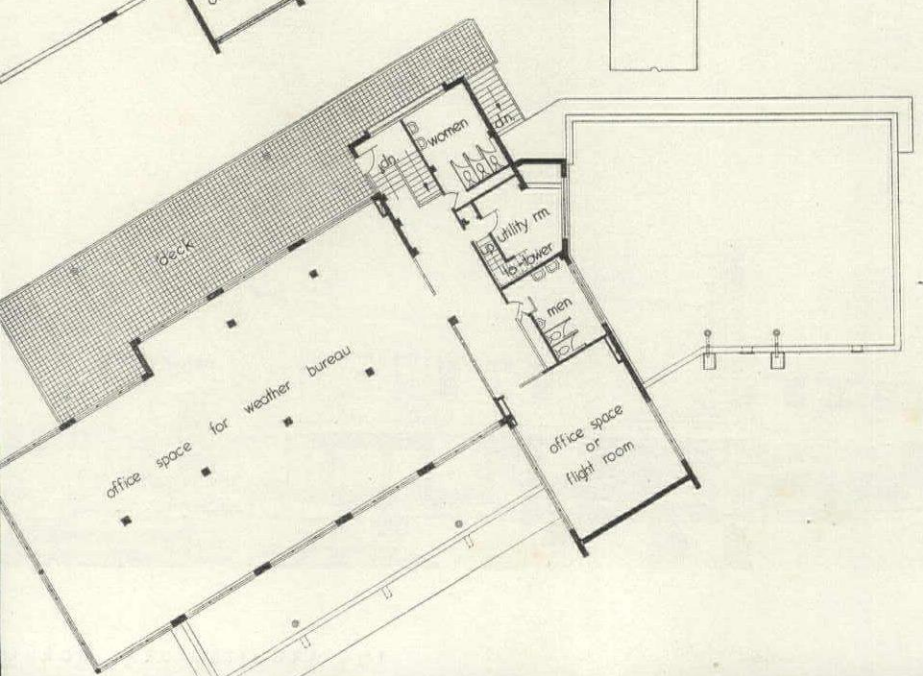








FIRST FLOOR



SECOND FLOOR

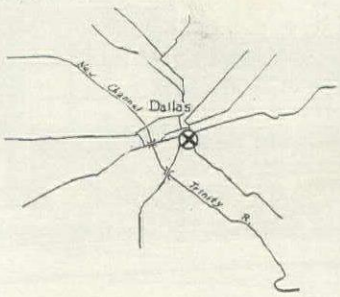
30. BUS TERMINAL

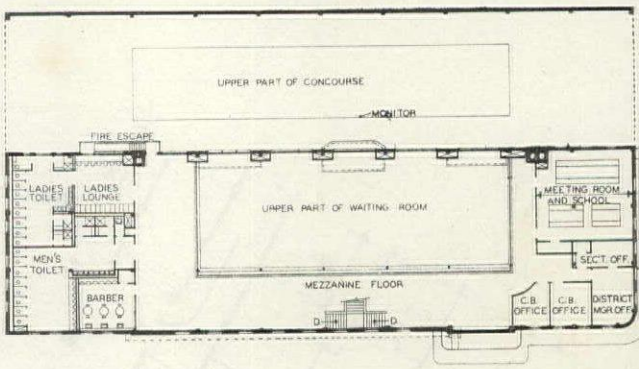
Greater size and more personal conveniences indicate trend in bus transportation buildings.

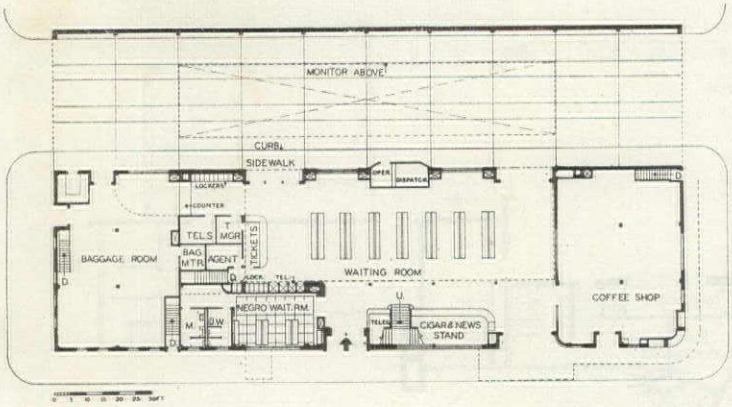
SOUTHWESTERN GREYHOUND LINES, Owner

GRAYSON GILL, Architect

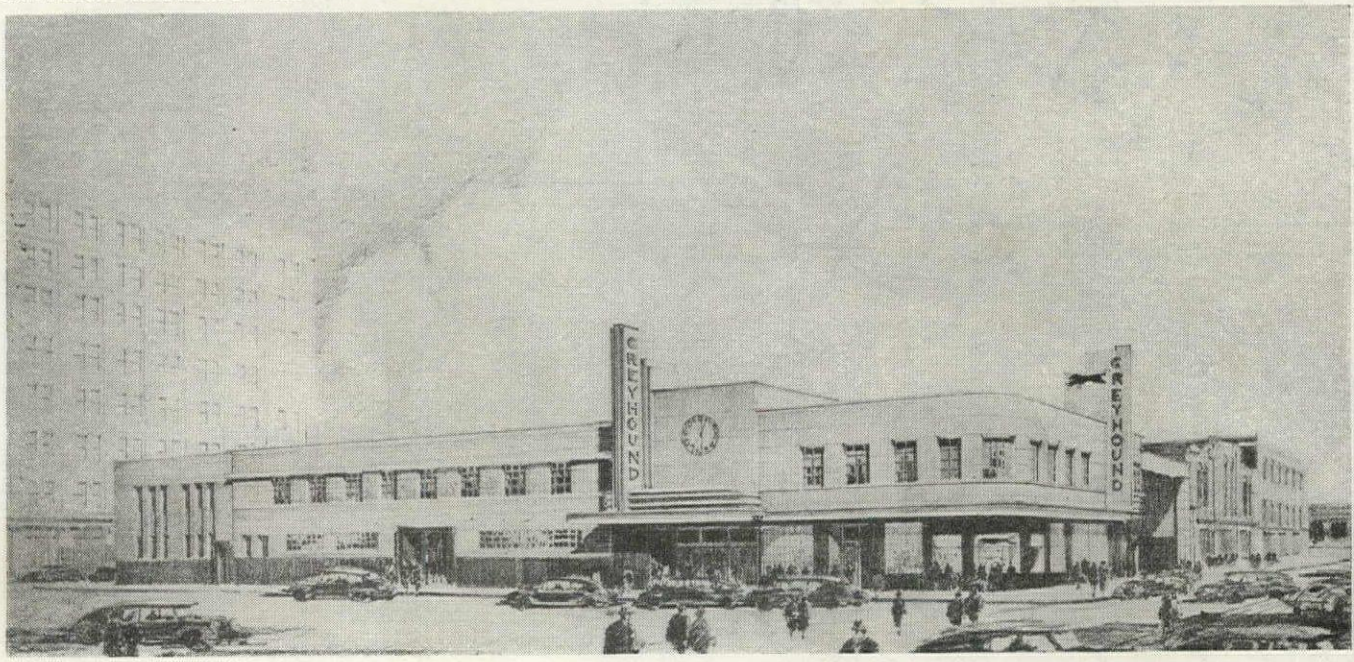
This terminal building is soon to be erected on a site 200 ft. by 100 ft. fronting on three streets in downtown Dallas. America's expanding bus system here takes another step forward, offering a large two-story waiting room flanked by conveniences usually associated with the bigger plane and train terminals. A stairway leads to a quiet mezzanine level and to unusually complete rest room facilities with private dressing rooms and showers. Buses will have a three lane, two story, monitor-lighted concourse for receiving and discharging passengers. The dominant blank mass about the clock in the elevation seems somewhat forced in view of the plan, which is actually organized as a simple rectangle, with no corresponding element on the inside. Materials are face brick above a granite base, with white stone trim and porcelain enamel signs. The entire interior is air conditioned. Cost is estimated at $200,000.







EXTERIOR SUGGESTS PREWAR WORLD'S FAIR ARCHITECTURE IN USE OF A WIDE VARIETY OF FORMS AND MATERIALS



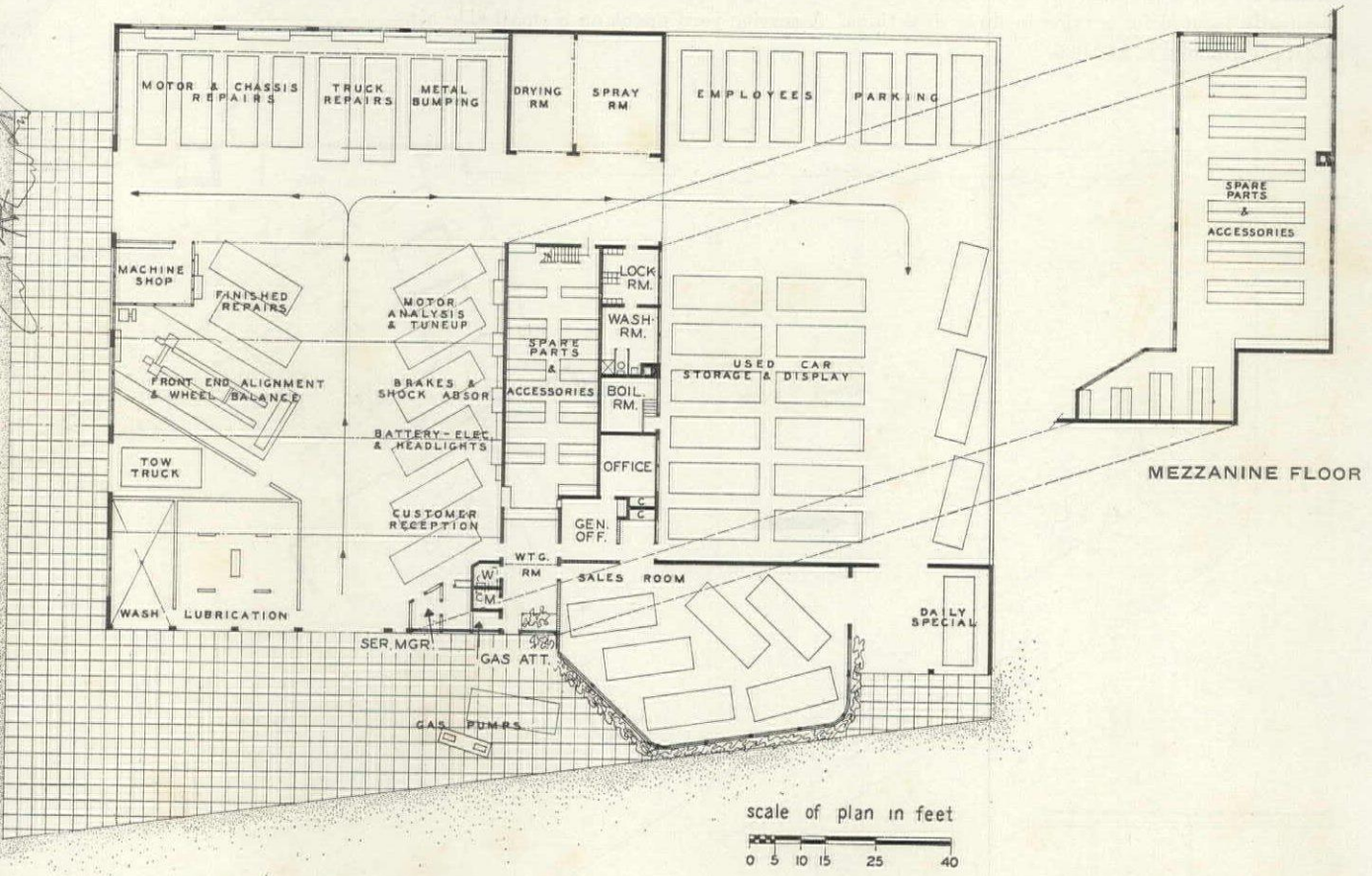
31. GARAGE AND SALESROOM

Careful analysis of dealer needs produces an excellent plan for motor sales and service.

BOLEY MOTOR SALES, Owner

JOHN M. GRAY CO., Architects

Realizing that his present building is outmoded, this dealer has decided that he can give better service and increase sales by constructing a modern garage in a more central location. To handle an estimated sales volume of 350 new and 700 used vehicles a year, and a service volume of 31 vehicles a day, the architect has provided a plan tightly integrating five main features. Management is given a central location for easy supervision of all sales and service. New vehicles are concentrated in a glass-walled salesroom projecting toward the street; used vehicles are placed in a walled outdoor lot, with a direct entrance from the street via a "daily special" alcove. Estimated cost is $90,000, plus an additional $10,000 for equipment.



STREET FACADE COMBINES UNUSUAL SALES VALUE WITH HONEST EXPRESSION OF BUILDING'S FUNCTIONAL PLAN

32. DRIVE-IN RESTAURANT

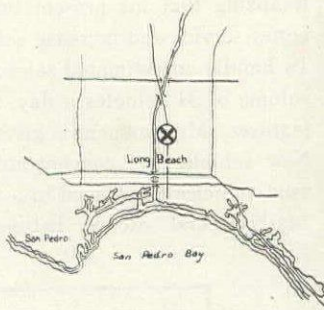
Simple design dramatizes this latest solution to the problem of eating in a motorized world.

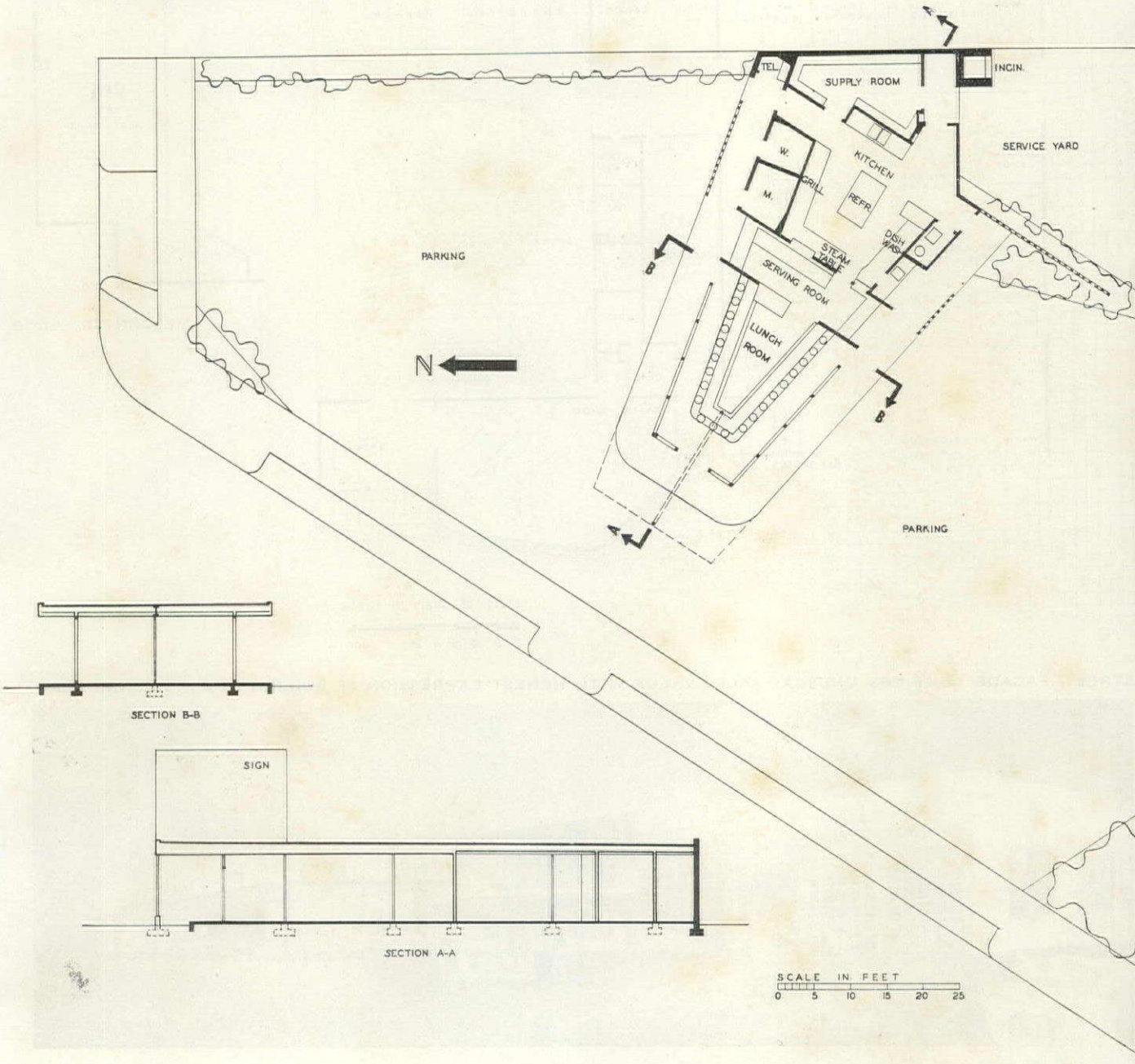
DONART, INC., Owner

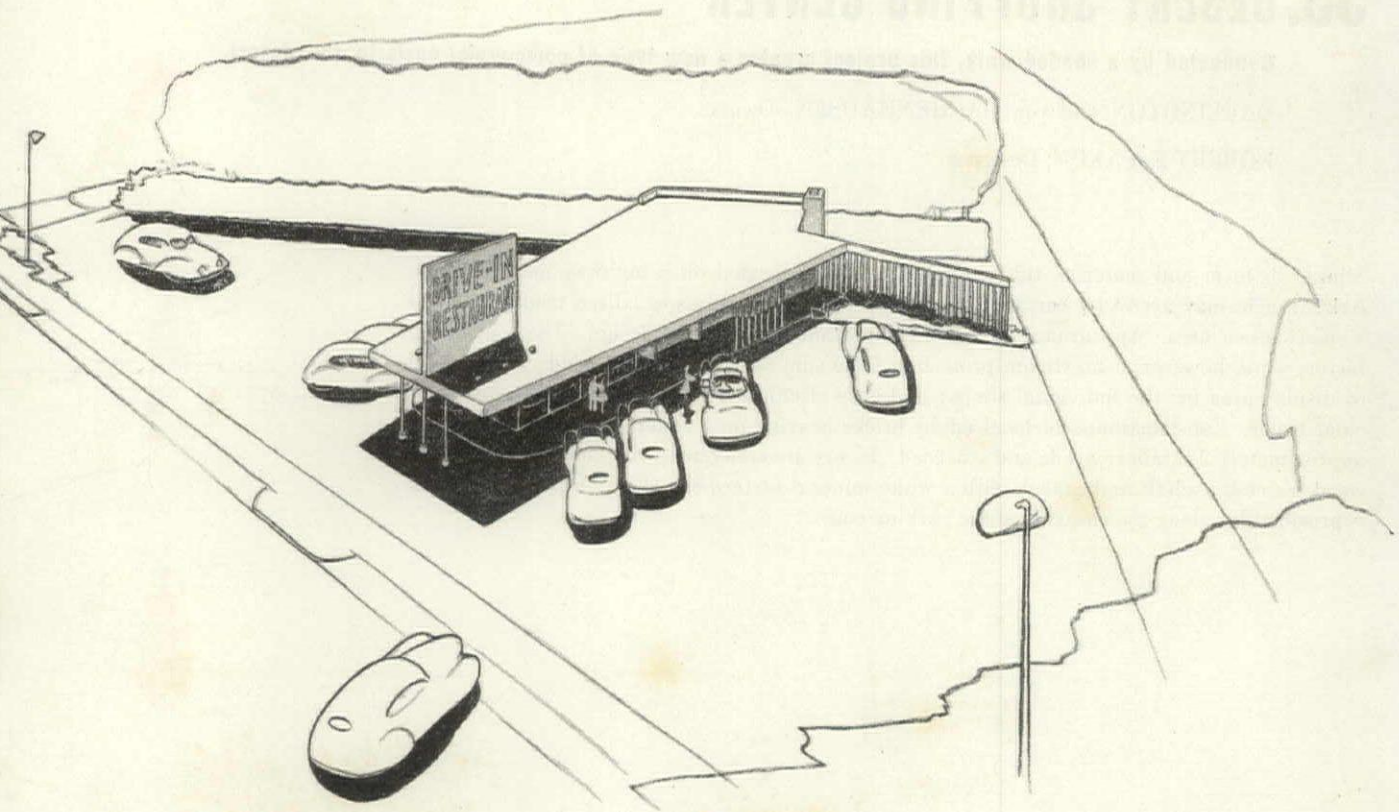
THORNTON M. ABELL, Architect

Like the filling station, the drive-in restaurant is a design problem typical of our day, with solutions ranging from Cape Cod cottages to Indian teepees. It is refreshing to find this solution concentrating on looking like nothing more than it is.

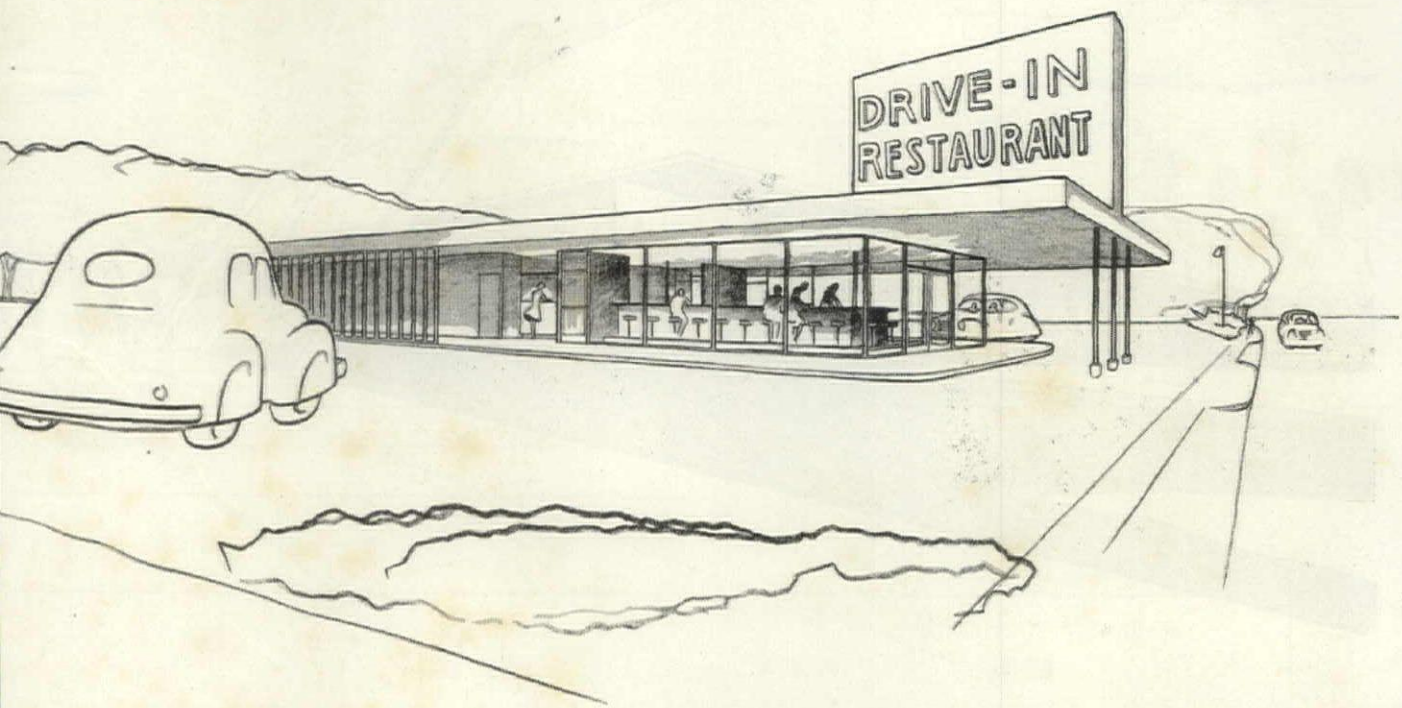
The owner of a small lot fronting on heavily-traveled Long Beach Boulevard asked architect Abell to create a restaurant that would serve half its patrons at a sheltered counter and half in parked cars. In addition, the building was to have advertising value while occupying as little of the lot as possible. The resulting wedge-shaped structure seems to accomplish the mission, with its counter section placed near the sidewalk to attract pedestrians, its parking space for 20 cars on both sides, its huge, eye-catching sign, and its kitchen centrally located for service in three directions. A service yard opens on a small side alley. Cost is estimated at $10,000.







FLOOR SLAB is of integrally colored cement; walls of wood stud, plaster and glass; roof of wood and steel beams supported on pipe and wood columns. Lighting of interiors and roof overhangs is by recessed incandescent floods. Sign has neon lettering on background floodlit from roof.

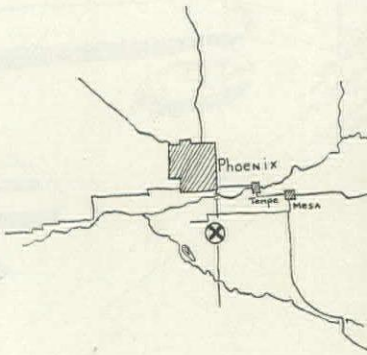


33. DESERT SHOPPING CENTER

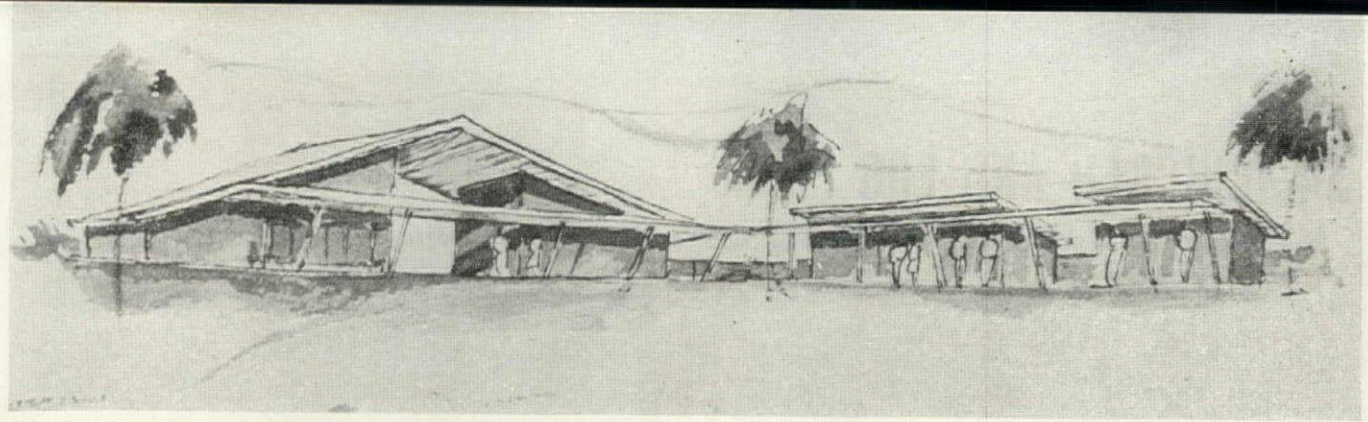
Connected by a shaded walk, this project creates a new type of commercial oasis in the desert.

DARLINGTON and von DACHENHAUSEN, Owners

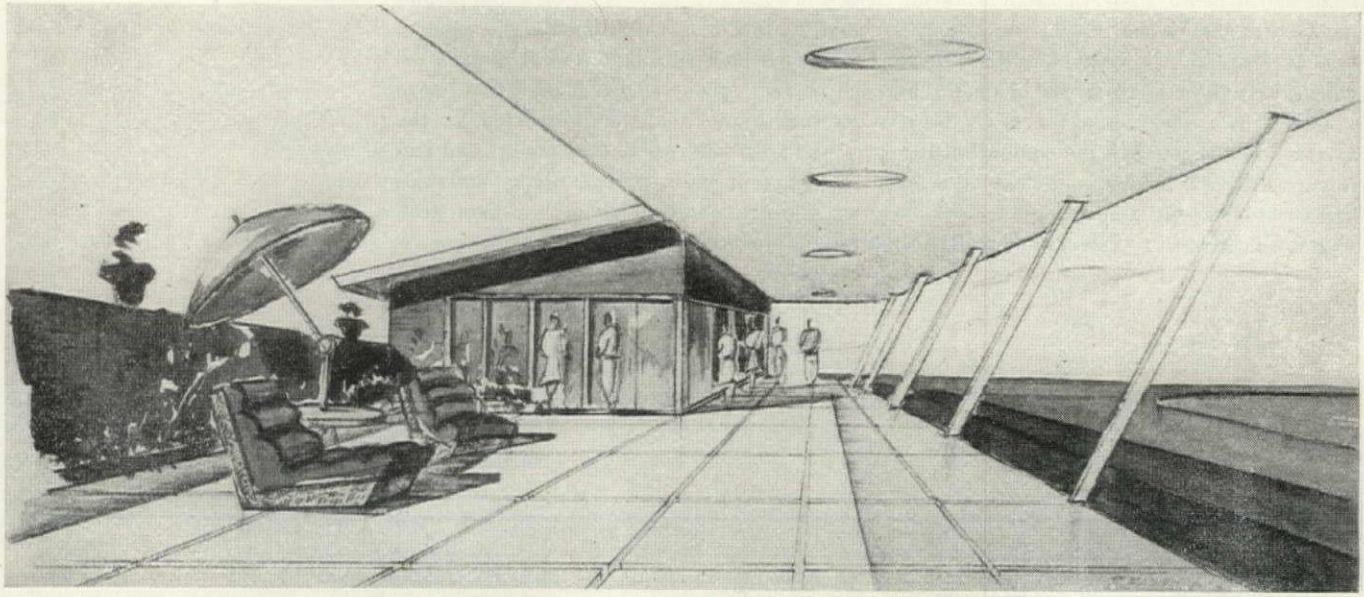
ROBERT E. FAXON, Designer



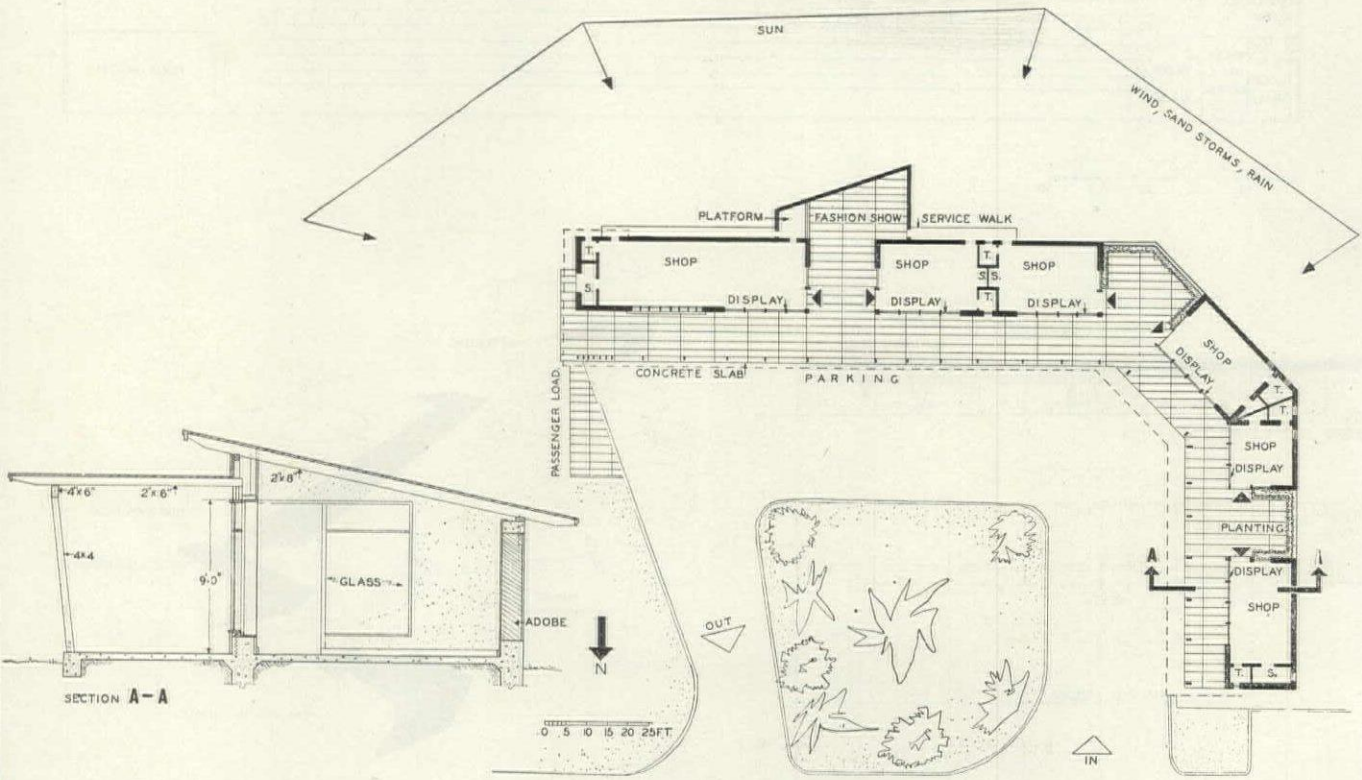
Simple in form and material, this shopping center is located on a highway near Phoenix, Ariz. Traffic may arrive by car, truck or burro—but the highly specialized trade is that of a smart resort area. Appearance is thus an important factor in the design. The controlling factors were, however, a maximum protection from sun, sand storms and wind; a maximum of display area for the individual shops; and easy circulation for both pedestrian and vehicular traffic. Construction is of local adobe bricks bearing on a concrete foundation carried approximately 2 ft. above grade and stuccoed. Floors are concrete throughout and the roof is wood framed, asphalt and gravel, with a white mineral-surface cap sheet. Future expansion is provided for along the east side of the parking court.



COLOR SCHEME: ADOBE RED WALLS, WHITE WOODWORK AND ROOFING, AQUA GREEN CEILINGS AND SOFFITS



NORTH-SOUTH OVERHANG IS CARRIED BEYOND CURB LINE BY ANGLED WOOD POSTS. COURTS ARE PLANTED



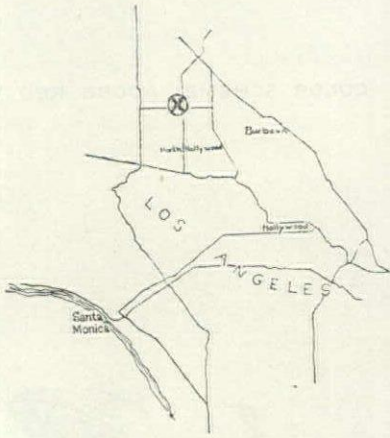
34. CHICKEN AND EGG FARM

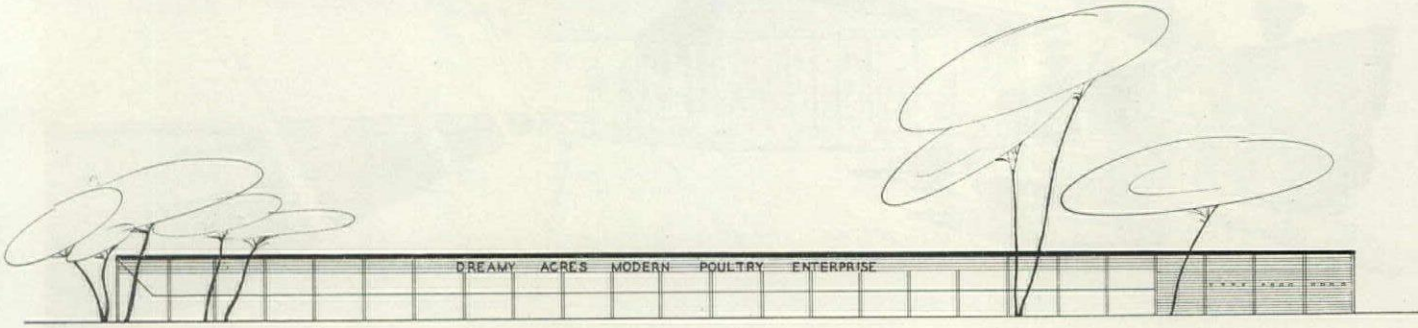
Assembly-line production of poultry and eggs provided for in modern California plant.

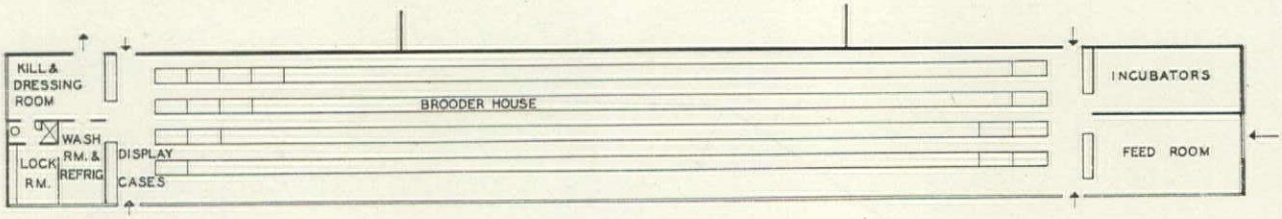
PENNY AND MILTON KATZ, Owners

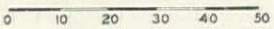
RAPHAEL S. SORIANO, Designer

Advances in agriculture are nowhere more startlingly apparent than in poultry production. And such developments are accurately mirrored in this plant for the production, on an efficient and hygienic basis, of broilers, laying hens and eggs. To be located on a 7-acre plot near North Hollywood, Calif., the project includes a brooder house, hen building, owner's residence and helps' quarters. In the brooder house, to reduce hand labor to a minimum, the chicks pass directly from the incubator into the nearest brooders. From here they move gradually from one compartment to the next, at such a rate that they are ready for the market when they reach the compartment nearest the kill room, where they are dressed and refrigerated. All feeding and cleaning is mechanized by conveyors, while sunlight, sunlamps and controlled ventilation keep the chicks healthy. Construction throughout is of light steel, with insulated steel roof decks and walls of lightweight pre-cast concrete.

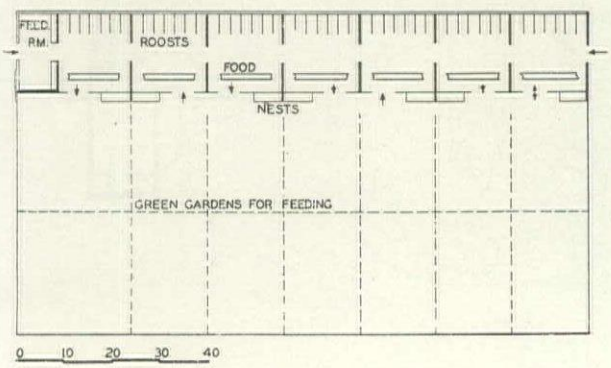


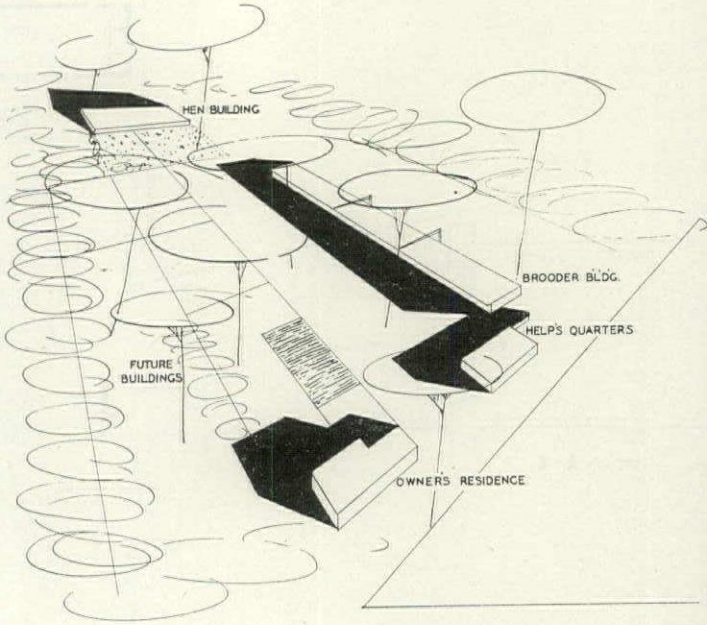






HEN BUILDING





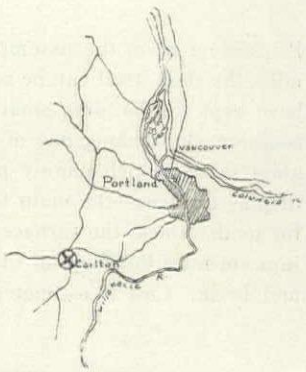
35. TURKEY BROODER

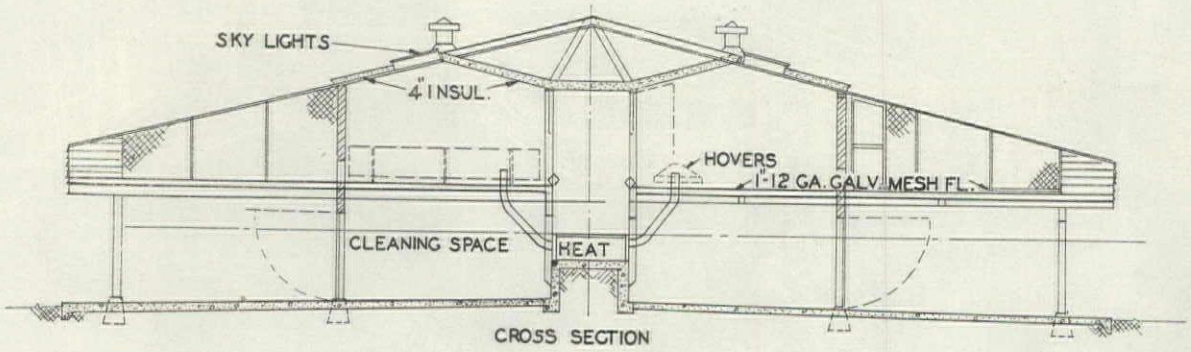
Elevated building yields hygienic conditions for birds, easy, economic operation for owners.

PANTHER CREEK RANCH, Owners

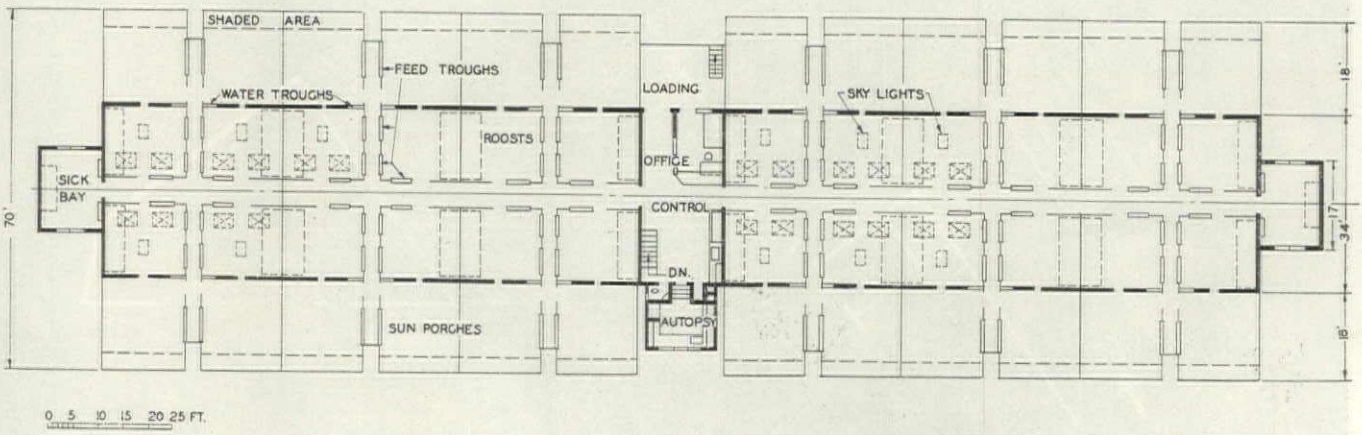
ROI MORIN, Architect

Turkeys, unlike chickens, are not marketable until mature: young turks are also far more susceptible than young chicks to so-called filth diseases, as well as to cold and dampness. Hence unusual care must be taken during the first critical 10-12 weeks before the poults are put out to range if mortality is to be held to reasonable limits. Such factors conditioned the design of this new brooder now under construction near Carleton, Ore. It is designed to produce 20,000 birds per year in two equal broods, and will require a crew of only three instead of the usual eight to 15. Such economies will be largely the result of rationalized cleaning: heated roosts and open porches are raised off the ground and "floored" with wire mesh; droppings fall to concrete floor at grade where they are scraped off by small tractor with blade. The building is insulated and heated and the cleaning space is closed in winter to prevent drafts. Cost is estimated at $20,000.





CROSS SECTION



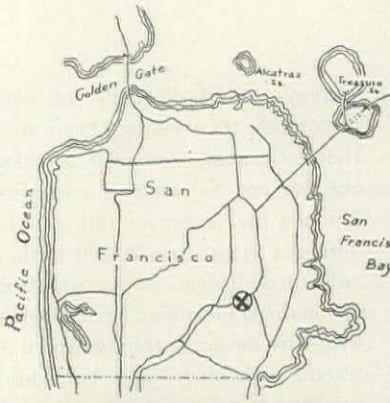
36. NURSERY AND SEED STORE

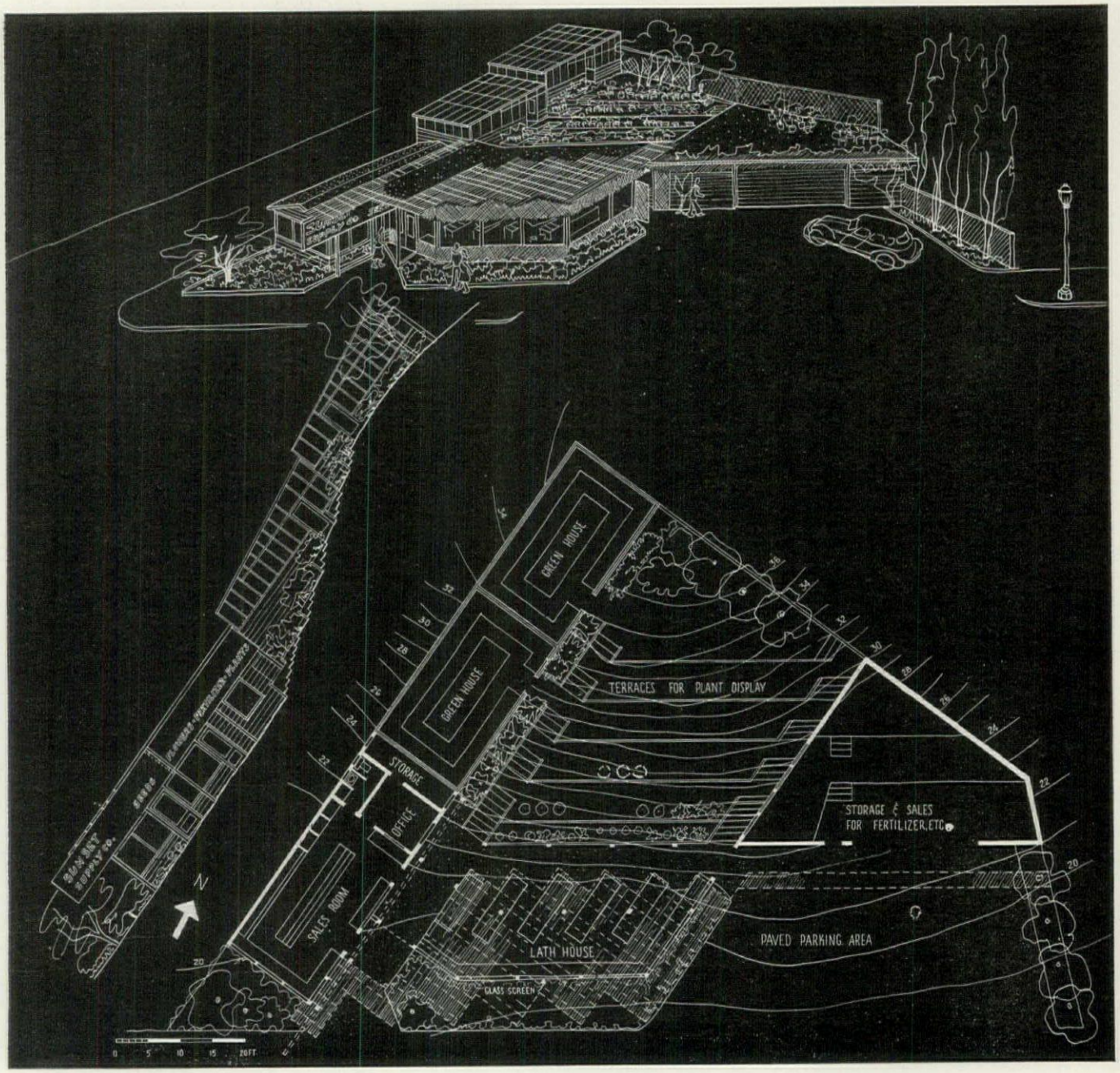
Itself a charming garden, this shop makes a canny display of merchandise in an open plan.

SUNSET SUPPLY COMPANY, Owner

WURSTER and BERNARDI, Architects

Proceeding upon the assumption that when the merchandise is flowers and the climate is mild, the shop itself can be reduced to a minimum, the architects of this San Francisco store have kept the building small and integrated it closely with the landscaping. The site is a southern slope along one of the suburban thoroughfares. The street front is a lattice and glass screen which merely protects the lath house behind it. Behind this are a series of display terraces—the main feature of the shop. Along the side street are the greenhouses for tender stock, the furnace room and sales room. Sale and storage of fertilizer is handled in a separate building off the parking area. Construction is simple, largely redwood, glass and brick. Cost is estimated at around $15,000, including all landscape construction.






WINTER WORLD THROUGH .
FOR TOMORROW'S HOME
BUY
BONDS TODAY
ONLY THE RICH CAN AFFORD POOR WINDOWS

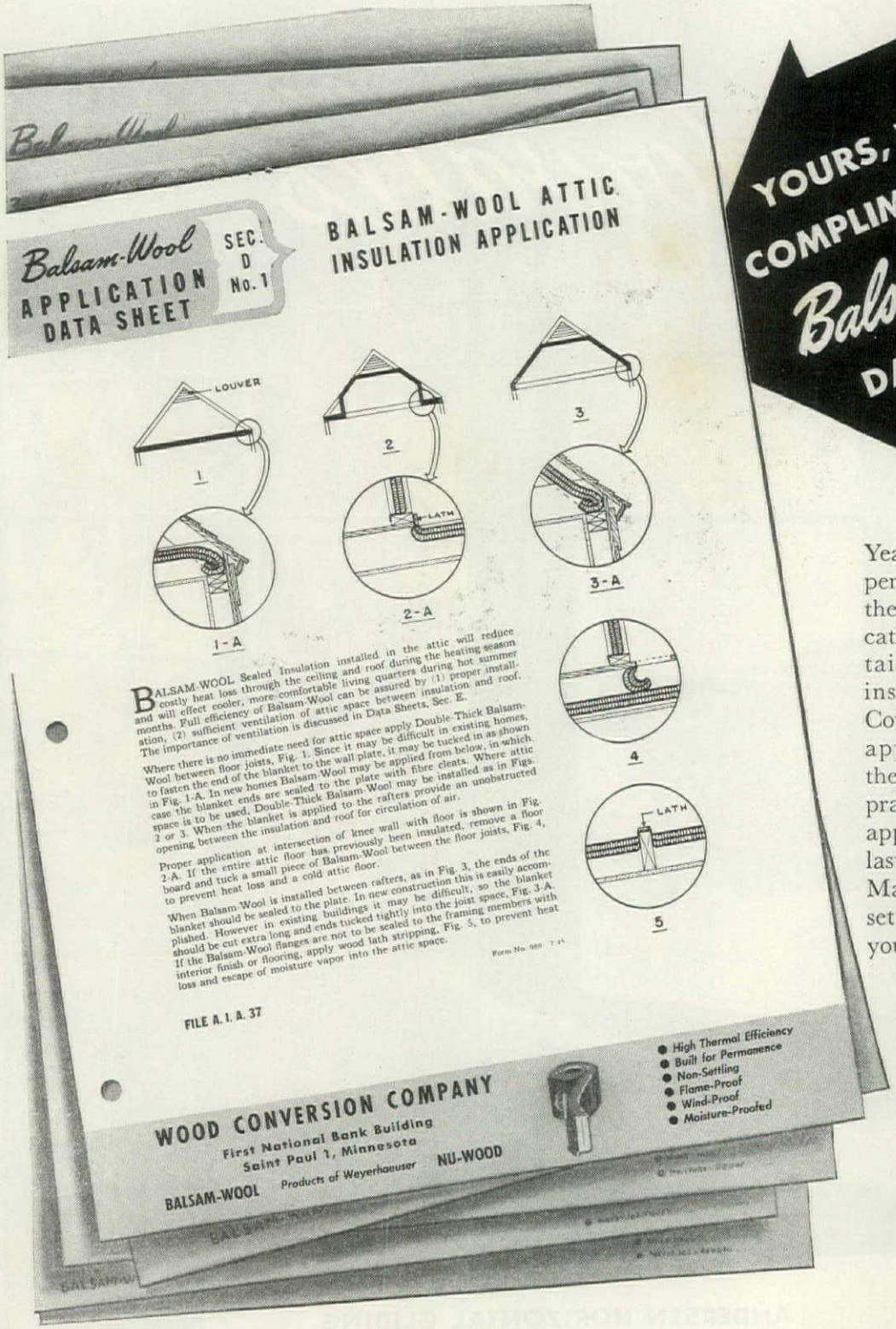
ANDERSEN HORIZONTAL GLIDING WINDOW UNITS IN A NORTHERN HOME

When WINDOWALLS stand between the comfort of the indoors and the frosty outlines of a winter-wrapped scene, then windows must perform the two essential functions now assigned to them by progressive architectural thinking. For, while framing the outside view, they must also act as a wall, insulating and protecting inside comfort.

WINDOWALLS that are engineered to meet these exacting requirements are made today by Andersen. An example is this use of Andersen Horizontal Gliding Window Units, Number 58056; sash opening size, 5′ $8\frac{13}{16}$″ x 5′ $6\frac{3}{4}$″. For details, see Sweet's Catalog.

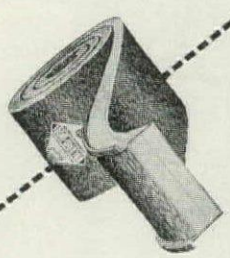
Andersen Corporation

BAYPORT • MINNESOTA



YOURS, WITH OUR COMPLIMENTS, THESE Balsam-Wool DATA SHEETS

Years of research and experience are embodied in these Balsam-Wool Application Data Sheets, containing latest data on insulation application. Covering a wide range of application problems, these sheets assure the best practice in many types of application—help create lasting owner satisfaction. Mail the coupon now for set of data sheets—they're yours for the asking!



Balsam-Wool

SEALED INSULATION

1. WINDPROOF
2. MOISTURE-PROOFED
3. FIRE RESISTANT
4. LASTING
5. NON-SETTLING
6. HIGHLY EFFICIENT

BALSAM-WOOL • NU-WOOD
Products of Weyerhaeuser

WOOD CONVERSION COMPANY
Dept. 147-11, First National Bank Bldg.
St. Paul 1, Minnesota

Gentlemen:
Please send me set of application data sheets.

Name ..... *Address* ..... *City* ..... *State* .....

ARCHITECTS—DRAFTSMEN—STUDENTS

Don't forget the closing date of the

$24,000.00

CHICAGOLAND PRIZE HOMES COMPETITION

All entries must be received or date-marked not later than 5 p.m., Monday, December 10, 1945

HAVE you seen a copy of the rules of the Chicagoland Prize Homes Competition, offering 24 cash prizes of $1,000.00 each for designs of small homes?

If not, send for your free copy today. There is still time to produce the simple floor plans, perspective, two elevations and other minor detail required before the closing date, December 10, 1945. No specifications or working drawings are required.

Here is an opportunity to encourage public appreciation of competent architectural skill, speed America's building revival, create more jobs—and win substantial monetary reward and national recognition and publicity for yourself. Entrants may submit any number of entries and are entitled to win any number of the prizes offered.

Mail the coupon today for your free copy of the rules.

Chicago Tribune
WORLD'S GREATEST NEWSPAPER
August average net paid total circulation: Daily, Over 1,025,000 Sunday, Over 1,300,000

Professional Adviser, BOYD HILL, A. I. A., *Chicago*

THE JURY OF AWARDS

PAUL GERHARDT, Jr., A.I.A.
Chairman
President Chicago Chapter American Institute of Architects, Chicago

PHILIP B. MAHER, F.A.I.A.
Co-Chairman, *Chicago*

IRVIN A. BLIETZ
Builder, Wilmette, Ill.

ARTHUR E. FOSSIER
President, Chicago Metropolitan Home Builders' Association Chicago

JOHN MERRILL, A.I.A.
Chicago

J. E. MERRION
President, National Association of Home Builders Chicago

JOHN R. O'CONNOR
Builder, Chicago

JOHN W. PARK
Architect, Chicago

A. N. REBORI
Architect, Chicago

Under a ruling of the A.I.A. committee on competitions, Institute members are permitted to enter this competition.

DON'T FORGET TO REGISTER!

If you have a copy of the rules and intend to submit an entry, be sure to register. Registrations close at 5 p.m. December 8, 1945.

CHICAGOLAND PRIZE HOMES COMPETITION
Room 1512—435 N. Michigan Ave., Chicago 11, Illinois

Please send free brochure containing complete details and rules of the Chicagoland Prize Homes Competition.

My name.....

Street and No.....

City..... Zone No. if any..... State.....
(please PRINT plainly)

F

ANNOUNCEMENTS

EDWARD G. CONRAD, J. BYERS HAYS, RUSSELL SIMPSON, PAUL C. RUTH, announce the consolidation of their offices for the practice of architecture, at 1110 Hanna Building. Cleveland 15, Ohio.

WILLIAM J. RUSH, architect-engineer, announces the addition to his staff of Ragnar L. Arnesen. The office is located on the Second Floor, Kesge Building, Main at Washington, Ann Arbor, Mich.

J. W. CRENSHAW, engineer and ALBERT H. JOST, architect, announce the organization of an engineering and architectural partnership, as successors to the Kensey Engineering Co., with offices at 512 Court St., Pekin, Ill.

The National Foundation for Lathing and Plastering has been established by the joining of hands of the Wood, Wire and Metal Lathers International Union, the Operative Plasterers and Cement Finishers International Assoc., and the Contracting Plasterers International Assoc. The Foundation plans to formulate standards for privately as well as publicly financed buildings of all types, resulting in lathing and plastering of a quality which will assure economy in first costs and maintenance. The standards contemplate the use of interior and exterior finishes which lend themselves to modern as well as conventional architecture, and will emphasize the decorative values and advantages of attractively plastered surfaces. Heading up the work of the foundation, as National Director, with headquarters at Room 420 Denrike Building, Washington, D. C., is Erwin Lurie, who was formerly with the War Production War.

COMPETITION

PROGRESSIVE ARCHITECTURE and RICH'S INC. announce a competition for the design of a Realistic House for a Family in Georgia. This competition is open to all architects, architectural draftsmen and architectural students. The closing date is January 21, 1946. First prize will be $3,000, second, $1,500, third, $1,000, fourth, $500 and in addition there will be 25 mentions at $100 each and a special Georgia prize of $1,500. The judges will be Thomas H. Ellett of New York, Ernest A. Grunsfeld of Chicago, Richard Koch of New Orleans, Ernest J. Kump of San Francisco, Roy F. Larson of Philadelphia, Roland A. Wank of Detroit and Robert Law Weed of Miami. Professional advisers will be Henry Toombs and Kenneth Reid. For program address PROGRESSIVE ARCHITECTURE, 330 W. 42nd St., New York 18, N. Y.

To encourage the design of new single family homes especially planned for the Chicago area, the *Chicago Tribune* announces a $24,000 prize competition open to architects and others everywhere. Twenty-four cash awards of $1,000 each will be awarded for the best solutions to each of the three different housing problems based on the needs of three typical family groups. Boyd Hill is professional advisor. Chairman of the jury is Paul Gerhardt, Jr., president of the Chicago chapter, AIA. Co-chairman is Philip B. Maher, Chicago architect and fellow of the AIA. Other architect members of the jury are John Merrill, AIA, *(Continued on page 178)*

The

WHERE, WHAT and WHY

of Multi-Purpose

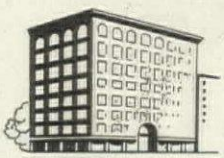
Millerite Industrial Flooring

where

MILLERITE IS APPLICABLE

OFFICE BUILDINGS

FACTORIES



DEPARTMENT STORES

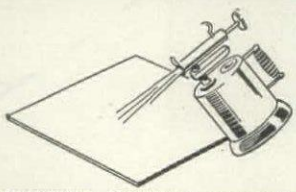
WAREHOUSES

HOSPITALS

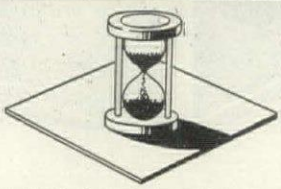
PUBLIC BUILDINGS OF ALL KINDS

what

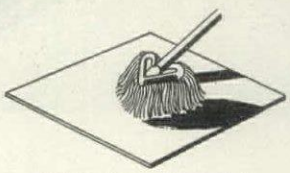
MILLERITE'S ADVANTAGES ARE



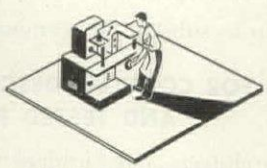
FIRE-RESISTANT • SPARKPROOF • NON-CONDUCTIVE



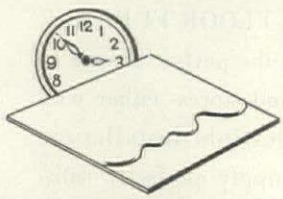
DURABLE • LOW COEFFICIENT OF EXPANSION



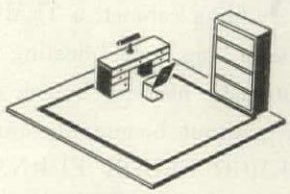
EASILY CLEANED • DUSTPROOF



NON-SKID AROUND MACHINES



AFTER APPLICATION READY FOR USE IN 18 HOURS



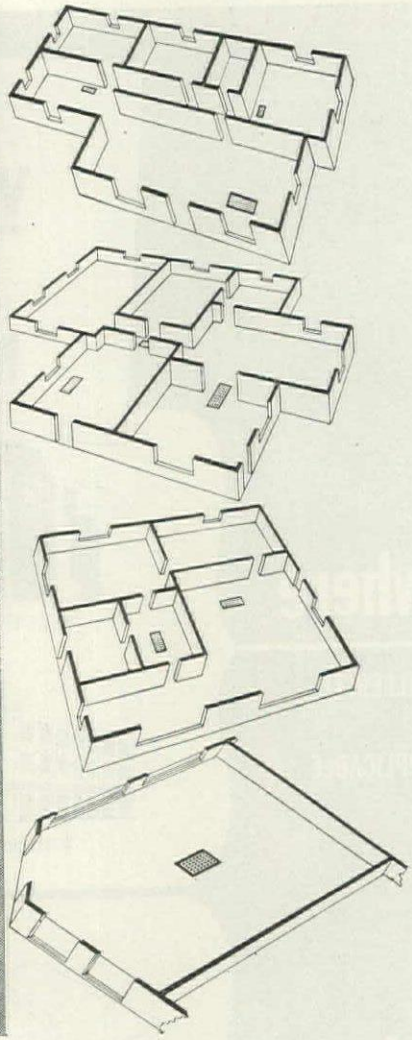
ATTRACTIVE • SANITARY

why

YOU MAY SPECIFY MILLERITE WITH CONFIDENCE

Our quarter century experience in oxychloride decking and flooring for maritime and industrial use enables us to make installations with unsurpassed speed and skill. Our coast-to-coast facilities and financial reliability are at your service. Write for new, illustrated brochure "Industrial Flooring and Marine Decking" which presents technical details and other essential information.

MILLER-MARINE DECKING CO • 230 Park Avenue • New York 17, N. Y.



ALTHOUGH it isn't much larger than a two-drawer filing cabinet, a TEMCO Gas FLOOR FURNACE does a "big home" heating job. It's the perfect answer to automatic heat for homes, offices and stores—either with or without basement—and, in multiple installation, TEMCO FLOOR FURNACES supply perfectly satisfactory heat in larger structures.

No basement or excavation is needed, for TEMCO Floor Furnaces are installed just under the floor, with only an ornamental grill visible in the room. In buildings without basements, the saving in construction cost—plus the low initial and operating cost of a TEMCO Floor Furnace—add up to substantial economies for the owner.

SEND FOR COMPLETE DESCRIPTION, SPECIFICATIONS AND TESTED FLOOR PLANS

For architects and builders we have prepared complete technical information about TEMCO Floor Furnaces . . . including a set of perspective drawings showing the most effective location of TEMCO Floor Furnaces in a number of typical layouts. Write for your copy today!

QUICK FACTS ABOUT THE NEW TEMCO GAS FLOOR FURNACE

- ✓ **COMPLETELY AUTOMATIC** —thermostatic controls turn heat on and off automatically.
- ✓ **100% SAFE** —built-in safety devices provide absolute protection in case of interference with gas service.
- ✓ **RE-ENGINEERED** —to include new features developed in wartime experimentation.
- ✓ **A. G. A. APPROVED** —TEMCO Floor Furnaces were among the first to gain approval by the Engineering Laboratory of the American Gas Association under their new and stricter standards of safety and efficiency.
- ✓ **QUIET OPERATION** —TEMCO is the only FLOOR FURNACE equipped with the new "Whisper-Quiet Burner"—insuring truly silent operation.

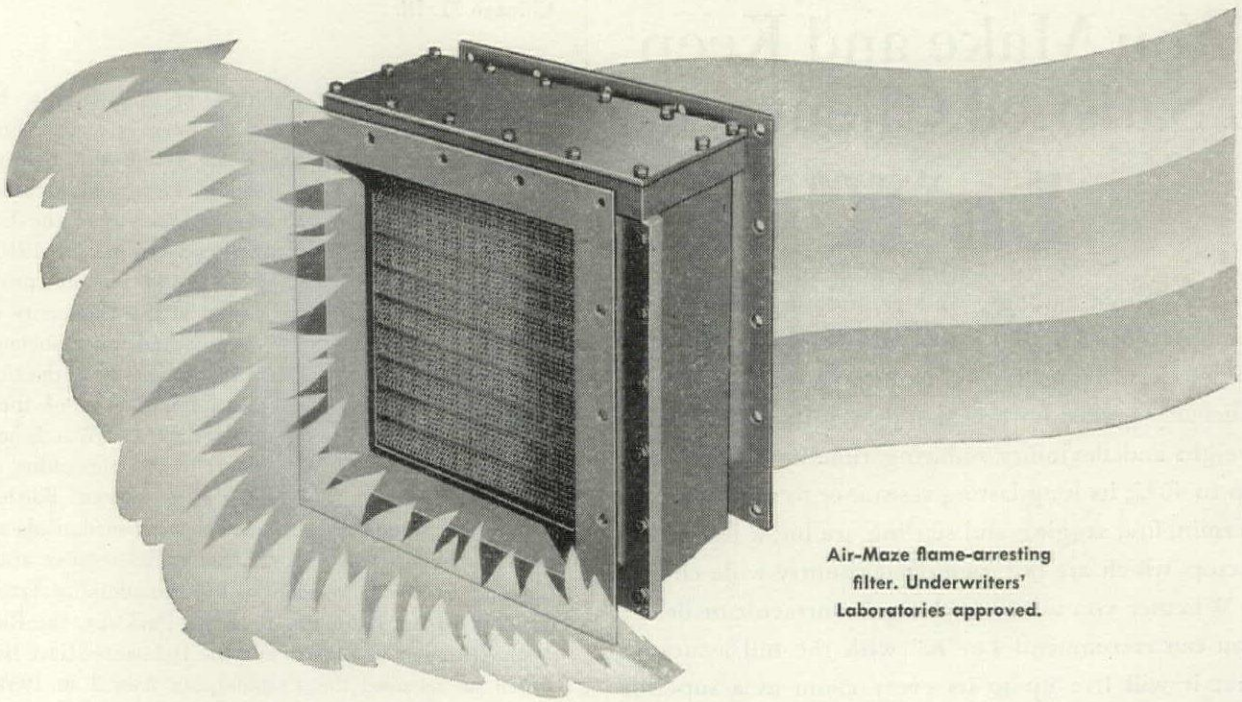
FOUR AWARDS

TENNESSEE ENAMEL MANUFACTURING CO.
Nashville, Tenn.

TEMCO
FLOOR FURNACES
"The Biggest Little Thing in Home Heating"

WHEN ONE EXPLOSION CAN BREED ANOTHER...

THIS "SNUFFER" KEEPS FLAME FROM SPREADING



Air-Maze flame-arresting filter. Underwriters' Laboratories approved.

—*another example of Air-Maze engineering*

In mines, grain elevators, liquid storage holds of ships—perhaps in your own building or plant—one explosion may set off others like a string of firecrackers. Flames blasting through ventilators can start a dozen infernos in an instant.

Air-Maze engineers have now developed a flame and explosion-arresting panel only 4 inches thick. This "snuffer" is open enough to permit air to pass through freely, yet it has the amazing ability to prevent an explosion on one side from igniting even an air-gasoline mixture on the other side.

This flame-arresting "by-product" of 20 years of specializing in air filtration is typical of the thousands of unusual developments pioneered by Air-Maze engineers. Whether your problem has to do with ventilation, humidity control, flame arresting, intake air filtration and silencing or fine particle filtration of liquids—bring it to Air-Maze.

AIR-MAZE CORPORATION, Cleveland 5, Ohio. *Representatives in Principal Cities. In Canada: Williams & Wilson, Ltd., Montreal, Quebec, Toronto, Windsor; Fleck Bros., Ltd., Vancouver, B. C.*

IF IT USES AIR . . . USE

AIR-MAZE

ENGINEERED AIR FILTRATION

• Oil bath type filters and filter-silencers • Cleanable filter panels for air-borne dirt, oil, grease and liquids • Oil-wetted type filters and filter-silencers • Exhaust spark arresters • Gear case, crankcase and tank vent breathers • Oil-separators for engine crankcases • Full-flow type cleanable oil filters

ANNOUNCEMENTS

(Continued from page 174)

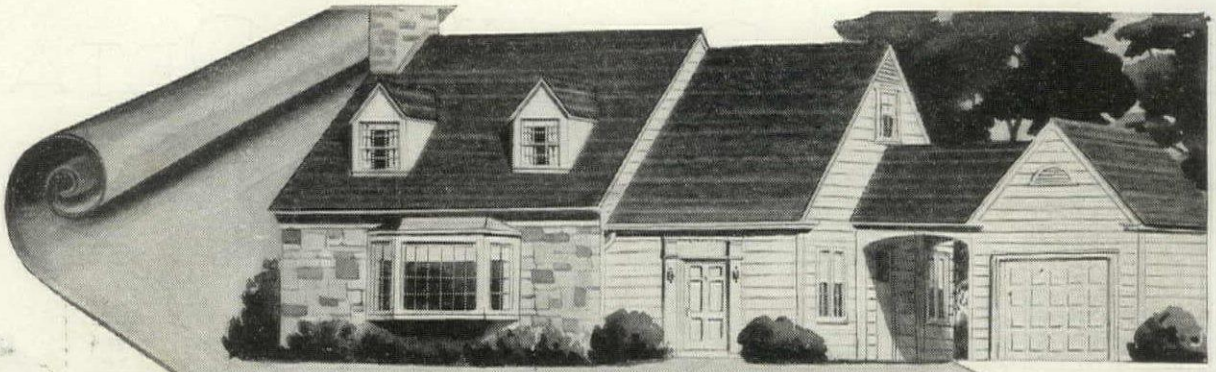
A. N. Rebori, both of Chicago and John W. Park, production manager of the *Chicago Tribune*. Builder members of the jury are Irvin A. Blietz, Wilmette; Arthur E. Fossier, President, Chicago Metropolitan Home Builders' Association; J. E. Merrion, president, National Association of Home Builders, and John R. O'Connor. Under a ruling made September 26 by the AIA committee on competitions, Institute members are permitted to enter the *Tribune's* contest. A copy of the rules may be obtained by writing to Chicagoland Prize Home Competition, Room 1512, Tribune Tower, 435 N. Michigan Ave., Chicago 11, Ill.

DIED

PAUL PHILIPPE CRET, architect, in Philadelphia, Penn., at the age of 68 on September 8. Born in Lyons, France, he studied architecture at the Ecole des Beaux Arts in Lyons and in Paris and obtained a degree in science at the University of Pennsylvania in 1913. From 1903 to 1937, he was professor of design at the University of Pennsylvania and was associate trustee of the university at the time of his death. A veteran of the French Army in World War I, he was for several years consulting architect to the American Battle Monuments Commission. He designed the war memorials at Varennes, Fismes, Chateau Thierry, Bony, Waereghem and Gibraltar. Mr. Cret was president of the Philadelphia Art Jury and designer of the Benjamin Franklin Parkway, the Rodin Museum, Rittenhouse Square and the Delaware River Bridge for which he received the Philadelphia Award in 1931. Other structures designed by him include the Pan-American Union, in Washington; Valley Forge Memorial Arch, in Philadelphia; Indianapolis Public Library; Detroit Institute of Arts; Hartford County Building; Folger Shakespeare Library, Washington; Hall of Science at the Chicago Century of Progress Exposition. Besides the Philadelphia Award, Mr. Cret won the Paris Prize in 1896; the Rougevin Prize and the Grand Medal of Emulation of the Ecole des Beaux Arts in 1901; the gold medal of the Salon des Champs Elysées in 1903; the medal of honor of the Architectural League of New York; the distinguished award of the Washington Society of Architects; the gold medal of the Pan-American Exposition; the prize of honor at the Pan-American Congress of Architects in 1940 and the Award of Merit of the University of Pennsylvania Alumni Society in 1940. Mr. Cret had been in private practice since 1937.

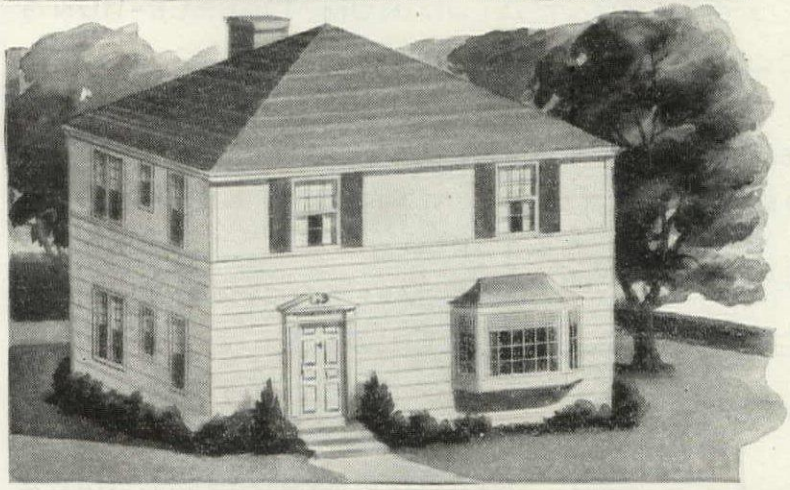
Paul Philippe Cret

H. LANSING QUICK, architect ond former vice-president of the Yonkers Municipal Housing Authority, at Lake Mahopac, New York, on Aug. 19 at the age of 75. Born in New York, Mr. Quick joined his father's architectural firm in Yonkers in 1888. The firm designed buildings as far west as Rockford, Ill. Yonkers buildings included the City Hall, Public Library, Dayspring Presbyterian Church, Yonkers Electric Light Company, Strand Theater and Halstead School. Recently Mr. Quick designed the auxiliary industrial plant of the Habirshaw Cable and *(Continued on page 182)*



CRANE *can help you sell*

THE HOUSES YOU BUILD...

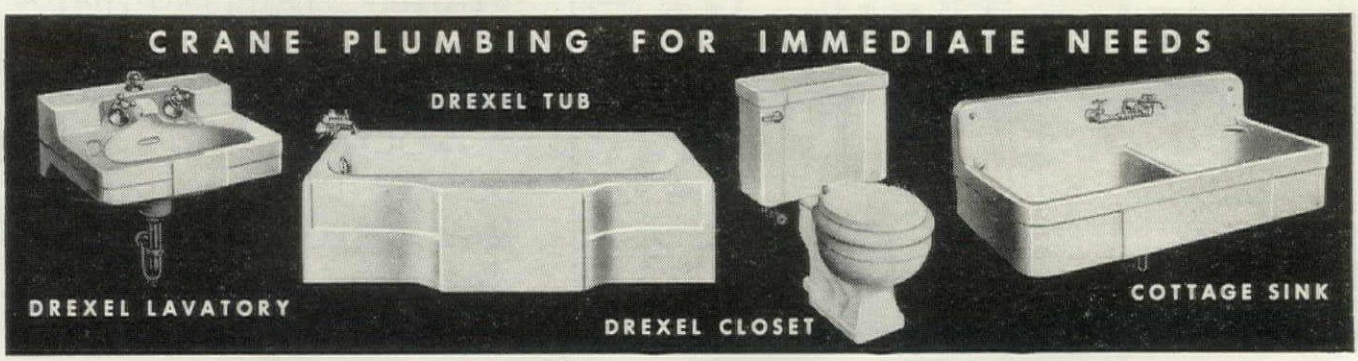


• MANY times a house is judged by its kitchen and bathroom facilities. For that reason alone it will be profitable for you to install Crane plumbing fixtures—the favored choice of homeowners everywhere.

The new Crane line will include plumbing fixtures for every building budget incorporating the last word in design and engineering improvement—possessing the same unmatched quality that has always characterized Crane equipment. And this equipment will be ready just as soon as Crane facilities—busy until the war's end with vital war work—can be turned to peacetime production.

Call your Crane Dealer or consult your Crane Branch for full information.

90 YEARS OF PROGRESS 1855 1945



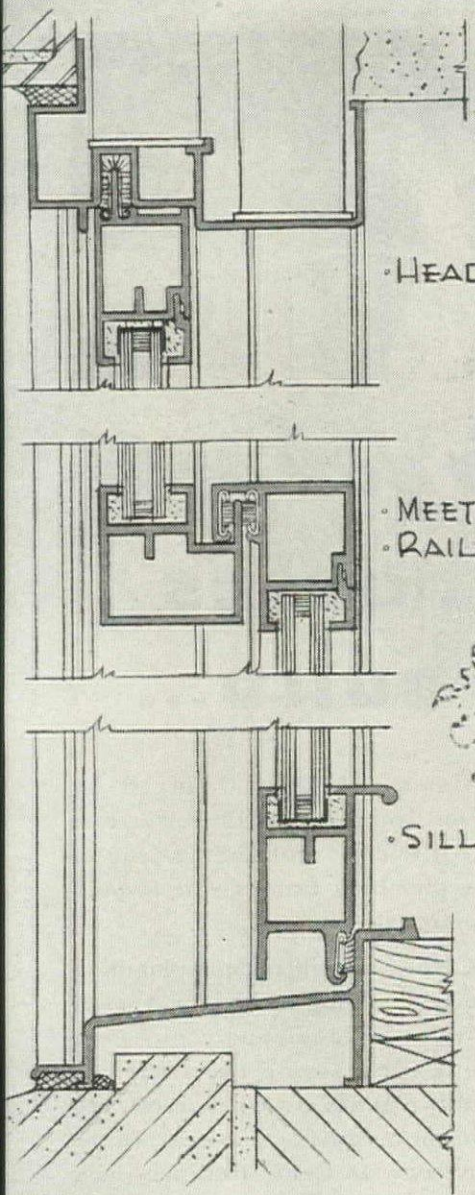
CRANE

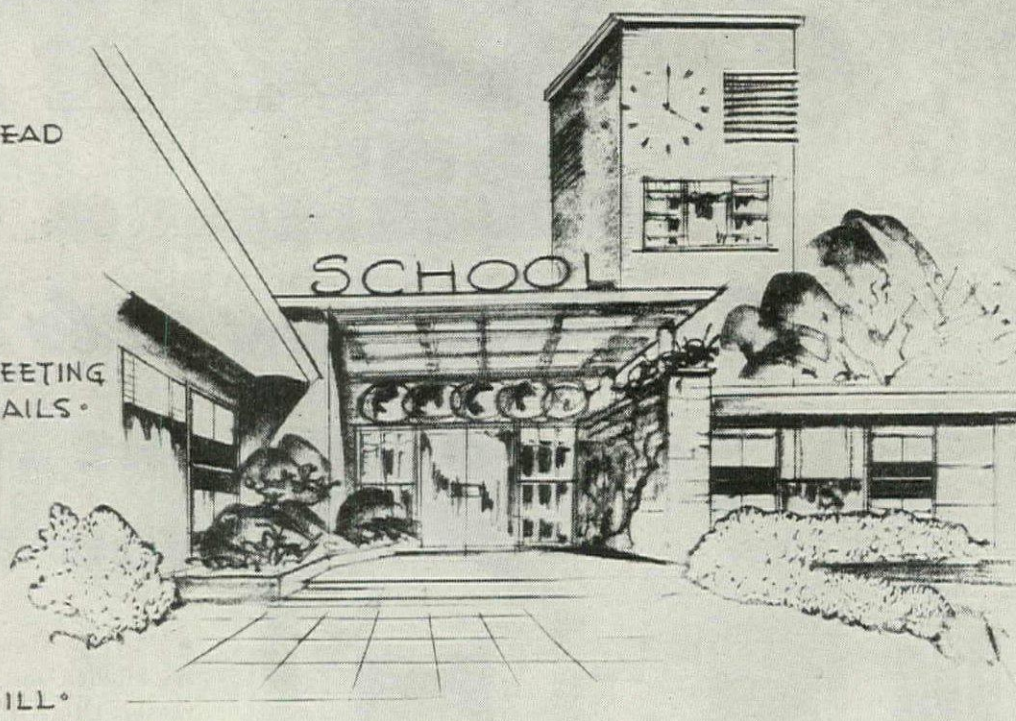
CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

POST WAR DETAILS



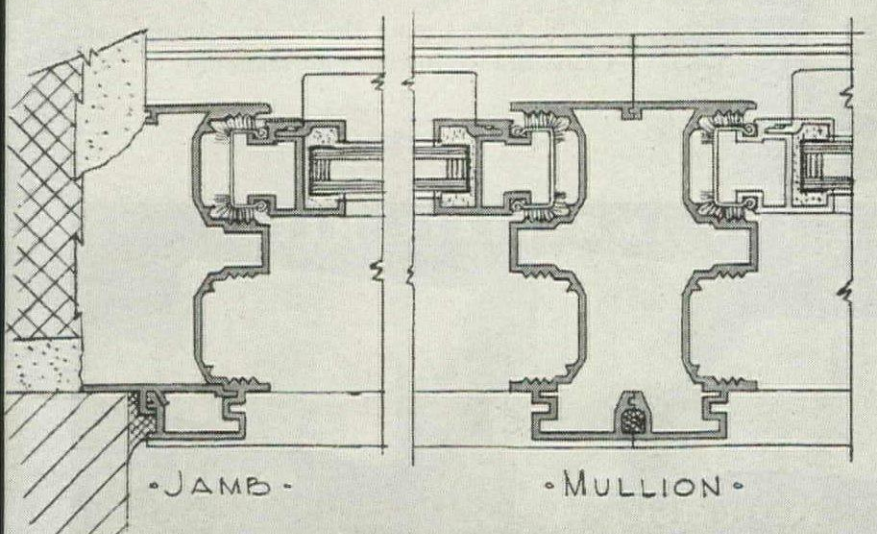


A RECENT AUTHORITATIVE SURVEY INDICATES THAT ALUMINUM DOUBLE-HUNG WINDOWS ARE ESPECIALLY ADAPTABLE FOR SCHOOLS ····· BECAUSE ····· LIGHT & VENTILATION CAN BE CONTROLLED IN AMOST PRACTICAL MANNER BY MOUNTING THE ROLLER-SHADES AT THE MEETING-RAILS·····

ADLAKE ALUMINUM WINDOWS GLIDE SO EASILY ON THEIR NON-METALLIC WEATHER STRIPPING THAT A CHILD CAN OPERATE THEM WITHOUT DIFFICULTY·····

ADLAKE ALUMINUM DOUBLE-HUNG WINDOWS ARE A SELF-LIQUIDATING ASSET·····

HALF·SCALE·DETAILS·(DOUBLE GLASS SHOWN)



SPECIFY AND DETAIL

Adlake

ALUMINUM DOUBLE-HUNG WINDOWS

THE ADAMS AND WESTLAKE CO. ELKHART, IND., U.S.A.

DELANY FLUSH VALVE equipped with NO. 50 VACUUM BREAKER, a device that prevents water contamination, telltales back syphonage. DELANY VALVES are noted for their simplicity and freedom from breakdown.

TOMORROW'S PLANNING

There is a bright future coming for community life in America. The pattern is in the weaving, the plans are on the boards, the funds in committees' hands awaiting the return of peace.

The acceptance of the FLUSH VALVE in private homes is but one of the foreshadowing changes now accepted as fact. War building has proved this. The water economy, efficiency of purpose, and freedom from fault and common maintenance of the DELANY FLUSH VALVES, over past accepted methods of domestic sanitation, earns them a place in your plans for modern community improvement.

SINCE 1879

Coyne & Delany Co.

BROOKLYN N.Y.

ANNOUNCEMENTS

(Continued from page 178)

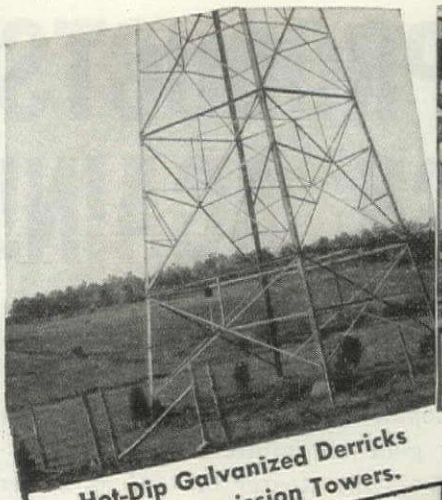
Wire Company. He was a member of the Yonkers Housing Authority during the construction of the Mulford Gardens low-cost housing project, but resigned from the authority a few months ago. He was also a member of the AIA.

CHARLES K. FOSTER, Director of the American Radiator & Standard Sanitary Corp. and for more than fifty years prominently associated with the heating industry, in New York on July 28, at the age of 77. Mr. Foster joined the American Radiator Co. at its formation in 1892. He was successively Assistant Secretary, General Manager Sales, Vice President in Charge of Sales, Vice President and Treasurer and Executive Vice President of the company. At the time of his retirement several years ago he was Vice President of the American Radiator and Standard Sanitary Corp. He was also a director of the American Steel Foundries Co.

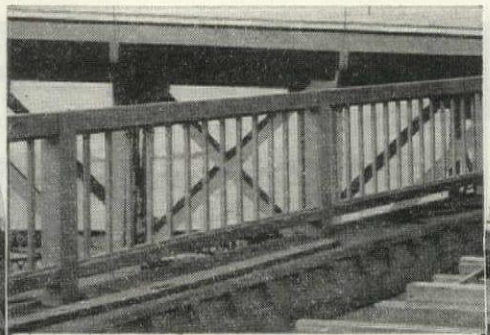
WILLIAM SANDERS, architect, in Bronxville, N. Y., on September 31, at the age of 66. Mr. Sanders was born in Ontario. In 1901 he joined the firm of Trownbridge and Livingston. He has worked on the design of buildings for the Bankers Trust Company, the New York Stock Exchange, the St. Regis Hotel, the Equitable Trust Company and the Museum of Natural History, all in New York. His buildings in other cities include the Palace Hotel in San Francisco, the Oregon State Capitol, the Gulf Oil Company and the Mellon National Bank in Pittsburgh and American Red Cross buildings in Washington. He was a member and a former president of the Brooklyn chapter of the AIA.

FRANCIS STEVENS, one of New York's leading real estate appraisers, at his summer home, Murray Bay, Que., on August 27, at the age of 68. He joined the staff of Douglas Robinson & Co., one of the early predecessors of the firm of Brown, Wheelock, Harris, Stevens in 1899 and continued with the company through various changes of name until in 1936 he himself became a member of the firm. At the time of his death, Mr. Stevens was first vice-president. In 1928 and 1929 he was one of the three appraisers appointed to value lands and easements bought and sold by the City of New York and the New York Central system for grade-crossing elimination on the west side of Manhattan. In 1929 he had entire charge of the purchasing for the New York Central of its West Side right of way from Spring Street to the city line. He also represented New York Port and Tunnel authorities in connection with condemnation in such projects as the Barge Canal Terminal, the George Washington Bridge, the Holland and Mid-Town tunnels. He was a member of the Real Estate Board of New York, the New York Society of Real Appraisers, the National Association of Real Estate Boards and the American Institute of Real Estate Appraisers.

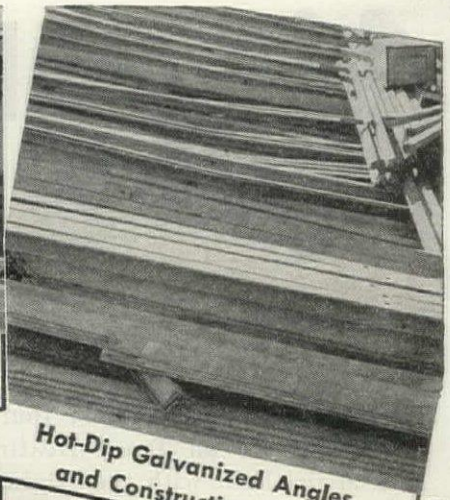
CAPTAIN WALTER J. HUEHTHAUSEN, assistant professor of Architecture at the University of Minnesota, was killed in Germany while operating in a special service branch of the United States Army. Capt. Huehthausen was a graduate of the University of Minnesota and received his master's degree at the Harvard School of *(Continued on page 186)*



Hot-Dip Galvanized Derricks and Transmission Towers.



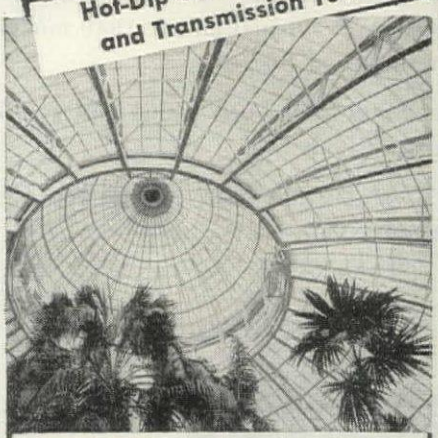
Hot-Dip Galvanized Bridge Railing and Grill Work.



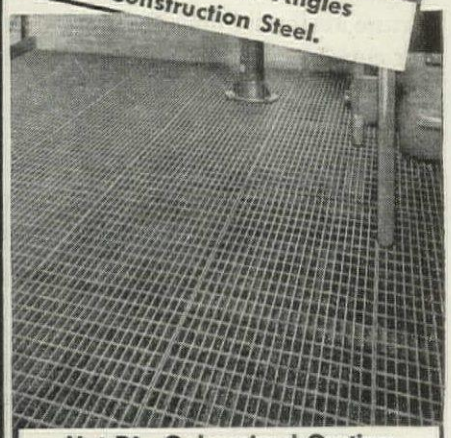
Hot-Dip Galvanized Angles and Construction Steel.

Dipped in Molten Zinc

FOR THE UTMOST IN RUST PREVENTION



Hot-Dip Galvanized Greenhouses and other structures



Hot-Dip Galvanized Grating and Open Steel Flooring.

Hot-Dip Galvanized for Longer Life and Longer Uninterrupted Service

Time—unrelenting proving ground for quality—firmly establishes that there is no satisfactory substitute for molten zinc as a rust and corrosive preventive. Hundreds of thousands of actual case histories provide evidence that iron and steel, exposed to the ravages of rust, will last far beyond normal expectancy, render longer life and greater uninterrupted service, and save expensive replacement and maintenance costs when hot-dip galvanized by the American Hot Dip Galvanizers' Methods.

The members of this Association have established, and are pledged to follow consistently the highest standards in the Hot-Dip Galvanizing process.

The services and facilities of this Association are at your disposal. There is a member of this organization located near who will gladly discuss with you any galvanizing problems.

. . .

For any specific information write direct to: American Hot Dip Galvanizers Association, Inc., First National Bank Building, Pittsburgh (22), Pennsylvania.

OFFICIAL • INSIGNIA
GALVANIZED PRODUCTS
PROTECTED BY GENUINE
HOT-DIP GALVANIZING
AMERICAN HOT-DIP GALVANIZERS ASSOCIATION, INC.

For the best Zinc Coating use hot-dip GALVANIZING

Now ALL TRANE PRODUCTS ARE BACK AGAIN!

How Many of These Heating Veterans Do You Know?

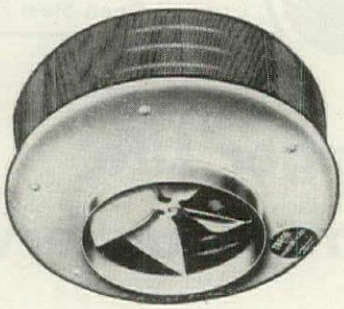
They're back—after almost four years of meritorious service all Trane Heating Products are back again, built with the original materials that Trane designers specified. Again they are available for construction projects of all kinds. For remodeling out-of-date heating plants. For repair and replacement.

And they're better than when they went away. Even though there has been a war, the past five years have been almost normal from the standpoint of product development and improvement. Product refinement has gone on uninterrupted. For example, the Trane Unit Heater of 1945 is better than that produced in 1940, just as the 1940 model was better than the 1935 heater.

Some new products have been added and you'll want to know about them too.

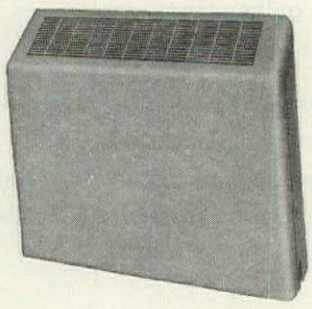
Now, see for yourself how many of the heating veterans and recruits you really know—

Try this Trane Quiz



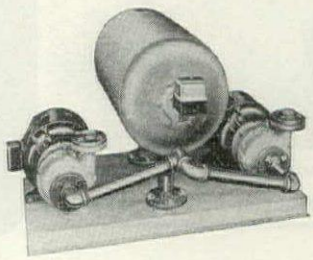
This is a . . . . . ?

Trane Projection Heater—the only new development in the unit heater field in more than fifteen years and one of three types that make the Trane Unit Heater Line the most complete available.



This is a . . . . . ?

Trane Convector-radiator, the modern successor to the old-fashion radiator. Easy to install, clean, attractive in appearance, an ideal heating unit for many applications.

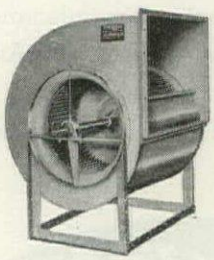


This is a . . . . . ?

Trane Condensation Pump, one of several different models and sizes which include single and duplex arrangements for uninterrupted and long time service.

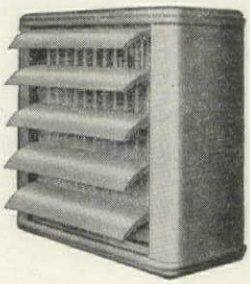
This is a . . . . . ?

Trane Radiator Valve and Trap, the happy combination that makes any low pressure steam unit work better. Valve is truly packless and will last a lifetime. The Trap contains the well known Trane Bellows.



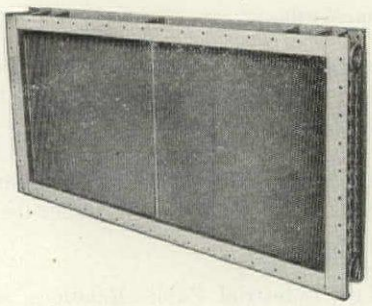
This is a . . . . . ?

Trane Centrifugal Fan from a wide line including blowers with either forward curved and backwardly inclined blades, utility blowers as well as propeller fans, in a wide range of sizes.



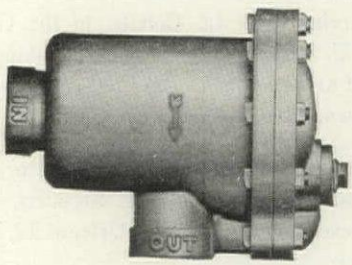
This is a . . . . . ?

Trane Propeller Type Unit Heater, the conventional heater with the special features which include a quiet broad blade fan, the Trane Coil and directional flow louvers.



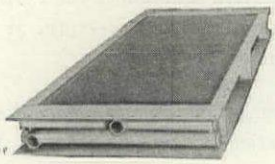
This is a . . . . . ?

Trane Steam Heating Coil famous for its mechanically bonded fin and tube construction that provides the maximum in heat transfer as well as long life.



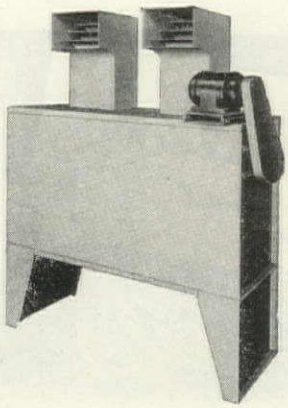
This is a . . . . . ?

Trane Bucket Trap, refined during the war into a rugged, trouble-free mechanism to trap maximum condensate and eliminate air in the industrial heating system up to 200 pounds steam pressure.



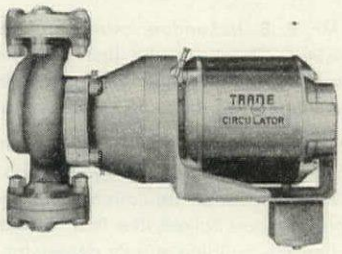
This is a . . . . . ?

Trane Coil for high pressure steam. Instead of the customary cast iron headers, heavy copper pipe welded firmly to the tubes is used to withstand heavy duty operation. Particularly useful for process heating and drying.



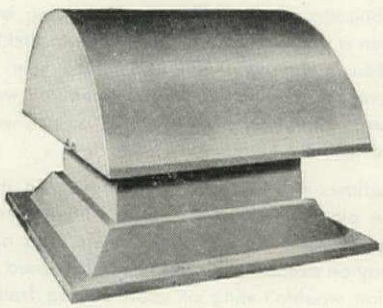
This is a . . . . . ?

Trane Torridor, a blower type unit heater available in three models for free delivery or duct work application. Thousands of sizes and arrangements. Ideal for industrial heating.



This is a . . . . . ?

Trane Circulator, the device that makes the Trane Hot Water System operate smoothly and economically. Handles large quantities of water against high heads. Precision built for vibrationless operation.



This is a . . . . . ?

Trane Roof Ventilator for providing positive ventilation to large building areas. This weather-proof unit is available in two models, one for supply, the other for exhaust. Fits over roof curb in flat or sloping roof.

★ ★ ★

Remember there are plenty of Trane Cooling Products too. All of them are also available for specification now. For complete information on all Trane products see Trane Postwar Products Catalog PB290.

ANNOUNCEMENTS

(Continued from page 182)

Architecture. He had traveled on fellowships abroad and had been director of design in the Boston Museum of Fine Arts. He was a corporate member of the AIA, Minnesota chapter.

NEW OFFICES

ROBERT S. LONEY, architect, is opening an office at 2518 N. Columbus St., Arlington, Va., for general practice in architecture, with emphasis on residential work. A Major in the Army of the United States, Mr. Loney has just received his discharge.

TOM HARGIS, JR., has opened his own office for the general practice of architecture, on the sixth floor of the Miller Building in Yakima, Wash.

JOHN JACOB MATTERN, JR., AIA, announces the opening of his offices for the practice of architecture at 110 N. Seventh St., Richmond, Va.

EUGENE JOHN STERN, AIA, has established an office at S. Juan de Letran 21-914, Mexico, D. F., under the title of Stern De Mexico, S. de R. L.

SELVAGE & LEE, Industrial Public Relations, announces the opening of an office at 1726 Field Building, Chicago, Ill.

JOSEPH A. GELBMAN, architect and MICHAEL GLICK, consulting engineer, announce the forming of their partnership for the general practice of architecture and engineering with offices at 400 E. Fordham Rd., New York 58, N. Y.

HAROLD W. GOETZ, architect, has been returned to inactive duty after serving as a Lt. Comdr. in the Civil Engineers Corps of the U. S. Navy and is re-establishing his office for the practice of architecture at 704 First-American Bank Building, Middletown, Ohio.

H. TARDY HART announces his return to the practice of architecture in association with I. WM. RICCIUTI, with offices at Queen and Crescent Building, New Orleans 12, La.

H. VERNON LEE, architect, has reopened his office at 11 Briarcliff Rd., Mountain Lakes, N. J.

BORIS W. DORFMAN, architect, has established his office at 44 Court St., Brooklyn 2, N. Y.

MARIO BIANCULLI, AIA, and HARRISON GILL have opened offices in The Chattanooga Bank Bldg., Chattanooga, Tenn.

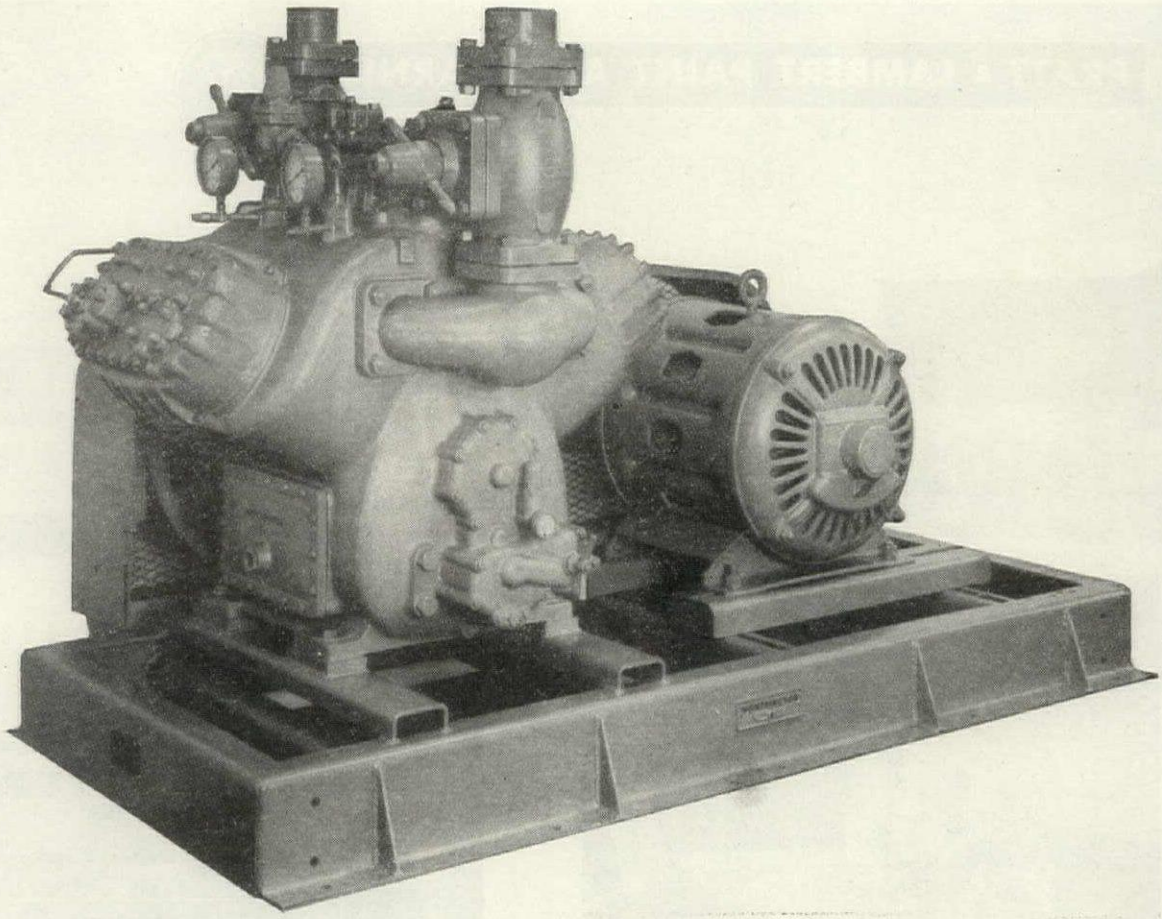
SANFORD W. GOIN, AIA, announces the reopening of his office for the general practice of architecture, at 230 E. Main St., S., Gainesville, Fla.

MICHAEL R. D'ORSI, architect, announces the reopening of his office for the practice of architecture, at 184 Boylston St., Boston, Mass.

CHANGE OF ADDRESS

JONES AND MARSH, architects, have removed their offices to the Concord Building, 208 S.W. Stark St., Portland 4, Ore.

(Continued on page 190)



A NEW LINE OF "EASY BREATHING" COMPRESSORS

for low pressure refrigerants

These new compressors do more work at less cost because Worthington has designed them to "take it easy."

Construction is simplified . . . light weight has been achieved at no sacrifice of durability . . . and famous Worthington Feather* Valves — simplest, lightest, most reliable ever designed for compressor work — eliminate shock, wear and noise.

Maintenance is easy, too. Moving parts are easily accessible. Bearings are renewable. And in larger sizes cylinder liners and forced feed lubrication contribute to trouble-free service.

One basic design, that stems from Worthington's more-than-a-century-old experience, covers a size range from 2 to 125 HP; with three cylinder sizes. Positive partial-capacity control is provided.

WORTHINGTON MEANS "INTEGRATED" SYSTEMS

Around this new compressor are designed Worthington condensing units — water-cooled or arranged for evaporative condenser operation. Units are compact and economical to install and operate . . . include Worthington Multi-V-Drive, specially-designed high-starting-torque, low-starting-current motor, high and low pressure safety controls.

In fact, Worthington makes so many of the "vitals" of an air conditioning system that it is your best source for an "integrated" system — efficient and economical.

Before specifying, engineering, or installing air conditioning and refrigeration equipment, find out why so many architects, contractors, building operators, have learned that *there's more worth in Worthington.*

Write *Worthington Pump and Machinery Corporation, Harrison, N. J. Specialists in air conditioning and refrigeration machinery for more than 50 years.*

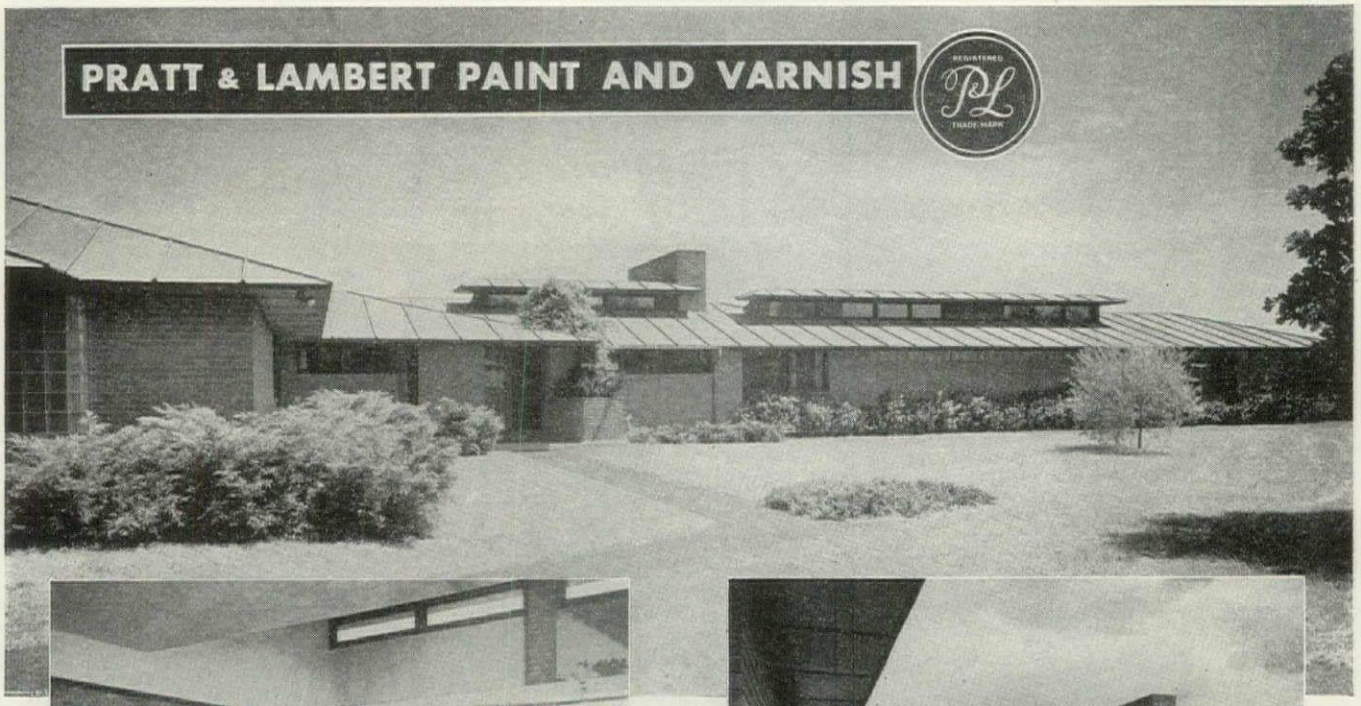
*Reg. U. S. Pat. Off.

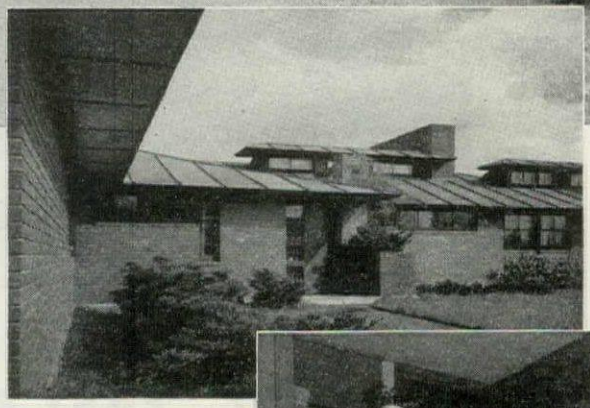
WORTHINGTON

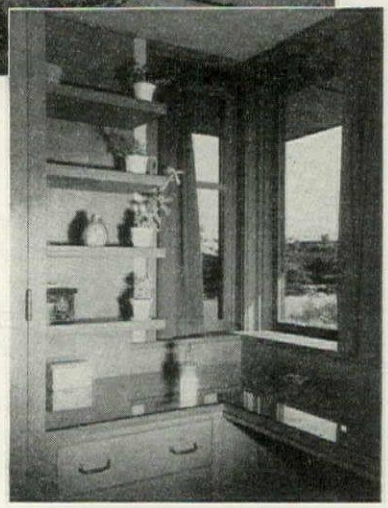
A5-28

Air Conditioning

PRATT & LAMBERT PAINT AND VARNISH







HOME OF DR. R. W. STUEBNER, LADUE, MISSOURI
HARRIS ARMSTRONG, Architect, St. Louis, Missouri
Photos: Large exterior by Tom Leonard, New York City; others by C. A. Lorenz, Kirkwood, Missouri

BUILT on a generous-sized lot in a highly-restricted residential park, this home at No. 5 Indian Hill, Ladue, Missouri, embodies both the owner's and the designer's plan for an extended layout. Commenting on the house, the owner says: "If walls and roof and arrangement of rooms can become an inspiration in addition to shelter, then this building has been that to us. Our reaction to the design seems to become more favorable as time goes on." Decoration throughout was with Pratt & Lambert Paint and Varnish.

With the resumption of planning and building, many architects are turning to the Pratt & Lambert Architectural Service Department for time-saving, decorative ideas and specifications. Wherever located, and whatever type of work you are doing, you are invited to make use of this co-operative service.

PRATT & LAMBERT-INC., Paint & Varnish Makers
NEW YORK · BUFFALO · CHICAGO · FORT ERIE, ONTARIO

And Now

THE IDEAL FOUNDATION
For Latex Upholstering

(Foam Rubber)

The Newsreel Theatre, Radio City, New York. AN AMERICAN SEATING COMPANY Installation Embodying latex cushioning over NO-SAG SPRINGS.

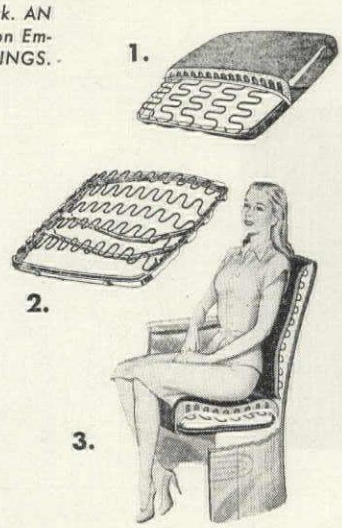
Latex is the next great trend in upholstering. And No-Sag* Springs are an indispensable part of that trend. For it is now apparent that latex alone does not meet all good furniture requirements. It needs a *conforming* foundation. And that's why latex combined with No-Sag is the perfect answer. You will find this easy to understand — for these reasons:

1. Because No-Sag Springs span the *entire* seat frame, they make an excellent decking for latex cushioning.

2. Because the entire length of each individual No-Sag Spring arch functions for spring action, pressure at any one point is evenly distributed over the *entire* arch as in a piece of elastic.

3. The result is a hammock-like suspension which saddles to fit each individual as it distributes the rubber comfort evenly under the seating or sleeping area regardless of the occupant's form or weight. The action of No-Sag Springs and latex are similar in their body-conforming characteristics. Hence, they *complement* one another.

Because with No-Sag Springs considerably less latex is required, the cost is reduced appreciably.



OUR ENGINEERING DEPT. is available for consultation. We will even spring up, free of charge, any sample frame you send us—and return it with complete construction specifications.

Guaranteed by Good Housekeeping

Write to Dept. A for "Progress" Booklet describing the numerous application of these unique springs.

*Patented and Pats. Pending

NO-SAG SPRING COMPANY • KAY MANUFACTURING CORP.

Executive Offices: 21590 Hoover Road • Detroit, Michigan

Executive Offices: Foot of Warren Street • Brooklyn, N. Y.

Permanent Display Quarters: American Furniture Mart, Chicago

ANNOUNCEMENTS

(Continued from page 186)

REQUESTS FOR OFFICE SPACE

A newly established professional group of structural engineers specializing in modern concrete building design desires to secure office space with a reputable firm of architects in New York. Contact Nicholas Farkas, 80 Van Cortland Pk., So., New York 63, N. Y.

MODELS

An independent model and design shop has been organized and opened at 402 E. 64th St., New York 21, N. Y., by Frederick W. Kirch, Theodore Postma and William D. Raffel. This shop is equipped to execute any type of model in every existing medium.

FUND

A fund to be known as the "Flour City Architectural Education Fund" has been established by the Flour City Ornamental Iron Co. of Minneapolis. It will produce somewhere between $1,000 and $2,000 a year to be used for scholarships to deserving students of architectural ability, talent, and promise to carry on their professional studies in the University of Minnesota School of Architecture; for prizes to be awarded in an annual competition in the School dealing with the design of metal work; and for such other benefits to the school as may be recommended from time to time.

EXPOSITIONS

General Electric's Lamp Department will sponsor a lighting exposition called the "Victory Lighting Jubilee" which will be held in New York at the 17th Regiment Armory, November 26 through the 30th. The five day exposition will bring together a representative cross-section of the combined talents of the lighting fixture and portable lamp industries. Every manner of fixture for commercial, industrial and residential needs will be featured. It is expected that the latest fixtures using germ-killing, heat-ray and health-maintaining ultraviolet sources will be shown.

The 1945-1946 Industrial Design exhibition of the Philadelphia Art Alliance has been opened by Sundberg & Ferar, Detroit Industrial Designing firm. The exhibit, which continues through May, 1946, gives the public a glimpse into the world of the future. Featured during the show will be the creative work of seven American designers; Sundberg & Ferar, Dave Chapman, Gustav Jensen, Joseph B. Federico, Peter Muller-Munk, Belle Kogan, Dohner and Lippincott.

ERRATUM

In the story on the Silverstein showroom, September issue, p. 100, credit to Store Builders, Inc., the contractors who handled the construction, built the fixtures and furniture, and to Robert Feldman, of that company, who supervised the work, was inadvertently omitted.

Get This FREE BOOKLET for your reference library

Tells how best to provide for using visual aids in school, church, hospital, and other buildings

VISUAL aids are now important teaching tools in almost every educational program . . . are destined to be as commonly used as textbooks. Your clients will recognize the wisdom of providing for the most effective, convenient use of visual aids in your plans for building or remodeling.

Let this new, free handbook help you. It covers the requirements of both classroom and auditorium . . . gives experienced counsel on seating arrangements; locations for projector, screen, loudspeaker, cables, and wall sockets; electrical specifications; illumination and acoustics; projection booths; service and storage rooms; other important considerations.

To get your copy, pin the coupon to your letterhead. No obligation!

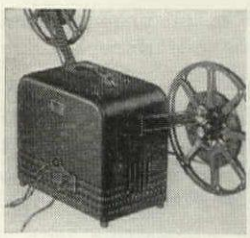
PERSONAL COUNSEL, TOO

FOR THE ASKING

Near you is a member of the B&H staff of Special Representatives. Thoroughly informed on visual education, he is able and willing to help you work out any related problem. Get acquainted with him now . . . he'll urge you to ask for his aid at any time. Send the coupon to learn his name.

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Established 1907.*

BELL & HOWELL PROJECTORS



FILMOSOUND 16mm. sound-on-film projectors are overwhelmingly preferred by educators and other users. Built in a full range of capacities to meet every need for lastingly superior sound and picture reproduction.

FILMOARC 16mm. sound-on-film projector with powerful arc lamp illumination. Provides brilliant pictures and ample sound volume in large auditoriums.

Products combining the sciences of OPTIcs • electrONics • mechanICS

BELL & HOWELL COMPANY
7139 McCormick Road, Chicago 45

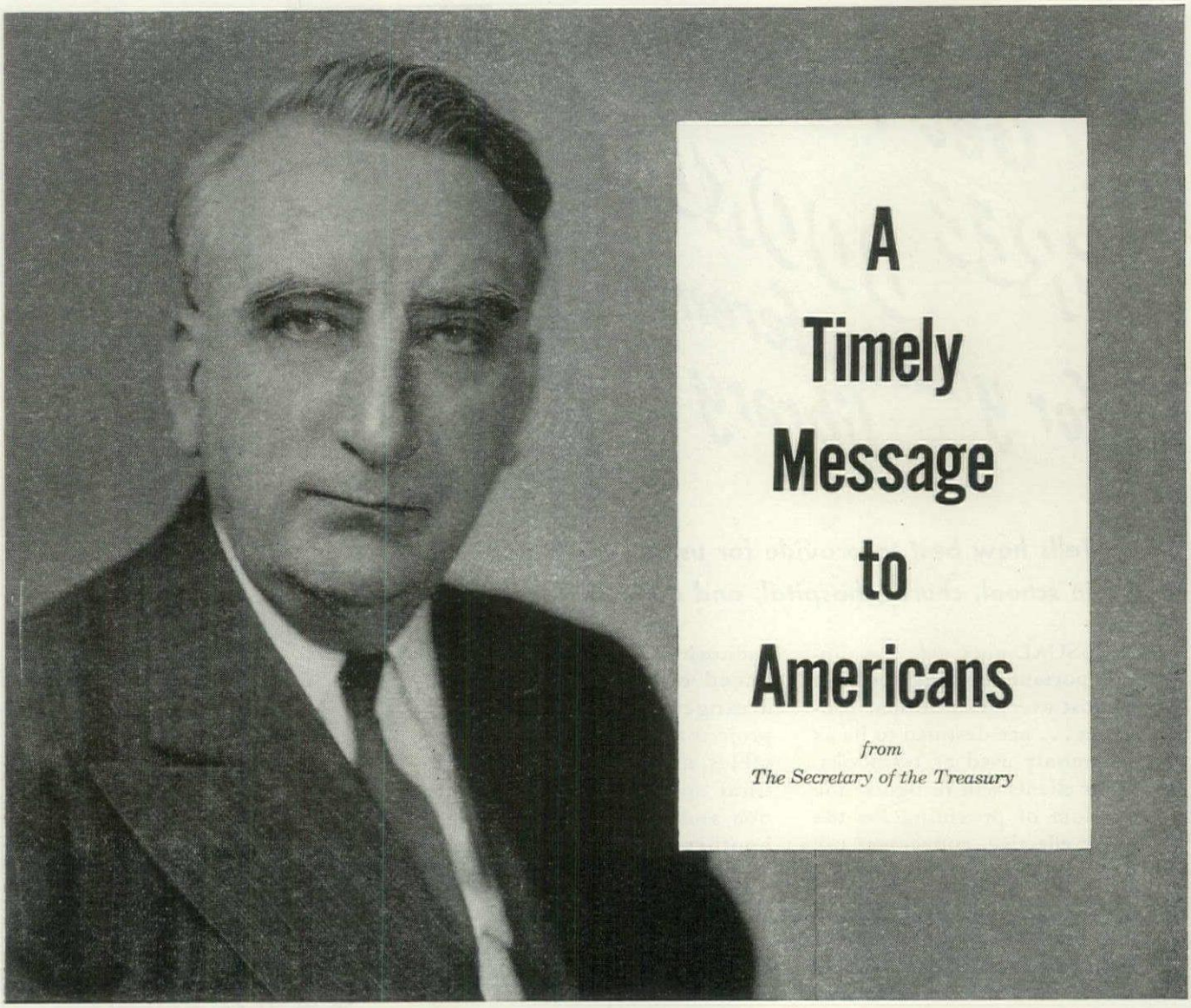
Please send, without obligation ( ) copy of *Architects' Visual Equipment Handbook*; ( ) name of nearby B&H Special Representative; ( ) Details about Filmosounds and Filmoarc.

Name.....

Address.....

City.....State..... AF-1145

PRECISION-MADE BY Opti-onics Bell & Howell



A Timely Message to Americans

from
The Secretary of the Treasury

America has much to be thankful for.

Abroad we have overcome enemies whose strength not long ago sent a shudder of fear throughout the world.

At home we have checked an enemy that would have impaired our economy and our American way of life. That enemy was inflation—runaway prices.

The credit for this achievement, like the credit for military victory, belongs to the people.

You—the individual American citizen—have kept our economy strong in the face of the greatest inflationary threat this nation ever faced.

You did it by simple, everyday acts of good citizenship.

You put, on the average, nearly one-fourth of your income into War Bonds and other savings. The 85,000,000 owners of War Bonds not only helped pay the costs of war, but also contributed greatly to a stable, prosperous postwar nation.

You, the individual American citizen, also helped by cooperation with rationing, price and wage controls, by exercising restraint in your buying and by accepting high wartime taxes.

All those things relieved the pressure on prices.

THE TASK AHEAD

We now set our faces toward this future: a prosperous, stable postwar America—an America with jobs and an opportunity for all.

To achieve this we must steer a firm course between an inflationary price rise such as followed World War I and a deflation that might mean prolonged unemployment. Prices rose more sharply after the last war than they did during the conflict and paved the way for the depression that followed—a depression which meant unemployment, business failures and farm foreclosures for many.

Today *you* can help steer our course toward a prosperous America:

—by buying all the Victory Bonds you can afford *and by holding on to the War Bonds you now have*

—by cooperating with such price, rationing and other controls as may be necessary for a while longer

—by continuing to exercise patience and good sense with high faith in our future.

The challenge to America of switching from war to peace with a minimum of clashing gears is a big one.

But it is a small one compared to the tasks this nation has accomplished since Sunday, December 7, 1941.

Fred M. Vinson
Secretary of the Treasury

A Government message prepared by the War Advertising Council and contributed by this magazine in cooperation with the Magazine Publishers of America.

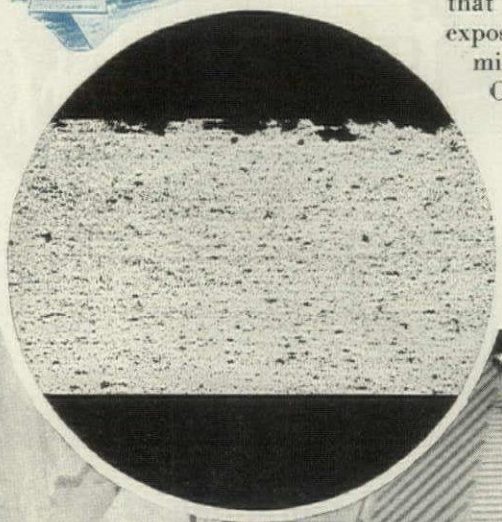
The Microscope confirms—

"Alcoa Aluminum roof in excellent condition after fourteen years in industrial Pittsburgh"

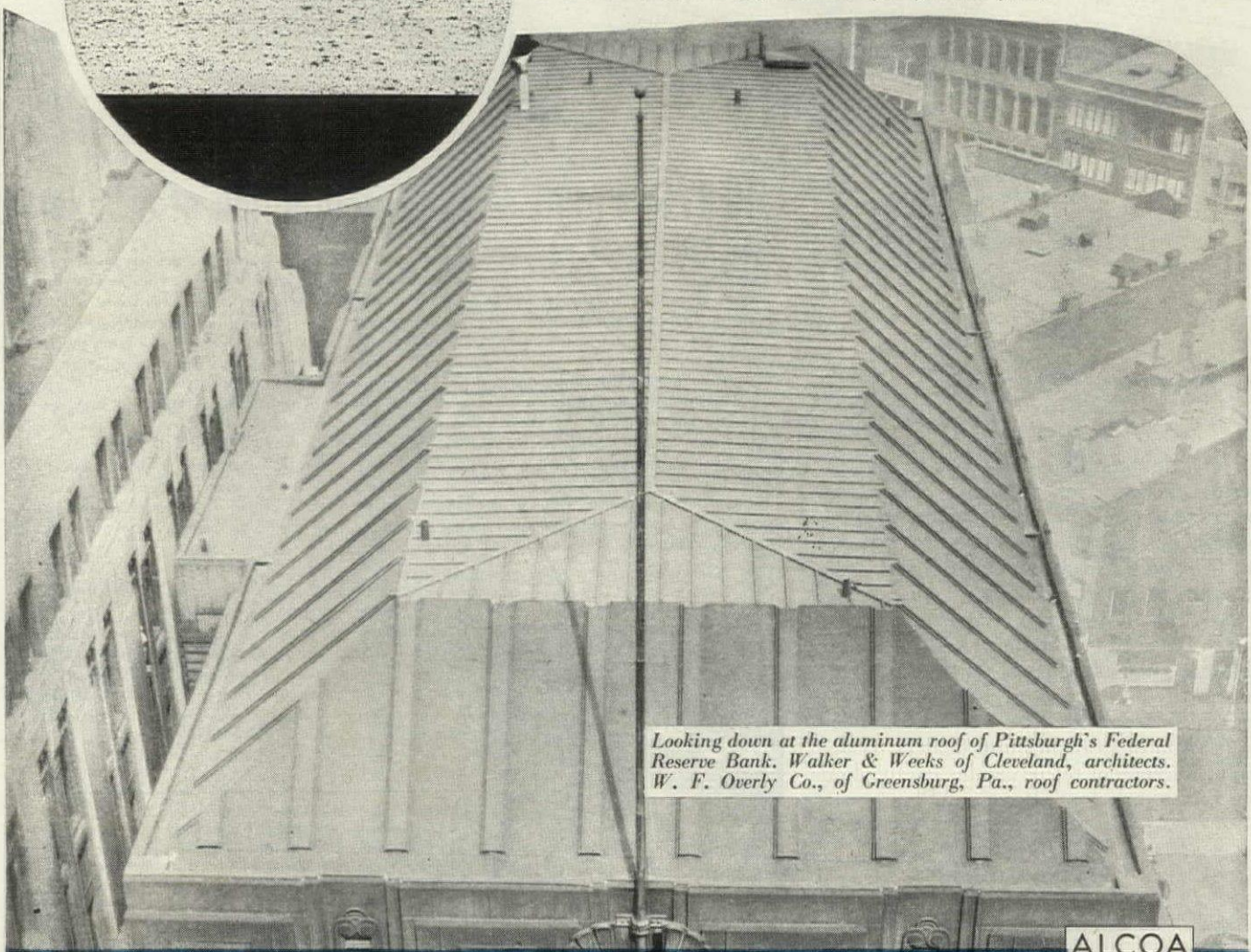
Visual inspections of this aluminum roof have been telling us right along, "Behaving fine". These observations were confirmed recently, following a fire under the roof, when portions of the sheet removed were given to Alcoa for microscopic examination and testing.

Strength of the samples is normal for this Alcoa Alloy, showing that its physical properties have not been impaired by 14 years' exposure. Corrosion, arch enemy of most metal roofs, has had only minor effect on the aluminum.

On the basis of these findings, Aluminum Research Laboratories make this prediction: There are many times 14 years' life left in that aluminum roof. ALUMINUM COMPANY OF AMERICA, 2166 Gulf Building, Pittsburgh 19, Pennsylvania.



Cross section of this aluminum sheet, magnified 43.5 times. The black hollows at the top show the very limited extent to which corrosion has penetrated after fourteen years.



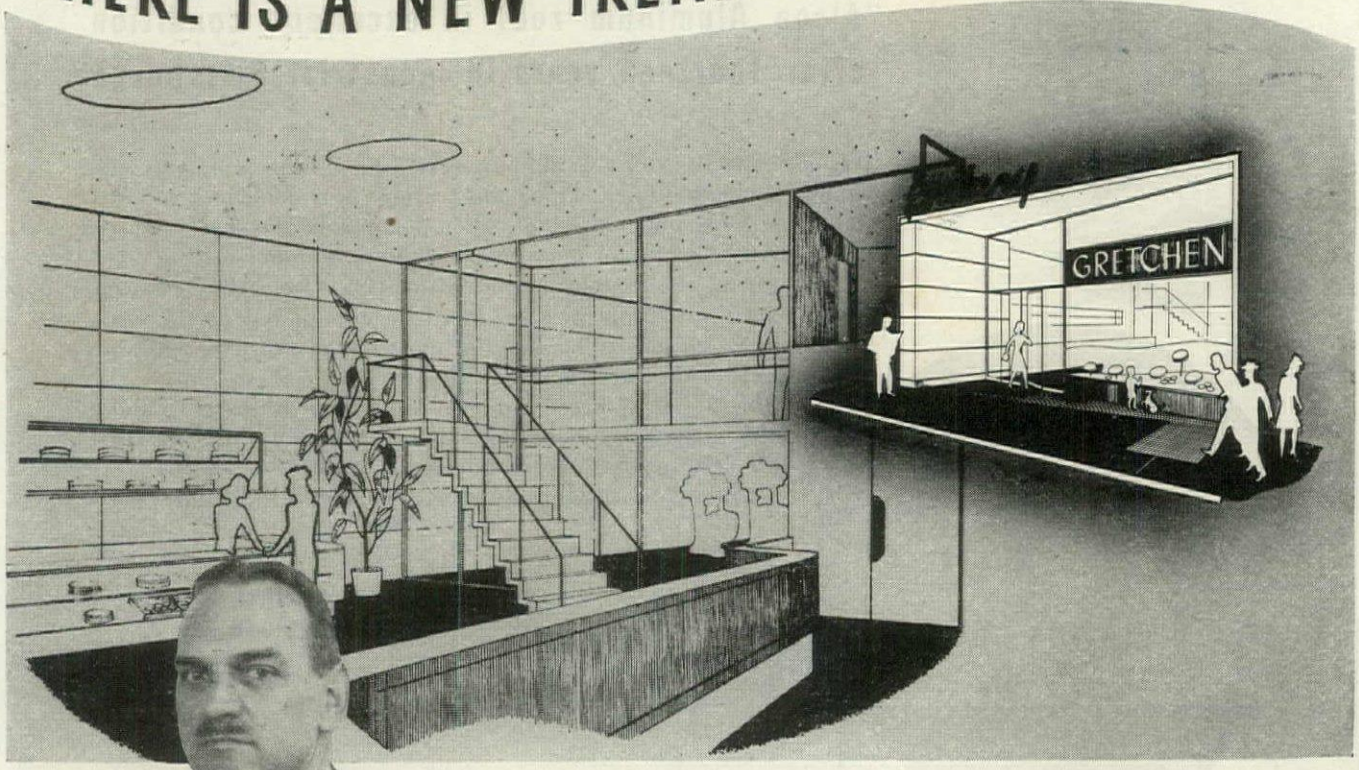
Looking down at the aluminum roof of Pittsburgh's Federal Reserve Bank. Walker & Weeks of Cleveland, architects. W. F. Overly Co., of Greensburg, Pa., roof contractors.

ALCOA FIRST IN ALUMINUM

REG. U. S. PAT. OFF.

ALCOA A.C.O.A. ALUMINUM

THERE IS A NEW TREND IN STORE DESIGN



Hervey Parke Clark

HERVEY PARKE CLARK'S conception of a Bakery

"The conception of this small production and sales unit is based on the assumption that seeing ideal working and sanitary conditions is an exciting experience for the customer and, therefore, good merchandising for the owner. The sales area is separated from the street by a transparent film (glass) which serves to keep the climate temperate and the air clean inside the store. A similar film divides the working area at the rear from the sales area in the front and confines odors and temperature differentials to the production area —yet customers and manager can readily view all the baking processes.

"The store front is transparent and, both day and night, clearly displays the freshly baked specialties in the shop window as well as affording a full view of the shop's interior. The entire glazed front is set in members of Pittco Store Front Metal.

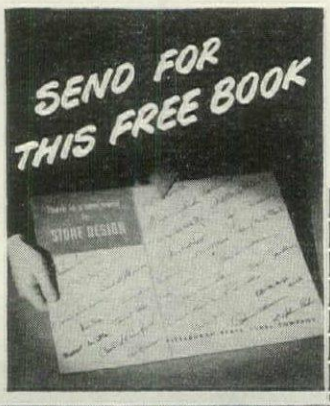
"Inside, the walls of ivory Carrara Glass form a colorful and sanitary background for the sale of bakery products. The mirrored backs of the display cases on the walls instantly show the customer all sides of the cake or pastry she is about to buy. Ivory Carrara Glass walls carry through into the bakeshop where they form a spotless background for production, where cleanliness is essential."

HERVEY PARKE CLARK,
Architect

In creating modern store fronts and interiors of distinction, you can rely upon the high quality and the adaptability of Pittsburgh Glass and Pittco Store Front Metal to help you execute your designs with striking success.

In 21 leading retail magazines, Pittsburgh Plate Glass Company is urging merchants to consult their architects, to modernize their stores *now*. Prompt, helpful service — is provided by our national organization of branches and dealers. If desired, convenient terms can be arranged on the Pittsburgh Time Payment Plan.

"PITTSBURGH"
stands for Quality Glass and Paint



It contains 41 designs, submitted by leading architects, for stores, restaurants, service stations, theaters, etc. Every architect, designer and student will want to own this up-to-date reference book of ideas for building or modernizing retail stores. Send the coupon for your free copy of "There is a New Trend in Store Design." It will be sent to you promptly.

Pittsburgh Plate Glass Company
3033-5 Grant Building, Pittsburgh 19, Pa.
Please send me, without obligation, a free copy of the book, "There is a New Trend in Store Design."

Name_____

Address_____

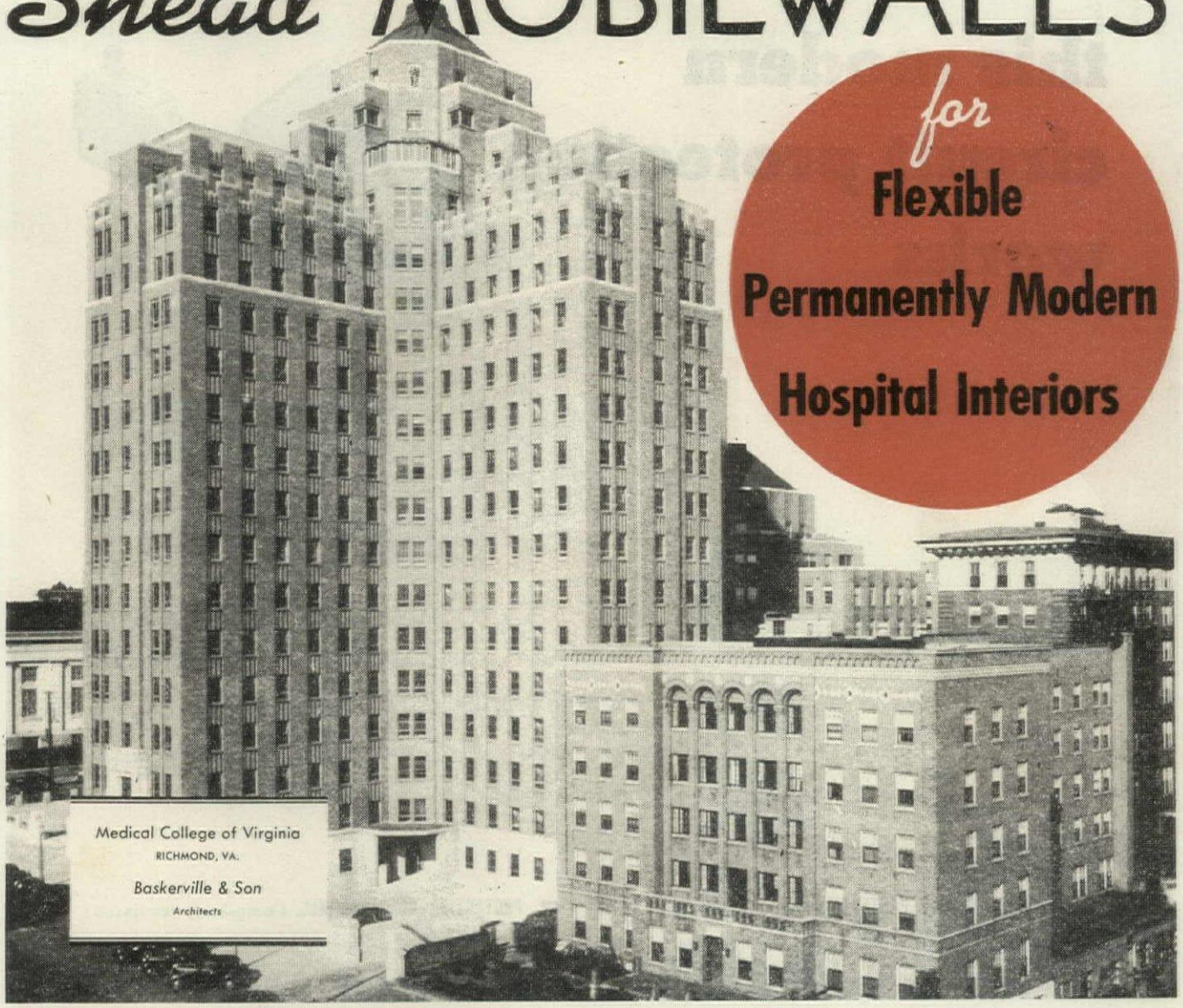
City_____ State_____

PITTSBURGH PLATE GLASS COMPANY
PRODUCTS FOR STORE FRONTS AND INTERIORS

Snead MOBILWALLS

for

Flexible Permanently Modern Hospital Interiors



Baskerville & Son, architects who designed the Medical College of Virginia were cognizant of the everchanging needs of such an institution. Snead Semi-flush Mobilwalls and hollow metal doors were specified for corridors and dividing walls to secure maximum flexibility of interiors. Classrooms and laboratories can be enlarged or reduced quickly and easily without interruption of schedules and without dirt or muss. Snead Mobilwalls combine the permanent appearance, privacy, and soundproofness of fixed masonry walls with instant mobility and complete reusability of parts. With Snead Mobilwalls you build for the future as well as the present. Send for catalog and photographs of Snead hospital and institutional equipment.

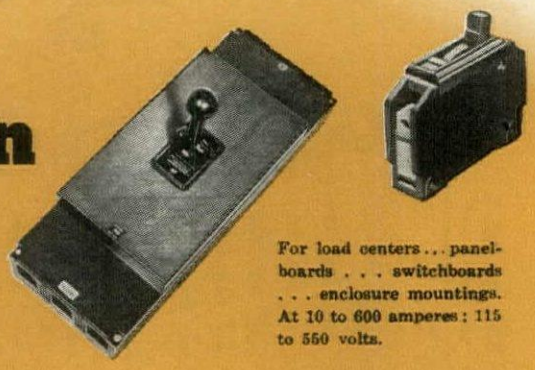
Since 1849, the Snead symbol of lasting beauty, quality and progress in metal construction

SNEAD & Company . . . . . FOUNDED 1849

Designers, manufacturers and erectors of library bookstacks and steel partitions

Sales Office: 94 Pine Street, JERSEY CITY 4, N. J. **Main Office and Plant: ORANGE, VA.**

this modern circuit protection works 4 ways



For load centers . . . panelboards . . . switchboards . . . enclosure mountings. At 10 to 600 amperes: 115 to 550 volts.

"One-way" protection for electrical circuits used to be ample—but not today! *Today*, the "4-way" circuit protection of Westinghouse AB "De-ion" Circuit Breakers is essential. This modern method gives:

1 MORE POSITIVE PROTECTION for circuits and machines. AB "De-ion" breakers "consider" both current and time, to give greater safety. They give accurately calibrated, production-tested, automatic protection against severe overloads and short circuits.

2 PROTECTION AGAINST TIME LOST is a double benefit. First, AB "De-ion" breakers do not trip out for brief harmless overloads—hence, cause no unnecessary stoppages. Second, when they do trip out, machinery goes back into operation faster—by simply flipping a switch. No waiting for replacements . . . for special maintenance attention . . . to waste man-hours needlessly.

3 PROTECTION OF PERSONNEL. Completely insulated enclosures are sealed to protect workers . . . to prevent tampering. Thermal elements controlling the breaker cannot be altered without visible evidence.

4 PROTECTION AGAINST FURTHER COSTS. One investment is the final cost . . . for one or 100 interruptions, or more. There is nothing to be destroyed . . . nothing to be replaced.

Ask your Westinghouse representative for facts and figures on Westinghouse "De-ion" Circuit Breakers. Or write for Descriptive Data 29-060. Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania.

Westinghouse
PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

AB "DE-ION"

"De-ion" action in arc quenching is one of the big reasons for the superior performance of Westinghouse Circuit Breakers.

A Westinghouse development, the "De-ion" principle is in use today on some four million electrical circuits and has saved millions of dollars and hours by quenching dangerous arcs quickly . . . speeding interruption of dangerous overloads . . . safeguarding valuable equipment and circuits.

Westinghouse experience in circuit control dates from the inception of alternating current. This engineering leadership together with public acceptance offers a dependable guide to selection. Specify Westinghouse Circuit Breakers in your panelboard or switchboard installations.

J-60626

CHECK THESE FEATURES OFFERED BY WESTINGHOUSE

"DE-ION" ARC QUENCHING. Arc is forced into a chamber; divided into small segments between plates of a grid; extinguished quickly.

NON-WELD CONTACTS. Contacts are made of special non-welding silver alloy.

LONG-LIFE BEARINGS. All bearing surfaces are of dissimilar metals to give long life and to prevent sticking due to any possible corrosion.

HEAVY-DUTY HANDLE moves in grooves, prevents tampering and insures cooling of hot arc gases generated during shorts.

TRIP-FREE. Operating toggle mechanism is trip-free in all positions and is of the quick-make and quick-break type.

SURGE-PROTECTED. Interpole barriers and insulating couplings insure protection against high surge voltages.

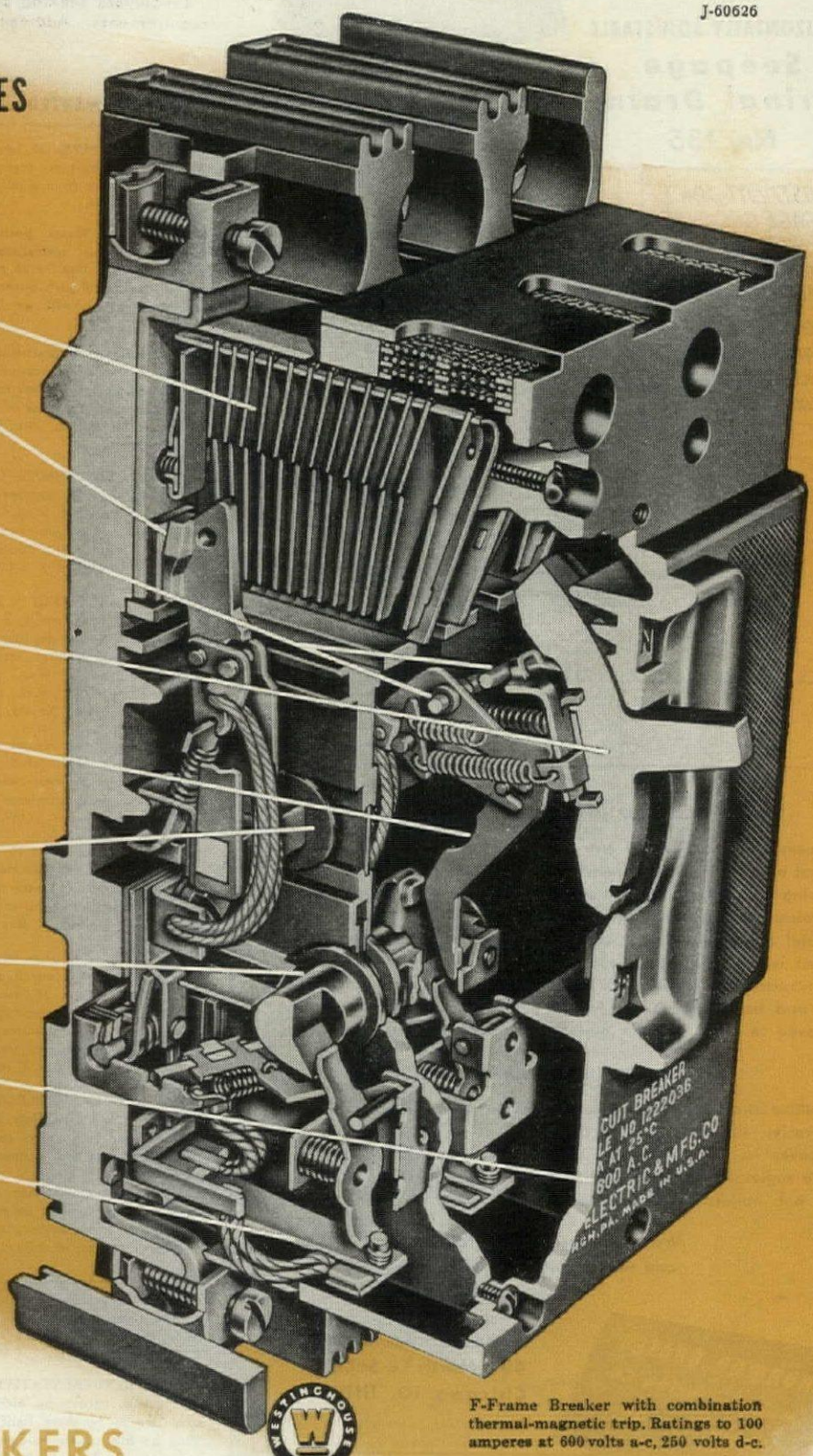
COMMON TRIP. Multi-pole units have insulated common trip bar that opens all poles when an overload occurs on any one. Prevent single phasing.

DEAD FRONT CONSTRUCTION protects operator. Mechanism is entirely enclosed in hot molded phenolic material (Moldarta).

LOW RESISTANCE. Westinghouse-designed bi-metal and shunts give low over-all resistance.

CORROSION RESISTANT. All parts are especially treated or selected to resist corrosion.

J-60626



F-Frame Breaker with combination thermal-magnetic trip. Ratings to 100 amperes at 600 volts a-c, 250 volts d-c.

CIRCUIT BREAKERS

G.I. JOBS

FREE SERVICE FOR DISCHARGED VETERANS

To aid discharged veterans secure professional and executive employment in the building industry, The FORUM will publish without charge classified ads giving applicants' qualifications, stating preference in occupation and location. Ads may be run with name and address or with box number.

Employers seeking personnel are urged to make known their requirements. Address: G. I. Jobs
THE ARCHITECTURAL FORUM
350 Fifth Avenue, New York 1, N. Y.

POSITIONS WANTED

SALES EXECUTIVE—30, ten yrs. successful sales & business exper., looking for representation from a m'fr in bldg. field. Box E-134.

SALESMAN — Wants position sales agency for constr. specialities or supplies. In constr. line for 25 yrs. During war on engr. staff govt. bureau. Prefers Cincinnati area — will go elsewhere. Box E-135.

ARCHITECT—Arch. draftsman. Age 36 yrs. C. E. officer in service about to be released. 18 yrs. exper. in all types of structures and handling of men. Desire pos. with future. East Coast preferred. Box E-136.

SR. ARCH. DRAFTSMAN—Chicago or Gary area. Age 24, married, 1 child; 2½ yrs. civilian draf. & engr.; 2½ yrs. in Navy CB's; 1 yr. pre-engr. col.; 2½ yrs. high school arch. drafting. Refs. former employers. Box E-137.

LICENSED ARCHITECT — Trained in modern design, desires to begin negotiations for position leading to junior partnership with architect established in South, Southwest, or West. 30, college grad., 8 yrs. drafting exper., apprenticeship under Richard J. Neutra. Box E-138.

SALES EXEC.—28, several yrs. exper. merch. dealers; bldrs., archs. and home owners. Desires business conn. in bldg. field upon impending release from duty as Naval officer. Box E-139.

SALES TRAINEE—Over 10 yrs. varied business exper.; efficient steneg., self-reliant, ambitious, pleasant personality. Wants reliable connection in bldg. field in Chicago or vinicity. Box E-140.

EXEC. MGR. — Background of dept. store and real estate merch. manag. and sales. Naval officer, 37, married, coll. Initiative; capable accepting responsibility; thorough, trustworthy. Desires position with producer of prefab. homes or bldg. materials. Box E-141.

TELEPHONE MAN & ELECTRICIAN—33 yrs., ex-Chief Elec. Mate. H.S. grad.; several night courses in telephony & elec. Completed two overseas contracts, Aleutian Islands, England. Engineered complete telephonic plant on foreign bases. Wants foreign assign.; prefers China-India-Burma or So. America. List of references, char. & ability. Box E-142.

ARCHITECT—Age 35, married, college grad., 10 yrs. exper., regis. in 2 states, desires a position leading to a partnership. Prefers southeastern states. Box E-143.

MANUF. REPRESENTATIVE — Exper. man desires agency for elec. or hardware line in Southern Calif. territory. Must be high qual. product, not sold on price. Grad. of U. S. Naval Acad. Lt. Comdr. on aircraft carrier, 39 yrs. old, released about Oct. 1st. Box E-144.

PRODUCTION MGR.—Officer, chemist and engineer, Ph.D., 39, wide exper. in the chem. field, wishes position supervising devel. and manuf. of newer synthetic bldg. materials. Wide desiga. devel., and plant exper.; excellent experimental background, can plan and supervise constr. Box E-145.

LICENSED BROKER—Disch. vet.; 12 yrs. exper. in sales manag. and appraisals all types of homes and business prop. Seeks position with bldr., real estate office or any concern interested in man with above exper. Box E-146.

MEN WANTED

ARCH. DRAFTSMEN OR ARCHITECTS—Familiar with arch. detail and design wanted by N.Y.C. constr. firm. Box R-161.

ARCH. DRAFTSMAN — For industrial bldg. work. Some opportunity for job supervision. Submit sample of work. P.O. Box 895, Lafayette, La.

ARCH. DESIGNER, DRAFTSMAN — To assume responsibilities and devel. creative work. Perm. employ. opp. for adv. in prog. office with large vol. of public and private work. Submit quals., exper., samples. David H. Horn, Arch., Rowell Bldg. Fresno, Calif.

YOUNG MEN—With arch. training to prepare small house plans and specs. wanted by large Midwestern line-yard lumber company. Opp. for adv. Box R-162.

EXPER. ARCH. DRAFTSMAN—Wanted to assume full respons. developing complete working drawings from sketches, including detailing. Modern res. work predom. Small N. Y. office. Box R-163.

DESIGNERS & DRAFTSMEN — Minn. firm wants Sr. and Jr. draftsmen for school, church, hospital work. State age, edu. and exper. Salary open. Perm. with future connection to qual. man. Box R-164.

ARCHITECT—For full-time position at Candlewood Shores on Lake Candlewood, Danbury, Conn. Good salary to start; unlimited possibilities for advancement. Box R-165.

CHIEF ARCHITECT—Wanted by large constr. corp. nr. Los Angeles. Occas. trip to Europe, expenses paid. Competent staff draftsmen, excel. working facil. Applicant must qualify as exec., have proven abil. as designer. Should possess necess. quals. to later pass Calif. State exam. for certif. to practice arch. Do not write unless you can "fill the bill." Detail educ., training, exper., age, family, gen. qual., salary desired. Photo advisable. Box R-166.

ARCHITECT OR ARCH. DRAFTSMAN—With arch. degree, needed for work on general practice, specializing in prefab houses. Perm. connection with oppor. for adv. Salary depends on ability & exper. Box R-168.

DRAFTSMAN—Wanted by an indus. designer in N. Y. Exper. in dept. store layout and fixture design. Box R-169.

DEPARTMENTAL ASSISTANT'S CHAIR

In Aluminum
(Fully Adjustable)
No. 2125

EFFICIENCY... above all

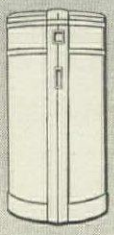
IMPROPER seating causes tense muscles and fatigue, interfering with efficiency and lessening work output. Increasing worker comfort pays dividends in increased production and better work. And increased comfort depends upon chairs specially designed and adjustable to the individual user. G-F, pioneer manufacturer of aluminum seating, employing finest craftsmanship and only the best available materials, brings you light-weight, durable, Goodform Adjustable Office Chairs cushioned in foam rubber and smartly upholstered. For management satisfaction and worker efficiency, standardize on Goodform, the Adjustable Aluminum Chair specially designed for each type of office job.

THE GENERAL FIREPROOFING CO.

YOUNGSTOWN 1, OHIO

Available SOON at G-F Dealers and Branches. Write for catalog.

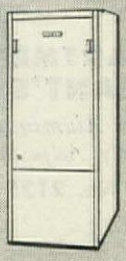
METAL DESKS—GOODFORM ALUMINUM CHAIRS—METAL FILING CABINETS—STEEL SHELVING—FILING SUPPLIES—STORAGE CABINETS



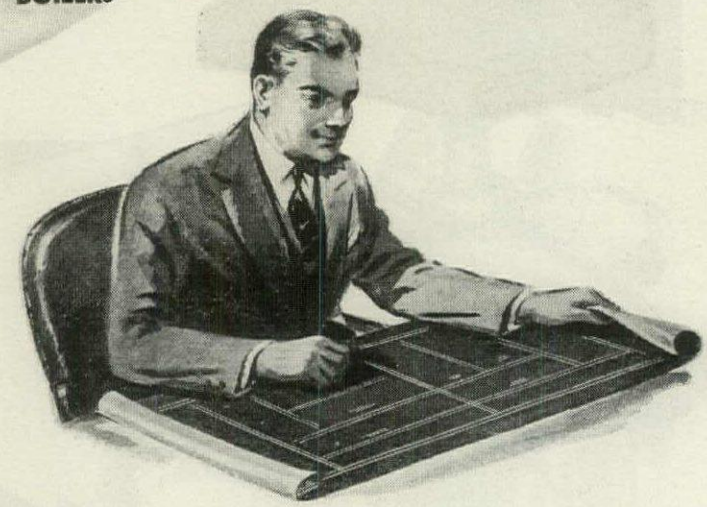
OIL-FIRED BOILERS

GAS-FIRED BOILERS

GAS-FIRED WARM AIR CONDITIONERS

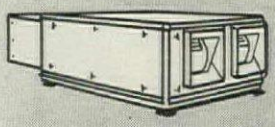


OIL-FIRED WARM AIR CONDITIONERS

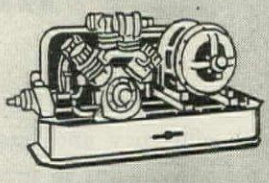


CONVERSION OIL BURNERS

ROOM COOLERS



CENTRAL PLANT AIR CONDITIONERS



CONDENSING UNITS

HEATING-COOLING PROBLEM?

TURN TO

GE

TO BE SURE!

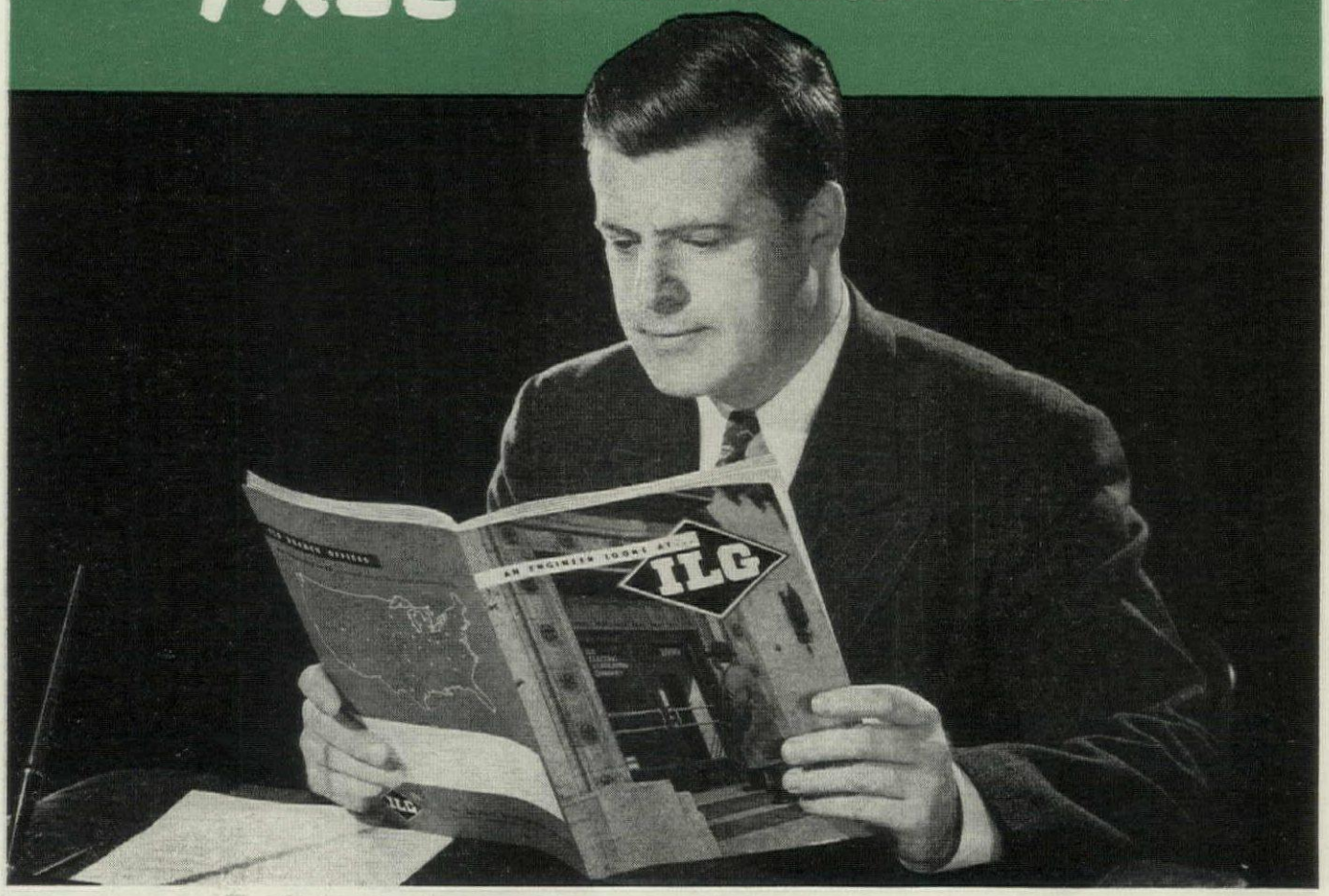
To heat or cool a home—to cool a skyscraper, get the facts on the complete G-E line before you specify heating or air conditioning. G. E. offers the dependable equipment for the job. Back of this equipment, ready to assist in layout and installation, is a vast fund of technical know-how. And a reputation that assures you and your clients of successful performance. See your G-E Distributor. He's listed in the Classified Telephone Directory for your convenience. *General Electric Company, Air Conditioning Department, Section 51311, Bloomfield, New Jersey.*

BUY . . . and hold . . . VICTORY BONDS

AUTOMATIC HEATING AND COOLING
AIR CONDITIONING AND COMMERCIAL REFRIGERATION

GENERAL GE ELECTRIC

FREE— GET YOUR COPY TODAY!



Take a quick trip through the ILG Plant

...from your easy chair!

Look through the eyes of a visiting engineer at the modern ILG Plant. Learn why ILG builds its own motors . . . see the fascinating steps in the manufacture of different types of heating and ventilating equipment. Make a stop at the new ILG Research Laboratory . . . meet the men who concentrate their skills on the development of better apparatus for you.

If you cannot visit the ILG Plant in Chicago, get a copy of this fascinating new photographic booklet. Send coupon or phone nearby Branch Office (consult classified directory).

ILG

VITALIZED VENTILATION

AND AIR CONDITIONING

WANTED: GRADUATE ENGINEERS!

for ILG Branch Offices, also Research and Engineering Departments. Exceptional opportunities now and in the future for graduates of accredited technical schools. Send details on education, experience, health, age, marital status.

ILG ELECTRIC VENTILATING CO., CHICAGO 41, ILL.
2899 North Crawford Avenue, Offices in 40 Principal Cities

☐ Rush free copy "An Engineer Looks at ILG" Booklet.

Firm Name _____

Individual _____ Title _____

Address _____ Zone _____

City _____ State _____

HOSPITAL PLANNING?

The fourth in a series of six advertisements prepared to help you plan effective communications for new or modernized hospitals.

HOW CONNECTACALL PROVIDES "NIGHT SUPERVISION"

At her duty station the night nurse in a CONNECTACALL-equipped hospital merely flicks a switch to make connections with a sensitive microphone at her patient's bedside. She can "tune in" each room one after the other—without leaving her desk. And by simply turning up the *volume control,* she can instantly detect the slightest sound of distress or labored breathing.

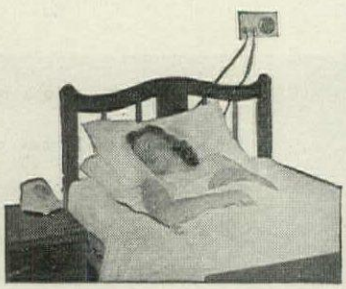
Silent Supervision at night is but one of the many advantages of CONNECTACALL—two-way patient-nurse communicating system. It permits the nurse to spend *more* time at her duty station . . . *less* time walking endlessly back and forth on routine errands. Day and night CONNECTACALL saves time . . . saves footsteps conserves energy. Translate these basic advantages in terms of *reduced* hospital payrolls. *Result:* more efficient nursing — with fewer nurses.

For full information on "Connecticut's" complete line of hospital communicating and signalling systems, write for Bulletin 102. And remember — our free advisory planning service places twenty-five years of engineering experience in hospital communications at your service.

CONNECTACALL

product of

CONNECTICUT TELEPHONE & ELECTRIC DIVISION
GREAT AMERICAN INDUSTRIES, INC.
MERIDEN, CONNECTICUT



NURSES' CALL SYSTEMS • DOCTORS' SILENT AND AUDIBLE PAGING • DOCTORS' REGISTRY • INTERIOR TELEPHONE SYSTEMS • NIGHT LIGHTS • NURSES' HOME TELEPHONE AND RETURN CALL SYSTEMS

SILBRAZ* JOINTS

the world's most modern method of joining brass pipe or I.P.S. copper tube

recommended by . . .

WALWORTH

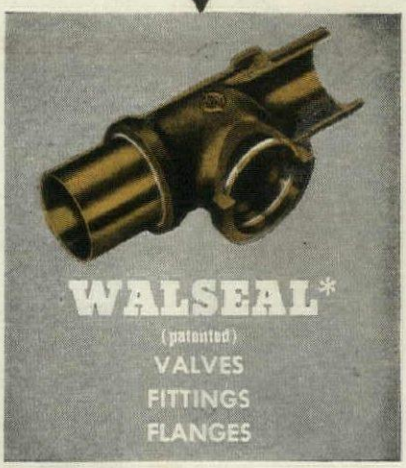
America's oldest manufacturer of valves and pipe fittings

Backed by more than 100 years of valve manufacturing and piping "know how," the Walworth Company unhesitatingly recommends the use of Silbraz joints for joining brass pipe or I.P.S. copper tube. These joints are unquestionably the strongest, most leak-proof yet devised. They are threadless, corrosion resistant, and vibration proof.

Their combat proved record in battleships, destroyers, submarines, and Army tanks—their extensive use in hospitals, homes, hotels, commercial and industrial buildings—serves to emphasize the claims we make for Silbraz joints, the modern method of joining brass pipe or I.P.S. copper tube.

Walworth Company manufactures a complete line of valves and pipe fittings, which includes a line of Walseal* valves, Walseal fittings, and Walseal flanges expressly produced for making Silbraz joints. For further details see your nearest Walworth distributor or write to Walworth Co., General Offices: 60 E. 42nd St., New York 17, N. Y.

*Patented—Reg. U. S. Pat. Off.



Cut-away view of a Walseal Tee showing (left) silver ring as it appears after Silbraz joint is completed; (center) silver ring as inserted by Walworth in each port of Walseal products; and (right) section showing penetration of alloy after joint is completed.

Make it a "one-piece" pipe line with WALSEAL

WALWORTH

valves and fittings

60 EAST 42nd STREET, NEW YORK 17, N. Y.

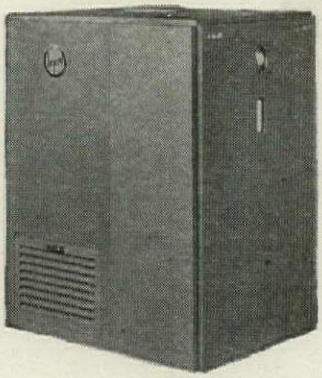
DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

Postwar

THE Most

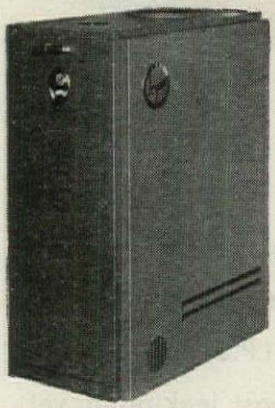
OF GAS HEATING

Boilers

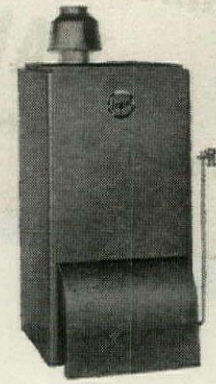


Forty-two different boilers for steam and hot water heating

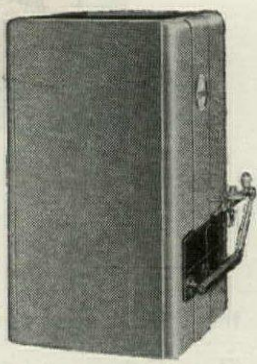
All Bryant boilers have CAST IRON sections for long life and efficient operation



Gravity Furnaces



Heavy CAST IRON heating element and baffle plates assure maximum heat and long life for the GF-56 model

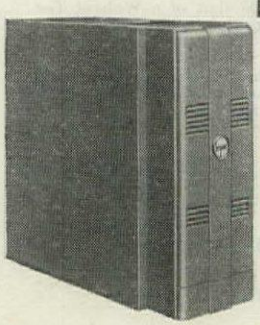


Destined to become popular for small homes heating, this STEEL gravity furnace fits the modest building budget

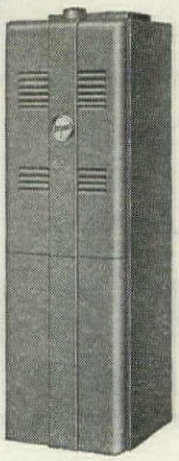
Winter Air Conditioners

Closet space is sufficient room for the VB model with CAST IRON heat exchanger

CAST IRON heat exchanger also is featured in the BA-88 model

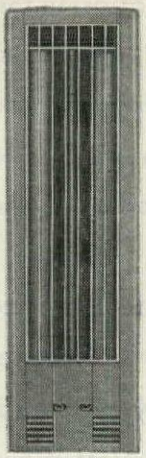


This basement-type model with STEEL heat exchanger provides complete winter air conditioning economically

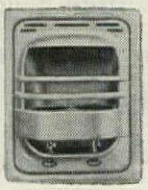


The Vertical model is a moderately priced, spacesaving unit with STEEL heat exchanger

Wall and Space Heaters



The new Panelray vented wall heater adds beauty and efficient heating to any room in the house



Bryant wall heaters fill the need for moderately priced, non-vented installations

New portable space heaters are built in modern streamline designs

Where circulated heat is required, this Console model does the job thoroughly and efficiently

Complete Line

EQUIPMENT IN THE NATION!

Here it is . . . the postwar gas heating equipment ou hoped would come . . . the Bryant Heater line hat fits every heating requirement of America's omes.

No matter whether your client wants a new home r modernization of an old home, there is equip- ent in the improved and expanded Bryant Heater ne to fit the heating job.

There are boilers with age-resisting cast iron ections, winter air conditioners and gravity rnaces in *both* cast iron and steel heat exchanger odels. A group of diversified floor furnaces, wall nd space heaters answers small home and indi- dual room heating problems. Specialties, such as onversion burners, attic-installed spacesaving eaters and unit heaters complete the picture to eet every heating requirement. All this, plus a ew line of Bryant water heaters in a wide range f sizes and prices.

Advertising in national magazines—*more than 3,000,000 four-color printed impressions this year*—as been telling and selling the public on the ad- ntages of choosing Bryant Heater equipment, roduced by the pioneers of residential gas heating. o, when your plans include Bryant, you are offering ecognized reliability . . . the automatic equipment hat truly will "let the pup be furnace man."

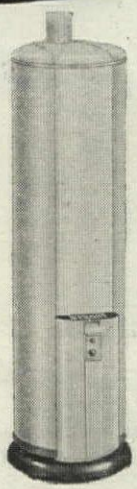
Ask your nearest Bryant distributor to give you he complete story, told in the factual presentation, Postwar Picture of Home Heating". You'll agree ith others in your field who say . . . "if it's modern as-fired heating equipment, Bryant has it!" Bryant eater Company, 17825 St. Clair Ave., Cleveland 0, Ohio—One of the Dresser Industries.

bryant

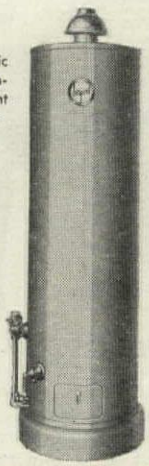
GAS HEATING

LET THE PUP BE FURNACE MAN

INCLUDING WATER HEATERS



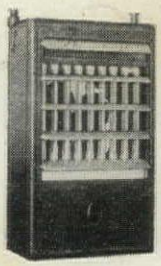
Six new automatic water heaters are included in the Bryant Heater postwar line



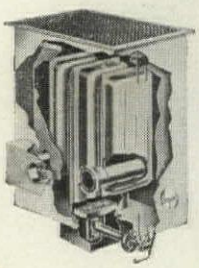
The new streamline water heater matches the modern note of many postwar home designs

And many specialities

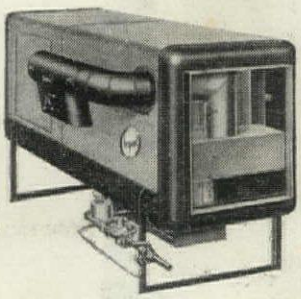
Conversion burners to meet postwar modernization demand



Unit heaters for garages, stores and shops



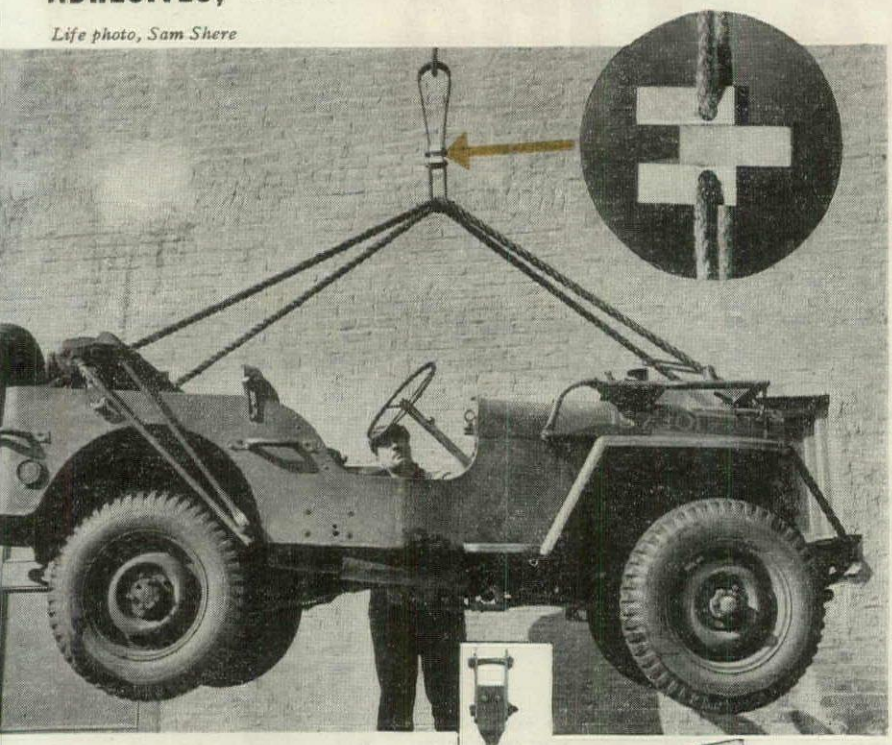
Floor furnaces in four types to fit every requirement

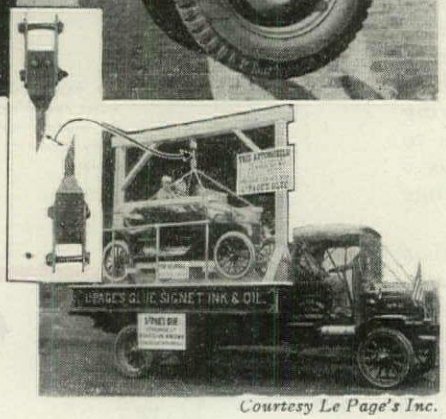


Forced-air, horizontal space-saver unit for attic installation

ADHESIVES, raised to new levels of permanence and efficiency by the war, will be important aids to postwar building.

Life photo, Sam Shere

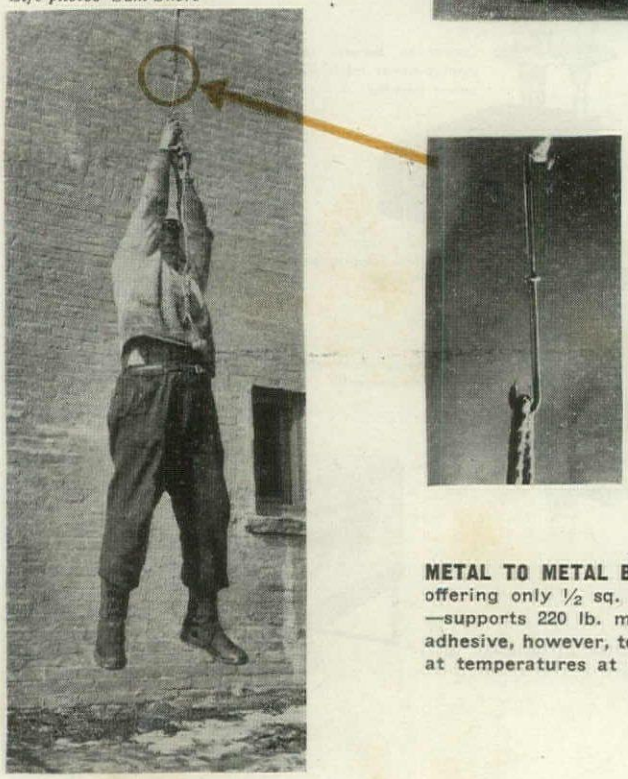




2563 LB. JEEP SUPPORTED by 2 sq. in. of glued area. Synthetic adhesive locks middle block of wood to others of metal (see insert). 25 years ago, fish glue (right) showed equal strength but bond was short lived, being subject to attack from water and fungus.

Courtesy Le Page's Inc.

Life photos Sam Shere



METAL TO METAL BOND—two nail heads offering only ½ sq. in. of gluing surface —supports 220 lb. man. Strength of this adhesive, however, tends to decline sharply at temperatures at 160° F. and over.

It is no easy matter to get a picture of one of the new super-glues at work. For the better the adhesive is, the less is required, the more transparent and colorless its appearance, the smaller is the actual joint. In the pictures at the left, a 2,500 lb. jeep is supported by a glued area of only 2 sq. in.; while the nail heads supporting a 220 lb. man have a glued area of only ½ sq. in. Building men might be justifiably skeptical about such pictures. Nor would it be surprising, in view of pre-war experience with the older animal and vegetable glues. Yet the fact of the matter is that a group of new adhesives worked overtime throughout the war in the jointing business, yielding incredibly strong and durable joints where rivets, screws, bolts and nails—for one reason or another — could not perform.

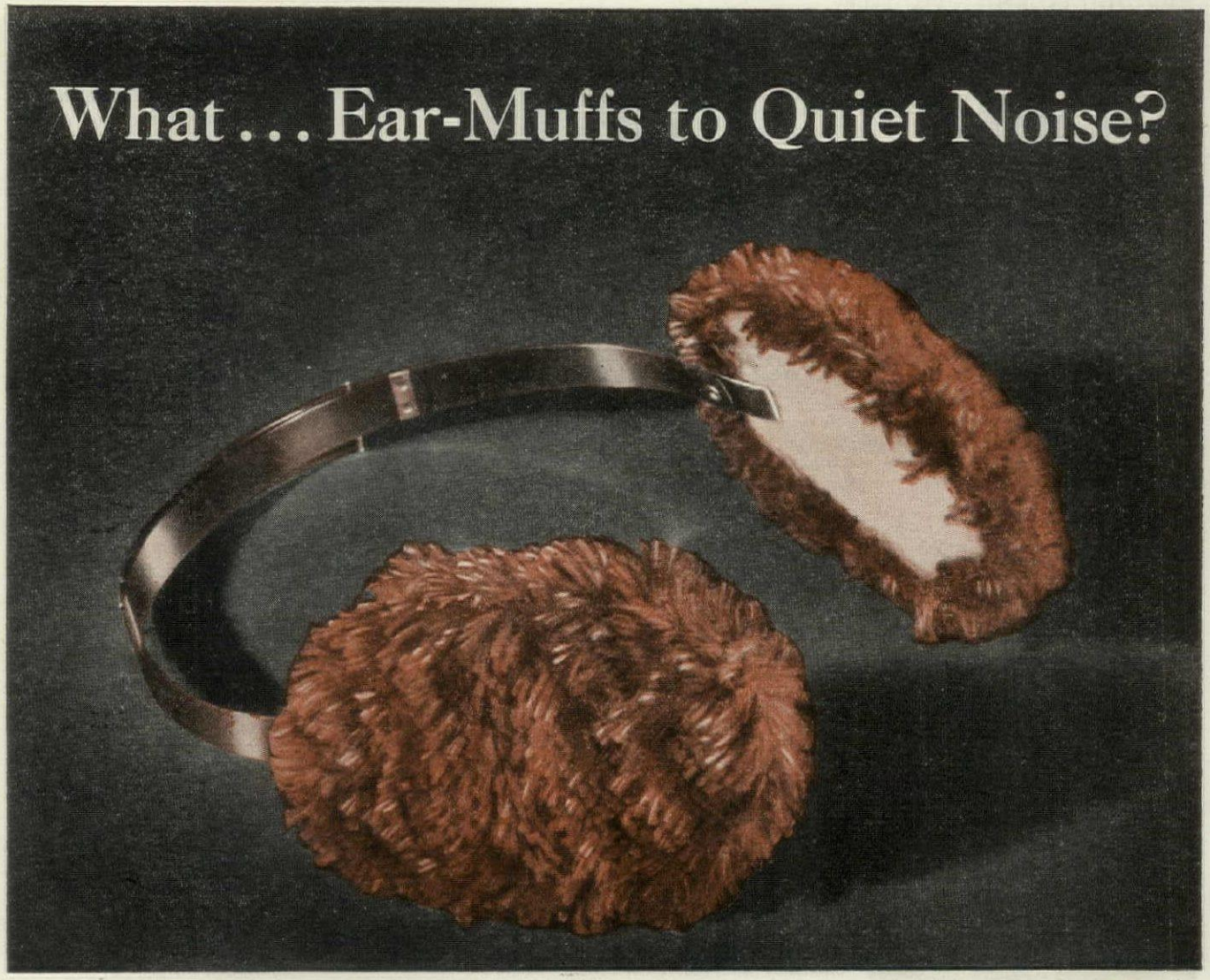
Today these new adhesives challenge any designer or fabricator who wants to join two pieces of anything together. And since the production of building is in many respects merely a matter of joining a lot of elements together, it is not surprising that building professionals are looking at the new adhesives with a speculative eye. There is good reason for this interest. In theory, at least, they threaten the continued supremacy of the nail, the screw and the rivet. In resistance to shear and tension, they are very strong and applicable to conditions where spot joints won't work; under a given set of conditions, they are equally long-lived. The new adhesives are highly resistant to most forms of chemical and mechanical attack — indeed, they resist salt spray, acid and water better than unprotected metal. Being either resistant or fatal to bugs, they offer an insect-free joint which no nail or screw could touch. Finally, they can bond together all sorts of hitherto unbondable materials—rubber and metal, cloth and wood, wood and glass.

NO ALL-PURPOSE ADHESIVE IN SIGHT

Eager as they are to invade the building field with their fabulous new adhesives, the manufacturers are themselves surprisingly cautious with their claims. They do not pretend that adhesives are or will ever be the sole method of jointing. Nor do they claim such a thing as an all-purpose adhesive. On the contrary, they are quick to point out that each has its special properties

(Continued on page 208)

What... Ear-Muffs to Quiet Noise?



. . . that's a job for SABINITE "M"

Everyone wants to find the best way to reduce noise . . . That's a job for Today's Quiet Way—Sabinite "M", the acoustical plaster finish that yields top value in noise quieting per dollar because of its superior quality, high sound absorption and low cost.

Sabinite "M" absorbs up to 60% of all sound that strikes its surface. Being an acoustical plaster finish, it combines fire protection, noise reduction and enduring beauty, all in one material. It is applied with satisfactory results over old ceilings or new by any expert plasterer.

ACOUSTICAL PLASTER FINISH

Sabinite "M" does not necessitate any patchwork pattern. It results in a beautiful unbroken surface like any plastered finish ceiling and consequently is available to any architectural design. It may be had in oyster white or four ready prepared pastel shades. After application it may be tinted with Texolite paint to match any decorative scheme.

Today "sound conditioning" is called for in the modern scheme of things, and that calls for Sabinite "M". See Sweet's Catalog for complete information and specifications.

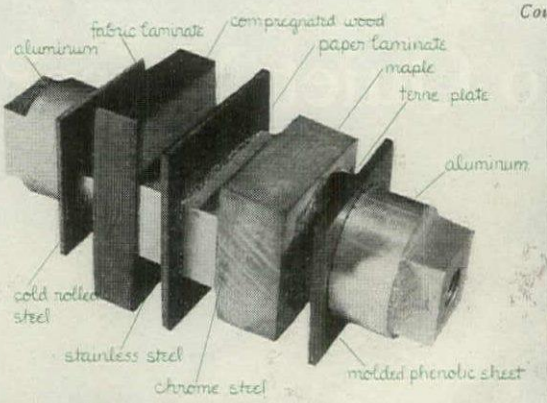
Sabinite and Texolite are trademarks owned by the United States Gypsum Co.

United States Gypsum

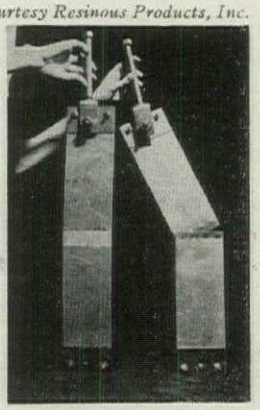
For Building • For Industry

Gypsum · Lime · Steel · Insulation · Roofing · Paint

(Continued from page 206)

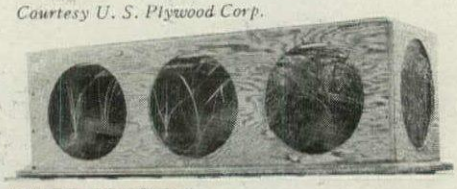


Courtesy Resinous Products, Inc.

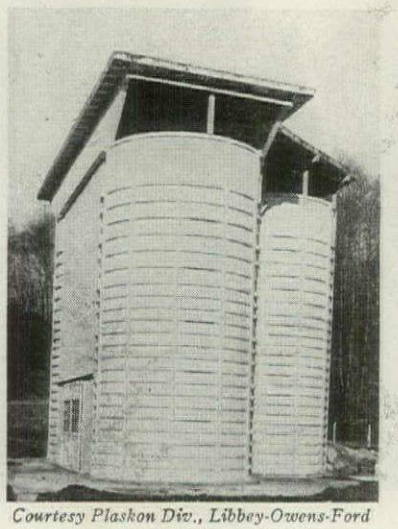


STRONG COMPOSITE BONDS are possible with the new adhesives: under test, riveted metal plates at right failed at 1,700 p.s.i. while adhesive joint showed no sign of rupture. The strongest metal-to-metal bond is achieved with thermoplastic and rubber-type adhesives, but the permanence of such bonds has not yet been established.

Courtesy U. S. Plywood Corp.



WATERPROOFNESS is demonstrated by this aquarium—full of fish and water—of phenolic bonded plywood. Several years constant use has produced no sign of failure.



Courtesy Plaskon Div., Libbey-Owens-Ford

ACID AND FUNGUS RESISTANCE is a decisive factor in silos; the natural fermentation of ensilage is successfully resisted by urea-phenolic- and resorcinol-bonded plywoods.

and each its limitations. Few of them are adaptable to field use, for example: most of them require controlled conditions (of temperature, pressure, humidity and/or cleanliness) for good results. The general characteristics of the new adhesives should be understood by building professionals at the start. Otherwise, the manufacturers feel, confusion is likely to lead to improper use and poor results.

The average architect or builder is unlikely to see more than the end result of the new glues. Thus though there is a wealth of technical information about them, little of it is actually useful and much of it is likely to be confusing. The adhesives are complex substances—complex in chemical structure, in application and in performance characteristics. Of the six in common use today, only one—casein—is of animal origin. Four others are true synthetic resins, members of the huge and growing plastics family: phenolic, urea, resorcinal and the thermoplastics. The sixth group has a rubber base.

HOW THE NEW ADHESIVES DIFFER

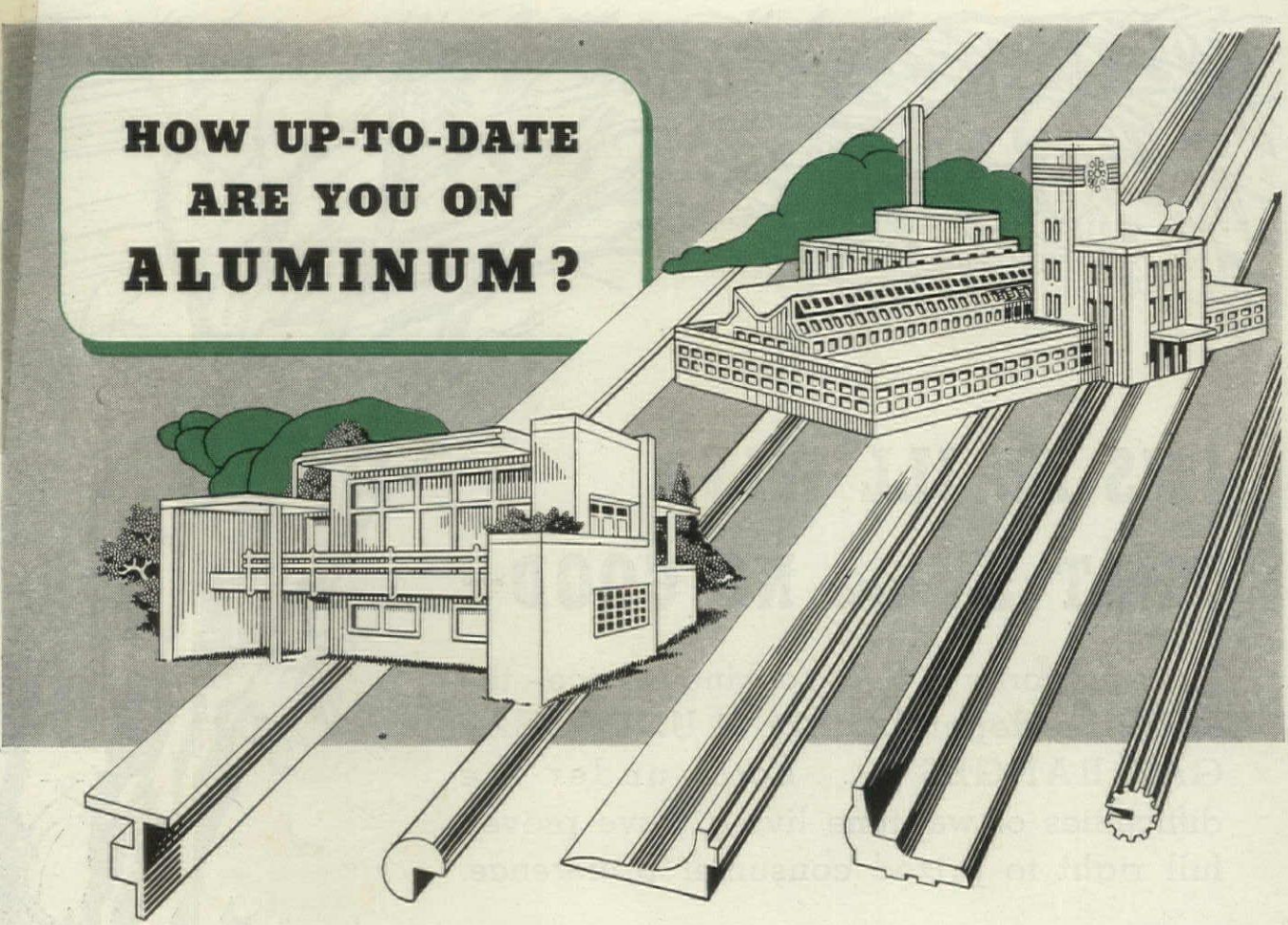
Practically the only thing they have in common is their adhesion under heat and/or pressure and (except casein) their non-animal origin. The thing which separates them sharply from the older animal glues is not so much the strength as the durability of their bond. (The animal glues are very strong but

(Continued on page 212)

COMPARATIVE PROPERTIES OF SEVEN ADHESIVES

Kind	Water resistant	Mold, fungus bacteria proof	Heat-fire resistant	Acid-salt alkali resistant	Weather resistant	Ease of use in field	Cost	Strength of bond—aside from deteriorating forces	Stain	Length of life	Bond with non-porous substances (metal, plastics, etc.)*
ANIMAL	Poor	Poor	Poor	Poor	Poor	Must be soaked overnight—then cooked. Will set at room temp.	Medium	Very high	No	Limited	Poor
CASEIN	Resistant	Resistant	Fair	Fair	Fair	Must be mixed to prescribed consistency. Can be used at 35° F. and up.	Medium	Medium	Yes	Fair	Poor
UREA	Very Resistant	Mold etc. proof	Good	Good	Good	1-part form easy to mix; 2-parts form must be accurately weighed. Use at 70° F. & up.	Medium	High	Yes	Good	Poor
PHENOLIC	Water proof	Mold etc. proof	Very high	Very high	Excellent	Can be used only 100° F. and up.	Medium	Very high	Yes	Permanent	Fair
RESORCINAL	Water proof	Mold etc. proof	Very high	Very high	Excellent	Must be accurately mixed. Will set in temp's 70° F. and up. Heat hastens curing.	High	Very high	Yes	Permanent	Fair
THERMO-PLASTICS	Resistant	Mold etc. proof	Poor	Good	Poor	Varies in different types of thermoplastics.	High	Medium	Yes	Indefinite	Good
RUBBER-BASE ADHESIVES	Water proof	Mold etc. proof	Fair	Very high	Good	Easy to use. Will set at room temp.	High	High	Yes	Limited	Good

* *Every adhesive will, according to its type, form a more or less satisfactory bond with porous materials—paper, leather, wood, fabric, etc.*



NEW REYNOLDS ALLOYS offer added strength and beauty to postwar structures

ALUMINUM has won its spurs under the harsh test of actual battle conditions. Today it stands ready to serve the architects and builders of the nation by making possible new freedoms in the strength-weight factor never before achieved.

Aluminum is only one third of the weight of steel, yet has unit strength equal to, and in many cases greater than, commonly used steels. Aluminum is now practical for *all* types of buildings . . . homes . . . shops . . . factories . . . hospitals—offering beauty, high strength, great corrosion resistance and substantial savings in weight.

See catalog in Sweet's or write for Catalog 104 "Reynolds Aluminum. Its Important Role in Architecture." **Consider Aluminum . . . Consult Reynolds.** Reynolds Metals Company, 2528 South Third St., Louisville 1, Ky.

Buy Victory Bonds now—and hold them

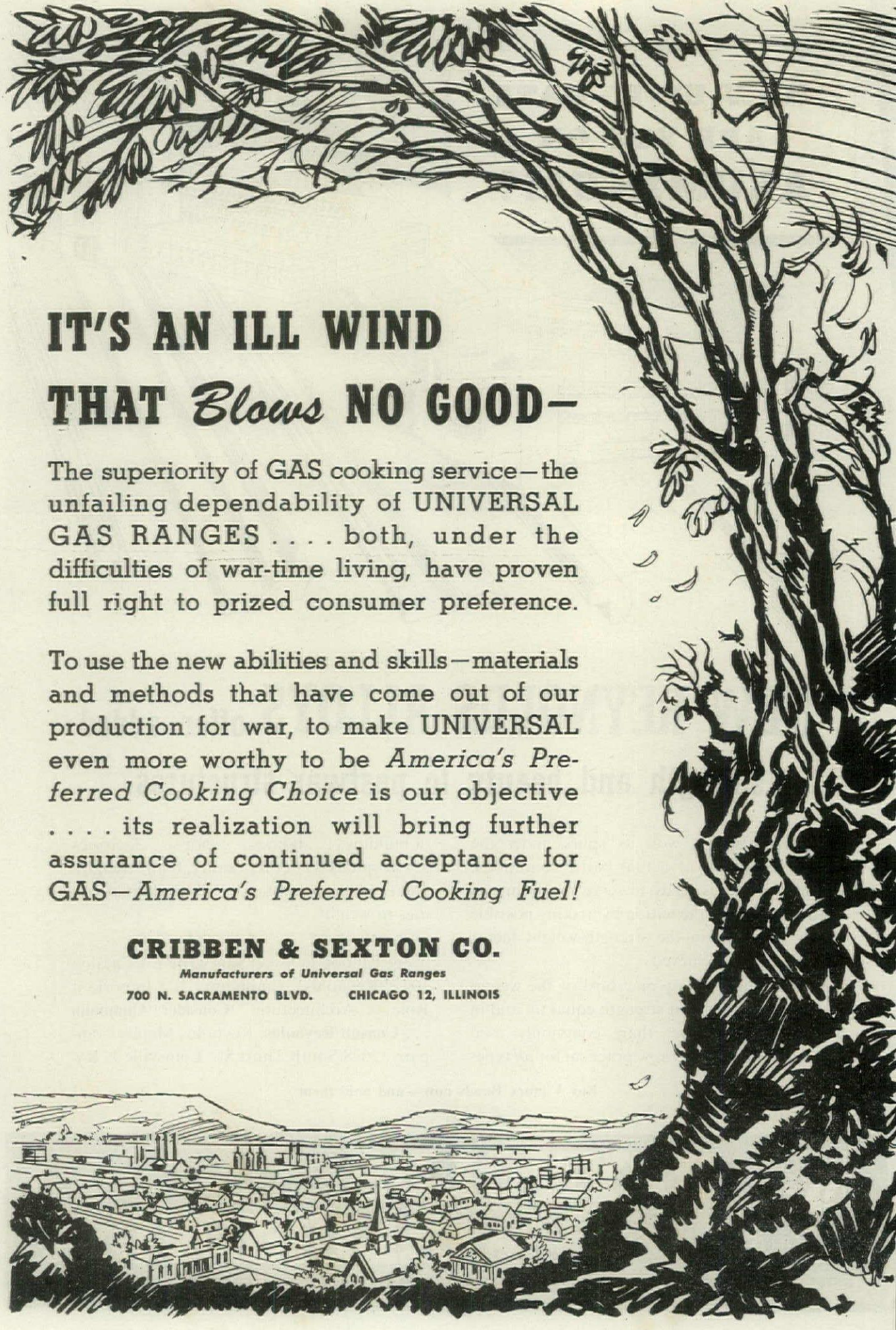
REYNOLDS METALS

7971-A3-8

REYNOLDS ALUMINUM

The Great New Source of

INGOT · SHEET · SHAPES · WIRE · ROD · BAR · TUBING · PARTS · FORGINGS · CASTINGS · FOIL · POWDER



IT'S AN ILL WIND THAT *Blows* NO GOOD—

The superiority of GAS cooking service—the unfailing dependability of UNIVERSAL GAS RANGES . . . . both, under the difficulties of war-time living, have proven full right to prized consumer preference.

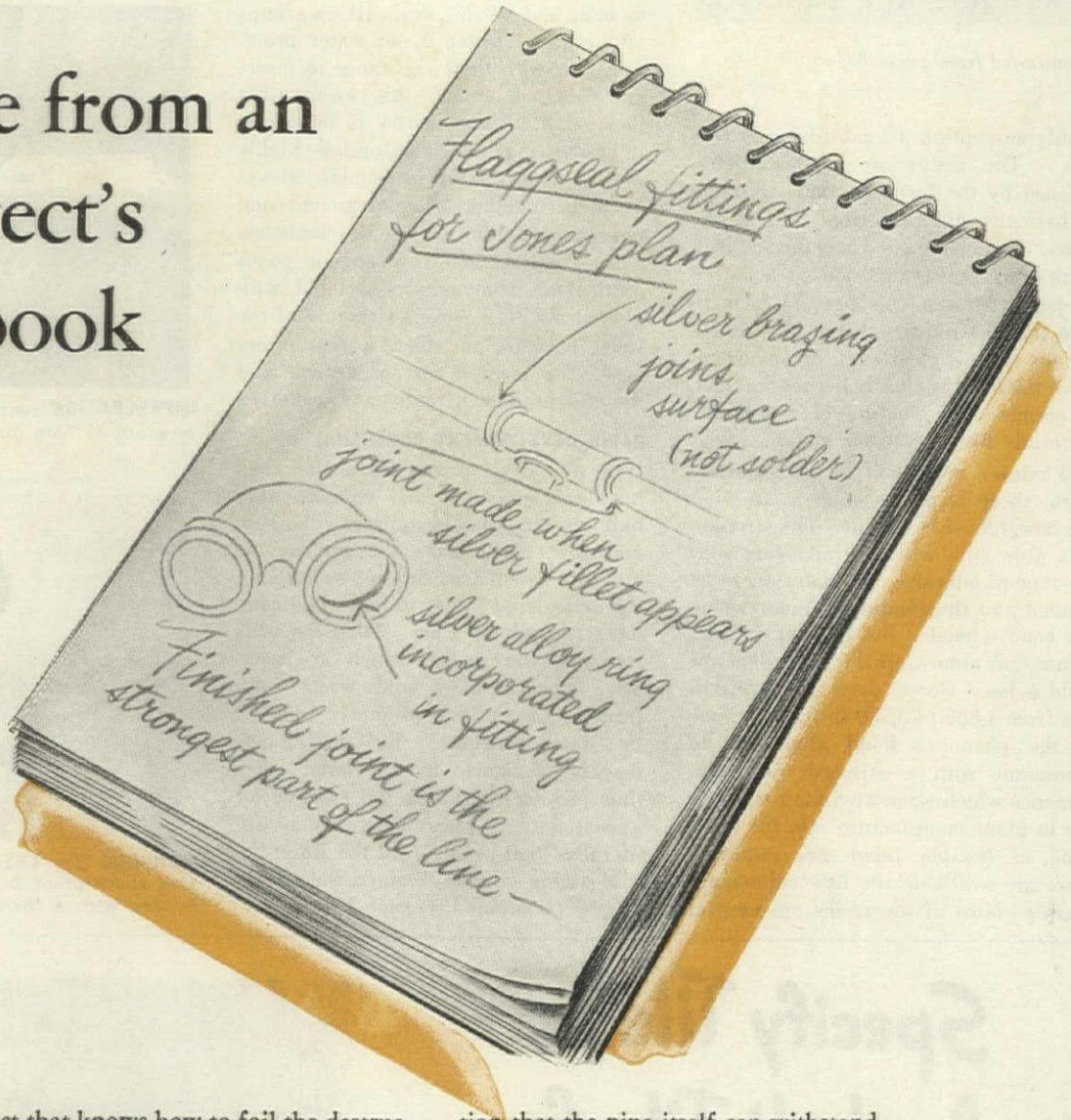
To use the new abilities and skills—materials and methods that have come out of our production for war, to make UNIVERSAL even more worthy to be *America's Preferred Cooking Choice* is our objective . . . . its realization will bring further assurance of continued acceptance for GAS—*America's Preferred Cooking Fuel!*

CRIBBEN & SEXTON CO.

Manufacturers of Universal Gas Ranges

700 N. SACRAMENTO BLVD. CHICAGO 12, ILLINOIS

A page from an Architect's note book



Here's an architect that knows how to foil the destructive action of corrosion . . . vibration . . . pressure on I.P.S. copper tubing and brass pipe. He knows that permanent Silbraz* joints, made with Flaggseal Fittings, are versatile, leakproof, durable – yet moderate in cost . . . the ideal solution to trouble-free piping.

You, too, can specify Flaggseal Fittings with full confidence. In thousands of installations – schools, hospitals, better-built homes, public, commercial and industrial buildings – Flaggseal Fittings have convincingly proved their worth . . . providing the nearest approach to the ideal "one-piece" pipe line yet attained. No properly made Flaggseal joint has ever been known to creep or pull apart under any service condition that the pipe itself can withstand.

Here's why! The top feature of all Flaggseal Fittings is a ring of silver brazing alloy (free-flowing at 1300° F.) incorporated in each port opening. When assembled and correctly heated with the oxyacetylene torch, this alloy flows out and forms a bond between pipe and fittings that will last as long as the building stands . . . year-in, year-out service that builds client-confidence in you.

For full details concerning these modern, threadless fittings, write today for a free copy of the Flaggseal Catalog. Address: Stanley G. Flagg & Co., Inc., 1421 Chestnut Street, Philadelphia 2, Penna.

* Patented – Reg. U. S. Pat. Off.

FF

FLAGG FITTINGS

SINCE 1854

MALLEABLE IRON FITTINGS • CAST IRON SCREWED FITTINGS • DRAINAGE FITTINGS
FLANGE UNIONS • FLANGES • GROUND JOINT UNIONS • RED BRONZE FITTINGS
FLAGGSEAL BRONZE FITTINGS • SPECIALTIES AND CASTINGS

(Continued from page 208)

highly susceptible to moisture and fungus.) The resins are further distinguished by the fact that their adhesion is basically different from that of the glues, whose bond is largely mechanical. With the resins, adhesion is achieved by polymerization — a process so intricate that the plastics people themselves are not entirely clear on it. In any event, since the bond is clearly not mechanical, it permits the bonding of nonporous materials like glass and metal.

Whatever the doubt as to how they work, there is no question as to what the new adhesives can do. The strength of a glue joint will naturally vary with the type of adhesive, the materials to be bonded and the conditions under which the bond is made. But current data indicate that almost all the new adhesives yield a bond whose shear strength will run from 1,800 to 3,500 lbs. p.s.i. Some of the phenolics bond aluminum to aluminum with a strength and permanence which warranted their wartime use in plane manufacture. On the other hand, if flexible joints are required, there are available the new rubber adhesives. Most of the resins are neutral to acids and alkalis, while all six groups are water resistant if not water proof. Together with their resistance to insect and fungoid attack, this means that they might ultimately be as important in protecting and reinforcing highly porous materials as in bonding sheets of them together. Compregnated and impregnated lumber are developments along this line: here is a range of possibilities not commonly associated with glue at all. The porous structure of the wood becomes in effect a reinforcing mesh, the resin a sort of cement and the end product a really new material.

RAPID DEVELOPMENT CONFUSING

However, development of adhesives has been so rapid and complex that building men should approach the subject with care. Take the problem of moisture resistance: casein was not long ago considered "waterproof" when compared to animal glues. Then the urea formaldehyde resins—which are actually impervious to cold water — appeared. Casein was promptly demoted to "water resistant." But urea bonds may be weakened by *hot* water: they thus proved inferior to the even newer phenolics and resorcinols, which are literally "boil proof." All the while the cold-setting caseins retained the advan-

(Continued on page 216)

Life photo, Sam Shere

IMPREGNATION with adhesives gives strength to limp glass fibers at right.

Photo courtesy American Cyanamid Co.

WEIGHING 7½ LBS., CAPACITY 2 TONS, this shock-proof brace is of glass fiber bonded with a thermo-setting resin.

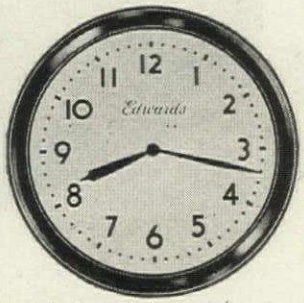
OUT ON THE DOT!

Split-second Time and Program Accuracy for your new school projects!

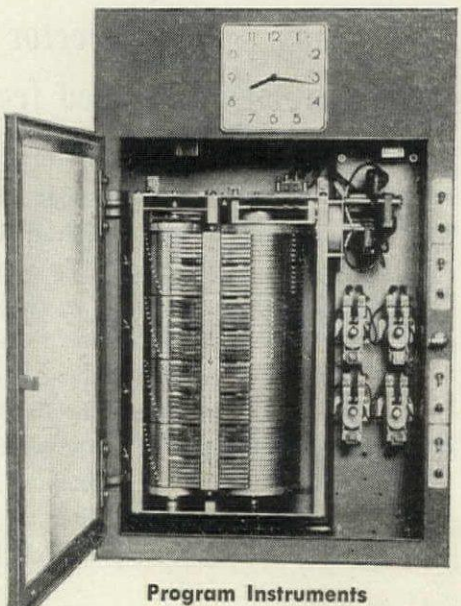
• Edwards complete Clock Systems are built to offer the finest in centrally controlled automatic time-keeping . . . completely meeting all requirements in schools, colleges, institutions, public buildings and industry.

Accurate, trouble-free operation is assured by the famous Telechron self-starting movement which is automatically and dependably synchronized by alternating current. No contacts, rectifiers, relays, pendulums, keys or switches to get out of order—no central control clock to be maintained, regulated and serviced.

This adjunct to Edwards telephones, alarm and protection systems, enables you to specify complete, "all-over" signaling equipment from one source. Full information on request.



Telechron motored clocks
for classrooms, corridors, etc.



Program Instruments
for simple or complex schedules.

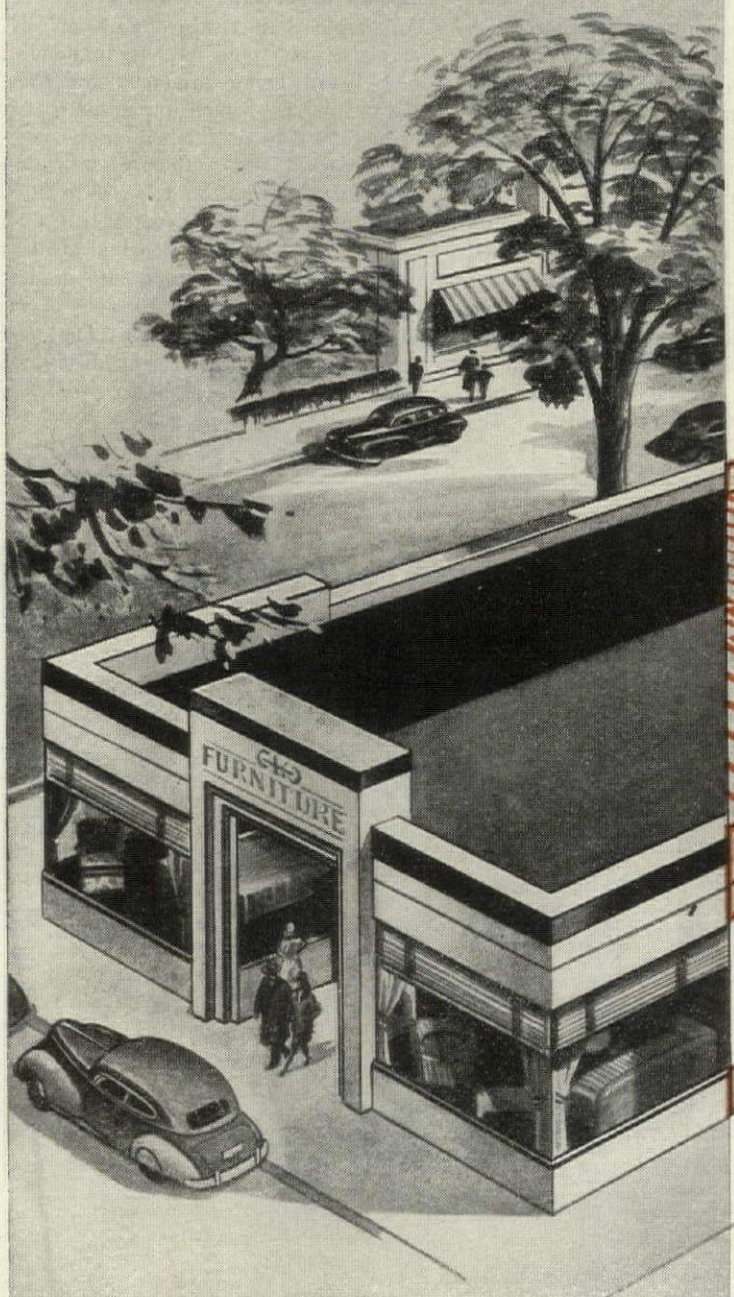
EDWARDS
and Company

NORWALK, CONN. • IN CANADA: EDWARDS & CO., OF CANADA, LTD.

Electrical Signaling Communication
and Protection for Homes, Schools, Hospitals, Offices and Industry.

THINK IN TERMS OF

STRAN STEEL



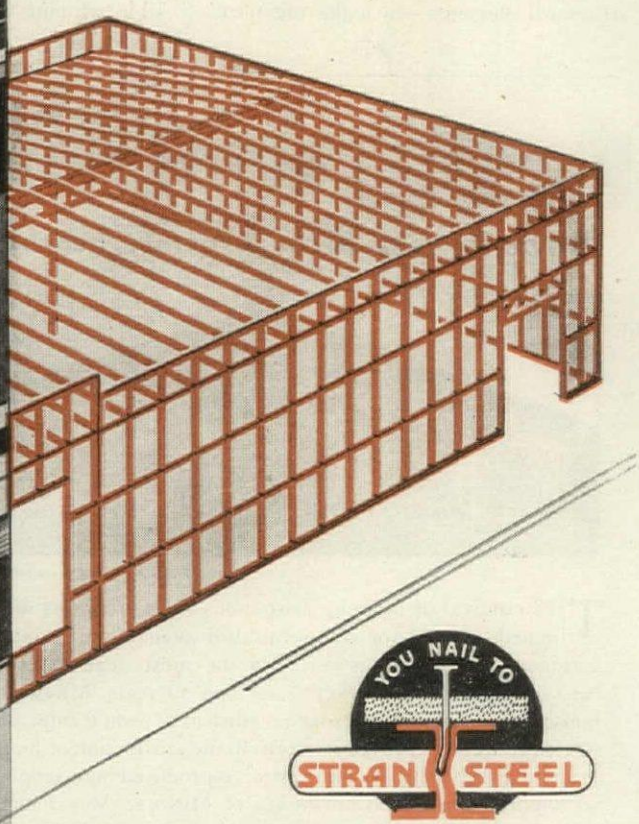
When You Design with STRAN-STEEL

You Give More . . . and Get More

When you design that new store, home or apartment building around a framework of Stran-Steel you give the future owner an unwritten guarantee based on a combination of steel permanence, increased fire-safety, and freedom from warp, sag and rot. At the same time, you strengthen your reputation for dependability and progressiveness, which, in turn, means additional business and profits for you.

Enterprising architects and contractors are thinking today in terms of Stran-Steel for the buildings of tomorrow . . . envisioning the ease and speed with which buildings framed with this uniform, precision material will be erected. For Stran-Steel is an ideal material with which to work. It's light, rustproofed, and features a patented nailing groove for quick and easy attachment of collateral materials.

Proved in more than one hundred and fifty thousand wartime "Quonset" buildings, Stran-Steel is ready to take its deserved place in the vanguard of today's quality building materials.



GREAT LAKES STEEL CORPORATION

STRAN-STEEL DIVISION • 37th FLOOR PENOBSCOT BUILDING • DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

(Continued from page 212)

tage — not equalled by the newer and more permanent adhesives — of being usable at temperatures as low as 35° F. And significant as they are, the flexible adhesives display a tendency to "creep" under use. These are all deficiencies of which the adhesive people are thoroughly aware, and their remarkable progress during the war is adequate guarantee that they will eliminate the bugs from all the new super glues.

In general, adhesives have three immediate applications to construction:

▸ As a sealer (mastic or caulking). It is used here to cover or seal the joint, not to form a strong glue line. Qualities like acid- or water-resistance are more important here than strength.

▸ As a cement for attaching subsidiary materials to the main structure. Wallpaper, linoleum, tile, carpets, canvas decking. Here the glue line must have reasonable strength but permanent resistance to moisture, acids, fungus, etc., is still paramount.

▸ As a true adhesive for compound structural elements—to make big parts out of little ones. Here a strong glue line is decisive, long life imperative.

FORUM readers do not need to be reminded that, in wood construction, laminated members are preferable to the best solid lumber; or that, in poor lumber, lamination is essential. But there is the additional fact that the war's lavish demands on our timber supplies have probably made the scarcity of good lumber and the high price of all of it a semi-permanent condition. This fact gives added importance not only to plywood but to laminated members of all sorts and sizes — none of which are possible without the new adhesives.

Courtesy Plaskon Div., Libbey Owens-Ford

MODERN ADHESIVES have made possible such advanced structures in wood as this midwestern dairy barn. Laminated hinged arches and plywood surfacing are both phenolic-bonded.

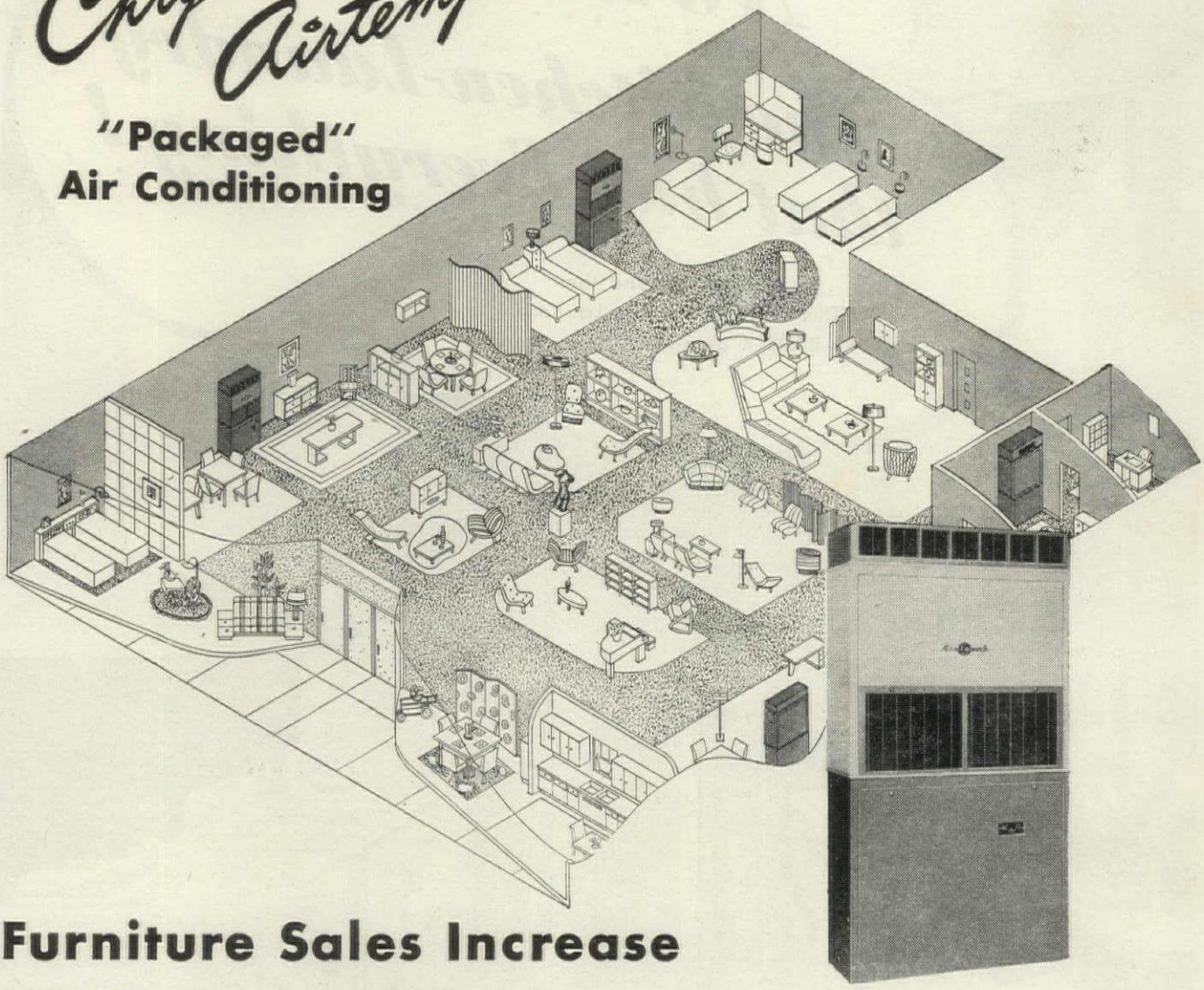
LAMINATED LUMBER COMING UP

A simple but vastly significant example of this trend is to be found in a new board being produced by TVA. Using lumber of such low grade that it cannot be sold as lumber on the ordinary market, the Authority is turning out a floor board 12 by 1 in., 28 to 30 ft. in length, which is superior in some ways to the best solid flooring. This is done by sorting the wood into grades, and sawing all of it into 1 by 4 in. planks with dressed edges. The best grade planks are then ripped in half and these ½ by 4 in. slabs are used, best

(Continued on page 220)

Chrysler Airtemp

"Packaged" Air Conditioning



Furniture Sales Increase With Air Conditioning

Customers enjoy the comfort and refreshing atmosphere of air conditioning—and particularly in furniture stores, where considerable time must be spent in the selection of merchandise. Furniture retailers, alert to the advantages, will want you to specify air conditioning in their modernization and building program because the records show: (1) customers stay longer and spend more, (2) delicate upholstery fabrics stay clean and fresh because dust, dirt and hand perspiration of customers are practically eliminated, and (3) the efficiency of employees is increased materially.

The records also show that "Packaged" Air Conditioners, pioneered by Chrysler Airtemp, are ideal in meeting the temperature-humidity requirements of most stores. Flexible, quiet, trouble-free, easy to install singly or in multiple, Chrysler Airtemp "Packaged" Air Conditioners are winning the praises of leading retail merchants. You can count on Chrysler Airtemp "Packaged" Air Conditioners, with the hermetically sealed compressors, for low upkeep and operating cost, too. • Airtemp Division of Chrysler Corp., Dayton 1, O. In Canada, Therm-O-Rite Products, Ltd., Toronto, Ont.

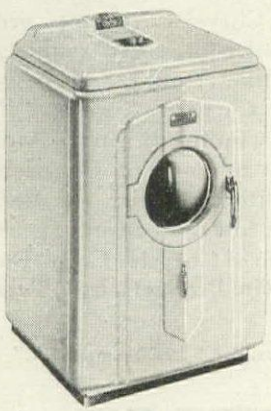
nvest in Your Future—Buy Victory Bonds—"Listen to the music of Andre Kostelanetz Thursdays, C.B.S., 9.00 p.m., E.S.T."

CHRYSLER AIRTEMP

HEATING • COOLING • REFRIGERATION

NOW! The Kitchen-Laundry that has Everything!

. . . centered around the
BENDIX automatic Home Laundry
and the BENDIX automatic Home Ironer



DE LUXE MODEL

• Mrs. America will insist on a step-saving kitchen and a modern laundry which naturally includes a BENDIX automatic "washer." Here's why: The BENDIX washes, rinses and dampdries clothes, then cleans, empties, and shuts itself off—all automatically!

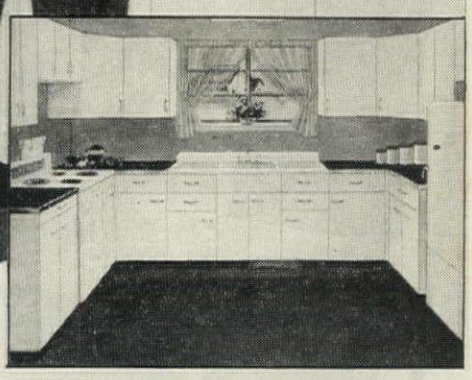
In many homes the kitchen and laundry will be combined for space reasons. That's another reason why the BENDIX merits first consideration. It takes only 4 square feet of floor space—has a counter-high, porcelain top and is shallow enough to provide space for plumbing connections behind. It fits perfectly into modern planning. So does the recently announced BENDIX automatic Home Ironer.

To get complete architectural data on BENDIX automatic home appliances, consult your Bendix Distributor. Or, if you prefer, you may write us direct.

Design by L. Morgan Yost, A.I.A.

BENDIX automatic Home Laundry

BENDIX HOME APPLIANCES, INC., SOUTH BEND, INDIANA · PIONEERS AND PERFECTORS OF THE AUTOMATIC "WASHER"



Simple to specify . . . in seconds!

AMERICAN kitchens call for no special plans, wiring or plumbing. And they are installed without extra work for you.

AMERICAN kitchens are truly modern in design. The functional beauty of sparkling white with chrome hardware is complemented by the black trim and black linoleum work surfaces. Raymond Loewy is our designer.

AMERICAN kitchens are all-steel and built in "skyscraper" construction to last a lifetime. The acid-resistant glow-finish realizes a new world in easy cleaning for your client.

AMERICAN kitchen sinks, base cabinets and wall cabinets are the product of twelve years' research, and contain work-saving features to fit *any* kitchen.

AMERICAN kitchens will suit every budget because the huge facilities and trained craftsmen make possible complete kitchens of highest quality . . . priced only a shade more than a new refrigerator!

These and other AMERICAN features make your client your enthusiastic booster when you specify . . .

American KITCHENS

CABINETS • SINKS • DISHWASHERS • DISPOSALS

New Time-Saving File Folder FREE!

AMERICAN CENTRAL MFG. CORPORATION
Dept. 11AF, CONNERSVILLE, INDIANA

Send me without cost or obligation your new File Folder, A.I.A. File No. 35-C-12, entitled *Kitchen Units*. I understand that this folder contains complete authentic information, specifications, photos and drawings of modern kitchens and how to plan them.

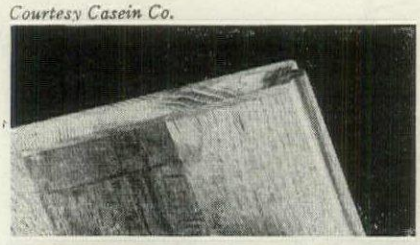
*Name*_____

*Address*_____

*City and State*_____

(Continued from page 216)

Courtesy Casein Co.



WOOD SO POOR that it could not be marketed is here converted into flooring which, in many respects, is superior to solid stock. The adhesive used is a phenolic resin.

side topmost, to surface a 1 by 12 in. built-up core of the lower grade lumber. Using a phenolic resin, the whole assembly process is mechanized to produce 10 lin. ft. per minute.

This technique can obviously be applied to the production of durable, high-grade stock for railings, fences, columns, etc. With careful finger-splicing, it can be applied to outside doors and door saddles. Current practice in adhesives is to take full advantage of the new waterproof bonds, even in interior work. Wallboards, veneered furniture and furniture joints — even when protected from the weather — can be adversely affected in the glue line by washing, mopping, condensation of high moisture content in the air.

Such applications of the resins are unequivocably serviceable. But it must be remembered that they are "factory" applications. In their present state, none of the resins and few of the other glues can be easily applied on the job. Hence where nails, screws and bolts will do a reasonably satisfactory job, it would be a waste of time and skill to try to substitute an effective glue bond. Site gluing of interior and exterior surfacing materials to wood studs was fairly extensive in wartime construction; for temporary buildings it was successful. But big timber fabricators no longer recommend field gluing of any sort—though the cold-setting resins are theoretically suitable — because of the hazards of site fabrication.

But the moment the fabrication process is shifted to shop conditions, the picture alters radically. The new resins are essential to really weatherproof plywoods; in prefabrication they promise equally weatherproof panels, roof and floor units. Up to date, the glues—new and old—have always been associated with wood. With their bonding properties, the new adhesives seem likely to move into far larger fields. Composite elements of wood, glass, metal, plastics and rubber are a certainty. Under controlled shop conditions, these can in turn be assembled into larger elements —whole houses, in fact.

Where this revolution in assembly and prefabrication methods will start — or, for that matter, end—is anybody's guess. As it enters the postwar years, the building field has never been in greater flux. The small town lumber dealer, the big operative builder or the far sighted architect—all of them will be quick to see the promise of the new adhesives. And somewhere along the line, the log jam will crack. The super glues will have written finis to the centuries-long supremacy of the nail, the bolt and the screw in building.

ADHESIVE MANUFACTURERS CONSULTED

American Cyanamid Co., New York, N. Y.
Bakelite Corporation, New York, N. Y.
Casein Co. of America, New York, N. Y.
Catalin Corporation, New York, N. Y.
Central Process Corp., Forest Park, Ill.
Cordo Chemical Co., Norwalk, Conn.
Durez Plastics & Chemicals, Inc., N. Tonawanda, N. Y.
Durite Plastics, Inc., Philadelphia, Penn.
B. F. Goodrich Corp., Akron, Ohio.
I. F. Laucks, Inc., Lockport, N. Y.
Le Page's, Inc., New York, N. Y.
Monsanto Chemical Co., Springfield, Mass.
Miracle Adhesives Corp., Newark, N. J.
Pennsylvania Coal Products Co., Petrolia, Penn.
Plaskon Division, Libbey-Owens-Ford Glass Co., Toledo, Ohio.
Reichold Chemicals, Inc., Detroit, Mich.
Resinous Products & Chemicals Co., Inc., Philadelphia, Penn.
U. S. Plywood Corp., New York.

RARIN' TO GO!

Conditioned by four hard fighting years, U.S. Wires and Cables are back in civilian gear.

Tough and reliable as they were at the start, they're even tougher and more reliable today.

The war experience proved the most valuable in all our wire-making history. Unpredictable developments in fighting methods demanded changes in almost every type of wire and cable.

Under the spur of necessity, U. S. Rubber Technicians met every challenge. The normal progress of many years was accomplished in a few.

The Architectural Engineer is offered a new and complete line. This includes Building Wires with rubber, synthetic and plastic insulations. Each has been improved. Laytex, for instance, is smaller in diameter, lighter in weight. Other important items are Lead Cables, the Royal Line of Rubber-Jacketed, Portable Cords and Cables, Non-Metallic Cables, Flexible Cords, etc.

U. S. ELECTRICAL WIRES AND CABLES

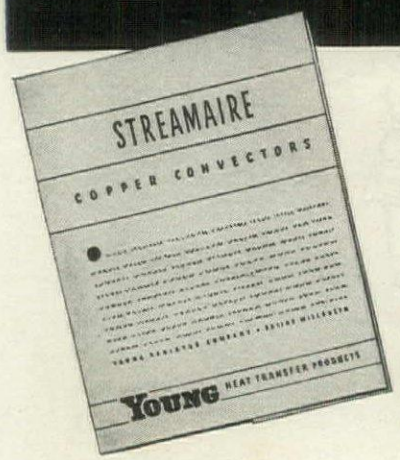
Serving Through Science

Listen to "Science Looks Forward"—new series of talks by the great scientists of America—on the Philharmonic-Symphony Program. CBS network, Sunday afternoon, 3:00 to 4:30 E.S.T.

UNITED STATES RUBBER COMPANY

1230 SIXTH AVENUE • ROCKEFELLER CENTER • NEW YORK 20, N. Y.

"Streamaire" Convectors
NOW STANDARDIZED IN 4 TYPES



Just off the press, this brand new folder..."Streamaire" copper convectors by Young ... has full information on capacity ratings, complete list of sizes of each style, easily read dimensional drawings and specifications. It can be had for the asking. Write today.

● Thousands of installation headaches will be avoided by architects, engineers, and contractors who wisely specify Young "Streamaire" Convectors in one of the four convenient standard types pictured at the right. They can be ordered directly from factory stocks which are being built up as rapidly as raw materials make it possible. These four designs have been scientifically engineered to satisfy a wide range of convector radiation requirements. Easy to order and easy to install, they can be depended upon to provide all of the warm comfort and even temperatures your customers expect. Young convectors are furnished with chain control dampers that make it easy to regulate flow of heat. Write for the pamphlet "Streamaire" Copper Convectors by Young and find out more about this conveniently standardized line of heating convectors.

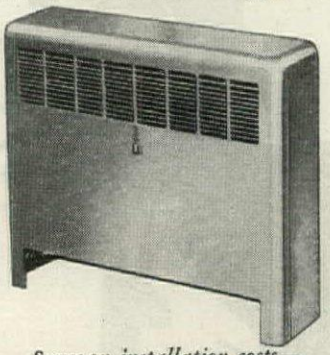
YOUNG

HEAT TRANSFER PRODUCTS

OIL COOLERS • GAS, GASOLINE, DIESEL ENGINE COOLING RADIATORS • HEAT EXCHANGERS • ENGINE JACKET WATER COOLERS • UNIT HEATERS • CONVECTORS • CONDENSERS • EVAPORATORS • AIR CONDITIONING UNITS • HEATING COILS • COOLING COILS • AND A COMPLETE LINE OF AIRCRAFT HEAT TRANSFER EQUIPMENT

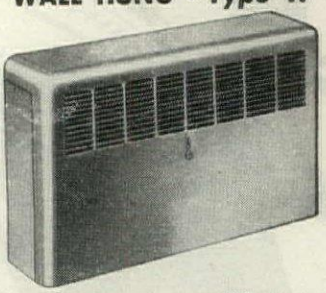
YOUNG RADIATOR COMPANY
DEPT. 155-L • RACINE, WISCONSIN

FREE STANDING • Type C



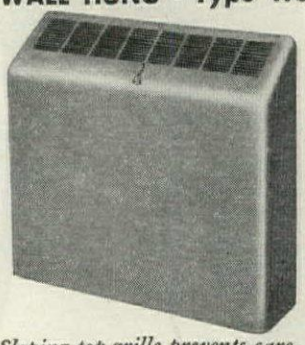
Saves on installation costs—no wall recesses are required.

WALL HUNG • Type W



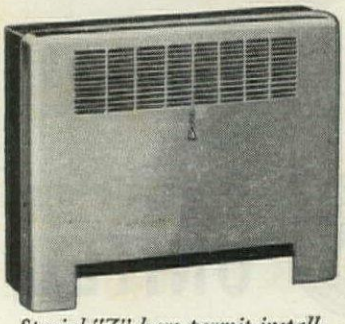
Heating elements accessible by easy removal of one piece front and top.

WALL HUNG • Type WS



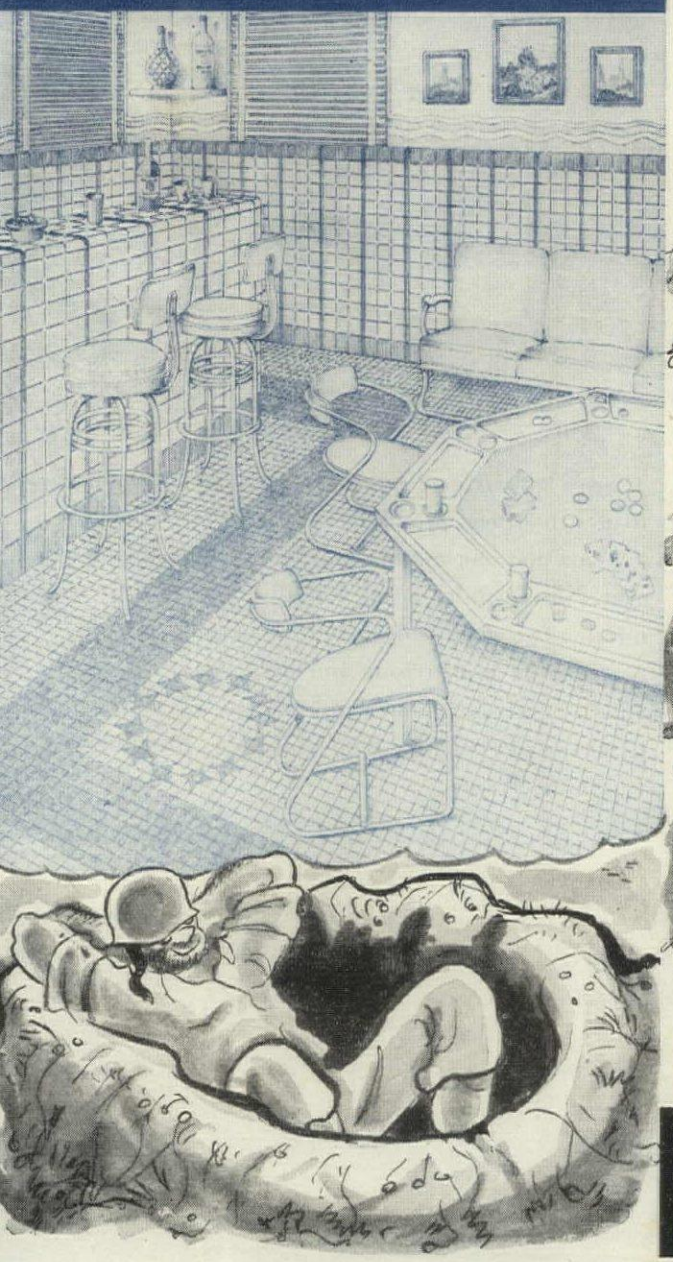
Sloping top grille prevents careless blocking of air circulation.

PARTIALLY RECESSED • Type S



Special "Z" bars permit installation before or after plastering.

★ What they dreamed about



"It ain't in the cards now, but when I get home, I'm gonna have me a snazzy Suntile recreation room."

★ WHAT THEY SAW...

For quick release from coat and tie manners, there is nothing like a Suntile recreation room . . . where floor and walls can take the abuse of a stag party. Is it any wonder that service men might look forward to a Suntile recreation room of their own?

Unlike ordinary play rooms, the original beauty of a Suntile recreation room is not impaired by the wear and tear of continuous use. Suntile is stainproof, fireproof, durable. It is unaffected by dryness or moisture. And it is amazingly easy to clean and keep clean.

To assure lifetime satisfaction for your clients, specify the color-balanced beauty that is Suntile. It will soon be available again.

Suntile

Bright with color-Right for life

Suntile

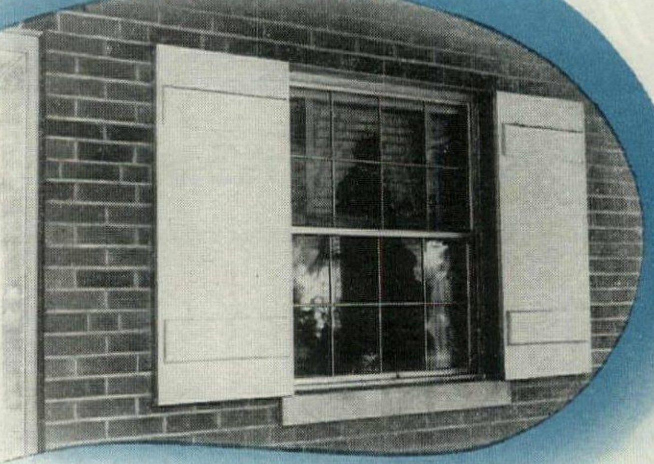
Best Beyond Measure for Lifetime Pleasure

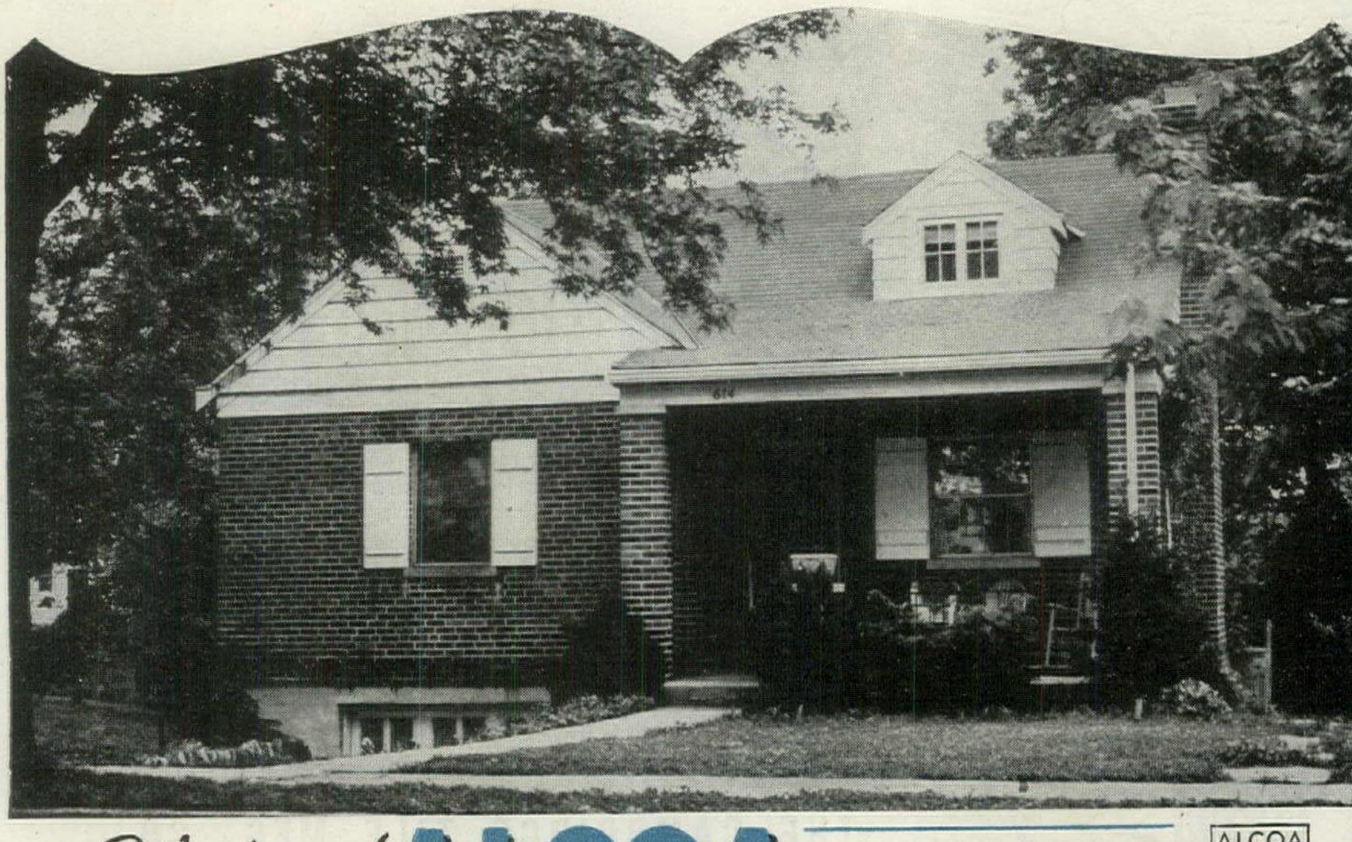
THE CAMBRIDGE TILE MFG. CO.

MEMBER OF THE PRODUCERS' COUNCIL

CINCINNATI 15, OHIO

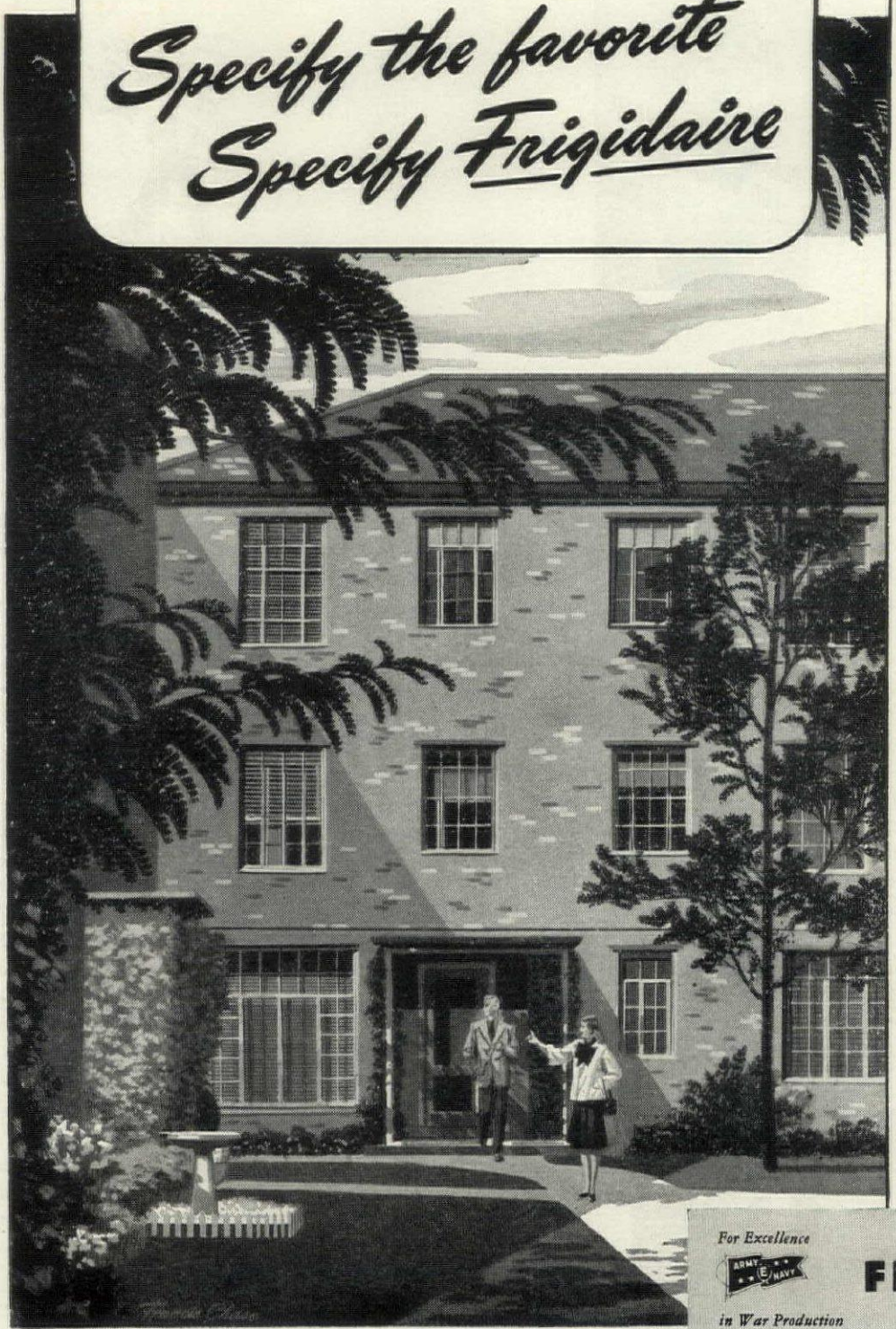
★ THIS SERIES IS BASED ON AN IDEA SUGGESTED IN LETTERS WRITTEN BY CPL. LOUIS A. PERKOVIC OF THE ARMY ENGINEERS IN THE SOUTH PACIFIC. OUR SERVICE MEN ARE BUYING AND WILL CONTINUE TO BUY VICTORY BONDS. AS CIVILIANS, LET'S BUY OUR SHARE AND HELP BRING THE BOYS HOME SOONER.





Whether it's electric kitchen equipment for a single home or a huge apartment development

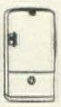
Specify the favorite Specify Frigidaire



CHATHAM PARK —Chicago's Community of Apartment Homes—five years ago decided on electric equipment for its 554 kitchens, and selected Frigidaire electric refrigerators equipped with the Meter-Miser mechanism, and Frigidaire electric ranges. "We have spent but a few cents on maintenance . . . electric bills have been surprisingly low," writes the management. "Frigidaire gets our OK without reservation."

Frigidaire Products

FOR HOMES AND APARTMENTS, OFFICES AND BUSINESS ESTABLISHMENTS



Household Refrigerators —in all sizes and models —including the famous Frigidaire Cold-Wall.

Electric Ranges—from small apartment models to full size deluxe cabinet models.

Fully-automatic Electric Water Heaters—in many capacities and models.

Home Freezers for freezing foods and storing frozen foods in the home.

Portable self-contained type Air Conditioners—for window installation.

Home Air Conditioners — complete in a single package.

Water Cooling equipment for all applications.

Self-contained, large capacity, Air Conditioners.

Refrigeration Cooling Units and Condensing Units for large refrigerators.

Whatever your requirements — home appliances, commercial refrigeration or air conditioning — consult your Frigidaire Dealer. He will be able to tell you about the kind of equipment that will meet your needs most effectively . . . give you the latest information on when this equipment may be available. Find his name in classified section of telephone book. Or write Frigidaire, 429 Amelia St., Dayton 1, O. In Canada, 412 Commercial Rd., Leaside 12, Ont.

BACK THE VICTORY LOAN!

For Excellence in War Production

ARMY-NAVY E

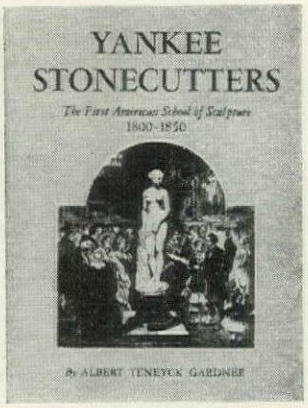
FRIGIDAIRE

made only by

GENERAL MOTORS

COMMERCIAL REFRIGERATION • AIR CONDITIONERS
BEVERAGE, MILK, AND WATER COOLERS
REFRIGERATORS • RANGES • WATER HEATERS
HOME FREEZERS • ICE CREAM CABINETS

BOOKS



Review this page

Review page 228

Review page 228

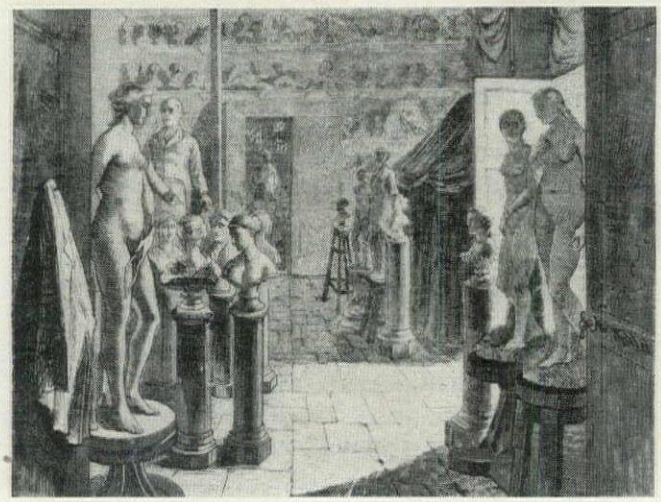
Review page 232

YANKEE STONECUTTERS: The First American School of Sculpture. By Albert TenEyck Gardner. Published for The Metropolitan Museum of Art by Columbia University Press, New York. 96 pp. including plates. 9 in. by 12¼ in. $4.

"Make me as I am, Mr. Powers," President Jackson said to the sculptor, "and be true to nature always and in everything. It's the only safe rule to follow. I have no desire to *look* young as long as I *feel* old; and then it seems to me, although I don't know much about sculpture, that the only object in making a bust is to get a representation of the man who sits, that it be as nearly as possible a perfect likeness. If he has no teeth then why make him *with* teeth?" Hiram Powers, the Yankee sculptor, recorded this conversation in his diary with obvious approval. It was exactly his approach to the problem of portraiture and the basis of his phenomenal success as a sculptor. A Boston critic, with unconscious irony, dubbed him "the sublime mechanic": had he not invented machines for imparting to the surface of the marble "a delicate 'roughness,' which so perfectly counterfeits the porosities and wrinkles of the skin as to produce the impression of excessive and minute labor?"

In many ways, Hiram Powers was merely typical of a whole school of American sculptors in the years from 1800 to 1850. And it is these men who are the subject of Mr. Gardner's illuminating new book. Powers himself could scarcely be called a realist. His busts might be authentic, wrinkle for wrinkle and pouch for pouch; but his reputation flourished likewise upon such "ideal" figures as his *Greek Slave*, whose marbelline nudity was clothed in both classic allusion and endorsements from the clergy. His idealism as a patriotic American sculptor never for a moment dimmed his sharp sense of business (the *Slave* netted the astonishing sum of $23,500 when exhibited in the States), nor his perpetual interest in gadgets. He had several inventions which he thought "would pay well if exploited."

The studio of the sublime mechanic.



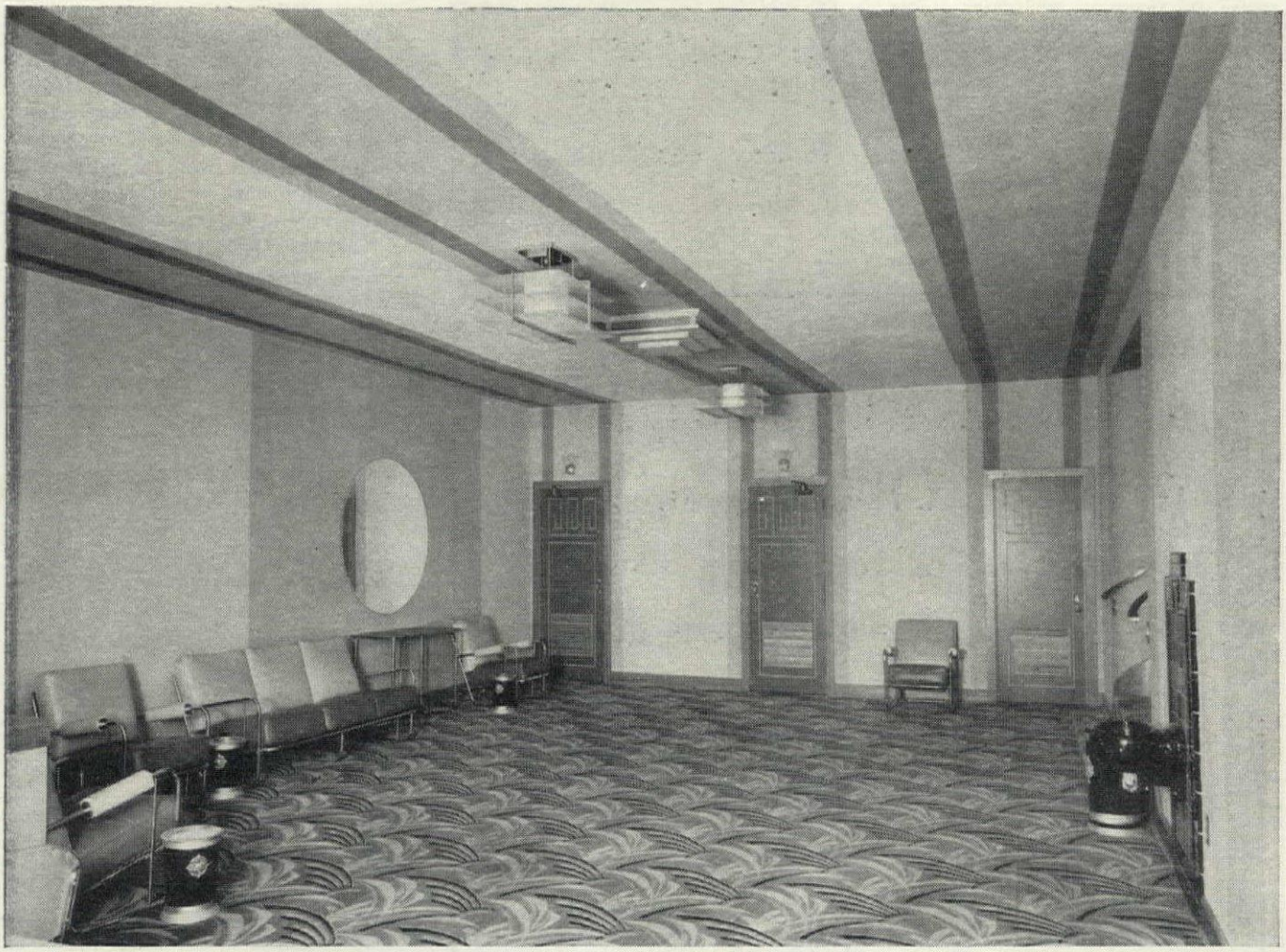
For those who have studied histories of art and architecture, and are inclined to regard themselves as well informed on the subject, Mr. Gardner's book will come as a very pleasant and stimulating surprise. For he deals with a period of American art which is practically unknown, especially to Americans. And if he succeeds in throwing new light into forgotten corners, it is precisely because he does not make the error common to most art historians of evaluating art forms on the narrow basis of personal esthetic standards. His researches have uncovered the astonishing fact that in the first half of the nineteenth century alone, America supported some 185 professional sculptors; that many of these men were regarded as great artists, not only by the American public but by the world at large; and that American society was generous in its subsidy — Powers got $19,000 for his monument to Webster, William Story $40,000 for a figure of Chief Justice Marshall, Randolph Rogers $75,000 for a Civil War monument in Michigan!

Yankee Stonecutter is a study of the artistic climate which produced such conditions. Brief as it is, it manages to tell a lot and to suggest a great deal more about the development of American sculpture. These artists — like the currently rediscovered painters of the Hudson River Valley School — sprang from the very warp and woof of early American society. They show all the characteristic strengths and weaknesses of our history. That few of them appear as truly great artists today is really beside the point. What is more important is the proof they offer that our interest and experience in art is far more extensive than has been commonly supposed.

Mr. Gardner has struck a lode of rich and suggestive material — one which merits further investigation by himself and by others.

(Continued on page 228)

FIREPROOF ACOUSTICAL TREATMENT FOR *FIREPROOF* BUILDINGS



IN specifying the acoustical material for schools, theaters, office buildings, hospitals and other buildings where the construction is to be as fireproof as possible, built-in fire protection for the acoustical ceilings is equally as important as fireproof floors.

Gold Bond Macoustic, an all-mineral acoustical plaster combines all the requisites that could be desired in an acoustical material. It is fireproof, very pleasing in appearance and provides a comparatively smooth monolithic surface that harmonizes with any type of wall treatment. It is applied by plasterers with regular tools and the surface is troweled like ordinary plaster.

Whether the problem is perfect hearing conditions for a theater or auditorium, or noise reduction for a busy office or deluxe restaurant, Macoustic with its high sound absorption at all frequencies provides the answer.

Macoustic is permanent and can be cleaned with a hand vacuum cleaner. It can easily be redecorated by spraying with Sunflex or any water thinned paint without any appreciable reduction in sound absorption.

Supplied in the natural color (oyster white) also ivory, cream and buff. For complete information, see Sweet's or write National Gypsum Company, Buffalo 2. N. Y.

BUILD BETTER WITH

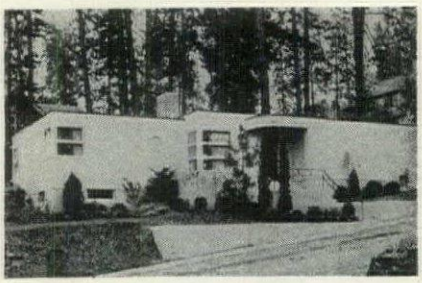
GOLD BOND

LATH • PLASTER • LIME • METAL PRODUCTS • WALL PAINT • INSULATION • SOUND CONTROL • WALLBOARD

(Continued from page 226)

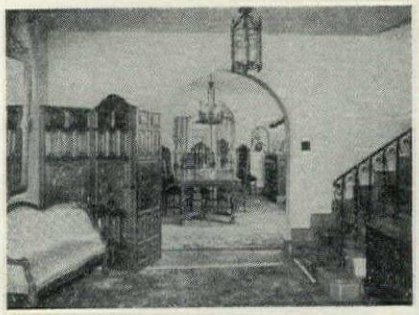
PLANNING YOUR HOME FOR BETTER LIVING. By Clarence W. Dunham, C. E. and Milton D. Thalberg. Whittlesey House, New York. 278 pp. Illustrated. 10½ in. by 7¼ in. $4.00.

Purporting to present "an unbiased picture of what has to be considered in the planning of a house," this extraordinarily dull, book-length manual of real estate and style should have been written a decade ago if it was written at all. It runs the gamut of house design from Colonial to French Provincial. Occasionally a "modern" house creeps



into its pages, but the white plaster walls and slot-like windows have little relation to contemporary architecture. One can only surmise that the authors have been asleep or incommunicado for some years since they are happily oblivious to the real progress made in designing homes for modern living. Messrs. Dunham and Thalberg are still agog over such simple discoveries as: "Openings sometimes can be used without doors" (p. 53) and "If there is to be a Governor Winthrop desk, or one that is similar, in your living room give it the benefit of placing it beside a window that will be at the left of anyone seated at the desk." (p. 69).

Some use could be made of the book as a guide to property buying, financing, and legal services which are dealt with at length. However, to glean this information it is necessary to wade through an undue amount of sentimental muck

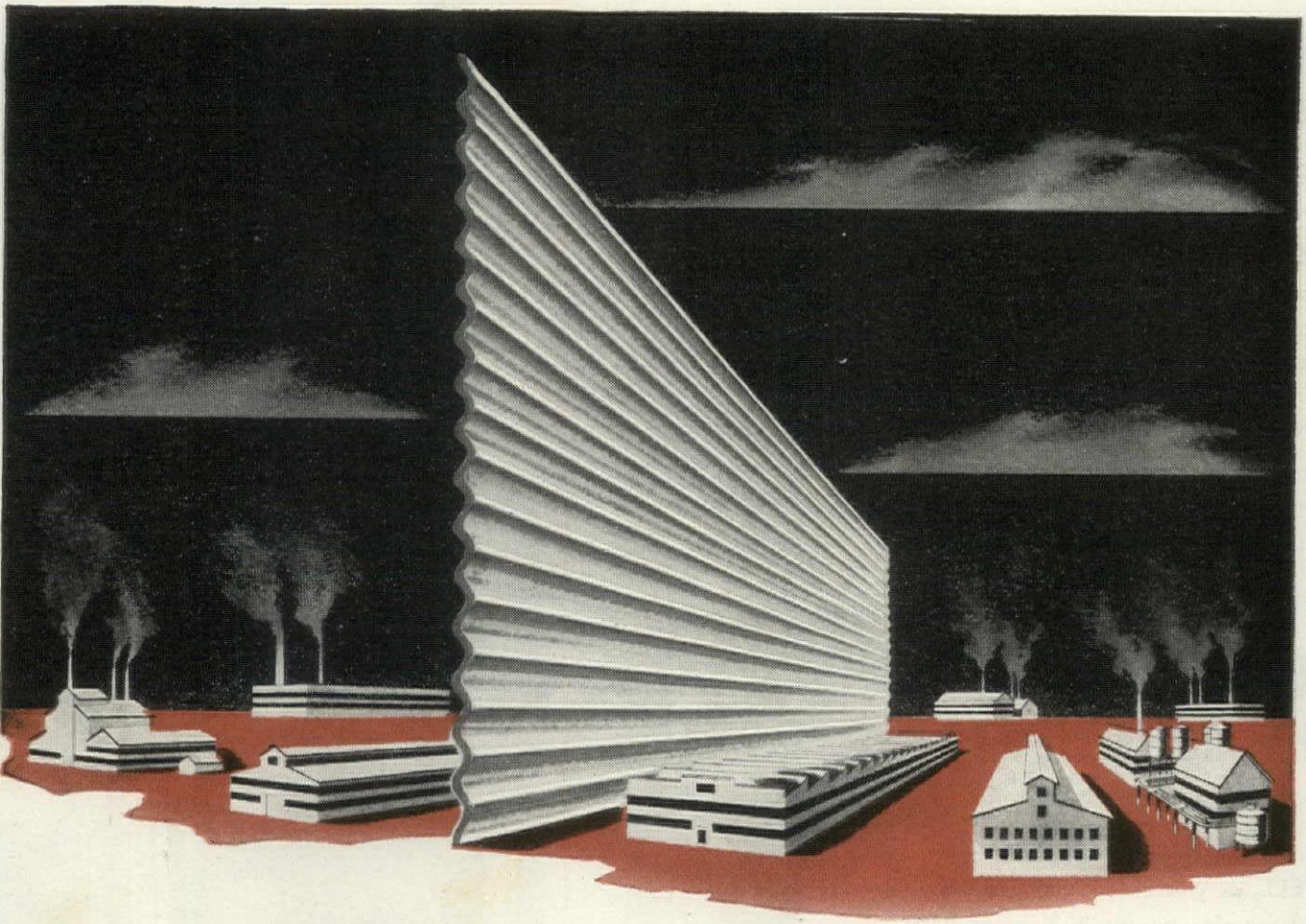


concerning home ownership which presupposes a not-very-bright public accustomed to calling its mother "Mom." We suspect that one of the authors, Mr. Thalberg, Advertising Manager of the Cosa Corporation, is selling "home" as he would sell jig borers to his customers. His partner in crime, Mr. Dunham, Associate Professor of Civil Engineering at Yale University, should know better.

AN APPRAISAL METHOD FOR MEASURING THE QUALITY OF HOUSING: A Yardstick for Health Officers, Housing Officials and Planners. Part I. American Public Health Association, Committee on the Hygiene of Housing. New York. 72 pp. $1.00.

Entering the housing field from the direction of public health, the APHA's Committee on the Hygiene of Housing has always been able to contribute a certain novel freshness to the subject. This springs from the fact that, of all approaches to housing, that of health is the most comprehensive as well as perhaps the most critical. It has long been a truism that there is a sinister connection between bad housing and bad health. But this connection is often quite surprisingly difficult to establish in specific cases. The Committee has, from

(Continued on page 232)



It comes with maintenance *built-in!*

IT'S REALLY TOUGH! Careystone is made of two of the most durable materials known—asbestos and Portland cement.

GOES ON FAST! Applying as much as 35-square-feet-at-a-clip cuts erection time to the bone.

Careystone Corrugated Asbestos-Cement Roofing and Siding carries its own maintenance . . . the protection goes clear through . . . no protective treatments are required.

It is cutting maintenance costs to the bone on factories, school buildings, chemical plants, railroad buildings, hangars, warehouses . . . and many other types of buildings exposed to industrial fumes or severe atmospheric conditions.

There's no wear-out to Careystone. The low first cost is the last. It is nearly 100% salvable . . . can be reused in new construction.

For engineering, erection or performance data on Careystone, consult your nearest Carey Branch or write—

PROTECTION GOES CLEAR THROUGH! No coatings. Structural and protective material are one.

WON'T BURN. It's naturally fireproof. Won't rot, rust or corrode. Ordinary industrial fumes or salt air won't faze it.

THE PHILIP CAREY MANUFACTURING CO.

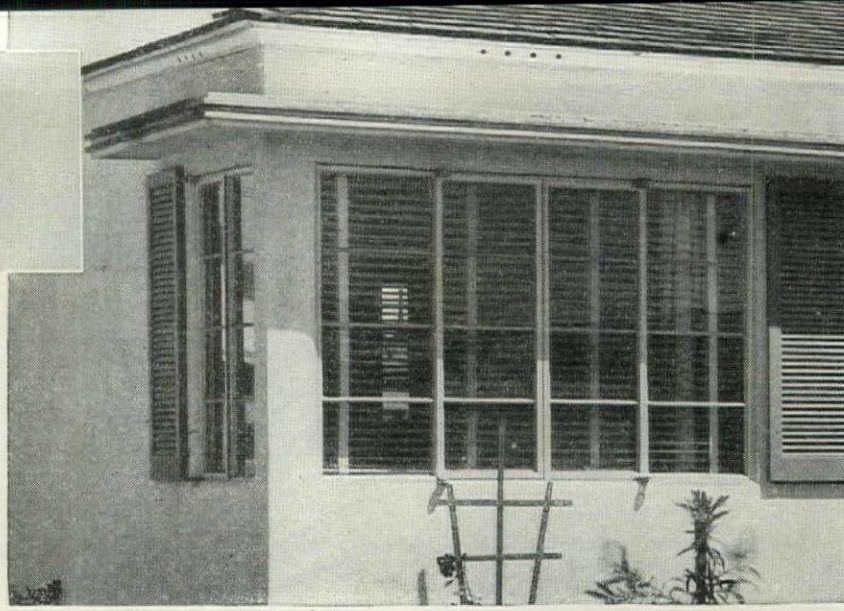
LOCKLAND, CINCINNATI 15, OHIO

IN CANADA: THE PHILIP CAREY CO., LTD. OFFICE AND FACTORY: LENNOXVILLE, P. Q.

Careyduct • Industrial Insulation • Rock Wool Insulation • Asbestos Shingles and Siding • Asphalt Shingles and Roofings
Built-up Roofing • Roof Coatings and Cements • Waterproofing Materials • Asphalt Tile Flooring • Pipeline Felt
Expansion Joint • Asbestos Wallboard and Sheathing • Corrugated Asbestos Roofing and Siding • Miami-Carey Bathroom Cabinets and Accessories

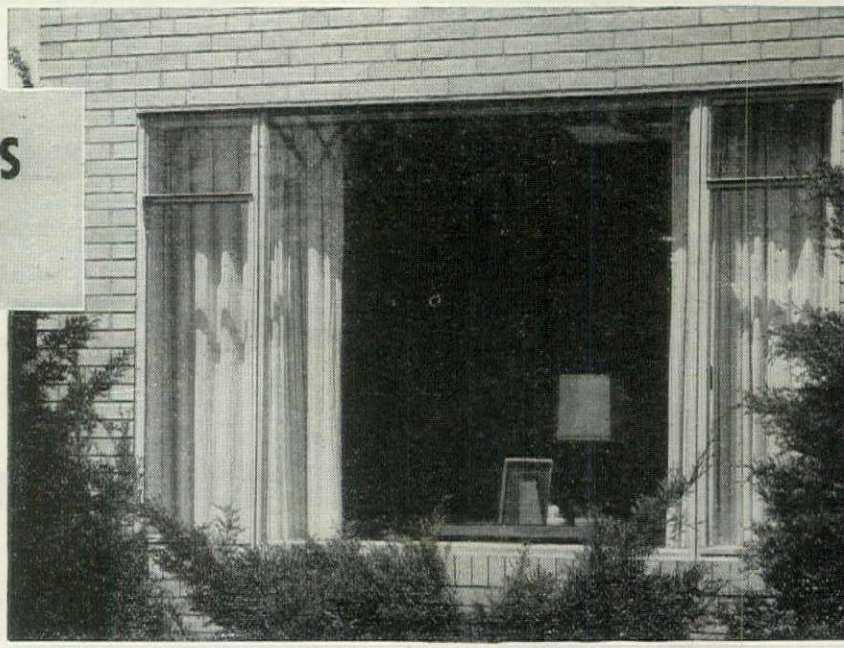
WHAT WINDOW COSTS THE LEAST?

STEEL! In steel casements the initial cost is the *final* cost. In other windows there are hidden costs you are likely to overlook—hardware, accessories, additional labor costs, etc. So save on window costs... specify Ceco *Steel* casements!



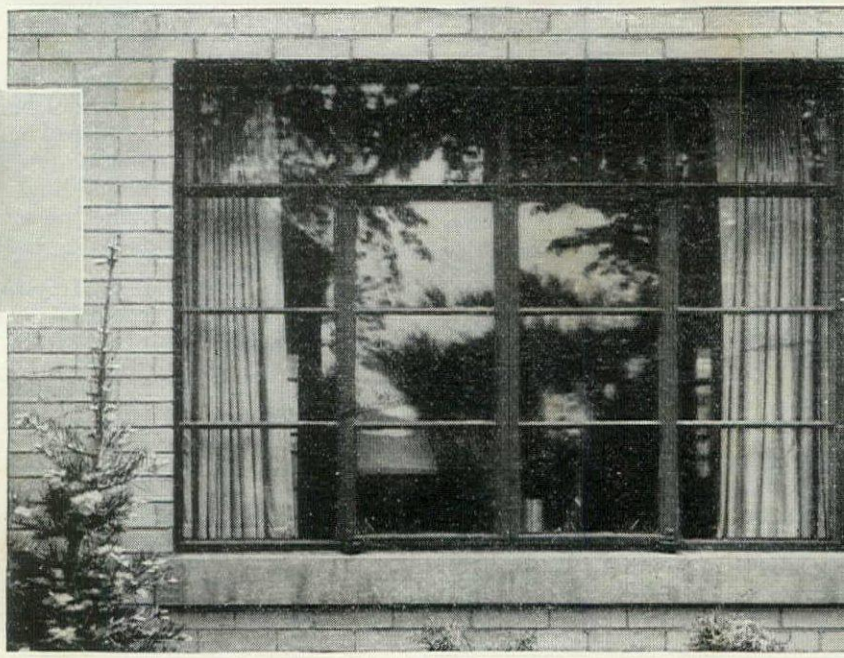
WHAT WINDOW ADMITS THE MOST LIGHT?

STEEL, as you know! Slender frames and muntins permit 30% more glass area. Steel casements flood homes with light, and fresh air . . . completely control drafts. For Cape Cod, or Modern, Ceco steel windows give more light and ventilation!



WHAT WINDOW COSTS THE LEAST TO INSTALL?

STEEL. For Ceco Steel windows come almost completely assembled. Just need fitting, hanging and painting. And steel windows are easy to install, too. So always specify Ceco steel for homes, large or small.



Concrete Engineering Division: Meyer Steel forms, adjustable shores and clamps, reinforcing bars, fabric, etc. **Manufacturing Division:** steel windows and doors, metal lath, metal weatherstrip, metal frame screens, steel joists, steel roof deck. **Highway Products Division. Sheet Steel and Wire Division.**

CECO STEEL PRODUCTS CORPORATI

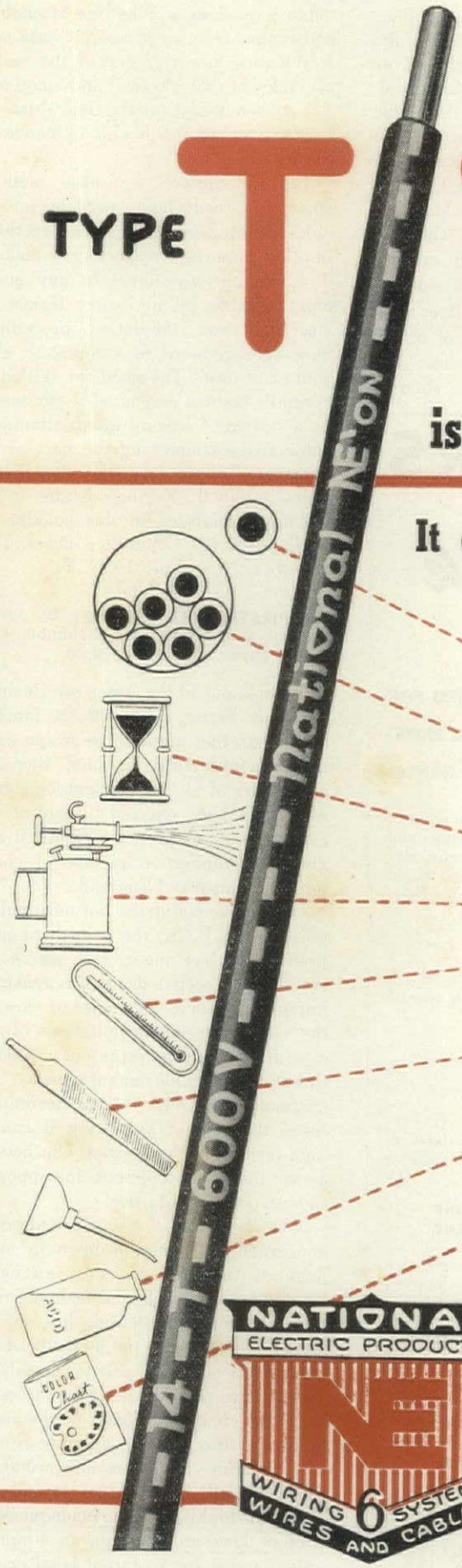
Manufacturing Division—5701 W. 26th St., Chicago, Ill.

ENGINEERING MAKES THE BIG DIFFERENCE IN CECO CONSTRUCTION PRODU

TYPE T NE`ON

(thermo-plastic)

is a superior building wire (600 volts)

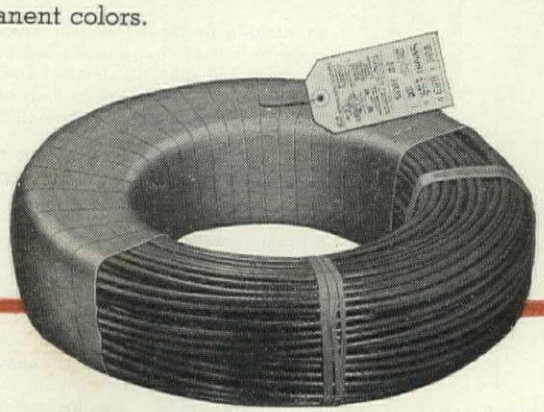


It offers these advantages over other types of electrical wiring:

- Superior dielectric properties, permitting minimum diameters.
- Greater number of Type T wires to the conduit, increasing wattage capacity as much as 212%.
- Better aging properties.
- Exceptional flame resistance.
- Approved for operating temperatures up to 60°C (140°F).
- Abrasion resistant—fibrous coverings unnecessary.
- High resistance to most acids and alkalies, alcohol, gasoline, oils and greases.
- Wide color range for easy identification. Permanent colors.

NATIONAL ELECTRIC PRODUCTS

WIRING SYSTEMS 6 WIRES AND CABLES



Available in all standard sizes up to 2,000,000 CM. Sizes 14 to 4/0 are approved by Underwriters' Laboratories. And for unusually moist locations, specify National Electric Type TW. Engineering data on request.

National Electric
PRODUCTS CORPORATION
Pittsburgh 22, Pa.

(Continued from page 228)

the start, avoided this pitfall by its insistence on hygienic standards for housing sufficiently broad to encompass many subtle factors commonly overlooked.

Most appraisal methods for housing, as typified by that employed in the 1940 Housing Census, confine themselves to a tabulation of the purely physical characteristics of the individual unit itself. Important as this information may be, it overlooks many important factors *outside* the unit which will ultimately affect the health of the tenants: it does not reveal the noise level of the area, the distance to the nearest playground or school, the amount of atmospheric pollution in the neighborhood or the traffic on the street. It is recognition of these factors which distinguishes the new appraisal method evolved by the Committee and described in this booklet. As Dr. C.-E. A. Winslow says: "The filth epidemics of the nineteenth century have been conquered in civilized and relatively prosperous lands like ours. We can now think in terms of health rather than in terms of disease; and from this standpoint . . . the slum of today is no longer a hotbed of cholera and typhus fever as it was 75 years ago. It remains, however, one of the major obstacles to that physical and emotional . . . efficiency and satisfaction which we conceive of as the health objective of the future."

The Committee's appraisal method, which is already being used by several cities, differs from conventional methods in other important respects. To make it of maximum usefulness to any municipal agency, all necessary forms, instructions and tabulation procedures have been reduced to a complete, self-contained unit. The need for skilled or specially trained personnel is eliminated by a system of scoring which eliminates subjective estimates on the part of the observer. Tabulation at the office is likewise simplified. Further details on the technique analyzed in this booklet are available at the Committee offices, 1790 Broadway, New York 19, N. Y.

THE PIRATES WILL GET YOU! By Sylvan Gotshal and Alfred Lief, Columbia University Press. New York. $2.00.

This book, one of the American Business Problems Series, deals with the familiar and frustrating question of design copying in manufactured articles. Basically a summary of U. S. copyright legislation which has been enacted to protect this most illusory of property rights, it also gives a comparative picture of conditions in France and England.

In all three countries, but most noticeably in the U. S., the growth of mass production has made the search for fresh and attractive designs increasingly important from a sales point of view. At the same time, cheap imitations of successful merchandise represent a constant threat to reputable manufacturers. The originator who pays for the design and takes the risk of launching it can be high-jacked by the copyist who bets on a sure thing and undercuts his opponent in both quality and price.

The Pirates Will Get You, although concerned with this problem in every field of manufacture, concentrates heavily on the textile and fashion industries where design stealing has reached its height and where the majority of test cases have occurred. So far legislative checks have proved full of loopholes.

To the creative designer or the manufacturing firm desiring a handy resume of legislation and court interpretations this book will be of value. It will also serve to highlight the inadequacy of present laws and perhaps to stimulate united action for foolproof legal protection. However, although great effort has been taken to make an essentially dry subject more palatable by jazzing up its phrasing, the book holds little interest for any but a specialized audience.

NOW AVAILABLE --

FENESTRA STEEL BUILDING PANELS

Your opportunity to meet the demand for well-built structures in double-quick time

Now you can draw the new Fenestra Building Panels into your plans for roofs, walls, floors, partitions. They are available for contracts you are developing.

They are designed for fast construction —for savings in field labor. Panels interlock easily, firmly.

Fenestra Panels can be vapor-sealed and insulated. They are incombustible. Surfaces are *ready immediately* for application of finish treatments of your choice.

Possible variations in length, depth and gage permit great flexibility in building design. Repeated parallel joint lines provide patterns in keeping with modern architectural trends.

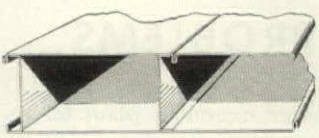
For further information, mail the coupon. And don't hesitate to submit your special application problems to our engineers.

WELL SUITED TO MANY BUILDING USES

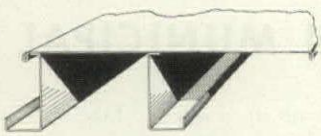
Factories	Commercial Buildings
Superintendent Offices	Stores
Process Enclosures	Offices
Storage Enclosures	Schools
Garages	Hospitals
Gate Houses	Homes

. . . and many others where economical, fast construction of sturdy floors, walls, roofs or partitions is desired.

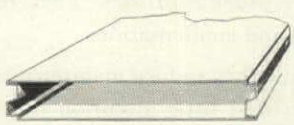
FOUR TYPES



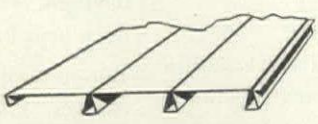
TYPE A. Two channels with top and bottom plate which, with service cover, form two-cell box beam.



TYPE B. One flat surface, two channel-type ribs. Flat side up or down, inside or outside.



TYPE C. Horizontally or vertically, for walls. Normally filled with insulation at the factory.



HOLORIB. Steel Roof Deck with triangular-shape ribs 6" on centers, 1½" deep, for spans to 8'.

Standard width of Type A, B and C Panels, 16", in #20 to #10 gages. Holorib in #20 and #18 gages.

Fenestra
BUILDING PANELS FOR
ROOFS
WALLS
FLOORS

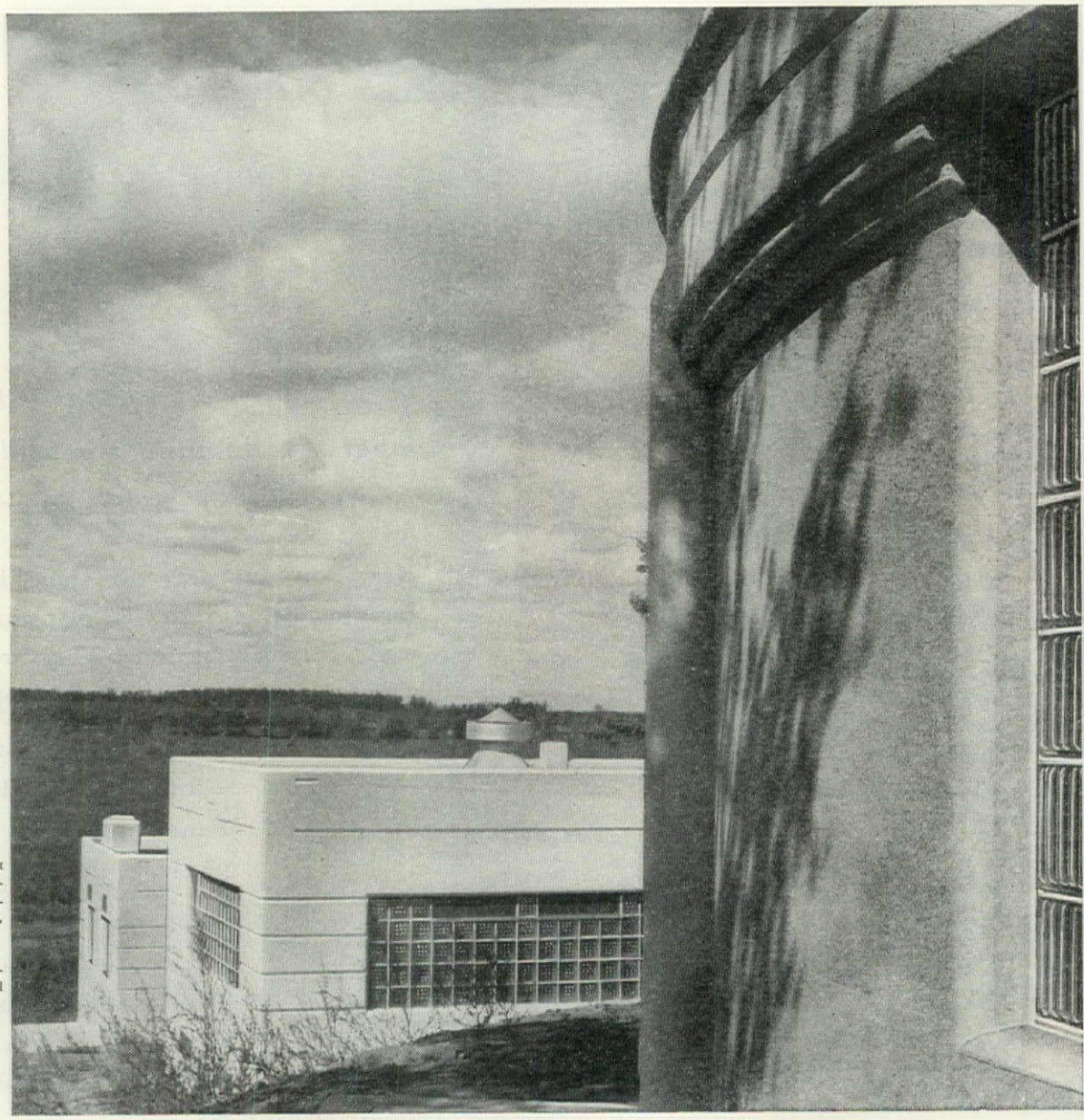
DETROIT STEEL PRODUCTS COMPANY,
Building Panels Division (*formerly Holorib Div.*)
Dept. AF-11, 2252 E. Grand Boulevard,
Detroit 11, Michigan

Please send me, without obligation, information on Fenestra Building Panels.

Name _____

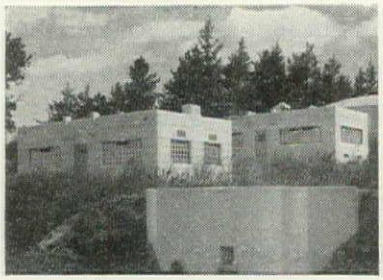
Company _____

Address _____



New Sewage Treatment Plant at Bagley, Minnesota. Engineers—Druar & Milinowski, St. Paul, Minn.

Photographs—Courtesy—the Portland Cement Association.



Panels of Insulux transmit and diffuse light better than ordinary windows yet provide privacy along with light.

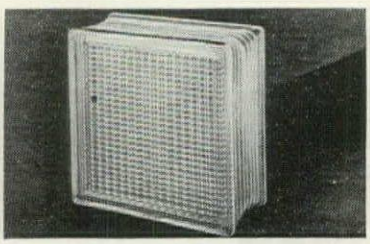
Panels of Insulux do not rot, rust or corrode. And they never need painting.

LIGHT ON MUNICIPAL PROBLEMS

MANY municipal buildings of the future will display lustrous, light-flooded panels of Insulux Glass Block.

And—rightly so!

Insulux is a *practical* as well as a *beautiful* building material. It has many functional uses.



Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials cannot do. Investigate!

Take this sewage treatment plant for example. These panels of Insulux bring in an abundance of softly-diffused natural daylight. They provide privacy. They reduce heat loss and condensation.

But—best of all—they reduce maintenance charges. They need little attention other than occasional cleaning. Painting is never required.

OWENS-ILLINOIS

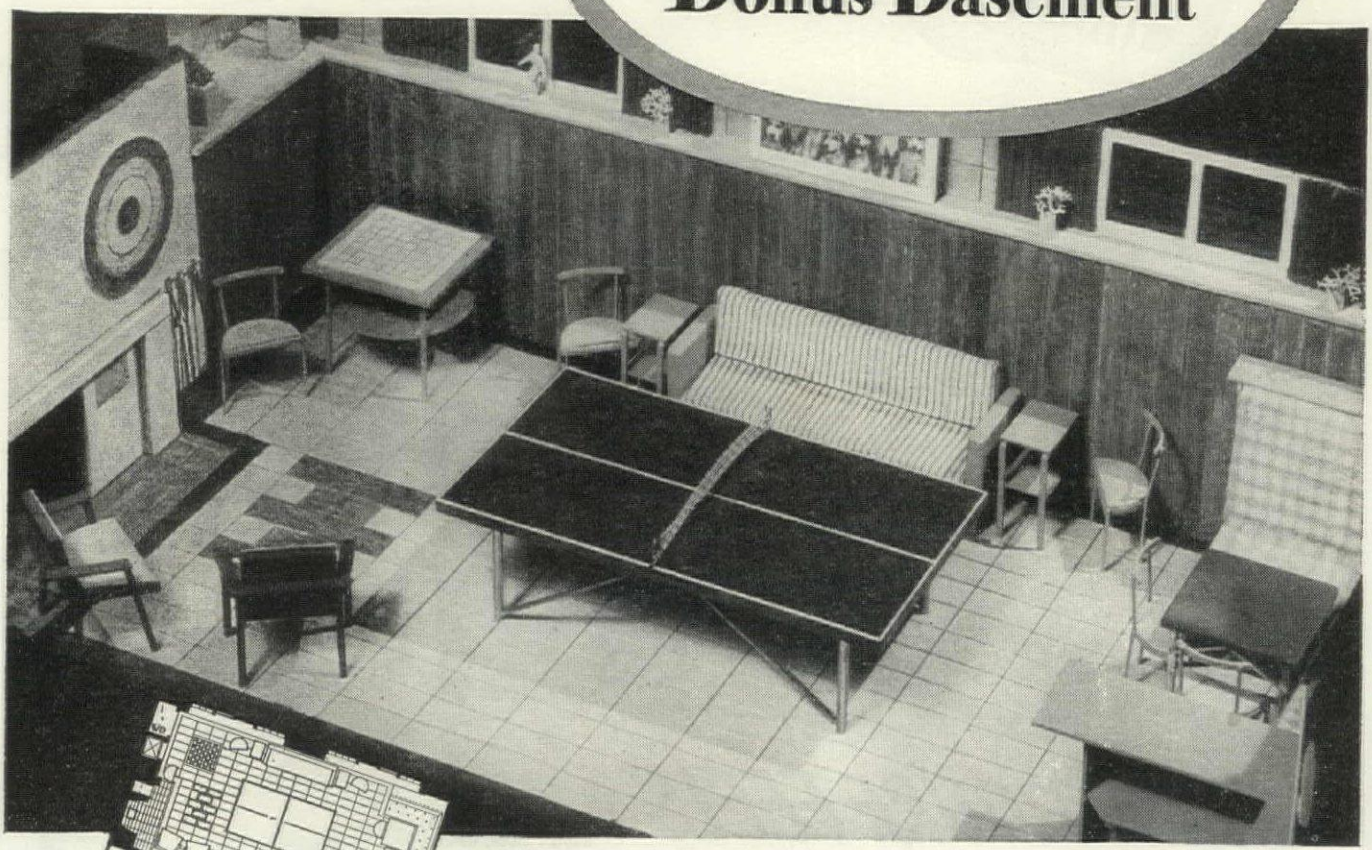
INSULUX

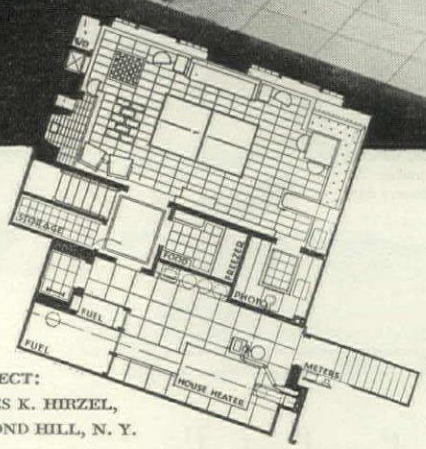
GLASS BLOCK

For technical data, specifications, and installation details, see our section in Sweet's Architectural Catalog, or write: Insulux Products Division, Dept. B-27, Owens-Illinois Glass Company, Toledo 1, Ohio.

SPECIAL OFFER! The "Bonus Basement" shown below was modeled from one of 20 architects' plans for an ideal basement of a $6,000 home. All 20 designs—showing basement and upper floor plans—have been reproduced in a helpful and informative book. While the edition lasts, we will send you a copy for the special price of 10¢ postpaid. Mail your request to the address printed below.

Take this tip if you want your new home to include a Bonus Basement





ARCHITECT:
CHARLES K. HIRZEL,
RICHMOND HILL, N. Y.

A WORD TO THE WISE! No matter what kind of fuel you now plan to use in your new home, *don't "build coal out."* For someday, when other fuels may become even more expensive, you may want to switch to the economy, comfort, and health advantages of heating with Bituminous Coal. So make sure your basement provides ample space for coal storage. Also be sure you get an adequate chimney—one with a flue big enough to handle Bituminous Coal as well as any other fuel. The extra cost of such a chimney flue is small—only about $16 for the average 7-room house.

How would you like your new home to include a handsome hobby room, such as the one modeled above? You *can* have one—even if your home is to cost no more than $6,000. And we'll help you plan it!

What's more, we'll tell you how to get such a room on mighty attractive terms: Heat your home with Bituminous Coal, and let the resultant savings, in just a few years' time, pay for your "Bonus Basement."

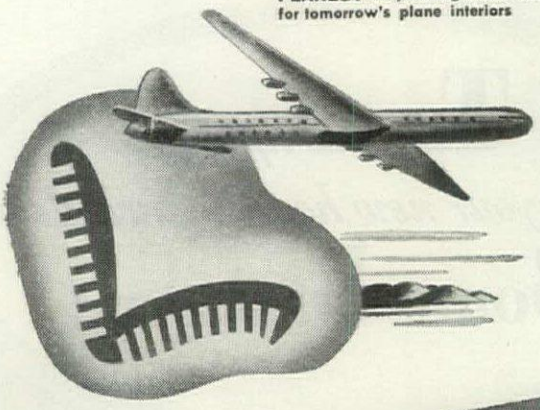
That's possible because Bituminous Coal is the most economical of all home-heating fuels. And the most dependable, too—supplying steady, uniform heat. Not only that, but—when burned in one of the marvelously efficient new stokers—Bituminous Coal also becomes an "automatic" fuel—even to the point of ash removal! Clean, quiet, odorless, smokeless.

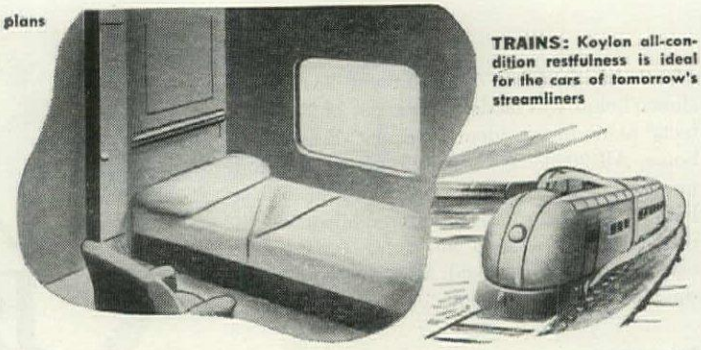
Over 4 out of every 7 homes in the U. S. are heated by coal. Plan now to enjoy the advantages of Bituminous Coal heat in *your* home—and let it buy you a "Bonus Basement" into the bargain! Accept the special offer outlined above. Then talk it over with your architect or builder.

BITUMINOUS COAL INSTITUTE
60 EAST 42ND STREET, NEW YORK 17, N. Y.

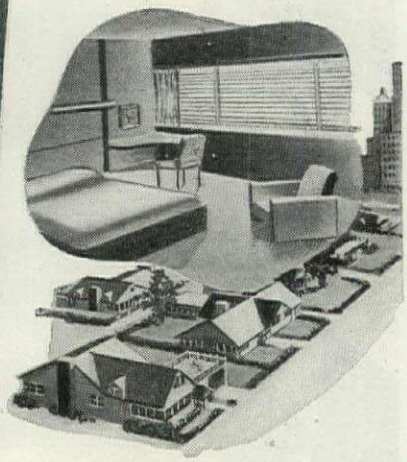
(This is one of a series of advertisements now appearing in home-makers' magazines)

PLANES: Koylon lightness fits plans for tomorrow's plane interiors





TRAINS: Koylon all-condition restfulness is ideal for the cars of tomorrow's streamliners



INTERIORS: Koylon adaptability is especially suited for upholsterers and designers of tomorrow's interiors

HOW THE FUTURE FEELS

BUSES & TRUCKS: Koylon clean, durable comfort is perfect for tomorrow's heavy duty business

Comfort will be a major factor in your future business. Making comfort is our business. For ten years we have been producing comfort in the form of "U.S." Koylon Foam—the cushioning material that has made a science of Comfort Engineering.

Buoyant Koylon actually lifts the body—flows away weight—fairly breathes comfort because of its air-in-latex texture. It is ideal for any type of seating and mattressing—completely satisfying to the rest-hungry. Its natural cleanliness and permanence—its freedom from bothersome parts to wear out—make Koylon an especially inexpensive item to maintain.

If you're future minded—you're going to be Koylon minded. When Koylon is available again —you'll discover how the future feels.

Comfort Engineered

"U.S." Koylon FOAM

REG. U.S. PAT. OFF.

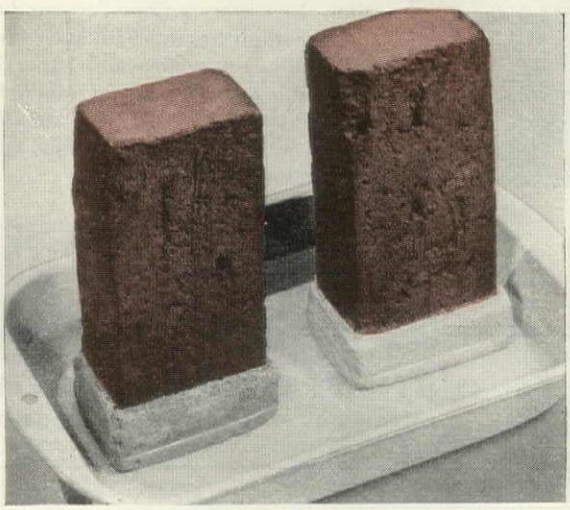
Serving Through Science

UNITED STATES RUBBER COMPANY

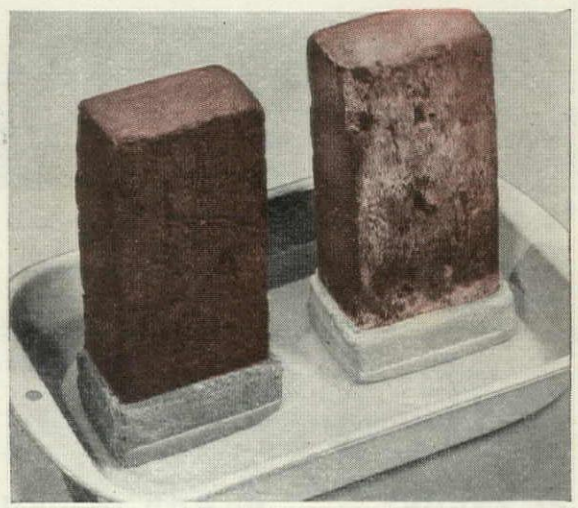
"U. S." KOYLON FOAM DIVISION · MISHAWAKA, INDIANA

BRIXMENT MORTAR

Helps Prevent Efflorescence



To test two mortars for resistance to efflorescence, "cap" two brick heavily with the mortars — let harden, and keep both brick for a few weeks in a shallow pan of water, as shown. Try this with Brixment mortar!



HERE'S WHAT CAUSES EFFLORESCENCE—AND WHY BRIXMENT MORTAR HELPS CONTROL IT

Efflorescence is an outcropping of minute white crystals on brickwork. When these crystals occur on colored mortar joints, the condition is sometimes mistaken for *fading.*

Efflorescence is caused by the presence of soluble salts in masonry materials. When reached by water, these salts dissolve, and are drawn by evaporation to the surface of the wall.

Brixment itself *does not cause efflorescence* because it is practically free from soluble salts. Even when such salts are present in the sand or brick, the waterproofing in Brixment usually *prevents them from coming to the surface.*

Bricklayers who have used Brixment mortar for years say they have far less efflorescence with Brixment than with any other mortar.

LOUISVILLE CEMENT CO., Incorporated, LOUISVILLE 2, KENTUCKY

CEMENT MANUFACTURERS SINCE 1830

All Three Are Satisfied Only When
ECONOMY is Linked With EFFICIENCY

Not fuel savings alone, not tenant comfort alone, nor yet profit on investment alone, indicate the ideal heating system. Rather, it is a functional *combination* that meets the needs of *all three.* The satisfaction of *tenant, operator* and *owner* is the basis on which a heating system should be judged.

For many years the supremacy of Dunham Differential Heating has remained unchallenged in every type of building for insuring *tenant* satisfaction. Its unvarying comfort-conditioning accomplishes this with such savings in fuel, maintenance and supervision that both *owners* and *operators,* from coast to coast, indorse Dunham Differential as the soundest heating system investment.

This is No. 6 in a series of 6 advertisements setting forth values of the adequacy, simplicity, flexibility, dependability and economy of the Dunham Differential Vacuum Heating System.

Performance data gladly furnished. Just ask for Bulletin 636. C. A. Dunham Company, 450 East Ohio Street, Chicago 11, Illinois

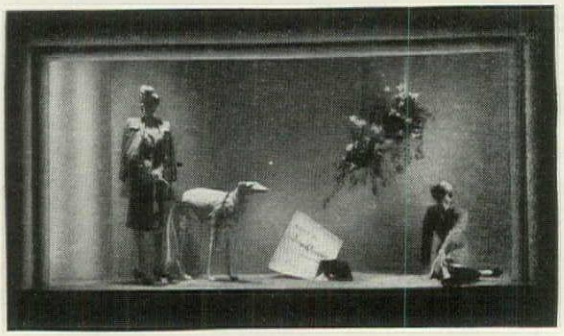
DUNHAM

DIFFERENTIAL HEATING

CHICAGO • TORONTO • LONDON

GENUINE STRUCTURAL BENDS ORIGINAL
OF TEMPERED MASONITE

For MODERN WINDOW BACKGROUNDS AND INTERIOR STORE REMODELING



A Beautiful Frame, Background and Valance Treatment Block and Kuhl Company, Peoria, Illinois

Made of strong tempered Masonite presdwood, Structural Bends are a practical, inexpensive material for creating outstanding display treatments for smart, modern window backgrounds, interior remodeling or new construction. Seventeen basic shapes, 8′ and 12′ lengths, any size area can be economically treated. Flexible . . . easy to cut . . . construct . . . finish and install. Time tested, durable, modern, extremely practical, they afford unlimited opportunities to create outstanding effects at low cost. In stock.

WRITE FOR CATALOG . . . PLAN YOUR NEEDS . . . PLACE ORDER NOW

Distributed Exclusively by

W. L. STENSGAARD AND ASSOCIATES, INC.

350 N. JUSTINE STREET • CHICAGO 7, ILL.

ATTENTION MANUFACTURERS

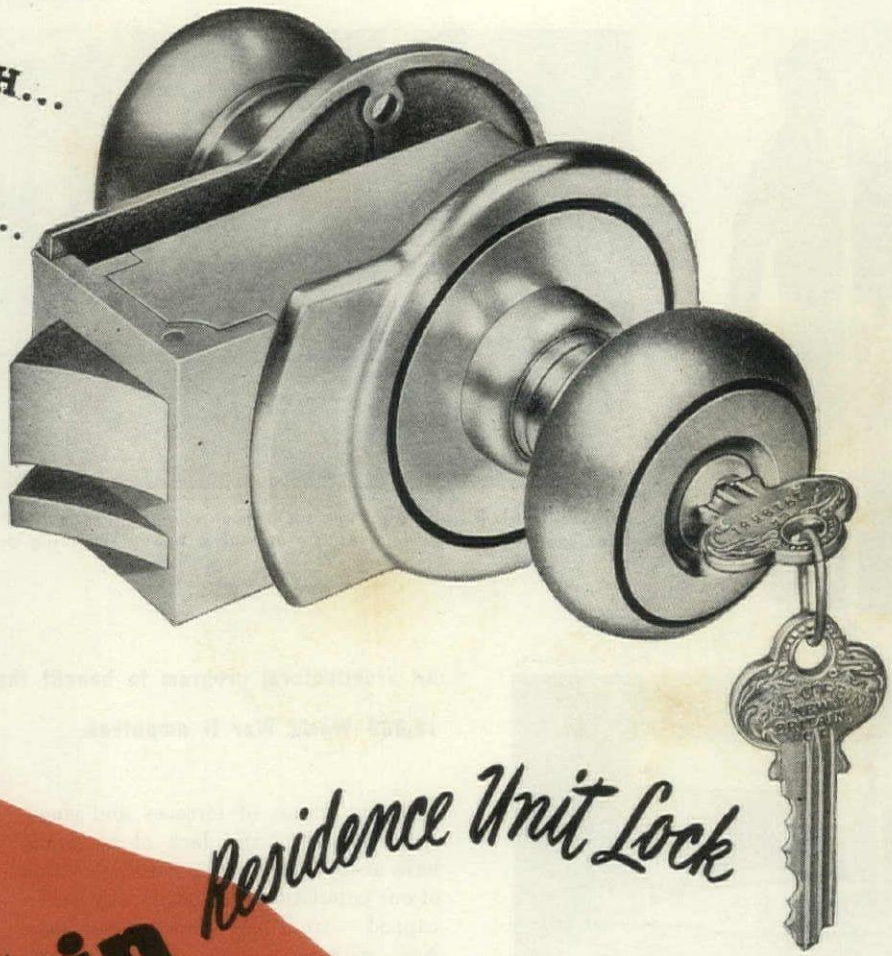
THE ARCHITECTURAL FORUM is just completing a new list of Dealers, Distributors and Manufacturers' Agents who are interested in adding new lines (building products, materials, specialties, household appliances, etc.). This registry will be made available to you on request. Personal calls or letters invited.

George P. Shutt
Advertising Manager
THE ARCHITECTURAL FORUM
350 Fifth Avenue
New York 1, New York

IT'S PRACTICAL...

IT'S STYLISH...

IT'S WANTED...



The Corbin Residence Unit Lock

For the first time . . . a CORBIN *UNIT LOCK* for homes . . . a lock as smart as it's sound . . . offering STRENGTH, STYLE and amazing EASE OF INSTALLATION! Streamlined version of the famous Unit Lock pioneered by Corbin in 1899 that is installed in hundreds of important office and public buildings, the new *residence* lock offers all the advantages of its commercial counterpart.

Because the lock is a complete unit assembled at the factory and only two saw-cuts instead of drilling or mortising are required, installation is simple and fast.

Architects may specify the Corbin Unit Lock for residences and small apartment houses with assurance that in function, "feel" and owner satisfaction it is a new note in residence builders hardware.

Quick Facts

- Ease of installation heretofore unknown for residences
- No boring, no mortising for lock case — 2 saw-cuts opening, knock out block, install
- Complete factory assembly
- Easy closing due to pivoted (swinging) latch
- For 1⅜" thick doors
- Eye-appealing 2" knob
- Solid frame cast in one piece
- Complete masterkeying for key locks when desired
- Push button locking and latch release for bathrooms
- Reversible for right and left hand doors

P. & F. Corbin

Good Buildings Deserve Good Hardware

CORBIN

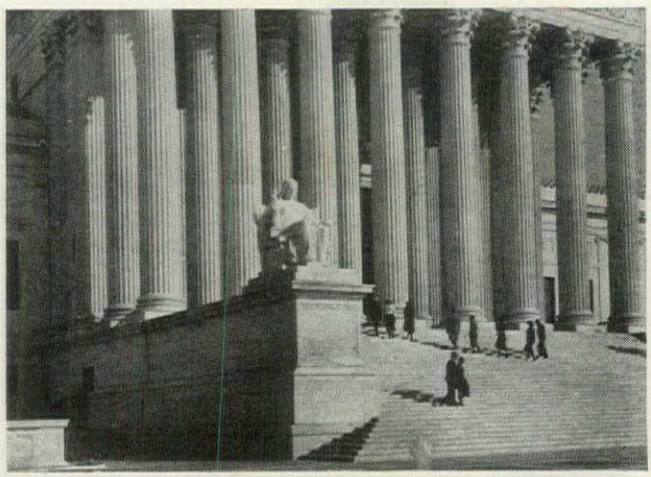
ARMY E NAVY

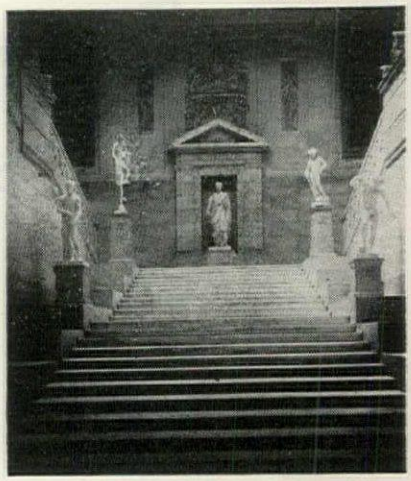
Division of the American Hardware Corporation

New Britain, Connecticut • Since 1849

BUILDING REPORTER

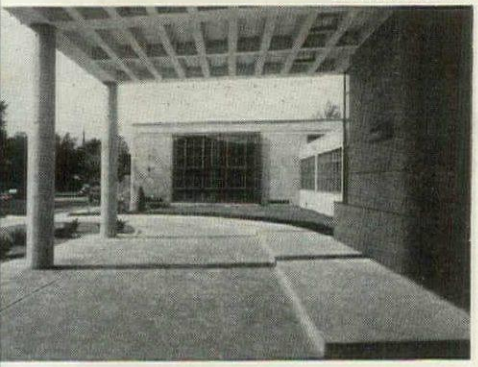
Harris & Ewing



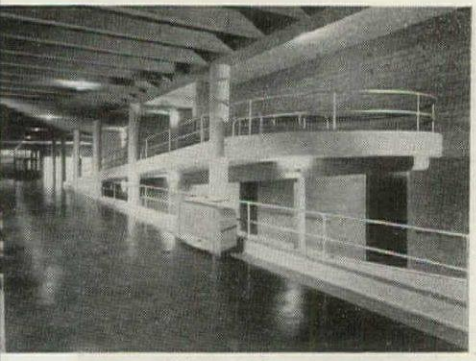


MONUMENTAL BUILDINGS, built for the enjoyment of the public, often exclude our millions of physically handicapped by their long flights of stairs, heavy revolving doors and high curbs.

Hedrich-Blessing



GRADE LEVEL entrances and elimination of high curbs make public buildings available to the crippled.



INTERIOR RAMPS and lightweight auxiliary swinging doors are functional aids to the physically handicapped.

An architectural program to benefit the physically handicapped—including our 15,000 World War II amputees.

Pompous flights of terraces and steps, revolving doors and lack of handrails have always excluded a sizeable section of our population—the physically handicapped — from our public buildings. Now, with the return of disabled servicemen to civilian life, this situation is rapidly becoming serious. To dramatize the need for easy, ground level access to public and private buildings, the Illinois Association for the Crippled recently set up an Architectural Advisory Committee. Chaired by C. Herrick Hammond, Supervising Architect for the State of Illinois, the Committee has drafted a seven-point program to solve this major physical and psychological problem of the handicapped:

- Eliminate outside steps to buildings or provide a grade level entrance;
- Wherever possible place elevators adjacent to ground floor entrances;
- Eliminate steps or, if this is impossible, provide ramps inside buildings;
- Eliminate high curbs by use of culverts;
- Where steps cannot be eliminated, place handrails on both sides;
- In designing apartments, schools and other buildings, provide enclosed passageways to adjacent parking lots or garages;
- Eliminate heavy doors; where revolving doors are necessary, provide light, auxiliary swinging doors.

Simple and obvious as these measures seem, they are — as the Committee pointed out — consistently ignored in most public buildings. Asks Committeewoman Margaret Pope Hovey: "Have you ever tried in slippery weather to climb twelve steps to enter a church while using a pair of crutches? Have you ever tried, following an illness, to visit an art museum with 28 steps to greet you? Have you ever tried to enjoy a day at the zoo when confined to a wheel chair?" A check of Chicago's cultural and educational institutions revealed that scarcely a one could be entered by a handicapped person without frustration, embarrassment or real danger. At the Chicago Museum of Natural History, he would have to negotiate 38 steps; at the Shedd Aquarium, 36; at the Adler Planetarium, 23; at the Museum of Science and Industry, 20. And Chicago is, of course, merely typical of any other town. Illinois has agreed to accept this program as a standard for new state buildings and to convert old buildings wherever possible. Other state and municipal agencies will almost certainly follow. For the modern architect, who could point out that the seven-point program was as logical for well people as for the crippled, it should serve as a final and clinching argument against the monumental stair.

(Continued on page 242)

Here's choice that frees your hands!

● Regardless of the type of built-up roof your project requires, *Ruberoid makes it*—Asbestos Felt and Asphalt, Coal Tar Pitch and Tarred Felt, or Asphalt Felt and Asphalt—and in various specifications to meet any condition that may be imposed!

When you call in a Ruberoid Approved Roofing Contractor you get unprejudiced collaboration—having all types of roofing, he has no reason to push one at the expense of another more suitable to your purpose. In addition, you centralize responsibility for both quality and workmanship.

Ruberoid's half-century of experience in the roofing field is your assurance of trouble-free performance for your clients. Why not call in a Ruberoid Approved Roofing Contractor and work with him on your problems?

RUBEROID

Built-up Roofing

The RUBEROID Co., *Executive Offices:* 500 Fifth Ave., N. Y. 18, N. Y.

Asphalt and Asbestos Building Materials . . . Thermal Insulations

BUILDING REPORTER

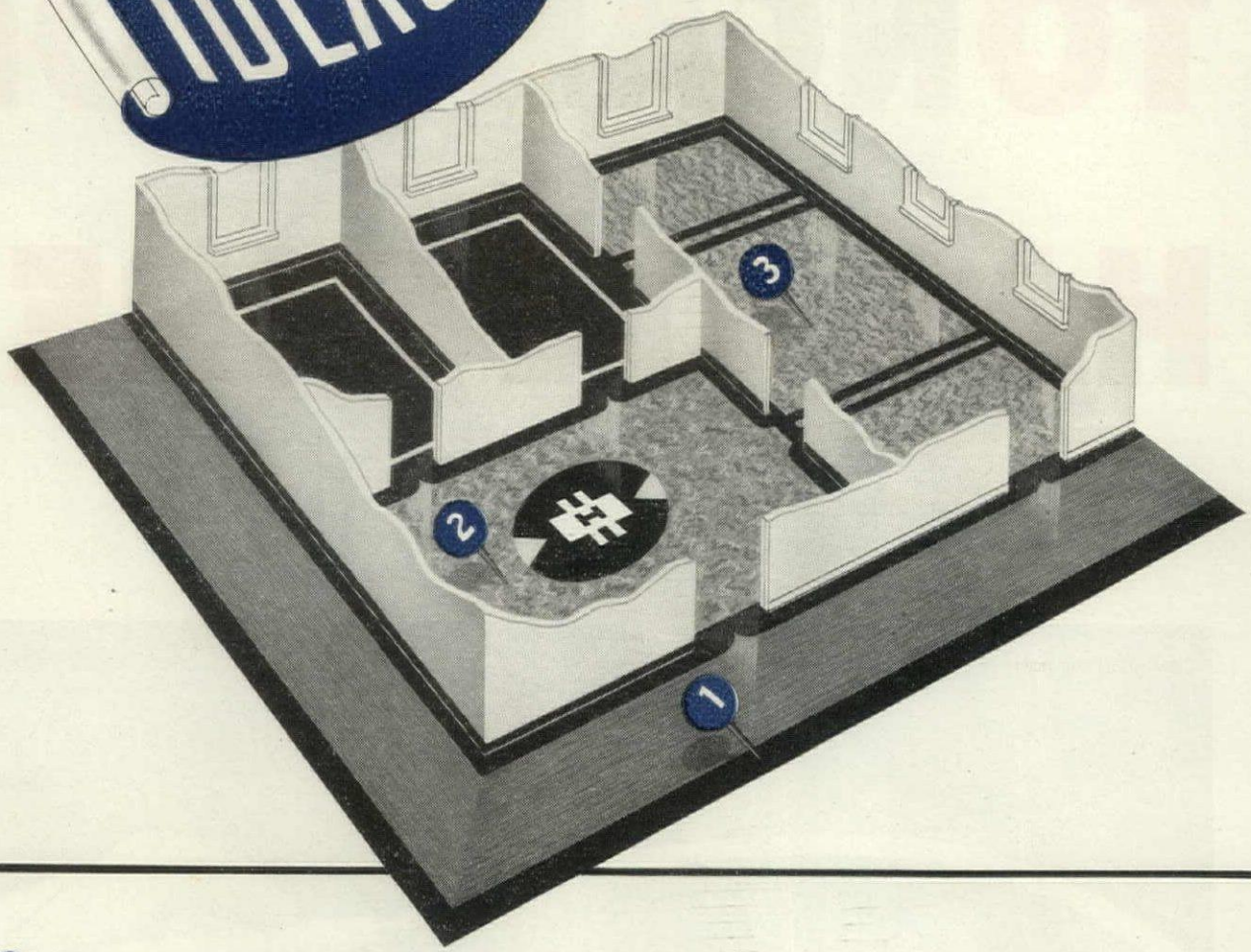
(Continued from page 240)

"DREAM SUITE," made of Plexiglas, the transparent, lightweight plastic used in many aircraft parts, is a department store demonstration for architects and home builders of Plexiglas applications to home construction. Designed by the Rohm & Haas Co. and shown in Philadelphia recently, the suite of plastic rooms consists of a transparent-walled bedroom, dressing room and bath. They are designed to demonstrate the structural advantages and decorative possibilities of Plexiglas, such as transparent walls formed in sweeping curves, plastic doors, concealed illumination and plumbing. One wall combines illumination and decoration. The curved wall contour covered with engraved and painted Plexiglas is edge-lighted by hidden fluorescent lamps which cause the wall to glow radiantly. The bathroom incorporates an etched, transparent, turret-shaped shower stall with semi-circular sliding doors. Handles of the automatic temperature controls are plastic as are fixtures, chests, shelves, partition prisms and a myriad of other items.

(Continued on page 246)

PLEXIGLAS walls, shower stall and fixtures, as featured in the "Dream Suite's" bath, are possible due to the wartime development of large size plastic sheets. The watertight, shatterproof shower has an easy sliding semi-circular door with etched decorative design illuminated by edge lighting. The streamlined dressing table-wash basin corner has functional pedestals, one concealing cosmetics in removable trays (right), another providing plastic-lined drawers.

IDEAS for architects planning building improvements

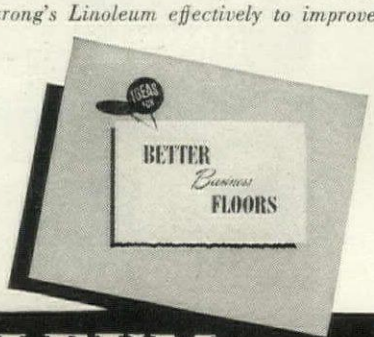


1 **Modernize corridors** with durable Armstrong's Linoleum Floors. These floors form a pleasing background for modern building improvements, help brighten corridors, and help attract long-term tenants.

2 **Reception room floors,** custom designed in Armstrong's Linoleum, give a smart, inviting office suite entrance. Offered in a variety of colors, Armstrong's Linoleum readily lends itself to custom designing.

3 **Inner office floors** of colorful Armstrong's Linoleum help create a cheerful working atmosphere. And they're resilient—comfortable to walk on—easily maintained. Armstrong's Linoleum Floors are durable, long lasting, and, with proper care, will remain attractive and new looking through years of hard service.

SEND FOR YOUR FREE COPY *of "Ideas for Better Business Floors." This new, color-illustrated book shows how many architects and designers have used Armstrong's Linoleum effectively to improve appearance and create a customer-inviting atmosphere in their client's shops, offices, and stores. Just write Armstrong Cork Company, Floor Division, 2311 State Street, Lancaster, Penna.*



LINOWALL is a registered trade-mark

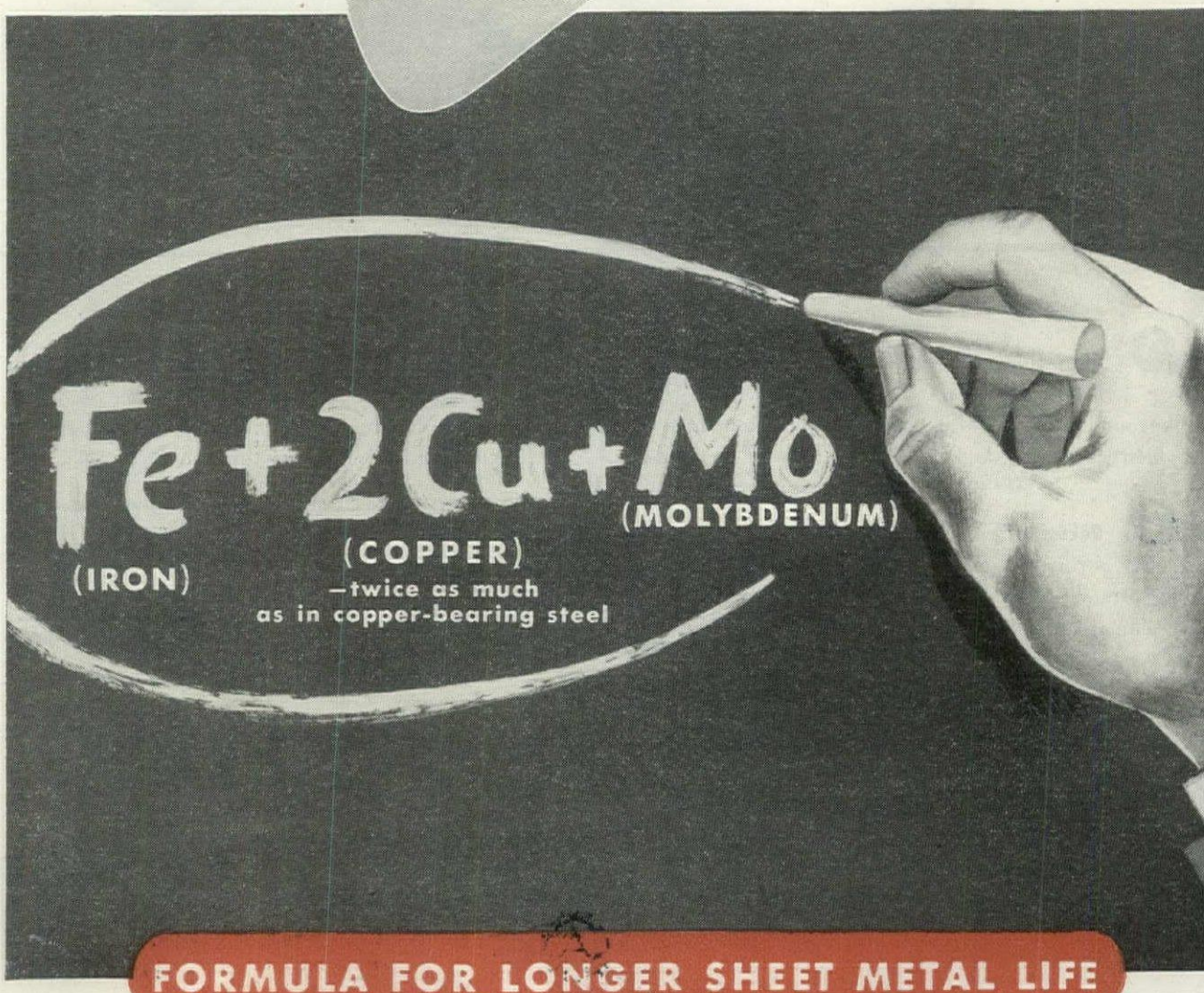
ARMSTRONG'S LINOLEUM

ARMSTRONG'S LINOWALL • ARMSTRONG'S RESILIENT TILE FLOORS

Only

TONCAN IRON

HAS ALL THREE



FORMULA FOR LONGER SHEET METAL LIFE

. . . to provide the Highest Rust-Resistance of All Ferrous Materials in it's Price Class

There's *no* other material like Toncan Iron. It isn't a steel. It is *not only* an iron —but an *alloyed* iron. That's why it has the highest rust-resistance of all ferrous materials in its price class.

Toncan is made from highly refined open-hearth iron. To this iron is alloyed copper—*twice as much* as found in copper-bearing steel—*and* Molybdenum to make the copper impart the highest rust-resistance possible.

In Toncan Iron, rust-resistance is not only a surface quality, it goes *all through the metal,* uniformly. And its effectiveness is not reduced by any type of fabrication.

Another outstanding quality of Toncan Iron for more than 35 years is its *high ductility.* Because it's made from commercially-pure iron and specially processed for working qualities, it is one of the *easiest* materials to fabricate by *any* method.

Other conclusive data about Toncan Iron and its many specific applications can be found in Booklet No. 406, "A Few Facts about Toncan Iron for Architects and Engineers." Write for it.

REPUBLIC STEEL CORPORATION
GENERAL OFFICES • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, New York

SEE SWEET'S FILE
or write us for detailed information on these Republic Building Products

Pipe—Sheets—Roofing
Enduro Stainless Steel
Toncan Enameling Iron
Electrunite E.M.T.
Fretz-Moon Rigid Steel Conduit
Taylor Roofing Ternes
Berger Lockers, Bins, Shelving, Kitchen Cabinets
Truscon Steel Windows, Doors, Joists and other building products

Republic

REPUBLIC STEEL — SERVES THE WORLD

TONCAN COPPER MOLYBDENUM IRON

Reg. U. S. Pat. Off.

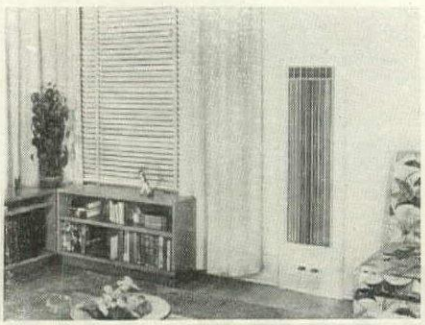
—for ducts, gutters, conductor pipes, roofing, siding, tanks, ventilators, skylights, hoods, and other sheet metal applications requiring rust-resistance.

(Continued from page 242)

PANEL HEATER

Gas fired heater radiates infra-red rays.

Panelray gas fired heating units for home, office or store, are designed for installation in standard 4 in. walls. They stand above the floor level and can be installed on any floor of a new or old building. The unit emits invisible infra-red heat rays at body level, which also strike and warm the floor. The heart of the unit is a specially designed vertical heat trap flue with a series of convolutions scientifically placed to



baffle the upward sweep of heat, deflecting it and radiating it outward. Available in three capacities — 10,000 Btu., 20,000 Btu., and 30,000 Btu., and in three colors—white, ivory and dark walnut baked enamel, all units are 59⅜ in. high. They come in three widths: 13 3/16 in., 17 11/16 in., and 21 3/16 in. In addition, a special metal corner adapter panel is available with a baked enamel finish matching that of the heater itself. With its use no openings need be cut in the wall, the flue being installed by cutting through the ceiling and roof. The adapter panel extends from floor to ceiling and is adjustable to various ceiling heights.

Manufacturer: Day & Night Manufacturing Co., Monrovia, Calif.

AWNING AND CHAIR FABRIC

Plastic coated duck is exceptionally durable.

Textasote G is a new plastic coated duck material suitable for awnings, deck chairs, porch furniture, upholstery, seat covers, and luggage. Manufactured in brilliant colors and vivid designs, it is flame and mildew resistant, washable and has excellent aging characteristics.

Manufacturer: The Pantasote Leather Co., Passaic, N. J.

FAUCET WASHER

Improved washer eliminates need for tools.

The Dumaco "Little Wonder" faucet washer provides an easy method of repairing leaky faucets. Applied with the fingers, the need for screw driver, tedious adjusting and balky screws are eliminated. Resilient material of the washer conforms to the shape of the seat whether irregular or new, and rotating action of the unit affords long life, eliminating the grinding wear common to conventional washers. Installation is simple. Available in three sizes, they meet all faucet requirements.

Manufacturer: Durst Mfg. Co., Inc., 462 Broadway, New York 13, N. Y.

FIRE EXTINGUISHER

Chemical engine produces 50 per cent more fire killing foam for oil fires.

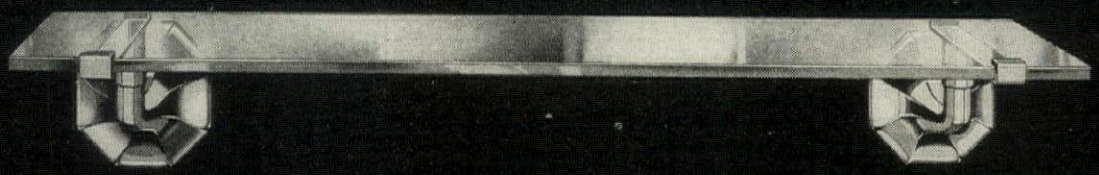
The function of the new Foamite Challenger Engine is to extinguish hot oil fires without danger of reflash. The manufacturer reports that The Challenger produces 50 per cent more foam than any other 40 gal. foam engine, delivering over 450 gals. in less than 3 minutes, and that the foam is better, tougher, more tenacious, and more lasting. The Engine has several scientifically designed features, one of which is its metering device, an important factor in its foam making function. Now in production, the unit has been approved by both the Underwriters and Factory Mutual Laboratories.

Manufacturer: American - LaFrance-Foamite Corp., Elmira, N. Y.

(Continued on page 250)

Refreshing in their new beauty

LIFETIME CHROME by Gerity

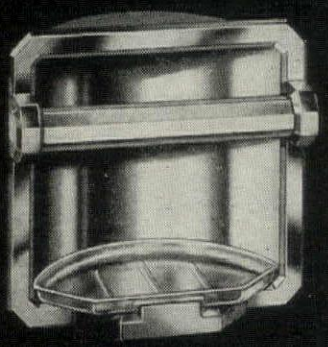


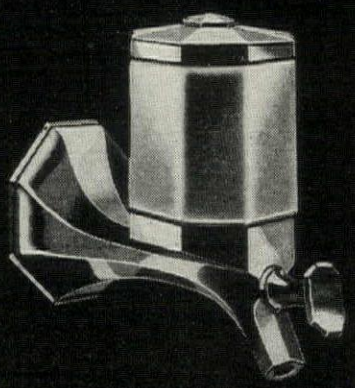
MONTHS and months ago, Gerity set some of America's finest designers to work planning the new lines of Gerity household chrome. Today these designs are ready—refreshingly beautiful.

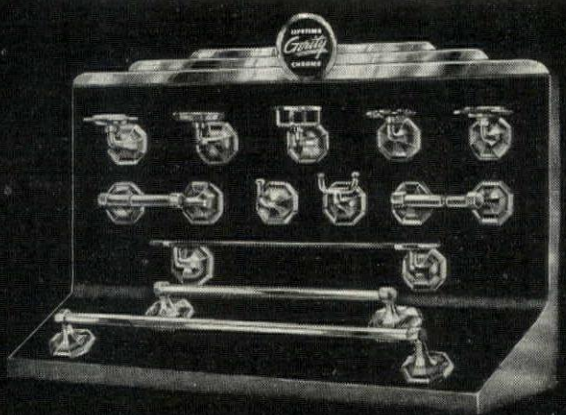
But even more important, all Gerity household chrome is now *guaranteed for life.* It will not break, crack, peel, check or tarnish.

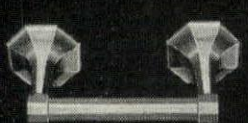
Sparkling new packages and striking new counter, window, floor and wall displays all add to the saleability of the Gerity lines.

With new building getting under way, be sure to order your Gerity Lifetime Chrome. Write today for Catalog Supplement No. 6 on your business letterhead.









Counter Display No. 363

One of the six striking displays of the Gerity Dover line

GERITY-ADRIAN MFG. CORP.

ADRIAN, MICHIGAN

OMPETITION

Competition open to

ARCHITECTS • ENGINEERS • ARTISTS
DRAFTSMEN • STUDENTS • OTHERS

with the exception of employees of the American Stove Company and its subsidiaries, The Architectural Forum, and advertising agencies which serve the American Stove Company and its subsidiaries, and the families of all such employees, or employees of other range manufacturers.

Grand Award	$5,000
Second Award	$3,000
Third Award	$2,000

Fourth, fifth and sixth winners will each receive award of $1,000. The next 10 contestants will each receive award of $500. Contest ends midnight March 4, 1946.

Magic Chef

GAS RANGE DESIGN COMPETITION

SPONSORED BY THE ARCHITECTURAL FORUM 350 Fifth Ave., New York 1, N. Y.

GEORGE NELSON, A.I.A., Professional Adviser, c/o The Architectural Forum, Dept. F, Empire State Building, 350 Fifth Ave., New York 1, N. Y.

I intend to enter the Magic Chef 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**____

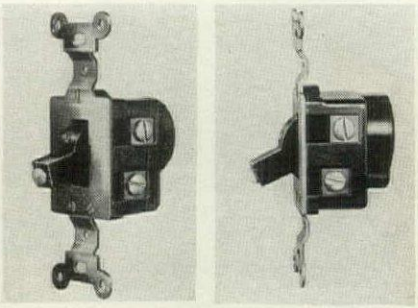
Other Occupation_____

(Continued from page 246)

DELAYED ACTION SWITCH

All-purpose light or power switch of toggle arrangement.

The new Tymzit switch provides light for any desired interval up to three minutes after movement of the toggle to "off" position, yet power or light can be turned off instantly by a slight continuing downward push of the lever. Operated in the standard toggle manner, the unit offers both delayed-action and instantaneous "off." A small, accessible



set-screw on the toggle lever permits quick, easy adjustment of the delayed action mechanism, which is claimed by the makers to be an entirely new and simplified action principle for toggle switches, employing no clockwork or electrical elements to achieve the delayed action. A phosphorescent tip on the toggle lever facilitates locating the switch in the dark. Many convenient uses are suggested for the new type switch. Located in the garage, Tymzit will provide time to walk into the house before the lights go off. Porch lights can be turned off when company leaves, but the light itself will remain on till they are well on the way. Bedroom lights will stay on for as many seconds as desired after turning off the switch. Tymzit conforms to Underwriters Laboratories specifications, and fits any standard wall box. It is offered in single and double pole assemblies, and will be rated at 10 amp. at 125 v. and 5 amp. at 250 v. Several types will be available, with prices starting at $1.50.

Manufacturer: T. J. Mudon Co., 1240 Merchandise Mart, Chicago 54, Ill.

FLUORESCENT XMAS TREE LIGHTS

Small, round fluorescent lamps burn cool, give glow to tree.

Fluorescent Christmas tree lamps in four pastel shades of blue, green, coral and maize, needing no auxiliary equipment for operation, will be on the market this year for the first time. The fluorescent bulbs, burning about 5 w. of current each, and rated at approximately 1,000 hrs., will provide a soft attractive glow to the tree, giving new and unusual color effects for Christmas decorations. The lamps come eight to a string, have a screw base and are independently operated. The lamps burn cool, retarding the drying of the tree, and are designed for use on either indoor or outdoor trees. Sets of lamps are being manufactured and will sell for about $7.50 with replacement lamps costing $.60 each.

Manufacturers: Royal Electric Co., and Miller Electric Co., both of Pawtucket. R. I.

ACID RESISTANT WOOD

For structures exposed to deterioration by acid solutions or fumes.

Through the use of Asidbar, a plastic impregnated wood, structures exposed to rapid deterioration by contact with acid solutions or fumes can be made acid-resistant. Its properties make it suitable for many requirements of severe service conditions at temperatures to 180°F. Asidbar is made by impregnating wood with a plastic treating material at high pressure and temperatures sufficiently high to hold the com-

(Continued on page 254)

Announcing SISALATION

An efficient Reflective Insulation with all the weather protecting advantages of SISALKRAFT

1. 

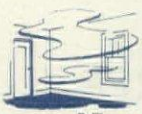
LOW IN COST — Only $20.00 for sidewall insulation in the average new 5-room home.

2. 

MORE COMFORT IN WINTER — Cold is reflected out . . . heat is reflected in.

3. 

MORE COMFORT IN SUMMER — The same reflective principle that saves fuel in winter keeps homes cooler in summer.

4. 

EFFECTIVE MOISTURE-VAPOR BARRIER—Prevents passage of moisture-vapor into structural materials.

5. 

STOPS WIND AND WEATHER — SISALATION gives Sisalkraft sidewall protection against wind and weather.

6. 

SEALS OUT DIRT — SISALATION helps keep homes cleaner . . . a barrier against dust and dirt.

7. 

TOUGH AND STRONG — Sisalkraft reenforcement of SISALATION insures intact application.

8. 

YEAR-IN and **YEAR-OUT PROTECTION** — SISALATION has long life! Its low first cost is the last.

Never before has an insulating material been perfected that will give so much protection for so little money. In addition to being an effective insulation, it provides a moisture-vapor barrier for little more than the cost of good building paper.

Write us for samples, literature, specifications and architectural data.

A Product of SISALKRAFT

Send Coupon for Samples and Complete Information

The SISALKRAFT Co., Dept. AF, 205 W. Wacker Drive, Chicago 6, Illinois

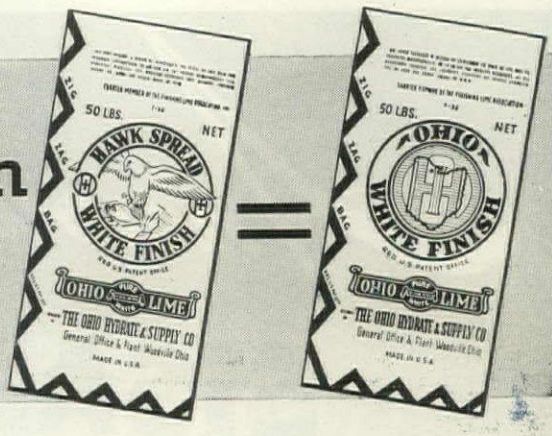
Please send me samples together with complete information on SISALATION.

Name.....

Address.....

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

"Ohio White Finish or equal"



The best "or equal" to the *original* Ohio White finishing lime is its identical twin, Hawk Spread.

Both brands are scientifically processed from kiln burned and inspected rock quarried from the heart of the world's purest deposit of dolomitic limestone.

The net result is alabaster whiteness, high plasticity, *far-spreading* workability.

Both brands are always fresh—both are always packed in bags distinctively marked with Red Zig Zag Stripes.

•

SOLD THROUGH DEALERS EVERYWHERE

THE OHIO HYDRATE & SUPPLY COMPANY
WOODVILLE, OHIO

Ralph F. Gates, Governor; Rue J. Alexander, Secretary of State; A. V. Burch, Auditor of State; Harold C. Shulke, Supt. of Public Buildings and Grounds.

Edwin May, Architect; Adolph Scherrer, Architect; Kaumacher & Denig, Contractors and Builders.

Indiana Votes for Chamberlin Weather Strips

The impressive list of public and semi-public buildings on which Chamberlin Metal Weather Strips have been installed includes the beautiful Indiana State Capitol Building, shown above. Architects are invited to submit their weatherstripping problems to Chamberlin . . . they, too, like Indiana and many other states, municipalities and private building owners, vote for Chamberlin Metal Weather Strips every time!

"Proper Installation Is Half the Job"

CHAMBERLIN
CHAMBERLIN COMPANY OF AMERICA

Formerly Chamberlin Metal Weather Strip Company

***Home Office:* 1236 LaBrosse Street, Detroit 26, Mich.**

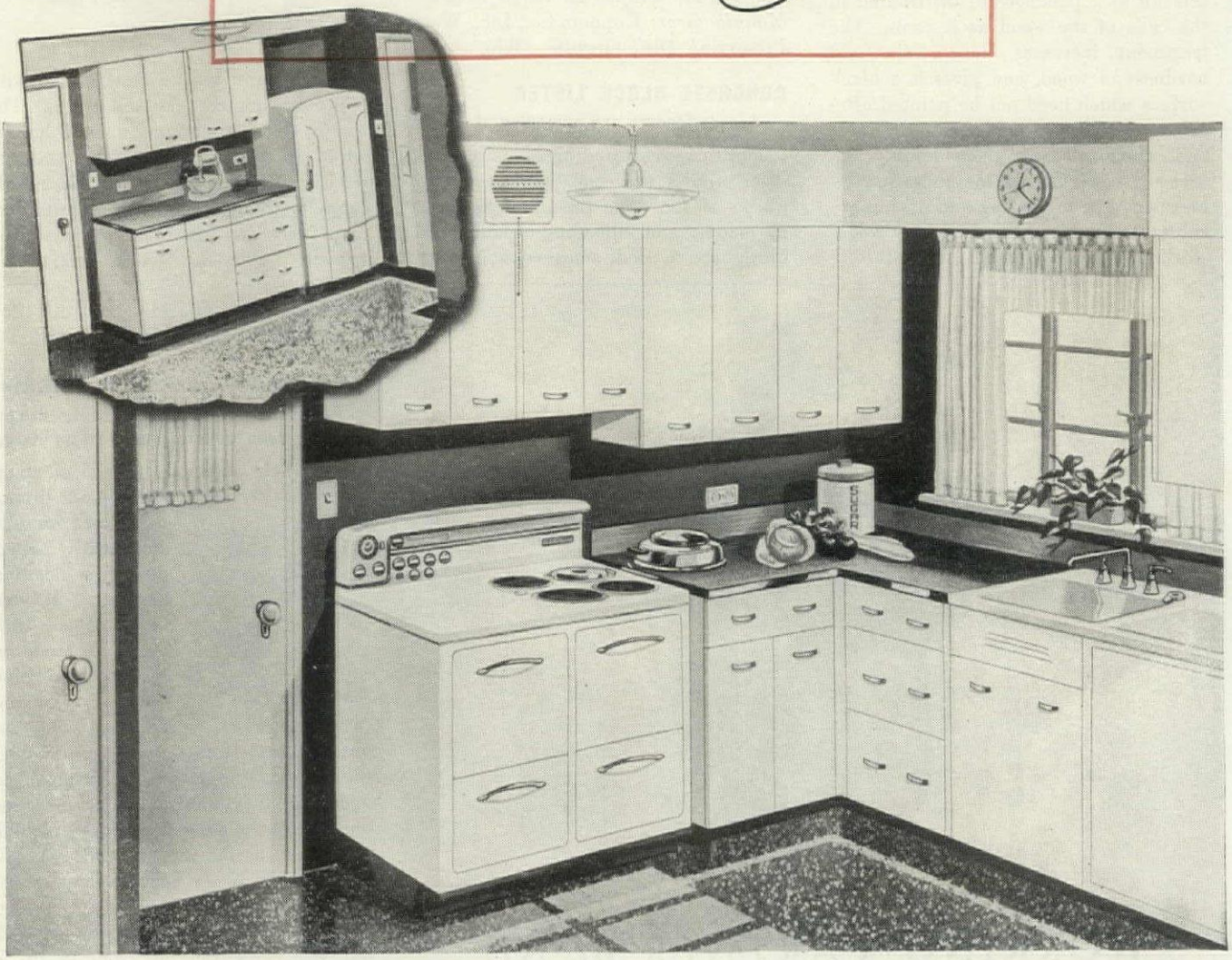
WANTED MANUFACTURERS' AGENTS

In anticipation of postwar building activity, many progressive manufacturers of building specialties are seeking new representatives, domestic and foreign.

THE ARCHITECTURAL FORUM will be pleased to act as intermediary; agents are invited to register their interest.

Address George P. Shutt, Advertising manager
THE ARCHITECTURAL FORUM
350 Fifth Avenue
New York 1, N. Y.

WHAT PEOPLE REALLY WANT IS *Electrical Living*



HERE'S AN ELECTRICAL LIVING KITCHEN FOR THE "BUDGET" HOME

There is a degree of Electrical Living for every price class of home. "Budget" homes that provide it will be more salable.

For a "budget" home, this smart kitchen design incorporates essential electrical features (range, refrigerator and dishwasher) together with expertly-planned work centers, modern lighting, electrical outlets placed for maximum convenience, and progressive lighting switches. Designs for kitchens with other degrees of electricity are available.

All through the house, the Westinghouse Home Wiring Handbook will help you plan and specify an efficient wiring system for Electrical Living. This Handbook is helping thousands of architects and builders to select the proper degree of Electrical Living and to provide necessary wiring facilities. The book has 120 pages, dozens of charts, diagrams and tables, suggested specifications, etc. Costs only $1.00. Send for your copy to Westinghouse Electric Corporation, Industrial Relations Dept., 306 Fourth Avenue, Pittsburgh 30, Pa.

J-91534

★ ★ ★

Better Homes Department, in addition to its consulting service, offers you the following FREE books: Electrical Living in 194X—Professional Edition, Manual of Better Home Wiring and Better Living Means Electrical Living.

Westinghouse
PLANTS IN 25 CITIES... OFFICES EVERYWHERE

Better Homes Department

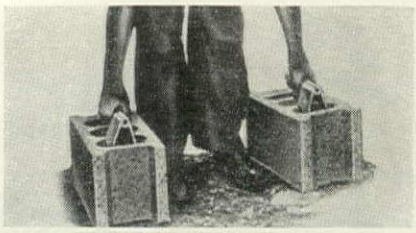
(Continued from page 250)

pound in a liquid state. After impregnation of 10 to 20 hrs., the compound sets up to a plastic-solid distributed in the cells of the wood as it cools. The treatment increases the weight and hardness of wood, and gives it a black surface which need not be painted. Resistance to wear and abrasion, water and chemicals are considerably increased, and changes in shape and dimensions due to wetting and drying are substantially decreased. Ordinary woodworking tools are used for installing the treated wood. Use of Asidbar for greenhouse construction to ward off destructive effects of moisture and decay is being explored. It also has possible application for flooring on platforms, in railroad cars and in other construction subject to rough usage.
Manufacturer: Koppers Co., Inc., Wood Preserving Div., Orrville, Ohio.

CONCRETE BLOCK LIFTER

Speeds loading and unloading of trucks.

Use of this sturdy and inexpensive block lifter allows one man to handle two blocks at the same time thus speeding up loading and unloading of trucks. No gloves are needed, smashed fingers are



prevented and blocks are handled with fewer broken corners and edges. The tool consists of a round, smooth handle with two flanges which project downward. A workman gripping the handle drops the flanges into the hole in a concrete block and lifts. Leverage instantly applied holds the block firmly and easily.
Manufacturer: The Michigan Silo Co., 2646 S. Washington St., Peoria 2. Ill.

ELECTRIC PIPE CLEANING MACHINE

For cleaning water services, drains, water tube boilers, flues, steam risers.

A wide field of application in cleaning water services and process plant piping is claimed for this electrically operated pipe cleaning machine. It can be equipped with tools for rodding 1 in. to 4 in. pipe lines, removing various types of obstructions from curved pipes and tubing containing difficult fittings. In operation the gun is held at the pipe opening so the desired length of flexible cable may be fed into the pipe. A cutter, attached to the rod, revolves at 300 rpm. scraping the inside of the line. The Electro-Rod can be equipped with any size cable ranging from ¼ in. to ½ in. diameter, and comes equipped with a compact, lightweight cable container. The machine may also be equipped with augers for wood drilling, thus serving a dual purpose.

Manufacturer: Spartan Tool Co., 6007 N. Lincoln Ave., Chicago 45, Ill.

FLUORESCENT LAMP STARTER

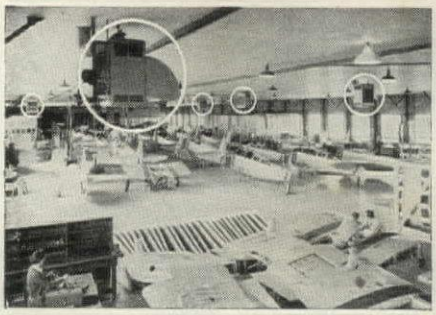
For 15 and 20 w. fluorescent lamps.

A Watch-Dog starter for 15 and 20 w. fluorescent lamps, and especially suitable for commercial and residential lighting fixtures is now available. The new starter, FS-20, has an average rated life of three years under specified test conditions, and its mechanical features help conserve lamp and ballast life, power consumption and maintenance service. Close tolerances in the starters' mechanism makes possible quick and positive lockout of dead lamps eliminating blinking and flickering.
Manufacturer: General Electric Co., 1285 Boston Ave., Bridgeport 2, Conn.

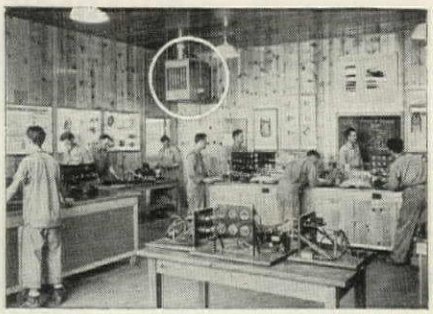
(Continued on page 258)

6 COMMON HEATING PROBLEMS

Solved at Spartan by Janitrol



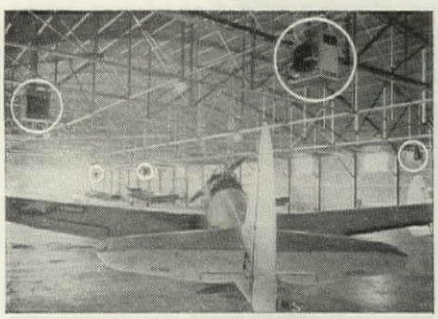
WORKING COMFORT IN LARGE AIRPLANE OVERHAUL AREA. This final assembly shop is only one of the several large areas heated by a battery of Janitrol Gas-Fired Unit Heaters. Complete employee comfort at low installation and operating cost.



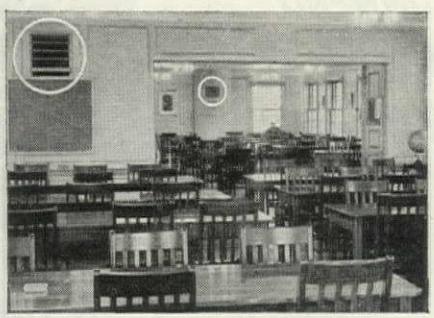
CLOSELY CONTROLLED TEMPERATURE AND CLEANLINESS FOR LABORATORY. Where clean air and constant temperature are required because of delicate instruments, Janitrol fills the bill. Janitrol automatic controls keep temperature constant.

CLEANLINESS AND WARMTH FOR INFIRMARY. The sick require the comfort of even temperature. That's why they appreciate Janitrol. No drafts, overshooting, nor lagging temperatures with the Janitrol Floor-Type Air Conditioner.

CONSTANT TEMPERATURE FOR STOREROOM. Whatever the optimum temperature for goods in storage, Janitrol can be depended upon to maintain it exactly. And thorough circulation of air means no damaging hot spots or cold corners.



BIG HEATING CAPACITY FOR HANGARS. Huge open hangar doors let in tremendous volumes of cold air. Large expanse of sheet metal wall and roof lose much heat by conduction. Answer: Janitrol for big volume, low cost gas heat to meet peak demands or continuous requirements.



HEATING COMFORT PLUS CLASSROOM BEAUTY. Janitrol Gas-Fired Unit Heaters mounted behind the wall circulate steady warmth into every corner of the room. With gas heat there's no dust or soot, to mar walls and decorations.

HERE at Spartan School of Aeronautics, Janitrol has met and solved a wide variety of typical heating problems. Your factory, store, garage, warehouse, or other type of building may not have *all* of these 6 heating requirements. But, whatever your needs may be, you can be sure that the complete Janitrol line includes equipment ideally suited for your purposes.

That's why more and more alert engineers and maintenance men are utilizing Janitrol's *unique flexibility* to meet their heating requirements with quick, economical gas heat *where* they want it . . . *when* they want it. The photographs on this page will give you some idea of the many types of Janitrol Gas-Fired heating equipment . . . suspended Unit Heaters with propeller type fans . . . other models with powerful blowers . . . floor type air conditioners delivering filtered air. For further information, write Surface Combustion Corporation, Toledo 1, Ohio.

Janitrol

GAS-FIRED HEATING EQUIPMENT

Winter Air Conditioner

Gravity Furnace

Conversion Burner

Unit Heater

Boiler

Floor Type Blower Unit

THE Perfect Solution TO YOUR SEATING PROBLEMS

Velon* UPHOLSTERY BEAUTY

FOAMEX* CUSHIONING COMFORT

***Foamex* simplifies built-in seating** design. Each *Foamex* seat or back is a simple, welded-together unit—feather-light, easy to handle and trim to any contour, or in pre-molded shapes ready to apply. Ounces of sagproof *Foamex* replace pounds of lumpy stuffing, yards of metal innards. Wears years longer! Now, electronic processing makes *Foamex* still more durable.

***Velon*—the wonder upholstery fabric**—makes built-in seats look as wonderful as *Foamex* makes them feel. Choose *Velon* in fresh pastel shades, in glowing jewel tones—practically wearproof.

Grease, dirt, grime can't cling to *Velon's* nonporous threads. One quick wipe of a cloth dampened with water or cleaning fluid makes *Velon* new again. *Velon* is snagproof, scuffproof—and "gives" without ever buckling out of shape. It's ideal for deep-seated cushioning such as *Foamex*.

Ask the leading railroads, air and bus lines about *Foamex* and *Velon*. Comfortable? "Luxurious! Beautiful? "Breath-taking!" Durable? "Wearproof!" Economical? "Upkeep zero!" Both are now ready to serve you. Write Firestone, Akron, Ohio, for complete details.

BEST TODAY··· STILL BETTER TOMORROW

LISTEN TO THE VOICE OF FIRESTONE MONDAY EVENINGS OVER NBC

Firestone

*TRADE MARK

(Continued from page 254)

LIGHTING BALLASTS

For hot and cold cathode fluorescent lighting.

Manufacturers of the new AmerTran line of ballasts for hot and cold cathode fluorescent lighting claim an exceptionally close matching with tube characteristics, thus assuring maximum lamp life and maintained brightness. Flicker, end-blacking, and premature burn-outs are reduced. Quiet in operation, these ballasts are suitable for installation where noise level is low as in churches, homes, offices, etc. The AmerTran ballast may be recognized by a roll-turn lead-out which prevents strain on lead insulation and makes wiring easier.

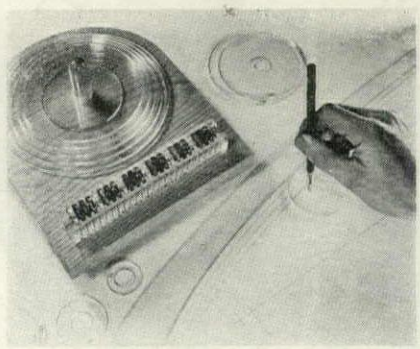
Manufacturer: American Transformer Co., 178 Emmet St., Newark 5, N. J.

MILDEW-PROOFING

Harmless chemical kills mildew and prevents its return.

Mil-Du-Rid ends mildew by killing the mildew spores. It also provides protection from mildew growth and stains for periods ranging from three months to several years. Mildew grows wherever there is slight dampness. As mildew grows it feeds on the surface to which it is attached. Some types of mildew feed on protein surfaces such as leather and wool; other varieties eat materials made of cellulose such as cotton, rayon, wall paper, etc. Mildew leaves a fast dye that cannot be removed ordinarily except by the use of strong, fiber weakening bleaches. Mil-Du-Rid does not harm fabric. A few drops sprinkled in the garbage can will kill odors immediately. It will free refrigerators and breadboxes of mildew and unpleasant odors.

Manufacturer: Interchemical Corp., Fair Lawn, N. J.



DRAWING INSTRUMENT

Facilitates drawing parallel to curve.

This Jackson Instrument, made of Plexiglas, is used to draw lines parallel to a French curve. A pencil point is inserted in the center of the disk which is then propelled along the edge of the positioned curve.

Manufacturer: Rohm & Haas Company, 222 Washington Sq., Philadelphia, Pa.

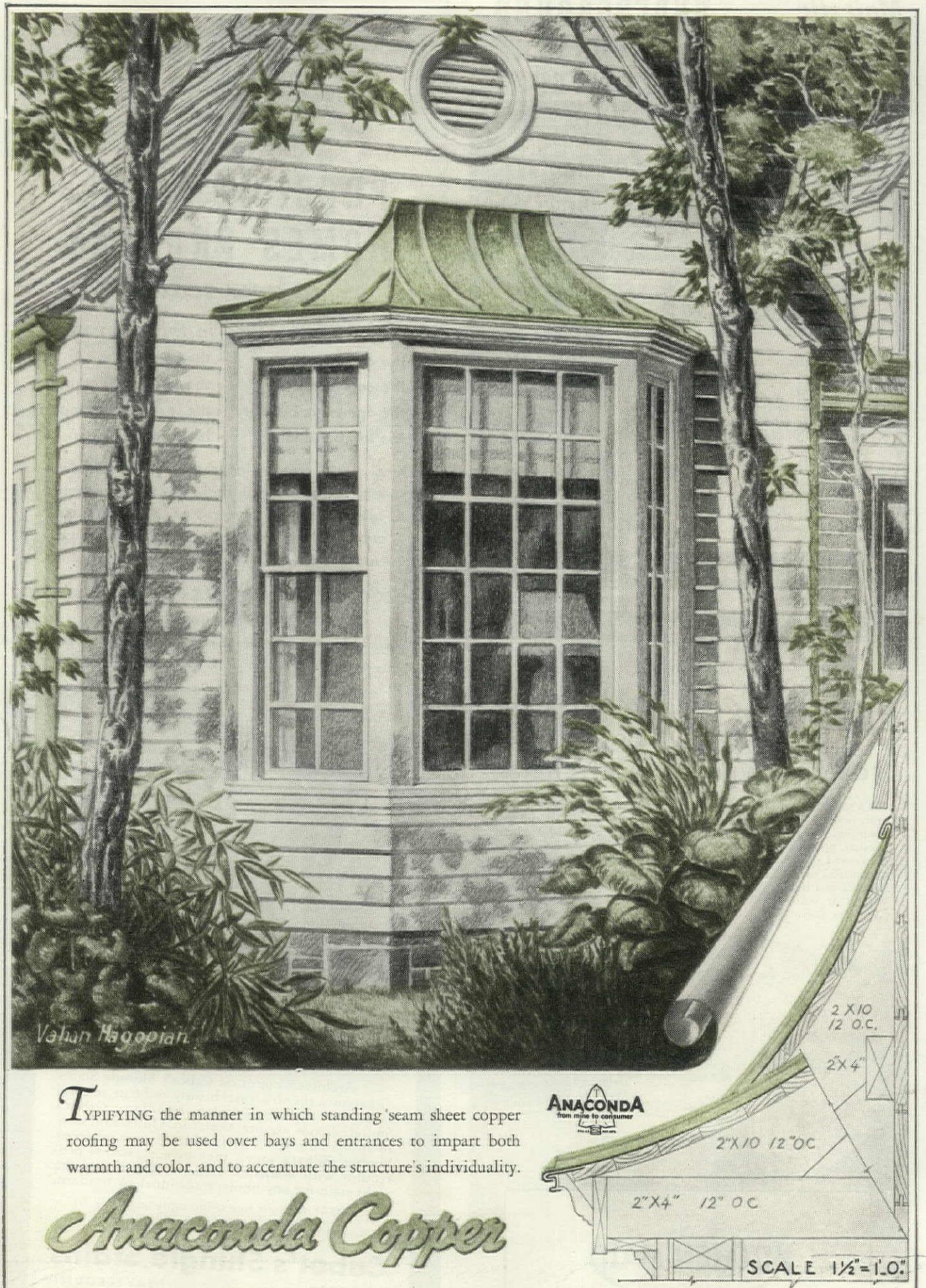
MOISTURE REGISTER

For testing variety of materials with curved, rough or flat surfaces.

Model K-2 Moisture Register, especially adapted for testing paper in stacks or rolls of varying diameters; bolts, rolls or stacks of cloth; rough lumber; plaster and other materials having curved or irregular surfaces, incorporates a new type of electrode equipped with buttons individually spring-cushioned to allow every button to maintain contact regardless of the contour of the material tested. It determines low moisture percentages providing readings down to 0 per cent, and anyone in three seconds or less can make an accurate check. Like other Moisture Registers, the K-2 operates on the principle of power absorption from a high-frequency oscillator circuit. The instrument is portable, weighs 5 lbs., and comes with a convenient carrying case.

Manufacturer: Moisture Register Co., 133 No. Garfield Ave., Alhambra, Calif.

(Technical Literature on page 264)



TYPIFYING the manner in which standing seam sheet copper roofing may be used over bays and entrances to impart both warmth and color, and to accentuate the structure's individuality.

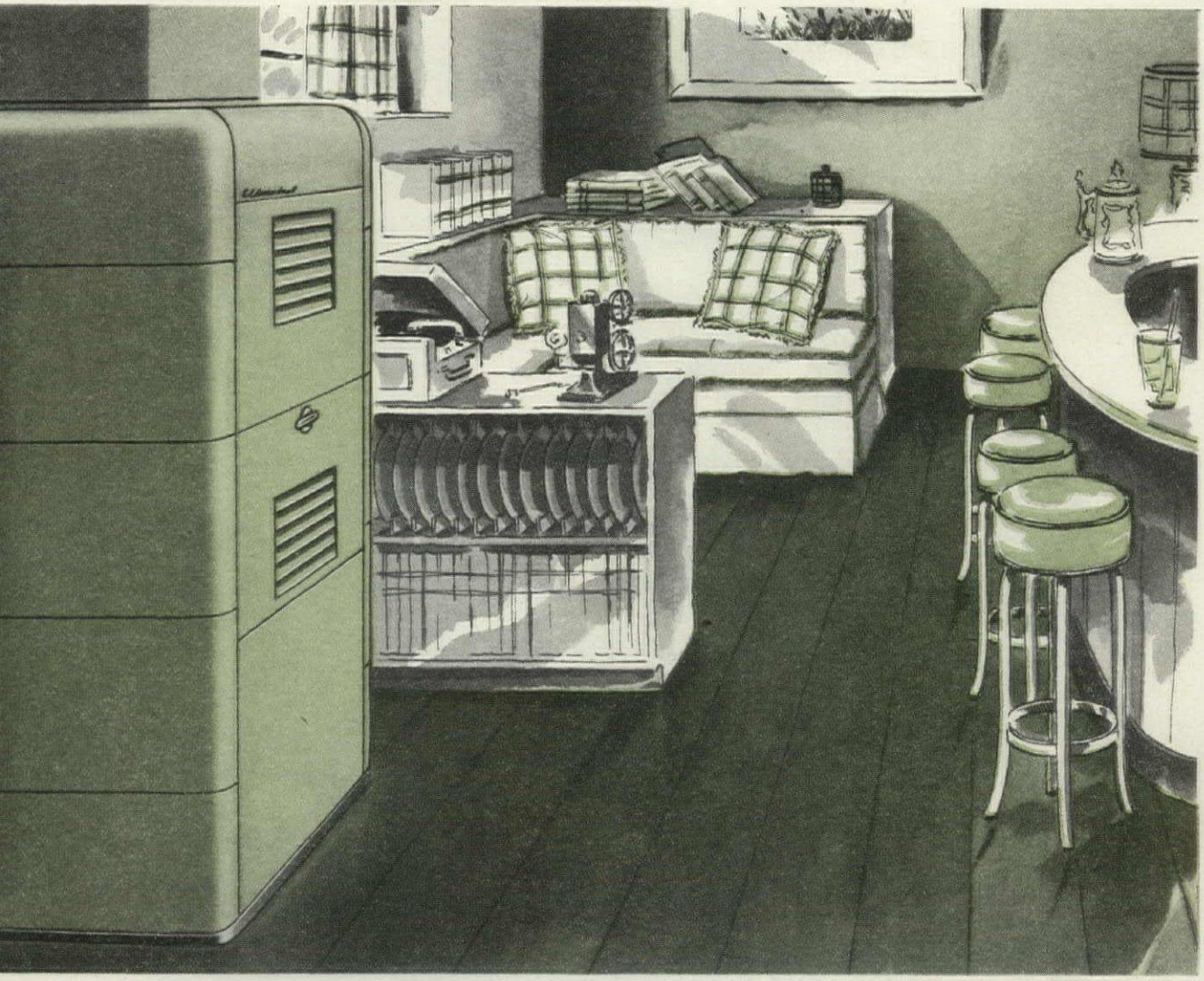
ANACONDA
from mine to consumer

Anaconda Copper

THE AMERICAN BRASS COMPANY, General Offices: Waterbury 88, Connecticut

Subsidiary of Anaconda Copper Mining Company • In Canada: ANACONDA AMERICAN BRASS LTD., New Toronto, Ont.

4536



You are sure of delivering True Indoor Comfort and winning the good will of satisfied customers . . . *when you install a Mueller Climatrol System*

The way to a home-owner's heart is through his heating system. It pays to select one that is *basically sound* —capable of delivering these essential "comfort factors":

1. Temperature control.
2. Humidity control.
3. Proper movement of air.
4. Introduction of fresh air.
5. Removal of dust, pollen, and other foreign matter.
6. Removal of bacteria conveyed on dust.

— and that offers a complete range of choice as to type, size, and fuel used. In short, a Mueller Climatrol System — basically designed to condition and handle air — backed by an 88-year performance record — *specifically* designed for efficiency with *each* of the major fuels (gas, oil, or coal)—smart and modern in appearance — nationally known and nationally advertised. Suitable models for old or new homes of every size, type, and price range. Specify "Climatrol" on your jobs, for all-around satisfaction. Write for bulletins. . . . *L. J. Mueller Furnace Co., 2001 West Oklahoma Avenue, Milwaukee 7, Wisconsin.*

Climatrol

REG. U. S. PAT. OFF.

B-26

New hom

A winning design of the architectural competition for "A House for Cheerful Living" conducted by *Pencil Points*, sponsored by Pittsburgh Plate Glass Company and Pittsburgh Corning Corporation. *Architect:* Oliver Lundquist, Washington, D. C.

ill stay modern longer

say mortgage loan experts . . . when equipped with Servel All-Year Gas Air Conditioning

IT won't be long before all new homes will *have* to have all-year air conditioning to be considered "up to date." So you protect your clients, insure the modernity of their houses now and in the future when you specify Servel *All-Year* Gas Air Conditioning.

The Servel unit provides a wonderful "New Quality of Living" for modern homes. It's the only equipment on the market that heats and humidifies in winter, cools and dehumidifies in summer, *all with a single unit!* And it's the only equipment of its kind that can back up its claims with hundreds of successful test installations in operation from coast-to-coast.

As evidence of its value, Mr. P. A. Benson, President of the Dime Savings Bank of Brooklyn, says: "In granting mortages, we carefully scrutinize a home not only for its immediate value, but also for its value ten or twenty years from now. We agree that *All-Year* Gas Air Conditioning is a development that will be included in more and more homes. A home that has an *All-Year* Gas Air Conditioner will, in our opinion, tend to stay 'modern' longer and have a greater resale value over a longer period of years."

Gas Company air conditioning engineers, trained by Servel, will be glad to help you specify and supervise installation of the unit. For complete details about the Servel *All-Year* Gas Air Conditioner, get in touch with your local Gas Company, or write direct to Servel, Inc., 2511 Morton Street, Evansville 20, Ind.

Tried . . . Proved . . . SUCCESSFUL

From Boston to San Diego
From Bismarck to Miami

The new Servel *All-Year* Gas Air Conditioner has behind it ten years of research . . . plus hundreds of successful test installations already operating—some for as long as four years—in every part of the country.

Servel

All-Year GAS AIR CONDITIONER

TECHNICAL LITERATURE

PUMP DATA. Pump Engineering Data, 416 pp., 5 in. by 8½ in.

This is a complete handbook designed to aid engineers in pump engineering and the proper selection of a pump for a specific job. Included are chapters on General Information, Principles of Pump Engineering and Engineering Data. A partial listing of pump types covered is as follows; clear-liquid pumps, sump pumps and ejectors, axial flow pumps, paper stock pumps, return line vacuum heating pumps, caisson pumps and pump accessories. The capacity, total head in feet, horse power and price of each model is given in convenient tabulated form. The handbook is sent free to engineers and others writing on their business letterheads. To others a charge of $2 is made. Economy Pumps, Inc., Hamilton, Ohio.

KITCHEN PLANNING. Min-A-Kit Book, 20 pp., 11 in. by 8½ in. Price 10 cents.

This booklet, containing valuable information on kitchen planning, includes 46 models of cabinet sinks, base and wall cabinets, stoves and refrigerators, which when cut out offer the home planner an inexpensive way to design his kitchen in miniature. Any size or style kitchen may be visualized using the cover of the book to form the kitchen walls. After the models have been removed from the booklet the inside colorful spread remains as a reminder of Youngstown Kitchens. Mullins Manufacturing Corp., Warren, Ohio.

ENGINEERING INSTRUMENTS Bulletin No. 50, Gurley Engineering Instruments, 89 pp., 6 in. by 9 in.

This bulletin is a condensed catalogue of Gurley Engineering instruments available for prompt delivery. Included are illustrations, descriptions and specifications for transits, levels, compasses, alidades, and other instruments. Attached as a supplement is price list P-50. W. & L. E. Gurley, Troy, N. Y.

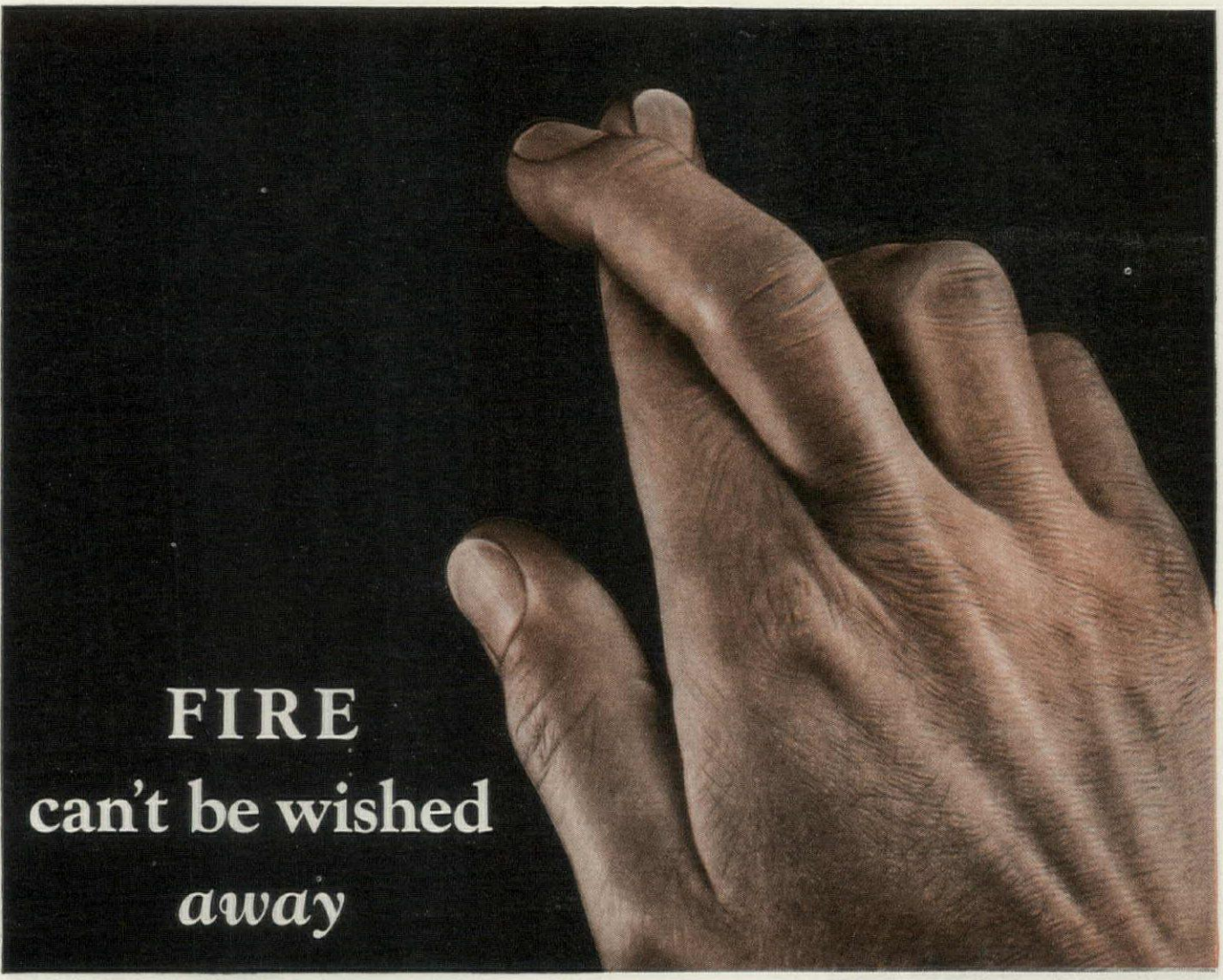
STEEL CONSTRUCTION. The Rigid Steel Standard Building, 6 pp., 8½ in. by 11 in.

This booklet tells very clearly the story of rigid steel construction, what it is, its advantages, equipment, loads, maintenance, etc. Essentially, rigid steel construction is rigid frame design, as compared with truss design. Joints, rafters, foundations, connections, roof and walls are explained with drawings, and rigid steel standard buildings are fully described with illustrations and text. Advantages of this type of construction are listed and illustrated. National Machine & Foundry Co., 313 Sixth Ave., Pittsburgh 22, Pa.

ARC WELDING. Procedure Handbook of Arc Welding Design and Practice, Lincoln Electric Co. 1,267 pp. 6 in. by 8¾ in.

This handbook, in its eighth edition, has been designed to present in convenient form for ready reference the basic information on arc welding in its present status. Its contents include a complete description of the arc welding process in its various forms and the essential data for its use in welding various types of steel, iron and non-ferrous metals. What one may expect from welds is answered in a section of the handbook devoted to the structure and properties of weld-metal. In welding, design is closely allied with the application for it allows the designer greater latitude in selection and utilization of material. A large portion of this handbook is therefore devoted to designing for arc welded construction of machinery and structures. Many design examples of machinery elements and units are included, as well as examples of various forms of structural details applicable to many types of buildings.

(Continued on page 270)



SHEETROCK *Fireproof* WALL *and* CEILING PANELS

Fire takes a yearly toll of 10,000 lives, $300,000,000 in property, untold suffering. Yet, many a building has been erected with only wishes for protection. That's why progressive architects and builders constantly seek safer building materials.

One safer building material is Sheetrock*. For U·S·G makes these big panels of gypsum, a mineral which will not burn. In fire after fire, they have proved their worth, keeping the flame confined till help could arrive.

More, this modern protection adds modern beauty to walls and ceilings. Plan smooth surfaces, sweeping curves or decorative paneled effects, decide on whatever form of decorating you will . . . and Sheetrock will do the job.

Call for wood-grained effects . . . and Sheetrocks offers faithful reproductions of knotty pine, bleached mahogany and walnut. That's why Sheetrock has been used on more walls and ceilings than any other gypsum wallboard in the world.

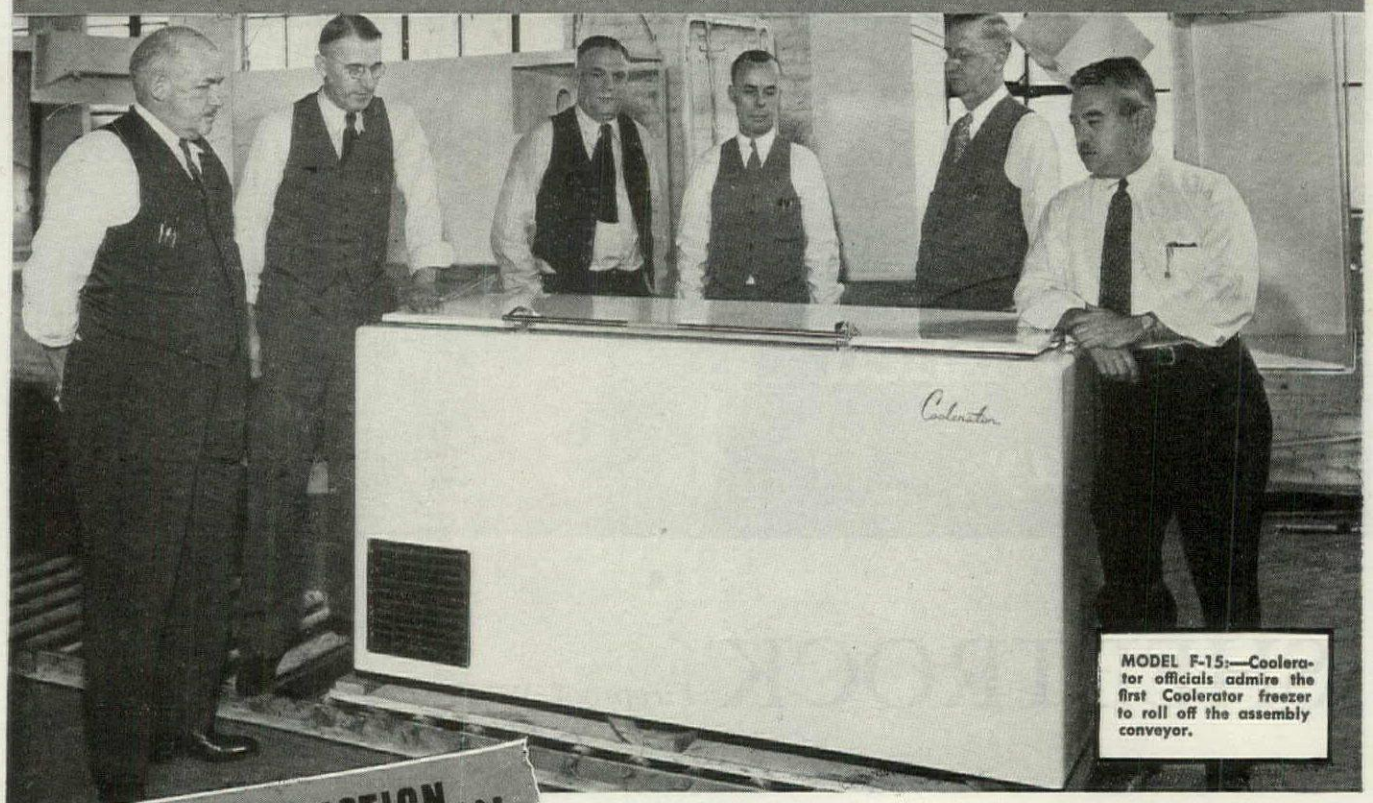
*Reg. T. M.

United States Gypsum

For Building • For Industry

Gypsum · Lime · Steel · Insulation · Roofing · Paint

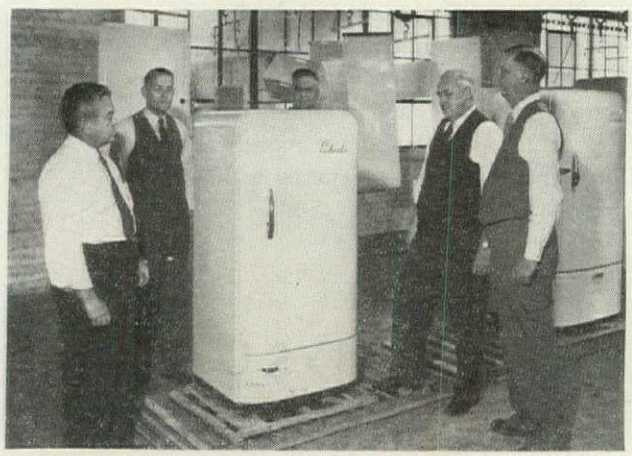
HERE COMES THE First COOLERATOR Home Freezer OFF THE ASSEMBLY LINE!



MODEL F-15:—Coolerator officials admire the first Coolerator freezer to roll off the assembly conveyor.

ALSO IN PRODUCTION...

during October—the newest Coolerator Air Conditioned Refrigerator.



A favorite with American Housewives as proven in survey after survey! No other name has ever been associated as long or as strongly with fine ice refrigeration. Almost 1,000,000 women say it's tops!

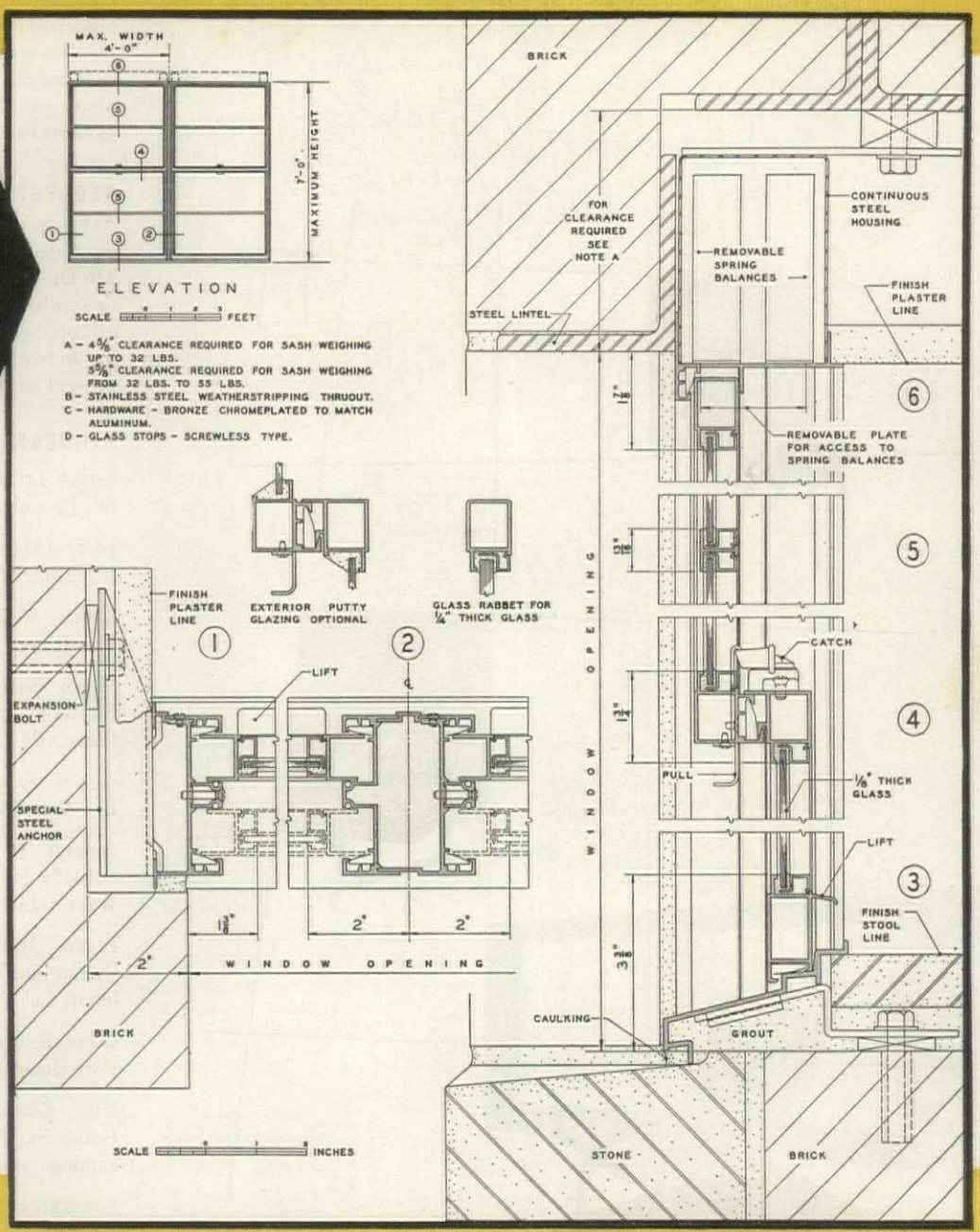
With production of the famous new Coolerator Electric scheduled to start this month, we know our friends will be interested in these photographs showing actual volume production of the freezer and ice refrigerators. You'll find that the Coolerator lineup offers refrigeration for every income—for every home, regardless of size. And you know—from past experience, that the name Coolerator is a preference with housewives everywhere . . . a refrigerator you can recommend with confidence. For further details, write the Coolerator Company.

Coolerator

THE COOLERATOR COMPANY, DULUTH 1, MINN.

GENERAL BRONZE
PRESENTS ITS NEW LINE OF
PERMATITE *Windows*
for hotels, schools and commercial buildings

DETAILS OF PERMATITE ALUMINUM DOUBLE HUNG WINDOW SERIES DHA-2



IF you would like a complete set of details of this and other new PERMATITE windows for your files, write us today on your letterhead.

Detailed above is the third of a series of new and improved PERMATITE windows. It embodies all the patented and exclusive features that have made the name PERMATITE representative of the finest in window design and construction. This window is designed to take either putty or metal glazing.

SPECIFY GB BUILDING PRODUCTS

GENERAL BRONZE CORPORATION

34-17 TENTH STREET LONG ISLAND CITY 1, N. Y.

TECHNICAL LITERATURE

(Continued from page 264)

PIPING HANDBOOK. By Sabin Crocker, McGraw-Hill Book Company, Inc., New York. 1,376 pp. 5 in. by 7¼ in. $7.00.

In the fourth edition, the scope of Piping Handbook has been extended to include chapters on "Gas Piping," "Refrigeration Piping," "Hydraulic Power Transmission Piping," and "Corrosion," which also covers the subject of protective coatings. In addition, the chapter on "Water-supply Piping" has been considerably augmented, and supplementary material of interest to hydraulic engineers has been added in the section on "Flow of Water in Pipes," which now includes the Scobey, Williams-Hazen, and Kutter-Manning formulas. This handbook — self-contained insofar as practicable—is for the benefit of those who have to deal with design problems without ready access to a reference library. Abstracts of all existing codes, dimensional standards, and material specifications for piping have been included. In addition to changes required to keep the handbook abreast of technical developments, a continual effort has been made to increase its usefulness through improving tables and charts, citing additional authorities, providing more cross references, and augmenting the index.

METAL WINDOWS. Hope's Metal Windows (Modular) Types and Sizes, 16 pp., 8½ in. by 11 in.

Useful to architects and designers in the selection of Hope's windows, this catalogue (Publication 101) was created to meet the needs of modular construction. Window types included are; commercial projected, pivoted, intermediate projected, architectural projected, intermediate combination, housing and apartment house, basement and utility, residence casements and intermediate casements. Installation data is complete with details. Hope's Windows Inc., Jamestown, N. Y.

REQUESTS FOR INFORMATION

ALBERTO PIWONKA, of Piwonka-Perez de Arce-Schimdt, architects, Ahumada 236 Of. 610, Santiago, Chile, would like to receive literature and information on all products connected with the building industry which might be exported at present or in the future.

REQUESTS FOR LITERATURE

LOUIS LIEBERMAN, architect, 44 Court St., Brooklyn 2, N. Y.

JOSEPH BAILEY, AIA architect, Congress Building, Miami 32, Fla.

KUHN & NEWCOMER, architects, 508 Third Ave., Pittsburgh, Pa.

WARD AND CONRAD, architects, 702 Swetland Building, 1010 Euclid Ave., Cleveland 15, Ohio.

GUS G. STAMOS, 766 E. Kensington Rd., Los Angeles 26, Calif.

JOSEPH H. MESSINEO, architect, Dr. Scholl's Foot Comfort Shops, Inc., 213 West Schiller St., Chicago, Ill.

ITALO WILLIAM RICCIUTI, architect, Queen and Crescent Building, New Orleans, La.

DORA B. ADAMS, 1530 McPherson St., Port Huron, Mich.

UHL CONSTRUCTION COMPANY, 6001 Butler St., Pittsburgh 1, Pa., would like catalogs and data in duplicate.

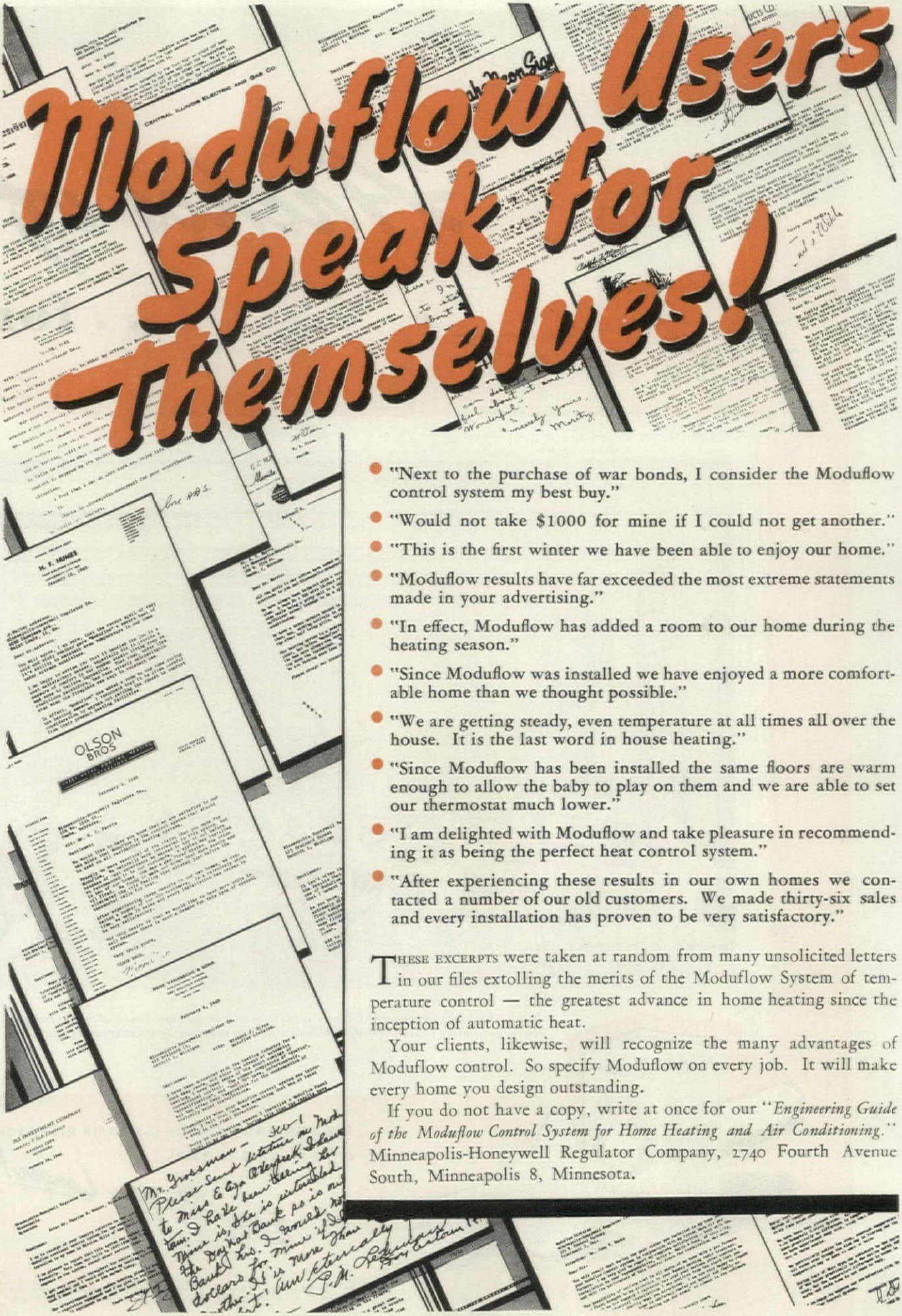
FREDERICK T. PAGEL, 9333 E. Jefferson Ave., Detroit 14, Mich.

W. M. WEIDEMEYER, 221 S. Crea St., Decatur, Ill.

JOHN CROMWELL, building materials dealer, North Aurora, Ill.

DAVID H. LESKY, 103-20 115th St., Richmond Hill 19, Queens, N. Y.

Moduflow Users Speak for Themselves!

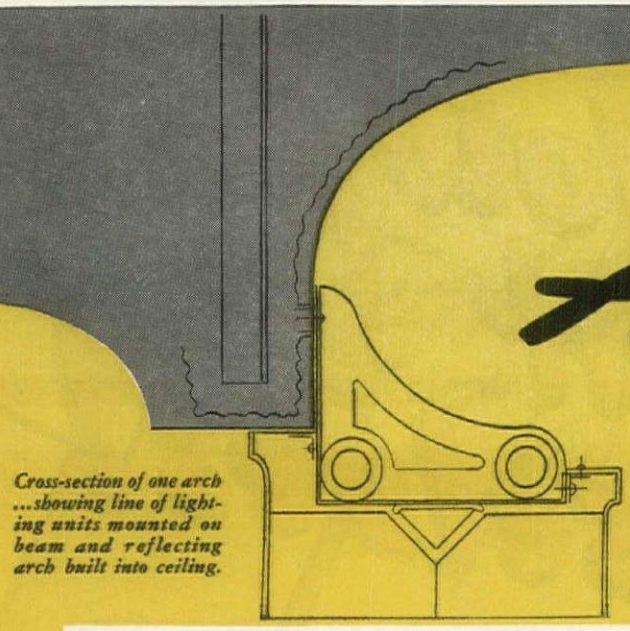


- "Next to the purchase of war bonds, I consider the Moduflow control system my best buy."
- "Would not take $1000 for mine if I could not get another."
- "This is the first winter we have been able to enjoy our home."
- "Moduflow results have far exceeded the most extreme statements made in your advertising."
- "In effect, Moduflow has added a room to our home during the heating season."
- "Since Moduflow was installed we have enjoyed a more comfortable home than we thought possible."
- "We are getting steady, even temperature at all times all over the house. It is the last word in house heating."
- "Since Moduflow has been installed the same floors are warm enough to allow the baby to play on them and we are able to set our thermostat much lower."
- "I am delighted with Moduflow and take pleasure in recommending it as being the perfect heat control system."
- "After experiencing these results in our own homes we contacted a number of our old customers. We made thirty-six sales and every installation has proven to be very satisfactory."

THESE EXCERPTS were taken at random from many unsolicited letters in our files extolling the merits of the Moduflow System of temperature control — the greatest advance in home heating since the inception of automatic heat.

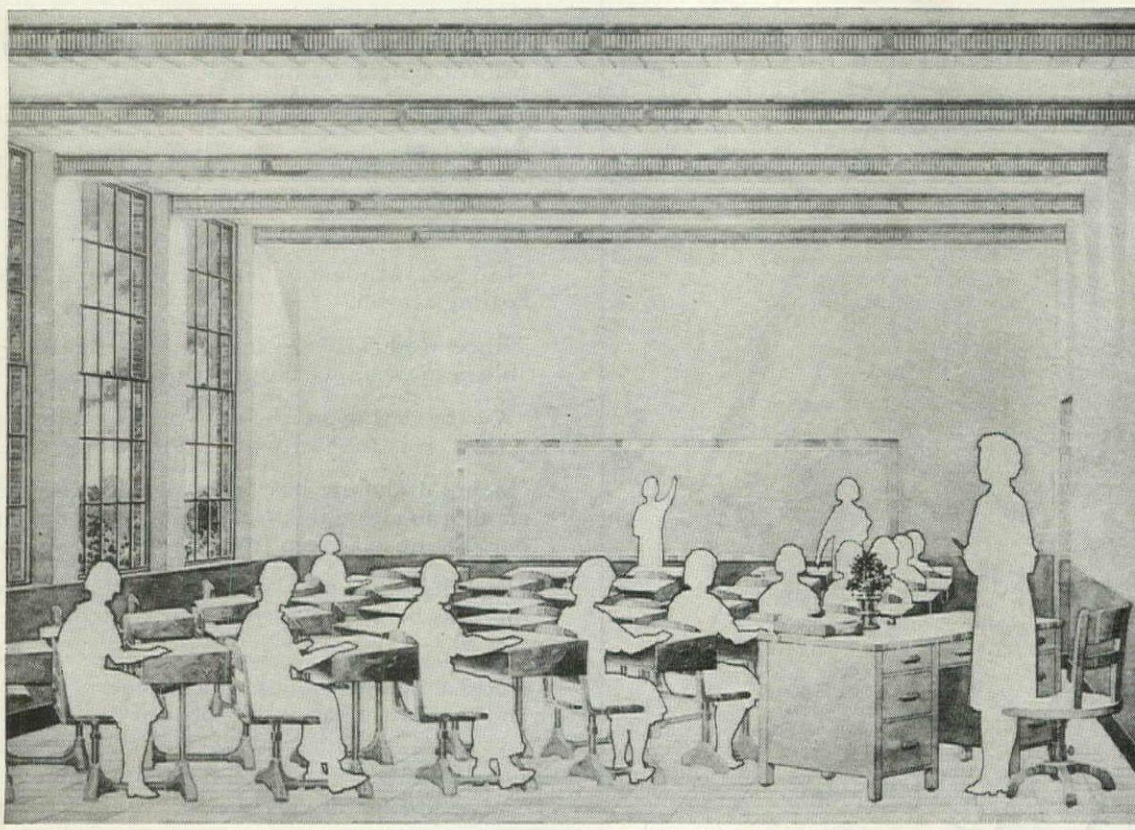
Your clients, likewise, will recognize the many advantages of Moduflow control. So specify Moduflow on every job. It will make every home you design outstanding.

If you do not have a copy, write at once for our "*Engineering Guide of the Moduflow Control System for Home Heating and Air Conditioning.*" Minneapolis-Honeywell Regulator Company, 2740 Fourth Avenue South, Minneapolis 8, Minnesota.

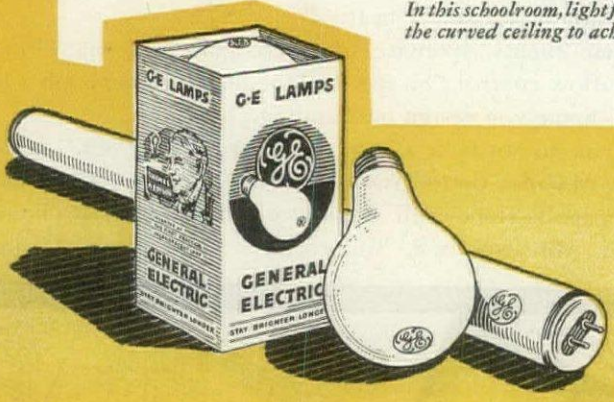


Cross-section of one arch ...showing line of lighting units mounted on beam and reflecting arch built into ceiling.

Arches of ... for



In this schoolroom, light from G-E Fluorescent lamps not only goes down but is also reflected from the curved ceiling to achieve comfortable distribution, generous light, better seeing conditions.

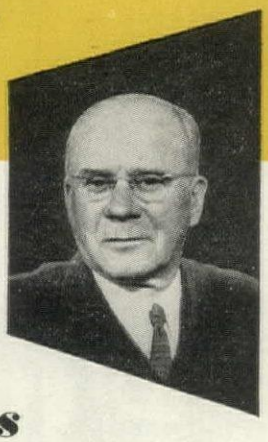


THE CONSTANT AIM OF G-E LAMP RESEARCH IS TO MAKE G-E LAMPS

Stay Brighter Longer!

No investigation has been made by General Electric Company regarding the patent situation on the design or construction suggestions shown in this advertisement.

Light
Modern Schoolrooms



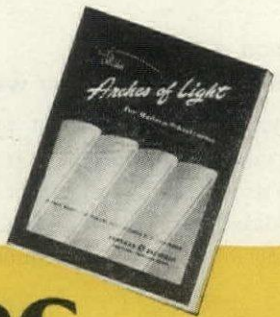
GENERAL ELECTRIC presents this new lighting design for the schoolrooms of tomorrow, by E. POST TOOKER, of Tooker & Marsh, New York.

A new idea for cheerful rooms and eyesight protection

"Today young eyes are being called upon to do more seeing tasks than ever before. They need the benefits of double protection—more light to see with and a quality of light that reduces glare and shadows.

"To achieve this, we suggest installing G-E Fluorescent lamps in a new type of continuous-row fixture overhead and constructing an arched ceiling between each line of light. This 'new construction' idea distributes light smoothly, minimizes contrast and makes for easy cleaning and replacement of lamps."

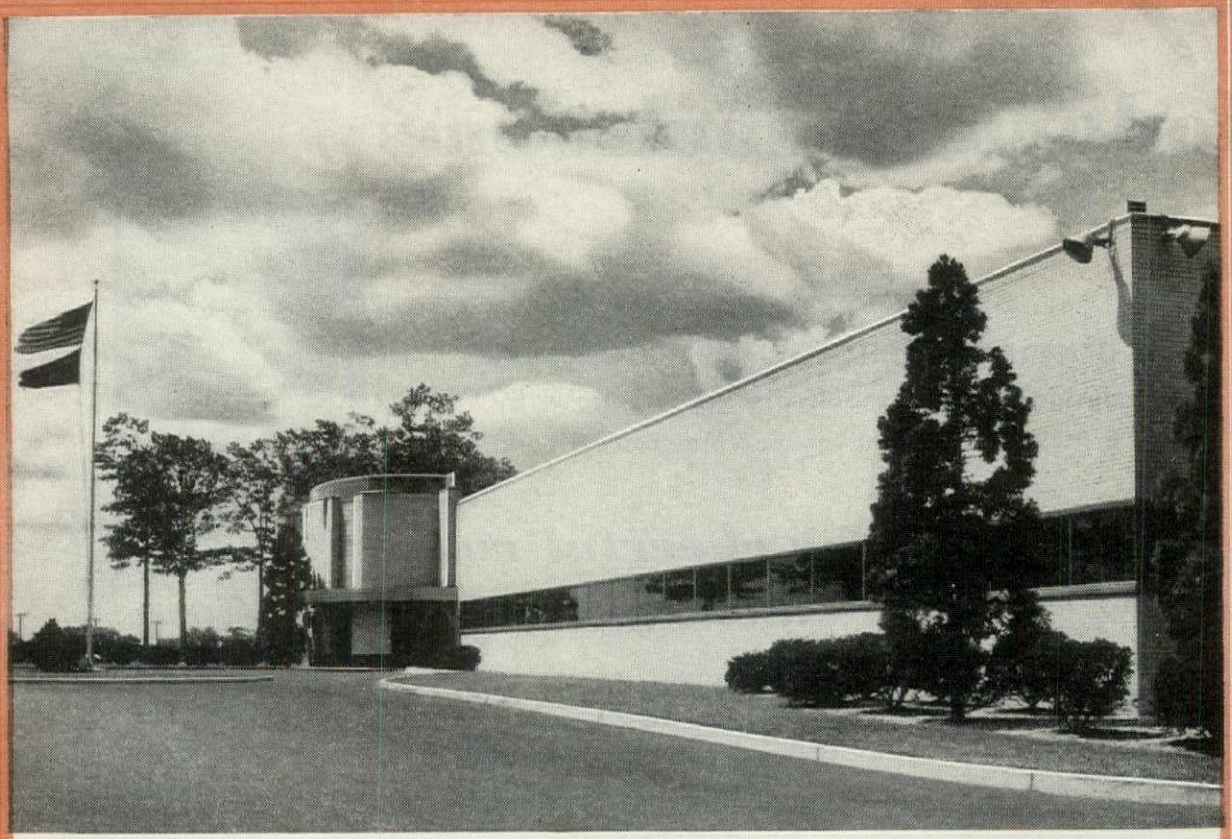
This new brochure, "Arches of Light," illustrates in greater detail the interesting school lighting ideas of E. Post Tooker. To get your copy, write General Electric Company, Department 166-AF11, Cleveland 12, Ohio.



G·E LAMPS

GENERAL ELECTRIC

Who are the Men who'll OK *the Plans for the* GREAT NEW PLANTS *of Tomorrow?*



JOHNSON & JOHNSON's Industrial Tape Division plant at New Brunswick, N. J. (Of the 22 directors and top management men identified as decision-makers by Johnson & Johnson and its Industrial Tape subsidiary, **50% are TIME subscribers of record.** Numbers on their subscriptions are: **DT-820-31; NSS-1020-41; HB-118-35; DHT-214-38; TTB-1145-18; 12-42-GGH-1243-418; 7-75-H-112-370; 11-40-AH-418-239; 11-75-HH960-599; CA-4344; NJH-210-41; NSS-0204.**

Once upon a time,
if you sold Mr. Big, you were "in."

But *today*, when you set out to sell building plans, materials or equipment, you find that your prospect is a *group*—of five or ten or more essential men. Nowadays, buying decisions follow much memo-sending and thinking-out-loud among management executives, engineers, finance men, technicians—the specialists of various kinds who form a corporation's general staff.

So in planning your advertising remember that *one* magazine—TIME—is read and *preferred* by just about 50% of *all* the officers, directors and key executives of 588 of the best-known U. S. corporations!

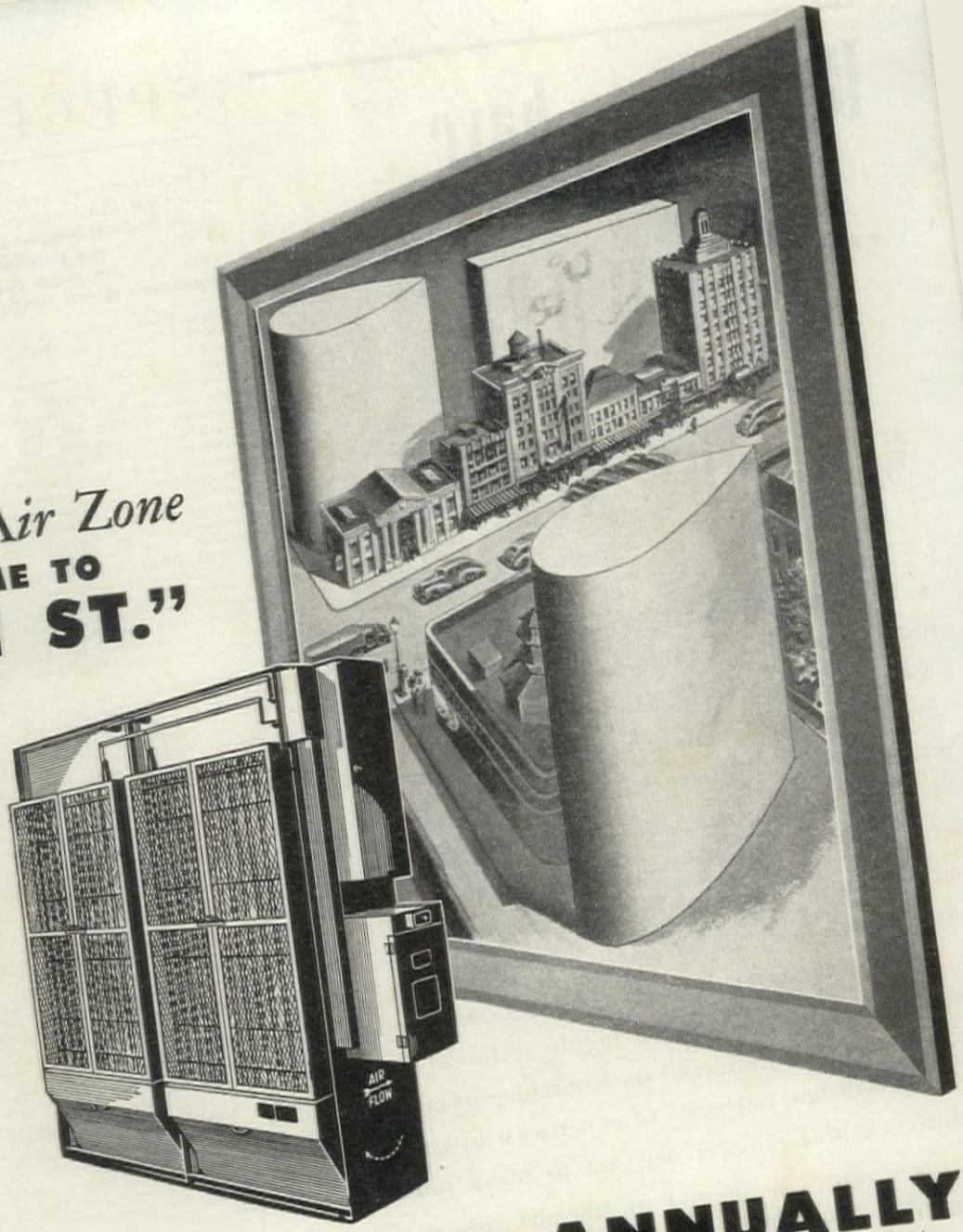
Advertisers of industrial supplies and equipment, during the first half of 1945, invested more advertising dollars in TIME than in any other magazine.

TIME

THE GATEWAY TO THE BUILDING INDUSTRY

ADVERTISING OFFICES • NEW YORK • CHICAGO • BOSTON • PHILADELPHIA • CLEVELAND • DETROIT • SAN FRANCISCO

The Clean Air Zone
HAS COME TO
"MAIN ST."



SAVING MILLIONS ANNUALLY FOR BUSINESS AND INDUSTRY

Office buildings, banks, department stores, theatres, libraries, drug stores, business houses of all kinds—from one end of Main Street to the other—are recognizing the importance of *clean air* in their establishments. Economically, *clean air* is saving millions of dollars annually by reducing building upkeep—more millions in reducing merchandise spoilage. Costly dust, soot and smoke need not be tolerated, for AAF Electronic Air Filters are designed to meet every clean air requirement. Send today for free Electro-Matic Bulletin No. 250D—you'll find it helpful in overcoming your dirty air problems.

AMERICAN AIR FILTER CO., INC., 427 Central Avenue, Louisville 8, Kentucky

In Canada: Darling Bros., Ltd., Montreal, P. Q.

Electro-MATIC

THE AAF ELECTRONIC AIR FILTER

SPECIFICATION AI

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* FORUM *does.*

UYING INDEX

More Important than ever...

the plus value of Flintkote Quality

Now, more than ever, people expect full value for every dollar they spend.

You can always give it to them with Flintkote Products.

THE EXTRA YEARS OF SERVICE COST NO MORE!

FLINTKOTE BUILDING MATERIALS

Every Flintkote Building Material is made from pre-tested raw materials... manufactured to the highest standards in the industry . . . and consistently *held* to those standards by a rigid system of manufacturing check-tests.

That's why there is always a steady demand for Flintkote, the line of building materials that is good *all* the time.

THE FLINTKOTE COMPANY

30 Rockefeller Plaza, New York 20, N.Y.

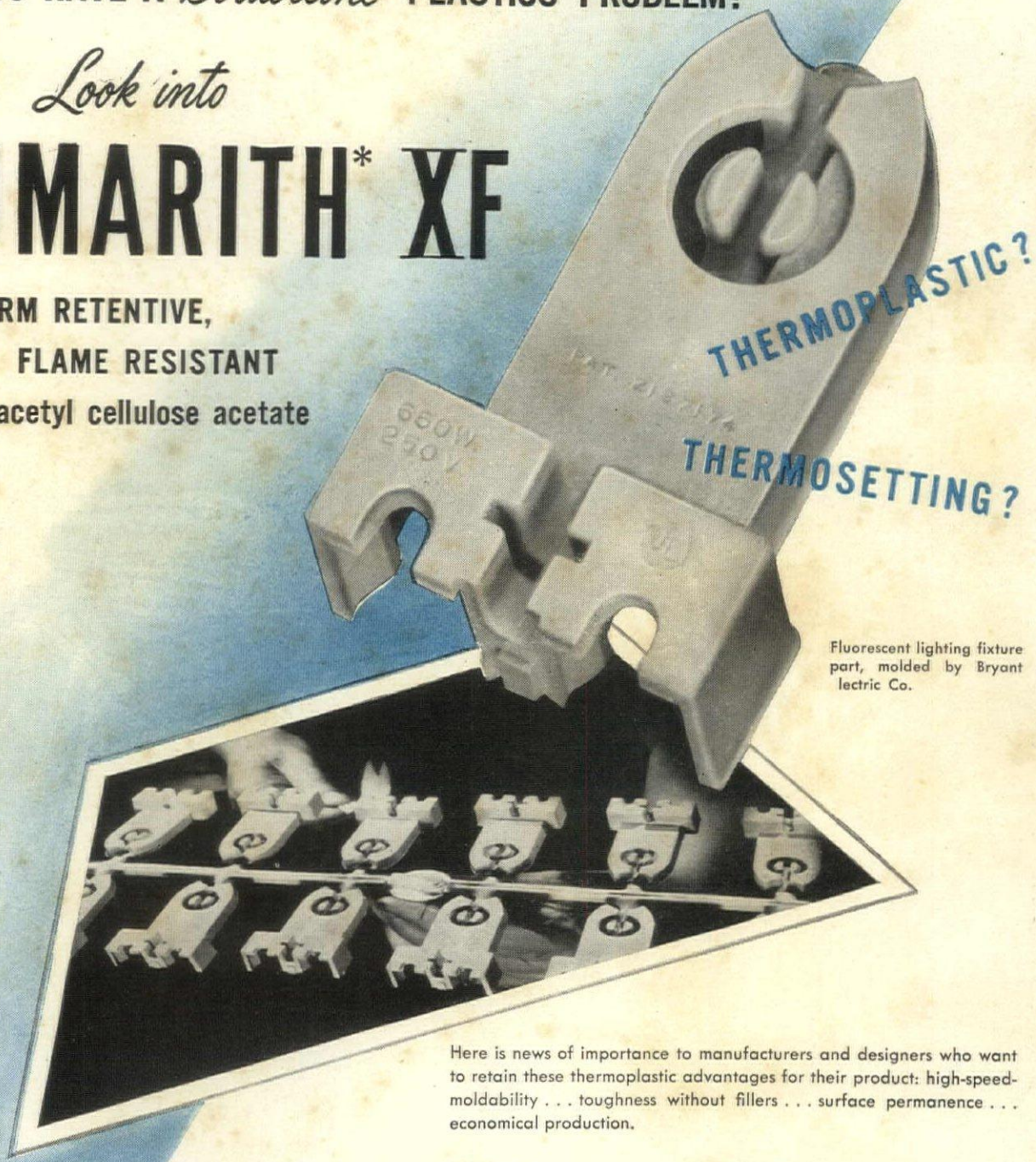
Atlanta • Boston • Chicago Heights • Detroit • East Rutherford • Los Angeles • New Orleans • Waco • Washington

DO YOU HAVE A *"Borderline"* PLASTICS PROBLEM?

Look into

LUMARITH* XF

FORM RETENTIVE,
FLAME RESISTANT
high acetyl cellulose acetate



Fluorescent lighting fixture part, molded by Bryant lectric Co.

Here is news of importance to manufacturers and designers who want to retain these thermoplastic advantages for their product: high-speed-moldability . . . toughness without fillers . . . surface permanence . . . economical production.

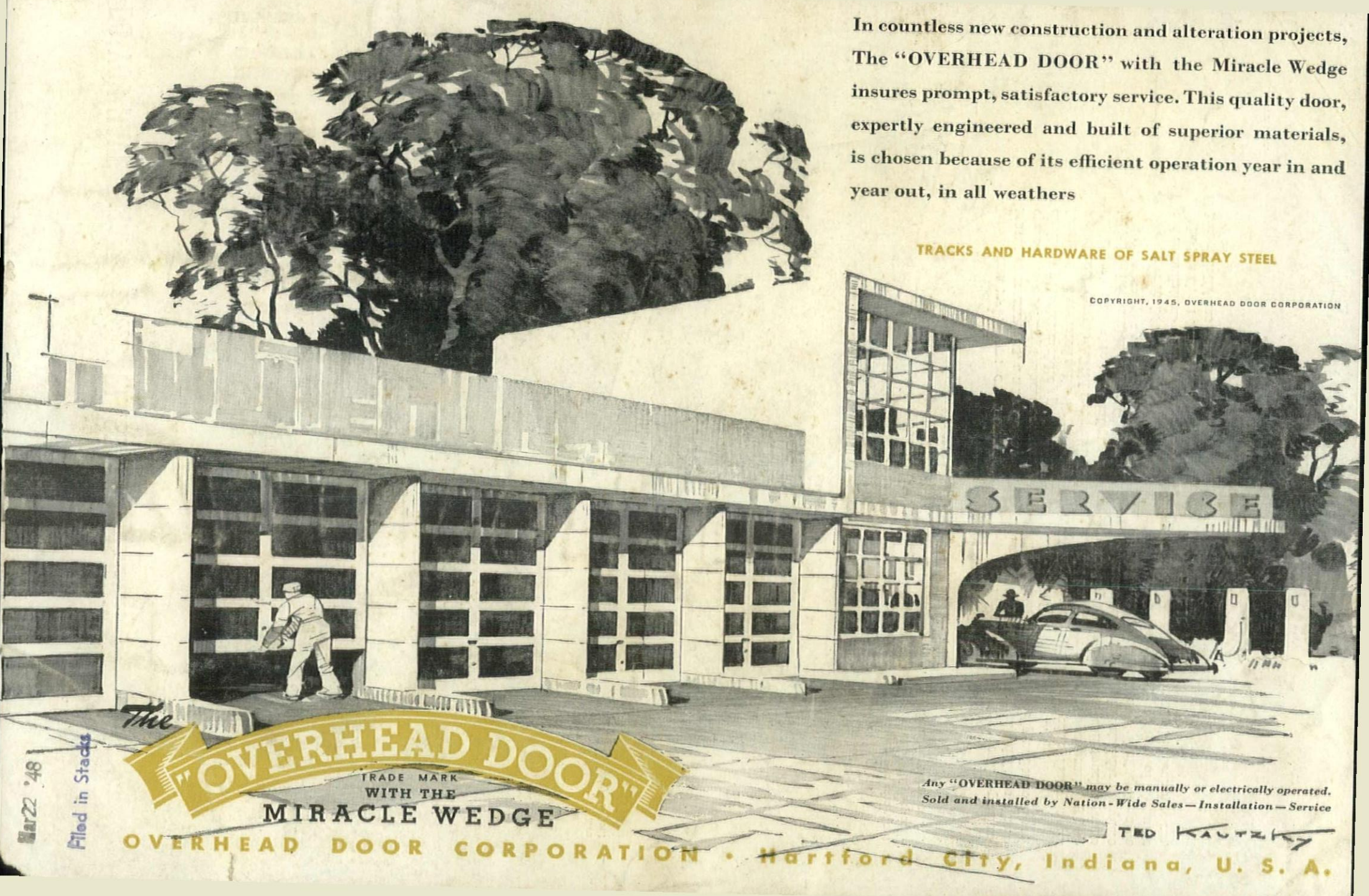
LUMARITH XF SERIES OF THERMOPLASTIC MOLDING MATERIALS, a new Celanese development, is providing the answer to many "borderline" plastics molding problems. These formulations are rated self-extinguishing when tested according to ASTM method D 635-41T, and show excellent form retention when subjected to heat and humidity. Giving high values for flexural and tensile strength, they offer ⅓ *greater resistance to cold flow* than standard formulations of cellulose acetate.

In the short time since its introduction, Lumarith XF has broadened the field of usefulness of the cellulosics tremendously—particularly in the electrical and allied fields where flame resistance and stability under load and heat are of prime importance.

If you are planning a product that you feel could be improved or more economically produced by thermoplastics, get in touch with the Celanese technical service staff for complete data on this new Lumarith plastic. Celanese Plastics Corporation, *a division of Celanese Corporation of America*, 180 Madison Avenue, New York 16, N. Y.

A Celanese Plastic*

*Reg. U. S. Pat. Off.



In countless new construction and alteration projects, The "OVERHEAD DOOR" with the Miracle Wedge insures prompt, satisfactory service. This quality door, expertly engineered and built of superior materials, is chosen because of its efficient operation year in and year out, in all weathers

TRACKS AND HARDWARE OF SALT SPRAY STEEL

The "OVERHEAD DOOR"
TRADE MARK
WITH THE
MIRACLE WEDGE

Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales—Installation—Service

TED KAUTZKY

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U. S. A.