

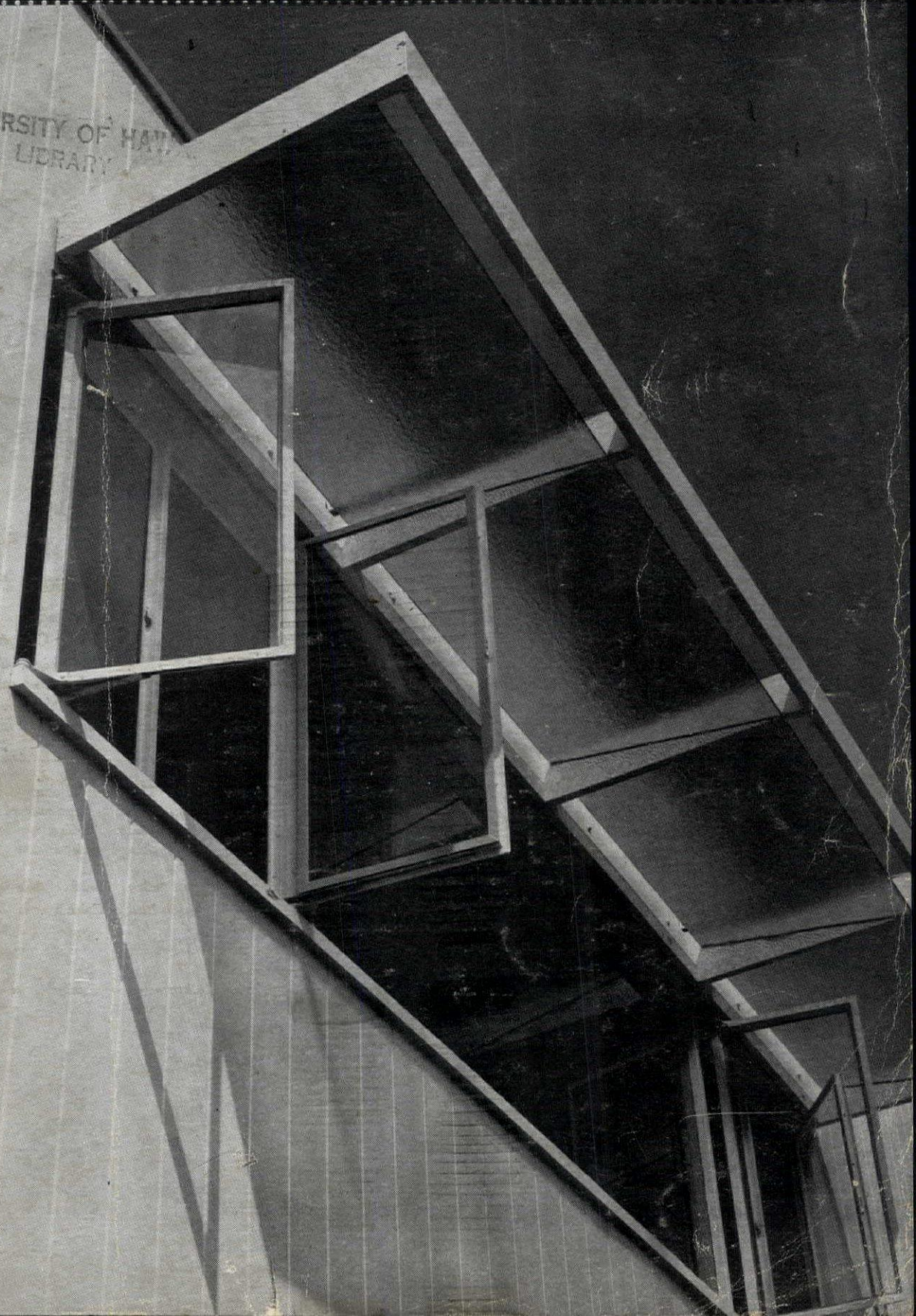
FORUM

The Architectural

Magazine of Building

65#4
TRIED

UNIVERSITY OF HAWAII
LIBRARY



1A1
B2
October 1946



It's what's inside that Counts!

STREAMLINED . . . well designed . . . balanced and good looking, yes. But the *heart* of those fine binoculars is the precision ground prisms *on the inside*.

It's what's *inside* that counts with quality building products, too. Hidden, *inside* values the eye seldom sees. That's why building-wise people insist on Celotex Building and Insulating Products.

They know the raw materials that go into Celotex are the best that nature can grow and money can buy.

And rigid production controls all along the line guarantee uniformly high quality of every product bearing the Celotex name.

Tireless laboratory research perfects materials and methods still *more* . . . helps to maintain Celotex leadership year after year.

These, plus more than a quarter of a century of building materials "know how," are the invaluable in-

gredients in every Celotex product.

They make a big difference in performance . . . in long life and low cost maintenance. A difference that has proved its value on hundreds of thousands of building jobs of every kind.

There aren't enough of these famous Celotex products to go around *now*—but rest assured as soon as building products generally become available, you'll be able to get all the Celotex you need.

Building Board Celo-Rok Sheathing and Wallboard
 Interior Finish Boards Celo-Rok Lath and Plaster
 Cemesto Rock Wool Insulation
 Triple Sealed Shingles

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

THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

The Architectural **FORUM**
MAGAZINE OF BUILDING

OCTOBER 1946



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: Millicent Bell, Leslie Check, Jr., Louise Cooper, James M. Fitch, Jr., Joseph C. Hazen, Jr., Mary Mix, Mary Sanders, Richard Saunders (Washington), Lawrence W. Mester (Production).

ASSISTANTS: Eleanor Bittermann, Sighe Kennedy, Rosalind Klein, Mary Jane Lighthown, Amnon Rubinstein, Helen Benz Schiavo, Ambrose Uchiyamada.

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 540 North Michigan Avenue, Chicago 11, Ill. Address all editorial correspondence to 350 Fifth Ave., N. Y. 1, N. Y. Yearly subscription payable in advance. U. S., Possessions and Canada, \$4.00. Pan-American Union, \$4.00 until Oct. 14—\$6.50 starting Oct. 15. Overseas countries, \$6.00 until Oct. 14—\$10.00 starting Oct. 15. When available, single issues, including Reference Numbers, \$1.00. All copies mailed flat. Copyright under International Copyright Convention. All rights reserved under the Pan American Copyright Convention. Entered as Second Class Matter July 17, 1944 at the Post Office at New York, N. Y., under the act of March 3, 1879. Copyright 1946 by Time Inc.

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 & Secretary, D. W. Brumbaugh; Vice President & Sales Director, Howard Black; Vice Presidents, Allen Grover, C. D. Jackson, P. I. Prentice; Comptroller & Assistant Secretary, Arnold W. Carlson; Production Manager, N. L. Wallace; Circulation Director, F. DeW. Pratt. Producer, THE MARCH OF TIME, Richard de Rochemont.

VOLUME 85, NUMBER 4

NEWS	5
LETTERS	38
FORUM	66
ANNOUNCEMENTS	74
INTRODUCTION	91
COMMUNICATION	92
Experimental Broadcast Studio . . . Air Terminal . . . Truck Terminal . . . Railroad Station.	
WORK	98
New Food Plant . . . Administration Building . . . Railroad Laboratory . . . Factory for Small Motors . . . Warehouse Offices . . . Starch Plant . . . Office Building.	
LIVING	106
Case Study House . . . House in Texas . . . House in Seattle . . . Forty Houses on Long Island . . . Florida Farmhouse . . . Tri-Level House . . . Veteran's House in Arizona . . . Six-Room Bungalow . . . 175-House Development in Houston . . . Veteran's House in Oregon . . . House in Pasadena.	
EDUCATION & HEALTH	126
Small Library . . . Dormitory for School Employees . . . Small Rural School . . . Clinic for Ten Doctors . . . Navy General Hospital in Houston.	
TRADE	132
Women's Specialty Shop . . . Tailor Shop . . . Cutlery Show-room . . . Furniture Store . . . Specialty Shop . . . Shoe Salon . . . Women's Apparel Shop . . . Auto Sales and Repair Shop . . . Flower Shop . . . Showroom for Toy Trains . . . Plastic Center . . . Two Roadside Drive-Ins . . . Downtown Butcher Shop . . . Remodeled Camera Shop.	
REVIEWS	152
Exhibitions . . . Industrial Art Explained . . . Three Pelican Books . . . Modern Terrace Houses . . . New City Patterns.	
G. I. JOBS	176
PRODUCTS & PRACTICE	183
World's largest radiant heating system . . . new synthetic vehicle for paint . . . lean-to utility room.	
TECHNICAL LITERATURE	198
Concrete Houses . . . Marble Forecast . . . Plastics Primer.	

Cover by James Lamantia, photo: Ezra Stoller

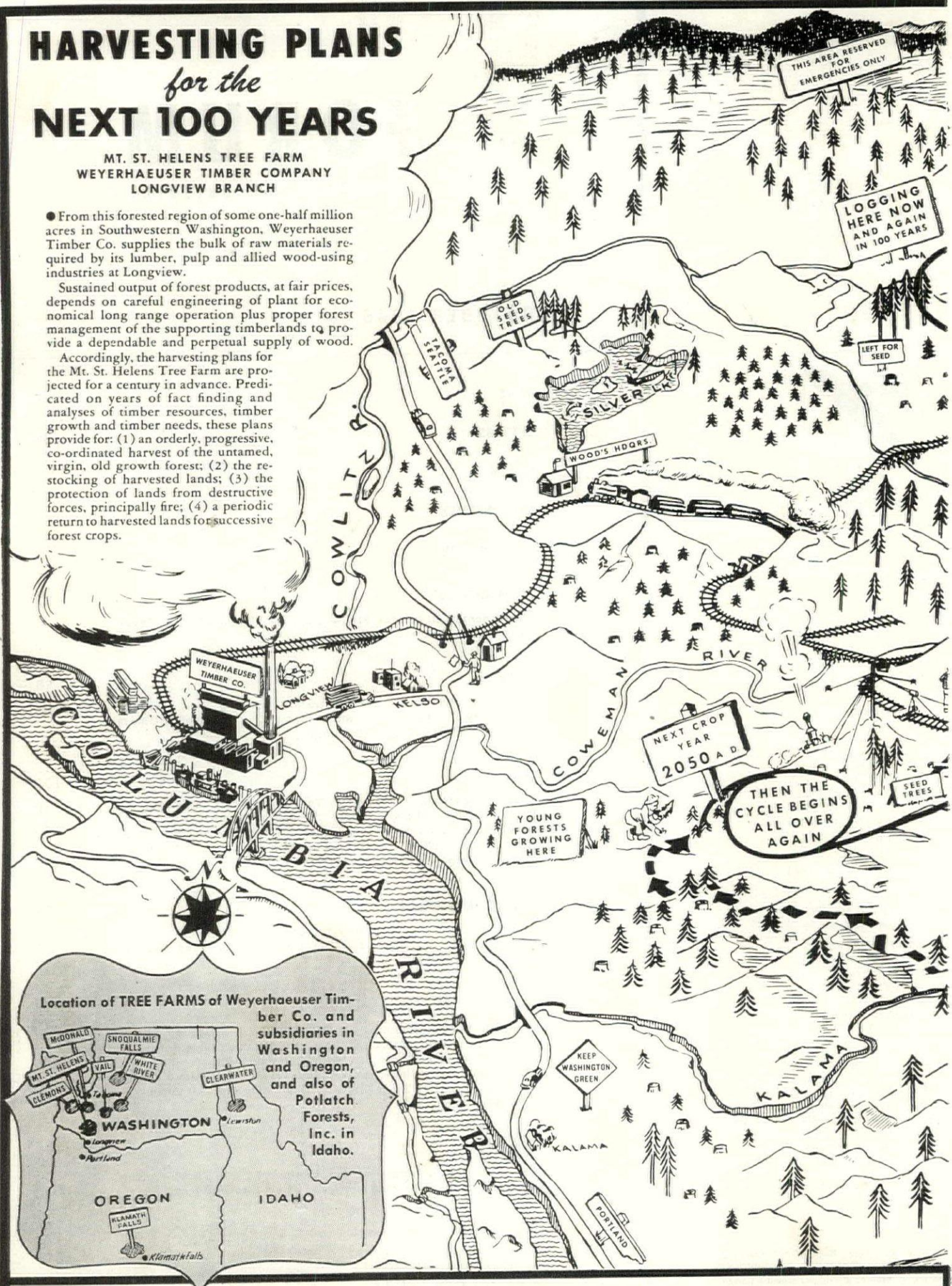
HARVESTING PLANS for the NEXT 100 YEARS

MT. ST. HELENS TREE FARM
WEYERHAEUSER TIMBER COMPANY
LONGVIEW BRANCH

● From this forested region of some one-half million acres in Southwestern Washington, Weyerhaeuser Timber Co. supplies the bulk of raw materials required by its lumber, pulp and allied wood-using industries at Longview.

Sustained output of forest products, at fair prices, depends on careful engineering of plant for economical long range operation plus proper forest management of the supporting timberlands to provide a dependable and perpetual supply of wood.

Accordingly, the harvesting plans for the Mt. St. Helens Tree Farm are projected for a century in advance. Predicated on years of fact finding and analyses of timber resources, timber growth and timber needs, these plans provide for: (1) an orderly, progressive, co-ordinated harvest of the untamed, virgin, old growth forest; (2) the restocking of harvested lands; (3) the protection of lands from destructive forces, principally fire; (4) a periodic return to harvested lands for successive forest crops.



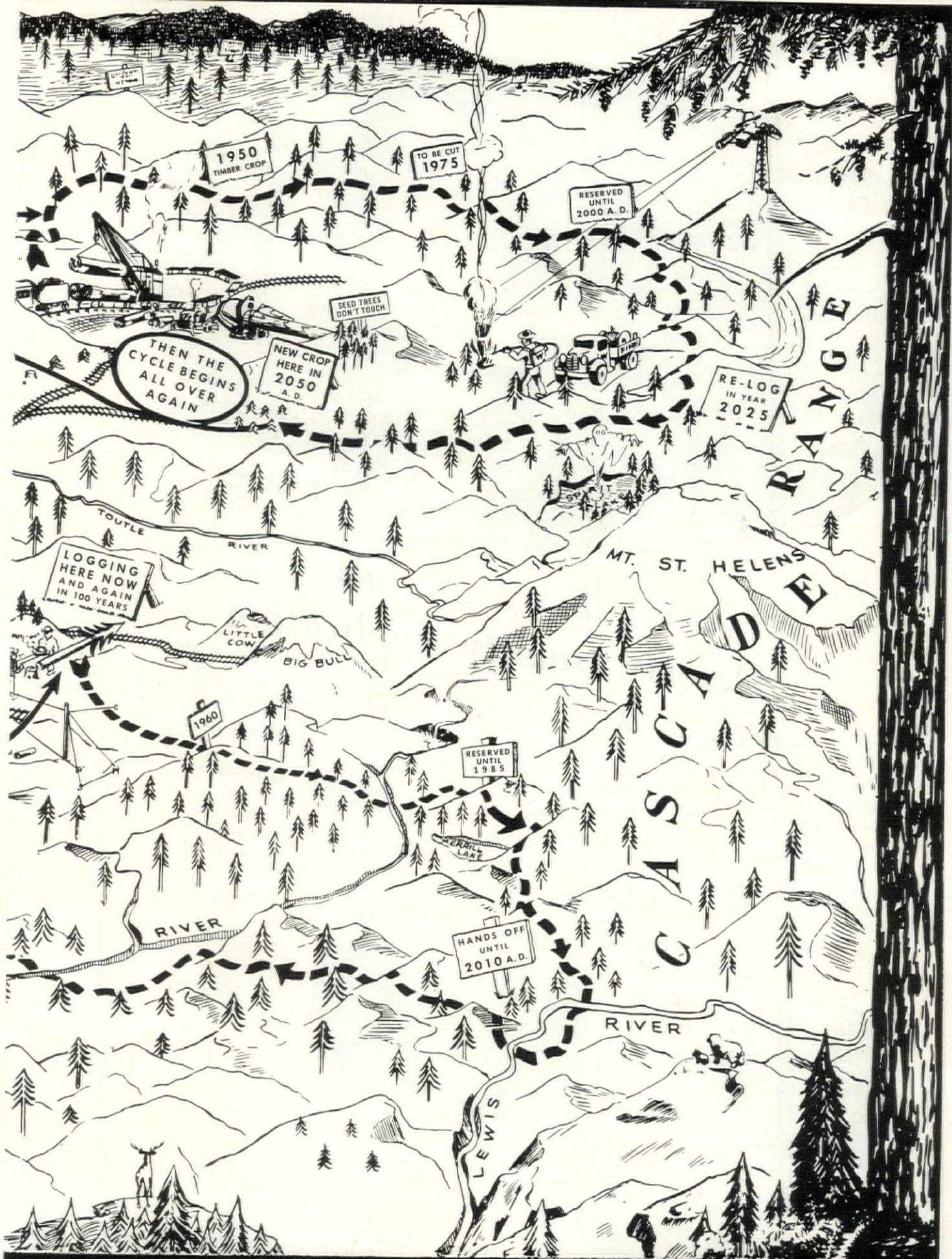
Location of TREE FARMS of Weyerhaeuser Timber Co. and subsidiaries in Washington and Oregon, and also of Potlatch Forests, Inc. in Idaho.

WASHINGTON: MCDONALD, SNOQUALMIE FALLS, WHITE RIVER, YAL, MT. ST. HELENS, CLEMONS, CLEARWATER, Longview, Portland

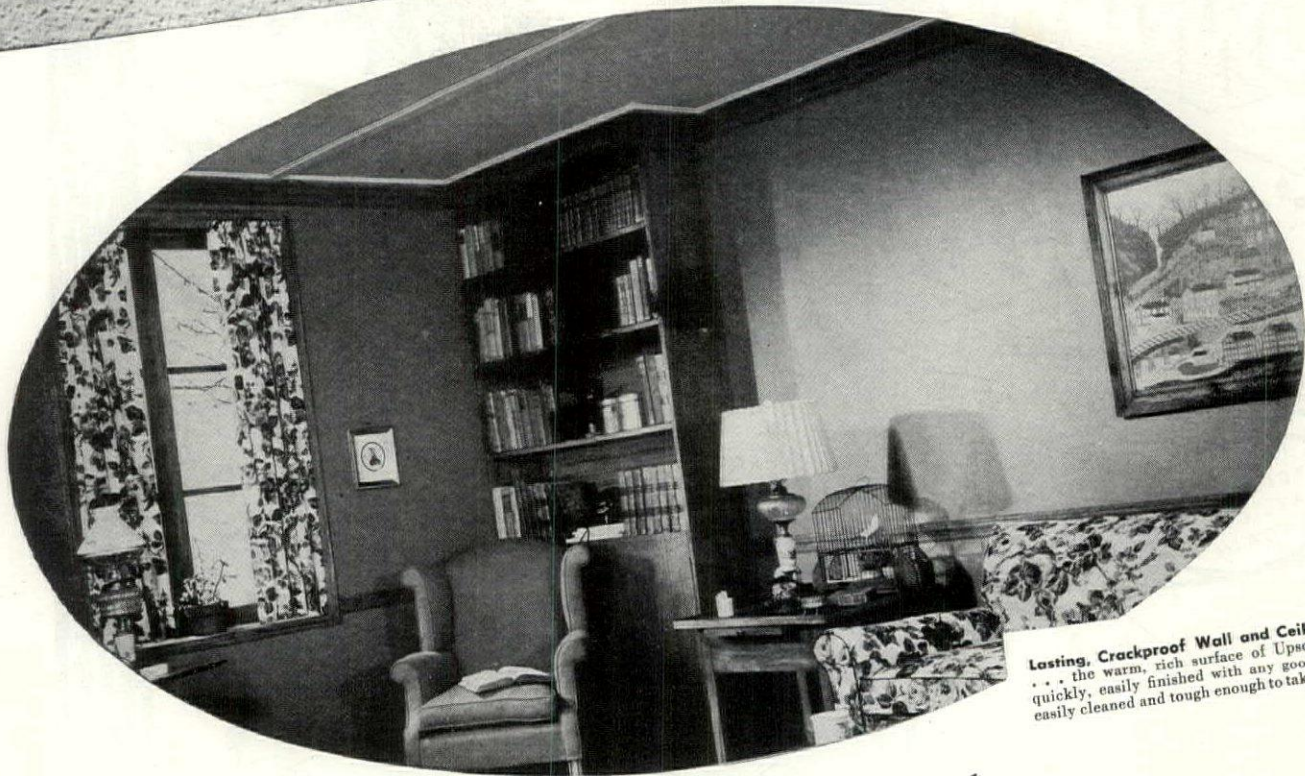
OREGON: KLAMATH FALLS, Klamath Falls

IDAHO: (Location indicated on map)

THIS ANIMATED MAP ILLUSTRATES THE CYCLICAL PROGRESSION OF THE PERPETUAL HARVEST. ITS FACTUAL BACKGROUND RESTS ON UNEMBELLISHED WORK-A-DAY MAPS, PLANS, ESTIMATES, ANALYSES AND VOLUMES OF DETAILED SUPPORTING DATA.



WEYERHAEUSER
 SALES COMPANY • ST. PAUL, MINNESOTA



Lasting, Crackproof Wall and Ceiling Beauty
 . . . the warm, rich surface of Upson Panels is quickly, easily finished with any good paint . . . easily cleaned and tough enough to take hard usage.

Quality Materials Deserve Quality Application

No chain is stronger than its weakest link!
 No building material can reflect its true quality when improperly applied.

The finest of flooring—or trim—or any good building material can have its goodness ruined by careless workmanship on the job.

So with Upson Panels! To insure the satisfaction which our product deserves, the simple application directions should be faithfully followed.

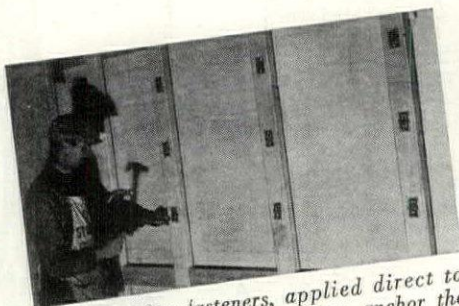
Use in thousands upon thousands of housing units has

THE UPSON COMPANY • LOCKPORT, NEW YORK

proven the utility and economy of Upson Panels—has proven that Upson Panels assure distinctive beauty—lasting satisfaction—and remain forever **CRACKPROOF**. They give the added dollar-value to the home which every owner covets.

Architects are urged to make sure that Upson Panels are given proper application.

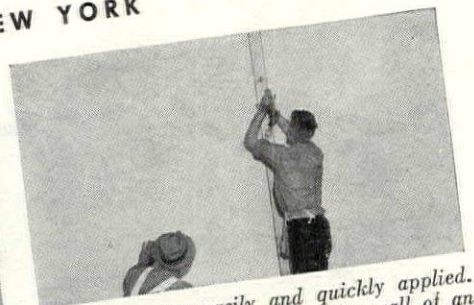
The day is approaching when Upson Panels will again be in full supply. In the meantime, let us send you descriptive literature showing the beauty of Upson Panels when properly applied.



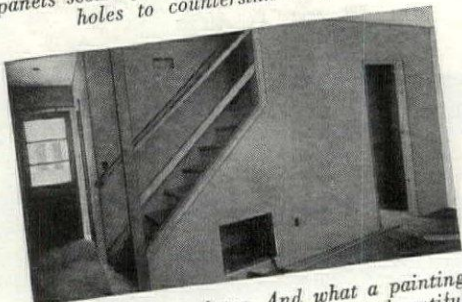
Upson floating fasteners, applied direct to studs or furring on 16" centers, anchor the panels securely from the back. No ugly nail holes to countersink or fill.



Ceiling panels go up quickly. Held in place by a T-brace, the panels are securely clinched by the fasteners by means of block and hammer. A permanent, **CRACKPROOF** ceiling!



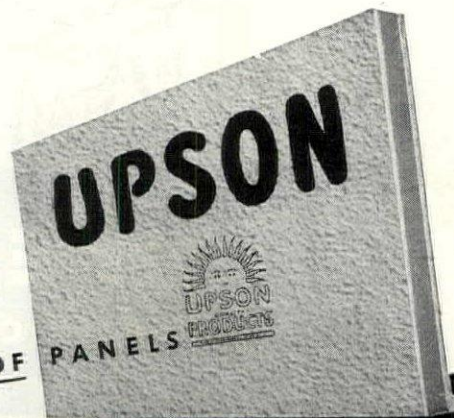
Walls, too, are easily and quickly applied. Giant panels to cover the entire wall of an average room—or four-foot widths for artistic paneling.



Ready for the painter. And what a painting surface! Pre-sized at the factory, the beautiful pebbled surface of Upson Panels takes paint smoothly and easily—and uses less paint than ordinary wall surfaces.

Upson Products are Easily Identified by the Famous Blue-Center

**PACEMAKER IN
 CRACKPROOF**



The Crackproof Beauty Surface
 with Efficient Insulating Value.

NEWS

WASHINGTON

- Inflation weather—how long will it last? p. 5
Month's debate—Who's stopping housing? p. 5
Non-residential building ban p. 6
Wyatt revamps his organization p. 6

BUILDING MONEY

- RFC will buy vet loans p. 7

MATERIAL

- Set-asides and premium payments vs. the black market p. 7

PREFABRICATION

- Guaranteed contracts on the way p. 8

JOBS

- Webb and Knapp plan an inner city for Manhattan p. 9

HOUSES

- Kaiser the housebuilder p. 10

MARKET

- Department store building boom p. 10
Louis Sullivan honored p. 12

OVERSEAS

- England's squatters set a style p. 14

CITIES

- The property tax is on the way out p. 16
Florida real estate omen—Pittsburgh anti-smoke law p. 24

LABOR

- Apprentice barriers loosen p. 28

BUILDING MONTH. Good building weather was fast running out. Nobody hoped any longer that 1946 would cure the U. S. of the housing shortage. But somehow—despite 708,100 houses started, 350,000 completed—the nation felt little better. Veterans continued to marry, babies to be produced faster than new places to live. With baffling perversity, the housing shortage continued to outpace efforts of industry and government. Even if the full goal of 1,200,000 homes were achieved this year—even then, mourned Expediter Wyatt, “the nation would be left with a greater shortage of housing compared with demand, than existed at the beginning of the year.” But we were not likely to get that many new homes. Many thought that the score was practically tallied. Present completion plus future finish-up of houses would probably total under 800,000 units at the

grabbed a ride that squeezed out many small projects. Veteran protest had stopped the \$5 million Marlboro Race Track in Baltimore, but not a \$3.5 million track in Atlantic City. Building men argued that the new drive to restrict non-residential building would depress the entire economy, make for fewer jobs and fewer homebuyers, discourage production in many materials lines.

There were hints that Building Money was drawing in its horns—just a little perhaps, but enough to indicate that it had caught the prevailing mood of trepidation mingled so oddly with the give-it-all-you-have mood of a postwar boom. F. W. Dodge surveys showed a downward spiral in residential commitments; Dun and Bradstreet recorded a leveling off of permit values.

House-hunting Americans were people of quiet desperation last month. They read in their newspapers of English families who had simply grabbed quarters in empty London residences and unused barracks buildings. Although no one knew just why, we had not yet come to that. Expediter Wyatt kept plugging, working out the details of his program—premium payments, guaranteed markets to new manufacturers and prefabricators, more inducements for rental investment. If you churned long enough, he seemed to argue, you would get butter. He moved to strengthen curtailment of most non-residential building, announced that for the first time in five years, home construction actually topped other building. He streamlined and reorganized his staff of advisors. But he was also ready to admit that you can't make butter from buttermilk. Materials were still in thin supply.

Like other industries, Building mulled over the effect of this paper tumble. The business activity curve has periodically humped and dipped after the sensitive course of the stock market. Had Building reason to fear? Merrill Lynch, Pearce, Fenner & Beane, the country's busiest brokers, turned an apprehensive eye towards the current building rush in Florida. The Florida land spree of the twenties collapsed in 1926 and 1927, they noted, and “a nationwide depression started less than three years later.”

Federal Reserve Board experts expressed the dour opinion that a “bust” lurked somewhere in the next 12 months. Their evidence: costs have risen so sharply—65 per cent above prewar scales—that many families are being priced out of the housing market. Houses aren't being snapped up as fast as they were early this year; prices on old homes have stopped rising.

Inflation was the unbidden conferee present at every anxious meeting of government, business, labor. While seamen and truckers walked off their jobs for wages to meet rising living costs, building workmen lined up for more pay, grumbled as the Wage Stabilization Board tried to peg wages at old levels. Building men watched sky-high prices flourish in a black market that was probably the housing program's biggest unofficial problem. In New York, sub rosa sales of oak flooring had reached an incredible \$350 for 1,000 feet, nails were up 900%. NHA flatly denied that black market operations had appreciably halted the home-building job, but moved to stiffen policing just the same.

More crucial than control of materials prices, however, was enforcement of materials rationing. CPA field offices had moved, as the month began, to cut non-residential construction to the bone. But in every city a few big jobs had already

“A serious charge has been made against me, the charge that I am an optimist,” said Expediter Wyatt. But about his cheerful head there raged a storm of acrimony. From labor's corner came the voice of U.A.W.'s R. J. Thomas, charging that the jinx on housing was the fault of “those phony friends of free enterprise—the organized real estate agents, landlords, mortgage bankers and black market builders.” Meeting in Milwaukee for its eleventh annual convention, the United Electrical Workers called upon the federal government to start construction of 3 million low

HOT TALK
Industry, labor, veterans blame government and each other.

HOT TALK

Industry, labor, veterans blame government and each other.

“A serious charge has been made against me, the charge that I am an optimist,” said Expediter Wyatt. But about his cheerful head there raged a storm of acrimony. From labor's corner came the voice of U.A.W.'s R. J. Thomas, charging that the jinx on housing was the fault of “those phony friends of free enterprise—the organized real estate agents, landlords, mortgage bankers and black market builders.” Meeting in Milwaukee for its eleventh annual convention, the United Electrical Workers called upon the federal government to start construction of 3 million low

cost homes for veterans "since private industry refuses to build adequate homes for them." Veterans' spokesman Charles Bolte gave builders until fall to provide homes for the homeless. "This," he said, "is a showdown. If they fail, the veterans have two recourses: either to demand that the President declare that the building industry is on strike against the veterans or to demand that the government should build homes and sell them directly to veterans." And VFW delegates, gathered at their National Encampment in Boston, roaringly passed a motion urging that Wyatt be promptly granted "Czarist powers."

Industry got in its licks, too. In New York for their annual conference, members of the Producers' Council placed blame for the national stymie at the door of government. "The answer to the housing shortage and other problems does not lie in a new pyramid of federal controls, nor in a hodge-podge of new legislation dictated by bureaucratic officials," said Douglas Whitlock. Retiring president L. C. Hart added: "The blame must be placed where it belongs—on the federal government which has hampered the building industry at every turn with ill-advised and poorly operated controls." The National Home and Property Owners Foundation, holding sessions in Washington, urged the "immediate removal" of Wyatt and "all the controls that have completely choked off the flow of building materials."

President Truman, meanwhile, said "No!" to a special session of Congress. He did not hold, he blandly told reporters, that the state of things justified such a move at this time.

RESTRICTION TUSSLE

Newest non-residential building cut in effect.

Wyatt was in New York, trading sallies with sharp-tongued Peter Grimm on ABC's Town Meeting of the Air. Their topic: "Should commercial building be curtailed to provide homes for veterans?" "There are, at very least, two clear reasons why the NHA policy has not produced houses in sufficient quantity," snapped real estate man Grimm. "The first is that prohibitions against any kind of needed construction restrict and restrain all kinds of needed construction. The second is that a considerable part of non-housing is required for new businesses and it's these which veterans depend upon for employment."

The tussle over restriction of non-residential construction reached a crisis last month. CPA regional offices (in 71 cities) moved to enforce the Housing Expediter's most drastic edict to date—26 per cent further limitations on approval of non-housing projects. To the popular eye it seemed a question of racetracks versus residences. In racing-conscious Atlantic County, N. J., there were few cheers for the spanking \$3.5 million Atlantic City racetrack. Only a few miles away a temporary homes project for veterans kept a snail-like pace for lack of materials. But elsewhere the choice was not so simple. Wyatt told debate-opponent Grimm: "If we're going to pay off our housing debt to veterans we have to give up not only juke joints—that's easy—but also new stores and factories and even schools and hospitals that can be postponed until veterans are housed."

How helpful was the new slash-order? In the first week of the month, there was a cut of 57 per cent in the dollar volume of Southern California construction. The order postponed the million-dollar expansion of the Miami Orange Bowl and \$10 million of Georgia highway projects, it crowded Denver's \$1 million Rose Memorial Hospital to the wall and shut out the \$7 million office building of the New England Telephone and Telegraph Building in Boston. The list of projects halted was only part of the effect of the cut. No one could measure the number of plans shelved because sponsors were now convinced that it would be pointless to apply for approval. In one week 29 Boston builders decided not to file their \$600,000 worth of applications for new jobs.

In most areas it was clear that the quota of approvals could and was being scaled down. The Chicago district office, having okayed \$2 million worth of new non-residential work a week before the order went into effect, let only some \$700,000 worth of jobs through a week later. In Detroit, however, district CPA manager John McGillis objected that the two previous control orders issued in March and July had done as much as could be done. McGillis argued that Detroit certifications were already way below the city's authorized \$1.6 million. He announced, therefore: "No drastic measures are contemplated in Detroit at this time." In Boston, similarly, CPA Regional Director William Homans expected that reduction in authorizations would be slight. New England, he observed, "has already been operating at 30 per cent below its set quota."

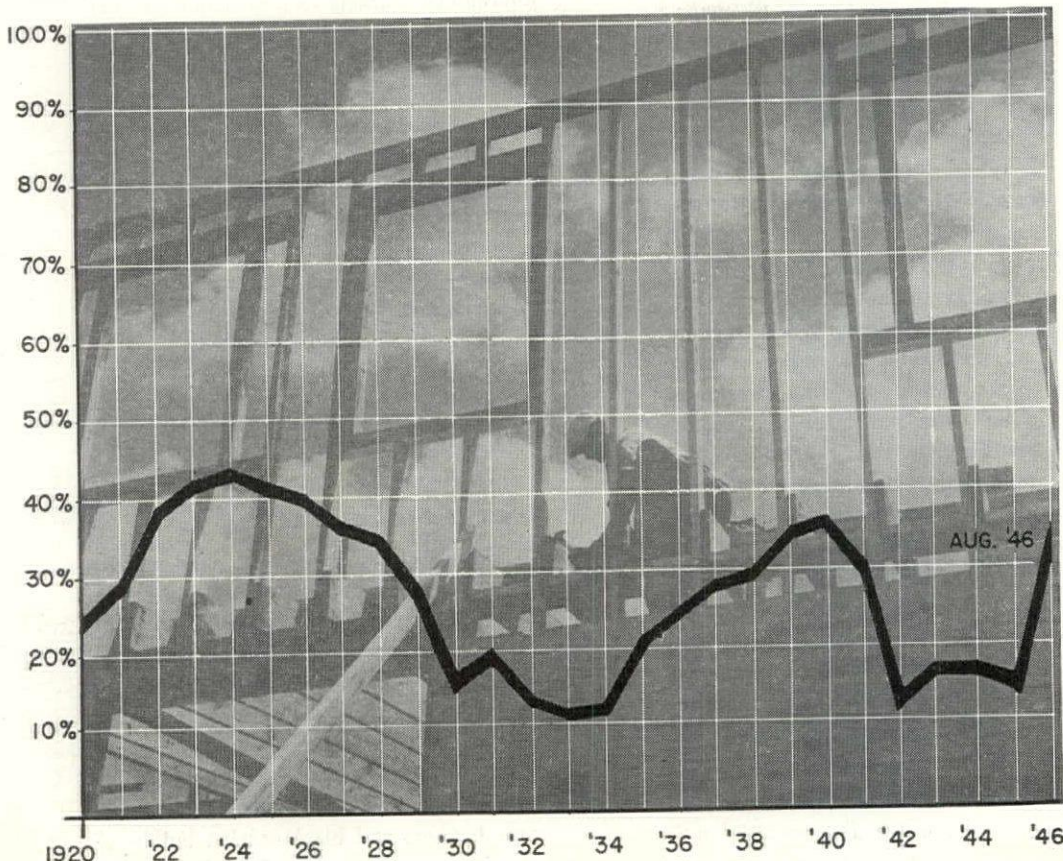
Residential builders and housing experts gave greater importance to Wyatt's reinforcing of materials set-asides than to the cut in commercial and industrial construction. Also expected to have more effect was the crackdown on "hardship" exceptions. Probably of far more importance than any of these was the grim mood in which the federal government moved last month to tackle the black market.

WASHINGTON RESHUFFLE

Wyatt strengthens prefab and technical team.

It was eight months since Wyatt had come to Washington, a solitary St. George with the job of slaying the housing shortage dragon. At his back he now had a small army. Last month, the Expediter reviewed his staff, revamped top echelons, appointed new lieutenants.

To the list of top administrative offices, he added two new departments—an Office of Industrialized Housing and a Technical Office, both formerly subsections of the Office of Production and Supply headed by Deputy Expediter E. A. Verpillot. The Office of Industrial Housing was put in charge of Robert A. Irwin, key advisor in Wyatt's council. Irwin, formerly Special



HOUSEBUILDING PERCENTAGE of total construction expenditures is now at high level, approaching peak year of 1925. Non-residential fraction (upper half of chart) includes road building and construction other than building. Government statisticians point out that, while housing is getting augmented share of materials, other types of building are still doing (in first 8 months of '46) 65 per cent of business.

Source: Dept. of Labor



Advisor on Financial Aid, has been NHA's number one policy man in regard to prefabrication, responsible for drafting the guaranteed contract program which bulks so importantly in Wyatt's plans. A Harvard law school lawyer, he served as WPB's Director of Procurement Policy.

Harold Hauf, recalled to his post at Yale last month, left the Technical Branch without top leadership. As Deputy Expediter of the new Technical Office, Wyatt appointed William V. Reed, old hand in managing housing matters. Reed, a University of Illinois and M.L.T. architect, (winner of the Plym Fellowship in 1935), has held down jobs with the USHA, in 1940 became a member of the staff of the Defense Housing Coordinator and

in 1942 was a member of a Presidential commission sent to study emergency housing in England.

As General Deputy, replacing Admiral Kirby Smith who resigned last month, Wyatt appointed Joseph L. Rauh, administrative veteran of a number of government agencies. Among Rauh's previous jobs: administrative assistant to Chief Justice Cardozo; counsel to the Wage and Hour Board, FCC, Lend-Lease Administration and OEM.

BUILDING MONEY

MARKET FOR VET LOANS

RFC will buy from overloaded lenders.

Many small lenders felt they were spilling over with veterans' home loans. GI mortgages, gilt-edged by government guarantees, were unarguably good investments. Even so, the banks complained, they could not afford to tie up a large bulk of their funds in long term investments with a slow turnover. And the in-flow of GI loan applications was reaching staggering proportions. No one had any idea when the flood tide would recede.

The Veterans Administration passed the complaint on to the RFC, and the RFC Mortgage Company agreed to offer a backstop to the loan program by buying mortgages from the original lenders. RFC

would thus provide a secondary mortgage market for the sterling dead-weight of long-term vet loans, enabling lending institutions to continue to finance housing.

RFC purchase specifications were 1) the loan must not exceed \$10,000, must bear interest at 4 per cent, must be secured by a first mortgage by VA.; 2) the loan must not be delinquent; 3) the seller must continue to service the loan, for which it will be paid a service fee of 1/2 per cent of the unpaid balance.

At month's end, however, RFC's generous impulse was lost in a thicket of red tape. Agency executives decided that RFC should get up its own approved mortgage forms, refuse to purchase mortgages that use any other forms. Since mortgage laws differ widely, there will have to be a widely different form for each state. The necessary forms for most of the states would not be available for two months.

MATERIAL

LINE-UP FOR MATERIALS

Set-asides and premium payments vs. the black market.

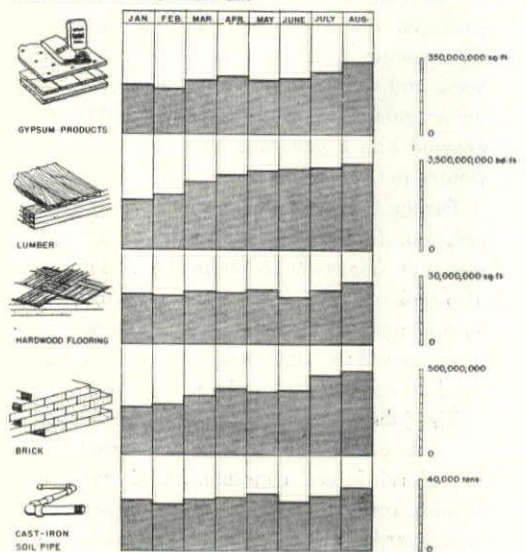
If materials could be obtained promptly, builders told the Mayor of Baltimore, 1,225 veterans' houses would be ready to live in on November 1. The Baltimore Veterans Emergency Housing Committee came up with a break-down: 680 need lath and plaster; 571, heating equipment; 474, soil pipe; 363, flooring; 238, electrical materials; 246, plumbing; 218, hardware

Although this, with variations, was still the story everywhere, there was more cheer in prospect than there had been for months. August materials production, (see chart), bounced further than at any time since the beginning of the year. Stringent set-aside orders, put into effect early in the month were funneling more of the supply into houses. From 75 to 95 per cent of the production of eleven critical materials was being set aside indefinitely for veterans' housing.

Premium payments, on the other hand, were not doing so well. Only seven payment plans have been approved so far this year, making it virtually impossible for NHA to use more than a fraction of the \$400 million subsidy authority granted by Congress. Principle cause for laggard development of this program has been industry's distaste for subsidies and its inclination to hold out for price increases. A well-taken point is that of the producers of gypsum products: While overall gypsum products profits have been good, producers are making money on board, losing it on lath; consequently they have skewed their production in favor of gypsum board. Price increases, applied with judicious selectivity, would enable them to boost scarce lines, gypsum men say.

The price of materials was already going up by way of the black market. Everyone had known that there was a black market—

MATERIALS MOMENTUM



but how big was it? How realistic was talk of prices and price control if a major proportion of materials skirted them entirely?

The *New York Times* made an estimate that rocked the industry on its heels: 75 per cent of supplies in the suburban New York area were going "underground". Oak flooring and nails, soil pipe and sheet metal were fetching skyscraping prices. Members of the Home Builders Council of New York, New Jersey and Connecticut declared that legitimate home-building was becoming impossible. Said chairman Henry J. Shaheen, "with heavy traffic by black marketeers, items such as ordinary nails are almost impossible to find... the ceiling-fixed builder is being forced to give up."

OPA, aided by Treasury and Justice Department experts, was quietly piling up indictments. Thirty major lumber cases involving criminal charges were pending. But the mood of the black marketers was best expressed by one illegal dealer: "So they do fine me. I'll still be making money. And OPA will be done with next year."

Wyatt's experts have maintained that premium payments are bound up with price control and cannot be continued if OPA goes out the window. If price controls are wound up by Congress early next year, one of Wyatt's big guns will have to scrapped, having fired hardly a round.

NEW HEAD FOR TURNER

Admiral Ben Morreel goes back to civilian building.

The Turner Construction Co., one of Big Building's biggest, had a new boss—big, efficient Admiral Ben Morreel, the Navy's past-master construction expert. Henry C. Turner, the company's founder, was retiring after 44 years. Into his seat as Chairman of the Board would move younger brother J. Archer Turner. Into J. Archer's job as president of busy Turner, Morreel.

Admiral Morreel, formerly Chief of



Morreel

the Bureau of Yards and Docks, was the strategist who planned the Navy's gigantic construction program, instituted the Sea-bees, and inaugurated such techniques as the seagoing battleship drydock. Navymen granted him a generous slice of credit for victory in the Pacific.

Turner Construction Co. had a war record, too. In four of the war years its total business was some \$386 million. Turner also took on such non-building assignments as management of Oak Ridge City, where it organized a 10,000-man payroll, managed all community services.

Big jobs have been Turner's forte ever since its early days, when it pioneered the use of reinforced concrete, and became a leading recipient of large factory construction awards. Turner company business has risen from \$40,000, to \$117 million (in 1944). To date, 77 Turner contracts have been for projects costing over \$2,000,000.

PREFABRICATION

PREFAB CONTRACTS WAIT

Likely signees include Harman, of Philadelphia.

Another month had shuffled by and prefabricators were still waiting for their big news-break. To whom would Expediter Wyatt give the first guaranteed market contract? NHA negotiators and applicants had been fussing for weeks over a score of agreements and word had gone out that at least four were ready to be signed. A Philadelphia newspaper prematurely gave the compliment to the steel-fabricated model of Harman Homes, likeliest among

several newcomers. At month's end, Washington dopesters put veteran manufacturer Jacques Wills peak-roofed plywood Home Ola closest to the finish.

Whoever would get there first, nobody was getting there fast. One cause for delay was the caution of banking institutions in granting production loans to new prefabers. Unlikely as the possibility had seemed earlier in the year, private money was actually tightening against the factory house, despite government's promise to insure sales. Many a conservative banker thought that prefabrication might have missed its big moment—by next year, conventional housing would be fit enough to offer it competition; in two years, it might chase prefabrication out of the picture. As a consequence, RFC was being asked to relieve the banks of as much as 75 per cent of the risk through participation in production loans.

Policy-maker Wyatt was still rooting for the mass-made house, as he had done since his arrival in Washington. His re-shuffling of his advisory council (see page 6) had again brought the prefab card to the top of the deck. But doubt as to prefab's future also assailed the more nervous in NHA. "What happens," they asked, "if the market dips and a prefabricated house selling for \$7,000 or \$6,300 goes down to \$5,000?" In a bust market the government would have to unload its cold hotcakes at a loss.

On its own power, so far prefabrication had furnished the housing program only some 16,000 units. Balked by shortages, like everyone in the building field, prefab manufacturers were tripped up further by

their dependence on such shortest short materials as plywood.

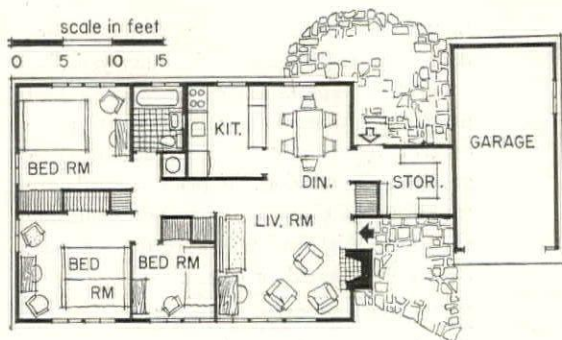
Voted most likely to succeed, as a consequence, were up-and-coming systems relying upon major use of metals or other substitutes. Long-habituated users of wood and plywood were taking another look at metal parts—National Homes, for one adopted steel bar joists and aluminum double-hung window frames.

Among producers who would make metal the major ingredient of their design, none seemed more promising last month than William H. Harman of Philadelphia, whose two- and three-bedroom house (see cut below) had the enthusiastic endorsement of government experts. Harman, formerly vice president of the Baldwin Locomotive Works, struck many as the industry's most significant recent newcomer, a man whose entire previous career had been spent in the precision engineering of metal parts.

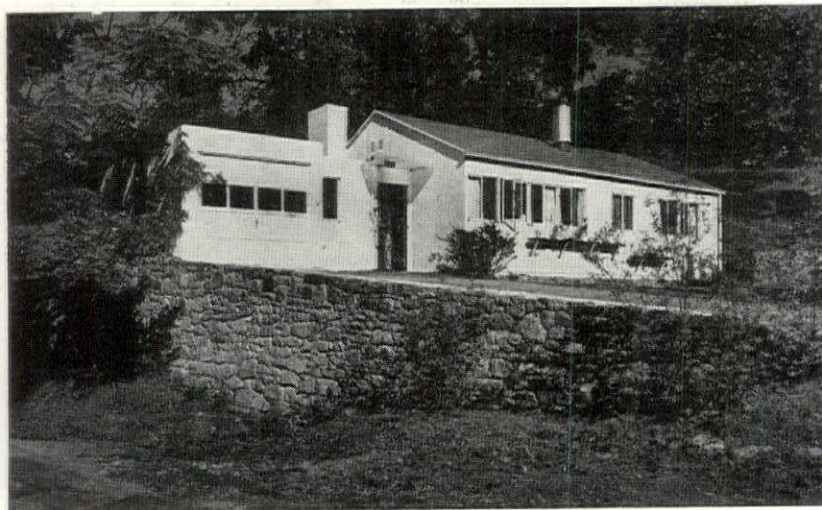
As a structural system, Harman's product is closer to pre-cut lumber than to prefabrication. Basically a knock-down assembly it employs some eight tons of parts, shipped in cases from the factory. Exterior walls and roof are of steel, bolted to furring strips and insulation. Interior walls and ceiling are plasterboard. Designer of the Harman House is firm-member Max Essel, with architect Oscar Stonoroff sitting in.

While many of the metal components of the house—sheets, frames, rafters trusses—will be manufactured by subcontractors in the middle west, Harman proposes to do a large part of the production finishing in a former Mack truck plant near Allentown, which RFC will make available. Houses will reach the consumer through dealers contracted to develop and build homes in community properties. Price f.o.b. factory, is expected to be between \$3,250 and \$4,000, including utilities. Higher-than-average assembly labor costs will bring its final price, with land, to \$6,000-\$9,000.

At month's end, government contract officials and Harman executives were still at the conference table. Their object: Federal guarantee of a market for 10,000 Harman homes.



HARMAN HOUSE, below, is likely candidate for guaranteed market contract. Precision fabricated parts can be assembled in a variety of floor plans. At left, three-bedroom model with optional utility room and garage. Sheet steel outer walls are vermin-proof, provide maximum fire protection, are ventilated at base and eaves to prevent interior condensation due to temperature changes. Because of excellent insulation, house is cool in summer, is said to cost only \$26 a year to heat. Interior walls and ceilings are plasterboard with metal trim for doors, windows, baseboards and ceiling and corner moldings.



JOBS

ZECKENDORF CITY

Giant riverside project for New York.

An eight-block jungle of slaughter-houses, factories and tenements, just a few blocks from Manhattan's Times Square district, is the site of one of the most ambitious rebuilding projects ever conceived. Last month Webb & Knapp's William Zeckendorf started New York with the announcement that his firm would plant a \$150 million inner city on a tract of industrial wasteland bordering the East River.

The plan, by architects Harrison and Abramowitz, called for a giant cluster of buildings set upon an elevated table linked to highway and air-landing entrances. Under this great platform, scaled to cover two-thirds of the entire site, the planners assigned parking space for 10,000 cars and a two-story section for merchandise showrooms, shops and broadcasting studios. Above, they stacked two 55-story, arc-shaped skyscrapers (a hotel and an office building); three cross-form apartment towers and four office buildings, all 30 stories high. Also included in the plan is an airline terminal to serve as a direct connection by helicopter with nearby airfields, a helicopter landing field, docks and a circular floating restaurant.

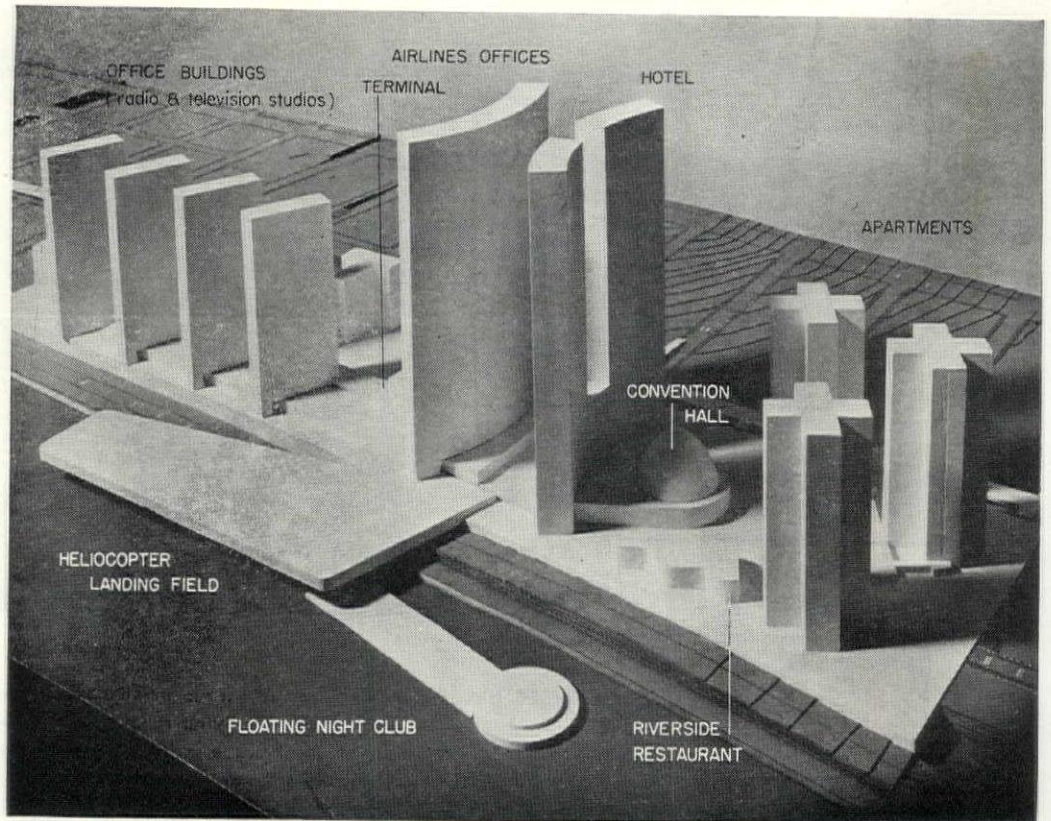


Zeckendorf

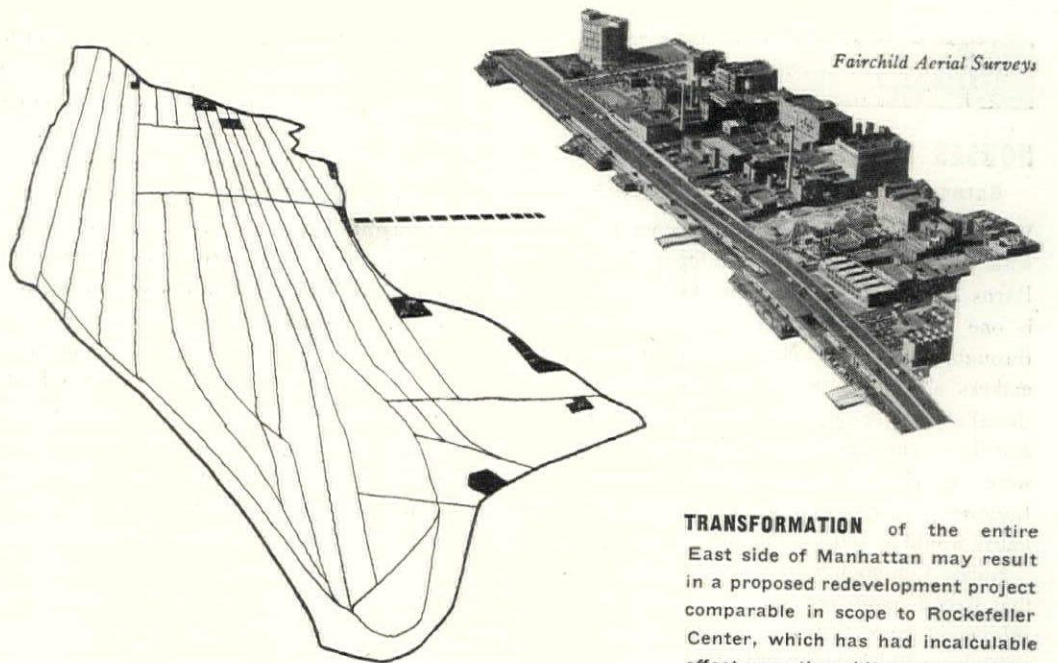
Webb & Knapp are specialists in jumbo ventures, but this is their biggest deal to date. It would out-bulk even Radio City, combine more investment than the Grand Central area development forwarded by the Vanderbilts in the twenties. (Other recent projects include purchase of the entire waterfront of the city of Hoboken, investment in a \$50 million model retail center in Flushing, L. I.)

Webb & Knapp already own 85 per cent of the area, but need city help for: 1) preempting space intended for a municipal park; 2) prying loose remaining private holdings; 3) constructing a loop subway line to bind the development into the city transportation system. When hurdles are cleared the project will be forwarded by a parent leasing corporation which will build the underlying platform structure, apartment houses and hotel, lease 99-year "air rights" above platform to large corporations.

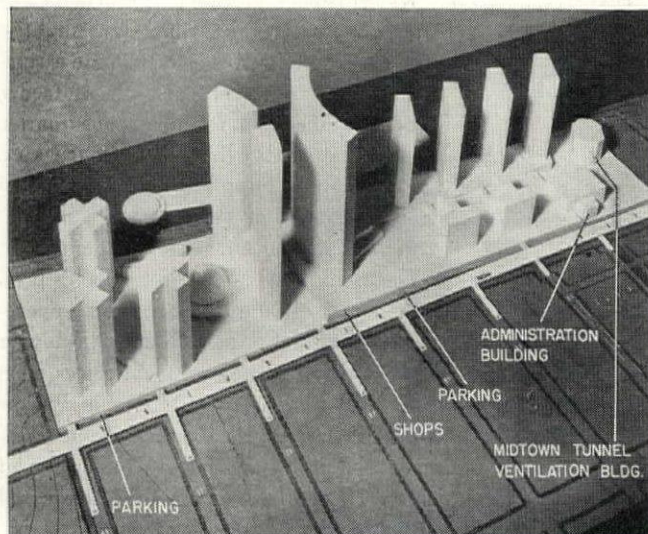
Seen on the map, the development appears as the latest, most electric of a series of changes transforming New York's East Side from frouziness to beauty. The 25-year-old shift of fashionable wealth is now being joined by the influence of housing projects for low and middle-income families. With vast facilities for parking, work and shopping moving to the river-front, the change-over will be complete.



WEBB AND KNAPP FLOAT AN ISLAND OF TOWERS ON HUGE RIVERFRONT PLATFORM

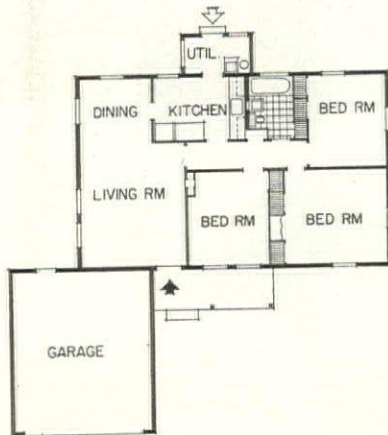
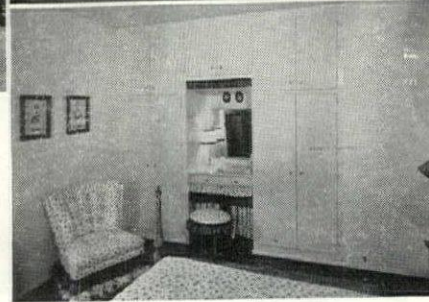


ELEVATED ROADWAY LINKS PROJECTS TO HIGHWAYS



TRANSFORMATION of the entire East side of Manhattan may result in a proposed redevelopment project comparable in scope to Rockefeller Center, which has had incalculable effect upon the midtown area. Other developments planned by the Metropolitan Life Insurance Company and the New York City Housing Authority will erase ugly river-front slums, while the Webb and Knapp citadel replaces a disorderly industrial 8-block area, (above). Fashion trends among the wealthy have, since the 1920s, established swank colonies on the East River recalling to this side of Manhattan its social brilliance of the last century.

Growth-spots on Manhattan's map, are, reading North to South, Colonial Village, Riverton, Abraham Lincoln, J. W. Johnson housing developments, Gracie Square, Sutton and Beekman Place, proposed Webb and Knapp development, Peter Cooper Village, Stuyvesant Town, Jacob Riis, Lillian Wald, East River and Governor Smith apartments.



KAISER HOUSE includes two-car garage in all cases. Three bedroom plan also has dinette off living room. Interiors are provided with floor to ceiling storage walls, (built in dresser in master bedroom), parquet-style floors.

HOUSES

HOUSES OFF THE LINE

Burns and Kaiser throw the switch.

When Henry Kaiser went into partnership with California's No. 1 developer Fritz Burns last year, home-builders said, "This is one industry you can't bull your way through, Henry!" Now (like plane-makers, ship-builders and auto-men before them) they were eating their words. Kaiser and Burns announced that 65 pre-cut homes were chugging off the assemblyline of their Inglewood plant each week; shortly the figure would be 100 a week.

Kaiser Community Homes also disclosed that it had purchased and laid out for development more than 2,000 acres of land, enough for 10,000 building lots, in Southern California and San Jose. By the end of the year Kaiser and Burns expect to put at least 2,000 houses on such sites, by next year, 10,000.

The completed Kaiser Homes house, "unveiled" last month, was tamely styled, if boldly engineered. Delivered to the site in prefabricated "sub-assemblies," it received final assembling, roofs, porches, and outside "trim" on the job. Kaiser publicity stresses site fabrication and surface individuation, shuns the "prefab" tag. "To avoid the monotony too often associated with mass housing," Kaiser site-crews apply one of five style dressings—Cape Cod, Colonial, Ranch House, California and Contemporary. Factory production, however, accounts for such basic elements as full-room wall and floor panels, ceilings, plumbing equipment and kitchen cabinets.

Kaiser homes will range from \$6,950 to \$8,650, include gas heating and all other utilities. Hardly resembling the fabulous \$75,000 Burns "Dream House" (FORUM, March, '46), they adopt some of its design niceties—Formica kitchen sink tops and storagewall partitions. Kaiser engineers explain that they have aimed to simplify the shell structure to allow enhancing features.

Perhaps the most spectacular achievement of Kaiser Community Homes is its articulated organization of the entire house-building series—money, land, procurement, design, construction, sales and even maintenance. Kaiser and Burns propose to procure and subdivide whole developments at a time, arrange loans, build houses on every lot and insure all possible economies in planning the subdivision. The organization will also build community shopping centers, to be rented on a "percentage lease" basis, and provide low cost maintenance.

Kaiser Homes' present program in the Los Angeles area is described by slightly-flushed representatives as a 100-mile assembly line, consisting of one mile of feeder lines into the 15-acre plant, one-quarter mile plant assembly line, a 30-mile trucking line to the site, 25 miles of foundations, 10 miles of homes in various stages of construction, and 30 miles of suppliers.

The uninhibited Mr. Kaiser calls his present enterprises "the biggest housing operation in America," and foresees a bigger future still for a chain of team offices from coast to coast. Kaiser affiliates in Willow Run, Mich. and Portland, Ore. have already acquired 3,200 lots. Total value of Kaiser Homes land now stands at over \$4 million.

MARKET

RETAIL RUSH

Department stores expand and build as business booms.

Strolling softly through his Famous-Barr store in St. Louis, Morton May often indulges in a favorite pastime. He jostles toward a counter in a shirt-sale, takes his place in a line-up for pressure-cookers, falls into conversation with a fellow-customer in the shoe department. Famous-Barr clerks, meanwhile suppress their recognition of the Caliph of May Department Stores (branches in St. Louis, Cleveland, Akron, Baltimore, Denver and Los Angeles).

Late last month May stores received stockholder approval of a merger with Pittsburgh's top Kaufmann's Department Store. President Morton May, whose father had started a small drygoods business in Leadville, Colo. just 60 years earlier, was now boss of the country's biggest retail empire. Sales of the new firm could be expected to go over \$300 million, probably put May-Kaufmann ahead of longtime leaders Macy's and Gimbel's.

May Co. holdings were already the biggest in the business—\$112.6 million last year (Gimbel's, next in size, was worth \$97.8 million). With Kaufmann's \$21 million in quality investment, the new firm could claim top notch on the retail totem pole. Last year's sales of the two firms had totaled \$246,353,826, well ahead of Gimbel's, Macy's and Marshall Field & Co. Nearest rival: Allied Stores, a holding company octopus whose tentacles extend to 69 department stores.

Morton May had already set his provinces humming with an expansion program bigger than any yet announced by his competitors. New May stores were going up in Los Angeles, Hollywood, Phoenix and St. Louis; additions would be built to stores in Wilshire, St. Louis, Akron and Baltimore; branch stores were being acquired in five smaller Ohio cities.

May's construction contracts have already committed the company to \$12.5 million-worth of building work. With new funds gained through the merger with Kaufmann's, an unestimated larger portion will await lifting of the ban on non-housing jobs. In St. Louis alone, May's will have spent \$7.5 million to remodel its present 12-story building, build three new suburban stores, a downtown garage and a seven-story warehouse.

May's hearty program went to swell mounting pressure behind a boom in department store construction—a boom that promised, by some estimates, to double big store fixed assets within three years. Many projects, like the upper Fifth Ave. store of New York's Best & Co., had bounded ahead of housing program restrictions by seizing an early start. Most big department

store plans, however, will have to wait out the housing emergency—or the government's control program.

Meanwhile, store designs accumulate on architects' drawing boards. Every major retail firm is readying one or more of three programs: extensive alteration, establishment of suburban branch stores, new downtown building. R. H. Macy, with king-size (but still largely secret) expansion ideas, will pursue a program of "peripheral expansion" through suburban building. Construction has begun on new suburban New York stores in Jamaica, White Plains and Brooklyn, and Macy affiliates Davison-Paxon and Lasalle and Koch have announced plans for sub-stores in Georgia and Ohio.

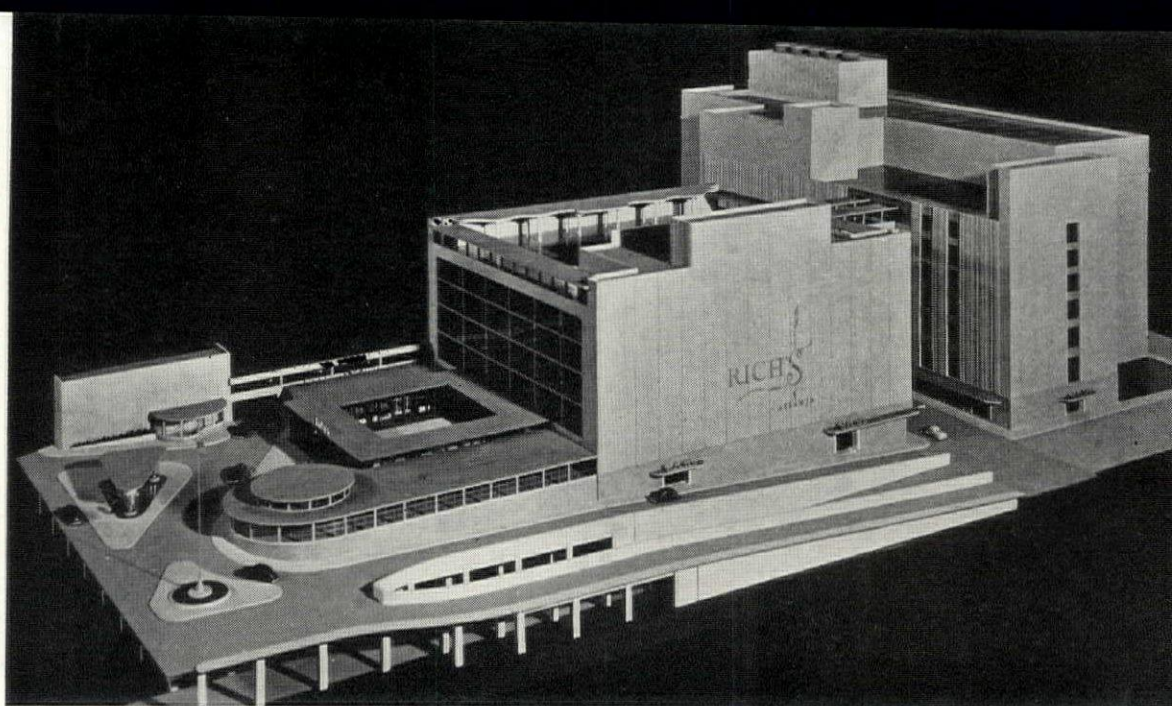
Rich's of Atlanta, on the other hand, will spend \$5 million to construct a new eight-story downtown building and will also enlarge its present building. Rich's, whose total business last year was the largest of any southern department store, expects sales to hit \$50 million this year. Previous Rich expansion, completed in 1939, was scaled to an annual intake of \$15 million.

Other expansion programs under way:

- ▶ Bullocks, Inc. will construct a new store in a park setting in Pasadena, Calif., feature indoor and outdoor tearooms, a restaurant and roof garden.
- ▶ Meier and Frank, Portland, will develop a square block into offices and selling area.
- ▶ I. Magnin & Co. will erect a series of new California buildings—a nine-story store in San Francisco, smaller stores in Beverly Hills, Santa Barbara and Pasadena.
- ▶ Neiman-Marcus of Dallas will establish branch units in Los Angeles, Houston and Amarillo, expand its present store.
- ▶ Miller and Rhoads of Richmond, Va. will construct a new twelve-story building on the site of its present four-story store.
- ▶ The Hecht Co. of Washington, D. C. will build a \$2 million branch store in Silver Springs, Md.
- ▶ Foley Brothers, Houston, Tex., will complete a new \$9 million downtown store with an adjacent half-block garage and service building.

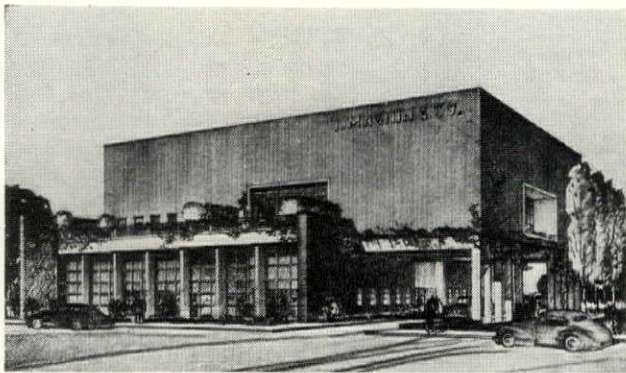
Never has the department store business been so promising. While other business indices quivered under the hail of last month's stock declines, department store sales were up to record totals. The prospect of a buyers' strike had so far failed to materialize. The Federal Reserve Board reported that sales were 48 per cent over a year ago. And 1945 had already scored a record peak—nearly twice as high as 1939.

Other signs were not wanting. One preview of the size of the department store future: quick-thinking Walter Hoving, who resigned his job as president of Lord & Taylor early this year, took steps to launch a chain doing a total business of \$200 million, and got the backing of Wall Street's sage Blyth & Co. As its first move, the new Hoving Corp. bought controlling shares of Manhattan's tony Bonwit Teller.



RICH'S INC., ATLANTA

Toombs and Creighton, archs.



I. MAGNIN & CO., PASADENA

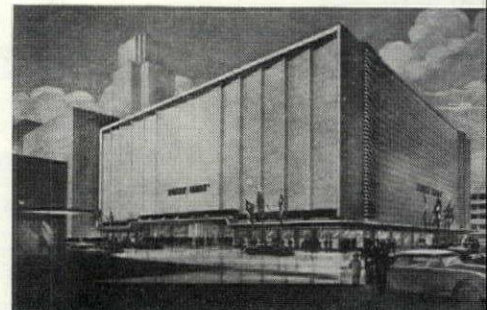
Timothy Pflueger, arch.

NEW STORE DESIGNS are either for large, elaborate downtown centers or for smaller branch stores. All have evolved a long way from warehouse-type plans characteristic of early department-stores, incorporate service and parking facilities, express store's multiple functions. Use of "clear vision" windows in Frederick and Nelson and Rich's street floor make display case of entire ground level. Air-conditioning and artificial lighting have virtually eliminated need for upper story windows, (superbly provided in Louis Sullivan's design for Carson's, page 12).



DAVISON-PAXON, COLUMBUS, GA.

H. M. Heatley, arch.



FOLEY BROS., HOUSTON

Kenneth Franyheim, arch.



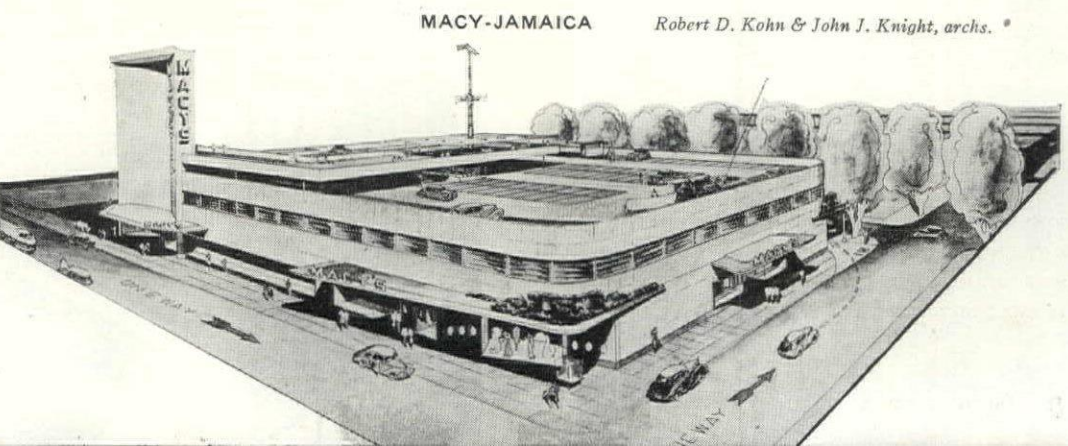
FREDERICK AND NELSON, SEATTLE

Moore & Massar, archs.



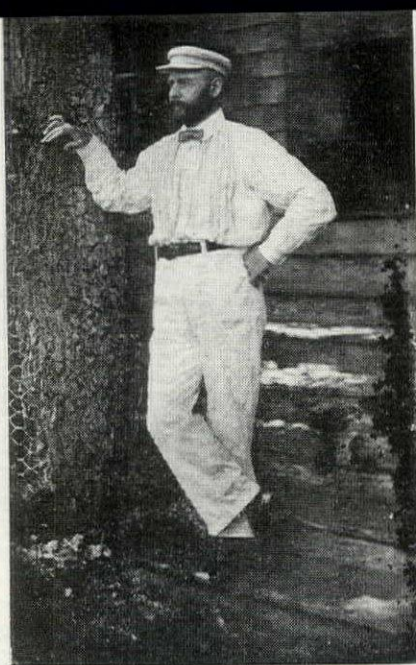
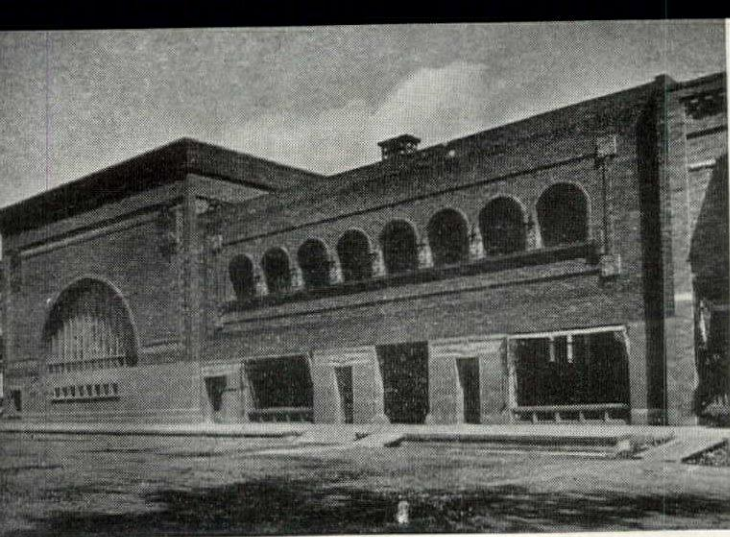
BASKIN'S, CHICAGO

Holabird & Root, archs.



MACY-JAMAICA

Robert D. Kohn & John J. Knight, archs.



Photos: Chicago Architectural Photo Co.

DESIGN

SULLIVAN REMEMBERED

Boston pays tribute to its greatest architect.

Early last month the snickering Muse of History ran down to Boston to enjoy an old joke. As countless times before, men had got around to honoring greatness a generation late. In laggard homage to Louis Henri Sullivan, Boston architects posted a plaque marking the birthplace of the man "whose stalwart and vital achievements mark the beginning of an independent architecture consistent with the normal creative spirit of men and the free aspirations of the people of America." As this praise came at last from the Boston Society of Architects and the Mass. State Association of Architects, the *Boston Herald*, with New England intransigence, reported: "Obscure Boston architect of 90's honored."

Sullivan died in 1924. For monuments he already had the Wainwright building in St. Louis, first skyscraper to express its structure in its design, and the Carson Pirie & Scott Department Store in Chicago, purest early expression of modern steel cage construction. It was he who phrased the much misunderstood sentence, "Form follows function."

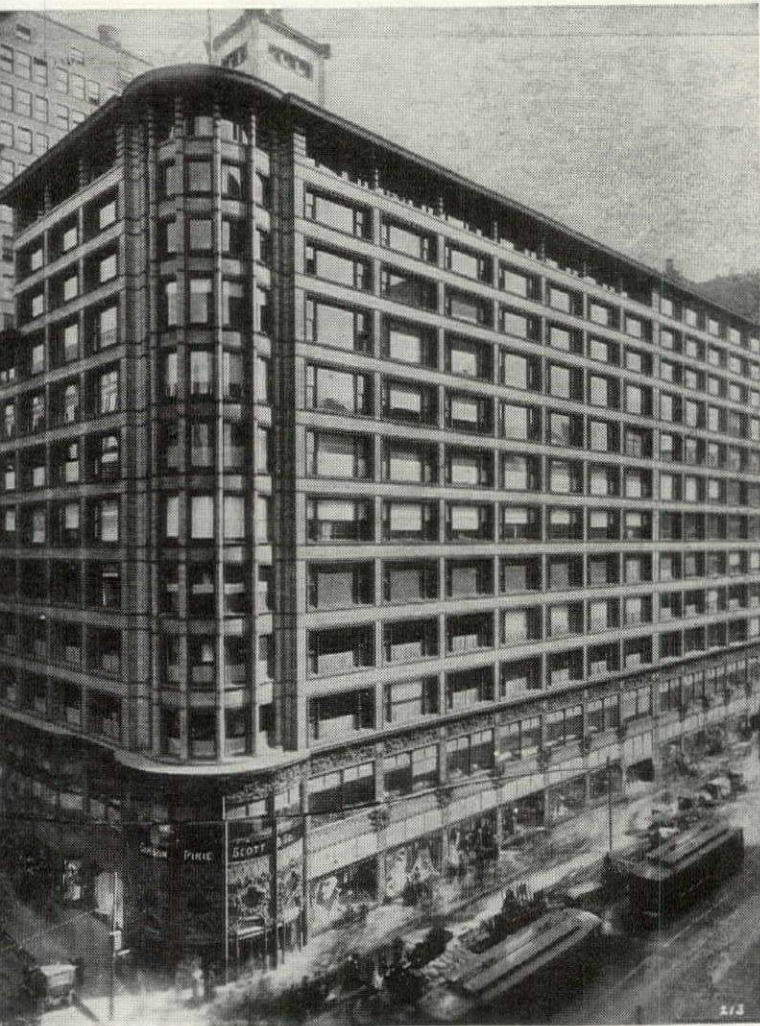
At 30, with Dankmar Adler, he won the biggest commission of the day—Chicago's monumental Auditorium, largest edifice ever to be set on floating piles. In 1893, many millions of persons who had never heard of Sullivan saw and remembered his Transportation Building at the Chicago Fair, a striking contrast to the pallid classicism of the other exposition buildings.

Sullivan had a haughty intolerance of an architecture that left "a banker sitting in a Roman bath, a Wall Street broker living in a French chateau, a rich vulgarian living in Trianon." When skyscrapers shot up in the "Woolworth Gothic" manner, Sullivan spat out at them as "the rottenness of Gomorrah," and called Wall Street's pinnacles "a plague spot of American architecture."

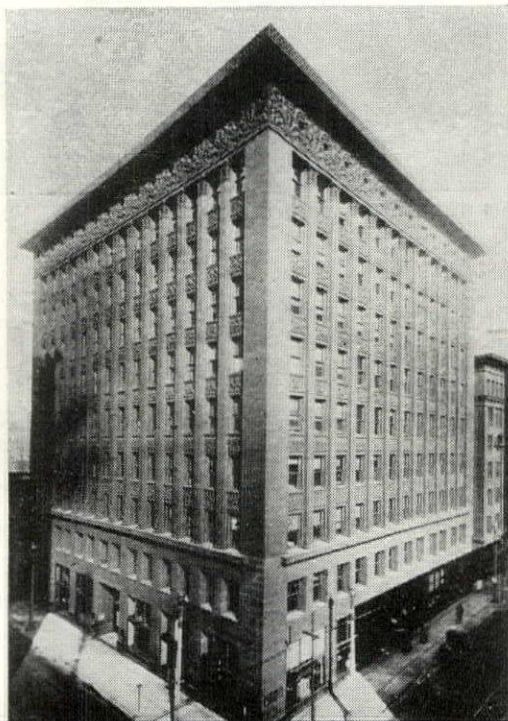
It was Chicago's "White City," however, which caught the fancy of junketing Americans and Sullivan, the original, was soon considered old-hat. In the last 30 years of his life he received only 20 commissions, chiefly for small banks which still bloom with an exotic brilliance on the Main Streets of small towns in the corn belt.

Sullivan's only disciple, Frank Lloyd Wright, was not present at Boston last month. Many years ago he had said his piece on such things—the occasion: dedication of a gravestone monument to Sullivan. "It was their only best thought for the man now, but no monument is ever more than a monument to the men who erect it . . . Monuments are made by those who, voluntarily or not, never did anything but betray the thing the great man loved most."

(NEWS continued on page 14)



BUILDINGS by Louis Sullivan are arresting even today for boldness and clarity of design. The Carson, Pirie & Scott store in Chicago (left) is one of his most influential works. In spite of its complexity this building was executed with a strength and precision not equaled for many years. Its basic unit is the horizontally elongated "Chicago window" coinciding with the steel skeleton, defining the neutral balance of cage construction. The rounded corner, with its reminiscence of the pavillion, was added at the clients' insistence. Sullivan's skyscrapers emphasize vertical tiers, glory in height. Below, right, is the Wainwright Building, first Sullivan skyscraper, built in St. Louis in 1890. The Schiller Building, left, has cupola and heavy cornice. Toward the end of his life, Sullivan designed a series of small banks, remarkable for structural dignity and vivid ornament. At top, left, National Farmers Bank, Owatonna, Minn.



SILVER SPRAY

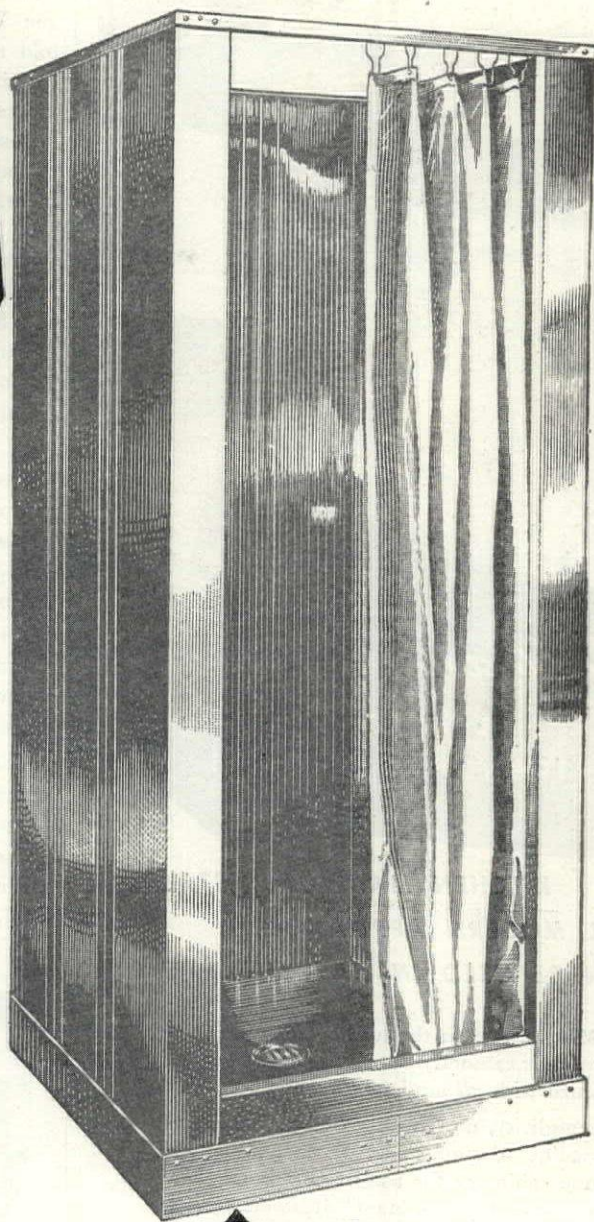
ALL-ALUMINUM SHOWER CABINETS

LIGHTER ... Total shipping weight only 63 pounds.

BETTER LOOKING ... Handsome design and gleaming aluminum finish blend harmoniously wherever installed.

DURABLE ... Never any refinishing or repainting. Silver-Spray's aluminum finish can't rust.

For detailed information, write
AMERICAN SANITARY PARTITION COMPANY, INC.,
 3706 22nd STREET, LONG ISLAND CITY, NEW YORK



Every Silver-Spray Shower Cabinet includes these accessories:

- Non-skid aluminum receptor
- Chrome-plated brass drain
- Chrome-plated hot and cold shower valves
- Chrome-plated water-saver showerhead
- Soap dish
- White plastic shower curtain with pins

QUICK, EASY INSTALLATION

ALL YOU NEED IS A SCREWDRIVER — AND TWENTY MINUTES!



AMERICAN SANITARY PARTITION COMPANY, INC.



Appliance Styling
PLEASES
AMERICAN HOUSEWIVES!

**KITCHEN MAID CABINETRY
AND ALL MODERN APPLIANCES
CAN BE USED IN HARMONY!**

Kitchen Maid has taken the lead again, with a line of standard unit cabinetry which has been re-styled to harmonize with *all* modern kitchen appliances.

New simplicity, new beauty of line and mass, new "Flow-line" design, make Kitchen Maid the number one cabinetry for use in new homes and remodeled homes. Kitchen Maid "Appliance Styling" has met with the enthusiastic approval of architects, builders, and housewives alike.

In addition this cabinetry retains all the well-known advantages of *Composite Construction*—the warmth, the strength, the dependability, and the flexibility of hardwood and wood compositions—the quiet, easy action of steel drawers with hardwood slides and guides—the beauty and durability of factory-applied appliance-white finish.

Write for additional information; The Kitchen Maid Corporation, Andrews, Indiana.

KITCHEN MAID
CABINETRY
Appliance Styling • Composite Construction

OVERSEAS

OPERATION SQUATTER England invents a tactic.

Too many Americans saw eye-to-eye with Joe Whiteside of Chelsea, London, who told a reporter: "I had a sergeant-major for six years and I don't intend to let my mother-in-law take his place." When the "squatter movement" burst into ten days of magnificent illegality in London last month, sore-driven veterans and their families looked close at the radiophotos as though they might recognize the faces of England's homeless. The discharged Yank who had laughed at English clothes, sniffed at English manners, misunderstood English humor—said: "By God, I see what they mean!"

In Brisbane, Australia, that same week, 100 veteran families moved into vacant military camps in the suburbs. In jampacked Ottawa, Canada, the Ottawa Veterans' Housing League led its members into empty Kildare Barracks, then smashed the gates of a naval training station, occupied a building, took over a former Canadian Women's Army Corps barracks at Lansdowne Park.

There was, as yet, small indication that Americans were ready to take so dramatic a course, though in Mission, Tex., 500 house-hunting veterans threatened to invade a surplus Army Air Field if their housing needs were not met. But it was—it was

definitely—something to think about. AVC leader Charles Bolte asked: "How low does veterans housing have to go before veterans become squatters?" And Congresswoman Clare Boothe Luce, deeply concerned, wired representative of leading vet organizations suggesting immediate formation of committees from leading veterans' organizations to consult with Real Estate Boards and Rental Agencies on preventive action.

Back in London, however, traditionally law abiding Britishers were filing back to their bombed-out cellars and leaking attics in obedience to court eviction notices. From the Duchess of Bedford House in the swank West End, came 200 men, women and children. Squatters trickled out of the 620-room Ivanhoe Hotel, Regent Park's Abbey Lodge, and from unused army barracks buildings in the country.

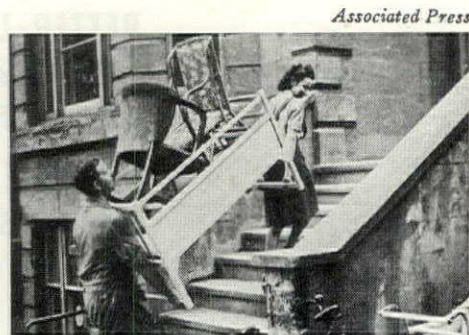
The British Communists had given a Bastille Day flavor to things, lending their lock-step leadership to organizing the occupation and the evacuation of the vacant government buildings. Prime Minister Attlee, in a Bourbon mood, threatened to prosecute Communist leaders for "criminal conspiracy."

It appeared that the squatters had made their point just the same. Meeting in a special cabinet meeting the government promised drastic action on Britain's bitter housing shortage, a program to house 200,000 in some 700 unoccupied camps.

(NEWS continued on page 16)

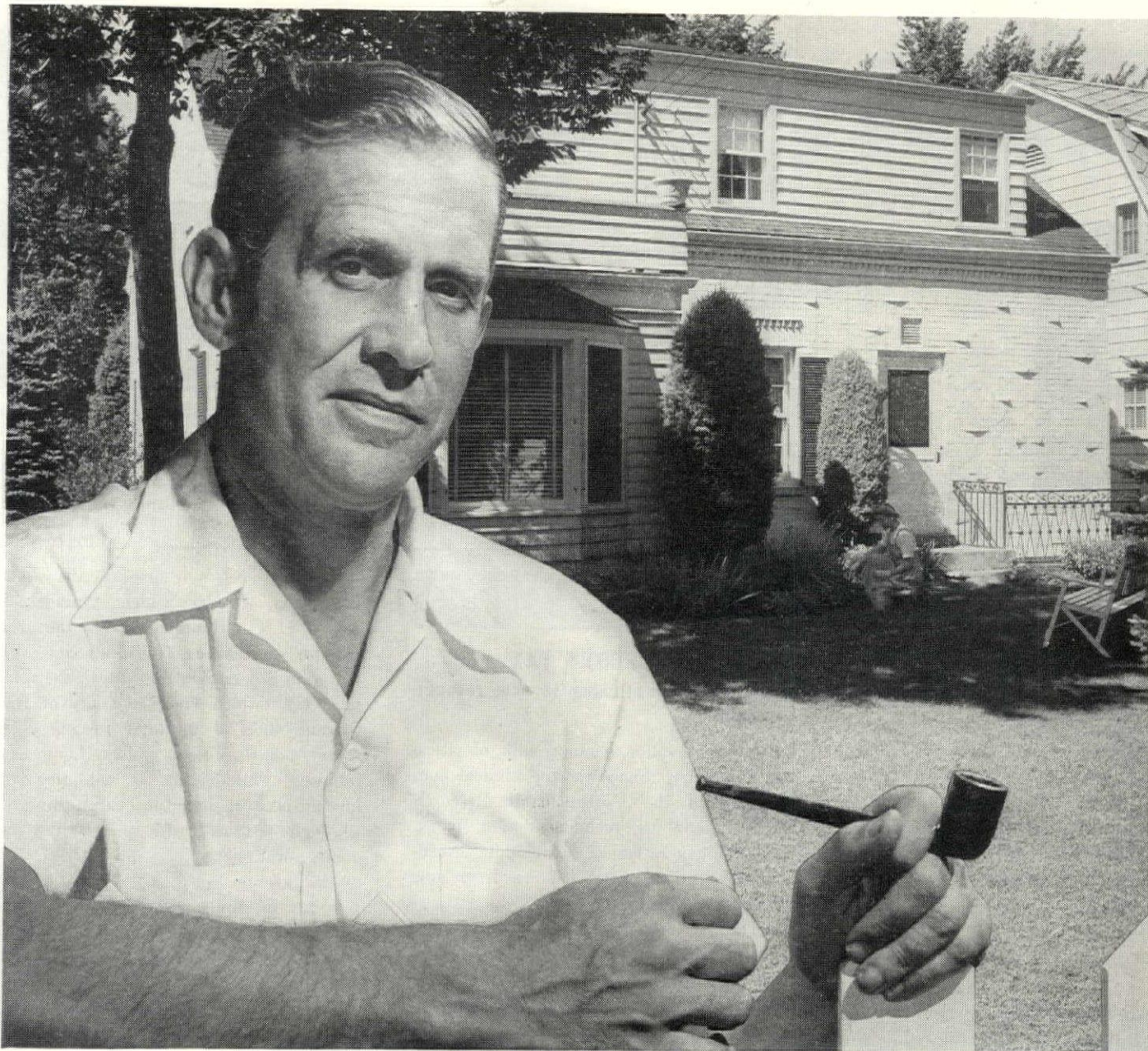


BRITISH SQUATTERS entered vacant London apartment buildings, made unforgettable picture, (above), appealing for water and bedding. In suburbs, many took over empty barracks, (right).



George Roger, Life





It's time for plain talk about home buying

ARE YOU considering a deal on a home? A bigger, nicer house for your growing family . . . or an all new wonder-home . . . or just anything with a roof that you can call your own? Take sixty seconds, please, to review the common-sense rules of home buying—reprinted here as a friendly public service.

Nobody could know better than we do how desperate you are to get those papers signed. Yet we say to you earnestly: *take time for one long, slow, careful thought before you sign.* And to safeguard your money, your home and your happiness, abide by these time-tested rules:

1. Don't Buy "Over Your Head". You simply can't make it good business to assume a \$15,000 mortgage on a \$3,000 income. The debt you take on should be not more than two-and-one-half or three times your present or anticipated annual income.

2. Don't Make Monthly Payments Too High. If you make \$300 a month and pay \$125 on your contract, the law of averages says you will lose your home. A good, safe rule (proved by our own experience of more than a half a century) is—not more than 25% of your monthly income for principal, interest and taxes.

3. Pay Down As Much As You Can. The bigger the down payment, the more interest you save. On a \$9,000 home, paying \$47.51 monthly, you actually save \$1,317 in interest by making a \$3,000 down payment, as compared to \$1,500 down. And you own your home five years sooner.

4. Get Professional Advice from your mortgage banker, lawyer, architect, contractor and realtor on matters involved in buying a home. It's too big a deal—and too technical—for any amateur guesswork.

Viewing every application in the light of those rules, Investors Syndicate is currently making real estate loans amounting to about two million dollars every week. If you want personal help, it is available through our loan correspondents located in principal cities of the United States and Canada. Write us, if you wish, for the name of our correspondent nearest to you.

INVESTORS SYNDICATE

One of America's leading makers of home loans

Robert E. Macgregor, President

MINNEAPOLIS 2, MINNESOTA

Did you happen to see this ad in the Sept. 2nd issue of Life? We thought you'd be specially interested in "Rule No. 4".

**THREE HINGES
TO A DOOR IS
SOUND ECONOMY
AND GOOD
BUILDING PRACTICE**

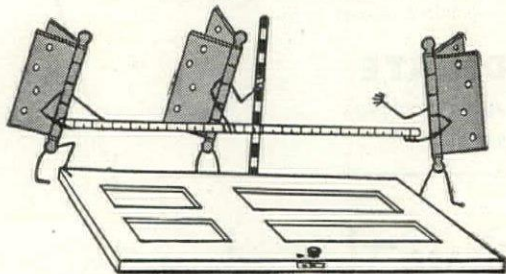


THE THIRD HINGE on every door in a home of twelve to fourteen doors would add very little to the cost of the hardware—but it would be hard to estimate the money it might save by preventing later repairs and replacements, and the annoyance, dissatisfaction, inconvenience and trouble it will avoid for the home owner.

“Three hinges to a door” throughout the house will assure free-swinging doors, with no sagging, sticking or warping—latches and locks that stay in perfect alignment and that operate efficiently . . . easy-moving doors that remain in good condition for the life of the building.

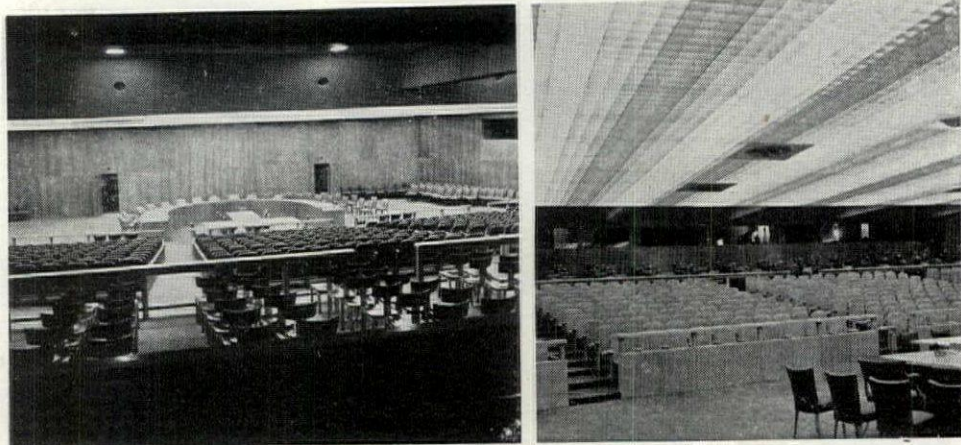
When you specify “three hinges to a door” throughout the building you will be giving your clients advice on sound economy and good building practice . . . and you will gain their lasting good will if you point out these facts to them.

**SPECIFY ALWAYS—
“Three Hinges to a Door”**



McKINNEY

MANUFACTURING COMPANY
PITTSBURGH 12, PENNSYLVANIA



UNITED NATIONS CHAMBERS at Lake Success, L. I., are the engineering and design triumph of Voorhees, Walker, Foley and Smith. Architects created main chambers of Security Council and Economic and Social Council, four conference rooms, ten subcommittee rooms, lounges and offices out of former Sperry Gyroscope plant. Security chamber (above), has one of the largest radio-audio installations in the world. Continuous illumination is achieved through 6,500-square-foot louvered ceiling (see page 183), superimposed over hung ceiling of acoustical tile. Construction time on job of converting the ungainly 10-acre plant was 46 days.

CITIES

WANING PROPERTY TAX

Cities are switching to new revenue sources.

Property taxation, mother milk of cities, is going dry. Such was the clinical conclusion of the Governmental Research Association. Its recommendation, for a hungry generation of municipal governments—fortified bottle-feeding from new revenue sources.

The Association's prescription came last month from sea-breezy Magnolia, Mass., where representatives of over 150 taxpayers' and government research groups met for their 32nd annual conference. Trend-conscious members from Los Angeles to Boston reported that government expenses were now up to 35 to 50 per cent since prewar days; tax sources thinning.

With a 200-year-old instinct, cities have been nursing hard on their oldest source of revenue, the tax on real estate. Los Angeles has raised the tax rate to record levels. Reported N. Bradford Trenham, general manager of the California Taxpayers' Association, “The taxpayer in Los Angeles can expect, in the 1946-47 fiscal year the highest property tax he's ever paid. It will be \$6.50 for every \$100 of assessed valuation.” Other cities have hoisted income by re-assessment: San Francisco property has just been re-assessed upwards by some \$11 million.

Magnolia's experts warned: 1) taxes on real property have just about reached the load limit; 2) suburban building activity is almost certain to send the value of city property nosing down again; 3) the main repositories of modern wealth are no longer land and buildings.

Some cities have already found that taxes on sales, income and public utilities, and on such sundry taxables as sewage-disposal, theater-seats and vending machines, were quite as nourishing as the old property tax. Growing rapidly in popu-

larity were such new taxes as the admissions tax, (under which Philadelphia gained \$1.5 million in 1944); the gross receipts business tax, (by which New York will gain \$23 million this year); the retail sales tax (which yields the city of New Orleans 40% of its total revenue). In recent months, Toledo and St. Louis have followed Philadelphia in adopting the income tax, calculated to charge the city's “daylight citizens”, with some of the cost of city government.

The average city still relies on the property tax for some 65% of its revenue but Seattle has shifted its dependence away from real estate so that only 36% of the city's income comes from real property; Birmingham's reliance is now only 41%; Washington, D. C.'s 42%; Denver 43%; Milwaukee, 52%.

Said Henry W. Connor, director of the Newark Bureau of Municipal Research: “During the past year there has been so much experimentation with new city revenues that this period may come to be known by future historians of cities as that in which the cities broke away from a main dependence on the property tax.”

**AS MIAMI GOES . . .
So goes the boom.**

For many months now, modest vacant lots with seashore frontage on the Gold Coast from Palm Beach to Miami, have been good for \$25,000. Little houses, thrown up a few years ago for \$6,000, have gone for \$17,500 in ready cash. In the three months ending June 30, some \$35 million worth of property changed hands in the Miami Beach area.

In Florida real estate circles, where the word “boom” is a breach of decorum, (recollection of the collapse of '26 is still painful), this runaway market is both feared and loved. There are those who say Florida is already on top of a head-on smash calculated to make the last one look mild as a kitten. And there are the partisans

(NEWS continued on page 20)



**What three
BIG IMPROVEMENTS
can you see here?**



WHETHER you're modernizing your old office or building a new one, three important considerations always pop up. They are modern lighting, air conditioning (if the budget permits), and the type of acoustical material that will provide ample noise reduction. This last is where we come in.

In selecting the right acoustical material, your local factory-appointed Gold Bond Acoustical Applicator can be of tremendous help. He is an experienced engineer—familiar with the newest types of materials, the sound absorption coefficients and the

installed costs. His recommendation will be supported with detailed specifications together with samples showing colors and surface finishes.

Whatever your preference, a tile design or a monolithic treatment, there's a Gold Bond acoustical product to meet the requirements. The full line is described in Sweet's along with over 150 other Gold Bond better building materials.

Consult the phone directory under "Acoustical Materials" for the official Gold Bond Applicator in your area or write us at Buffalo for his name.

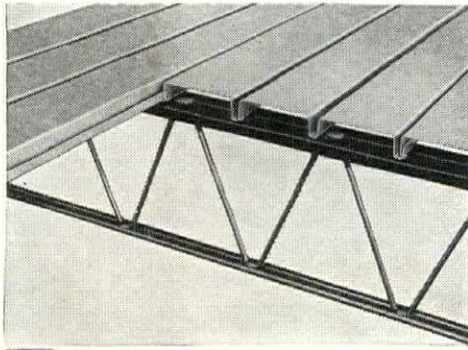
**You'll build or
remodel better with
Gold Bond**

NATIONAL GYPSUM COMPANY • BUFFALO 2, N. Y.

Over 150 Gold Bond Building Products including gypsum lath, plaster, lime, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.



In construction products **CECO ENGINEERING**



Ceco Steel Roof Deck partially installed, showing use of Ceco open web steel joist as purlin.

Why Steel Roof Deck?

Architects, engineers and contractors are looking for better, faster, more economical ways to build structures of the future. Ceco Steel Roof Deck . . . along with other Ceco-engineered construction products . . . offers practical building advantages. Here are four such features which Ceco Steel Roof Deck can contribute to any type of industrial, commercial or institutional building:

- 1 Lightweight construction—reduces weight of supporting structural members—wide purlin spacings may be used.
- 2 Economical—erection costs are low.
- 3 Fire resistive.
- 4 Quick installation.

WHY SPECIFY CECO?

Ceco construction products stand preeminent in their field. They are engineered to a perfection that guarantees your construction. Years of pioneering . . . years of on-the-job experience in the construction field . . . have given Ceco engineers a sure grasp of your problems. All that fund of knowledge is yours to command, in 23 offices strategically located coast to coast. Ask your nearest Ceco service headquarters for full particulars.

CECO STEEL PRODUCTS CORPORATION
 GENERAL OFFICES: 5701 W. 26th Street, Chicago 50, Illinois

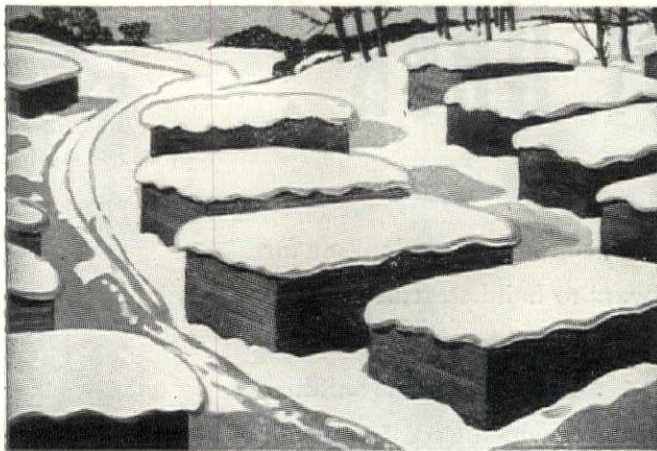
Offices, warehouses and fabricating plants in principal cities

makes the big difference

Partial List of Other Ceco Products

MEYER STEELFORMS • REINFORCING
 STEEL • METAL FRAME SCREENS •
 METAL WEATHERSTRIPS • STEEL JOISTS
 • METAL LATH AND ACCESSORIES •
 HIGHWAY PRODUCTS • CORRUGATED
 ROOFING • METAL WINDOWS

THE MEANING OF *Weatherproof*



There are no store-houses at the Homasote Mills. Winter or Summer, the big sheets of Homasote are piled outdoors. When needed, they are trimmed to size—as big as 8' x 14' or as small as 4' x 4'—and are immediately ready for shipment. This has been standard practice for more than 30 years. It is the behind-the-scenes evidence that the Homasote Company know their product is



weatherproof. No similar product can be treated this way. Pan American Airways was building an over-seas base in an equatorial Turkish bath—the average temperature 95 degrees F.—the average humidity 90 percent—the annual rainfall 170 inches! Homasote—tested and then used for the interior walls—convincingly proved its ability to withstand moisture and mildew.

Admiral Richard E. Byrd used Homasote in the construction of Little America. Six years later he reported that the Homasote boards were “just as good as when they were put on”.

Hundreds of letters from owners—in all parts of the world—testify that Homasote homes and buildings have come through floods, snow, tornadoes, hurricanes and even fire—with little or no damage.

That is the meaning of *weatherproof!*

Today the demand for Homasote exceeds the supply. In spite of expanded production capacity, our entire output for the balance of this year is already under allocation.

Looking to 1947, however—we invite architects and builders to write for our new fully illustrated booklet describing some of the many uses for *weatherproof* Homasote. The book gives physical characteristics, performance charts, specification data and application instructions. Write for your copy today.



HOMASOTE COMPANY, Trenton 3, N. J.

who say that Florida's present joy-ride “is different,” based on real demand rather than on speculation, on ready cash and hefty down payments instead of the early carnival of ten percent down and two to five-ply mortgaging.

Last month, Merrill Lynch, Pierce, Fenner & Beane, the country's most Argus-eyed broker (90 branches), turned its gaze on Florida and came up with an “outlook” report in its widely-circulated “Investor's Reader.” In sibylline tones, M. L., P., F. & B. observed: “In the early twenties Florida real estate went through one of the most fantastic booms in U. S. history. Thousands of uninformed citizens speculated crazily; elaborate ‘developments’ were projected where God had sown only sea weed, sea oats and cabbage palms. In 1926-27 the boom collapsed. Economists differ as to how this affected U. S. economy. But the fact remains that a nationwide depression started less than three years later.”

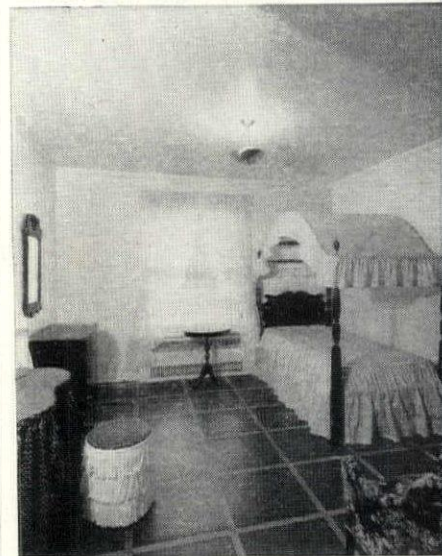
Was Florida—and national—history about to repeat itself? Surveys showed that most realty prices throughout Florida had tripled since 1940 and are at least five times depression lows. A real estate broker in pint-sized Clearwater expected to total \$11 million in sales before the year ended—he had done a \$500,000 business in 1938. In Fort Lauderdale, a community of some 26,000 “permanents,” 40,000 “visitors,” a \$50 million yearly business was in sight.

The pulse of sales was most feverish in beach- and lake-front holdings along Florida's 3,500-mile shoreline and 30,000 lakes. Along Daytona's beautiful ribbon of shingle, frontage sells for \$400 a foot; at Indian Rocks, a realtor sold 104 empty lots at \$500 to \$1,250 each even before the dredge had pumped the land up from the Gulf tidewater. All types of property were riding high: grovelands up to \$3,500 an acre; hotels zooming out of receiverships into snappy best-sellers at four times their replacement cost.

Local Florida has argued that under its flashy hustle, the boom in Florida cities is based on a durable prosperity. Much of the bloated spending of the winter season, Floridians point out, is the work of spend-thrift visitors, the resort crowd that left millions in slot machines and paid \$15,293,294 in racing taxes this year. Real estate, on the other hand, is grounded on such substantial elements as a growth in population and industry and a real housing need. Cheeriest fact in the current situation, perhaps, is that cash purchases are almost the rule, second mortgages rare; big insurance companies like Metropolitan and Prudential have been combing the state for first mortgages on prime business property.

(NEWS continued on page 24)

IT'S **SAFE**
TO PAINT OVER NEW
PLASTER WITH



LUMINALL



That does it!

Deliver fully painted interiors far ahead of competition. When you specify LUMINALL the painters can follow right on the heels of the plasterers. No priming or sizing—just an easy coat and the job's ready for occupancy. Capillary action of LUMINALL film permits new plaster moisture to escape without having to paint or plaster.

LUMINALL is a happy choice for painting fire homes, hotels, theaters—public and private buildings of every type. Recommended by illuminating engineers for better sight, because it reflects and diffuses more light than any other type of paint. Costs no more than common paint, but goes farther. Dries in 4 minutes. Odorless.

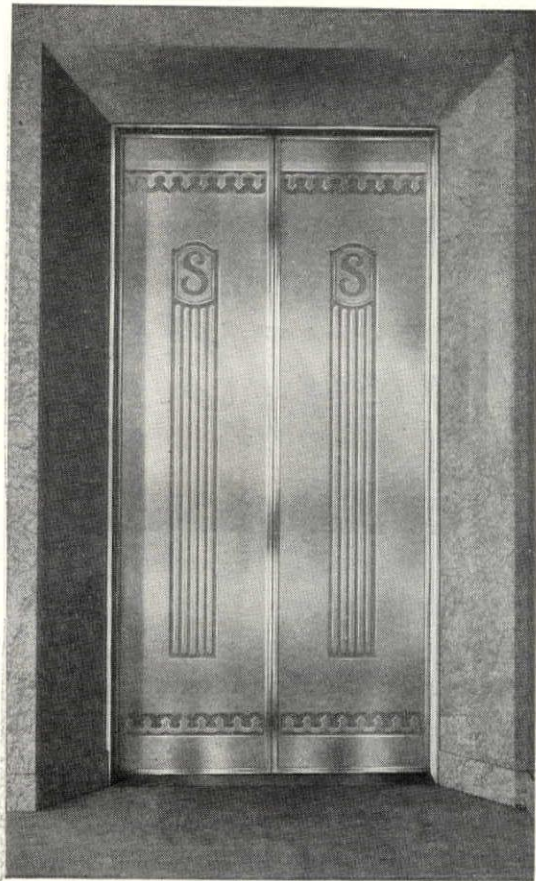


Ask for your Copy

Send for “Painting for Light & Decoration” which gives complete data, information, and specifications on the use of Luminall.

NATIONAL CHEMICAL & MFG. CO.
3612 S. May St., Chicago 9

LUMINALL



"Get a HORSE!"



★ But folks didn't get a horse . . . instead, they bought more horseless buggies. They quickly found that they provided a better and faster means of transportation. People used to climb stairs to transact business too. Now, modern vertical transportation is insisted, not accepted. In the competitive days that are surely coming, the full buildings will be the ones which provide the best in this type of transportation. Part of this modernization calls for attractive

elevator entrances. And that, we believe, calls for a full knowledge of what Dahlstrom has to offer both Architects and Building Owners. If you are faced with a job of this kind, we suggest that you give us an opportunity to contribute something from our Forty years experience which may be helpful. We can point—if you'll pardon us—to hundreds of the finest buildings in the country which have been equipped with Dahlstrom Elevator Entrances.

Illustrated above: First floor elevator entrance in the Spear and Company Building, Pittsburgh, Pa. Typical floor entrances also by Dahlstrom. Aluminum etched doors and aluminum frames.

DAHLSTROM

METALLIC DOOR COMPANY, JAMESTOWN, N. Y.

Branch Offices:

NEW YORK, CHICAGO, PHILADELPHIA, BOSTON, CLEVELAND, BUFFALO, ATLANTA, SAN FRANCISCO

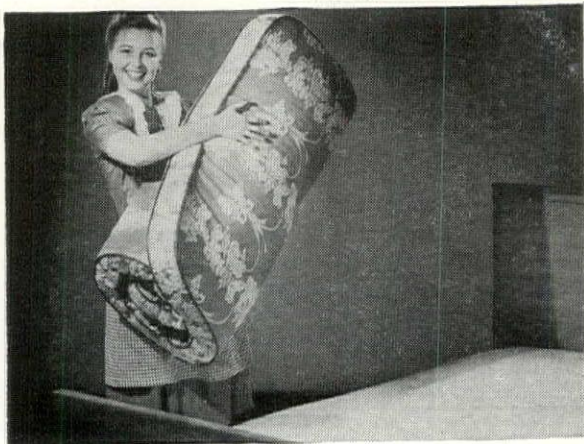
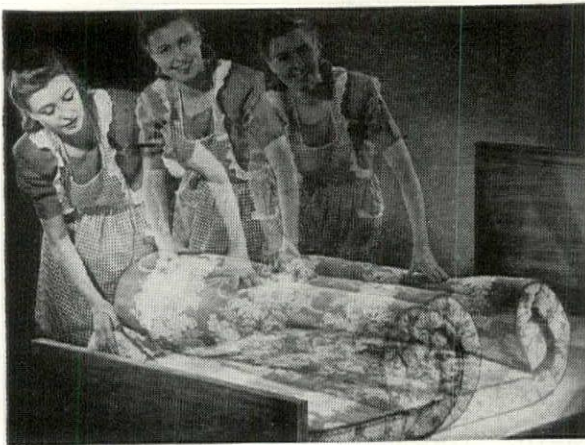
Representatives in Principal Cities

MAINTENANCE AIDS



A new issue of this helpful folder, contains operation, maintenance, and care of finish information of value to building operators and owners. Send for your copy.

SERVING YOU THROUGH SCIENCE



HERE'S THE
LIGHTWEIGHT
CHAMPION!

To get some idea of how light Koylon Foam really is . . . you have to think in terms of a substance like angel food cake.

Actually, Koylon Foam is 85% air . . . captured in millions of tiny, interconnecting cells of resilient latex.

This helps to solve the weight problem in airplane design. It lightens the task of housekeeping in homes, hotels, hospitals and schools . . . where merely "turning the mattresses" becomes a Herculean task.

With no springs—no stuffings—to wear out . . . Koylon Foam lowers maintenance costs. Eleven years of use on major railroads proves that Koylon Foam adds to seat upholstery life!

Yet *lightness* and wear are merely by-products of Koylon Foam's primary function—*matchless comfort*. And it's another reason why we say: If you sell "seats"—or "sleep"—better sell Koylon Foam!

*Comfort Engineered
for Sitting and Sleeping*



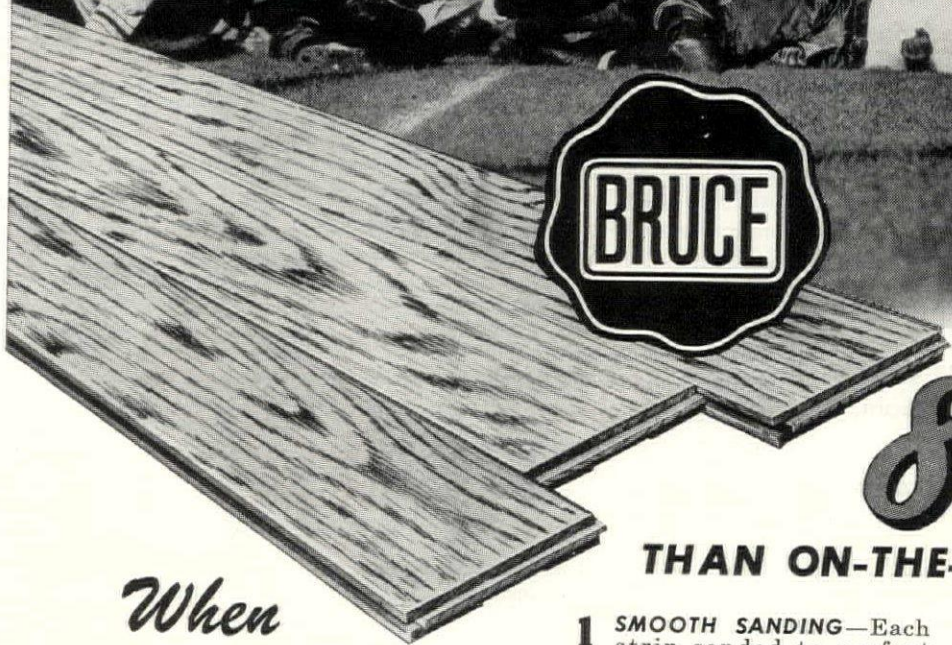
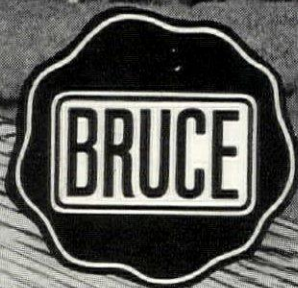
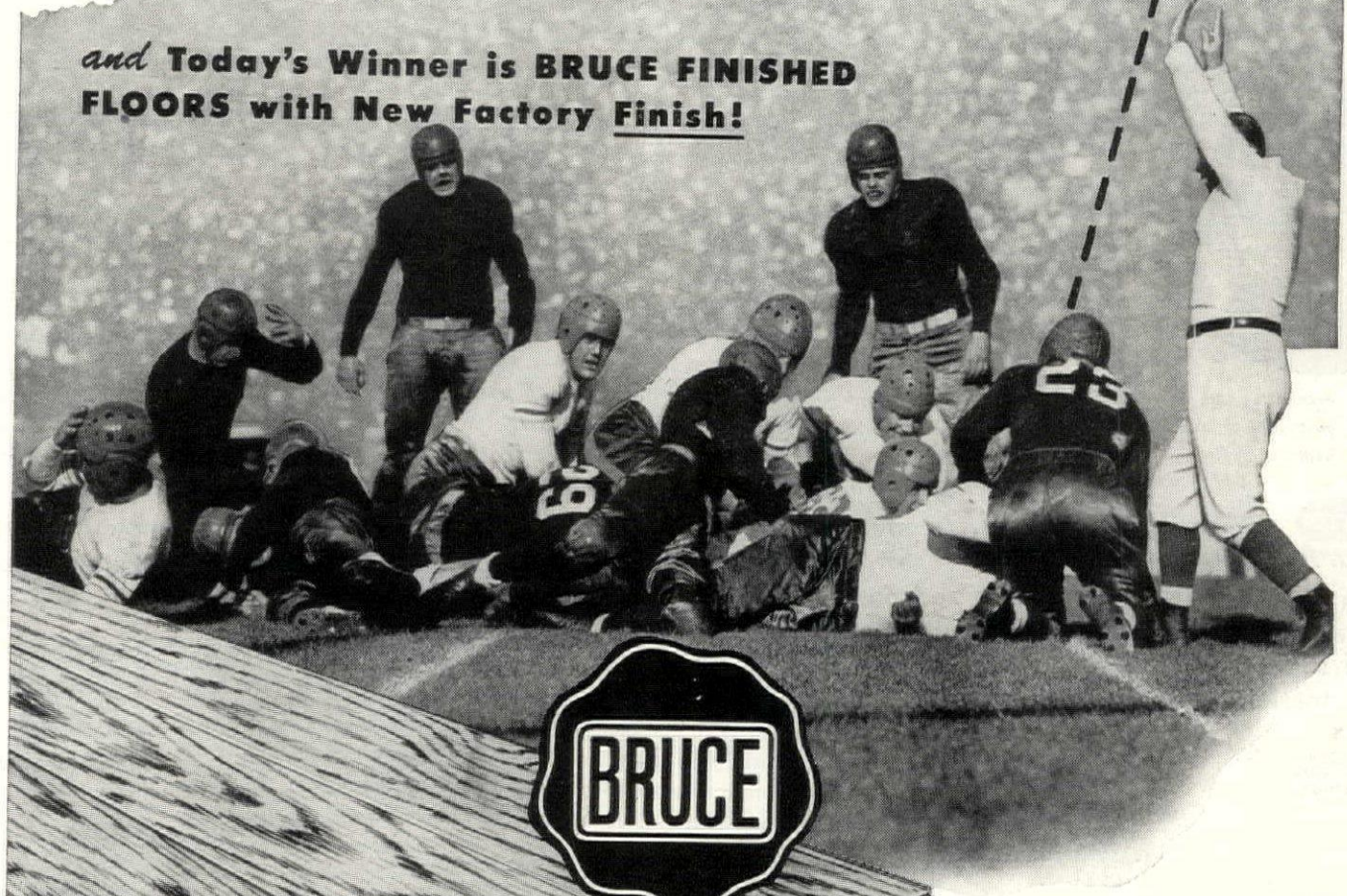
"U.S." KOYLON FOAM DIVISION • MISHAWAKA, INDIANA

UNITED STATES RUBBER COMPANY

in floors, too...

IT'S THE *Finish* THAT COUNTS !

and Today's Winner is **BRUCE FINISHED FLOORS** with New Factory Finish!



8

WAYS BETTER THAN ON-THE-JOB FINISHES!

When can you get it?

There's still no improvement in the critical lumber shortage holding up production of Bruce Finished Flooring. But just as soon as conditions permit, we will give you the finest hardwood flooring ever made . . . more beautiful, longer wearing and easier to maintain than ever before.

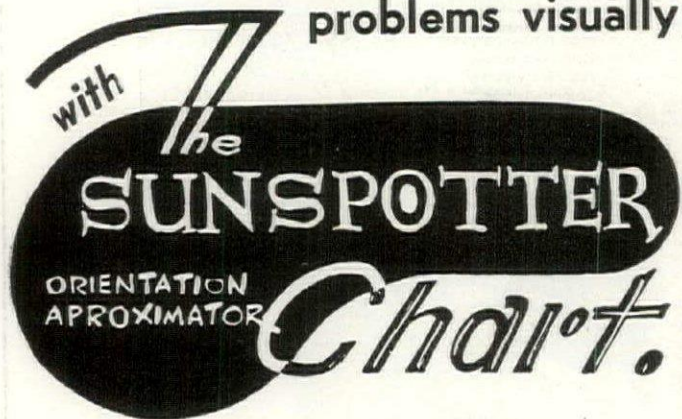
E. L. BRUCE CO.
MEMPHIS 1, TENN.

World's Largest Maker of Hardwood Floors
Also BRUCE Floor Finishing & Maintenance Products

- 1 SMOOTH SANDING**—Each strip sanded to perfect smoothness on multiple drum, precision sanders. No sander marks.
- 2 PRIME CONDITION**—Finishing starts immediately after sanding, so no "raised grain." Moisture content of flooring is right.
- 3 PERFECT FILLING**—Highest quality silex filler is rubbed into wood as flooring moves down the finishing line.
- 4 THOROUGH SEALING**—Bruce Finish penetrates into wood pores . . . seals them against dirt and wear. Beautifies wood grain.
- 5 INFRA-RED DRYING** applies heat uniformly . . . welds finish into a tough, even film. No "unfavorable drying weather."
- 6 EXTRA BUFFING** with high-speed brushes burnishes finish . . . provides a harder, smoother surface for waxing.
- 7 SUPERIOR WAXING**—Special wear-resistant Bruce Floor Wax is applied evenly, then polished over and over with brushes and buffers.
- 8 READY-TO-USE**—No waiting on the job for finishes to dry . . . no hazard of finish being walked on too soon. Ready-to-use immediately.

BRUCE FINISHED FLOORS

HOW TO HARNESS THE SUN and solve your Orientation problems visually



Architects can now orient buildings for best use of sun and solar heat without hours of tedious projecting and computing.

The Sunspotter Chart. requires no special skill or study; simply lay the transparent chart over your plan (plan may be at any scale and no sectional drawings are needed) then scale off the length of shadow—the Compass-Rose printed on chart automatically tells you the angle.

The Sunspotter Chart. SHOWS AT A GLANCE:
Sun's position at any hour of any season,
Azimuth angle of sun's rays,
Length of shadow cast, in plan, for any height,
Time and season when no light will enter room,
When a wall is in shadow,
And just about everything else you need to know.

The Sunspotter Chart. is permanently laminated in transparent plastic with a special satin-finish top surface on which you can draw and erase. May be used over and over again.

The Sunspotter Chart. may be had for each of the following Latitudes: 30 35 40 45. Others in preparation. Price; in Plastic—\$10.00. On Superfine Bristol (not transparent)—\$3.95. Both are 11" by 17", double standard file size.

To: WILLIAM'S METHODS, Box 40, Redding, Conn.
Please send me the Sunspotter Chart for; 30 35
40 45 Latitude, (specify other latitudes for later
delivery) in Plastic-\$10.00 on Bristol \$3.95
check enclosed money order enclosed Send C.O.D.
to:
Name
Address
Firm Name

NO SMOKING

Pittsburgh puts smoke ban into effect.

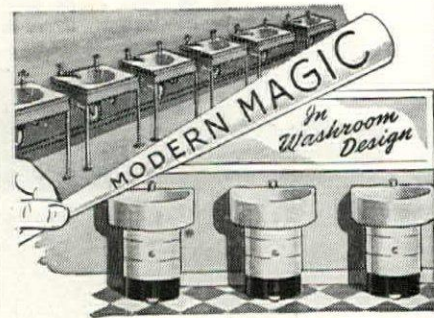
Time out of mind, it seemed, Pittsburgh has suffered the opprobrium of being America's grimeiest city. Pittsburgh prosperity, signaled by soot-belching furnace stacks, covered the city's buildings with a uniform black, made housekeeping terrifying to young wives, shrouded the sky with a special Pittsburgh phenomenon known as "smog"—one-third smoke, one-third fog, one-third sinus trouble.

Plans to rid Pittsburgh of its pall have ranged from a proposal to erect huge fans to blow the smoke over Duquesne Heights and out of town, to a scheme to banish smoke by educating all users of furnaces in methods of careful firing. Most practical program is that conceived by the United Smoke Council, which has urged an anti-smoke law to control all of Allegheny county's hundreds of soot-breathed mills.

First phase of the long-awaited campaign for smoke-elimination begins on October 1, when strict regulation is applied to all commercial and industrial establishments in the city. Pittsburgh's smoke ordinance, passed in 1941, and modeled after that of St. Louis, will eventually make it illegal for any furnace or stove to produce smoke by requiring either a smokeless fuel or mechanical equipment that will choke off smoke. In addition to policing the skyline, the new Bureau will exercise authority when new heating equipment is installed or major repairs are made in existing units. Detailed plans must be filed by the owner, and inspection made by a smoke inspector. Delayed because of the war, the plan will be put into operation in two stages. During the second stage, it will place all remaining fuel consumers—chiefly home-owners—under the regulations now applying to large buildings. By next October, every building in Pittsburgh will be the concern of the Bureau of Smoke Prevention.

Pittsburgh officials admit that it will take more than two years to get satisfactory compliance with the anti-smoke rule. St. Louis inspectors, checking industrial chimneys in the first winter of the smoke ban, found that 21.6 per cent were still puffing illegally. But last year only 5.6 per cent sent up law-breaking smoke. Forseeing such a day for Pittsburgh, the *Press* caroled last month, "You will waken to the realization that Pittsburgh is a really clean city . . . As you get up to shut the window in your bedroom, you will note that there is no deposit of soot on the sill. As you look down in your yard you will see evergreens that wouldn't grow there before . . . Downtown the tall buildings will gleam in the sunlight."

(NEWS continued on page 28)



With the new Bradley DUO-WASHFOUNTAIN

Once again the magic of modern skill and engineering has succeeded in molding maximum utility with attractive design. For the Bradley DUO-Washfountain combines modern streamlined appearance with unusual utility value.

Installation of DUO-Washfountains is economical because one DUO takes the place of two "single-person" wash basins, with one Bradley sprayhead replacing four faucets.



DUO-Washfountains available in stainless steel or glistening white enameled iron with roll rim or apron bowl.

In addition, the DUO easily-cleaned sprayhead, self-flushing bowl and automatic foot-control reduce maintenance and afford maximum sanitation. Hands touch nothing but clean running water. Ideal for smaller washrooms used by engineering, drafting departments, office and supervisory personnel. Bradleys are nationally distributed through plumbing jobbers.

BRADLEY
WASHFOUNTAIN CO.
2241 W. Michigan St.
Milwaukee 1, Wisconsin

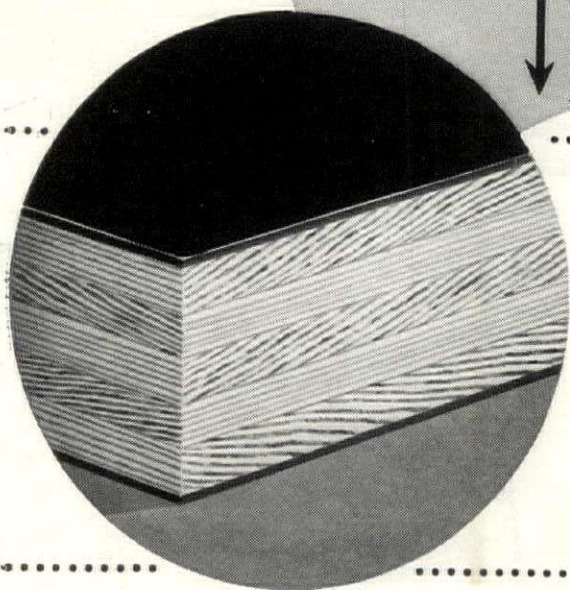
For further interesting
details write for New
Bulletin 464-D



BRADLEY
Duo Washfountains

Kimpreg* + Plywood

a new material
with new advantages



PERMANENT SURFACING. Now Kimpreg gives plywood a face of plastic armor. A thermosetting phenolic resin laminate, Kimpreg provides a flint-like waterproof surface that defies parasites, decay and extremes of temperature. It is washable, insoluble, stainproof. Impervious to alcohol.

WEAR-RESISTANT, SCUFFPROOF. Kimpreg is a sheath of enduring beauty. It's durable — withstands hard use and abrasion without showing appreciable signs of wear! Kimpreg increases the abrasion resistance of plywood up to 5 times when dry, up to 33 times when wet.



VERSATILE, WORKABLE. Kimpreg + Plywood is a new material with the versatility of a plastic plus the economy and basic workability of plywood. Find out more about Kimpreg + Plywood — an amazing new product with a myriad of possibilities. Mail the coupon today for complete book of information.



Kimberly-Clark Corporation, Neenah, Wisconsin. Please send me the new free book on Kimpreg and its uses.

AF-1046

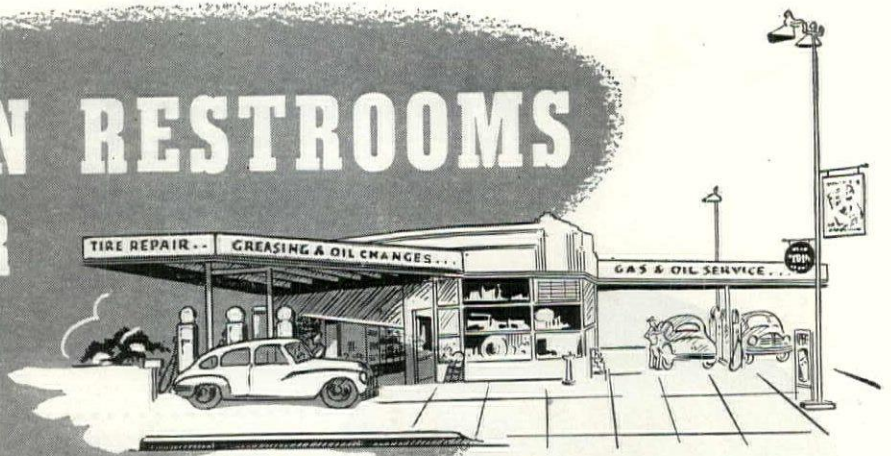
Kimpreg
REG. U.S. PAT. OFF.
PLASTIC SURFACING



Name _____
Firm _____
Type of Business _____
Address _____
City, Zone, State _____

*TRADEMARK

MODERN RESTROOMS CALL FOR FLUSH VALVES



Always a problem because of the severe use and abuse they receive, toilet facilities in service stations can be greatly improved by the use of direct flushing valves — Watrous Flush Valves.

These valves are rugged and durable — are fast and economical in operation — provide strong flushing action assuring a clean and sanitary bowl — are not subject to tampering — offer remarkable freedom from servicing — assure maximum savings of water.

In hotels, depots, service stations, schools, public buildings and other places where toilet facilities are subjected to severe service, Watrous Flush Valves have proved themselves a source of satisfaction over the years. In planning new, modern service station restrooms, you will gain many important advantages through the use of Watrous Flush Valves.

All Watrous Flush Valves Offer These Important Advantages for Service Stations

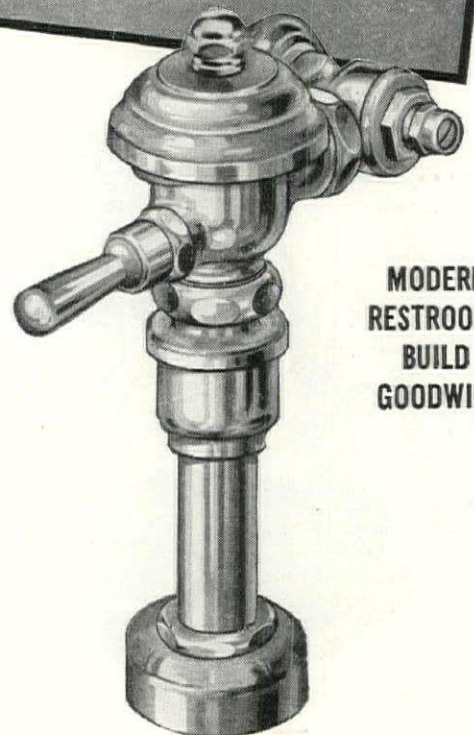
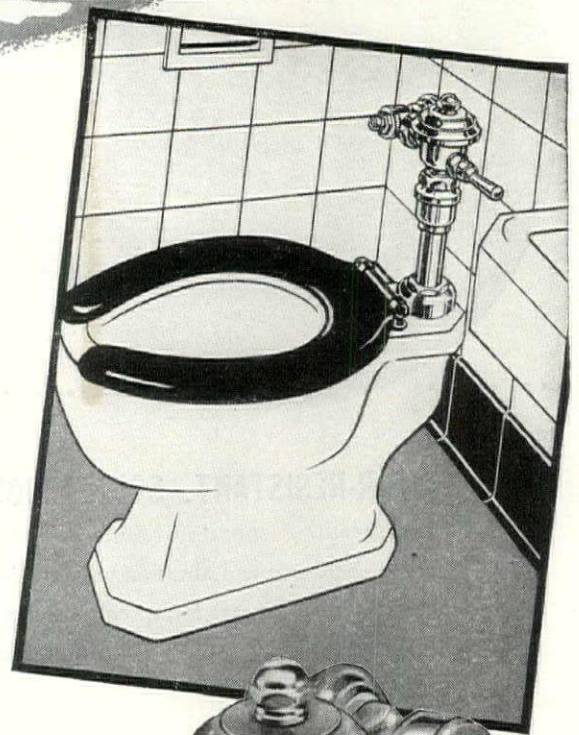
1. Easy to operate. Fast, powerful and thorough in action.
2. Rugged and durable — will withstand severe use and abuse.
3. Practically foolproof and theftproof — not subject to tampering.
4. Cost much less to maintain because they have no parts subject to breakage — fewer parts subject to wear.
5. Occupy less space. Promote better sanitation because they make cleaning easier.
6. Provide important savings of water through ease of adjustment to the actual water needs of the fixture.
7. Silent-Action equipment can be furnished when desired.

THE IMPERIAL BRASS MANUFACTURING COMPANY
1238 W. Harrison St., Chicago 7, Illinois



For complete information on Watrous Flush Valves see Sweets' Catalog or write for Catalog No. 448-A.

Watrous Flush Valves



MODERN
RESTROOMS
BUILD
GOODWILL

THEY PAY FOR THEMSELVES IN THE WATER THEY SAVE

Did you miss this announcement in 1944?

IT'S STILL NEWS!

REVOLUTIONARY NEW WINDOWPANE FOR EVERY TYPE OF BUILDING

Thermopane

THE WINDOWPANE THAT INSULATES

with the **BONDERMETIC SEAL**

Climaxing fourteen years of research, L·O·F THERMOPANE is the first successful windowpane ever made with permanent built-in insulation. It is made of two panes of glass, separated by an insulating layer of air, and sealed around the edges by an insulating metal-to-glass bond. This Bondermetic Seal has without break-up to L·O·F's Bondermetic Seal strength. You install THERMOPANE in a modified single window sash, just as you would ordinary window glass. And what a difference it makes!

Cuts heating costs amazingly. Shields street noises. Keeps homes warmer in winter, cooler in summer. In short, THERMOPANE, the new patented insulating windowpane, makes possible an entirely new standard of comfort and economy in the homes of tomorrow that you design, build or finance. It provides all of the benefits of double-glass insulation without the seasonal problems of putting up and taking down extra sash. There's no extra glass to keep clean. For a descriptive booklet, write Libbey-Owens-Ford Glass Company, 1454 Nicholas Building, Toledo 3, Ohio.

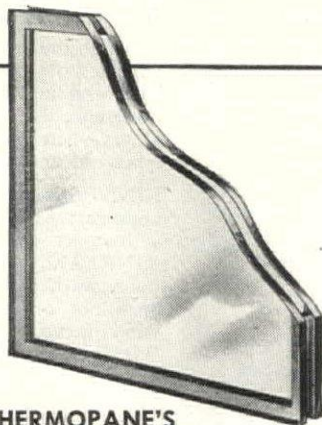
4 IMPORTANT FEATURES OF THERMOPANE

- 1 INSULATING AIR SPACE. The air inside the Thermopane units is scientifically cleaned, dried and hermetically sealed. This layer of air gives Thermopane its high insulating efficiency.
- 2 BONDERMETIC SEAL. This metal-to-glass seal permanently bonds two panes of glass into a single unit. Strong and weather-proof, it seals the insulating air space from dirt and moisture.
- 3 NO FOGGING UP. Because of the patented Bondermetic Seal, and the insulation afforded by the sealed-in air, frosting up and condensation are eliminated on the two inner surfaces.
- 4 ONLY TWO SURFACES TO CLEAN. The inner glass surfaces are specially cleaned at the factory... always stay clean.

LIBBEY·OWENS·FORD
a Great Name in GLASS

Copyright, 1944, Libbey-Owens-Ford Glass Co.

Trade Mark Registered



THERMOPANE'S

metal-to-glass Bondermetic Seal bonds the panes into one unit. This hermetic seal guards against dirt and moisture entering the dry air space. Thermopane is made for most window openings...and in 50 standard sizes for simplification of design and replacement. Write for our booklet on Standard Thermopane Sizes. Libbey-Owens-Ford Glass Company, 35106 Nicholas Building, Toledo 3, Ohio.

Early in 1944, after fourteen years of research and development, Libbey-Owens-Ford announced Thermopane*. Although this was the first public announcement of the windowpane that insulates, Thermopane already had been proved by years of service in hundreds of actual installations.

Since its public announcement, Thermopane has captured the imagination of architects, builders and homeowners...has become one of the most talked-of advancements in the building industry.

Why do we refer to this advertisement now? Because everything we said about Thermopane has been borne out by the tremendous demand.

All of this adds up to one fact—you can install Thermopane with complete confidence...for time has added its proof to laboratory promises. Thermopane has proved itself in homes, schools, hospitals, offices and public buildings...in the United States, Mexico, Canada, Alaska and even Iceland.

*Reg. U.S. Pat. Off.

LIBBEY·OWENS·FORD
a Great Name in GLASS

LABOR

LABOR OUTLOOK

Door opening to apprentice training. Labor Day, 1946, found Building still bucking limiting factor No. 1—the materials shortage. By spring, Expediter Wyatt warned, builders would have supplies licked, but then the industry would run into its No. 2 barrier—lack of sufficient workers to turn materials into houses.

To meet next year's housing goal, NHA figured 2,500,000 skilled workers would be needed, some 750,000 more than the number currently employed in the construction industry. Yet the prospects of any considerable increase were slim—not more than 65,000 men are now training under union apprentice contracts.

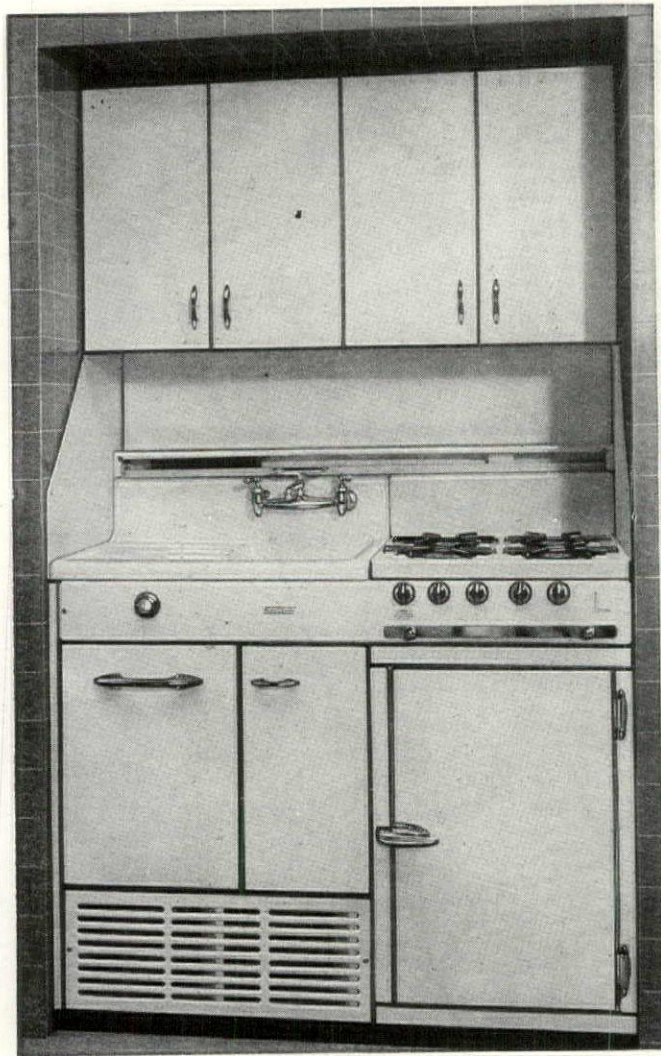
National shortages were most cramping in the trowel trades, bricklaying and plastering, and there was a serious shortage of carpenters. Local bottlenecks showed up in the count of other skills: in San Francisco, for example, painters were hardest to find.

Housebuilding is likely to encounter particular discomfort when government relaxes its hammer-lock on big commercial and industrial projects. Labor, like materials, flows to the readiest channel when in short supply. Workers tend to put big jobs ahead of housing, since non-residential work is traditionally higher paid and more continuous, and prefer repair and maintenance assignments (indoors and less grueling) to new building.

Training Breakthrough. Everyone remembered that during the war we had tackled a huge cantonment and plant building program and attracted 2,500,000 workers into the building field at a time when a large number of experienced building tradesmen were either in the army or other industries. The formula used was at once simple and enormously difficult. It had meant abandoning the mortised ratio of journeyman to apprentice, utilizing the semi-skilled and the unskilled, equalizing wages according to job performance.

Like many a war-born advance, this procedure was largely junked with resumption of "business as usual." Last month in St. Louis, however, unions and builders reached an agreement which recalled wartime flexibility. Recognizing that many returning veterans had received carpentry training in the services, the St. Louis Carpenters' District Council agreed that competent men be paid a third or fourth year apprentice wage, at the employer's discretion. The National Wage Adjustment Board ruled that such sub-journeyman classification was permissible, instructed the unions to list veterans on their books as apprentices of from one to four years' experience. Graduation to the fifth year, or journeyman scale, could be achieved by a veteran who had served only

(NEWS continued on page 32)



UPKEEP is part of Kitchen cost too!

Owners who have had experience with Murphy Cabranette Kitchens *know* their minimum of upkeep cost.

Exposed surfaces are of genuine vitreous porcelain . . . never require painting . . . are restored to original gleaming beauty with only soap and water.

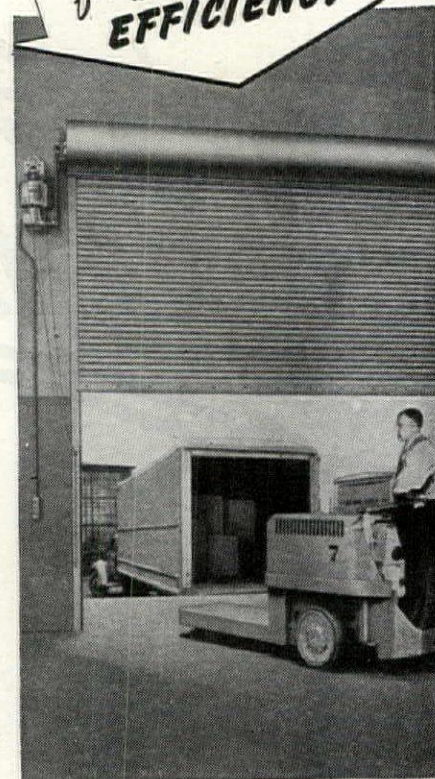
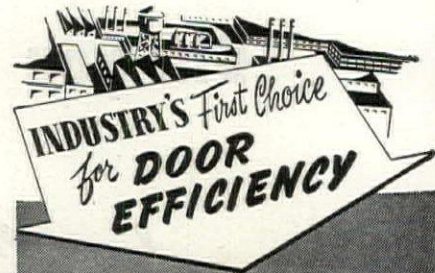
Ranges and refrigerators are made to meet the expected abuse of tenant usage.

They are the only kitchens of their kind in all the world . . . unequalled for small apartments.

For catalog of models in current production and for name of nearest representative . . . write today.

DWYER PRODUCTS CORPORATION

Dept. 1046 Michigan City, Indiana



KINNEAR ROLLING DOORS

Through the years, the multiple advantages of *coiling upward action* have won increasing, industry-wide preference for KINNEAR Rolling Doors — in plants of all sizes and types old and new.

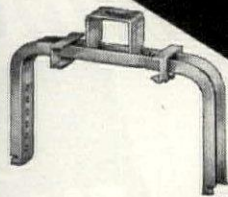
KINNEAR advantages are quickly apparent: by rising vertically into a compact coil above the lintel, KINNEAR Rolling Doors save floor, wall, and ceiling space . . . open out of reach of damage by wind or vehicles . . . require no "clearance area" for operation . . . and clear *the entire doorway* when opened.

KINNEAR'S famous interlocking-steel-slat construction assures *extra* protection against fire, intrusion, accidental damage, and the elements.

For the *ultimate* in time-and-labor-saving efficiency, KINNEAR Motor Operators add push-button control, plus any number of remote control stations if desired. KINNEAR Rolling Doors are built in any size, for old or new construction. Write.

THE KINNEAR MFG. CO.
Factories: 1640-60 Fields Ave., Columbus 16, Ohio
1742 Yosemite Ave., San Francisco 24, California
Offices and Agents in All Principal Cities

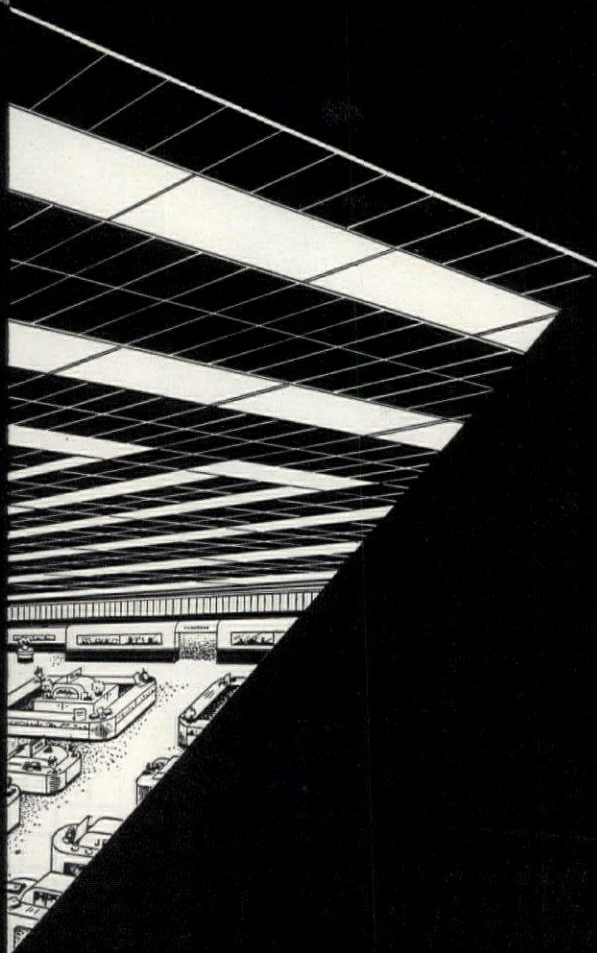
KINNEAR
ROLLING DOORS



Not just lighting - but Ceilings Unlimited

THE MILLER FLUORESCENT TROFFER LIGHTING SYSTEM for stores, offices, schools, factories, and public buildings is an important advance in lighting. The backbone of this system is the patented Miller Ceiling Furring Hanger which suspends ceilings from the lighting system — does away with laborious fitting of recessed lighting into hung ceilings, cuts needed supports from structural ceiling 50 to 75%. Has its own wireway which reduces wiring costs up to 50% . . . conduit and conduit fitting costs up to 80%.

MILLER FLUORESCENT TROFFER LIGHTING SYSTEMS provide not just lighting — the best seeing light — but provide the means for interior improvement — CEILINGS UNLIMITED.



THE MILLER COMPANY • MERIDEN, CONN.
Illuminating Division

- HEATING PRODUCTS DIVISION
- ILLUMINATING DIVISION
- ROLLING MILL DIVISION
- FOUNDRY DIVISION

Announcing the

New **AMPRO**
SLIDE PROJECTOR

with the features you
have always wanted



AMPRO SLIDE
PROJECTOR
Model "30-A"
(2" x 2")

AMPRO

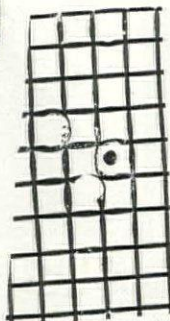
8 mm Silent • 16 mm Silent
16 mm Sound-on-Film • Slide Projectors
16 mm Arc Projectors

**Has Important Basic
Improvements**

This new AMPROSLIDE projector (2" x 2") embodies the engineering skill and fine precision workmanship that have made Ampro 8mm. and 16mm. projectors world famous for quality. It offers features that guarantee quick, simplified operation -- and long satisfactory service, including:

Automatic snap-action, self-centering slide changer, with patented features that assure hair-line focus, perfect alignment of slides on screen, interchange of glass and ready mount slides without refocusing. Operates with one hand -- fingers never touch slide surface . . . **Convenient case lifts off** in a flash for easy accessibility . . . F 3:5 anastigmat projection lens, 5" focal length with convenient knob for hair-line focusing . . . **New condenser design** that combines maximum brilliance with cooler operation . . . 300 watts of uniform light with effective heat dissipation and minimum light loss . . . **Pointer aperture** permits use of pointer with slides . . . Attractively finished, compact, sturdy with clean flowing lines and controls and parts readily accessible . . . the ideal projector for brilliant full color or black-and-white 2" x 2" slide projection.

Write for special Amproslide circular giving full specifications and prices.

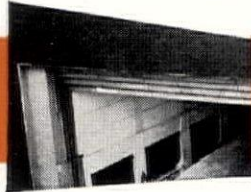


AMPRO CORPORATION ★ CHICAGO 18, ILLINOIS — A General Precision Equipment Corporation Subsidiary

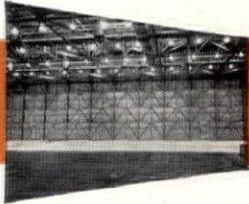
The principle of Vertical Lift

in doors has several distinct advantages which are quickly seen.

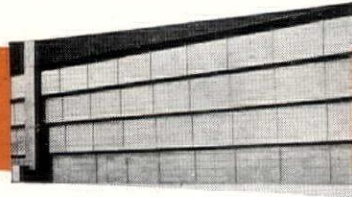
The door nests directly above the opening, completely stored away and out of the way when it is open.



This leaves the ceiling, walls, floor and approaches absolutely unobstructed. Overhead equipment can come right out to the main truss.



You have no problem with sand drifts or a sagging roof caused by snow. The doors are unlimited in height and width and number of sections.



Even a ground swell caused by frost will not jam the Vertical Lift Door. If ground slope is uneven, the lowest section can conform.



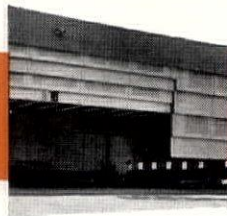
The Door is fully counterbalanced and opens electrically or manually. The largest of these doors can be opened in one minute. Smaller sizes, now in operation, open in less than ten seconds.



All leaves reach the top at the same time, but, to save heat, they can be stopped at any point. There is also a safety device available which stops the door if it touches an object.

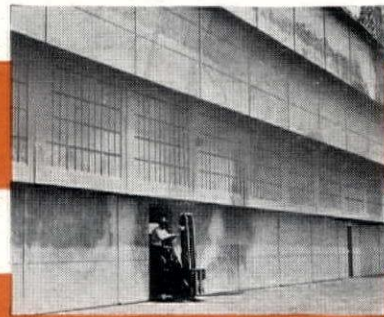


Divided Doors need not have obstructing side members. Independent doors can be raised to give



the effect of one large opening.

Details of skin material and windows, heat and sound insulation and sliding pilot doors are arranged to specification.



Robertson Vertical Lift Door

The principle of Vertical Lift is simple and gets around the difficulties usually encountered in industrial doors. Robertson engineering is so flexible that this door can be harmonized into your specifications with a great degree of adaptability. Any Robertson representative will be glad to furnish you data. For Door Literature, write

H. H. ROBERTSON CO.



2403 Farmers Bank Bldg.
Pittsburgh 22, Penn.

Offices in 50 Principal Cities
World-Wide Building Service

Will your new school provide for change?

Here's a proved system of interior construction that offers complete flexibility to meet ever-changing educational needs



THINK OF IT! . . . the entire interior of a school completely flexible, yet having all the necessary qualities of permanent and solid construction!

Think what that means in terms of economy alone . . . when you want to expand or subdivide units, or convert a building from academic to vocational, or from grade school to junior high!

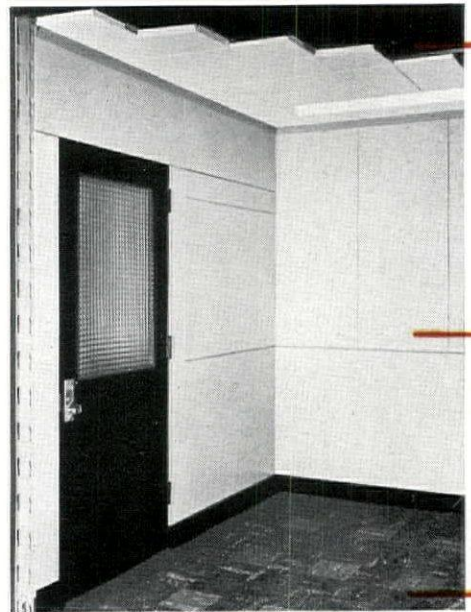
Three Johns-Manville materials make this revolutionary development possible . . . permit Unit Construction of walls, ceilings, and floors under a single specification, a single manufacturer's responsibility:

1. **Movable Walls** . . . 100% salvageable. Made of Transite sheets—difficult to mar, highly resistant to shock and abuse.
2. **Acoustical Ceilings** . . . reduce noise, increase classroom efficiency. Demountable units can be taken down and relocated as desired.
3. **Colorful, Resilient Floors** . . . quiet to walk on; easy to clean; stand up under heavy traffic. Small units permit easy extension of the floor to meet changing conditions.

The constituent parts of Johns-Manville Unit Construction are built to last as an integral part of the structure. And they're so much easier to keep clean that they bring maintenance expense way down. Their modern attractiveness inspires genuine pride on the part of students, teachers, and parents.

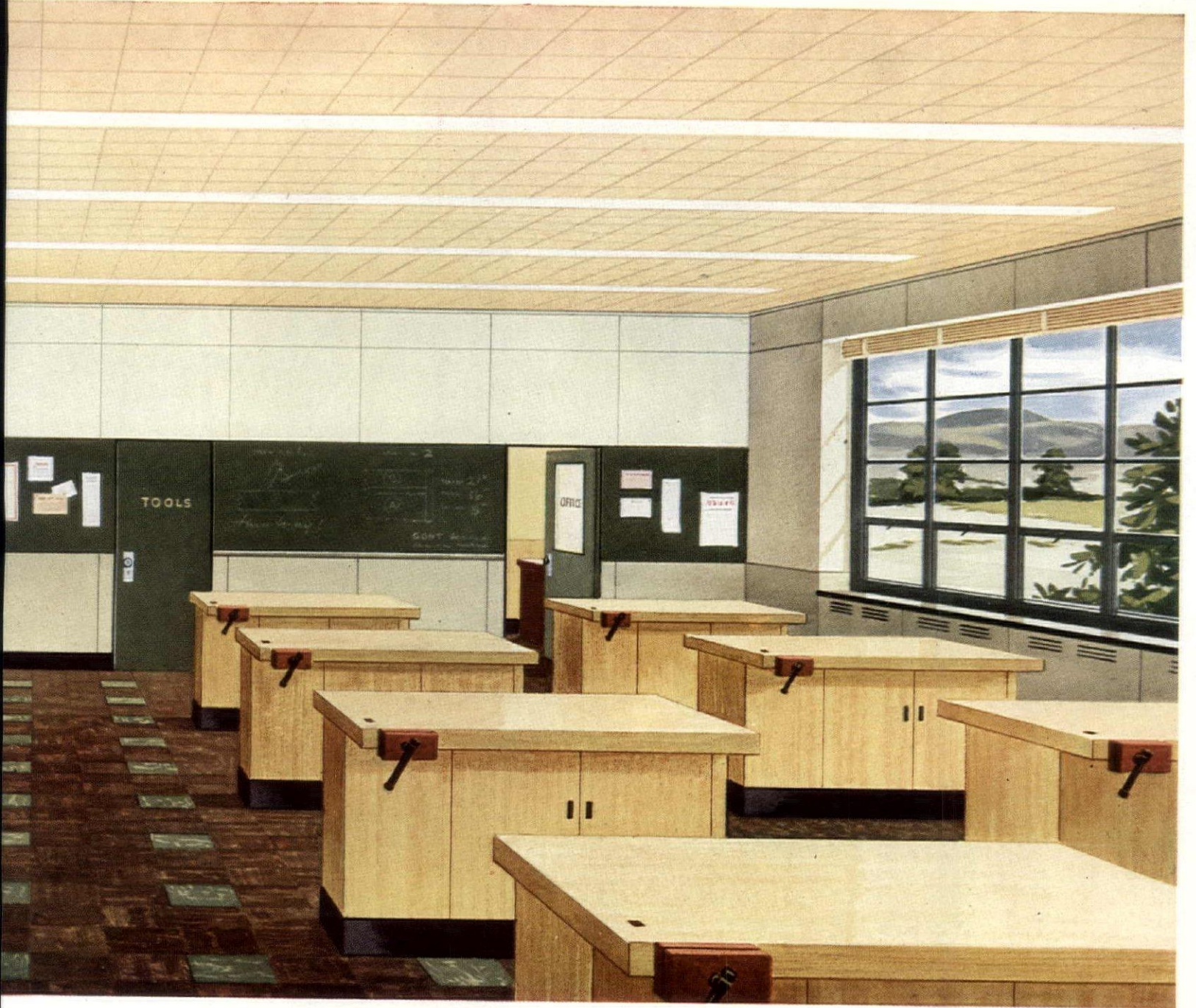
Before planning a new school or converting an old one, write for our brochure describing this important step forward in school design. Johns-Manville, P. O. Box 290, New York 16, N. Y.

Because of the unprecedented demand for Johns-Manville Building Materials, there may be times when we cannot make immediate delivery of the J-M products you need. We therefore urge you to anticipate your requirements as far in advance as possible.



With Johns-Manville Walls, Ceilings, Floors, you can keep expanding, converting, or subdividing schoolroom units as often as conditions require





ACOUSTICAL CEILINGS—Important factor in helping to overcome the handicap of distracting noise, Johns-Manville Acoustical Ceilings are beneficial both to teacher and student alike. They give the desired degree of quiet for effective teaching, eliminate frequent causes of nervousness, and are proved aids to concentration. An exclusive Johns-Manville patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical ceiling units, which are readily demountable.

MOVABLE WALLS—The keystone of flexibility in Unit Construction is the J-M Transite Wall. It can be disassembled and relocated as educational needs require. One-unit rooms, for instance, can be speedily converted into two-unit rooms, or vice versa. Made of fireproof asbestos and cement, practically indestructible materials, the movable panels are used to form rigid, double-faced partitions, 4" thick. Can also be used to finish the interior of outside walls. Transite base is easily removable for access to wiring, etc.

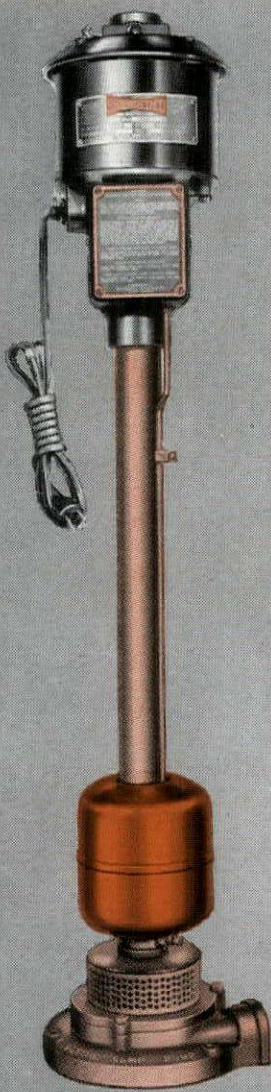
COLORFUL, RESILIENT FLOORS—J-M Asphalt Tile Flooring completes the Unit Construction System. Made of asbestos and asphalt, the units withstand the kind of hard wear and abuse that must be expected in any school building. Not only durable, J-M Asphalt Tile Floors are comfortable and quiet underfoot, reducing the disturbing effects of noisy footsteps in corridors, gymnasiums, etc. Individual units permit easy alterations or extension of patterns. Made in a wide variety of plain and marbled colors.

Incredible as it may seem, this beautiful and solidly built Vocational Room can easily be expanded, subdivided, or converted to an ordinary classroom—thanks to the flexibility of Johns-Manville Unit Construction. Note the projection-free lines of the movable, hard-to-mar Transite Walls. And note the Acoustical Ceiling (with fluorescent lighting), which cuts down noise and reverberations that would otherwise distract students and teachers in other rooms. The colorful floor is Asphalt Tile, easy to clean, highly resistant to scuffing, yet resilient underfoot.

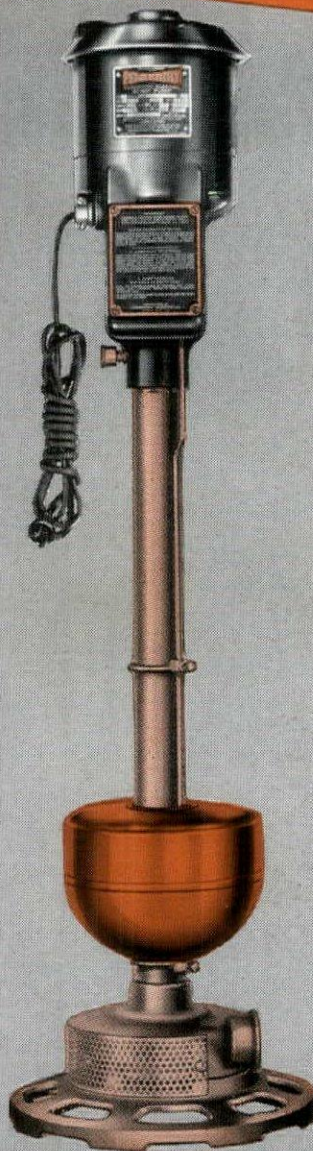


PENBERTHY AUTOMATIC ELECTRIC SUMP PUMPS

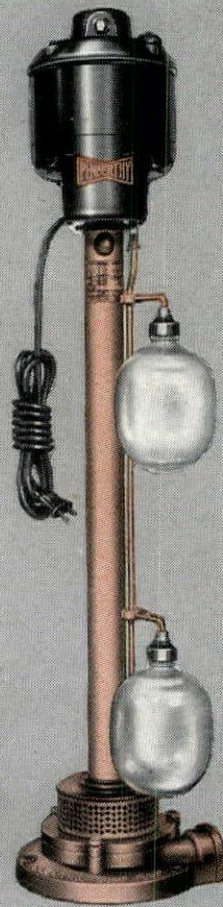
CONSTRUCTED OF COPPER and BRONZE THROUGHOUT



MODEL 46



MODEL M
*Made for 5 Different
Sump Depths*



MODEL 45

PENBERTHY INJECTOR COMPANY

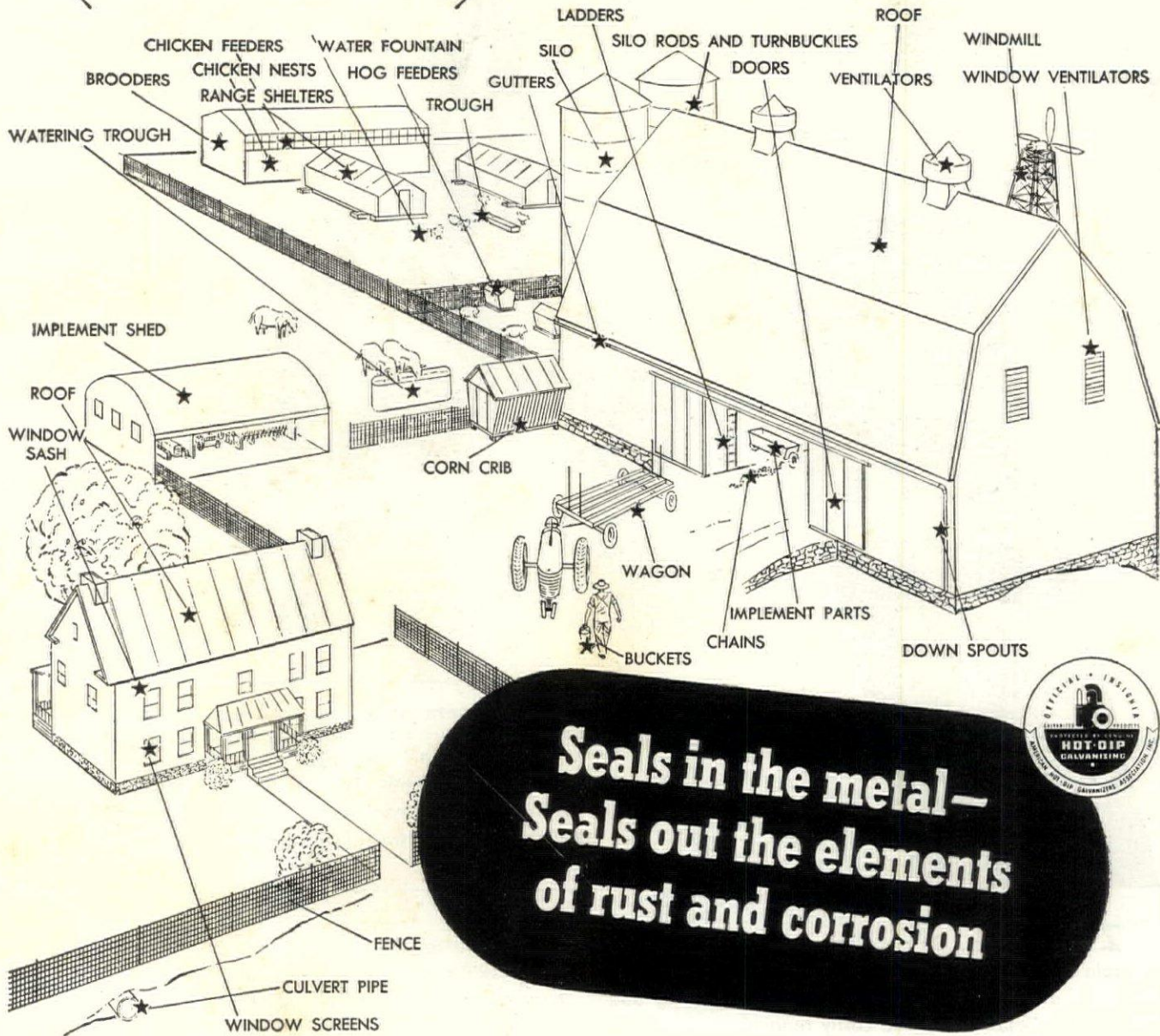
Canadian Plant—Windsor, Ont. (Manufacturers of Quality Products Since 1886) DETROIT 2, MICH.



DIPPED IN MOLTEN ZINC

*For the utmost
in Rust Prevention*

The metal parts of farm machinery, equipment, structures and installations are constantly exposed to the elements that are the cause of rust and corrosion. Hot-Dip Galvanizing definitely seals out these causes because it seals in the metal.



**Seals in the metal—
Seals out the elements
of rust and corrosion**

MOLTEN ZINC applied to metal by the Hot-Dip Galvanizing process provides the utmost protection against rust. Because, through the high temperatures involved, this process creates a fusion of protective zinc with the base metal.

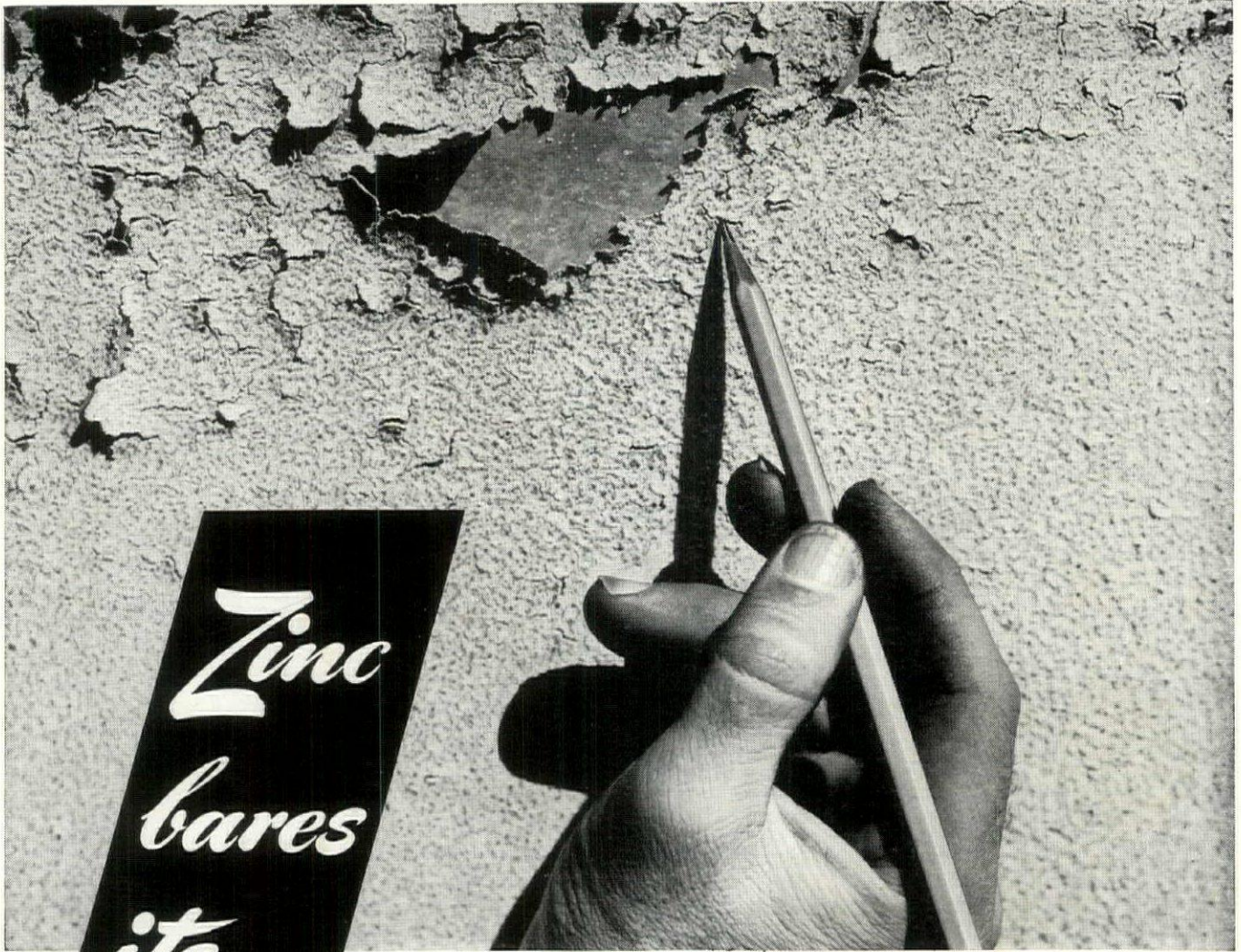
Only Hot-Dip Galvanizing creates a bond of iron-rich alloy which holds the best possible coating of protective zinc to the metal, sealing out the causes of rust and corrosion.

Time-tested and proved under climatic conditions in all parts of the world, Hot-Dip Galvanizing has long paid its way in providing longer life, greater uninterrupted service, and in effecting savings by averting costly replacement and maintenance.

For information regarding your particular problems of rust and corrosion, write American Hot Dip Galvanizers Association, Inc., First National Bank Building, Pittsburgh 22, Pennsylvania.

*For the best Zinc Coating
use*

hot-dip GALVANIZING



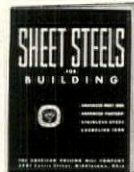
*Zinc
bares
its
teeth*

SEE SWEET'S CATALOG for uses, advantages and general specifications of these other Armco special-purpose sheets:

ARMCO Stainless Steels

Galvanized ARMCO Ingot Iron

ARMCO Enameling Iron (for fine porcelain enameled work)



Zinc is a fighter. On a steel sheet it plays a protective role and combats rust. But it also fights paint. It dries out the vital oils and causes premature peeling and flaking. Result: early and costly repainting.

But this doesn't happen when you use ARMCO Galvanized PAINTGRIP Steel. Weather exposure tests prove that paint lasts several times longer on PAINTGRIP gutters and downspouts, air-ducts, furnace casings, and other equipment than on ordinary galvanized or uncoated steel. That's because the mill-Bonderized surface insulates the paint from the raw zinc, and

helps preserve its life and beauty. And remember, PAINTGRIP actually costs less than it does to use ordinary galvanized steel and acid-etch before painting.

ARMCO Galvanized PAINTGRIP can be specified with an ARMCO Ingot Iron, Copper Steel or Open Hearth Steel base. In every case it assures longer lasting, better looking sheet metal work. This means satisfaction for the owner and good-will for the builder and architect. The American Rolling Mill Company, 3771 Curtis Street, Middletown, Ohio. Export: The Armco International Corporation.

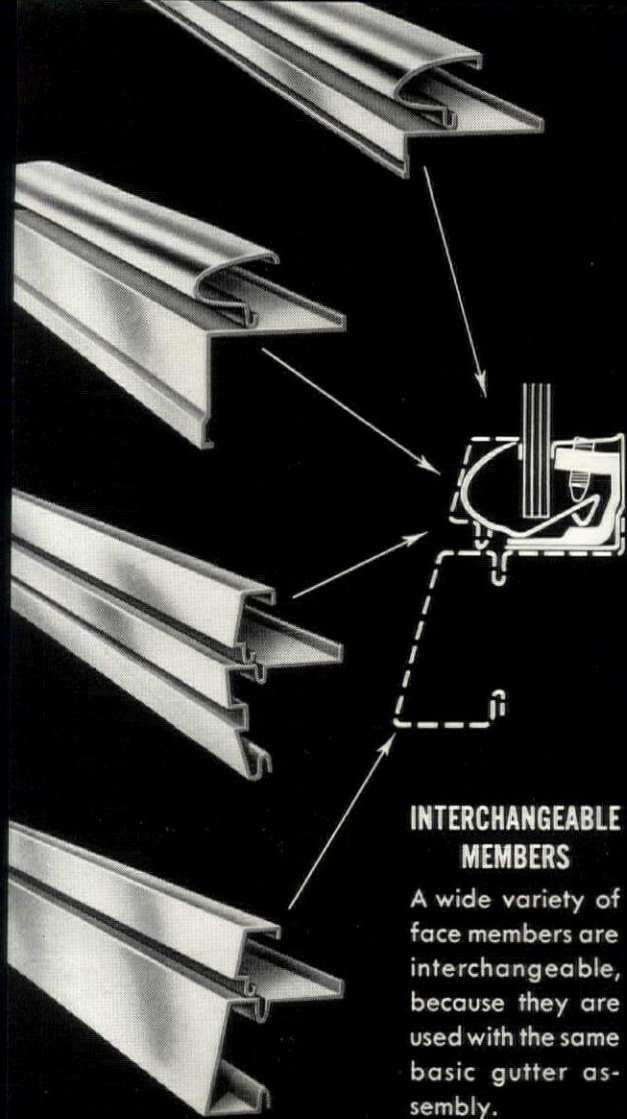
THE AMERICAN ROLLING MILL COMPANY

- SPECIAL-PURPOSE SHEET STEELS
- STAINLESS STEEL SHEETS, BARS AND WIRE



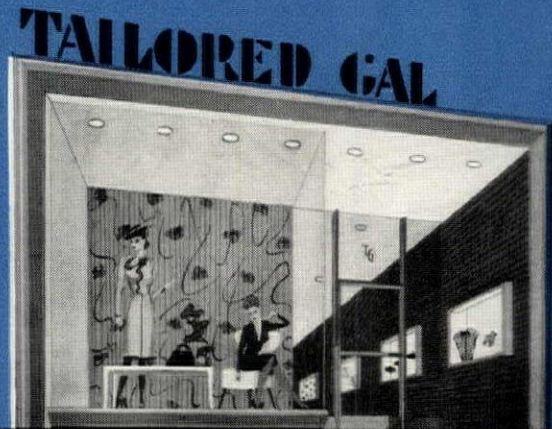
new

Interchangeable Members With Multiple Uses



INTERCHANGEABLE MEMBERS

A wide variety of face members are interchangeable, because they are used with the same basic gutter assembly.



Designed by Ketchum, Gina, and Sharp, Architects, New York City.

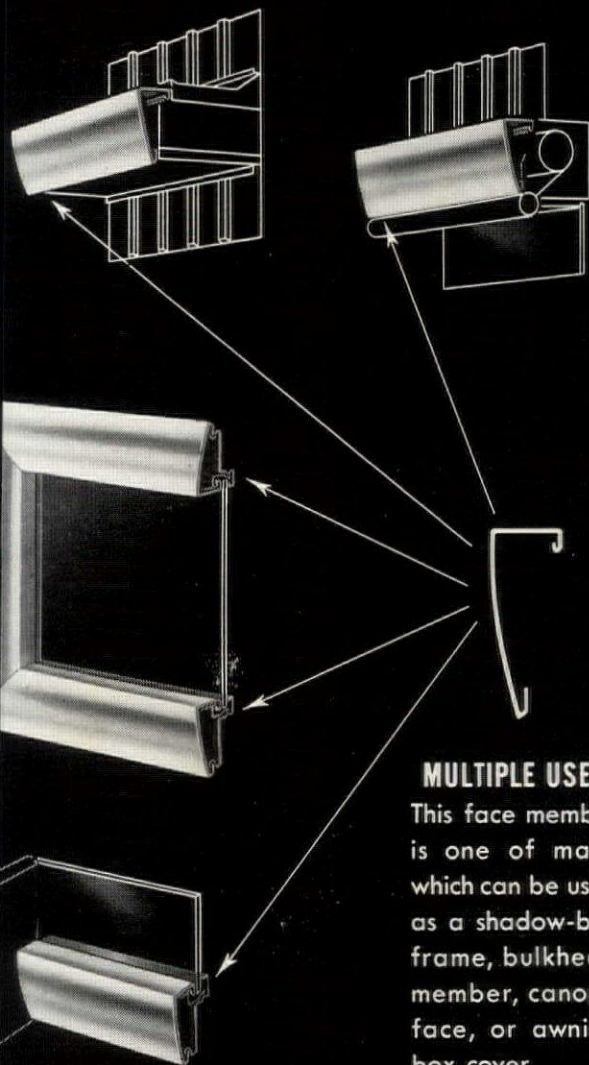
You can create an endless variety of custom-styled store front designs with the K-47 Line of store front metals, because its members are interchangeable and they also serve multiple uses.

A typical example of K-47 interchangeability is illustrated in the upper panel at the left. It shows a few of the many face members which are used with this same gutter assembly. And an illustration of the multiple uses of a K-47 member is shown in the lower panel.

These two outstanding features enable you to obtain unparalleled flexibility and freedom in designing a limitless number of distinctive store fronts.

They also reduce drafting expenses, since you can use the elements of a good design more than once and obtain new effects with K-47 interchangeable members. The use of a standard assembly for each type of construction simplifies installation and minimizes the costs of job supervision.

For details of the striking new K-47 Line and the Kawneer Standard Line, fill out and mail the coupon below.



MULTIPLE USES

This face member is one of many which can be used as a shadow-box frame, bulkhead member, canopy face, or awning box cover.

Kawneer

STORE-FRONTS

THE KAWNEER COMPANY, 716 North Front Street, Niles, Michigan

Check portfolio you desire. Both will be sent if checked.

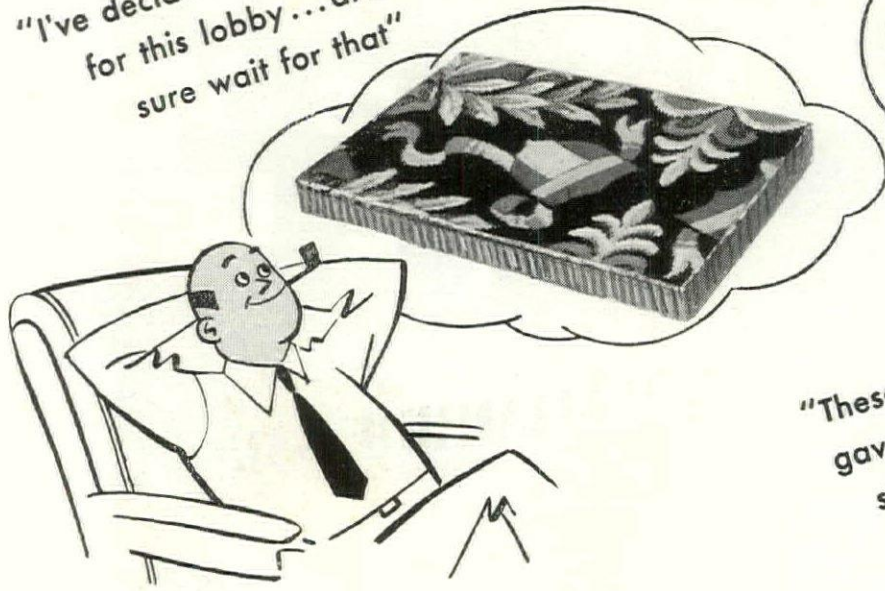
Details of new K-47 Line. Details of Standard Line.

Name _____ Firm _____

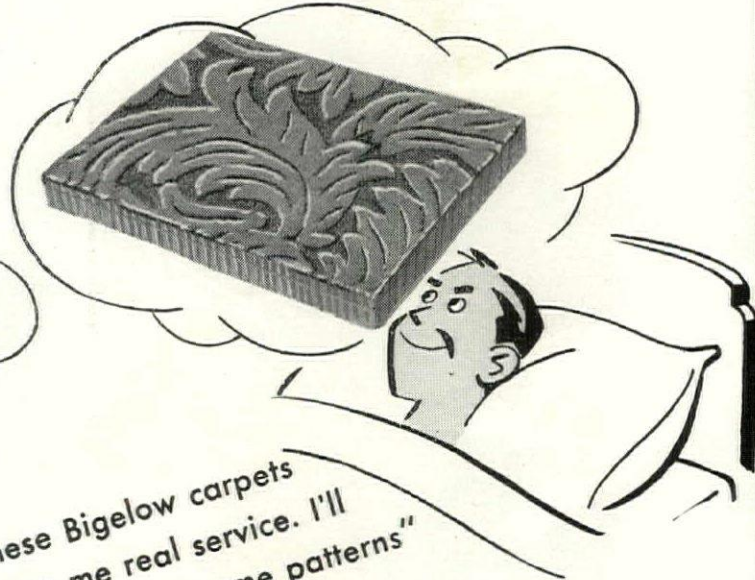
Address _____ City and State _____

About those **NEW** carpets . . .

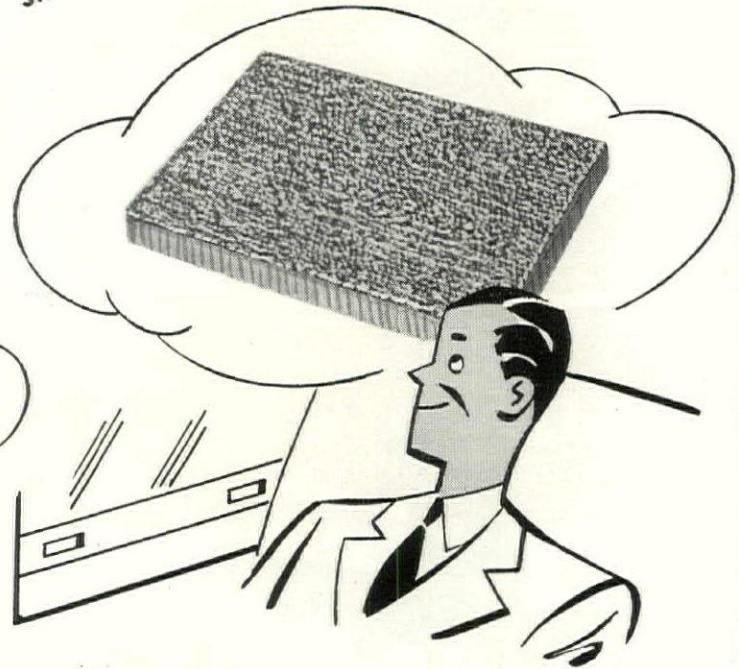
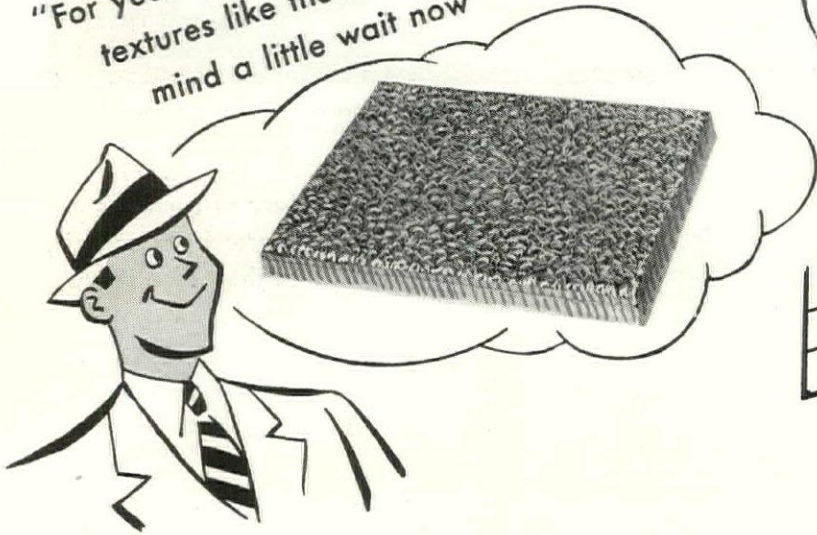
"I've decided on Hartford Saxony for this lobby... and I'll sure wait for that"



"These Bigelow carpets gave me real service. I'll stick to the same patterns"



"For years I've wanted rich, new textures like these... so I won't mind a little wait now"



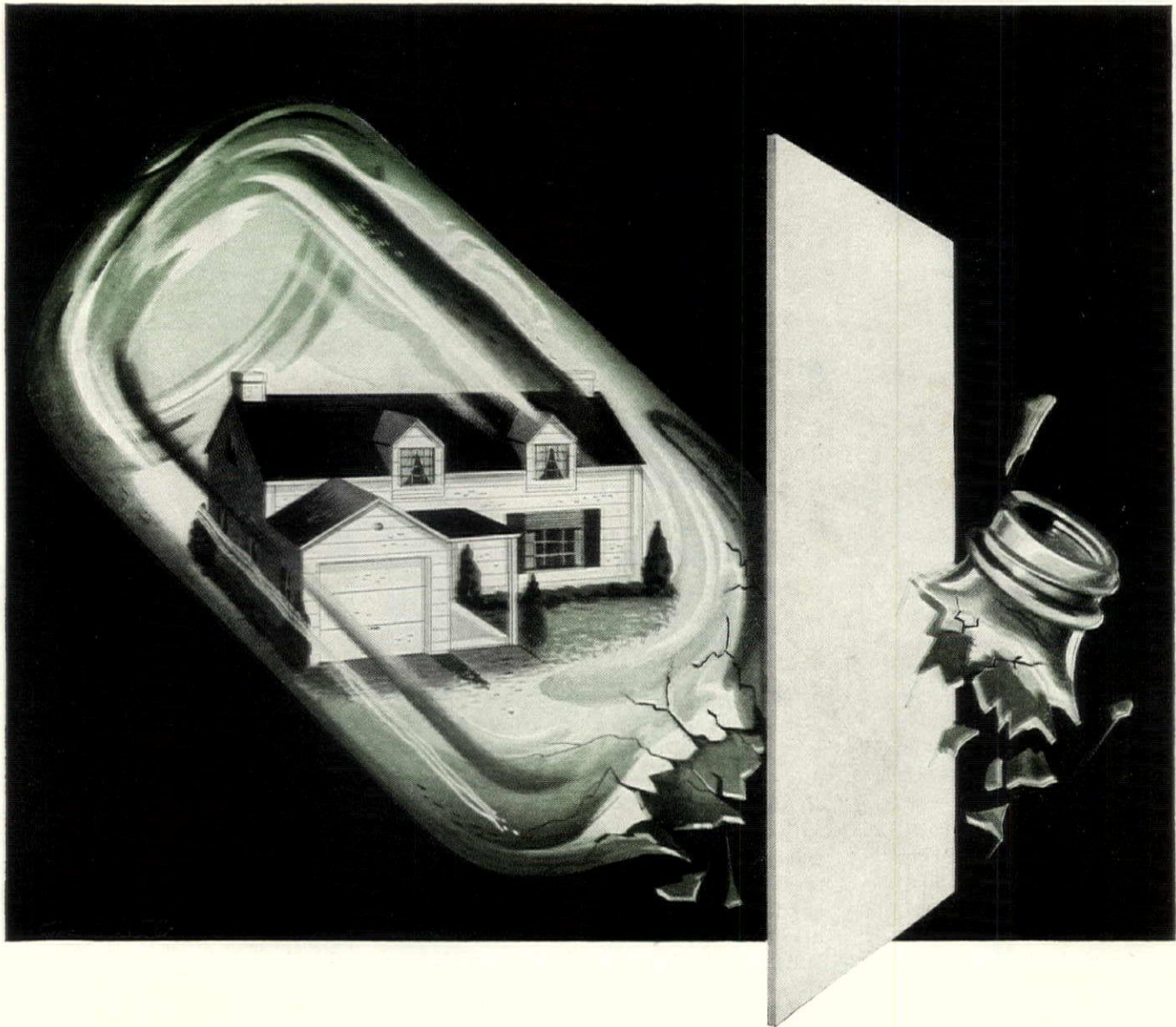
"I can save both installation and maintenance waste with Bigelow Lokweave. That's what I want"

...It's worthwhile waiting

Bigelow carpet production is getting back to normal ... and orders will be filled. Now's the time to plan redecorations. Ask your dealer about Bigelow's Carpet Counsel. It's an old, free service to save you time and money.

BIGELOW-SANFORD CARPET CO., INC.

140 Madison Avenue • New York 16 • N. Y.



Helping to Break the Bottleneck

Sheetrock*, the fireproof wallboard, is one outstanding material that lends itself to fast, easy application in these days when housing for 4,000,000 people is needed so desperately. These big panels cover up to 48 sq. ft. of wall or ceiling at a time, are quickly cut and fitted. Then Perf-A-Tape* Joint System "welds" them into smooth, trouble-free surfaces. Even faster for remodeling is Bevelled Edge Sheet-

SHEETROCK
FIREPROOF
WALL & CEILING
PANELS

rock; it can be decorated as soon as the last nail is in. And Sheetrock is made of gypsum, a mineral which cannot burn. This versatility is the reason why the demand for Sheetrock still is greater than the supply. But more and more is being produced every month . . . we are close to record-breaking volume. Large Sheetrock book of complete data available. Write to 300 W. Adams St., Chicago 6, Ill.

*Trademarks Reg. U. S. Pat. Off.



United States Gypsum

For Building • For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint

Spraddle-legged cover girls . . . Allen at last . . . Veterans' housing miasma . . . A plea from Italy . . . Cut-rate homes . . . The Bank of America vs. the insurance companies.

GRASS ON MAIN STREET

Forum:

Mr. Lamantia's whimsical August cover, "Grass on Main Street," is—well, *novel!* But I'm hesitant to say "I like it!"

A. L. LONGWORTH

New York, N. Y.

Forum:

How many shots of rye did the person—he could hardly be called an artist, probably not even a draftsman—have before he perpetrated the atrocious cover on the August issue of the FORUM entitled "Grass on Main Street, Rye, N. Y.?"

As chairman of the Planning Commission of Bristol, Va., I can thoroughly appreciate your article on the Shopping Center of Rye, N. Y. It is timely, thoughtful and well presented, except for one thing. Why, in the name of all that is beautiful, did the person who drew the perspective populate the streets with all those misshapen, spraddle-legged abortions? It is an insult to Rye! If the people of Rye bore the slightest resemblance to these creatures—and I am sure they do not—I hope I am never called on to go there. Your cover, I presume, is intended to show the beautiful effect that would be secured by having velvety green grass and spreading shade trees in the streets in place of asphalt. But what does it show? Horribly deformed, three-toed monstrosities unrolling what looks like Cyclone Fencing over what purports to be green grass! Even Lucy, our office secretary, wanted to know how the heck they would mow the grass.

Why is it that so many recent drawings depicting architectural subjects have to be desecrated with grisly, writhing apparitions presumably representing human beings? If the modern delineator cannot draw a reasonable facsimile of human beings—for Pete's sake, let him leave them out entirely!

I have been a subscriber to your magazine almost continuously from the time when you were known as the *Brickbuilder*, and that is a *long time*, believe me! In those early days it was a pleasure and an asset to have copies of your magazine on the table in the reception room, where its dignified and attractive cover gave some indication of the material to be found within. But, if the cover of your August issue is any indication of the contents, no one would want to leave such an idiotic publication where a client could see it.

If you are so short of help that this cover is the best you can do, let me know and I

will ask my four-year-old grandson to do it for you. I am sure he could do a better job blindfolded and with one hand tied behind him.

Whew—I'm glad I got that off my chest!
CLARENCE B. KEARFOTT, *Architect*

Bristol, Va.

Feel better?—Ed.

ARCHITECT'S FORUM

Forum:

Your August issue was a very pleasant thing. It looked like—and was—an architects' magazine, which usually has not been the case. Please do it more often.

HARRY LUCHT, *Architect*

West Englewood, N. J.

FORUM's audience is industry wide including many architects.—Ed.

ALLEN'S ARCHITECTURAL KIDNEY

Forum:

Naturally, when I read the letter from Ernest Kremers of Niagara Falls in the August FORUM ("Show us some examples of Allen's work. Let's have a look at the stripe of his architectural kidney.") I communicated with my lawyers, the well-known firm of Moth, Eaton and Riddled. "Can a guy from Niagara Falls claim that I have a striped kidney and get away with it?" I demanded. Unfortunately, the words "Niagara Falls" reminded Mr. Riddled of the anecdote about the fellow who remarked, "I've been at more first nights than anybody in America."

"You a dramatic critic?" inquired a bystander.

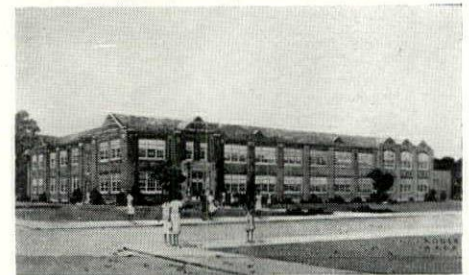
"No; I'm a bellboy in a Niagara Falls hotel."

This left me no further advanced than I was at the beginning. I still do not know if Mr. Kremers wants to look at my buildings or at an X-ray of my kidneys, but since the latter would be depressing viewing, I am sending you a photograph of a building at the Michigan Veterans' Facility that we just completed plans for.

I realize that the FORUM will not like this design but I can't help it. I told Gus Langius, the State Director of Buildings and Construction, that I wished to steal a few ideas from Frank Lloyd Wright's Museum of Non-Objective Art. Of course, I would improve on it. We would have the spiral leading from the top floor but it would be steeper, so residents of the building, wearing roller skates, could whiz down all three floors signing pension applications as they went. He shook his head. I then

proposed to abandon the Wright spiral as too old-fashioned and substitute the Allen frog-in-a-well chute, designed so that every time you slide down one foot you come back up two. The only way you could get down cellar would be to start for the elevator penthouse. Mr. Langius said this idea was no good or Mr. Wright would have done it himself. I then got angry and designed the building as you see it.

Of course, I could send you some photos of the work we are doing at the Central



ARTS AND CRAFTS BUILDING, Central Michigan College of Education, Roger Allen, architect.

Michigan College of Education. I could, but why set off a wave of mass suicides in the FORUM office? These buildings (don't say I didn't warn you) are Gothic in design. Can you imagine the scene in the FORUM office when a photo of a building with any trace of Gothic arrived? (It would have to be smuggled in disguised as a shipment of reefer cigars.) Henry Wright flinging himself face down upon the accursed picture to blot it out before the young and tender eyes of any lady associates fell upon it; George Nelson gargling DDT to ward off infection and Howard Myers repeating that corny old gag of his about "In my youth I looked at so much Gothic I gothic to my stomach." Several junior associates would laugh at this, gamely.

No, I would never do this to the FORUM. Or hardly ever.

ROGER ALLEN, *Architect*

Grand Rapids, Mich.

Next month the Allen Kidney.—Adv.

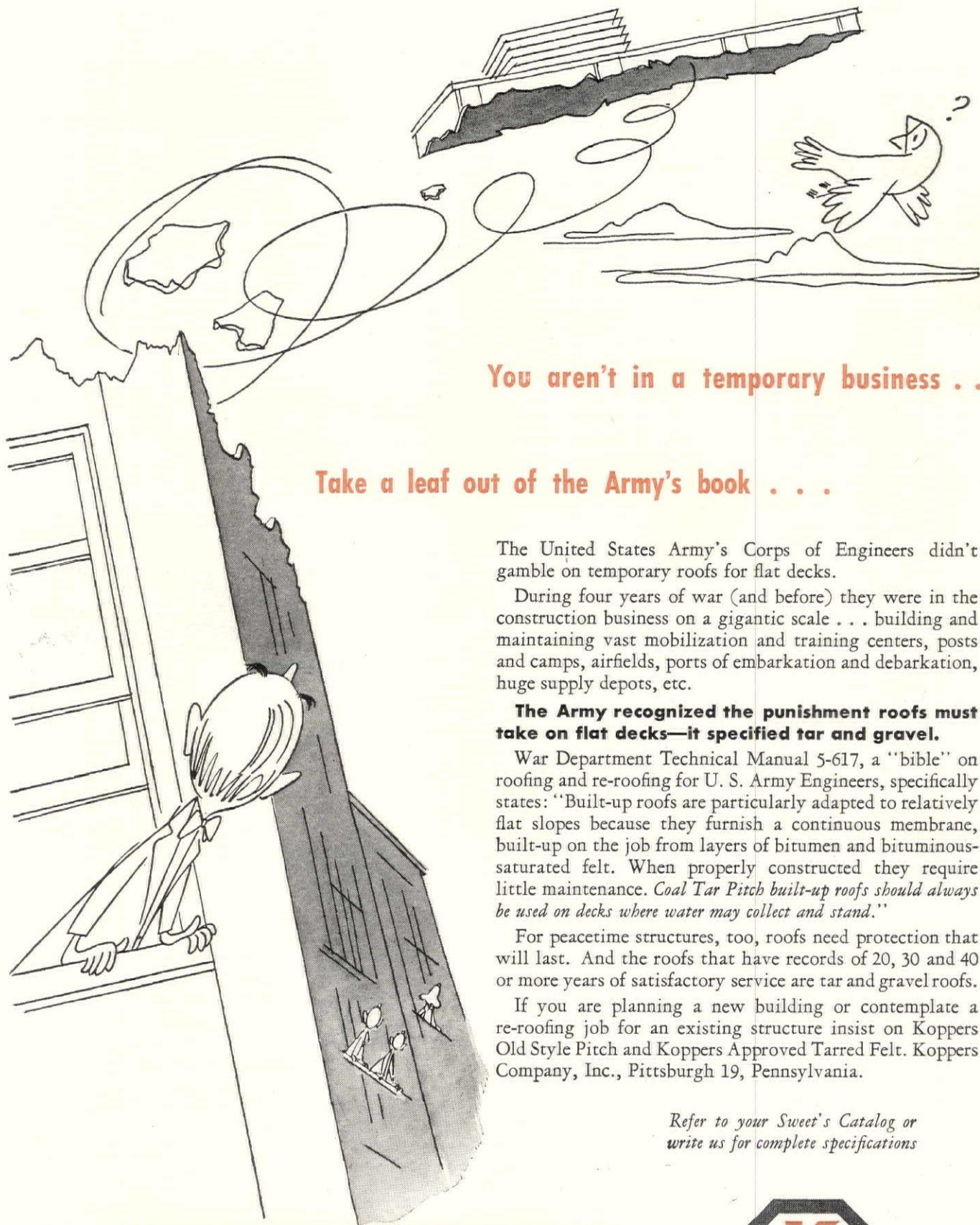
CAPTIOUS CAPTIONS

Forum:

There are many things I like about the FORUM. However, it is very annoying now and then to see a supercilious criticism under a picture with no statement explaining your viewpoint and as if your opinion were final. Unless you explained it, I would not want my work in your magazine.

The present dark age of architecture is

(Continued on page 40)



You aren't in a temporary business . . .

Take a leaf out of the Army's book . . .

The United States Army's Corps of Engineers didn't gamble on temporary roofs for flat decks.

During four years of war (and before) they were in the construction business on a gigantic scale . . . building and maintaining vast mobilization and training centers, posts and camps, airfields, ports of embarkation and debarkation, huge supply depots, etc.

The Army recognized the punishment roofs must take on flat decks—it specified tar and gravel.

War Department Technical Manual 5-617, a "bible" on roofing and re-roofing for U. S. Army Engineers, specifically states: "Built-up roofs are particularly adapted to relatively flat slopes because they furnish a continuous membrane, built-up on the job from layers of bitumen and bituminous-saturated felt. When properly constructed they require little maintenance. *Coal Tar Pitch built-up roofs should always be used on decks where water may collect and stand.*"

For peacetime structures, too, roofs need protection that will last. And the roofs that have records of 20, 30 and 40 or more years of satisfactory service are tar and gravel roofs.

If you are planning a new building or contemplate a re-roofing job for an existing structure insist on Koppers Old Style Pitch and Koppers Approved Tarred Felt. Koppers Company, Inc., Pittsburgh 19, Pennsylvania.

Refer to your Sweet's Catalog or write us for complete specifications

KOPPERS roofing
KOPPERS waterproofing



THE INDUSTRY THAT SERVES ALL INDUSTRY



For floors of maximum beauty and service — MINWAX WOOD FINISHES

ON the basis of MINWAX Wood Finish service records over the past 30 years, MINWAX Flat Finish, when properly maintained, will retain its beauty and serviceability *without rescrapping*, as long as the building stands.

MINWAX Flat Finish is the original *penetrative stainwax* finish. It is truly *scratchproof*. The film of wax that protects the surface cannot chip and will not scratch white. An occasional waxing will maintain full serviceability. Any traffic-worn areas may be completely restored without visible laps by the application of a little more MINWAX.

The Ideal Low-Cost Finish!

There is no dwelling, single or multiple, which need be without the advantages of MINWAX Flat Finish on its floors. MINWAX Flat Finish really *saves money* over the years through ease of maintenance and freedom from costly re-finishing.

For a floor finish that retains its beauty through the years, specify MINWAX Flat Finish. For further information see Sweet's or for complete specifications, write MINWAX Company, Inc., Dept. AF, 11 West 42nd Street, New York 18, N.Y.

For the 28th Consecutive Year
OUR COMPLETE CATALOG IS IN SWEET'S

WOOD FINISHES
Floors • Paneling • Trim

OTHER MINWAX PRODUCTS
Waterproofings • Dampproofings • Caulkings • Protective Coatings

as bad as the mid-Victorian era. We are past the style-copying age. Eventually we will design to suit our ways of living and will develop a sense of design with good proportion, scale and harmony of detail and color. We might even get rid of the *passé* fireplace, which owners still demand in functional, air-conditioned homes.

We need more and better prefabricated units. Many that are back on the market belong, like the automobile, to the prewar era and show very little improvement.

Let us have less smug criticism and more praise for advancement and improvement. The July issue is very good.

H. WALTER DAMON, *Architect*
Youngstown, Ohio

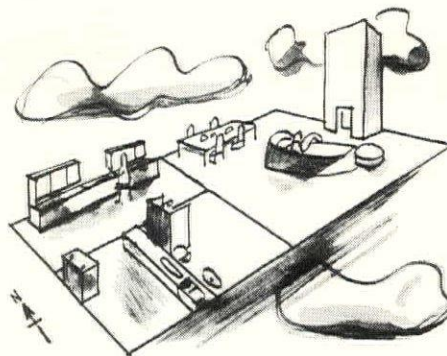
When improved and advanced designs are submitted, FORUM will praise them.—Ed.

VETERAN'S HOUSING

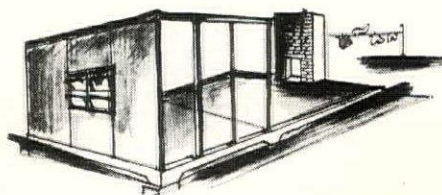
Forum:

A permeating calumny is . . . the claim that most veterans want to rent rather than build. If more were done about modular design and welded steel panel construction this contention would quickly disappear.

Designs based on structural unit proportions could provide minimum living space for veterans and could be expanded easily in the future. The following sketches illustrate construction stages and land use for such a house design.

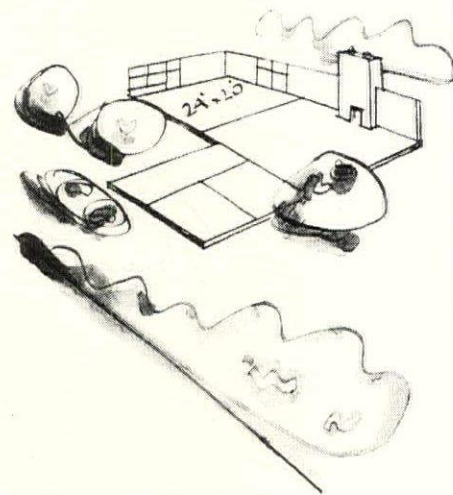


The basic layout sketched above gives living, dining and utilities, including kitchen, toilet, . . . heating and laundry facilities, based on two 24 ft. units . . . but no sleeping unless you're addicted to a bed-couch, which isn't bad with a rubber mattress.

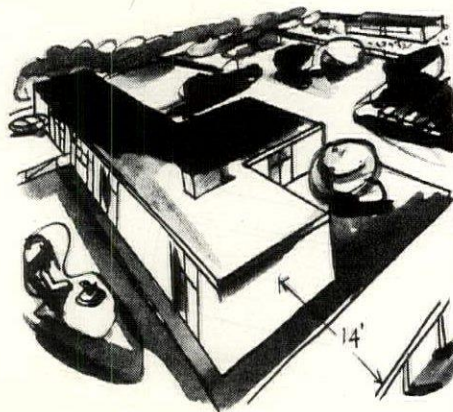


Assuming the average half-acre at 110 ft. width, which affords 220 ft. depth, it would be simple to extend sleeping accommodations in a north wing, 24 x 24 ft., an expedient which increases living-dining space

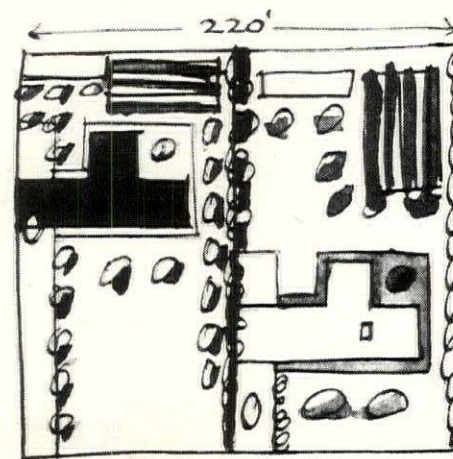
to 24 x 28 ft., giving a 24 x 20 ft. bedroom as shown below. . . .



A similar extension to the east would add another bedroom . . . and a garage could be added on the west (see below) . . .



This would leave 14 ft. between the neighbor's garage and your bedroom wall . . . and suggests the acre plot or staggering the layout to afford maximum individual privacy of two houses per acre. . . .



Elaboration could include built-in cabinets, etc., except in the lower income brackets. But when the only evidences of a much-touted . . . ingenuity are those like Revere's postwar dream house, the Celotex version and U. S. Steel's double-page spread, the
(Continued on page 44)



These New
Guth HY-LITERS

DRAMATIZE MERCHANDISE!

**INTENSE SPOT-LIGHT AND FLOOD-LIGHT EFFECTS
 WORK MIRACLES WITH STORE DISPLAYS!..**

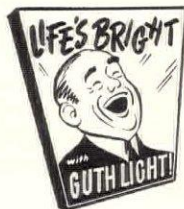
GUTH HY-LITERS, using 150-watt Sealed Beam Projector Lamps, provide novel, effective "accent" lighting for stores! HY-LITERS, easily adjustable through a 90° arc for full concentration on merchandise displays or in show windows, bring dramatic emphasis to modern retail merchandising.

HY-LITERS' exterior portions are finished lustrous 300° WHITE Enamel, and surface types are attractively trimmed with polished Aluminum flutings.

They're beautifully fashioned—the last touch in good store lighting. Write today for more details.



Two Types Available for ACCENT Lighting!



HY-LITERS may be had for either Surface or Recessed Mounting. Both types are suitable for use as individual units, or arranged in rows with GUTH FLUORESCENTS. HY-LITERS maintain the high engineering and construction standards of all GUTH Lighting Equipment, and are ideal for today's important ACCENT Lighting.

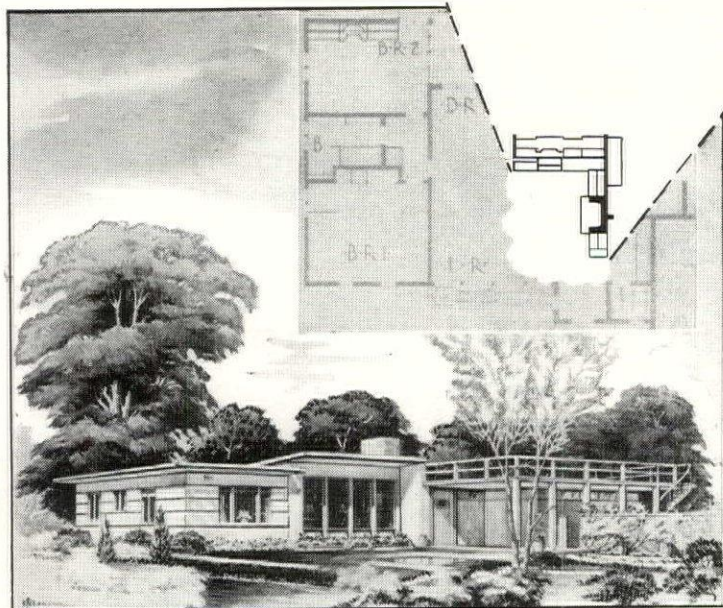
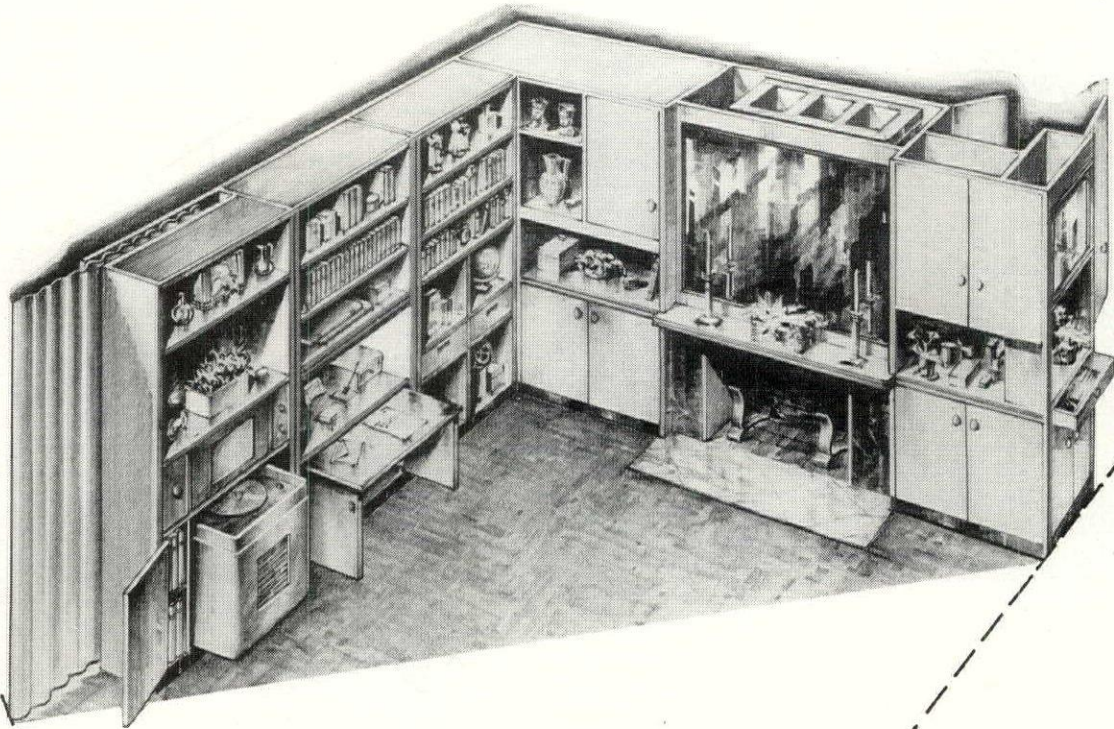
GUTH HY-LITERS ARE AVAILABLE NOW!

THE EDWIN F. GUTH CO. • 2615 WASHINGTON AVE • ST. LOUIS 3, MO.

Guth
Leaders in **LIGHTING**
 SINCE 1902

A NEW ANGLE ON

BETTER LIVING



BETTER to live in, easier to keep in "shipshape" order—that's modern home-making with Defoe's "Working Walls".* And Defoe will literally put your walls to work with expertly designed, built-in storage and utility units in addition to closets and wardrobes. ✓ The "Working Wall" illustrated here, for example, is one living room unit combining a heat-circulating fireplace with book cases, writing desk, radio-phonograph and plenty of storage space for your record albums, card tables and other accessories for home enjoyment. ✓ Send in the coupon today for your copy of the illustrated brochure which describes and illustrates other "Working Wall" units. It will also bring you architect's drawings of homes which can be built by Defoe's distinctive method of home construction.

*TRADE NAME REGISTERED




HOUSING DIVISION
 DEFOE SHIPBUILDING CO., Dept. AF-10
 BAY CITY, MICHIGAN

Please send me the descriptive brochure on the new Defoe Homes.

Name _____
 Street _____
 City and State _____

DEFOE SHIPBUILDING COMPANY... BAY CITY, MICHIGAN




 and I just redecorated my
 living room in colors I
 never dared use before.

Fabrics woven of

Firestone *Velon**

are soilproof, practically wearproof



This room is a gay deception. It *looks* fragile as a cream-puff. But the whole family can romp in it—and laugh at soil and wear.

The upholstery, drapes, lampshades, trim are woven of *Velon*, Firestone's wonder fibre that shrugs off dirt.

Grease and grime can't cling to *Velon's* non-porous threads. A whisk of a damp cloth restores its original beauty. Even the sheerest *Velon* defies abrasion and snagging, because each tiny

thread is a single filament of giant strength. *Velon's* gorgeous colors can't sun-fade or wash out.

The finest cars, planes, hotels and restaurants are adopting *Velon* upholstery. Your best clients deserve this amazing new material. Specify it. Ask your regular fabric sources for samples.

FREE — Write Firestone, Akron, for your copy of the full-color *Velon* booklet.

LISTEN TO THE VOICE OF FIRESTONE MONDAY EVENINGS OVER NBC

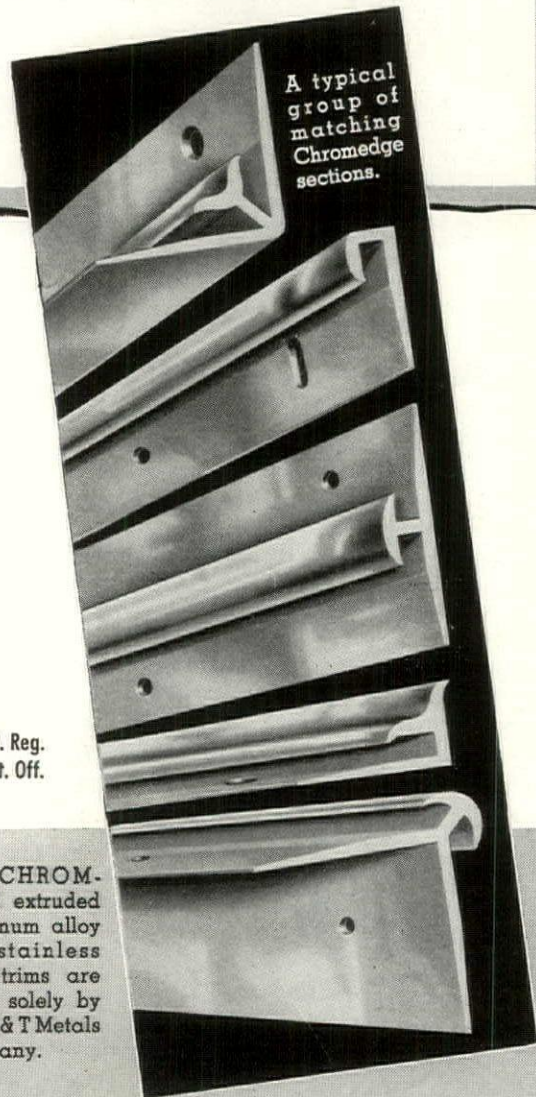


*TRADE MARK

LETTERS

Another Advantage of
CHROMEDGE...

Matched Sets in metal trims for all floor and wall materials



A typical group of matching Chromedge sections.

* T.M. Reg.
U.S. Pat. Off.

* **CHROM-EDGE** extruded aluminum alloy and stainless steel trims are made solely by The B & T Metals Company.

CHROMEDGE Metal Trims offer both *extruded aluminum alloy* and *stainless steel* moldings in a complete range of matched sets. Sizes for all materials, from lightweight enameled coverings to wall-board and plywood thicknesses. The matched set shown above is for use with 1/8-inch materials. Extruded sections may be had in bright or satin finish, or in the rich, velvet-like luster of B & T's remarkably durable Chromalite finish — which *will not rub off black*.

Distributed through authorized wholesalers only.

The B & T Metals Company
Columbus 16, Ohio

vet winds up in a technological miasma . . . in which hardship cases take precedence.

A. S. WILKINSON

New York, N. Y.

INVISIBLE CASH

Forum:

Being a veteran of this last war and slowly wearing my nails down to the nub trying to get a house built, I was a little startled to read on page 5 in your August issue this remark, "With all veterans supplied by a grateful government with plenty of cash for down payments . . ."

Please, FORUM, if I'm missing out on something, let me know. So far it has cost me \$32 to have a government appraiser look at my plans and property to see if my \$10,000 house will be worth guaranteeing \$4,000-worth of the mortgage, which a very reluctant bank is willing to give me providing I don't draw on the mortgage until the house is three-quarters finished. The cash to get the house to this point comes from my pocket, if I've got it. To date, the grateful government has given yours truly the whole sum of \$300 mustering-out pay, which didn't begin to pay for some clothes to cover my nakedness, and which \$300 was paid over a three-month period to make it a little more difficult.

Don't keep us in the dark about government cash—if there's any cash being handed out for down payments, I'm first in line. Not that *all* veterans need help getting started again, but people might get the impression we have everything handed to us on a silver platter. The housing situation is like a dog chasing its tail—round and round it goes—and the more one reads, the less one knows.

RALPH J. DENNIS

Detroit, Mich.

CALLING ALL COMPASSES

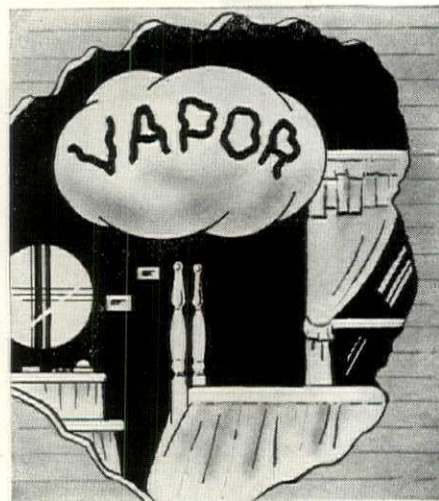
Forum:

I am an Italian engineer and I wish to know, if possible, something of the building systems used in new living houses designed in the U. S. A. during and after the war. I read a copy of Architectural FORUM and *Planning with You*, two very interesting technical reviews that an American soldier gave me one day. Because I don't know any American man to whom to write, I think to write to you and try your patience with this letter.

But don't trot away from the pole; let me tip my mitt: I arrived at the end of the war without any equipment in technical books and drawing instruments, like compasses and similar. Can you help me in any manner? Can you send me something of your literature, catalogues or technical

(Continued on page 48)

THIS "STORM CLOUD" FORMS INSIDE THE BUILDING



PREVENT "IN-WALL" CONDENSATION

with BIRD NEPONSET BLACK VAPOR BARRIER

Vapor condensation is the foe of insulation. It impairs insulating efficiency, hastens paint peeling, structure rot. A sure way to lick the "storm cloud" of vapor that forms indoors, but condenses within the exterior wall, is with Bird Neponset Black Vapor Barrier. Applied on the warm side of insulation, Neponset Black gives three-way protection—against moisture condensation, paint peeling, structure decay. Costs so little, lasts a lifetime . . . only about \$20. to safeguard a \$10,000 house. Bird Neponset Black Vapor Barrier is recognized as standard the world over. Remember! No insulation is complete without a separate vapor barrier . . . be sure of the best. Specify Bird Neponset Black. Consult Sweet's Architectural Catalog, 9b-2. Write Bird & Son, inc., Dept. 1610, East Walpole, Mass., for sample.



Specifications: roll width: 36"; length: 500 ft.; approximate wt.: 50 lbs. Asphalt Saturated. Coated both sides with glossy asphalt surface. Meets Federal Specifications UU-P-536 Grade B.



BIRD & SON, inc.
CHICAGO
NEW YORK
SHREVEPORT
EAST WALPOLE, MASS.

Walseal* valves and fittings

**permanently leakproof
department store
pipe lines**



SILBRAZ* joints made with Walseal valves, fittings and flanges are ideally suited to red brass or copper service lines for hot water, gas, steam, boiler feeds and air conditioning. They are permanent, leakproof, and trouble-free . . . their use will avoid costly maintenance and repairs — that's why leading architects and builders rate them so highly in the construction or remodeling of department stores.

Threadless, patented Silbraz joints are silver brazed (not soft soldered) pipe joints that are vibration-proof, corrosion-resistant, that will not creep or pull apart — joints that literally make the piping system a "one-piece pipe line".

So, if you are looking for maintenance-free pipe lines — for either new construction or remodeling — include Silbraz joints made with Walseal valves, fittings and flanges in your specifications. For further information regarding Walseal products, write for Circular 84.

**Patented—Reg. U. S. Pat. Off.*

WALWORTH
valves and fittings

60 East 42nd Street, New York 17, N. Y.



Make It A "One-Piece Pipe Line" With Walseal



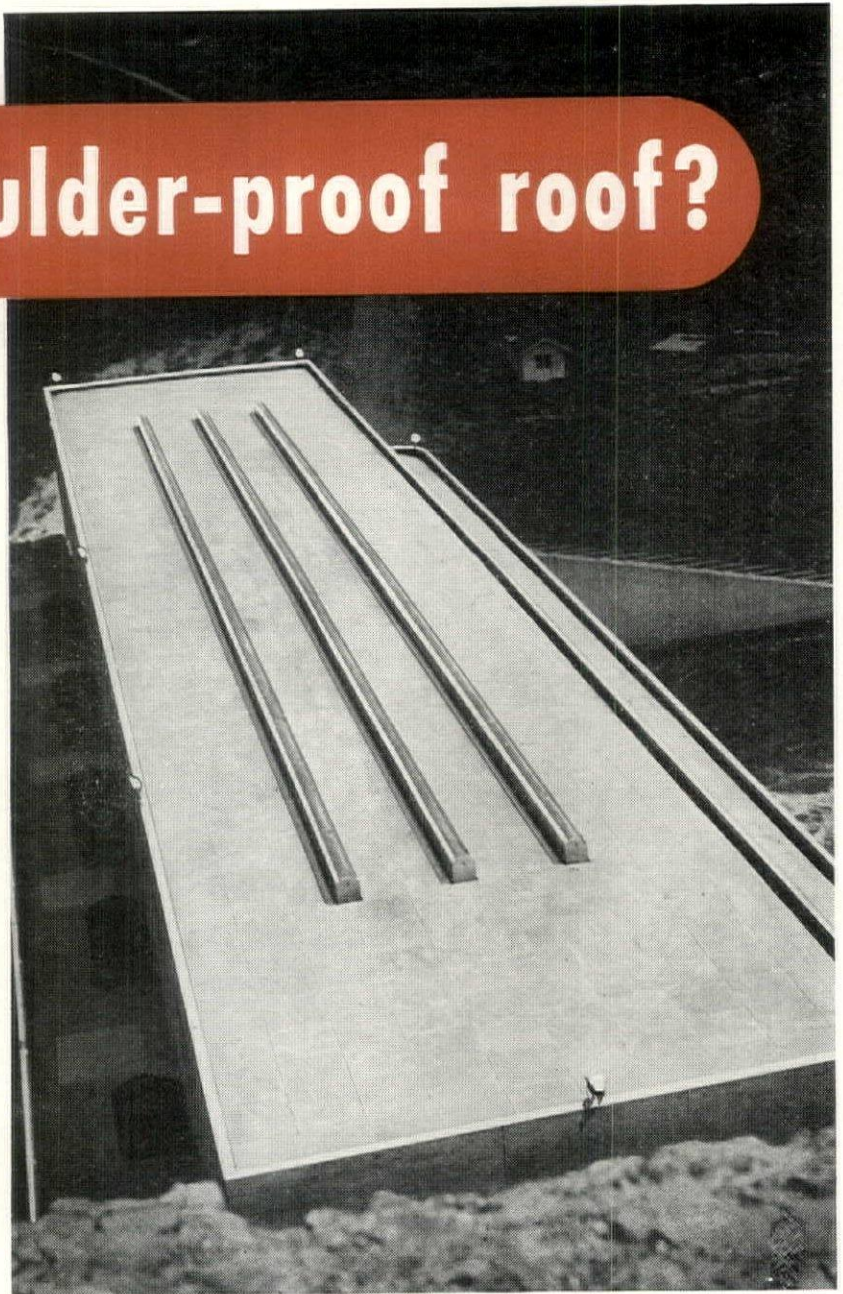
DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

Need a boulder-proof roof?

• You're looking at one in this picture of a large Mid-West hydro-electric plant. Located where rocks, boulders and dirt rain down on it from the adjoining cut, this giant plant is safely protected because it has a Ruberoid concrete-surfaced industrial roof.

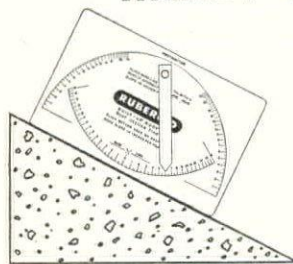
Obviously, roofs like this will stand the roughest treatment. That's why Ruberoid heavy-duty roofs are opening new architectural possibilities in the use of valuable roof areas for the storage of oil drums, heavy equipment—and even as roof parking areas!

Proved-in-performance specifications—worked out by Ruberoid engineers—are available now for these recent roof developments. Ruberoid Approved Roofing Contractors, located in principal cities and towns are ready to give you assistance in planning and executing them. No matter what type of roof you may have in mind—Asbestos Felt and Asphalt, Coal Tar Pitch and Tarred Felt, or Asphalt Felt and Asphalt—call a Ruberoid Approved roofer. His assistance, based on long experience and backed by a complete line of materials—all from the same source—assures you of the *right* roof for *any* job.



HANDY ROOF INCLINE FINDER

Free On Request!



This useful pendulum device instantly gives the roof incline in inches per foot. Helps determine proper type of roof. Made of transparent plastic, it can also be used as a protractor.

RUBEROID BUILT-UP ROOFING

The RUBEROID Co., Executive Offices: 500 Fifth Avenue, New York 18, N. Y.
ASPHALT AND ASBESTOS BUILDING MATERIALS • THERMAL INSULATIONS

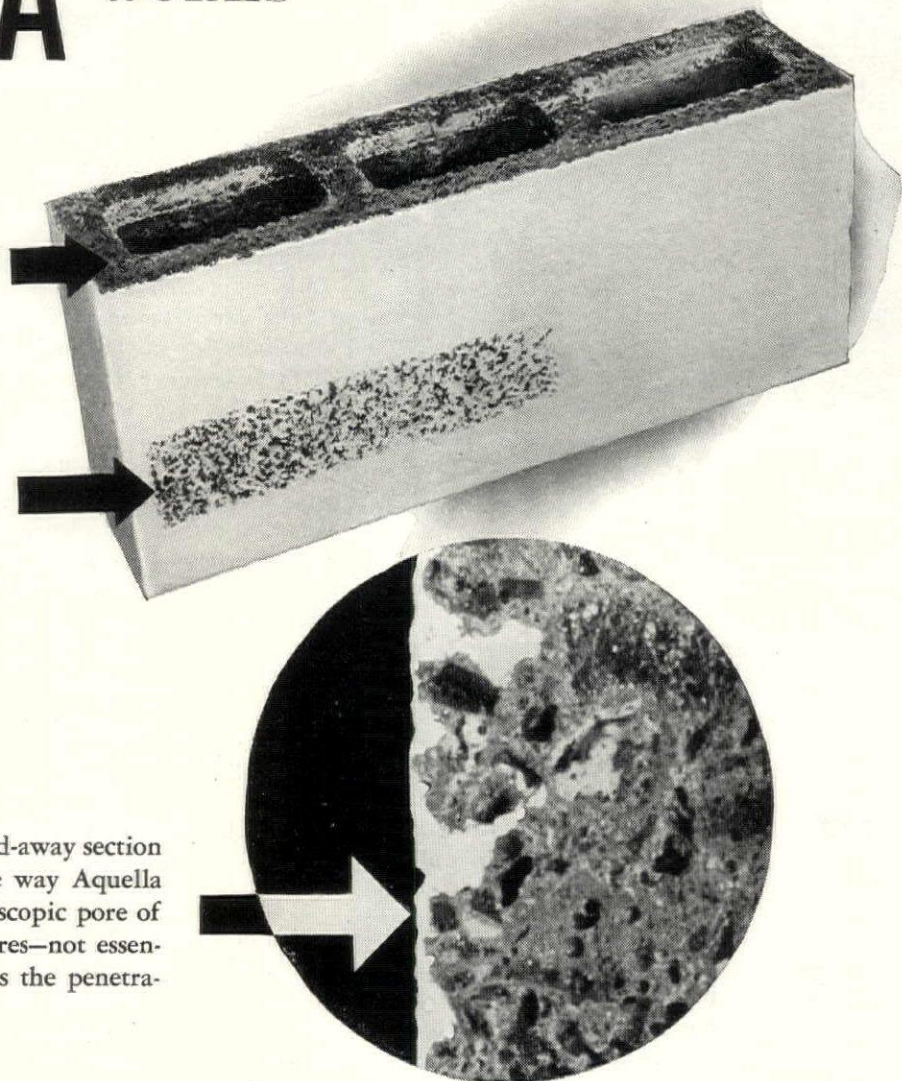
THE PRINCIPLE ON WHICH

AQUELLA WORKS

① Here is an Aquellized concrete masonry unit filled with water. Naturally, there is no leakage.

② But what happens if the Aquella surface coating is scraped off? To answer that, we scraped away this portion, and there's still no leakage. This may be slightly puzzling until you study the photograph of the third step...

③ The enlargement of a small, sawed-away section of the above block, which shows the way Aquella penetrates to fill and close each microscopic pore of the surface. It is the filling of the pores—not essentially the surface coating—which stops the penetration of water.



YOU SEE IT NOW—the principle on which Aquella works to make concrete masonry structures watertight!

The properly balanced ingredients of which Aquella is composed are so *finely ground* that when mixed with water, and scrubbed into the masonry, they penetrate and fill even

the minutest pores of the surface.

Then—contrary to the shrinkage phenomena of most waterproofing materials—Aquella continues to *expand* as it cures to set up a hard, firm bond which stops water leakage, dampness or seepage.

Consequently, even the presence of a hydrostatic head of water on the *unprotected side* has no effect whatsoever on the integrity of the Aquellized surface. Nor does it in any way affect Aquella's inherent property to resist capillary action or water seepage. Aquella is cheerfully bright in

its natural white finish...does not powder, peel or flake, and can be painted over with any color.

SPECIFY AQUELLA FOR CONCRETE, BRICK, LIGHT WEIGHT MASONRY UNITS, STUCCO OR CEMENT PLASTER.

Free from the organic binders, hygroscopic salts and stearates used in the making of ordinary water barriers, Aquella is an entirely new mineral surface coating which you can specify for watertightness inside or outside...above or below ground on all porous masonry surfaces.



FREE

Write today for your copies of "Aquella and Concrete Masonry Construction" and the "Key to Aquella Specification Types."

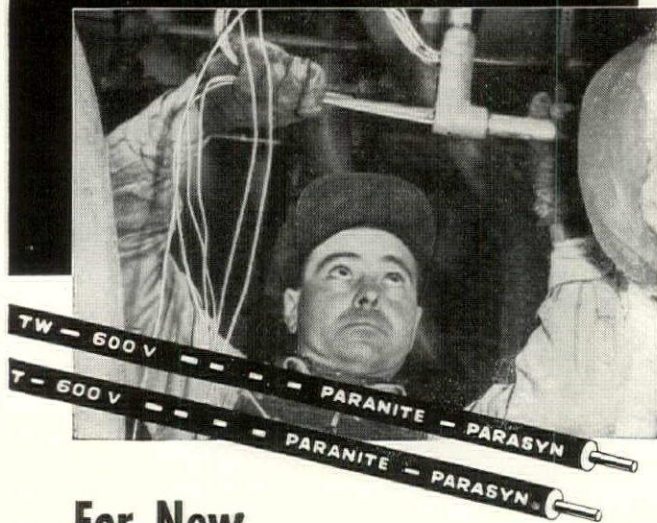


PRIMA PRODUCTS, INC.

DEPT. D, 10 EAST 40TH STREET

NEW YORK 16, N.Y.

**PARANITE PARASYN
TYPE T and TW BUILDING WIRE**



**For New
Wiring — Rewiring —
And Maintenance Wiring**

**Thermoplastic
Insulation**
(Non-Braided)

**RESISTS
FLAME**



OILS and GREASE



ACIDS and ALKALIS



MOISTURE (Type TW Only)



PARASYN thermoplastic small diameter building wire is ideal for new wiring, rewiring, and maintenance wiring. It is easy to pull in conduits, and strips fast and clean.

The thermoplastic insulation of both TYPES T and TW has long life, is high in dielectric and mechanical strength and is resistant to FLAME, OILS AND GREASE, ACIDS AND ALKALIS.

Black is standard, but also available in broad range of colors.

TYPE TW is especially recommended for wiring in wet locations.

Electrical Wires and
Cable "Better Than
Code Requires"



Paranite Wire and Cable

Division of ESSEX WIRE CORPORATION

General Sales Offices: FORT WAYNE 6, INDIANA

Manufacturing Plants:

MARION, INDIANA • JONESBORO, INDIANA

Warehouses and Sales Offices: *Atlanta, Ga.; *Chicago, Ill.; Cleveland, Ohio; Dallas Texas; *Detroit, Mich.; *Kansas City, Mo.; Los Angeles, Calif.; *Newark, N. J.; Philadelphia, Pa.; St. Louis, Mo.; San Francisco, Calif.; Washington, D. C.

If It's PARANITE It's Right!

books about steel, wood or beton houses, or some manual for engineer or civil builder?

The why of my petition is that in this city of Civitavecchia many and many citizens are yet without house, so that we here have a great work and we must work with hurry if we want the reconstruction of our city.

You Americans send each day in Italy coal, corn, milk, sugar, etc; well, let you send also for me a few books of engineering and of your building manner and an old compass box and I also will be able to do something for my country.

Excuse my rough English: I am now a little out of exercise, but till the beginning of the war I studied your standardization especially for shipbuilding, and in those days I spoke and wrote American and English language more fluently and more mistakeless than now.

Well, I am sure you will help me in clearing this hurdle, so that, very glad of your knowledge, I wait for a letter of yours. (If you cannot send the books, let you write the same, I will prefer.) And waiting, I shake your hand giving my thank.

AGOSTINO SPAMPINATO, *Engineer
Civitavecchia (Roma), Italy*

Readers may contribute to the bundle of material which FORUM will send to Engineer Spampinato.—Ed.

OVERALLS VS. ICE CREAM PANTS

Forum:

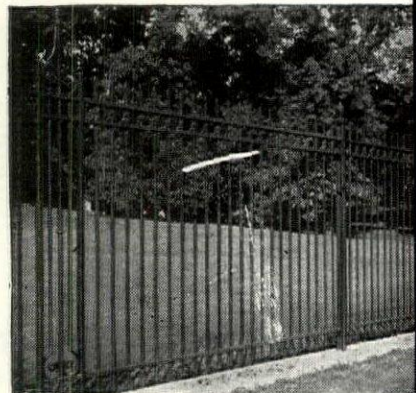
You are, of course, aware of the confiscation of human rights carried out by the A.I.A. when the perfectly good, common word "architect" was torn out of the dictionary and legally confined to members of a small club. However, this sad state of affairs has been no real hindrance to me, only an annoyance. For, in my fifteen years of house designing, I have built up quite a satisfactory business and reputation.

When I graduated from Antioch College of Art in 1928, no self-respecting architectural office would take on a house design job for a home to cost less than \$20,000. In fact, house design has always been the architect's stepping-stone to grander things, such as railroad stations, schools, etc. But not for me. I have been exclusively interested in low cost homes, and in all my practice have never designed a house to cost over \$20,000.

No matter what kind of a degree you have, you cannot design low cost homes and live in ice cream pants. So I am pretty good with a saw, hammer and trowel, too. But my first and main interest is in design. I can make a better house at less cost, but I save more in designing than in construction. I couldn't save realistically un-

(Continued on page 52)

**Electrically-Welded
PERMANENCE
Wrought Iron
BEAUTY and DIGNITY**



You get both when you specify
**ANCHOR-WELD
IRON FENCE**

Anchor Weld Fences and Gates . . . made in many handsome designs . . . provide a beautiful setting for homes, country estates, schools and institutions. And, when you specify them, you can be sure they'll maintain their fine appearance through the years.

For . . . in Anchor-Weld Iron Fence . . . grooved, square pickets and rails of the same size are worked into architecturally correct designs . . . then electrically welded under pressure in an exclusive Anchor process. Pickets cannot loosen. Sections cannot sag. There is no need for ugly cross-bracing.

Anchor also makes a complete line of Anchor Chain Link Fence, in heights from 3½ feet to 10 feet. Tough and durable, it has deep-driven "Anchors" which hold the fence erect and in line, in any soil and in any weather.

**Free Specification Manuals
for Your A. I. A. File 14-K**

No. 111 for Anchor-Weld Iron Fence. No. 110 for Anchor Chain Link Fence. Show installation photographs and sectional drawings . . . describe the various heights, weights, architectural features and applications of Anchor fences and gates. Anchor Post Div., Anchor Post Products, Inc., 6635 Eastern Ave., Baltimore 24.

Anchor Fence
Nation-wide Sales and Erecting Service



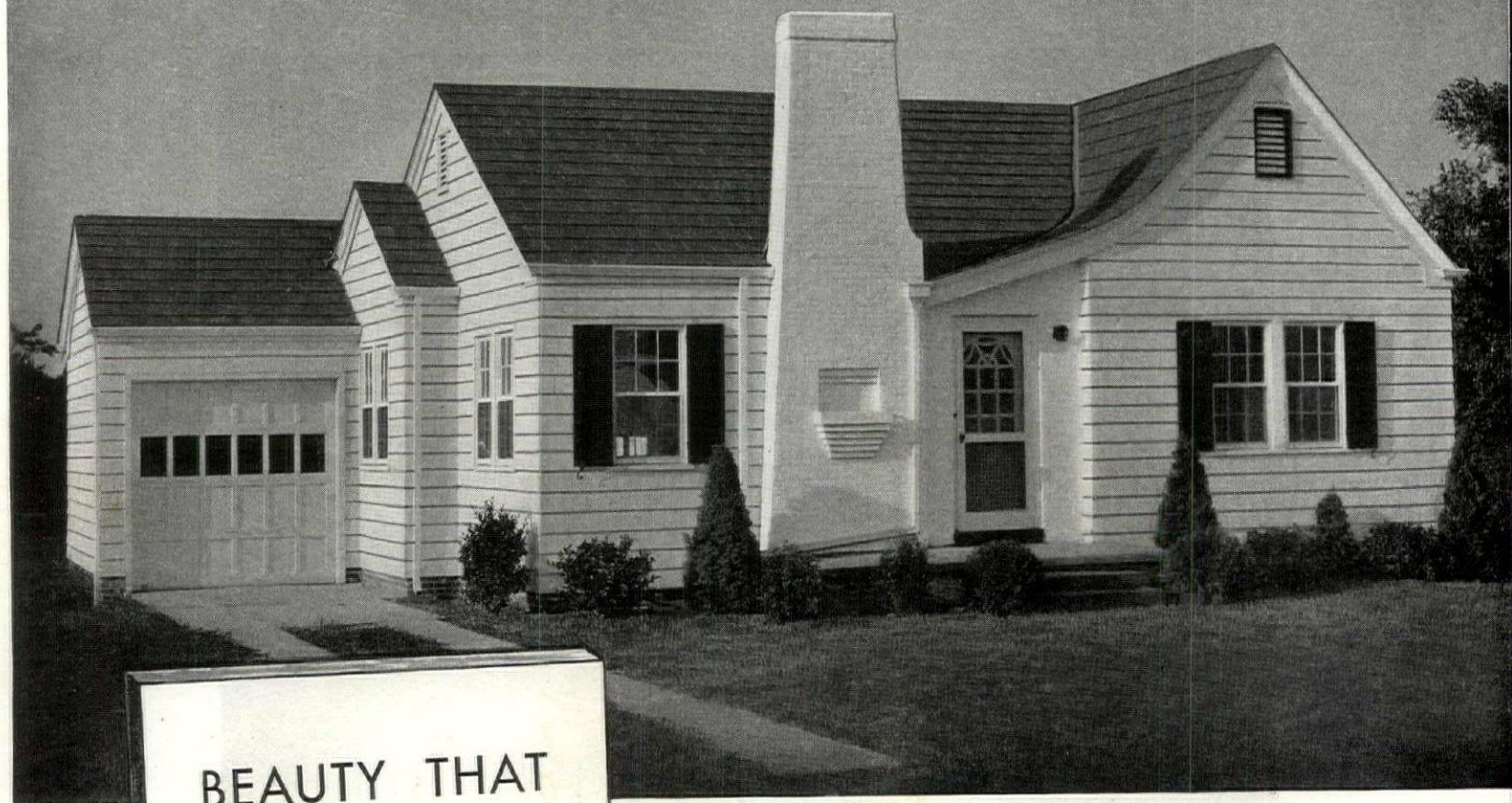
BOHN

**Watch the latest products and see the
wider and wider use of advanced light
alloys by Bohn**

BOHN ALUMINUM AND BRASS CORPORATION
GENERAL OFFICES—LAFAYETTE BUILDING—DETROIT 26, MICHIGAN
Designers and Fabricators

ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS

Asbestos in Action



BEAUTY THAT
WILL LAST...

K & M "Century" ASBESTOS-CEMENT SIDING and ROOFING SHINGLES

This attractive cottage—with "Century" Asbestos roof and sidewalls—has three qualities that countless GI's and other home buyers want... good looks, sound value, and durability.

"Century" Shingles and Siding are economical in cost, suitable for any type building, and they last indefinitely. They are proof against weather, fire, rot, rodents, termites, and never need to be painted because they are made of asbestos and cement.

"Century" Siding comes in color-fast shell

white and graytone... in ready-to-use 24" lengths... with grained, weathered surface and in wavy butt-line style.

"Century" Roofing Shingles are supplied in various styles to suit any taste, fit any architectural plan, harmonize with any environment.

Specify "Century" Roofing Shingles and Siding in the homes you are planning to build. Write for further information about these and other K&M products.

*Original manufacturers of asbestos-cement
roofing shingles in this country*

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA



BUILD WITH
**STRAN
STEEL**



Easy to Design with . . . Easy to Build with



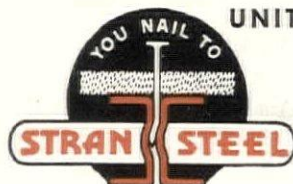
ARCHITECTS find Stran-Steel practical and economical to use. It provides durable, rigid, fire-safe framing of lightweight steel, yet permits wide flexibility in working out designs.

BUILDERS like to work with Stran-Steel. Pre-cut to required lengths, the framing members are assembled with self-threading screws. Other building materials are simply nailed to the frame by means of the nailing groove, a patented feature of all Stran-Steel studs and joists, which grips nails as in a vise, holds them permanently and securely. The frame goes up quickly, without the use of special tools or equipment.

PROSPECTIVE BUYERS are quick to appreciate the advantages of Stran-Steel. It gives homes, apartments, stores and industrial buildings a greater investment value, since sag-, rot- and termite-proof framing means lower maintenance costs.

For full details, see Sweet's File, Architectural, Sweet's File for Builders, or the January issue of Building Supply News.

GREAT LAKES STEEL CORPORATION
Stran-Steel Division • Penobscot Building • Detroit 26, Michigan
UNIT OF NATIONAL STEEL CORPORATION



WHEN YOUR CLIENT SAYS,
**"Do Something about
 Cockroaches!"**



Or half a dozen other things like...
 "No mold growths" or "No sparks!"

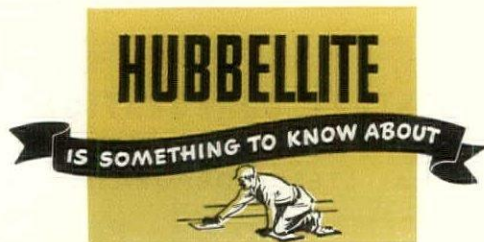
You can solve the problem with a floor surfacing material—Hubbellite.

Laboratory tests and actual installations in kitchens, hospitals and food processing plants prove that roaches would rather starve than live on Hubbellite.

Hubbellite is a monolithic surfacing applied only 3/8" thick over structurally sound wood or concrete. It is resilient but so resistant to foot traffic or the small wheeled vehicles common in most plants, that it compares more than favorably with hardwood or cement. It is non-denting with ordinary point loads, non-dusting, static-safe and non-sparking.

One of its most unique features is that it retards many molds and bacteria growths. This inhibiting effect has given it great success in locker rooms, shower rooms and around swimming pools. Hubbellite also withstands foods and fats which usually wreck resilient type floor coverings in kitchens. It also withstands the neutral oils and greases in machine shops.

This seems to be claiming a lot for one floor. We have records of laboratory tests and of installations. The best thing is to write, stating your particular interest, or ask for complete literature for your file. You never know when you will have a client who demands any of Hubbellite's features—or all of them.



H. H. ROBERTSON CO.

2403 Farmers Bank Building
 Pittsburgh 22, Pennsylvania



Offices in 50 Principal Cities
 World-Wide Building Service

less I had done and keep doing from time to time some actual construction and plenty of cost analysis.

I am shortly going to North Carolina to build a group of modern, all electric homes in the \$1,000 to \$3,000 price class. If you think these prices are impossible, it's because you do too much sitting and reading and not enough *doing* on the firing line.

H. MCGUIRE WOOD

Pittsford, N. Y.

FORUM editors are skeptical over prospect of crossing Mr. Wood's \$1,000 all-electric threshold.—Ed.

LOANS AND GROANS

Forum:

When I saw the story on page 7 of the July issue about the Bank of America and their policy of lending larger sums on houses than other loan agencies in southern California, I was curious to see whether this was just more publicity from their well-organized promotion department.

On the same day this week, I applied for a loan on my house in Beverly Hills from the Bank of America, and from one of the insurance companies. The Bank of America's offer was for a loan of \$8,500 at 5 per cent for a 10-year period. The insurance company offered \$7,500 at 4 per cent for a 15-year period.

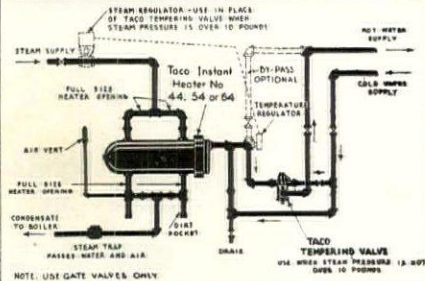
My impression from this is that, while the Bank of America is lending larger amounts each month than the other banks, their rate of interest is too high and the total is too close to the insurance company's offers to justify the kind of publicity you gave them in your July issue. They are after the suckers who haven't heard that insurance companies are in this market too—with a lot of money at a lower rate of interest and for longer periods. It is obvious that Bank of America money at 5 per cent for 10-year periods is fairly safe under these terms—but it is nothing like the 60 per cent of market value figure that you quote.

At the same time I asked a real estate broker to get me an offer on the same house. It will sell, as of today, for \$22,500 on a half-cash deal. Thus, the Bank of America will lend 40 per cent of its market value, not 60 per cent. And the insurance company will lend 33 1/3 per cent, approximately.

I have no direct interest in refuting this publicity about the Bank of America. But if they had offered to lend me \$12,500 on this house which, less than three years ago, cost \$9,000, I would have sold my Bank of America stock at once if I had still been holding it.

(Continued on page 56)

**Tankless
 HOT WATER**



For
 Apartment Houses
 Industrial Processes
 Office Buildings
 Factories

Whether you require 3 or 1050 gallons of water a minute, heated from 40° to 140°F. or 40° to 180°F., Taco can supply a Tankless Taco water heater for the job.

Use
 Boiler Water
 Steam Condensate
 Low Pressure Steam
 High Pressure Steam

It doesn't matter to the Taco. We've been supplying dependable Taco water heaters to property owners for 26 years. Use Taco Tempering Valves to control hot water temperature to fixtures whenever you are heating water with boiler water or with less than 10 pounds steam pressure.

5 to 6 Weeks' Delivery

Taco can ship as quickly as that on the Tankless Tacos using steam for apartment, industrial and commercial installations. There is, however, a large backlog on residential sizes.

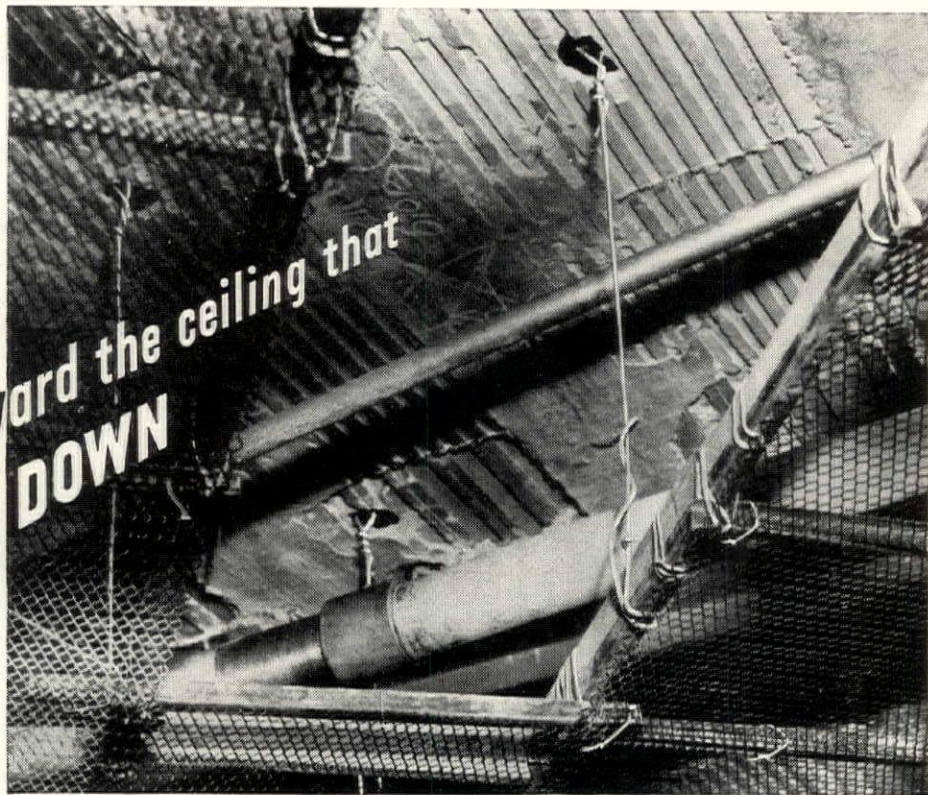
Ask for a Taco solution to your next water heating problem.

Better Heating - Better With Taco



TACO HEATERS, INC.
 342 MADISON AVE., NEW YORK 17, N. Y.
 In Canada: Taco Heaters of Canada, Ltd.,
 24 Adelaide St., W. Toronto

Looking up... toward the ceiling that
WON'T COME DOWN



SAFETY AND LONG LIFE assured. This view shows Monel hangers and tie-wires used in new office building of Williams and Company, distributor of INCO products in Pittsburgh.

Put on the plaster! Here's a ceiling that will stay put.

Rust is definitely licked. Corrosion is permanently stymied. For this ceiling is suspended on hangers and tie-wires of Monel.*

Rustproof through and through, these wires have no coating that flakes off when workmen bend and twist them. And they'll resist corrosion by alkalis, salts and acids encountered in plaster, lime and other materials.

Their tensile strength (approximately 66,500 pounds per square inch) eliminates the need for such wasteful operations as four-inch spacing and double looping of tie-wires. You can safely secure wire mesh and expanded metal lath with *single* Monel ties spaced at *six-inch* intervals.

In addition to being rustproof, corrosion-resistant and strong, Monel hangers and tie-wires are *pliable*. They thread easily and twist to a snug fit without breaking.

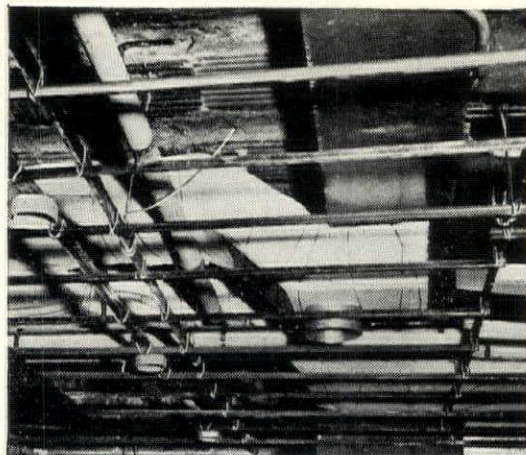
All these qualities add up to increased safety, rapid and economical installation and lengthened wall and ceiling life.

Widely used in schools, institutions, hospitals and public buildings of all types, Monel wires are equally suited for general office building construction and remodeling. They're unequalled for securing metal or fabric lath to furring bars, channels or studs. They provide permanent fastening for roof and ridge tiles, and for concrete and brick masonry anchors.

Our illustrated specification folder, **MONEL TIE-WIRE**, contains further information which we're sure you'll find valuable. Use the handy coupon at right, and we'll get your free copy out promptly.

*Reg. U. S. Pat. Off.

THE INTERNATIONAL NICKEL COMPANY, INC.
 67 WALL STREET, NEW YORK 5, N. Y.



FURRING BARS and channels hung for one of the suspended ceilings in the Williams and Company building. Monel tie-wire, available in all gauges and tempers to meet individual needs, was used exclusively.

SEND FOR THIS HELPFUL FOLDER!

The International Nickel Company, Inc.
 67 Wall Street, New York 5, N. Y.

Monel tie-wire sounds like a good bet to me. I'd like to know more. Please send along your specification folder.

Name.....Title.....

Firm.....

Street.....

City.....Zone.....State.....

A.F. 10-46



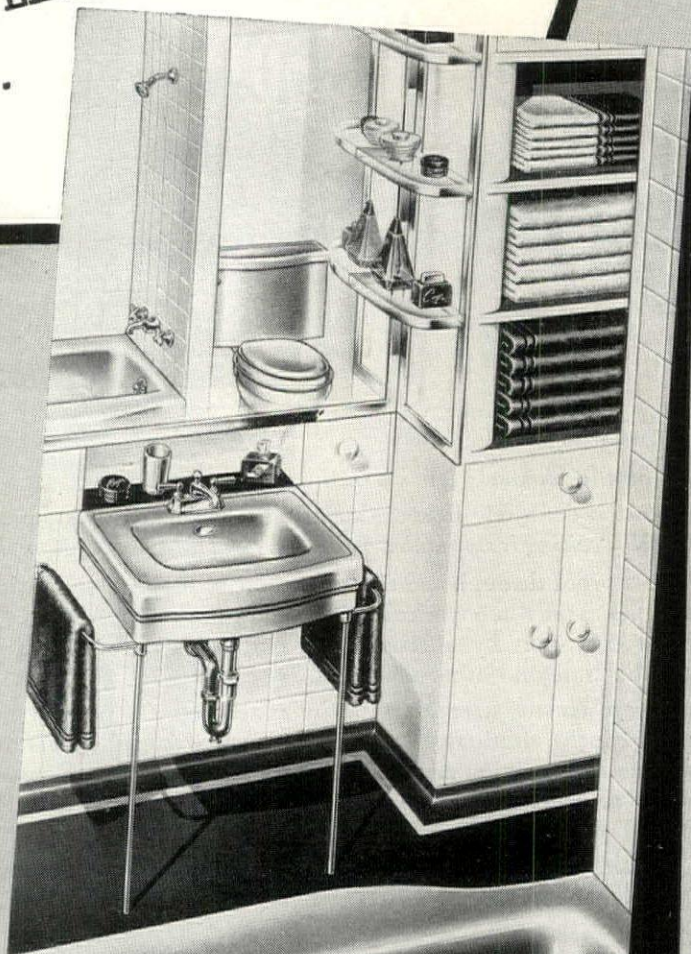
MONEL

ANOTHER IN THE SERIES OF COLORFUL
BRIGGS Beautyware ADVERTISEMENTS
 APPEARING IN LEADING NATIONAL
 MAGAZINES . . .

For more than a decade, Briggs Beautyware has enjoyed an enviable reputation for customer satisfaction.

Tried-and-tested in hundreds of thousands of American homes, its colorful modern beauty . . . superior quality . . . and extra safety features have won enthusiastic acclaim.

Today, despite increased manufacturing facilities and greater-than-ever production, the demand for this distinguished nationally advertised line continues to exceed supply. You may be sure, however, that every effort is being made to provide prompt service and immediate delivery.

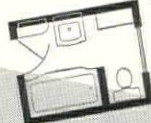


BRIGGS MANUFACTURING CO.
 3001 MILLER AVENUE
 DETROIT 11, MICHIGAN

Designed and Illustrated by Briggs Design Research Department

Reflected Beauty

Here's a compact bathroom with plenty of swish! And the Briggs Beautyware fixtures are just about the last word in design and beauty. Their gleaming surfaces are amazingly easy to clean and stay satin-smooth. And that safety bottom bathtub, a patented Briggs feature, is just right for a family that's always in a hurry. You can trust Briggs Beautyware to be tops-in quality too!



BRIGGS Beautyware
 Briggs Manufacturing Company • 30011 Miller Ave., Detroit 11, Michigan

Write for free booklet "Planning Your Bathrooms and Powder Rooms"

Where the weather man is Chief Inspector

Yes, sir. The Weather Man is boss. When it comes to placing a Flintkote Asphalt Shingle on the market... he's the one we have to satisfy.

In the Flintkote Laboratory, there's a Weatherometer... a machine that makes time really fly. It produces weather effects in one-tenth the time of outdoor exposure.

Day after day, hundreds of shingle samples undergo rigorous exposure tests in this machine.

And, year after year, thousands of shingle samples are standing tests by the weather itself on the Flintkote Roof Decks in New Jersey, Louisiana, Illinois

and California. Some for as long as 20 years.

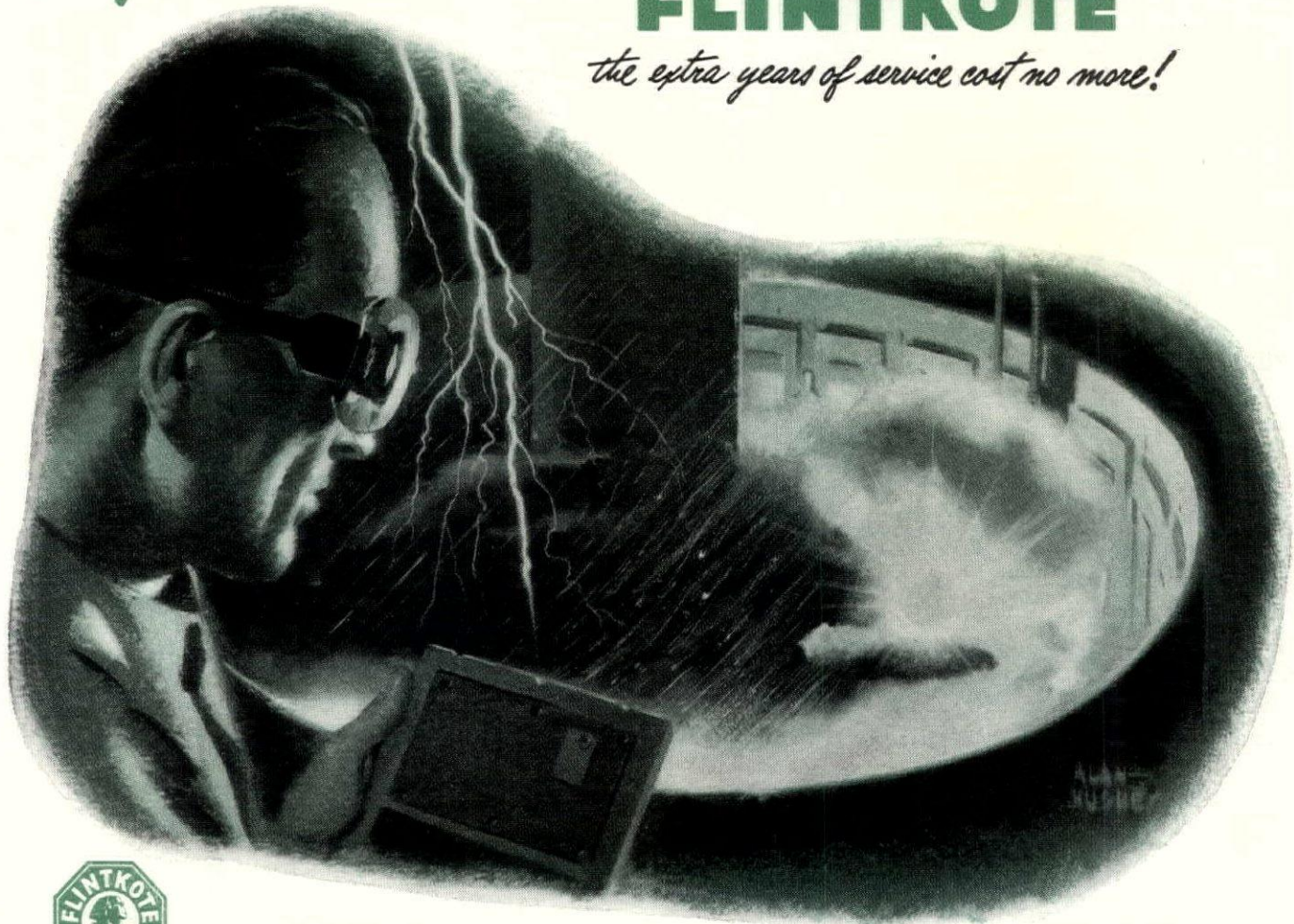
At Flintkote, it's not enough for skilled scientists and engineers to say a shingle is good... that it will retain its colorful beauty... that it won't crack in cold climates or soften in blazing sun.

Until the *Weather Man* puts his stamp of approval on a Flintkote Shingle... approval that enhances your reputation by ensuring long years of service to the home owner... it does not leave our plants.

The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, New York. Offices in principal cities.

FLINTKOTE

the extra years of service cost no more!



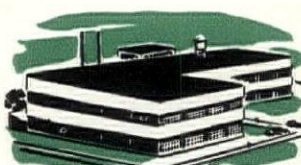
FLINTKOTE QUALITY BUILDING MATERIALS FOR MANY PURPOSES



Flintkote Asbestos-Cement Shingles and Sidings are ideal for new construction... or for the economical modernization of existing homes.



A new \$1,000,000 research laboratory, part of a \$16,000,000 plant expansion program, will soon bring you even better Flintkote products.

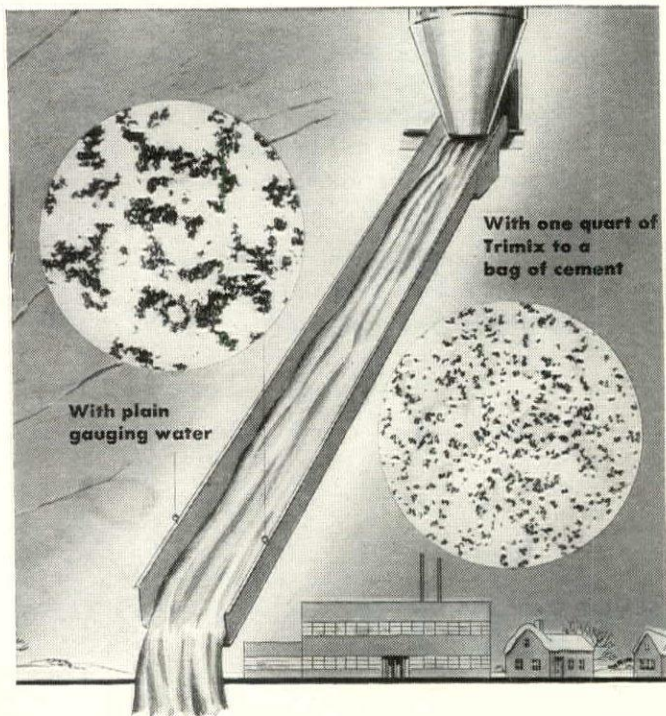


Flintkote Cold Process Built-up Roofs go on fast, and economically, without fire hazard, when they're applied by brush or spray equipment.



Flintkote Insulating Wool is easy to apply, light in weight, fire resistant, and won't mat or settle. Provides year-round home comfort.

LETTERS



Better concrete because of better dispersion with **TRIMIX**

THE MULTI-PURPOSE INTEGRAL LIQUID ADMIXTURE

The magnified photographs show why TRIMIX improves workability of cement and mortar mixes with lower water-cement ratio—20% less than the usual volume of gauging water required for normal slump.

A patented surface-active agent enables TRIMIX to wet and scatter the particles without interfering with the hydration reaction of the cement.

TRIMIX accelerates set . . . also has air-entraining properties, helping concrete to resist effects of freezing and thawing.

See SWEET'S for further information, and for descriptive literature write Dept. A-10.



SONNEBORN
"BUILDING SAVERS"

•

Floor Treatments • Waxes • Paints and
Protective Coatings • Concrete and Mor-
tar Admixtures • Waterproofing and
Dampproofing • Caulking Compounds
Roof Coatings

IF IT'S
WORTH BUILDING
IT'S
WORTH SAVING

Building Products Division, **L. SONNEBORN SONS, INC.**, New York 16, N. Y.
In the Southwest: Sonneborn Bros., Dallas 1, Texas

I thought this would be of interest to you, possibly to insure more careful reading of future publicity hand-outs from the Bank of America and to question their truth, as I did this one.

N. Z. OPPENHEIM
Beverly Hills, Calif.

Financier Giannini wisely goes by appraised rather than market values in lending his 60 per cent, still tops other west coast bankers.—Ed.

RUGGED INDIVIDUALIST

Forum:

Several statements in the July issue interest me very much, beginning with HM's statement that approval of "public" housing is a criterion of "good citizenship" (page 66). Do you really mean to say that a man who disapproves of or repudiates the actions of men in PWA, RA, USHA, NHA and FPHA is not a good citizen?

On page 98, where did you get your figures on the cost of street and lot improvements? I would like to pay anyone who can install improvements at such rates a bonus of 150 per cent of costs to do some work for me.

Do you approve the statement in the Wilde letter (page 56) that we lack materials because industry is on a "sit-down strike?" As a member of the builders' Wyatt committee, I have heard both Wyatt and Small attribute the shortages to the union-called strikes and to OPA. If you do not approve the statement, do you think you should print "opinions" which are obviously lies?

Do you approve the demand in the Wilde letter for a central agency to direct planning, production and construction?

. . . We have a great American heritage—physically, economically and politically. We need reforms and changes. Primarily, we need to learn that great fortunes are essentially great capital and that we do not need to take as much capital out of production in the future as we have in the past. Why must the FORUM support totalitarian bureaucracy when the fundamental precepts of a free enterprise economy are so much more challenging, the results so obviously better for mankind?

FRANK KIRKPATRICK
Milwaukee, Wis.

1) Disapproving of "the actions of men in PWA, RA, USHA, NHA, and FPHA" should not be confused with a blanket indictment of public housing. FORUM has long backed government aided housing for those whom private enterprise are currently further away from serving than ever.

2) Cost figures on street improvements were based on data from the Urban Land Institute and FHA; unit and front foot costs were derived by averaging January, 1946 costs throughout the country.

3) Publication of any letter in the FORUM signifies reader interest not FORUM approval.—Ed.
(*Publisher's Letter, page 62*)

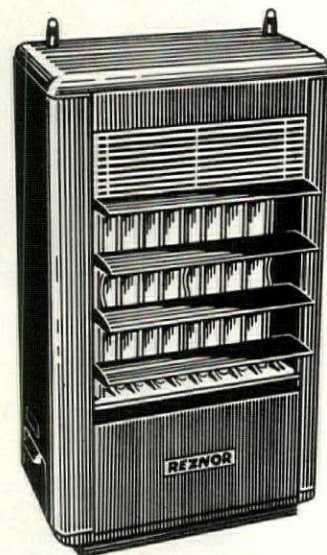
"Yes. Heat where
you want it —"



REZNOR

Gas unit heaters

1. CLEAN HEAT
Saves cleaning expense.
2. GAS FIRED
Saves maintenance expense.
3. SUFFICIENT
Saves floor space.
4. INTERMITTENT FIRING
Saves fuel.
5. HEAT WHERE YOU WANT IT
Saves heating unoccupied areas.



REZNOR MANUFACTURING CO.
Since 1888
MERCER, PENNA.

NO BOILERS • NO STEAM LINES
NO FUEL STORAGE • NO FIRE TENDING

Free Stripping

Less Weight Per Foot



Type T Conductors

IT'S **PVX** THE NEW NON-METALLIC SHEATHED CABLE FOR RESIDENTIAL AND FARM WIRING

Take a good look at the benefits of this new thermoplastic-insulated cable. Check its features against your clients' requirements. You'll find many reasons for specifying it for new wiring, or re-wiring work.

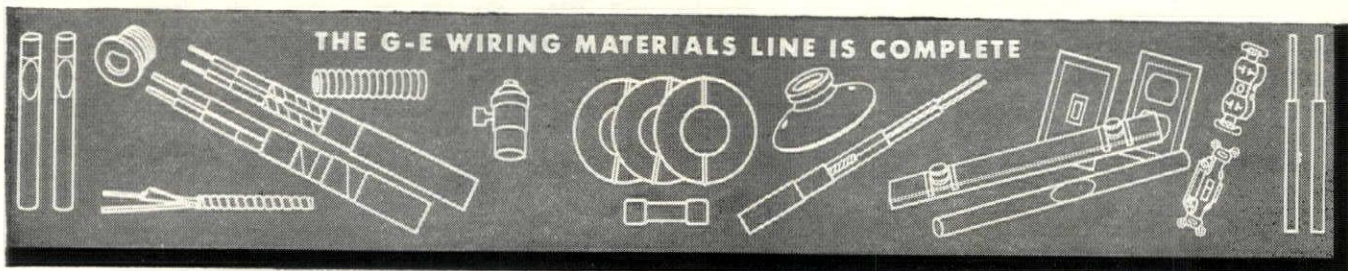
The Type T thermoplastic-insulated conductors, paper wrap, and over-all braid on PVX all strip easily to save

time in making splices and connections. PVX (14-2) weighs only 77 pounds per 1000 feet, or 27 pounds lighter than comparable Type R non-metallic cable. This lighter weight makes handling and installation easier, reducing "wear and tear" on busy workmen. The over-all braid is tough and moisture resistant, with an improved finish that

makes it smooth and non-tacking.

There are many other advantages that make PVX especially well suited for open and concealed work where permitted by local Codes and the National Electrical Code. It resists flame, oils, acids, and alkalis. Conductors are permanently colored for positive identification. PVX is available with two or three conductors in sizes 14 to 4, approved for 60 C operation.

Ask your G-E Merchandise Distributor for more complete information, or write to Section W16-1026, Appliance and Merchandise Department, General Electric Company, Bridgeport, Conn.



GENERAL  **ELECTRIC**

INSULITE

Insulates as you build



Outside Walls

Insulite sheathing builds a strong, weathertight, wind-proofed wall . . . a wall with effective insulation.



Inside Walls

Insulite Sealed Lok-Joint Lath provides a strong, rigid plastering surface . . . plus a second wall of insulation.



Refer to Sweet's File . . . Architectural Section 10 a/9.

INSULITE

The Original and Best* Wood Fibre Structural Insulating Board

**As Determined by Leading Testing Authorities*

REGISTERED TRADEMARK

Minneapolis 2



Minnesota

Design Unshackled!

**ALZAK* ALUMINUM'S EASY
Formability GIVES YOU FREE REIN!**

The formability of Alcoa Aluminum Reflector Sheet gives you freedom of design; the metal is readily formed, spun, or drawn to carry out your own individual ideas for reflector or fixture design . . . and lighting efficiency. This formability is a big plus, when you add it to the other advantages of Alzak Aluminum Reflectors: corrosion and heat resistance, surface stability; in short, *sustained high efficiency*, for either specular or diffuse applications.

Consult your reflector manufacturer regarding specifications for Alzak Aluminum, or other finishes of Alcoa Reflector Sheet. ALUMINUM COMPANY OF AMERICA, 1944 Gulf Bldg., Pittsburgh 19, Pennsylvania. Sales offices in principal cities.

* PATENTED PROCESS

**NEW CURTIS LUMINAIRE
USES ALZAK ALUMINUM**

For offices, drafting rooms, schoolrooms, the new Curtis "Forty-Sixty" Luminaire makes use of Alzak Aluminum's efficiency to direct approximately 40% of the light upward, 60% downward, provide ideal working light.

ALCOA FIRST IN ALUMINUM



IN EVERY COMMERCIAL FORM

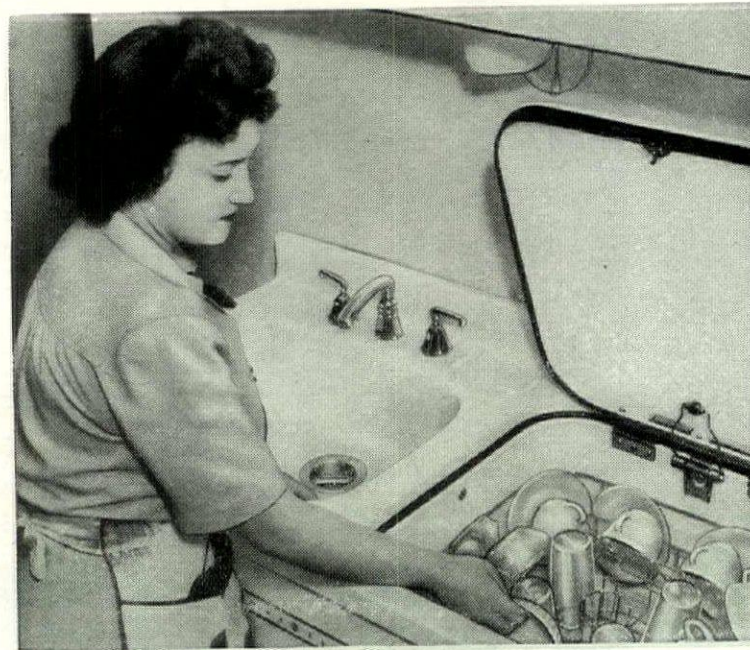
“Don't tell us it can't b



• Masontown, Pa., site of 110 homes being built under the direction of the George C. Brown Co. of Pittsburgh. Architect, William C. Young. Contractor, Mellon-Stuart. This is the first in a series of the George C. Brown Company developments.



G-E EQUIPPED HOMES



• New owners are enthusiastic about better living, electrically. Mrs. E. C. D. of 18 Cumberland Ave., Masontown, Pa., is especially proud of her G-E Dish and Disposall. But, like other Masontown homemakers, she has found that *all* her appliances — Range, Refrigerator, Steel Cabinets, Washer, and Water Heater — help make housework easier, living pleasanter, in her new all-electric home.

One - **WE'RE DOING IT!**"

"We're Selling G-E Equipped Homes For As Little As \$51 to \$53 a month," Says the George C. Brown Company of Pittsburgh.

re's what George C. Brown, president, has to say about his
pany's postwar homes at Masontown, Pa.

These homes are the first fulfillment in this region of the
ease and convenience which housewives have been prom-
ised since before the war.

Standard equipment in every home includes the *all-*
electric kitchen with G-E Range, Refrigerator, Steel Cabi-
nets, Dishwasher, and Disposall,* as well as a G-E Washer
and Water Heater.

But most important is the fact that these homes with G-E
equipment cost the owner only about \$3.00 a month
more than the same homes would cost without *any* equip-
ment.

So don't tell us it's impossible to include the best electric

appliances in new homes, and still keep the cost down
... we're doing it!"

In Pittsburgh, Denver, Kansas City, St. Louis—all across the
country, architects and builders are planning new homes, *de-*
signed for better living, electrically!

From a cost angle: they know it doesn't cost them a dime
extra to include all the dependable G-E Appliances. And that
there's only a minor increase in cost to the buyer, usually less
than \$3.00 a month on his mortgage payments.

From a sales angle: they know that today's homeowner
wants, and expects, a completely equipped, up-to-date home;
that a home with no *extras* to buy is always a fast seller.

From a quality angle: they know that selling complete, all-
electric homes will bring them a reputation as *good builders*
—and a good reputation is going to be mighty important as
competition gets stiffer.

Most women want G. E.

In planning *your* new homes, keep this in mind too: *recent*
national surveys showed that 53 per cent of all women prefer
G.E. to any other appliances!

This preference, and the record of G-E appliances for *depend-*
able performance, are good reasons why so many builders and
architects are specifying G-E appliances as standard equipment.

Let us help you plan your 1947 program. For complete in-
formation on all-electric homes, with special emphasis on the
kitchen and laundry, write to G-E Home Bureau, General
Electric Company, Bridgeport 2, Conn.



n cost less to live better in these new homes, financed by
Housing Mortgage Corporation of Pittsburgh. Inclusion of
equipment in the mortgage makes only a minor difference
e initial cost. Economical operation and maintenance, and
ng life of G-E appliances, more than offset the slight increase
onthly payments.

THE APPLIANCES MOST WOMEN WANT MOST

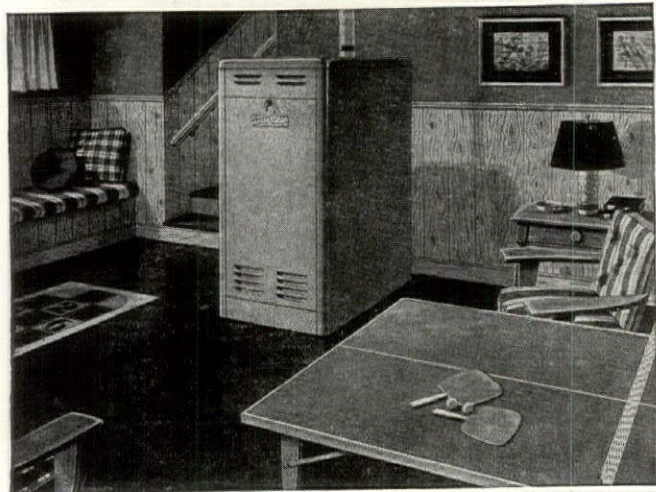
GENERAL  ELECTRIC

*Trade-Mark Reg. U. S. Pat. Off.

KOVEN

*For
Economical
Quick
Heat*

WATERFILM BOILERS



The home builder of today plans his house carefully—a vital part of those plans being the heating unit. Before installation, the advantages of a KOVEN WATERFILM BOILER deserve consideration.

The patented construction of KOVEN WATERFILM BOILERS, the fastest steaming boilers on the market, incorporates all the newest scientific improvements—assuring a plentiful supply of hot water, abundant heat and even room temperature—all at economical operating cost.

Attractively jacketed, KOVEN WATERFILM BOILERS are made for automatic firing with oil, stoker or gas and are available in a variety of models to suit small or large homes, apartment houses and

industrial plants. Write for detailed information.



*Even Room
Temperature
Throughout
The House!*

Waterfilm Boilers, Inc.
154 Ogden Avenue, Jersey City 7, N. J.
Plants: Jersey City, N. J. • Dover, N. J.

A LETTER FROM THE PUBLISHER

Dear Reader:

Even if the players who had the bad luck to lose in the semi finals of the National Amateur Tennis Championships last week had won, it would still have



been a field day for California. With the single exception of Miss Hart, who lost to Pauline Betz, they all came from the West Coast. The matter of producing champions is by no means limited to tennis. Take building. Try to find smarter home builders than Fritz Burns of Los Angeles and Dave Bohannon of San Francisco. Architects? If we made up a list of the hundred best men in the U. S., fifty of them would be from the West Coast and forty of the fifty from California. A few months ago Los Angeles produced the most progressive zoning ordinance to be found in North America, and that, undoubtedly, could be widened to this hemisphere. These facts are generally recognized, but too often dismissed by airy references to the climate. Granted the Southern California climate is moderate. But anyone who has ever watched the fog roll in and felt the wind whip around in San Francisco knows that it gets pretty rugged. So let us not confuse climate with competence.

This comment is in pleasant reply to those who criticize the FORUM for publishing so much California work. We pick it on merit—and look at the post-mark later.

* * *



But Californians would probably confess, however reluctantly, that the top schools teaching architecture today are still in the East, and mostly in New England. This statement must be tempered by reporting that Columbia will build a scientific laboratory at Irvington-on-Hudson where postwar research will be undertaken. This fine collegiate enterprise, however, will be sheltered in a new structure “planned as far as practicable in keeping with the lines of the early nineteenth century home of Col. James Alexander

Hamilton,” located on the estate. Smith College, on the other hand, is an institution which feels only a compulsion to look forward in its building program. Already we can picture a future Smith girl rebuffing the advances of a Columbia student researcher?

* * *

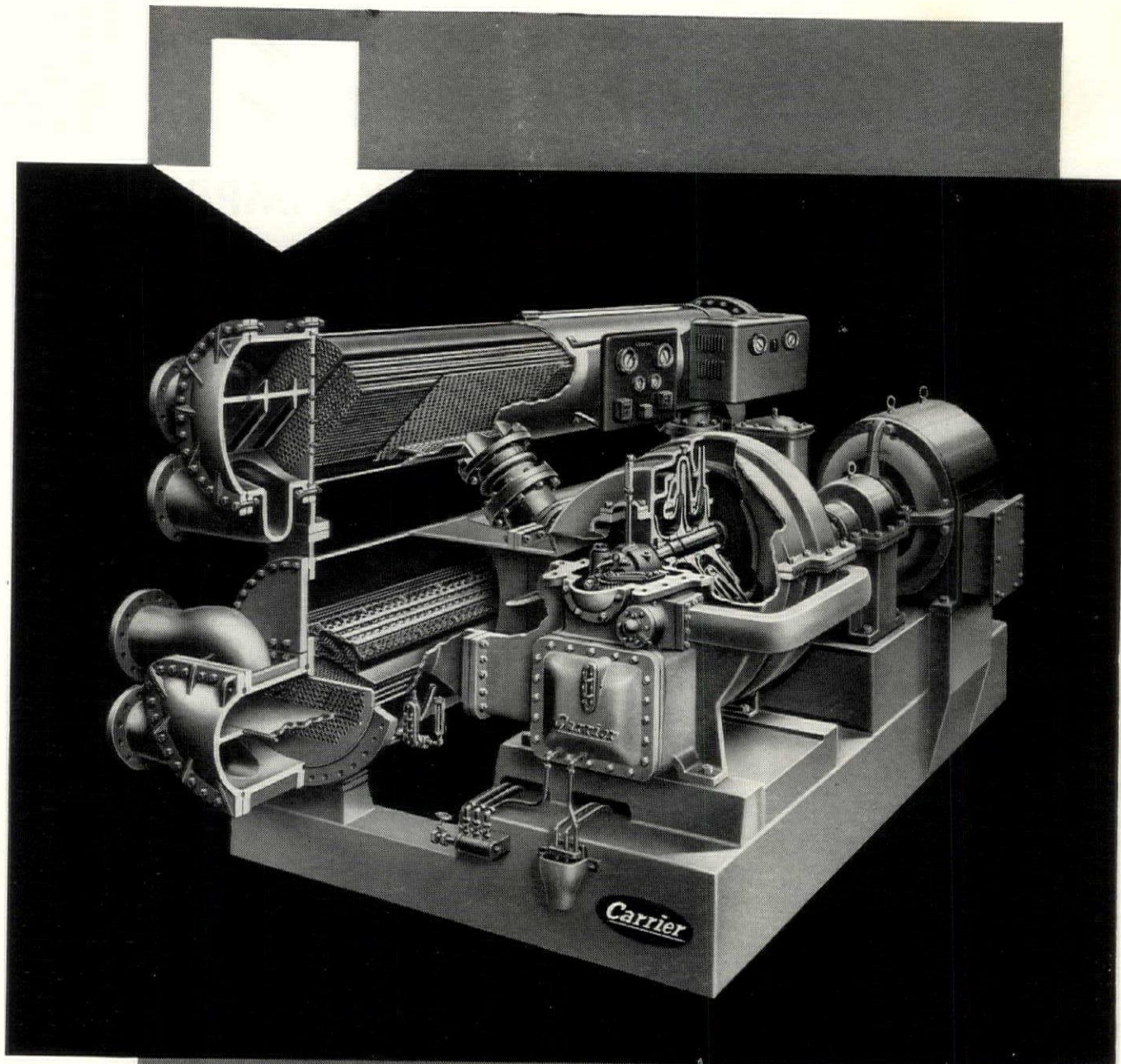
FORUM Editors continue to find time to dash off an occasional tome between issues. Scheduled to appear next year is a considerable work (still awaiting a title) by Technical Editor James Marston Fitch, Jr. Jimmy, who loses no opportunity to discuss this volume in a high, nasal, Southern twang, reports modestly that it will make any further books about American building—past, present and future—unnecessary. We would be somewhat less terrified by this prophecy if it came from a less erudite and versatile character. After some considerable observation of Mr. Fitch, whose background includes not one but two universities, not one but two planning commissions, not one but two professional journals, we are disposed to take him at his word and calmly await deliverance from our current building mess sometime next spring. It looks as though we would have to do that, Fitch or no Fitch.

* * *



As the vacation season draws to a close, we were shocked to discover that some FORUM absentees had not been on vacations. For example, it now turns out that Associate Editor Louise Cooper Whiting was away from the office producing an eight-pound potential journalist (male). Empty drafting boards yawn in the art department . . . vacated by artist-draftswomen such as talented Madeline Thatcher, who, it appears, has ducked off to New Mexico for a spell of painting. One battered desk, which we made an excuse to visit every day, is momentarily vacant through the departure of Charlotte Speight Wax, likewise bent on exploring New Mexico, and even old Mexico. Actually, this art department exodus, an inevitable aftermath of war, was first started by Ruth Feierabend. Looking at the thing very selfishly, General Hershey might have served us better had he been less hasty in demobilizing certain dashing young husbands.

H.M.



CORNER-STONE OF A REPUTATION

Behind the reputation of Carrier Corporation leadership in refrigeration and air conditioning . . . is the Carrier centrifugal refrigeration machine.

It was Dr. Carrier and his associates who developed the centrifugal machine in 1922. And since then Carrier has manufactured more centrifugals . . . by far . . . than any other firm.

Carrier has unrivaled knowledge of large-scale installation problems in a wide variety of industries . . . and from the earliest days of centrifugal refrigeration has consistently utilized this knowledge to improve its centrifugals.

It was Carrier that first introduced such improvements as low fin tubing,

which simplifies maintenance and lightens the weight of the machine . . . an economizer to reduce horsepower. And only the Carrier centrifugal has the leak-proof, dollar-saving shaft seal.

Carrier centrifugal refrigerating machines are available in sizes from 100 to 1200 tons. For industrial applications, they'll use many different types of refrigerants, both hydrocarbon and

halogenated hydrocarbon. They can be made a part of existing ammonia installations and are adaptable to direct turbine drive as well as to motor drive.

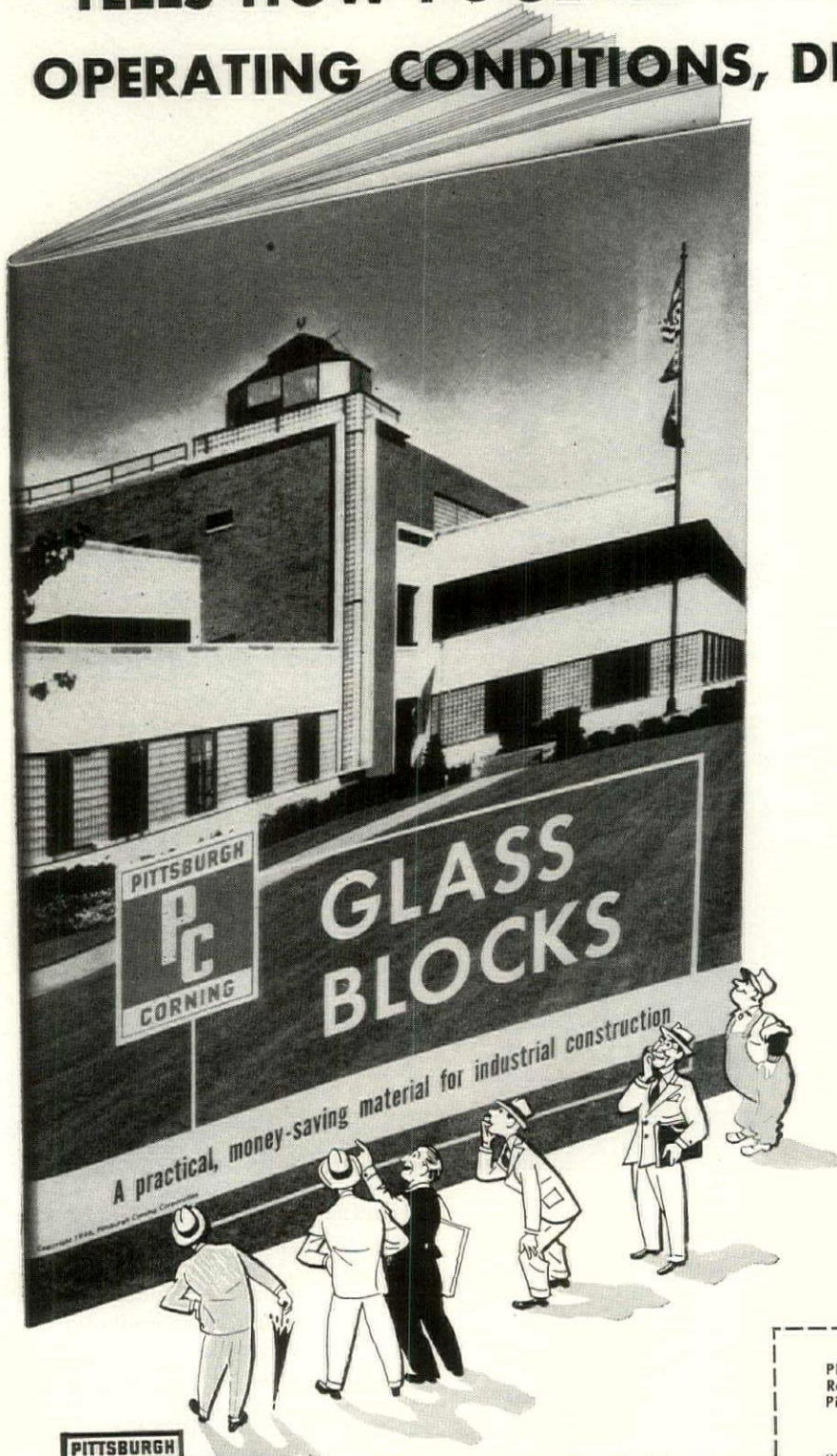
These facts add up to leadership . . . leadership which provides for buyers of Carrier centrifugals three qualities of great importance . . . **ECONOMY, LONG LIFE, DEPENDABILITY.** Carrier Corporation, Syracuse, N. Y.



**AIR CONDITIONING
REFRIGERATION
INDUSTRIAL HEATING**

This Free Book

TELLS HOW PC GLASS BLOCKS IMPROVE OPERATING CONDITIONS, DECREASE COSTS



The many and varied uses of PC Glass Block construction in industrial buildings are described and illustrated in this new 28-page book. See how PC Glass Blocks improve working conditions and also save money!

HERE is the latest and most complete information on the use of PC Glass Blocks in all sorts of industrial buildings.

This lavishly illustrated book—just off the press—contains actual photographs of PC Glass Block installations in industrial plants of all types. The properties, characteristics and functions of the individual blocks are described, the full line of patterns is pictured, the sizes are listed.

The technical data section includes authoritative information on light transmission, insulation (which minimizes condensation), weather resistance, structural strength, ease of cleaning and maintenance, exclusion of dust and grit, dampening of distracting noise. Layout tables and detailed drawings of typical PC Glass Block installations are supplemented by detailed specifications for panels and for panel and sash combinations.

Get this information now. Send in the coupon and your free copy of this new book will be mailed to you promptly.

· Also Makers of PC Foamlas Insulation ·



GLASS BLOCKS

Distributed by

PITTSBURGH PLATE GLASS COMPANY and by W. P. Fuller & Co. on the Pacific Coast

PITTSBURGH CORNING CORPORATION
Room 361, 632 Duquesne Way
Pittsburgh 22, Pa.

Please send along my free copy of your new book on the use of PC Glass Blocks for Industrial Construction. It is understood that I incur no obligation.

Name.....

Address.....

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

Handsome is —as Kentile does!

We promise you—with Kentile—the handsomest floor in town. For Kentile is tile-set, not sheet-laid . . . Kentile puts flexibility, versatility and personality right at your fingertips—fits into any color scheme—any decor.

Behind that beauty, you'll find more years of service in Kentile than in any other type of floor. Kentile laughs at wear! Kentile colors stay fresh because they go all the way to the back . . . and they come clean with simple soap-and-water mopping. Kentile can take abuse—hard scuffing, jabbing heels, steady pounding, and give back a quieting effect on nerves and a sure tread. Kentile is moisture-proof, even on basement concrete in direct contact with the earth. Kentile can do wonders—in styling—in service—in economy. Get all the facts in our handsome color booklet.

DOUBLE ECONOMY!

1. When replacements or floor alterations are necessary, you save with Kentile. *Only the area affected need be reset—not the entire floor.*
2. A special, greaseproof Kentile may be used where needed—in regular Kentile colors.



THE WHOLE STORY

Kentile offers 15 different advantages—all told in the new, full-color catalogue showing all the colors, some of the countless patterns and full-color pictures of Kentile in actual use. Send for your copy—no obligation.

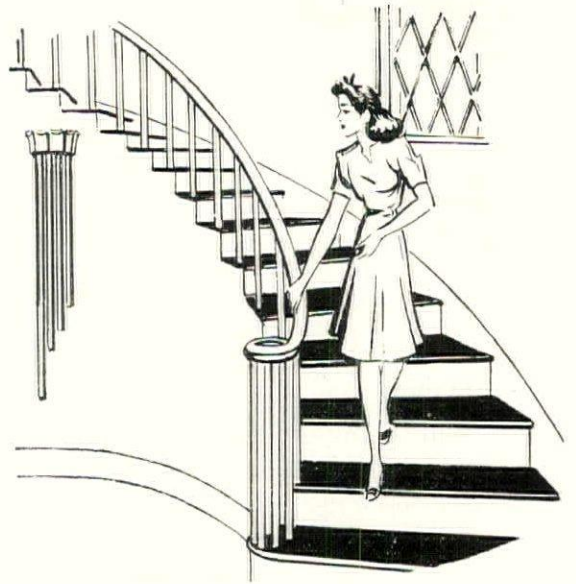
KENTILE
Asphalt Tile
Trade Mark Reg.



DAVID E. KENNEDY, Inc.
80 Second Avenue, Brooklyn 15, N. Y.
208 Bona Allen Bldg., Atlanta 3, Ga.
2000 Ulloa Street, San Francisco 16, California
30 No. Michigan Ave., Chicago 2, Illinois
452 Statler Bldg., Boston 16, Mass.
614 Olympia Road, Pittsburgh 11, Pa.
1211 National Broadcasting Co. Bldg., Cleveland 14, Ohio



A LITTLE THING, YES . . .



BUT HOW IT COUNTS WITH YOUR CLIENTS!

The average home buyer may know little or nothing about what goes into a good building. The fine points of quality construction may be just so much Greek. But he *does* know something about fixtures and appliances. And if these aids to better living are brands he recognizes and respects, the house in which he finds them takes on added value.

In the door-chime field, no name is more widely known or more respected than the name—NUTONE. So many people prefer this brand that NUTONE is today the world's largest maker of door chimes.

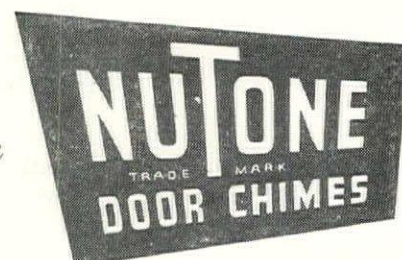
This preference stems from our determination to make the best door chimes money can buy—at prices to suit every man's purse (from \$3.95 to \$59.95). Then, too, there's such a *variety* of NUTONE

Chimes—fourteen in all. Compact, two-note models; short-tube chimes; a combination *Telechron* Kitchen Clock and NUTONE Door Chime with a large, legible dial; long-tube chimes in two-note and combination four- and eight-note styles—some with fine built-in hall clocks.

That makes it easy to please everyone—including yourself! For these chimes are styled and colored to blend with all interior designs and wall finishes. They're easy to install and simple to service.

Best of all, a NUTONE Door Chime helps make a house a home. It's a little thing, yes . . . but how it *counts* with your clients! Write today for folder illustrating and describing all 14 NUTONE Door Chime models.

*...better living means
better listening, too!*



Your clients will
thank you for

THIS WATER HEATER THAT CANNOT RUST!

The finest kitchen and the most beautiful bathroom are a trial and a disappointment if the hot-water faucets deliver tank-rusty, corrosion-stained water. That's why your clients will welcome this modern water heater that CANNOT rust or corrode—the

Permaglas
WATER HEATER

Only the *Permaglas* has the tank of mirror-smooth, sparkling blue glass-fused-to-steel. Sanitary as a clean drinking glass. It CANNOT rust or corrode under *any* local water condition!

Yet this is only one modern feature of many—features that challenge all comparison in style, beauty, convenience, and trouble-free service.

Specify

CLEAN HOT WATER

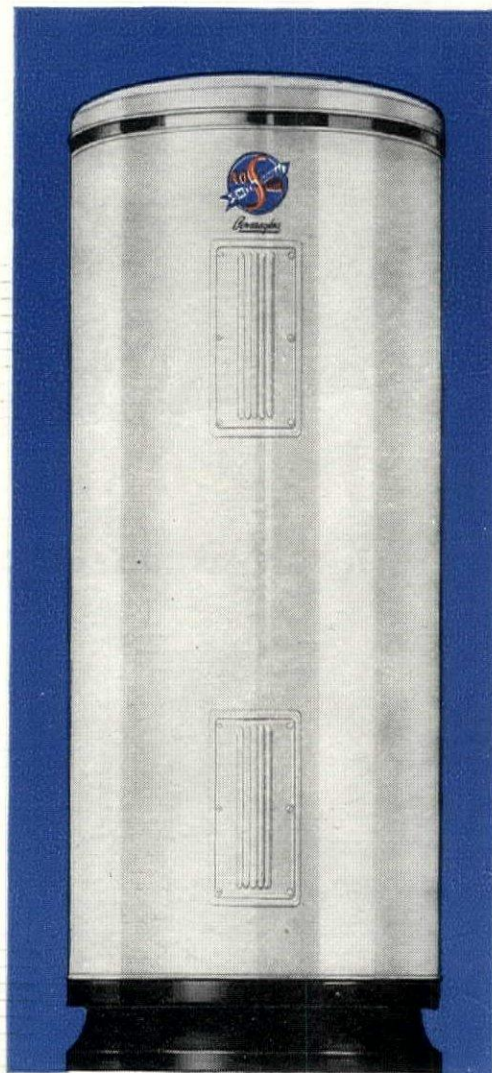
Only A. O. Smith produces this truly modern water heater that stores and delivers hot water as pure and clean as the source itself. Ample capacities for all homes. Gas or electric.

Get the whole story now. Ask the A. O. Smith office nearest you for a copy of "The Inside Story of Permaglas."

HOT WATER...

"Packaged-in-Glass"

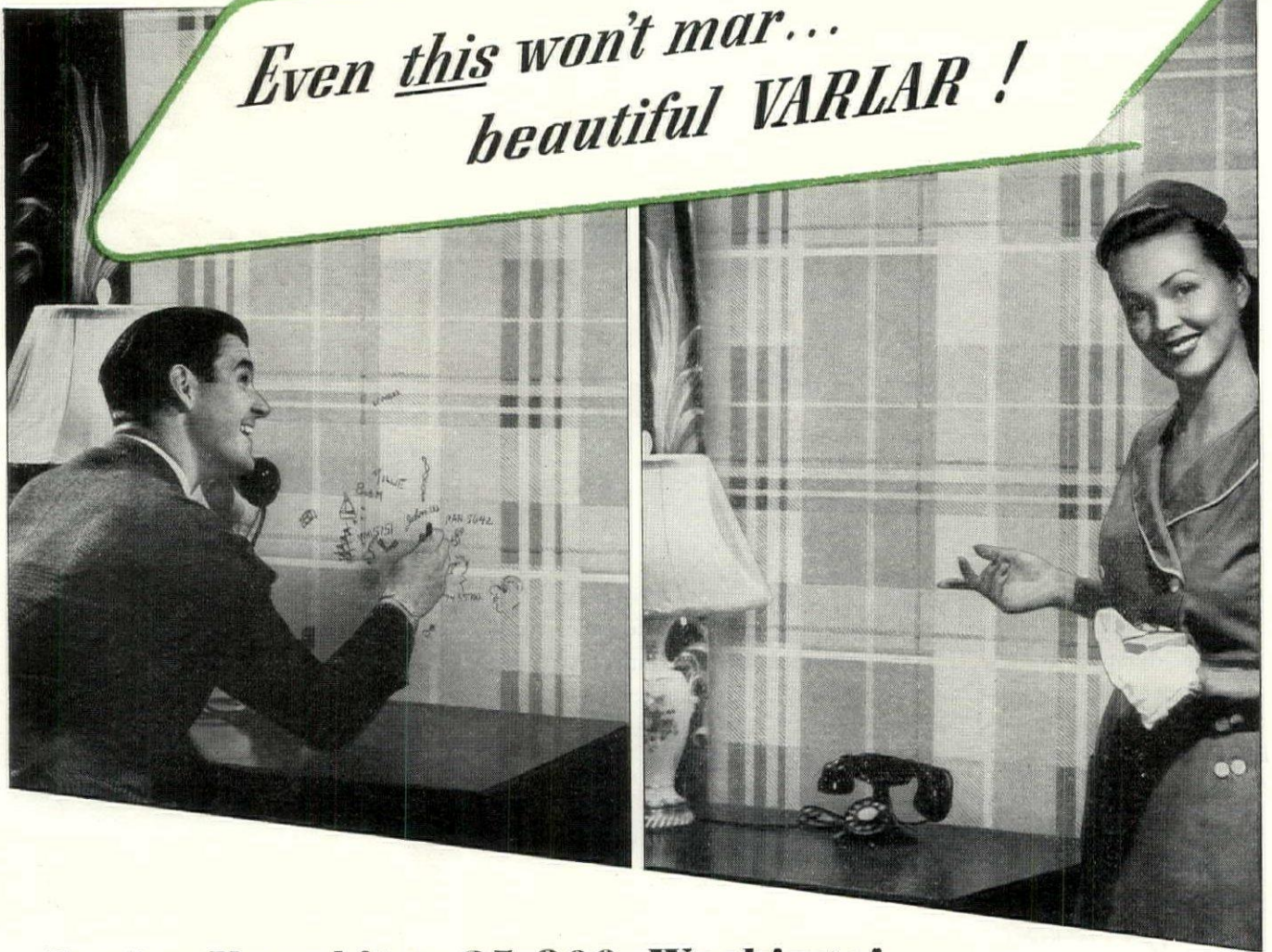
Guardian of the Nation's Health



A. O. SMITH
Corporation

NEW YORK 17 • ATLANTA 3 • CHICAGO 4 • HOUSTON 2 • SEATTLE 1
LOS ANGELES 14 • INTERNATIONAL DIVISION: MILWAUKEE 1
LICENSEE IN CANADA: JOHN INGLIS CO., LIMITED

*Even this won't mar...
beautiful VARLAR!*



Looks New After 25,000 Washings!

HERE'S wall *beauty* that begins a new era of low-cost wall *maintenance*. Because, by actual laboratory test, Varlar is *stainproof*. Pencil, ink, lipstick, oil, hot kitchen grease, perfume, jam, dirt accumulation—stains of ALL kinds—wash clean from Varlar with ordinary soap and water. Varlar is fire-resistant, water-resistant, and proof against mildew, bacteria and vermin, too.

Varlar goes up easily as wallpaper... comes in 90 beautiful styles, including a variety of solid tones. But don't confuse it with laminated wallpapers. Varlar is a new *kind* of wall covering, made with miracle plastics an entirely new way. It has no coatings to crack, peel or discolor. Write today for laboratory test reports (shown below) on Varlar's amazing performance.

Never Before Such Enduring Beauty

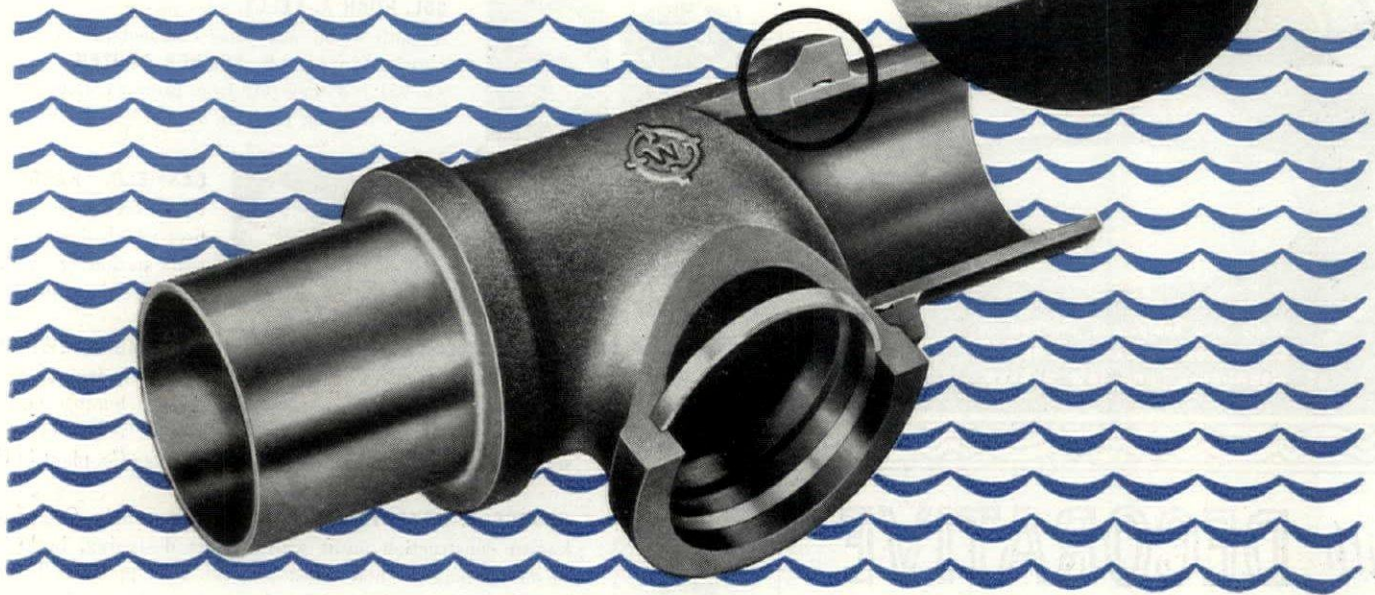
VARLAR

Stainproof Wall Covering



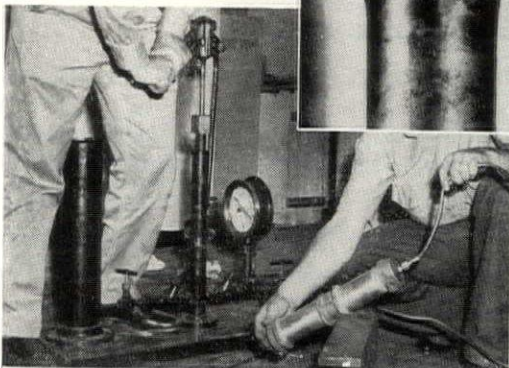
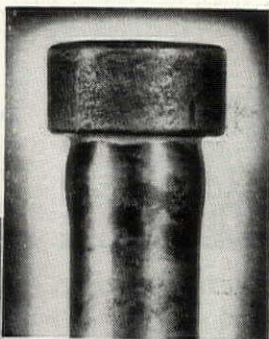
VARLON, INC., Division of **UNITED WALLPAPER**
Merchandise Mart, Chicago 54, Ill.

Silbraz* JOINTS



...are permanently **LEAK-TIGHT**

The strongest guarantees of the leak-tight quality of Silbraz joints, are the thousands of pressure tests under a wide variety of conditions that SIL-FOS brazed joints have successfully met.



*Patented
Reg. U.S. Pat. Off.

A copper or brass pipe or tubing system constructed the threadless way—with Silbraz joints—is the counterpart of a system without a joint. It is **leak-tight for life**.

The factor which assures this property is the low-temperature brazing alloy—**SIL-FOS**—that makes the Silbraz joints. Rings of this alloy come as inserts in the bores of fittings, flanges and valves used in making up a piping system of this type.

SIL-FOS when heated is so free-flowing that the instant its low flow point of 1300°F. is reached, it penetrates throughout the joint area and diffuses into pipe and fitting surfaces—forming a practically homogeneous union that **matches solid metal** in strength, ability to withstand shock and vibration and permanent leak-tightness.

Leak-tightness is one of the important reasons why a non-ferrous pipe or tubing system made with Silbraz joints is such a sound and satisfying investment:

H A N D Y & H A R M A N



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

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

Agents in Principal Cities

Behind the scenes with FORUM contributors

Make interiors grow young . . . and stay that way . . .



Walls and table tops finished in Decorative Micarta combine beauty, cleanliness, and low upkeep.

with DECORATIVE MICARTA*

Now, with Decorative Micarta, you can create exciting, colorful interiors . . . give walls, ceilings and table tops a lustrous finish that years of service cannot dim.

For the gleaming surface of Decorative Micarta is tougher than fine hardwood, but will not split or warp. Remarkably easy to clean . . . not affected by spilled liquids including alcohol, oil, or even dilute acids and fruit juices.

The cigarette-proof grade is not harmed by smoldering cigars or cigarettes.

Decorative Micarta is made in sheet form . . . in most wanted colors, linen effects and wood veneers. Distributed exclusively by United States Plywood Corporation. Write for full information today.

*Manufactured by Westinghouse Electric Corporation. Reg. U. S. Pat. Off.

UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 18, N. Y.



C. R. JACOBS, Acting Director of Construction and Building Operations for CBS, is the acoustical expert for his company's newest broadcasting studio (p. 92). Since 1937 when he joined the company, Jacobs has designed the technical aspects of all CBS studios. Architects for these same jobs are Alfred Fellheimer and Steward Wagner.



KENNETH S. WING, architect for the air terminal building in Long Beach, Calif., (p. 94), has had a general practice in that city since 1930. He studied architecture at the University of Southern Calif., worked in the offices of W. Horace Austin and Meyer & Holler. In 1945 he served as Vice President of the Southern Calif. chapter, A.I.A.



COL. HUGH A. KELLY, who served with the Corps of Engineers in both world wars, has resumed his architectural practice in partnership with **B. SUMNER GRUZEN**. Their freight terminal (p. 95) is a departure from prewar collaboration which included mainly housing projects for FHA and USHA.



GARFIELD, HARRIS, ROBINSON & SCHAFFER are partners in the Cleveland firm which designed the C. & O. railroad station (p. 96). They have had city planning and FHA experience.



THEODORE CRILEY, JR., designer of the Hoffmann Radio Corp. (p. 100), studied at Stanford, U. of C. and M.I.T., has recently done war housing and urban planning.

SKIDMORE, OWINGS & MERRILL are recently famous as architects for the atom bomb's Oak Ridge. In this issue is a peacetime offering, the Heinz Co. plant in California (p. 98).



GEORGE A. BRYANT is president of the Austin Company, internationally known construction outfit which offers designing, building and equipping in one package. Their latest job, the G.E. plant in Tiffin, Ohio (p. 101) is typical of this company's work which has included a \$60 million industrial city for the Soviet government.



JOHN D. FARRINGTON, Chief Executive Officer of the Chicago, Rock Island Railway Co., has worked for the railroads since 1909. He was a timekeeper foreman, trainmaster, superintendent and general manager before reaching his present position; currently has an eye on his company's new laboratory building (p. 101).



EMMERLING, SPELLICY & HARTMAN, Detroit architectural and engineering firm, designed the Production Steel Co. plant (p. 102). Since its start in 1945, the firm has completed over \$1 million worth of commercial and industrial buildings.



S. MURRAY RUST, JR., President of the Rust Engineering Company which designed the U. S. Sugar Co. plant (p. 103), succeeded his father as head of the family firm. He received a B.S. in mechanical engineering from Lehigh University and became a registered engineer in Pennsylvania and Connecticut. He is also a member of the N.A.M.



DONN EMMONS is the new partner in the west coast firm of Wurster, Bernardini & Emmons which designed the Harney Cement Co. plant (p. 104). After graduation from Cornell, Emmons worked for various Los Angeles architects before moving in on Wurster's San Francisco office. The war interrupted his career, but he is now back in the architectural fold.



J. R. DAVIDSON, designer of the Case Study house (p. 107), is European born and trained. He came to the U. S. in 1923, opened an office in Los Angeles and has remained in the same spot ever since. In 1937 his work received recognition from the Royal Institute of British Architects and in 1938 he won the Pittsburgh Plate Glass Competition.

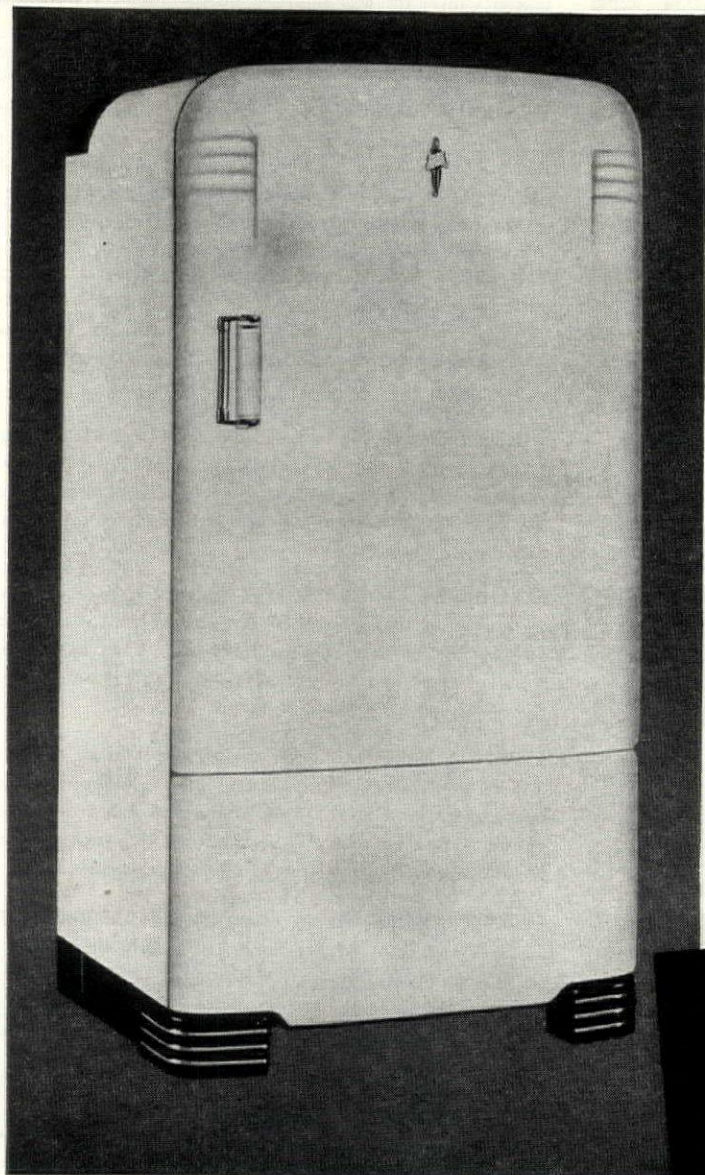


CAUDILL & ROWLETT is a postwar partnership with offices in Austin, Texas. Both men are veterans of overseas duty with the navy; both were formerly instructors in architecture at Texas A. & M. where they did school and housing research, a campus plan for A. & M. (p. 109). (Continued on page 68)

"Never makes a sound!"



"Lasts longer, too!"



YOU'LL SATISFY BOTH TENANTS AND OWNERS WHEN YOU SPECIFY SERVEL

Everyone will approve your choice when you specify Servel Gas Refrigerators in the new apartment houses you design or build. For more than 2,000,000 users are enthusiastic about the permanent silence of this modern gas refrigerator. It never makes a sound, never annoys. Owners, too, find that, even after 10, 12 and 15 years, Servel keeps giving the same dependable service it did when new.

This unmatched performance is the result of Servel's amazingly simple, basically different method of operation. There are *no moving parts* in its freezing system. No motors, valves, pistons or pumps to get noisy or wear. A tiny gas flame circulates the refrigerant that produces constant cold and an abundance of sparkling ice cubes.

So decide now to include outlets for Gas Refrigeration in your current designs and construction work. Consult Sweet's Catalog for installation data. Or write today to Servel, Inc., Evansville 20, Ind.

Stays silent... lasts longer

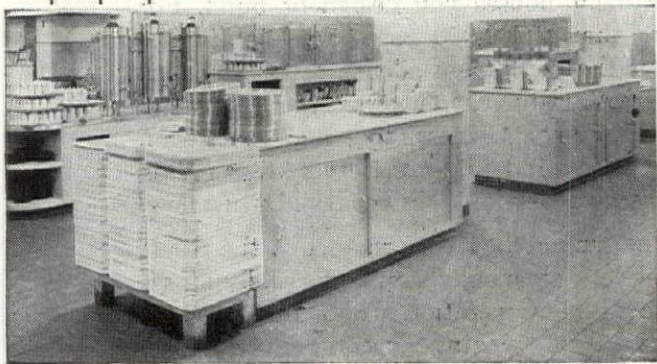
Servel
GAS REFRIGERATOR

Behind the scenes with FORUM contributors

ORDERLY! EFFICIENT! ECONOMICAL!

FOOD SERVICE EQUIPMENT THAT MEETS YOUR NEEDS

● Efficiency in the preparation and serving of food is the product of sound thinking. The factors of space, equipment and maintenance can be carefully integrated to produce a unit effective in design and operation. Polhemus representatives have a knack for thinking in terms of a sound working plan. Jobs that not only "look well, but work well."



ROSELLE, N. J.
Polhemus

representatives are prepared to assist you in problems of:

LAYOUT & PLANNING MANUFACTURE & INSTALLATION

Modern up to the minute ideas are employed against a background of half a century's experience in the kitchen equipment field. Consult us in your planning of commercial and institutional food serving facilities.

P. B. POLHEMUS CO., INC.
ROSELLE, NEW JERSEY

11 Park Place New York 7, N. Y.



CHARLES A. LAWRENCE was born, educated and now practices architecture in Seattle, Wash. He visited the east coast long enough to get a Master's degree from M. I. T. and work in New York for a short period. In 1943 he opened his present Seattle office doing residential, commercial and institutional work. His own house (p. 110) is typical of his designs.



CY WILLIAMS, who became famous on Colonial, has switched to modern in his most recent residential development, a group of C. I. homes in Roslyn, L. I. (p. 112). Builder Williams started as carpenter's helper with Richards Construction Co., rose in two years to be superintendent, quit to go into housebuilding for himself.



IGOR B. POLEVITSKY, who did the Weiss house (p. 114), was born in Russia but came to America at an early age and received his schooling here. Until 1941 he was in partnership with T. T. Russell, turning out approximately \$10 million worth of work, mainly commercial and apartment buildings. His present practice includes a greater percentage of residential work.



GEORGE NEMENY, designer of the Long Island development (p. 116), was born in Hungary, came to American in 1920, took his architectural training at Cornell University.

ARTHUR T. BROWN, architect for the Hull house (p. 119), worked for David Adler in Chicago and Richard Morse in Arizona before opening his own office in Tucson four years ago.



LESTER C. HAECKEL, a partner in the firm of Wm. B. Ittner Inc., designed the Broderick house (p. 119). A Master's degree in architecture from Washington University was followed by the James Harrison Steedman Traveling Fellowship and a job in Rabat, Morocco. During the war he did experimental work on jet airplanes for McDonnell Aircraft.



WILLIAM G. FARRINGTON is president of the company by the same name, a community development outfit currently building 175 veterans' homes at the rate of one a day (p. 120). Educated as an engineer at Oklahoma A. & M. and the University of Cincinnati, Farrington worked five years as a development engineer before organizing his own firm in 1931.



VAN EVERA BAILEY, architect of the Bayless house (p. 122), started his career as a shipyard draftsman in World War I, worked for a telephone company, a dredging outfit and an oil company in Texas before getting a job with an architect. He qualified for registration after several years of night school, set up his own office in 1932.



WHITNEY SMITH, young west coast architect who designed the Zwell house (p. 124), got his architectural training at the University of Southern California, worked in various Los Angeles offices before setting up his own practice in 1940. He has worked on several FPHA projects including San Diego's Linda Vista (FORUM, Sept. '40).



ELSA GIDONI was born in Riga, Latvia but lived most of her life in Berlin setting up her own office there in 1929. In 1933 she went to Palestine, opened an office in Tel-Aviv and practiced there until 1938 when she came to New York. The branch library (p. 127) is an example of her work for Kahn & Jacobs where she is now a designer.



ALONZO J. HARRIMAN, architect for the Pownal School (p. 128), has been a down-easter all his life. Born in Bath, Maine, he studied mechanical engineering at the University of Maine and labored in the Bath Iron Works before getting a job with an architect. He strayed as far afield as Harvard to study architecture, returned to Maine to practice.



EUGENE R. MEIER, architect for the Todd School (p. 128), has offices in St. Joseph, Missouri and Wichita, Kansas. His special interest is in school design.

NARAMORE, BAIN, BRADY & JOHANSON, designers of the doctor's clinic (p. 129), are active members of the Washington A.I.A. Naramore and Bain are both past presidents.



One native Texan, an Irishman and a Canadian make up the partnership of **FINN, CUMMINS & TAYLOR**, practicing in Houston. Taylor and Cummins are engineers, Finn an architect; their latest Naval Hospital (p. 130).

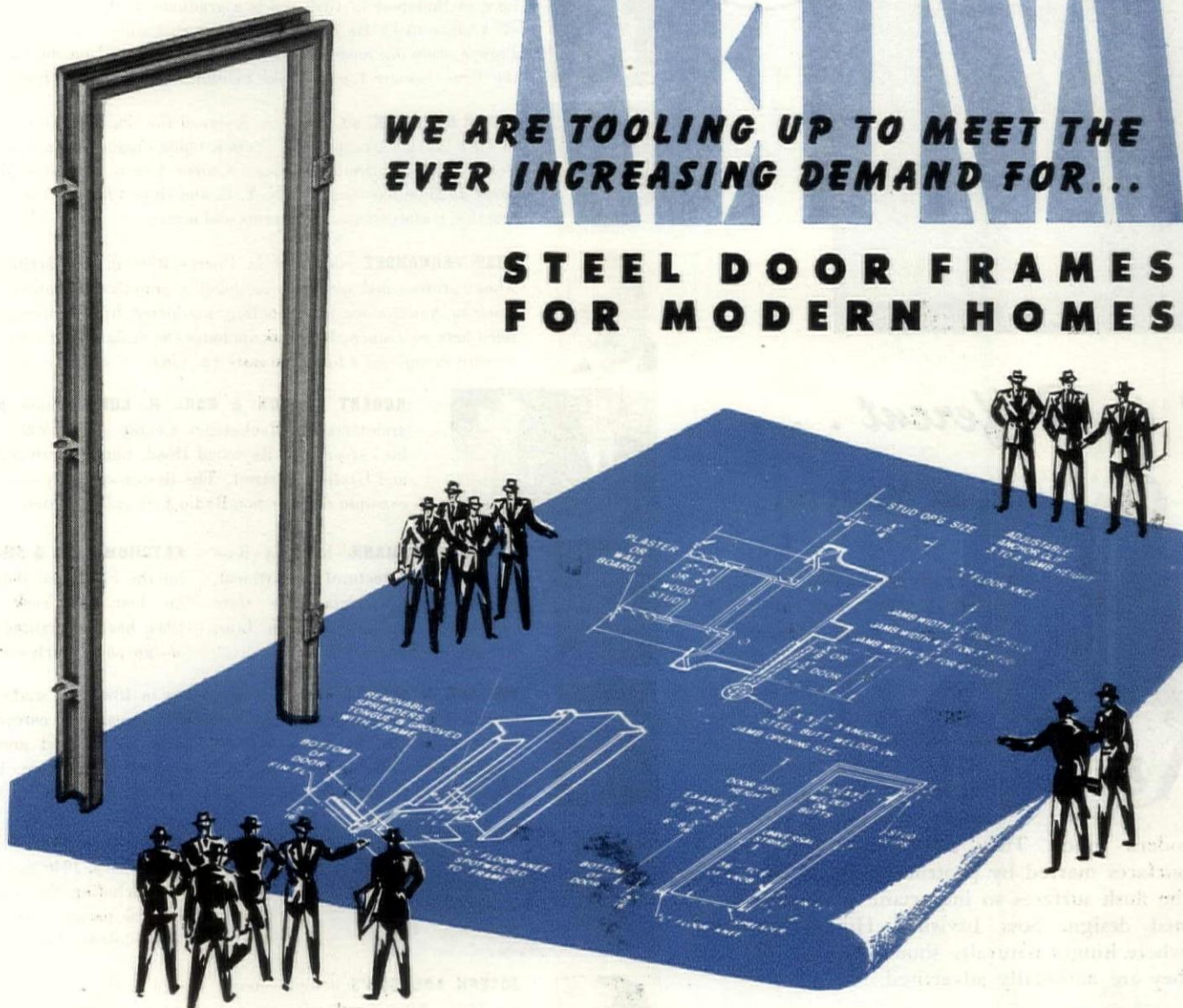
(Continued on page 70)

GOOD NEWS FOR 1947!



**WE ARE TOOLING UP TO MEET THE
EVER INCREASING DEMAND FOR...**

STEEL DOOR FRAMES FOR MODERN HOMES



THESE ADVANTAGES ACCOUNT FOR THE GREAT DEMAND

- **STRENGTH**—Welded to form a complete integral unit of jamb, head, and two sides trim; resulting in great strength.
- **RIGIDITY**—Being one complete integral unit, they will not warp or crack, and mitres will not open. Aetna Frames will not absorb moisture and swell, thus the size of the frame will not change.
- **SIZE**—Designed for 1 1/2" and 1 3/4" standard size doors.
- **PERMANENCY**—Will not chip or damage, eliminating costs and inconvenience of repairs.
- **FINISH**—Prime coated at the factory, saving one coat of paint.
- **HARDWARE**—Hinges are welded to frames at the factory, saving the cost of a pair of hinges and application. They are spaced to fit virtually all prefabricated doors. Bronze strike plate is furnished to fit most standardized bit key and tubular locks and latches.
- **LOW COST**—Cost less than wood jambs and trim installed.

Aetna Steel Door Frames, like many modern improvements in the construction field, will serve as a stimulant toward building activity. Aetna Frames are easy to erect requiring less handling at the building site, offer you mass production economy and simplify your supply problems.

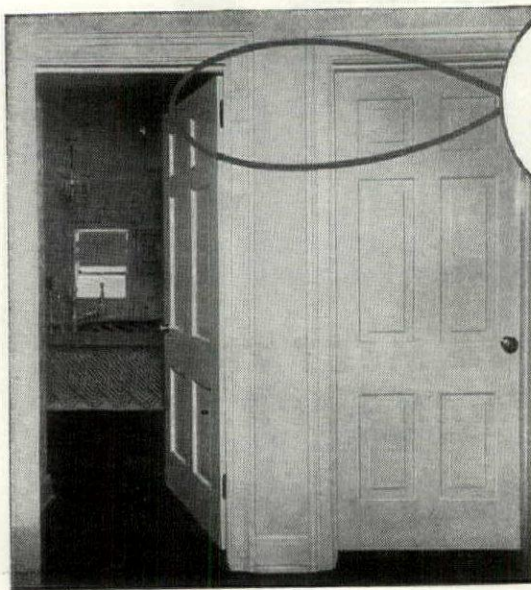
SEND FOR NEW AETNA STEEL DOOR FRAME FOLDER.



AETNA STEEL PRODUCTS CORPORATION

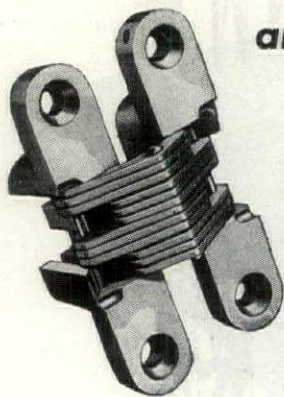
EXECUTIVE OFFICES: 61 Broadway, New York 6, N. Y. • PLANT: Pottsville, Pa.

Behind the scenes with FORUM contributors



The
SOSS
INVISIBLE
Hinge

"It is Different . . .
and so Modern!"



● How often you hear this remark when folks inspect a home where the doors, panels and cupboards have no hinges showing . . . in other words, when **SOSS INVISIBLE HINGES** are "on the job." These hinges give

THE modern touch. They eliminate unsightly broken surfaces marred by protruding butts, and permit the flush surfaces so important in modern streamlined design. Soss Invisible Hinges are located where hinges naturally should be—out of sight. They are nationally advertised.

Write for the Soss "Blue-Print Catalogue" giving full details of the many applications of this modern hinge. Free on request.

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



GRUEN & KRUMMECK, shop specialists, offer their newest Grayson store design (p. 133). Before forming their partnership seven years ago, Victor Gruen practiced architecture in Vienna and Elsie Krummeck did exhibition work, including jobs for both the Chicago and New York World's Fairs.



EUGENE BACK, designer of the New York men's wear shop (p. 134), was born in Budapest in 1899 and is a graduate of the Royal Hungarian College of Architecture. He has lived in America since 1921 except for a year in Europe studying modern architecture. He worked on the Chrysler building, the Times Square Lucky Strike exhibit and the Delman building.



SIMON B. ZELNIK, an Austrian, designed the Englishtown Cutlery show room in New York City (p. 135). Zelnik holds degrees from France's Ecole des Beaux Arts and from America's Cooper Union and New York University. Since 1928 he has taught at N. Y. U. and since 1932 has maintained a private practice, mainly shops, restaurants and homes.



JOSE FERNANDEZ was born in Puerto Rico of an "architectural family" whose professional members included a grandfather, father and uncle. He came to America for his schooling, graduated from Columbia and has practiced here ever since. His work includes the designing of furniture and he has recently completed a furniture store (p. 136).



ROBERT CARSON & EARL H. LUNDIN have been managing architects for Rockefeller Center since 1939. Carson started his career with Raymond Hood, Lundin with Smith, Hinchman and Grylls of Detroit. The Boston specialty shop (p. 137) is an example of their non-Radio City collaboration.



HERMAN NEUMANN, head of Ross Frankel's architectural department, designed the Virginia Dare store (p. 140). He was born in Linz, Austria, studied in Vienna.

KETCHUM, GINA & SHARP, architects for the Florsheim shop (p. 138), set up their New York partnership in 1944, have specialized in commercial design, particularly small retail shops.



RICHARD J. NEUTRA was born in Vienna in 1892 and studied at the Polytechnical College and the University of Vienna. His career has included lecturing at the Bauhaus, winning numerous national and international awards and authoring two books on American architecture. His latest completed design is the Kaiser-Fraser automobile building (p. 141).



The firm of **BERNINGER, HAAG & d'ENTREMONT** was formed in January, 1946 and has since completed 17 jobs including the Valentine Flower Shop (p. 141.) The partners are respectively natives of Alsace, Philadelphia and Nova Scotia.



JOSEPH ARONSON'S newest interior design is the Lionel Train show room (p. 142). Since graduating from Columbia in 1923 he has specialized in furniture design and custom-built interiors, working in his own studio-laboratory in New York. He started out designing period furniture, switched to modern in 1927 under the tutelage of Winold Reiss.



HERMAN SIEGEL, architect of the plastic shop in New York City (p. 143) is a native of Manhattan who took his training at C. C. N. Y. and New York University. During the war he worked for both Army and Navy doing such varied jobs as designing an officers' mess and repairing ships. Current work includes jobs in Florida, Mexico City and Syria.



BOLTON WHITE & GEORGE KOSMAK'S partnership is a recent one, formed when Kosmak traded New York for San Francisco. Current work includes homes, display rooms and commercial jobs such as the Dietz meat store (p. 145). Both partners studied at Columbia, White also at l'Ecole des Beaux Arts.

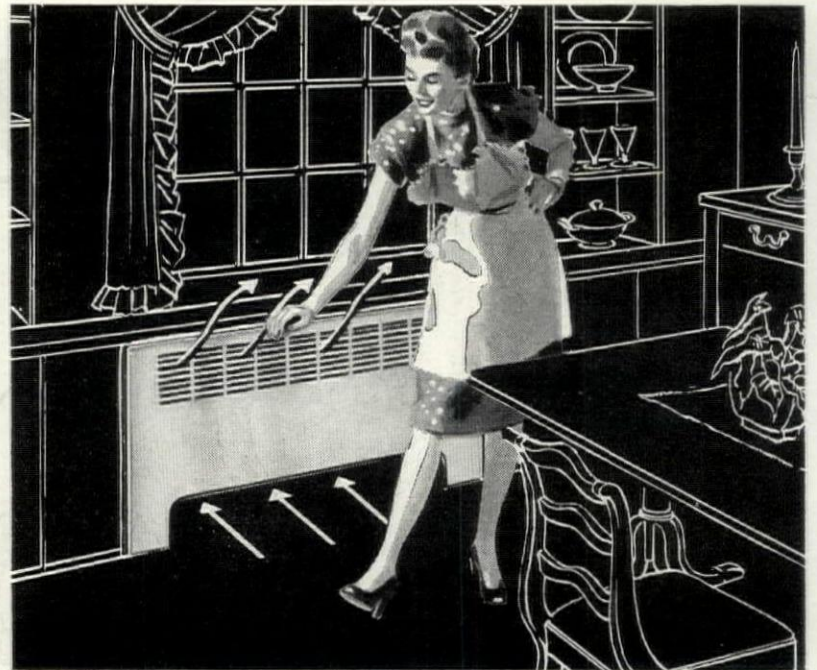


JOHN C. WARNECKE, 27, studied architecture at Stanford, spared enough time from the drafting board to play tackle on Stanford's immortal 1940 Rose Bowl Team. He went on to Harvard, thence to war housing and is now associated with his father's architectural office in Oakland, Calif. where he designed the camera shop (p. 146).

not just radiant heating . . .
not just convection heating . . .

BUT A BLENDED COMBINATION OF BOTH!

that's what Modine Convector Radiation offers you!



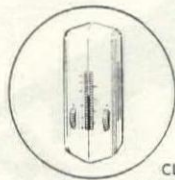
1 RADIANT HEATING
See those arrows coming from that Modine Convector Panel beneath the window? They represent *radiant heating* — mild, radiant heat in just enough quantity to offset heat loss from window areas. But that's not all . . .

2 CONVECTION HEATING
To this — Modine Convector Panels add *convection heating*. Hot water or steam, circulating through copper heating unit, draws floor-line air into bottom of convector where it's warmed, rises, and is then gently circulated through the room.

RESULT: Blended, combination heating for modern living comfort — that's what Modine Convector Radiation offers today's moderate cost homes and apartments! In addition, you get *individual* room control that responds almost instantaneously to sensitive automatic controls — plus gentle, continuous air circulation without the use of moving parts that wear out. Yes, the dependable heating comfort, distinctive charm, space-saving, and long service life of Modine Convector radiation is now available for your heating needs. Look for Modine's nearby representative in the "Where To Buy It" section of your phone book. Write for descriptive literature. MODINE MANUFACTURING COMPANY, 1736 Racine Street, Racine, Wisconsin.



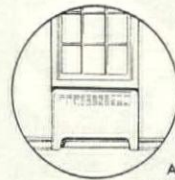
MODERN BEAUTY



CLOSE TEMPERATURE CONTROL



EASY TO INSTALL



ADDS TO LIVING SPACE



PRICED FOR TODAY'S HOMES AND APARTMENTS

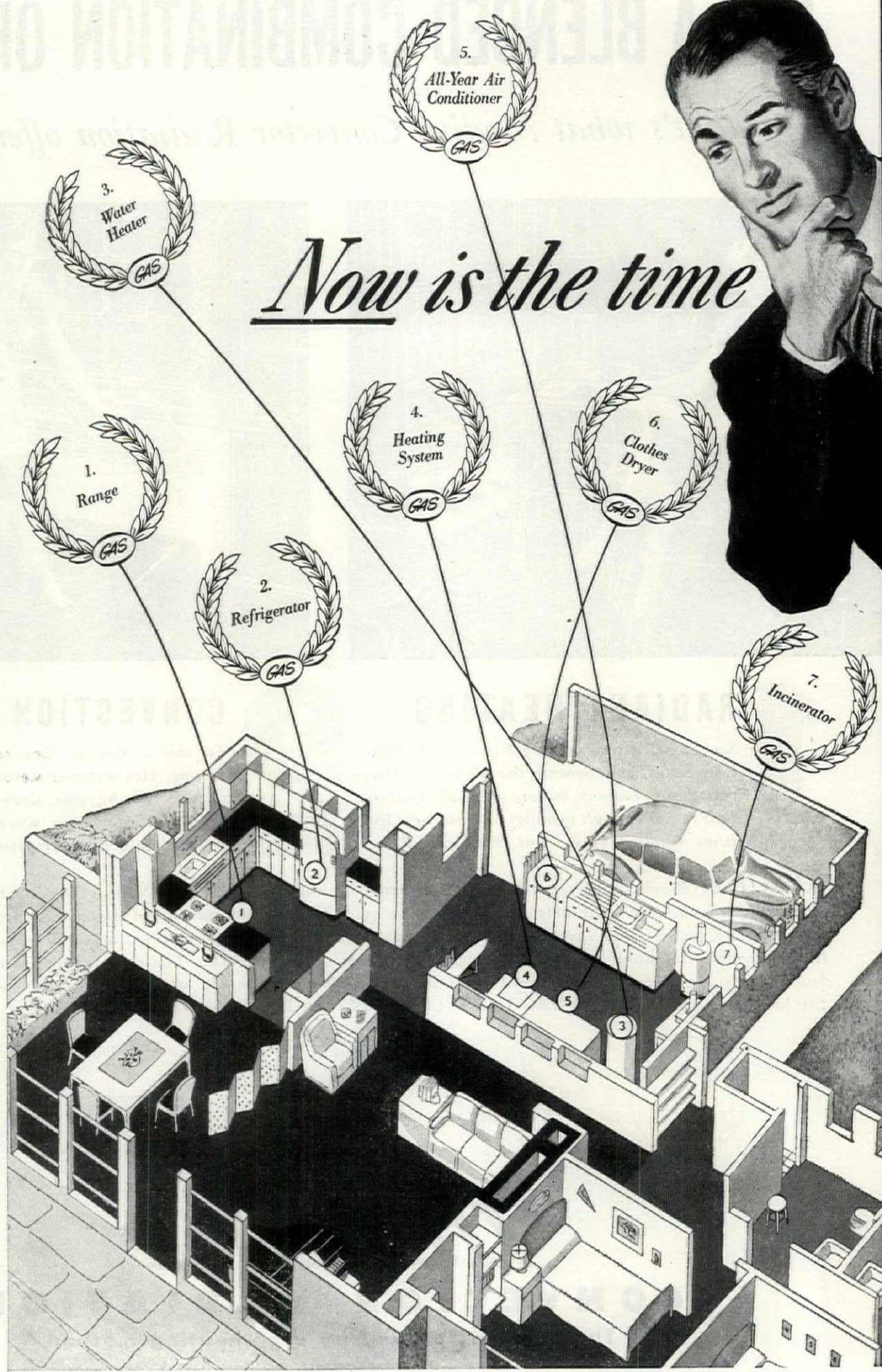
Modine
CONVECTOR RADIATION
The Modern "proved by use" heating method

... not just radiant heating...
... not just convection heating...

A BLENDING COMBINATION OF BOTH!



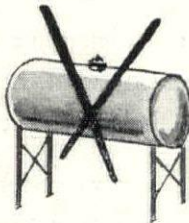
Now is the time



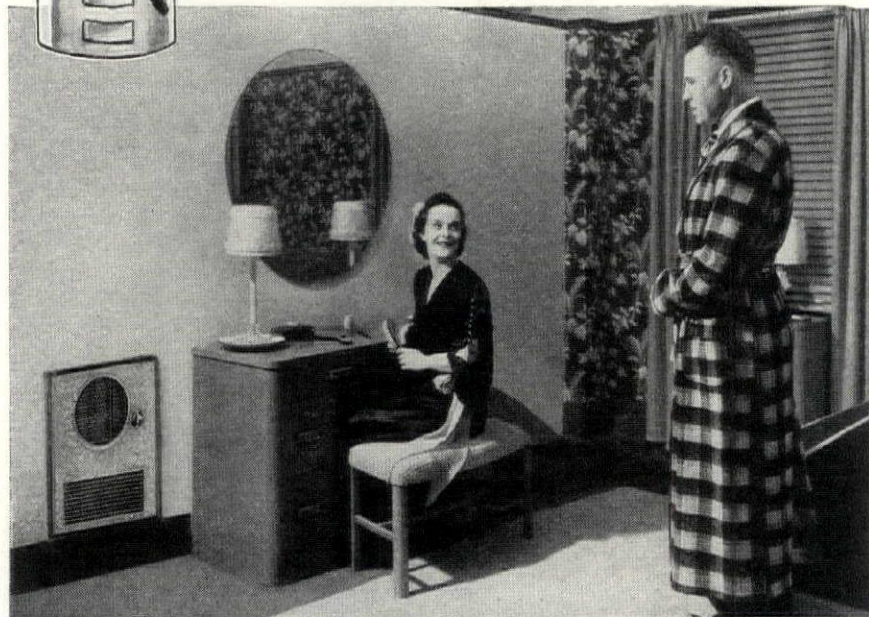
NO FUEL



NO FURNACE



NO DIRT



**HEAT BY WIRE
WITH ELECTROMODES**

In your new home or modernization program, plan to banish furnace chores, space-stealing heating plants and expensive installations. *Heat by wire* instead.

With Electromode all-electric Bilt-in-Wall Home Heating Units, you can enjoy safe, clean, instant heat, fan-circulated and automatically controlled for true economy and care-free heating comfort. These Units are equipped with the patented Electromode heating element, the resistor of which is embedded in a one-piece finned aluminum casting. This element is the same as used in Electromode Heaters for U. S. Submarines. It is free of fire, shock, or explosion hazards.

If you are planning a new home, Electromodes save the cost of a basement. If your plans call for modernizing, Electromode Electrical Heating will enable you to add useful room to your home by eliminating the need for a central heating plant.

ELECTROMODE CORPORATION, Rochester 3, N. Y.

ELECTROMODE
All-Electric
ROOM HEATERS

ARCHITECTS

This advertisement is one of a series appearing in National Magazines, bringing the story of Electromode Heaters to millions of prospective home-builders. New Brochure 46-D contains installation suggestions and helpful data. Write today.



THE NEW YORK CITY PUBLIC HOUSING PROGRAM recently started work on foundations for its fifth postwar project, the Jacob Riis Houses, which will be erected on the lower East side of Manhattan. These apartments, designed by James Mackenzie, Sidney Strauss and Walker & Gillette, will cost \$18,329,000 according to latest estimates, and when completed will provide 1,768 dwellings units.

A FORD MOTOR CO. ASSEMBLY PLANT, designed by Albert Kahn Associates, is now under construction at Metuchen, N. J. The \$8,500,000 project will include a one-story assembly building providing approximately 523,000 sq. ft. of floor space; an office building with a large display room and mezzanine section providing all employees' services; a boiler house; an oil and paint house; a test track for newly assembled cars and a six-acre parking lot. Air conditioning, soundproofing and indirect fluorescent lighting will be installed throughout the office portion of the building.

A GENERAL ELECTRIC CO. OFFICE BUILDING at West Lynn, Mass. has been begun by Turner Construction Co. The three-story steel and brick structure which will house GE's Motor Division is expected to be completed about June 1947.

A LOW-COST HOUSING RESEARCH PROJECT has been organized by Louisiana State University, Baton Rouge, to conduct scientific studies on new materials and developments and to inform the public of the impartial results of their experiments. Demonstration units will be erected to show methods of good construction to students, contractors and builders, particularly veterans who plan to enter the building field.

GHOST TOWN BLIGHT, caused by migration of rural talent and enterprise to cities from 82 per cent of U. S. counties, is being combatted in Montana by recently increased funds to expand the study project's staff and activities. Montana, which has lost almost 20 per cent of its population since Pearl Harbor, is attempting to bring adult education facilities to rural areas and to help small towns stabilize their economic life. It has been estimated that only one in ten U. S. college students returns to live in the small community from which he came.

THE JERSEY CITY PLANNING BOARD of New Jersey has engaged the firm of Churchill-Fulmer Associates to prepare a preliminary survey of the city, to include recommendations for the location of industry, land use and immediate steps toward physical improvement.

THE UNIVERSITY OF DENVER announces the opening of a School of Architecture—the first in the Colorado-Rocky Mountain region. Carl Feiss has been named director.

RAMSEY LABORATORIES of Cleveland, Ohio offers a specialized consulting service to architects engaged in designing dairy buildings. The Laboratories can prepare floor plans and layouts of processing equipment (not architectural drawings), as well as flow charts and isometric diagrams for sanitary milk piping.

(Continued on page 76)

Even in these times—when you could sell a grass hut to an Eskimo or an igloo to a Hottentot—it pays to build houses people really want. Pays . . . not only in immediate sales . . . but in long term prestige.

That is why so many foresighted architects and builders are turning exclusively to the all-Gas home.

to LOOK

For Gas is the fuel people know and prefer. It is the trusted "servant" of 91,000,000 Americans in 10,000 communities, today. And modern Gas service—with postwar Gas appliances—promises even *greater* ease,

comfort and efficiency, tomorrow.

to your Laurels!

Here are a few ways it adds to better living:

House heating with an automatic Gas furnace assures cozy warmth on the rawest winter day. Year-round Gas air-conditioning goes even farther — actually brings healthful comfort in every kind of weather. Hot water in abundance is provided for every need . . . with such economy and speed-of-recovery that it is eminently satisfactory to own both an automatic dishwasher and laundry. Silent Gas refrigeration keeps foods fresh for long periods—eliminates daily shopping trips. The automatically controlled Gas range prepares meals and turns itself off while the home-maker relaxes or attends to other duties. Incineration simplifies disposal of refuse. A Gas clothes-dryer makes laundering easy and rapid.

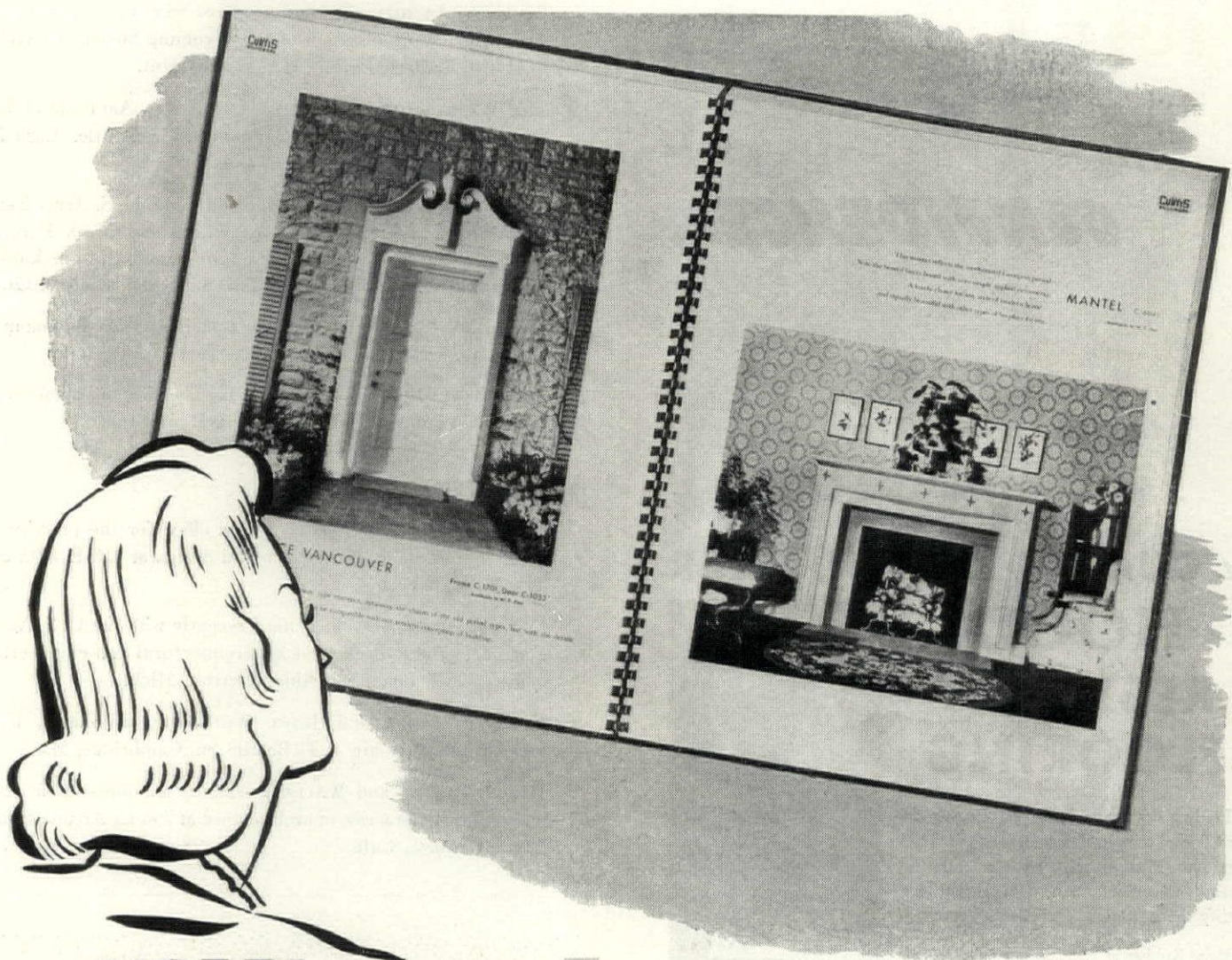
Yet with all this, Gas is economical! Both the initial cost of equipment and carrying charges are low. Mass production, due to volume demand, has resulted in high quality without high cost. And this superior quality *plus* freedom from mechanical wear means that appliances stay at their peak of efficiency for a much longer time. Add to that the well-known *economy of operation* and it is obvious why Gas is the best buy for any client's money.

Most important of all (from *your* point of view) . . . Gas appliances are designed compactly to save space. Space that often allows you to put in an extra room or cut down the outside dimensions. They reduce building costs further because they require only simple connections. And the attractive streamlined design of each of the seven Gas appliances (illustrated on the opposite page) is so recognizably *postwar* that they help sell a house on *sight!*

AMERICAN GAS ASSOCIATION



THE WONDER FLAME
THAT COOLS
AS WELL AS HEATS



NOW...

BETWEEN TWO COVERS

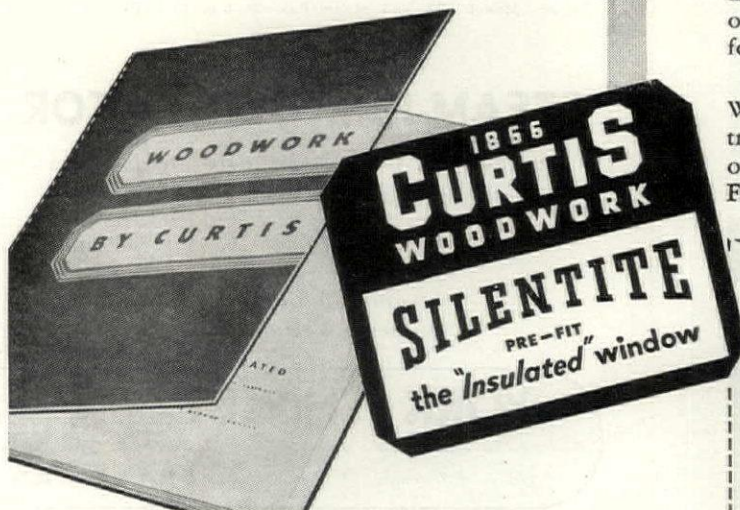
An Amazing "Showroom" of New Woodwork

**...NEW CURTIS WOODWORK
STYLE BOOK!**

You'll say you've never seen anything like it—once you examine this *new* Curtis Woodwork Style Book! Never before has any book presented woodwork so effectively . . . and so beautifully. For here, in big pages measuring 15 x 19 inches, are mantels—entrances, windows and doors—kitchens—china closets—stairways—and other woodwork in natural room settings and charming life-like colors.

The new Curtis Style Book contains scores of ideas for interior and exterior treatment, using Curtis Woodwork and the new Self-Fitting Silentite Windows. Outstanding decorators have contributed valuable suggestions to make this book a source of inspiration in planning and building any size home—and to make selection of woodwork easy for architect and builder as well as for the home-owner.

Have your Curtis dealer show you the big, new Curtis Woodwork Style Book which the whole building industry is talking about. And mail the coupon for literature on the new Curtis Woodwork line and the new Self-Fitting Silentite Windows.



Curtis Companies Service Bureau
AF-10B Curtis Building
Clinton, Iowa

Gentlemen: Please send me booklets on the new Curtis Woodwork and the new Silentite Window Line.

Name

Address

City State

ANNOUNCEMENTS



in QUALITY, DESIGN, WEAR HOOD RESILIENT FLOORING

Leading Architects, Designers and Decorators have complete confidence in Hood Resilient Flooring because its enduring quality, versatile patterns, and longer wear satisfy the most particular client.

Hood Rubber or Asphalt Tile is backed by 50 years of Hood manufacturing skill, combined with B. F. Goodrich leadership in research. A wide variety of colorful designs permits floors with *personality*... warm, interesting, attractive. Or you can design floors that are purely functional yet in keeping with the character of libraries, hospitals, department stores. In either case, these two famous Tiles are easier to clean, easier to walk on. *Super-Density* eliminates dirt-catching pores... resiliency absorbs shock and vibration.

With production on the increase, you should learn about the advantages of the Hood line and see why so many Architects specify "Hood" for the best in resilient flooring. See Sweet's or send for free color catalogs of Hood Rubber or Asphalt Tile... America's leader since 1925.



RUBBER & ASPHALT TILE FLOORING

WYOMING ARCHITECTS, after a recent meeting in Cheyenne, announce the organization of the Wyoming Society of Architects with Frederic Porter, AIA, as President.

THE WASHINGTON SOCIETY OF LANDSCAPE ARCHITECTS has been formed recently with headquarters in Seattle. Cash M. Beardsley has been elected President.

CHARLES FRANKLIN, formerly Lt. Col. in the U. S. Army Engineer Corps, has rejoined Ernest Kump and Mark Falk as partner in the architectural and engineering firm to be known as Franklin, Kump & Falk, 9 Main St., San Francisco, Calif.

WILL GRIFFIN, AIA, has become associated with Baumann & Baumann, architects, of Knoxville, Tenn.

The firm of Miller, Yeager & Vrydagh, wishes to be known as Miller & Vrydagh, architects, Terre Haute, Ind.

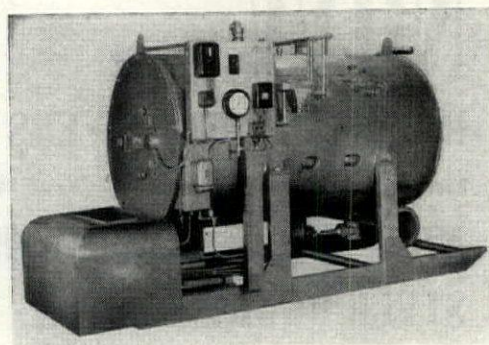
NEW OFFICES

MARCEL BREUER has opened a new office for the practice of architecture, planning research and design at 438 E. 88th St., New York 28, N. Y.

C. WILLIAM PALMER, AIA, until recently with the U. S. Navy, announces the reopening of his architectural and engineering office at 2675 Penobscot Bldg., Detroit, Mich.

EDWIN JOHNSON and JOHN WHITCOMB, architects, have formed a partnership at 44 Brattle St., Cambridge, Mass.

HENRY HOWELL and WALLACE ARENDT announce their association for the practice of architecture at 236 La Arcada Bldg., Santa Barbara, Calif. (Continued on page 78)



Model SPL-30-5 Steam-Pak—30 h.p. Low Pressure

When you own a STEAM-PAK GENERATOR

you own the finest steam generating system ever produced in the United States

Catalog ID-46-7G gives you complete specifications on the Steam-Pak line. It's yours upon request. Write today.

YORK SHIPLEY INCORPORATED

America's Most Complete Line—Industrial, Commercial, Domestic Oil-Fired Equipment
Industrial Division YORK • PENNSYLVANIA

MODERN, Expressed in Terms of

Windowalls



THE designer with a flair for modern line finds in Andersen Windowalls the perfect answer to fenestration needs. In their simplicity of structure, in their rigid adherence to the functional, Windowalls provide the contemporary designer with exactly what he demands. Andersen Windowalls perform both the functions of a window, in

that they open up a view and provide ventilation, and of a wall, in that they act as a barrier against inclement weather.

This bedroom installation, in a home designed by Joseph Douglas Weiss, architect, consists of a pair of Andersen Horizontal Gliding Windows, Unit Number 48040. For details, see Sweet's Catalog.

Andersen Corporation • BAYPORT • MINNESOTA

ADIRONDACK PREFABRICATED HOMES...



PGH. PREFABRICATED HOUSING CO.
417 Westwood
Pittsburgh 21, Pa.
Phone PA. 6931
July 17, 1946

Mr. Harry Levy
Adirondack Log Cabin Co.,
New York.

Dear Mr. Levy:

We have just unloaded Mr. Fischel's house. It was the best and the most perfect building we have received so far. There wasn't any damage to the house in shipping. The car was packed perfectly. If our future buildings come like this one we will sell more houses than you will be able to deliver. The house came from Richmond and sure was a beauty.

Trusting all our houses will be as satisfactory as this one.

Yours very truly,
J. J. [Signature]
Pgh. Prefabricated Housing Co.

WE DON'T HAVE TO BLOW OUR OWN HORN!

Adirondack Log Cabin Co.
143 East 45th Street
New York 17, N. Y.

300 Westwood Street
Pittsburgh 12, Pa.
July 29, 1946

Attention: Mr. J. Hart

Dear Jerry:

I received two houses on my order of ten and they were in perfect order. Thanks a million for a swell job. Please rush the balance as soon as possible. I hope to place an additional order for five or six more next week.

As we agreed, you'll finish my original order of thirteen "50" and thereafter, it will be type "70" homes. I'm working on another project of sixteen homes—these will be the five room jobs. Will keep you advised as each balance of present order.

Very truly yours,
Tom J. [Signature]
Louis L. Goldman

WESTERN UNION

WE WILL DELIVER YOUR MESSAGE IN THE MOST RELIABLE AND EFFICIENT MANNER. WE WILL DELIVER YOUR MESSAGE IN THE MOST RELIABLE AND EFFICIENT MANNER. WE WILL DELIVER YOUR MESSAGE IN THE MOST RELIABLE AND EFFICIENT MANNER.

Read what they say about our product. Boiled down here are extracts from some of their letters and telegrams:

- "The construction so far as I can see is without doubt the finest that can be put into a home, whether prefabricated or custom built."
A. H. Scherer
- "My five-room house is a sweetheart! It looks swell."
Robert F. McCann
- "Purchaser more than pleased."
Charles Bromin
- "Loan Association officials, contractors and purchasers declare the house the best job ever!"
Milton Elrod
- "Received two houses of my order for 10. They were in perfect order. Thanks a million for a swell job!"
Lewis L. Goldman
- "Just unloaded Mr. Fischel's house. It was the best and most perfect building we have received so far!"
Pgh. Prefab Housing Co.

This is what our dealers and purchasers are writing and wiring us. They are remarkably enthusiastic about our new Adirondack Prefabricated Cape Cod Colonial homes.

We are currently producing and shipping by rail and trailer truck, 4-5-6 room homes under plans approved by the National Housing Agency. These buildings will pass the average local codes and are eligible for issuance of HH priorities. Production is rapid and adequate and sizable orders can currently be accepted for quick shipment. We invite your visit to our New York office and inspection of our plant facilities.

We know that we have the right product at the right prices. New designs for 1½ story houses are being completed.

AVAILABLE FOR QUICK DELIVERY

Telephone... wire... or write for appointment.

ADIRONDACK LOG CABIN CO., INC.

143 EAST 45th STREET NEW YORK 17, NEW YORK

Affiliated with the UNITED STATES PREFAB CORP.

We are desirous of procuring additional sources of supply on large volume purchase of quality lumber, hardware, etc. Welcome letters from individuals or groups interested in exclusive arrangements.

ECKBO, ROYSTON & WILLIAMS, planning consultants and landscape architects, have established an office at Sunset Fields Golf Club, 3701 Stocker St., Los Angeles 43, Calif.

DON HATCH has reopened his office for the practice of architecture at 207 E. 32d St., New York, N. Y. after duty with the U. S. Marine Corps.

RAYMOND BROWN, JR. has opened an office for the general practice of architecture at 60 Main St., Torrington, Conn.

MILTON SHERMAN, architect, has reopened his office at 2 Park Ave., New York, N. Y.

THORNE SHERWOOD, AIA, WILLIS MILLS, AIA, and LESTER SMITH, AIA, have formed a partnership in architecture and associated fields of design with offices located at 101 Park Ave., New York and also at 4 South St., Stamford, Conn.

OSCAR POOL, AIA, formerly with the Army Engineer Corps, has resumed practice at 618 E. 48th St., Indianapolis, Ind.

JOSEPH PALMA, JR. has opened a studio for architecture and product design at 6831 W. 34th St., Berwyn, Ill.

THOMAS WORCESTER, INC., a new firm to provide complete service of engineering, architecture and construction, is now located at 84 State St., Boston 9, Mass.

J. LAWRENCE HOPP, AIA, has resumed architectural practice at 654 Washington Rd., Mt. Lebanon, Pittsburgh, Pa.

THEODORE HARTMAN and STANLEY HOWE have formed a new architectural office at 1518 11th St., Monroe, Wisc.

RAYMOND MARLIER, LAWRENCE WOLFE and B. KENNETH JOHNSTONE announce their partnership for the practice of architecture with offices in the Empire Bldg., Pittsburgh, Pa.

MARIE FROMMER, R.A. has reopened her office at 140 West 57th St., New York 19, N. Y.

(Continued on page 82)

SAVE time, weight, costs USE MIRACLE!

MIRACLE is a quick-setting, war-tested, "on-the-job" adhesive requiring no heat or pressure to effect a lasting, waterproof, flexible bond. With it you can install metal, glass, tile, cork, plastics and wood without nails, screws, bolts or other disfiguring fasteners.

One example: Miracle bonds tile direct to plaster, metal, concrete or any strong rigid base. Speeds work. Eliminates dust and dirt. Saves dead weight—15 lbs. (1½ gal.) of Miracle does the work of 1000 lbs. of lath and mortar.



For other uses and full information write to Miracle Adhesives Corporation, 852 Clinton Ave., Newark 8, N. J.



Miracle ADHESIVES

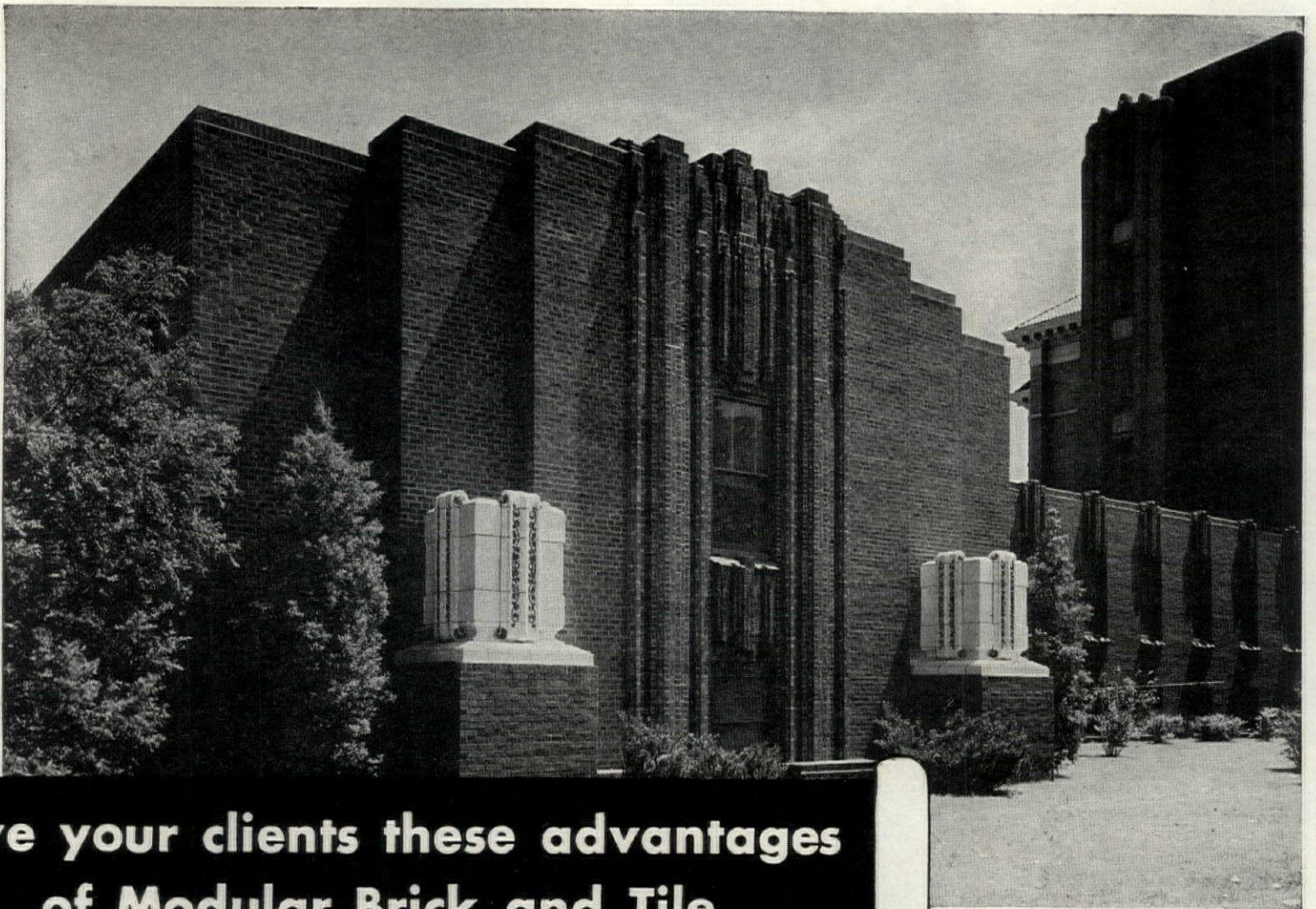


PHOTO BY HYSKELL DENVER

Give your clients these advantages of Modular Brick and Tile

Today the emphasis is on essential building—apartment houses, hospitals, schools, homes for veterans and factories necessary to the national economy.

But there is no less emphasis on quality and economy in design and structure. These, too, are essential.

As you design essential buildings, specify brick and tile of coordinated dimensions. Your clients will gain the advantages of simplified planning and estimating—versatility of design—low first cost—economy in upkeep and maintenance—strength of structure—permanence—fire-safety—and beauty.

Some of these features are inherent in brick

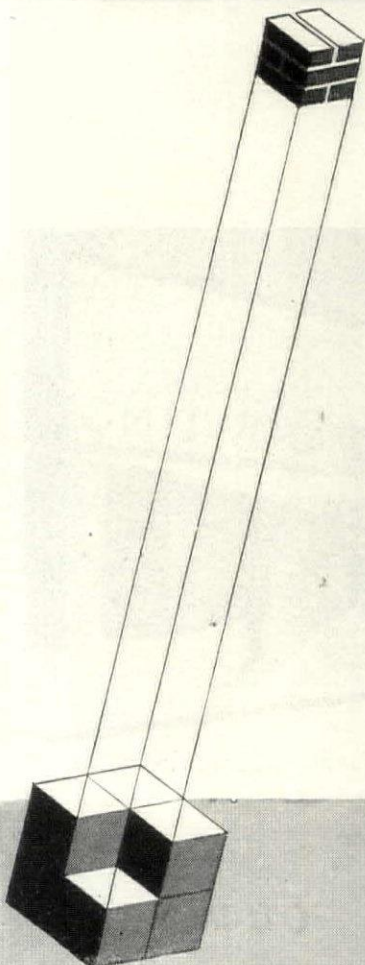
and tile. Others are the result of industry-wide adoption of modular sizes and constant research to improve materials long known for their high quality.

For your own satisfaction—and your client's—recommend brick and tile of coordinated dimensions.

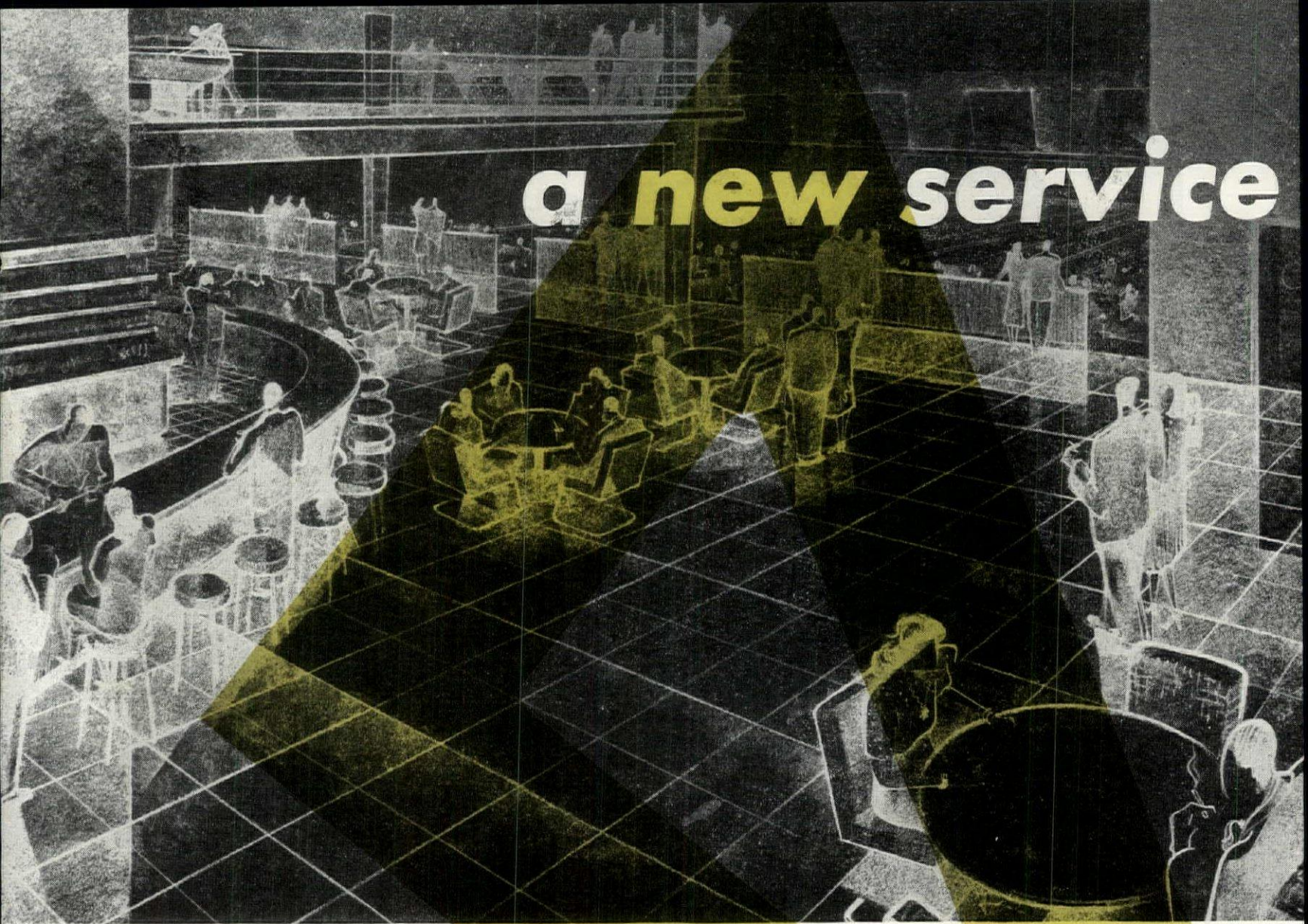
Architects are invited to write for two FREE booklets. One, "Modular Sizes of Brick and Tile," for those desiring to use these sizes in current design, and the other, "The ABC of Modular Masonry," for those interested in the development of coordinated dimensions. For either or both write the Structural Clay Products Institute, Dept. AF-10, 1756 K Street, N. W., Washington 6, D. C.



NOW IT WILL BE BUILT WITH MODULAR-DESIGNED
BRICK AND TILE



a new service

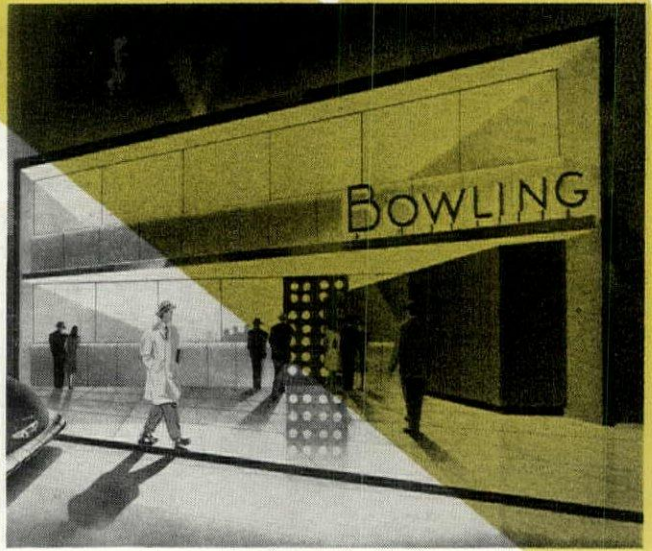


...of the building... with...
...and...
...of...



Photograph by Fabian Bachrach

Edgar Lynch, Architect, directs activities of the new Brunswick Architectural Research Department. In practice since 1929, he interrupted a noteworthy career as architect and consultant to outstanding Chicago and New York business and realty firms, to collaborate with Donald Deskey Associates on the original concept of this Brunswick service.



THE BRUNSWICK - BALKE - COLLENDER COMPANY

623 South Wabash Avenue • Chicago 5, Illinois

to architects

Brunswick OFFERS SPECIALIZED

DESIGN ASSISTANCE FOR COMMERCIAL

RECREATIONAL PROJECTS...

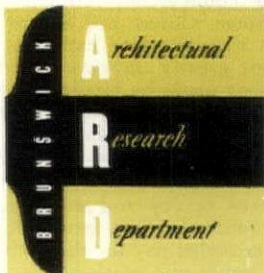
Today more and more business and investment capital is flowing into commercial recreation. Aware of the important profit opportunities in our 'round, indoor participant sports, many alert business men are planning to establish bowling and billiard recreational centers.


Such planning creates the need for competent *architectural* assistance—offers rich opportunity for every qualified member of the architectural profession.

Because Brunswick equipment has been and will continue to be first choice for indoor participant sports, we have established the Brunswick Architectural Research Department under the direction of Architect Edgar Lynch.

Mr. Lynch and his staff associates have prepared suggested plans for recreational projects that can be adapted to almost any financial appropriation, ground plot, or present commercial building.

This service is yours, without expense or obligation. To utilize it to your own best advantage, use the coupon below for explanatory literature on the different plan suggestions now available.



MAIL THIS COUPON TODAY! 

THE BRUNSWICK-BALKE-COLLENDER CO.
623 So. Wabash Ave., Chicago 5, Illinois
Please send complete information on Brunswick
Architectural Research services available to me with-
out charge.

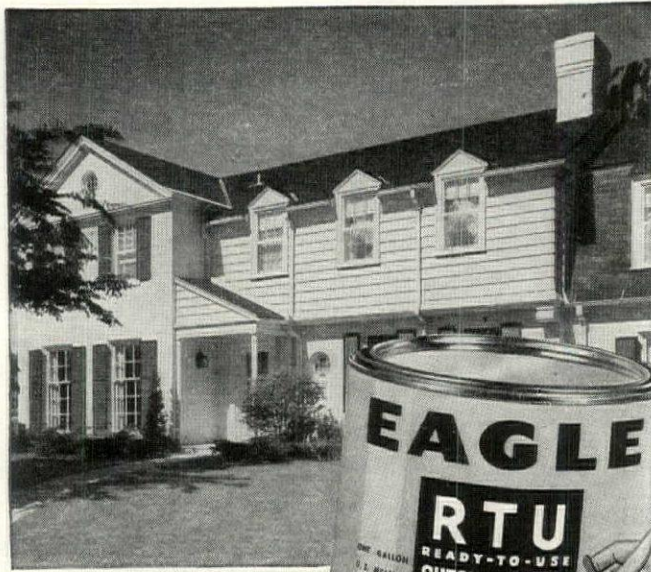
Name.....

Address.....

City & State.....

(Please attach to your professional letterhead)

ANNOUNCEMENTS



Ralph Stuetzel, Architect

*"Easy does it"
when you specify*

EAGLE Ready-To-Use WHITE LEAD PAINT

Here's a paint with a new plus—*greater brushability*. It gives better, more even coverage—leaves practically no brush marks. It's a more satisfactory paint for home owners, easier for painters to use. The velvety smoothness of Eagle RTU is a triumph of Eagler-Picher research.

From the original white lead formula

Master architects and builders recognize that for 2000 years white lead has had no equal for durability, beauty and economy. Eagle Ready-To-Use White Lead Paint retains the qualities that made white lead famous and adds new convenience. It is ready to open, stir and apply. This marvelous paint will give stalwart protection to the surfaces of your buildings. It dries to a whiter white, doesn't crack or scale, but "breathes" with the surface. It ages gracefully by even chalking. It is being made available as rapidly as possible. Two forms: Primer Sealer and Outside White. One, two, and five gallon pails.

THE EAGLE-PICHER COMPANY

Cincinnati (1), Ohio

Member of the Lead Industries Association



ARTHUR FEHR, AIA, and CHARLES GRANGER, AIA, have reopened their office for architecture and urban planning at 502 East Fifth, Austin, Tex.

S. PORTER GRAVES, JR. and WALTER TOY, JR. announce the opening of their office for the general practice of architecture at 1100 S. Clarkson St., Charlotte, N. C.

GUY PANERO is official successor to the firm of Clyde Place, consulting engineers, and is directing the organization at its former office in the Graybar Bldg., New York, N. Y.

APPOINTMENTS

RICHARD TATLOW has been elected president of Abbott, Merkt & Co., New York, designers of industrial and store buildings.

DAVID GIDEON, formerly Lt. Col. in the U. S. Corps of Engineers, is now General Manager of Mendelsohn, Dinwiddie & Hill, architects, of San Francisco, Calif.

WALLACE MACDONALD has been appointed executive-in-charge of the Yakima Central office of John Maloney, architect, of Seattle and Yakima.

CHANGES OF ADDRESS

GEORGE EBELING, R.A., announces the removal of his office to Suite 234, Colonial Arcade Bldg., Cleveland 15, Ohio.

PAUL T. FRANKL ASSOCIATES, industrial and interior designers (formerly Frankl Galleries), have opened new offices at 306 North Doheny Drive, Los Angeles 36, Calif.

WILLIAM SHINDERMAN, architect, has moved his offices to Suite M-206, 203 N. Wabash Ave., Chicago 1, Ill.

WILLIAM SCHORN ASSOCIATES, INC. announce that their office has been moved to 198 Broadway, New York, N. Y.

DONALD GOSS, architect, is now located at 131 State St., Boston, Mass. (Continued on page 86)

Add Comfort, Save Fuel
with
CHAMBERLIN
Metal Weather Strips

A Complete, Nationally Available Service for Architects, Contractors and Building Owners

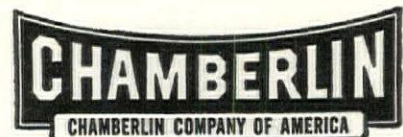
Chamberlin offers a complete, factory-installed Metal Weather Strip Service for commercial, residential, institutional and industrial buildings. Oldest and largest weather strip service in the world with 50 years' experience. Chamberlin Metal Weather Strips greatly improve storm window efficiency. All installations made by factory-trained mechanics, working under close factory-branch supervision. Proper installation is half the job and Chamberlin does it right. Chamberlin men study your needs as they would their own.

Free Survey—For free survey and estimate, call nearest Chamberlin office or write factory. Chamberlin Metal Weather Strips pay for themselves in fuel saved. Ask for further information today.



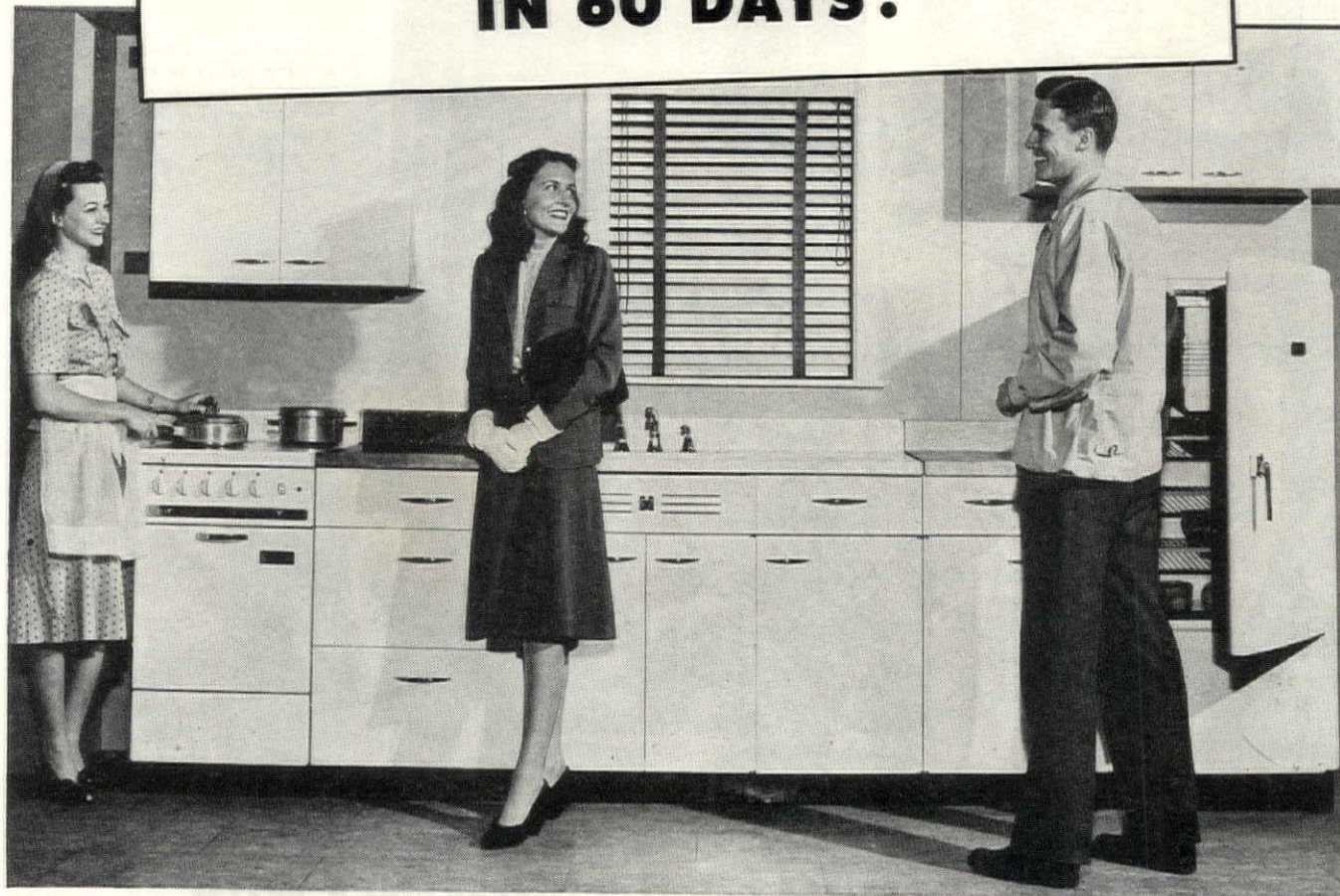
See insert in Sweet's Catalog

Similar Service also available on Insulation, Calking, Storm Windows and Screens



1350 LaBrosse Street • Detroit 26, Michigan

1000 G.I. KITCHENS SOLD IN 60 DAYS!



America's builders share in success of HOTPOINT PLAN; *proof of huge demand for All-Electric kitchens*

BUILDERS everywhere were besieged with calls when Hotpoint's HERE TODAY KITCHEN program was announced June 10. One thousand complete electric kitchens, allocated especially for veterans' homes, were sold within 60 days! Calls for additional units are received daily.

This is further evidence of Hotpoint leadership in the home appliance field. And sharing benefits with prospective G. I. home owners are the builders of America. Hotpoint quality kitchens, plus both national and local publicity enhance their reputation and aid them in securing their place in the home building boom yet to come.

HOTPOINT REGIONAL SALES OFFICES

570 Lexington Ave., New York City 22,
Plaza 3-9333; 304 Red Rock Building,
Atlanta 3, Walnut 2959; 1456 Mer-
chandise Mart, Chicago 54, Superior
1174; Western Merchandise Mart, 1355
Market Street, San Francisco 3,
Underhill 2727

In most states, all Hotpoint kitchen equipment can be included
in F. H. A. insured mortgages

Hotpoint
ELECTRIC KITCHENS
DEPENDABILITY ASSURED BY
40 YEARS EXPERIENCE



Refrigerator



Range



Water Heaters



Home Freezers



Clothes Washers



Flat Plate Ironers



Clothes Dryers



Dishwashers



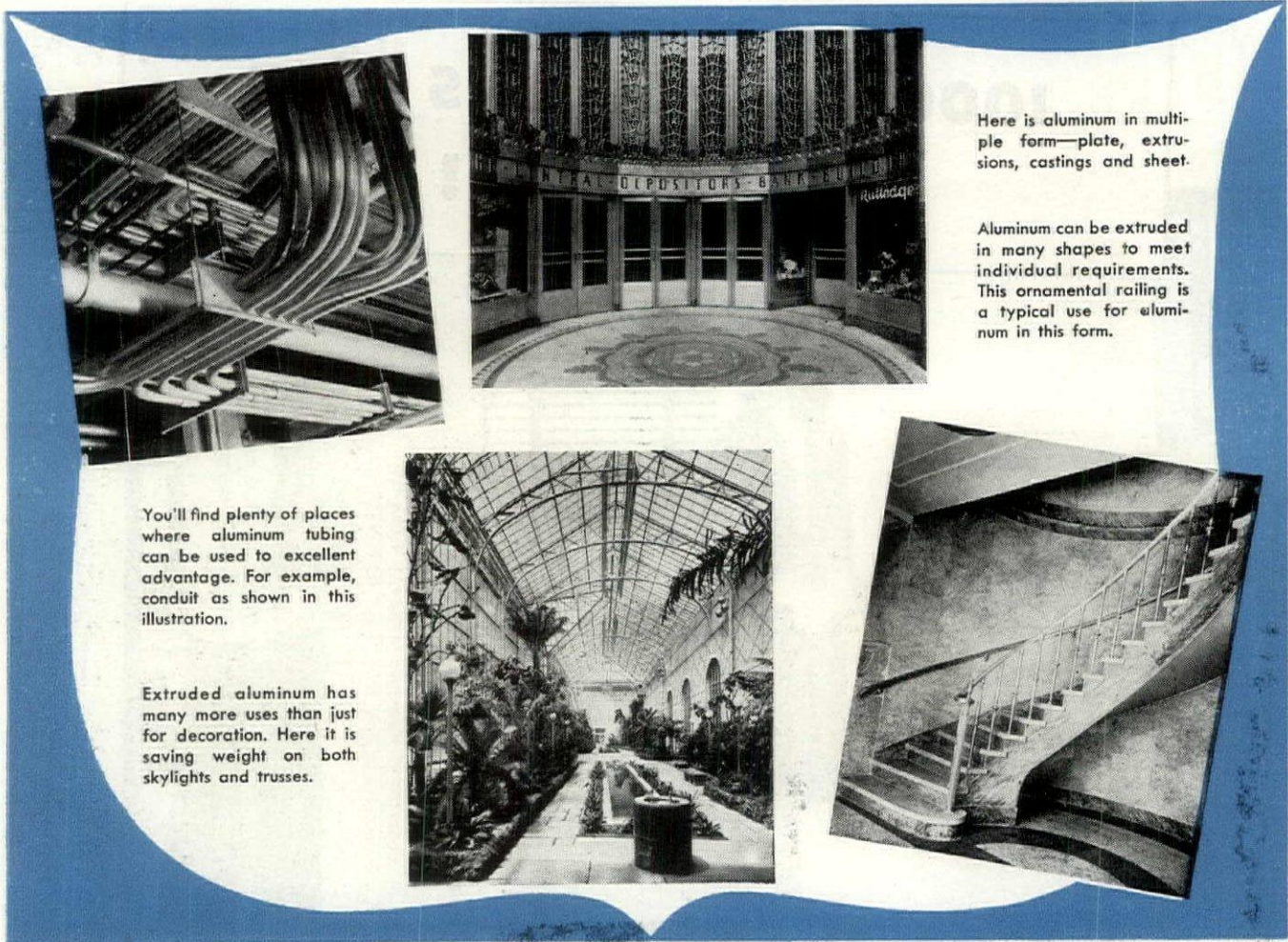
Disposals



Cabinet-Sinks



Stool Cabinets



Here is aluminum in multiple form—plate, extrusions, castings and sheet.

Aluminum can be extruded in many shapes to meet individual requirements. This ornamental railing is a typical use for aluminum in this form.

You'll find plenty of places where aluminum tubing can be used to excellent advantage. For example, conduit as shown in this illustration.

Extruded aluminum has many more uses than just for decoration. Here it is saving weight on both skylights and trusses.

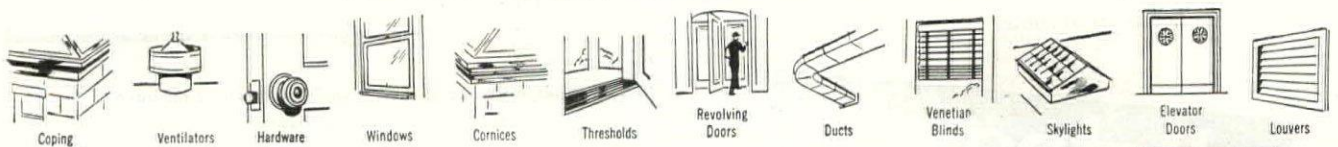
SHAPE OR FORM MAKES NO DIFFERENCE WITH

Alcoa Aluminum

This is another outstanding advantage of Alcoa Aluminum. No matter where you decide to use it, you will never be handicapped by form or shape. Alcoa Aluminum can be rolled, drawn, spun, forged, cast, extruded, machined

and welded. Aluminum will be ready to go to work for you in any form or shape you need on your future buildings. ALUMINUM COMPANY OF AMERICA, 1866 Gulf Building, Pittsburgh 19, Pennsylvania.

THE MOST VERSATILE OF ALL BUILDING MATERIALS



ALCOA FIRST IN ALUMINUM



IN EVERY COMMERCIAL FORM

THERE IS A NEW TREND IN STORE DESIGN



PIETRO BELLUSCHI'S conception of a Shoe Store

"The design for this shoe store was conceived as an effort to exploit, in a more definite and organic way, the idea of the open front. This same idea has in many cases fallen short of success, because the attention of the on-looker was divided and confused between an interior which was not designed to be seen from the sidewalk, and an exterior front which hated to lose its identity.

"It seems that a thoughtful use of glass, and a carefully laid out interior would show the inherent possibilities of the open front plan, and its probable impact as an advertising medium".

P. Belluschi
Architect



MANY prominent architects include Pittsburgh Products in their specifications. They have found that Pittsburgh Glass and Pittco Store Front Metal assure faithful execution of their designs—as well as maximum eye-appeal and sales personality in the finished stores.

Through our advertising in 23 leading retail magazines, we are urging retail merchants to consult their architects now, to build new sales-power into their stores.

A nation-wide system of "Pittsburgh" branches and dealers is ready to give you prompt and helpful service on Pittsburgh Products for store fronts and interiors.

"PITTSBURGH" STORE FRONTS and INTERIORS



"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

SEND FOR
THIS FREE BOOK



It contains photographs of store fronts and interiors — representing practically all kinds of business, in all parts of the country — selected from the thousands that have been remodeled with Pittsburgh Glass and Pittco Store Front Metal. Send in the convenient coupon for your free copy of this up-to-date book of ideas, "How Eye-Appeal — Inside and Out — Increases Retail Sales".

Pittsburgh Plate Glass Company
2346-6 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, a free copy of the book, "How Eye-Appeal—Inside and Out—Increases Retail Sales".

Name _____

Address _____

City _____ State _____

ANNOUNCEMENTS

WALTER JACOBS, architect, is now located at 1170 Broadway, New York, N. Y.

BODIN & LAMBERSON, architects, have moved their offices to 827 Forsyth Bldg., Atlanta, Ga.

MAX MERCER, AIA, has transferred his office to the Little Theater Bldg., Yellow Springs, Ohio.

DIED

CHARLES LANDERS, civil engineer, an expert on foundation constructions, at his home in New York City. Mr. Landers acted as consultant on the Equitable Building and American Telephone and Telegraph Building as well as other important New York structures, most recent of which was the Stuyvesant Town housing project.

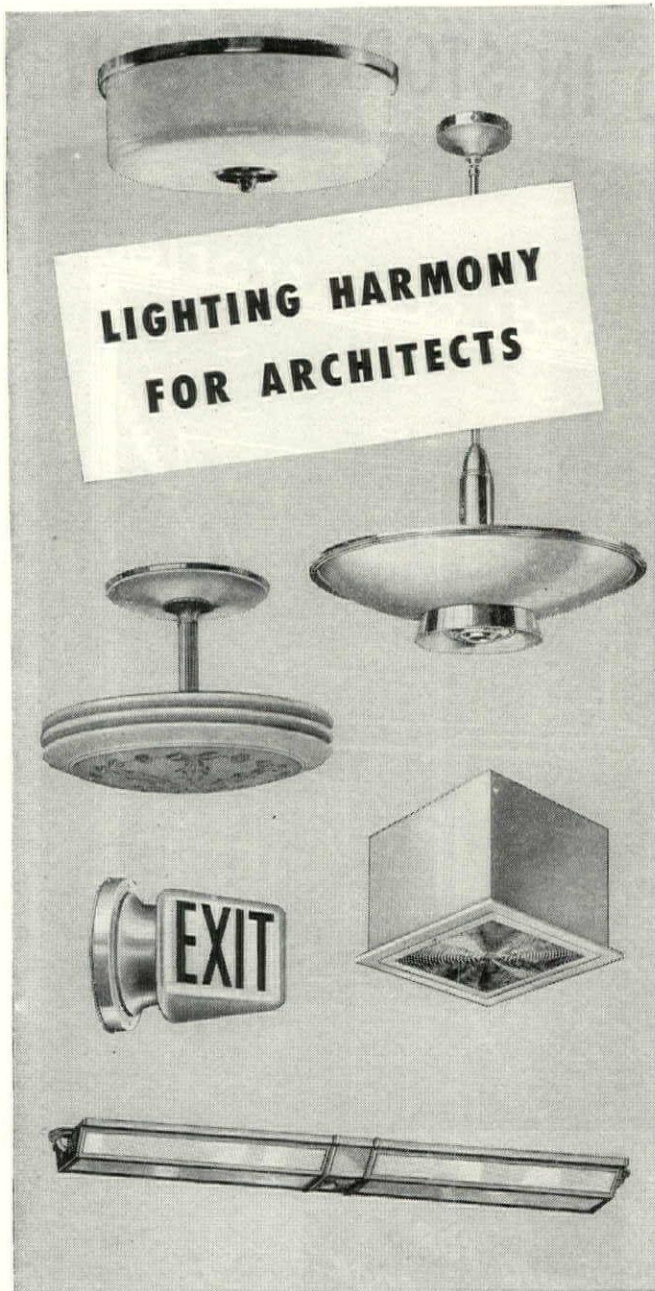
STANLEY ROUSH, Pittsburgh architect and designer of bridges. As architect for the city of Pittsburgh and the County of Allegheny, Mr. Roush designed many county and state institutions and industrial buildings.

CHARLES BEERSMAN, Connecticut architect, an associate of Fellheimer & Wagner of New York. Mr. Beersman designed such well-known structures as the Missouri State Capitol, the Cleveland and Chicago Union Stations, Wrigley Building in Chicago and the Strauss Building in Cleveland.

CORRECTIONS

Design of the precast concrete warehouse at Mechanicsburg, Pa. described in the July Products & Practice section, p. 197, should have been credited to Mr. A. Amirikian, Head Engineer, Bureau of Yards and Docks, Navy Department.

The interior design of the Washington House lobby, shown on page 87 of the August FORUM, should have been credited to Eugene Schoen & Sons of New York City.



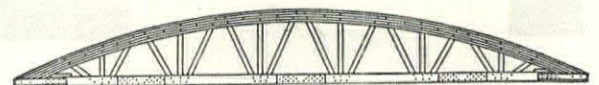
In the new Art Metal line are fixtures engineered for lighting performance, designed for lighting harmony. Down to the last detail—Art Metal designers and engineers have planned related lighting so that an architect can specify and his clients enjoy complete lighting harmony—not only in work or traffic areas but in vital secondary areas, corridors, exits, and similar locations as well.

From Art Metal—as a single source—the architect can obtain related filament and fluorescent fixtures for modern lighting plus DISINFECTAIRE Ultra-violet Germicidal Equipment for the Electronic Air Disinfection of stores, plants, schools, hospitals, and homes. There's an Art Metal field man near you—or complete information available at . . .

THE ART METAL COMPANY

Manufacturers of Engineered Lighting and Ultraviolet Equipment

1814 EAST 40TH STREET • CLEVELAND 3 • OHIO



Got a TRUSS problem?

Why worry about truss problems in your building? Save time and money by submitting them to experienced AMERICAN TRUSS engineers. For, when you "buy American," you get the benefit of expert technical skill, born of over 25 years experience in building fine trusses.

You'll find that AMERICAN trusses span distances up to 150' safely, economically . . . easily meet your *needs* and your *budget*. That is why so many leading architects and contractors today *insist* on AMERICAN TRUSSES *every time*. For they *know* that AMERICAN is a *truss* you can *trust*. So, why not send us *your* problem *today*?

AMERICAN ROOF TRUSS CO.

6850 Stony Island Ave., Chicago 49, Ill.
Plaza 1772

DUST-STOP Air Filters used in Dual heating system

In the new Benjamin Electric Manufacturing Company Laboratory at Des Plaines, Illinois, the heating system employs both radiant floor coils and warm air from the air-conditioning system during the heating cycle. The dual system, according to its designer, combines the best features of both types of heating, while keeping the cost of the radiant portion to a minimum.

DUST-STOP Air Filters are used in this modern commercial heating and ventilating system. The DUST-STOP is a replaceable type air filter. Packs of adhesive-coated Fiberglas fibers provide an efficient medium for catching and holding most atmospheric and manufactured dusts.

Be sure to have complete information on DUST-STOP Air Filters for new or existing systems. Write for booklet "Air Filtration in Central Systems" (A5.2.1) Owens-Corning Fiberglas Corporation, Dept. 830, Toledo 1, O.

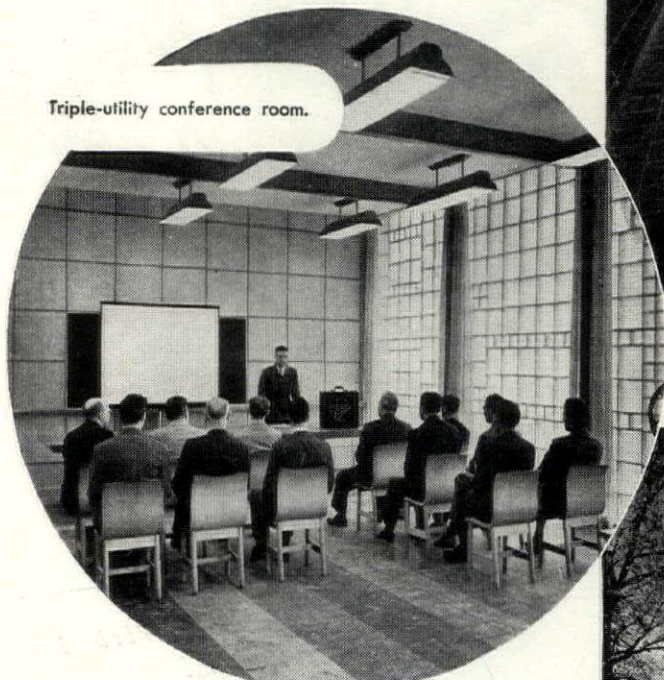
In Canada: Fiberglas Canada Ltd., Toronto, Ontario

Perkins & Will, architects-engineers. E. R. Gritschke, mech. eng.
All photos by Hedrick-Blessing Studio.



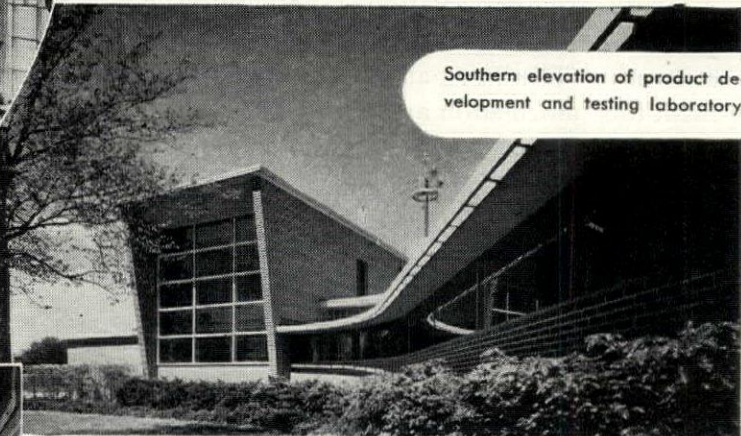
Benjamin Electric Company's new photometric testing laboratory.

As demonstrated by their use in Benjamin Electric's new laboratory, DUST-STOP Air Filters are adaptable to the smallest and largest commercial and industrial heating and ventilating systems.



Triple-utility conference room.

DUST-STOP Air Filters may be installed in custom-built or the complete, ready-to-assemble DUST-STOP steel frame cells. The cells can be built up into filter banks to handle any cfm of air required.



Southern elevation of product development and testing laboratory.

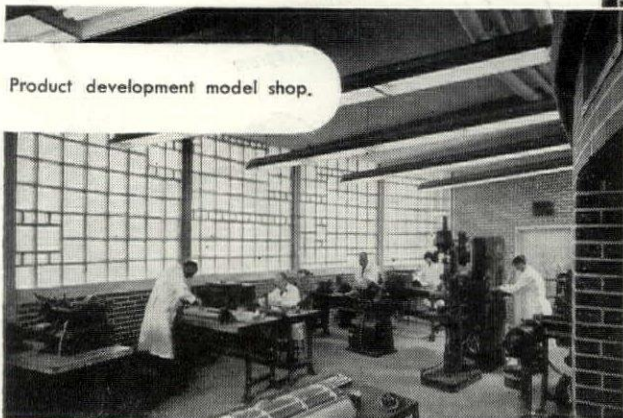
Maintenance of the air filtration system is easy and economical. Replacement DUST-STOPS are readily available from authorized suppliers in nearly every community.

DUSTSTOP^{*}

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

Air Filters

A FIBERGLAS* PRODUCT



Product development model shop.

More and more engineers are specifying DUST-STOPS because of the efficiencies obtained both at low initial and low maintenance costs. Be sure to write for booklet A5.2.1 today.

Is your Tile-Tex reference file Complete?



In Sweet's Architectural File, you will find a comprehensive presentation of specification and product data on Tile-Tex products. There are four other Tile-Tex pamphlets which supplement this information and are of specific interest to architects.

These booklets, copies of which are yours for the asking, are as follows:

- "Tile-Tex Products for Today's Hospitals"
- "Tile-Tex Asphalt Tile in Schools"
- "Layers' Handbook for Tile-Tex Floors"
- "Maintenance Data"

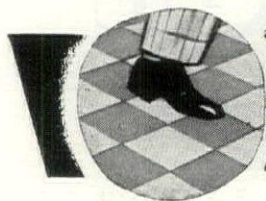
These folders have been prepared with great

care—so that they will provide you with accurate information *when* you need it. Your constructive criticisms and suggestions in regard to this literature will be appreciated.



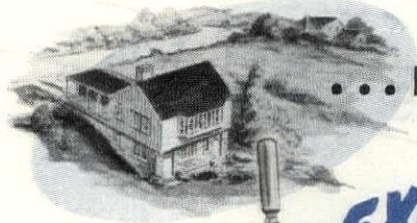
THE TILE-TEX COMPANY, Inc.

Asphalt Tile Mfr. Subsidiary of The Flintkote Company
Chicago Heights, Illinois • 220 E. 42nd Street, New York City



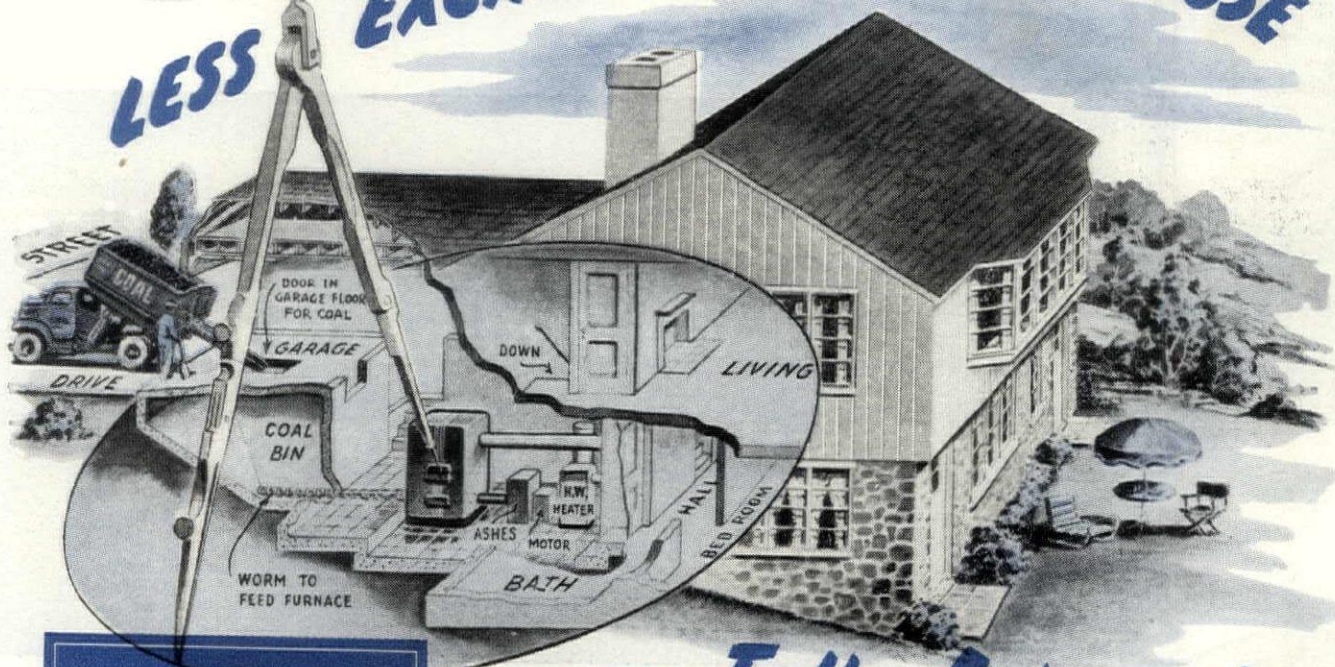
**LOOK TO Tile-Tex IN '46
FOR THE BEST IN FLOORING**



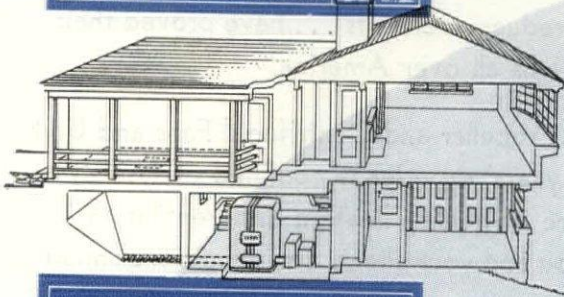
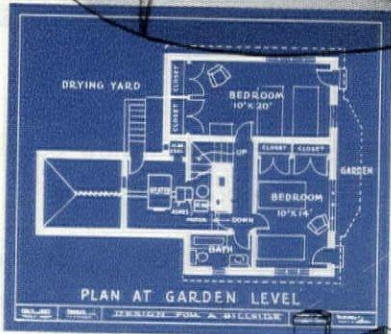


... FOR A HILLSIDE

LESS EXCAVATION.. MORE HOUSE



... AND Fully Automatic COAL HEAT!



This little house on a hill is the solution to many designers' problems. It offers the economy of a one story home with the advantages of a two floor plan! It can be built on a steep and rocky lot with a minimum of expensive excavation, since the partial basement fits into the slope of the lot. Living and dining spaces are at the top of the house, overlooking neighboring homes and affording a grand view. If the house is placed close to the street, a maximum of secluded garden space may be provided on the lower side, close to the living room and bedroom windows.

ECONOMY is the key factor in building the 11 million new homes needed in the next few years. The heating facilities you select will play a major part in the economy and salability of houses you design or build. The heart of this livable home is an economical, fully automatic coalburning heating plant, with easy access provided to the basement from all parts of the house. Coal heating . . . whether fully automatic as above, or hand-fired with automatic controls . . . is the most satisfactory and economical in the long run.

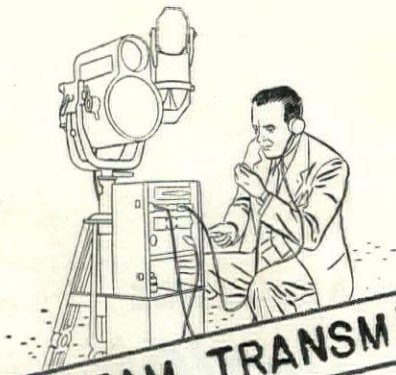
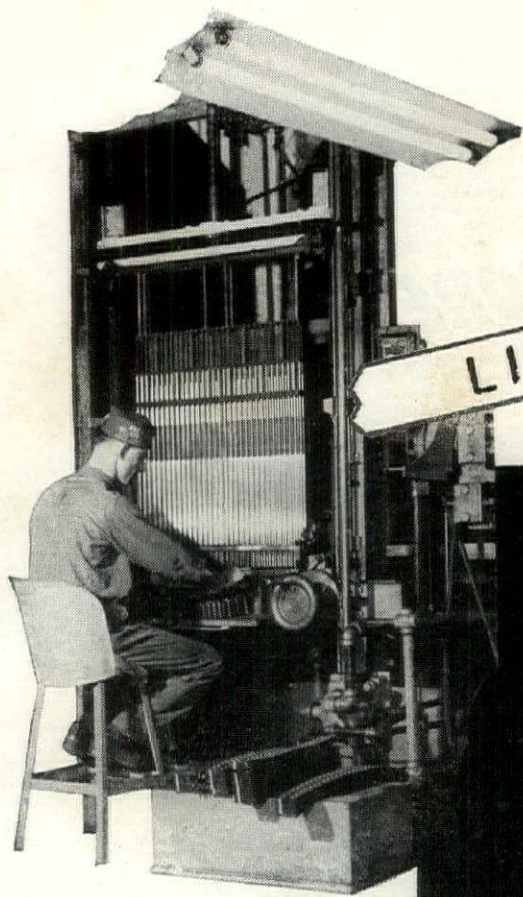
A coal heating plant is the only installation that can be converted to all other types of heating—when you design or build, play safe, provide coal storage space and chimneys adequate for any fuel. Design for coal . . . "Fuel Satisfaction". It is economical, safe, clean, quiet, odorless and abundant.

Norfolk and Western RAILWAY

CARRIER OF FUEL SATISFACTION

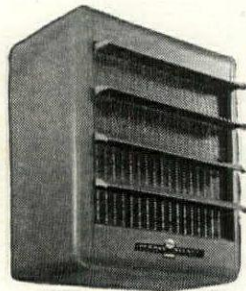
Unique design of this home places bedrooms on the lower floor with combination living and dining room directly above—all away from the street for quietness, privacy and maximum view. This is an ideal design for homes along rivers and lakes, or for those in any city.

- **INITIAL COST ECONOMY.** A hand-fired coal furnace is the least expensive of all central heating plants.
- **FULLY AUTOMATIC HEAT.** The ultimate in cleanliness, safety, comfort, convenience and economy, is a bin-fed, ash removal, coal-burning stoker—the cost is little more than a regular stoker.
- **PLENTIFUL FUEL SUPPLY.** We have a three thousand year coal reserve. Other fuels may be exhausted while your building is still relatively new.
- **AUTOMATIC HEATING.** The cost of a stoker-fired coal furnace is no greater than the cost of a good installation using any other fuel, over a period of time . . . economy in cost of fuel is the saving.
- **CLEAN, SMOKELESS FUEL.** Coal today is sized, cleaned, and dustproofed at the mine.
- **CONVERSION POSSIBILITIES.** A conversion burner can be installed economically in a coal furnace. The reverse is not possible. Be safe . . . provide for coal.

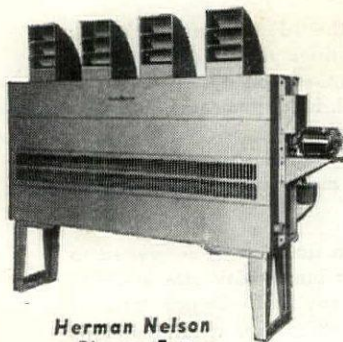


LIGHT BEAM TRANSMITS SPEECH - -

But . . . proper heating and ventilating may be vastly more important to your clients



Herman Nelson Propeller-Fan Type Unit Heaters



Herman Nelson Blower-Fan Type Unit Heaters

Sending your voice over an invisible infra-red ray of light is now possible, but still in an experimental stage and thus of little practical value.

However, Herman Nelson Heating and Ventilating Products . . . designed to provide better working conditions . . . help keep employees on the job, speed up production and reduce accidents . . . have proved their value in thousands of installations all over America.

Herman Nelson Unit Heaters, Propeller and Centrifugal Fans and Unit Ventilators are backed by 40 years' experience confined exclusively to the design and manufacture of quality heating and ventilating products. That's the reason you and your clients can expect maximum dependability and minimum operating costs from Herman Nelson Equipment.

It's as true today as it was back in 1906 that you can't specify better heating and ventilating products than those bearing the Herman Nelson nameplate.



THE HERMAN NELSON CORPORATION
for 40 years manufacturers of quality heating and ventilating products
MOLINE, ILLINOIS

TRENDS

HOW do the buildings of the first year of peace differ from those of 1939 or 1940? To answer this question, the editors of the FORUM surveyed the U. S. They garnered a surprising number of finished jobs in a wide variety of fields. While none of these buildings represents any climactic break with the pre-war years, their general design level is indubitably higher. Equally happy is their geographic distribution—instead of the usual concentration along the east and west coasts, the whole country showed itself to be hard and intelligently at work. Contrary to popular impression, a large volume of building has been completed, and there is evidence of new talent cropping up in widely divergent places.

Even a cursory glance at this issue will show that, at one level at least, generalization is possible: the trend towards contemporary design continues. In commercial and industrial work it has become, of course, the dominant idiom: but in the past five years it has obviously spread to all other types as well. Even the Cape Cod cottage is yielding before its advance. Evidence of this comes from those pulse-counters of public taste, the operative builders. Thus Cy Williams' project (p. 112) offers single-floor, basementless houses with solar windows and radiant heating, while George Nemeny's higher-priced Long Island development (p. 116) stems unabashedly from the more advanced architectural design of prewar years.

The designs in this issue show other trends. For example—that the line between architecture and engineering has in some areas almost completely disappeared. Thus both lightmeter *and* taste were necessary to the luminous ceilings of the Florsheim shop (p. 138) and the Grayson store (p. 133). And both good acoustics and good looks resulted from architect-engineer collaboration in Columbia's new experimental studios (p. 92). This tendency towards synthesis is expressed in another fashion in A. C. Robinson's work for the Chesapeake and Ohio (p. 96): here one architectural office is designing railroad stations, locomotives and coal loaders.

If large-scale projects are notably missing from the present collection, they are not missing from most offices, where drafting boards creak under impressive working drawings. The press of most cities daily carries mammoth projects for shopping centers, municipal parking garages and housing developments which—in scale and complexity—are qualitatively different from those of the prewar period. Nor are these merely exciting speculations: real men, real money and real land stand behind them, waiting for the lights to change. If there is a postwar trend, this is it. Here is forecast the major effect of reconversion.

The buildings on the following pages show that the design curve of the Thirties has been projected across the chasm of the war. Building has picked up where it left off and goes forward from there—this, in itself, gives validity to prewar trends.



Photos: Ezra Stoll

C

COMMUNICATION

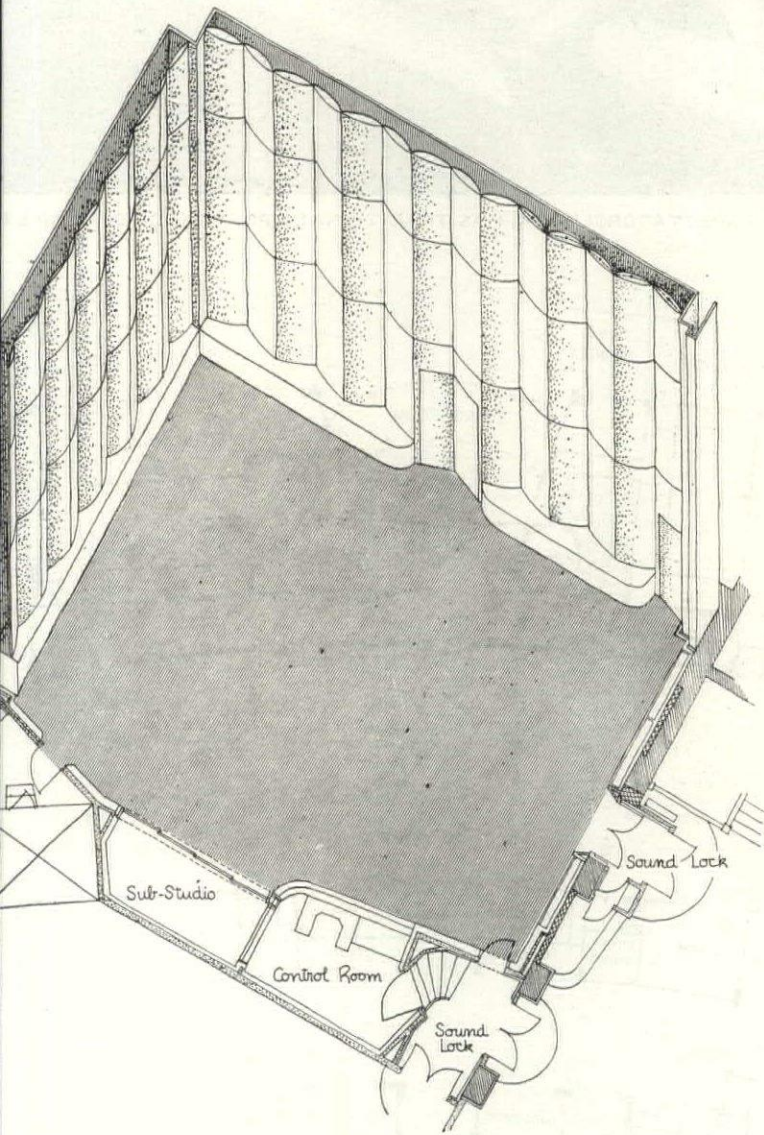
In the fields of communication and transportation wartime technological advances have built up an almost irresistible pressure for change. Although railroads, airlines and radio could get by with existing facilities, they are in a mood to scrap the old and start afresh. An added incentive is intense postwar competition between rail, air and motor travel which will force each to improve its service. New construction already reflects these changes.

EXPERIMENTAL STUDIO uses motorized walls to vary acoustics.

FELLHEIMER & WAGNER, Architects
CLARENCE R. JACOBS, Acoustical Engineer

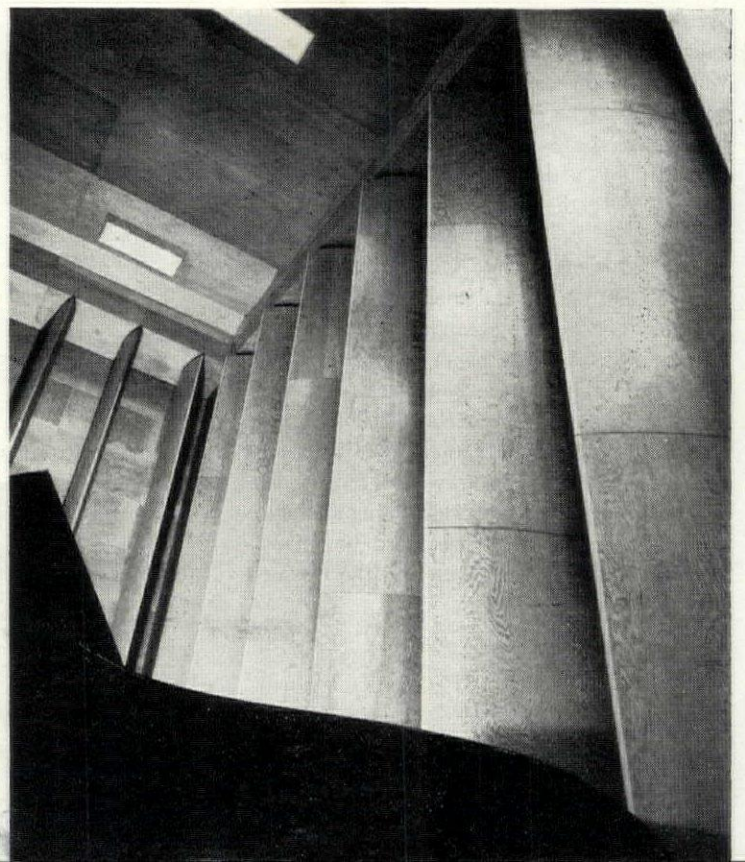
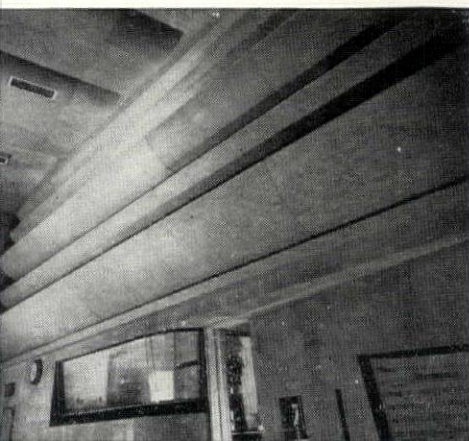
The need for acoustical flexibility in broadcast studios has been long apparent. Big networks require a variety of acoustical conditions to permit production of each program in the most desirable environment; yet simple bookkeeping dictates the maximum use of each studio. To unlock this paradox the Columbia Broadcasting System recently installed a pilot studio in the century-old Liederkranz clubhouse in New York City. Key to the solution is a system of movable vanes which, at the touch of a button, convert the response of the studio from "dead" to "brilliant." These vanes—designed and patented by CBS engineer Clarence R. Jacobs (FORUM, Sept., '40)—constitute the inner membrane of the studio walls: on two sides they are vertical, on the other two, horizontal. (Although the ceiling has a similar profile it has no movable elements.) Built of plywood on wooden frames, the fins are hollow and roughly airfoil in section. Behind them, but inside the structural walls, are absorptive materials in various thicknesses. Manipulation of the vanes by the control board yields a wide range of acoustic conditions, both in wall profile and surface characteristics. Thus the studio can be adapted quickly to either a single piano or an orchestra of eighty pieces. There are no provisions for an audience.

The illumination, which was engineered by the Holophane Company, was designed for 98 per cent visibility at the most critical seeing task—that of reading script. This required 25 foot-candles. For psychological effect, the light itself is tinted pink by means of special lenses which absorb the yellow.



THE ACOUSTIC RESPONSE of this new studio is approximately three and one-half times as brilliant with vanes closed (top, above) as when they are fully open (facing page).

HORIZONTAL VANES have continuous piano-hinge along bottom edge. Vertical vanes are pivoted. Each series is hydraulically operated.



AIR TERMINAL for small west coast field follows best prewar pattern, allows for expansion.

KENNETH S. WING, Architect
 W. HORACE AUSTIN (deceased), Associate
 STANTON-REED, General Contractor

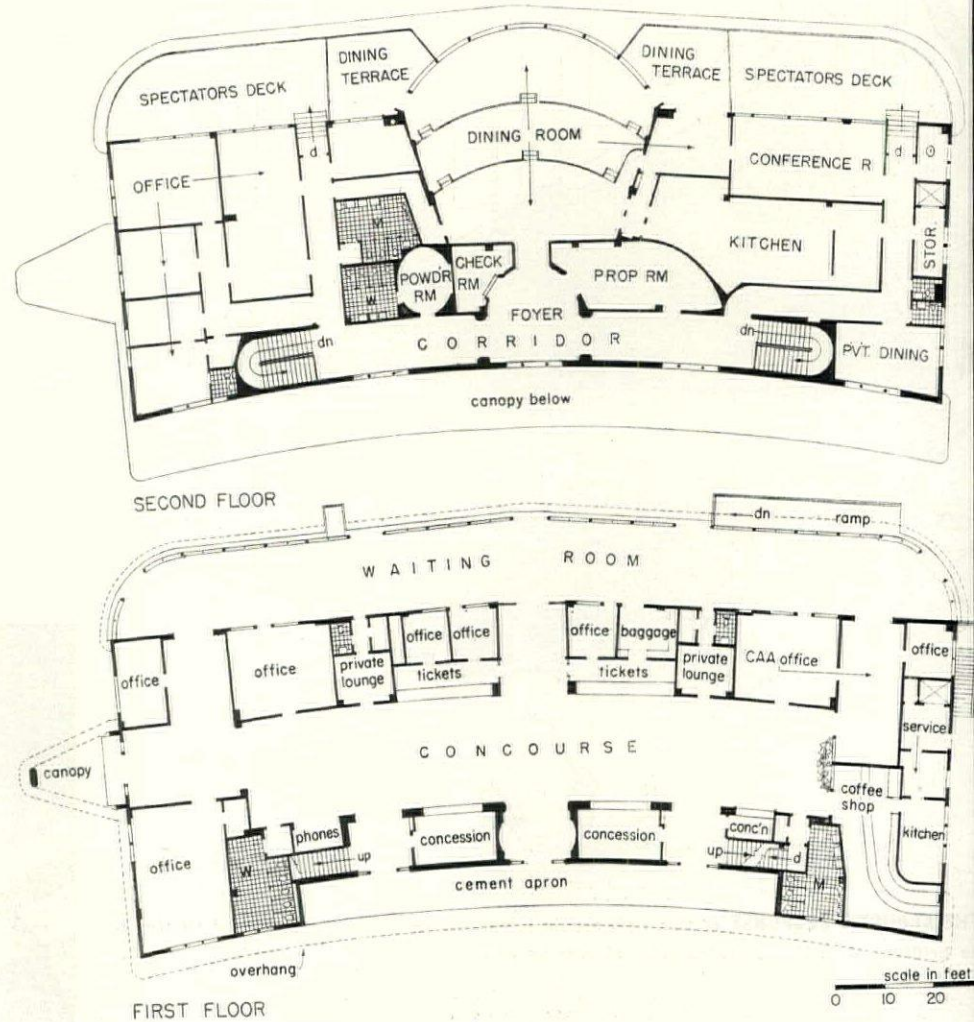
Photos: Floyd Ray



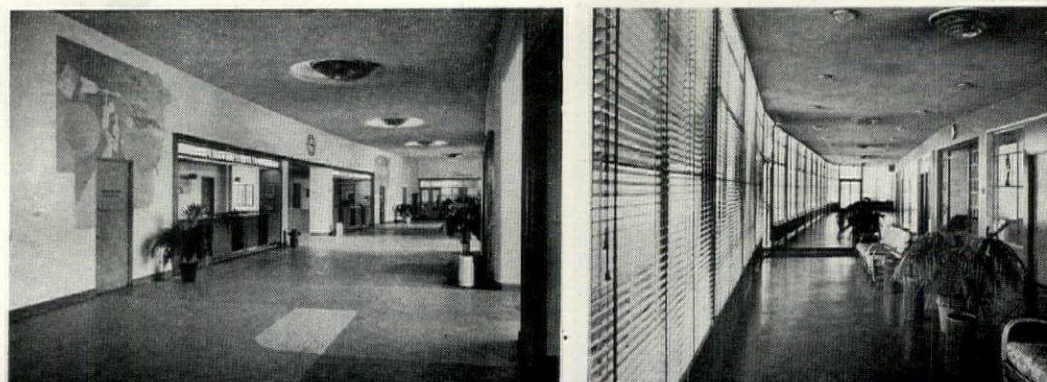
ENTRANCE FACADE IS PROTECTED BY LONG MARQUEE; REAR, WITH GLAZED SPECTATORS' DECK, HAS TRADITIONAL APPEARANCE OF SHIP'S

With experts predicting that airline travel will soon break prewar railroad records, expansion of airport facilities promises to become aviation's No. 1 problem. Chances are that the new crop of air terminals will be basically the same as their predecessors, for designers of these buildings have arrived with prophetic regularity at a single solution to their varied requirements—a symmetrical building dominated by a central operations element and topped with the proverbial control tower.

Latest evidence that this design pattern is still in vogue is the reinforced concrete administration building at California's Long Beach Municipal Airport, which recently emerged from its wartime camouflage. Called Dougherty Field, this airport currently serves two scheduled airlines and numerous unscheduled flights, but steadily increasing traffic is anticipated. Thus, the architects' major requirement was a building which would adequately handle today's relatively light business and lend itself to almost limitless expansion. The latter was accomplished by designing the building as a small curved segment of a large wagon wheel, the hub of which is the perpendicular intersection of the 500 ft. access road and Lakewood Boulevard, a main route to the city. Containing 455,000 cu. ft. and measuring 175 ft. in length, this building can be expanded in stages until the additions on either end form a semi-circle abutting the boulevard. Although passengers could be checked through these increments directly to the field, it is likely that any extensive expansion would require enlargement of the second floor dining and office facilities, the third floor weather, communication and traffic departments and the elevated control tower.

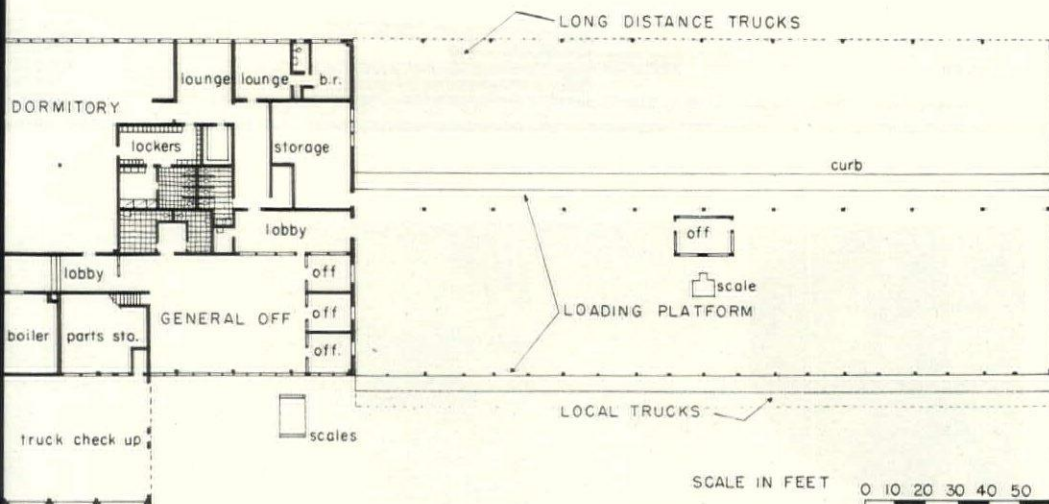


CONCOURSE FEATURES WPA MURALS AND, LIKE THE SPECTATORS' DECK, IS AIR-CONDIT

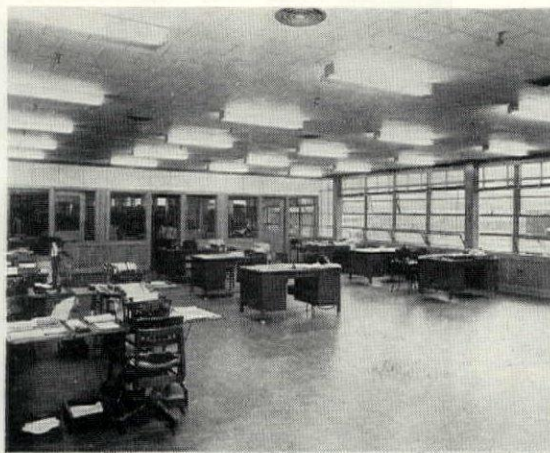


TRUCK TERMINAL in New Jersey provides a haven for drivers as well as a transfer point for long distance freight.

KELLY & GRUZEN, Architects—Engineers



Photos: Alfred Cook



DORMITORY SLEEPS 60 DRIVERS, WHILE GENERAL OFFICE PREPARES SHIPPING RECORDS AND TRUCKS ARE FILLED FROM LOADING PLATFORM

UNADORNED EXTERIOR OF BRICK TERMINAL BLENDS WITH PUBLIC HOUSING BACKGROUND



trucks arrive at the terminal at the end of their cross-country runs. They are driven into the large shed where they are turned over to "jockeys" who park the trucks and handle them throughout the unloading and reloading process. The long-distance truck shed is about 100 ft. deep and will accommodate 20 of the large company-owned vehicles at once. It is completely covered to facilitate operations in all kinds of weather and to permit use of the shed as a garage for truck repairs.

On the opposite side of the loading platform, 20 smaller local trucks may be backed up to the dock to deliver freight for long distance movement and to make pick-ups for nearby stores and other outlets.

When a "jockey" relieves a long-distance driver, the latter reports to the general office where he prepares and turns in certificates on the contents and weight of the load he has just delivered. His subsequent stops include the washroom, locker room and, depending upon his needs, the lounge or dormitory.

In addition to caring for the company's routine business, the building includes a two-stall garage for the servicing and repair of trucks and a storage room for the safekeeping of freight not picked up on schedule.

RAILROAD STATION for a small town is first step in C & O's big modern design program.

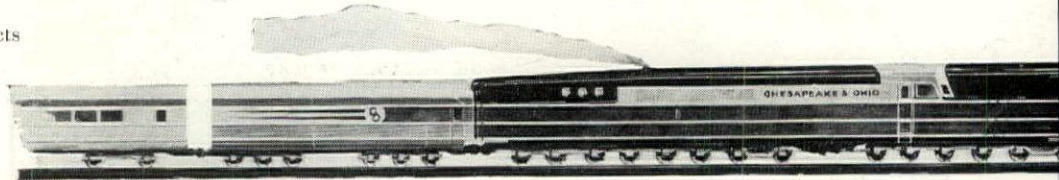
GARFIELD, HARRIS, ROBINSON & SCHAFER, Architects
JOHN P. PETTYJOHN & CO., General Contractor

While the Chesapeake & Ohio Railway earns most of its money hauling freight, particularly coal, it is also interested in passenger traffic. It has gained the good will of railroad passengers in general by its lively advertising campaigns sponsoring coast-to-coast through service and industry-wide improvement in passenger car facilities. The C. & O. is also practicing what it preaches by making its own railroad more presentable. It has just completed a new station for the small coal-mining town of Prince, W. Va. (pop. 150), and is ready to begin a bigger one to be presented in a later FORUM. Collaborating with specialists, the architects of these stations have also styled three large turbo-electric locomotives for lightweight passenger trains (see rendering, above), worked out the streamlining of existing steam locomotives and designed special coal loaders to service the new locomotives.

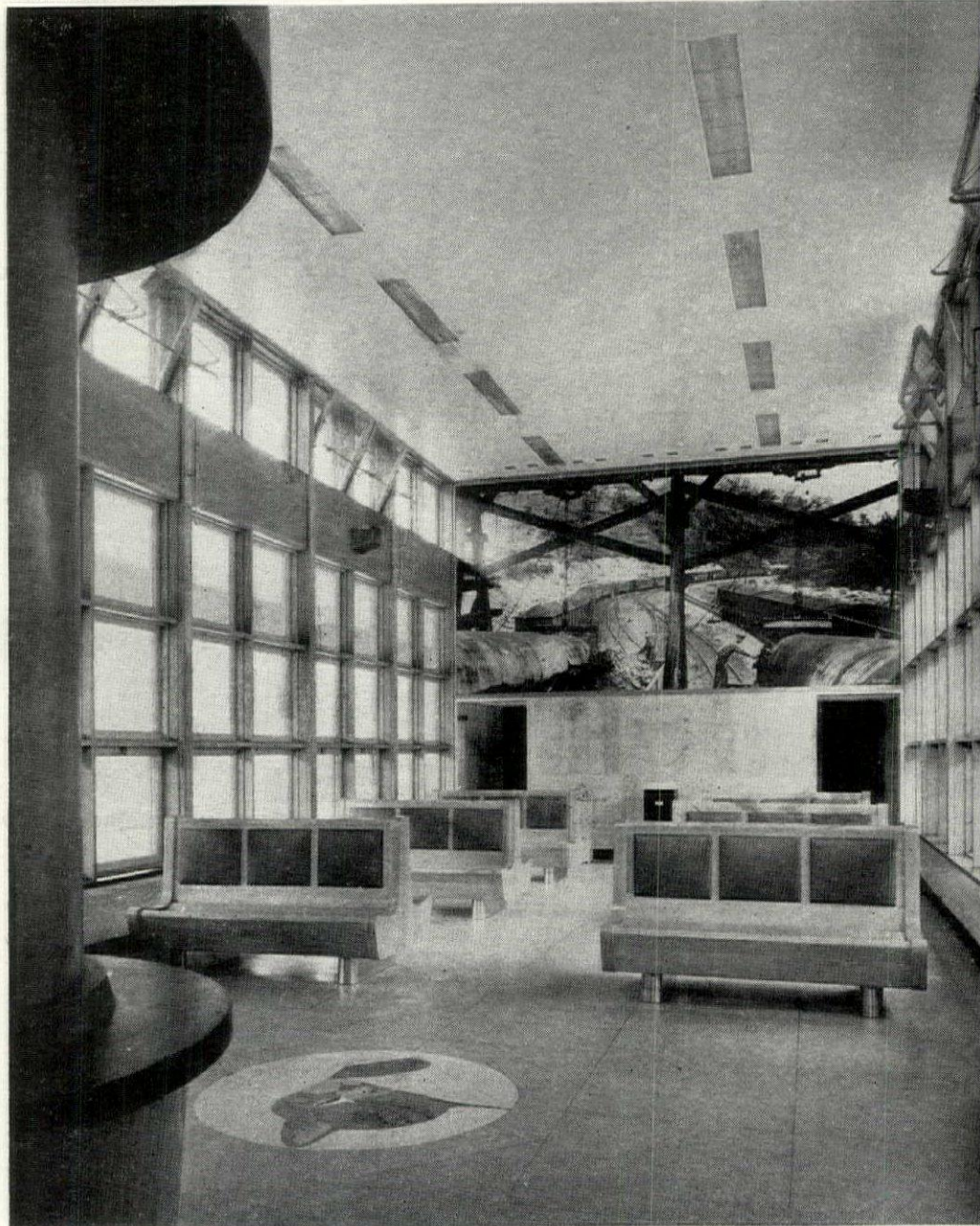
Design of the Prince station belies its small size. Measuring only 19 x 55 ft., the dimensions of the central waiting-office room are exaggerated by the full side-wall windows which extend from the floor to the 18 ft. ceiling. These windows are protected by overhanging eaves (and to the south by the platform canopy) designed to admit winter sunlight but to shield the room from the direct rays of the summer sun. In addition to their lighting function, the large windows open the room to the building's scenic surroundings which become the waiting room's major decorative feature. A photomural at one end of the room depicting a typical C. & O. freight scene adds to the outdoor illusion.

The building is radiant heated throughout. Although hot water coils were placed in both the floor and ceiling of the public rooms, they were omitted from the concrete floor of the freight, baggage and express room so that items stored there would not be affected by unusual temperatures.

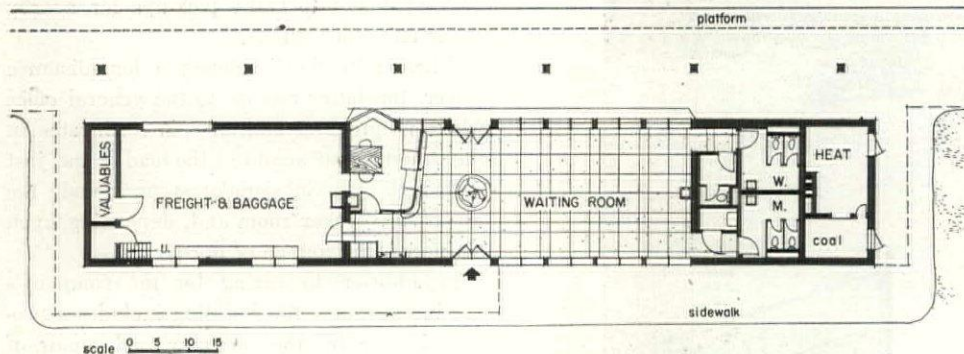
Parking space for a total of 38 automobiles is provided along the platform canopy.

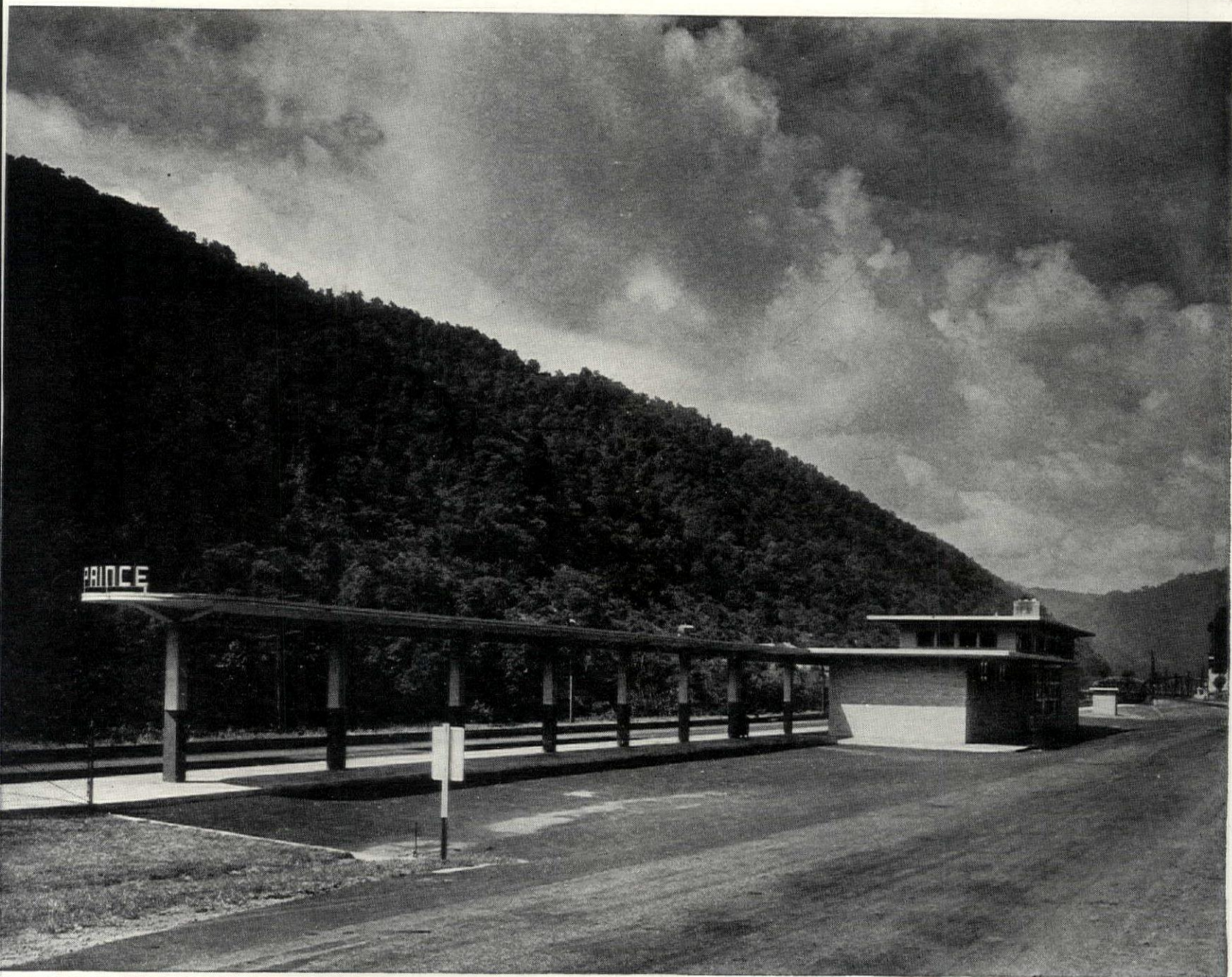
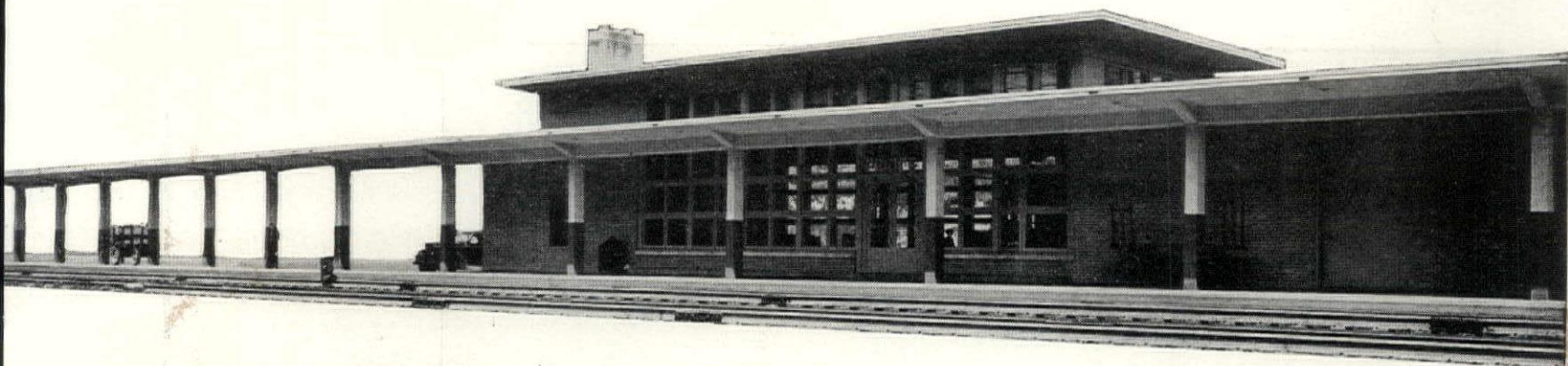


Photos: R. Marvin Wilson

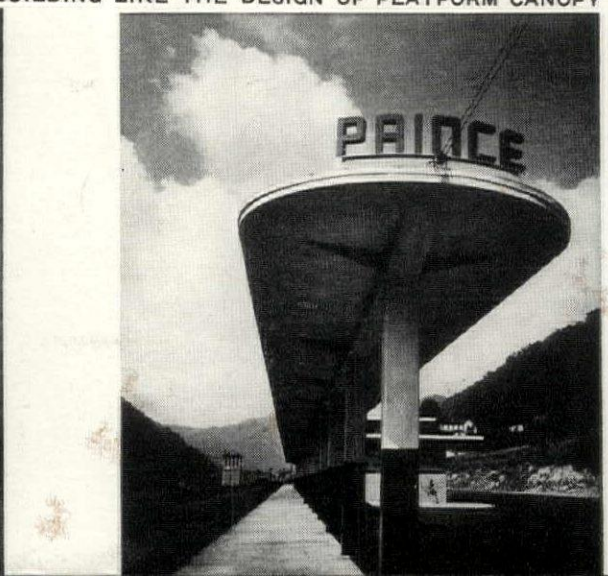
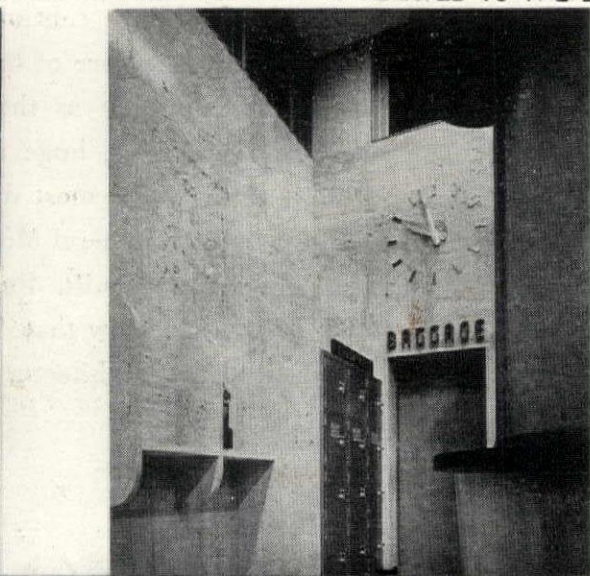


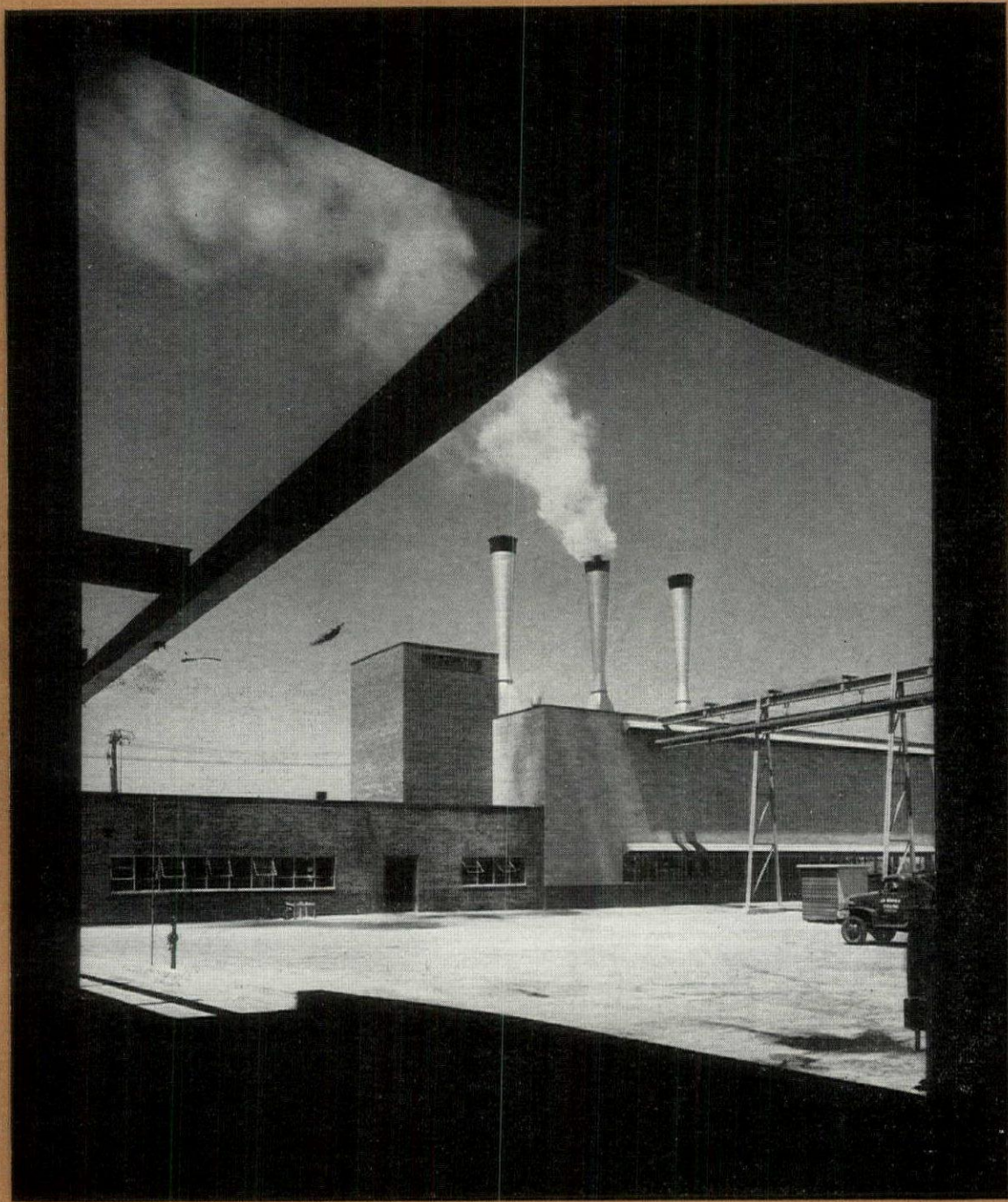
WAITING ROOM SEATS 36, IS VENTILATED BY MOVABLE SASH AT TOP OF TWO WINDOW WALLS. FLUORESCENT FIXTURES LIGHT WAITING ROOM AT NIGHT.





PLATFORM CANOPY AND ROOF OF BAGGAGE WING COMBINE TO PRODUCE A LONG, LOW PROFILE WHICH CONTRASTS WITH RUGGED SURROUNDINGS
DETAILING OF TICKET OFFICE WINDOWS AND SERVICE FACILITIES IS RELATED TO THE BUILDING LIKE THE DESIGN OF PLATFORM CANOPY

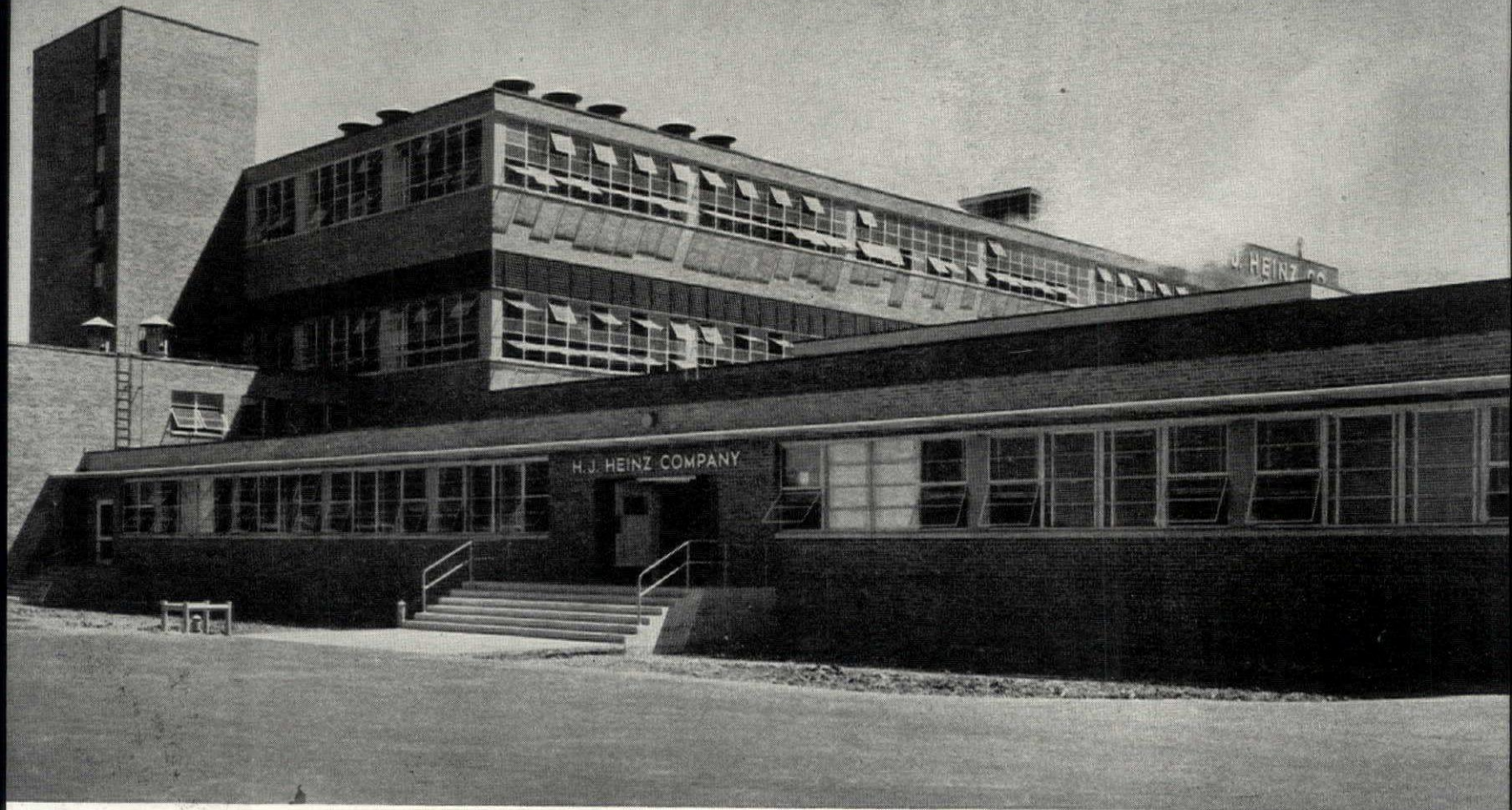




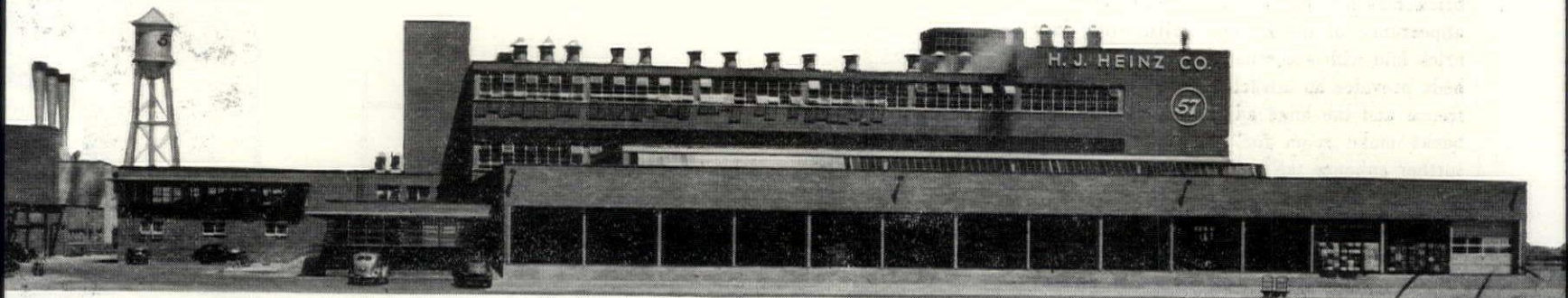
W

ORK

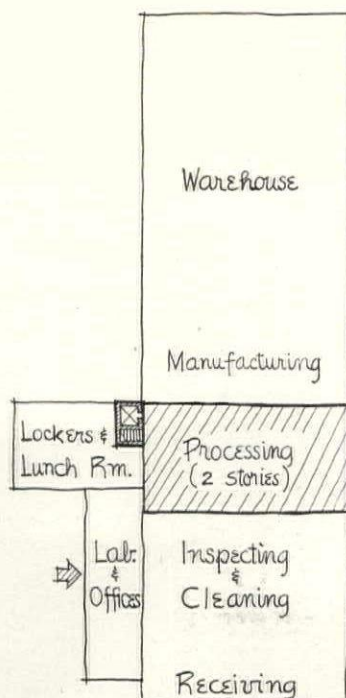
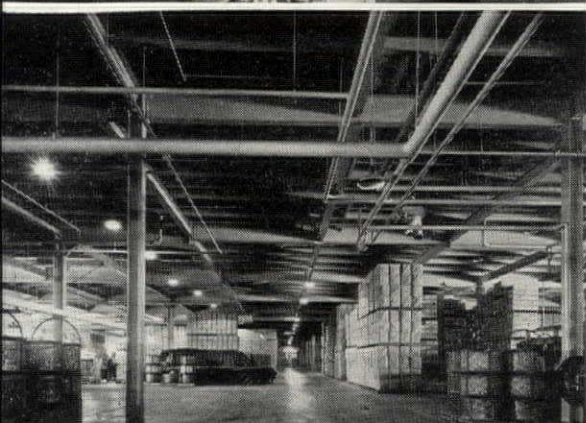
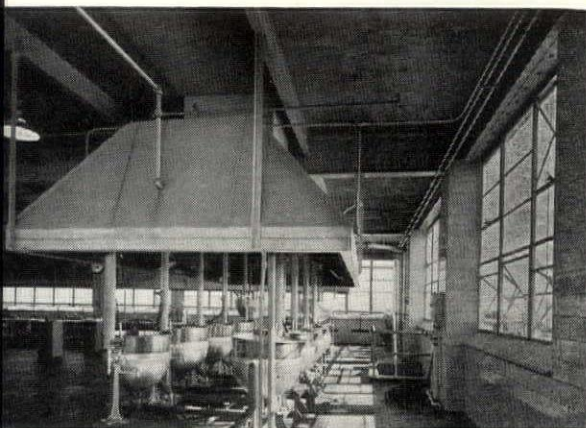
The prewar trend toward better design in industrial buildings continues to move forward. The appearance of the factory is today almost as important as that of the product itself. Many of the huge new plants which illustrate this point most dramatically (such as the Ford and General Motors research centers) are yet to be built. But finished projects of smaller scale show that American industry has decided that architecturally it pays to put its best foot forward.



WITH A CUBAGE OF FIVE-AND-ONE-HALF MILLION FEET, THIS NEW PLANT IN CENTRAL CALIFORNIA IS OF EARTHQUAKE-RESISTANT CONSTRUCTION



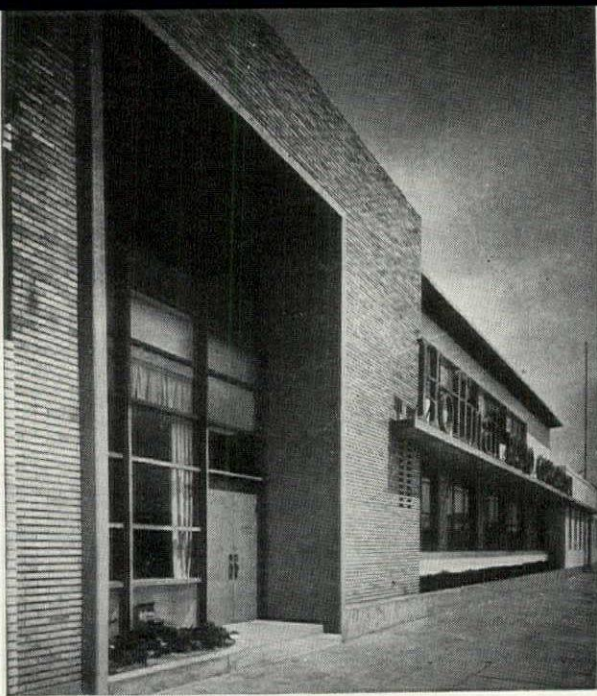
UNLOADED FROM TRUCKS AT PLATFORM IN FOREGROUND, FOOD MOVES THROUGH TWO-STORY KITCHEN, EMERGES READY FOR TABLE AT FAR END



NEW PLANT for H. J. Heinz processes baby food in one continuous operation.

SKIDMORE, OWINGS & MERRILL, Architects
W. A. BECHTEL CO., General Contractors

Raw fruits and vegetables enter at one end of this huge new plant at Tracy, Calif. and emerge, completely processed, at the other—ready for the grocers' shelves. Designed for straight-line production, the plant employs from 300 to 1,000 people, depending upon the season. The huge two-story kitchens are floored and walled in glazed tile (fruit acids would quickly destroy plain concrete). Eventually they will be completely air conditioned.



TWO-STORY WINDOW ACCENTUATES ENTRANCE, LIGHTS DISPLAY AND CONFERENCE ROOMS, RELIEVES BUILDING OF FACTORY APPEARANCE

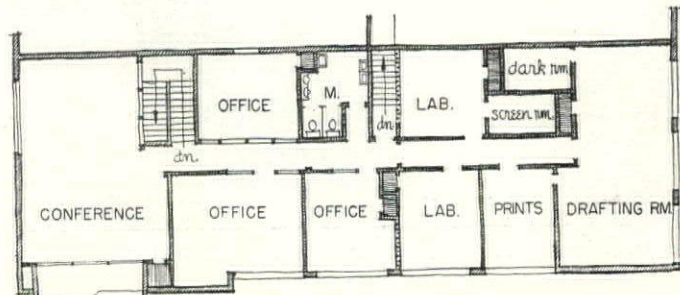
ADMINISTRATION BUILDING for radio maker includes display room.

Photos: Fred R. Dapprich

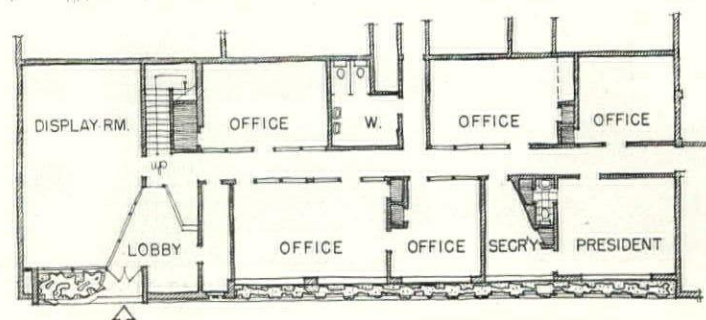
THEODORE CRILEY, JR., Architect
WM. P. NEIL CO., LTD., General Contractor

Adjoining its major Los Angeles plant, Hoffman Radio Corp.'s new administration building harmonizes with the exterior design of the existing factory, yet stands out as the executive hub of the project. Reinforced common brick masonry painted white duplicates the appearance of the factory walls, while face brick laid with accentuated horizontal mortar beds provides an attractive frame for the entrance and the huge adjoining window. Set-backs make room for planting which will further enhance the building's appearance.

Interior of the building is finished with asphalt tile on the concrete floors, plaster on the walls and acoustical tile on the suspended ceilings. Walls of the president's office are covered with panels of combed fir plywood in a checkerboard pattern. Containing examples of the company's products, the display room is located where it may be seen from both the lobby and street.

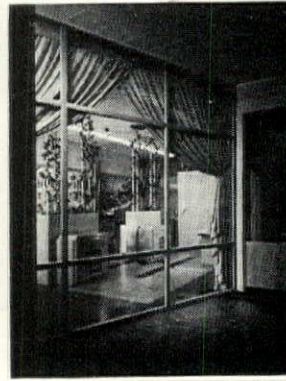


SECOND FL.



FIRST FLOOR

SCALE 0 5 10 20 FEET

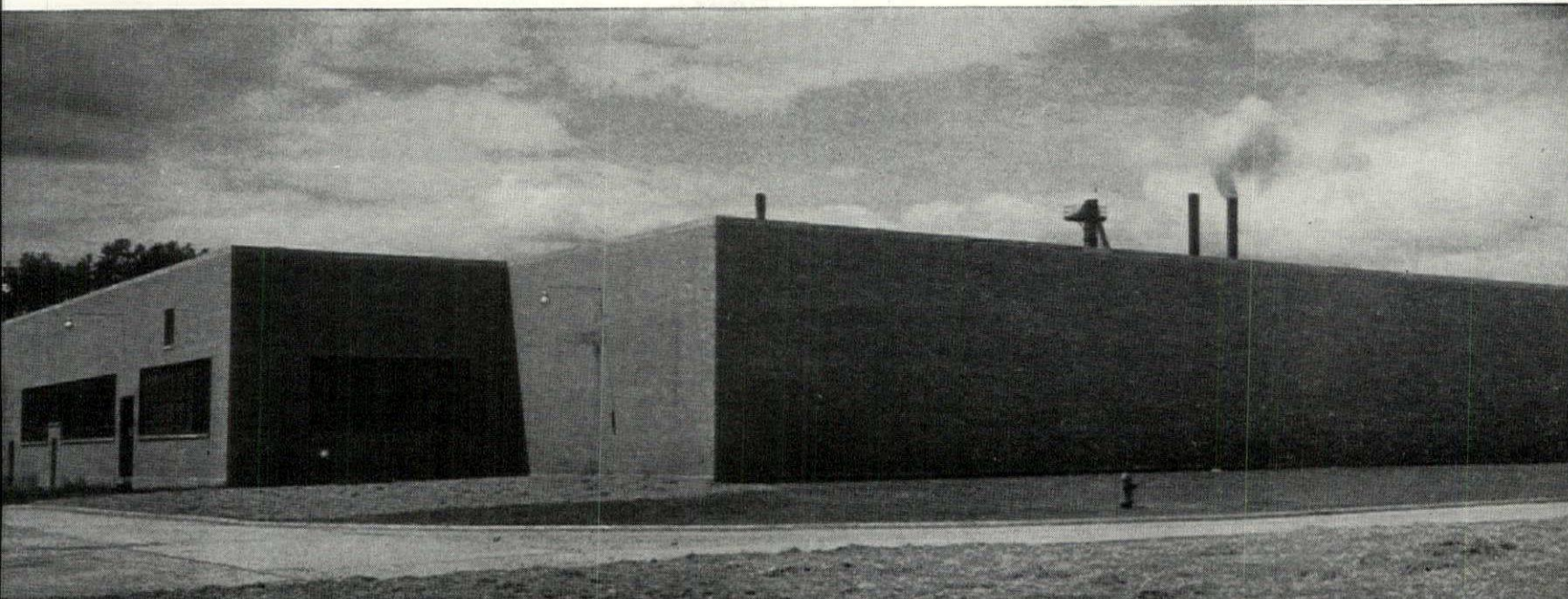


DISPLAYS FROM LOBBY



PRESIDENTIAL OFFICE

WINDOWLESS CONTROLLED-CONDITIONS ROOM IS FLANKED ON LEFT BY CLEANING ROOM, ON RIGHT BY WING CONTAINING OFFICES, SERV



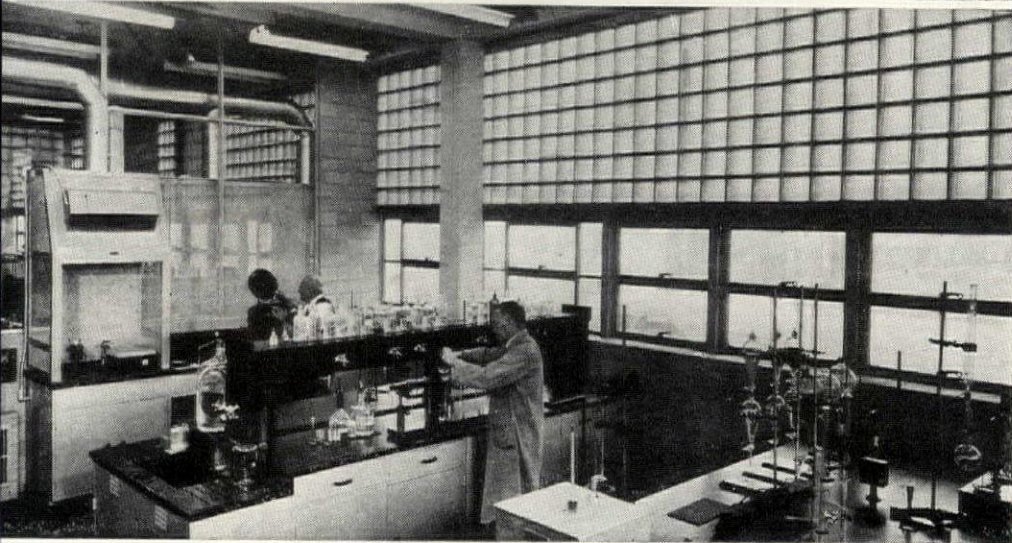


RAILROAD LABORATORY employs interior colors as safety devices.

DE LEUW & CATHER, Architects
BULLEY & ANDREWS, General Contractors

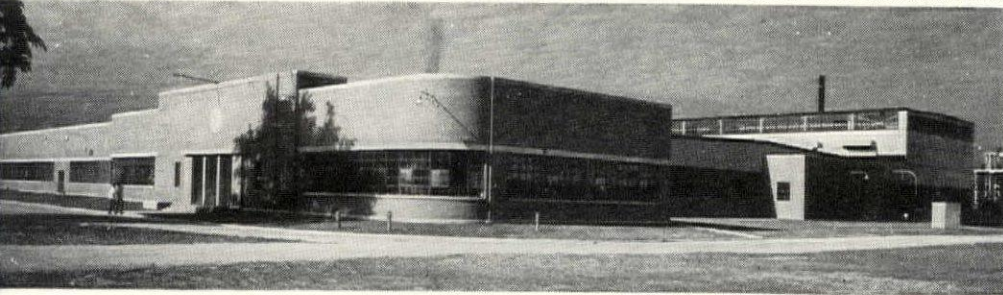
Part of an extensive rebuilding program, the Rock Island Railroad's new Chicago laboratory is designed for the testing of some 70,000 items used in the company's operations. In addition to general offices, a library and the usual service facilities, the building contains fully equipped individual laboratories for testing various classes of materials ranging from paints to locomotive parts. Natural lighting of the entire 16,275 sq. ft. floor is accomplished by continuous lines of glass block panels, horizontally hinged windows and clear glass interior partitions. To further insure adequate lighting, the interior of the reinforced concrete structure is finished with unglazed vitrified tile whose buff color was selected for its light reflecting properties. (The exterior is veneered with red shale brick.)

Colors used in the machine shop and physical testing laboratory are intended to promote safety as well as comfort. Ceilings are a pastel green trimmed with a deeper green, claimed to be restful to the eyes. All stationary equipment is painted focal green; moving parts are buff; operating levers, focal yellow; starting switches, focal orange.



GLASS BLOCK AND STRIP WINDOWS DOMINATE EXTERIOR, PROVIDE ABUNDANT LIGHT

Photos: C. W. Ackerman Studio



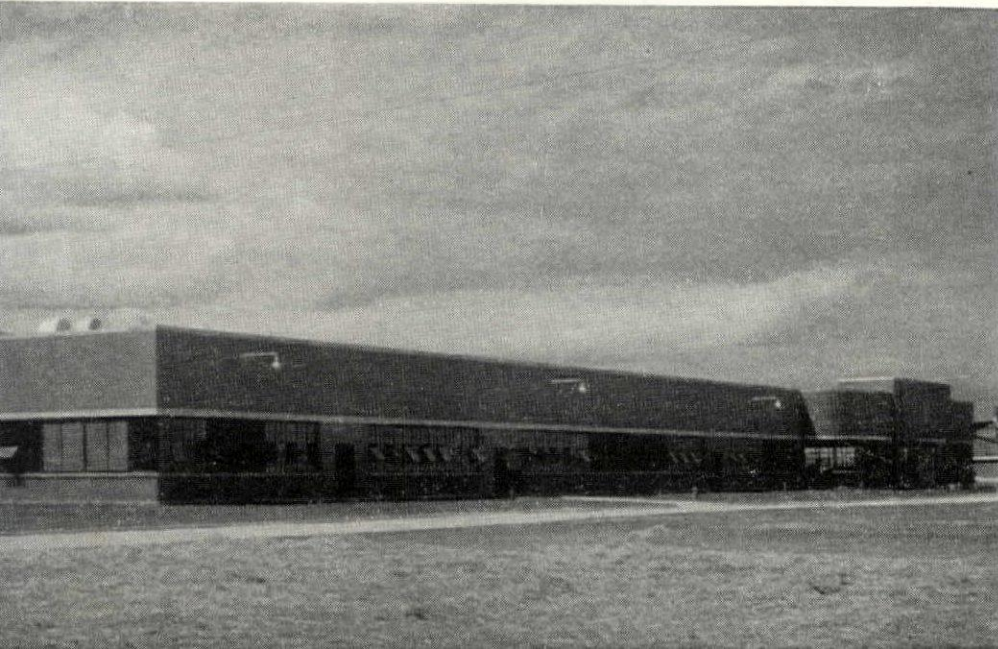
VENTILATING EQUIPMENT. ABOVE: MANUFACTURING AREA AND HIGH RECEIVING BAY

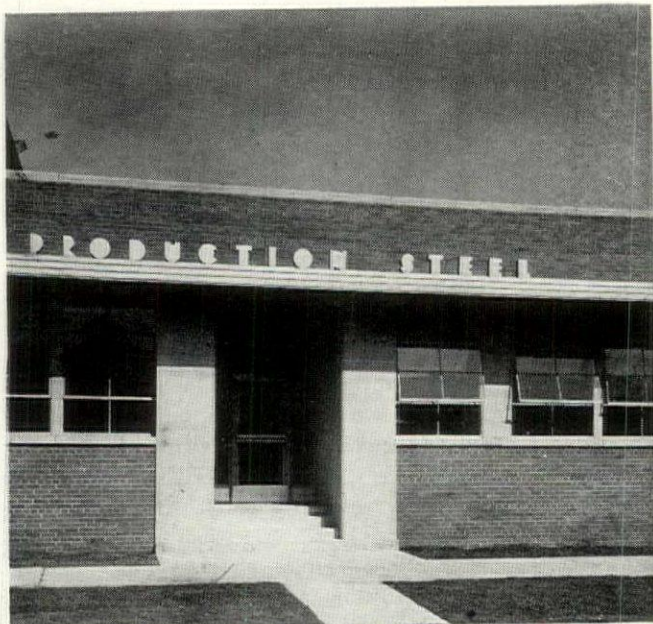
FACTORY for small electric motors enjoys controlled conditions.

THE AUSTIN COMPANY, Engineers and Builders

The new General Electric Co. plant at Tiffin, Ohio processes raw materials into fractional horsepower motors. To obtain the maximum benefits of straight-line mass production techniques and to control quality through dust elimination, the room housing the stator winding facilities enjoys completely controlled conditions. Remainder of the manufacturing space receives the benefit of partially controlled conditions, with 22 changes of air per hour.

Column spacing throughout the general manufacturing areas is 40 x 60 ft. These dimensions are spanned with Austin-developed trusses comprised of welded H-beams which permit the use of overhead conveyors along their lower chords and thus allow a much more extensive and flexible system of overhead conveyor lines than is possible with conventional panel joint trusses.



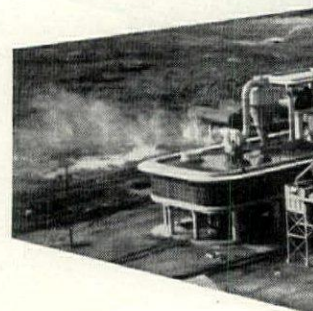
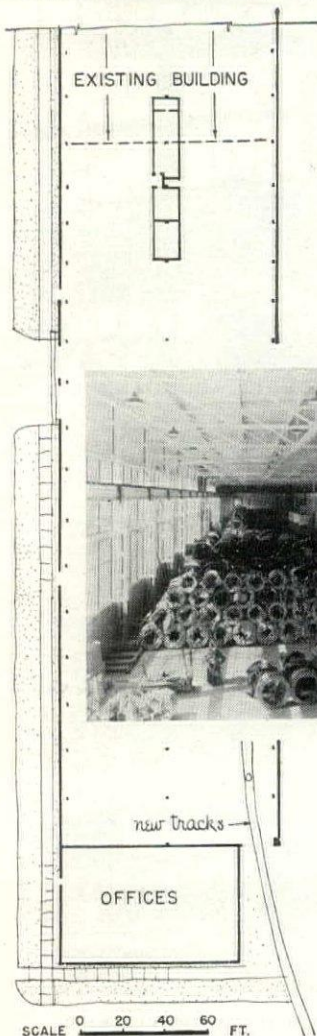


THREE-FOOT SUN CANOPY COMPLETELY PROTECTS SOUTH EXPOSURE, ELIMINATES NEED OF WINDOW BLINDS ON WEST UNTIL MID-AFTERNOON

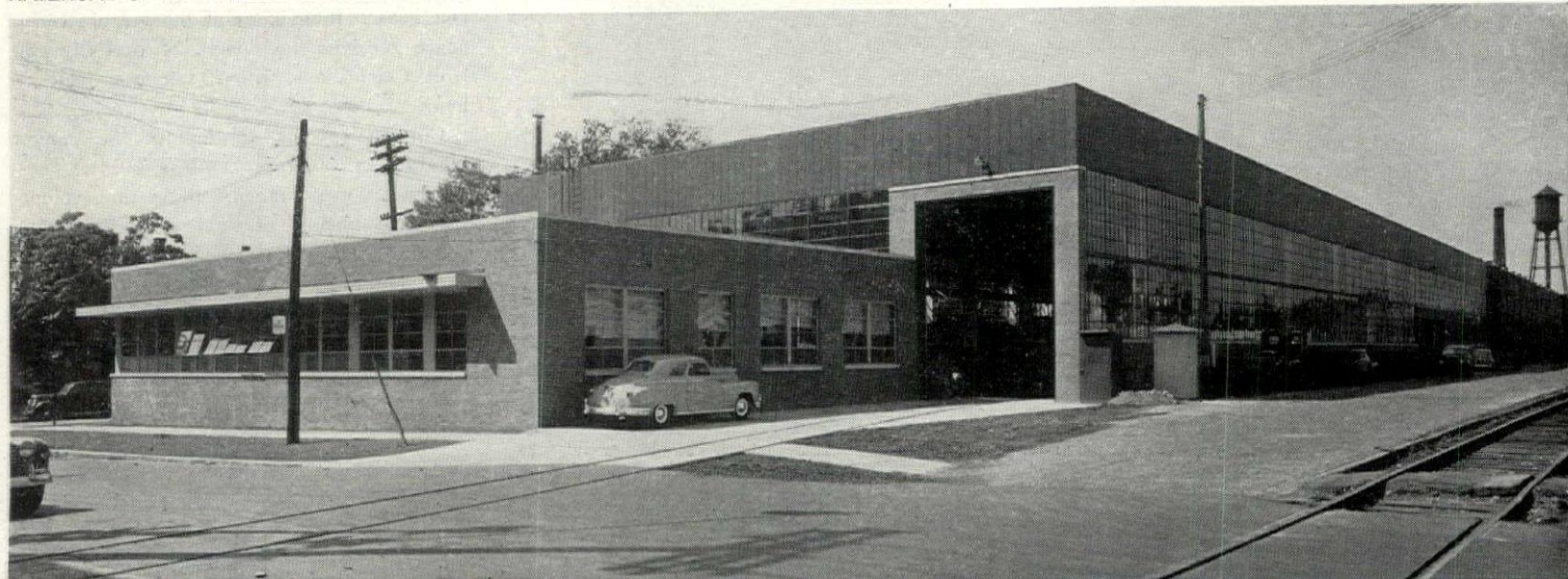
WAREHOUSE OFFICES are cooled by water on the roof.

EMMERLING, SPELLICY & HARTMAN, Architects
 DARIN & ARMSTRONG, INC., General Contractors

The neat appearance of Production Steel Co.'s new Detroit warehouse belies the fact that much of it was built of materials salvaged from the burned-out original plant. Existing column footings were reused, and reclaimed brick, steel sash and framing members helped circumvent material shortages. Comprised entirely of new materials, the office wing has a dead level roof covered with a 2 in. film of water during the summer. Cooling water from the air conditioning compressor is discharged on the roof with the two-fold effect of reducing the cooling load and lowering the roof surface temperatures on hot days from 140° to 90°. Other features of the office building: prefabricated steel partitions and wall liners and acoustical metal ceiling pans, all of whose dimensions fit handily the 4 ft. module on which the design is based.



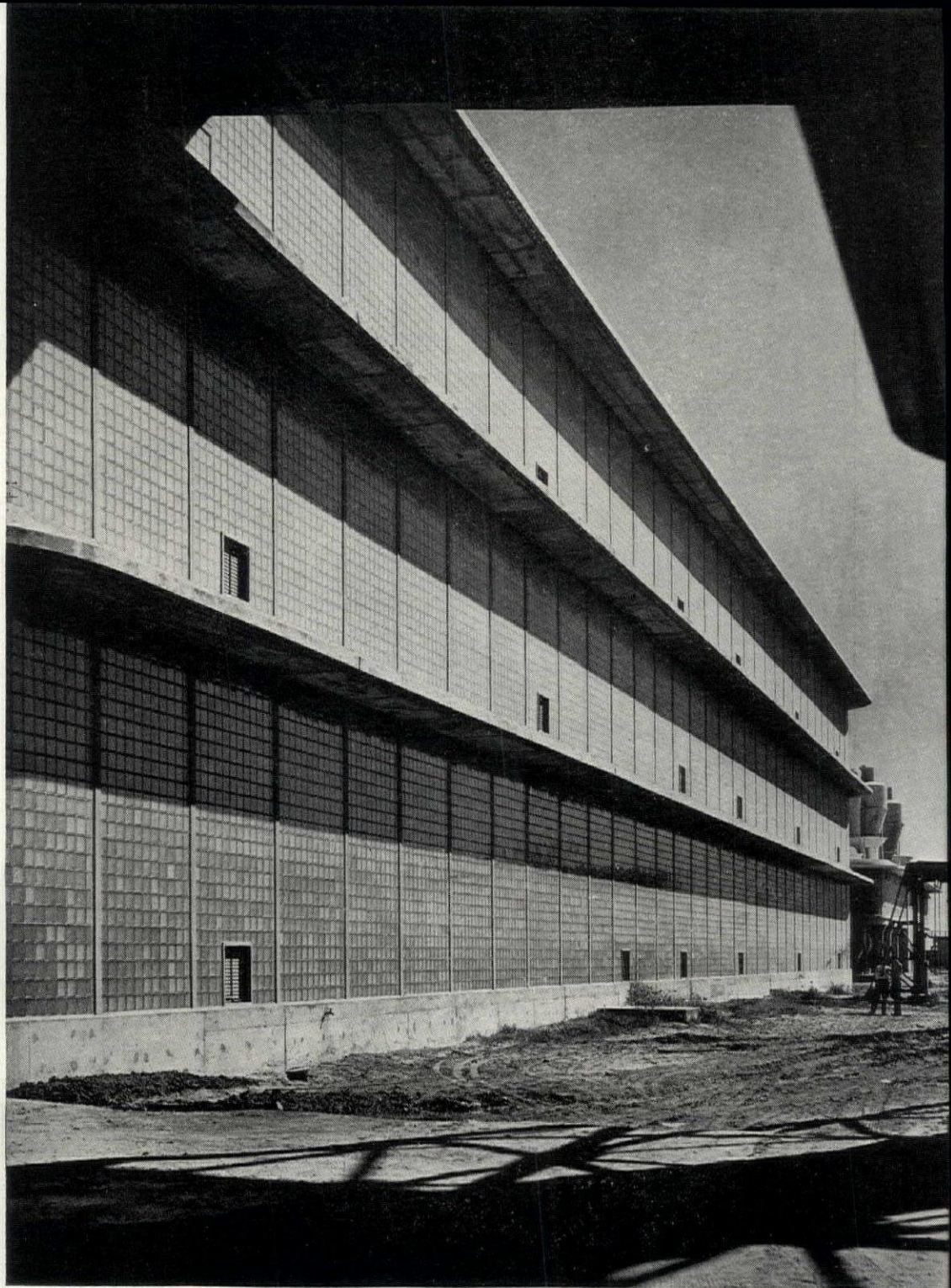
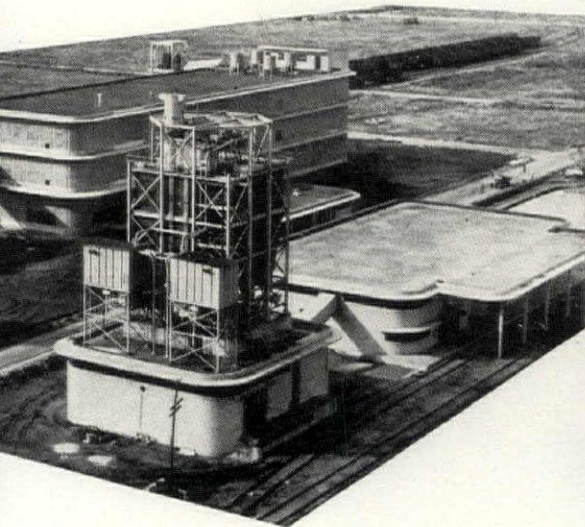
RAILROAD SIDING PASSES OFFICES TO ENTER WAREHOUSE. INSULATED STEEL PANELS ARE WELDED TO WAREHOUSE FRAME ABOVE WINDOWS



STARCH PLANT uses curved corners for cleanliness.

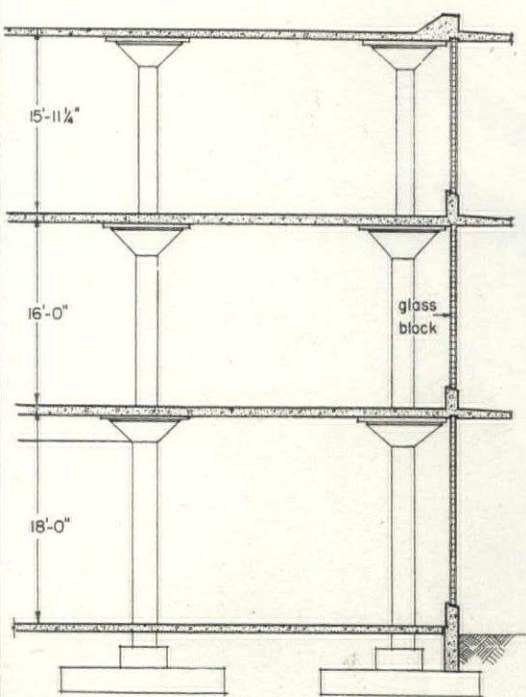
RUST ENGINEERING CO., Engineers and Constructors

Conversion of sweet potatoes into starch at the Clewiston, Fla. plant of the U. S. Sugar Corp. is a dangerous process, for starch dust is highly explosive. This fact is reflected many times in the design of the project. Buildings housing the various operations are separated by at least 50 ft. in accordance with the fire underwriters' specifications. Lower floors of the smaller units are not enclosed, eliminating the need for explosion vents. Dust-catching corners in all enclosed units have been replaced with curves which are repeated in the open buildings to unify the design of the project. Forced filtered ventilation, adaptable to future cooling, was required to maintain cleanliness in the largest building. This also suggested the use of windowless glass block walls. (The alternative screened opening was vetoed because a 30 mesh screening would be required to keep out Everglade insects and would admit little air.)

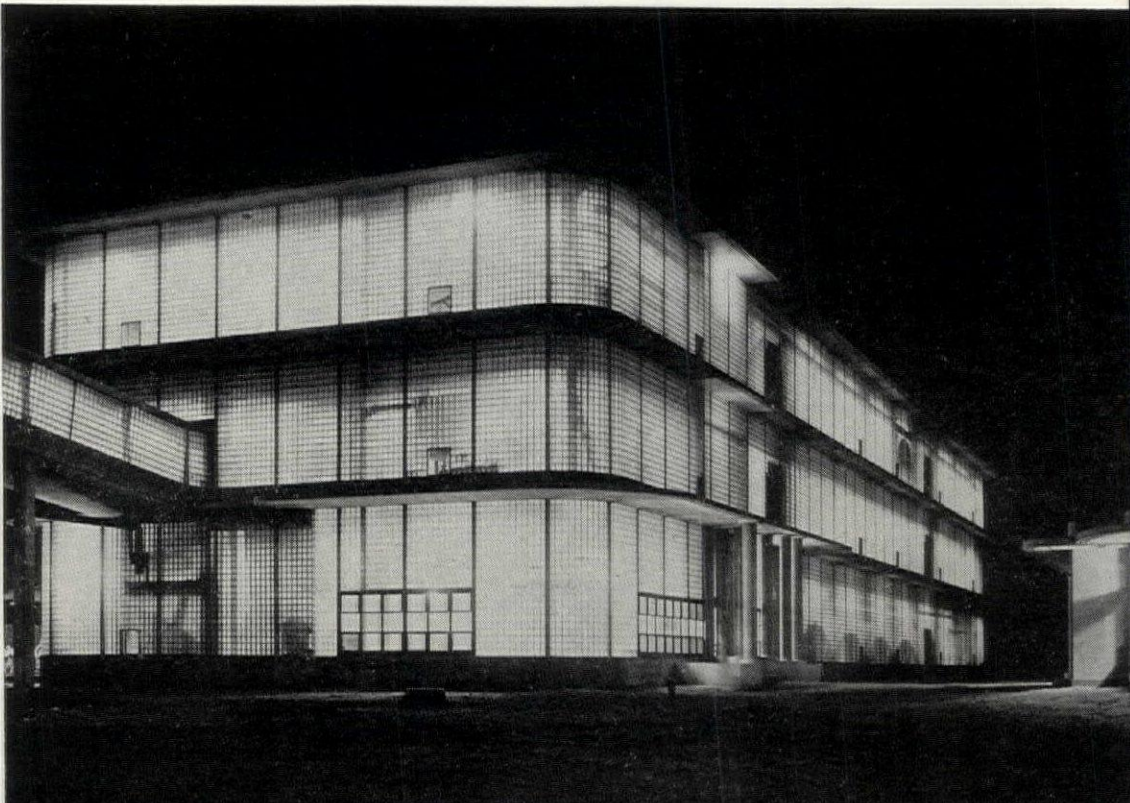


GLASS BLOCK CURTAIN WALLS ARE CARRIED AND SHIELDED BY CANTILEVERED FLOORS

AT NIGHT INTERIOR ILLUMINATION CASTS PROTECTIVE LIGHT ON SURROUNDING YARDS



TYPICAL SECTION

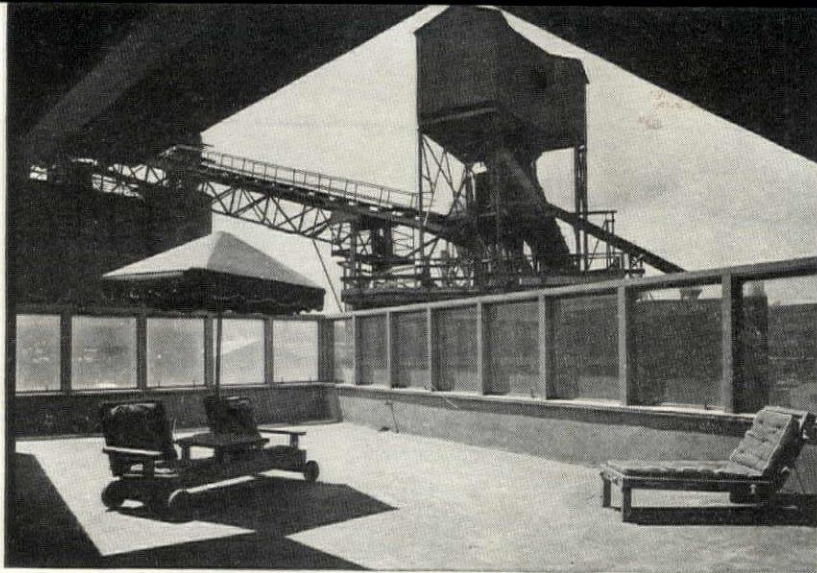




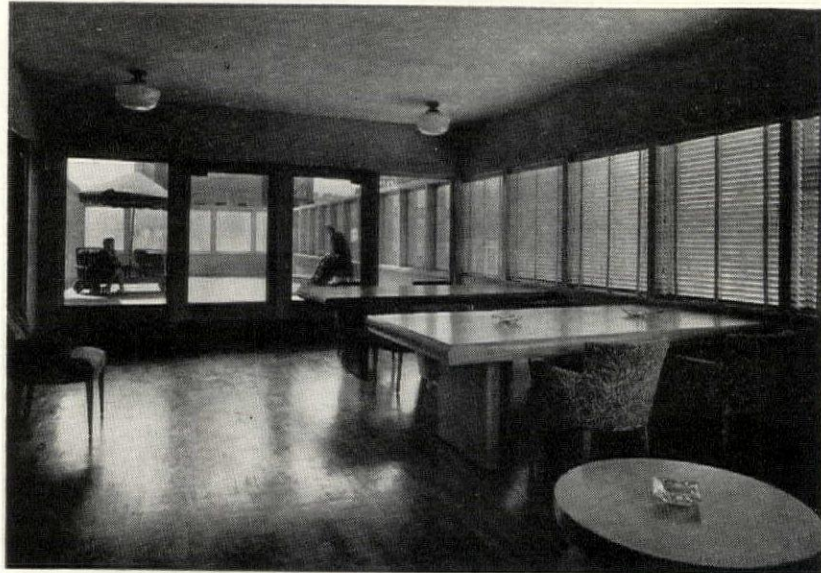
EXTERIORS ARE BRUSHCOATED BLUE-GREY, SIGNS AND COLUMN AT ENTRY ARE CORAL AND ALL TRIM IS PAINTED ALUMINUM

GLAZED SCREENS PROTECT EMPLOYEES' SUN DECK FROM SHARP BAY WINDS. WINDOWS ARE SEALED AGAINST DUST, OPEN ONLY FOR CLEANING





LACK OF EATING PLACES IN AREA LED TO THIS SUN DECK AND . . .



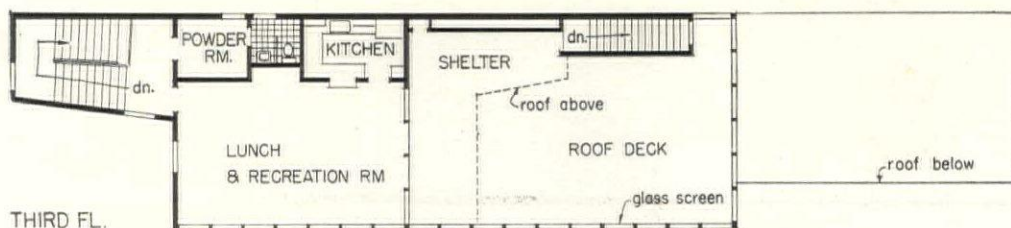
THIS HANDSOME LUNCH AND RECREATION ROOM FOR EMPLOYEES

OFFICE BUILDING provides for efficient work, pleasant lunches.

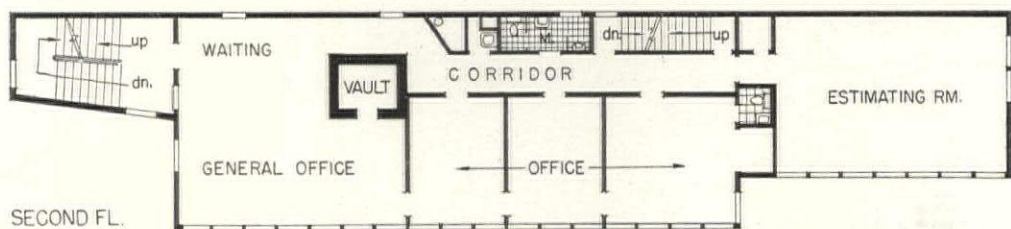
WURSTER, BERNARDI & EMMONS, Architects

Plant and general offices of the Charles L. Harney Co. have recently been consolidated in this striking new building erected at the company's plant in San Francisco. This firm of general contractors, prior to the completion of the new building, maintained its general office in a downtown office building. This necessitated time-consuming travel for the staff between offices and plant: hence, the decision to consolidate all office and clerical operations at the plant. However, because there were no restaurant facilities in the neighborhood suitable for the women staff members, it was decided to provide for lunches in the new building. This led to its most distinctive feature—the spacious recreational area on the top floor. The suite consists of a pleasant dining room, a self-contained kitchen and a partially roofed sun deck enclosed with a glass windscreen.

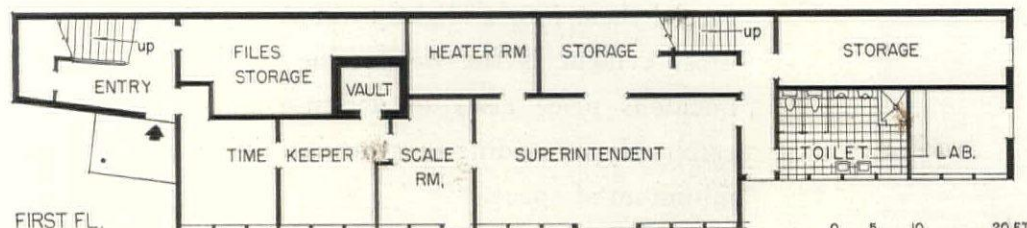
The building lies along one of the property lines, its narrow plan being determined by the existing layout of the plant. Plant offices occupy the ground floor, with general offices on the second. Since the rock crusher is a source of dust and noise, all windows are weatherstripped and opened only for cleaning. Ceilings are acoustically treated and all interiors are mechanically ventilated.



THIRD FL.



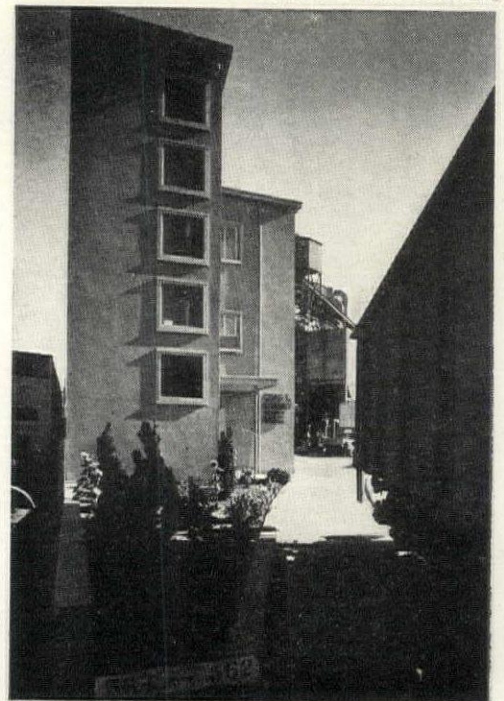
SECOND FL.



FIRST FL.

SCALE 0 5 10 20 FT.

FRAMED WINDOWS ACCENT STAIR TOWER.



Photos: Roger Sturtevant

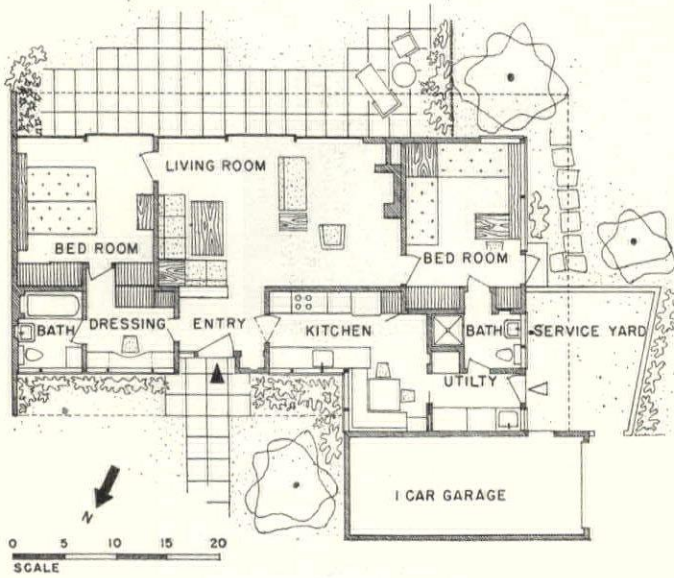


LIVING

The best houses built since the war are not radically different from prewar designs. The exigencies of the present crisis, however, have forced them into a slightly different pattern. Most evident is the need (due to the tremendous price rise) to design simply and compactly, providing comfortable living in a minimum of space.

CASE STUDY HOUSE solves the living problems of a small family.

J. R. DAVIDSON, Architect
MYERS BROS., Contractor



Two years ago *California Arts & Architecture* started a program of "Case Study Houses" by leading architects to forecast the trend of creative thinking in contemporary home design. The J. R. Davidson house is the first of these plans to be taken off *Arts & Architecture* pages and translated into wood and glass. Built for \$14,000, its compact plan boasts extraordinary ease of circulation, includes such amenities as a dressing room, kitchen-dining nook, utility area, service yard and two separate patios—one connecting with the living room and master bedroom, the other with the second bedroom whose separate entrance makes it practical as a private apartment. Noteworthy are the dry-wall construction, radiant heating and appropriate use of modern materials.

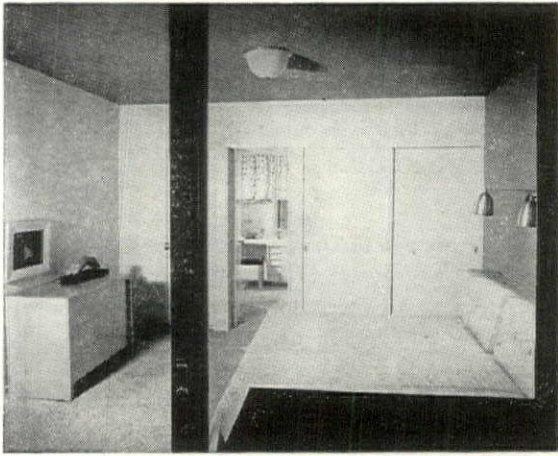
CENTRAL FOYER CONNECTS DIRECTLY WITH LIVING ROOM, DRESSING ROOM AND KITCHEN. NOTE GLASS-PANELED ENTRANCE DOOR



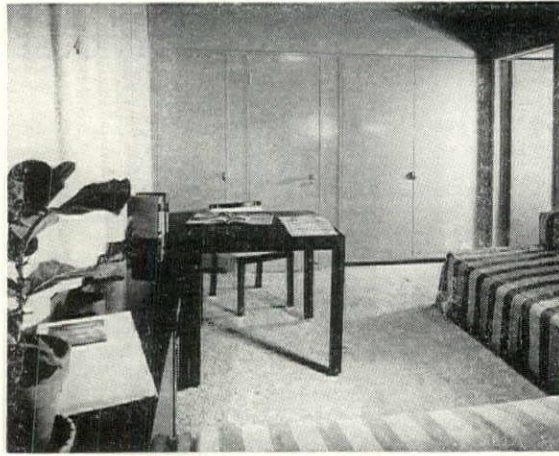
VIEW OF ENTRANCE FROM LIVING ROOM



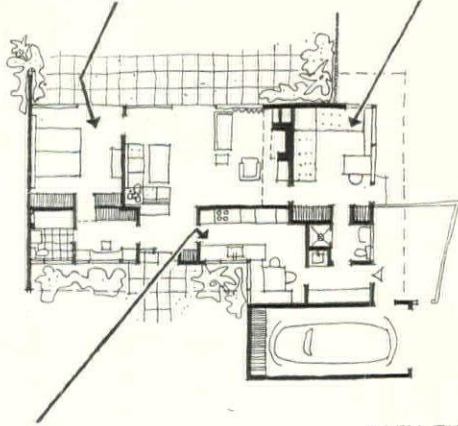
Photos:
Julius
Schulman



SEVERELY SIMPLE MASTER BEDROOM



EXTRA BEDROOM HAS STUDIO COUCHES, DESK



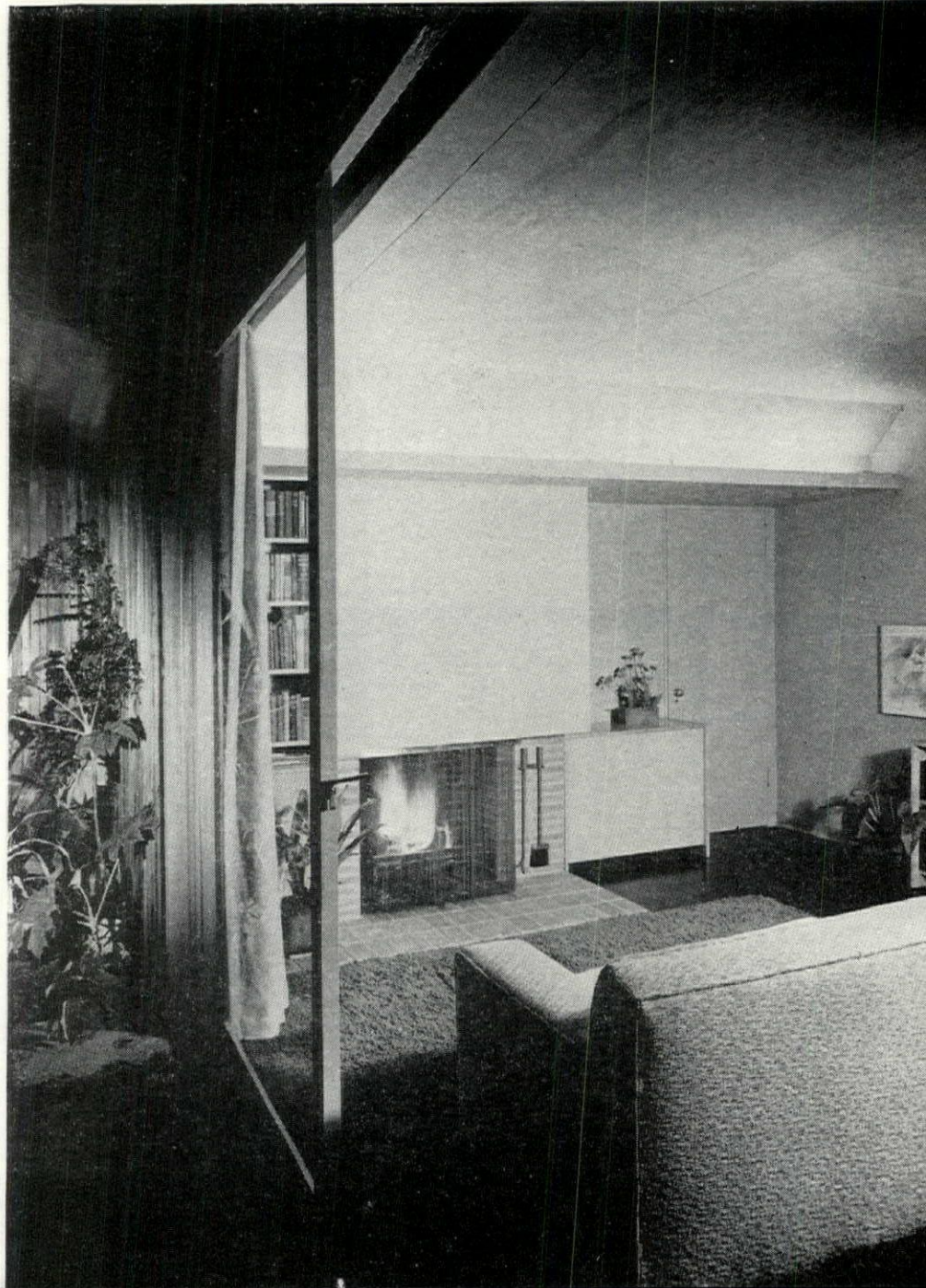
J. R. DAVIDSON, Architect
MYERS BROS., Contractor

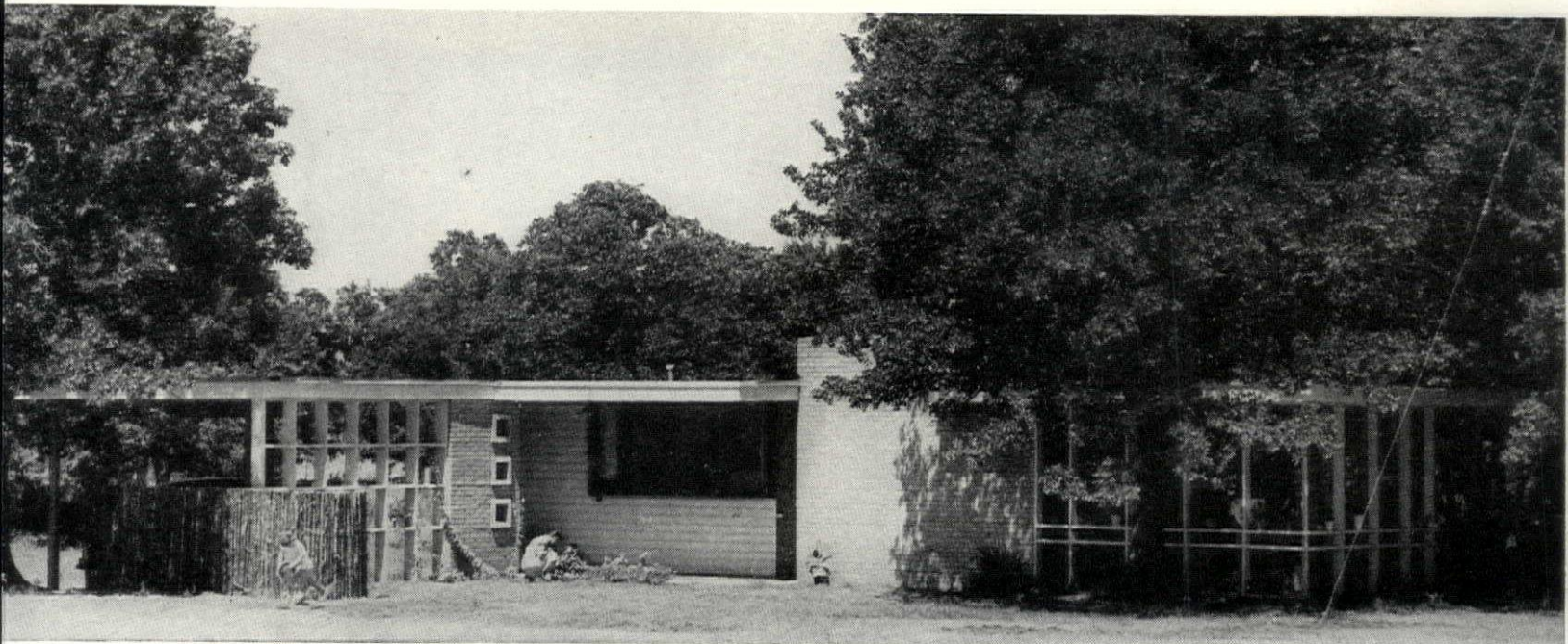
COZY FIREPLACE CORNER IS FOCAL POINT FOR THE GROUPING OF LIVING ROOM FURNITURE



KITCHEN OVERLOOKS FRONT YARD

DINING GROUP IS NEAR KITCHEN



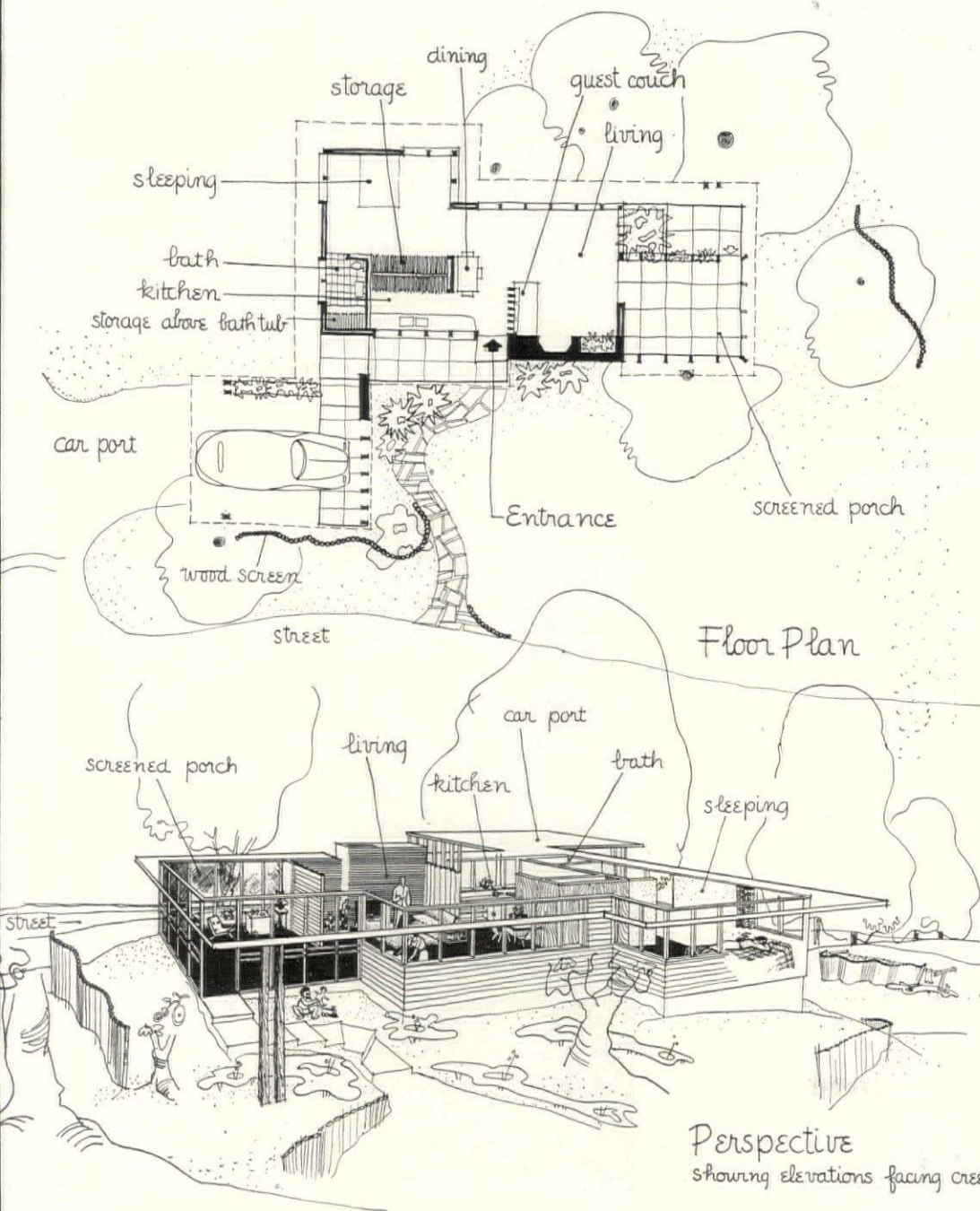


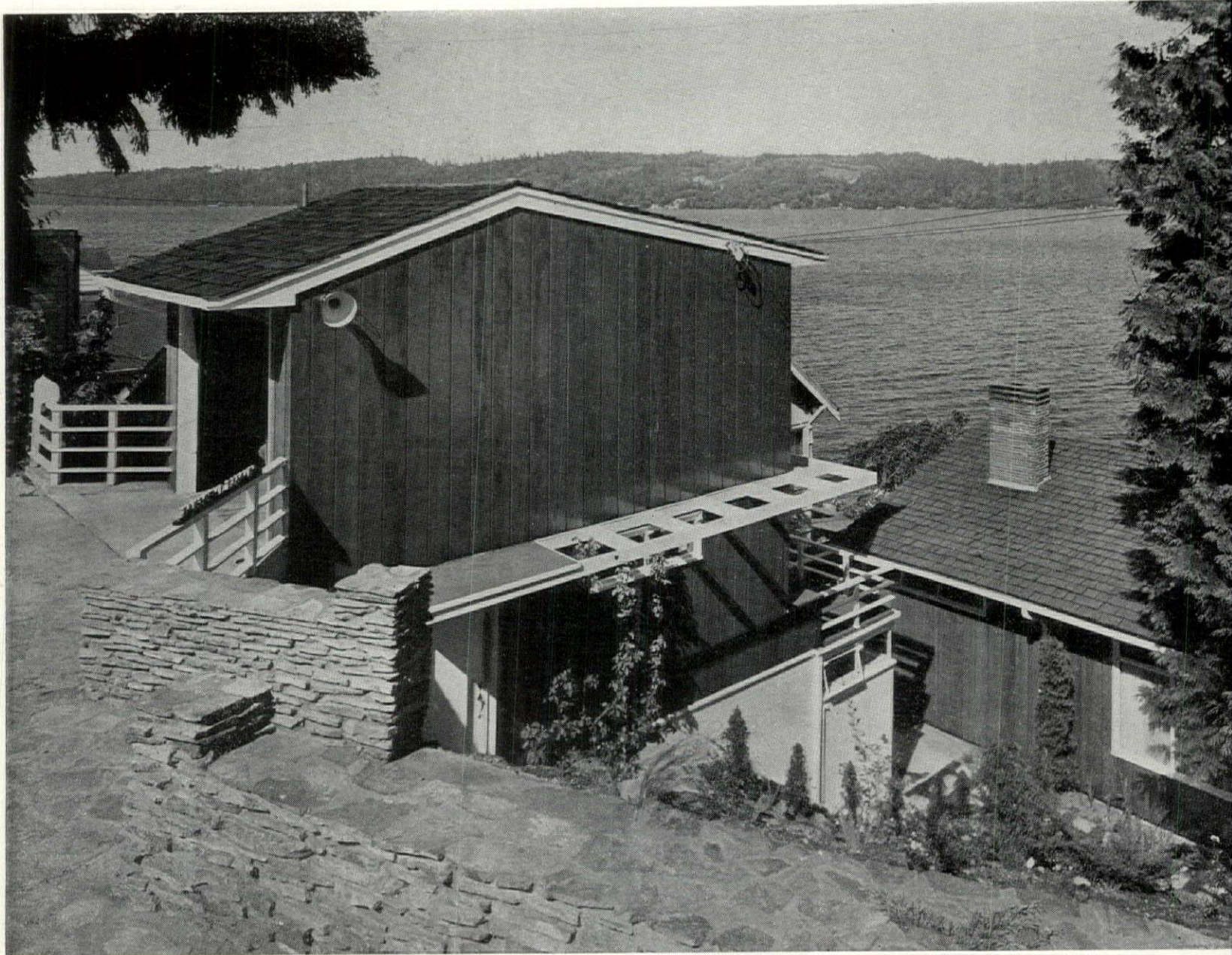
VIEW FROM STREET REVEALS SCREENED PORCH (RIGHT) AND CARPORT (LEFT). NOTE FLOWER POT BOXES ON BRICK TRELIS EXTENSION

HOUSE IN TEXAS provides maximum living in two major rooms.

CAUDILL & ROWLETT, Architects

An open plan with only one interior door serves to cut costs and improve circulation in this small, low-priced home. It is oriented to receive the cool summer breezes, but regardless of wind direction there is always cross ventilation through the entire house. Although only 650 ft. of floor area are actually enclosed, the dwelling achieves a spacious atmosphere with its large glass areas, absence of partitions and good-sized porch opening off the living room. There are twenty windows in all, designed in identical sizes to save money. Three-foot overhangs above these windows keep out the sun and rain. The exterior—salmon pink brick, ivory siding and gray-green trim—contrasts pleasantly with the deep green of surrounding oak trees.





REAR SERVICE BUILDING PROVIDES ACCESS TO AN OUTDOOR STAIRWAY AND SIDE ENTRANCE COURT CONNECTING WITH THE LOWER HOUSE

HOUSE IN SEATTLE, WASH. is designed for privacy from neighbors and separation of living-working quarters.

CHARLES A. LAWRENCE, Architect

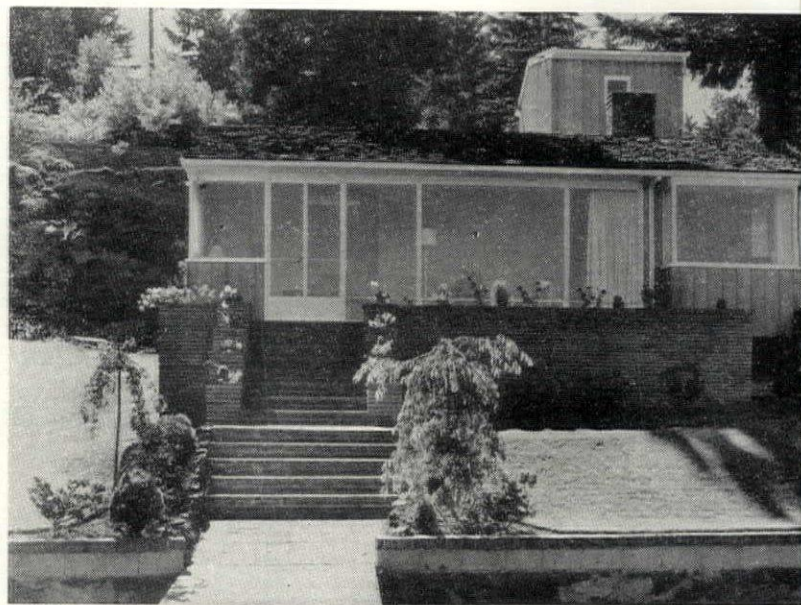
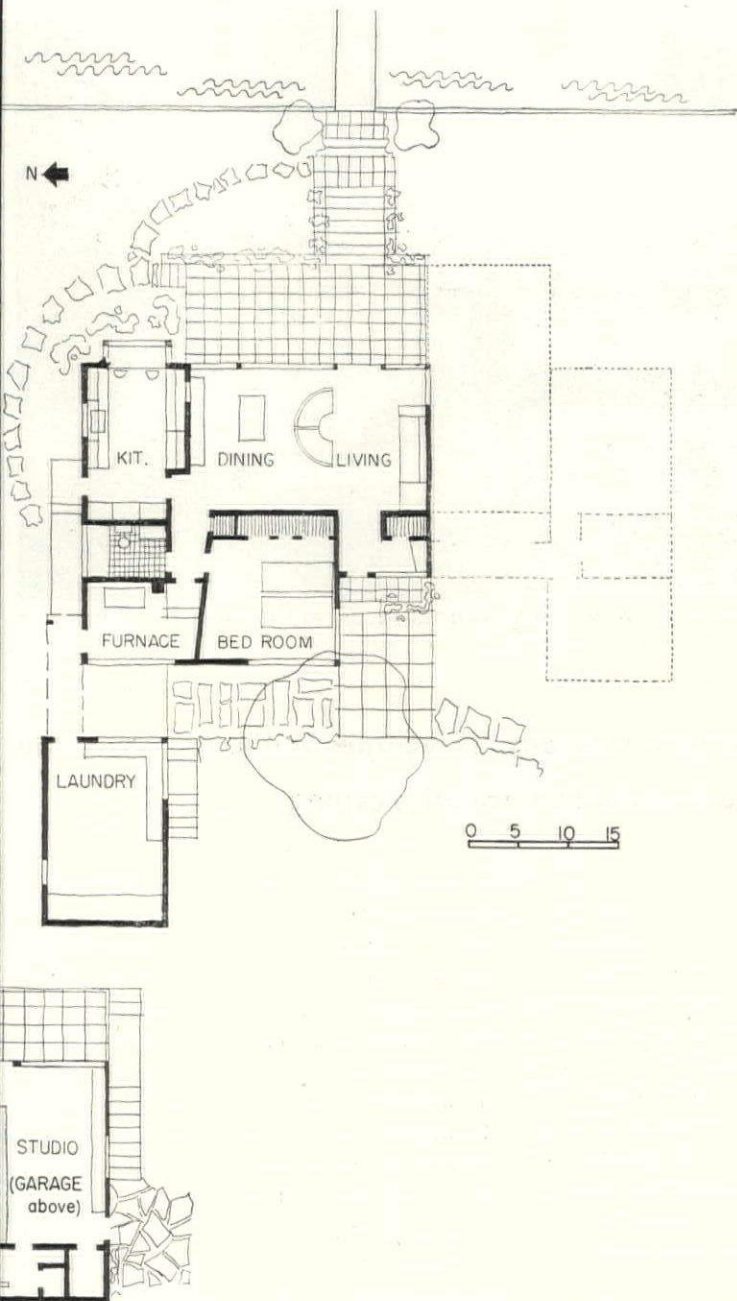
A steeply sloping site overlooking Lake Washington was the determining factor in the design of this split-level, two-building home. The main quarters, with living-dining room and kitchen facing the lake, are in the lower house; the laundry, architect's studio and garage are in a three-story building nestled against the steep bank, planned so that the garage is high enough for access from the street. The two buildings are joined by a covered passageway leading from the kitchen to the laundry.

Taking full advantage of the view, the architect has created an open design with large glass areas on the lake front and a patio for outdoor living. Because neighboring houses are very close, the sidewalls are windowless except for a few clerestories. Floors are raised from grade to prevent dampness, and heating is supplied by ducts feeding into a cemented area beneath the lower house. These ducts are carried in the overhead walkway to the laundry, studio and garage.

CEDAR DOMINATES LOWER ENTRANCE COURT



Photos: K. S. Brown

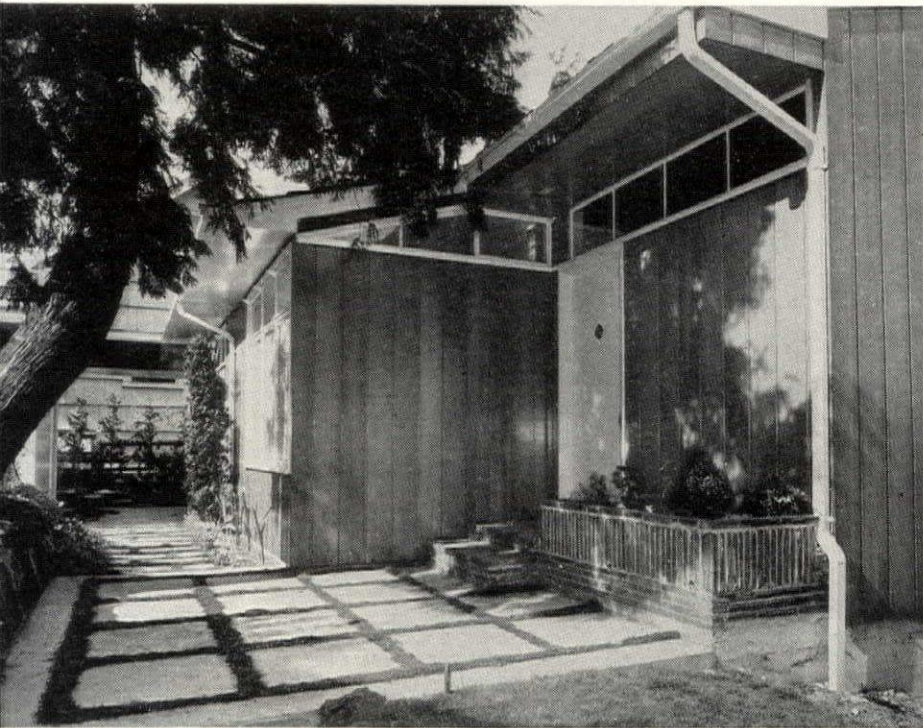


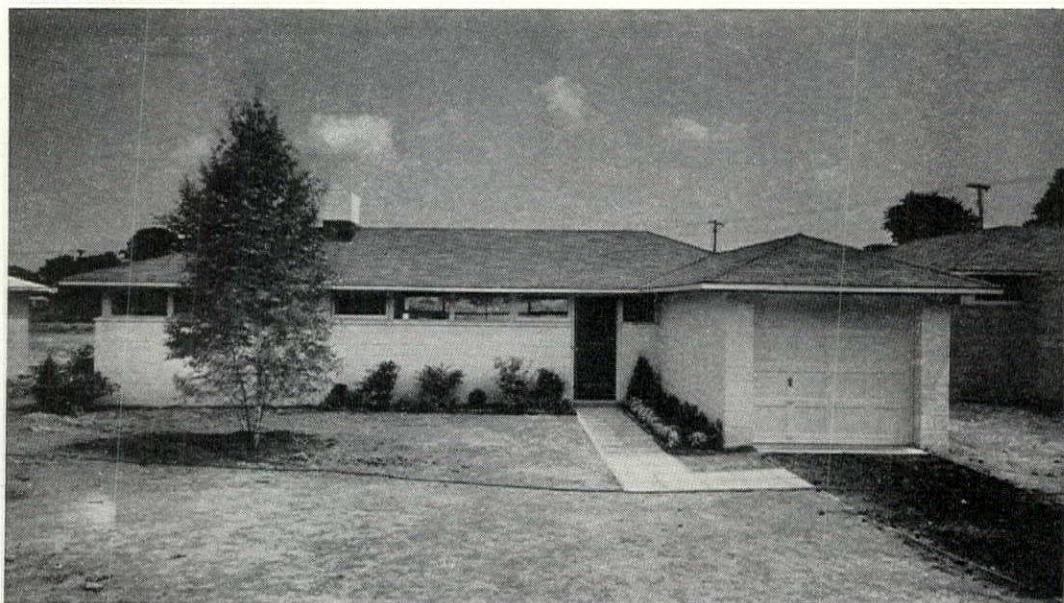
VIEW OF GROUND FLOOR AS SEEN FROM THE LAKE FRONT



LIVING ROOM'S LIGHT FURNITURE PRODUCES AIRY LOOK

ENTRANCE COURT ON UPHILL SIDE PROVIDES DIRECT ACCESS TO LIVING ROOM





STREET SIDE OF HOUSE BENEFITS FROM SURE HANDLING OF FENESTRATION AND ROOF

40 HOUSES OF CONTEMPORARY DESIGN are built for New York veterans. Developer Williams moves the ranch house East, proves that livable dwellings can still be built under Federal price ceilings.

While most builders in New York's traditionally high cost metropolitan area have been arguing that even a two-bedroom house cannot be built under the government's \$10,000 price limit, a notable few have proved them wrong and have thrown in an extra bedroom to boot. Proof enough that New Yorkers can still get a lot of house for their money is the 40-unit project of Builder Cy Williams in Roslyn, Long Island, about 30 parkway minutes from midtown Manhattan. Moreover, through contemporary design, Williams has made his 1,089 sq. ft. houses seem even more spacious than they are and has put them in a class by themselves as far as appearance and livability are concerned.

Admittedly patterned after the much-ballyhooed Postwar House of California's Fritz Burns (*FORUM*, May, '46, p. 97), Williams' design features many departures from Eastern small house tradition. Spread out like a ranch-house, the building occupies but one floor, and its 48 ft. width is accommodated by a 66 ft. lot. High windows across the front and along the bedroom sidewall light the rooms, insure privacy, improve ventilation and permit various furniture arrangements. Large windows open the living room, master bedroom and kitchen to the patio at the rear. An oversize attached garage provides space for storage or a workshop, and a kitchen of ideal shape and generous dimensions makes room for laundry equipment and informal dining. Ample closet space is augmented by cabinets built into the bedroom hall and the dwarf partition between the entrance and the main dining space. Shelving is also set into the fireplace wall. Finally, the house is radiant heated by wrought iron coils in the concrete slab and a small furnace located economically beside the fireplace.

The contemporary design of Williams' houses has made possible several concessions to economy and the materials shortage which

traditional design would not have permitted. Walls are concrete block, finished with waterproof paint on the outside and—on the inside, furred, lathed, plastered and finished with wallpaper. Floors are painted concrete, except in the kitchen and bath where they are finished with linoleum. The living room roof structure is exposed, and, in the first house to be completed (see photographs), is accentuated by a couple of coats of brown paint. In subsequent houses the horizontal members will be replaced by two less conspicuous steel tie rods, and rafters may be painted to harmonize with the exposed insulating board.

Purpose of Williams' Roslyn project is twofold: it is, first, a test of public reaction to the appearance and layout of the house and, second, an experiment in which Williams is working out design and construction bugs before beginning factory fabrication of frame houses of similar design. The first purpose has already been served; consumer reaction has been enthusiastic. Since the house-hungry public looks favorably upon almost any kind of shelter, Builder Williams has been impressed not so much by the number of people who have come to see his houses—more than 1,000 on the Sunday following newspaper announcements—but by the number of house-hunters who said they were willing to wait for Williams' factory to get into production.

Priced at the present \$10,000 ceiling, including about 10 per cent for land and development costs, the experimental concrete block houses have all been sold to veterans for down payments averaging about \$1,250. Mortgages bearing interest at 4 per cent and partially guaranteed by the Veterans Administration are being written by the North River Savings Bank at a cost of about \$5.22 per \$1,000 per month, including 25-year amortization. Other monthly carrying charges amount to about \$15

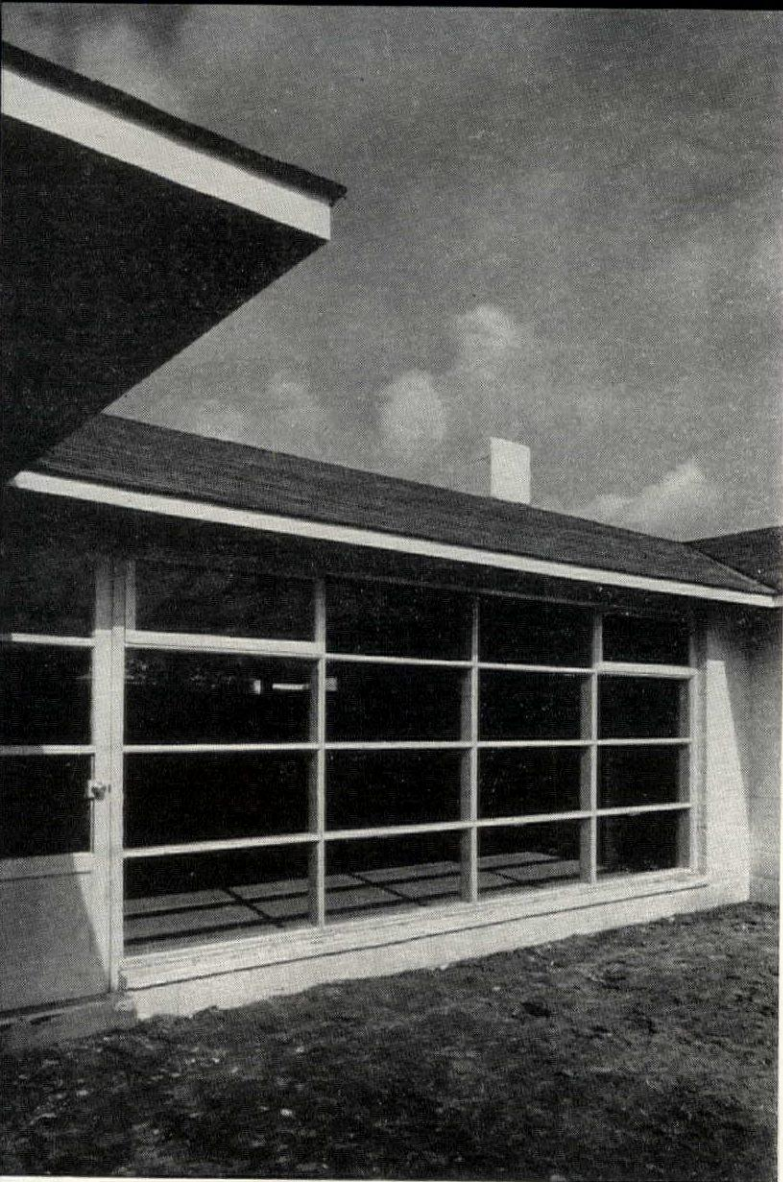
for taxes and \$2 for insurance, bring the total to about \$63 per month.

When Williams' factory gets under way, it will serve only the local market. For the time being, he plans to merchandise only one house—a duplicate of the one shown on these pages—constructed of frame panels—and to confine his activities within about 20 miles of his Huntington plant. Within this area he will contract to supply and erect complete houses on lots provided by purchasers.

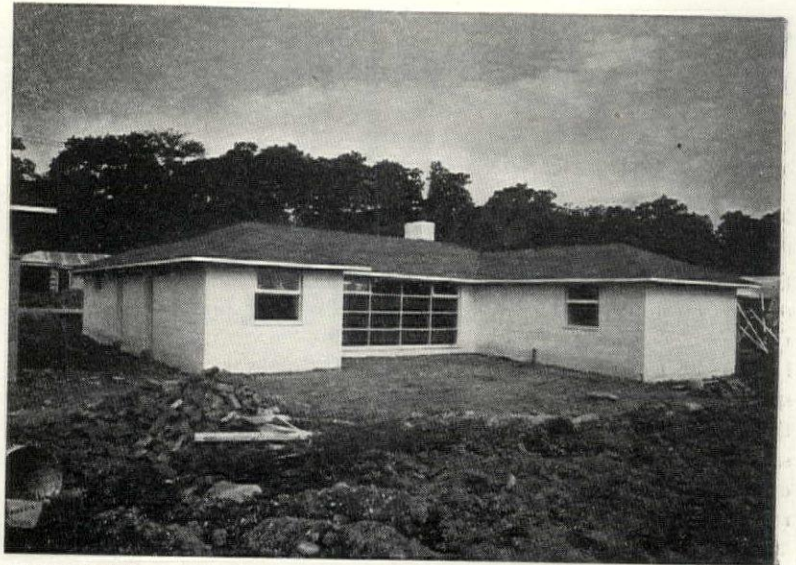
Pointing to the success of Williams' budding prefabrication venture are his M. I. T. training in engineering, his practical building experience (once a carpenter's helper, he became the head of a firm which has completely developed several Long Island subdivisions) and his knowledge of prefabrication (during the war he supervised the building of prefabricated houses for industrial workers). Also in his favor is the fact that, in all of his house building operations, Designer-Builder Williams has tried to stay in front of his field—but not so far out front that he lost the public.

CONSTRUCTION OUTLINE

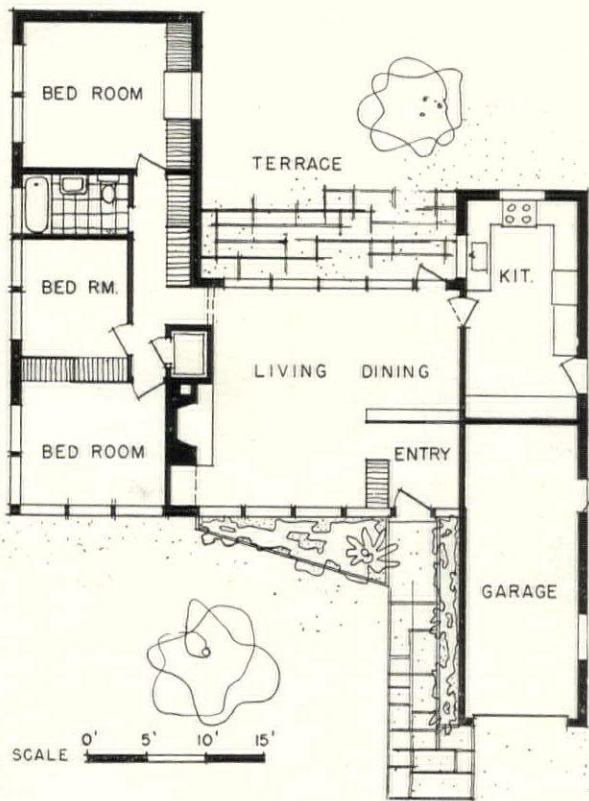
STRUCTURE: Exterior walls—painted concrete block, furring, gypsum lath and plaster. Floors—concrete slab over gravel fill, waterproof paper. **ROOF**—sheathing and asphalt shingles, U. S. Gypsum Co. **INSULATION**—Celotex Corp. insulation board over living-dining room; remainder—rockwool, Johns-Manville. **WALL COVERINGS**—wallpaper. **PAINTS**—Truscon Laboratories. **FLOOR COVERINGS**—kitchen and bathroom, linoleum, Armstrong Cork Co.; other floors, paint. **GARAGE DOORS**—overhead type, Crawford Door Co. **HARDWARE**—Schlage Lock Co. **ELECTRICAL FIXTURES**—Lightolier Co. **KITCHEN EQUIPMENT:** Range—J. B. Slattery & Bros., Inc. **BATHROOM EQUIPMENT**—American Radiator-Standard Sanitary Corp. **Cabinet**—G. M. Ketchum Mfg. Co. **HEATING**—radiant, hot water system. Coils—wrought iron, A. M. Byers Co. **Boiler**—Pacific Steel Boiler Div., U. S. Radiator Corp. **Regulator**—Minneapolis-Honeywell Regulator Co.



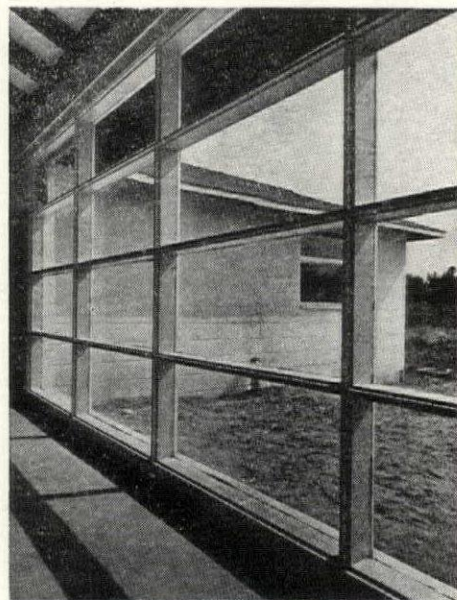
OF GLASS WITH DOOR AT DINING END OPENS LIVING ROOM TO PATIO
 BED BRICK WALL IN LIVING ROOM HOUSES FIREPLACE AND FURNACE



REAR WINGS OF HOUSE FORM THE PATIO, HAVE LARGE WINDOWS.



PICTURE WINDOW IS SIMPLY BUILT

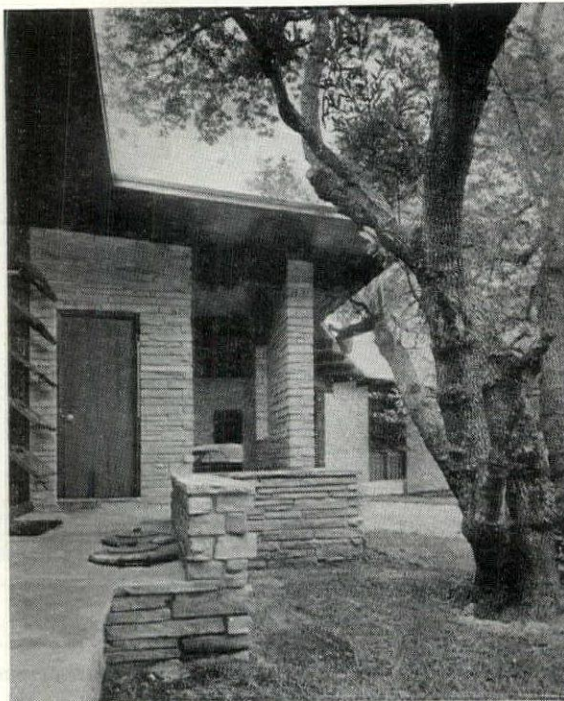


FLORIDA FARMHOUSE designed for year round comfort in Everglades.

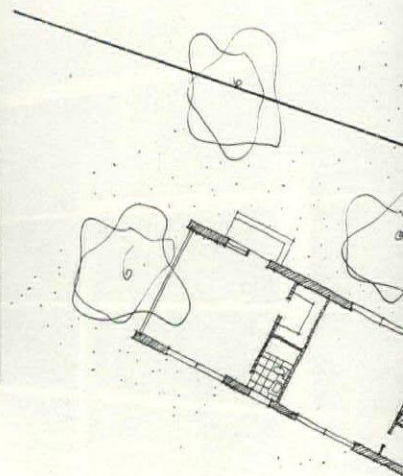
IGOR B. POLEVITZKY, Architect
TERRACE SHOPS, INC., Interiors

Located on a hammock in the Everglades some thirty miles northwest of Miami, Fla., this project is the owner's residence on a large modern farm. Since it is to be a year round residence, comfort was a decisive factor. Hence, the main face is turned to the south-southeast's prevailing breezes—and the whole front kept open by an ingenious system of screens, louvered jalousies and sliding glass doors. A handsome swimming pool lies directly off the porch.

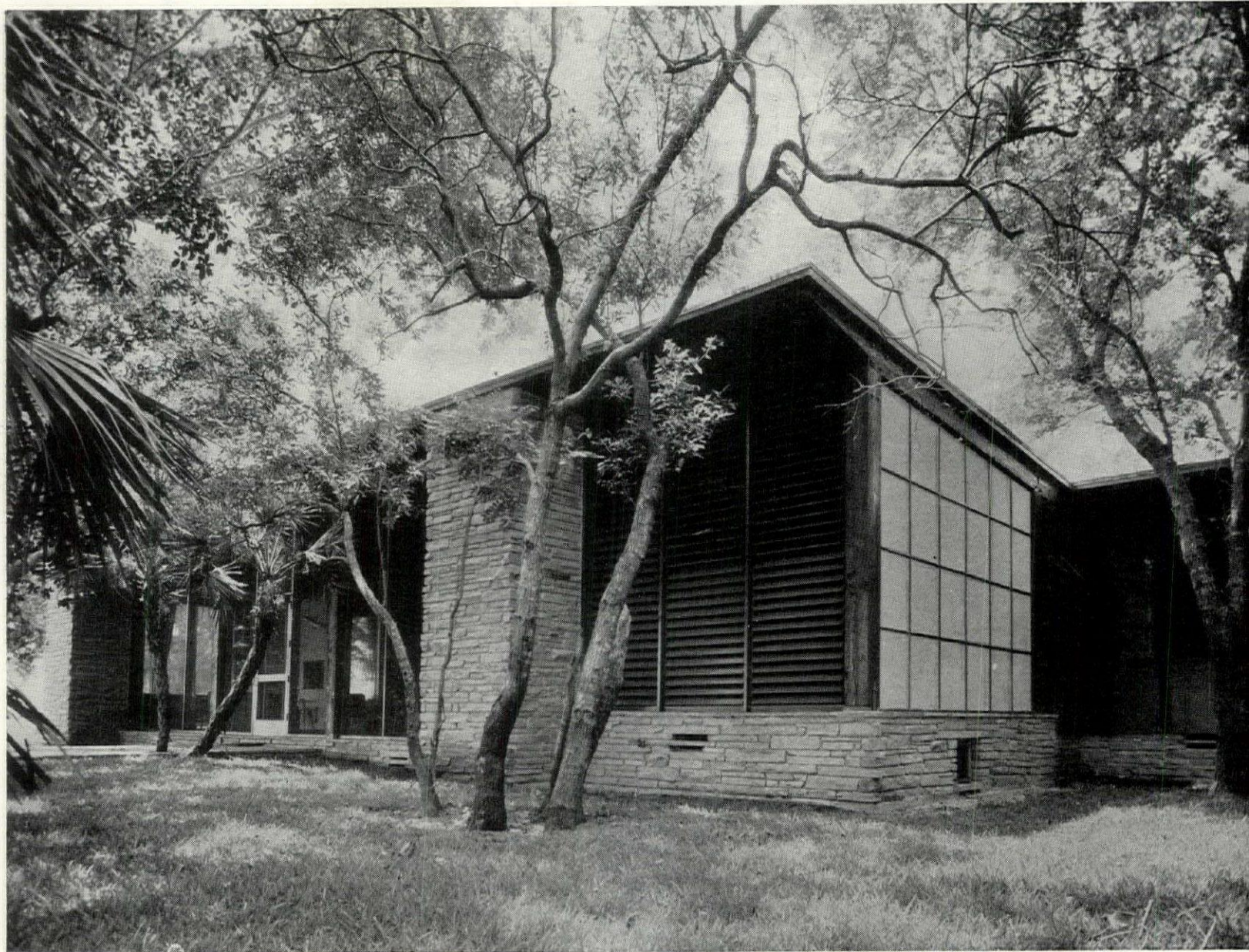
The design is based upon surplus material which the owner was lucky enough to get from the Navy—6 x 12 in. and 10 x 12 in. timbers, and 4 in. planking. The structural scheme centers around the maximum span of these planks and beams. Its skeleton consists of solid wood columns and beams, assembled with countersunk steel plates. The slightly-pitched built-up roof consists of a single layer of 4 in. planking. Together with walls of Crab Orchard stone, this yields a construction well-suited to Florida's hot summers.

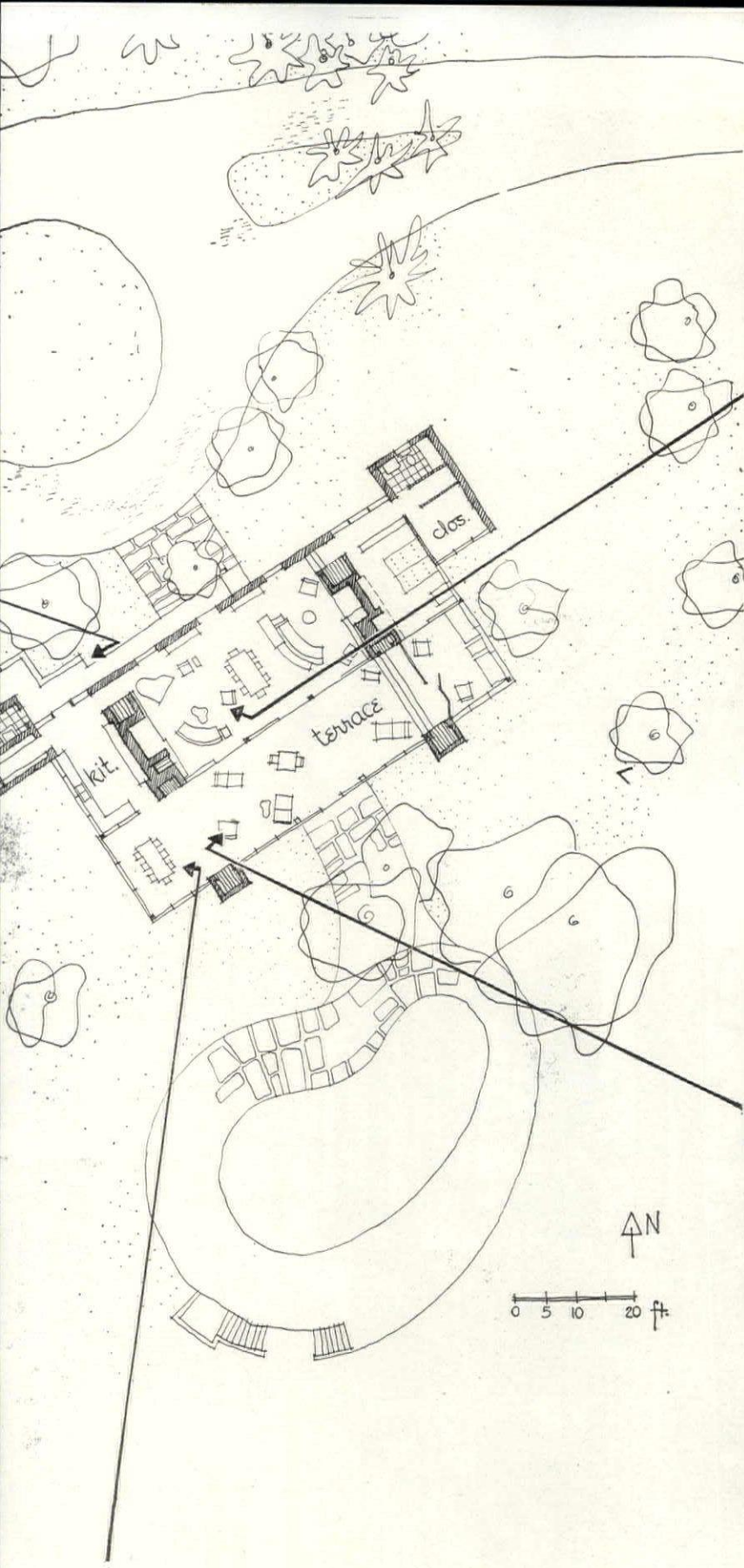


GUEST WING IS FOR EVENTUAL SERVANTS' USE

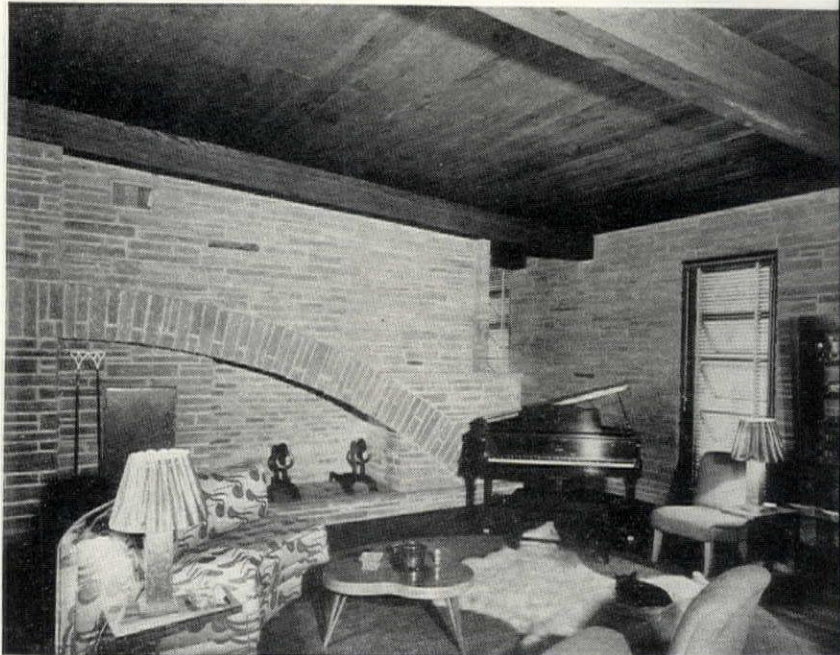


HOUSE SITS ON HAMMOCK AMID LIVEOAKS AND PALMS, FACING SOUTHEAST ACROSS SWIMMING POOL AND TOWARD PREVAILING BREEZE





Photos: Hinman Photography

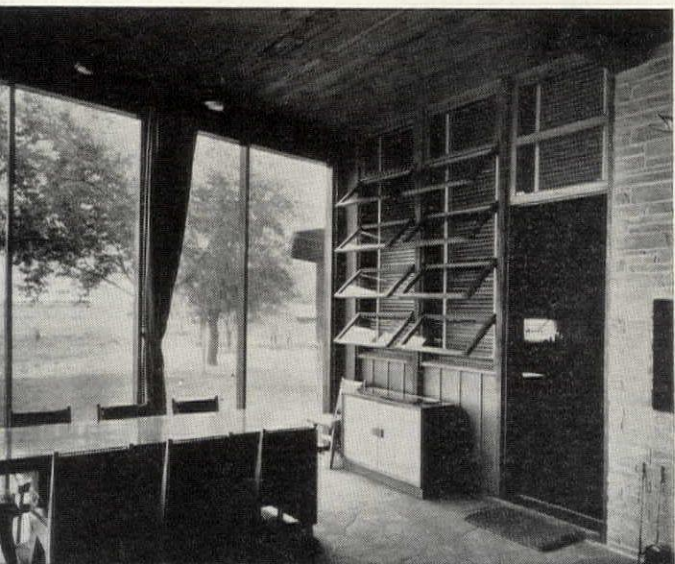


LIVING ROOM HAS WOOD CEILING AND FLOOR, STONE WALLS



DEEP SHADY PORCH PROTECTS THE LIVING ROOM FROM GLARE

END OF PORCH CONNECTS DIRECTLY WITH THE KITCHEN



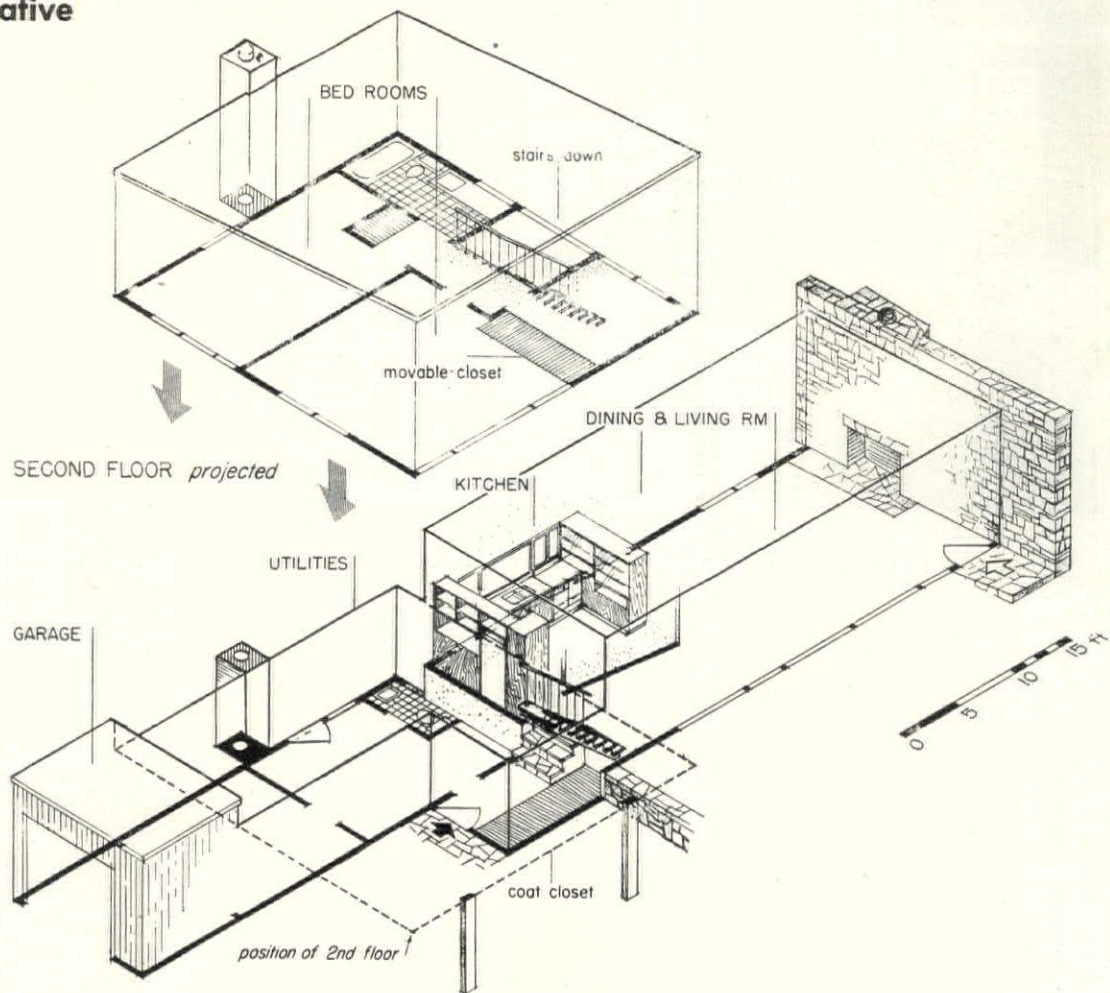


TRI-LEVEL HOUSE is first of a speculative group for Long Island.

GEORGE NEMENY, Architect
GORDON B. ROTH, Builder

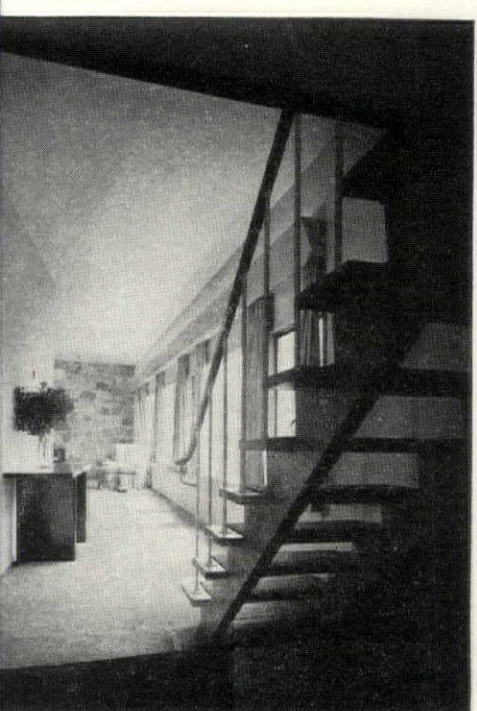
Occupying a typical 40 x 100 ft. suburban lot, this house is significant not only as an example of excellent design but also as one of a group of similar houses built speculatively in Long Beach, N. Y. The builder had ten such houses well under way when the government put price ceilings on residential construction, and he plans to start many more by the same architect as soon as the restrictions are lifted. Meanwhile, the initial ten have been sold at prices ranging from \$18,500 (for the unit shown on these pages) to \$40,000, including land.

Since zoning laws required side-yard setbacks of 5 and 8 ft., the width of the building was limited to 27 ft.—the long dimension of the bedroom wing, set across the main axis of the house and up nine steps from the living area. However, since the major wing of the house is only 16 ft. wide, a side-yard of above-average size results, and around this yard the house is designed. To reduce hall space and overall cubage and shorten the stair run between living and sleeping areas, the house is built on three levels, the garage and utility room being four steps below the living level. The design features simplicity of detail, use of natural materials and reliance upon functional elements for decorative effect—note, for instance, heat-reducing glass canopy over the bedroom windows (see cover).

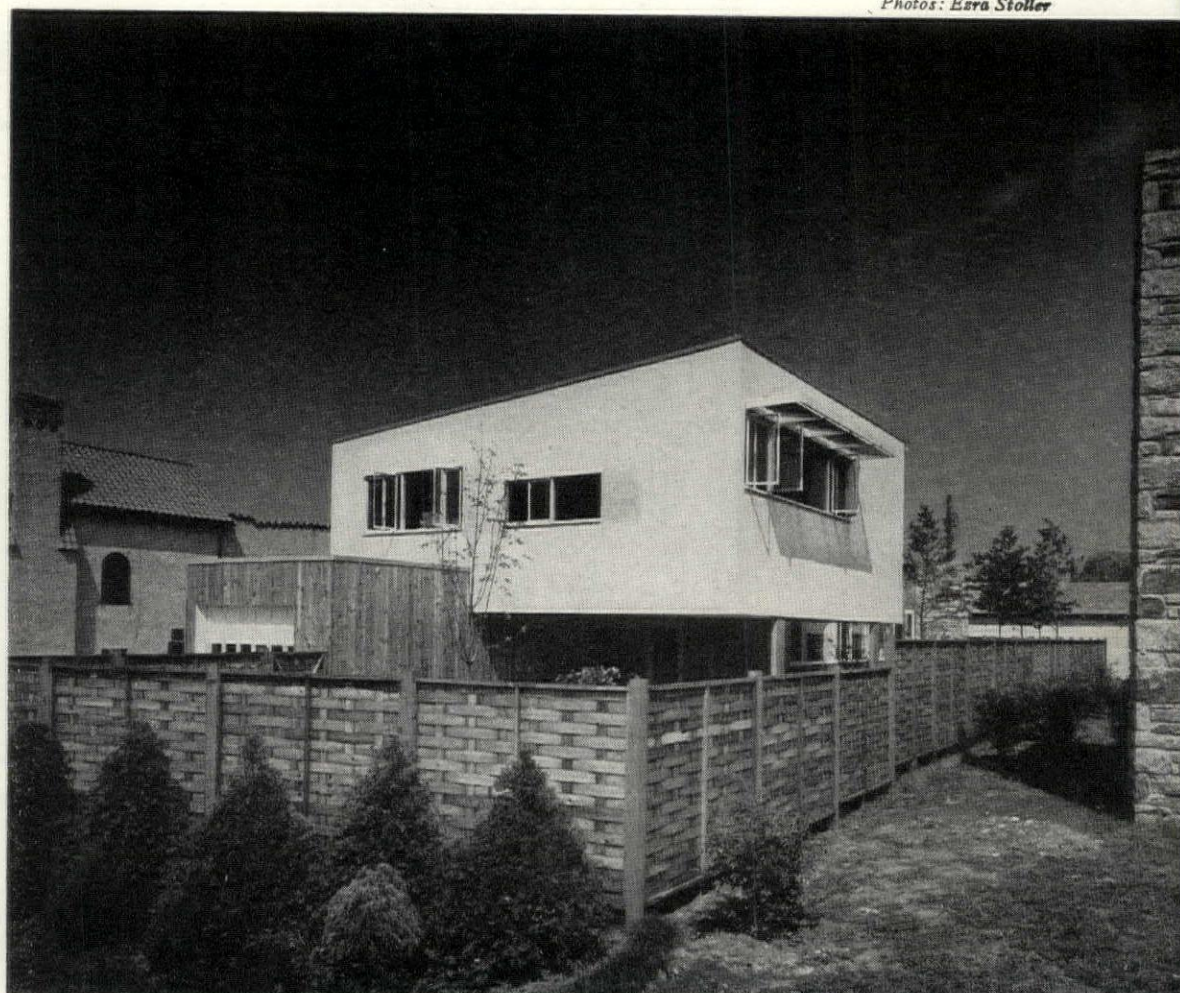


Architect's Staff:
A. W. Geller, A. Jupp and J. Stein
James C. Rose, Landscape Consultant

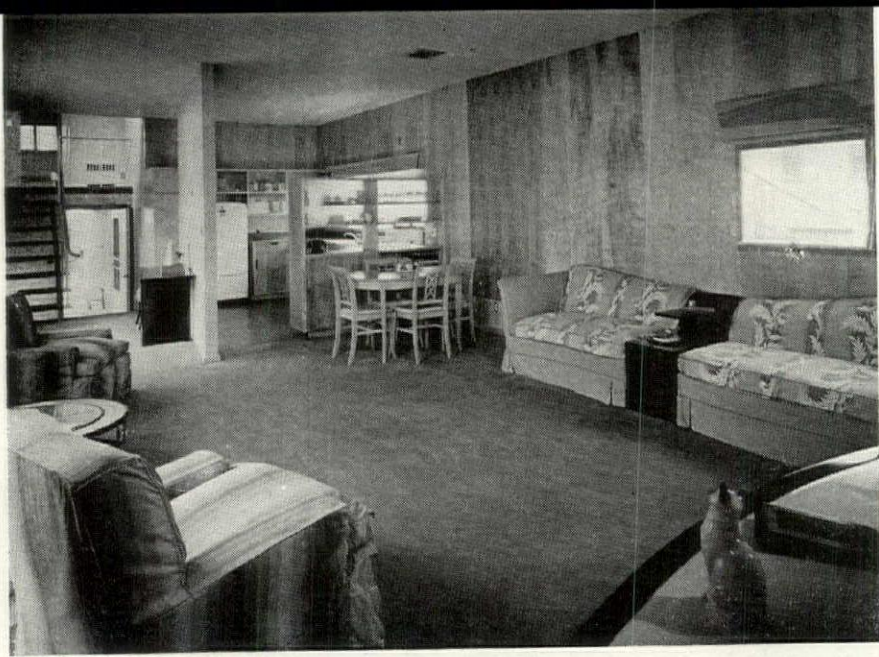
Photos: Esra Stoller



STAIRS FIT NEATLY INTO OPEN PLAN

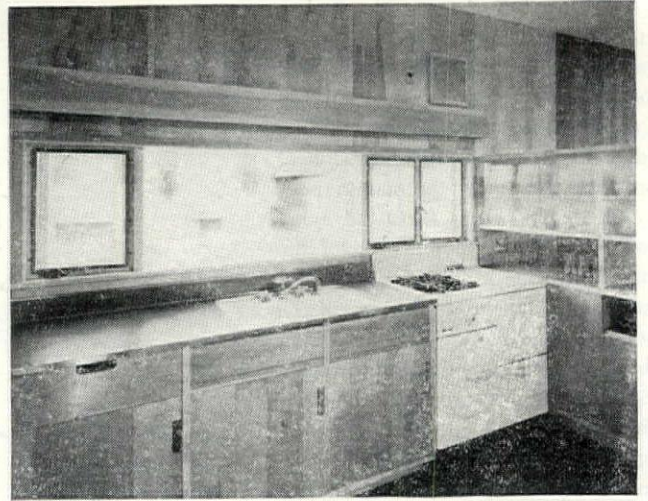


WOVEN WOOD FENCE GIVES PRIVACY TO NARROW LOT, BLENDS WITH GARAGE FINISH

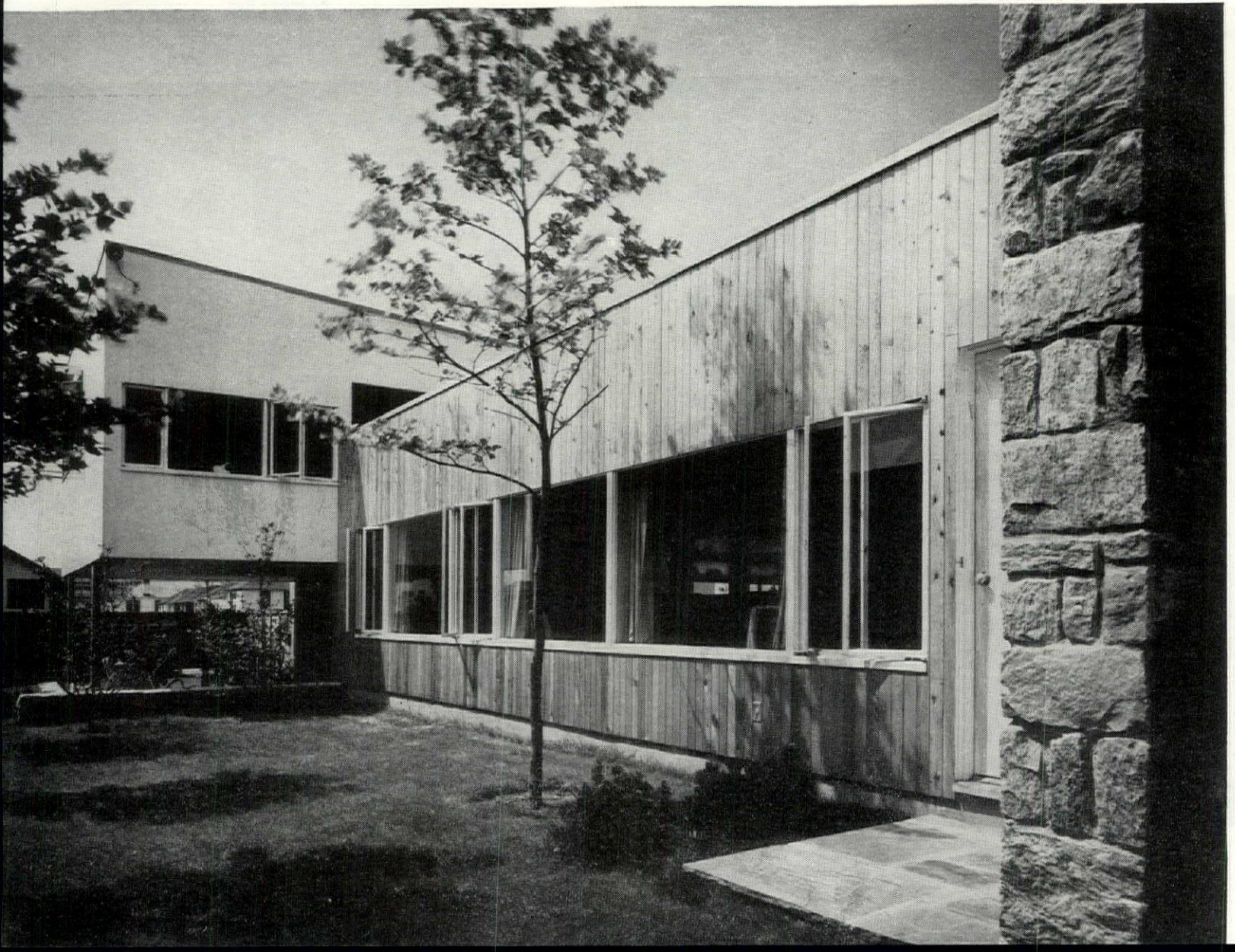


Photos:
Enra Stoller

OPEN PLAN MAKES MOST OF HOUSE VISIBLE FROM LIVING ROOM: ENTRANCE AND BEDROOM HALL TO LEFT OF PARTITION, KITCHEN TO RIGHT



PROJECTING BEDROOM WING COVERS TERRACE WHICH, LIKE LIVING ROOM WINDOWS, MAKES THE MOST OF SMALL SIDE YARD



VETERAN'S HOUSE is economical and livable four-room unit.

THUR T. BROWN, Architect
WILLIAM MASSEY, Contractor

That design of the minimum house is by no means frozen by its small size and four rooms is amply demonstrated in this simple, attractive house in Tucson, Ariz. Without sacrificing economy (it cost \$6,900 exclusive of lot), the architect varied the traditional arrangement of rooms to create two sheltered terraces and give the house a longer, lower, bigger appearance. Walks along two sides and terraces which they connect were poured as integral parts of the concrete slab foundation. Noteworthy economies include central location of the gas-fired warm air furnace and partial concrete floor in the oversize garage, which provides work space around the automobile. Volume: 12,000 cu. ft.

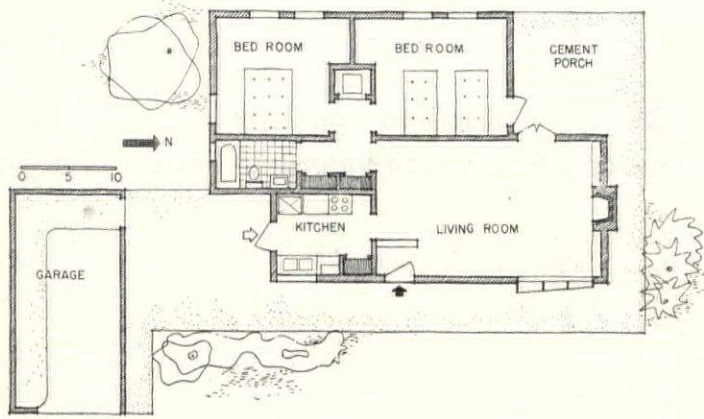


PROJECTING ROOF, EXTENDED TO GARAGE, FORMS SHELTER, EXAGGERATES HOUSE SIZE

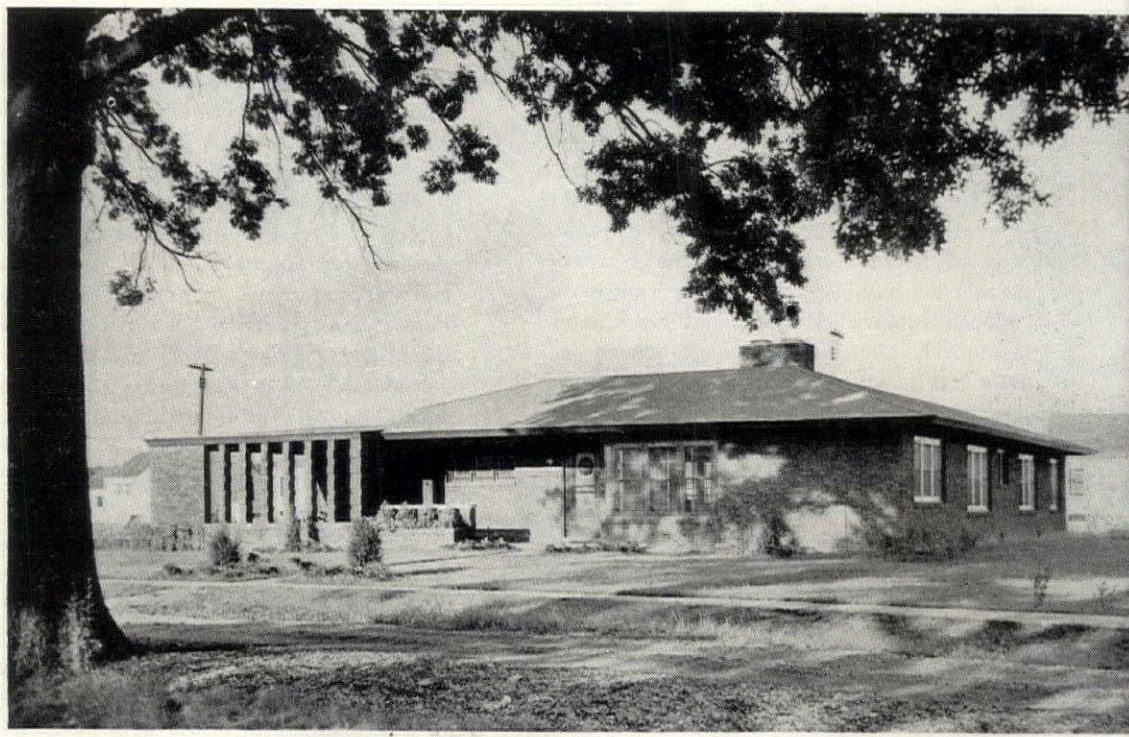
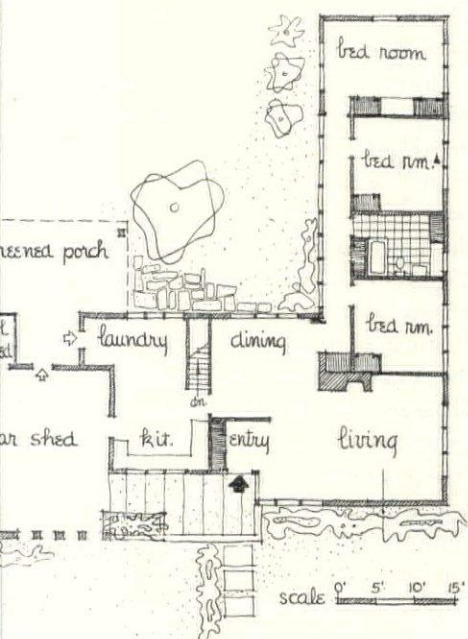
THREE-BED ROOM BUNGALOW is built on an H-shaped plan.

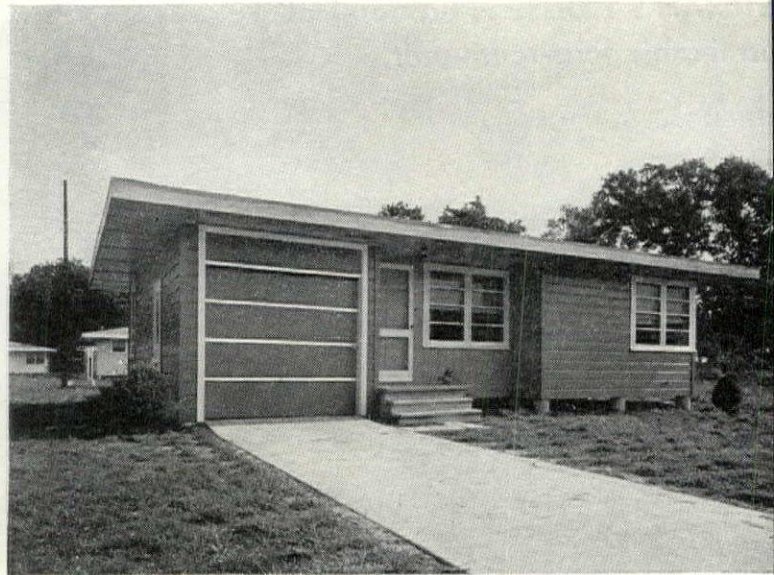
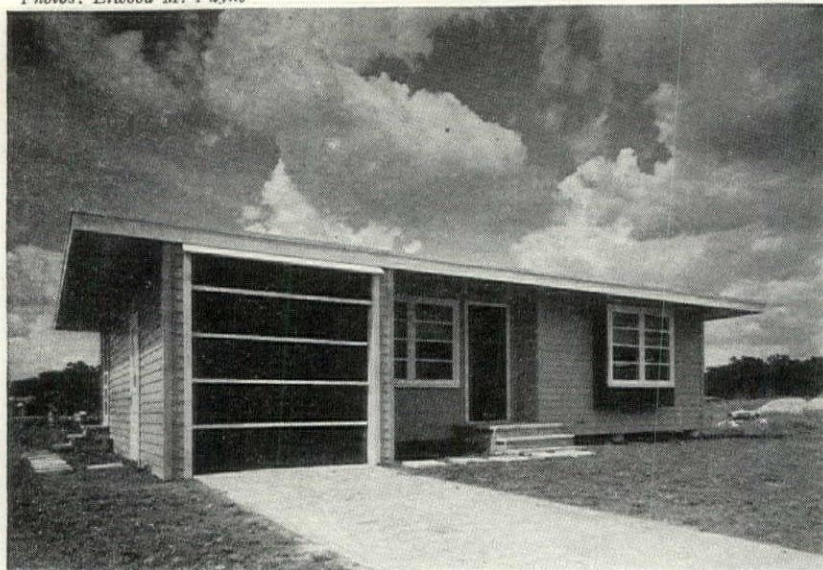
ROBERT C. HAECKEL, Architect

Clipped around a rear-yard terrace, this house in Marion, Ill. features an open car shed, convenient to the main and kitchen entrances. While the living room is at the front of the house, the position of the fireplace directs attention to the rear and the large window in the dining space. The living-dining area flows together, the only separation being a dwarf partition at the entry. Opening off the laundry (which doubles as a breakfast room), the screened porch is handily placed for outdoor dining.



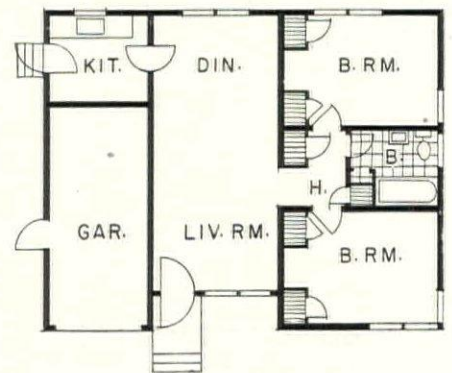
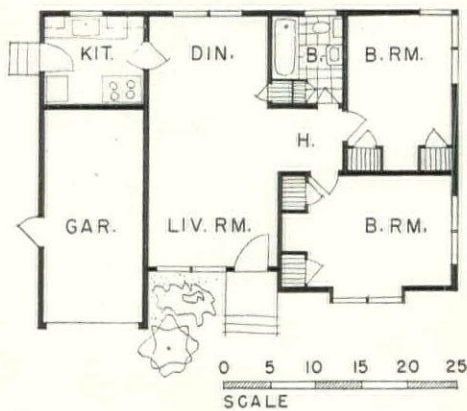
VERTICAL OPENINGS IN CAR SHED CONTRAST WITH HOUSE'S HORIZONTAL CHARACTER





BOLD HANDLING OF COLOR HELPS RELIEVE THE STANDARDIZED DESIGNS

OVERHANGING EAVES SHIELD MULTIPLE WINDOWS FROM HOT TEXAS



175 STANDARDIZED HOUSES in Houston spotlight the trend to modern design. Developer Farrington builds an integrated company to produce veterans' houses at high speed, low cost.

A mild Texas climate requiring minimum heat and insulation may help Houston's William G. Farrington Co. hold the cost of his 5-room houses to \$5,300, but weather is not the determining factor. Integration within a single organization of talents in all fields of residential construction is primarily responsible for the low cost of the houses in the Southdale project as well as their functional planning and sound construction. Known locally as "community developers," the Farrington Co. with its staff of experts normally handles all phases of house building from land purchase and planning to sales and financing. With one unfortunate exception, this is the case at Southdale—to save time in the production of houses for veterans, the company bought the unsold section of a previously developed subdivision which had been unimaginatively plotted with straight streets and 50 x 100 ft. lots. From there on, however, no lack of imagination is evident in the 175-house project.

Realizing that standardization was essential to minimum cost, Farrington's design experts limited their efforts to eight basic floor plans of two sizes which are repeated with varying orientations, roof lines, entrance details, color combinations and other inexpensive but effective changes of face. And within these different floor plans various rooms and room-arrangements are further standardized—the

garage-utility room is always backed up against the kitchen, bathrooms are all of the same size and shape, and closets always occupy the same location in bedrooms.

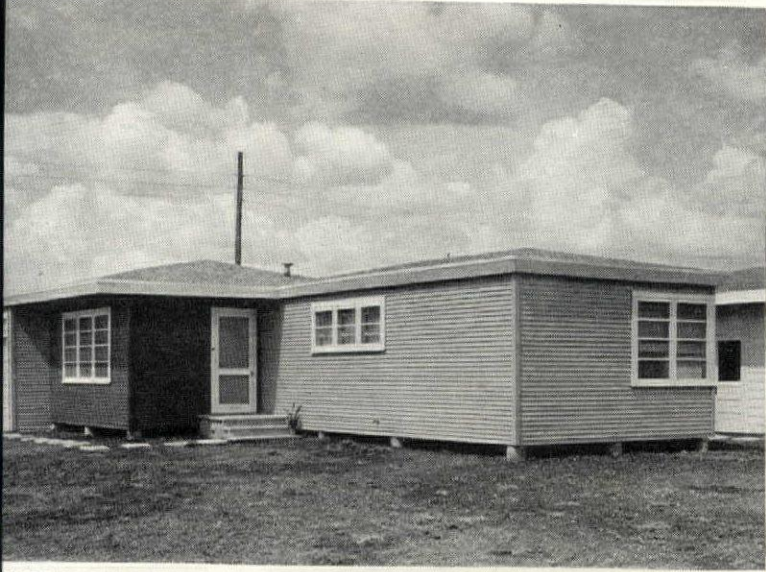
Aside from site fabrication, construction of the house is conventional. Specifications are far from skimpy; they provide many conveniences and "extras" not found in most veterans' housing: hard-to-get oak finishes the floors, steel cabinets designed by the Farrington Co. provide adequate kitchen storage space, a wall heater in the bathroom augments the living room floor furnace, pressed steel doors of the overhead type (also designed by the company) enclose the attached garage, copper screens are provided for all windows, the driveway is concrete, and all porches, steps and walks are made of precast concrete sections. Month ago 75 houses were complete and the production rate was one per day. Having considerable effect on speed of construction as well as costs is the fact that 90 per cent of the materials and equipment going into Farrington's houses is manufactured within 100 miles of the site.

Although sales prices are about \$550 per house higher than was anticipated when the project was launched early this year, they are still comparatively low for the space provided. The smaller unit (800 sq. ft. plus garage) sells for \$6,250; the larger (900 sq. ft. plus garage) is priced at \$6,900. When

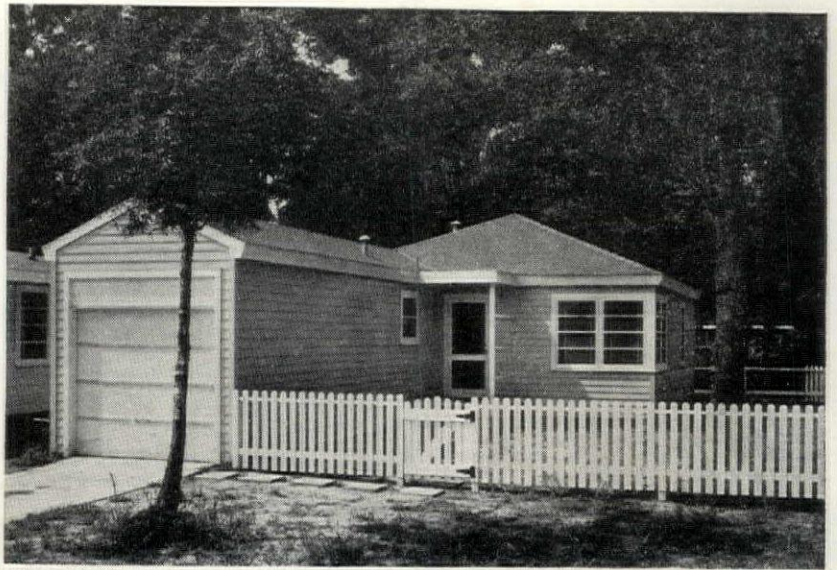
the \$650 valuation of the average lot is subtracted from these prices and the 10 x 20 ft. garages are considered, costs come to about \$6.25 per sq. ft., including overhead and profit.

All sales are limited to veterans and first priority is given to hardship cases. Each purchaser is required to make a down payment of at least \$300; the balance is financed by the local Gibraltar Savings & Building Assn. with a single mortgage, half of which is guaranteed by the Veterans Administration. Monthly payments of about \$40 amortize the loan in 17 years and include its 4 per cent interest. Taxes and insurance are \$4.50 per month.

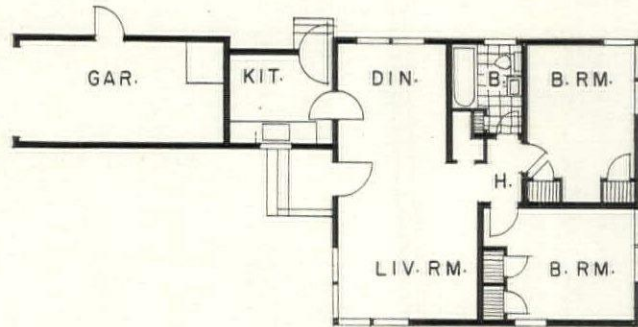
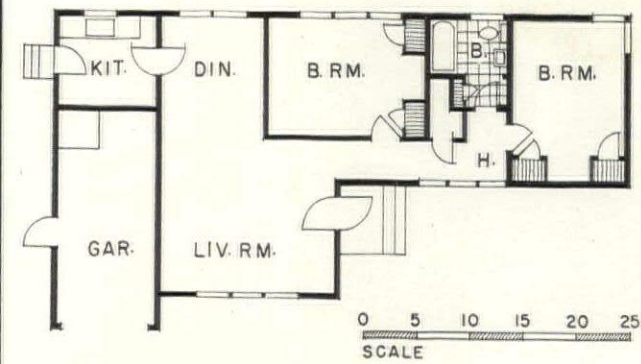
Credit for the many good points of the Southdale Project was earned by no single individual, but by the entire organization. Confronted with the usual lack of coordination between individual architects and builders in the small house field, William G. Farrington 15 years ago formed a company to handle all phases of community development for the Houston market. He employed architects for the design staff, then trained them in the field alongside a construction organization headed by engineers and experienced construction superintendents. Goal of this integration of talents was to produce quality houses economically through efficiency of design and construction and without duplication of effort. The Southdale project comes close to meeting it



WOOD CLAPBOARDS ILLUSTRATE USE OF VARYING EXTERIOR FINISHES



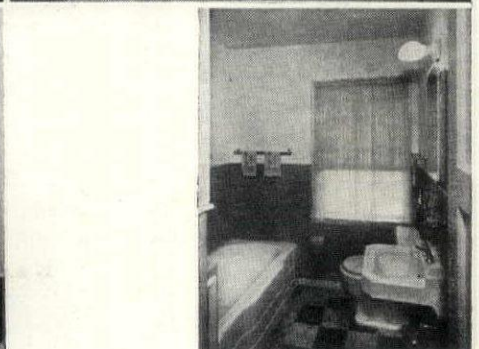
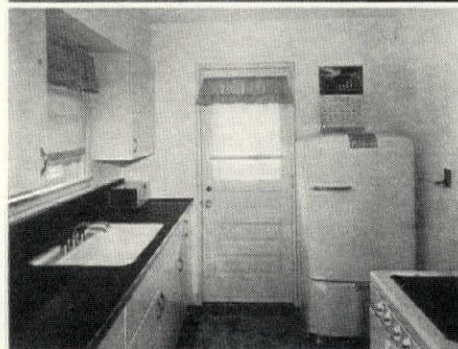
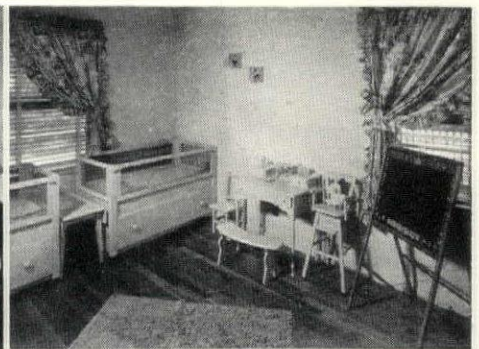
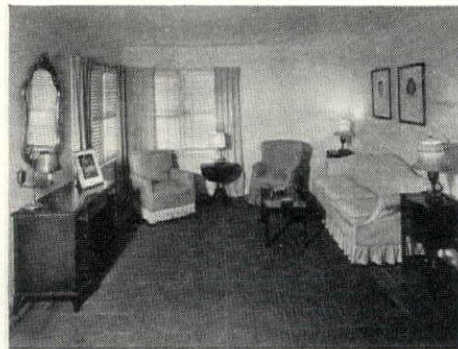
MOST WORKABLE DESIGN HAS GARAGE ECONOMICALLY CLOSE TO STREET



SIMPLE DETAILING IS FEATURED INSIDE AND OUT

CONSTRUCTION OUTLINE

FOUNDATIONS—cylindrical concrete piers poured in paper forms, Sefton Fibre Can Co. **STRUCTURE**—wood frame, weather-cap insulating paper, Graham Paper Co., wood exterior siding, plaster board interior, U. S. Gypsum Co. **ROOF**—wood sheathing, 3-ply asphalt felt with sea gravel finish, The Philip Carey Mfg. Co. **WINDOWS**: Sash—wood, double hung, Unique Sash Balance Co. Weatherstripping—bronze, National Metal Products Co. **FLOOR COVERINGS**: Main rooms—oak. Kitchen and bath—oleum, Congoleum-Nairn, Inc. **PAINTS**—U. S. Gypsum Co., John W. Masury Co. and Pittsburgh Plate Glass Co. **HARDWARE**—Pacific Plastic Mfg. Co. and R. H. Osborne Co. **ELECTRICAL INSTALLATION**: Switches—Arrow, Hart & Legeman Electric Co. **KITCHEN EQUIPMENT**: Sink—Briggs Mfg. Co. **BATHROOM FIXTURES**—Eljer Co. Cabinet—Phillip Carey Co. **HEATING**—warm air furnace, Payne Furnace & Supply Co. Wall heater—Peerless Mfg. Co. Water heater—Mission Water Heater Co.



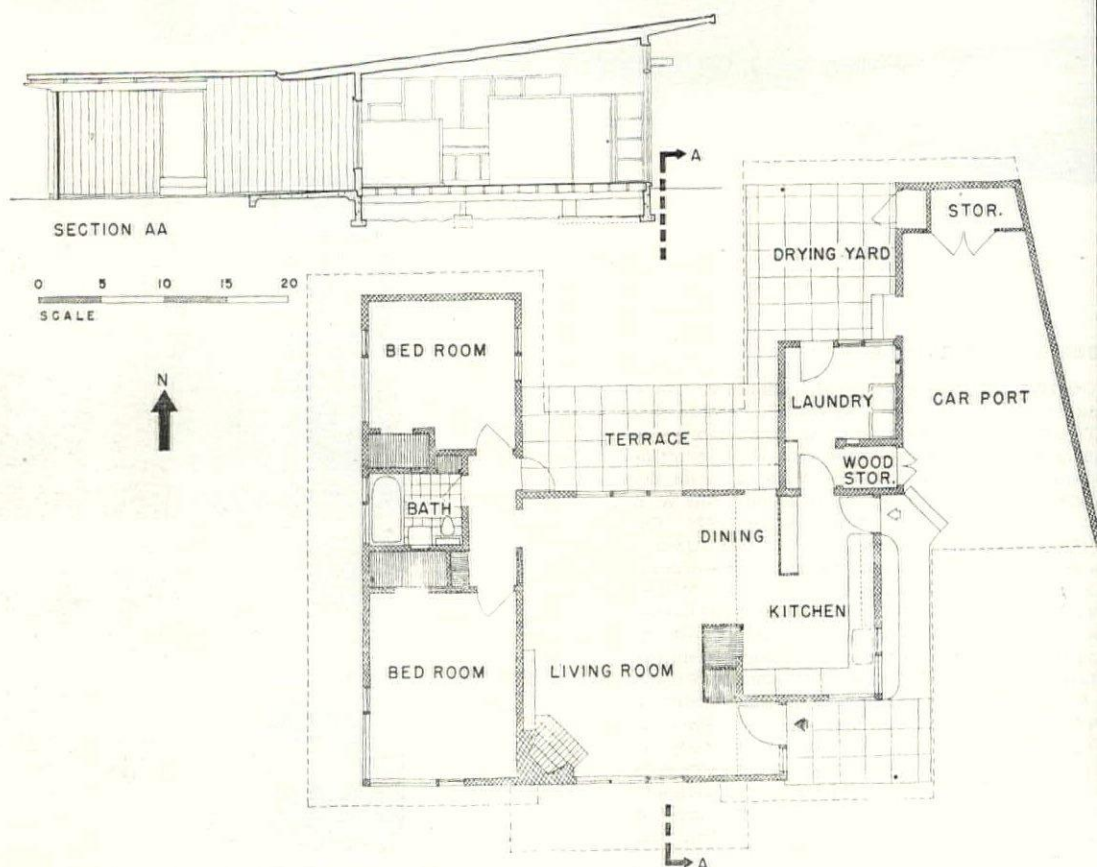


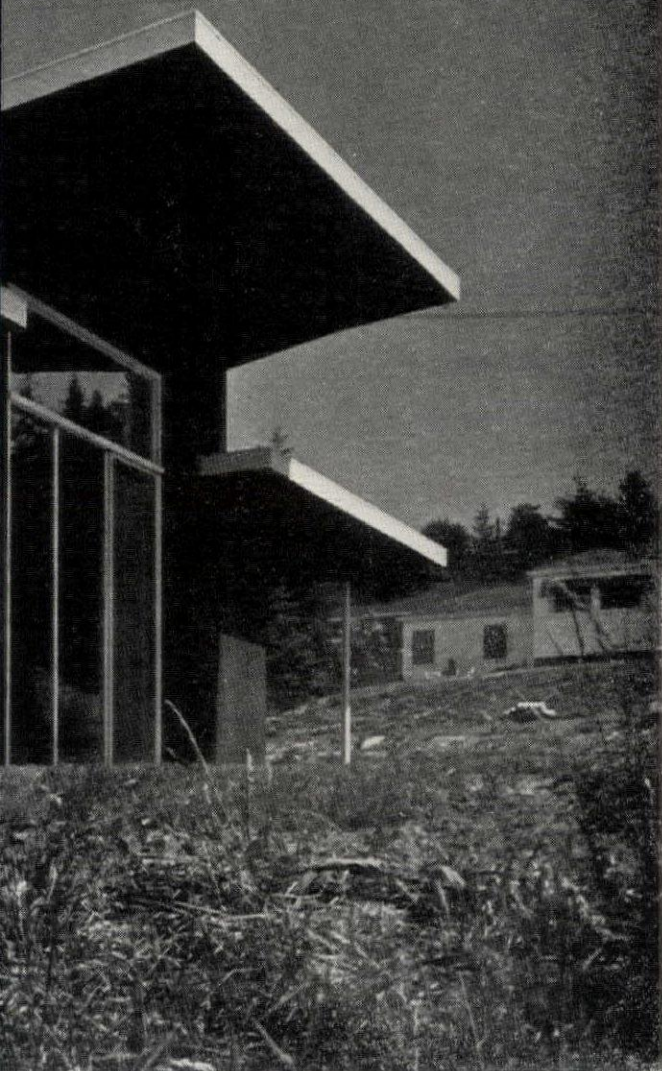
EXTERIOR IS SHEATHED IN VERTICAL TONGUE-AND-GROOVE FIR SIDING IN NATURAL FINISH. WINDOW TRIM AND CORNICE FACIA ARE PAINTED

VETERAN'S HOUSE has handy layout heated by electric coils.

VAN EVERA BAILEY, Architect

This veteran's house would merit notice if only because it was completed this year at a contract price of \$7,650 or \$6.30 per sq. ft. It has in addition, however, good looks, good layout and a novel method of heating. Located near Portland, Ore., it is built entirely of wood and includes several modest but interesting structural details. Floors are framed in 4 x 6 in. joist, 4 ft. on centers, with a 2 x 6 in. T & G common subfloor. This is topped by plywood and linoleum in kitchen and bath, and by hardwood and carpeting elsewhere. Although frowned upon by the underwriters and feasible only in public power areas, the successful radiant heating is by means of electric resistance coils imbedded in ceiling plaster.





LIVING ROOM HAS PITCHED ROOF, REMAINDER IS FLAT

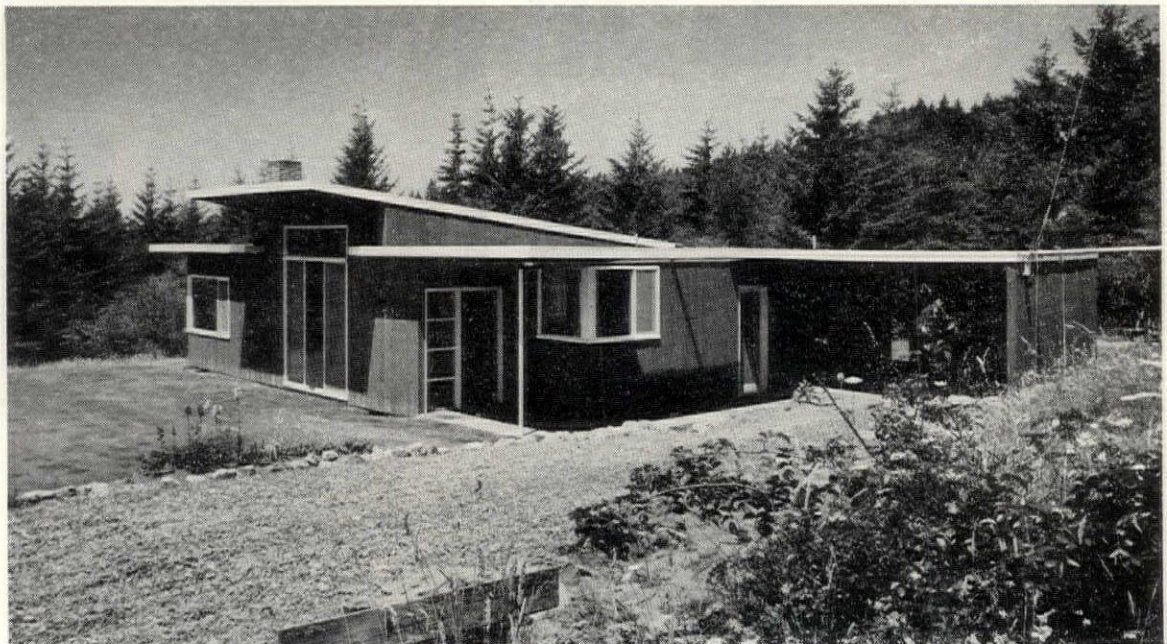


THE SHED ROOF GIVES GREATER CEILING HEIGHT, LARGER WINDOW



TWO PLASTERED CLOSETS SCREEN KITCHEN FROM LIVING ROOM

WHERE ROOFS ARE FLAT THEY HAVE NO PITCH AT ALL. THIS GREATLY FACILITATES FRAMING



HOUSE in Pasadena provides gracious living in a minimum package.

WHITNEY R. SMITH, Architect
 THEODORE VAN FOSSEN, Collaborator
 RAYMOND GERHART, Contractor

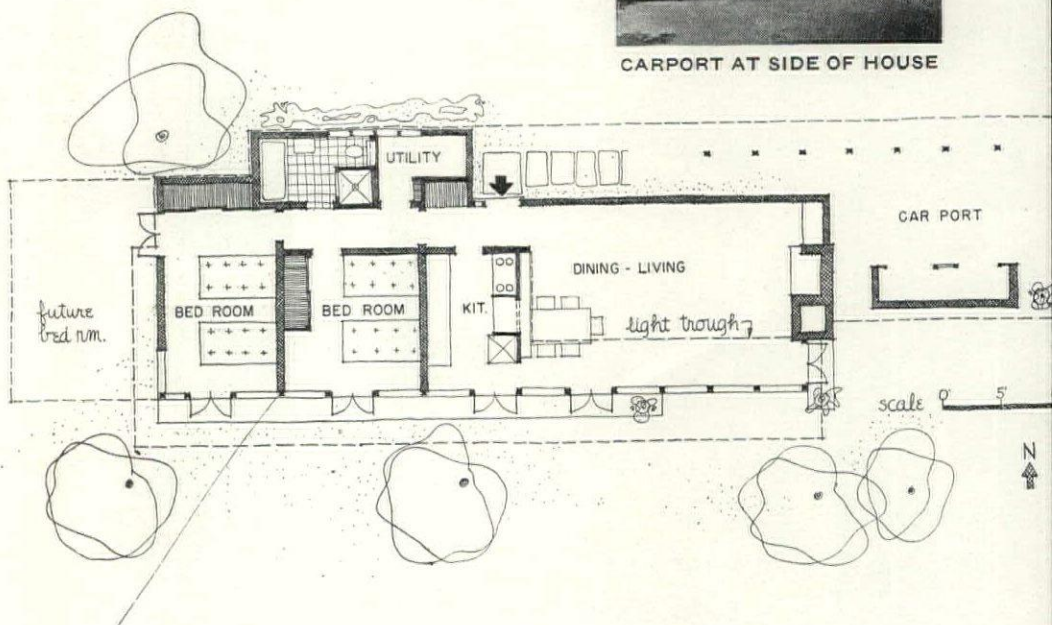
An example of the simple, compact solution which can bring even a postwar house within reach of the average budget is the trim California bungalow shown here. Into 1,300 sq. ft. of space the architect has squeezed two bedrooms, living-dining room, kitchen, ample storage areas and a carport. The cost: \$7,000.

The economy of the house rests partially on its one-story basementless plan; partially on its simple, in-line arrangement; and partially on its concrete and plaster construction which uses only a small amount of wood. An uncomplicated shed roof not only cuts costs, but gives to the rooms a feeling of spaciousness in spite of minimum footage. Next to the carport a storage wall provides convenient space for trunks and garden tools which usually line the interior of a garage.

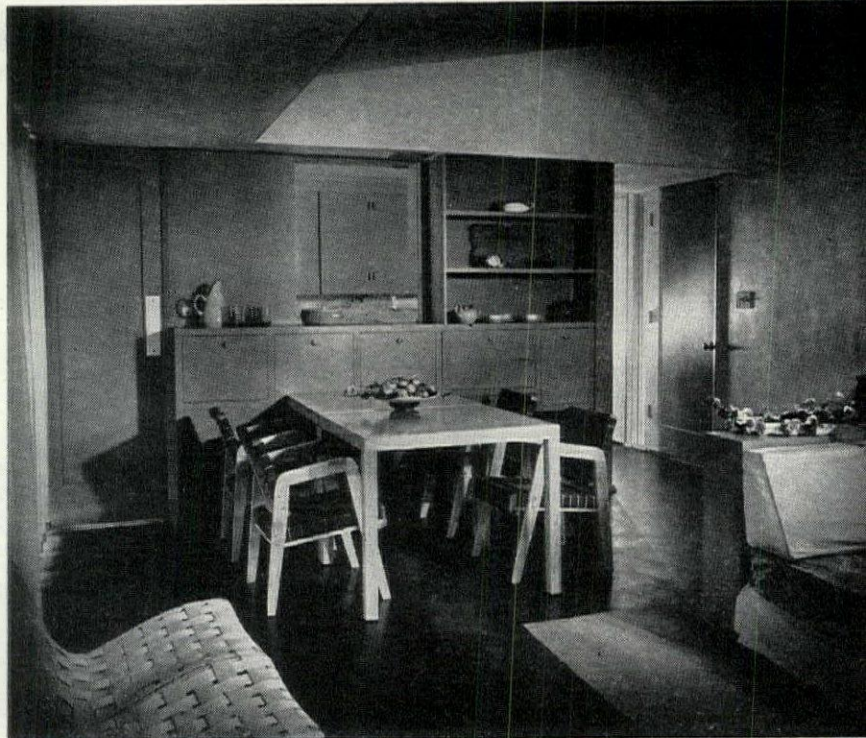
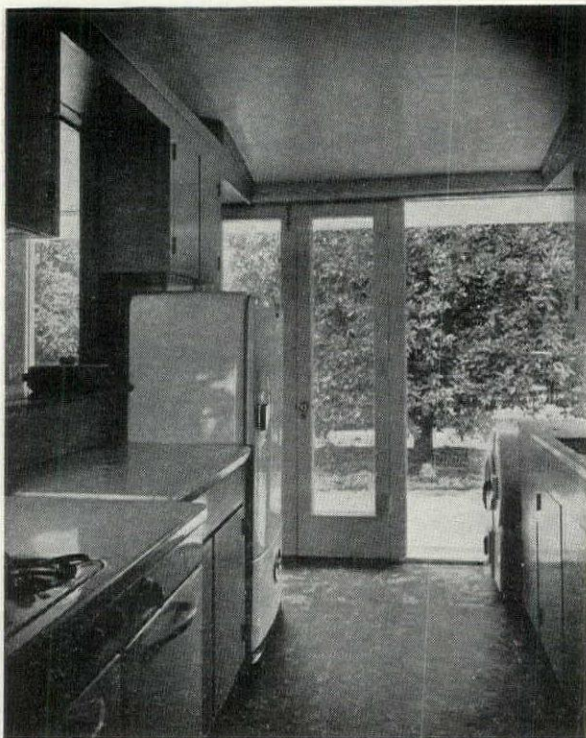
An improvement in exterior good looks will come when Garrett Eckbo completes the landscape gardening, providing a fenced court of planting and paving. Eckbo's plan will retain existing trees but trim them to above-head height to allow use of the ground below.



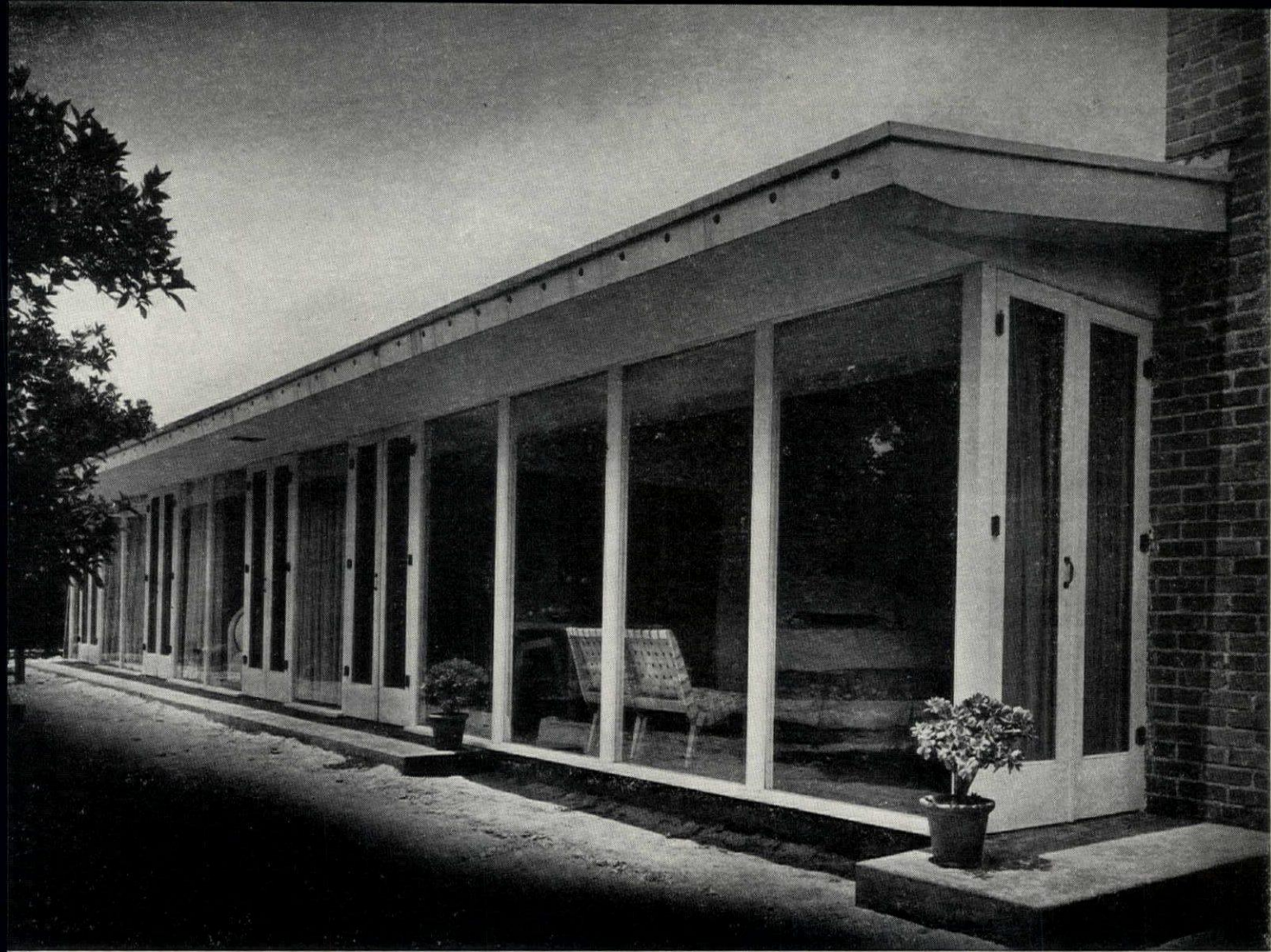
CARPORT AT SIDE OF HOUSE



SUNNY KITCHEN CONNECTS WITH DINING AREA OF LIVING ROOM. SLIDING PANEL ABOVE CUPBOARDS AIDS IN SERVING

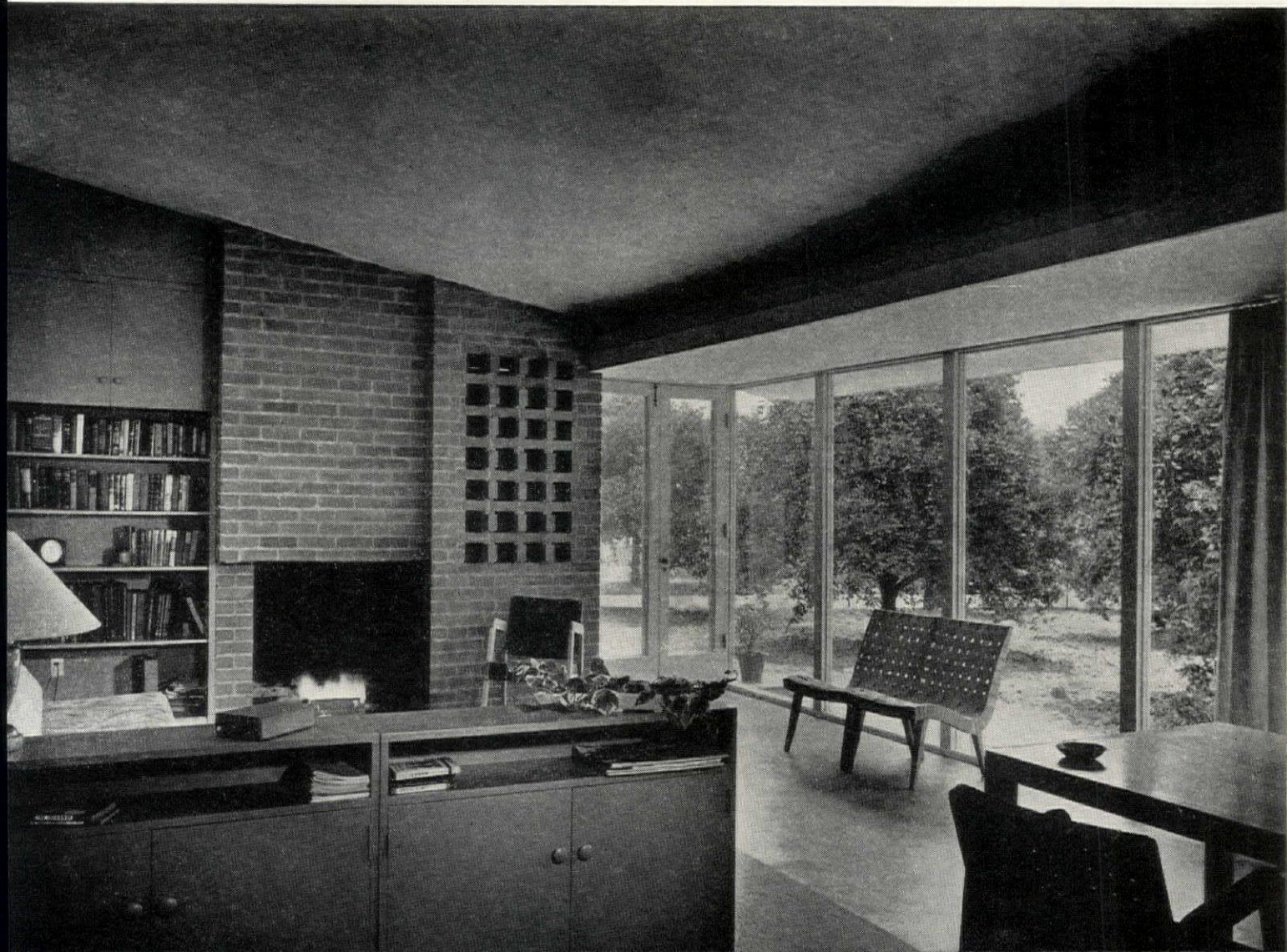


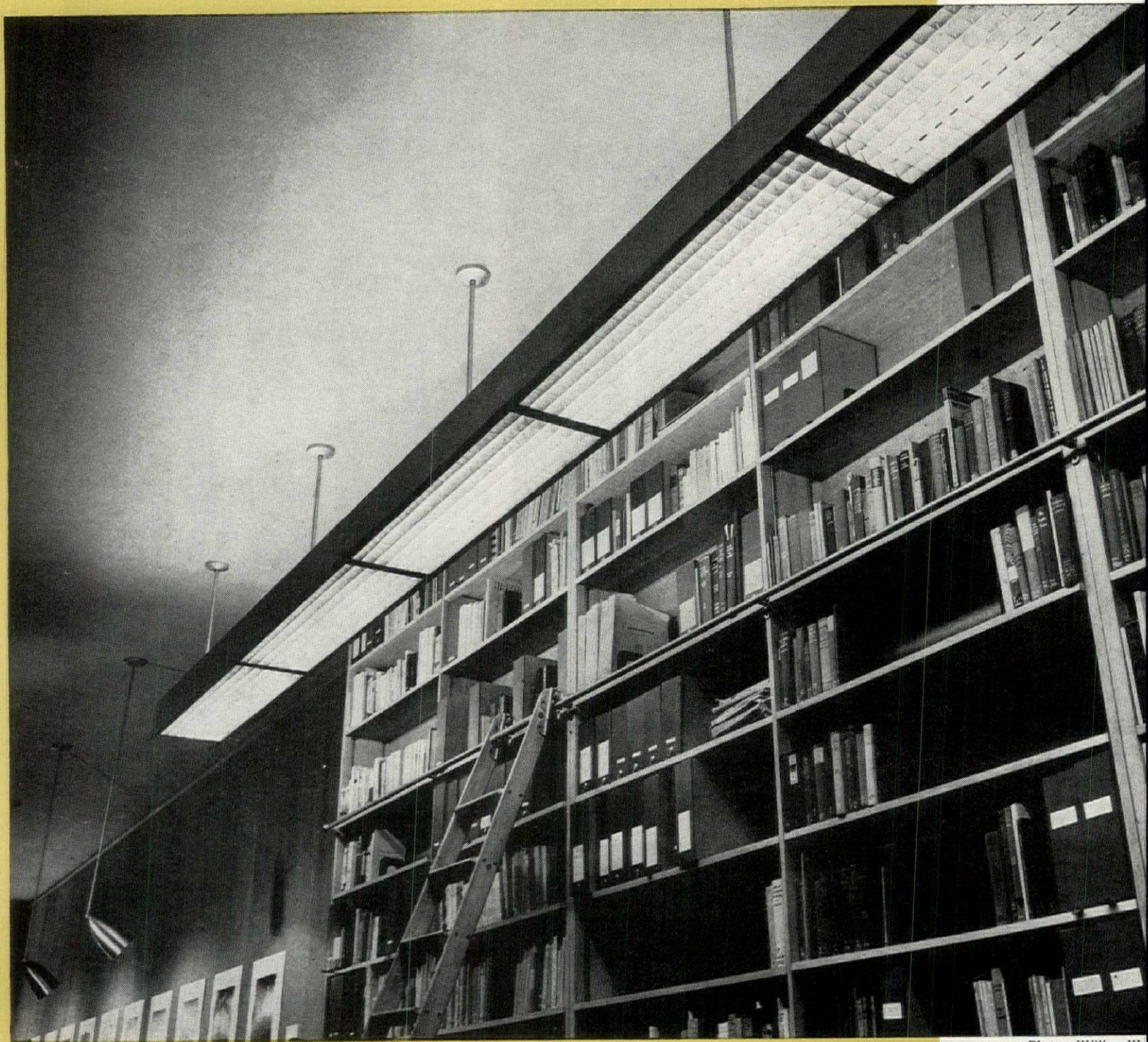
Photos: Maynard L. Parber



CONTINUOUS GLAZED FRONT PROVIDES SOUTHERN EXPOSURE FOR ALL ROOMS. SEPARATE ENTRANCES MAKE EACH INDEPENDENT UNIT

LUXURIOUS USE OF GLASS AND BUILT-IN STORAGE CAME WITHIN THE BUDGET BECAUSE OF OVER-ALL ECONOMY OF PLAN





Photos: William Wa

E

EDUCATION AND HEALTH

Education and health are fields of architectural design rarely approached with a sound grasp of the problems involved. Libraries are notoriously badly lighted. Hospitals and clinics are often designed without the thorough research necessary to devise an efficiently functioning layout. Although little of this type of work has been completed since the war, the jobs which have been finished indicate a healthy emphasis on fundamental requirements, less concern with superficial design treatment.

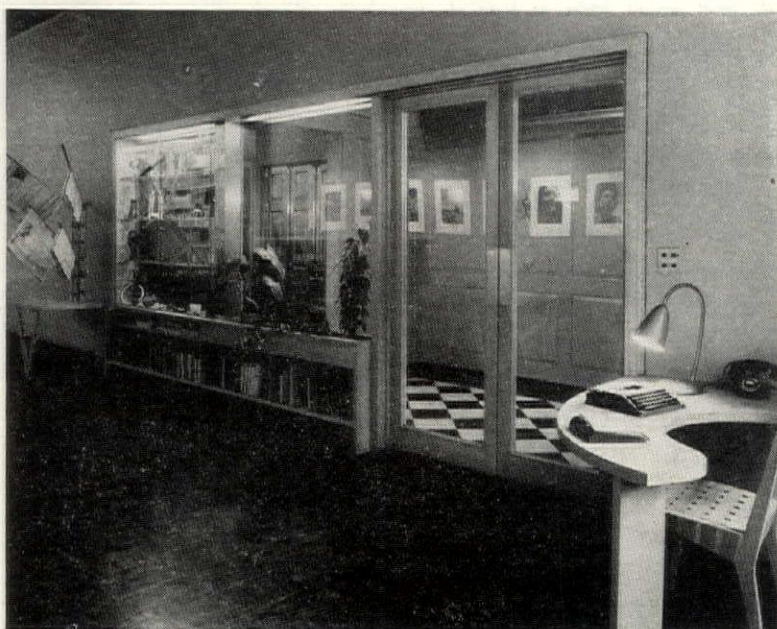
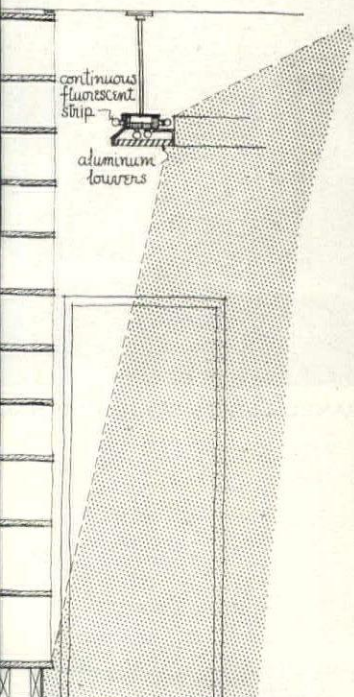
**SMALL LIBRARY of 5,000 books
doubles as exhibition room.**

ELSA GIDONI, Designer
FRANKWILL BLDG. CORP., General Contractors

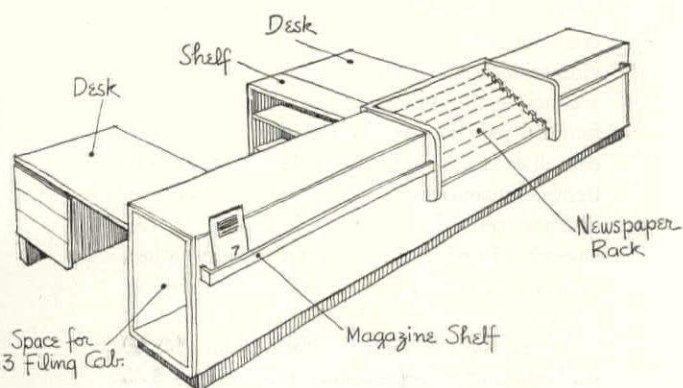
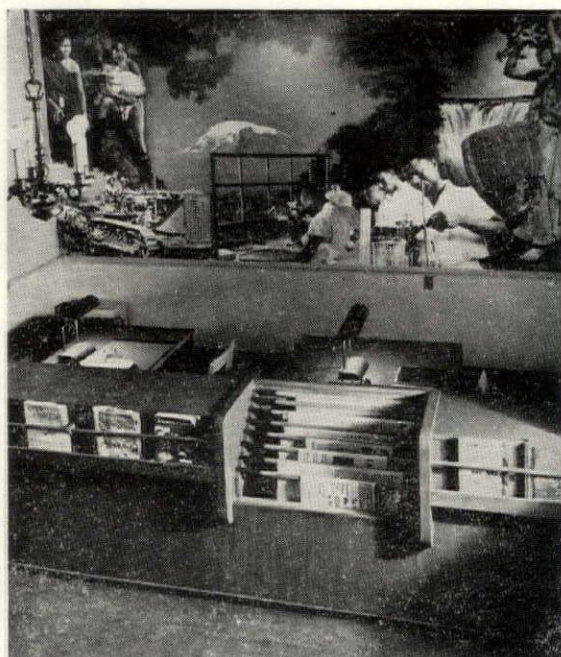
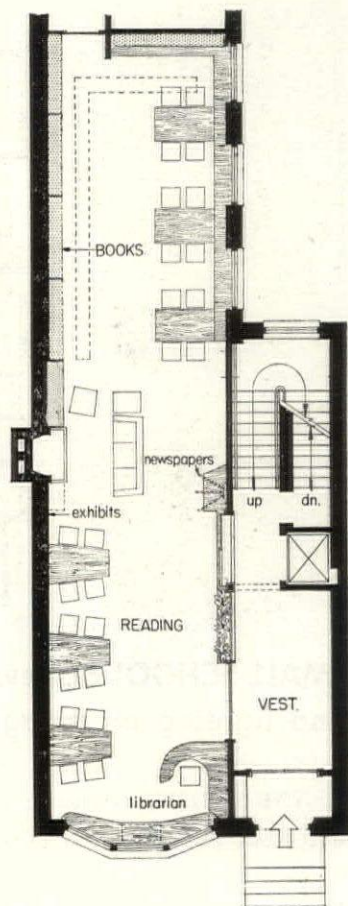
The first floor of a building belonging to the Council for Pan-American Democracy has been converted into a combination library, reading room and exhibition hall for traveling Latin-American displays. Before alterations the space was chopped into three small rooms, cut off from the corridor and badly in need of repair. Now the separate areas have been thrown into one long gallery with reading tables at the front and rear, exhibition and newspaper racks in the center and bookcases lining the rear and side walls. By removing the tables the new library can be converted into a lecture hall. A rolling movie projection screen is concealed beneath a wooden baffle at the front.



SUSPENDED EGG-CRATE TROUGHS ILLUMINATE THE BOOKSHELVES AT REAR



CURVED LIBRARIAN'S DESK IS NEAR GLASS-PANELED ENTRANCE

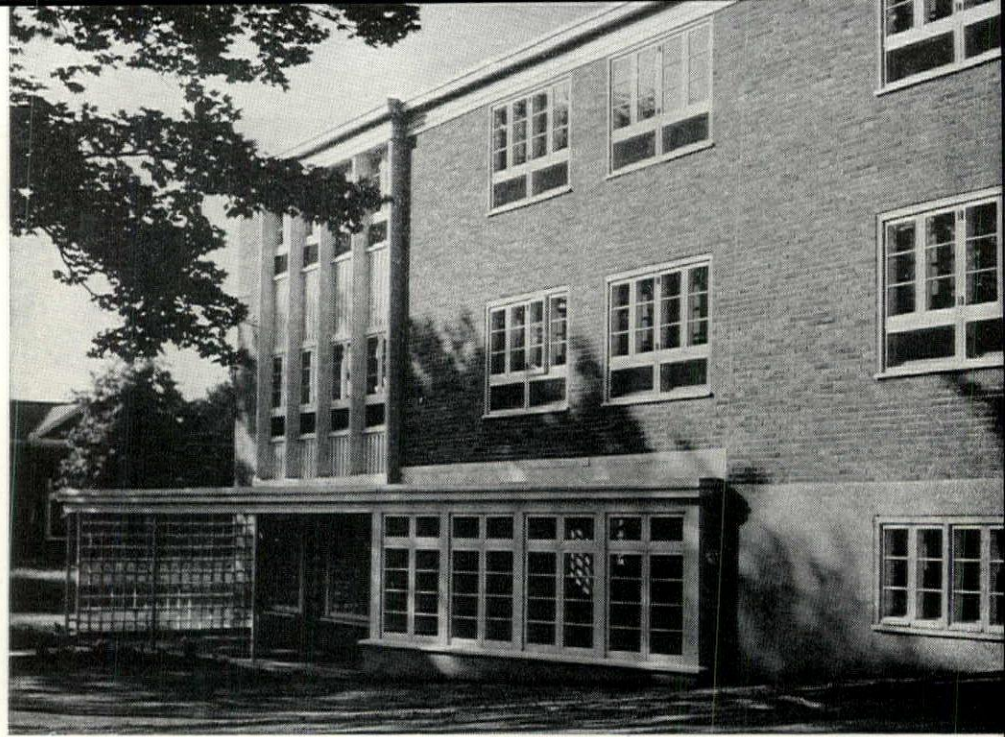


SPECIAL MAGAZINE RACK ALSO PROVIDES DESK SPACE

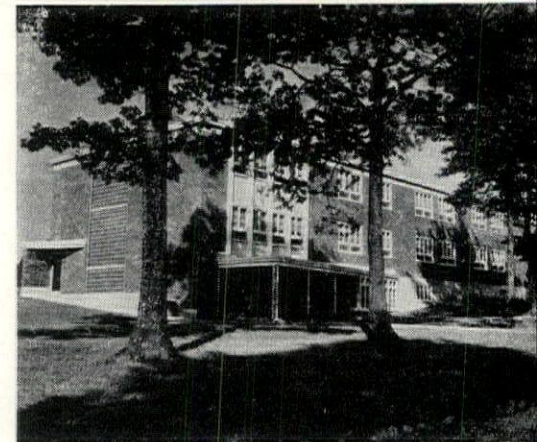
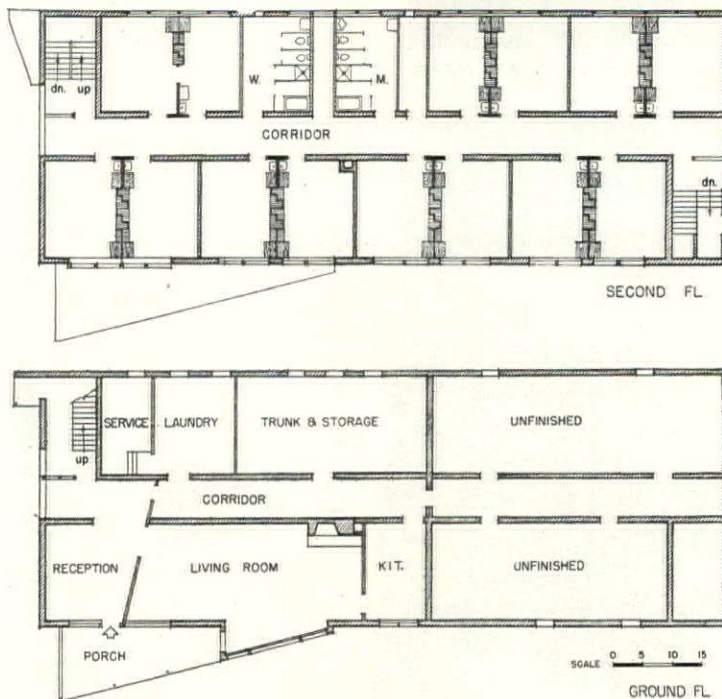
DORMITORY houses fifty school employees in homelike surroundings.

ALONZO J. HARRIMAN, Inc., Architects
STEWART & WILLIAMS, General Contractors

As part of an overall expansion program, Maine's State School for Feeble Minded at Pownall has completed this new dormitory. The new building—which accommodates fifty unmarried employees, two to a room—represents an intelligent effort to provide comfortable, pleasant living accommodations at moderate rents. Each bedroom is equipped with built-in cases containing wardrobes, dressers, desk and lavatory (showers and toilets are grouped on each floor). On the ground floor a large, sunny living room and adjoining kitchen provide space for off-duty relaxation.



LARGE DIAGONAL BAY GIVES LIVING ROOM PLENTY OF LIGHT. PORCH PROTECTS LOBBY

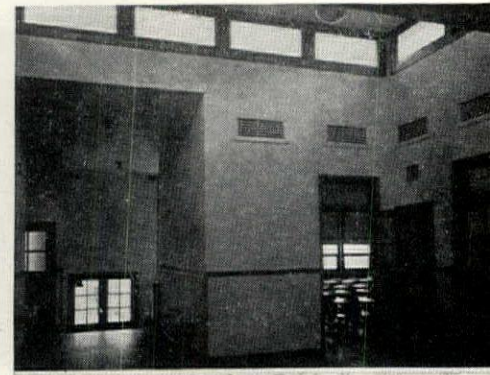
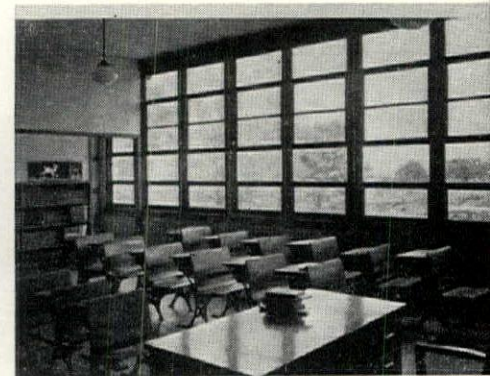
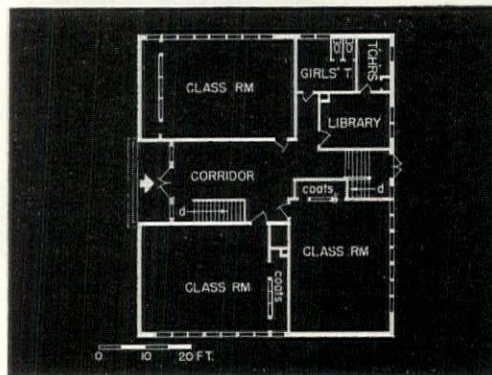


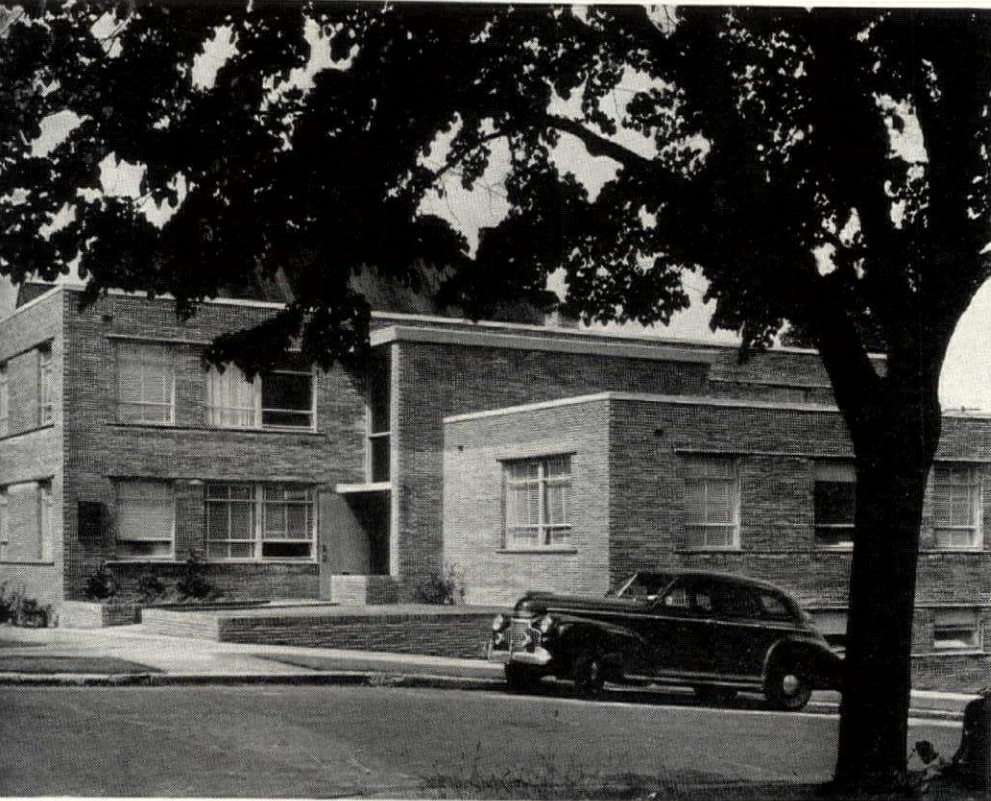
GLASSBLOCK PANEL LIGHTS STAIR AND HALL

SMALL SCHOOL achieves good plan and lighting on meager budget.

EUGENE R. MEIER, Architect
MITCHELL THOMAS, General Contractor

The new Todd Grammar School near St. Joseph, Mo. was built on the foundations of a burned-out older school, and was restricted by the tightest of budgets. Center of a lively community controversy—an adjacent country club wanted the school moved to another site; a bond election to finance the move failed—the finished project shows what ingenuity can accomplish. Each of the three classrooms is well-lighted by continuous, ceiling-height wood sash and the central hall by a clerestory. A full basement provides a playroom for bad weather, a boys' toilet and a furnace room for the forced air heating system. Finished in February of this year, the cost of this little building for 60 students and three teachers was held to \$.35 per cu. ft.





MAN BRICKWORK AND LARGE WINDOWS ARE LIKE THOSE USED IN NEARBY CLINICS

Photos:
P. A. Dearborn

10-STORY WINDOW LIGHTS BRICK AND TILE FOYER



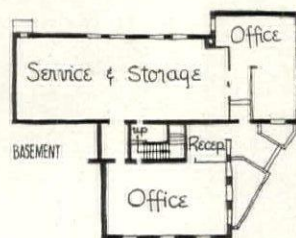
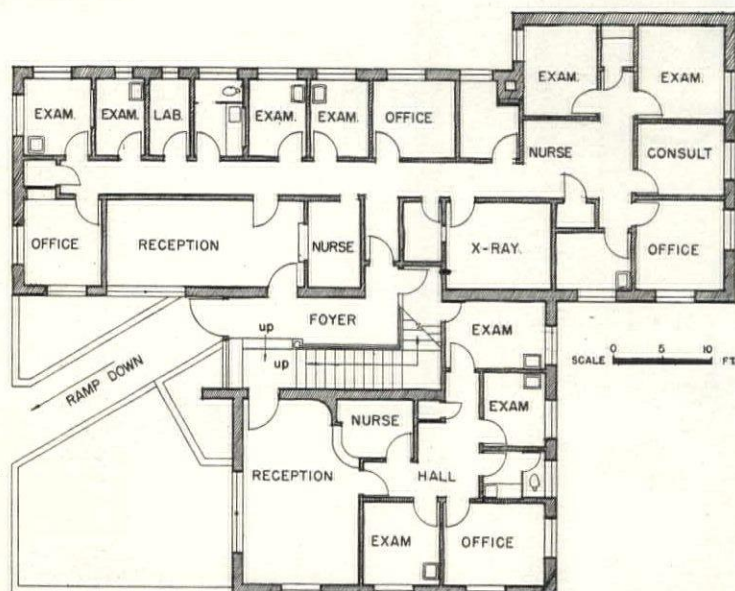
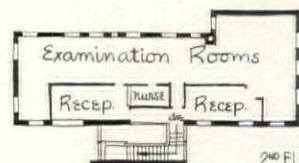
CLINIC on a sloping lot accom- modates ten doctors in five suites.

NARAMORE, BAIN,
BRADY & JOHANSON, Architects & Engineers

The latest in the rash of doctors' clinics breaking out all over Seattle, this project is located near the city's leading voluntary hospital and was tailored to meet the requirements of ten doctors, most of whom are on the hospital staff. A similar building a half block away was completed before the war; two others are under construction nearby and three more are abuilding in other parts of the city—all typifying the current decentralization of doctors' offices to suburban areas or hospital neighborhoods.

Making the most of a steeply sloping, irregular lot served by streets at front and rear, the architects created a sizable planting area by setting one wing of the building back from the main street and converted "basement" space into two small offices, opening up the rear wall with large windows and a secondary entrance. Containing a total of 76,900 cu. ft., the building cost \$70,000 exclusive of land, landscaping and furnishing.

FINISHES AND EQUIPMENT: GLASS—Libbey-Owens-Ford Glass Co. HARDWARE—Russell & Erwin Mfg. Co. PAINTS—L. E. Miller Co. and Sherwin-Williams Co. PLUMBING—American Radiator-Standard Sanitary Corp. HEATING: Boiler, oil burner and water heater, Petroleum Heat & Power Co. Convectors—Tuttle & Bailey Mfg. Co. Regulators—Minneapolis-Honeywell Regulator Co.



GENERAL HOSPITAL in Houston contains 1,000 beds, ranks as Navy's newest and largest. Its 37 buildings cost \$11 million.

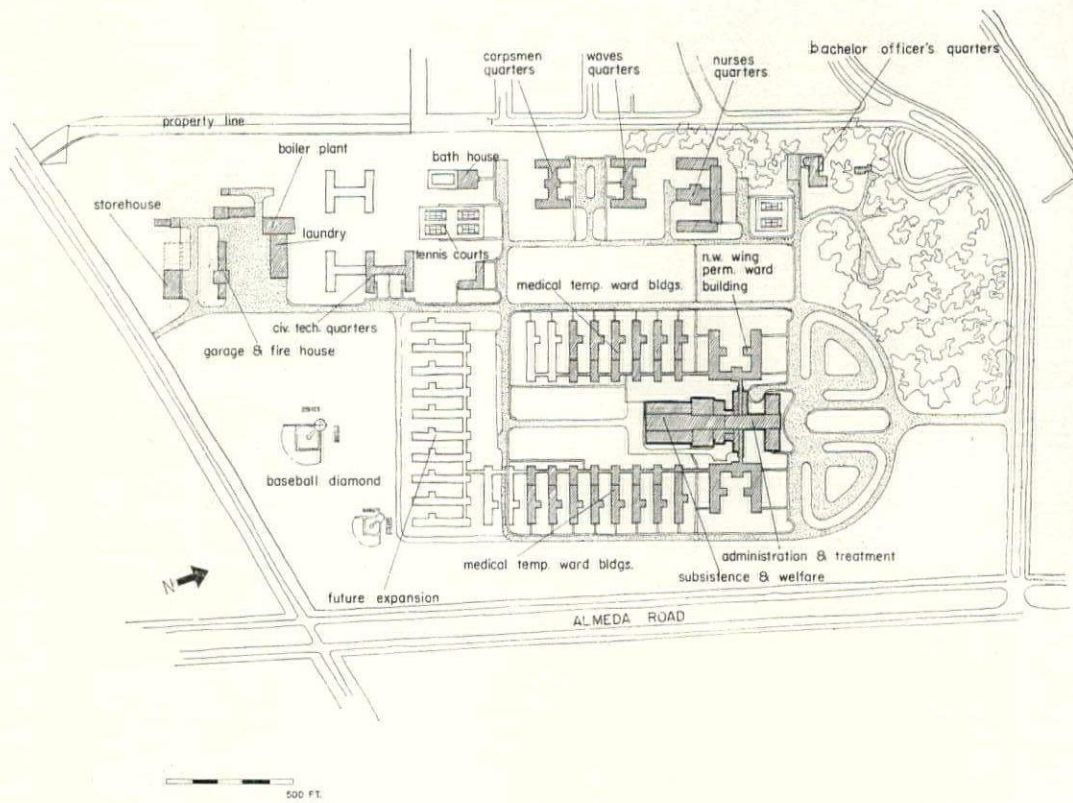
ALFRED C. FINN, Architect
ROBERT J. CUMMINS, Consulting Engineer

REG. F. TAYLOR, Mechanical Engineer
JAMES STEWART CONSTRUCTION CO., General Contractor

Dedicated last month, the Navy's largest permanent hospital is the first major postwar construction project to be completed in booming Houston, Tex., fifth most active building center in the U. S. The medical buildings proper are laid out symmetrically near the center of a level, almost barren tract and oriented so that one side of each ward building enjoys the southern sun and prevailing breeze. Flanking the medical group are accessory buildings including, in addition to those pictured to the right, a corpsmen's building, a cooks' quarters and a residential building for civilian technicians—all two-story units.

Executed in a style called "conservative contemporary," the medical buildings are faced with buff brick trimmed with Texas shell-stone and darker spandrels of terra cotta. Windows are aluminum. Inside, terrazzo floors contrast with a wainscot of structural glazed tile and a suspended acoustical ceiling.

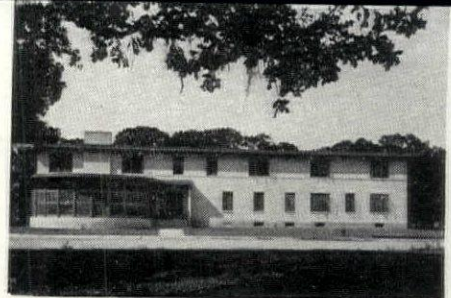
Connected to the taller buildings with enclosed corridors, the one-story ward buildings are classified as "temporary" but, due to the lumber shortage, are of relatively permanent construction. Floors and roofs are reinforced concrete; walls are of 8 in. structural tile glazed on the inside surface.



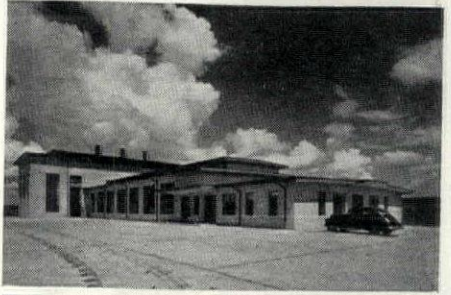
HOSPITAL PROJECT'S 118 ACRES ARE DOMINATED BY THE INTERCONNECTED SEVEN-STORY ADMINISTRATION AND TREATMENT BUILDING



Photos:
Elwood
M.
Payne



Bachelor officers' quarters have large screened porch



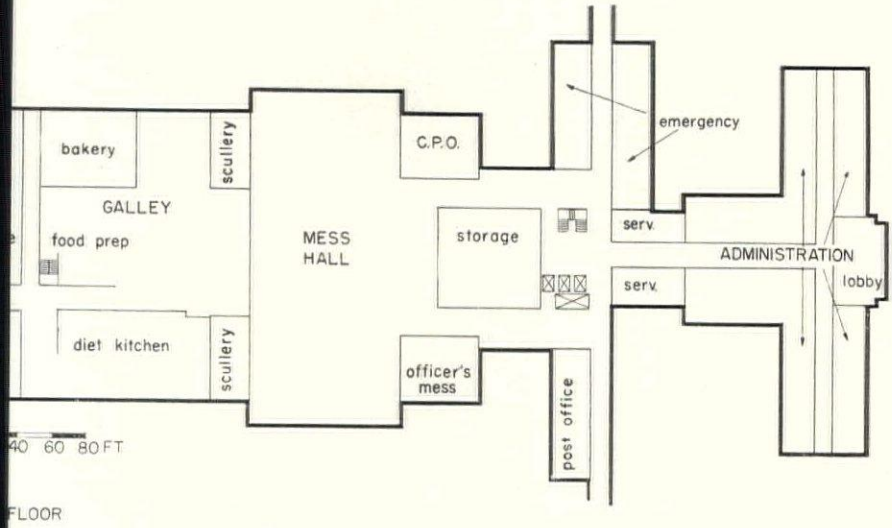
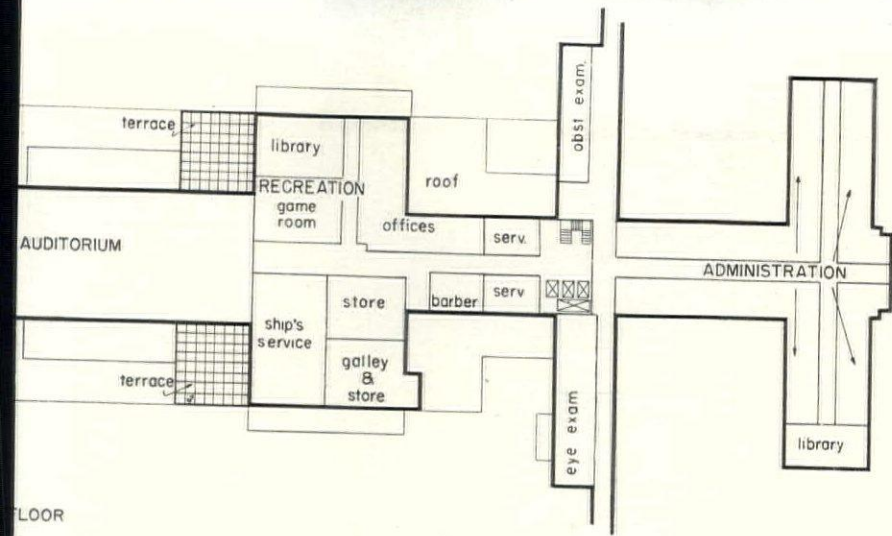
Boiler house (and laundry) supplies steam to all units



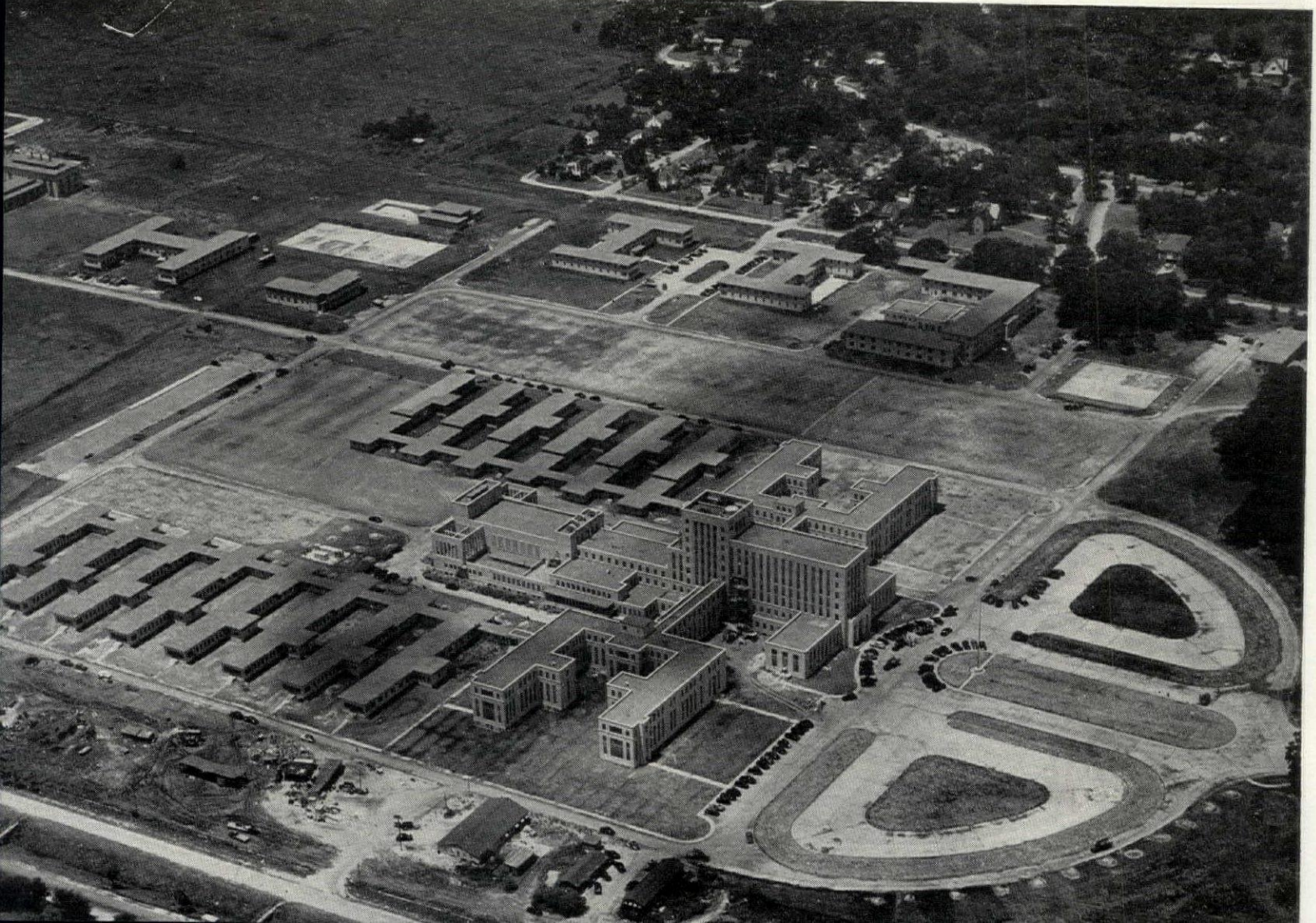
WAVES' quarters are in one of two H-shaped units

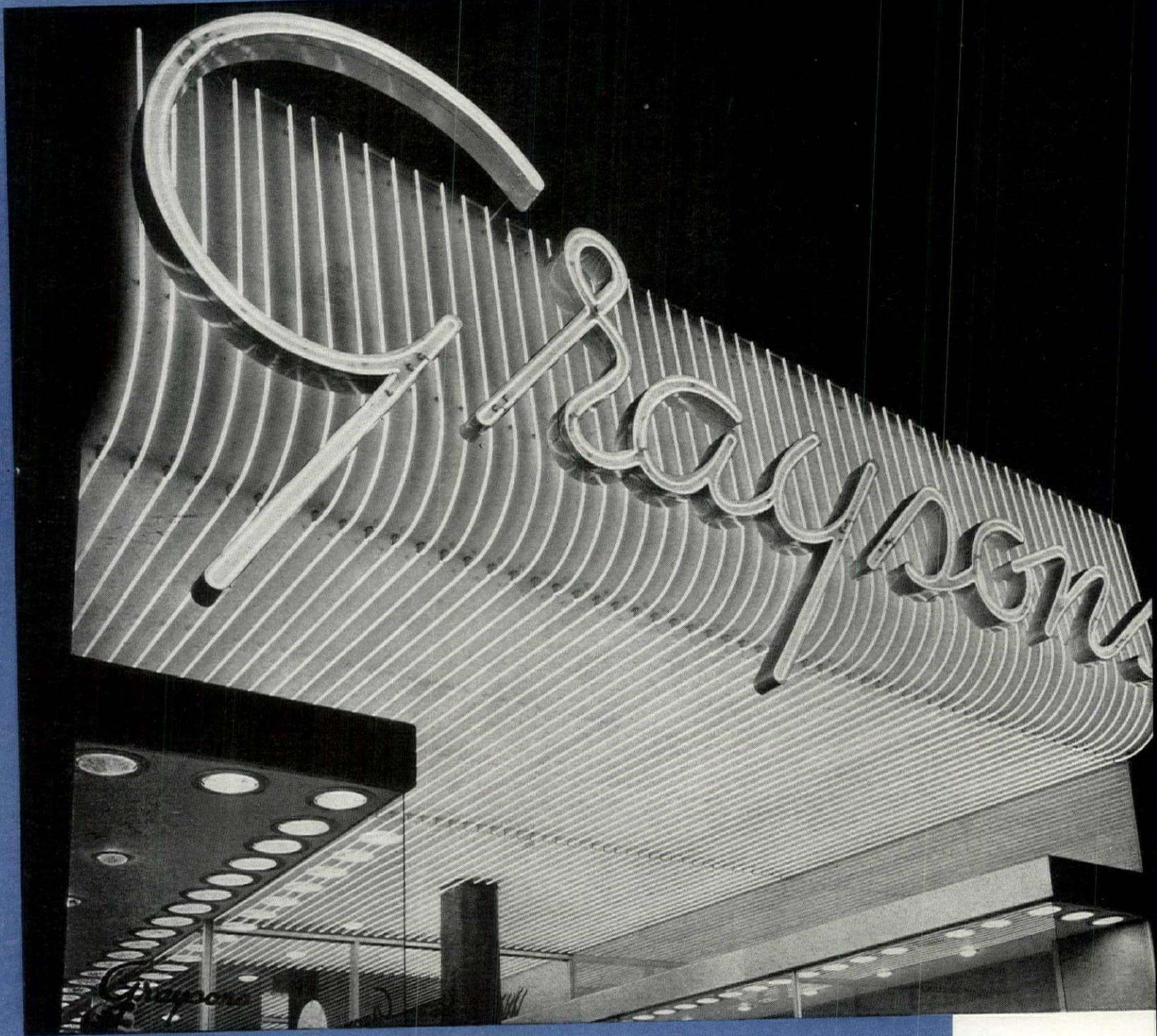


Nurses' home for 200 is largest of residential units



STORY WARD BUILDINGS AND THE SPRAWLING SUBSISTENCE AND WELFARE WING. TO THE SOUTH (LEFT) ARE 14 LOW WARD BUILDINGS





T TRADE

It is evident to any casual pedestrian that store design has undergone a minor revolution in the past few years. The open front which made such a splash in the late 30's is by now commonplace. It is no surprise, therefore, that the first sampling of postwar commercial building should be characterized by the large glass wall. More important, the open front idea is at last being handled with a mature grasp of the lighting and design problems it involves. This new sureness represents a real step forward in contemporary store design.



VIEW THROUGH HERCULITE ENTRANCE DOORS REVEALS TIDY ARRANGEMENT OF MERCHANDISE

WOMEN'S SPECIALTY SHOP uses a concentration of light as a customer come-on.

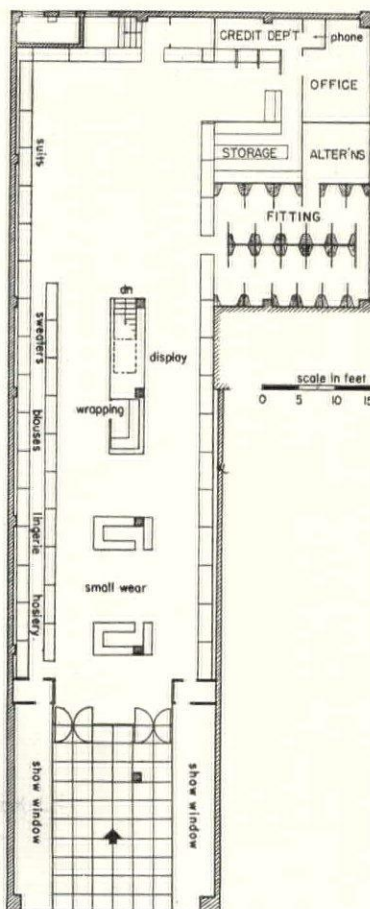
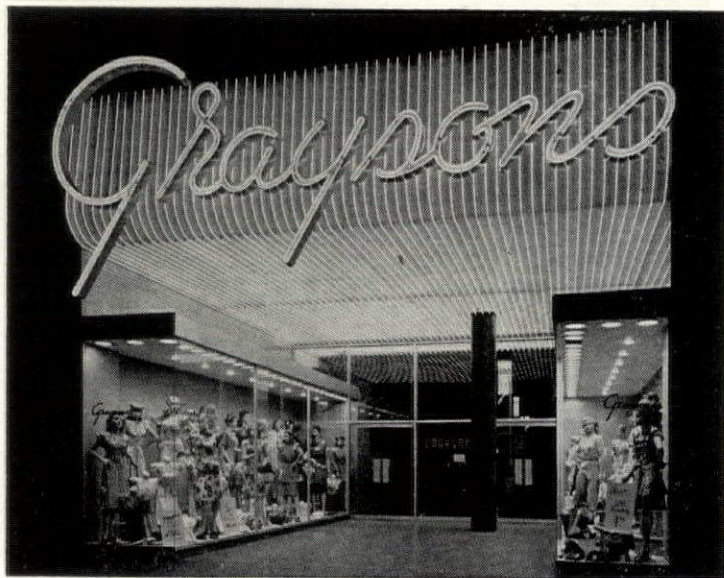
GRUEN & KRUMMECK, Architects
JACKSON BROTHERS, Contractors

The new Graysons Shop in Hollywood represents the ultimate in competitive store front design. Located on King's Road, a boulevard of brightly lit shops, Graysons was faced with the problem of outshining its neighbors. This was the more difficult since conditions in the lease limited its front height to one story, a restriction not applied to surrounding shops. A continuous sign background was therefore worked out, consisting of single strip neon tubes on 4 in. centers which extend down the narrow front and along the arcade ceiling to the far edge of the show windows. As a result of this imaginative treatment, the handicapped store has achieved one of the most brilliantly lit fronts on an already bright street.

Interior lighting combines cove wall installations with direct ceiling spots which do not illuminate the store to a brilliance corresponding with the exterior. Thus, the effect is of walking through an intensely bright gallery into a darker store.

Other features of the interior design are more commendable. A long, narrow space has been effectively utilized by placing merchandise along the wall in specially designed cases and counters. Only infants' wear and the wrapping desk are free-standing units in the central area.

BLAZING NEON BACKGROUND CREATES EYE-CATCHING FACADE



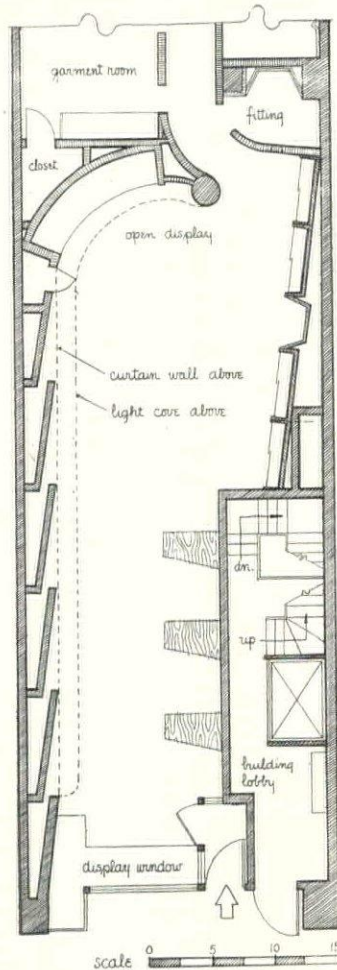
TAILOR SHOP uses interior as show window, mirror wall to double size.

Designed by:
EUGENE BACK and THEODORE YONKLER

THEODORE YONKLER CO., INC.,
General Contractor

Usually descended from the conservative British, tailors have been among the last of the trades to swing to contemporary design. Moreover, tailors have shied away from modern, open shops because they have no completed merchandise to display. Cutting a new pattern for the rest of the trade is this Fifth Avenue shop of Richard Bennett Associates, Inc., in New York City. Its interior doubles as the show window—an inviting display of fabrics for men's suits. One complete wall of the sales room is lined with sliding racks from which fabrics are draped and which are readily viewed by those approaching the shop from the right. A huge mirror on the other wall presents the same picture to passers-by approaching from the opposite direction and increases the apparent size of the narrow shop. A curved open display at the end of the sales room screens the fitting and garment rooms and manager's office from public view.

FINISHES AND EQUIPMENT: Glass—Pittsburgh Plate Glass Co. **HARDWARE**—Yale & Towne Mfg. Co. and Richard-Wilcox Mfg. Co. **PAINT**—Keystone Paint Co. **ELECTRICAL FIXTURES**—General Lighting Co. **FLOOR COVERINGS**—carpet for store; asphalt tile elsewhere, Kentile, David E. Kennedy, Inc. **PLUMBING FIXTURES**—American Radiator-Standard Sanitary Corp. **Pipe fittings**—Crane Co. **AIR CONDITIONING**—American Air Filter Co. **RADIATORS**—American Radiator Co. **GRILLES**—Tuttle & Bailey, Inc. **REGULATORS**—Minneapolis - Honeywell Regulator Co.

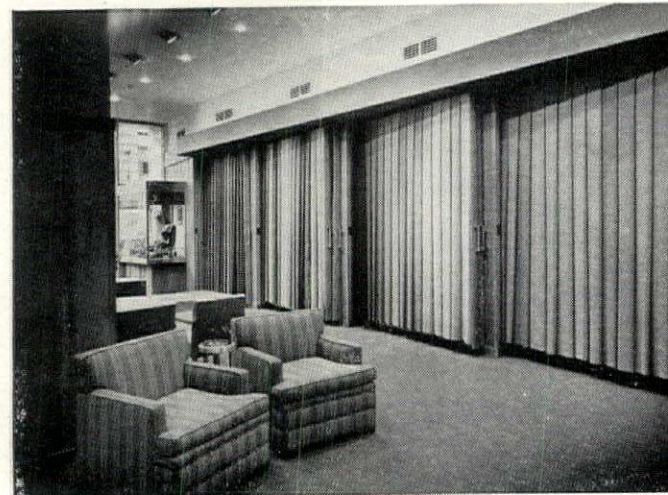


A SYMMETRICAL FRONT ATTRACTS ATTENTION TO SHOP INTERIOR AND FABRIC DISPLAYS
CEILING SPOTLIGHTS ARE CONCENTRATED ON DISPLAY PANELS AND SELLING TABLES



Photos: Gottscho-Schiesner

FABRIC DISPLAYS IN PAIRS
SLIDE ON OVERHEAD TRACKS,
REVEAL BLEACHED OAK PANELS
WHEN PUSHED INTO WALL



CUTLERY SHOWROOM provides background for wholesale selling.

SIMON B. ZELNIK, Architect

JANDER & FORGIONE, General Contractor

Since the customers of Englishtown Cutlery, Ltd.'s new showroom on New York City's Fifth Avenue are mainly buyers from department stores and retail cutlery houses, its design is basically different than that of retail shops. Not catering to the pedestrian public, the company has no need for show windows, and therefore the columns of the existing facade were retained to preserve the homogeneous character of the office building. In place of show windows, a large, handsome entrance was provided.

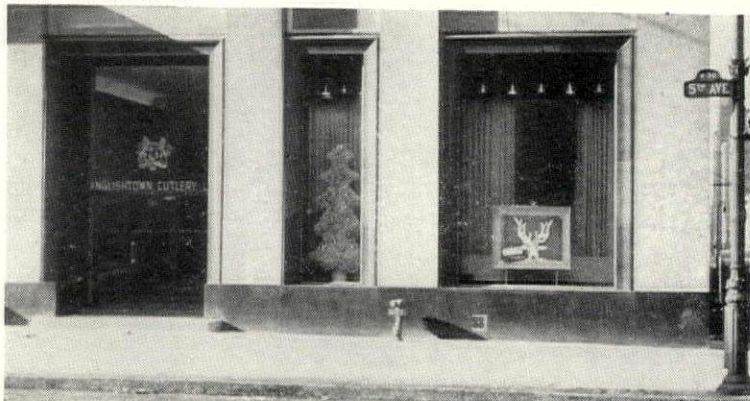
Interior of the showroom features a battery of identical niches, each an independent unit containing a complete set of samples. Every niche is equipped with a desk, chairs, display trays which are stored in wall cabinets and a shadow box for the display of featured articles. Division of the showroom into these self-sufficient "sales rooms" permits the simultaneous service of at least four customers, and the repetitive design, exaggerated by the mirrored wall at the rear end of the showroom, creates the desired atmosphere of simplicity and precision.

FINISHES AND EQUIPMENT: Plaster partitions and acoustical tile ceilings, U. S. Gypsum Co. GLASS—Mississippi Glass Co. and Pittsburgh Plate Glass Co. FLOOR COVERINGS—terrazzo and asphalt tile, Kentile, David E. Kennedy, Inc. PAINTS—Pittsburgh Plate Glass Co. HARDWARE—Oscar C. Rixson Co. ELECTRICAL FIXTURES—indirect cathode, Artcraft Strauss Sign Co. PLUMBING FIXTURES—Crane Co.

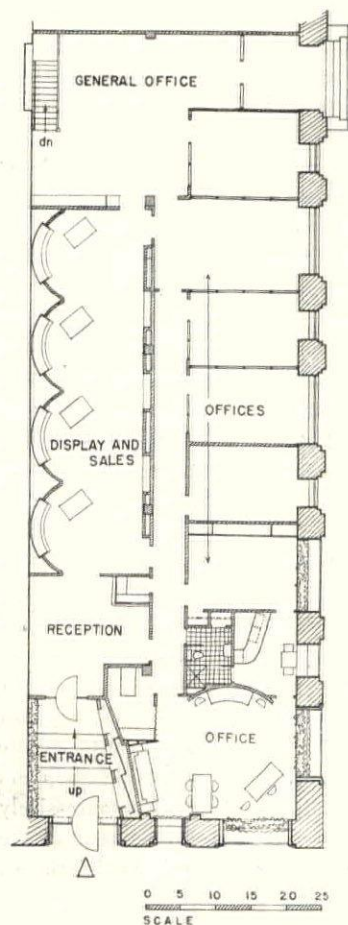


INDIVIDUAL NICHE FOR EACH SALESMAN CONTAINS COMPLETE LINE OF COMPANY'S WARES

Photos: Robert Greene



ENTRANCE STAIRS ARE DISTRIBUTED IN THREE RUNS TO EASE THE 3 FT. RISE FROM STREET LEVEL





GLASS FRONT IS INDIRECTLY LIGHTED FROM CIRCULAR RECESSES WHICH CREATE A DECORATIVE CEILING PATTERN, UNIFY FRONT AND STORE

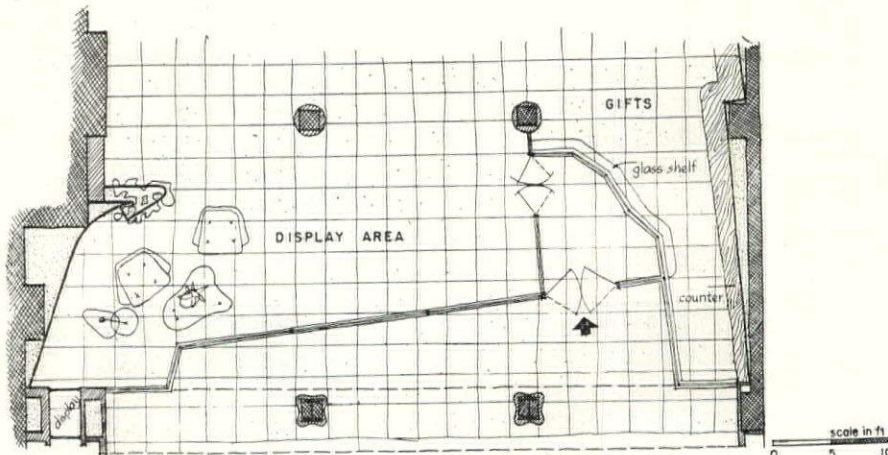
FURNITURE STORE is opened to sidewalk by a recessed wall of glass.

J. A. FERNANDEZ, Architect
STANGER BROS., General Contractor

When shoppers visit the 34th Street store of New York City's Modernage Furniture Co., they are practically inside the showroom before they open the front door. Recessed and protected from the elements, the glass front extends the entire 55 ft. width of the building and provides an unimpaird view of the merchandise displayed inside. The glass is set at an angle, intended to lead window shoppers to the door.

Color of the framing terra cotta strikes a lively note among the drab shop fronts which characterize the street. The wide band against which the white metal lettering is silhouetted is a turquoise green, as is the finish of the two supporting columns. Carried to the front as a narrow band of trim, the entrance soffit and reveals are finished in contrasting off-white terra cotta.

Although the store does not make the most of its glazed front from the esthetic point of view, it is exploited to the fullest from the merchandising standpoint. Thus, the forward part of the floor is cluttered with displays of countless knickknacks (mostly glassware) whose variety, small size and relatively low cost interest more people than would a suite of modern furniture. Once inside, shoppers are attracted by displays of progressively larger, more costly items to the rear of the store where furniture is set in model rooms.



DISPLAY TABLES WERE DESIGNED BY ARCHITECT FERNANDEZ



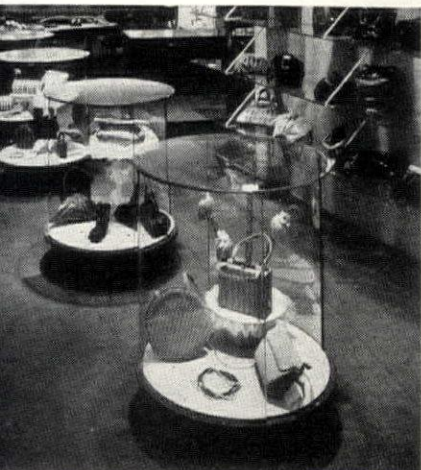


SECOND FLOOR SHOE DEPARTMENT IS DECORATED WITH WALL DISPLAYS, VIEW OF PARK

LIGHTS ARE DIRECT AND INDIRECT TWO-STORY GLASS FRONT SET ASKEW REVEALS ATTRACTIVE INTERIOR, REPLACES SHOW WINDOW



DISPLAY CASES ARE CYLINDRICAL



SPECIALTY SHOP displays fancy shoes and a view on balcony, accessories on street level.

CARSON & LUNDIN and
HARRY E. DAVIDSON & SON, Architects

Commanding a splendid view of Boston Common across the street, the Guild Shop illustrates a new trend in shoe store design, influenced by the increasing tendency of such shops to sell more than shoes. In fact, the major emphasis is placed on the display of accessories (casual shoes, gloves, pocketbooks, etc.) which is located on the ground floor, separated from the sidewalk by a glass wall. Of balcony-like construction, the second floor of the air conditioned building is more luxurious and roomy, in keeping with its more expensive merchandise. The angular facade not only tends to accentuate the entrance but also permits the front door to swing out (in accordance with local code requirements) without interfering with sidewalk traffic. Name of the shop is derived from the fact that it is the consolidation of several smaller shops.



Florsheim Shoes



GLASS FRONT IS RECESSED AND SLANTED TO PROVIDE SPACE FOR WINDOW SHOPPING. INTERIOR DISPLAYS ARE PLACED IN MOVABLE

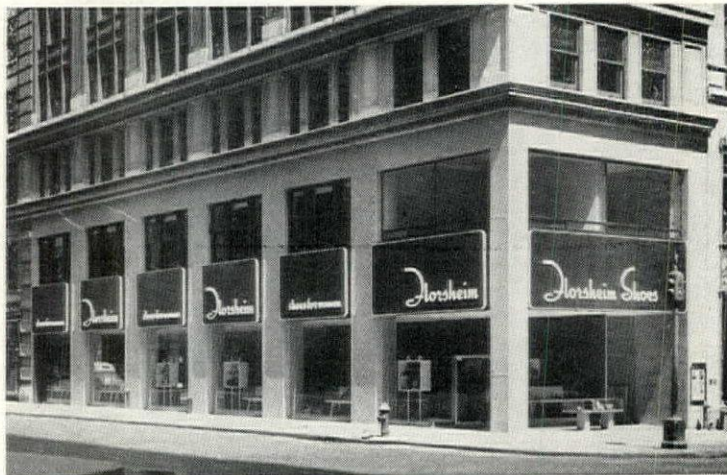
SHOE SALON on New York's Fifth Avenue is designed to exploit the possibilities of the open front.

KETCHUM, GINA & SHARP, Architects

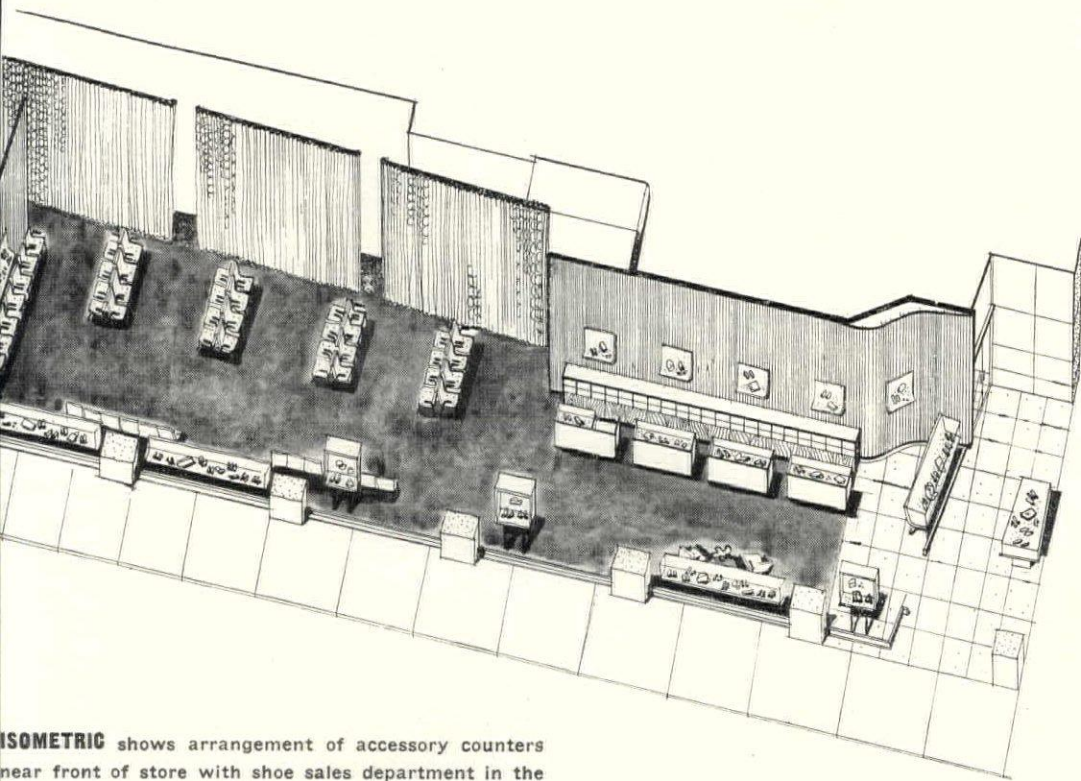
B & S STORE FIXTURE CO., Contractors

When a store becomes a display case why not design it as such? This is the reasoning behind Manhattan's new Florsheim shoe shop which, for the first time, takes full advantage of the open front plan. The sacrifice of precious store frontage to allow a deep and continuous setback has proved an effective customer lure, permitting unhurried window shopping and a clear view of the "display case" interior. Equally important is the ceiling illumination, a mass of fluorescent tubes concealed behind closely-spaced egg-crate louvers, and providing more than 75 foot-candles of light on the selling floor. Thus, illumination is brought sufficiently above the intensity of outside reflections to permit easy vision into the store. Movable mazda spots are used to accentuate displays and create ceiling color changes, another important feature when the entire shop is treated as a show window. Part of the same plan is a drapery wall finish which can be varied for seasonal atmosphere.

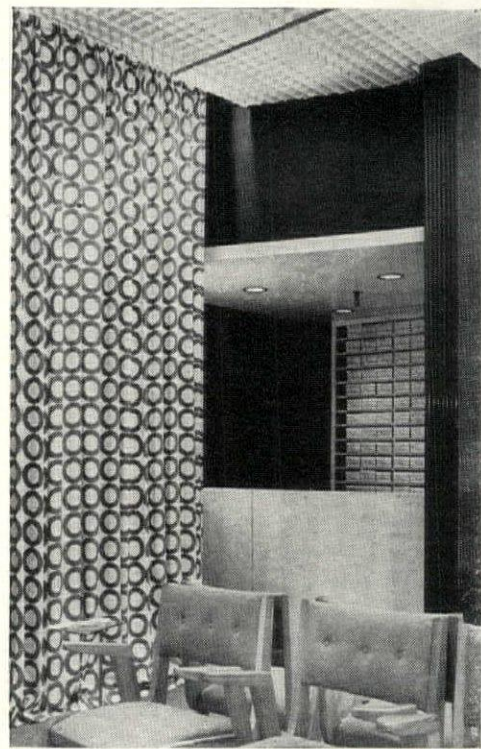
Photos: Gottscho-Schleisner



EXTERIOR SIGNS USE PLYWOOD, RAISED ENAMEL LETTERS



ISOMETRIC shows arrangement of accessory counters near front of store with shoe sales department in the rear. Long, narrow plan might seem cramped without the corner location which permits windows on side.



CASHIER'S DESK CONCEALED IN CORNER

ILLUMINATED THROUGH OVER-ALL EGGCRATE LOUVERS. WALLS ARE OF WALNUT 1/2-ROUNDS AND CONTRASTING PATTERNED DRAPERIES



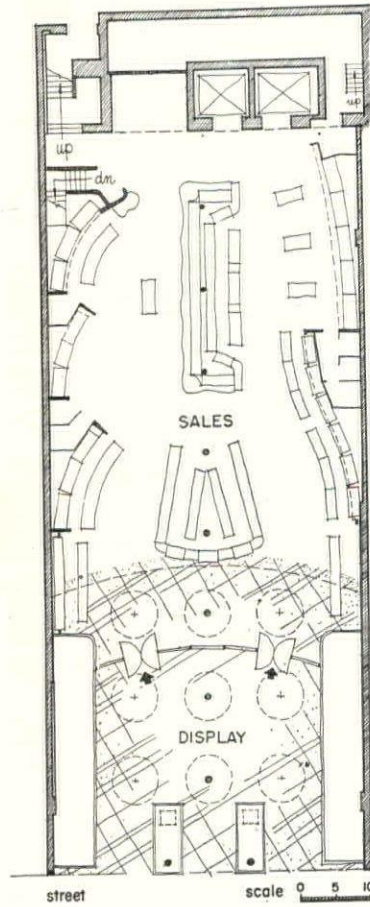
WOMEN'S APPAREL SHOP hides behind a four-story architectural trade mark.

ROSS-FRANKEL, INC., Designers and Builders

Most interesting aspect of the new Virginia Dare store in Kansas City, Mo. is its facade. "The front was not designed merely as another store front, but as a personalized front which would aid in identifying other stores in the chain . . . Something to be remembered." To make it different and therefore memorable, the designers covered the front with 30 large squares of porcelain-enameled sheet metal. Prefabricated in panels at the factory, the material was selected for its light weight, facility of erection and ease of maintenance.

Like the facade, the deep entrance recess belies the original 1900 structure. Only the supporting columns remain, and they have been finished with mosaic and used to support exterior displays which augment the show windows on either side.

FINISHES AND EQUIPMENT: GLASS BLOCKS—Libbey-Owens-Ford Glass Co. ELEVATORS—Otis Elevator Co. FLOOR COVERINGS—asphalt tile, Armstrong Cork Co. WALL COVERINGS—wallpaper, Richard E. Thibaut, Inc., Laverne Originals and Wolf Bros. EXTERIOR DOORS—Herculite, Pittsburgh Plate Glass Co. HARDWARE—Yale & Towne Mfg. Co. and Oscar C. Rixon Co. PAINTS—Pittsburgh Paint Co. ELECTRICAL FIXTURES—Pittsburgh Reflector Co. and Century Lighting, Inc. PLUMBING FIXTURES—Crane Co. AIR CONDITIONING—Carrier Corp. REGULATORS—Minneapolis-Honeywell Regulator Co. GRILLES—Anemostat Corp. of America.

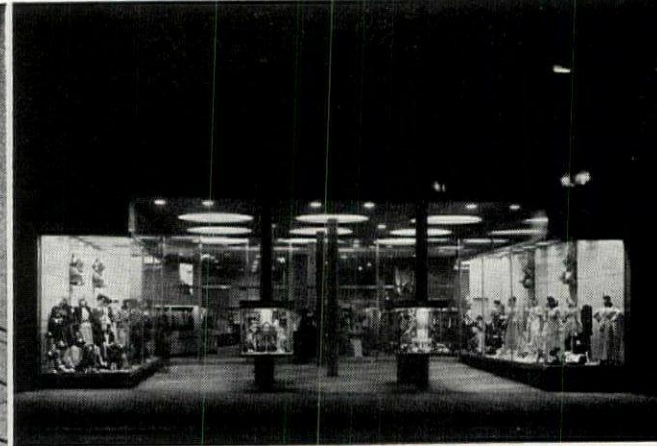
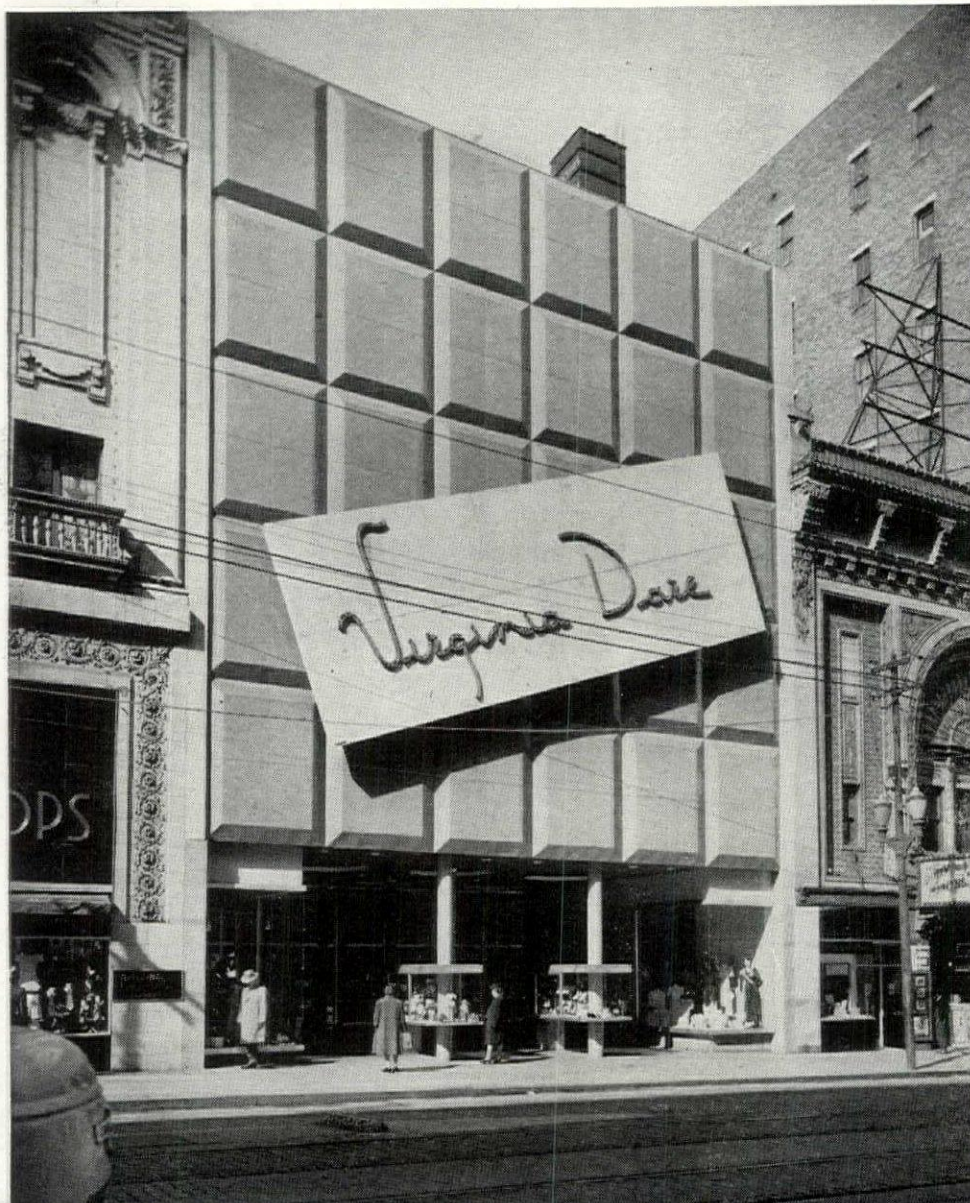


OPEN PLAN ADDS FORMALITY TO FUR SALON

LIGHTED DISPLAY PANELS DECORATE WALLS



FACADE OF HUGE CHAMFERED SQUARES CONTRASTS WITH NARROW SHOW WINDOW AND CIRCULAR LIGHTING RECESSES ABOVE ENTRANCE



CURVED COUNTERS DEFINE SALES SECTIONS



AUTO SALES AND REPAIR SHOP is glass-enclosed for attention.

RICHARD J. NEUTRA, Architect
BENNY HUGHES, General Contractor

The site of this North Hollywood, California project had considerable effect upon its design. The corner lot is bounded by a major boulevard and a side street which leads to another heavily trafficked boulevard. Since the site is located in a relatively open suburban neighborhood, it is easily seen from both of these important streets. To make the most of this visibility, the front and side of the showroom were completely enclosed with glass. Further aimed at attracting the public's eye is the location of the repair shop, in such a position that drivers of ailing automobiles must pass the display of new cars (eventually Kaiser-Frazers).

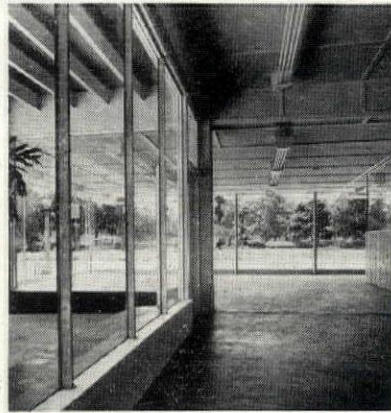
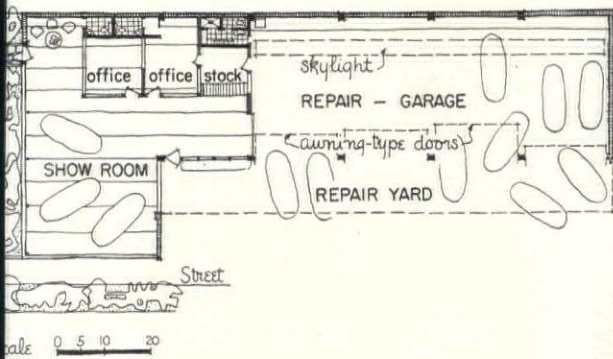
Completed last June, construction of the building was influenced by the availability of materials. The building proper is roofed with composition materials on wood sheathing and joists, while the projecting shelters are made of steel girders covered with 18-gauge aluminum.

FLOWER SHOP provides display spaces inside and out.

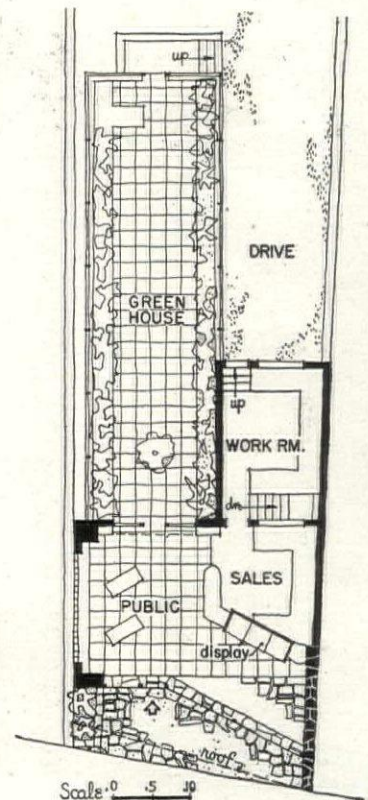
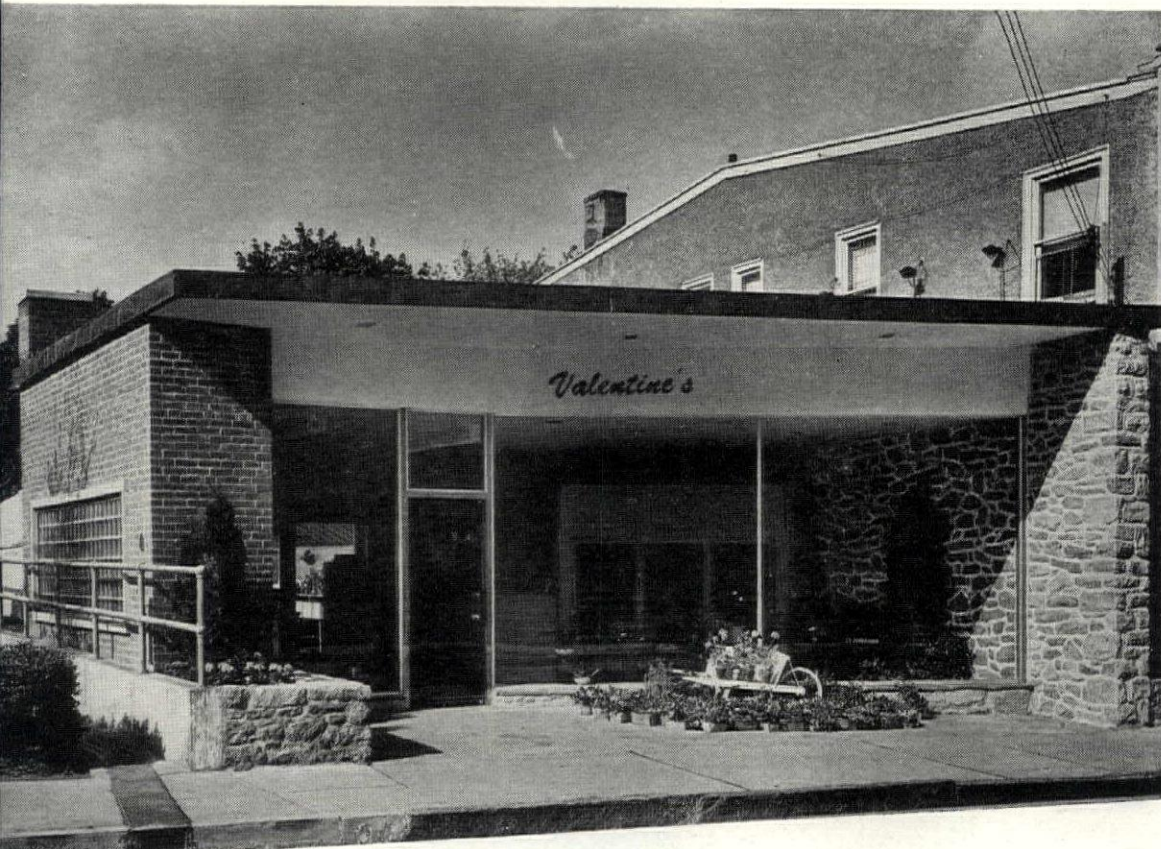
Making the most of a narrow downtown lot (32 ft. front) in Jenkintown, Pa., the architects set this flower shop back from the sidewalk and thus created a sheltered outdoor display space for potted plants. Cut flowers displayed inside the shop are easily seen from without, for the only separation is a wall of prefabricated panels of double glass. The brick and stone walls running through the glass front add to the garden atmosphere and further integrate the two display areas.



SHOWROOM WINDOW, PROTECTED BY METAL CANOPY, IS DESIGNED TO CAPITALIZE ON CORNER LOCATION



DOMINIQUE BERNINGER, G. HAROLD W. HAAG and PAUL d'ENTREMONT, Architects



SHOW ROOM of toy train wholesaler serves public and buyers alike.

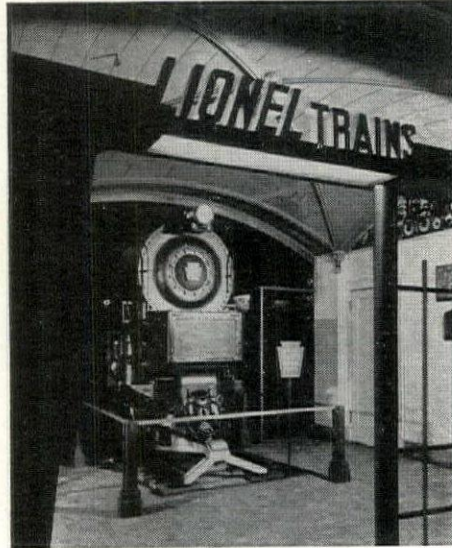
JOSEPH ARONSON, Designer and Decorator

Intended to fascinate the public as well as buyers for retail stores, the second-floor show room in the New York City offices of Lionel Trains presented several peculiar problems to the designer. Most important were the requirements for free circulation, lighting and protection of exhibits. Arriving on the show room floor by elevator, visitors pass through an entrance lobby dominated by the front of a 7/10 scale locomotive set against a background of black glass. Leading to the main exhibit room is a museum corridor displaying early train models and innumerable wartime gadgets. The exhibit floor features a large scale model created by the Museum of Science and Industry for educational purposes; a secondary action display on a small island table (picture, below) is used for selling.

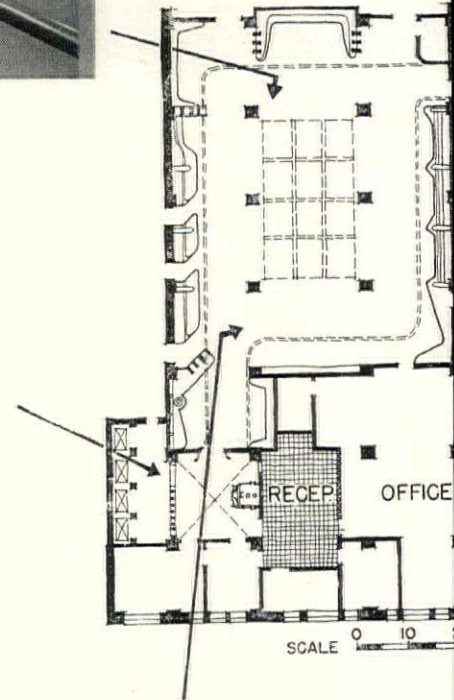
Variation of ceiling levels helps achieve effective lighting. The lower ceiling contributes direct light over the aisles through numerous incandescent flush fixtures spaced in a random pattern and, over the main exhibit, through a lattice pattern of fluorescent strips hung low in a black well. Side aisles are also indirectly lighted by fluorescent cove fixtures, and each display case is illuminated by fluorescent tubes close to the merchandise.



Photos:
F. S. Lincoln

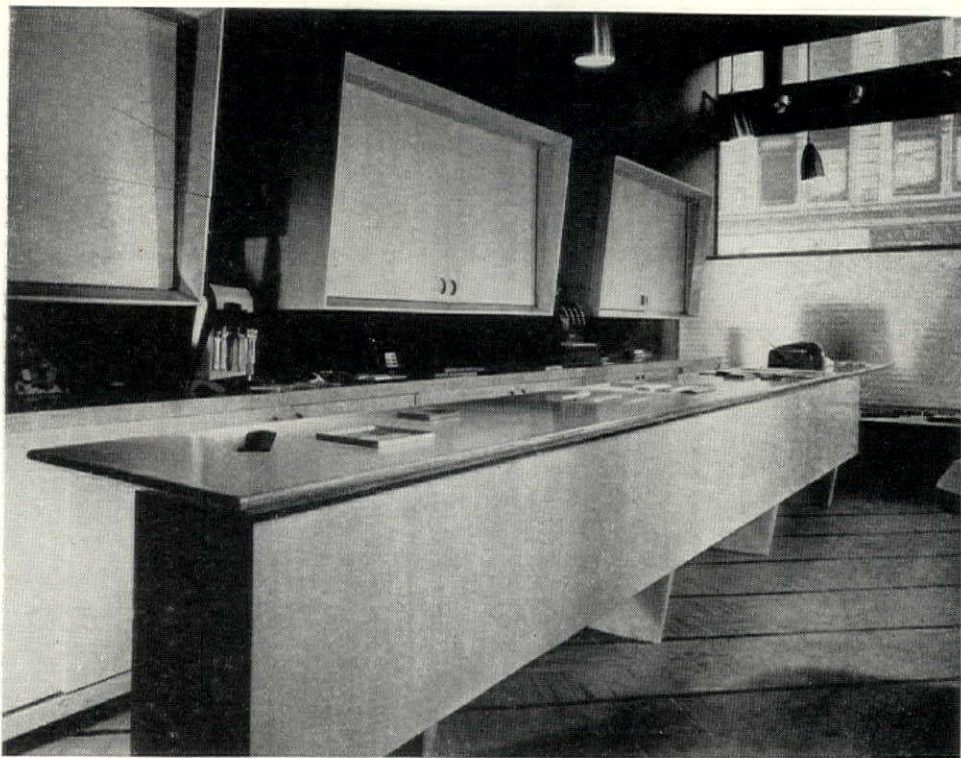


ENTRY LOBBY SUGGESTS TRAIN SHED

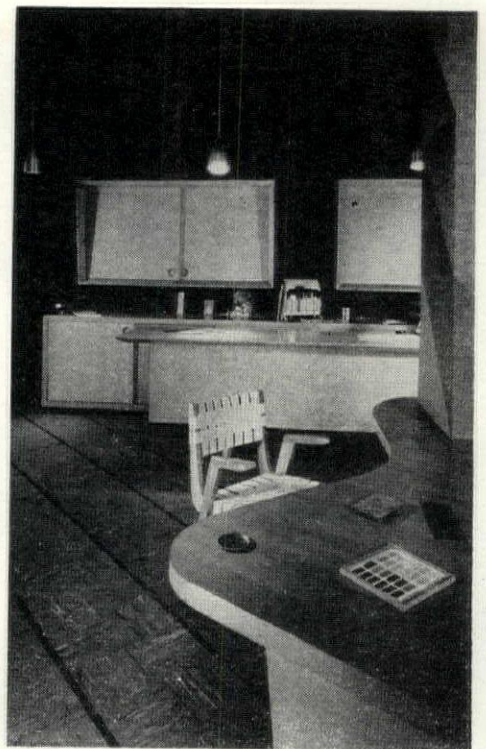


CENTRAL DISPLAY IS KEPT OUT OF PUBLIC REACH BY MOULDED PLYWOOD RAIL, CARRIED BY PLYWOOD STANCHIONS AND STRUCTURAL CO

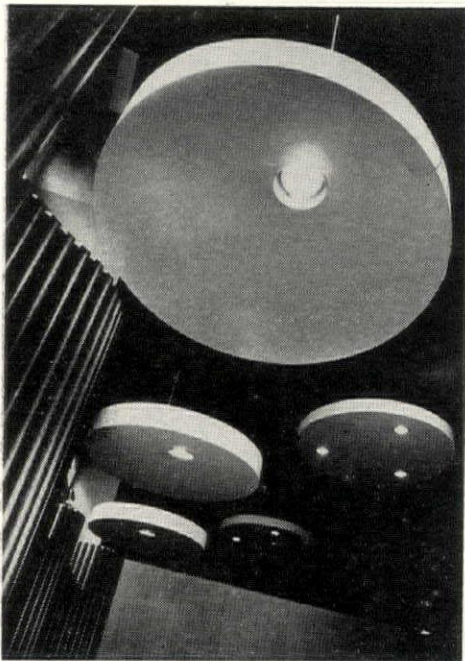




OAK CABINETS CONTAINING CANS ARE SILHOUETTED AGAINST BLUE-BLACK WALL



CENTRAL SALES TABLE IS FREE-SHAPED

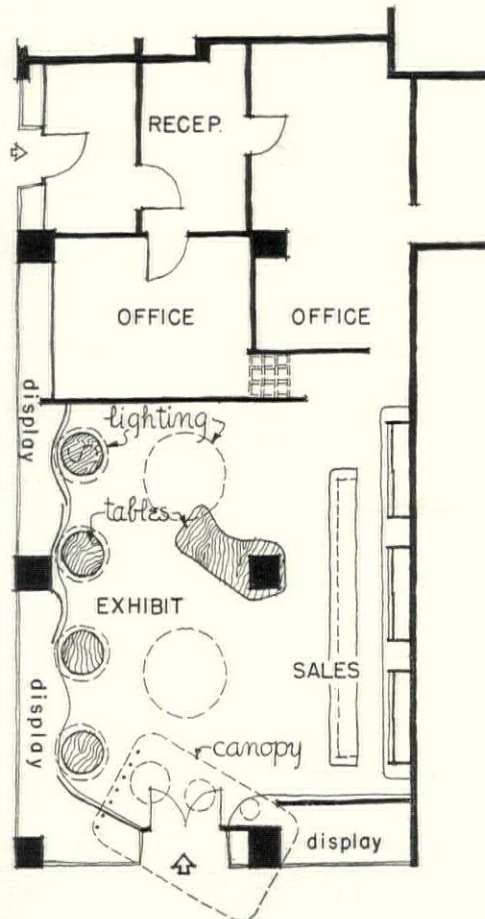


SUSPENDED LIGHTING DISCS FOCUS . . .

ATTENTION ON CIRCULAR TABLES BELOW



Photos:
Ben Schnall



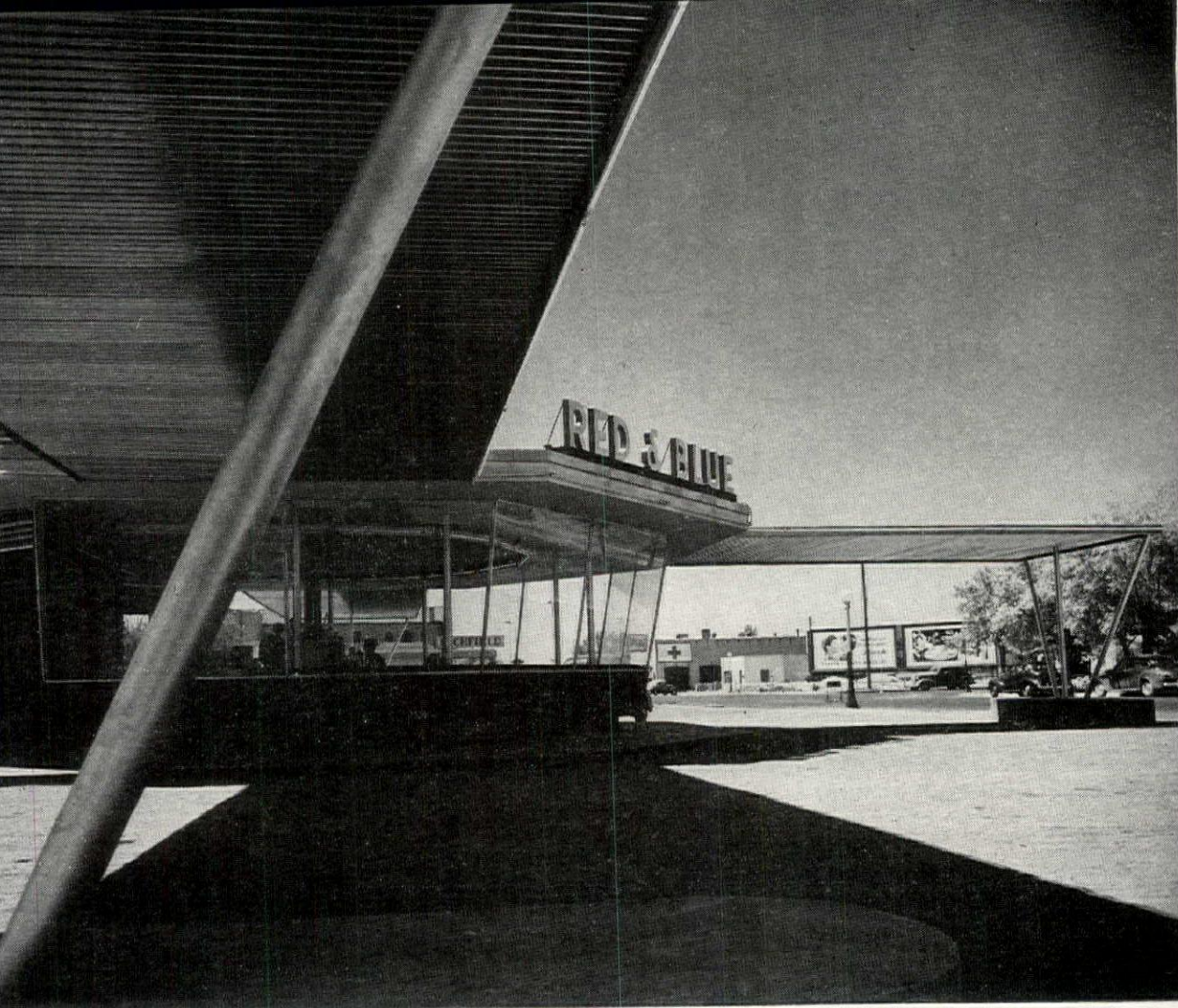
SCALE 0 5 10 FT.

PLASTIC CENTER illustrates new ideas for display of paints.

HERMAN H. SIEGEL &
SEYMOUR JOSEPH, Architects
WINOLD REISS, Color Consultant
KARL EGGER, General Contractor

Since paint cans do not lend themselves to attractive display, the design of a show and sales room for such merchandise must, in itself, be the major attraction. Thus, the "Plastic Center" of Cello-Nu Products in New York City relies on its unusual design and color styling to attract retail and wholesale customers for its plastic paints. Moreover, its extremely "modern" design is intended to symbolize the promising future of the relatively new plastics industry. (While merchandise is currently limited to paints, it may be expanded to include other plastics products.)

To reduce the apparent height of the narrow store and to spotlight the various display tables, lighting fixtures are dropped 11 ft. and painted a strong vermilion in contrast with the almost-black ceiling. Further to exaggerate the actual size of the shop and to relieve its barn-like proportions, the partitions separating the offices from the sales room are limited to 6 ft. in height. Show window platforms and backdrops are kept low, so that the design of the store interior is clearly visible from the sidewalk. Separate entrances are provided for wholesale and retail customers.

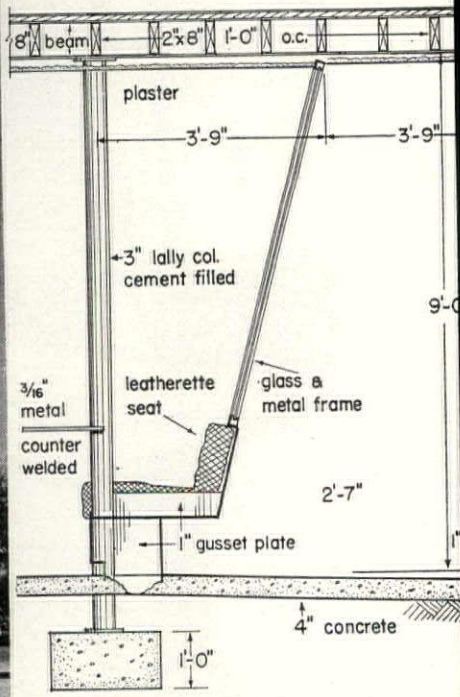
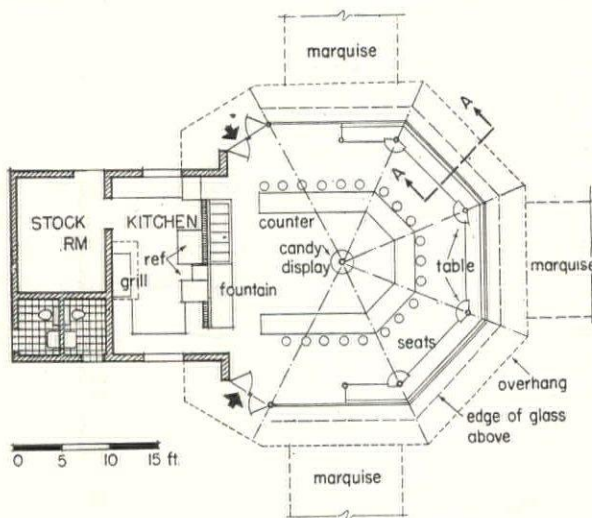


THREE WELL-FRAMED WINGS SHADE PATRONS OF THIS DRIVE-IN CAFE FROM THE HOT ARIZONA SUN

TWO ROADSIDE DRIVE-INS use light framing and lots of glass

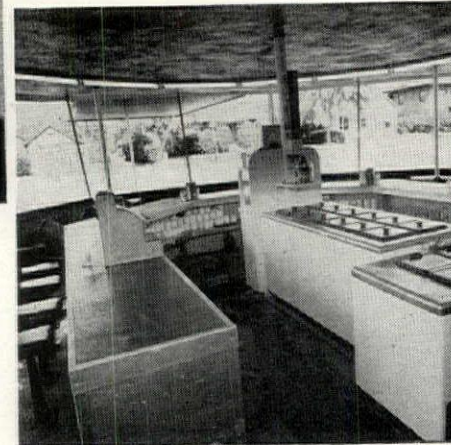
ARTHUR T. BROWN, Architect

The far west has long been famous for its roadside eating places. It now begins to seem that good looks must be added to this reputation of extravagance and numbers. At any rate, these two drive-in establishments at Tucson, Arizona indicate that the roadside stand is as valid a subject for architectural talent as any other building type. The two jobs have many qualities in common: large glass areas, amply shaded; interiors clearly visible from passing cars; bright colors and sharp distinctive forms which are themselves eye-catching. The larger of the two cafes (above) has three projecting sheds which provide shaded curb-service for 12 cars in addition to the short-order counters inside. The smaller one (right) has ample parking space, none of it shaded, and a semi-circular counter inside. Both are air conditioned; both are largely fabricated of metal and glass, though the service areas of the Red and Blue are of concrete block plastered on both sides. And both are admirable for restraint and simplicity in a type of building where exuberant neon is too often substituted for a little common sense.

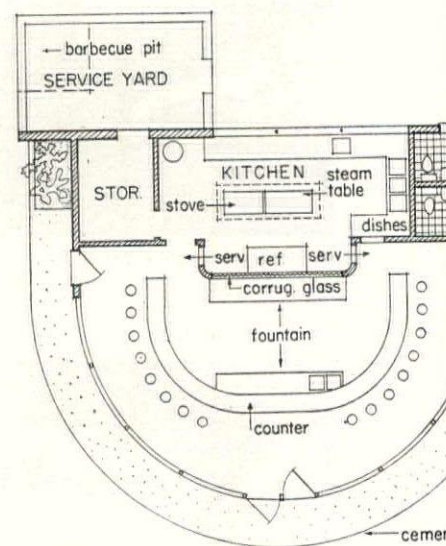


SECTION A-A

M. T.

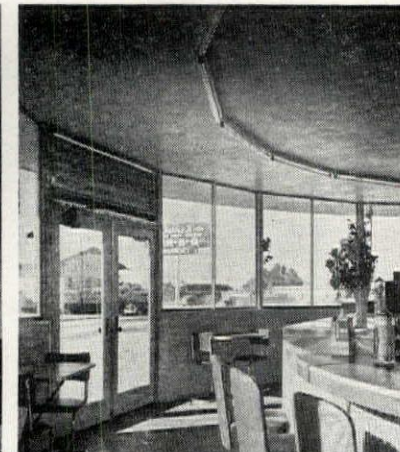


LUNCH ROOM IS ALL GLASS ABOVE C



FACIA OF GOLDEN YELLOW CEILING CARRIES NARROW BAND OF NEON SIGN AND LI

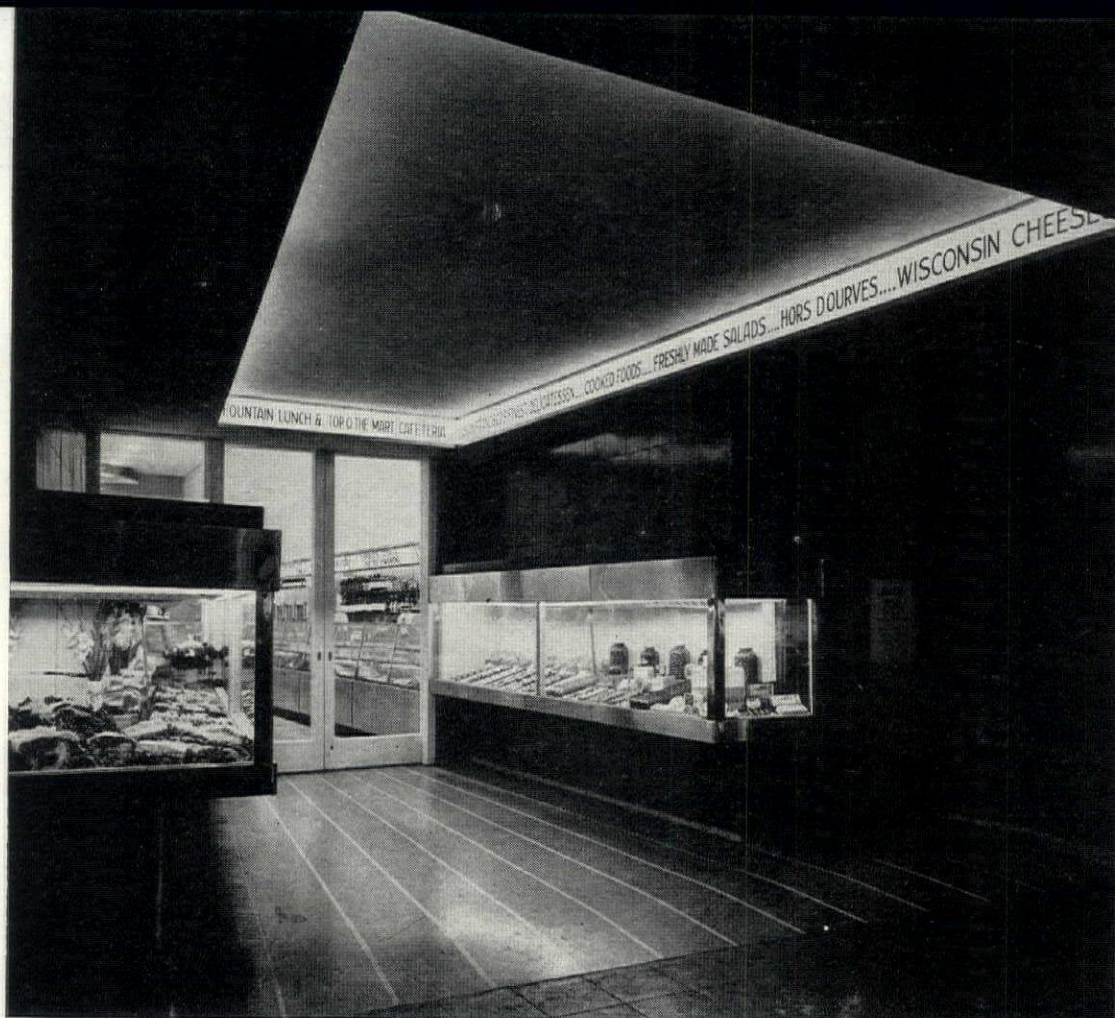
Maynard L. Parker



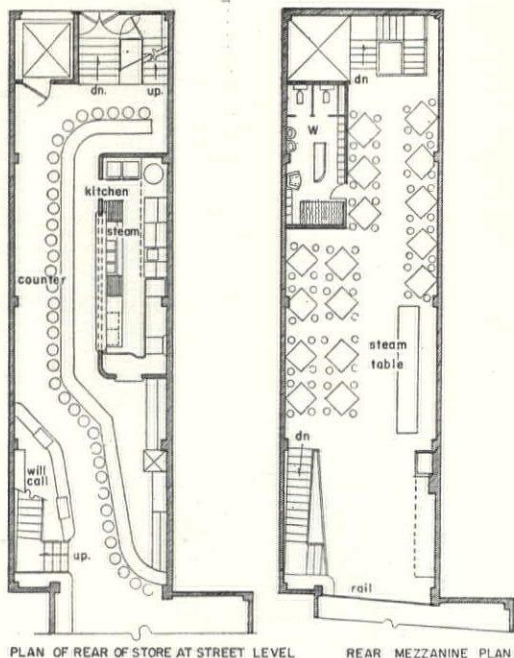
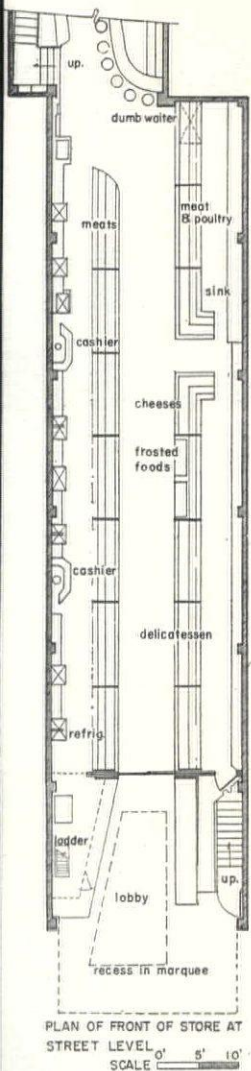
DOWNTOWN BUTCHER SHOP uses new display techniques on office trade.

OLTON WHITE, Architect
 GEORGE KOSMAK, Associate
 MACDONALD, YOUNG & NELSON, Contractors

Controlling factors in the design of this remodeled San Francisco meat and delicatessen store were its special location and clientele. Situated in the heart of the downtown business district, the shop's customers are almost exclusively office workers in the vicinity. Many of them eat lunch in the cafeteria at the rear and shop on their way out; others order by phone; and nearly all of them pick up their purchases after work. Thus, the operation the architects faced was unusual. Separate sections had to be provided at the front for meats, poultry, seafood and delicatessen foods. The counter and cafeteria at the rear had to handle the important luncheon trade, with the kitchen cannily used afterwards for the preparation of delicatessen foods. A full-sized mechanized cutting shop had to be installed. Aside from a workable plan, the architects sought to give the shop an appearance of simplicity and unity, inside and out. This they have accomplished by careful detailing of fixtures and cases, by standardized signs and by good general and display lighting. The latter, incidentally, uses a mixture of 75 per cent white and 25 per cent cerise fluorescents.



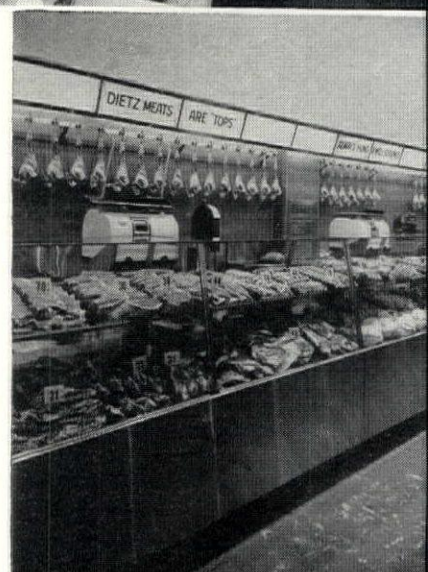
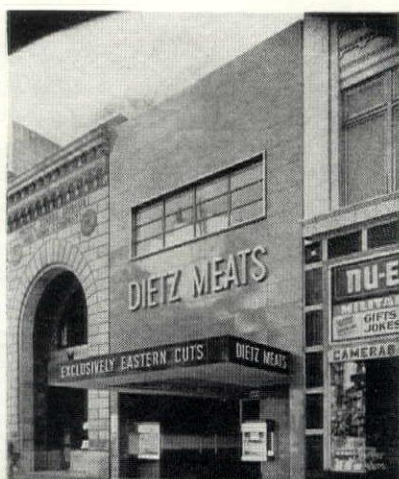
THE REFRIGERATED SHOWCASES HAVE DOUBLE GLAZING TO ELIMINATE FROSTING



LIGHTING IS TINTED PINK TO FLATTER MEATS



NEW FACADE IS IN DARK TURQUOISE FERRO ENAMEL WITH LEMON YELLOW TRIM, MARQUISE IS DARK CHERRY RED



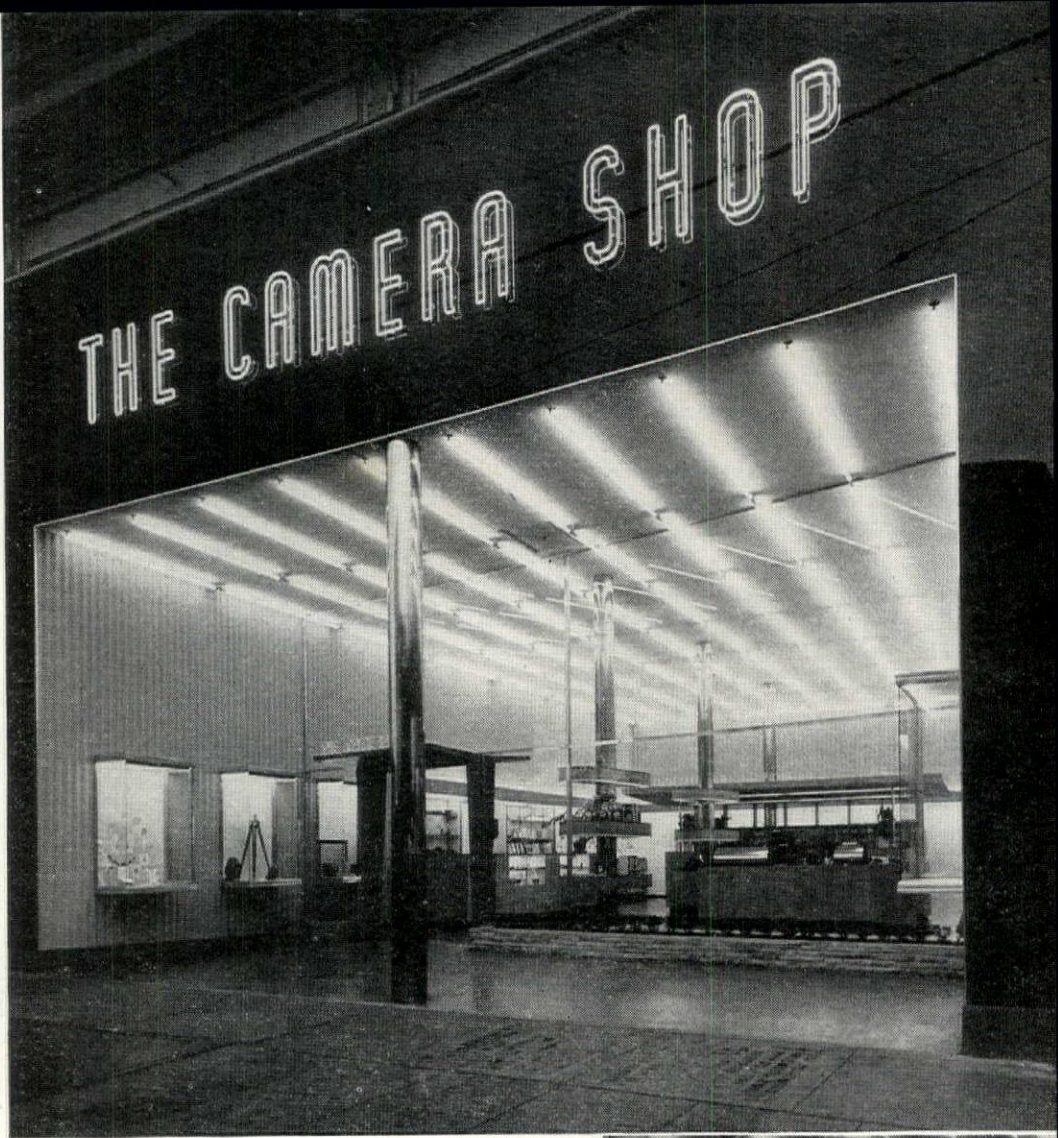
Photos:
 Philip
 Fein

A REMODELED SHOP in Berkeley demonstrates value of open front.

JOHN CARL WARNECKE, Architect
HANS C. JENSEN, General Contractor

The sheer glass front of the remodeled home of the Camera Shop at Berkeley, Calif. is almost literally uninterrupted from sidewalk to ceiling. Only a low stone planting box serves as a curb at the bottom while, at the top, the cold cathode lighting actually penetrates the plate glass through holes drilled for that purpose. The result is a shop whose whole 30 ft. by 60 ft. interior is a showcase. The owners confess that they were a bit afraid of the design at first—"we really expected a certain amount of adverse criticism," they say, "for we thought anything as new as this might be a little too different to have universal and immediate acceptance." They were wrong, however; "the response of the public has been remarkable . . . resulting in greatly increased store traffic with a corresponding rise in sales volume."

Using the same location as the previous shop, but with twice the frontage, the architect has achieved a crisp, bright attention-commanding job. The black structural glass of the street front is repeated inside in counter and table tops. Floors are brick red linoleum, walls are corrugated asbestos, painted chartreuse and ceilings acoustical tile: all woodwork is maple veneer in natural finish. Columns are sheathed in stainless steel.

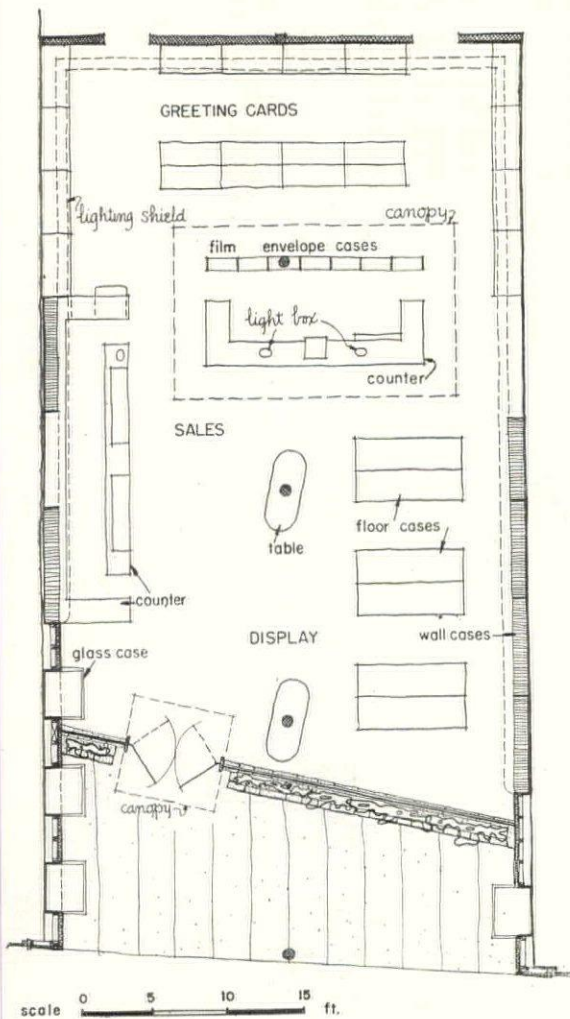


Photos: Philip Fein

RECESSED STREET FRONT MAKES A SHOWCASE OF ENTIRE SHOP

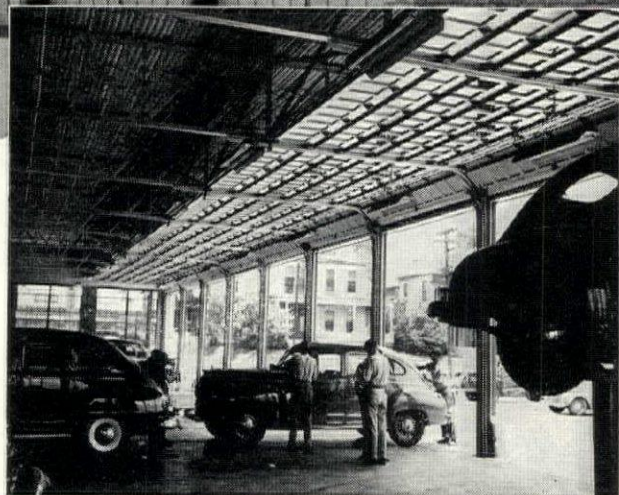
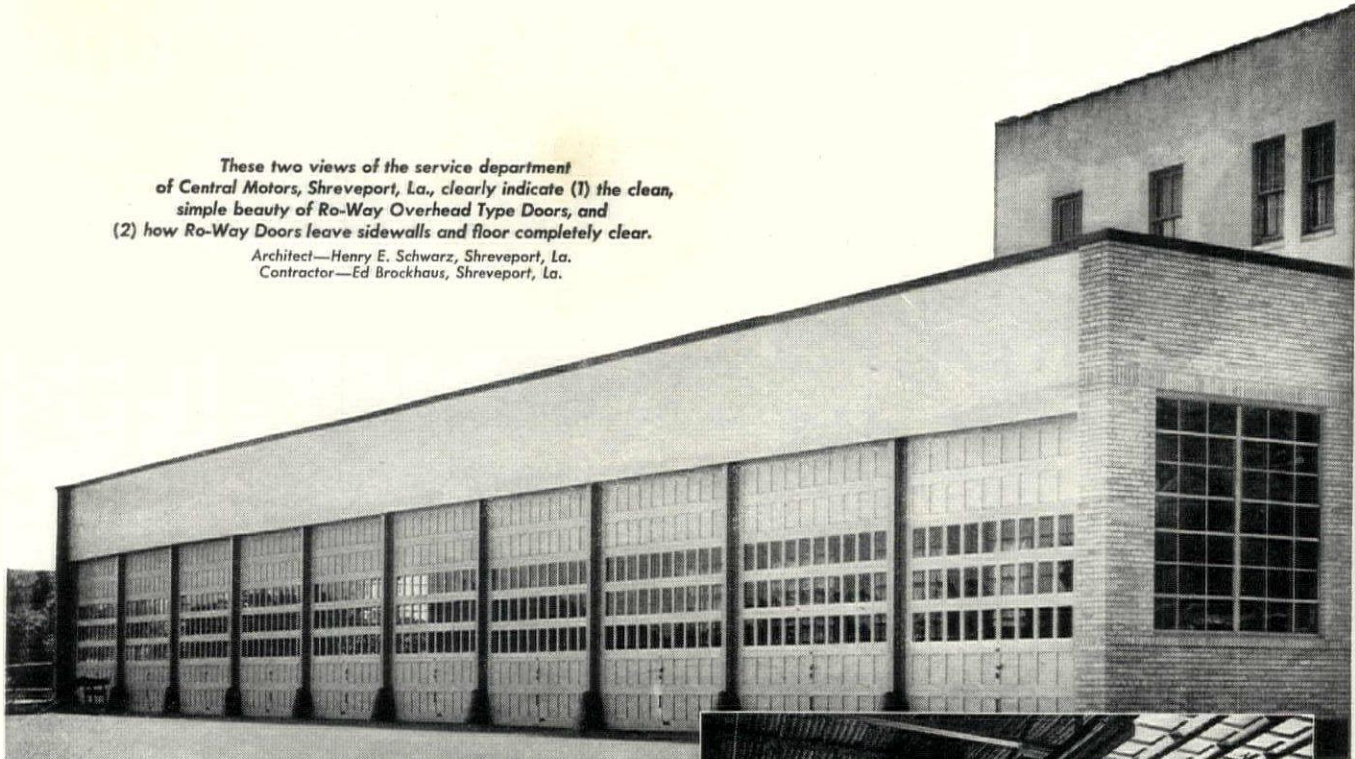


STAINLESS STEEL AND BLACK GLASS ADD SPARKLE TO INTERIOR COLORS OF CHARTREUSE AND RED



These two views of the service department of Central Motors, Shreveport, La., clearly indicate (1) the clean, simple beauty of Ro-Way Overhead Type Doors, and (2) how Ro-Way Doors leave sidewalls and floor completely clear.

Architect—Henry E. Schwarz, Shreveport, La.
Contractor—Ed Brockhaus, Shreveport, La.



An
OPEN and SHUT CASE
for
Ro-Way
OVERHEAD TYPE DOORS

So Much Extra Value at No Extra Cost!

Forget, for a moment, the smart appearance of Ro-Way Overhead Type Doors. Ignore (if you can) their simple modern design. Consider only these five extra-value features—exclusive with Ro-Way at no extra cost:

- 1. FRICTION-REDUCING TRACK**—Makes rollers ride away from the track sidewall . . . provides extra clearance.
- 2. "DOUBLE-THICK-TREAD" TRACK ROLLERS**—Each rolling smoothly on seven ball bearings.
- 3. "TAILOR-MADE" POWER SPRINGS**—Individually "Power-Metered" to give just the right lift.

4. "CROW'S FOOT" OUTER BEARING SUPPORT—Holds sheave wheel in permanent alignment . . . no twist or sag to cause friction or binding.

5. RUSTPROOF HARDWARE—All hardware rustproofed by Parkerizing and painting after fabrication.

And there you have it—the case for Ro-Way. The reasons why Ro-Way Overhead Type Doors are in a class by themselves . . . and first choice of so many architects, builders and owners—

But you be the judge. Specify Ro-Way on your next job. See if you don't agree that Ro-Way is the right way to solve doorway problems. Write for free catalog—no obligation.

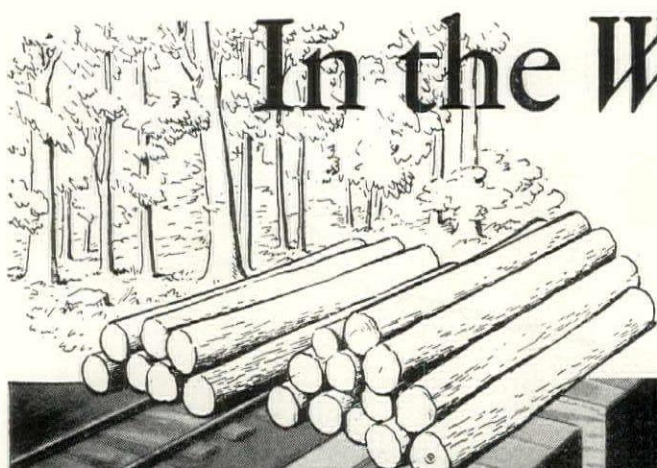
See our catalog in Sweet's. Ro-Way sales and installation service available nationwide.

ROWE MANUFACTURING COMPANY

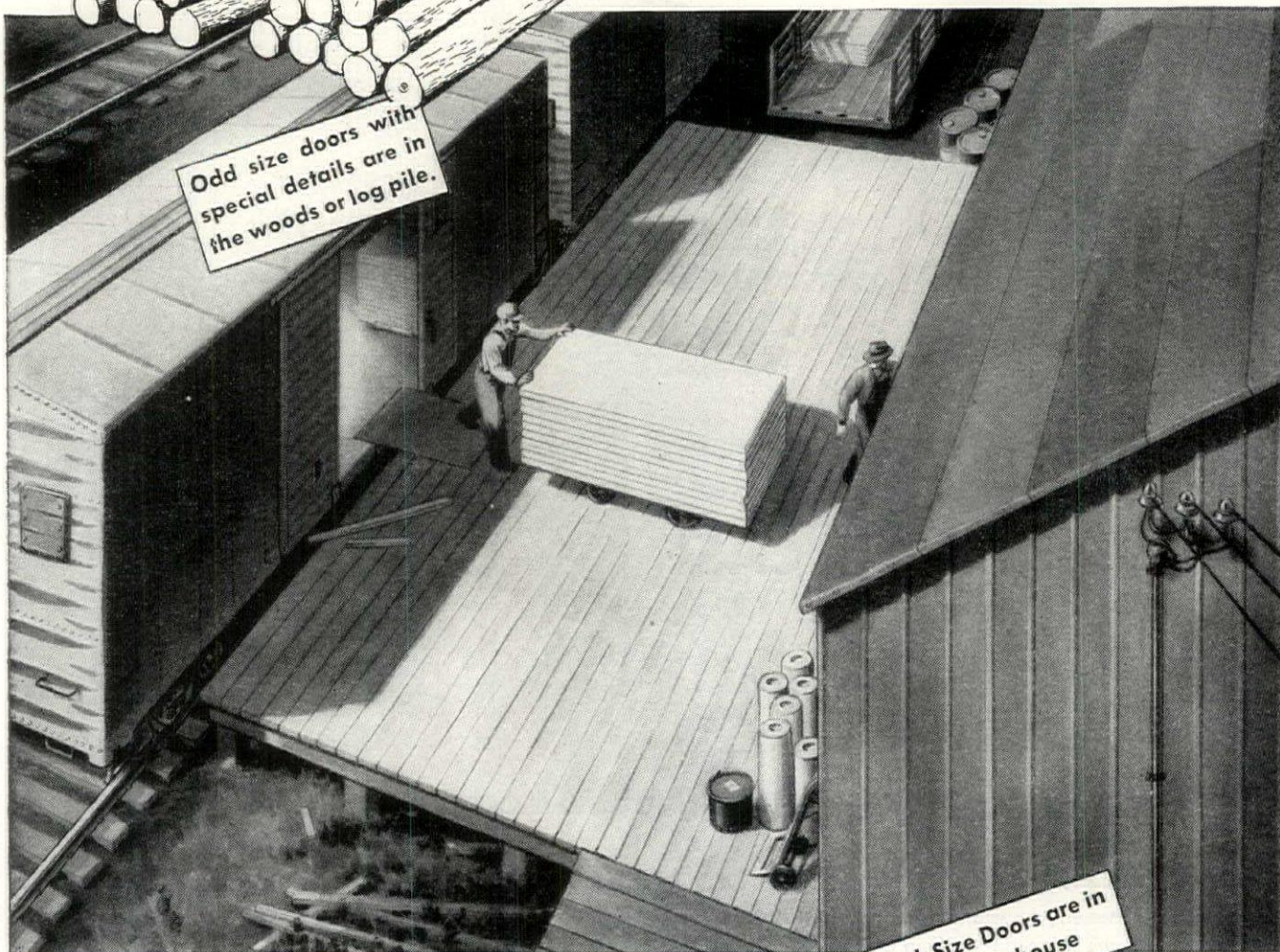
914 Holton Street

Galesburg, Ill., U. S. A.

There's a RoWay for every Doorway!



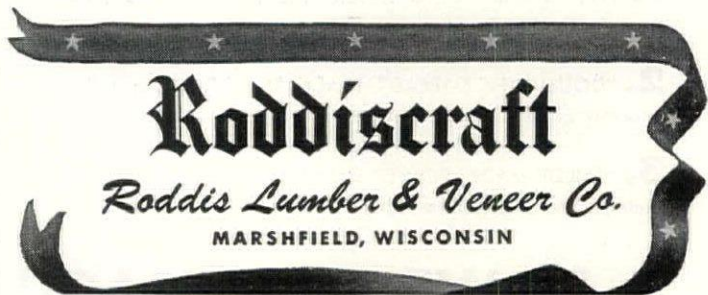
In the Woods or in the Warehouse?



Odd size doors with special details are in the woods or log pile.

Stock Size Doors are in the Warehouse

CUSTOM made doors can't be cut and fashioned until specifications are received. Odd sizes and details slow down production, require additional labor — waste materials. Stock sizes on the other hand permit maximum continuous production, make the most use of man-hours and machines — provide stocks at our warehouse — ready where you want them, when you want them . . . Since the call today is for production and more production Roddis is limiting itself to stock sizes both in doors and plywood. This policy means more Roddiscraft doors and more Roddiscraft plywood for our customers — a continuation of our 55 year old policy of giving our customers what they want.

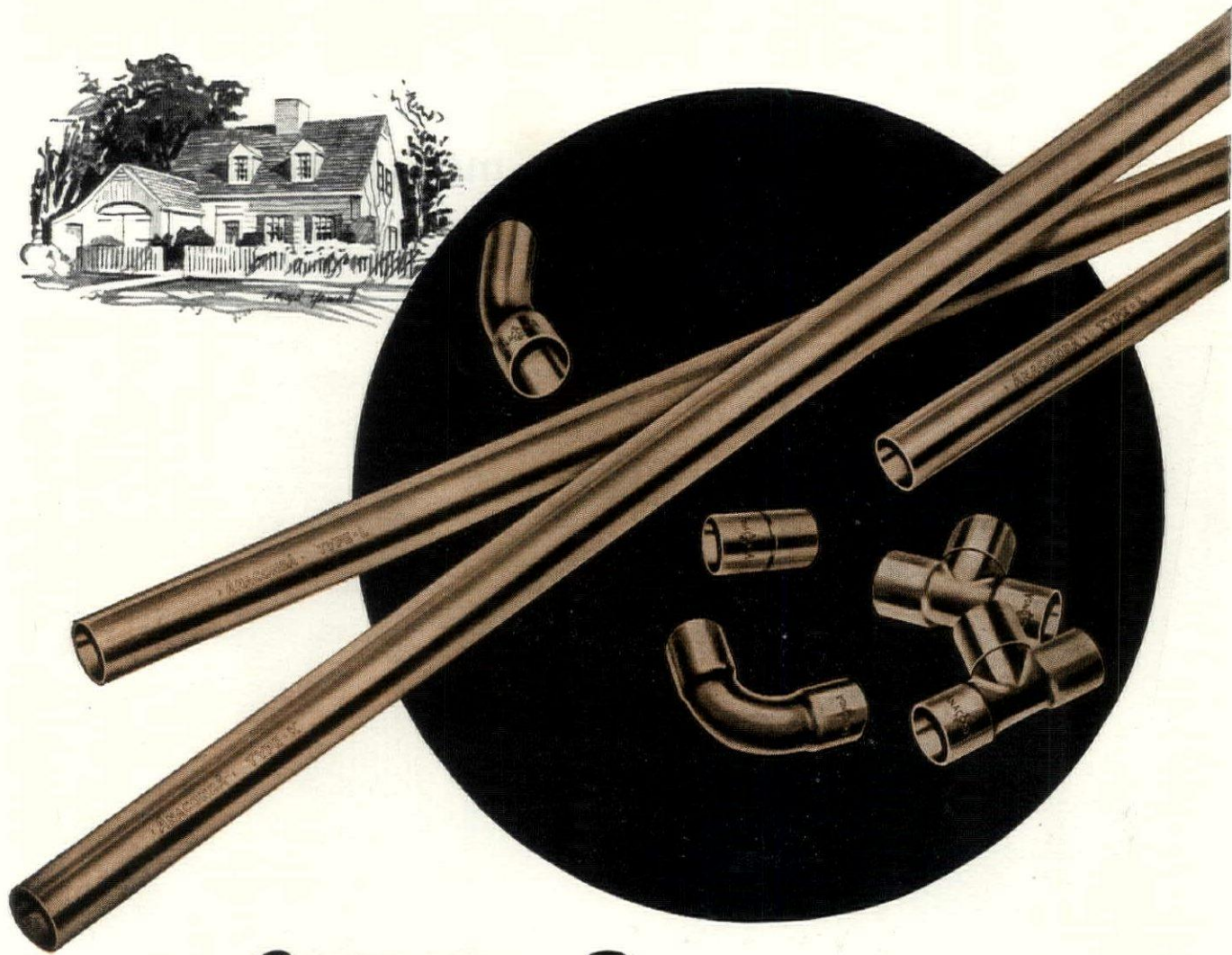
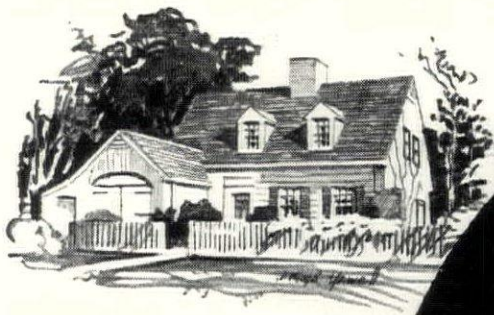


Roddiscraft
Roddis Lumber & Veneer Co.
 MARSHFIELD, WISCONSIN

Roddiscraft WAREHOUSES

- | | |
|---|--|
| CAMBRIDGE 39, MASS., 229 Vassar St. | LONG ISLAND CITY, N. Y.,
Review & Greenpoint Ave. |
| CHICAGO 8, ILL., 1440 W. Cermak Road | MARSHFIELD, WISCONSIN |
| CINCINNATI 2, OHIO, 457 E. Sixth St. | MILWAUKEE 8, WIS., 4601 W. State St. |
| DALLAS, TEXAS, 2615 Latimer Street | NEW YORK CITY 18, N. Y., 515 W. 36th St. |
| DETROIT, MICH., 11855 E. Jefferson Ave. | SAN ANTONIO, TEXAS, 727 N. Cherry St. |
| KANSAS CITY 8, MO., 2729 Southwest Blvd. | |
| LOUISVILLE 10, KY., 1201-5 S. 15th Street | |

DEALERS IN ALL PRINCIPAL CITIES



COPPER PLUMBING

... installed at a price competitive with rustable pipe


IF YOUR CLIENTS could have copper plumbing at little or no more than the cost of a rustable installation which would they choose? Today they can have just that by using Anaconda Copper Tubes, Type K or L, with Solder-Type Fittings.

Made from deoxidized 99.9+ % pure copper, Anaconda Copper Tubes are furnished soft in 60-foot coils in sizes up to and including 1 1/4"; also hard or soft in 20-foot straight lengths. Larger sizes are supplied hard or soft in 20-foot straight lengths only.

Because of the excellent performance records of Anaconda Copper Tubes for water

lines, they are gaining wide acceptance for forced circulation hot water heating, and also for lawn sprinkler systems, tank-to-oil-burner, bottled gas and other connections. Detailed information is available in Publications B-1 and C-2. Write for a copy of each.

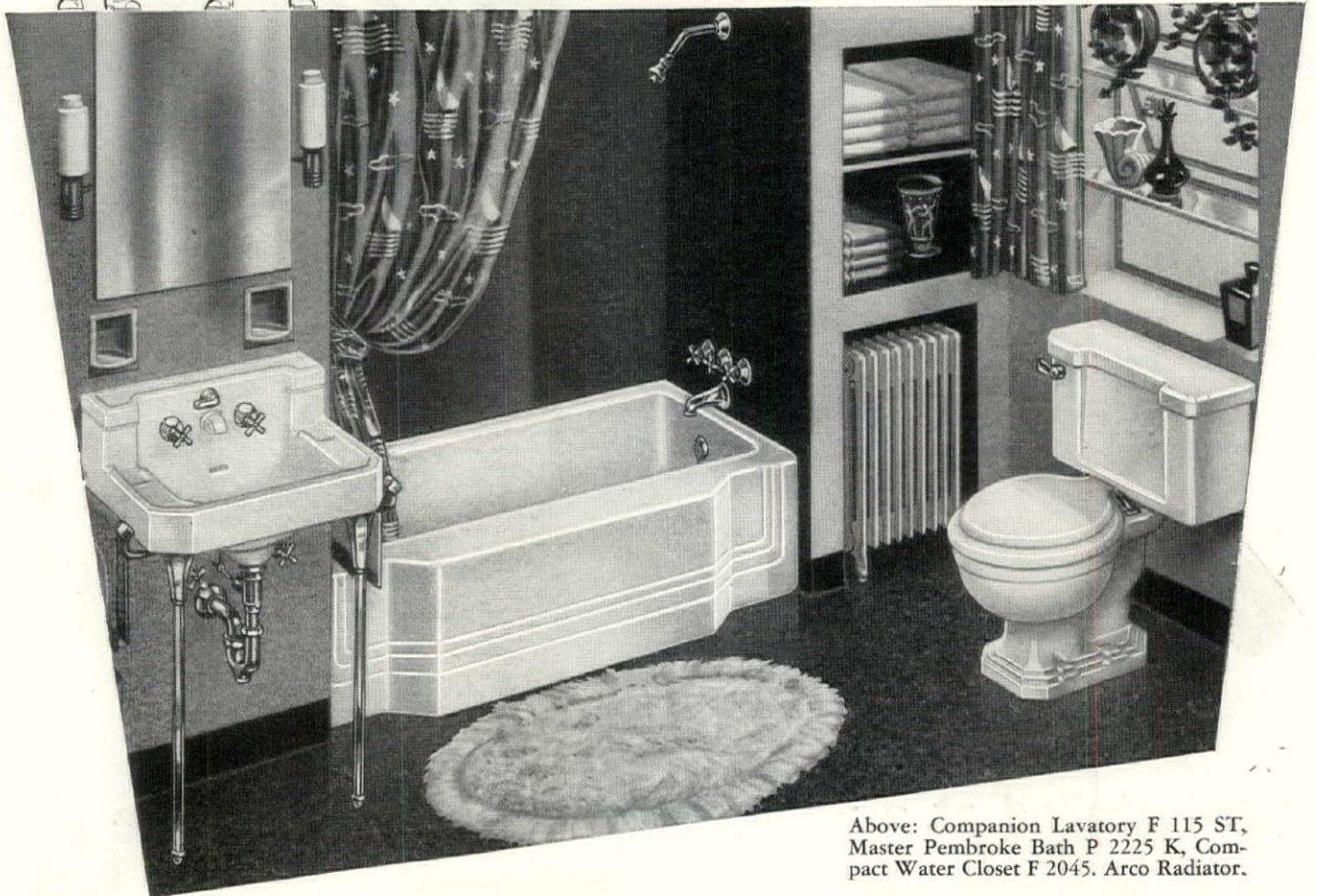
4672A

ANACONDA

Anaconda
COPPER TUBES
THE AMERICAN BRASS COMPANY
General Offices: Waterbury 88, Connecticut
Subsidiary of Anaconda Copper Mining Company
In Canada: ANACONDA AMERICAN BRASS LTD.,
New Toronto, Ont.



Quality fixtures like these
cost no more than others

—and they're just right for today's small homes



Above: Companion Lavatory F 115 ST, Master Pembroke Bath P 2225 K, Compact Water Closet F 2045. Arco Radiator.

WHEN IT COMES to specifying plumbing fixtures for those new homes and modernization jobs, the surest way to please is to recommend American-Standard. No name is better known. No products enjoy greater public acceptance.

The recessed Master Pembroke Bath, Companion Lavatory and Compact Water Closet shown above are typical of the smart, modern styling you'll find throughout the complete line. Like all products bearing the familiar American-Standard Mark of Merit, they are distinguished by their superb craftsmanship, quality materials and sound construction.

With production and delivery conditions improving steadily, you're safe in specifying Ameri-

can-Standard bathroom fixtures, kitchen sinks and laundry trays. Your Plumbing Contractor welcomes an opportunity to figure with you. Fixtures for modernization can be bought on the Heating & Plumbing Finance Corporation convenient F.H.A. Time Payment Plan. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.

AMERICAN-Standard

HEATING  PLUMBING

Serving the Nation's Health and Comfort

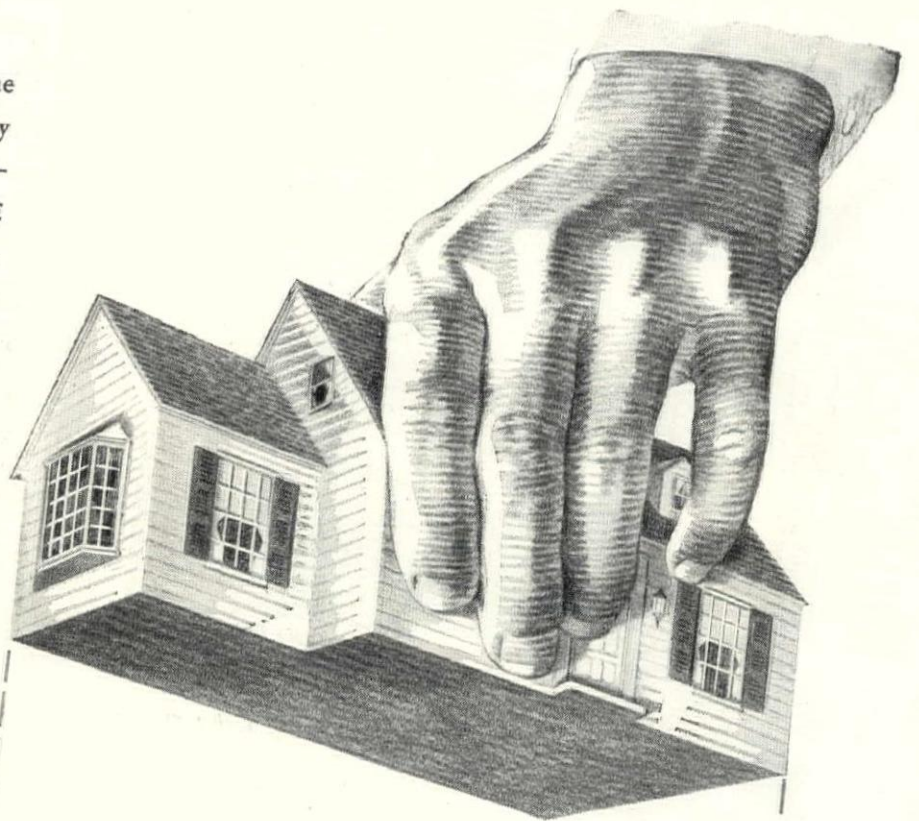


LOOK FOR THIS MARK OF MERIT—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, Water Heaters, for all fuels . . . Radiators, Convectors, Enclosures . . . Gas and Oil Burners . . . Heating Accessories . . . Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim . . . and specialized products for Hospitals, Hotels, Schools, Ships, and Railroads

TODAY, more than ever before, home buyers want to know what their money is buying. They want *value* throughout—and that's why they look for the G-E emblem on switches, convenience outlets, lampholders, fuses, and other wiring devices.

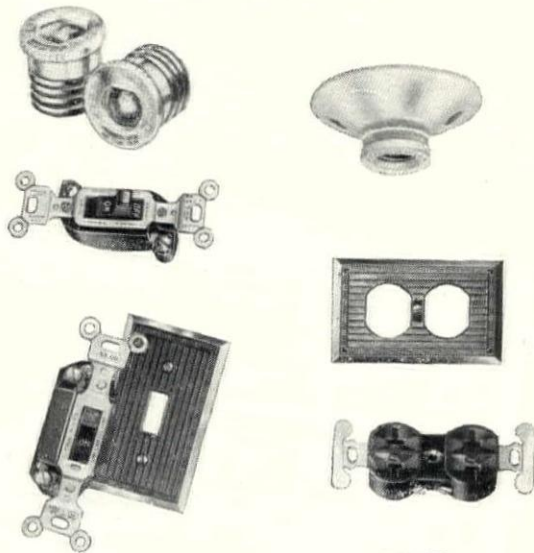
The name of General Electric is something to be proud of, for it signifies that there has been no skimping on quality, no outmoded design, in the wiring devices installed in the buyers' prospective homes. They add an extra "plus" to homes that makes them better to live in . . . and safer to buy.

It's easy to specify G-E wiring devices on *your* building plans, because the G-E



there's nothing humble about homes equipped with G-E wiring devices

line is complete. Just say "G.E. throughout." Your nearest G-E Merchandise Distributor will gladly give you complete details on G-E wiring devices, or you may wish to write for information to Section D12- 926, Appliance and Merchandise Department, General Electric Company, Bridgeport, Connecticut.

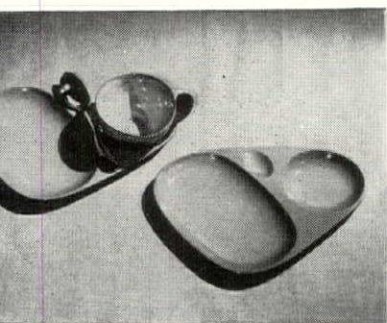


FREE

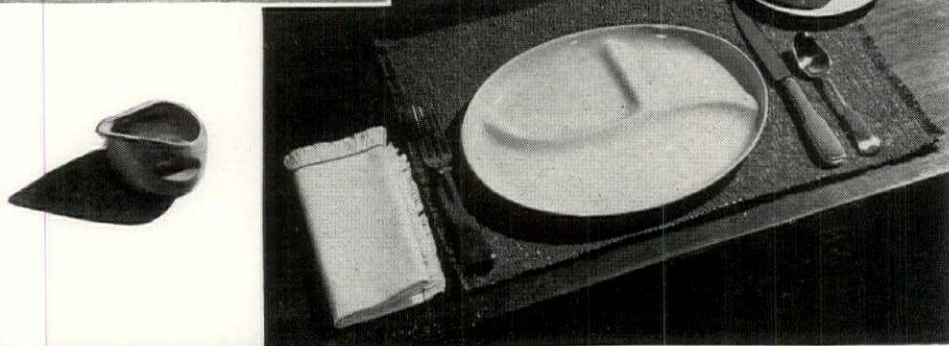
Write for your copy of this informative guide to "Electrical Modernization"

GENERAL  ELECTRIC

REVIEWS



Earthen pottery developed by Florence Forst has an attractive, crisp appearance and is rationally designed to make meals easier to prepare, easier to eat.



Pottery photos by Leustik



Textiles by Dorothy Liebes are designed for drapery and upholstery.



Hedrich-Blessing



Upholstered furniture illustrates the three sizes of sectional units designed by Edward Wormley for Dunbar Manufacturing Co.

Frank Willming



Mengel's modular (6 inch) furniture, designed by Morris Sanders, comprises all storage units and tables in this room.

EXHIBITS

MUSEUM OF MODERN ART in New York City, signaling the demand for house furnishings which always accompanies a rise in residential construction, last month furnished the small gallery of its Industrial Design Department with the latest inventions by designers of tableware, fabrics, storage cases and unit furniture. Arranged by Department Director Edgar Kaufmann, Jr., the exhibition will remain on public view until mid-November. Highlights:

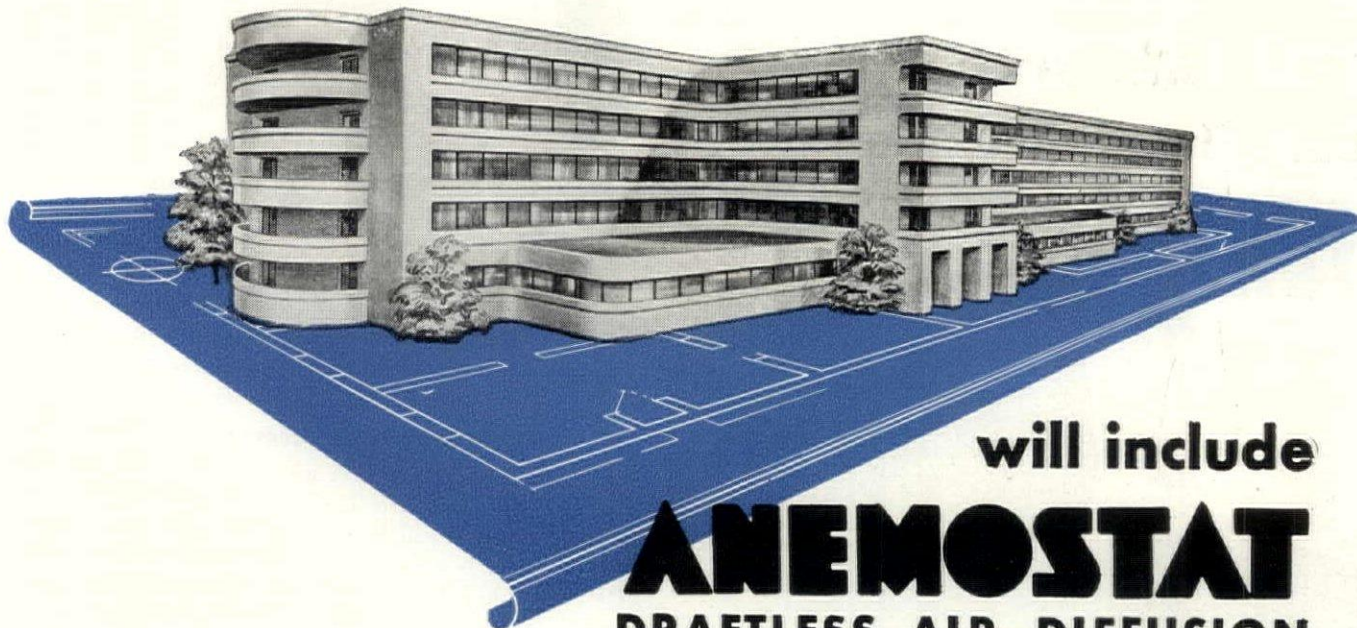
Earthen pottery, developed by Florence Forst at Chicago's Institute of Design, is an obvious effort to meet the challenge of glass and plastic tableware through functional design. Simplification of the dining process as well as kitchen chores keynotes the displayed pottery. The number of pieces necessary to a table setting are reduced through the introduction of multi-purpose items; plates and serving dishes have been studied to eliminate unused space and superfluous weight; and shapes and sizes are streamlined to permit more efficient stacking. Several of the new forms are illustrated to the left. The sandwich or dessert plate (top) was designed to simplify buffet or tea service. Its small indentation for the spoon also fits the thumb and the triangular design eliminates excess weight, helps balance. Designed to accommodate an entire course with serving spaces for meat, vegetables and salad, the "Blue plate" (shown on table mat) rests on the bottoms of the three depressions rather than on a single flat surface. The handle of the matching cup is molded with the cup—not stuck on later as in conventional practice—and its saucer has a raised center which holds the cup high and dry when the coffee is spilled. Since there is no functional need for handles on small containers intended for cold foods, the creamer (small illustration) and sugar bowl are equipped with grip-fitting depressions instead—likewise, the three mugs pictured with a plain plate. The asymmetrical shapes of many of Designer Forst's pieces emphasize the fluidity and freedom of form made possible by pressing the clay, as opposed to the geometric formality which machine turning dictates. Also, the stamping of pieces from sheets of clay creates a cross section of uniform thickness and permits considerably lighter pottery than is turned out by conventional production methods. Executed in red clay, the tableware is generally covered with a transparent blue-white slip which permits the basic color to show through slightly. Some portions are left unglazed for purposes of decorative contrast.

Textiles designed by master-weaver Dorothy Liebes for Goodall Fabrics, Inc. add a colorful note to the Museum exhibit. Originally conceived and executed on hand looms, all materials were designed with a view to preserving the hand-loom effect in their power-loom reproduction at the Goodall factory. Some, like "fleeceweave," a sheer light-diffusing web of mohair in clear red and light blue, are outspoken drapery materials. Others, like the special fabric developed for a railroad company, a heavy undyed beige plush, are distinctly upholstery cloths. Although she has woven some for Goodall, none of Miss Liebes' famous metallic fabrics are included in the display.

Storage cases by Morris Sanders, much publicised (FORUM, Sept. '46, p. 11) and much advertised by the Mengel Co., are the feature of the show. Called "Mengel Module," the furniture is comprised of five basic units, all of which were

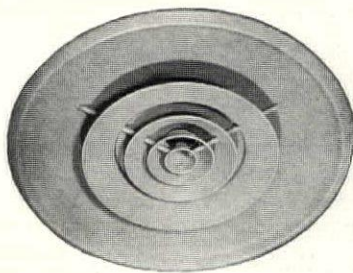
(Continued on page 154)

The Best Laid Plans...



will include

ANEMOSTAT DRAFTLESS AIR-DIFFUSION for successful air-conditioning



On the boards today, the ultra-modern commercial and industrial buildings of tomorrow are being designed to assure unsurpassed production. Incorporating all the newest advances in architectural design, they will add much to worker efficiency and comfort.

The best laid plans for newly designed commercial and industrial buildings include successful air-conditioning. To get it, more and more architects, engineers, and contractors are specifying Anemostat—the patented air-diffuser—which completes the air-conditioning process by providing scientifically correct distribution of the conditioned air to every part of the conditioned rooms.

The extreme changes proposed in building and

structural design, the new ideas for interiors and equipment, all magnify the need for correctly engineered air-distribution as provided by Anemostat. Without it, the air-conditioning system is incomplete—drafts occur . . . stale air-pockets persist . . . temperature and humidity are unequalized.

The Anemostat eliminates these trouble-breeders by distributing conditioned air in pre-determined patterns, and precisely in accordance with prescribed-for-comfort air velocities. The result: **SUCCESSFUL** air-conditioning for true air-comfort!

Anemostat engineers are air-diffusion specialists. Backed by 25 years of experience, they can capably solve difficult air-diffusion problems. A consultation can be arranged today. There is no obligation.

Descriptive literature is available on request.

AC-1092

"No air-conditioning system is better than its air-distribution"

ANEMOSTAT

REG. U. S. PAT. OFF.

ANEMOSTAT CORPORATION OF AMERICA
10 East 39th Street, New York 16, N. Y.

REPRESENTATIVES IN PRINCIPAL CITIES

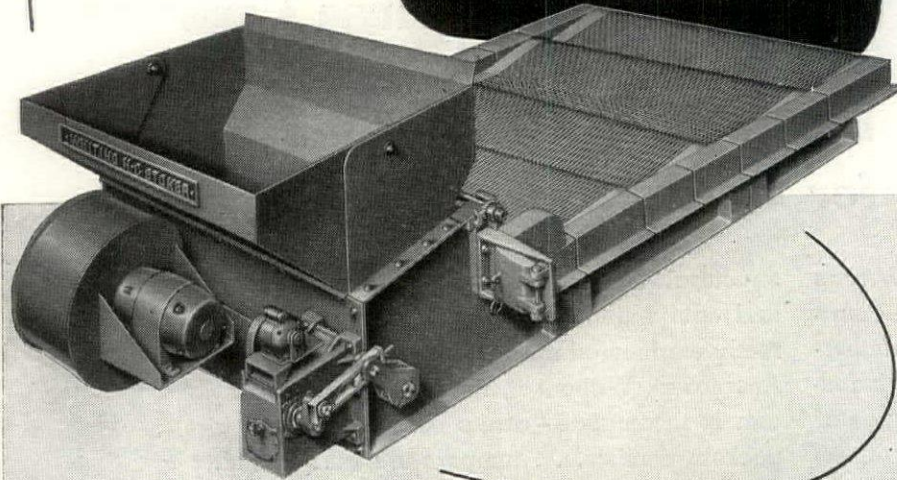
**A PROVED PRINCIPLE
that Cuts Steam Costs**

**THREE
WAYS**

1
Saves Fuel Dollars: Burns the cheapest coal — even 100% fines — smokelessly and with high sustained efficiency. Cuts tonnage required and price per ton, too.

2
Saves Labor Dollars: Automatic ash removal and automatic closure of "holes" relieve engineers from constantly watching the fire and working it.

3
Saves Power Dollars: Both fans and drive motors require less current because load is far lighter for given burning rate.



Nineteen years of grueling service have proved the Whiting Horizontal-Compression principle the most effective way to fire boilers developing from 130 to 500 BHP. It is not uncommon for a Whiting H-C stoker to earn its entire cost by the savings of a single season. We are prepared to support that statement with overwhelming evidence.

Costs of every kind are rising. Now is the time to act to keep steam costs down. Full information will be sent you promptly—and Whiting H-C stokers are now coming through for shipment without serious delay.

If you want to save money this coming season, write or wire immediately for our new bulletin.

WHITING STOKER SALES CO.
Suite 2501, 11 So. La Salle St., Chicago 3, Ill.



WHITING

HORIZONTAL-COMPRESSION FEED

Stokers

used to build up the wall piece illustrated on page 152: fluted base, deep case (with half doors), flat case (with drawer), shallow case (with grille door) and wide shallow case (with shelf). Accessories include legs and additional bases of which the basic units may be placed to form tables, chest cupboards and an array of other pieces limited only by the buyer's imagination. An ingenious connector holds the units together, permits them to be assembled in tension or compression, cantilevered or hung.

Unit furniture designed by Edward Wormley also emphasizes flexibility. Produced by Dunbar Manufacturing Co., the upholstered pieces are made of sectional units of foam latex on resilient plywood runners. Each runner is crimped so that it will not act like a rocker when placed on an uneven floor—it has only two points of contact with the floor. Available in three sizes (single, double and triple), the units can be combined to provide continuous seating. J.H.

THE WALKER ART CENTER in Minneapolis leads the Midwest these days with good exhibitions. They have just concluded their Third Annual Purchase Exhibition, titled "13 American Painters Today," and, judging from the catalogue, it is a far better interpretation of the American scene than has been assembled in the ambitious, highly publicized calendar competitions which receive so much attention. They have selected a good sprinkling of styles—from Julien Binfon to George L. K. Morris—and most of the artists are well established in reputation, well-grounded in the representational. Such well-known names as Edward Hopper, Charles Burchfield, Boardman Robinson are included. There are some excellent pictures by painters not quite so famous—notably Vernon Smith's harbor scene, which is highly comparable with Stuart Davis' excellent harbor scene also reproduced, and the charming, Matisse-like group by Margaret Stark. E. B.

BOOKS

INDUSTRIAL ART EXPLAINED by John Gloag. George Allen Unwin, Ltd., London. 248 pp. Illustrated. 6 in. by 8 3/4 in. 15 shillings.

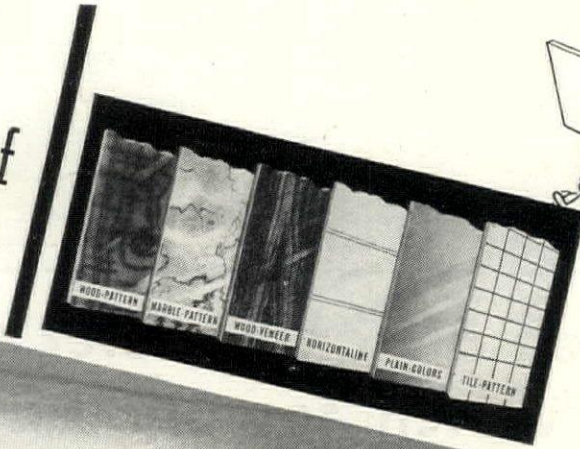
From England comes an enlarged edition of a work plugging the industrial designer, which first appeared in 1934. It makes one think of Henry Wallace's stand that we needn't go all-out for everything British. As Mr. Gloag himself says, Herbert Read's 'Art and Industry' still remains the authoritative work on English industrial art.

According to the author, the industrial designer "is not a stylist . . . not a 'putter-on' of sleek disguises for ill-planned or outmoded articles." To correct the unfortunate lapses of nineteenth century design brought about by the industrial revolution, Mr. Gloag says, "Progressive manufacturers should regard industrial design as a technical operation and employ the services of an industrial designer in the same normal businesslike way they would employ the services of a research chemist or a sales manager."

To explain industrial art, he takes the reader back to the Greek orders of architecture and on through the English D.I.A.—Design and Industries Association—founded in 1911 with the creed "fitness for purpose." Admitting that the English "have never had the leadership in industrial design which the United States has attained," Mr. Gloag throws a great deal of blame on William Morris. But in condemning Morris (with whose social ideas he doesn't sympathize), he states that "in Europe William Morris was taken far more

(Continued on page 158)

A Friend of
Designers, too



Versatile Marlite

... friendly to progressive draftsmen and designers ... permits a wide latitude of expression. Normally available in a variety of pleasing colors, patterns and finishes that let Marlite say "YES!" to almost every stroke of the designer's brush, Marlite is "friendly," too, in company with modern or traditional tastes. Tried and proved for years in nearly every type of room, in almost every kind of building, Marlite's ease of cleaning and low maintenance cost have built ready acceptance among builders, owners and renters. Marsh Wall Products, Inc., 101 Main St., Dover, Ohio.

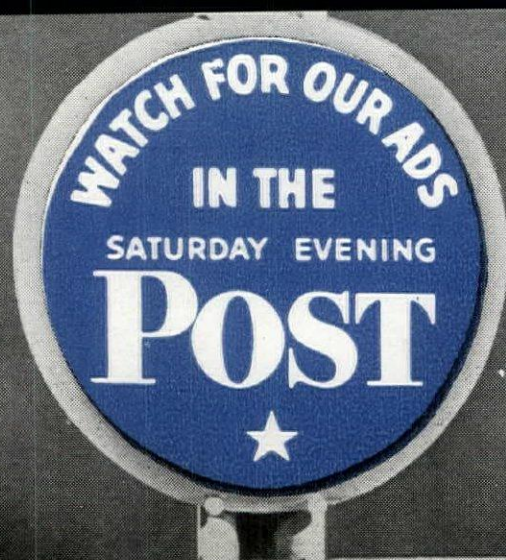
NOTE: Today Marsh's usually prompt, nation-wide Marlite service has been slowed by unprecedented demand. However, Marsh Mouldings, Marsh Mastic and Marsh Bathroom Accessories are available for prompt delivery—and every effort is being made to bring all Marlite deliveries back to normal.



Marlite

REG. U.S. PAT. OFF.

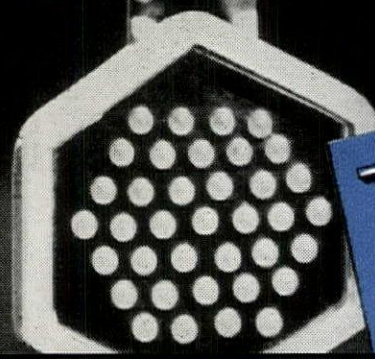
... FOR CREATING BEAUTIFUL INTERIORS



When a manufacturer asks you to "watch for our ads in the Post," he's calling your attention to the *best* kind of local support.

For advertisements in the Post reach your *best* customers—the *leaders*, who are first to buy the new and better things.

And advertisements in the Post get attention. For people like to read ads in the Post—far more than in *any* other magazine.



ONE-PIECE *Skeletons* FOR SKYSCRAPERS

Silently, almost stealthily, arc welding swiftly unites steel members into one-piece skeletons for today's skyscrapers. Combined with oxyacetylene cutting for various operations of fabrication, arc welding saves steel...assures full strength...and permits wider architectural latitude.

To help you solve the many perplexing problems involving this modern method of erecting buildings, Airco has just published "Manual of Design for Arc Welded Steel Structures"—a handy, useful book that brings you a wealth of information covering design, materials, inspection, estimating, and engineering control of welding and related operations...tables of standardized welded connections for all sizes of beams...AND a series of diagrams for the rapid design of special connections.

But see this invaluable new manual for yourself—just mail us your check or money order for \$2, and we will send the book to you at once...look the book over for ten days; then, at the end of this period, if it does not live up to your expectations, simply return the book to us, and we will refund your money.

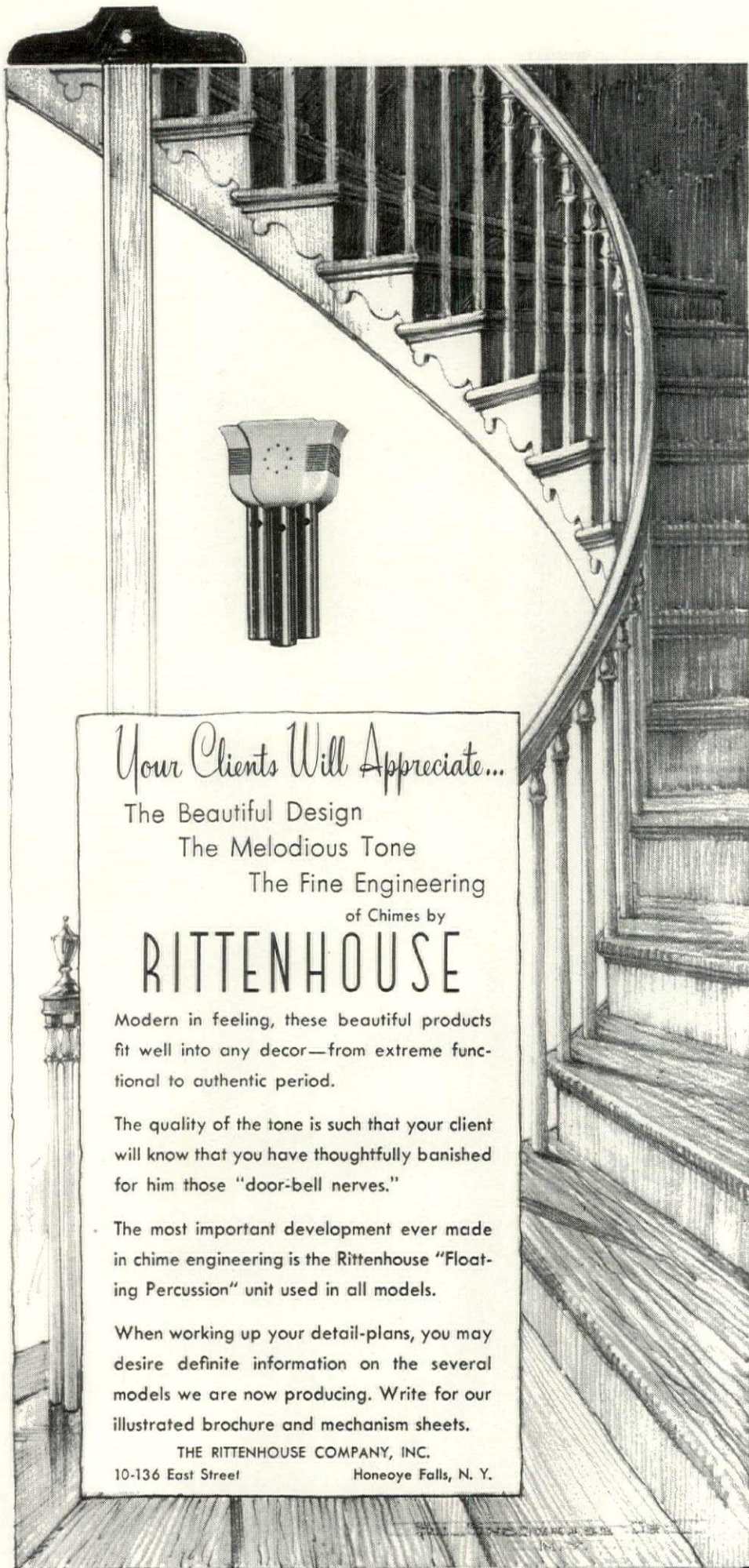
Write today; address: Air Reduction, Dept. AF 2-1, General Offices, 60 East 42nd St., New York 17, N. Y. In Texas: Magnolia Airco Gas Products Co., Houston 1, Texas.



AIR REDUCTION

Offices in All Principal Cities

HEADQUARTERS FOR OXYGEN, ACETYLENE, AND OTHER GASES . . . CARBIDE . . . GAS WELDING AND CUTTING APPARATUS AND SUPPLIES . . . ARC WELDERS, ELECTRODES AND ACCESSORIES



Your Clients Will Appreciate...

The Beautiful Design
The Melodious Tone
The Fine Engineering

of Chimes by

RITTENHOUSE

Modern in feeling, these beautiful products fit well into any decor—from extreme functional to authentic period.

The quality of the tone is such that your client will know that you have thoughtfully banished for him those "door-bell nerves."

The most important development ever made in chime engineering is the Rittenhouse "Floating Percussion" unit used in all models.

When working up your detail-plans, you may desire definite information on the several models we are now producing. Write for our illustrated brochure and mechanism sheets.

THE RITTENHOUSE COMPANY, INC.

10-136 East Street

Honeoye Falls, N. Y.

seriously than in his own country, and in Sweden particularly his work inspired the arts and crafts and also informed industrial art." So far as we can see, Swedish household design—which welcomed Morris' ideas—is not inferior to the English. An impression that somehow the English have muddled through may be given by the book's plates and drawings; the first presents a Hottentot quiver of arrows alongside a modern golf bag, with the caption: "the functional needs are almost the same." E.B.

THREE PELICAN BOOKS:

AN INTRODUCTION TO MODERN ARCHITECTURE. By J. M. Richards; 127 pp.

TOWN PLANNING. By Thomas Sharp; 121 pp.

AN OUTLINE OF EUROPEAN ARCHITECTURE. By Nikolaus Pevsner; 237 pp.

Penguin Books, Publishers, Harmondsworth, Middlesex, England; illustrated, paper-bound, 4 $\frac{3}{8}$ x 7 $\frac{1}{8}$; 35 cents (ninepence).

American admirers of England's superb *Architectural Review* as well as students of architecture and planning and just plain laymen looking for some interesting new reading will be pleased at the American advent of these new editions of wartime English books. Distributed in the U. S. by Penguin Books, Inc., who have already brought us the excellent British Penguins, these pocket-size Pelicans may seem less attractively covered than their American cousins, but for solid reading content and illustrations they have not yet been equaled in this country.

The authors and some of the material will be familiar to readers of the *Review*, which did manage to get through to us during the war. Richards, assistant editor of that magazine, has written a sociological treatise on the newer style in architecture. He relates architectural change to the social setting—beginning with the industrial revolution and its accompanying disintegration from architectural plan-book consistency. He devotes considerable space to the effects of industrialization and machinery on architectural construction—prefabrication, and the effects on esthetics, or the appearance of buildings. He disavows the theory of "functionalism" which made such a to-do in the early quarter of this century but probably was necessary in the architectural rebellion against what had gone before; he says the new architecture is not only mechanically efficient, it coordinates utility and art. In a chapter on new materials and methods he explains simply and more technically such things as reinforced concrete, flat roof construction, lighter walls, etc. A following chapter recapitulates the early beginnings of the modern type of building in England: Webb, Voysey, Shaw; and in Europe: *Art Nouveau*, *Deutscher Werkbund*; and mentions Frank Lloyd Wright in America. A chapter on Europe after 1918 lauds Gropius and Le Corbusier, but will impress American readers as underrating America's future in modern architecture (remember, this book was first written in 1939).

Thomas Sharp, some of whose other books on planning have reached us, writes in a highly readable way specifically about the English problem of town and city planning. In his book there are sections on the need for relating town and country, theories of town development such as ribbon towns, maximum size of towns, building types, light orientation, population density, social health and city architecture.

Pevsner's history covers a field urgently needed—a modern interpretation of western architectural development. However, its Spengler-like figures of comparison may give a sweeping, generalized impression of northern European architecture;

(Continued on page 162)

PERMANENCE

Just imagine, if the pyramids, when built some 5,000 years ago, had been insulated with Ferro-Therm, today the insulation would still be efficient. Amazing—but true. That's just one of the many reasons why more and more architects and builders are recommending Ferro-Therm to their clients—to do the job once to last forever.

Acquaint yourself with the many advantages of this modern steel insulation. Write today for complete information.

EVALUATE BEFORE YOU INSULATE

Ferro-Therm
REG. U. S. PAT. OFF.
STEEL INSULATION

AMERICAN FLANGE & MANUFACTURING CO., INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

HOGAN & COMPANY, Eastern Distributors, 383 MADISON AVENUE, NEW YORK 17, N. Y.

Douglas Fir Doors are being precision-produced for America's critical housing needs

RECONVERSION HOUSING

NOW REQUIRES

MOST OF THE CURRENT PRODUCTION

TODAY'S urgent reconversion housing needs—plus the critical shortage of shop lumber from which stock doors are made—has naturally reduced the number of doors available for inventories or for general building.

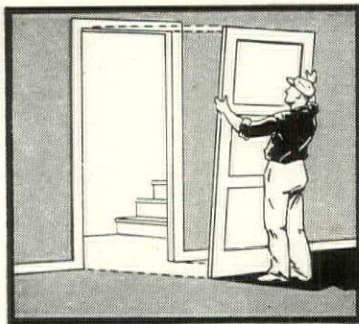
been overcome — substantial additional quantities of durable Douglas fir doors will be available.

available. They provide the biggest advance in stock door values in a decade. They'll save time and labor on the job, improve the appearance of every installation.

However, once the present raw material shortages have

Study the Pre-fit and Factri-fit features which will be

Every door will be sturdy, attractive, durable — made to exacting standards by modern precision methods.



Pre-Fit

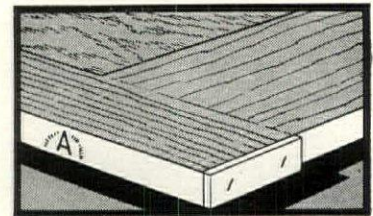
Douglas fir doors will be available pre-fit to exact book size . . . ready to hang without on-the-job sawing and fitting.

Pre-Sealed

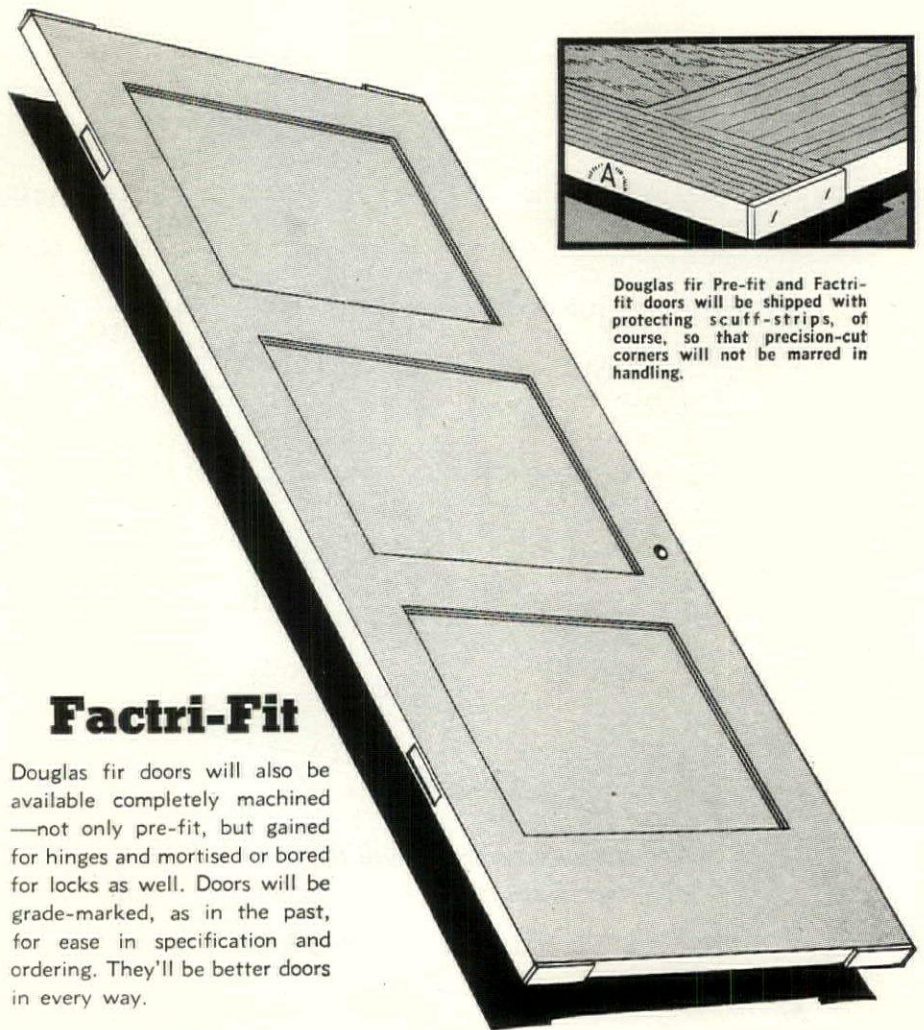
Douglas fir doors will be available pre-sealed . . . a feature which improves dimensional stability, reduces moisture absorption, and eliminates the need for one prime coat.

Factri-Fit

Douglas fir doors will also be available completely machined —not only pre-fit, but gained for hinges and mortised or bored for locks as well. Doors will be grade-marked, as in the past, for ease in specification and ordering. They'll be better doors in every way.



Douglas fir Pre-fit and Factri-fit doors will be shipped with protecting scuff-strips, of course, so that precision-cut corners will not be marred in handling.

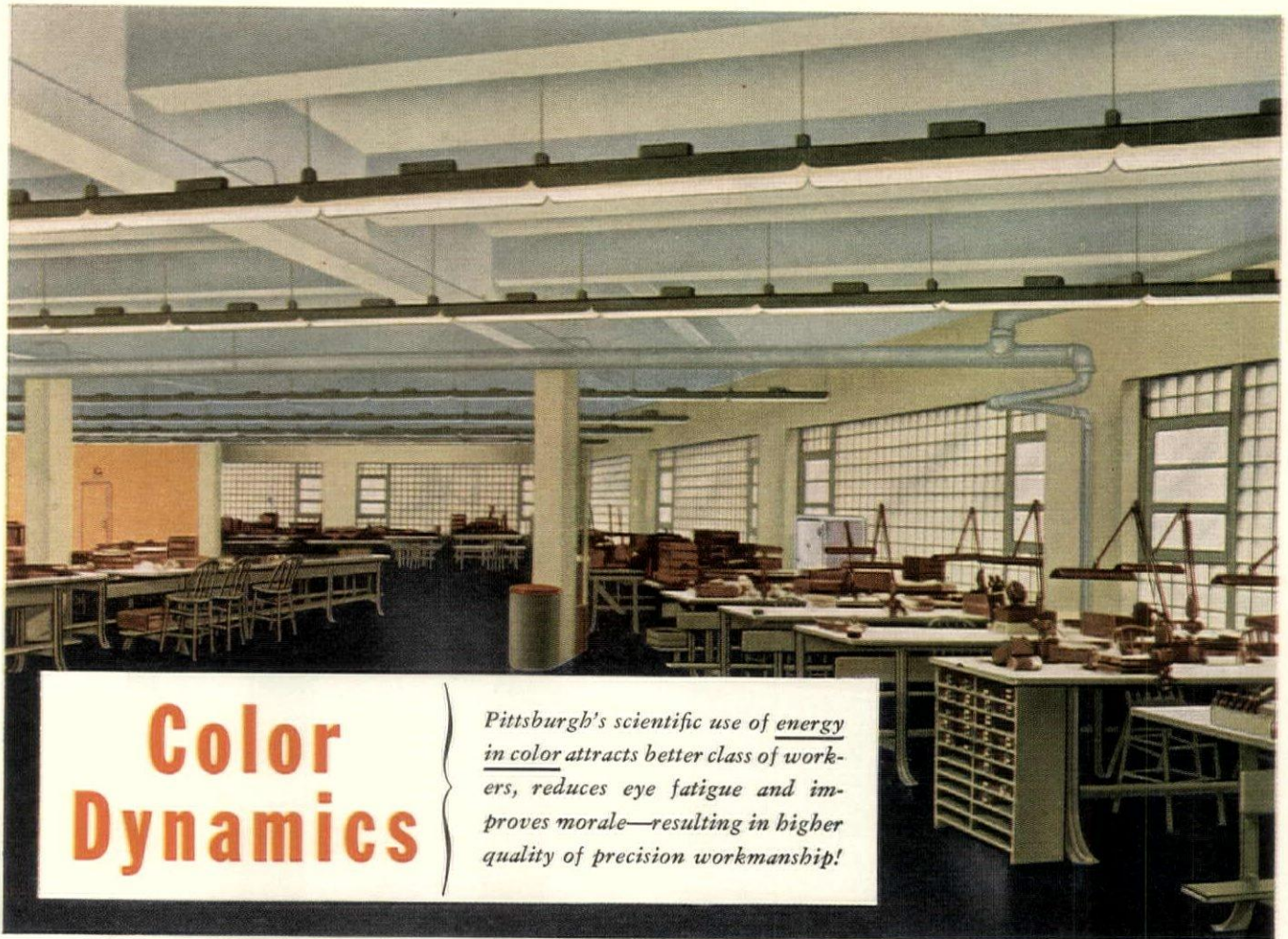


FIR DOOR

**Douglas Fir
DOORS**



INSTITUTE Tacoma 2, Washington
The National Institute of Fir Door Manufacturers



Color Dynamics

Pittsburgh's scientific use of energy in color attracts better class of workers, reduces eye fatigue and improves morale—resulting in higher quality of precision workmanship!

COLOR DYNAMICS Helps Precision Workers At DeJur-Amsco!

ACTUAL EXPERIENCE in hundreds of industries has shown that the new Pittsburgh system of COLOR DYNAMICS exerts a great influence upon the well-being and safety of employees, the quality of their output and relations with management.

Characteristic of such benefits are the results in the Long Island plant of the DeJur-Amsco Mfg. Co., makers of cameras, projectors, enlargers, photo-electric meters and other electrical precision indicating devices.

"Since we painted our plant according to the principles of COLOR DYNAMICS," writes R. A. DeJur, president of this company, "morale of our employees has improved. Our production has also improved because we now attract a higher type of help. The attractive appearance of our plant is winning many enthusiastic compliments not only from our staff but from customers and suppliers as well."

Such results prevail everywhere that COLOR DYNAMICS has been used because its principles are scientifically based upon the physical, mental and nervous reactions of normal human beings to the *energy in color*.

Pittsburgh has worked out special methods to utilize this energy on every paintable surface—machines, floors, walls, ceilings and mobile equipment. With COLOR DYNAMICS you can also make offices or living quarters seem more spacious and attractive. Rooms can be made to appear longer or wider, ceilings higher or lower, halls lighter and wider.

For a complete explanation of COLOR DYNAMICS and how it works, write for a free, profusely illustrated booklet. Pittsburgh Plate Glass Company, Paint Division, Dept. AF-10, Pittsburgh 22, Pennsylvania.

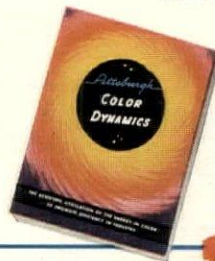
Paint RIGHT with Color Dynamics Paint BEST with Pittsburgh Paints!

The benefits of COLOR DYNAMICS are made more enduring when you use Pittsburgh long-lasting quality paints. There's a Pittsburgh Paint for every need.

WALLHIDE—for one-day wall painting—available in three types: **PBX**—gives extra durable finish which can be washed frequently without streaking or spotting; **SEMI-GLOSS**—where higher sheen is required; **FLAT**—a velvet-like finish that is beautiful and restful, for offices, suites and dining rooms. These paints are enriched with "Vitolized Oils" for controlled penetration which keeps film *live*, tough and elastic.

WATERSPAR ENAMEL—for woodwork, furniture, metal trim. Smooth, china-like gloss resists marring and abrasion.

FLORHIDE—for floor surfaces. Quick-drying, tough, can be scrubbed frequently with soap solutions.



PITTSBURGH PAINTS
PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.
PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

How Up-to-Date are you on ALUMINUM?

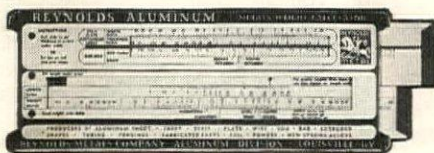
NEW ALLOY SELECTOR

Aluminum alloy data at your fingertips

Here is a handy, accurate, easy-to-use aluminum alloy selector that tells you at a glance which aluminum alloy and temper to use on a particular job.

Simple to operate, this sturdy 8½" x 11" alloy selector shows the characteristics of the wrought products—sheet, plate, wire, rod, bar, shapes, tubing, pipe, and forgings—for 18 aluminum alloys!

Lightning-fast in operation: Just two settings . . . set one temper for the alloy; set the other slide for the form. Then you can read at a glance the mechanical properties, chemical composition, physical constants, thermal treatments, and specification numbers.



METALS WEIGHT CALCULATOR. One of the handiest calculating devices ever developed . . . simple . . . accurate . . . fast. Calculates weights of aluminum, magnesium, steel, brass, copper, and nickel in various forms (sheet, rod, etc.). Cost 50 cents. Check space in coupon.

If you work with metals, you'll find this aluminum alloy selector invaluable in helping to solve your alloy selection problems. This simple, handy source of information is yours for only one dollar.

Send for your Reynolds Alloy Selector today! Just fill out the coupon below and mail.

Enclose this coupon, with check or money order for \$1.00, in an envelope and mail to:

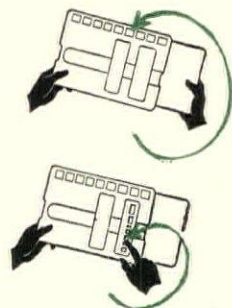
Reynolds Metals Company, Aluminum Division
2528 South Third Street, Louisville 1, Kentucky

Please send me a new Reynolds Aluminum Alloy Selector. I enclose one dollar (check or money order).

NAME _____ TITLE _____
 COMPANY _____
 STREET _____
 CITY _____ ZONE _____ STATE _____

Please send me a Reynolds Metals Weight Calculator, for which I enclose 50 cents, ()

PLEASE TYPE OR PRINT INFORMATION



9162-A1-7B



No Collisions in this Kitchen!

The incoming groceries will never collide with the out-rushing housewife—in this well-planned kitchen! The well-placed doors of Ponderosa Pine take care of that—effectively separating the service entrance from the dining room entrance, and helping to divide the kitchen into two efficient work areas.



You can be generous with doors—and windows, too—when you choose stock designs of Ponderosa Pine. At prices that fit into the most modest building budget, they place in your hands the means of making homes more convenient and more comfortable.

“Today’s Idea House”—new 32-page Ponderosa Pine idea book—contains page after page of illustrations, showing how Ponderosa Pine doors and windows can create more functionally effective and more interesting interiors. You’ll want a copy for your files—and it is yours for the asking. Just mail the coupon.

Because of its smooth grain and even surface texture, Ponderosa Pine lends itself to practically any type of surface treatment. Takes paint or varnish beautifully.



The Best is Yours with...

Ponderosa Pine
WOODWORK

“Today’s Idea House” treats doors and windows functionally—in terms of what they can do to make living more convenient and more comfortable. Send today for this booklet—your copy is waiting.



Ponderosa Pine Woodwork
Dept. OAF-10, 111 West Washington St.
Chicago 2, Illinois
Please send me a free copy of “Today’s Idea House.”

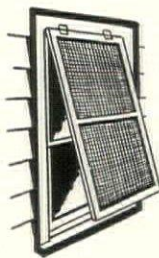
Name

Address

City Zone State

6 steps of protection in the public interest ...and yours

Wood, used as a building material, has always been noted for its natural lasting qualities. Today, the NDMA takes six steps of protection—in the public interest and yours—to assure even greater value in woodwork such as doors, frames, screens and windows:



step one:

Through years of research, NDMA has developed a reliable test for measuring the effectiveness of toxic preservatives for woodwork.

step two:

This test has made possible the establishment of minimum standards for wood treating—standards easily and quickly applied.

step three:

The NDMA Seal of Approval—available by license to all manufacturers and distributors who conform to NDMA toxic preservative standards—is stamped on wood products. Look for this Seal—it is positive evidence of sound practice.

step four:

Periodical mill inspection of wood treating equipment and practices by NDMA technicians provides practical application of NDMA standards.

step five:

Check tests of preservative solutions, made in NDMA laboratories, assure absolute and continuing conformity to minimum toxic treatment standards.

step six:

A continuing educational program is carried on by NDMA to acquaint architects, builders and the public with the results of scientific research in toxic preservative treatments.



NATIONAL DOOR
MANUFACTURERS' ASSOCIATION

McCORMICK BUILDING • CHICAGO, ILLINOIS



they cloud the main issues and make it hard to follow particular threads of development in various styles, periods and countries.

The illustrations are amazingly well reproduced considering the handicaps. In fact, these excellent little books are tremendous bargains at the price. E.B.

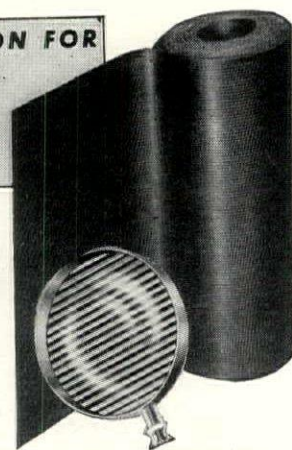
MODERN TERRACE HOUSES. By A. Trystan Edwards, M. A., F.R.I.B.A., M.T.P.I. John Tiranti, Ltd., 72 Charlotte St., London, W. 1. 23 pp. XXIII plates. 8½ x 11. Paper bound. 6 shillings. Subtitled "Researches on High Density Development," this study prepared under the auspices of the Chadwick Trust is a comprehensive analysis of the case for the row or attached house. Text and plates concern themselves with all phases of floor and site planning and, although strongly colored with problems and practices peculiarly British, they present much that is of interest to U. S. architects and town planners.

Main object of the work was to present a practicable alternative to the building of apartment flats in central urban areas such as is now required by legislation in London and other large provincial cities. These regulations, prescribing that the density of self-contained dwellings in central zones be less than 12 per acre and that certain minimum distances between the fronts and backs of houses be maintained, have practically outlawed the economical row house in English cities—the only type of house that could have been built on expensive urban sites. With his detailed sketches of floor and site plans, architect Edwards attempts to prove (and with considerable success) that, properly handled, the terrace or row house could once again become the important building type it was a quarter of a century ago, and that authorization

LOW-COST PROTECTION FOR
HEAVY TRAFFIC
FLOORS!

BIRD
Rubberlike*
RUNNER

COSTS LESS THAN **6¢** PER SQUARE FT.



*Reg. U.S. Pat. Off.

Here's hard-to-beat economy! Rubberlike, the modern composition floor runner with rugged corrugations protects all heavy traffic areas for less than 6c per square foot! Widely used in factories, offices, schools, hotels, cafes, institutions, Rubberlike cushions and quiets footsteps—makes slippery floors safe. Skidproof even when wet. Easy to clean, Rubberlike needs no special upkeep, can be put down without cementing. Won't curl at edges. Amazingly durable—and doubly desirable because of its "petty-cash" cost! In rolls, 27 in. by 100 ft. or 36 in. by 75 ft. Order from supply house or write for sample. Bird & Son, inc., Dept. 1510 East Walpole, Mass.



BIRD & SON, inc., EAST WALPOLE, MASS.

NEW YORK

SHREVEPORT, LA.

CHICAGO

**HERE'S THE MODERN WAY
TO FINANCE HOMES —
SIMPLER . . . LESS COSTLY!**



NATIONAL LIFE'S *Packaged Mortgage*

Everyone's enthusiastic about National Life's "Packaged Mortgage!" Architects, realtors, builders, buyers — all acclaim this new, low-cost plan that makes home-financing so much easier than ever before.

There's no burdensome installment financing when your clients can include all major household appliances (range, refrigerator, freezer, dish-washer, garbage-disposing sink, home laundry equipment and the like) in one convenient mortgage contract, along with house and lot. Rates are lower than with conventional installment plans, and pay-

ments are spread out evenly over the life of the loan — no extra-big bills right at the start. The home-buyer deals with only one lender — has only one monthly payment on his budget to cover all these items.

No doubt about it, National Life's "Packaged Mortgage" is a big step forward — makes houses easier to buy . . . easier to sell. Your clients and prospects will thank you for introducing them to this new, simplified, cost-cutting plan. For full information and name of our nearest loan correspondent, use the convenient coupon below.

NATIONAL LIFE
INSURANCE COMPANY
HOME OFFICE — **VERMONT**
MONTPELIER,

A Mutual Company, founded in 1850, "Solid as the granite hills of Vermont"

CLIP AND MAIL THIS COUPON NOW

NATIONAL LIFE INSURANCE CO., DEPT. M-4, MONTPELIER, VT.

Please send me full information on your new, all-inclusive, low-cost plan for home-financing, and address of your nearest loan correspondent.

Name.....

Business or Home Address.....

It will pay you
to read these **FACTS** about
TWINDOW
TRADE-MARK

Fact #1

*Twindow is the newest development
in insulating windows*

It consists of two or more panes of glass with a hermetically sealed air space between, and a protecting frame of stainless steel. Twindow is the result of years of research to create an economical window unit combining transparency with *built-in* insulation.

Fact #2

*Twindow saves money
on heating and air-conditioning*

Twindow with two panes of glass has more than twice the insulating efficiency of ordinary windows. With three or more panes, the insulating efficiency is still further increased. This saves money by reducing the load on heating and air-conditioning equipment. It banishes many restrictions which used to limit the size of windows.

Fact #3

*Twindow makes any building
more comfortable and more healthful*

It helps to maintain proper temperature and humidity levels. And it virtually does away with downdrafts near windows.

*Twindow is designed to prevent
fogging or condensation on the glass*

Except under extreme conditions, its sealed-in air space assures window transparency in any climate. This makes Twindow a "must" wherever clear vision is important . . . picture windows for homes, store front display windows, large windows in office buildings, factories and institutions.

Fact #5

Twindow can be handled, installed and cleaned as simply as a single pane of glass

It is a one-piece window unit, completely assembled at the factory.

We regret that current production is not meeting demands. Deliveries must continue slow until new facilities are completed. When planning new construction or modernization, we suggest you get in touch with our nearest branch to determine if our delivery schedule will permit your use of this finest of insulated windows.

"PITTSBURGH" stands for Quality Glass and Paint

P I T T S B U R G H P L A T E G L A



COMPANY

Pittsburgh Plate Glass Company
2378-6 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, complete facts about
TWINDOW, the window with *built-in* insulation.

Name.....

Address.....

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

FIAT Zephyr SHOWER DOORS

NOW AVAILABLE

The Fiat Zephyr is a high quality shower door designed for service in finest installations. Yet the moderate cost of the Zephyr permits it to be used extensively on all types of shower cabinets and built up showers.

Practical features in design and construction developed through twenty-five years' experience in building shower equipment are incorporated in the Zephyr door. For example—the water deflector with gutter prevents water dripping on the floor when door is open after taking shower, full length piano hinge, bullet type catches that eliminate possibility of door binding, and offset handles are features found only in the best type of shower door construction.

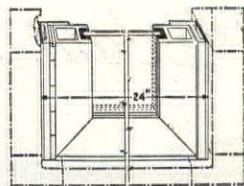
Economical manufacturing methods and volume production enable Fiat to offer to the trade a shower door of high quality at a moderate price.

CONSTRUCTION FEATURES

- Frame:** One-piece heavy aluminum alloy.
- Jamb:** Heavy aluminum alloy.
- Hinge:** Specially constructed, continuous aluminum piano hinge.
- Lock:** Two bullet catches, prevent door binding.
- Glass:** Clear glass, set into a heavy rubber "U" channel.
- Handles:** Special offset design on both sides of door.
- Water Deflector:** Made of heavy aluminum alloy with gutter to prevent water from dripping on the floor when the door is opened after taking shower.
- Grille Vent:** Horizontal aluminum bar.
- Finish:** Satin "Alumilite."

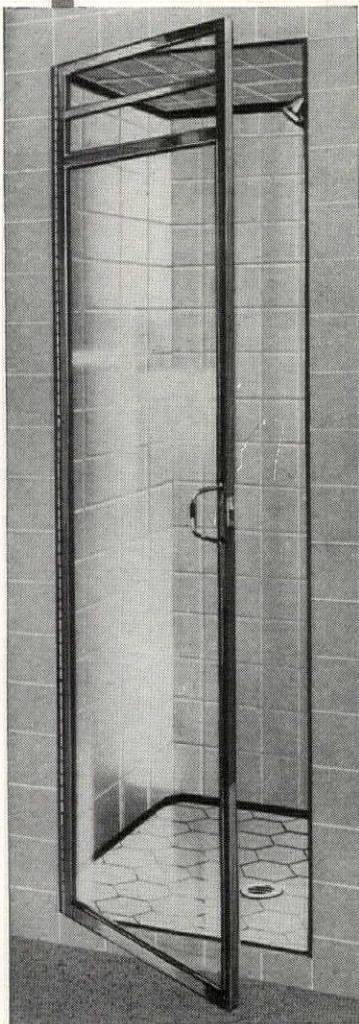
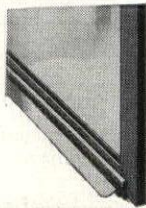
STANDARD SIZE

- The standard size (24" x 72") door is built to fit an exact opening 24 inches wide by 72 inches high. All other opening sizes require a specially built door. When ordering a door, state the size of the opening, model, hinging (either right or left when facing), and whether for tile, structural glass, marble or FIAT shower cabinet.



CONSTRUCTION DETAILS

The water deflector with gutter prevents water dripping on the floor when door is opened.



FIAT METAL MANUFACTURING COMPANY

1205 Roscoe St., Chicago 13, Illinois
21-45 Borden Ave., Long Island City 1, New York
32 S. Gabriel Blvd., Pasadena 8, California

of such construction would involve no compromise with hygiene, comfort and appearance. J.H.

NEW CITY PATTERNS, the analysis of and a technique for urban reintegration. By S. E. Sanders and A. J. Rabuck. Reinhold Publishing Corp., New York. Illustrated. 197 pp. 8½ in. x 11 in. \$8.

It has been a long time since a work on city planning has appeared with the sanity, broad approach and simple clarity of this one. As the authors point out in their introduction, it is not to be regarded as encompassing the entire field of city planning, since this would entail huge volumes of work by many men in various fields. Its purpose is to illustrate the need for a method of developing new city patterns, for land use flexible enough to accommodate the most advanced techniques and inventions as they are developed. Refreshing is the fact that, greenbelts notwithstanding, the book follows no highbrow professional tenets, has no axe to grind.

It opens with an irate dissertation on the evils and causes of urban blight, the menace of uncontrolled decentralization. Immediately following is the biggest surprise of all. Instead of shoving a few dry and cursory pages on administration and finance just inside the back cover, as is the custom, these subjects are given a front-row seat, treated boldly and generously. In discussing the metropolitan planning commission, its framework and function, a strong plug for federal, state and municipal cooperation is put in, since few people seem to realize that these three levels of government should be, ideally, interdependent parts of a single governmental institution or instrumentality. Reviewing the desirability for federal participation, the authors say: "Nearly every action of the federal government has its impact at local points throughout the U. S., and, because over half the people now live in urban communities, perhaps one-half of all federal actions have points of special impact in urban areas . . . Federal participation in metropolitan planning, based on federal interest, responsibility and financial aid, is as fully justified as federal regulation of interstate commerce. In terms of human welfare and of economics, inter-municipal problems within metropolitan areas are as complicated and important as inter-state problems. . . . The confused and conflicting status of local government has been discussed not with the thought of suggesting reforms, but rather to explain why there are so few comprehensive plans in existence which provide for the coordinated development of urban areas. It is too late now to hope to consolidate, unify or integrate local government in order to facilitate the planning of public works for the postwar emergency. But it is not too late to bring about working relationships between the local political units of metropolitan areas, with a view to effecting coordination and cooperation in the planning and execution of public works programs for and during the rapidly approaching unemployment emergency."

These arguments may seem too far-reaching to be immediately understood. However, no one is more aware than Messrs. Sanders and Rabuck of the indispensability of public comprehension and support. In this connection they offer the professional a sound bit of customer psychology: "The ordinary planning technician knows little about planning news. He apparently thinks the average citizen will read articles dealing with statistics, sunlight and the philosophy of planning. What he really wants to know is: What is being done? What is going to be done? How will these developments affect me? People are interested in their own children, their own property, their own neighborhoods, their own workshops and recreation facilities, their own health, safety and

(Continued on page 170)



LOOK FOR **UNWRITTEN SPECIFICATIONS, TOO**

There are written and unwritten specifications. The ones by which size and shape and breadth and depth are regulated are the written specifications. The ones upon which prestige is built are the unwritten specifications.

Speed, load, car size, controls, such terms as these are familiar in the written specifications for an elevator.

Safety, satisfactory service, economy of operation, long life, these are associated with the unwritten specifications of an elevator or escalator manufactured by Otis. They are the end results of the skills perfected by experience and the determination to provide the finest vertical transportation possible.

OTIS ELEVATOR COMPANY

Offices in all principal cities



*The minute I saw the
Kitchen - I knew!*

"Yes, I knew this was the house for us. Oh, it wasn't the Frigidaire Refrigerator and Range and Cabinets alone that decided us—it was what they stood for. We KNOW Frigidaire, and seeing appliances of such quality in the kitchen somehow gave us confidence that the entire house had been designed and built RIGHT."

Many a home-buyer—yes, and many a renter, too—has felt more assurance about a house

because he saw the familiar FRIGIDAIRE nameplate on important electrical appliances. For it's only natural to assume that if such quality and dependability have been put into one part of a house, the same kind of quality and dependability must have been built into all parts of the house.

Isn't this a fact well worth considering the next time you specify electrical appliances? Many architects and builders do consider it—that's why they specify FRIGIDAIRE, a great

name in home appliances for more than quarter-century.

Send today for literature—pictures, dimensions, descriptions—on:

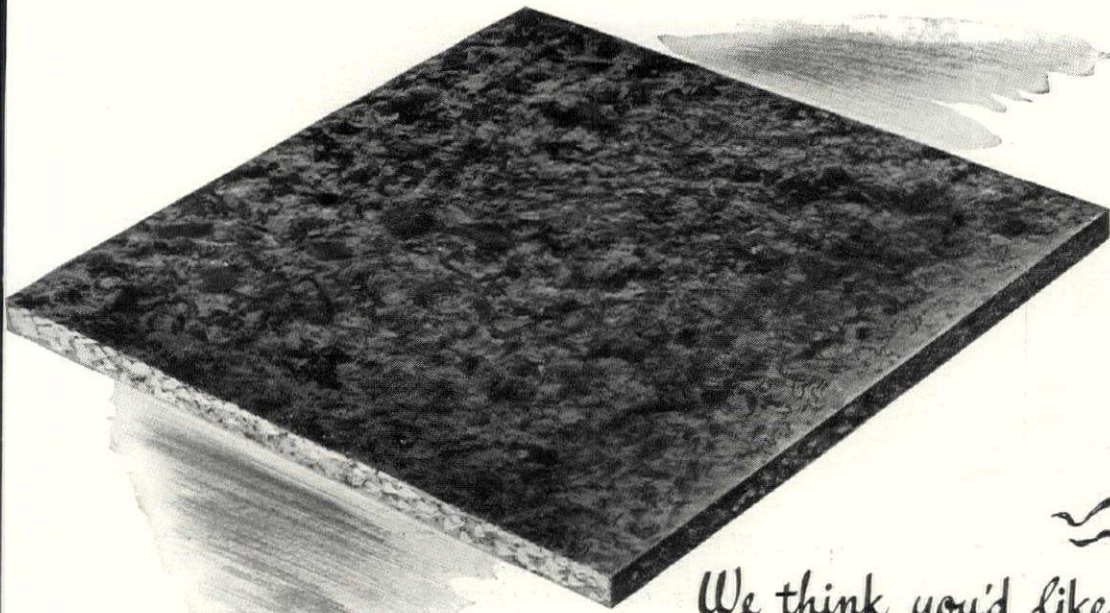
Frigidaire Refrigerators
Frigidaire Electric Ranges
Frigidaire Electric Water Heaters
Frigidaire Home Freezers
Frigidaire All-Steel Kitchen Cabinets
Frigidaire All-Steel Cabinet Sinks

Write Frigidaire, 863 Amelia Street, Dayton Ohio. In Canada, 590 Commercial Road, Leaside 12, Ontario.

You're twice as sure with two great names

Frigidaire *made only by* **General Motors**

REFRIGERATORS • ELECTRIC RANGES • WATER HEATERS • HOME FREEZERS • KITCHEN CABINETS
AUTOMATIC WASHERS • COMMERCIAL REFRIGERATION AND AIR CONDITIONING EQUIPMENT



We think you'd like to know
about Kencork's **DEBUT!**

Early this Spring, Kencork entered an entirely new world—the big field of America's homes.

And we're proud to say she's a popular child.

Designers have taken Kencork to their hearts—as the ideal flooring for bedrooms, baths and nurseries.

Home owners—both immediate and prospective—are impressed by Kencork's ability to cushion footsteps, shrug off moisture, and act as a natural insulator.

Department stores have cooperated generously with display rooms, impressive literature and enthusiastic selling.



KENCORK
the friendly floor
TRADE MARK REG.

DAVID E. KENNEDY, INC., 69 SECOND AVENUE, BROOKLYN 15, N. Y.

**A 22-YEAR
SUCCESS
STORY
IS BEHIND THIS
SLOGAN!**

**"so they
MASTIPAVED
the floor!"**

There's a 22 year success story behind every yard of PABCO MASTIPAVE you lay. There are millions of square yards of installations that prove that Mastipave is the Number 1 Floor for Institutions!

MASTIPAVE is the rugged low-cost floor.

MASTIPAVE is the easy-to-clean floor.

MASTIPAVE is the water-rot-and vermin-resistant floor.

MASTIPAVE is the warm, quiet, resilient floor.

MASTIPAVE is the floor that is readily applied over almost every type of floor.

PABCO
MASTIPAVE
The Low Cost, Long Life
FLOOR COVERING

Write Dept. M4046,
nearest Pabco office
below

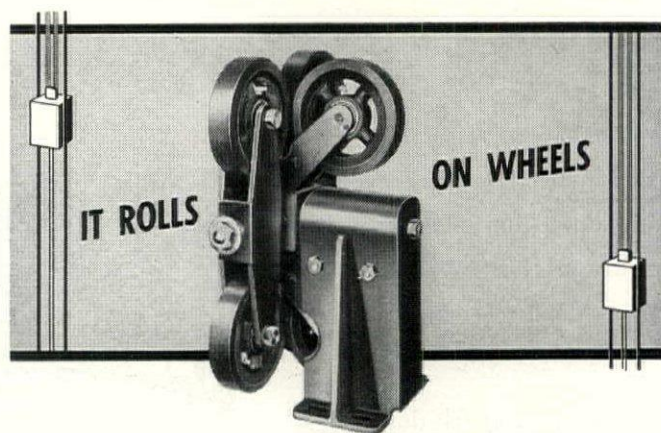
Also Grip-Tread
MASTIPAVE • Non-Slip
Wet or Dry

22-Year Record
of Amazing
RUGGEDNESS!

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 Paint, Roofing and Building Materials

convenience and their own taxes. Newspaper reporters understand these facts, but are not likely to interpret properly the important relationships between them and planning without help from someone who understands both planning and news. . . . Projects, procedures and results must be explained to the public promptly, straightforwardly, and in concise and simple language. They must be shown exactly how the execution of a sound master plan saves money, reduces taxes, makes home neighborhoods more livable. . . ."

Concerning actual planning technique, the chapter on the general application of planning objectives to urban development is as lucid and likely as any well-advanced specific job. Rightly, outstanding examples of European planning have been included as an addendum. Though decay and inefficiency of urban areas may not be a characteristic exclusive to the U. S., the authors make it clear that this in no way lessens our responsibility. As they put it: "Let no man say these problems are insurmountable. Certainly no American doubts that the war-devastated cities of Russia, Germany and other European countries will be rebuilt. So let's not sell America short. We have the opportunity and we have the ability to do a bigger and better job of rebuilding cities than any other country in the world. We also have a national responsibility to do so. Let's say we can, and do it, before the problem gets further out of hand. Let's make a worthy start by beginning now to plan comprehensively and earnestly for full employment. . . . And let's do it, not merely to provide employment, but rather to convert our urban areas, where more than half our people reside, into efficient, economical, safe and pleasant places in which we and future generations will be proud to live." And, for once, no reference is made to the atom bomb. *M.S.*



SPECIFY →

**ELSCO ROLLER GUIDES
FOR ELEVATORS**

REDUCE →

Electric Current by at least 20%
Maintenance Costs
Fire Hazards

ELIMINATE →

Greasing and Cleaning Rails
Rail and Joint Knocks

ElSCO Roller Guides roll on wheels on a dry, greaseless rail. Easily installed on all elevators, new or old. Approved by the Board of Standards and Appeals. Patented. Manufactured only by _____.

INQUIRE →

ELEVATOR SAFETY CORP.
Dept. A 165 Broadway, N. Y. C. 2, N. Y.
CO 7-1433

SYLVANIA NEWS

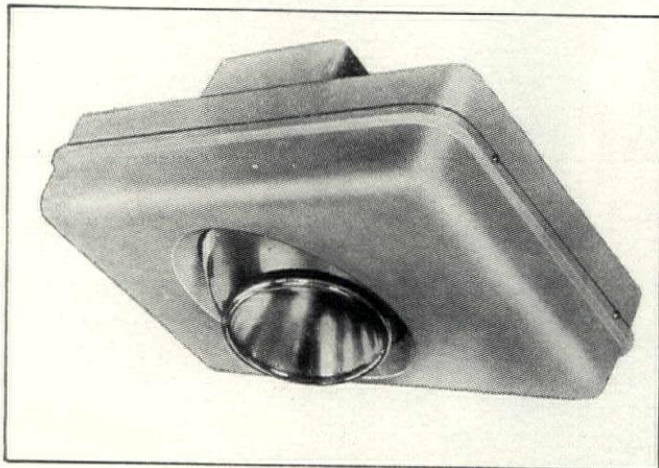
ARCHITECTURAL EDITION

OCT.

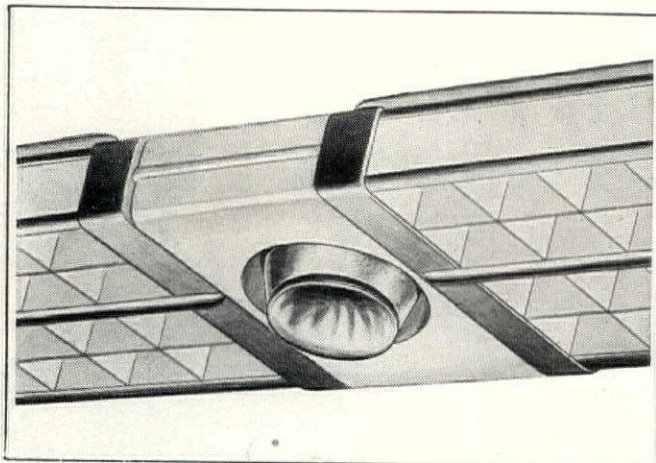
Prepared by SYLVANIA ELECTRIC PRODUCTS INC., Salem, Mass.

1946

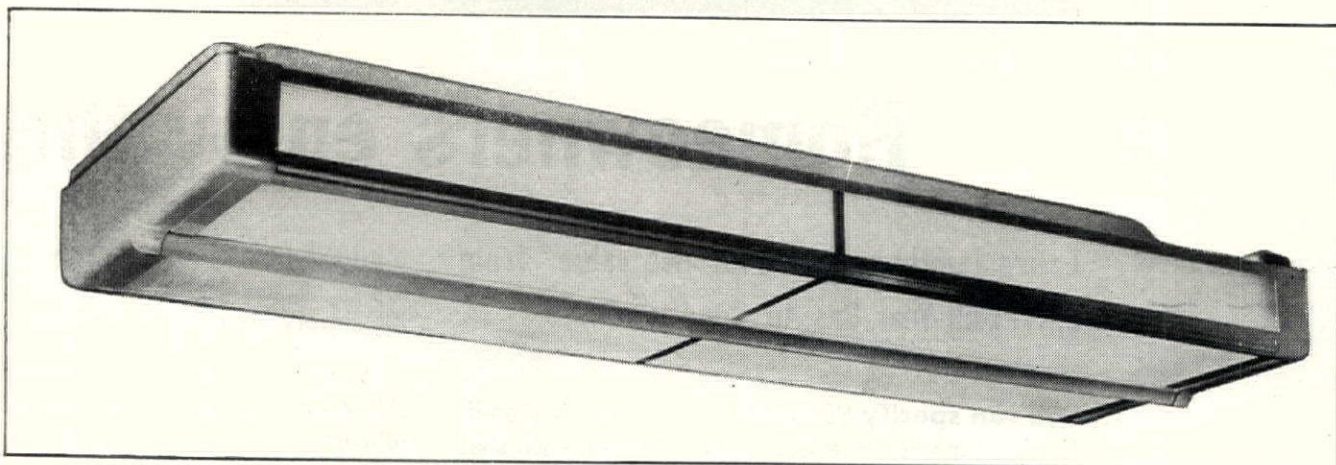
INCANDESCENT AND FLUORESCENT LIGHTING COMBINED BY VERSATILE SYLVANIA FIXTURES



Here is the new Sylvania CP-150 adjustable incandescent spotlight. This powerful unit will find wide use in stores, theatres, entrances, window displays—for focusing attention where it is wanted. CP-150 can also be joined with fluorescent fixtures to form a combination lighting unit.



The CP-150 spotlight is shown joined with two Sylvania CL-440 fluorescent fixtures—all three being members of the same "design family." Provides accent lighting plus general illumination. (The CP-150 can also be turned to its narrow side and centered between fixtures of *two* 40-watt lamps each.)



This is the Sylvania CG-440—glass shielded version of the CL-440 fixture (above right). Containing four 40-watt fluorescent lamps, this fixture has the beauty and modern appearance required by the most exclusive shops and offices.

These new fixtures are examples of Sylvania's pioneering in new and improved lighting equipment. Architects will find these Sylvania Electric units readily adaptable to the most exacting design specifications.

SYLVANIA ELECTRIC

MAKERS OF FLUORESCENT LAMPS, FIXTURES, WIRING DEVICES; ELECTRIC LIGHT BULBS; RADIO TUBES; CATHODE RAY TUBES; ELECTRONIC DEVICES



Homeowners enjoy this "new

Entire family gets 100% "use value" from Servel All-Year Gas Air Conditioning

You can specify Servel *All-Year* Gas Air Conditioning for your new homes in full confidence that your clients will receive maximum value from their investment in it. For, unlike many features in the modern home which are used only intermittently . . . extra bathroom, guest room, laundry . . . every member of the family enjoys Servel's "new quality of living" *every day in the year*.

In summer the Servel unit provides cleaned, refreshingly cooled, delightfully dehumidified air. In winter it circulates clean, draft-free, properly hu-

midified heat. Through every season, the owner can select just the climate he wants by simply touching the central Selectrol

As proof of the high investment value of *All-Year* Gas Air Conditioning, mortgage officers all over the country have indicated willingness to extend longer, more favorable loans on homes equipped with it. They feel that "new quality of living" it provides will keep homes modern longer, thus maintaining their resale value on a higher plane for a longer period of time.

Get full details now from your local Gas company on all the advantages Servel *All-Year* Gas Air Conditioning offers your clients. Or write to Servel, Inc., 2610 Morton Ave., Evansville



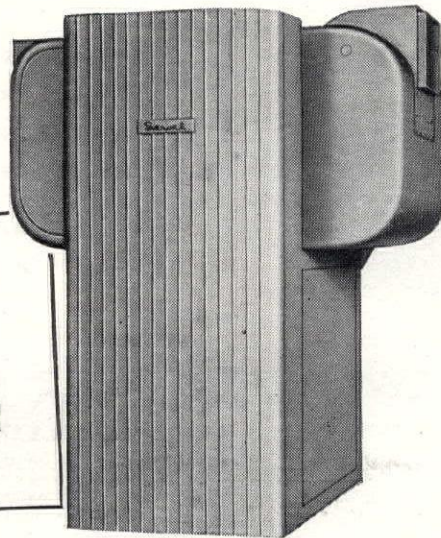
"Cape Cod—'46 Model," one of a series in *Good Housekeeping's* "Homes America Wants." Royal Barry Wills, Boston, Architect.

Quality of living" the year round

TRIED . . . PROVED . . . SUCCESSFUL

(From Boston to San Diego . . . From Bismarck to Miami)

Serwel All-Year Gas Air Conditioner is already operating successfully in hundreds of installations from coast to coast. Some have been running for more than four years. The equipment is tried, . . . and *approved* by users everywhere.



Serwel

All-Year **GAS AIR CONDITIONER**



When materials are available, there will be trim, enclosing jackets to further add to the eye-appeal of Kewanee Type "R" series.

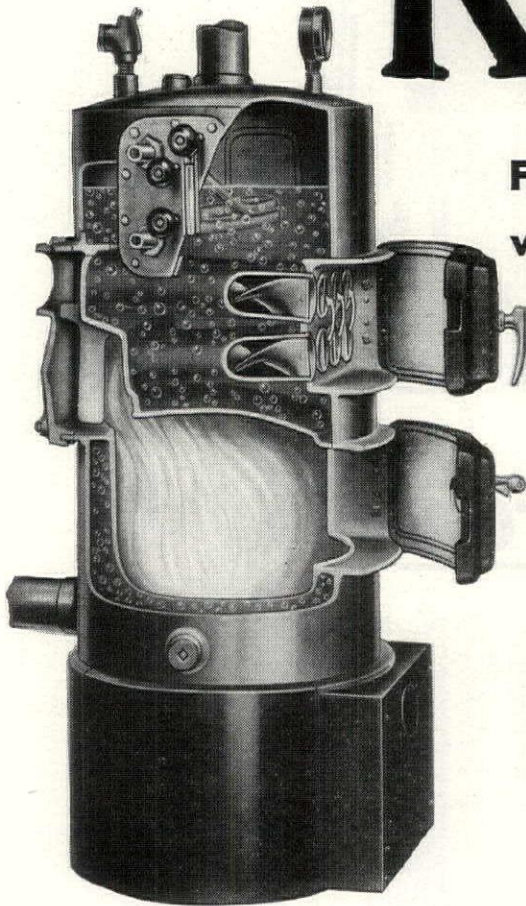
Appearance is Important . . .

But Performance Counts Most

KEWANEE

TYPE "R" STEEL BOILER

For Heating Homes and Small Buildings
with Oil, Gas or Coal (*Hand or Stoker Fired*)



Even without its enclosing jacket, each type "R" is smart and business-like in appearance. But of greater importance is the extra years of service provided by sturdy steel construction... and its ability to provide heat at minimum cost.

The flame-cut cross section of this baby size Kewanee shows the features which insure getting the most heat from fuel.

Big, high fireboxes provide that extra room essential to complete combustion. The long travel of gases through the *two-pass tubes* equipped with *spinner blades* keeps the usable heat in the boiler until all of it is transferred to the water. *Extra large steam space* means that plenty of steam is always available, even on sub-zero days when the boiler is pushed.

Sizes to heat 275 to 2924 sq. ft., steam.

Round or Square Models for every fuel.



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**

GLUE ADDS PERMANENCE . . .

to the economies of BUILT-IN FURNITURE

BUILT-IN furniture—cabinets, bookcases, counters, dining nooks and even bunk beds—is part of the planned economy of today's prefabricated houses.

Part of the house, the cost of these "built-in" features might be included in the long-term real estate mortgage. Thus, the buyer would be saved the large cash

outlay which would be necessary in buying movable pieces of furniture of these types.

Since these "built-in" features are integral parts of the house, they should be built with the same permanence as the house proper—with Cascophen, the new completely durable, resorcinol-resin glue.

Ideal for both structural and non-structural work in house building, Cascophen has been laboratory- and field-tested to resist moist or dry heat, mold, fungus or solvents—forms a bond so durable that it cannot be destroyed without first destroying the wood fibre.

Cascophen glues are available either room-temperature- or intermediate (warm)-temperature-setting, are easy to use, require only moderate clamping pressure and have a long storage life.

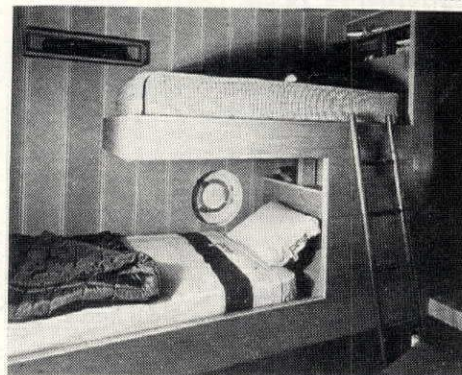
Get a free working sample and complete information. Fill in the coupon below and mail it today.



Courtesy Carl H. Riesen



Courtesy Pierce Foundation



Courtesy Ezra Stoller

Casein Company of America

DIVISION OF THE BORDEN COMPANY

350 Madison Avenue, New York 17, N. Y.

Casein Company of America, Dept. AF-06
(Division of The Borden Company)
350 Madison Avenue, New York 17, New York

Please send us a free working sample and complete information on CASCOPHEN resorcinol-resin glue today.

Name & Title _____

Company _____

Address _____

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. (If answering ads please include postage for forwarding—3¢ per letter.)

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

PREFAB. HOUSE DESIGNER—Draftsman, 34, desires position with progressive architectural, engineering construction firm, prefab mfr. or any potential prefab. housing mfr. in New York area. 10 yrs. background and experience. Variety abilities. Write: Leonard Illions, 2072 E. 22nd St., B'klyn 29, N. Y.

DESIGNER—Expect to locate in Fla. soon. 8 yrs. designing stores, all types; layouts, fronts, fixtures, displays. 2 yrs. small homes, midwest and Calif. Handled customer contacts, perspectives, working drawings and supervision. 34 yrs. old, single. Like to hear from retail chain, manufacturer, designing firm, or? Loren Curtis, P. O. Box 310, Carson City, Nev.

VETERAN—Freshman at the Univ. of Pennsylvania, majoring in architecture, desires part-time job in architect's office. 3 yrs. mech. drawing in high school. Age 22, single. Prefer job in Philadelphia proper. James A. Jolley, 2555 S. Massey St., Philadelphia 42, Pa.

ARCHITECT—39, married, one child. Practicing architect, regis. in N. J. and Fla. NCARB regis. pending. 15 yrs. in profession, 12 yrs. in own private practice, primarily in the metro. area. Varied experience in residential, commercial and institutional bldg., field work, procurement, administration and industrial design. Desires assoc. with Fla. firm on substantial drawing acct. basis applied against share in business produced. Grad. Pratt Inst. and American School of Beaux Arts Design. Box E-296.

STORE DESIGNER—10 yrs. exper. before induction; 9 mos. exper. since being discharged. Architectural degrees from Ohio State and Texas Univ.; thorough study of European functional store design which necessitates structural economy without loss of drama in presentation. Considered a top display engineer throughout southern states. Married, 3 children, age 34. Interested in perm. pos. with firm specializing in store design and execution, or dept. store entering extensive bldg. program. Box E-297.

ARCHITECTURAL AND MECHANICAL DRAFTSMAN—Pacific vet, 24, married. Experienced in arch. and mech. drafting, and model-making. Can do pencil rendering and perspective. Now employed as instructor in arch. and mech. drafting. Desire pos. in firm who can use an ambitious and studious young man. Will consider full or part-time in or around N. Y. C. Box E-298.

MANUFACTURERS' REPRESENTATIVE—Canadian ex-army officer desirous of obtaining agencies for bldg. trade materials for distribution in British Columbia. First class refs. coupled with thorough practical knowledge of bldg. industry in this part of Canada. Box E-299.

ARCHITECTURAL DRAFTSMAN—28, released as Lt. Comdr. USNR (Constr. Corp.). Graduated from Univ. of Illinois with B.S. Architectural Engineering. 4 yrs. naval construction experience. 2½ yrs. experience as architectural and structural draftsman. Desires position as architectural draftsman in Chicago, Ill. Oscar Santostefano, 114 E. 24th St., Chicago Heights, Ill.

APPRENTICE DRAFTSMAN-DESIGNER—Vet, 28, married, desires experience in architecture. Has 3 yrs. of arch. drafting at the Maryland Institute and was an arch.-draftsman for 2½ yrs. while in the Corps of Engineers in the Army. Will further education by going to night school if job is obtained. Employed as draftsman now. Prefer house designs, apartments and store fronts. Has samples available if necessary. H. Joseph Kirby, II, 716 E. 23rd St., Baltimore 18, Md.

VETERAN—with top-notch following in the East, wants additional lines of constr. and decorative materials on either jobbing or representative basis. Experienced in foreign trade. Promotional ability proven. Unquestionably the right man for the right products. Box E-300.

CONSTRUCTION SUPERVISOR & ESTIMATOR—(Apprentice or trainee). 1,000 hrs. supervised drafting instruction on board. 3 mos. experience with professional engineer; thorough knowledge of filing plans with bldg. dept. 4 mos. all around exper. in estimating on various types of constr. with large survey company. Young, vet, attending Mech. Inst. evenings. Interested N. Y. area. Box E-301.

BUILDER-REALTOR-BUSINESSMAN—8 yrs. own exper. from family with 40 yrs. in field. Desire new connection with reputable firm in bldg. or related line whether in planning, production, promotion, sales or management. Age 32, university major in business and accounting, ex-naval supply officer, wife and 2 school-age children. Need \$5,000 plus real opportunity to perform and profit. Location secondary. Box E-302.

REGISTERED ARCHITECT & STRUCTURAL ENGINEER—15 yrs. experience on commercial, industrial public bldgs. and oil tank forms. Desires pos. with possibility of association or foreign work with American concern. Box E-303.

CIVIL ENGINEER—33, Civil Engr. degree and Indus. Engr. practice 15 yrs. Desires position that has something to do with civil engr. line in the way of surveying, field engr. of construction, mapping, concrete products manufacture, hydraulic goods manufacture, material estimating, costing, city planning or city engr. Backed by experience as Asst. Plant Mgr., Asst. Plant Supt., Office Mgr., Production Control Supvr., Asst. Supvr. of Tools and Methods. Prefer small industry offering partnership or profit-sharing based on productive improvements. Box E-304.

FREE LANCE DRAFTING—Why waste experienced men, your valuable time and drafting boards on tracings, lettering and simple drafting problems? Let us handle these jobs for you. Small fees. We are vets trying to get a start. Please drop us a card. Clip this ad for future reference. V. R. Fiore, 2502 Ave. "D", B'klyn, N. Y.

DISCHARGED ARMY ENGINEER—43 years old. Knows all about homebuilding. Can design, draw, blueprint, write specifications. Knowledge of building codes of all kinds, plumbing, wiring, painting, plaster, stucco and masonry. Estimator, superintendent, foreman. Can operate a mill, also make any millwork and cabinets. Can go anywhere. Will hire out to any good builder. John E. Robertson, 105 Green-bur St., Camden, Arkansas.

APPRENTICE ARCHITECT—20, Navy veteran desires position with architectural firm in N. Y. C. metropolitan area. Expects to enter college in 1947-1948. High school graduate with 3 years mechanical drawing experience. Clyde M. Emmons, 447 Prospect St., East Orange, N. J.

ARCHITECT—25 years experience on industrial and commercial work desires a position as head of a regional office in Southern California. Box E-305.

MANUFACTURERS' SOLE DISTRIBUTOR—Ex-Canadian Major and Ex-Provincial Cabinet Minister, graduate lawyer, interested in exclusive agency for manufacturers of outstanding building products in Western Canadian Provinces. Box E-306.

MEN WANTED

ARCHITECTURAL DRAFTSMEN—Three experienced architectural draftsmen wanted for immediate employment in established firm in progressive city. Must be capable of developing complete working drawings from preliminary sketches, design ability desirable. Write complete information as to age, experience, education, salary expected when available. Also send recent photograph. Louis G. Hesselde, A.I.A., 40 N. 12th St., Albuquerque, N. M.

ARCHITECTURAL DRAFTSMEN—A well-established firm specializing in the design of school and college bldgs. requires the services of additional architectural draftsmen. Location Michigan. Box R-258.

RESIDENT MANAGER—Large, select Philadelphia apartment house wants executive manager, sales and engineering ability, to assume complete responsibility; leases, employee supervision, general operations. Give full details. Box R-152.

SPECIFICATION WRITER—Practical intelligent man with broad, general experience in bldg. construction work interested in contemporary methods and materials. Excellent opportunity for permanent position. State qualification and salary expected. Mendelsohn, Dir-widdie & Hill, 233 Sansome St., San Francisco, Calif.

DESIGNERS & DRAFTSMEN—Nationally prominent firm in the field of store designing and construction has opening for several top-flight designers and draftsmen. Splendid opportunity in rapidly expanding organization. Excellent salary and working condition. Location Manhattan. Replies kept in strict confidence. Box R-247.

ARCHITECTURAL DRAFTSMAN—First class. Wanted by long established firm. Box R-250.

MECHANICAL MAN—Majoring in lighting and general electrical layouts wanted by long established architectural firm. Box R-251.

REGISTERED ARCHITECT—4 or 5 yrs. practice, age pref. 28 to 35, succeed soon-retiring advisory architect with religious body. Midwestern headquarters. Incumbent in 23rd year. Consultations and preparation of sketch studies for church and religious educational buildings over U. S. require unusual opportunity for originality. Salary net. Travel and office expenses paid. Pension. State exper. and personal status. Box R-252.

TELLING MANAGEMENT ABOUT DUNHAM PRODUCTS

TO PROTECT YOUR PROPERTY INVESTMENT

ROUTE THIS MESSAGE TO YOUR BUILDING MANAGERS

THERE IS A DUNHAM PRODUCT TO MEET EVERY REQUIREMENT OF THE Heating System

AN EXAMPLE OF THE WAY DUNHAM ENGINEERS DEVELOP NEW WAYS OF MAKING YOUR PROPERTY PAY GREATER DIVIDENDS

DUNHAM
DIFFERENTIAL HEATING MEANS BETTER HEATING

IN FORTUNE FOR SEPTEMBER

Radiator Traps • Radiator Valves • Float and Thermostatic Traps • Closed Float Traps • Bucket Traps • Vacuum and Condensation Pumps • Convectors • Unit Heaters, Base-board Heating System • Control Equipment

Dunham research and practical heating engineering experience stands behind every Dunham product. The installation of Dunham products in modernizing any heating system steps up efficiency and provides operating economies. C.A. DUNHAM CO., 450 E. Ohio St., Chicago 11, Ill.

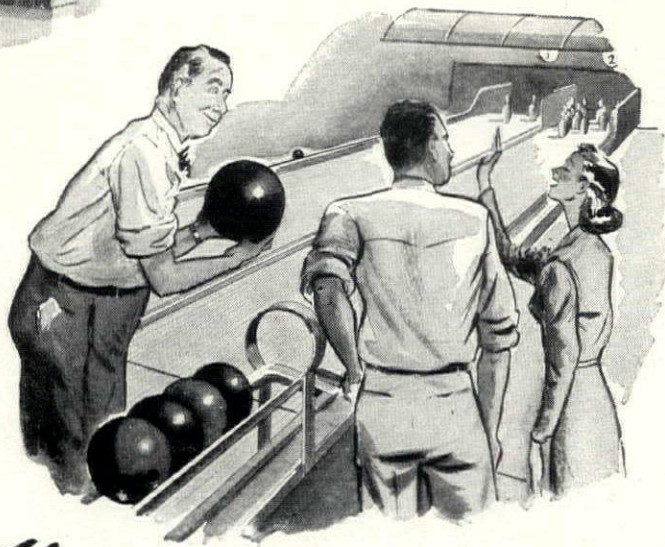
9-46

DUNHAM

HEATING MEANS BETTER HEATING



from Bank...



to Bowling Alley...

Turn to



for Better Air Conditioning

Why does G-E air conditioning create good-will for the architect?

Simply because G-E engineers have worried out the wrinkles in air conditioning that used to mean drafty, dusty, stuffy, installations. The G-E men have come up with *Better Air Conditioning* that performs *all five* essential air conditioning functions: Cooling*, Dehumidification*, Circulation, Ventilation, Filtration.

*In winter, *Better Air Conditioning* includes controlled heating and humidification

G-E *heating* equipment, too, is a real reputation builder. G-E gas or oil plants give quick, economical heat for homes or small commercial buildings . . . for steam, hot water, vapor, or conditioned warm air systems.

Check Sweets Catalog for specifications . . . or call your G-E distributor. *General Electric Company, Air Conditioning Department, Section 61310, Bloomfield, N. J.*

GENERAL  ELECTRIC
Complete Air Conditioning

THE NEW IMPROVED thrush

PROVED IN
YEARS OF
SERVICE



New MANUAL
ADJUSTMENT

EXCLUSIVE
PATENTED
FEATURE
VENTS BELOW SEAT

FLOW CONTROL VALVES

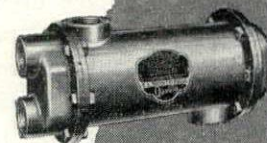
for
AUTOMATICALLY FIRED, FORCED CIRCULATING

Hot Water Heat!

THE THRUSH Flow Control Valve has proved its dependability and fine quality through years of service. Now it is better than ever, with the convenient Manual Control as an added feature. This, plus the exclusive, patented vent below the seat which eliminates leakage makes it the finest flow control valve on the market, bar none . . . and yet it is lower in cost than competitive valves! It is designed for operation with Thrush Water Circulator to control the circulation and prevent wasteful overheating in automatic, forced circulating hot water heating systems. *It can't stick.* Manual control does not interfere with normal operation. Neat in appearance, easy to install, takes the place of a tee. Ask your Wholesaler or write for more information. Address Dept. H-10



THRUSH WATER
CIRCULATOR



THRUSH WATER
HEATER

H. A. THRUSH & COMPANY · PERU, INDIANA

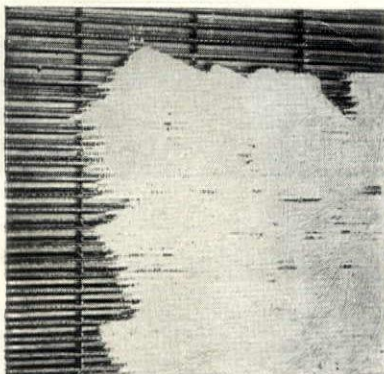
Summer. Winter DOMESTIC *Hot Water*

Where your plans
specify walls
and ceilings of
MILCOR
Metal Lath
and Plaster...

— you provide the
advantages of



fire-safety . . . permanence . . . lasting beauty



• Above: The scratch coat is forced through Milcor Metal Lath so that it is keyed on both sides of the steel reinforcing.

• Below: Note how the back surface of plaster on Milcor Metal Lath becomes permanently "clamped" to the steel.



ON the drafting board, Milcor Metal Lath gives you unlimited freedom to develop structural forms and shapes.

On the job site, Milcor Metal Lath provides maximum rigidity with light weight. The whole wall and ceiling is held together in one fire-resistant monolithic slab, free from cracking, warping, and shrinking tendencies.

Although not plentiful today, metal lath is more easily obtained than substitutes which do not have the fire-safety, permanence, or vermin-resis-



Milcor Netmesh Metal Lath



Milcor Specialmesh Metal Lath

tance of steel . . . and which have never equalled metal lath as a satisfactory plaster base.

Steel-reinforced plaster faithfully expresses your conception of form and color tone. The entire plastered surface remains at practically the same temperature, thus avoiding condensation and resultant plaster blemishes such as lath streaks. The plaster stays new-looking longer, a credit to your reputation.

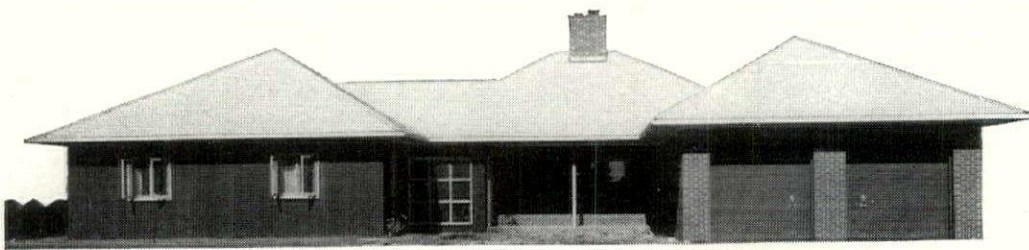
Consult the Milcor catalog in Sweet's. Or write today for the Milcor Manual.

F-268

MILCOR STEEL COMPANY

MILWAUKEE 4, WISCONSIN

Baltimore 24, Maryland • Buffalo 11, New York • Chicago 9, Illinois
Cincinnati 25, Ohio • Cleveland 14, Ohio • Detroit 2, Michigan
Kansas City 8, Missouri • Los Angeles 23, California • Rochester 9, New York



When an architect
builds his own home...

HE PUTS IN A MODERN LAUNDRY!

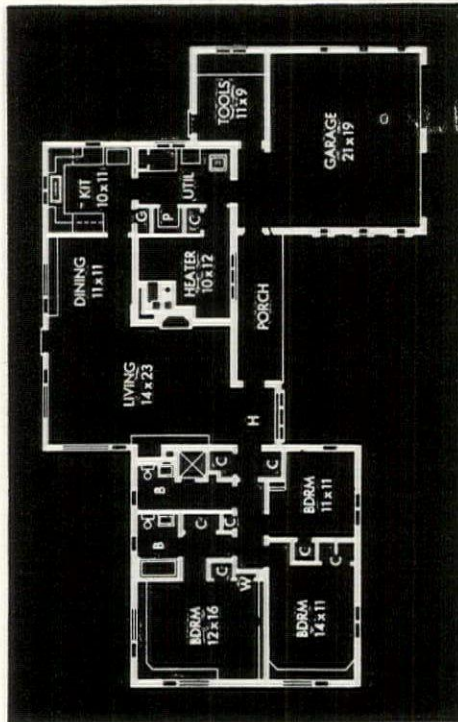


When Harold Spitznagel of Sioux Falls, South Dakota, prominent American architect, planned a new home tailored precisely to the living requirements of his own family, he was careful to include a laundry room for his BENDIX automatic washer.

And he did it deftly, economically, as you can see from the floor plans below.

You can see how cleverly he utilized the space—every square foot is *working*. And how convenient is the arrangement! The service sections are grouped—compact, yet uncluttered: garage, toolroom, heating room, kitchen, and laundry form a unit, departmentalized for highest household efficiency.

Tuned to the tempo of modern living here is a home that "works." And The BENDIX is an important part of its working efficiency.



MODERN WOMEN DEMAND A MODERN LAUNDRY ROOM

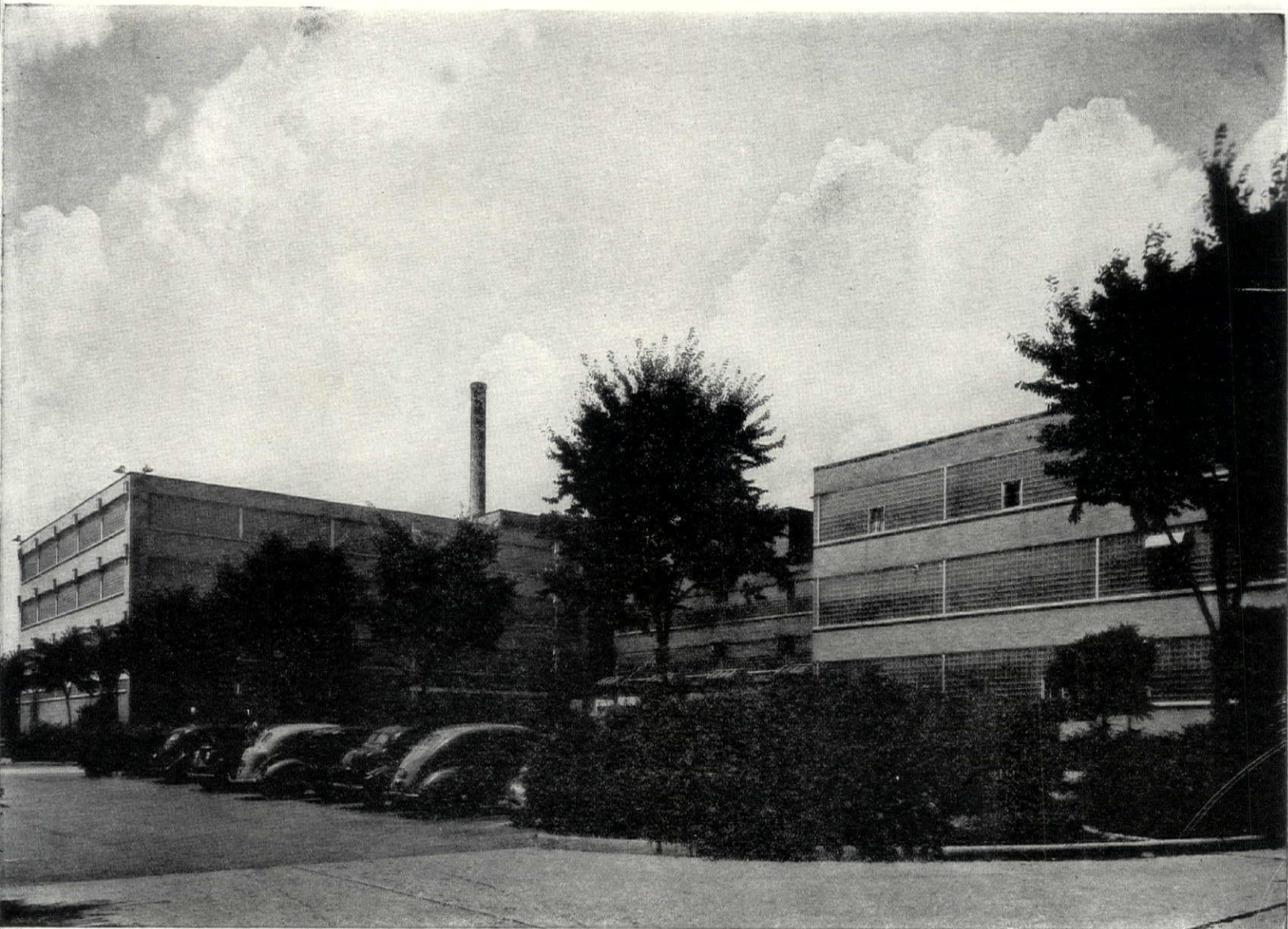
You know that more women are demanding a separate laundry room in their new homes. The BENDIX automatic Washer is partially responsible for that trend. For women know that with BENDIX the old washday worries disappear. It means completely work-free, worry-free washing. The housewife puts in the clothes, sets the dial, adds soap—and leaves. She can go about other duties while the BENDIX washes, rinses, damp-drys, then drains itself

and shuts itself off. No wet hands, no slopped floors, no wrestling with a heavy machine. And the beautiful, compact (4 sq. ft.) BENDIX easily "goes with" the most modern laundry.

It's easy to plan a home that gives all that to the modern woman. Write for our booklet of suggestions, pictures and plans. And the house with a BENDIX is easier to sell, too. In most States the machine can be included with the price of the house under FHA.

BENDIX^{automatic} Home Laundry

BENDIX HOME APPLIANCES, INC., SOUTH BEND, IND.

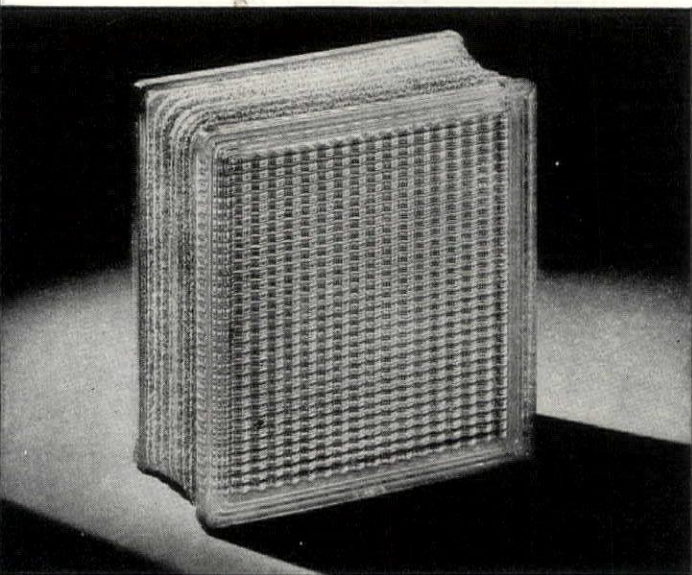


Seven-foot high continuous panels of Insulux Glass Block usher in daylight to all three floors of Miles Laboratories, Elkhart, Ind. Important to this manufacturer of proprietary medicines is the diffusion of daylight through wide working areas,

spotless appearance, and high insulating value. To keep clean, all that is required is an occasional fast and inexpensive washing. Clear windows are set in some of the Insulux panels for vision out and ventilation.

OWENS - ILLINOIS
INSULUX
GLASS BLOCK

Glass harness for daylight



Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do many things other materials cannot do. Investigate!

Daylight—in harness—opens a host of architectural opportunities, and this control is easily realized with Insulux Glass Block.

Natural daylight can be diffused evenly through a horizontal plane or the direction of light rays can be changed. Distracting views are eliminated, privacy assured. Infiltration of outside noise is materially reduced.

Insulux helps maintain controlled conditions of cleanliness and sanitation—stops air leaks around ill-fitting openings. Also, the insulating properties of Insulux give lower cost air con-

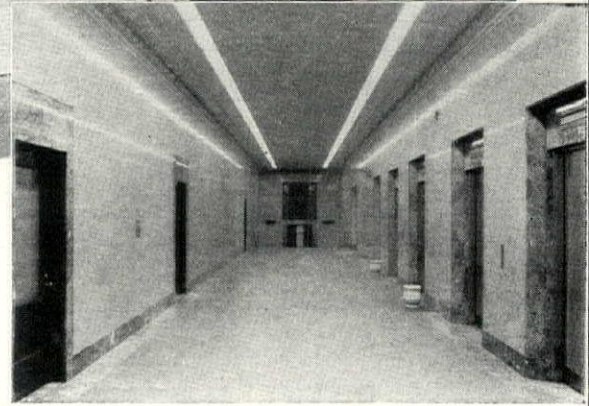
ditioning and heating operations. Condensation of the room side of panels is much less than on a single glazing.

These qualities merit careful consideration in any structure where natural daylight under close control will give better working conditions or improve livability.

Technical data, specifications and installation details will be found in the "Glass" section of Sweet's Architectural Catalog, or write Dept. C-22, Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.



NATIONAL LIFE AND ACCIDENT INSURANCE COMPANY BUILDING, NASHVILLE, TENN.
 HART, FREELAND & ROBERTS, Architects, Nashville. NILE YEARWOOD CO., General Contractor, Nashville.
 NASHVILLE DECORATING CO., Painting Contractor.



VISITORS to the National Life and Accident Insurance Company Building, at Nashville, Tenn., are impressed with the restrained beauty of its interiors. Tennessee Marble in a beautiful gray shade is used in the corridor walls, with pink marble being used for door trim and border for the green stone floor. Other floors are mastic tile. Ceilings are accoustical tile. The executive offices are paneled in different woods, including knotty white pine, walnut and butternut. Modern, decorative and utilitarian are the illuminating panels which provide abundant light throughout the building. On the same plane as the ceiling level, this illumination forms a pleasing pattern which accentuates the strong, simple lines of the interiors.

Included in the Pratt & Lambert products used originally and for maintenance, are: Lyt-all, the Universal Wall Coating, Interior Trim Primer, "61" Enamel Undercoating, "61" Enamel Eggshell, "38" Preservative Varnish, P&L Stains, and Oil Colors. Appropriate decoration thus goes hand-in-hand with economical maintenance—an important factor in the efficient operation of a large building.

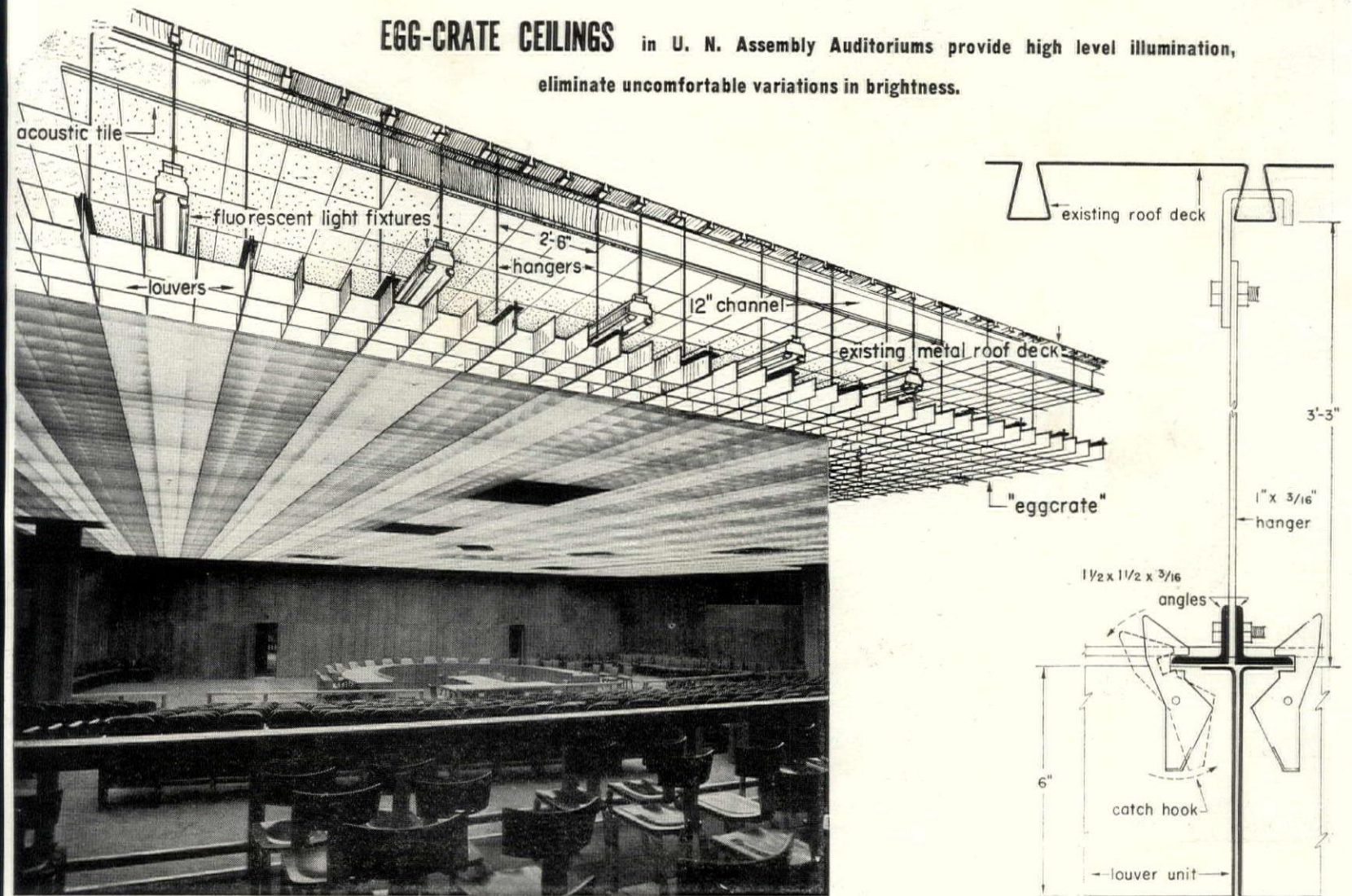
On request, the Pratt & Lambert Architectural Service Department will provide complete color plans and sound painting specifications for projects of all types.

PRATT & LAMBERT-INC., Paint & Varnish Makers
 NEW YORK : BUFFALO : CHICAGO : FORT ERIE, ONT.

PRATT & LAMBERT PAINT AND VARNISH

PRODUCTS AND PRACTICE

EGG-CRATE CEILINGS in U. N. Assembly Auditoriums provide high level illumination, eliminate uncomfortable variations in brightness.



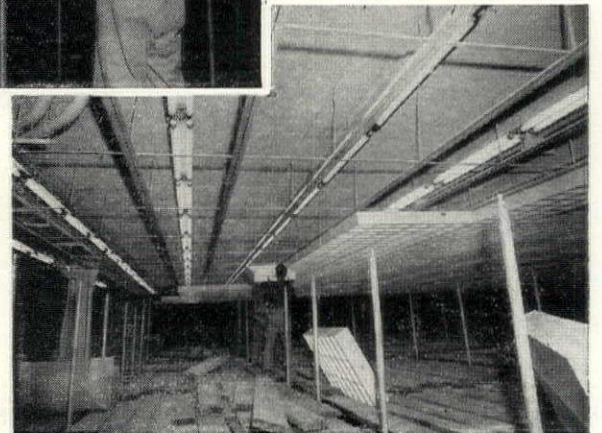
Designed to throw plenty of light on the Councils of the United Nations at their new home at Lake Success, L. I., egg-crate ceilings in the two 6,500 sq. ft. auditoriums are the largest ever attempted. Providing a continuous blanket of uniform soft white light over the entire ceiling area and a general illumination of 55 footcandles, uncomfortable variations in brightness are reduced to a minimum. This general eye comfort is achieved by the combination of white ceiling and louvers, closely spaced lamps of low brightness, and design of the louver fins to cut direct viewing of the lamps. Voorhees, Walker, Foley & Smith, architects responsible for the conversion of the former industrial plant into a suitable setting for the U.N. meetings, designed the installation assisted by G.E. engineers.

Two lighting panels, supplied with 208/120 v., 3 phase, 4 wire, 60 cycle, AC, from 500 amp. busways located in monitors above the chambers, serve each ceiling. Contactor operated by remote control switches and wired to alternate rows of the continuous installation, half level illumination is possible when desired. A total of 36 circuits carry the lighting load of 24,000 w., or an average of 3.7 w. per sq. ft.

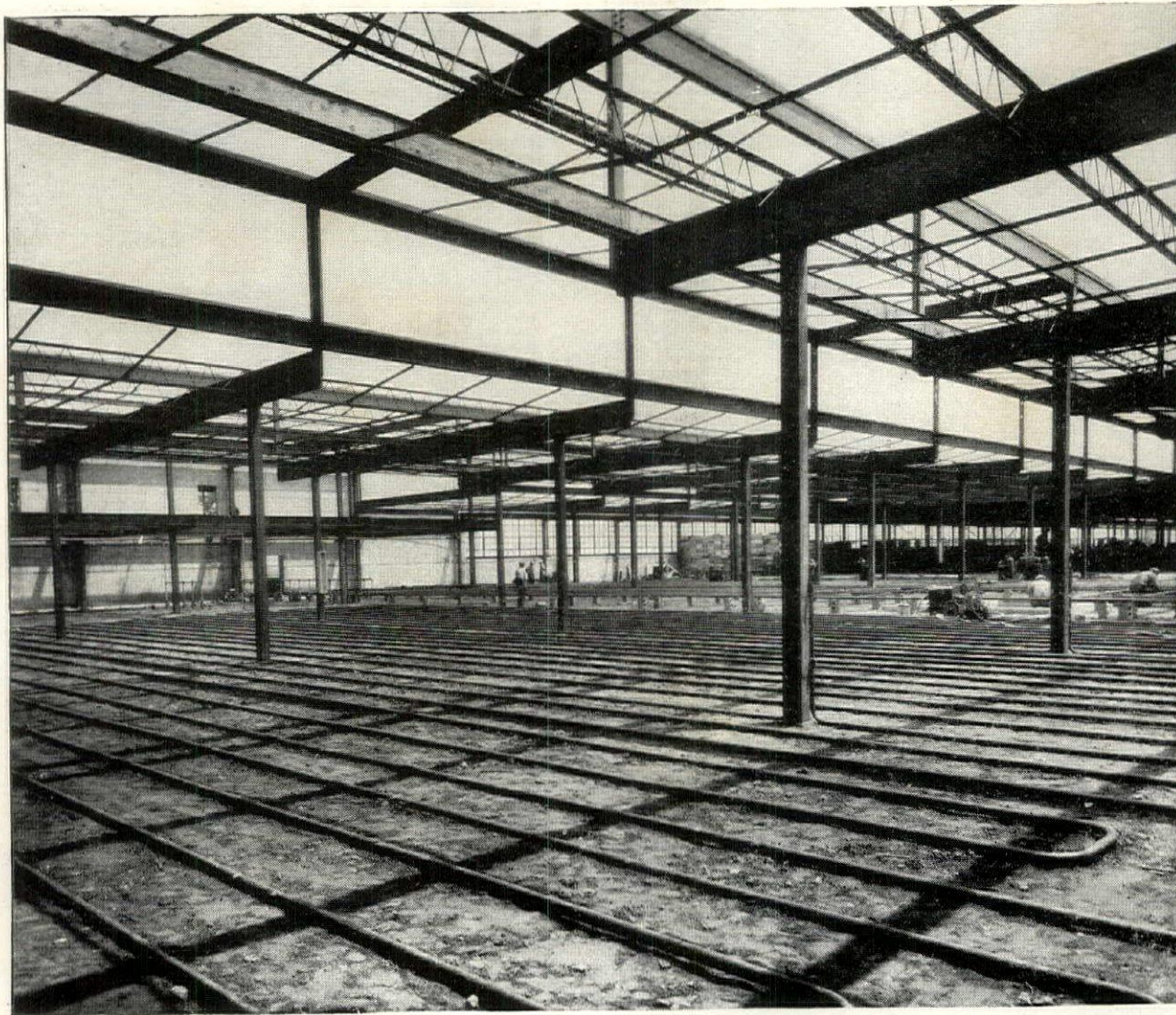
As the former industrial plant utilized continuous wiring channels, a considerable saving was effected by using the existing troughs and mobile bipin sockets. Channels were rewired with instant start ballasts, equipped with blank cover plates and new 40 w., 4,500° white lamps. Because of the multiplicity of speakers and radio circuits, a G.E. interference filter was mounted in the wireway with each pair of ballasts.



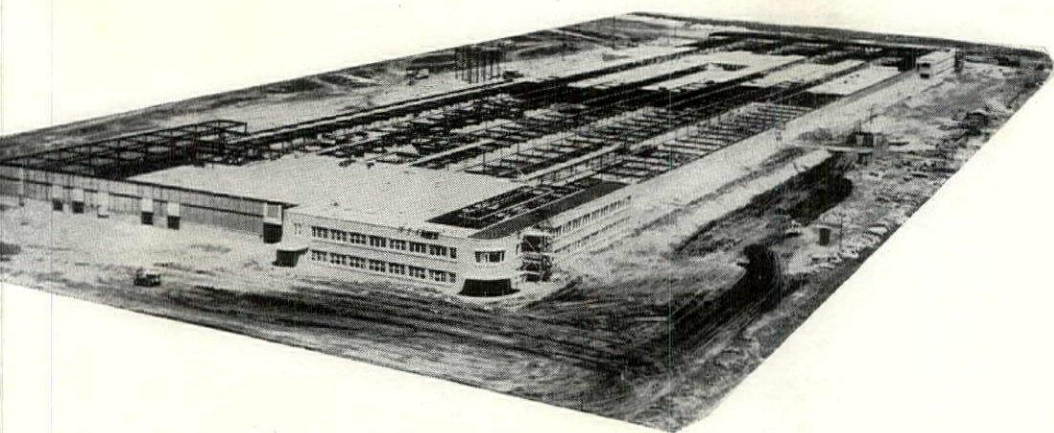
ALUMINUM LOUVERS, 6 in. deep with 9 in. sq. openings, are easily removable for maintenance in sections 2 ft. 6 in. wide by 5 ft. 6 in. long. Hung from runners spaced 2 ft. 6 in. o.c., lateral tie straps assure alignment.



WORLD'S LARGEST RADIANT HEATING SYSTEM is installed in A. O. Smith Corporation's Kankakee (Ill.) plant. Forty Miles of wrought



TWO OF SMITH'S own water furnishes hot water to floor coils of the 48 bays of manufacturing. The heaters—which may be connected independently—are connected to respective panels by a by-pass system so that full capacity of heaters can be utilized. For easy maintenance, exact location of every weld, bend, header and lateral in the



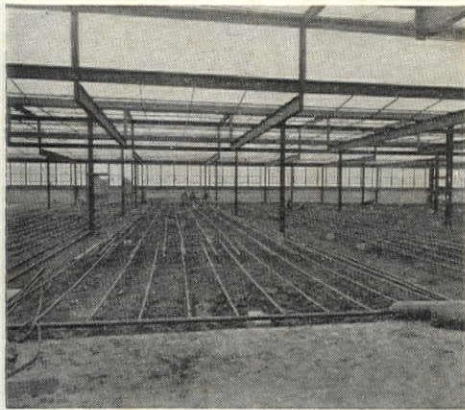
WHEN COMPLETE, this new factory at Kankakee, Ill. will turn out 250,000 domestic storage heaters per year. Designed for single-story, straight line production, the plant covers an area 315 ft. wide, 1,200 ft. long. A two-story administration and laboratory unit occupies the southeast corner.

The largest radiant heating system on record, using 40 miles of piping supplied with 180,000 gals. of water per hour from small water heaters, has been installed in the new Kankakee Works of the A. O. Smith Corp., Milwaukee, Wis. This system, of dividing the heating equipment into 120 small systems for heating any part of the plant independently of the balance, a combination of wrought iron, copper and steel tubing, chosen by engineering logic, necessity and exigency of material prices, is used in both grid and sinuous coils. An arrangement of thermostats, unique both as to type and operation, will control the system, and servicing can be handled easily by one man.

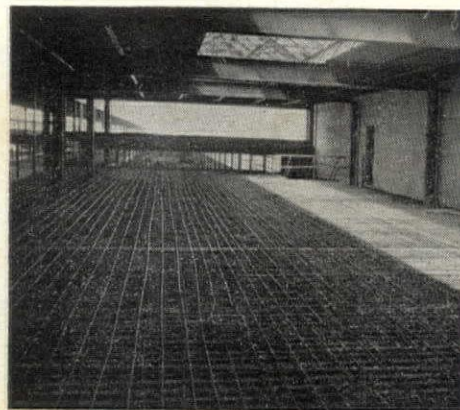
The plant is largely a one-story structure, 1,200 ft. by 315 ft., divided into 48 bays, each 315 ft. by 25 ft. wide. Eighty per cent of this installation is of grid construction. As pipe suitable for continuous coil construction was more readily available, the remaining floor area has a combination of grid and sinuous coils. Headers were introduced into the coil construction to reduce resistance to flow where it was too great for the capacity of the pumps, and to guard against future changes in floor arrangement and foundations. Two gas Smithway-Burkay water heaters (see B.R. 7/46) connected in a bypass system to serve each bay, one heater serving half the bay.

In addition to the plant proper, there are mezzanine floors and extra office areas totaling 33,438 sq. ft. Bundy tubing is used in all the mezzanine floors to fit into the thin concrete floor. First-floor offices use regular grid construction but incorporate an auxiliary wrought iron surface in the ceiling at the window exposures. Copper tubing is used in the ceiling of second-floor offices. In addition, the wrought iron panels near the windows warm portions of the floor under the windows.

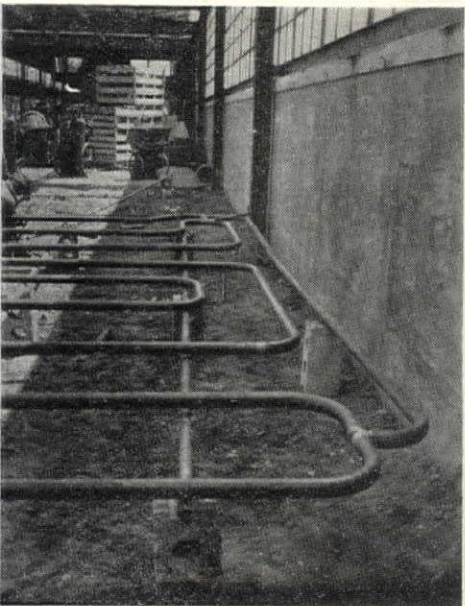
and steel tubing used in grid and coil installations.



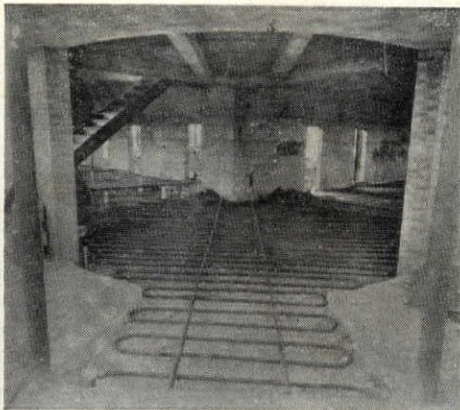
WROUGHT IRON GRID—consisting of 2 in. inside diameter headers, 20 ft. long, and 1/4 in. laterals approximately 140 ft. long—is used in this portion of the manufacturing area. Each bay is served by two heaters mounted in clerestory.



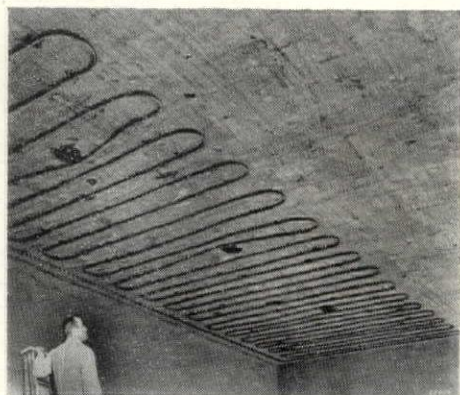
STEEL TUBING, 3/8 in. I.D., is used in welded loops 100 ft. long in the mezzanine level. Coil is laid directly on steel decking and imbedded in concrete. Overall thickness of floor is 3 in.



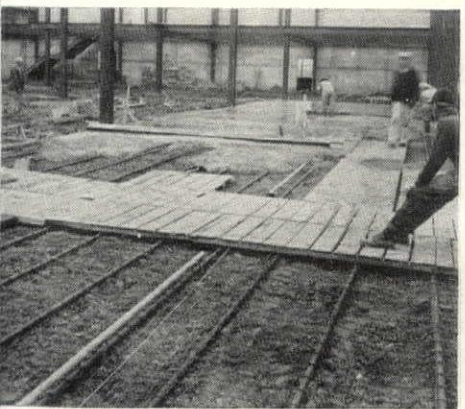
COMBINATION of grid and continuous coil construction in 2 in. I.D. wrought iron pipe yields a concentration of heating surfaces along outside wall. Assembly is fabricated in place.



CIRCULAR LOBBY in office building has a wrought iron grid of special design to fit space requirements. Note that grid extends beyond building line into sidewalk in front of entrance.

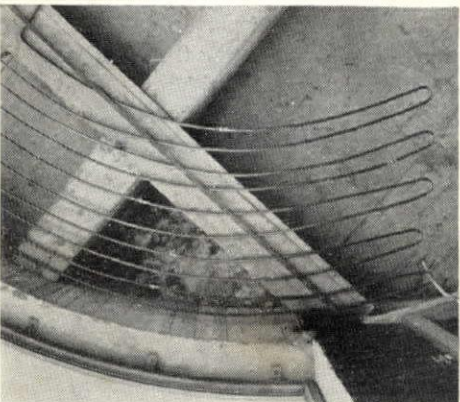


COPPER TUBING on second floor ceiling of office block is imbedded in brown coat and half-inch acoustical plaster. Coils of 3/8 in. diameter are on 4 in. centers at outer wall, increasing to 5, 6, 8 and 10 in. spacing toward inner side.



AFTER FABRICATION, the wrought iron grid—with 1/4 in. I.D. laterals, 24 in. on centers—is placed directly on compacted earth grade. Wire mesh is then laid and concrete poured.

STEEL TUBING in lobby ceiling is imbedded in plaster, handles glass areas in the lobby wall.

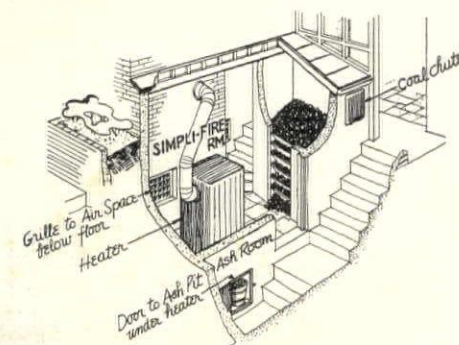


SYNTHETIC VEHICLE FOR PAINT helps solve current shortages.

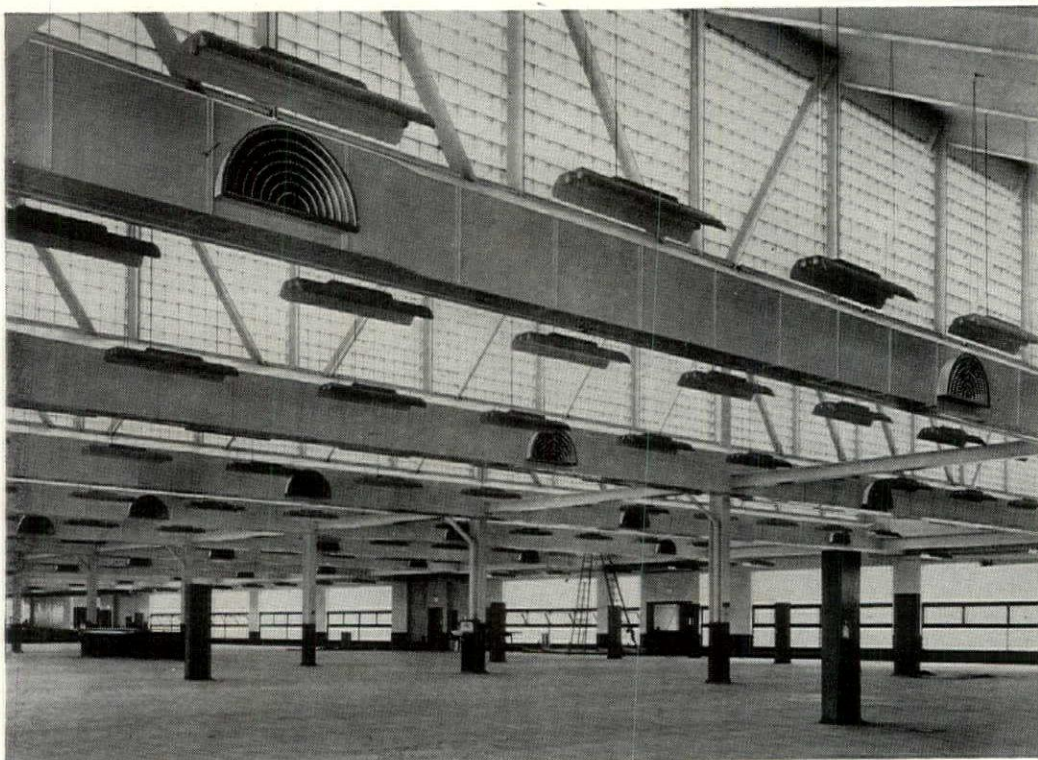
Pliolite S-5, a new vehicle for paints, is helping to solve the crucial shortage in this commodity. Developed by the Goodyear Research Laboratory from readily available materials, it is a thermoplastic, non-oxidizing, synthetic copolymer resin. It is said to be superior to natural rubber Pliolite used in paint manufacture before the war, and is finding use in acid- and alkali-resistant coatings, concrete floor enamels and architectural finishes of all types. Non-toxic, highly resistant to moisture, acids, alkalis and other corrosive chemicals, it has many properties which make it advantageous for fast-drying protective coatings. It possesses excellent color and clarity, has no objectionable odor and is readily soluble in aromatic hydrocarbons. In addition, solutions will tolerate considerable dilution with cheap petroleum thinners without separation or precipitation of pigments. Low solvent retention permits quick evaporation of the solvent, thus bringing about fast drying without an oxidizing period. Resistant to alcohol, vegetable, animal and mineral oils and greases, abrasion and scrubbing, it also possesses good aging characteristics and outstanding toughness and adhesion. It has good thermal stability and withstands mixing on two-roll mills and baking. The material is furnished in two forms by the Goodyear Tire and Rubber Co.—a clear dry resin and a dry resin in which pigments have been dispersed.

LEAN-TO UTILITY ROOM saves floor space, facilitates furnace tending.

Where to put the furnace and coal supply in a basementless house has been neatly solved by this lean-to, frost-line utility room, designed by Randolph Evans for the Anthracite Industries. The solution not only saves valuable floor space but makes the job of furnace tending relatively easy. The heater room is placed outside the main body of the house on the chimney wall, and is only a few feet below grade. Readily accessible from the kitchen and an exterior areaway, its design permits the furnace to utilize the fireplace flue and warm the crawl space beneath the house. A compact coalbin with chute, and an ash pit built in under the furnace are included. A door direct from the ash pit chamber to the areaway provides for easy ash removal.



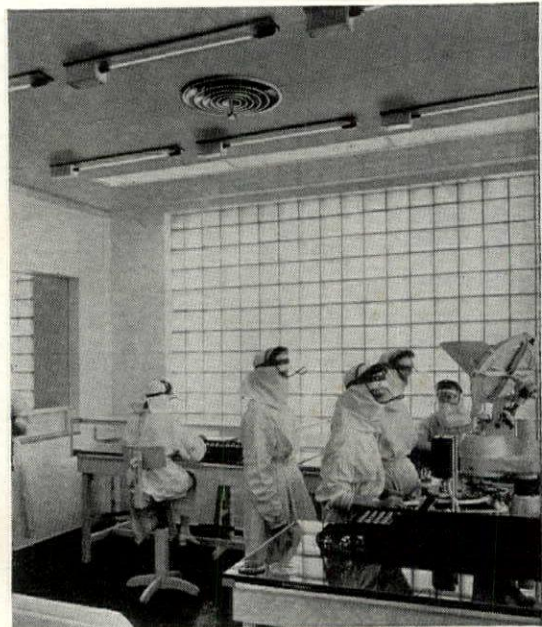
ARCHITECT EVANS' version of convenient coal-fired furnace room for basementless house.



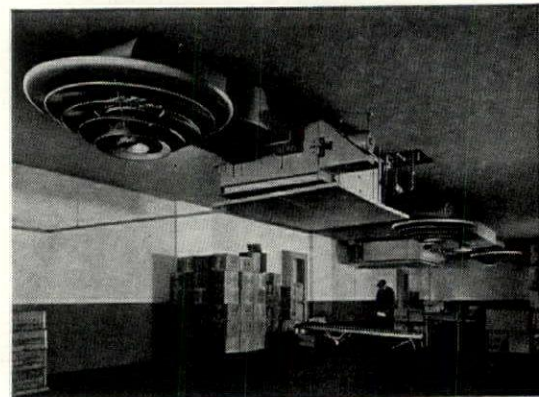
IMPROVED AIR DISTRIBUTION is boon to Industrial Air Conditioning.

Given impetus by the wartime boom in plant construction, air conditioning has proved to be one means of increasing industrial efficiency. Controlled conditions insuring even temperature and humidity, vital to certain industrial processes, are helping in the manufacture of superior products. Comfortable, draftless working conditions for personnel result in high product quality. An important factor in the success of many such installations is use of the Anemostat for proper air distribution. Customarily used in commercial air-conditioning installations, this air diffuser has

been successfully engineered into many industrial plants. Composed of a group of metal cones, the device reduces incoming air velocity, mixes it with room air siphoned into the diffuser, and redistributes the mixed air over a predetermined area near the ceiling. All diffusion and air-mixing taking place within the device, and air turbulence being limited to its vicinity, there are no perceptible drafts in the occupancy area. Several industrial air-conditioning installations which depend upon these diffusers for their success are illustrated herewith.



WALL-TYPE ANEMOSTATS are used in International Business Machine's Plant at Binghamton, N. Y. to distribute 400,000 c.f.m. without drafts (left). In the penicillin plant of Commercial Solvents Corp., air diffusers provide comfortable working conditions while keeping drafts at working level to an absolute minimum (above). Comfortable working conditions in Bowman Dairy's shipping room are maintained although low temperatures are required.



BUILDING REPORTER



SECTIONAL STAIR UNIT combines tread and riser for speedy stair construction.

Fast stair construction for homes and commercial buildings is possible with the Pressed Steel Sectional Stair Unit. Combining a 9 in.-deep tread and a 7½ in.-high riser in one piece of formed metal, punched and slotted for easy erection, a complete 36 in.-wide stairway can be put up in approximately 90 minutes. A lip extending above the tread has a 1⅜ in. slotted hole through which bolts secure the lower unit to the one above. This slot permits adjustment for the height of the rise to the extent of 1 in. per unit, from 7 to 8 in. Made of 12 gauge steel, the stairs may be covered with rubber treads, carpeting or paint. Hardware and instructions for assembly are included in each of 13 units for the stairs and one for the top. Units may be used for exterior stairs in addition to the usual interior applications, or for surfacing or molding cement stairways. For a 72 in.-wide stairway, two units may be used together.

Manufacturer: HomeOla, Inc., 9 S. Clinton St., Chicago, Ill.

ALL-PURPOSE SEALING COMPOUND for household and industrial uses.

Cauxeal is a plastic, all-purpose seal which can be worked and shaped with ease. Water-tight, fume-proof, acid-resistant and not adversely affected by hot or cold water or weather, it bonds firmly to practically any thoroughly clean material, expanding and contracting with the surface to which it adheres. Cauxeal seals water, fume, air or electrical conduits or ducts of metal, tile or fibre, soil pipe or glass block. It may be used for glazing or as a caulking compound, or for setting plumbing fixtures, for expansion or other structural joints, for laying or pointing tile, for cracks in floors under wet or damp conditions, and for miscellaneous industrial uses. Dark brown in color, it retains its plasticity indefinitely and contains no asphalt or tars. It is applicable with hand or knife and comes ready for use in 1 lb. and 5 lb. containers priced at \$.40 and \$1.75 respectively.

Manufacturer: X-Pando Corp., 43-15 36th St., Long Island City 1, N. Y.

(Continued on page 188)

How...

**TRANE ENGINEERS MADE THE CONVECTOR-RADIATOR
EASY TO BUY**

**NOW... CUSTOM-TYPE
HEATING BOUGHT OVER THE COUNTER**

Convectors had to be ordered specially for each job until Trane engineers decided to do something about it. There were dozens of cabinet models, and scores of heights, widths, and lengths. Each type of heating system required a different heating element.

To make the convector easy to buy, Trane engineers first designed a single cabinet that could be installed either free standing or recessed. They found that a smaller number of heights, widths, and depths would satisfy nearly every requirement. Then they designed a universal element that would work equally well with every type of hot water or modern steam system. Finally they devised a system of mass production.

Now Trane can build its standardized Type A Convector-radiator as fast as materials can be ob-

tained. Distributors can easily stock the lightweight packaged units, so that contractors can readily buy them over the counter.

The process of making a Convector-radiator easy to buy is another example of the ingenuity of Trane Engineers, who carry out a constant program of research in the development and refinement of Trane Products and Systems.

All Trane Products are designed and built together for service together. The architect and engineer will find that there is a complete Trane System for almost every conceivable application in heating, cooling, and air conditioning.

More than 200 Trane field engineers in principal cities all over the country cooperate with architects, engineers, and contractors in the application of Trane Weather Magic.

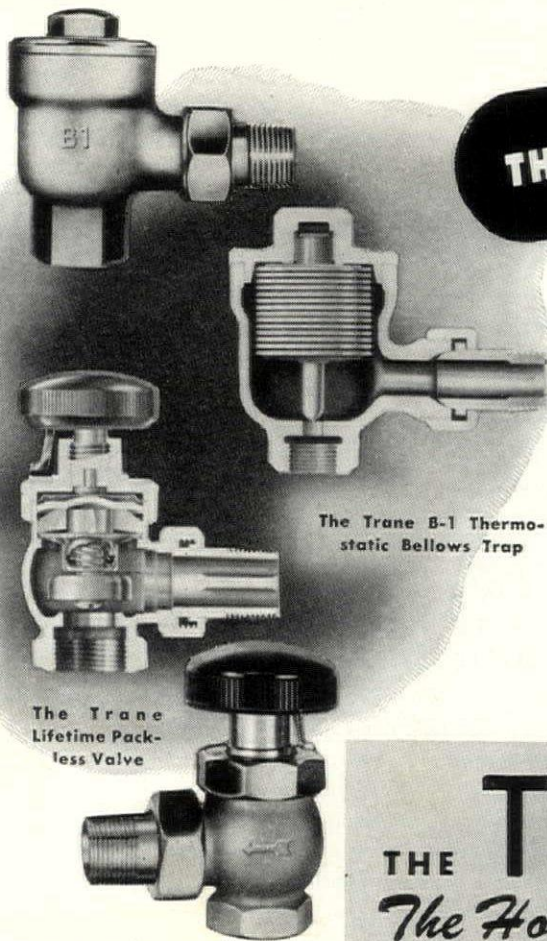
THE MOST MODERN HEATING COMBINATION

**CONVECTOR-RADIATORS
and HEATING SPECIALTIES**

Trane Convector-radiators used with Trane Heating Specialties, either steam or hot water, provide the perfect heating method for any comfort application, large or small.

The new standardized Trane Convector-radiator can now be used economically in every type of building—its cost is no more than old-fashioned radiators, and its installation is far easier and quicker.

In addition to the packless valve that is fine enough to be guaranteed for a lifetime and the thermostatic trap with the balanced pressure bellows, the Trane Steam Heating Specialties Line includes float, bucket, and direct return traps, and vents, strainers, and other heating specialties for low and high pressure applications. The Trane Hot Water Heating Line features the Trane Circulator and includes flo valves, flo fittings, feed and relief valves in addition to other accessories for a complete system.



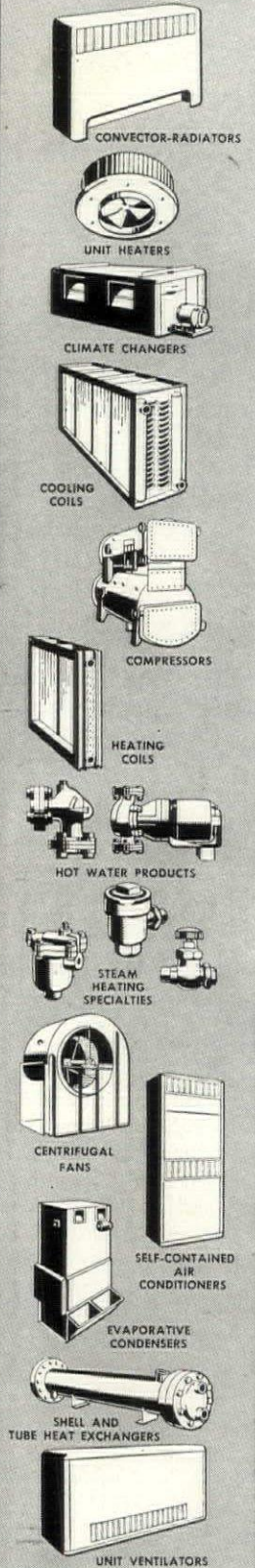
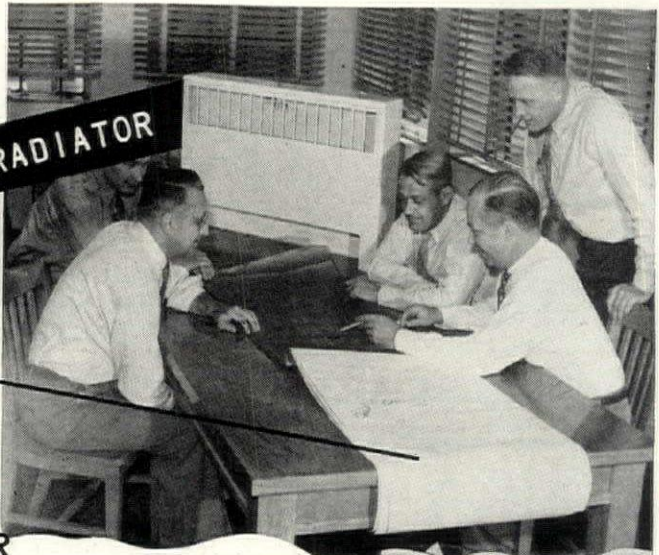
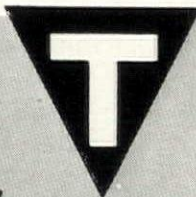
The Trane B-1 Thermostatic Bellows Trap

The Trane Lifetime Packless Valve

All of these Trane products are designed to be carried in local distributors' stocks.

THE TRANE COMPANY
The House of Weather Magic
LA CROSSE • WISCONSIN
TRANE COMPANY OF CANADA, LTD., TORONTO

MANUFACTURING ENGINEERS OF HEATING AND AIR CONDITIONING EQUIPMENT



ASBESTOS PLASTER provides fire protection, thermal insulation and noise reduction.

Clapseal is an insulating, fire protecting and noise reducing material which has the ability to bond directly to any non-oily surface. Delivered to the job ready mixed and applied in the same way as ordinary plaster, one application provides a combination of fire protection, thermal insulation and acoustic treatment. Successful applications have been made on metal, wood, structural building boards, masonry, glass and all types of conventional lath. Clapseal is very lightweight as compared with regular fireproof materials, will not sag or pull away from the surface to which it is applied and will not crack. It finishes with a hard, gray surface similar in appearance to smooth cement, and may be further finished, if desired, by direct application of hard plaster, porous paper or water, oil, asphalt or rubber-based paints. Cost of Clapseal

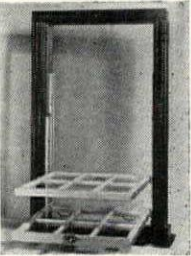
is said to be approximately 10 per cent more than ordinary plaster, but this differential, according to the manufacturer, is more than saved by the reduction in insulation requirements when Clapseal is used.

Manufacturer: Brooks Green Co., 673 Boylston St., Boston 16, Mass.

DOUBLE HUNG WINDOW opens inward to provide maximum safety in cleaning.

Tilting inward, both sashes of the Mauro Safety Window can be easily cleaned, painted or glazed from the inside without removing screens or storm windows. They may be regulated to any desired angle for draft-free, rainproof ventilation, and in hot weather may be fully opened to a horizontal position level with the sill. Replacing the ordinary sash lock, springs, weights or pulleys is a patented device which provides smooth, noiseless movement under all weather conditions. It also constitutes a burglar-proof lock which cannot be opened from the outside even when the window is partly open. Factory fitted and toxic treated, Mauro Safety Windows are furnished in any size and style, glazed and weatherstripped. They can be installed in new or old buildings without changing present frame and trim. According to the manufacturer, installed cost is comparable to that of ordinary double-hung windows.

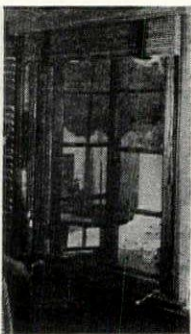
Manufacturer: Safety Window Corp., 215 Montague St., Brooklyn, N. Y.



UNIVERSAL CASEMENT WINDOW OPERATOR for commercial and residential construction.

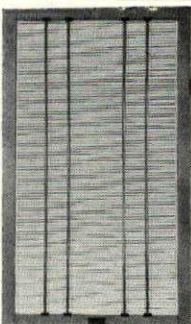
The Parlyn Casement Window Operator, suitable for use wherever casement windows are installed, provides easy operation, safety and security. Truly a universal operator, the same model may be used on left- or right-hand, large or small windows without adjustment or special equipment. It requires only 1 3/8 in. between screen and sash, and operating handle can be quickly adjusted to any screen depth. According to the manufacturer, the unit is virtually burglar-proof by its special Zamak alloy construction and can be installed faster and easier than old style operators. A roller bearing-borne arm and precision operating gears assure easy operation, and a turret top allows the arm to swing in a full circle in either direction. Thus, the operator opens windows over 90°.

Manufacturer: Parlyn Ltd., 707 S. Broadway, Los Angeles 14, Calif.



ADJUSTABLE FLY SCREEN kills flies and flying insects.

Suitable for places where food is produced and handled, such as hospital, hotel and restaurant kitchens, for factories, dairies or country homes, this electric fly screen kills flies instantly. It operates continuously and automatically at a cost of approximately 10 cents a month, and comes in both door and window units. Screen consists of horizontal rods, 3/32 in. in diameter spaced 3/8 in. apart, and two sets of parallel struts supported by a metal frame. Struts are energized by a transformer operating



The Sacred Heart Church, West Lynn, Mass. Altar section is White Dewdrop Flexglass, with niches and insets in Amber Dewdrop Flexglass. Niche in the foreground of picture is lined with White Dewdrop Flexglass. Columns are done in Beige Opal Flexglass.

WHEREVER PEOPLE GATHER... plan to use this Beautiful Background Material

NEW settings need a more carefully chosen background than the altar of a church.

The material itself must be beautiful... yet focus attention on the objects it displays. It must harmonize perfectly with the atmosphere and appointments of its surroundings.

The material frequently chosen for such settings is FLEXGLASS.

Versatile FLEXGLASS is real glass, made pliable by a patented process, and permanently bonded to a fabric backing.

You'll also see this lovely, modern material in the best stores, hotels and restaurants.

It creates exactly the right mood for any interior. You'll relax in smart new lounges

with gay, sparkling FLEXGLASS interiors.

You'll stop in front of scintillant, eye-catching FLEXGLASS display backgrounds that add fresh appeal to store merchandise.

Wherever used, FLEXGLASS brings new life, color and charm. Whenever beauty needs a background, FLEXGLASS reflects good taste.

Write for free information and samples today.

Flexwood and Flexglass are manufactured and marketed jointly by United States Plywood Corporation and The Mengel Company.

UNITED STATES PLYWOOD CORPORATION
Dept. F, 55 West 44th Street, New York 18, N. Y.

flexglass
The Glass That Bends

Also FLEXWOOD and LEATHERWALL

FLEXGLASS — The Glass That Bends. Genuine glass rectangles mounted on flexible fabric backing. Readily cemented to flat or curved surfaces. Mirrors, dewdrops and opals... in many different colors.

LOOK AT ALL THE ADVANTAGES of Saran screen, but first consider these: It gives you the *longest* service life at the lowest cost.

This Dow plastic has created screen that stands up to time, weather and hard use. Saran screen is many times stronger than ordinary screen. It takes more abuse. It's resilient. It won't sag, or become disfigured with dents and bulges.

Saran screen practically eliminates maintenance. It's easily cleaned and it requires no painting. It saves the cost, too, of frequent painting of window sills and siding. It can't rust or corrode and thus never stains or discolors.

Happy home owners attest the long-lasting value of Saran screen. Specify it—and cut costs for years to come!



cut costs for years

WITH SCREEN FROM

SARAN



Let's work it out together

Success in plastics is best measured in end products. It calls for the combined efforts of manufacturers, designers, fabricators and raw material producers. Dow is ready to do its part. Save time and money—call on Dow and get the most out of plastics.

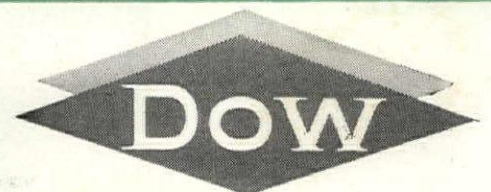
PLAN NOW WITH THESE DOW PLASTICS

Saran for colorful rustproof screen; plumbing parts and equipment; name plates; wire coating; paint brush handles. Styron for brilliant lighting fixtures; escutcheons; decorative objects and trim; insulators; food-handling equipment. Ethocel for modern window blinds; extruded shapes for kitchen trim; rods, tubes and bars. Properties of these Dow plastics make them adaptable to other architectural uses under development.

PLASTICS DIVISION

THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

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



PLASTICS

ETHOCEL • ETHOCEL SHEETING
STYRON • SARAN • SARAN FILM

MORE THAN **5** OUT OF EVERY **10** FAMILIES PLANNING TO BUILD WANT SEPARATE SHOWERS

Of 11,428 families with building plans now under way well over half will have separate showers (not just a shower over the tub) in their new homes.

This answer was given in a recent survey made by Better Homes & Gardens. Names for the survey were supplied by F. W. Dodge Corporation. In the \$5,000 price group 45% said their plans include a separate shower. As the home price increased the percentage rose—to 65% in the \$15,000 class.

These figures check with other carefully made surveys. They all reflect the rapidly growing demand for the full enjoyment and convenience of shower bathing which only the separate shower affords.

The quality of Weisway Cabinet Showers has been a big factor in winning this acceptance of Cabinet Showers as standard bath equipment.



SPECIFY

Weisway CABINET SHOWERS

Product of the pioneer manufacturer in this field.

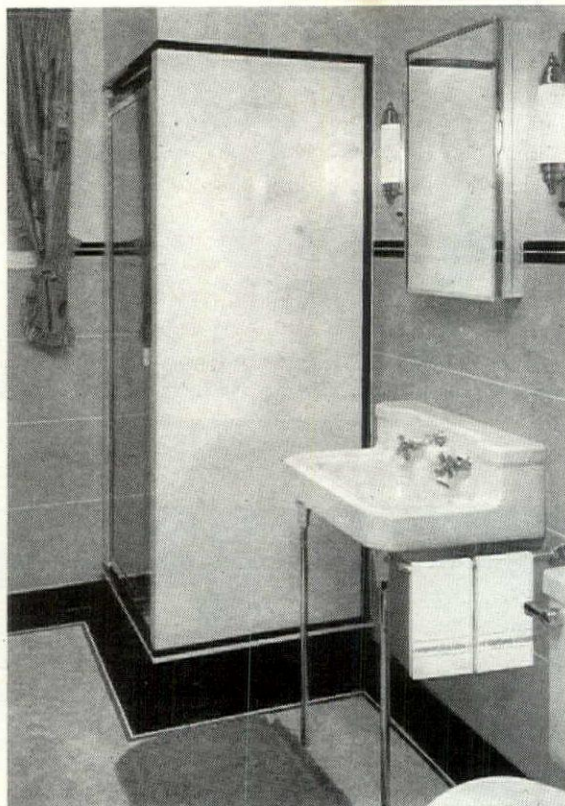
Quality-proved, service-tested through years of actual use.

Vitreous porcelain receptor, with exclusive "foot-grip, no-slip floor."

Precision built, leakproof, easy to install.

Models for homes in every price class.

Write now for detailed information, without obligation to you.



HENRY WEIS MFG. CO., INC., 1002 Oak St., Elkhart, Indiana

at 10 milliamperes. Standard size door and window units will be available shortly and will have an adjustable screw which permits adjustment of 1 in. in both height and width. The equipment is harmless to humans and animals.

Manufacturer: Detjen Corp., 303 W. 42nd St., New York, N. Y.

ADJUSTABLE HOOD SHADES attached to outlet box-covers.

Especially designed for spotlighting store interiors, this line of adjustable lighting fixtures is available in a choice of various arm lengths from a flush mounting on 3 1/4 in. or 4 in. outlet box-covers to a 36 in. pipe attached to the outlet box-cover. Clusters of 2, 3 and 4 shades attached to a single outlet are also available. Each fixture incorporates the unique and adjustable "Swivelier" socket, which will not work loose regardless of vibration or number of adjustments. Held in place by means of special index spring construction, it is universally adjustable to any position, 90° vertical adjustment and 350° horizontal adjustment.

Manufacturer: Swivelier Co., 30 Irving Pl., New York 3, N. Y.

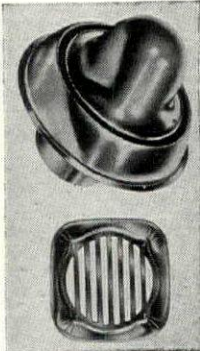
VENTILATOR for wall or ceiling mounting.

Composed of an aluminum intake grille which mounts in the kitchen and a fully-enclosed operating unit which mounts on the outside wall, Kitchen-Aire Six can be used for wall or ceiling mounting. It requires only a 6 in. opening through

the wall, and for other than side wall installation uses standard sections of 6 in. pipe between the joists. Runs up to 30 ft. have proved successful. The blade and motor, fully enclosed in an aluminum housing, incorporate a unique design whereby grease-laden air is not drawn over the motor but passes through an unrestricted opening and is discharged. Thus, cleaning of motor and blades, necessary with conventional ventilators, is eliminated and fire hazards reduced. Since it is located outside the building, operating noises are minimized.

Other features include a weather-resistant motor cover and deflector which effectively resists wind, rain and snow, and a patented automatic back-draft damper which safeguards against drafts and excessive heat loss. Electrically operated and controlled from a wall switch, the Kitchen-Aire may be used in kitchens, bath and recreation rooms, in new or existing structures. A larger model with greatly increased capacity is suitable for commercial use in restaurant canopies or other applications handling smoke, moisture or contaminations normally injurious to motors mounted in the air stream.

Manufacturer: Stewart Manufacturing Co., 3209 E. Washington St., Indianapolis, Ind.



1947 UNIT HEATER LINE incorporates design changes.

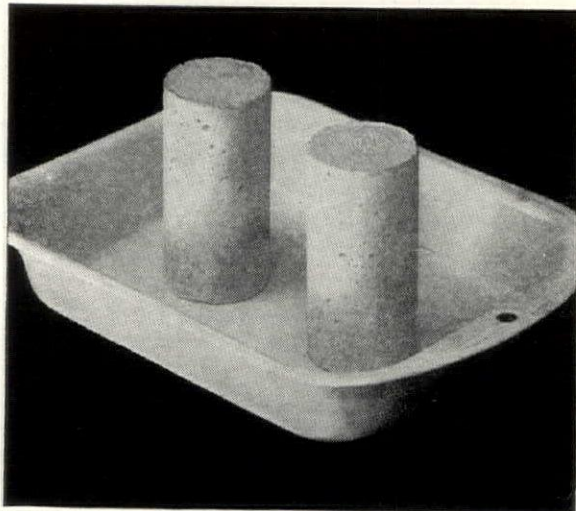
Featuring three types of units with a total of 47 basic capacities, the 1947 Modine line of propeller unit heaters is designed to harmonize with modern industrial and commercial interiors. Incorporating improvements such as the integral, all-brazed copper condenser, copper tubes and headers are brazed into rugged, pressure-resisting units. Copper fins are mechanically and metallurgically bonded to tubes, and bends in each tube absorb expansion strains. Casings are acoustically insulated for quiet operation and are bonderized for rust protection. In addition to



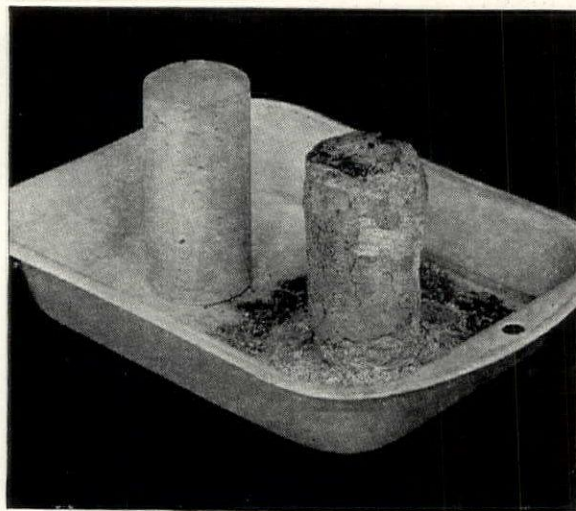
(Continued on page 192)

BRIXMENT MORTAR

Is More Durable



To compare the durability of two mortars, make a cylinder or block of each, let them "cure" for a month or so, then freeze and thaw them forty or



fifty times, with a little water in the pan (the freezing unit of your electric refrigerator will do). Try this with Brixment mortar!

—AND DURABILITY MEANS PERMANENT STRENGTH AND BEAUTY

For permanent strength and beauty, mortar must be *durable*—must be able to withstand the alternate freezing and thawing to which it is subjected many times each winter.

Brixment mortar is *more durable*. This greater durability is due partly to the strength and soundness of Brixment mortar, and partly to the fact that Brixment is waterproofed during man-

ufacture. This waterproofing helps prevent the mortar from becoming saturated—therefore protects it from the destructive action of freezing and thawing.

Walls built with Brixment mortar therefore *retain* their original strength and appearance. . . . Even in parapet walls and chimneys, where exposure is particularly severe, Brixment mortar will almost never require repointing.

LOUISVILLE CEMENT CO., Incorporated, LOUISVILLE 2, KENTUCKY

CEMENT MANUFACTURERS SINCE 1830

**GIVE YOUR CLIENTS
100% PROTECTION**
Specify

**Cabot's Clear
Brick Waterproofing**

A natural water-repellent that penetrates deep into the pores of brick, sandstone, and other dark masonry, above-grade . . . **SEALS AGAINST MOISTURE.***

PREVENTS disintegration caused by freezing and thawing of moisture in walls.

PREVENTS efflorescence and other unsightly stains.

PREVENTS dangerous weight increase due to water absorbed in walls.

Insulating qualities are improved because pores in masonry are sealed. Interior plaster, wall paper, paint, are preserved because dampness is shut out. The results are permanent! Does not deteriorate with age.

Write **TODAY** for catalogue with complete information and illustrations. Samuel Cabot, Inc., 1274 Oliver Building, Boston 9, Mass.

* Use Cabot's Clear Cement Waterproofing for stucco, cast stone, yellow brick, and other light colored masonry surfaces.

FOOT CANDLES TALK!



with
*** COLOVOLT**
Cold Cathode—Low Voltage
Lighting

and here's what they say:

"Lower maintenance cost—longer maintenance of a given foot-candle level—greater dependability because of guarantee (One year of light guaranteed, except for failure due to breakage)—instantaneous starting—no flickering—continuous line lighting."

These extra advantages are available to commercial and industrial users of light when installations are made with COLOVOLT Cold Cathode, Low Voltage Fluorescent Lamps and Fixtures.

Write for illustrated material and technical data.

* Trade Mark Registered U. S. Patent Office

GENERAL LUMINESCENT CORPORATION
622 S. FEDERAL STREET CHICAGO 3, ILLINOIS

conventional horizontal and vertical delivery units, there is the Power-Throw, a new draw-through unit which provides horizontal discharge of heated air over an extra-long range. It may be used alone or in combination with the other types of unit heaters. All three types are available in standard models as well as in models designed to provide low outlet air temperatures when used on steam pressures of 30 lbs. or more. The new line also features a wide range of heat throw patterns made possible through the use of several air distribution devices on the units.

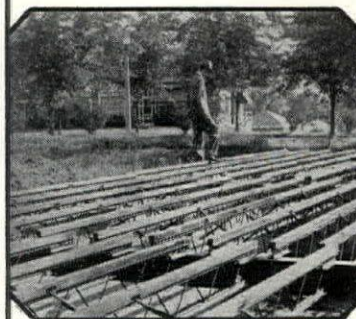
Manufacturer: Modine Manufacturing Co., Racine, Wis.

FROZEN FOOD CABINETS for hotels, restaurants, farm use.

Two new frozen food cabinets, designed for use in hotels, hospitals, small commercial establishments and farm homes, feature quick-freezing compartments in addition to the usual storage sections. The larger unit, a 33 cu. ft. upright model with front opening doors, can store up to 1,300 lbs. of frozen food. It has the condensing unit and controls on top and a 1/2 h.p. motor to handle the refrigeration load. A warning bell rings when storage temperature rises above the recommended range and a pilot light burns continuously as long as the power supply is not broken. Size of the unit is approximately 6 ft. high, 5 ft. wide and 34 in. deep. The smaller model with a 16 1/2 cu. ft. capacity holds up to 600 lbs. Measuring approximately 6 ft. long, 3 ft. high and 29 in. deep, it has a 1/3 hp. condensing unit, two extra large access lids for entrance, and movable partitions in the storage compartment for convenience in stacking packages. Both units utilize Freon-12 as the refrigerant, are finished in baked enamel on bonderized steel, and have aluminum interiors for serviceability.

Manufacturer: York Corp., York, Pa. (Continued on page 196)

LACLEDE STEEL JOISTS



**For Fast,
Economical
Construction
of Single
and Multiple
Housing Units.**

ONLY STEEL JOISTS ARE —

Light weight . . .

Light, easy to place, fast erecting

Useful for All Structures . . .

Spans up to 32 feet. Steel Joist for concrete floors; Nailer Joist for wood floors.

Efficient . . .

Joists are shop fabricated to exact dimension to fit job requirements: Ready for placement.

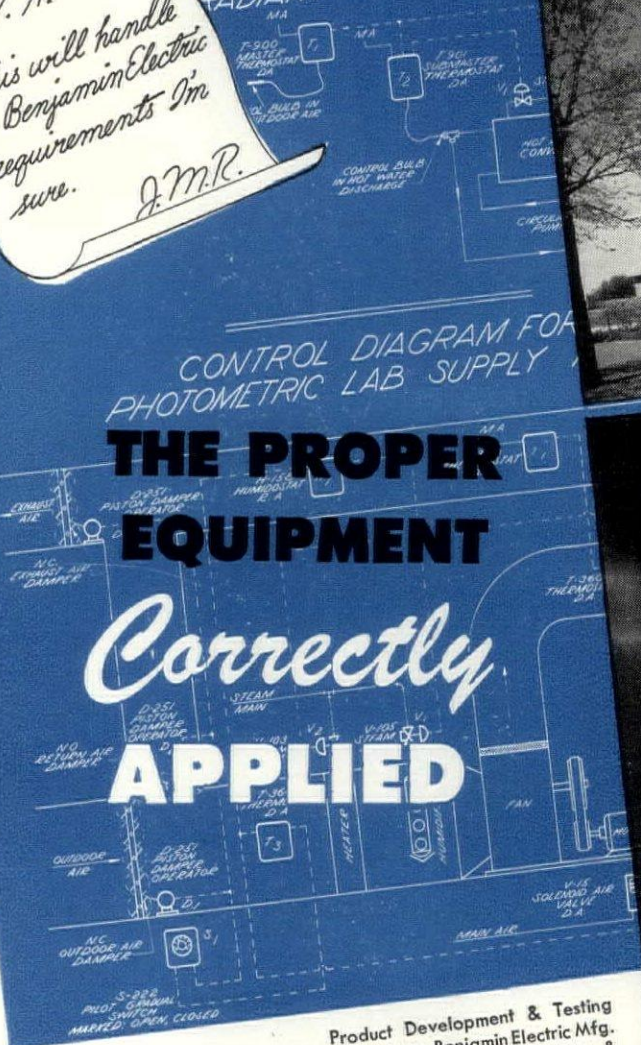
LACLEDE STEEL COMPANY
ARCADE BUILDING ST. LOUIS, MO.

J
 L.W.H.
 This will handle
 the Benjamin Electric
 requirements I'm
 sure. J.M.R.

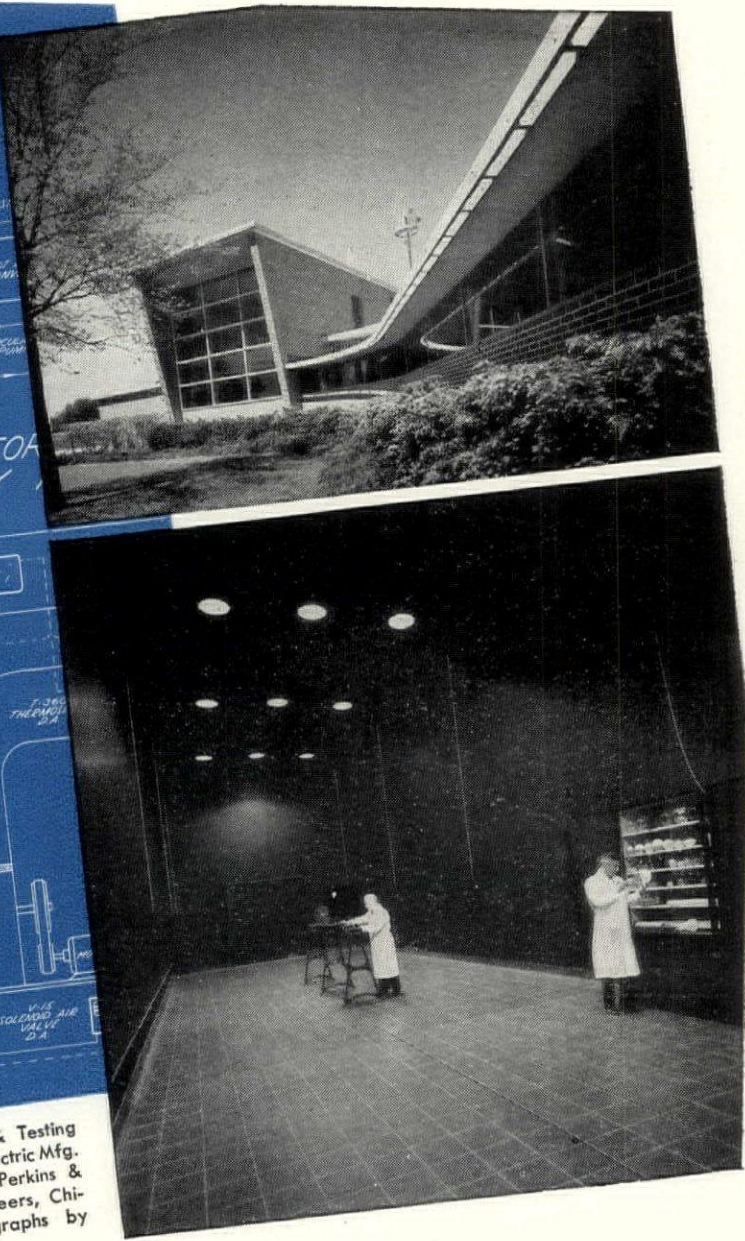
CONTROL DIAGRAM FOR
 RADIANT HEATING

CONTROL DIAGRAM FOR
 PHOTOMETRIC LAB SUPPLY

**THE PROPER
 EQUIPMENT
 Correctly
 APPLIED**



Product Development & Testing
 Laboratory, Benjamin Electric Mfg.
 Co., Des Plaines, Ill. Perkins &
 Will, Architects-Engineers, Chi-
 cago, Illinois. Photographs by
 Hedrich-Blessing Studio.



The purpose of Benjamin Electric Manufacturing Company's new \$100,000 Laboratory is "to contribute to the advancement of the science and art of illumination." The building embodies many new and unique advancements in construction, equipment and design. The keynote of the building itself—and of the work which is to be performed there—properly may be said to be "The Proper Equipment... CORRECTLY APPLIED." And that, too, is the keynote of Johnson Systems of automatic temperature control.

In this interesting building, Johnson Control for Radiant Heating varies the temperature of the water supplied to the heating surfaces according to the outdoor temperature. This assures a change in the heat

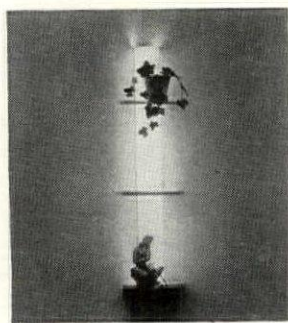
input to the radiant surfaces immediately upon a change in weather conditions. Irritating "thermal lag" is overcome... For the Photometric Laboratory, Johnson Control of the central plant air conditioning system is extremely important because of the facts that the area is windowless and devoted to precise instrument work. Provision is made for the automatic regulation of future cooling coils.

The hook-up diagrams for the guidance of engineer, installation mechanic and operator—reproduced above—are typical of Johnson-engineered installations. Ask us to help solve *your* next temperature control problem. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities.

JOHNSON *Automatic Temperature and*
Air Conditioning **CONTROL**
 DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885



Afterglow of Mr. **E**dison



In the bright blaze of Mr. Edison's incandescent lamp, the romantic Nineties might have lost their bloom. But far-sighted families heard about revolutionary new lighting fixtures and quickly subdued the 16-candlepower glare.

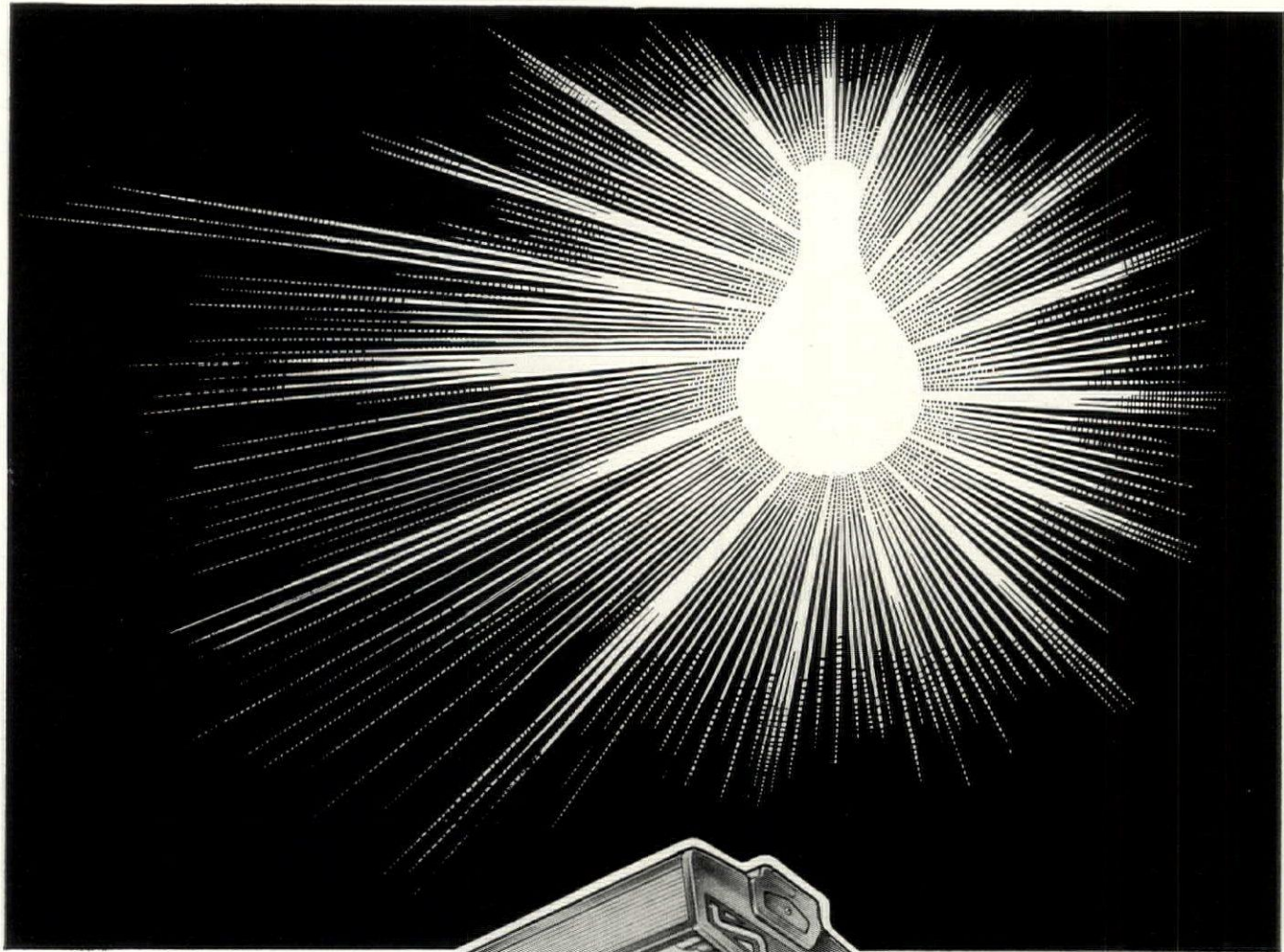
They bought the *first* bulbs with frosted tips.

They replaced pink silk shades with huge reflector lamps. They defied convention and hung center lights upside down.

Just as enterprising families of the Nineties advanced the progress of lighting, alert readers of *House & Garden* are setting new trends in lighting . . . *and new trends in living . . .* today. Because they are the most forward-looking families of the day, their influence is felt throughout the entire housing field.

House & Garden

sells America's most influential families



Stop that Glare

The VIZ-AID

For ceiling or suspension mounting—unit or continuous installation. Designed for two 40-watt lamps. U. S. Patent Nos. D-138990, D-143641 — others pending.

Day-Brite fluorescent fixtures are optically engineered to make seeing comfortable... In the VIZ-AID, patented V-shaped ALZAK louvers evenly distribute glareless light.

Day-Brite Lighting, Inc., 5471 Bulwer Avenue, St. Louis 7, Mo.

Nationally distributed through leading electrical supply houses.

In Canada: address all inquiries to Amalgamated Electric Corp., Ltd., Toronto 6 Ont.



IT'S EASY TO SEE WHEN IT'S

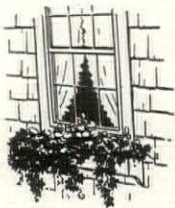
DAY-BRITE

Lighting

13

SPECIFY LASTING BEAUTY FOR SHINGLED ROOFS AND SIDINGS

NEW DUAL-PURPOSE



Preserves and Decorates in a Single Operation

DE-K-PRUF

SHINGLE FINISH

Now, in one, low-cost labor-saving operation, new revolutionary DE-K-PRUF Shingle Finish scientifically protects wood against destructive fungi and insects . . . and provides a decorative coat of rich and practical beauty. Unlike old-fashioned preservatives, DE-K-PRUF can be painted over as often as desired. It penetrates deep down into wood fibers, giving positive protection that lastingly reflects to the architect's credit. Easy to apply with brush, spray, or by dipping. Especially practical for today's unseasoned wood. In five attractive colors, brown, red, light green, medium green and white. Write for any further information desired.



UNEXCELLED CHEMICAL CORPORATION

11 Park Place

New York 7, N. Y.

For Greater FIREPLACE EFFICIENCY

Majestic FORMED STEEL* Dampers

*FORMED STEEL

The heavy-gauge formed steel units developed by Majestic to meet war-torn needs proved the advantages of this advanced construction — which is now featured on the regular Majestic line, including Circulator Fireplace Units, Underground Garbage Receivers, Home Incinerators.

The
Majestic Co.
1115 ERIE STREET
HUNTINGTON, IND.

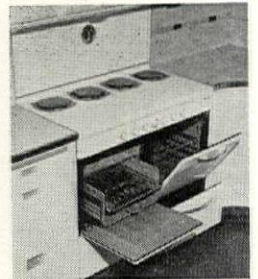
Rugged and Long-Lasting

With Majestic Formed Steel Dampers the proper ratio of throat area to fireplace opening is constant. Correct height of throat and other dimensions are assured. Built to get highest efficiency from every fireplace, these dampers also withstand years of exposure to rust, smoke, soot, and heat without impairment. Valve closes tightly against frame. Operates easily with an ingeniously simplified poker control. The Majestic built-on lintel simplifies installation — no angle iron required. No fitting necessary. Damper rests flat on rough masonry. For safe draft control and permanent, smoke-free satisfaction, specify Majestic Formed Steel Dampers.

Nationally Known and Advertised for 40 years

GAS RANGE incorporates new cooking features.

Designed to fit flush with the wall, cabinets and working surfaces at each side, this fully automatic Western-Holly gas range will be available in 1947 for California distribution only. It incorporates a new heating element, Tempa-plate, which, according to the manufacturer, provides even heat distribution and outstanding efficiency. The four top burners are arranged in a line at the rear of the range for safety and to facilitate the removal of cooking vapors by an automatic ventilator concealed in the cabinet above the range. Two ovens, a large baking oven and a special meat oven for broiling and barbecuing, are other features.
Manufacturer: Western Stove Co., Culver City, Calif.



WORKING MODELS in metal, wood and plastic.

This company will supply designers, engineers, architects, etc., with all types of working or display models of machinery, industrial plants, architectural layout and products. Using metal, wood and plastics, it is equipped to work from blueprints to the closest tolerance in any scale. Model of a screw-cutting metal lathe scaled 1½ in. to the foot is illustrated.



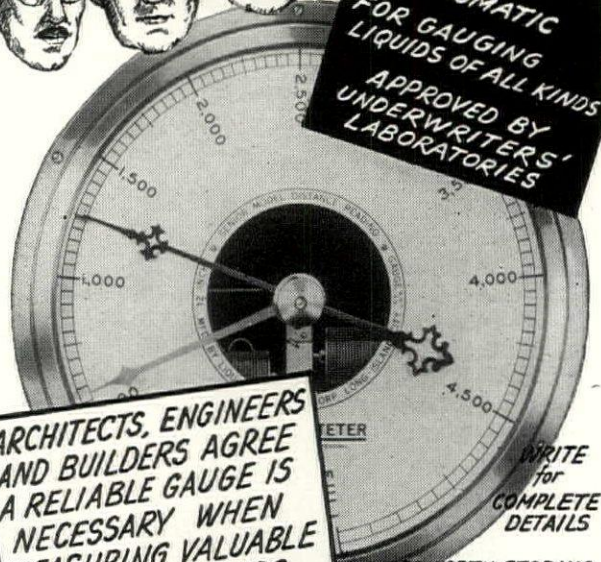
Manufacturer: Stark Industrial Models, 95 Jane St., New York, N. Y.
(Technical Literature, page 198)

LIQUIDOMETER

Tank Gauges



100%
AUTOMATIC
FOR GAUGING
LIQUIDS OF ALL KINDS
APPROVED BY
UNDERWRITERS'
LABORATORIES



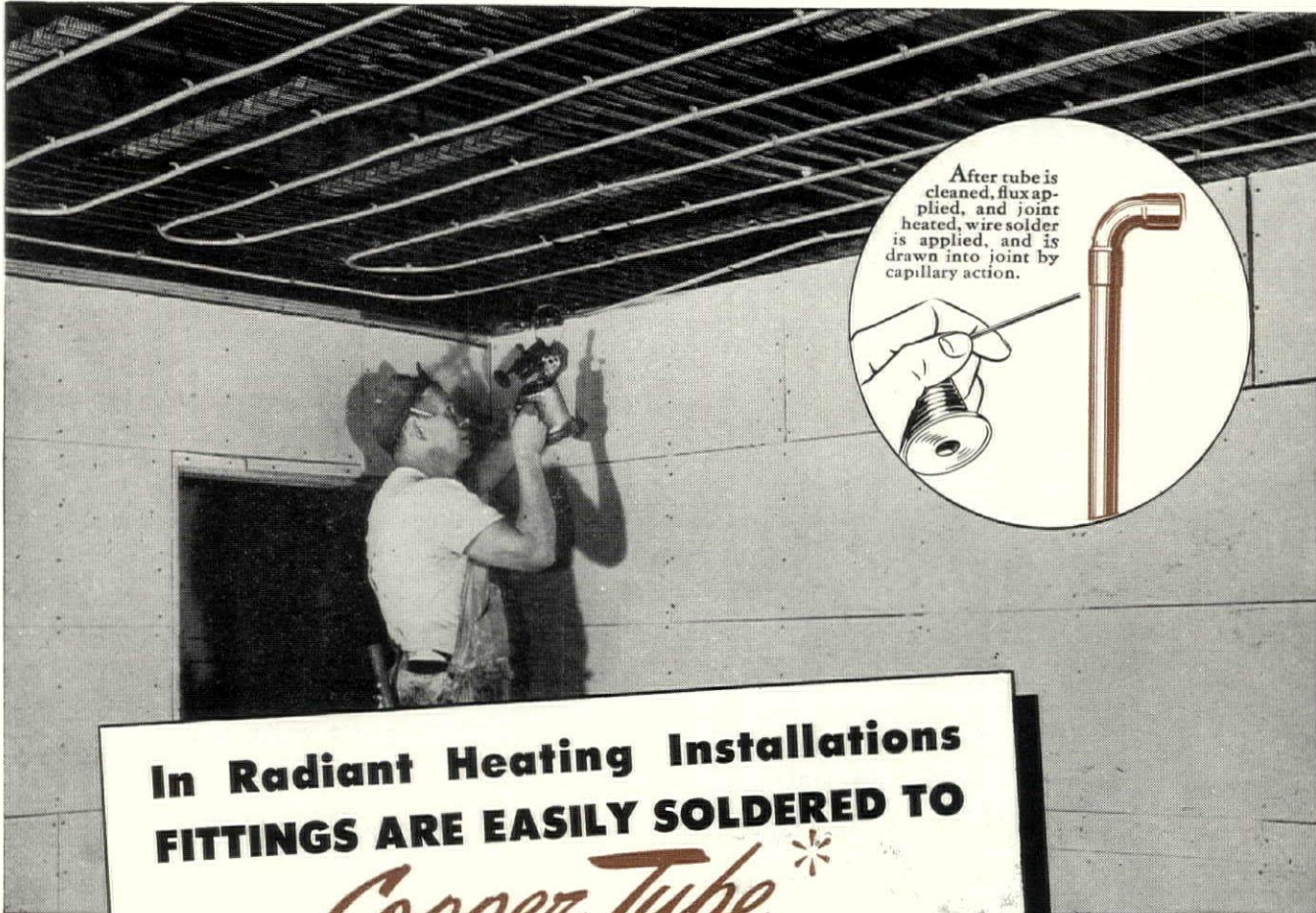
ARCHITECTS, ENGINEERS
AND BUILDERS AGREE
A RELIABLE GAUGE IS
NECESSARY WHEN
MEASURING VALUABLE
STORED LIQUIDS

WRITE
for
COMPLETE
DETAILS

LIQUIDS WORTH STORING
ARE WORTH MEASURING

THE **LIQUIDOMETER** CORP.

36-30 SKILLMAN AVE., LONG ISLAND CITY, N. Y.



**In Radiant Heating Installations
FITTINGS ARE EASILY SOLDERED TO**
Copper Tube *

WHEN Chase Copper Tube is used in radiant heating installations, tight joints are easily made by a simple soldering operation. Both Chase Copper Tube and Chase Solder-type Fittings are made to close tolerances that help assure proper filling of the joint with solder.

Even these easily made joints are needed in only small numbers. Chase Copper Tube comes in lengths up to 100 feet—fewer joints needed between coils. It's

easily bent to shape right on the job—no fittings needed at bends. No special tools required for bending, either.

With these and other advantages of Chase Copper Tube (note list at right) it's not surprising that we cannot always keep pace with the demand. But if you're planning radiant heating installations, the information is available for your use right now. We'll be glad to send you our radiant heating literature—simply address Dept. AF106.

- 7 Reasons
WHY CHASE COPPER TUBE
FOR RADIANT HEATING**
1. EASY TO BEND
 2. LIGHT IN WEIGHT
 - * 3. SOLDERED FITTINGS
 4. SMALL DIAMETERS
 5. LONG LENGTHS
 6. LOW COST
 7. LONG LIFE



Chase
BRASS & COPPER CO.

Waterbury 91, Connecticut
SUBSIDIARY OF KENNECOTT COPPER CORPORATION

This is the Chase Network—handiest way to buy brass

INCORPORATED

ALBANY† ATLANTA† BALTIMORE BOSTON CHICAGO CINCINNATI CLEVELAND DETROIT HOUSTON† INDIANAPOLIS JACKSONVILLE† KANSAS CITY, MO. LOS ANGELES MILWAUKEE
MINNEAPOLIS NEWARK NEW ORLEANS NEW YORK PHILADELPHIA PITTSBURGH PROVIDENCE ROCHESTER† SAN FRANCISCO SEATTLE ST. LOUIS WASHINGTON† (†Indicates Sales Office Only)

America finds a new, easy way to save



OUT OF the war has come a great lesson in thrift—the success of the *Payroll Savings Plan*.

Under this Plan, during the war, millions of wage earners set aside billions of dollars for War Bonds through *weekly pay deductions*.

Under it today, millions continue to buy *U. S. Savings Bonds* . . . to put away the money for new homes, new cars, new appliances.

SUGGESTION: Why not save this new, easy way too?

Weekly Savings	SAVINGS AND INTEREST ACCUMULATED	
	In 1 Year	In 10 Years
\$ 3.75	\$195.00	\$2,163.45
6.25	325.00	3,607.54
7.50	390.00	4,329.02
9.38	487.76	5,416.97
12.50	650.00	7,217.20
15.00	780.00	8,660.42
18.75	975.00	10,828.74

Savings chart. Plan above shows how even modest weekly savings can grow into big figures. Moral: Join your Payroll Savings Plan next payday.



Out of pay—into nest eggs! A wage earner can choose his own figure, have it deducted regularly from earnings under Payroll Savings Plan at his place of employment.

SAVE THE EASY WAY...

BUY YOUR BONDS THROUGH PAYROLL SAVINGS

Contributed by this magazine in co-operation with the Magazine Publishers of America as a public service.



PLASTICS. Celanese Synthetics for the Electrical Industry. Celanese Plastics Corp., 180 Madison Ave., New York. 20 pp. 8¾ in. by 11¼ in.

This booklet describes various Celanese synthetics, their characteristics, mechanical and electrical properties and some of their applications in the electrical field. Lumarith films, foils, sheets and molding materials, Celanese yarns and fabrics, Fortisan and Celanese synthetics are covered, and many photographs illustrate how they serve the electrical industry.

WIRING. Handbook of Farmstead Wiring Design. Industry Committee on Interior Wiring Design, 420 Lexington Ave., New York. 64 pp. 6 in. by 9 in. Price 40 cents.

Discussing practically every phase of electric service on the farm, this handbook makes recommendations for interior wiring of farm buildings and distribution systems between buildings. Intended to show how to plan farm wiring systems for adequacy, efficiency and ease of future expansion, it emphasizes the necessity for initial adequate capacity service. Floor plans show best locations for switches and outlets. Tables and data illustrating demands, wire sizes and voltage drop are included to aid in the selection of conductor sizes for services, feeders and circuits.

HEATING & AIR CONDITIONING. Carrier Air Conditioning, Refrigeration, Unit Heating. Carrier Corp., 300 So. Geddes St., Syracuse, N. Y. 12 pp. 8¾ in. by 11 in.

This catalog is intended to familiarize the architect's and engineer's client with Carrier air conditioning, refrigeration and unit heating equipment. It illustrates, briefly describes and gives uses of such pieces of equipment as dehumidifiers, Weathermakers, Weathermasters, refrigerating machines, condensing units, cold diffusers and unit heaters.

PLUMBING & HEATING. Crane Plumbing and Heating for Low Cost Homes. Crane Co., 836 S. Michigan Ave., Chicago, Ill. 20 pp. 8½ in. by 11 in.

Crane's line of plumbing fixtures and heating equipment now available for low cost homes is fully illustrated and described in this catalog. Four newly designed bathroom groups, two newly developed kitchen cabinet sinks, and newly designed boilers for burning coal, oil or gas are featured as well as specific equipment such as corner lavatories, shower receptor baths, medicine cabinets, laundry trays, water heaters, etc.

INTERIOR DECORATION. Fundamentals of Interior Decoration, Circular Series H.I.O. Small Homes Council, Mumford House, University of Illinois, Urbana, Ill. 8 pp., 8½ in. by 11 in.

The principles involved in good interior decoration—scale, form, color and arrangement of furnishings—are treated in this booklet. These elements of decorating, which govern the standards of good design, are illustrated and discussed in detail. Rules regarding color, period furnishings, harmonious woods, etc., and a list of "don'ts" are included along with a typical decorating problem.

COST REDUCTION. Visual Consultation Chart for Cost Reduction. Designers for Industry, Inc., 2915 Detroit Ave., Cleveland, Ohio. 1 pp., 22 in. by 17 in.

This quick reference chart, covering the classifications of Direct Labor, Manufacturing, Overhead, Administration, Selling and Distribution, and Materials, gives remedies for 37 problems which contribute to today's high costs. Helping industry to pick out cost items which need study, it suggests a remedy for each problem. (Continued on page 200)

Announcing

A NEW 4-POLE THERMAL MAGNETIC TRIP MULTI-BREAKER

Trips instantly
on short circuits
but holds on
harmless over-
loads

The popular MO
2-pole Multi-breaker
now increased
to 4-pole range

Calibrated for
the new National
Electrical Code,
wire ratings 15,
20, 30 ampere



TYPE MO4

AVAILABLE NOVEMBER 1, 1946

2-WAY PROTECTION FOR CIRCUIT WIRING

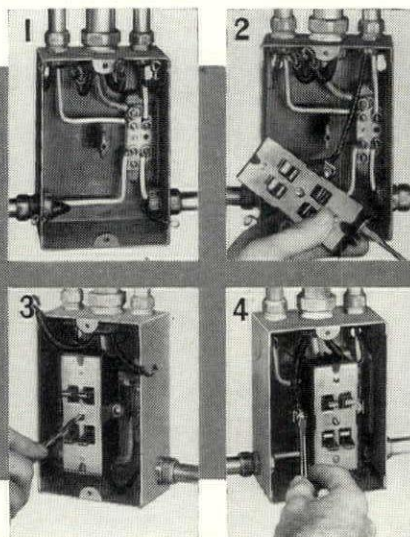
The magnetic trip functions in 1/50 to 1/100 of a second even on minor short circuits. This magnetic trip feature is combined with the time-tested thermal bi-metal element which provides time-delayed tripping on moderate overloads.

The MO4 MULTI-BREAKER is compact (5" x 7") having 4 single poles with circuit ratings of 15, 20, 30 amperes. Either top or bottom poles can be converted into a double pole circuit by inserting a handle tie bar furnished with the device.

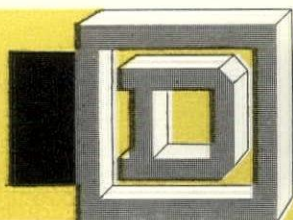
MO4 MULTI-BREAKERS are available for flush or surface mounting.

Specify MO4 MULTI-BREAKERS for GI homes, prefabs, schools, churches, stores, shops, factories—or on any lighting or single phase appliance circuit requiring either single or double pole circuits of 15, 20, 30 ampere capacities on 115/230 volt systems.

THE
MO4
IS
EASY TO
INSTALL



FOR COMPLETE DETAILS, WRITE FOR BULLETIN 4100. ADDRESS
SQUARE D COMPANY, 6060 RIVARD ST., DETROIT 11, MICHIGAN

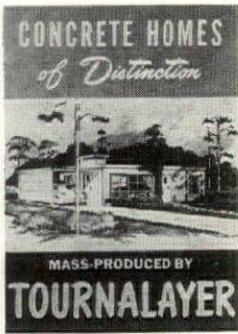


SQUARE D COMPANY

DETROIT

MILWAUKEE

LOS ANGELES



CONCRETE HOUSES. Concrete Homes of Distinction, Mass-Produced by Tournalayer. R. G. LeTourneau, Inc., Longview, Tex. 14 pp., 9 in. by 12 in.

Advantages of Tournalayer-built concrete homes, erection method using the Tournalayer machine, and merits of this method of construction are featured in this booklet. Plans and drawings of various single-unit house designs and larger houses produced by two or more unit structures show wide possibilities of the construction system. The mobile machine which lays the house, the Tournalayer, is fully described and factors important to mass production, such as site location, concrete pouring and setting and preparation of inner forms, are discussed. Step-by-step photographs and text illustrate Tournalayer's simple operation. Terms and costs of leasing Tournalayer home-building equipment, and the history behind the Le Tourneau Monolithic Home are also included.

CLAY PIPE. Sanitation and Drainage With Clay Pipe. Clay Sewer Pipe Assoc., Inc., 17 S. High St., Columbus 15, Ohio. 4 pp. 8½ in. by 10⅞ in.

The many uses of clay pipe products in residential construction are featured in this folder. Chimney-top production, flue linings, many types of drainage pipe, wall copings, etc., are illustrated and described. Advantages of clay pipe for sanitation and drainage are discussed.

PANELLING. Edge Grain Cedar Panelling. Canadian Forest Products, Ltd., New Westminster, B. C. 4 pp., 9 in. by 11 in.

Portraying the advantages of cedar paneling as used in offices, stores and homes, this folder illustrates and describes the three grades of P.V. Edge Grain Cedar Panelling available. Application, finishing and maintenance features are also discussed.

MARBLE. Marble Forecast, September 1946-47. Marble Institute of America, Inc., 108 Forster Ave., Mt. Vernon, N. Y. 8 pp., 8½ in. by 11 in.

Marble Forecast indicates what domestic and foreign marbles are available in the U. S. today and, generally, what quarrying conditions are likely to be in this country and abroad for the next year. Grouping marbles into four classifications, according to respective characteristics and working qualities, it lists domestic companies and available stocks, and all types of available marbles. The Institute membership is also presented.

MINERAL WOOL INSULATION. Industrial Mineral Wool Products, All Types—Testing and Reporting, Commercial Standard CS 131-46. National Bureau of Standards, U. S. Department of Commerce, Washington, D. C. 40 pp., 5⅞ in. by 9 in. 10 cents.

This standard provides uniform methods for testing and reporting the physical and chemical properties of mineral wool products made of rock, slag or glass, and describes equipment required to produce standard results. Methods of testing are included for adhesive strength, compressive strength, corrosion resistance, coverage, density, fire resistance, moisture absorption, odor emission, shot content, temperature stability and thermal conductivity. An impressive list of acceptors, who have agreed to utilize the standard insofar as practicable in their activities as producer, distributor, purchaser or testing laboratory, is included.

ALUMINUM ALLOYS. Reynolds Aluminum Alloy Selector. Reynolds Metals Co., Aluminum Div., 2500 S. 3rd St., Louisville 1, Ky. 8½ in. by 11 in. \$1.

This slide-rule chart, presenting technical information on aluminum alloys 2S, 3S, 14S, 17S, 18S, 24S, Pureclad 24S, 25S, 32S, A51S, 52S, R353, 56S, R361, R301, R303, Clad R303, R317, greatly simplifies the selection of the desired alloy and temper for a particular application. A main horizontal slide pulls to line up with the aluminum alloy under consideration. A second slide moves vertically to line up with one of seven different product forms—sheet, plate, wire, rod-bar, shapes, tubing-pipe, forgings. Thus, by setting one slide for the alloy and the other for the product, the user has available in handy form data on mechanical properties, chemical composition, physical constants, thermal treatments and specifications. In addition, alloy and temper designations are explained and outstanding properties of each of the 18 alloys are briefly noted.

PLASTICS. Plastics Primer. The Dow Chemical Co., Midland, Mich. 16 pp., 8½ in. by 11½ in.

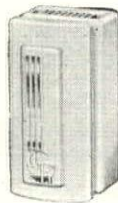
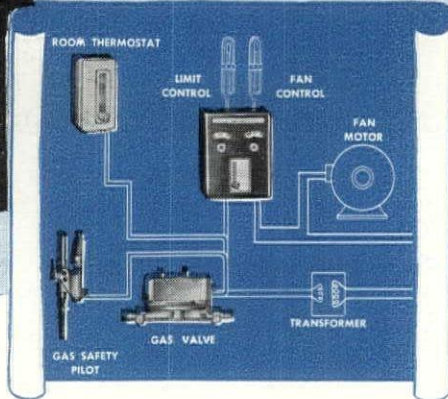
This booklet gives the facts about Dow plastics, their properties, fabrication and uses. It includes: an introduction to what plastics are and how they are molded; articles on the history and uses of Styron; outstanding characteristics of Ethocel and Saran; descriptions of Dow packaging materials and Dow plastics at work. Many photographs illustrate uses and advantages of the materials. (Continued on page 204)

WHITE-RODGERS CONTROLS MEAN BETTER SATISFIED CUSTOMERS

Specify
**WHITE-RODGERS
CONTROLS**
for accuracy and
complete dependability

Builders everywhere are specifying White-Rodgers automatic controls for the heating plants in the homes they build. Their accuracy and dependability eliminate the need for service calls, and give you better satisfied customers.

These controls are so flexible in application and range that the same standard types can readily be adapted to different heating requirements. Write today for heating catalog and installation data.



Designed to grace any home, the attractive type 120 Room Thermostat is essential to real home comfort.



Fan, circulator and limit controls, singly or in combination, are available for any type of system or any kind of fuel.



Electric diaphragm gas valve automatically protects in case of current failure. May be operated before current is turned on.



WHITE-RODGERS ELECTRIC CO.

ST. LOUIS 6, MISSOURI

Controls for Refrigeration • Heating • Air Conditioning

CIRCLINE opens New Horizons!

GENERAL  ELECTRIC

Architects and designers will find that new G-E Circline fluorescent lamps suggest an unlimited number of ways to develop lighting that's original, and more attractive, and more useful. These smooth, compact circles of glass present a versatile lighting form possessing distinctive decorative quality—Circline is *flexible* and will harmonize with other light sources to create unusual and interesting light patterns. • For more information on all the newer G-E lamps... Circline, Slimline, Fluorescent, Projector and Reflector lamps... call your nearest G-E lamp office.

ATLANTA 3, GA., 187 Spring St., N.W., WAInut 9767
 BOSTON 10, MASS., 50 High St., HANcock 1680
 BUFFALO 2, N.Y., 901 Genesee Bldg., Cleveland 3400
 CHICAGO 80, Ill., 842 S. Canal St., HARRison 5430
 CLEVELAND 14, O., 1320 Williamson Bldg., CH 1010
 DALLAS 2, TEXAS, 1801 N. Lamar St., Central 7711
 DENVER 2, COLO., 1863 Wazee St., MAIn 6141
 DETROIT 26, MICH., 1400 Book Tower, CHerry 6910
 KANSAS CITY 8, MO., 2100 Wyandotte St., VI 7671

LOS ANGELES 13, CALIF., 601 W. 5th St., Mich. 8851
 MINNEAPOLIS 13, MINN., 500 Stinson Blvd., GRan. 7286
 NEW YORK 22, N.Y., 570 Lexington Ave., Wicker. 2-6300
 OAKLAND 7, CALIF., 1614 Campbell St., Highgate 7340
 PHILADELPHIA 2, PA., 1405 Locust St., KINGsley 3336
 PITTSBURGH 22, PA., 535 Smithfield St., GRant 3272
 PORTLAND 9, ORE., 1238 N.W. Gilliam St., BEacon 2101
 ST. LOUIS 1, MO., 710 No. Twelfth Blvd., CHEstnut 8920
 General Offices: NELA PARK, CLEVELAND 12, OHIO

*Shielded Circline
 Fluorescent Lamps
 combined with G-E
 Projector lamps in
 adjustable fittings,
 make a new type of
 decorative luminaire.*



*G-E Circline lamps
 may be used for un-
 usual edge lighting
 effects around signs
 and ornamental
 plaques.*

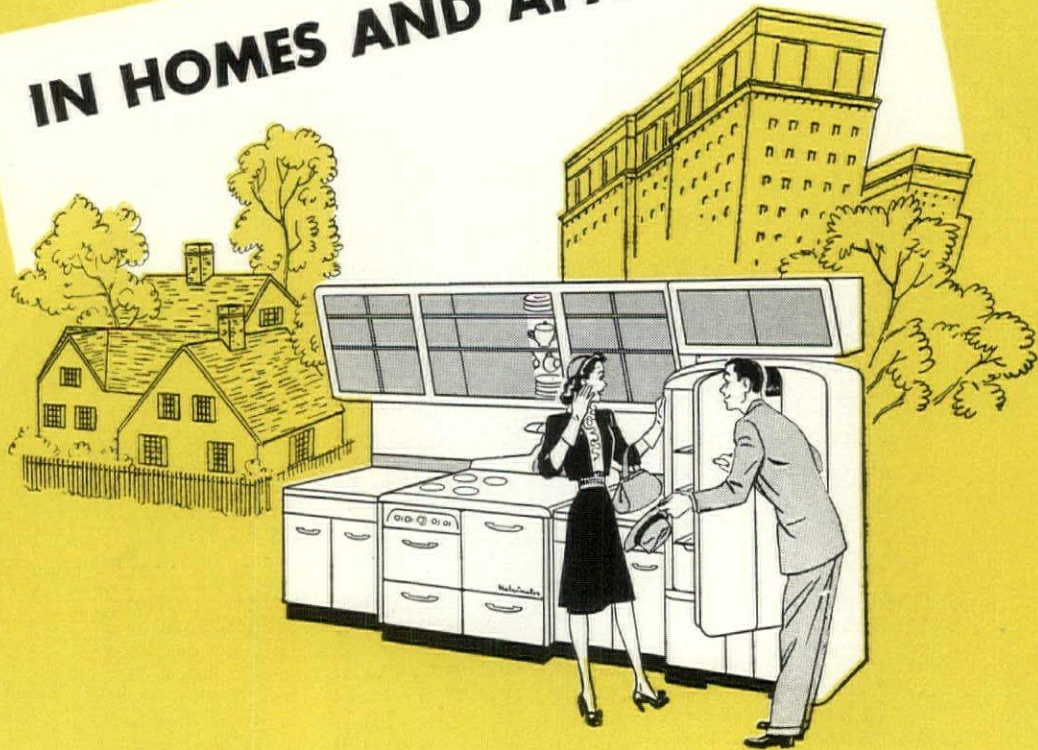
The constant aim of G-E lamp research is to make G-E lamps

Stay Brighter Longer!

G-E LAMPS

GENERAL  ELECTRIC

IN HOMES AND APARTMENTS



Kelvinator means greater user satisfaction!

Thousands of enthusiastic users in homes and apartments have acclaimed the dependability of Kelvinator refrigerators. The experience gained in over 30 years of building fine refrigeration has made Kelvinator the recognized standard for trouble-free performance.

Powered for dependability by the famous Polarsphere unit—sealed-in-steel and permanently lubricated—Kelvinator refrigerators bring you quiet, economical refrigeration at its best.

For property managers this means longer-lasting units, lowered maintenance costs, fewer replacements . . . and for users, greater all-round satisfaction.

For complete details, see your local Kelvinator dealer. His name and phone number are in the classified section of your local phone book. Or write to Kelvinator, Detroit 32, Michigan.

PROPERTY MANAGERS SAY:

... in letters from Kelvinator's files:

NEW YORK—"With reference to the performance of the 214 Kelvinator refrigerators in our development, we have over the period of the past four years and four months spent only \$39.50 for replacement parts. Two years ago a complete refrigerator unit was purchased as a spare, but to date has never been installed in one of our refrigerators."

WASHINGTON—"There are 100 Kelvinators installed in this project and have given very satisfactory service since 1941. To date none of them have had to be replaced or have had any great amount of maintenance work."

Kelvinator



DIVISION OF NASH-KELVINATOR CORPORATION, DETROIT



REFRIGERATORS • ELECTRIC RANGES • HOME FREEZERS • WATER HEATERS

How to Create Custom-Built Panel Effects...

with

**WELDWOOD
PLYWOOD**

This living room is finished in Oak Weldwood. Note how the recessed-joint paneling treatment lends extra character to the walls.



You may be surprised at the number of distinctive and original wall-panel and joint effects which can be constructed from Weldwood Plywood.

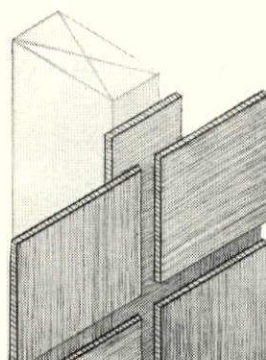
Here indeed is a material that enables you to cater to your clients' individual tastes and special requirements.

Prices, too, are within modest budgets because none of these handsome decorative effects requires prefabrication. All can be created by carpenters right on the job.

You'll find a fund of valuable construction ideas and detailed drawings, in addition to those shown here, in the new Weldwood Application Booklet.

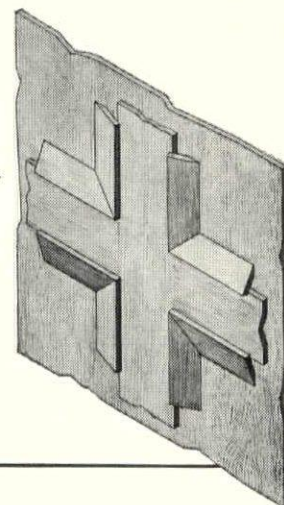
This booklet also contains suggestions for finishing, furring, installing corners, erecting walls and ceiling panels, together with numerous photographs of modern Weldwood interiors. Send for your free copy of this booklet today.

At the present time, Weldwood Plywood is available only in limited quantities. But we expect this condition will improve soon.



← Showing detail of recessed-joint construction.

Detail of Stile and Rail panel effect. (These suggestions are but two of many shown in the Weldwood Application Booklet.)



PLASTICS and WOOD WELDED for GOOD

Waterproof Weldwood for exterior use is bonded with phenol formaldehyde synthetic resin. Other types of water-resistant Weldwood for interior applications are manufactured with extended urea resins and other approved bonding agents.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle, Houston. Also U. S. Mengel Plywoods, Inc. distributing units in Atlanta, Jacksonville, Louisville, New Orleans, Houston, St. Louis. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.

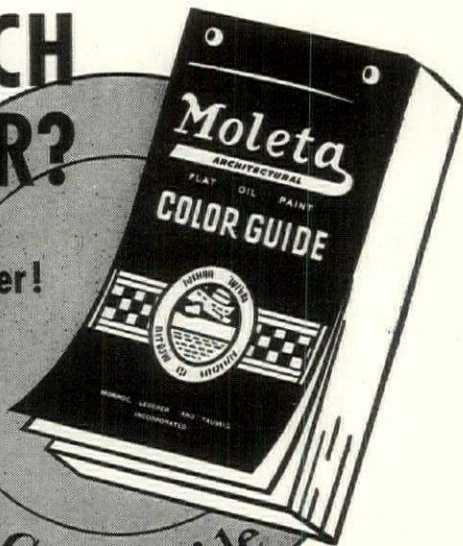
Weldwood Plywood

Weldwood Plywood and Mengel Flush Doors are products of
UNITED STATES PLYWOOD CORPORATION **THE MENGEL COMPANY, INCORPORATED**
 New York 18, N. Y. Louisville 1, Ky.

WHICH
COLOR?

Here's
the Answer!

The Moletg Color Guide



A "find" for the ARCHITECT! This comprehensive *Color Guide* (pages 9" x 15") displays 150 beautiful colors ranging from pastels to deep shades. Formulas are given on the reverse of each color sheet to show how the shade can be quickly made. Price, \$5.00 . . . delivered anywhere in the U. S. A. Write for *your copy*.

MONROE, LEDERER & TAUSSIG, INC.
606 N. AMERICAN STREET PHILA. 23, PA.

Moletg FLAT OIL PAINT
ARCHITECTURAL
THE TRULY WASHABLE FLAT PAINT



Advertisements in national magazines have already told the amazing story of Cotton Insulation to more than 7,000,000 home owners and prospective builders this year. Cotton Insulation is ready now—ready for you to sell now!

The 38-page booklet "Cotton Insulation" tells why home owners by the thousands are specifying this flame-proof, lighter, more efficient insulation. Write for your copy now. Address National Cotton Council, Box 18, Dept. F, Memphis 1, Tennessee.

NATIONAL COTTON COUNCIL
COTTON INSULATION ASSOCIATION

REQUESTS FOR INFORMATION

H. AVEDIAN, Rue Nejib Haddad, Beyrout, Syria requests prefabricators' literature.

GROSVENOR CHAPMAN, architect, 1432 Wisconsin Ave., Washington, D. C. would like to receive information on materials and equipment for small home construction.

PAUL E. DEARMIN, prefabricated steel buildings, Dearmin Sales Co., 900 N. Main St., Ft. Worth, Tex. would like information on equipment, construction and maintenance materials for residential and commercial buildings.

CHARLES T. GEE, civil and architectural engineer, University of Nanking, Nanking, China would like to receive literature on plumbing equipment for kitchens, baths and laboratories; lighting equipment for schools and hospitals; heating equipment for library, hospital and school buildings; construction equipment.

ROBERTO LAPERAL, 853 Rizal Ave., Manila, P. I. would like to receive information on store fronts, structural techniques, interior designs, etc., for modern department store.

DOUGLAS N. LINNETT, Box 4455, G.P.O. Sydney, New South Wales, Australia is interested in receiving information on industrial and domestic architecture in the U. S., building and construction materials and methods.

LOW-COST HOUSING RESEARCH, Louisiana State University and Agricultural and Mechanical College, University Station, Baton Rouge 3, La., requests manufacturers' literature on housing.

BARBARA M. PARR, architectural student, Carrick House, Stafford Road, Eccles, Lancashire, England requests technical information on lighting and color.

MILTON SHERMAN, architect, 2 Park Ave., New York 16, N. Y. requests information on housing devices.

HARLOW G. WEISS, Sunny Acres, Warrensville 22, Ohio desires information on interior wall finishes.

JOHN CHARLES WHEELER, architect, Cleghorne Road, Nashville 5, Tenn. requests information on construction, materials and equipment for residences, shops, offices and schools.

(Continued on page 208)



Your Clients Will Appreciate
a Convertible Bedroom

Here's an idea that's really geared to these times. A convertible bedroom! Modernfold, the accordion-type door, makes it possible for you to specify a room that can be easily converted into two smaller ones. It's all done simply and quickly by merely closing this fabric-covered metal-framed door. Then, too, Modernfold means elimination of swing area . . . savings in wall and floor space . . . and is so beautiful in appearance that it is always a source of pride to its owners.

Write for full details . . . and see how Modernfold meets today's requirements in bedrooms, living rooms, kitchens, closets, etc.



NEW CASTLE PRODUCTS

1613 I Street, New Castle, Indiana

Dealers in all principal cities in the United States and many foreign countries.

*Chrysler
Airtemp*



You Can Make Bowling Profitable Every Month

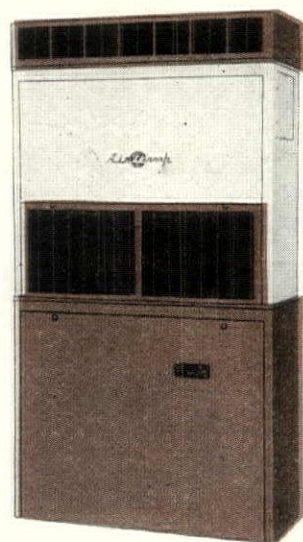
Remember when bowling was a Winter sport only? Operators who have installed air conditioning will tell you that it's a year-round activity today, with great money-making possibilities. Extra Spring, Summer and Fall business quickly pays for air conditioning.

Architects will find that it is easy—and more economical—to air condition bowling alleys with the famous "Packaged" Air Conditioners pioneered by Chrysler Airtemp. "Packaged" Air Conditioners fit readily

into any plan, are easily and quickly installed.

Each "Packaged" Air Conditioner is a complete and automatic air conditioner in itself. It cools its own zone, operates independently as the load requires.

Heating coils can be added to "packages" to provide simplified year-round air conditioning. Airtemp Division of Chrysler Corporation, Dayton 1, Ohio. In Canada: Therm-O-Rite, Ltd., Toronto, Ontario.

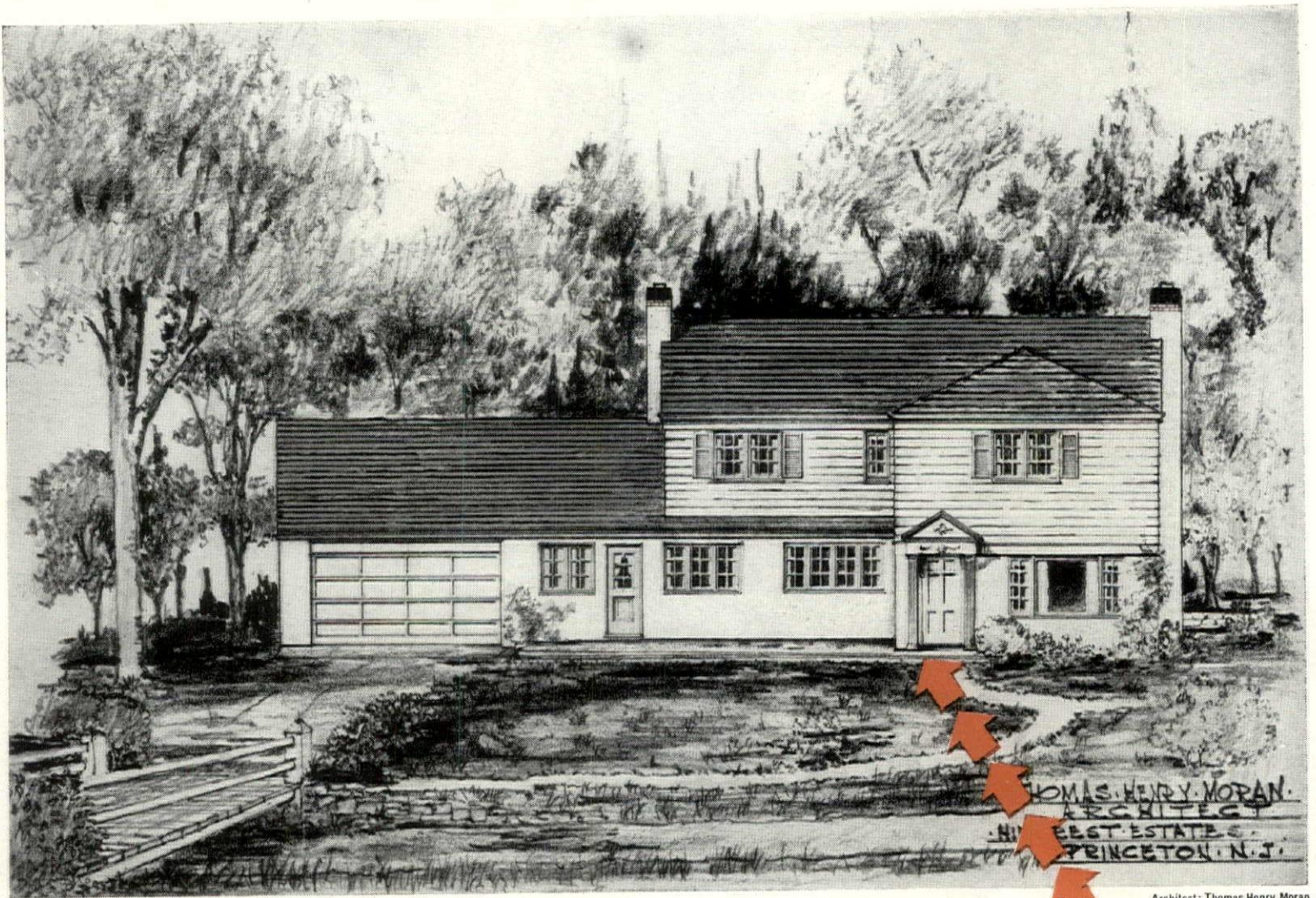


"Packaged" Air Conditioner

Air Conditioning was simplified with this development by Chrysler Airtemp. "Packaged" Air Conditioners operate automatically, require a minimum of attention, have long life and are very economical to operate.

CHRYSLER  **AIRTEMP**

HEATING • COOLING • REFRIGERATION



Architect: Thomas Henry Moran

Presenting
THE SHOW-ROOM HOMES
of the Nation

TIME will soon be putting through a change of address for subscriber #13-42-GGHC97-544, Mr. Ralph M. Hagen, when he moves into this new home in Princeton, N.J.



HOUSES like this, in all stages of construction, are centers of interest for home-owners and home-builders throughout the nation—show-places for your new building ideas and materials.

For people like the readers of TIME, people who can appreciate and afford top-grade designs-for-living, are also the influential people others in the community look up to and copy.

Of course not all TIME's 1,500,000 families across the U. S. are talking to architects and contractors about new homes. But when they do build or remodel, TIME families have the money to do so in a way that will set standards for their neighbors.

Get the attention of TIME readers—and you are on the way to selling them, their friends, and friends' friends—a great group of higher-incomed families.



ADVERTISING OFFICES • NEW YORK • CHICAGO • BOSTON • PHILADELPHIA
 CLEVELAND • DETROIT • ST. LOUIS • SAN FRANCISCO • TORONTO • MONTREAL



MARBALLA*

THIS FAMOUS WALLPAPER

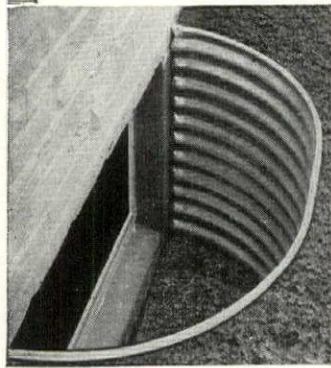
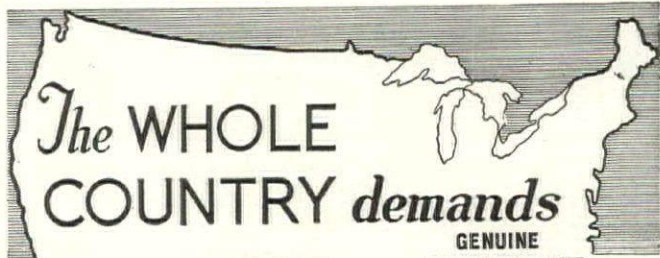
throughout the United States.


laverne originals

225 FIFTH AVENUE, NEW YORK, N. Y.

is basic specification for contemporary interiors — 1001 effective color patterns, plastic surfaced, washable, economical.

* Reg. U.S. Pat. Off.



GENUINE LUX-RIGHT AREAWALLS

- Corrugated, ALL-steel
- Heavy galvanizing (hand-dipping) AFTER forming protects edges against rust.
- Never crack or crumble
- Hold fast to foundation
- See your dealer, or write us for free folder

HERE is a ONE-PIECE steel Areawall for basement window wells, accepted as standard and essential and good by *architects, contractors and homeowners* throughout the land. Heavy-gauge steel, unbelievably rigid, hot-dip GALVANIZED AFTER forming. Time and labor-saving. Wherever there's a basement window below ground level, LUX-RIGHT* Areawalls will give years of meritorious service.

*TM Reg. U. S. Pat. Off.

SAINT PAUL CORRUGATING CO.
South End Wabasha Bridge Dept. AF-7 Saint Paul 1, Minn.

O'BRIEN'S
Pen-chrome
WOOD FINISHES
Bleached Mahogany
Wood Stain (Dye-Coal)

BLONDE
WOOD FINISH

Modern, easy to apply, low in cost. Ideal for plywood panelling, doors, trim.

FREE SAMPLE of Pen-chrome Wood Stain and Clear Finish to architects and builders. Inquire on your letterhead.

See Sweet's for complete information on all O'Brien Paints.

O'BRIEN VARNISH COMPANY
SOUTH BEND 21, INDIANA
SINCE 1875

REQUESTS FOR LITERATURE

- ROBERT M. BECKER, engineering, 50 Beacon St., Boston 8, Mass.
- BIGGS, WEIR & CHANDLER, architects-engineers, 224 N. Congress St., Jackson, Miss.
- JULES P. CHANNING, engineer, P. O. Box 572, Miami Beach, Fla.
- COOPER & PERRY, architects-engineers, 204 Journal Bldg., Knoxville, Tenn.
- R. E. EARNHEART, architect, 1810 Walker Ave., Kansas City, Kan.
- JOSEPH P. FARLEY, City Investing Co., 25 Broad St., New York, N. Y.
- FRANCIS A. FAULHABER, architect, 128 E. Maumee, Adrian, Mich.
- F. K. HELM, architect, Norris, Tenn.
- FRITZ KRUCER, architect, 28 Atalaya Terrace, San Francisco 17, Calif.
- AQUILES LANDOFF, architect, Casilla 119, Vina del Mar, Chile.
- ROGER LEE, architectural designer, 1745 Silverlake Blvd., Los Angeles 26, Calif.
- MACDONALD & KAAKE, INC., building construction, 11 Union National Bldg., Marquette, Mich.
- ROBERT T. C. MILLER, 3220 Lorain Ave., Cleveland 13, Ohio.
- RICHARD L. PARLI, 2017 Key Blvd., Arlington, Va.
- F. F. RAMSEUR, JR., designer and builder, 130 E. 4th St., Charlotte, N. C.
- PALMER SABIN, architect, 1009 E. Green St., Pasadena 1, Calif.
- H. F. SESSIONS, 5838 E. Greenlake Way, Seattle 3, Wash.
- WILLIAM SHINDERMAN, 203 N. Wabash, Chicago, Ill.
- LINN S. SPAULDING, civil engineer student, Route 3, Box 764-A, Watsonville, Calif.
- BOB STENZHORN, building supply, Darlington, S. C.
- H. STERN, P. O. Box 9231, Johannesburg, South Africa.
- A. B. SWANK, architect, 2812 Fairmount St., Dallas 4, Tex.
- Y. TAJIRIAN, civil engineer and contractor, 13 Bustanil-Khass, Baghdad, Iraq.
- JOHN CHARLES WHEELER, architect, Cleghorne Rd., Nashville, Tenn.
- WISE CONTRACTING CO., INC., 122 North 8th St., Richmond, Va.

BACK AT
**GRAND CENTRAL
PALACE**
NEW YORK
31st Annual

**NATIONAL
HOTEL
EXPOSITION**
NOVEMBER 11th-14th

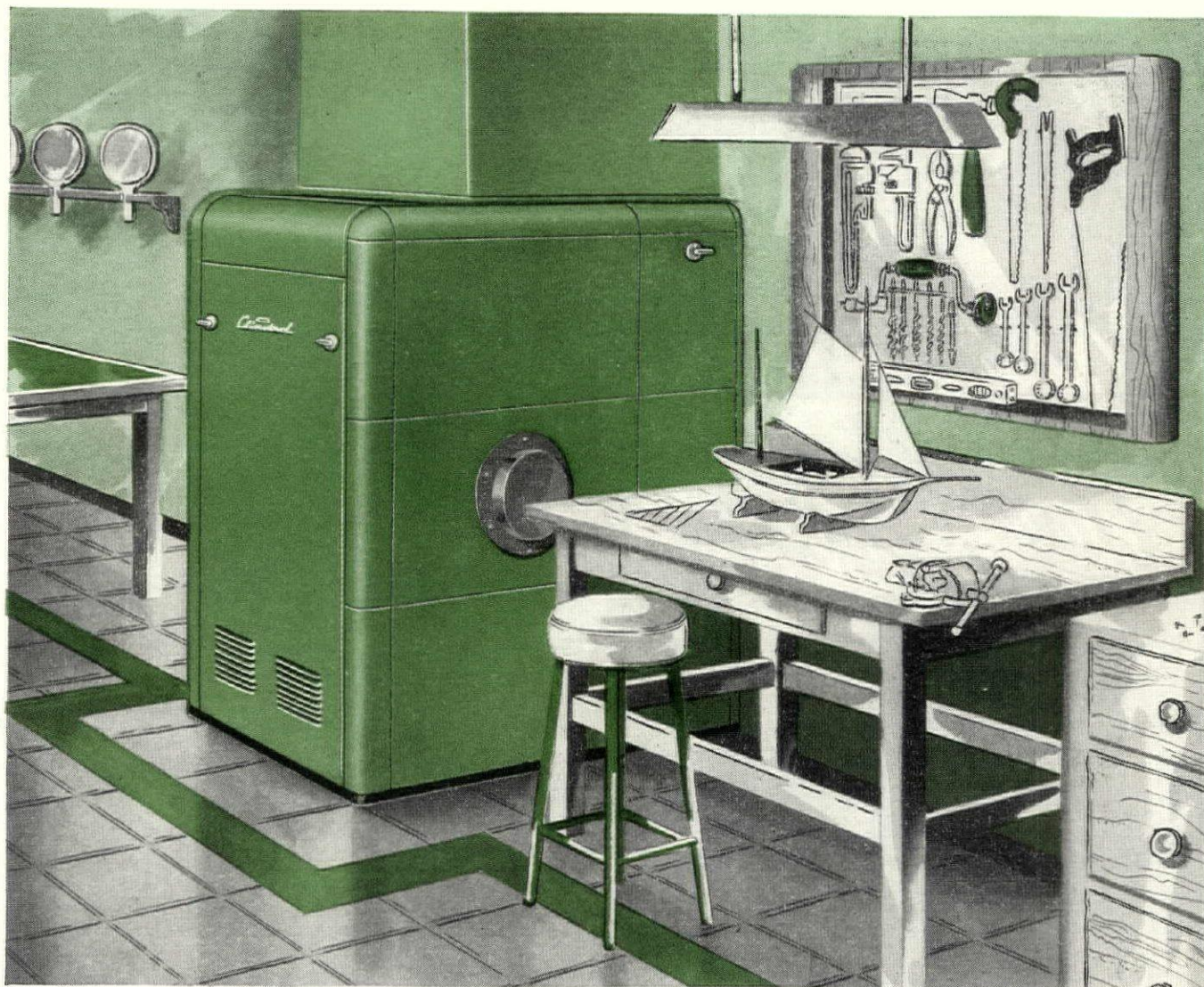
Charles L. Ornstein, Chairman

The World's largest Exposition devoted to the requirements of Hotels, Restaurants, Hospitals, Clubs, Institutions, Steamships, Airlines, Railroads, Caterers and similar allied interests.

Arthur L. Lee, General Manager, National Hotel Exposition, 221 W. 57th Street, New York 19, N. Y.

**NATIONAL
HOTEL
EXPOSITION
NOV. 11-14**

GRAND CENTRAL PALACE



B-31

“Climatrol” means “Climate Control for Comfortable Living”

... and that's something the home owner always appreciates after he builds or buys a home

You win the lasting good will of home owners when you provide Climatrol's *True Indoor Comfort*. Now they thank your good judgment for the immediate enjoyment of today's highest standards of indoor comfort. Later, they will appreciate your forethought in selecting an original installation to which future developments can be added easily.

True indoor comfort depends on the condition of the air in the home. Climatrol treats and handles air to guarantee the basic comfort benefits.

There is a Climatrol unit to fit the needs of every home—old or new—of every size, type, and price range. You can depend upon Climatrol — its performance is assured by 89 years specialized experience in providing home comfort. It pays to install Climatrol on your jobs.

Write for bulletins.

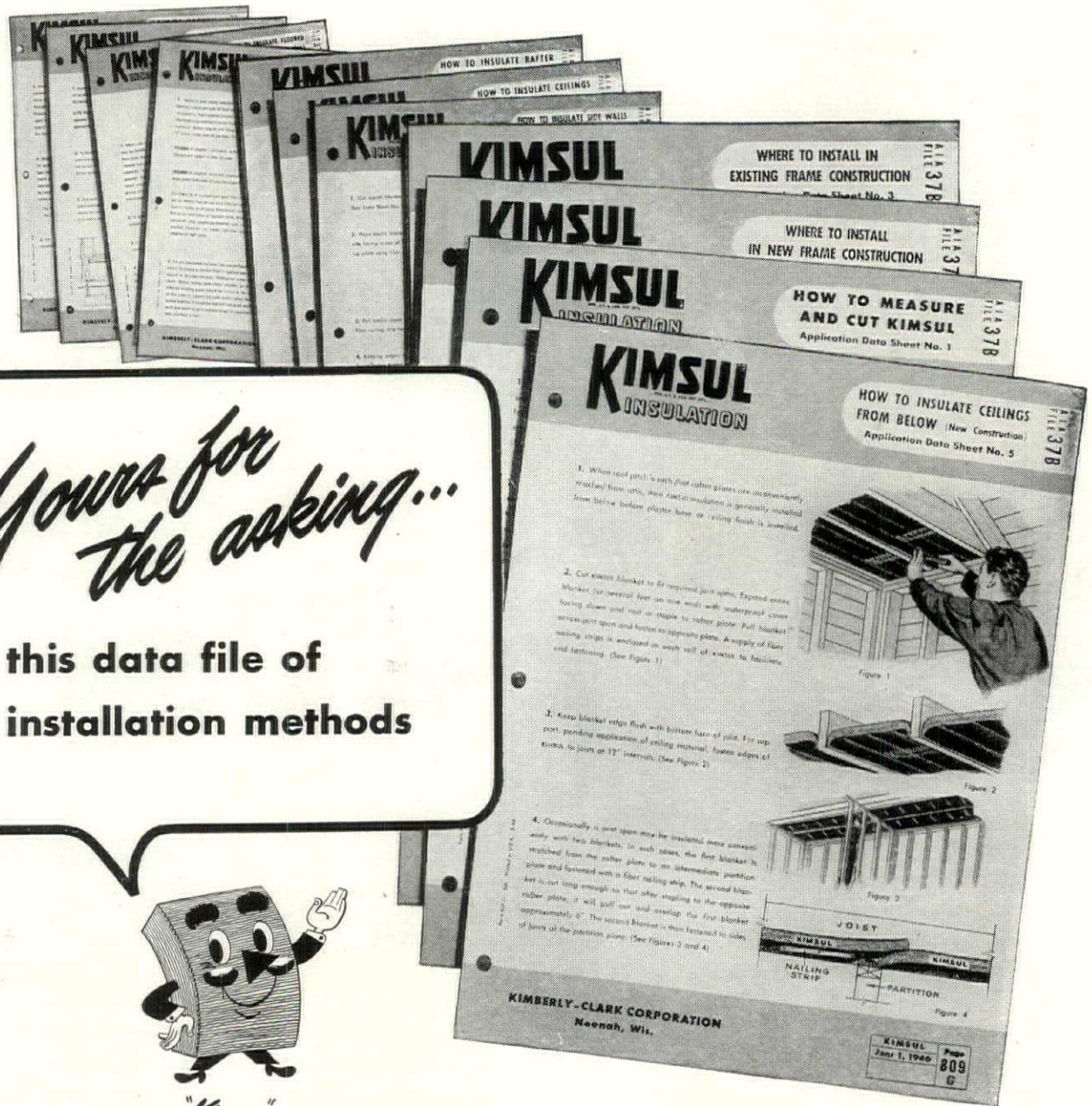
L. J. Mueller Furnace Co.

2001 W. Oklahoma Avenue

• Milwaukee 7, Wisconsin

MUELLER
Climatrol

REG. U. S. PAT. OFF.



Yours for the asking...

this data file of installation methods



It's yours now . . . a tried and proven insulation working tool designed to save you money. It's practical—a file of installation methods that make insulation jobs easier to figure . . . faster to do . . . and far more profitable. It's tested. The KIMSUL* Application Data File has been developed for you by KIMSUL engineers and proved in practice on both new and existing construction by thousands of architects and builders.

Mail the coupon today for your free copy of the KIMSUL Application Data File. And for complete information on KIMSUL, one of the most effective—and most easily applied—insulations ever developed.

We are producing all the KIMSUL Insulation we possibly can, but, due to the great demand, your dealer may have some difficulty in supplying your requirements as promptly as usual.



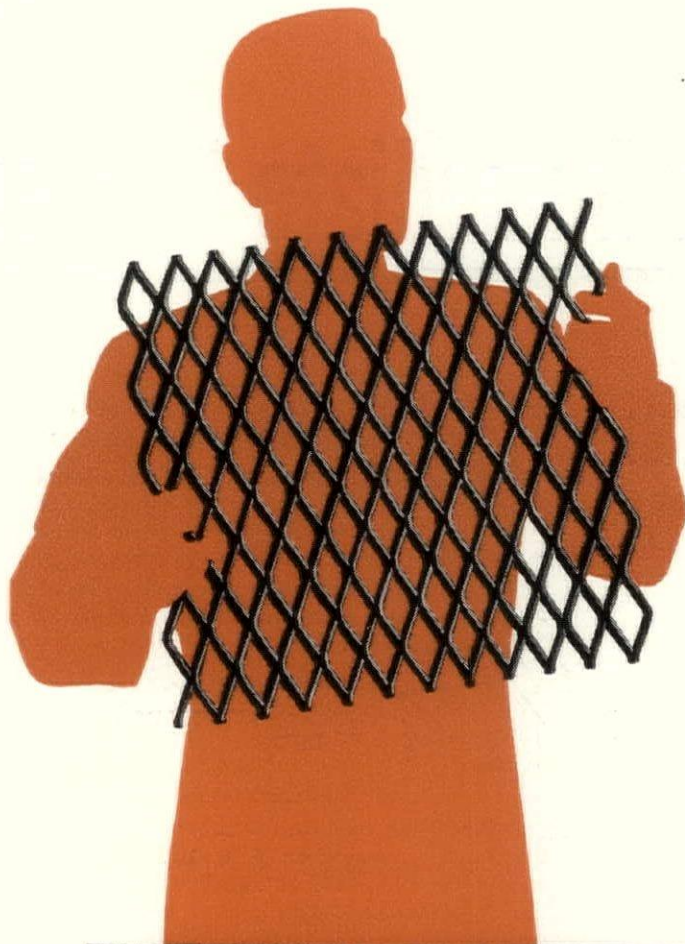
*KIMSUL (trademark) means Kimberly-Clark Insulation

Kimberly-Clark Corporation
KIMSUL Division, Neenah, Wisconsin

AF-1046

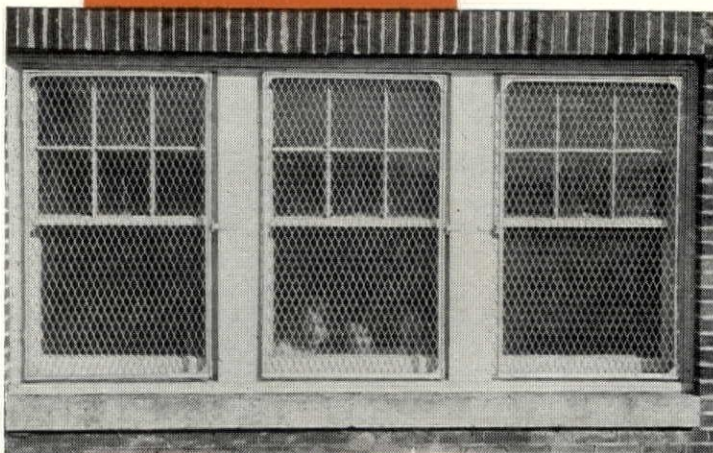
Please send at once FREE Application Data File and full technical information on many-layer KIMSUL Insulation.

Name _____
 Firm _____
 Address _____
 City, Zone, State _____

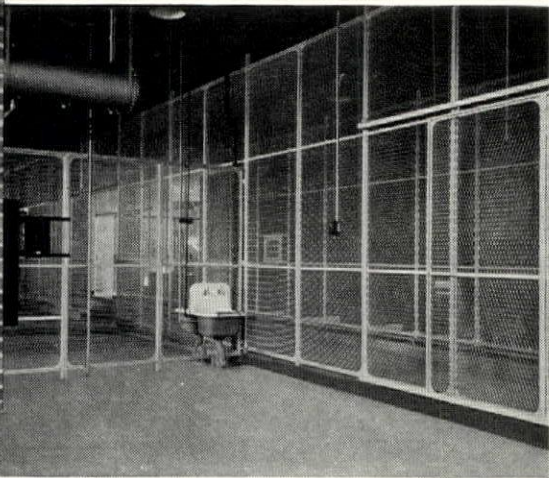


ARE YOU THE MAN in your office who should know about **WHEELING EXPANDED METAL?**

EVERY day more and more architectural problems are solved with Wheeling Expanded Metal. This interestingly textured construction metal, stronger than steel sheet of the same weight, can be easily formed for hundreds of architectural uses, partitions, cages, grilles, guards, decorative designs, and in heavier grades, sky-walks, stair treads, etc. It is light in weight, strong, allows free air circulation, visibility. Many standard fittings are available to keep down costs. Comes in a wide variety of weights and mesh sizes. Write us for further information.



GUARDS windows, doors, skylights, elevators, machinery, etc. Easily formed to fit installations of all kinds.



VENTILATES lockers, partitions, grilles, shelving. Admits both light and air. Sanitary, easy to clean, protective.

BUILDS weather-proof sky-walks, fire escapes, non-slip floors, and stairways, draining floors, etc.



WHEELING CORRUGATING COMPANY, WHEELING, W. VA.

ATLANTA • BOSTON • BUFFALO • CHICAGO • CLEVELAND • COLUMBUS • DETROIT • KANSAS CITY • LOUISVILLE
MINNEAPOLIS • NEW ORLEANS • NEW YORK • PHILADELPHIA • PITTSBURGH • RICHMOND • ST. LOUIS



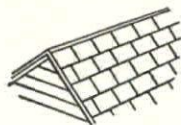
Now Ready for Immediate Delivery...

For All Types of Houses... For Farm, Commercial and Industrial Buildings



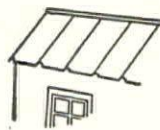
REYNOLDS LIFETIME ALUMINUM CLAPBOARD SIDING

A sensational and original development of Reynolds engineering! Each clapboard sets firmly into the locking flange of the clapboard beneath, so that all nailing is completely covered! .032 gauge, 8 and 12-foot lengths, exposed clapboard surface 8". Special Starter Strip, Butt Joints and Corner Finishing Caps. Makes a beautiful Colonial sidewall when painted—or may be left unpainted. Either way, the inside aluminum surface provides efficient insulation.



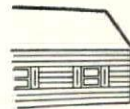
REYNOLDS LIFETIME ALUMINUM SHINGLES

Soundly engineered shingles of .027 gauge aluminum, with firm and watertight interlocking flanges. Nails are completely covered. Coverage, 8" x 14½". Shadow line, ¼". Accessories include special Eave Starter, Ridge Cap, Gable End Cap, Hip Cap and Valley. Combining beauty with efficiency and lifetime durability, this roofing is perfect for any house.



REYNOLDS LIFETIME ALUMINUM "SNAP-SEAL" ROOFING

A new and expertly engineered product, uniform and handsome in appearance, with a permanent, watertight interlock between sheets. All nails completely covered. Supplied with special Eave Starter, End Starter, End Wall Flashing and Gambrel Joint, as well as Ridge Roll and Formed Valley. 6, 8, 10 and 12-foot lengths, 24" coverage. 6-foot sheets weigh only 5½ pounds!



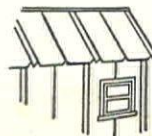
REYNOLDS LIFETIME ALUMINUM WEATHERBOARD SIDING

.027 gauge solid aluminum sheet, crimped in simulation of clapboard—which effect can be enhanced by painting. Supplied in 6, 8, 10 and 12-foot lengths, 24" coverage, exposed "clapboard" surface 4". Easily erected in horizontal strips, 12 feet weighing 11 lbs.



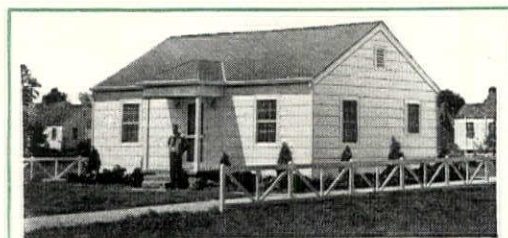
REYNOLDS LIFETIME ALUMINUM CORRUGATED ROOFING AND SIDING

.027 gauge aluminum sheet in either 2½" x ½" or 1¼" x ¼" corrugations. 6, 8, 10 and 12-foot lengths, covering width 24". Easily handled—even the 12-foot length weighs only 11 lbs.! Makes a structurally strong siding and roofing. Supplied with Ridge Roll, Formed Valley and Roll Flashing.



REYNOLDS LIFETIME ALUMINUM 5-V CRIMP ROOFING AND SIDING

Distinguished by two paired "V" crimps down each side, with one crimp down the center for extra structural strength, this .027 gauge roofing and siding is superior in appearance and efficiency. Weight is less than half a pound per square foot. 6, 8, 10 and 12-foot lengths, covering width 24". Accessories include Ridge Roll, Formed Valley and Roll Flashing.



Aluminum requires no protective surface coating. However, it may be painted for decorative purposes, as in this house constructed with Reynolds Lifetime Aluminum Building Products.

REYNOLDS LIFETIME ALUMINUM BUILDING PRODUCTS

THE building industry had a right to expect that out of wartime experience would come new, better, *permanent* building products in time to meet America's critical shortage. Reynolds answers that call with a great new line of aluminum building products... soundly engineered... already being delivered in tremendous quantities... already going up in America's most modern homes!

You know the advantages of aluminum... fire-proof, rust-proof, impervious to rot, vermin and termites... these mean safety and lifetime durability, with low maintenance cost. One-half to one-third the weight of most comparable building materials, yet structurally strong... that means ease of handling, economy in shipping, a structure firmly built. And you can figure for yourself the insulation value of specific installations... knowing that aluminum surfaces

reflect 95% of all radiant heat, inward in winter, outward in summer.

This is the beginning of a new era in building. Those who now sponsor Reynolds Lifetime Aluminum Building Products will reap the rewards of enterprise. For as these materials now rise on city lots and farms and the sites of industry, they mean far more than a solution to today's problem. They stand as models for the building industry of tomorrow!

Distribution is through established building trade channels. Contact your supply source for full information.

IF YOU SEE RUST
YOU KNOW IT'S NOT
ALUMINUM



REYNOLDS
Lifetime
BUILDING PRODUCTS

REYNOLDS METALS COMPANY

BUILDING PRODUCTS DIVISION

LOUISVILLE 1, KENTUCKY

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 reputations merit confidence. This FORUM does.



St. Patrick's Cathedral restoration. George A. Fuller Company, New York, N. Y., General Contractors. Maginnis and Walsh, Boston, Mass., Architects.

GEORGIA *Crystalline* MARBLE

Selected for enduring beauty

The selection of Georgia Marble for extensive replacement and repair work on St. Patrick's Cathedral is another tribute to the versatility of this time-tested construction material.

Georgia Marble—"the marble with the sparkling crystal"—is admirably adaptable to innumerable projects—from venerable cathedrals to modern corner stores. It can be supplied in thin veneers, and it does not require painting on the back. For complete service and information, write the nearest sales and service office listed below.

THE GEORGIA MARBLE COMPANY, Tate, Georgia

SALES AND SERVICE OFFICES:

Bona Allen Building ATLANTA 3, GA.	300 No. Beacon Street BRIGHTON 35, MASS.	Bond Building WASHINGTON 5, D. C.
419—4th Avenue NEW YORK 16, N. Y.	1256 Commercial Trust Building PHILADELPHIA 2, PA.	1570 Hanna Building CLEVELAND 15, OHIO

Aetna Steel Products Corporation.....	1
Air Reduction	1
Airtemp (Division of Chrysler Corporation).....	2
Aluminum Company of America.....	59,
American Brass Company, The.....	1
American Flange & Manufacturing Co., Inc.....	1
American Gas Association	72,
American Hot Dip Galvanizers Association, Inc., The.....	1
American Radiator & Standard Sanitary Corporation.....	1
American Rolling Mill Company, The.....	1
American Roof Truss Co.....	1
American Sanitary Partition Company, Inc.....	1
Ampro Corporation	1
Anchor Post Products, Inc.....	1
Andersen Corporation	1
Anemostat Corp. of America.....	1
Art Metal Co., The.....	1
B & T Metals Company, The.....	1
Bendix Home Appliances, Inc.....	1
Bigelow-Sanford Carpet Co., Inc.....	1
Bird and Son, Inc.....	44, 1
Bohn Aluminum and Brass Corporation.....	1
Borden Company, The (Casein Division).....	1
Bradley Washfountain Co.....	1
Briggs Mfg. Company.....	1
Bruce Co., E. L.....	1
Brunswick-Balke-Collender Company, The.....	80,
Cabot, Samuel, Inc.....	1
Carrier Corp.	1
Casein Company of America (Div. of The Borden Co.).....	1
Ceco Steel Products Corporation.....	18,
Celotex Corporation, The.....	Cover
Chamberlin Company of America.....	1
Chase Brass & Copper Co., Inc.....	1
Curtis Companies	1
Dahlstrom Metallic Door Company.....	1
Day-Brite Lighting, Inc.....	1
Defoe Shipbuilding Company.....	1
Dow Chemical Company, The.....	1
Dunbar Furniture Mfg. Co.....	1
Dunham, C. A., Co., The.....	1
Dwyer Products Corporation.....	1
Eagle-Picher Lead Company, The.....	1
Edison General Electric Appliance Company, Inc.....	1
Electromode Corporation	1
Elevator Safety Corporation.....	1
Eljer Co.	Cover
Essex Wire Corp. (Paranite Wire & Cable Div.).....	1
Fiat Metal Manufacturing Company.....	16
Fir Door Institute.....	16
Firestone	7
Flintkote Company, The.....	5
Frigidaire Division (General Motors Corp.).....	16
General Electric Company.....	57, 60, 61, 151, 177, 20
Georgia Marble Company, The.....	21
General Luminescent Corporation.....	19
General Motors Corp. (Frigidaire Division).....	16
Great Lakes Steel Corporation (Stran-Steel Division).....	5
Guth, Edwin F., Company, The.....	4
Handy & Harman	6
Homasote Company	2
Hood Rubber Co.....	7
House & Garden.....	19
Imperial Brass Company.....	2
Insulite Company, The.....	5
International Nickel Company, The.....	5
Investors Syndicate, Inc.....	1
Johns-Manville	Bet. 32 & 3
Johnson Service Company.....	19
Kawneer Company, The.....	3
Keasbey & Mattison Company.....	5
Kelvinator	20
Kennedy, David E., Inc.....	Opp. 64, 16
Kewanee Boiler Corporation.....	17
Kimberly-Clark Corporation	25, 21
Kinnear Mfg. Co., The.....	2
Kitchen Maid Corp., The.....	1
Koppers Company	3

ALPHABETIC INDEX

Aacledale Steel Company.....	192
Averne Originals	207
Abbey-Owens-Ford Glass Co.....	27
Aquidometer Corp., The.....	196
Louisville Cement Company, Inc.....	191
Ajestic Company, The.....	196
Marsh Wall Products, Inc.....	155
McKinney Manufacturing Company.....	16
Mengel Company, Inc., The.....	203
Milcor Steel Company.....	179
Miller Company, The.....	29
Minwax Company, Inc.....	40
Miracle Adhesives Corp.....	78
Moline Manufacturing Company.....	71
Monroe, Lederer & Taussig, Inc.....	204
Mueller, L. J., Furnace Company.....	209
National Chemical & Manufacturing Co.....	20
National Cotton Council of America.....	204
National Door Manufacturers' Association.....	162
National Gypsum Company.....	17
National Hotel Exposition.....	208
National Life Insurance Company, The.....	163
Nelson, Herman Co.....	90
Norfolk and Western Railway.....	89
New Castle Products.....	204
NuTone, Inc.....	Bet. 64 & 65
O'Brien Varnish Co.....	208
Otis Elevator Company.....	167
Overhead Door Corporation.....	Cover IV
Owens-Corning Fiberglas Corporation.....	87
Owens-Illinois Glass Company.....	181
Paraffine Companies, Inc., The.....	170
Paranite Wire & Cable Co. (Div. of Essex Wire Corp.).....	48
Parmerby Injector Company.....	Opp. 33
Pittsburgh Corning Corporation.....	64
Pittsburgh Plate Glass Company.....	85, Opp. 160, 164, 165
Polhemus, P. B., Co., Inc.....	68
Ponderosa Pine Woodwork.....	161
Pratt & Lambert, Inc.....	182
Prima Products.....	47
Reynolds Metals Company.....	Opp. 161, 212, 213
Reznor Manufacturing Co.....	56
Rittenhouse Company, Inc., The A. E.....	158
Robertson, H. H., Company.....	Opp. 32, 52
Roddis Lumber & Veneer Co.....	148
Rowe Manufacturing Co.....	147
Ruberoid Co., The.....	46
Saint Paul Corrugating Co.....	208
Saturday Evening Post, The.....	156
Savel, Inc.....	67, 172, 173
Square D Company.....	199
Smith Corporation, A. O.....	Bet. 64 & 65
Sonneborn Sons, Inc., L.....	56
Soss Manufacturing Company.....	70
Tran-Steel Division (Great Lakes Steel Corporation).....	51
Structural Clay Products Institute.....	79
Pennsylvania Electric Products, Inc.....	171
Taco Heaters, Inc.....	52
Thrush, H. A., & Co.....	178
Tile-Tex Company, The.....	88
Time.....	206
Trane Company, The.....	187
Trumbull Electric Mfg. Co.....	215
Unexcelled Chemical Corporation.....	196
United States Gypsum Co.....	37
United States Plywood Corporation.....	66, 188, 203
U. S. Prefab Corporation.....	78
United States Rubber Company.....	22
U. S. Savings Bonds.....	198
United Wallpaper, Inc.....	Opp. 65
Upson Company, The.....	4
Walworth Company.....	45
Waterfilm Boilers, Inc.....	62
Weis, Henry, Mfg. Co., Inc.....	190
Wendel, Rudolf, Inc.....	31
Werner, R. D., Co., Inc.....	32
Weyerhaeuser Sales Company.....	2, 3
Wheeling Corrugating Co.....	211
White-Rodgers Electric Co.....	200
Whiting Stoker Sales Co.....	154
William's Methods.....	24
Worthington Pump and Machinery Corporation.....	216
York Shipley, Inc.....	76

NEW .. TO THE ELECTRICAL INDUSTRY
 .. IN *Speed* OF TRIPPING
 .. IN COMPACT .. STREAMLINE DESIGN

**MAGNETIC *plus* THERMAL
 BRANCH CIRCUIT PROTECTION**

**LOW COST CIRCUIT
 BREAKER OPERATION**



TRUMBULL ELECTRIC

MO-4 MULTIBREAKER

Four Circuits..... or less

Countless thousands of locations require a sentry to guard 4 single phase circuits or less . . . for which duty Trumbull recommends the MO-4 Multibreaker . . . NEW to the Electrical Industry . . . an improvement of the MO-2, tested during war years in millions of circuits.

It is low in cost yet has both automatic overcurrent and short circuit protection for branch circuits, in the form of a Circuit Breaker with combined thermal and magnetic characteristics . . . for the greatest speed in tripping.

The MO-4 has a wide range of application in homes, garages, apartments, small stores, and is ideal for camp and farm installations. Specify or order this NEW TRUMBULL MO-4.

**30 Ampere
 FOR NEW CODE
 WIRE RATINGS
 (Nov. 1, 1946)**

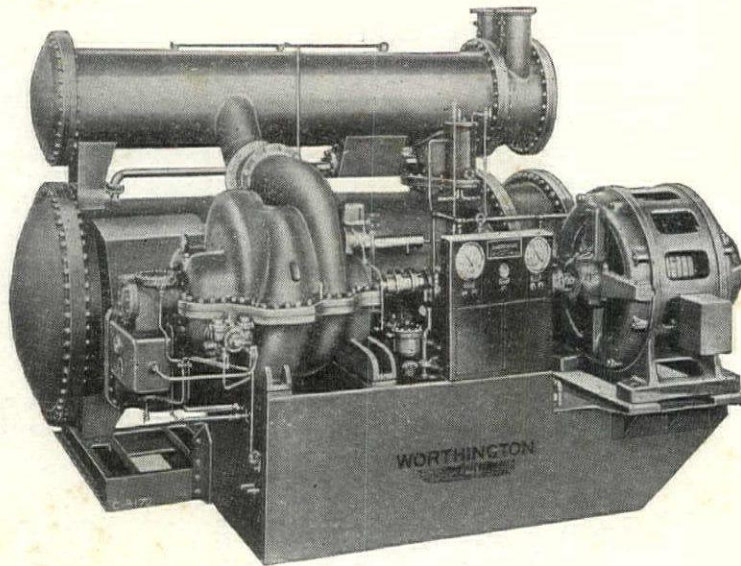
IN PRODUCTION NOV. 1 .. ORDER NOW!

THE TRUMBULL ELECTRIC MFG. CO. • PLAINVILLE, CONN.
 OTHER FACTORIES AT NORWOOD, O. — SEATTLE, SAN FRANCISCO, LOS ANGELES

WORTHINGTON

Air Conditioning and Refrigeration Report

Worthington Pump & Machinery Corporation, Harrison, New Jersey



WORTHINGTON CENTRIFUGAL REFRIGERATION SERVES INDUSTRY IN MANY IMPORTANT WAYS

The applications of Worthington Centrifugal Refrigeration are many and varied. Chilling water for air conditioning; chilling water or brine for industrial processes; cooling chemical and other liquids; maintaining constant temperatures in testing rooms — these are but a few of its commoner uses. In addition, its large-volume compressors are well suited for producing ultra-low temperatures for technical research.

A system consists essentially of compressor, condenser and evaporator. Worthington manufactures these in their entirety, from foundry to finished product. For steam-turbine-driven units, Worthington also makes the turbine, as well as many

other auxiliaries vital to a complete refrigeration plant. Rarely does the purchaser have such an opportunity to fix responsibility for a system's over-all operation on a single manufacturer.

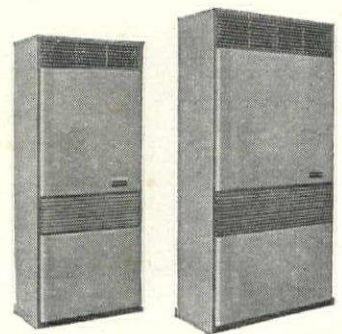
Worthington Centrifugal Refrigeration Systems, in capacities ranging from 150 to 2600 tons, combine minimum floor space requirements with maximum accessibility. Their rugged construction, advanced design and outstanding efficiency assure many years of dependable, low-cost refrigeration.

Worthington Pump and Machinery Corporation, Harrison, N. J. Specialists in air conditioning and refrigeration for more than 50 years.



Noted Western Hotel Adds Worthington Air Conditioning

The popular Adams Hotel in Phoenix, Arizona, follows today's trend by installing a Worthington centrifugal refrigeration unit for air conditioning. In assuring its guests of healthful, comfortable air the year round, this modern hotel joins a large and growing list of famous hostleries now using Worthington equipment.



"Packaged Air Conditioning" for Smaller Business Spaces

Worthington Self-Contained Air Conditioners, Model SYC, are ideal for smaller stores, shops, offices. Two sizes: 3-ton and 5-ton refrigeration capacities. For year 'round supply of fresh, clean invigorating air — cooled in summer and heated in winter. A competitive necessity . . . and another good reason why *there's more worth in Worthington.*

Look To Worthington for "Integrated" Systems

As makers of so many of the "inner vitals" of an air-conditioning or refrigeration system — compressors, condensers, pumps, turbines, valves, fittings, etc. — Worthington is your logical source for an "integrated" system to give you efficient, economical, trouble-free service. Your nearby Worthington Distributor will gladly supply full details.



A6-14

The Martha Washington

by ELJER

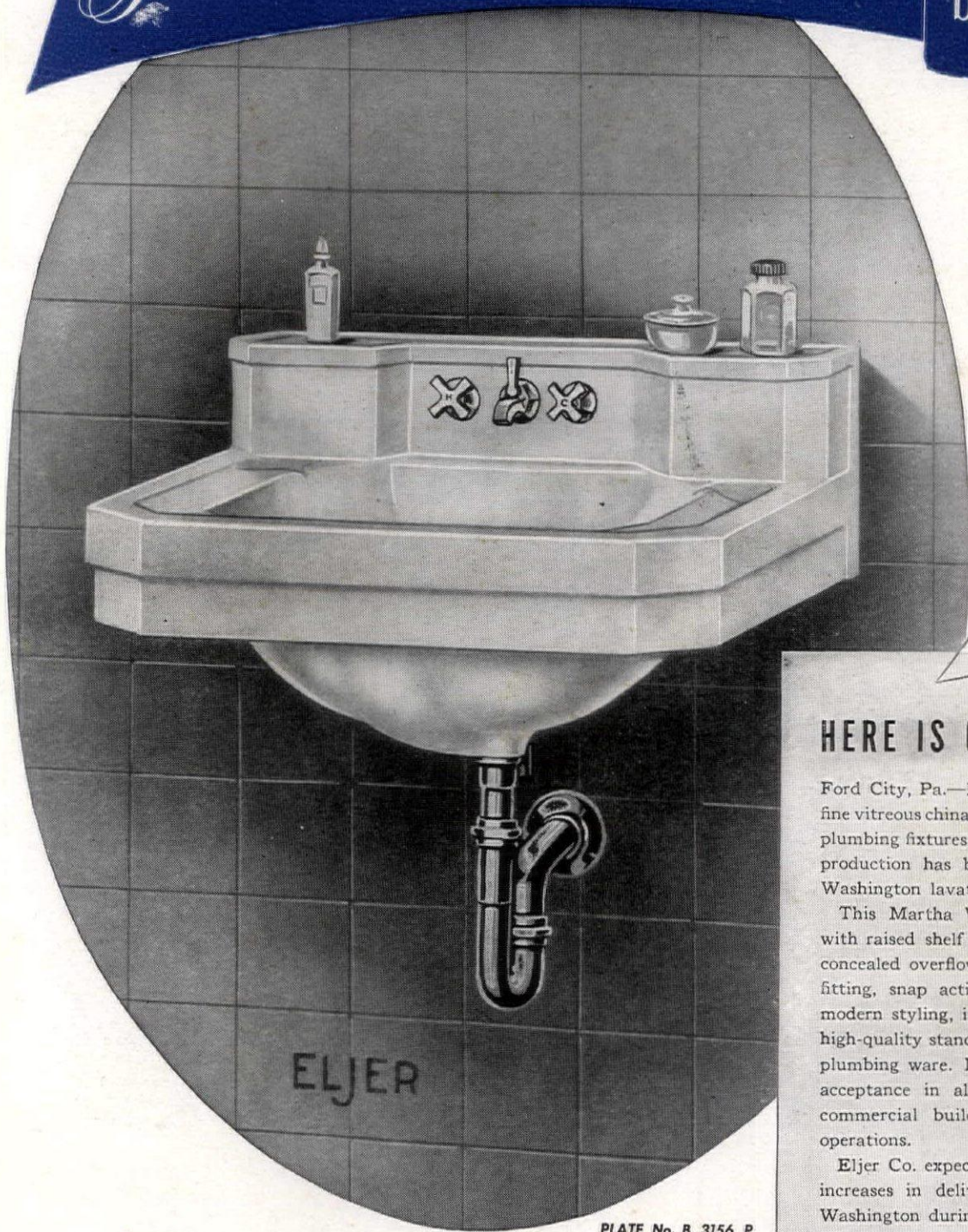


PLATE No. B 3156 P

Remember: Adequate housing will eventually mean at least two bathrooms in every home.

HERE IS GOOD NEWS!

Ford City, Pa.—Eljer Co., producers of fine vitreous china and enameled cast-iron plumbing fixtures, today announced that production has begun on the Martha Washington lavatory.

This Martha Washington 20" x 18" with raised shelf back, anti-splash rim, concealed overflow, combination supply fitting, snap action pop-up waste and modern styling, is engineered to Eljer's high-quality standards in vitreous china plumbing ware. It will find immediate acceptance in all types of home and commercial building and remodeling operations.

Eljer Co. expects to achieve constant increases in deliveries of the Martha Washington during the coming months. Eljer General Offices are at Ford City, Pa.

KEEP YOUR WAR BONDS!

ELJER CO. . . . FACTORIES AT

FORD CITY, PA. . SALEM, OHIO . LOS ANGELES, CALIF.

SINCE 1907 MAKERS OF FINE PLUMBING FIXTURES

Service...

Filed in Stack

AND MORE

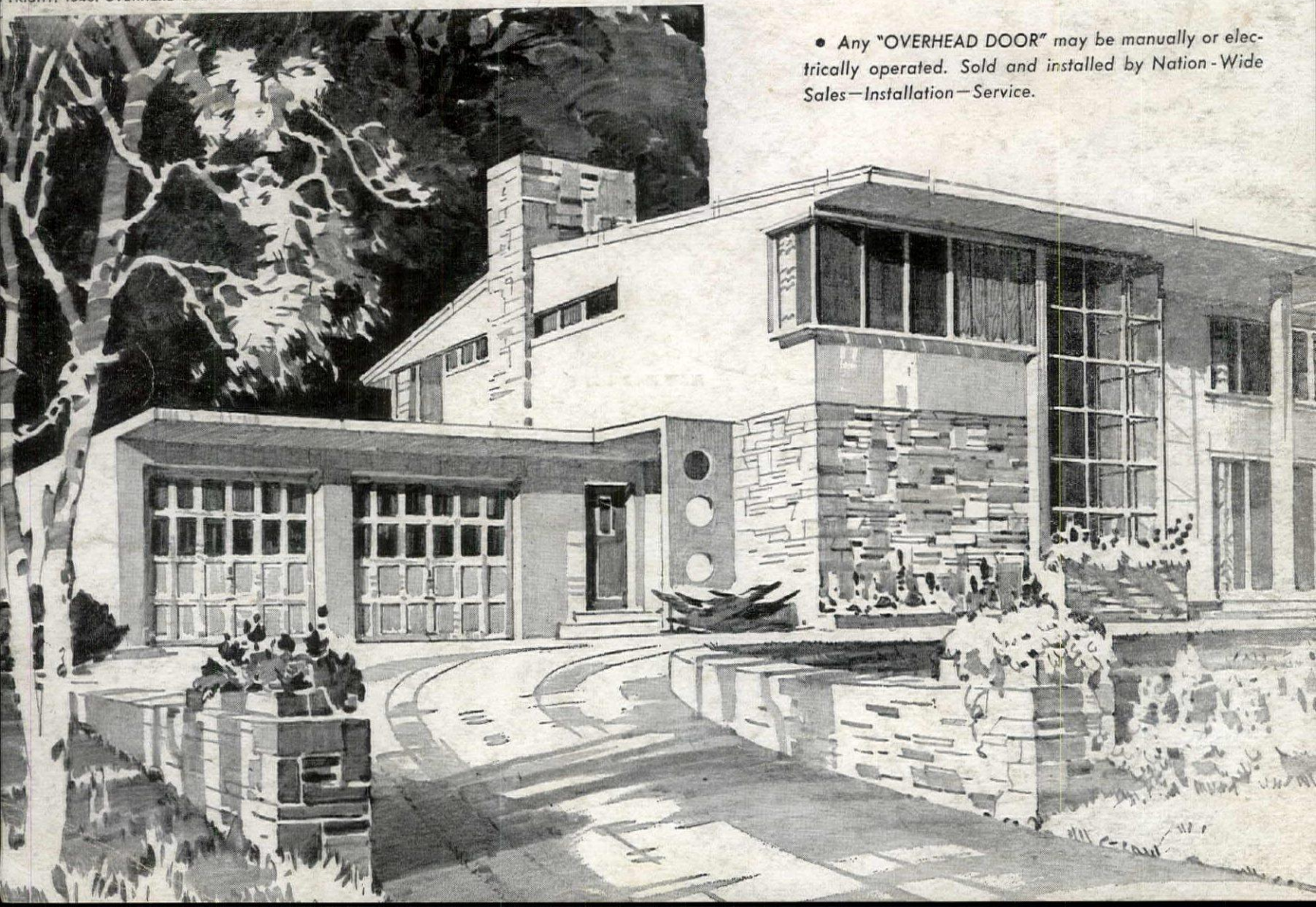
● Because quality construction is basic in its manufacture, users of The "OVERHEAD DOOR" are assured continued ease of operation and dependable performance at all times in all weathers. Beyond this there is satisfaction in the handsome appearance this expertly engineered door presents, for it blends with any style of architecture. The "OVERHEAD DOOR" with the Miracle Wedge, built for residential, commercial and industrial use, is weathertight and tamperproof. It is the door to specify for constantly reliable service — and more.

TRACKS AND HARDWARE
OF SALT SPRAY STEEL

The
"OVERHEAD DOOR"
TRADE MARK
WITH THE
MIRACLE WEDGE

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U.S.A.

COPYRIGHT, 1946, OVERHEAD DOOR CORPORATION



● Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales—Installation—Service.