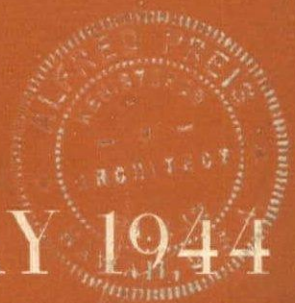
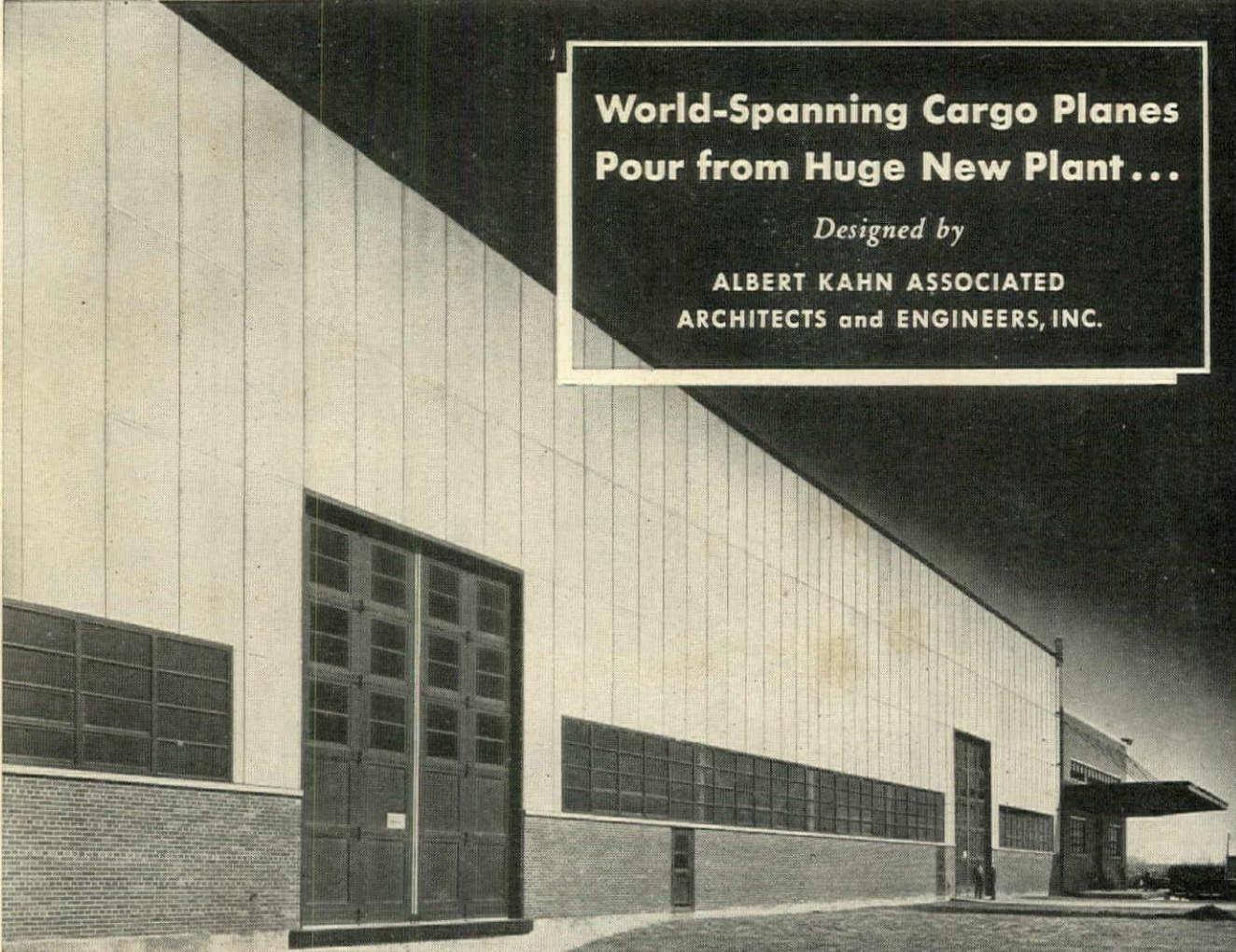


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MAY 1944





**World-Spanning Cargo Planes
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Designed by

**ALBERT KAHN ASSOCIATED
ARCHITECTS and ENGINEERS, INC.**

(Hedrich-Blessing Photo)

67,000 Sq. Ft. of Cemesto Wall Units Used to Speed Plant to Completion

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Cemesto Wall Units in any type of building. A note to us will bring a trained Cemesto representative to your desk.

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INSULATING WALL UNITS

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| | |
|--|----|
| NEWS | 55 |
| FONTANA PROJECT | 61 |
| Another of Henry Kaiser's vast enterprises—the steel town he built and is operating in California. | |
| PLANNING WITH YOU | 69 |
| A survey of the creative efforts of American cities to awaken civic interest in their planning programs. | |
| PREFABRICATION | 71 |
| "Progress in Prefabrication": an exhibit and conference sponsored by the Architectural League of New York. | |
| DENTAL CLINICS | 75 |
| Two offices—one in a private building, designed by Perkins, Wheeler & Will; the other with specially designed equipment, by Elroy Webber. | |
| "BUILT IN USA, 1932-1944" | 81 |
| The first really comprehensive selection of modern American architecture is presented in a current exhibit by the Museum of Modern Art. | |
| HOUSES | 97 |
| A group: one on Cape Cod with radiant heating, one on a California hill, a shooting lodge in the Illinois woods, a beach house at the New Jersey shore. | |
| FORUM OF EVENTS | 4 |
| Mosaics, old and new . . . A new television studio for General Electric . . . Postwar design of the month. | |
| PRODUCTS AND PRACTICE | 12 |
| Postwar wiring must provide ten times the usual amount of power to supply completely electrified work centers, air conditioning, and other advances foreseen by Westinghouse as commonplace in 194X. | |
| BUILDING REPORTER | 16 |
| Technical news . . . new products . . . technical literature. | |
| BOOKS | 26 |
| The Greek Revival in American Architecture . . . Postwar Plans of the United Nations . . . Modern Highways. | |
| LETTERS | 34 |

NEXT MONTH: The Postwar Factory . . . Fresno City Hall . . . An Interview with Abner Ferguson . . . Private Art Gallery . . . House Portfolio . . . Prefabrication . . . Family Behavior.

Since January 1, 1943, TIME, LIFE, FORTUNE and THE ARCHITECTURAL FORUM have been cooperating with the War Production Board on conservation of paper. During the year 1944, these four publications will use 73,000,000 lb. (1,450 freight carloads) less paper than in 1942. In view of the resulting shortage of copies, please share your copy of THE FORUM with friends.

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VOLUME 80—NUMBER FIVE

A VIEW, FOCUSED IN THE LENS OF

FOR TOMORROW'S
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BONDS TODAY

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In this installation, Andersen Casement Window Units are combined with a "picture" window to form a view-framing **WINDOWALL**. Architect: Roy E. J. Olson. For details, consult Sweet's Catalog, or write Andersen direct.

FORUM OF EVENTS



1. BYZANTINE EMPRESS GAZES AGAIN FROM 12TH C. WALL

MOSAICS — revived after eight centuries of decline.

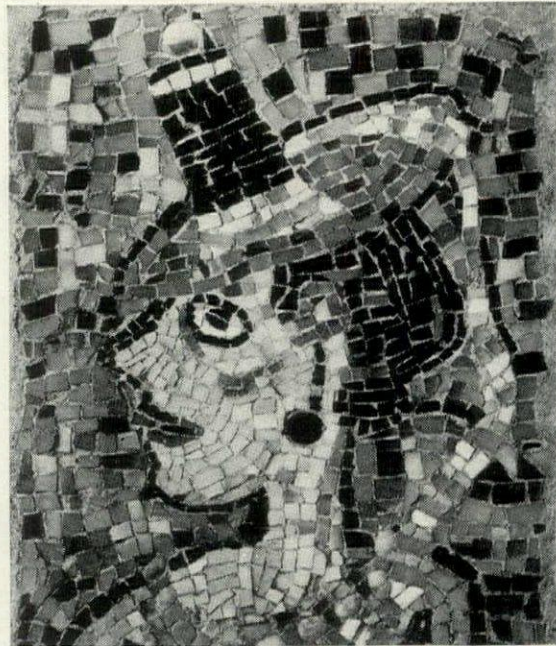
The Metropolitan Museum's exhibition of mosaic restorations at Hagia Sophia in Constantinople may hold the germ of an idea for modern architects. On the 6th-12th century walls of this mosque there occurred one of the happiest meetings of art symbolism and technique in history. "The mosaics are comparable in their importance to the Elgin marbles, the high-water mark of Greek sculpture," according to the *Museum Bulletin*.

But today most people shudder at mosaic, for they have been exposed to the dregs left after eight centuries of deterioration. Now we think only of the efflorescence in subways and behind Park Avenue altars. Most recent mosaics are just copies of bad pictures.

Aside from its symbolic and pictorial use—which in our modern society has little purpose—mosaic has an affinity for modern architecture, where simple lines focus attention on wall surfaces and finishes. As Hildreth Meiere, mosaicist, says: "Time is ripe for what mosaic is best fitted for—texture, a quality such as no flat painted surface has, a relationship to modern planes and angles, a moving quality of finish that has life in it. The little interruptions give light and shade to architecture. Mosaic was needed in the big simple interiors of the Byzantine style, and modern architecture has been moving steadily toward that same sort of decoration."

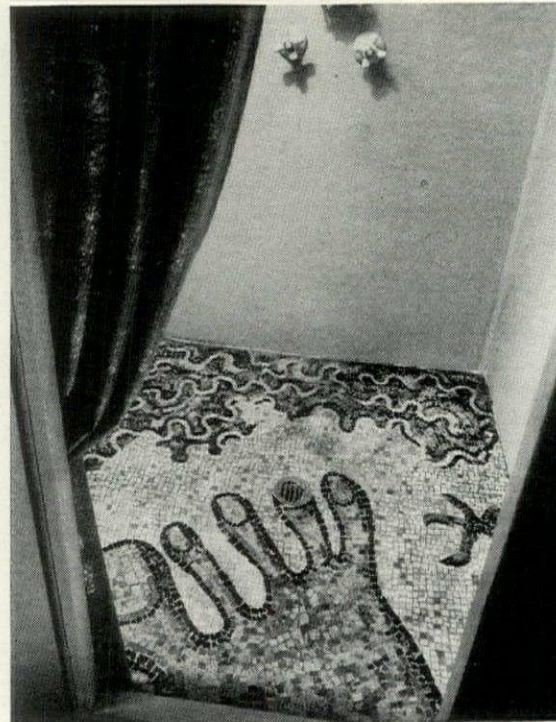
A few modern designers have already laughed some stuffiness out of mosaic, using this sacrosanct medium in places the ancients never dreamed of. Perhaps art and architecture are coming again to their proper place—together.

Photo credits: 1. Metropolitan Museum of Art. 2. Colten Photos. 3. Roger Sturtevant.



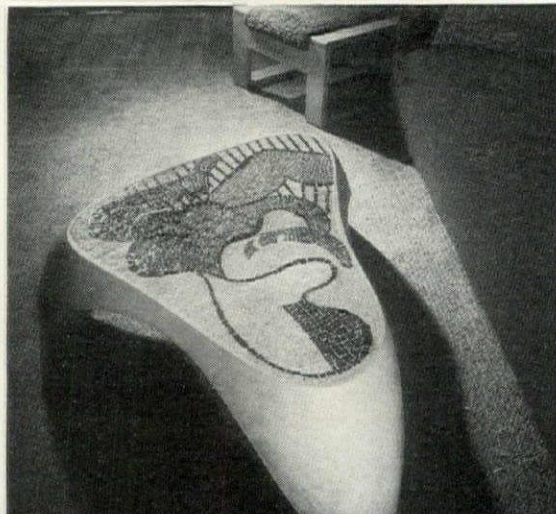
2.

MANHATTAN MODERN: BY MAX SPIVAK ON WPA



3.

JEANNE REYNAL of California executed this shower stall and the coffee table top, with base designed by sculptor Isamu Noguchi of New York City





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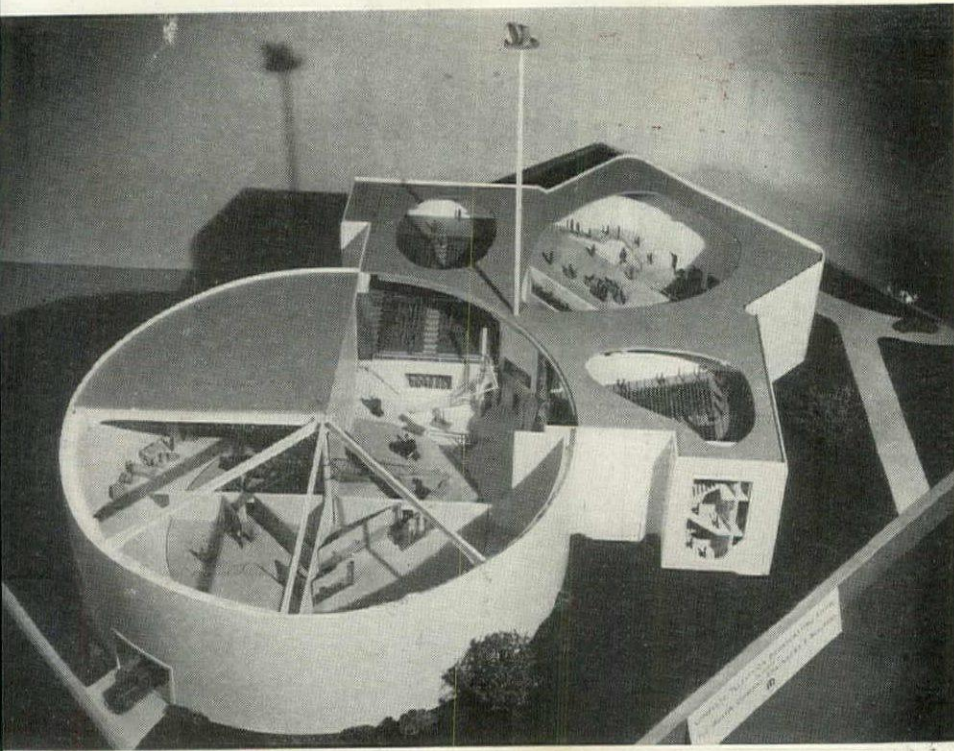
Perhaps the best place of all to go would be to the people who originated that type of application, who developed the decorative grades that made it effective, and whose engineers worked out the means of attaching and applying the material.

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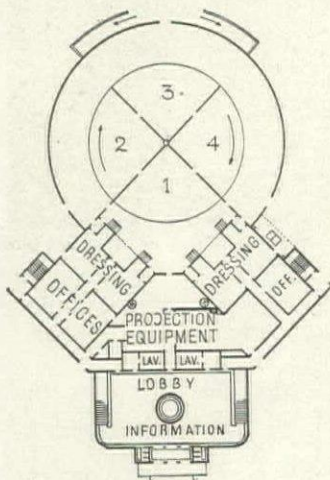


TELEVISION STUDIO

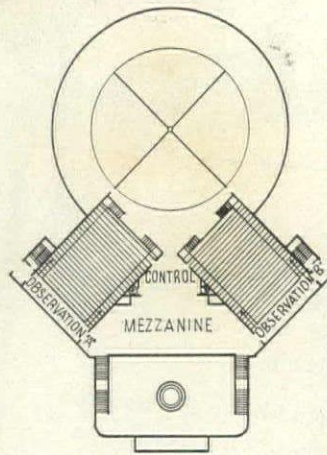
When commercial television becomes a reality it will take up where radio left off. Paralleling years of technical advancement, radio broadcasts have become more and more elaborate, with large orchestras, on-the-spot audiences, public participation programs, etc. Television will incorporate all these features and more. While the two fields have much in common their production problems differ widely. Since neither stage sets nor costly and intricate equipment are needed for radio broadcasting, program presentation is comparatively simple and flexible. Existing theatres have been found adequate with little or no alteration. Equipment is easily duplicated and is, in most cases, portable. Television broadcasting, on the other hand, involves the use of strong lighting, elaborate cameras and scenery. That maximum use be made of each production set-up is vital. A working model for a television theater recently executed for General Electric by the Austin Company recognizes these problems. It features a basic new building design developed around a turntable stage and two separate auditoriums, making possible rapid changes of scene and audience without the duplication of expensive television equipment.

The two seating areas located on either side of the central control room can accommodate several hundred people. They overlook a quadrant of the revolving stage from which all productions emanate. Soundproof curtains across the front of the auditoriums permit alternate or joint use. When the final curtain is drawn in one section spectators may leave and a new audience assemble there without

(Continued on page 132)



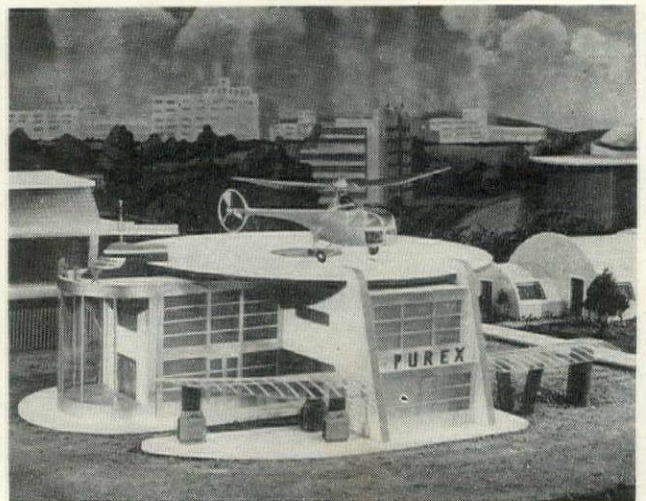
FIRST FLOOR

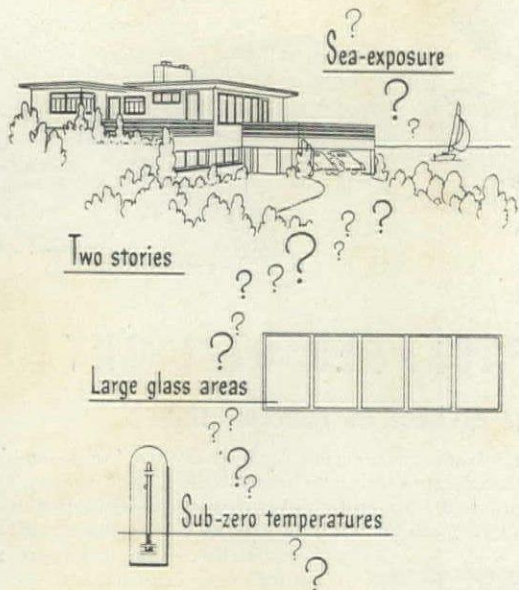


MEZZANINE FLOOR

POSTWAR DESIGN OF THE MONTH

Recently added to an exhausting list of postwar peep-shows is the movie (right), which depicts the forebodings of Martial and Scull, industrial designers. While the idea of a helicopter on every roof is already familiar, their version of the filling-station-to-be has something new. Its Oz-like quality is characterized by the apparent absence of pedestrian access to the roof. The plight of a weary aviator, negotiating a teacup full of gasoline for his next thousand-mile lap presents an interesting study. Wing-like appendages over the pumps indicate that in an emergency the whole service center might take to the air. Among the postwar babies so far presented to the public, this one bears visible traces of a forceps delivery.

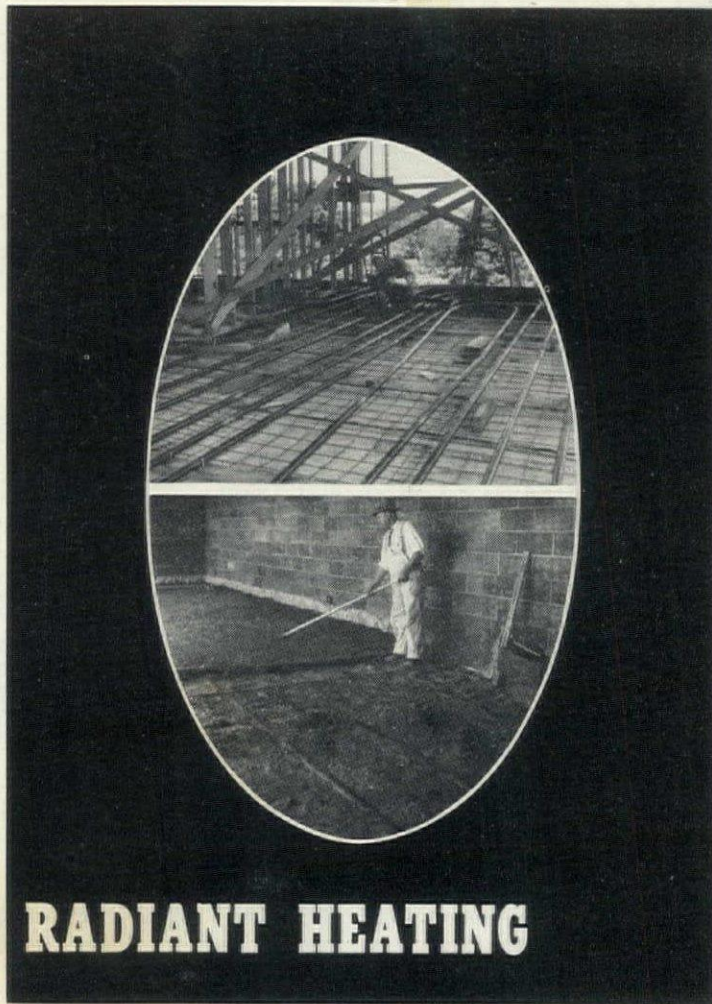




This Architect's Home

answers

these queries on **BYERS RADIANT HEATING**



It comes as a surprise to many architects and engineers to learn how completely almost every question about Byers Radiant Heating is answered by actual user experience. Here is an example that gains in authority because an architect is the owner-occupant.

The home was built by Ernest Gunnar Peterson, on a wind-swept hill overlooking Vineyard Sound, Massachusetts. The lower story is constructed of concrete blocks, and the upper is frame. Glass areas are unusually large. Hot water from an oil-fired boiler is circulated by 4 pumps through Byers Wrought Iron heating coils, laid on a gravel bed on the first floor, and on prefabricated concrete joists on the second. The floors are covered with asphalt tile, and some carpets and throw rugs are used.

Mr. Peterson reported he was "continually amazed" at the low temperature settings necessary for comfort . . . 60° to 62° for the bedrooms, and only 68° in the living room with its large exposed glass areas. The floors were never uncomfortably warm, even at 15°-below outside temperatures . . . and only about 80% of the fuel oil allotment was used last winter. "No other system could heat it so successfully," Mr. Peterson wrote.

The clearing-house of information in the Byers Engineering Service Department covers installations using oil, gas and coal-fired boilers; with wall, floor and ceiling coils; in basementless and basement houses, one and two stories; with concrete, mastic, tile and wood floors; with linoleum, carpet and rug coverings; and under a wide degree of outside tem-

peratures. These records provide a splendid guide for the designer, eliminating experiment and guess-work.

Engineering records, too, eliminate any need for experiment or guess-work in selecting durable and dependable material, for Byers Wrought Iron is a veteran in radiant heating service. It is readily fabricated. It has excellent heat transmission and emissivity. It expands and contracts at practically identical rates with concrete and plaster, which protects against cracking, loss of bond, and noise. And its combination of silica slag fibers and high-purity iron are extremely effective in resisting corrosion.

Our technical bulletin, "Byers Wrought Iron for Radiant Heating Installations," is a compact, complete and interesting treatment of the entire subject. Our Engineering Service Department will gladly answer any detailed questions it does not cover to your satisfaction.

A. M. Byers Company. Established 1864. Offices in Pittsburgh, Boston, New York, Philadelphia, Washington, Chicago, St. Louis, Houston, Seattle, San Francisco.

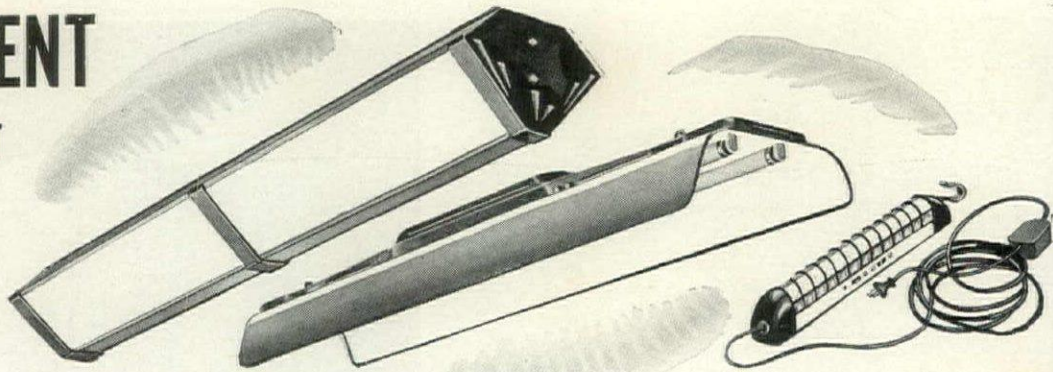
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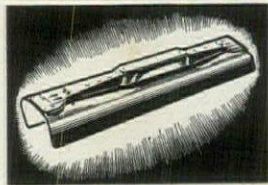
FLUORESCENT AT ITS FINEST



IN COMPLETE PACKAGES OF LIGHT

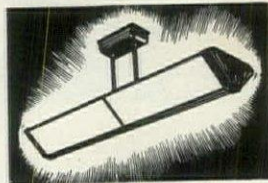
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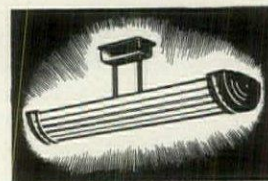


COMPLETE PACKAGES OF COMMERCIAL LIGHT

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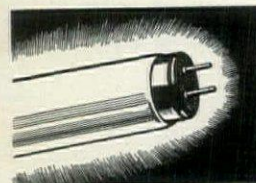
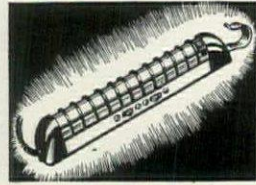


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C-200R Unshielded



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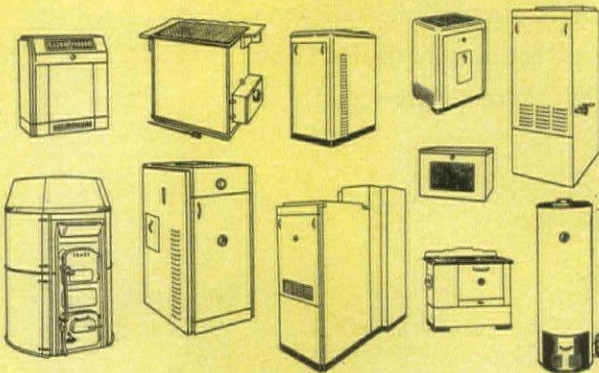
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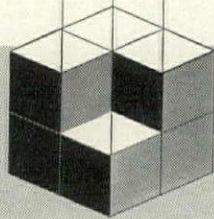


exteriors, and which illustrates the standard shapes and finishes that are available in facing tile. Address Structural Clay Products Institute, 1756 K Street, N. W., Washington 6, D. C.



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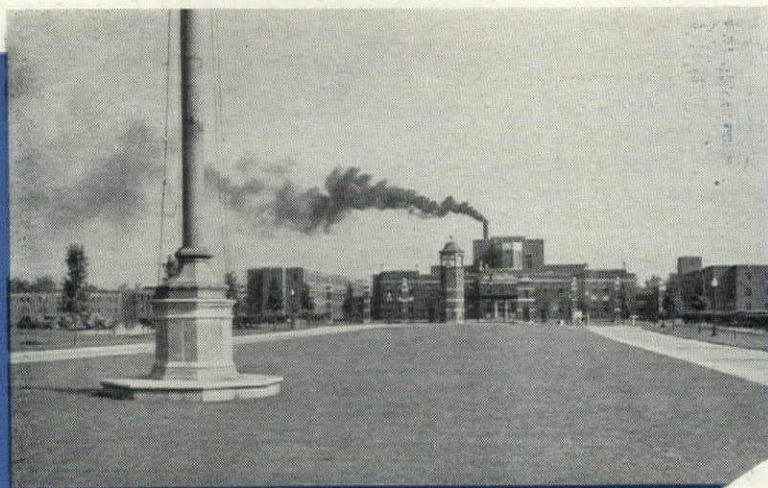
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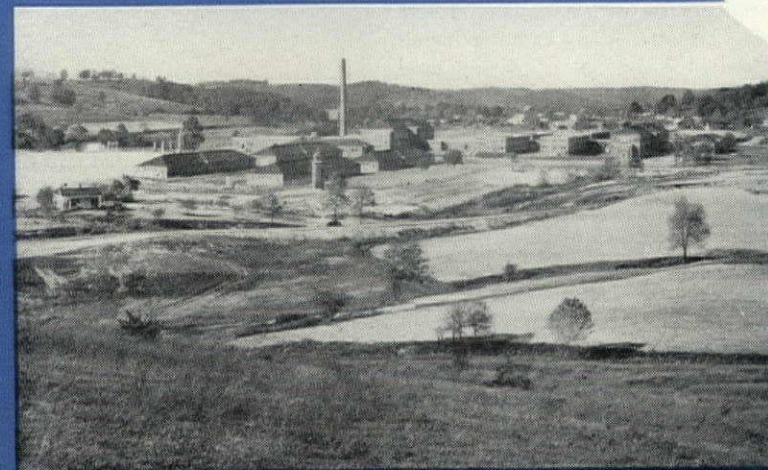
Write for our catalog and our free booklet on residential bathrooms, entitled, "Women Tell Us...". Also see our 8-page catalog in Sweet's.

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Both institutions are equipped with Eljer plumbing fixtures.



PRODUCTS AND PRACTICE

POSTWAR WIRING must provide 10 times the usual amount of power to supply completely electrified work centers, air conditioning, and other advances foreseen by Westinghouse as commonplace in 194X.

With an eye to future appliance sales, Westinghouse engineers have developed a house wiring system which can stand the strain of electricity's gargantuan job in the postwar home. The plan is of particular interest because it diverges so greatly from former conceptions of adequate wiring.

Under stringent restrictions of war, the housewife wistfully wishes she could get her hands on a common electric iron, toaster, refrigerator or range. But while she wishes for the commonplace, she is already dreaming of future wonders. In the never-never land of nylon stockings and no ration points, she wants her own completely modern kitchen, laundry and utility room. She hopes for air-conditioning, new types of lighting, a quick-freeze cabinet, garbage disposal unit, ventilating fan, and stream-lined range, refrigerator, dishwasher and automatic washer. Every day she hears about some new or improved appliance for her dream house.

Usually omitted from these dreams is the matter-of-fact question: how can the electricity for her electrical robots be supplied? Westinghouse, cognizant that postwar sales of electrical equipment depend on an adequate power supply in consumers' homes, has worked out its own solution.

Present wiring systems would be completely unable to carry an increased electrical load, since in 95 per cent of America's homes they are inadequate even for today's appliances. The home-owner's cure-all for insufficient outlets—a five and dime three-way plug and extension cord—wastes electricity and overloads the circuit. Lights dim when heavy equipment is switched on, the toaster is slow, and fuses blow frequently. Although full voltage is delivered, registered, and charged at the meter, it never reaches the appliance because of a voltage drop on overloaded lines.

Replacing a blown fuse with one of greater capacity does not help matters. The original size fuse allows a maximum safe flow of current. Additional current results in overheated wires which often cause permanent injury to the insulation, requiring expensive replacements.

Increased use of electricity in the

past twenty years is responsible for this trouble. In 1925 the average family consumed 398 kw-hrs. Ten years later the amount was nearly doubled, and last year the national average per family exceeded 1,000 kw-hrs. The Westinghouse home of the future suggests a potential consumption of 10,000 kw-hrs. The result of even half this amount on already overloaded circuits would undoubtedly be a complete breakdown.

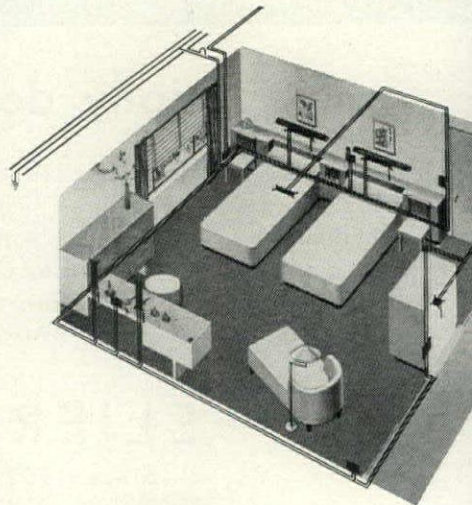
Wiring systems which worked adequately for small amounts of electricity have already been strained just by increased current consumption of individual appliances. A toaster formerly used 500 w. or less, now uses 1,000. Electric irons have increased the same amount, lamps and fixtures which used to consume 40 to 75 w., now use 60 to 300 w.

To architects and builders struggling with WPB restrictions, the Westinghouse wiring system may seem nothing short of fantastic. Under present limitations, service conductors are held to the minimum and large wires necessary to supply an electric range are forbidden except in areas where gas-run equipment cannot be used.

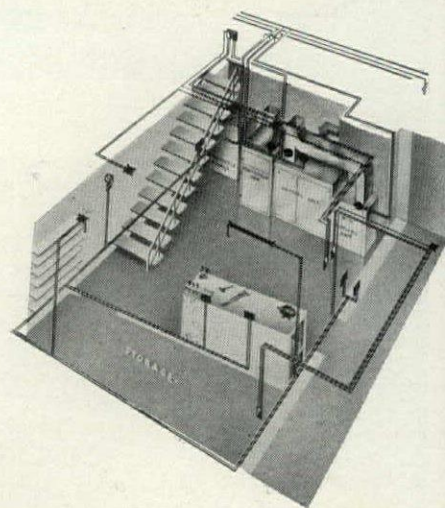
Under the WPB most five-room houses of approximately 1,000 sq. ft. would be allowed only a service conductor of two No. 8 wires, a 50-amp. switch, and two to four branch circuits. An absolute minimum wiring system for an electric range, automatic heating and small appliance service in the same house, would consist of three No. 6 entrance wires with a 60-amp. switch, and five circuits. Many existing homes have only the amount of wiring used in this emergency housing. The Westinghouse plan, however, leaps far ahead of any minimum requirements, providing three No. 4 entrance wires, a 100-amp. switch and the unheard of number of 18 branch circuits.

One of the most unusual features of this plan is the installation of three branch distribution centers throughout the house to carry the huge circuit load. Feeder conductors from the main distribution panel to the branch panels consist of 3-wire, 230 volt lines, carry large current loads at double the usual efficiency.

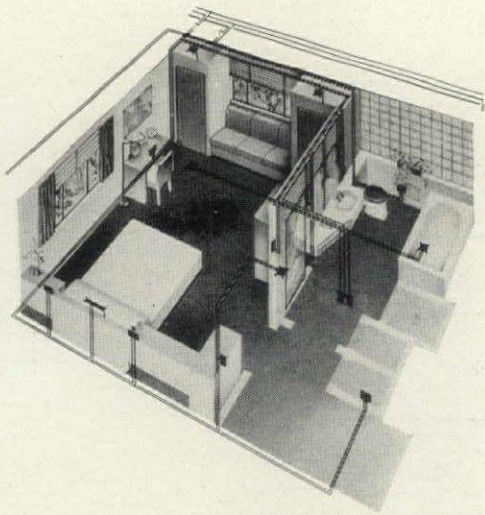
Instead of the traditional fuse, circuit breakers protect the circuits



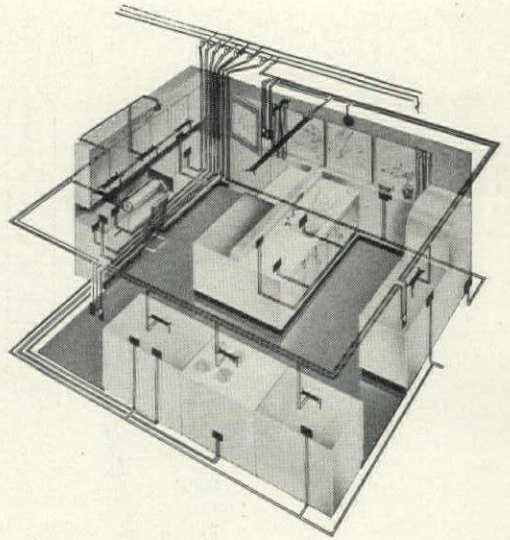
MASTER BEDROOM Rates a separate circuit instead of being wired on the other bedroom and bath set-up. The total load for the three circuits is kept under 3,500 w., thus increasing efficiency and decreasing wire wear.



BASEMENT The automatic heating unit, Precipitron air cleaner, Home-freeze locker, air cooler, etc. require three circuits for proper distribution of the electrical load.

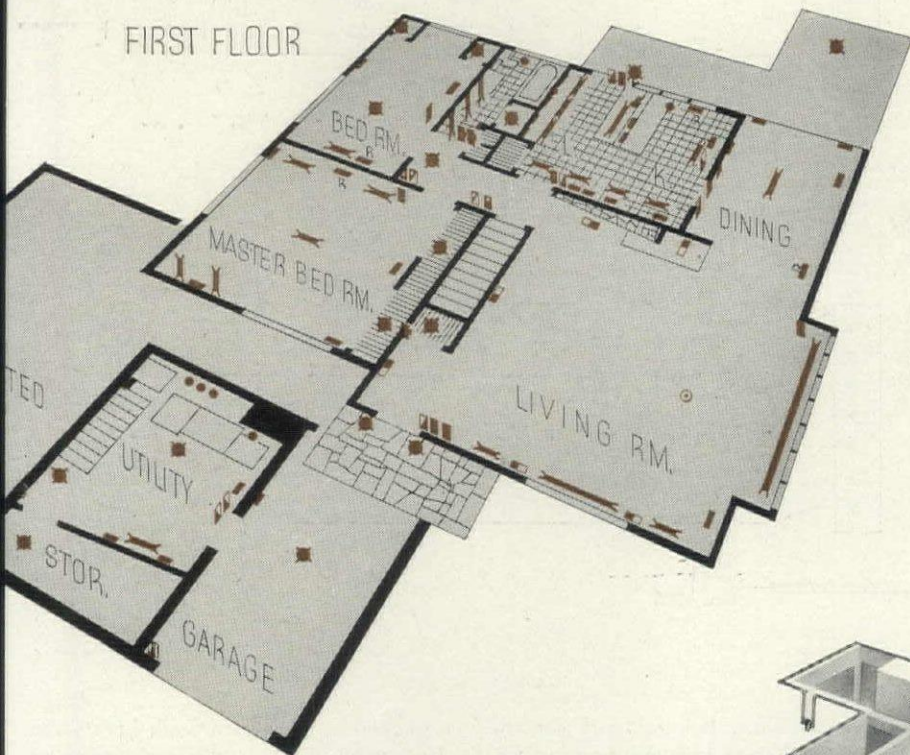


BEDROOM-BATH Here two circuits take care of lighting and electrical appliances. There is plenty of power for radiant heater, clock, fan, radio, razor, and fluorescent lighting. The radiant heater supplies quick heat to the bathroom.



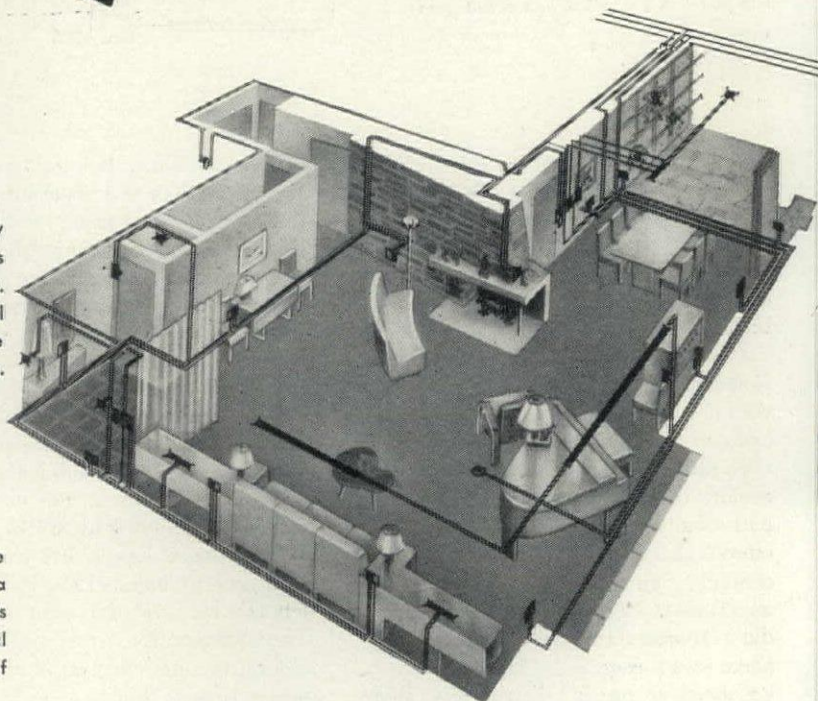
KITCHEN-LAUNDRY In this completely electrified work-center equipment performs at peak efficiency. Eight circuits supply current for dishwasher, refrigerator, electric mixer, automatic washer, drier, ironer, and many other electrical work-savers.

FIRST FLOOR

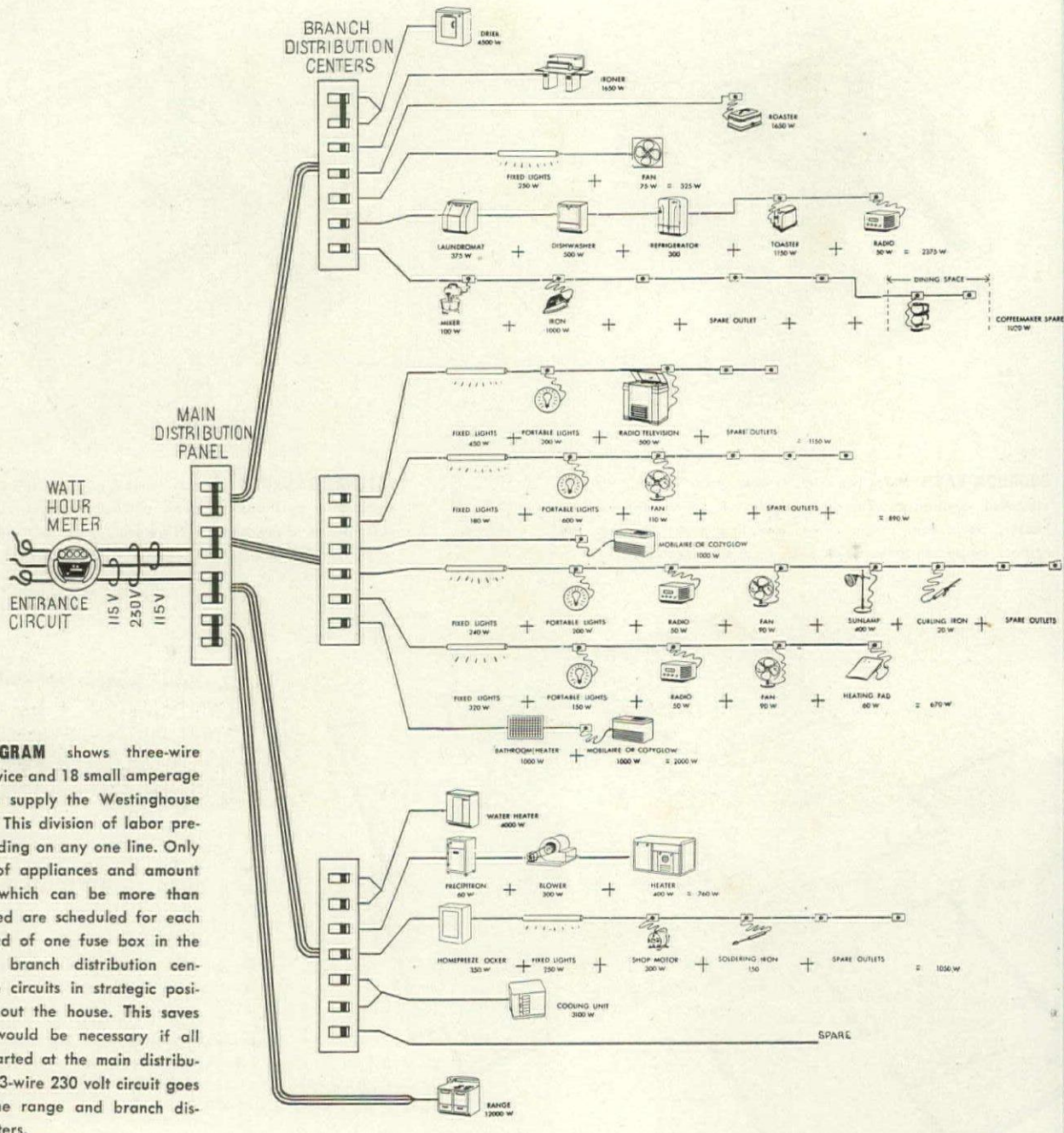


- WALL SWITCH
- WALL PILOT SWITCH
- MULTIPLE CONTROL SWITCH
- MULTIPLE CONTROL PILOT
- DOOR SWITCH
- ♀ BELL RINGING TRANSFORMER
- DUPLEX CONVENIENCE OUTLET
- COMBINATION RADIO OUTLET
- DUPLEX SPLIT OUTLET
- CEILING FIXTURE
- BRACKET FIXTURE
- SPECIAL OUTLET
- FLOOR CONVENIENCE OUTLET
- FLUORESCENT FIXTURE

THE WESTINGHOUSE HOME OF 194X, a typical single story house of 1,400 sq. ft. (exclusive of garage and basement), is wired for a postwar consumption potential of 10,000 kw-hrs. Fluorescent lighting, air-conditioning, and other new electrical devices are served by 18 separate circuits. Plan includes adequate outlets, correct segregation and proper protection of circuits.



LIVING-DINING ROOM Lighting is distributed over two separate circuits with short runs. Circuit No. 1 has spare capacity for a television set. Circuit No. 2 cares for Cozy-Glow on chilly days and Mobilair in summer. A third circuit provides for additional lighting and appliances. As in all the rooms there are plenty of outlets for electrical gadgets.



WIRING DIAGRAM shows three-wire 100-amp. service and 18 small amperage circuits which supply the Westinghouse model home. This division of labor prevents overloading on any one line. Only the number of appliances and amount of wattage which can be more than safely supplied are scheduled for each circuit. Instead of one fuse box in the cellar, three branch distribution centers start the circuits in strategic positions throughout the house. This saves wire which would be necessary if all 18 circuits started at the main distribution panel. A 3-wire 230 volt circuit goes directly to the range and branch distribution centers.

and insure against overheating. They offer two-way protection—from either a short circuit or a long-time slight overload. If either occurs, the circuit breaker trips, disconnecting the current. Merely lifting the circuit breaker's lever resets it.

In line with the National Electric Code (1940), the Westinghouse plan offers separate circuits for lighting and for appliances. The cooling unit, the range, the water heater, drier, ironer, roaster, Mobile and built-in bathroom heaters each have their own circuit. Lighting in the kitchen-work center is on a separate circuit from appliances. Before the war one heavy-duty 20-amp. circuit for kitchen appliances was required. However, there has been so much talk recently about

combined kitchen-laundry work centers that more than one separate circuit for their heavy equipment must be considered, whether or not the Westinghouse plan is adopted in full. With equipment all over the house given its own separate source of supply, laundry apparatus alone is expected to consume an average of 3,800 kw-hrs.

The number of outlets is also greatly increased to take care of small plug-in appliances. The combined bedroom-bath space has 20 outlets as compared with eight allowed by WPB. However, Westinghouse has failed to solve one annoying problem. Practically all outlets shown are the split-outlet type. The upper outlet is reserved for radios, clocks, vacuum cleaners, etc. The lower outlet is on a switch control, a device

designed to drive men mad. Lights can be turned off either at a wall switch or at a switch on the lamp. But they must be turned on where they were turned off! This results in bumping and stumbling about a darkened room in a mad search for the lamp, merely because the wall switch won't work. Solutions are: three-way-switch lamps or a three-way-switch on the wall beside the lamp.

Except for the troublesome split outlet, electricity works without any hitches in this future home. All equipment can be used simultaneously at top efficiency and current is never pulled from one appliance when another is turned on. Fluorescent lighting, air-cleaning, television—all the postwar electrical predictions — are

(Continued on page 126)



70°



75°

Individual control of temperature keeps tenants happy.

THIS APARTMENT HAS *Individualized* HEATING PLUS AN AMPLE SUPPLY OF HOT WATER 24 HOURS A DAY

In bygone days, the only way to heat an apartment house was to pour the same amount of heat, regardless of the weather or varying tenant requirements, into every apartment.

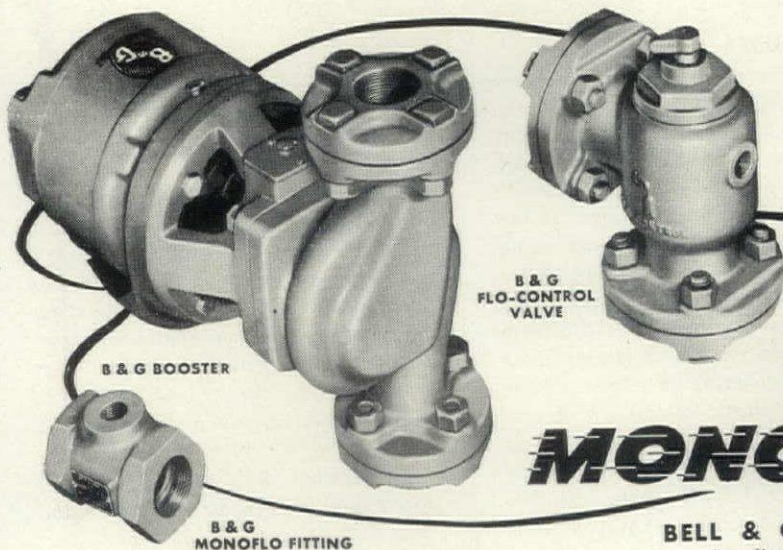
Today the B & G Monoflo System, with the simplest kind of equipment, brings positive relief from such uncontrolled waste of fuel and over and under-heating discomfort.

1. It modulates the heat supply to match the weather.
2. It can be zoned to give each tenant individual control of temperature.

3. It furnishes a summer-winter supply of hot water at amazingly low cost—heated by the same boiler that heats the building.

All of this adds up to minimum heating expense and maximum tenant comfort. It is possible because mechanically circulated hot water can be accurately controlled to deliver only as much heat as actually needed.

Less designing time, less installing time and less material are required because a B & G Monoflo System is installed with a *single* pipe main.



SEND FOR THIS DESCRIPTIVE BOOKLET

The complete story of the B & G Monoflo System is given in this liberally illustrated booklet. Ideal for showing new builders or modernizers how this modern system gives them luxurious heating comfort and year 'round hot water at low installation and operating cost.



B & G MONOFLO SYSTEM

BELL & GOSSETT CO., MORTON GROVE, ILLINOIS
Canadian Licensee: S. A. Armstrong, Ltd., 115 Dupont St., Toronto

TECHNICAL NEWS

A SAFETY COLOR CODE for all industry developed by the E. I. du Pont de Nemours & Co. was presented at the 15th annual convention of the Greater New York Safety Council. The code recommends the establishment of standard safety colors, each of which would warn against a special hazard. Six colors have already been selected as industrial safety code colors, and each has received a name appropriate to its function. High visibility yellow warns against stumbling and bumping hazards. Alert orange warns against parts of machinery that cut and shock, and is recommended for interior guard surfaces. Safety green identifies first aid locations and safety equipment. Fire-protection red indicates fire protection apparatus. Precaution blue identifies equipment or apparatus not to be used, moved or started, and traffic white marks aisles, locations for waste receptacles, and storage areas. The code also recommends that definite geometrical symbols should accompany each color for the protection of those who are color blind.

TRENDS IN RESIDENTIAL HEATING as surveyed by H. R. Smith Co. Inc., boiler manufacturers, reveal the expected preference for forced hot water heating systems after the war. The 1,500 plumbing and heating contractors and wholesalers who answered the questionnaire also gave a majority vote to automatic heat control, convertible heating systems, and oil as the leading fuel. A sidelight of the survey was the interest shown in panel heating. Twelve per cent of the voters predicted it would be the most popular type of heating for the postwar home.

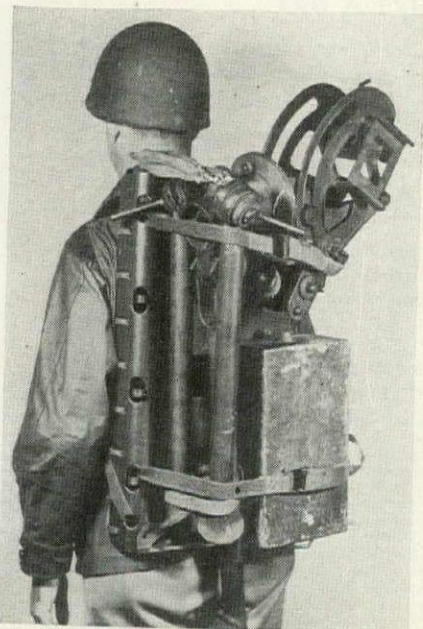
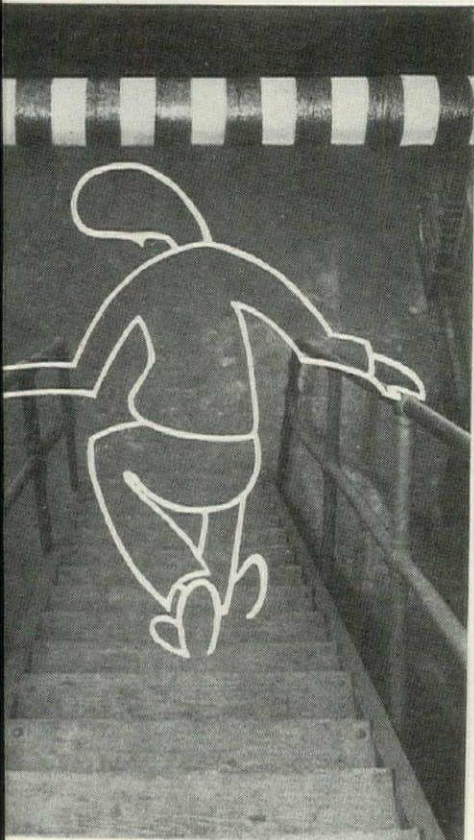
NEW PRODUCTS

FIREPROOF UPHOLSTERY made of plastic. *Features:* This new plastic fireproof upholstery is non-smoldering, gasoline and oil resistant and extremely durable under wide temperature ranges. It has a high abrasive resistance, good aging qualities, and resistance to salt water and perspiration. The Navy has ordered this upholstery for use on furniture in all new combat vessels. It is also being used as seat covering in planes. After the war this plastic material will provide fireproof upholstery for night clubs, theaters, buses, etc. *Manufacturer:* United States Rubber Co., 1230 6th Ave., New York, N. Y.

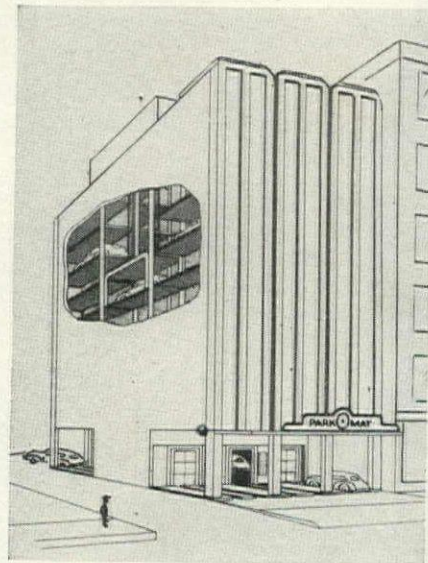
COLD CATHODE FLUORESCENT FIXTURE for industrial use. *Name:* Kold-Volt.

Features: This Kold-Volt fixture makes cold cathode fluorescent light available in a standard package unit. The lamps used in this fixture are similar in appearance and general lighting qualities to the conventional type "F" fluorescent lamp except that they are 7 ft., 9 in. long, 1 in. in diameter, and employ a different type of cathode at the tube ends. The fixture, equipped with four "Colovolt" cold cathode fluorescent tubes, does the


(Continued on page 164)



MOLDED PLYWOOD "PACKBOARD" for soldiers has been designed by Hugh Johnson, peacetime architect now a technologist in the Quartermaster Corps. By equalizing stress over all the shoulder and back muscles the "Packboard" permits easier carrying of irregularly shaped loads. The army is now using it for moving stores beyond where vehicles can go. It weighs only four pounds as compared to seven for old-style equipment.



THE PARK-O-MAT, a glorified parking system, handles cars automatically without an attendant to drive them. This comparatively inexpensive prefabricated structure, 30 x 60 ft. and 12 stories high, has room for 110 cars at once. Its feature is an automatic device which moves the car by grasping a bumper and sliding it to an elevator where it goes to various levels of the building. There it is automatically removed and placed in a stall. An attendant controls the moving of the car from the parkway to its stall by pressing a button on the master control board. To return the car to the exit the "out" button is pressed. Only 22 seconds is needed to place a car in a stall or to return it. The Park-O-Mat, perfected by a group of engineers and business men in Los Angeles, California, will eventually be manufactured by the Park-O-Mat Co.

five minute ^{45 50 55}  ⁶⁰ ₅ forum on plastics

Glowing predictions have been advanced suggesting that, shortly, we shall live in a "plastic" world. Our homes—our cars—even our clothes—will stem from these "magical" materials.

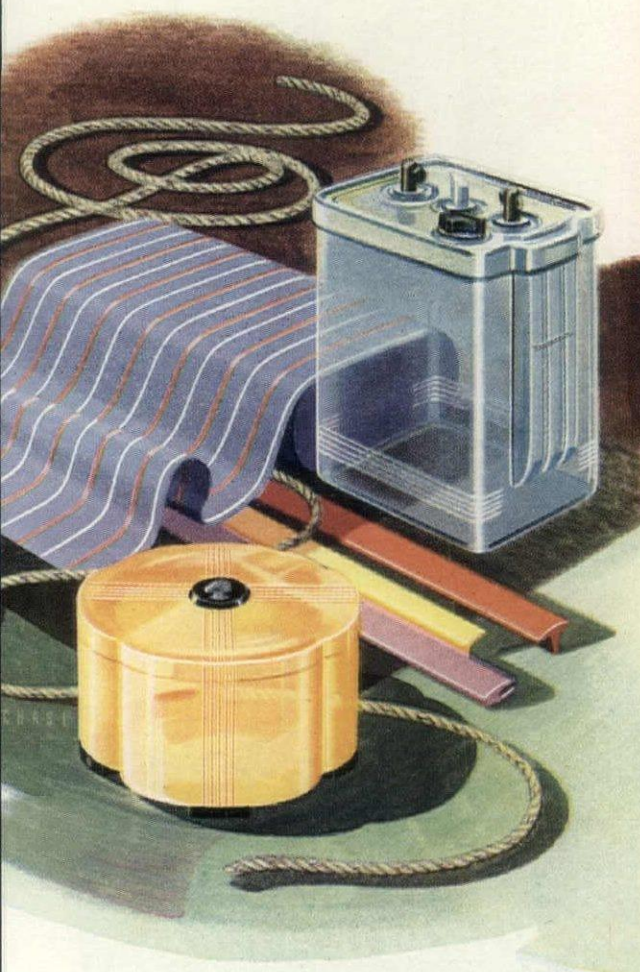
Enthusiasm for the broad usefulness and the growing application of plastics is, of course, justifiable—but, such enthusiasm must be tempered with realism. Plastics are man-made, resulting from our advances in chemical knowledge. But, like all other structural substances, plastics possess their limitations as well as their virtues.

The great virtue of plastics is that they offer combinations of physical properties found in no other single material.

Plastics are easily manufactured into many articles at low cost. They offer, even as a comparatively new development, a wide range of characteristics—such as electrical resistance, moisture-proofness, resistance to alkalis and acids, physical beauty, impact and tensile strength, and light weight.

Even at their present stage, plastics are only beginning their career. The multitude of chemical compounds yet to be discovered, investigated and perfected is beyond imagination. And, as our knowledge increases, it will be possible to make plastics come still closer to meeting exact, predetermined qualities.

In the postwar years we shall see a tremendous

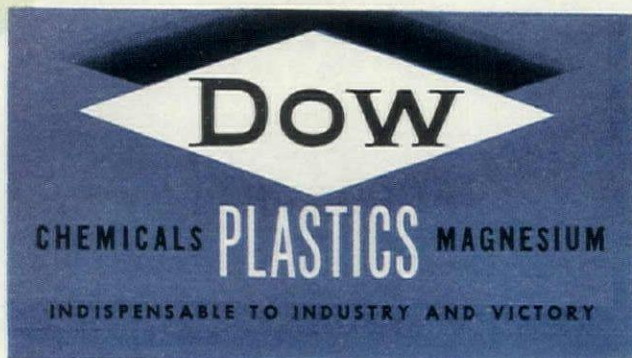


WHAT CAN YOU EXPECT FROM PLASTICS?

growth in the application of plastics. And, this will be only the beginning.

Dow is devoting much of its research and technical effort to expanding the usefulness of its own plastic developments. Styron, Ethocel, Saran and Saran Film—each in its own field—are already important factors in the huge plastic industry.

Dow Plastics include
Styron, Saran, Saran Film, Ethocel
and Ethocel Sheeting




THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN
New York Boston Philadelphia Washington Cleveland Detroit Chicago St. Louis
Houston San Francisco Los Angeles Seattle

★ U. S. BULLETIN ★ MAY

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★
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★

SIGN OF SERVICE

"U. S. Radiant Warmth" stands for dependable heating equipment that has been manufactured and delivered without interruption to the limit of our ability under war conditions



TTC
RADIANT WARMTH
U.S.



★ *UNITED STATES RADIATOR CORPORATION*

AND

★ **PACIFIC STEEL BOILER DIVISION**

★ **Detroit, Michigan · Branches and Sales Offices in Principal Cities**

Manufacturing Plants At:

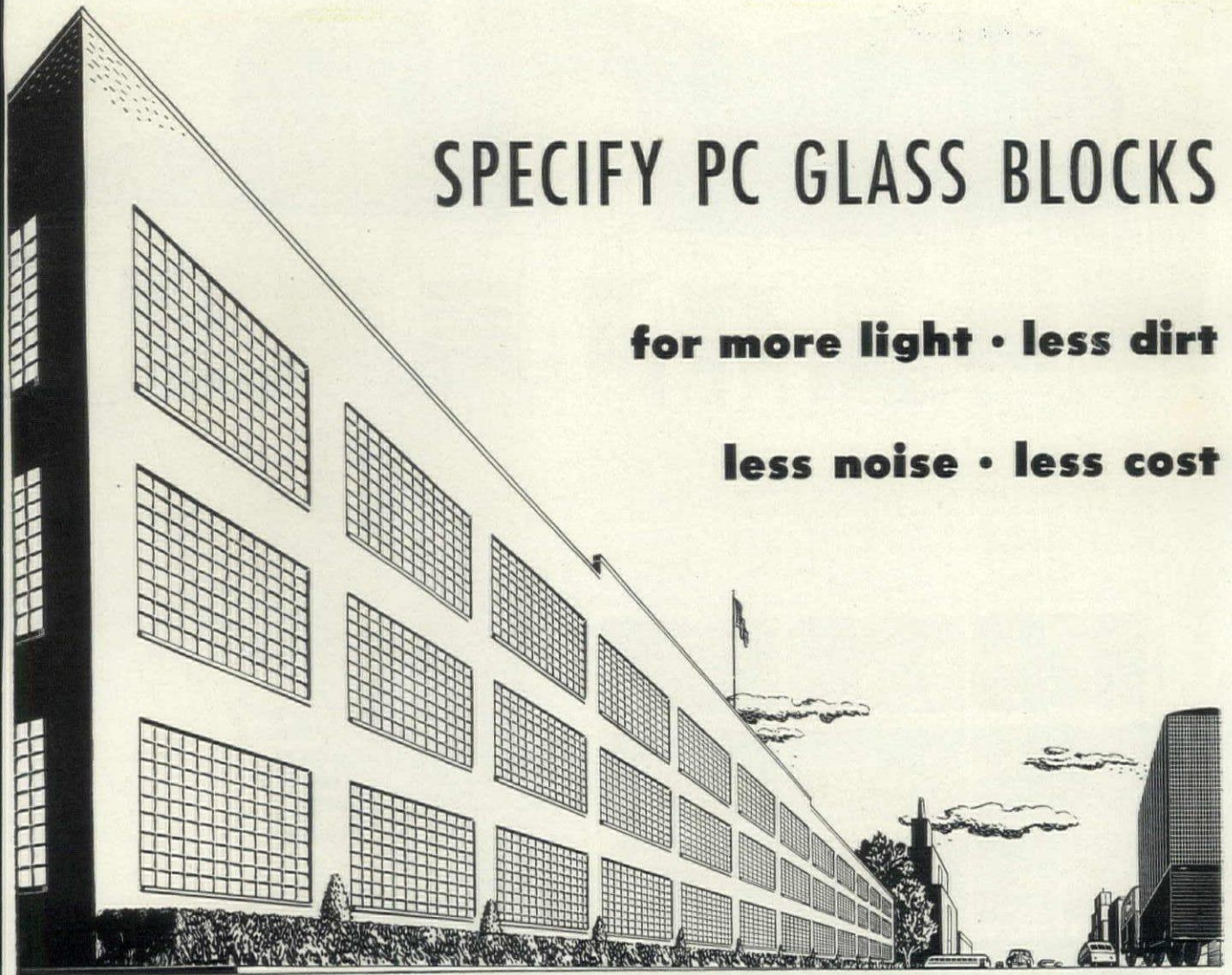
Bristol, Pa. · Detroit, Mich. · Dunkirk, N. Y. · Edwardsville, Ill. · Geneva, N. Y. · Waukegan, Ill. · W. Newton, Pa.

Member The Institute of Boiler and Radiator Manufacturers • Member of Steel Heating Boiler Institute

SPECIFY PC GLASS BLOCKS

for more light • less dirt

less noise • less cost



IN THIS PLANT, delicate precision machines help make instruments for our fighting flyers. It is located on the noisy main line of a busy steam railroad, subjected to constant drift of cinders and flying gritty dust from roadbed ballast.

To prevent infiltration of powdery grit—which would ruin the machinery and its precision products—to prevent outside noises from distracting skilled workers—to provide

an ample supply of clear, diffused daylight in workrooms where hair-line tolerances must be maintained—the architect specified PC Glass Blocks, which solved the problem to the entire satisfaction of his client.

When you specify PC Glass Blocks for factory lighting areas you also insure these advantages: lower heating costs in cold weather, less load on air-conditioning equipment, thanks to the high insulation value of glass

block panels; quick and easy cleaning due to flat glass outer surfaces; elimination of sash maintenance and replacement, all resulting in savings of expense.

It will pay you well to get full information about PC Glass Blocks now. When you fill in and mail the convenient coupon, we shall be glad to send you our free book, which tells all the ways they can save your industrial clients time and money.



GLASS BLOCKS

Distributed by

PITTSBURGH PLATE GLASS COMPANY

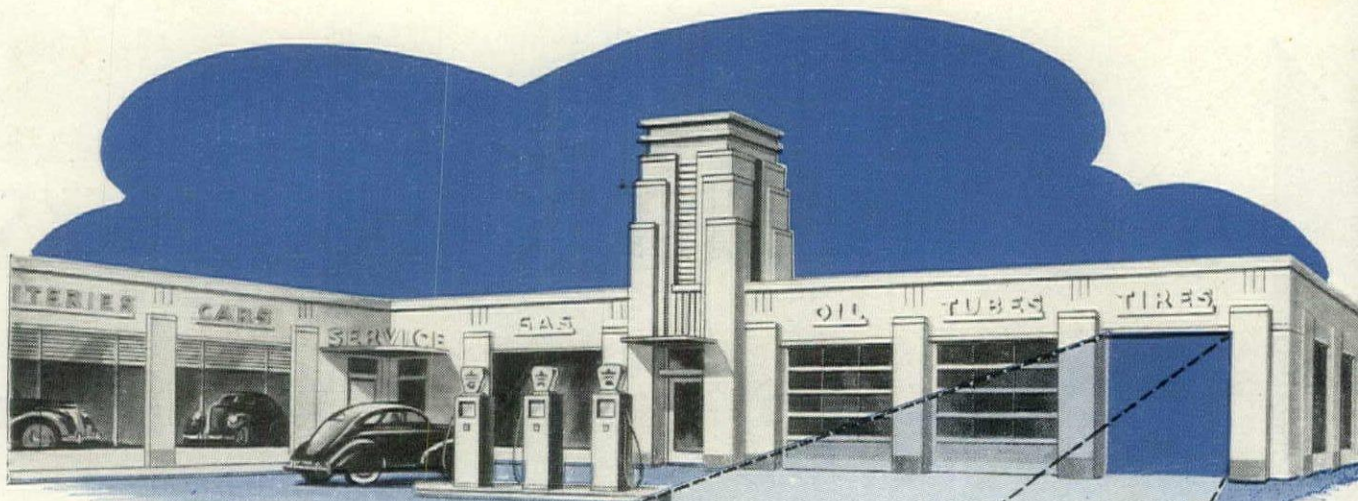
and by W. P. Fuller & Co. on the Pacific Coast

Pittsburgh Corning Corporation
2169-4 Grant Building, Pittsburgh 19, Pa.
Please send me your free book on PC Glass Blocks. It is understood that I incur no obligation.

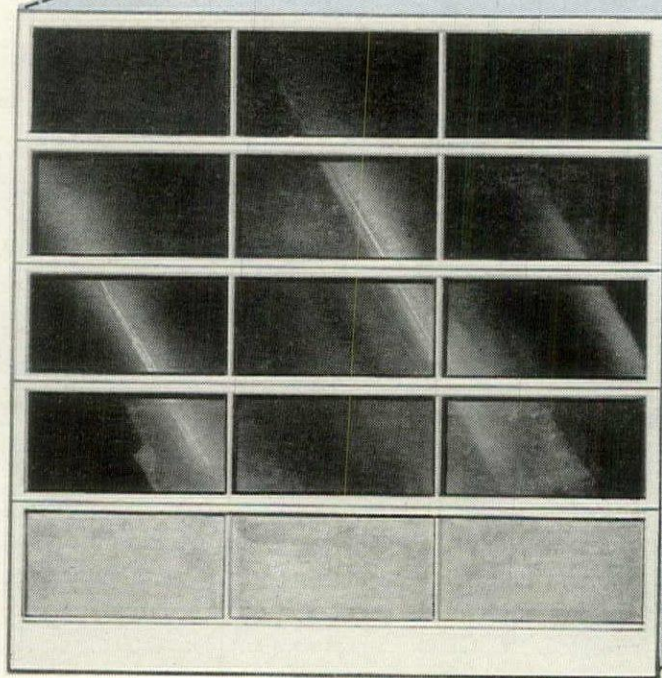
Name.....

Address.....

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



Standard Crawford Door designed for modern service station application. Upper four sections glazed for maximum light and attractive appearance. Lower section solid panels for protection. Easy to install, easy to operate. Built for service.



HERE'S OUR SLANT

on
doors to step up
service station
traffic and profits

● When motoring comes back into its own the volume business will naturally gravitate to those places where the motorist finds the maximum of convenience and service. In this, as all experienced service station operators know, the public is largely guided by appearance. That means there will be many brand new service set-ups—and many more where existing buildings will undergo "face-lifting" operations.

Important in all of these will be doors—and the answer will be ready in Crawford Doors engineered and designed for the job. Substantial in construction, simple and trouble-free in operation, splendid in appearance—Crawford Doors will fill the bill. It's not too early now to get in touch with Crawford. Your inquiry will have our prompt attention.

Crawford Door Company, 401 St. Jean, Detroit 14, Mich.

Crawford

**UPWARD - ACTING
DOORS**

Residential Garage Doors
Commercial & Industrial Doors
Hand or Power Operated Doors
Craw-Fir Doors

NEW SUBURBAN HOME FOR POST-WAR PLANNERS



FREE!



TIMKEN *Silent Automatic*

Send for FREE BOOKLET

1946-47

VICTORY HOME \$2500

for post-war incomes beginning at \$2500



FREE!

TIMKEN *Silent Automatic*



Send for FREE BOOKLET

YEAR-ROUND GARDENING IN THIS POSTWAR HOBBY ROOM!



FREE! ...and New Timken Silent Automatic Heat

TIMKEN *Silent Automatic*



Send for FREE BOOKLET

Can ads like these aid the architect?

A marine in the South Pacific writes, "I like your Victory Home. Tell D. Allen Wright I want him to plan a home for me after the war."

A garden club cast a vote of thanks for Cameron Clark's timely suggestion of a garden-hobby room.

More than 49,000 people sent in for a free booklet containing a description of the Suburban Home shown at upper left — proof in itself that this type of advertising stimulates thinking, recreates interest in new homes!

Of course we do not attempt to furnish plans and specifications. To those who request them, we advise "see your local architect."

Progress in the field of architecture, unfortunately, rests with the people, as well as with the architects.

Unless people place the responsibility for building on the shoulders of competent architects, the science of architecture is retarded.

But advertising can speed progress in architecture just as it has speeded the advancement of the automobile, airplane and a host of other products. It can open up new avenues of profit, build confidence, bring in prospects.

How do we know? More than 200,000 letters, personal calls and coupons have come to us in the last several months as a result of the experience, skill and imagination displayed by architects in their forward-looking contributions to Timken Silent Automatic advertising.

As a leading manufacturer of quality heating and air conditioning equipment for homes, we fully realize that whatever helps architects helps us.

We are doing everything possible to make sure that our postwar products continue to merit the high regard of architects and their clients.

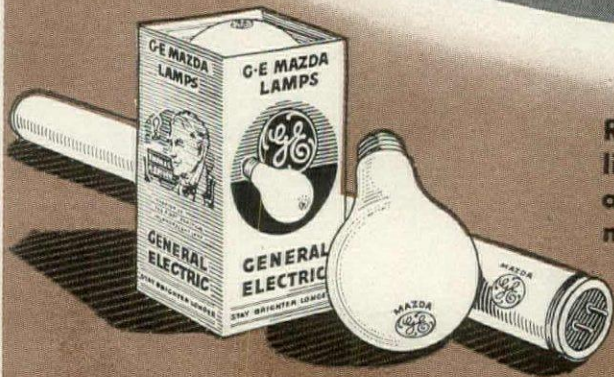
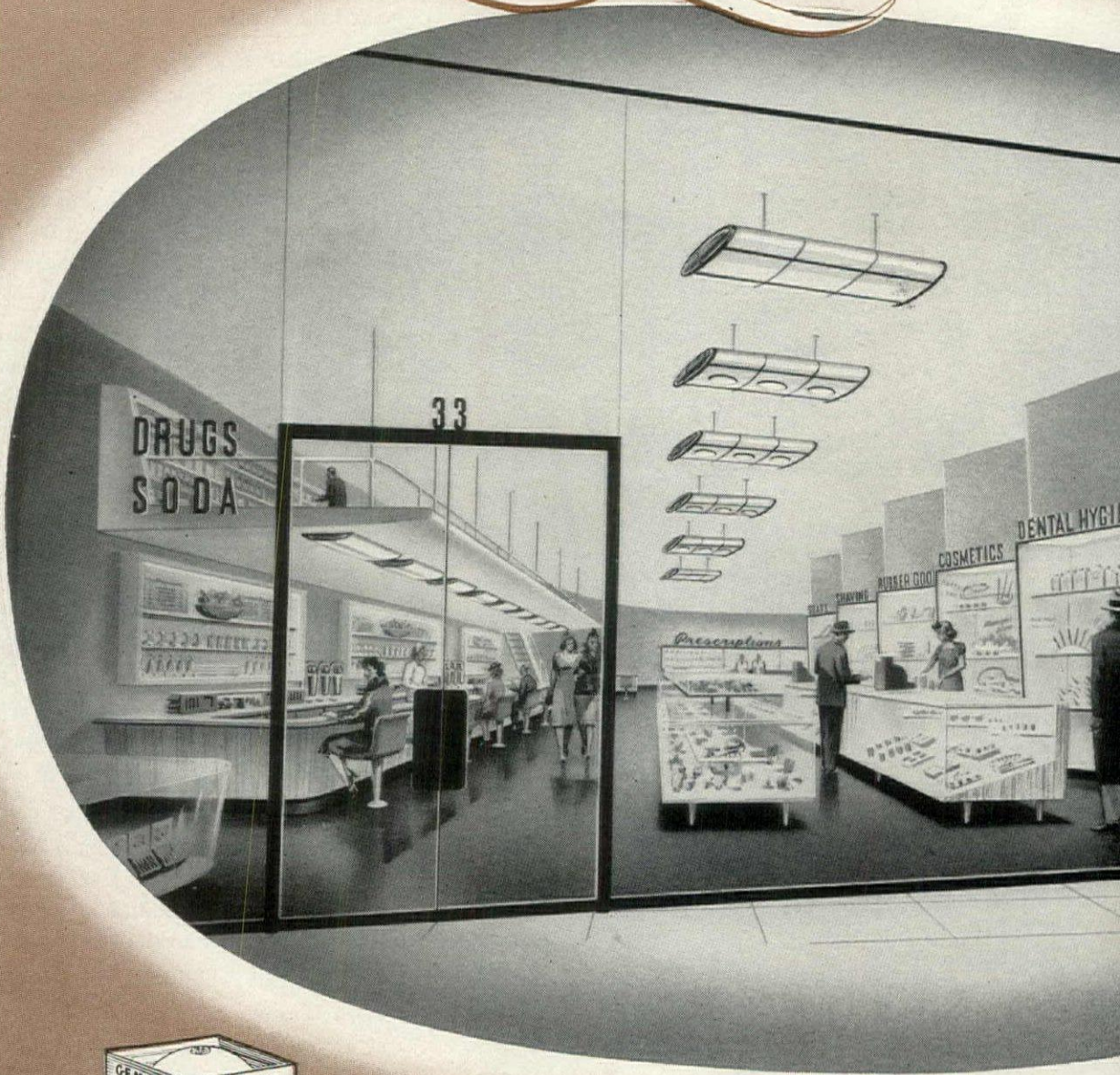
TIMKEN

Silent Automatic

Quality Home Appliances—
for Comfort, Convenience and Economy

Division of THE TIMKEN-DETROIT AXLE CO., Detroit 32, Michigan

Lighting



Remember that good lamps are the heart of any lighting installation. And that the never-ending aim of General Electric Lamp Research is to make G-E lamps *Stay Brighter Longer*

BUY AN EXTRA WAR BOND
THIS MONTH


G-E MAZDA LAMPS

GENERAL  ELECTRIC

Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday 6:45 p. m. EWT

goes dramatic...

FOR THE POSTWAR DRUG STORE



GENERAL ELECTRIC is glad to bring you another in its series of postwar perspectives on lighting. This stimulating idea comes from J. Gordon Lippincott, M. S., in Engineering and Architecture, consultant industrial designer of the New York firm, Dohner and Lippincott.

says Mr. Lippincott—

“The power of suggestion, always a potent force in drug merchandising, largely depends upon dramatic display and well-designed lighting. The more drug products customers can see *and the more easily they can see them*, the more they buy.

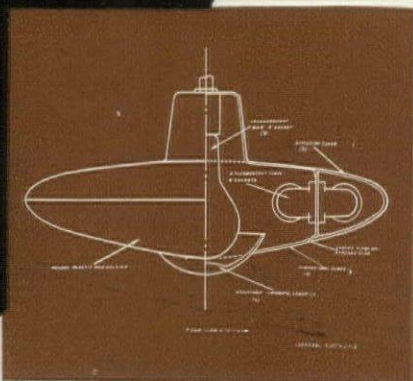
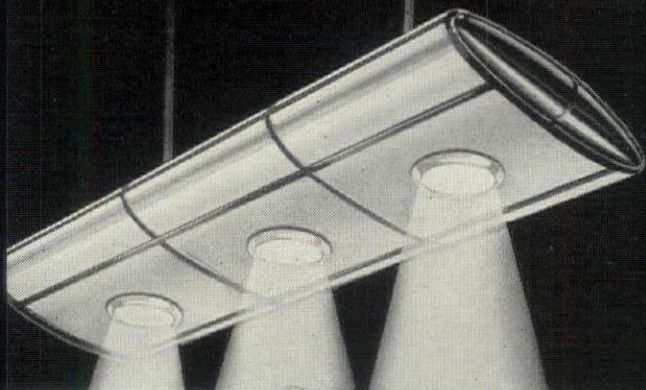
“In the design of this postwar drug store, we have employed proven light sources to illuminate an unusual and attractive interior. New, specially-designed fixtures combine the large-area low brightness of fluorescent lighting with the spotlighting punch and color of filament lamps to make the whole store an exciting show window. An all-glass store front, slanted back from the street at one side, attracts the eye of the passer-by. As shoppers see them, even from the street, off-set cases furnish a series of colorful supplementary displays.

“Thus in postwar store interiors, with many new lighting tools available, **LIGHT** can be a creative medium for the architect, a powerful sales-aid to the druggist and an important help to his customers.”

AN INTERESTING BOOKLET with further details will be sent you on request.
Address: General Electric Co., Dept. 166-AF5, Nela Park, Cleveland 12, Ohio.



Here is the new and unusual idea in commercial fixture design suggested by Mr. Lippincott. With fluorescent lamps, it combines auxiliary filament lamp spotlights which can be adjusted to highlight displays over a 30° radius.



Want to be Surprised?



...THEN LEARN HOW LITTLE IT WILL COST TO RUSTPROOF ANY OF THESE POSTWAR HOMES

First of all, what would you guess to be the extra cost of rustproofing an average 6 or 7 room house including:

- Anaconda Copper Tubes for both hot and cold water lines.
- Copper for roof and chimney flashings, ridges and valleys.
- Copper for rain gutters and downspouts.
- Bronze Wire for screens.

Five hundred dollars? Three hundred dollars? Well, get set for a surprise! Because *two hundred dollars* will more than cover the extra cost of these durable metals... and in many houses of simplified design the extra cost might be even less than *one hundred dollars*.

And here is what you will get in return: Water pipe that cannot rust to stain the water or reduce the flow. Flashings and valleys that will give lasting roof protection against water leaks around chimneys, gables, etc. And screens, gutters and downspouts that can be depended on for years of trouble-free service.



When the red metal gets the green light...

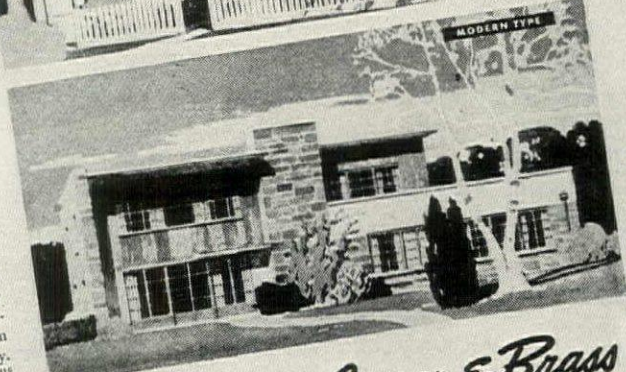
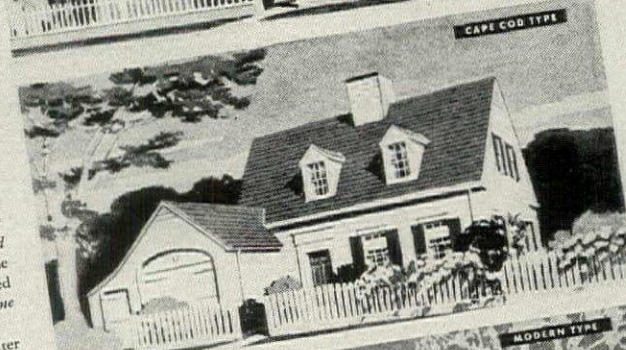
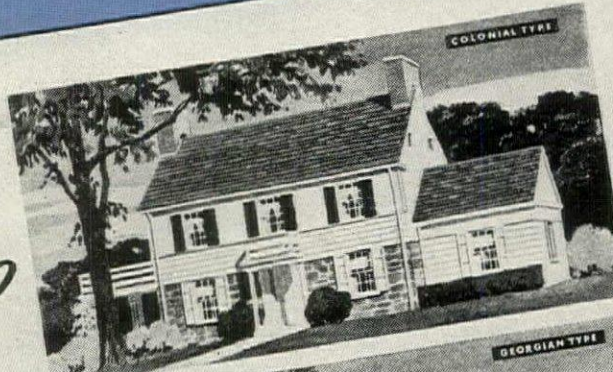
Today, war needs get first call on all copper and brass. But when conditions permit, time-tested Anaconda Copper, Brass, Bronze will be ready for home builders in many forms of usefulness...including plumbing, sheet metal work, decorative trim and hardware of enduring service and economy.

THE AMERICAN BRASS COMPANY
 Subsidiary of Anaconda Copper Mining Company
 General Offices: Waterbury 88, Connecticut

In Canada: ANACONDA AMERICAN BRASS, LTD., New Toronto, Ont.



Anaconda Copper & Brass

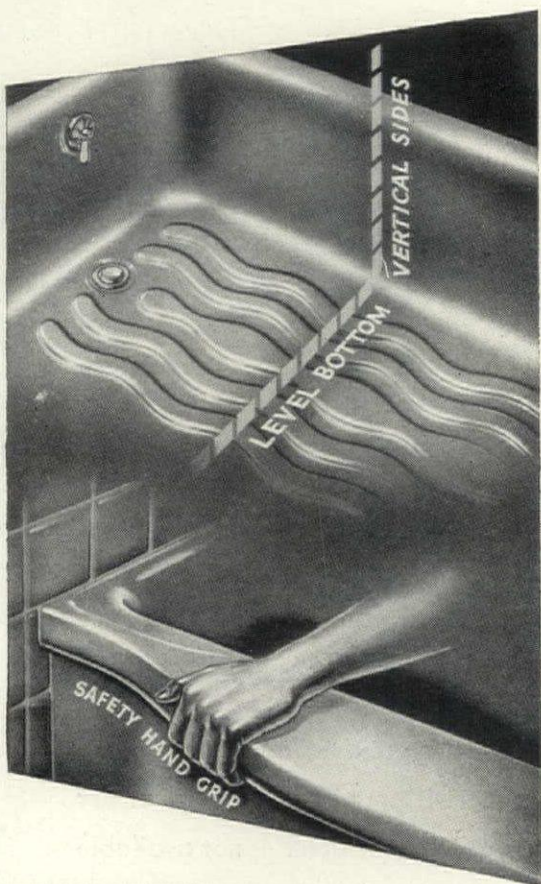
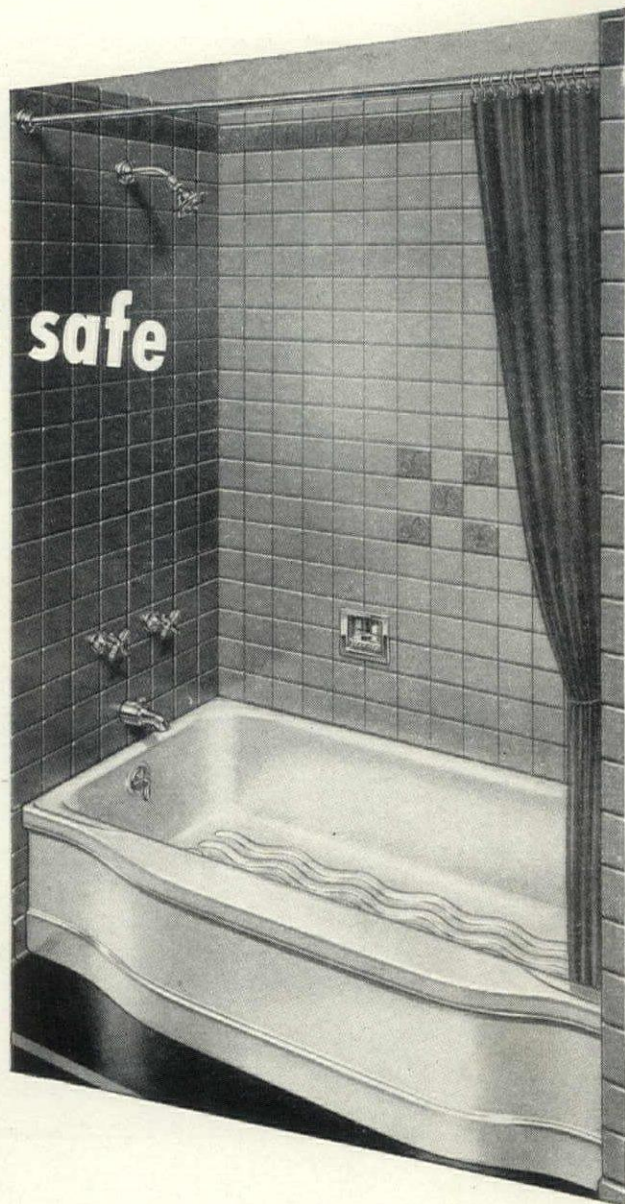


Farsighted Home Builders will call for

Copper and Brass

• Wartime maintenance difficulties with materials less durable than copper and brass, have convinced many homeowners of the economy of rustproof construction. Today, when many postwar homes are being contemplated, messages such as this in *Better Homes & Gardens* and *American Home* should help to create a desire for good design and quality materials.

If it's BRIGGS—it's safe



OTHER FEATURES OF BRIGGS BEAUTYWARE

- Smartly styled functional design.
- Color — in a wide range of pleasing pastels.
- The scientific elimination of unnecessary dead weight — easier handling.
- Acid-resisting vitreous porcelain enamel—at no extra cost.
- Unvarying dimensions — an aid to installation.
- Integral one inch flange permitting waterproof flashing, tub to walls.

Briggs engineers designed and produced the only real safety bottom bathtubs.

They eliminated the cause of many painful and serious accidents—slipping on the scoop-shaped interiors of old-fashioned bathtubs.

Briggs Beautyware tubs have vertical sides and a maximum area of level bottom, serpentine embossed for safety. This non-slip tread is an exclusive, patented Briggs safety feature.

Add to these the wide rim seat, the low sides, and the convenient safety hand grip—all time proven features pioneered by Briggs—and the result is a tub which provides real safety insurance for your clients.

BRIGGS *Beautyware*
PLUMBING FIXTURES

BRIGGS MANUFACTURING COMPANY, DETROIT 11, MICHIGAN



This is the
Connectacall

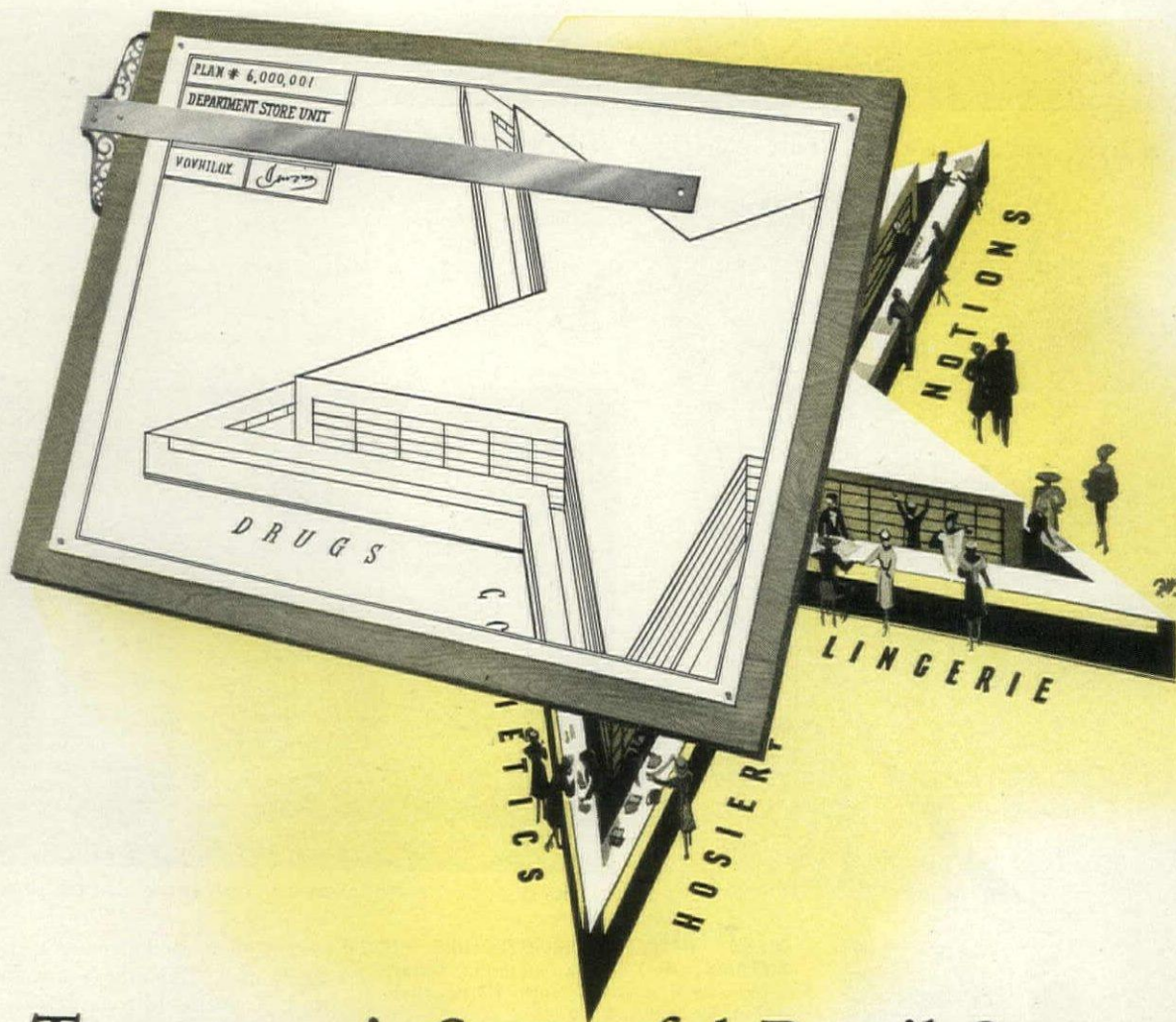
It permits a nurse to talk to each of her patients, and "listen in" to each room to detect any unusual sound or disturbance. It permits her to stay at her station and use orderlies or aides for routine errands • "Connectacall" is not available now, because our wartime job is the manufacture of communications equipment for the armed forces • We will gladly tell you more about the advantages of this and many other "Connecticut" communicating and signalling devices for hospitals. Within the limits of wartime propriety, we will tell you of the basic improvements to be made possible by communications developments of the past several years.



CONNECTICUT TELEPHONE & ELECTRIC DIVISION

Great American Industries • Meriden, Connecticut





Tomorrow's Successful Retail Stores are on Architects' Drawing Boards TODAY

Realizing that buyers will be more selective than ever about what they buy and where they buy it, astute merchandisers are planning their postwar success today. Many an architect is busy on such plans. Undoubtedly you are too, or soon will be.

Modern air conditioning is a "must" in these plans. For customers have come to expect it. They naturally tend to patronize the most attractive—the most comfortable stores.

Modern Air Conditioning means

Westinghouse—and its years of pioneering research and engineering experience.

For essential war uses in factories, hospitals, airports, military bases, etc., Westinghouse Air Conditioning and Industrial Refrigeration Equipment is available today.

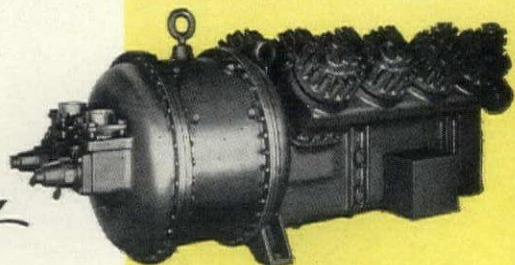
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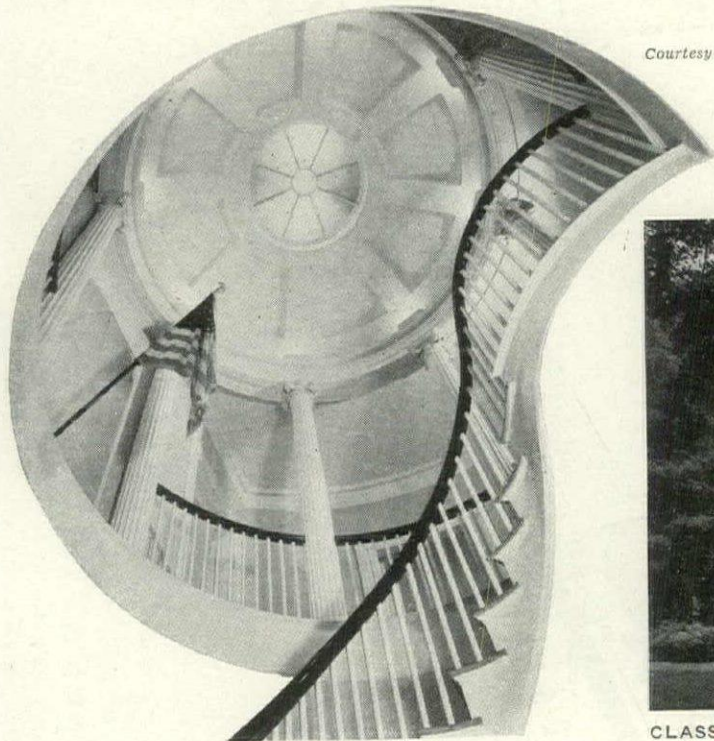
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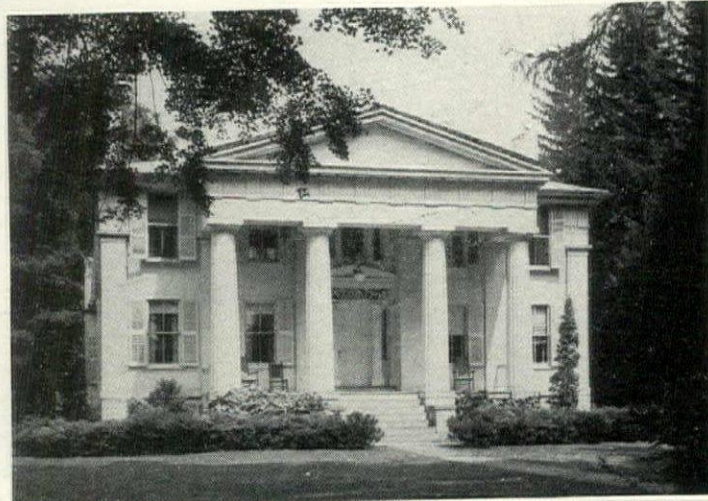


BOOKS

Greek revival architecture as a truly American expression: an authoritative study by Talbot Hamlin.



Courtesy Worcester Museum



CLASSIC PORTICO OBSCURES VIEW FROM UPPER WINDOWS

GREEK REVIVAL ARCHITECTURE IN AMERICA. By Talbot Hamlin. Oxford University Press, New York. 439 pp. Illustrated. 6½ x 9½. \$7.50

Talbot Hamlin, a man as carefree as he is scholarly, has at this time published a very fine book on the Greek Revival. It has two purposes: a) to advertise a much neglected period in American architecture, and b) to prove that this architecture was peculiarly American. Purpose a) is fine; purpose b) is, if you will forgive us, nonsense.

As far as the style itself goes nobody, except Talbot Hamlin, knows much about it. This may be due in part to an acute suspicion that, if prodded too hard, the period (1820-1860) might disinter architectural examples as bad as the Grand Rapids furniture it inspired. Professor Hamlin prods all right, and with considerable success.

The social and intellectual climate of any time is, of course, the sole criterion by which its art and architecture can be judged, and Professor Hamlin begins with an investigation of this backdrop. At the outset the social climate was one of industrial development in the east and agricultural expansion on the new land west of the Alleghanies. The intellectual climate was a surge of nationalism which replaced an equally widespread enthusiasm for pure democracy. The differences in these ideals paralleled an equally subtle distinction between the Federal

period—with its borrowed trappings of the Roman "Republic"—and the Greek Revival. And, just as Jefferson sponsored the former delusion, the alien Byron's ardor for the Greek rebellion launched an international fad for all things Hellenic. This taste, God bless it, gave us Indianapolis and the Doric order.

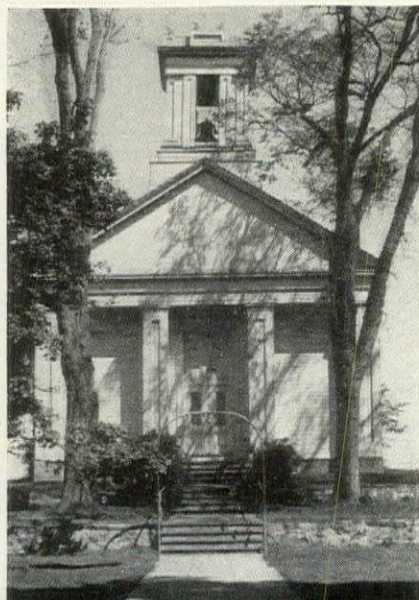
When Professor Hamlin says that the Greek Revival produced an "architecture . . . new and American", he is simply talking through his hat. The majority of middle western settlers were merely transplanted easterners, many of them with mature cultural backgrounds. They carried with them a love for the classic originally imported from England. The new settlements often had academies and colleges as soon as they had city halls. The social climate of the time produced no architectural developments as important as the invention of the log cabin, already a tradition, or the jerry-built cities which were to come with the era of speculation that followed the Civil War. What was built in Marietta, Ohio, was not substantially different from its counterpart in Bloomsbury. It is true that here and there the plans became less rigid, the moldings a little less stylized, but the fact that now and again a tobacco plant replaced the vegetable garnish on a Corinthian capital was merely a re-

(Continued on page 28)

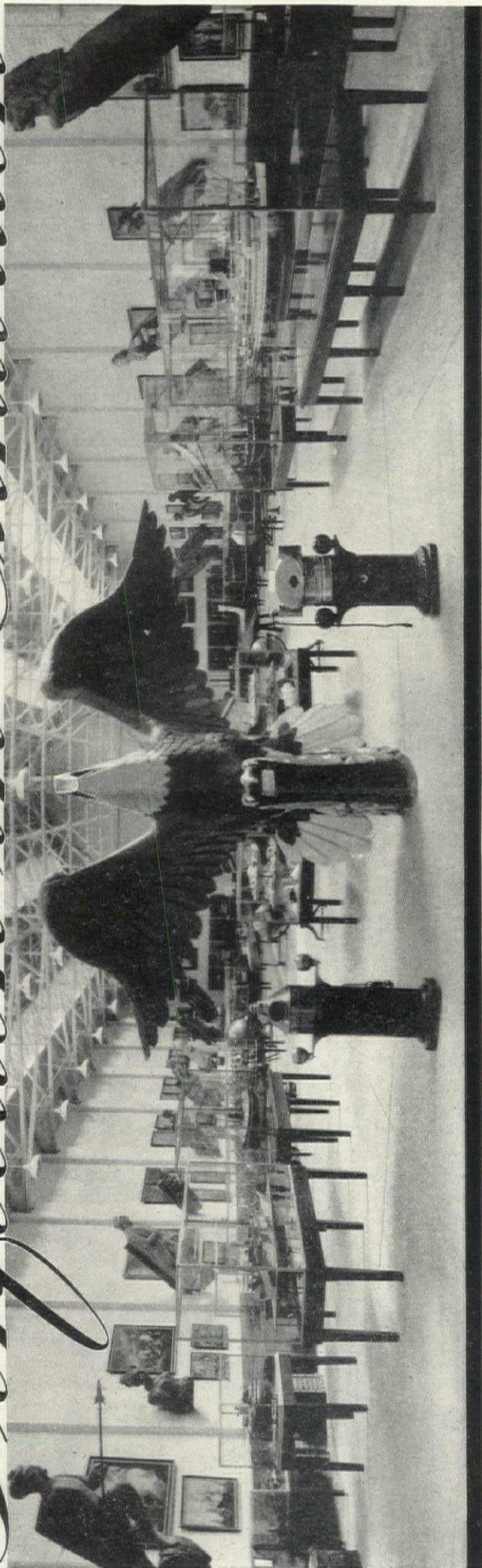


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Cases, Recessed Cases and cases built to meet individual specifications. Naturally, Time-Tight Cases are not available now because all Michaels facilities are devoted to war work. But it is not too early to plan for the future. With this in mind, we suggest you send for illustrated folder which gives complete details and specifications. When the war is over Michaels will resume the manufacture of Time-Tight Exhibit Cases, Bronze Tablets, MI-CO Parking Meters, and many other products of ferrous and non-ferrous metals.

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BOOKS

(Continued from page 26)

assuring indication that our national expression was not irretrievably buried under classic ruins. When the author claims that in some cases the American variations show better taste, he mistakes forced economy of expression as an indication of discrimination. Certainly, our American edifices could not match the lavishness of their European examples, but given an accomplished carpenter, they invariably showed a surprising and delightful flamboyance.

And how did the Greek Revival express the new and ribald democratic nationalism? The Greeks who, illogically, produced wooden structural forms in stone—made possible through slave labor—belonged to an aristocracy. They created special concepts that were thoroughly out of scale with the individual. To the rugged American settler, divorced from his heritage and bound to the rude business of shaping a new nation by his own sweat, these borrowed architectural forms provided an illusion of solidity, prestige, and cultural maturity. Though our national Grecomania often failed to penetrate deeper than the facade, it undoubtedly presented an impressive and comforting contrast to the uncleared forests and rutted trails.

With all its fascinating bits of information about architecture and the architects, Professor Hamlin's book follows no consistent logic. He claims for several hundred pages that the Greek Revival was a truly American architectural expression, only to conclude that it was not. For in the end we find Professor Hamlin powerfully swayed by his own words. He admits in a sudden flash of perception that the Greek Revival failed because "the difference between the life and needs of the past and those of present were too great to be bridged."

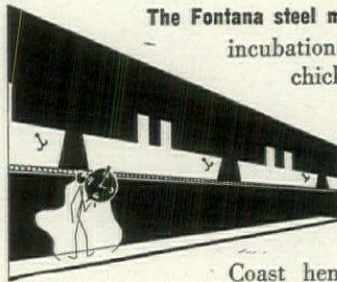
This leaves us with a record of the period, and it is excellent. After briefing us on the pre-natal influences of the Greek Revival, he buckles down to a series of case histories—at first national, then regional.

A word about the illustrations: there are many that are excellent, and others that might have been omitted, particularly since some beautiful drawings had to be reduced to a point of obscurity to leave room for abundant mediocrity. On the whole however, they help to make Greek Revival in America worth a good look even to those who do not entirely share Professor Hamlin's views.

(Continued on page 148)

IN THE FORUM

"Oddly enough, the Stoddard house (page 100) failed to come up to the budget but we solved that problem by adding a porch and all was jake," says Morgan Yost. "When my clients counterbalanced the first shortcoming by adding twins I began to feel more like a real architect—over the budget, around the clock."



The Fontana steel mill (page 61), is only one phase in the incubation of Henry J. Kaiser's industrial egg-and-chicken pattern. He is the man who builds the

homes to house the people to smelt the steel to make the plates to build the ships to win the war. Unless the freighters themselves resort to a more primitive method of reproduction, the set-up couldn't be neater. Even the West

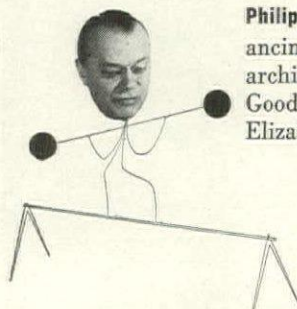
Coast hens are picketing: unfair to the 21 day setting standard they call it.

The undignified files of Perkins, Wheeler & Will bulge with defaced menus from the restaurant downstairs. Adorning a choice of Vichyssoise, lobster bisque and green turtle soup, we discovered the early progress sketches for the dentist's office (page 75). Frankly, we wince a bit at the prospect of substituting art nouveau for novocain, but ours is just a case of unashamed, open mouthed terror.



There is one thing about Cape Cod, and that is Cape Cod. When a small scale modern invasion was launched recently (page 102), architect Gunnar Peterson was among the first to land. Despite head-on and flanking fire from a brigade of dowagers who had been entrenched on the Cape for generations, Commando Peterson held his ground and at last reports was moving surely but slowly over the dunes. Said he, "My secret weapon is no secret—it's good old radiant heat."

Elroy Webber, who has recently been making structural analysis of dirigibles, is not a specialist in stress and strain alone, he also designs props for streamlined agony. Like Perkins, Wheeler & Will above, his dentist's office (page 78), offers a perfect setting for the practice of oral archaeology, ceramics and welding. The Herculean resiliency of the equipment stems from Webber's scientific discovery that a drill in the molar cavity or a shell in the helium tank are both good for an "Ouch!"



Philip Lippincott Goodwin is seen here skillfully balancing a couple of black balls, the kind of thing no architect wants to see zooming up his alley. Mr. Goodwin and his colleagues, Alfred Barr and Elizabeth Mock of the Museum of Modern Art, after completing the hazardous job of picking the 47 buildings which best represent the last ten years (page 81), have fled the Museum's frail walls for a stronger and undisclosed bastion.

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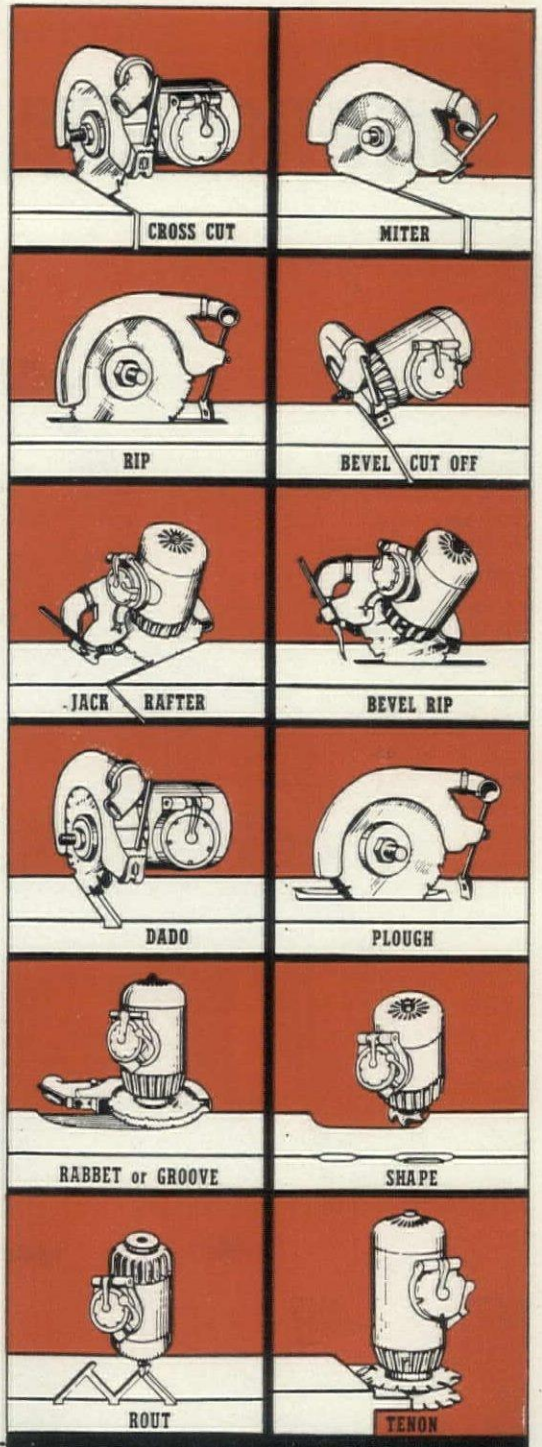
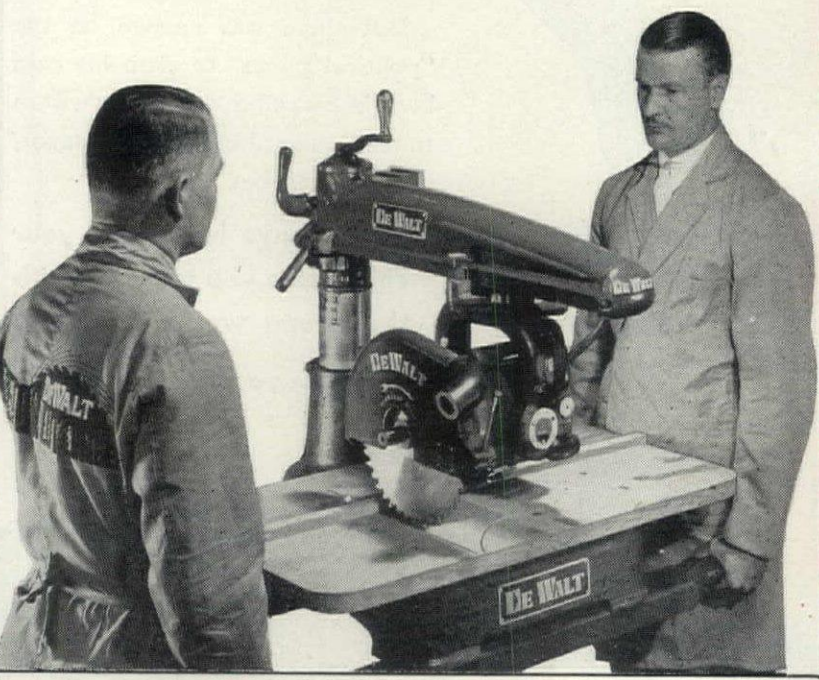
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Then he said to himself

"THIS WAR HOLDS UNPREDICTABLE DEVELOPMENTS"



FOR once Premier Mussolini was right when, just a year ago, he warned the Fascist Directorate that "This war still holds unpredictable developments, which will not all be on the political plane."

But there was enough on the "political plane" to slam his chin back in his collar, and if one wishes to read a moral into his statement, it could well be:

You always lead with your chin when you team up with the wrong working partner.

It is then you get unpredictable results of a **DESTRUCTIVE** nature.

'Unpredictable Developments' he says

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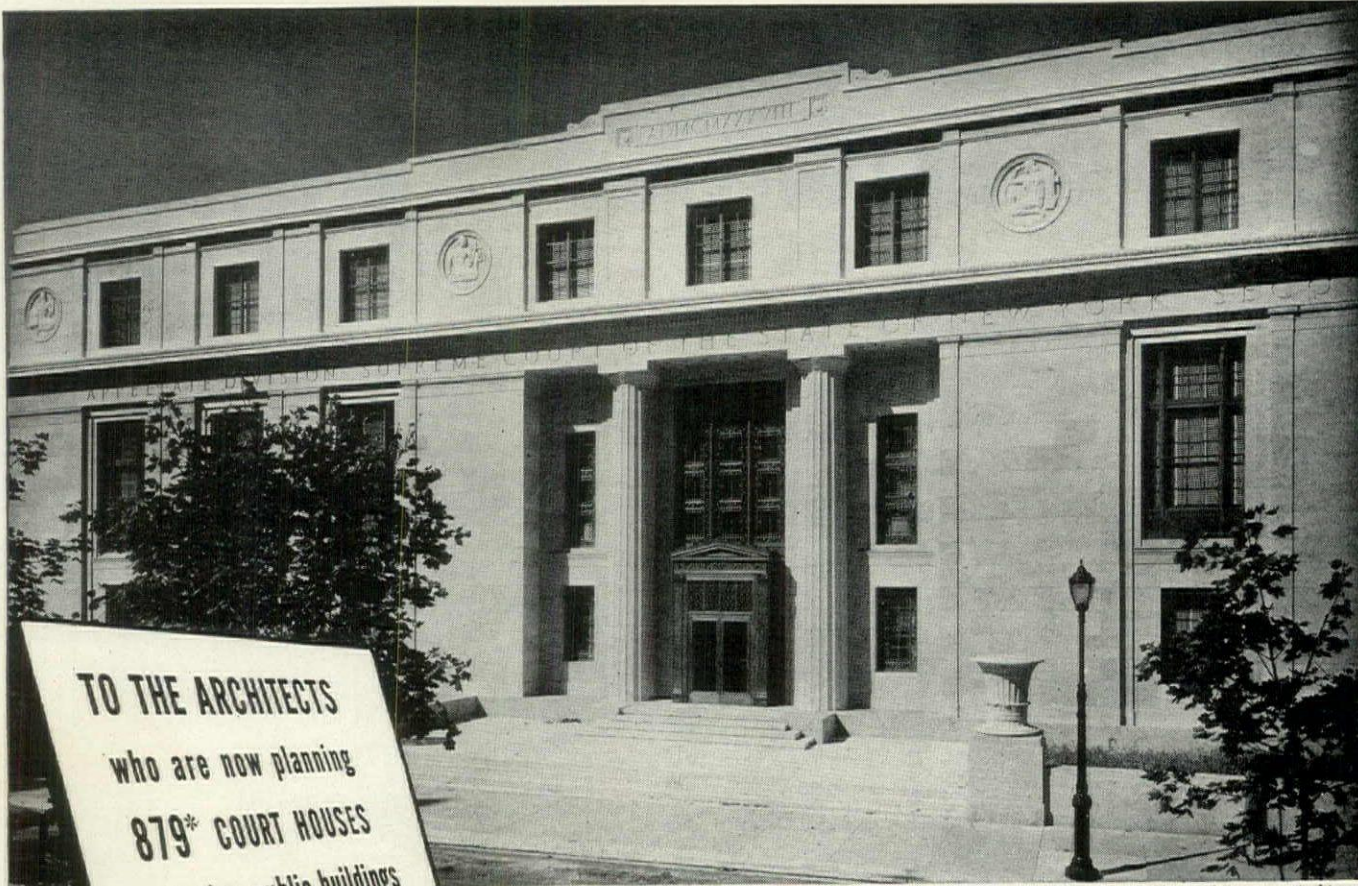
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*From "Statistical Summary of V-Day Projects" tabulated by F.W. Dodge Corporation

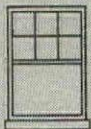
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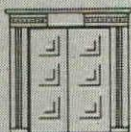
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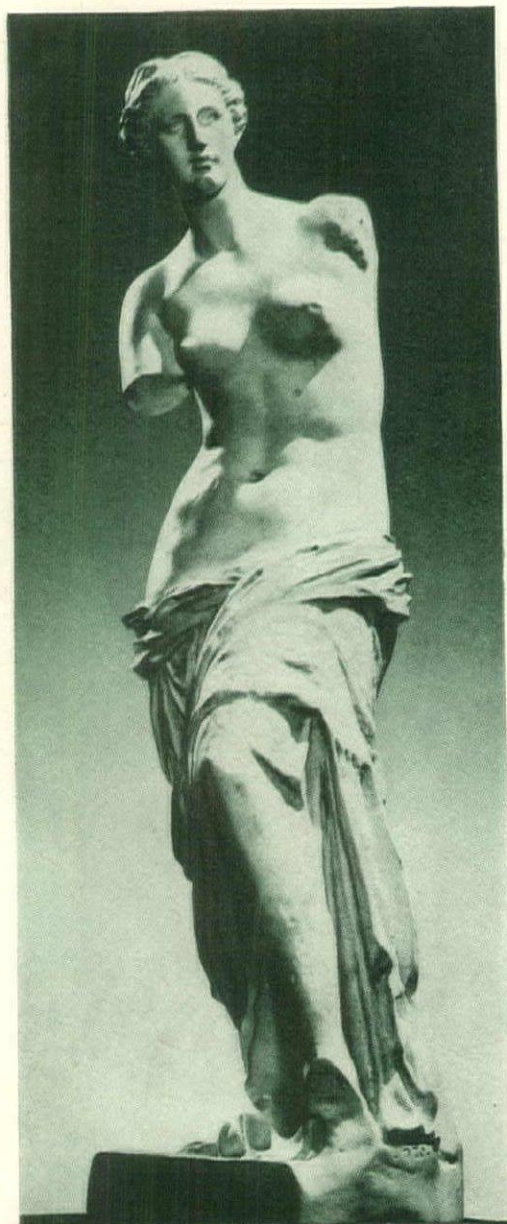
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About 125 million tons of it will be needed to heat at least 41% of the nation's homes next winter.

At least 115 million tons will be needed to power the railroads. A ton of coal is required to produce each ton of steel. Bituminous coal is essential to the manufacture of plastics, war chemicals and high explosives, and 62% of the electric power that runs our industries comes from it.

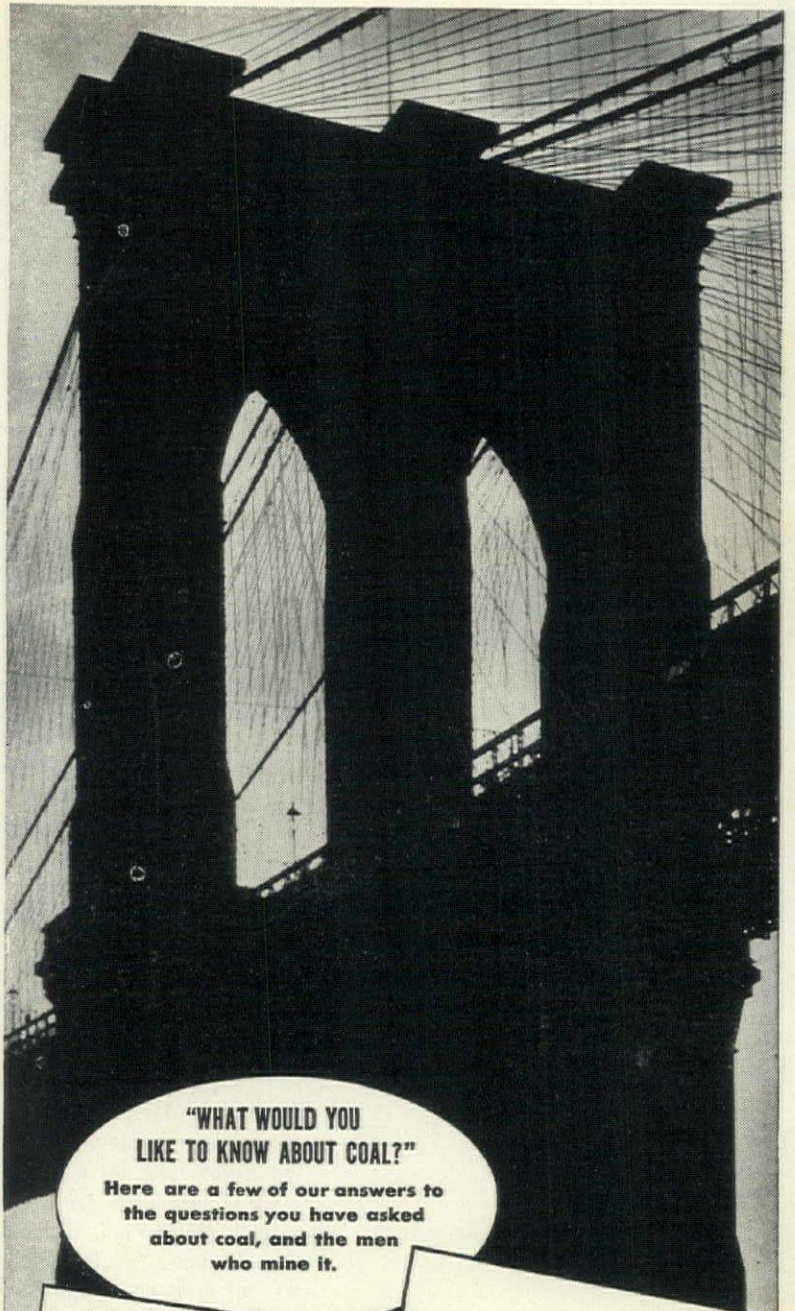
That's how important bituminous coal is and that is why the bituminous producers, with a full sense of their responsibility to the nation, to their customers and to the men who work for them, say:

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Here are a few of our answers to the questions you have asked about coal, and the men who mine it.



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In December 1943, bituminous coal miners earned an average of \$52.85 per week. An inside miner who works 48 hours a week will earn a minimum of \$57 a week. This varies up to \$73.36 a week in cases where the base wage is \$9 a day. Pieceworkers can earn as much as \$600 a month. The miners' take-home pay tops that of other workers in non-manufacturing industries, which in December 1943 averaged \$37.43 per week.



Can a coal miner advance himself?

That depends on the man himself. Most important mine officials have come up through the ranks. A great many mines have training programs to fit men for better jobs. Schools and universities offer extension courses on the technical side of mining. A miner who shows promise is always encouraged to advance himself.

FORUM in the fox hole . . . More dirt on Duncan . . . The articulation of prefabrication . . . The South African postwar world.

DOWN TO EARTH

Forum:

During pleasanter days at the University of North Carolina, I was frequently impressed by your delineation and objective discussion of current developments in contemporary architecture. The articles impressed me because they were functional and the architect adapted his structure to the *gestalt* environment. This all leads me to wonder if anything has been done by our architects in the way of designing the functional fox hole—considerations being given to protection from N. E. (high burst and contact fuze), drainage, cleanliness, lighting and heating, lightproofing and sleeping. Other considerations may be concerned with the mountain hole, the slope hole and the flat hole, depending on the angle of terra firma. This isn't a selfish query as the fox hole is the most ubiquitous fortification of combat troops, yea verily, our castle and salvation. As for the scientific fox hole—what's the hot oil?

PVT. JIM SKIPPER

c/o Postmaster
New York City

MORE FROM THE FRONT

Forum:

The January and February issues of *THE FORUM*—the first I have seen in more than two years—arrived yesterday. It's hard to tell you how good it is to be meeting the old friend again. My regret is that I didn't get the idea of having a subscription sent here, in addition to the one I want saved at home, a long time ago.

The contents of the magazines aren't fully digested yet, but it's gratifying to see that they are still up to your usual high standard—no staleness because of wartime difficulties.

I'm glad to see the excellent article on the Seabees in the February issue; it's a good job and those boys deserve the credit. It will be an ideal subject and reference for one of my weekly "Army Talks" to my platoon. . . .

LT. CHARLES STRIEBY

c/o Postmaster
New York, N. Y.

DUNCAN TRIANGLE

Forum:

Please forgive me if I appear to horn in on this argument. I refer to the excellent article on Malcolm Duncan's house and the comment by Mr. Allison H. Dean in your March, 1944 issue. Such a dispute always develops into a three-sided fight anyway—builder vs architect vs home owner—so let's continue.

I'll take the part of the home owner, for I am one and the facts and figures on Mr. Duncan's house closely parallel mine. I built a home in 1941 and the cost was only a little under \$7.00 per sq. ft., with floor area slightly less than Mr. Duncan's house.

Can Mr. Dean possibly be serious about building such a house, much less a better one, for \$4.00 per sq. ft.? I'd like to see it and I'm sure many people who have been through the mill would like to see a good, solid little house for that price. I am inclined to believe that a livable home built according to Mr. Dean's figures would not outlast a ten-year mortgage, not to mention one for twenty years.

Here's a chance for a free-for-all or another Gallup poll if you like. Then, too, if you "professionals" care to lay any bets on building costs in this locality, you'll have plenty of takers and enough building jobs to keep you busy for life.

FRANK E. BOWER, *Banker*
Great Falls, Montana

BUSH LEAGUE?

Forum:

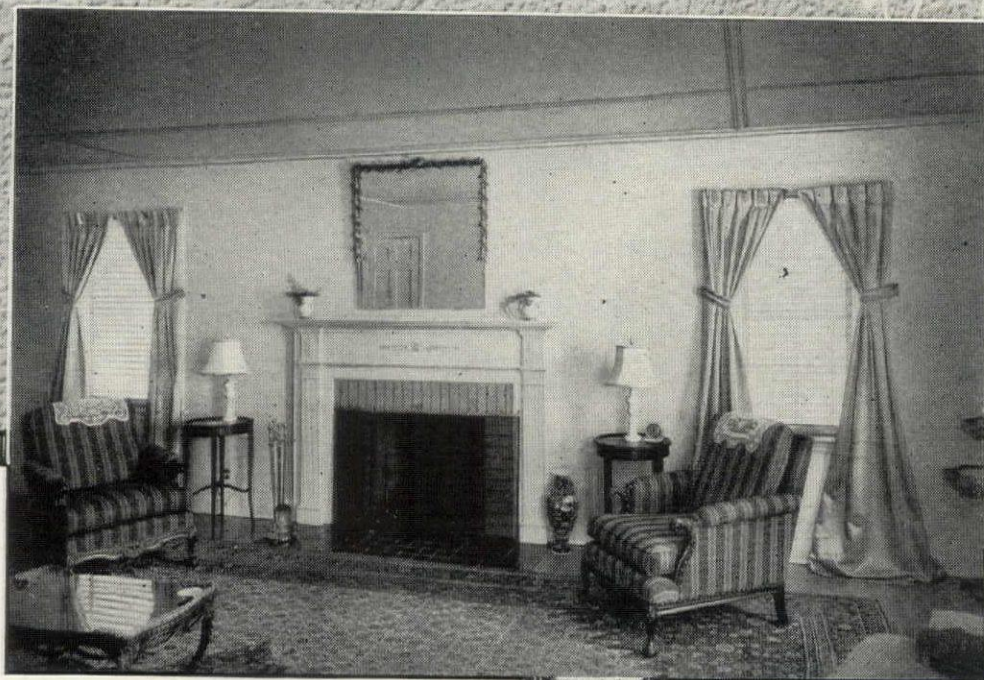
. . . Putting poetry aside, as best I could observe, the convention on prefabrication of the Architectural League resolved itself again into a disunited pattern of miniscule, willfully ignorant, esoteric byways in which the architects would continue to kid themselves into thinking that prefabrication amounts to just another phase of mass-produced "bricks," standard elements with which they could toy to their heart's content. In conversation I found still active each of the little ambitions for making mass

production of housing "practical" by cheapening methods, rather than by scientific gains. It made it even more dismal that the compromises were not even designed for the consumer but were evolved to stroke the particular pathological disarrangements of the respective financial backers. No vital ideas were really invited out in the open because there were none there who could have done anything about it if the century's best idea had sprung up from the floorboards as a full-fruited bush.

I am not discounting the intentions of the Leaguers, who are a good lot. And I am not sure that, by the law of indirection, good will not come of it all. But it is most appropriate that two days after the American prefabricators' three-week convention closed in New York on the key-note that no one design was involved in prefabrication and that "postwar industrialization of housing is just an advancement of the quality of the prewar materials," etc., that Mr. Churchill should announce on behalf of the British Empire, whose traditional "conservatism" these Americans emulate, that His Majesty's Government and people had settled on full scale mass production of ONE design of dwelling machine. And this was not a policy to be tried out and the one design to be found,—it was all done, all industrial arrangements had been made, all prototyping and tool designing completed, all materials "found" etc. He simply announces that they are going to produce one billion dollars worth of housing on their first run just for their domestic needs. England's mass production housing industry sits right along-side Europe, which needs immediately 60 times that first English production run to house only the 100% bombed out portion of its population.

They certainly have taken a neat little jump on American industry, to corner the immediate-demand market of 60 billion dollars worth of emergency houses. These are the real figures. The magnitude of these figures precludes from participation all but those as wise and unified in government as England has demonstrated itself to be during this war. This produc-

(Continued on page 36)



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LETTERS

(Continued from page 34)

tion requirement can only be coped with by broad national subsidy of private industry's most courageous and cooperative enterprise.

The minute hostilities cease for Russian armies, their excess industrial capacities will also be available to the scientific solution of their immediate dwelling requirement, the numbers of which run into the same magnitude of multi-millions of bombed-out people. The Russians, wise in the matter of external trade, will unquestionably compete in Europe and elsewhere with the British "emergency" house. They will probably go them one better.

Hadn't we better stop poking fun at science? Hadn't we better get over our inferiority complexes? Shouldn't we remember that the Wright brothers had to go to England with their plane because we were not as yet a grown-up people, confident of our own intelligence? Shouldn't we submit to the world as rapidly as possible *one prototype* demonstrating American science and industry's enormous ability?

There need be no opinionated quarrel about that one prototype. It is entirely a matter of scientific criteria. It must render the greatest service with the least material, in order to successfully engage the energy conversion facilities of industry in giving the most service with the least weight of materials, least energy of formation and forwarding, least time of labor, and least motion of handling and assembly and service.

The problem will resolve itself with far greater simplicity than that of prototyping war aircraft. It will be a matter which ingenuity of engineers can quickly settle. That a bomber's nose has, of economic necessity, to be round instead of cubical, doesn't matter a bit. The natural external shapes of these living machines will be developed with equally impersonal logic. It is of the greatest importance that the trade journals and thereafter the press philosophy of our country be articulated in this direction.

R. BUCKMINSTER FULLER

Washington, D. C.

NEW VELDTs TO CONQUER

Forum:

... During the war, building in this country as elsewhere is virtually at a standstill, but what you say of the U.S.A.—that the postwar era will be the most challenging period in building history—will apply equally, though of course on a much smaller scale, to this

(Continued on page 158)

A LETTER FROM THE PUBLISHER

Dear Reader:

The closest we've ever come to "down under" was to shake hands with Walter Nash, New Zealand's great Minister to the U. S. We were so impressed with what Mr. Nash had to say at a housing luncheon that we can hardly wait to meet some of his neighbors.

Matter of fact, we did spend a memorable "evening" with an Australian several years ago. He was an architect by the name of Stephenson from Melbourne, a specialist in hospitals, and after exposing him—and ourselves—to ten hours of New York night life, we were ready to be a patient in one of his buildings. We called him "Mr. Me" because he was always leaving "me rubbers" or "me umbrella" or "me brief case" somewhere. He was a wonderful tireless gent, was Mr. Me, and Lord willing, he will not forget his personal safety during the emergency.



This rambling talk is taking a long time to come to the point, which was to tell about our numerous antipodal correspondents. THE FORUM gets a lot of mail these days and none of it brighter and more winning than the letters from Melbourne, Cape Town, Natal, Haifa and one particularly fine one from Mysore. These letters are friendly, fairly long and always aware commentaries on the brave, new world. But best of all, they are eager and as inquisitive as a columnist at a soirée.

To satisfy your curiosity about their curiosity, here are samples:

New Zealand: I am anxious after the war to pull down and rebuild this place. Anything I can find out in the way of town planning and domestic house design I want to.

South Africa: I want an idea for a small cottage with covered stoop, site 2,500 ft. with a wide vista to the sea.

Australia: Developing a 1,000-acre scheme for four big works and homes for workers. Very interested in prefabricated homes.

New Zealand: Our government has had a housing scheme in hand for some years and is now planning

to erect 6,000 per annum. . . Perhaps it is just as well there is no more room on this paper, otherwise I might go on writing about our conditions "away down yonder." But many of your own lads, whom we are pleased to see and welcome, will be giving you some ideas.

Brazil: Could you present some ideas on building in terms of modern building methods and more use of machinery?

India: Where can I find out more about the TVA and the various Greenbelt schemes?

South Africa: Having recently completed a large block of flats at a cost of 120,000 pounds, we are now planning another to cost approximately 300,000 pounds. For this venture we are most anxious to incorporate all the best ideas. We have great faith in the future of plastics. Glass is another feature with a great future.

Palestine: Could you send me a representative list of the best American books about modern architectural work . . . houses, flats, industrial buildings, hotels, schools, hospitals, churches?

Hawaii: Cannot understand why new model kitchens make no allowance for an exhaust fan or method of removing fumes and heat from over the stove. What ideas have you got about kitchen ventilation?



Africa: We are very backward in the matter of electrical appliances for the kitchen and kitchen equipment designs. Can you send us detailed illustrated material about new

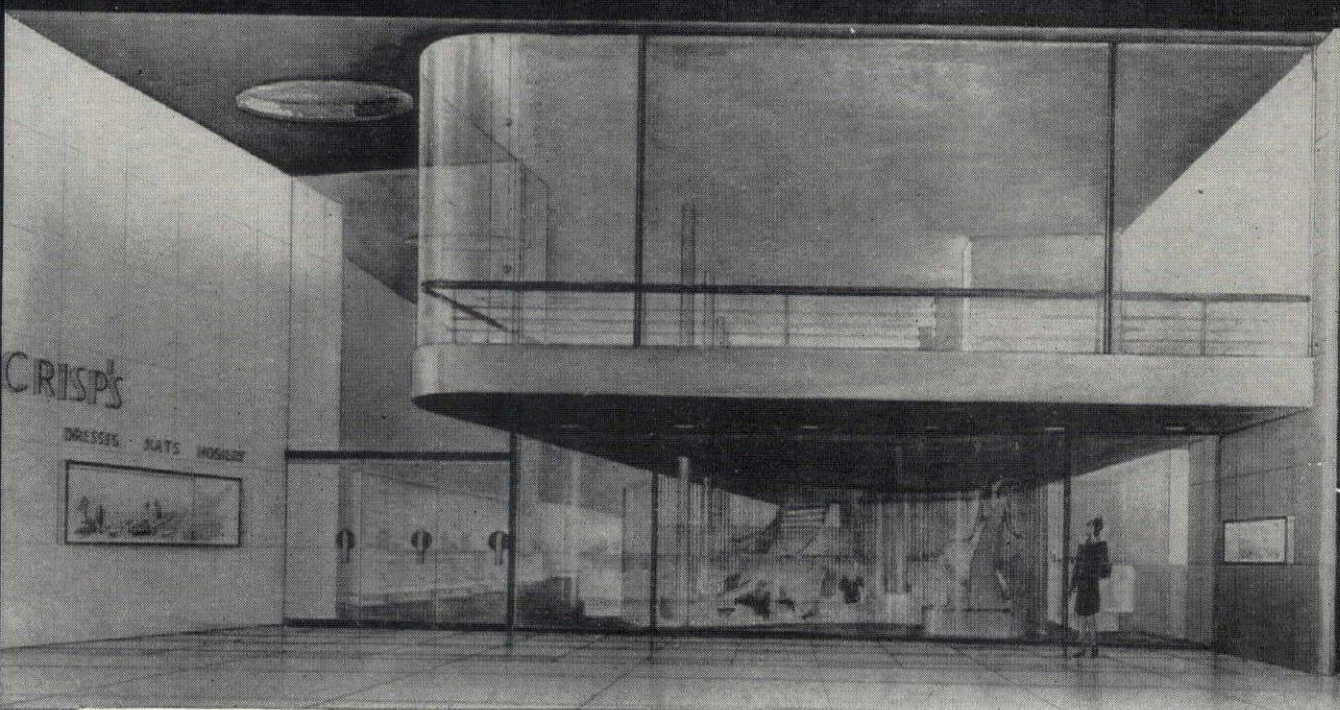
American products?

India: I am the only architect in a seven million state. . . Can you bring me up to date on new plastic products?

Such queries are welcome, and we do our best. Accept this, please, as a cordial invitation to all of THE FORUM's foreign friends, whether in Cairo, Chungking, London, Moscow, Rio or way stations in between, to write when the spirit moves you. We haven't heard from Berlin or Tokio for some time, but we're watching the mails. H.M.

THERE IS A NEW TREND IN STORE DESIGN

CRISP'S



ROBERT ALLAN JACOBS' conception of a department store

"One of the new trends in store design is the emphasis on three-dimensional window display. Through extensive use of plate glass, the store, rather than just the window, becomes a medium for advertising. The traditional window thus loses static quality and becomes alive with the activity of the store. A movable screen behind the window can, however, achieve the traditional effect if desired. This store is 45 feet wide with two spans, and 20 feet in height. The mezzanine was put to the front instead of the rear to: (1) create two display areas or store windows visible to pedestrian and bus traffic on both sides of the avenue, and (2) to minimize the sense of interior columns."

Robert A. Jacobs

Ely Jacques Kahn · Robert Allan Jacobs, Architects



THE new trend toward "openness" in store design makes more essential than ever the use of high quality construction materials. Pittsburgh Glass and Store Front Metal consistently provide this necessary excellence. These products are versatile and adaptable. They comprise a complete line, providing a type of glass for every need, and giving the architect wide latitude in design. And they are readily available through a nation-wide system of branches and dealers.

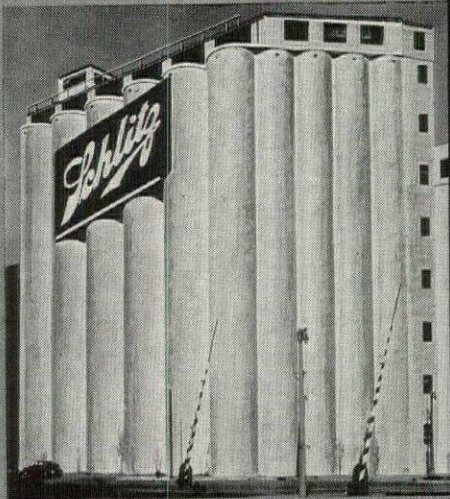
Hundreds of thousands of merchants are being urged to consult architects by Pittsburgh Plate Glass Company. Advertisements running in 21 magazines suggest planning now for postwar building and alterations, with the help of architects.

"PITTSBURGH" stands for Quality Glass and Paint

FREE! 21 x 25-inch reproduction of architect's drawings, showing interior perspective, plan, and several details of this design, as well as the exterior shown on this page. It is the second of a series of store designs by some of America's leading architects. Mail the coupon now.

Form with fields for Name, Address, City, and State, and contact information for Pittsburgh Plate Glass Company.

PITTSBURGH GLASS FOR STORE FRONTS AND INTERIORS



what a difference before and after Waterfoil

Far-sighted companies like the Jos. Schlitz Brewing Company of Milwaukee have restored and maintained their structures in first class condition to meet tomorrow's needs. Concrete surfaces such as these Schlitz grain elevators, and stucco and brick walls can be coated with Waterfoil for decoration and protection now. No need to wait.

Waterfoil is a scientific contribution to masonry protection. It is manufactured of irreversible inorganic gels . . . non-critical materials available today. The Waterfoil coating permits the masonry to breathe yet impedes water absorption inwards, avoiding reinforcing bar rust or spalling. Application is simple by any careful workman.

If you are responsible for property maintenance and investment protection, send for the Waterfoil literature . . . it is very important information.

A. C. Horn Company *established, 1897*

Manufacturers of Materials for Building
Construction and Maintenance
43-36 Tenth Street, Long Island City 1, New York



WATERFOIL

THE UNIQUE TREATMENT FOR EXTERIOR MASONRY SURFACES



Boilermaker's pride!



Photo by U. S. Army
Signal Corps

TANK SMASHER BY FITZGIBBONS is an alternative title for this picture. It shows one of Uncle Sam's M-7 Tank Destroyers, whose 105 mm. gun is calculated to turn the toughest enemy tank into scrap in a few seconds. The chassis and assembly work in large numbers of these units is a Fitzgibbons job. We're a bit proud of it.

After all, it is something of an honor to be handed a job like the building of these Tank Destroyers. Fitzgibbons was selected because of the excellent record of our men and our shops in the production of General Sherman tanks. We feel as though we had a medal pinned on us. And we're more than determined to keep on earning the distinction.

It's not such a jump from welded steel boilers to welded steel armored fighting equipment. Nor will it be such a big jump back again to steel boilers. And those Fitzgibbons boilers will be even better in engineering and workmanship, because of the broadening experience of Fitzgibbons wartime production.

FITZGIBBONS BOILER COMPANY, INC. • 101 Park Ave., N. Y. 17, N. Y.

Works: OSWEGO, N. Y. • Branches in Principal Cities

FITZGIBBONS
STEEL HEATING BOILERS SINCE 1886

**BUY
U. S. WAR BONDS
and STAMPS**



REVOLUTIONARY NEW WINDOWPANE FOR EVERY TYPE OF BUILDING

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 at the factory with a metal-to-glass bond. In the Libbey·Owens·Ford Laboratories this *Bondermetic Seal* has withstood tests up to 4,000 pounds per square inch without failure—dramatic proof of its amazing strength. You install THERMOPANE in a modified single window sash, just as you would ordinary window glass. And what a difference it makes! Keeps homes warmer in winter, cooler in summer. Cuts heating costs amazingly. Deadens street noises.

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, since dirt and moisture cannot penetrate the seal. THERMOPANE makes it possible for tomorrow's homes to be designed with *Daylight Engineering* . . . to incorporate larger windows without sacrificing heating economy. For a descriptive booklet, write Libbey·Owens·Ford Glass Company, 954 Nichols Building, Toledo 3, Ohio.

Copyright 1944, Libbey·Owens·Ford Glass Co.



LIBBEY·OWENS·FORD

a Great Name in **GLASS**

Thermopane

THE WINDOWPANE THAT INSULATES

with the
BONDERMETIC SEAL

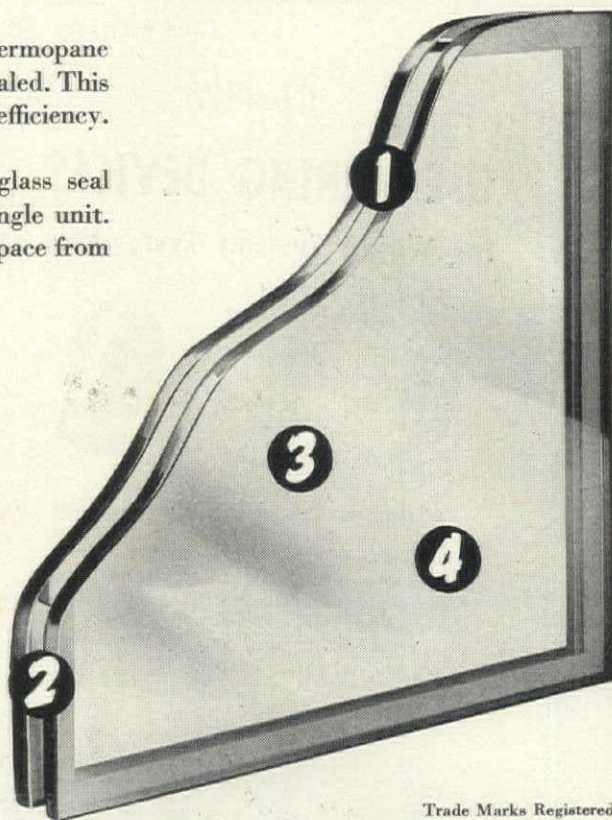
IMPORTANT FEATURES OF THERMOPANE

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.

BONDERMETIC SEAL. This remarkable metal-to-glass seal permanently bonds the two panes of glass into a single unit. Strong and weatherproof, it seals the insulating air space from dirt and moisture.

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.

ONLY TWO SURFACES TO CLEAN. The inner glass surfaces are specially cleaned at the factory . . . always stay clean.



Trade Marks Registered

WHEREVER VISION IS IMPORTANT
USE L.O.F. *Polished Plate* GLASS

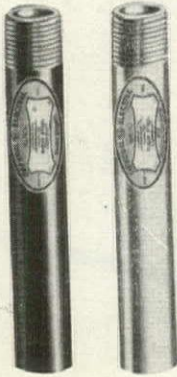


G-E Wiring Material News

For Utmost Wiring Protection

Specify

G-E Rigid Conduit



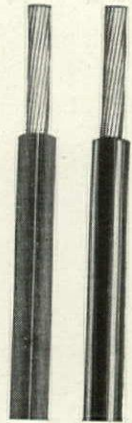
Two G-E rigid conduits are available to protect wiring systems. Both have high quality. *G-E White rigid conduit* is hot-dipped galvanized. This provides a heavier coating of zinc than could be applied in any other way. *G-E Black rigid conduit* is coated with tough corrosion-resistant, asphaltic-base enamel.

G.E. Now Offers A Complete

FLAMENOL*

Thermo-plastic Building Wire Line

This small diameter, thermo-plastic insulated building wire can be used for complete wiring installations—Type SN Flamenol Wire in dry locations, Type SNW Flamenol Wire in wet locations. Both types have long life. Type SNW Flamenol Wire has all of the well known desirable features of Type SN Flamenol Wire and in addition its insulation has low moisture absorption. Both are approved by the Underwriters Laboratories.

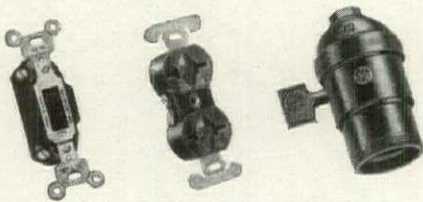


*Reg. U.S. Pat. Off.

Specify

G-E WIRING DEVICES

For Wiring Systems Everywhere



Wiring devices needed for electrical systems in every type of building are included in the G-E line—lampholders, convenient outlets, switches, connectors, fuses, fluorescent accessories, etc. All of these devices are carefully made of high quality materials and can be depended upon to give good service.

Mail This Coupon

Send the coupon for further information on G-E products described on this page:

General Electric Co.
Section CDW-547-26, Appliance
and Merchandise Dept. Bridgeport, Conn.

Sirs: Please send me information on:

- G-E Rigid Conduit
- Flamenol Building Wire
- G-E Wiring Devices

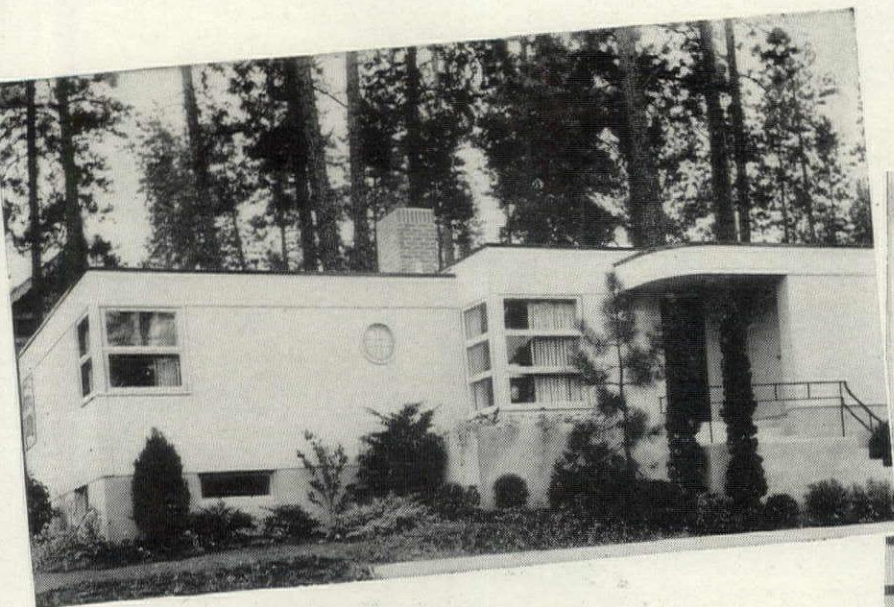
Name.....
Address.....
City..... State.....

HEAR the General Electric radio programs:
The G-E "All Girl Orchestra" Sunday 10
P.M. EWT, NBC. "The World Today"
news every weekday 6:45 P.M. EWT, CBS.

BUY WAR BONDS

GENERAL ELECTRIC





Design of this attractive, durable home relied upon smooth exterior walls of plywood for appearance value. Edwin J. Peterson, architect.

Lorenzo Mansfield designed this smart circular breakfast room, built of Douglas Fir Plywood. A similar installation rejuvenates any kitchen.



**In your post-war building plans
... give first consideration
to versatile, practical**

Douglas Fir Plywood

Houses Dri-Bilt with Douglas Fir Plywood are more durable, more rigid, more comfortable. This versatile construction material—proven in pre-Pearl Harbor use and doubly-proven by countless war applications under every conceivable condition—assures your client a BETTER house that will remain sound and firm for years.

Plan post-war houses—large and small—around this modern “miracle wood.” In your specifications, apply the proper grades of Douglas Fir Plywood to their many uses—for concrete forms, sub-flooring, wall and roof sheathing, interior walls and ceilings, built-ins and exterior finish. Write for detailed literature on the many uses of durable, beautiful Douglas Fir Plywood.

Douglas Fir Plywood is now available only for essential war uses. After Victory, this Miracle Wood will serve you in countless new ways.

DOUGLAS FIR PLYWOOD ASSOCIATION
Tacoma 2, Washington

**How to use
Douglas Fir
Plywood in
Home
Construction**

Finish roofing

5/16" Plyscord sheathing

1/4" Plywall ceiling

Insulation

3/8" Plywall

Asphalt paint vapor barrier

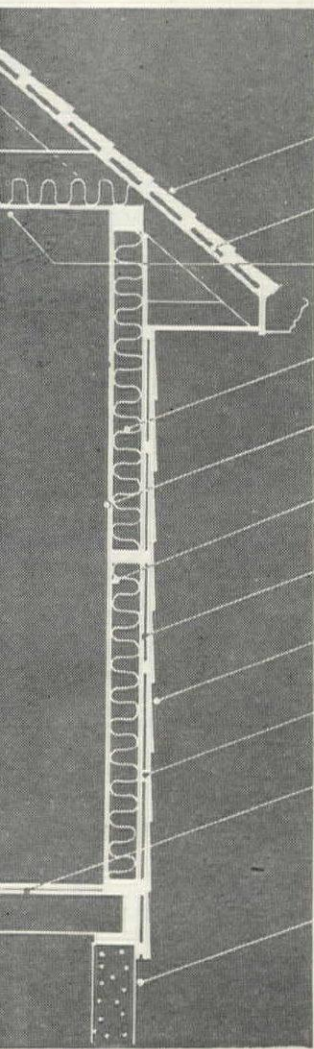
5/16" Plyscord sheathing

EXT-DFPA exterior finish

Furring strip

1/2" Plyscord sub-floor

Concrete formed with 1/2" Plyscord, which is then used for sub-floor.



DOUGLAS FIR PLYWOOD
Real Lumber
**MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER**



SPECIFY DOUGLAS FIR PLYWOOD BY THESE "GRADE TRADE-MARKS"





*Living
Pictures*
through

..... SOULÉ
Steel WINDOWS



*Award to San
Francisco and
Los Angeles
Plants*

To attain indoor-outdoor living at its best, residential steel casements must combine beauty with efficiency. Soulé Steel casements have been de-

signed to include all features essential to the many future types of home construction. In addition they meet all

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WITH AN ARCHITECT
...NOW...
SETS BUILDING TIME
AHEAD

the requirements for operation and arrangement to accommodate shades, venetian blinds, draperies and screening. Soulé window engineers will gladly assist you now with your window problems.

PRODUCTS

Steel Windows and Doors Reinforcing Steel
Welded Fabric Steel Forms Metal Lath Products
Expanded Metal Stucco Netting Fabricated Steel
Merchant Steel

SOULÉ STEEL COMPANY
SAN FRANCISCO

LOS ANGELES ★ PORTLAND ★ SEATTLE ★ HOUSTON

"To Me, it means Certified Performance!"



CP

"To Me, it means tops in cooking perfection, a cooler, cleaner kitchen and big savings in time, food, fuel and money!"



Every Gas Range bearing this famous CP Seal meets the highest performance specifications of home economists and engineers of the entire American gas industry. That is why CP Gas Ranges are the recognized standards by which all cooking appliances are judged. That is why you will want to specify CP Gas Ranges in your postwar homes.

For information on CP Gas Ranges, ask your Gas Company or write Association of Gas Appliance & Equipment Mfrs., 60 E. 42 St., New York 17, N. Y.

GAS RANGES BEARING THE CP SEAL ARE MANUFACTURED BY

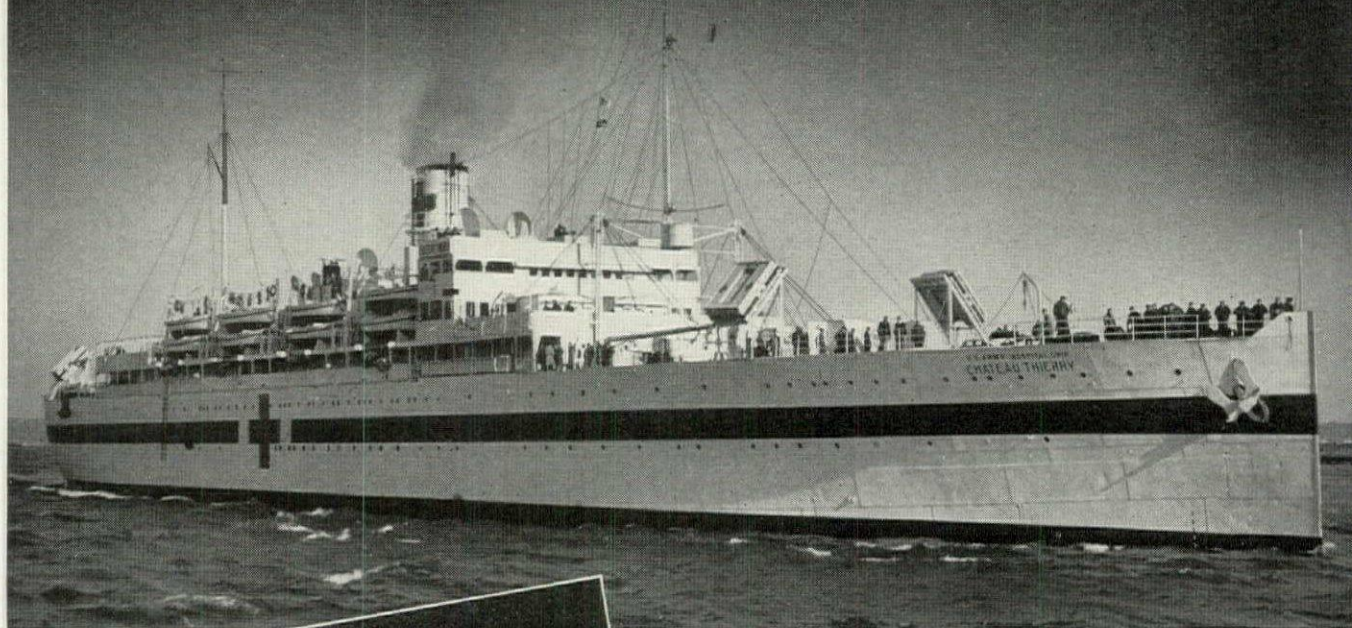
A-B Stoves, Inc.
American Stove Co.
Caloric Gas Stove Works
Cribben & Sexton Co.
Detroit-Michigan Stove Co.
The Estate Stove Co.
Glenwood Range Co.
James Graham Mfg. Co.
Grand Home Appliance Co.
Hardwick Stove Co.

O'Keefe & Merritt Co.
Roberts & Mander Stove Co.
Geo. D. Roper Corp.
Standard Gas Equipm't Corp.
The Tappan Stove Co.
Western Stove Co., Inc.
IN CANADA
Clare Bros. & Co., Ltd.
Gurney Foundry Co., Ltd.
Moffats, Ltd.

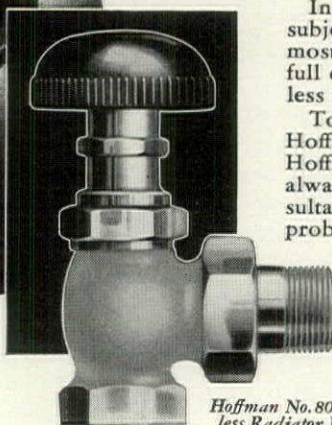


.. THE FLAME THAT WILL
BRIGHTEN YOUR FUTURE

Famous CHATEAU THIERRY modernized with HOFFMAN VALVES AND TRAPS!



Hoffman No. 8 Trap



Hoffman No. 80 Packless Radiator Valve

U. S. ARMY TRANSPORT CONVERTED INTO A COMPLETELY MODERN HOSPITAL SHIP

This veteran transport for twenty years has carried troops to posts throughout the world. Today, at a cost of \$2,000,000 it has been remodeled and commissioned as a hospital ship with a total capacity of 515 patients.

Modernization of the heating system was part of the conversion program. 331 Hoffman No. 80 Packless Radiator Valves and Hoffman No. 8 Traps were installed to make the heating comfortable, efficient and to conserve steam.

Hoffman Specialties make any steam heating plant modernization a genuine success. Not only are they recognized by critical steam plant operators as highly efficient units, but they have features which amazingly prolong service life.

In Hoffman Traps, for example, the parts subject to wear are renewable. Their thermostats are made of non-corrosive metal, full of spring, long-lived in spite of countless flexings and high temperatures.

To stretch fuel and assure comfort, specify Hoffman Steam Specialties. Remember that Hoffman engineers are always available for consultation on your heating problems.

SEND FOR THIS BULLETIN

Contains complete information and engineering data on Hoffman Traps.

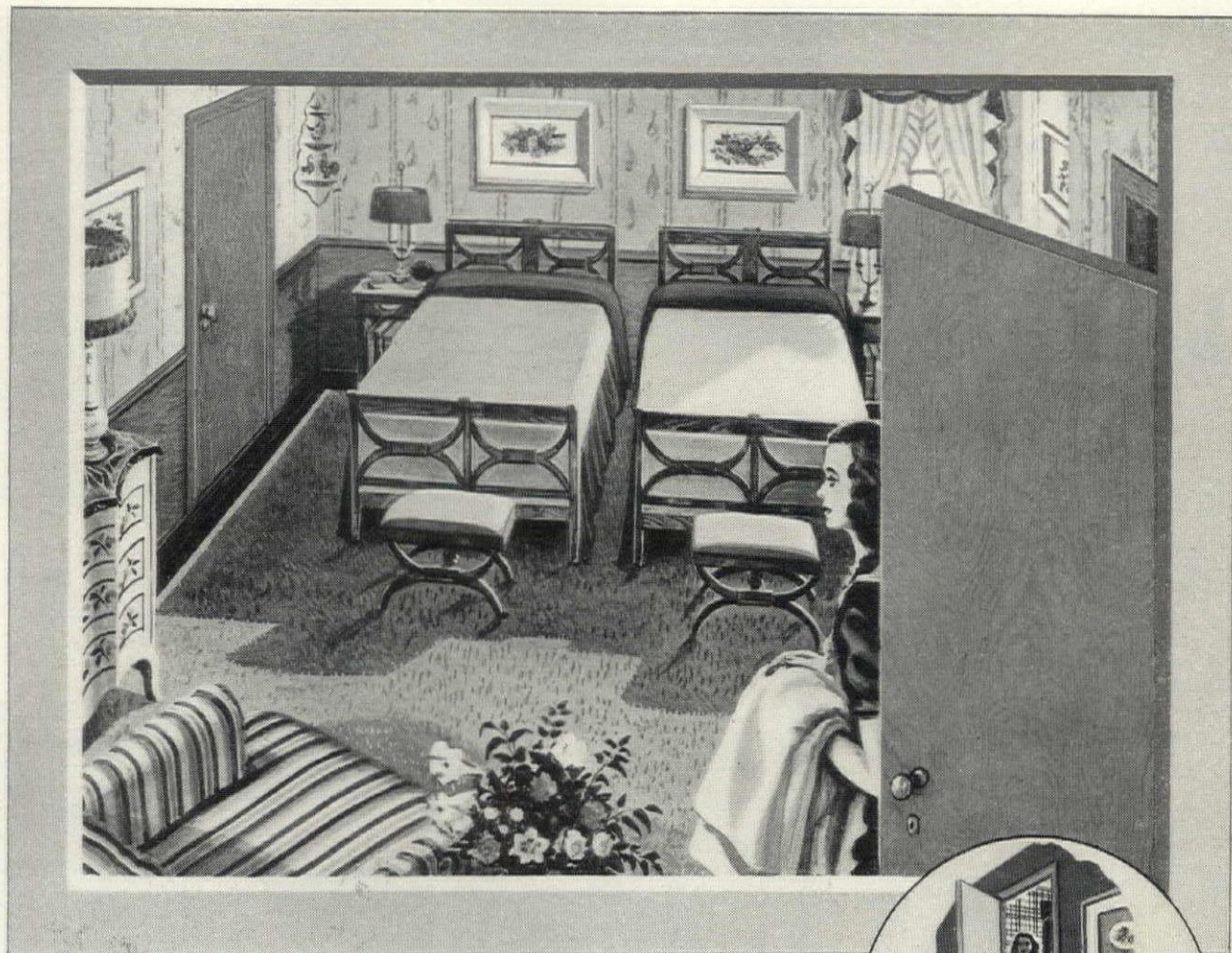


HOFFMAN

HOFFMAN SPECIALTY CO., Dept. AF-5, 1001 YORK ST., INDIANAPOLIS 7, IND. MAKERS OF VALVES, TRAPS, HOT WATER HEATING SYSTEMS, CONDENSATION AND VACUUM PUMPS... SOLD EVERYWHERE BY WHOLESALERS OF HEATING AND PLUMBING EQUIPMENT.

Controlled Heating

STEAM  HOT WATER



Through these *D*oors... pass the Most Critical Women in the World

From soft, deep-piled rugs to hardwood flush doors, American women are used to demanding — and getting — the utmost in home convenience, beauty and serviceability.

Their critical judgment is acute. They know what they want.

In doors, as in all other parts of their homes, they want the last word in scientific design.

Mengel Flush Doors, made of Weldwood Plywood, are scientifically designed for "fingertip control" yet they easily survive 25,000 slams in a half-ton slamming machine. Their patented "hollow-grid" construction is permanently sealed against moisture, dirt and air — and every door is fully guaranteed.

American women want smartness and lasting beauty.

Could anything be lovelier than smooth door

faces of Weldwood Plywood in rich mahogany, warm walnut, cool oak, knotty pine, gum or other fine hardwoods — hardwoods that match the Weldwood Plywoods your clients are demanding for their wood-paneled walls?

And, where your plans call for painted interiors, birch- or gum-faced Mengel Doors are ideal. They never show grain-raise.

"No crannies to catch dust and dirt, either," say American women. And they mean it!

Mengel Flush Doors, unbroken by panels, have no ledges or moulding for dust to cling to.

"We don't want to pay much," they say.

Mass production of Mengel Doors has brought the price of this top-quality door to little, if any, more than doors having none of the Mengel Door advantages.



Your choice of doors for the homes you design will be judged by the high standards of American women.

Write now for complete information and detailed specifications of Mengel Flush Doors.



EXCLUSIVE MENGEL DOOR FEATURES

1. Hardwood rails, dovetailed and wedge-locked to stiles.
2. Hardwood stiles, assuring superior screw-holding qualities.
3. Hardwood lock blocks make locks easier to fit and smoother in operation.
4. Rigid insulation board grid; strips $\frac{3}{8}$ " wide provide greater surface for gluing faces to core.
5. Faces welded to core on hot plate presses.

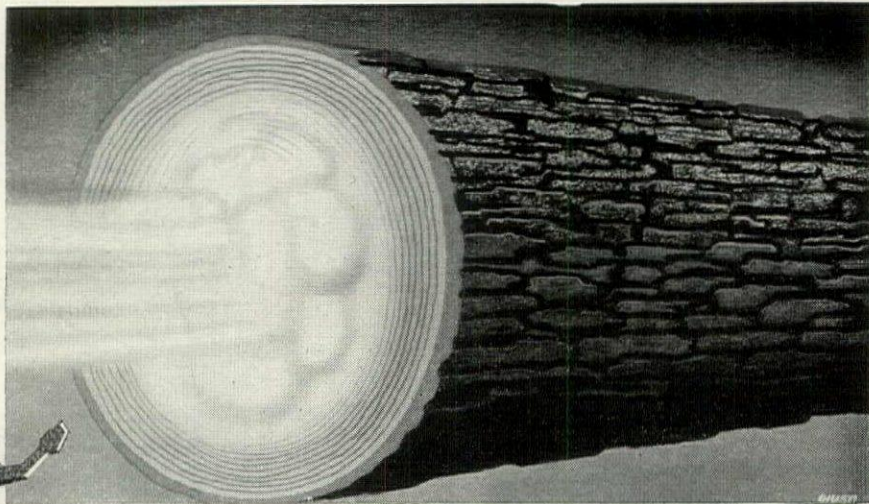


Mengel Doors

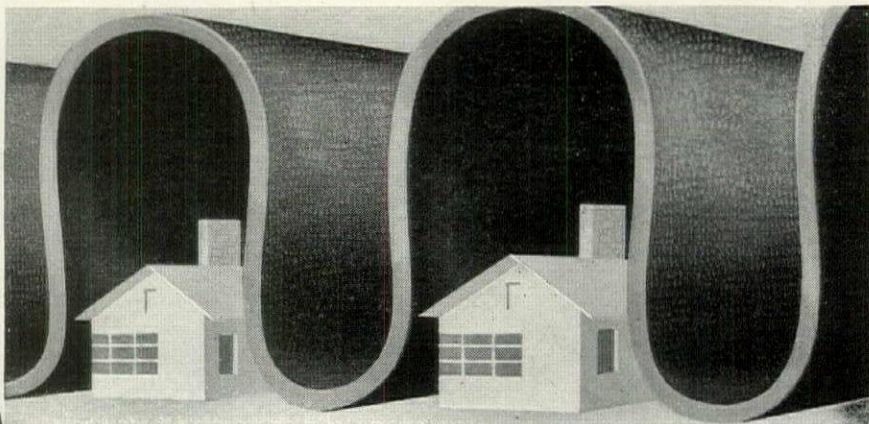


Mengel Flush Doors, Weldwood Plywood and Plywood Products are manufactured and marketed by THE MENGEL COMPANY, Louisville, Ky...THE UNITED STATES PLYWOOD CORPORATION, New York, N.Y. Distributing Units in Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Louisville, Newark, New York, Oakland, Philadelphia, Rochester, San Francisco, Seattle . . . Send inquiries to nearest point.

Fill a log with air
to make a
BLANKET!



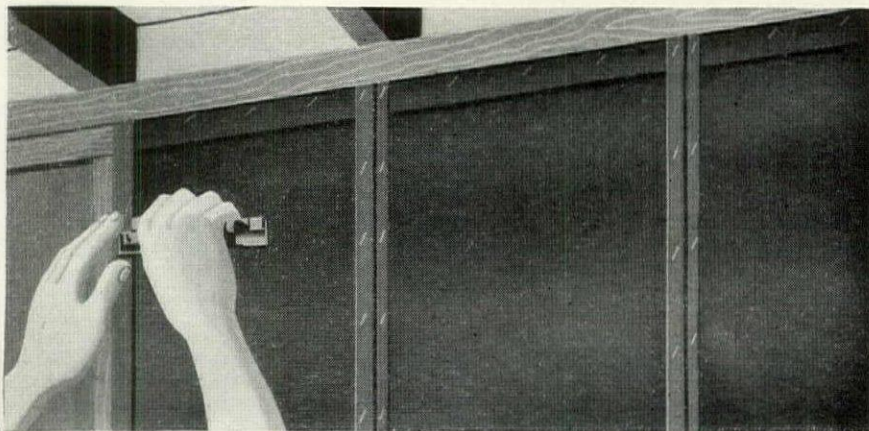
It's a semi-rigid blanket for buildings that keeps heat *in* in winter and *out* in summer. An ingenious Masonite* process uses special foaming agents to build wood's fibers into a cellular structure of millions of tiny air cells—the most efficient type of heat insulation known!



• You can count on Masonite Cell-U-Blanket and the Masonite Presdwoods* for war-essential construction. Government Departments and Services are familiar with their possibilities. For full details and practical information regarding Cell-U-Blanket, write Masonite Corp., Dept. AF-5, 111 W. Washington St., Chicago 2, Ill.

Fuel costs drop and comfort increases wherever this light-weight insulating material is installed. As Masonite Cell-U-Blanket,* it comes in rolls—enclosed in moisture-proof covering—and stays permanently in place in walls and attic framing, flame-proofed, safe from wind or weather.

MASONITE
CELL-U-BLANKET

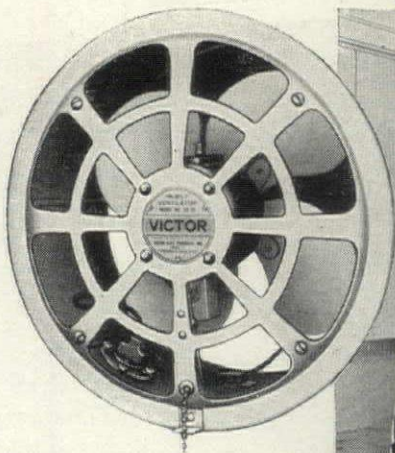


Cell-U-Blanket comes in four widths to fit common spacing between studs, joists or rafters. Lengths are cut with shears, stapled or tacked in place, can be lapped to make a complete heat and vapor barrier that will not shrink or settle. Cell-U-Blanket is available *today* for civilian building and remodeling, in addition to its many jobs in the war effort.



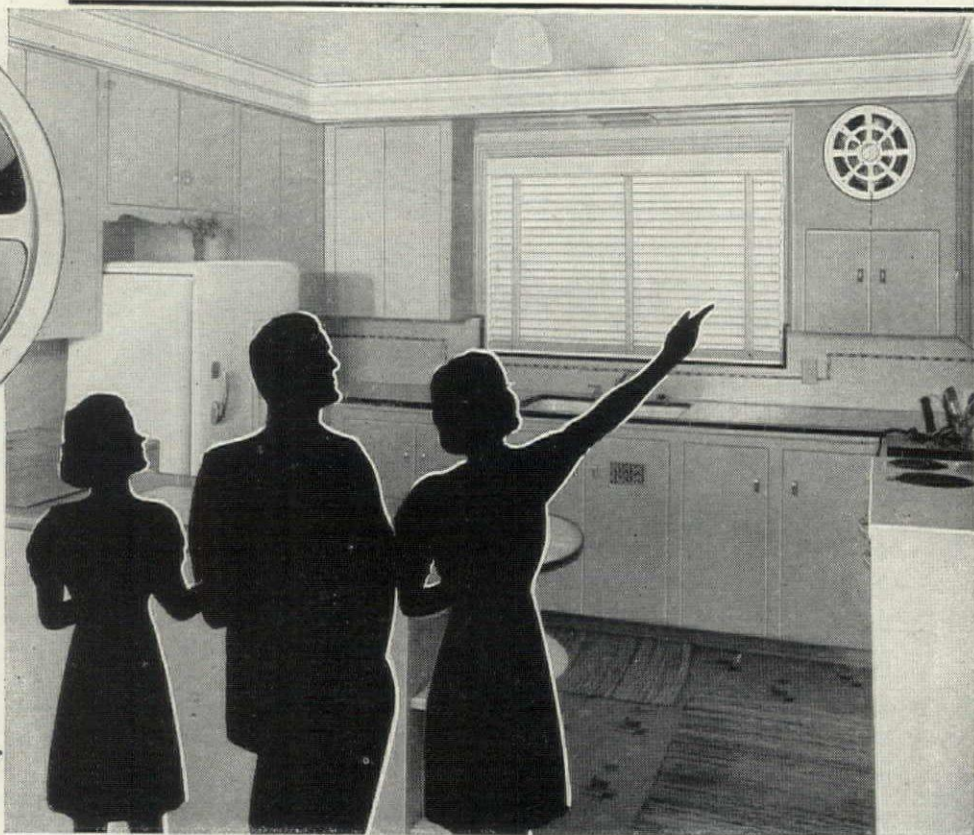
*TRADE-MARK REG. U. S. PAT. OFF.
COPYRIGHT 1944, MASONITE CORPORATION

Give them what they want!



Many, many pounds of grease and dirt never find their way into the garbage can. They float thru the air finally landing on walls, curtains, everywhere, smudging everything they touch. The Victron In-Bilt Ventilator automatically rids your home of these unwanted, obnoxious elements — whisks them out of doors in a jiffy.

A Good Housekeeping Essential



Americans the country over are dreaming and planning for tomorrow's home—today...and of the things they want "inside" that home.

One of the things they want and are going to demand is better ventilation. High on their list of pet hates is the linger, longer odor of yesterday's cooking. According to the latest Small Homes Survey of post-war Home Planners, 80% stated that they want a ventilator in their home of tomorrow. A large majority want a Ventilator in the kitchen at least. Others want a ventilator in the bath, rathskeller or bedroom.

Let's give 'em what they want.

Needless to say many remember the good job of removing stale kitchen odors a Victor Ventilator is doing in the homes of friends. They will prefer a new Victron Ventilator in their post-war home.

VICTOR ELECTRIC PRODUCTS Inc.

DEPT. AF-544 2950 ROBERTSON AVE., CINCINNATI 9, OHIO

Note:
TO KITCHEN CABINET MANUFACTURERS

In your plans for tomorrow's kitchens, you plan to give the home owner the utmost in utility, beauty, convenience. Don't forget the importance of kitchen cabinets which incorporate Victron Ventilation. Our engineers will be glad to work with you on your post war plans.

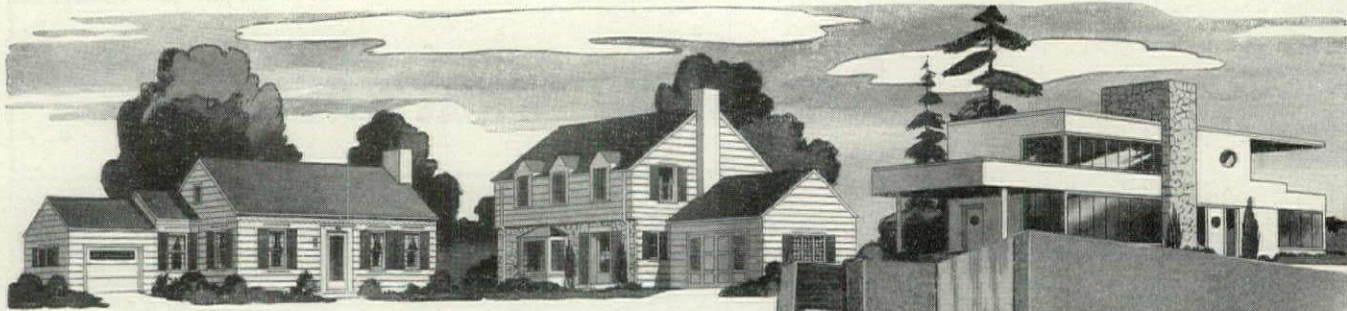
Get the latest news of the developments by Victor in the Ventilator and home appliance fields. Write today and simply say, "Put me on your list".



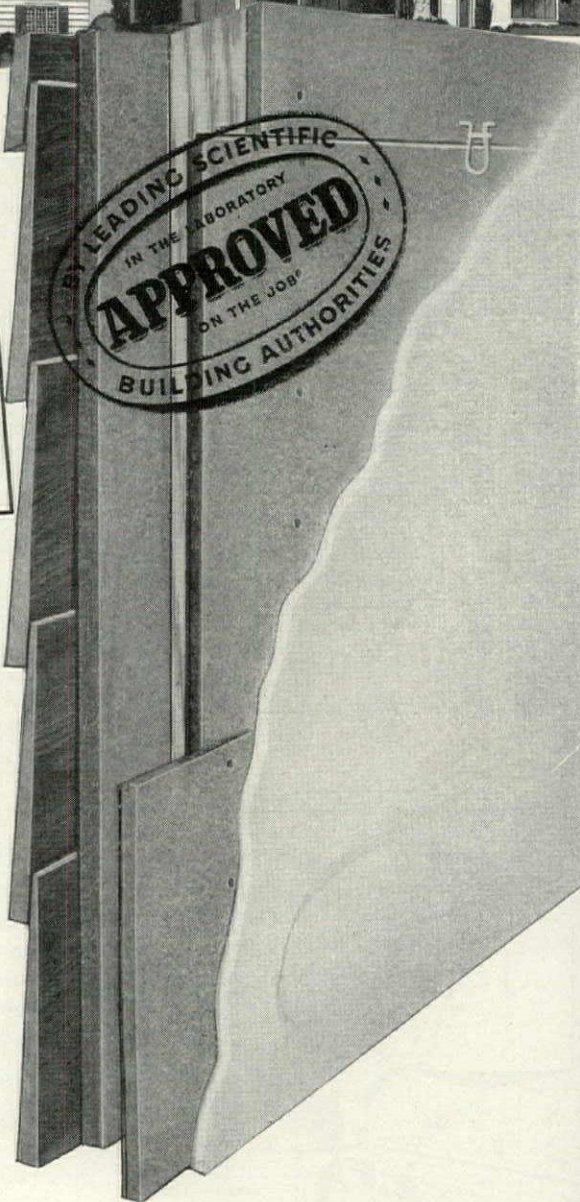
The Trade Mark of Quality

INBILT KITCHEN VENTILATORS

THE BONDS YOU BUY TODAY WILL BUY BETTER LIVING TOMORROW



No matter what type
... Tomorrow's Homes
Should Have The Approved
Insulite Wall of Protection!



Cape Cod, Modern Colonial or Modern—no matter what type of home you design in the future, the walls of the house will face added responsibilities.

Tomorrow's homes, because of new standards of heat control, must have walls with effective insulation.

Tomorrow's homes, because of air-conditioning, must have walls so constructed that moisture condensation within the walls is reduced to a minimum.

The Approved Insulite Wall of Protection will do the job. This wall gives these effective safeguards:

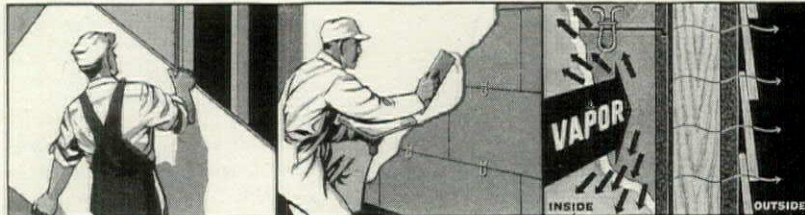
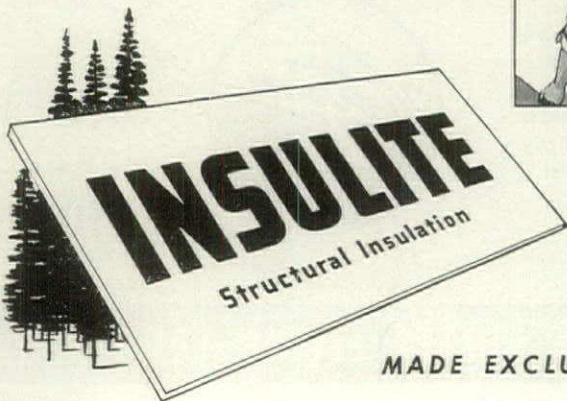
Double Insulation ... Superior Bracing Strength ... Protection against internal moisture condensation.

The detailed drawings below explain why. For specifications, refer to Sweets Architectural File, Section 10, or write for "Scientific Facts" Booklet. Address: Insulite, Minneapolis 2, Minnesota.



INSULITE

Division of Minnesota and Ontario Paper Company
 MINNEAPOLIS 2, MINNESOTA



On outer-walls, Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite Sheathing has a bracing strength four times that of wood sheathing, horizontally applied.

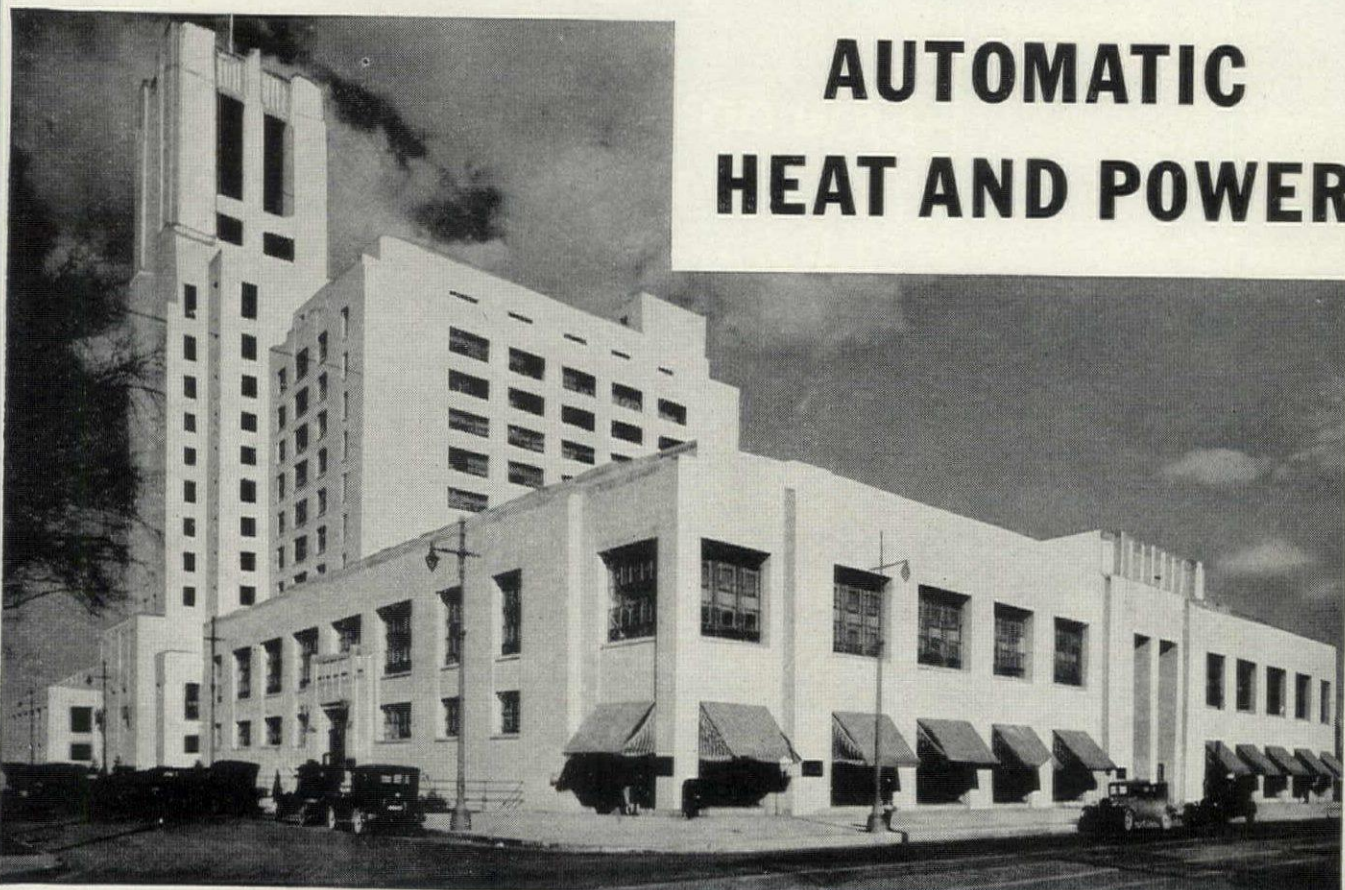
On inner-walls—Sealed Lok-Joint Lath, furnishes a second wall of insulation. The patented "Lok-Joint" provides a strong, rigid plastering surface, prevents joints from opening under trowel pressure.

How moisture condensation is effectively minimized in the Approved Insulite Wall of Protection. Sealed Lok-Joint Lath, with asphalt barrier against the studs effectively retards vapor travel. Bildrite Sheathing, being permeable to vapor, permits what little vapor escapes to pass naturally towards the outside.

MADE EXCLUSIVELY FROM WOOD

Post-war construction means...

AUTOMATIC HEAT AND POWER



Just as the modern war plants of today rely on the economical efficiency of *automatic* heat and power through the use of liquid and gaseous fuels . . . so will the factories, commercial and institutional buildings of postwar tomorrow. It is inevitable. And when you think of such automatic heat and power, you think of Todd because this name has become synonymous with leadership in the field of combustion equipment.

Todd is the answer to every architect's combustion equipment problem . . . supplying a burner to meet practically every requirement . . . an installation tailored to fit any specification!

Time and again, Todd burners have proven their efficiency . . . in manufacturing plants, hospitals, schools, office buildings, hotels, banks and stores. They provide the utmost in flexible response to rapidly changing heat and power demands. Their use insures fuel economy . . . and exceptionally low maintenance costs!

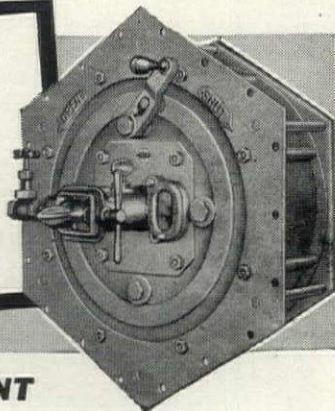
Todd engineers are available for consultation. You will find them extremely helpful while working out your heat and power specifications for postwar construction or while planning the modernization of existing plants. Don't hesitate to call on them—at any time.



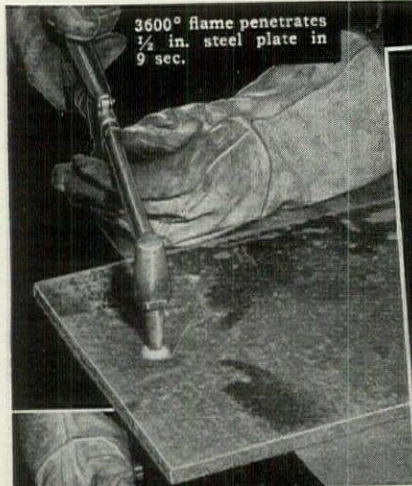
TODD SHIPYARDS CORPORATION (COMBUSTION EQUIPMENT DIVISION)

601 West 26th Street, New York 1, N. Y.

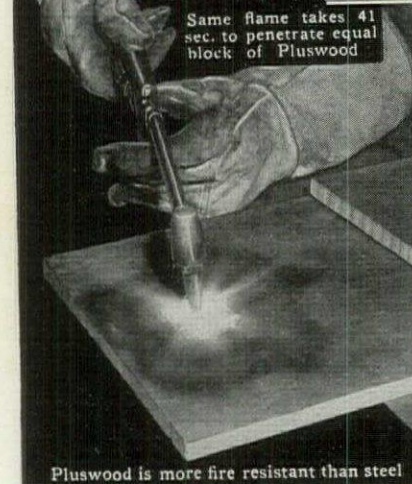
NEW YORK * BROOKLYN * HOBOKEN * BARBER, N. J. * SO. PORTLAND, ME.
GALVESTON * HOUSTON * MOBILE * NEW ORLEANS * LOS ANGELES
SAN FRANCISCO * SEATTLE * TACOMA * BUENOS AIRES * LONDON



ON THE FIRING LINE OF AMERICA'S WAR PRODUCTION FRONT



3600° flame penetrates 1/4 in. steel plate in 9 sec.



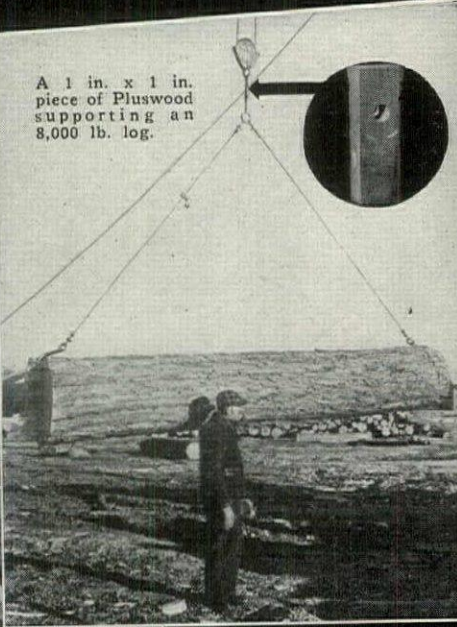
Same flame takes 41 sec. to penetrate equal block of Pluswood

Pluswood is more fire resistant than steel

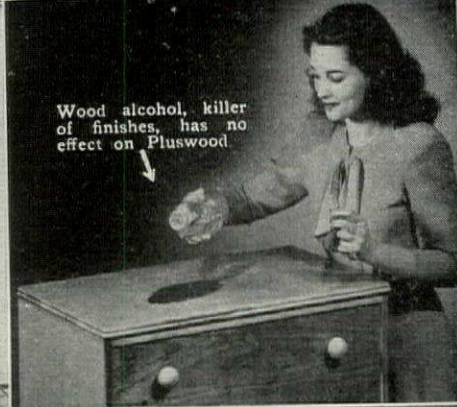
This is PLUSWOOD

A Wood Alloy

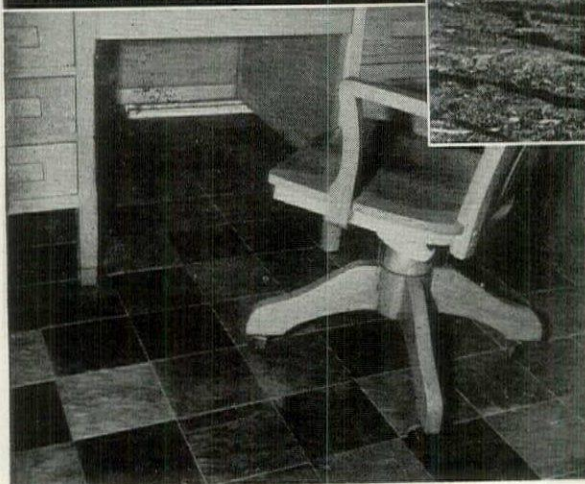
You are invited to investigate this remarkable postwar material with a great potential for building



A 1 in. x 1 in. piece of Pluswood supporting an 8,000 lb. log.



Wood alcohol, killer of finishes, has no effect on Pluswood.



Pool of ignited alcohol burns harmlessly on Pluswood.

After 90 days of hard use, not a scratch on this floor of Pluswood



Unmarred is beautiful Pluswood surface.

There have been many promises of new materials for building to come after Victory. Pluswood is one of these war developments now ready for your consideration—a high density wood alloy with an exciting weight-strength ratio. Made by a chemico-mechanical process, Pluswood has the strength of many metals plus metallic qualities of toughness and resistance to abrasion. It is a non-conductor, inert to mild acids and alkalines, and impervious to water. Add all of these advantages to the natural aesthetic qualities of wood, and you have a material to inspire any interior or exterior design.

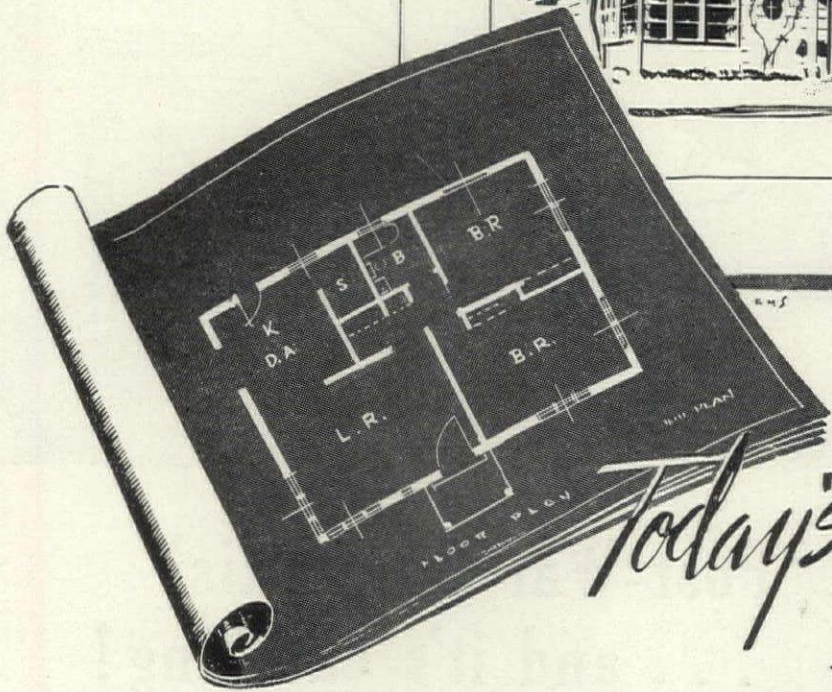
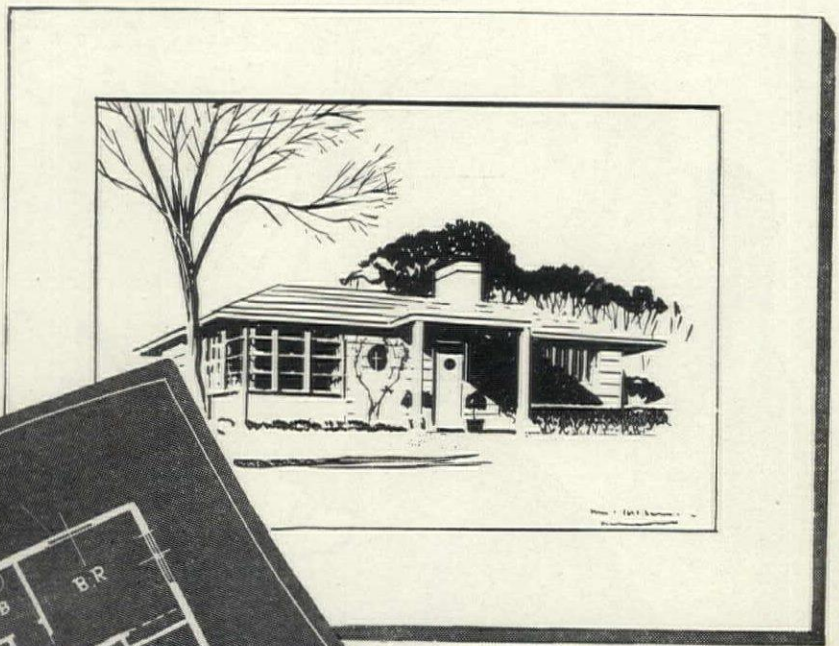
Pluswood invites your ideas as to its application in your postwar plans—for it will be available to your order, made to any pre-determined description, in a wide range of woods and at a moderate cost. Back of this new wonder material is the Lullabye Furniture Corporation — since 1897 America's foremost manufacturer of juvenile furniture. Write today for an interesting engineering data bulletin that will give you more complete information.

PLUSWOOD, Incorporated, Oshkosh, Wis.

Associated Companies

LULLABYE FURNITURE CORPORATION, Stevens Point, Wisconsin
 NORTHERN HARDWOOD VENEERS, INC., Butternut, Wisconsin
 ALGOMA FOREST PRODUCTS, LTD., Bruce, Ontario, Canada





Today's Blueprints



TOMORROW'S LOW-COST PREFABRICATED HOUSE

What will your prospect want in a low-cost house after the war is over? That's the question that is causing much discussion and planning in our offices as we work to develop a modern prefabricated house you can sell as a complete package in the low-cost field. Frankly, we've had a lot of ideas, have discarded many, incorporated a few into our more recent plans. The sketch above is one of the many plans that have been worked out, and we're still not ready to say that this is "the house" we'll have to offer, for we're still in the planning stage. However, we feel confident that today's blueprints will become tomorrow's prefabricated house for your prospects.

Our entire manufacturing facilities are still engaged in production of war materials for our Government, and will be as long as needed. Insulated barracks, tropical hospitals, grain bins,

hutments, ammunition crates, houses for war workers—whatever we've been called upon to produce, we've applied the production line technique and time-saving, money-saving methods learned since 1917 in the manufacture of prefabricated houses.

As soon as we have details of our post-war prefabricated house plan available, and the package plan for dealers that goes with it, we'll send this information in the order that inquiries have been received. If your name isn't on file for this, write us now, so that you'll get these interesting facts to consider in your post-war selling plan.

HOUSTON *Ready-Cut* **HOUSE CO.**

Prefabricators Since 1917

POLK AVENUE

HOUSTON, TEXAS



It's called "Post-War Dreamitis" ... and it's catching!

IT'S a disease. And the funny thing about it is that you may have caught it and don't even realize the fact.

The symptoms sound more amusing than alarming. The patient thinks about post-war and the house he plans to build. He sees visions of partitions that appear and disappear as he touches a button. Houses that glitter with glass and plastics. Houses that revolve with the sun, where he lolls in comfort not equalled since the days of ancient Rome.

There are at least two alarming things about "Post-War Dreamitis", if you sincerely want to build a house some day soon:

1. You lose time worrying about impractical ideas, when there is no time to spare.
2. You get confused with dream ideas. And if you don't look out, you'll miss entirely the many new improvements in building and in materials that are ready and waiting.

For example, new "floating type" plaster walls and ceilings that reduce room-to-room noise and cut down on repair expense. Fire-

proof gypsum sheathing at no more cost than old-style inflammable sheathing. High efficiency rock-wool insulation that brings year 'round comfort, and pays for itself even in the low-priced home by fuel savings. Washable wall finishes in colors, and noise-reducing materials for rooms where quiet is desired. These are just a few of the products which National Gypsum research has ready for your post-war home... products that can be specified *now*.

START PLANNING NOW

You should start now if you want to avoid the rush later on. Most authorities predict 1,000,000 new homes a year in the 10 years after the war. So the man who begins planning today has the jump on the market. One of the best ways to begin is by seeing your nearby Gold Bond lumber or building material dealer, or a local contractor or architect. These men know building. They can tell you how to get the house you want and how to finance it up to 70% or 80%.

The main thing to remember is that if you start now—today—with your planning you'll

probably be living in your new house while the man with "Post-War-Dreamitis" will have nothing more tangible than his dreams.

M. H. Baker, President
National Gypsum Company

TO ARCHITECTS!

Architects know better than anybody that it takes more than dreams to build houses. It takes definite plans and specifications. To avoid visionary dreaming by the public and encourage practical planning, National Gypsum is running this series of ads in National Magazines. Then, when building restrictions are lifted, the whole building industry—architects, manufacturers, dealers and builders—will be able to start right in building comfortable, efficient homes for the people of America. National Gypsum Company, Buffalo, New York.

BUILD BETTER WITH GOLD BOND

Wallboard • Lath • Plaster • Lime • Metal Products • Wallpaint • Insulation • Sound Control

THE MONTH IN BUILDING . . . NEWS

Rumor puts U. S. Steel behind Gunnison's prefab house (this page) . . . Labor peer says Tories block British planning (page 56) . . . New York Kleig-lights its postwar program (page 57) . . . Klutznick heads FPHA (page 58) . . . Commando Kelly comes home (page 59) . . . Holden sees construction doubled (page 60).

REVIEW

Last month as in every recent month Building's future crowded Building's present off the news stage. In New York all eyes turned to a slick exhibit, the eventual postwar city in 1/4800 scale, and the most exciting new construction job was a certain yellow door on upper Fifth Avenue, which merchandiser Mary Lewis had brashly painted to the dismay of sedate neighbors.

But New York's brisk real estate trading was ample evidence that postwar building headlines would tell a different story. Two of Fifth Avenue's most imposing landmarks—a Vanderbilt mansion and the adjoining Union Club—sold to a buyer whose plans for rebuilding, although rumored to be prodigious, were as mysterious as his identity. Rockefeller interests, acquiring new sites around 99 per cent occupied Rockefeller Center, made no secret of their plans to build new skyscraper office space. The Guggenheim museum, now a-borning of Frank Lloyd Wright and to be built at Fifth Avenue and 89th Street, caught the eager eye of Robert Dowling, builder of Parkchester and other Met projects. Buying a plot next door, Dowling said he would build an apartment house, designed to blend agreeably with the museum's architecture "if at all possible."

Defense Homes Corp. was pleased to report the sale of the first lot of its \$71,000,000 holdings—at a \$1,000 profit. Stuart Gardens, a 980-unit project at Newport News, Va., and one of DHC's first ventures, sold to a group of local business men for \$3,615,000. Terms: 10 per cent down and a 20-year mortgage at 3 per cent.

With the long-rumored union between U. S. Steel and Gunnison Housing Corp. coming to a boil, the mass-produced, mass-marketed house looked less like a pipe-dream, more like a portentous postwar reality. That U. S. Steel was mindful of a burgeoning European emergency housing need was not lost on other prefabers,

Blinking at the size of the slum clearance job ahead, planning and housing

officials met in Chicago to measure and compose their know-how against coming demand. From Washington foxholes, builders fired another round at the National Capitol Housing Authority's slum clearance plans, sought Congressional approval of a bill that would authorize public acquisition of blighted land, then put the rehousing job in private hands.

Backed strongly by the Navy, which wants homes built for its West Coast personnel, the National Housing Agency was trying to pry more Lanham Act funds from Congress. If NHA feels it can meet the Navy's needs, it may this time ask for \$75,000,000—ten times as much as its last appropriation.

Small housing surpluses showed up in a few places, and the Federal Public Housing Authority was at last able to give some attention to the needs of service wives unable to find housing at rents within their means. Where available, public war housing, FPHA said, may now be rented to families of service men.

NHA's much-puffed program for converting older properties to provide war homes was stumbling badly. Although leases have been signed covering 45,364 units, construction has been finished on little more than half this number. Reason: builders' lack of enthusiasm for small, scattered jobs requiring time-consuming priority applications.

Russian lumber was helping the U. S. meet its boxing and crating needs. With the Luftwaffe no longer over Murmansk, the Russians had time to reload lend-lease ships with softwood.

U. S. STEEL LOOKS AT PREFAB

Rumors, still unconfirmed but persistent, name U. S. Steel as ready to purchase Gunnison Housing Corp. This may be climaxed a decade of painful prefabrication progress in which government war needs upped this fledgling business within gunshot of a burgeoning industry.

Students of prefabrication have been of two schools. Most numerous have been those who hold flatly that the in-

dustrialized house must take the form of prefabricated units for site assembly. But an articulate minority contend that the true economies and advantages of prefabrication can be gained only by producing complete houses in a factory, shipping them to prepared foundations for erection. Leading protagonist of the latter theory has been Foster Gunnison, whose plant in New Albany, Ind. has

Acme



U. S. STEEL buyer Benjamin Fairless and seller Foster Gunnison hope for the mass-produced house.



Wide World

produced 5,000 houses for the war program. If Big Steel buys Gunnison it will have satisfied its corporate caution that the factory-built house is the more likely winner.

Fairly familiar are the arguments on both sides: The transition from conventional construction is easier, the public demands unlimited variety, labor will not oppose, shipping charges are less—say the anti-Gunnison group. Insists Mr. Gunnison: prefabrication of parts is a timid makeshift; completely controlled production will save up to 50 per cent; ample variety is possible with adequate research, plant facilities and capital.

If the deal clicks its implications are enormous. Truly industrialized housing, uninhibited by the limitations of hand production and by too-restrained notions of what the public will buy, could well revolutionize U. S. living.

Homeopathic Doses. That the Corp. would empty the housing prescription bottle for its first try seems too much to hope. More likely it would dip in cautiously, gradually increase the dosage as success stiffens its nerve.

Gunnison himself, whom rumor places at the head of the new enterprise, is still mindful of the coolness that greeted his earliest experiments, which were more advanced in design than his current models. A steel cots-wold with a fringe on top is a fairly predictable opening move well within the Detroit "whip socket car" tradition. Only purists will be too bothered by this. Realists will patiently sit out the experimental period, confident that true mass production design and public acceptance will presently meet on a rational plateau.

Steel's Motives. Why the Corp. is making this move, if it is, remains a guessing contest. Good guesses: huge potential tonnage to offset the threat of competitive metals in the expanding transportation industries; a stabilized position for steel in the housing field by control of the end product. And backing up these is the probability that U. S. Steel's move into housing is the newest and most substantial effort in a long and expensive wooing of the public favor. People who cross a steel bridge or who work in a steel-frame skyscraper do not *think* steel; people who live in a steel house would. Thus at one whack the Corp. could close the gap which obscures its products from public identification and line up profitably in the most socially important postwar field—housing. Nor is internationally-minded U. S. Steel indifferent to possible export market.

Headaches. A bag full of problems obviously awaits the first big try at the industrialized house. That U. S. Steel knows this and has at least tentative solutions is a foregone conclusion. The Corp. has an abundance of what others have lacked before—cash, research facilities and production know-how. Its chief lack, which Foster Gunnison would presumably supply, is merchandising technique.

If the rumor is true, credit for a timely assist must go to none other than the Prime Minister of Great Britain, who month ago said that the govern-

Myron Ehrenberg



LORD LISTOWEL wants it basic

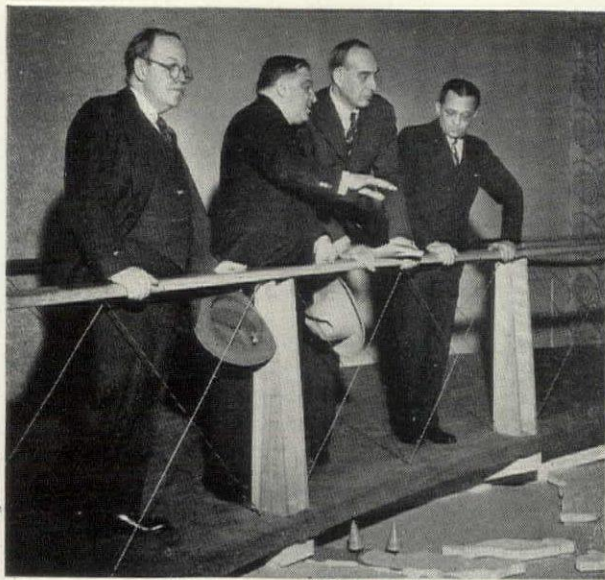
ment would back England's first big venture into prefab—a half-million steel emergency homes for heroes.

CHANGE FOR THE LONDON PLAN

To Lord Listowel, London County Council member who was in New York last month with other members of a Parliamentary mission to Australia, the Council's London plan is "one manifestation of a powerful drive for social betterment which springs from the somewhat weary but still ardent spirit of the British people." But like other members of the Prime Minister's loyal opposition, Lord Listowel, Labor whip of the House of Lords, mourns the absence of supporting action from the government.

Already passed by, Lord Listowel said, is one road to basic planning. The slow and almost unmarked death of the Barlow report, which recommended national planning of industrial location, has had the direct effect of emasculating one of the salient proposals of the London plan: that 500,000 Londoners be moved out of the city. Workers can't be moved unless industrial moves can be planned to support them, and this stark reality has already forced the London County Council to follow a policy it deprecates; its recent acquisition of housing sites in suburban Hertfordshire will obviously swell London to even more unwieldy proportions.

Lord Listowel said that the moderate proposals of the Uthwatt report to ensure sound future use of all undeveloped land have already been officially discarded. Quibbling at their prospects for compensation if the government bought only development rights according to the Uthwatt
(Continued on page 58)



Architect Louis Skidmore and Edwin A. Salmon, chairman of the City Planning Commission.

NEW YORK GAPES AT ITS FUTURE

First U. S. city to convert its postwar program from grandiose oratory to precise plans and budget figures, New York is also the first to show proudly the apple-pie order of its public works shelf to an enchanted citizenry. By May day New Yorkers strolling on Park Avenue found a new door open, wandered into the old Board of Education building to find their city's future dramatically spread out in three-dimensional maps, graphic charts, elaborate models.

Designed by Manhattan architects Skidmore, Owings and Merrill and executed at a cost of about \$90,000, the New York exhibit impressively lifts the city plan out of the abstractions which obscure it for non-specialists, makes it come alive for the people to whom it belongs. Biggest attention getter is a large-scale model (50' x 20') of all five boroughs, festooned with postwar works. Bright green trees grow where playgrounds will be, up-standing red crosses mark new hospitals, small slates spot schools. New Yorkers paused long on a semi-circular ramp to peer at the new city at their feet, passed on to view models of specific projects planned for their own boroughs, emerged to take a second look at lobby displays describing the number of men who would get postwar jobs, the amount of materials to be used.

For the whacking \$1,200,000,000 job that will put 250,000 men to work, the city has 76 per cent of the architectural plans completed or in progress, careful cost estimates for all projects. To pay for the work it sees ahead, New York feels \$469,900,000 in federal aid will be necessary, also counts on state aid amounting to \$164,310,000. But the city expects to find more than 50 per cent of the necessary funding in its own pocket.

Could even rich New York afford it? Mayor Fiorello LaGuardia thought so. "A billion dollars is a lot of money, but it is not much more than was spent in New York to provide jobs during the depression. In normal times New York spends over \$100,000,000 a year on improvements."

To those who labeled the program "not a city plan but a building replacement scheme", Comptroller Joseph D. McGoldrick, chairman of the city postwar committee, replied reasonably: "Admittedly the city's postwar works program does not attempt to rebuild New York—that would be a pretty ambitious task—but it will make some worth-while changes in the face of the city and will make it a more commodious and pleasanter place to live."

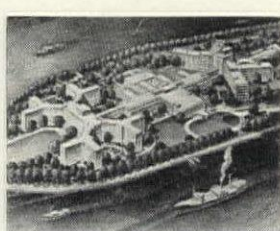
CITY FATHERS VIEW panoramic map of postwar New York (see below), are visibly impressed. Read left to right for Postwar Committee Chairman McGoldrick, Mayor LaGuardia, Park Commissioner Robert Moses, and Reuben Lazaran, aide-de-camp.



HOUSING: \$115,282,000



SCHOOLS: \$118,678,000



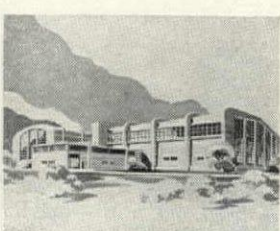
HOSPITALS: \$98,586,000



PARKS: \$77,982,000



TRAFFIC: \$100,870,000

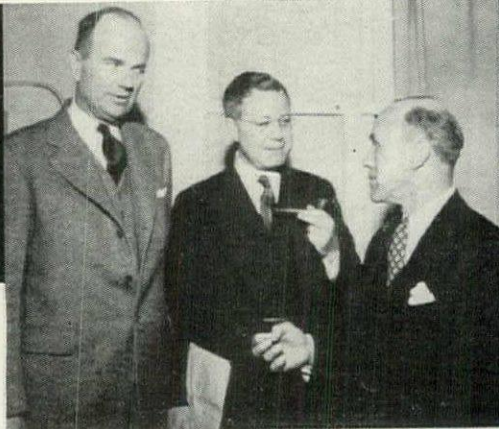


SEWAGE: \$86,640,000

Herald Tribune Photo



FESTOONED WITH \$1,200,000,000 PUBLIC WORKS this 1/4800 map of greater New York was viewed by visitors from semi-circular ramp, leading to exhibit of project models.



CITIES ARE HERE TO STAY

agree builder Robert Dowling and real estate broker Charles Noyes, who wax nostalgic over urban real estate, commend it to Mortgage Bankers Assoc. as one of today's best investment opportunities. Other speakers at MBA's New York meeting (l. to r.): New York Life's Stephen Foster, George Johnson of the Brooklyn Dime Savings Bank,

Continental American Life's Claude Benner, Connecticut Mutual's Frederick Eberle, Mutual Life's Felix Davis, Guardian Life's Buriye B. Pouncey.

Continental American Life's Claude Benner, Connecticut Mutual's Frederick Eberle, Mutual Life's Felix Davis, Guardian Life's Buriye B. Pouncey.

formula, myopic land owners have quibbled much less at an ultimately far more socialistic step, which will put more money in their pockets: government acquisition, not merely of development rights, but of the undeveloped land itself.

Lord Listowel is convinced that Britain's future can be best insured by increased public control of industry and by "partnership between the state and local authorities, informed by a positive conception of public welfare." Said the thoughtful, quiet-mannered fifth Earl of Listowel: "Our job as government is to patch up the weaknesses of our economic system, make it work as well as we can for the greatest number."

NEW FPHA CHIEF

Level-headed Philip M. Klutznick, who has endeared himself to private business with more success than most of his fellow bureaucrats, was suddenly a man without a job last month. This was the fairly surprising result of Klutznick's promotion to head

the Federal Public Housing Authority. When President Roosevelt's nomination reached Congress, somebody with a flair for detail pointed out that no such job as Federal

Commissioner really exists. Herbert Emmerich, who has long been so identified, was, it developed, actually the United States Housing Authority Administrator in disguise. Best solution Congress could figure out: call Klutznick USH Administrator. But

USHA, lacking funds, has no practical existence. While the legalistic-minded lovingly contemplated this small blind alley, Klutznick dusted off his new desk.

Klutznick is a man who knows private business as well as he knows public service. A brilliant lawyer, he was a partner in one of Omaha's most successful law firms for many years. Becoming interested in public housing through his work as general counsel of the mayor's committee on housing, Klutznick wrote the Nebraska enabling act to set up local housing authorities and served the Omaha Housing Authority as general counsel. Drafted to help out with war housing at the beginning of the job, Klutznick has confronted and executed a number of tough assignments. Heading the National Housing Agency's homes' use program, he was principally responsible for finding homes in existing housing for two million war workers. He has recently served as assistant NHA Administrator in charge of programming operations.

Leaving a sterling Washington record, Herbert Emmerich resigned to go back to his old job as assistant director of Chicago's Public Administration Clearing House, research agency which, funded with Rockefeller money and inspired by the public service vision of its director, Louis Brownlow (whom Emmerich is rumored to succeed), has sent dozens of well-trained administrators to staff federal war agencies. Emmerich could look proudly at his accomplishments: Production of public war housing had tripled, reached a peak of 1,000 units a day. Temporary building had saved 80 per cent in critical materials, \$400,000,000 in public funds.

CLEARING PARK AVENUE SLUMS

Like many a New Yorker. Builder Alfred Rheinstein is concerned with the dying neighborhoods that threaten the total life of the city. Like many an American, he is anxious to put private initiative and private capital to work at urban rebuilding. More optimistic than most, Rheinstein believes that obsolete neighborhoods can be cleared and new city homes built at a profit. He sees large-scale and efficient land planning as the key to redevelopment



RHEINSTEIN

returns. City dwellers must make a clear-cut agreement to share land, light, and air, just as they now share water and electricity. Land now randomly split among a variety of owners and uses can serve the whole community efficiently if it is pooled for joint use.

As chairman of the New York Housing Authority, Rheinstein cut \$3,000,000 from the cost of the city's first big project, Red Hook Houses. On the same job, he picked up a healthy distaste for federal intervention in municipal operations. Out of this as much as out of his essential conviction that private enterprise, intelligently directed, can find the way to solve most of our economic ills comes Rheinstein's reluctance to turn to the federal government for aid in bailing out the cities.

Six Per Cent Return. Choosing an upper East Manhattan block and using careful figures, Rheinstein has demonstrated to his own satisfaction that the area might be acquired at 100 per cent of



KLUTZNICK

assessed value and rebuilt to return 6 per cent on capital invested. His plan calls for rimming the block with two rows of apartments, separated by an avenue-wide strip, with a 290 x 1,773 ft. green space in the middle. Open space would be owned and maintained by the city; cost would be amortized by assessment of property owners.

After areas for rebuilding have been designated by the city planning commission, planning vitality and flexibility, Rheinstein believes, might be achieved by competition between two prequalified planning groups. Five judges, to be appointed by the Mayor, would decide the contest. "After the winning over-all plan has been made public for a reasonable period, bids shall be received by the city on the restricted plottages in the first section selected for redevelopment. If the bids are satisfactory, the city shall acquire the land through purchase or condemnation, or both. The bid prices should be much higher than the acquisition prices because they would be based on values in a well planned modernized area while the acquisition costs would reflect current values in an outmoded, deteriorated neighborhood."

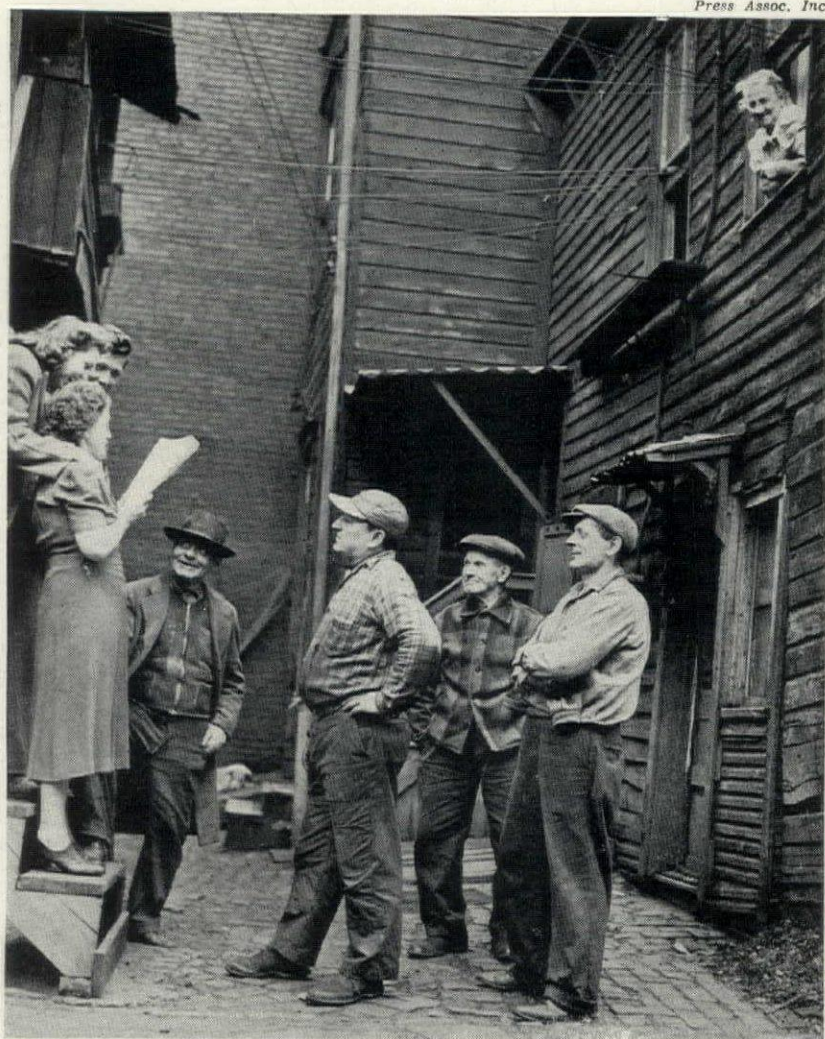
Convinced that his system would pay off, Rheinstein is the first to point out that it is not the answer to the housing problem of the lowest-income groups. "But", he reminds, "Park Avenue dwellers sometimes have less light, air, and use of exterior space than tenants in a public housing project. Rehousing is badly needed for city groups able to pay an economic rent."

HARDSHIP HOUSING

Security-minded underwriting experts in the Federal Housing Administration have never been really happy about the unmeasurable risks of insuring war housing mortgages. Present insuring authority under Title VI amounts to \$1,600,000,000 worth of mortgages, and FHA will be bumping that ceiling by mid-June. Since many unanswerable questions attached themselves to the central question of actual need for extending Title VI, FHA opinion was at first sharply affected by its anxiety to get rid of the extra risks involved.

Few could see clearly exactly how much more war housing would be needed. WPB feeling was that the spotty remaining need could best be supplied by federally-built temporary housing. But the National Housing Agency was out of money for temporary building, too, was already seeking an additional allotment from Lanham Act funds.

Although hope mounted that some non-war housing might be resumed by late summer under Title II, WPB out-



HOME FOR HERO

The story of the slums has been told in pictures of outside toilets, fire-gutted shambles and spindle-legged kids. But it has never been told better than in this photograph of the home Congressional Medal winner "Commando" Kelly now returns to. With the stench of battlefields still in his nostrils, with the misery and desolation of war fresh in his memory, this young soldier probably

will not say what is in his mind. He and his neighbors from the war plants and millions like them throughout the U. S. may wonder whether the slum is one of the things they are fighting to preserve. But if they keep their thoughts to themselves now they may be less reserved when they go to the polls next November to vote for or against the men who are for or against slums.

look was resolutely bearish. Reminding that war needs may suddenly spurt upwards, WPB was as reluctant as ever to make promises about material allocations.

By month's end, FHA opinion had firmed, and Title VI looked better to everybody as the best way to bridge the gap between war and nonwar housing. Best guess was that FHA would ask Congress to increase war housing insuring authority by another \$200,000,000, reduce risks by upping standards as fast as materials become available.

But whatever the Title, some housing not strictly war housing would likely be built. WPB had agreed to look at

priority applications in terms of "war" housing (H-1) and "hardship" housing (H-3). FHA hoped WPB would soon give some attention to another category (H-2), which would cover cases where a whole community suffers from housing shortage.

DOLELESS, BUMPLESS BUILDING

Looking backwards at its twenty-third annual meeting, the New York Building Congress could remember both construction boom and construction depression. Looking forward, the Congress hopefully discerned a rising spiral, soberly sought for ways to take some of the giddy bumps out of its business.

NEWS

After re-electing architect Andre J. Fouilhoux to its presidency, the Congress settled back to hear knowledgeable Thomas S. Holden, who as president of F. W. Dodge Corp. has probably taken Building's temperature oftener than any other one man. To Holden as to others prosperity now means most of all "a nation-wide condition of economic well-being to be enjoyed by all the people."

Eliot Elisofon



HOLDEN takes Building's temperature

Said he: F. W. Dodge Corp. has accumulated since September 1942 reports on 33,900 specific construction projects contemplated for the postwar period, the estimated combined construction cost of which is over \$8,300,000,000.

Holden said his own conservative estimates are that total construction volume during the ten years following the war will at least double the average volume of the 1930-39 decade, that residential building will show a three-fold annual increase, non-residential building increase about 70 per cent, heavy engineering about 50 per cent.

Down with Doles. Looking forward to a private-enterprise economy and not a government-dole economy, Holden said he expected private building to increase by considerably larger percentages than public projects. "Construction revival will start, not with any grandiose federally-subsidized works program, but with thousands of deferred maintenance and repair projects needed to put our present private and public facilities in shape. Estimates of deferred maintenance and repair needs throughout the country run from three to four billions of dollars. . . Artificial stimulation of public works, at a time when deferred demand for all kinds of construction will be greater than the capacity to get work done, would

merely intensify competition with private construction in the material market and greatly increase pressure on prices."

SHIFTING U. S.

There was one question the Census Bureau could not answer: how permanent will be the new growth patterns shaped for cities by war? But looking over registrations for Ration Book IV on Nov. 1, 1943, the Bureau could answer a lot of others. Fastest growing areas in the U. S. were the West Coast, Nevada and Arizona. There was no reversal of the major war migration trend; workers were still leaving the northern and central sections for far western and southern coastal areas.

The country's 137 metropolitan areas were swelling. In April 1940 they had 50.8 per cent of the nation's population; by last November their share had increased to 53.6 per cent. War Manpower officials guess that the shift from rural sections to cities will be reversed after the war. Some Census experts argue this point, expect coastal sections in the West and South to hold on to their gains.

AMERICAN BUILDING WAY

To Lord Portal, Minister of Works, last month went a dozen finely-printed, carefully-worded pages. In them, Britishers hoped to find some tips about how to remove what looks like the biggest threat to their earnest plans for rebuilding. In Britain construction costs are already double prewar levels (U. S. costs are up 30 per cent) and expectation is that they will jump an additional 60-100 per cent. Since the U. S. pays building craftsmen and unskilled workers at rates higher than in Britain, but also manages to achieve substantially lower construction costs, the Ministry naturally hoped that what the British Building Mission had gleaned from its six-week look at the U. S. would be useful (see ARCH. FORUM Oct. '43).

The Mission's report made pleasant reading for U. S. building, which hears much at home about its make-work and monopolistic sins. Not less impressed by economy of design than by the better-known American flair for job standardization, the Mission agreed that design is "simple, relying for its effect on the arrangement of plain masses rather than on the modelling and decorating of surfaces" is also aimed for the "maximum of mechanization in construction work." Standardization of dimensions has made possible extensive use of larger units and factory pro-

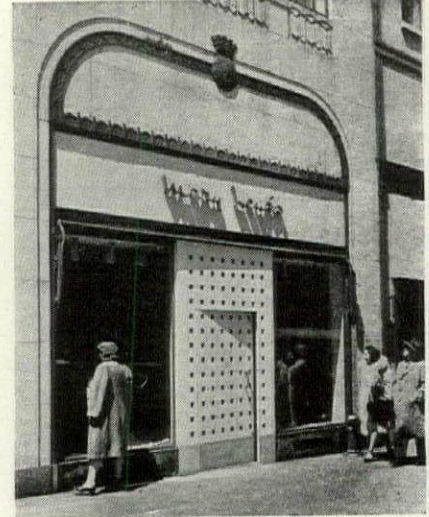
duced parts, reduced the need for manufacturing and handling alternative parts. Cited for special attention at the Ministry of Works is the modular system for designing units and equipment now being developed by the American Standards Association.

Casting an enchanted eye at the amenities of American housing, the experts pointed out that average consumption of water per head of population is more than double the British rate.

YELLOW PERIL

Merchandise Mary Lewis, who has built her reputation by skillfully avoiding stodginess in womens' ready-to-wear, likes staid stores no better. Dressing up her new shop on upper Fifth Avenue, smack between satiny Bergdorf-Goodman and the tweedy Tailored Woman, architects Skidmore, Owings and Merrill painted the waffle-patterned front door and its foot-wide frame bright yellow. To the renting agent neighboring tenants howled that the yellow door "spoils the dignity of the block." They had, they added petu-

Charles Phelps Cushing



YELLOW DOOR starts Fifth Ave. fuss

lantly, spent thousands of dollars improving their own fronts. At last report, Miss Lewis was still holding her chrome in the battle of Fifth Avenue. "Yellow paint carries a note of gayety," she said cheerfully.

MASTER SALESMAN

Joseph P. Day, who has sold more of New York City over the auction block than most real estate men can remember, died last month at the age of 70. Part of the era of the expanding city, Day believed as much as inspired the invincible legend that no matter how

(Continued on page 110)



K. C. I. Photo by Gray

FONTANA STEEL MILL FONTANA, CALIF.

The "miracle man" does it again. To supply his ever-hungry, steel-eating shipyards Henry J. Kaiser has built a 100 million dollar steel mill, the first in the West. Only eight months after construction began on a former Fontana pig farm, the colossus was meeting a tough production schedule.

Open hearth building is an important link in the Fontana steel mill's production chain.

Kaiser's plant would win hands down in any beauty contest for steel mills. It proves again that buildings erected primarily for production do not have to be ugly. One reason for its handsome appearance is the plant's setting. Instead of being crowded into a small, drab area on the outskirts of a town, it spreads over 1,300 acres of California farm land. Orange groves, vineyards, and walnut orchards bloom next to clanging mill apparatus. The remaining unused acres are landscaped or planted to fruits and vegetables for the workers.

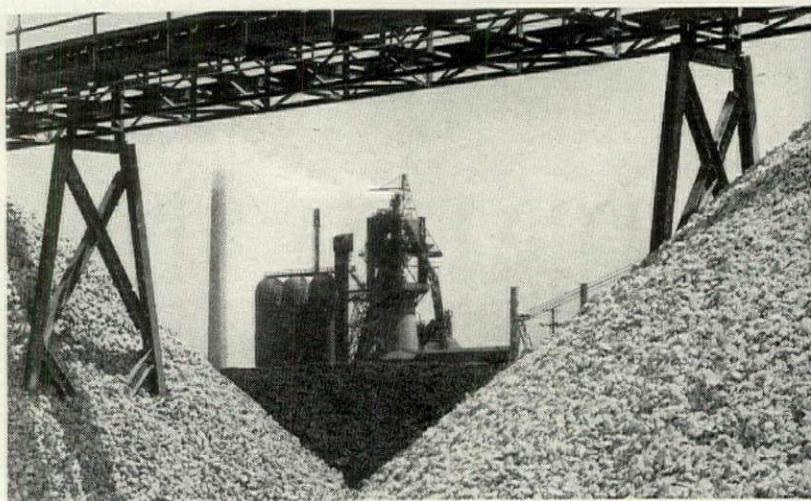
Because of its unrestricted size, the plant was built to function in a theoretically ideal manner. Sensible grouping puts raw material stockpiles at one end of the site. From them, coal and ore are conveyed to the coke ovens and blast furnace, then the newly made pig iron goes on to the open hearth. Steel travels westward to the soaking pits, and out through the plate, structural and merchant mills. Finished plates and ingots arrive at the opposite corner ready for shipping to Kaiser yards and other markets.

A network of railroads connects the many plant buildings and brings coal, iron ore and limestone from nearby mines and quarries.

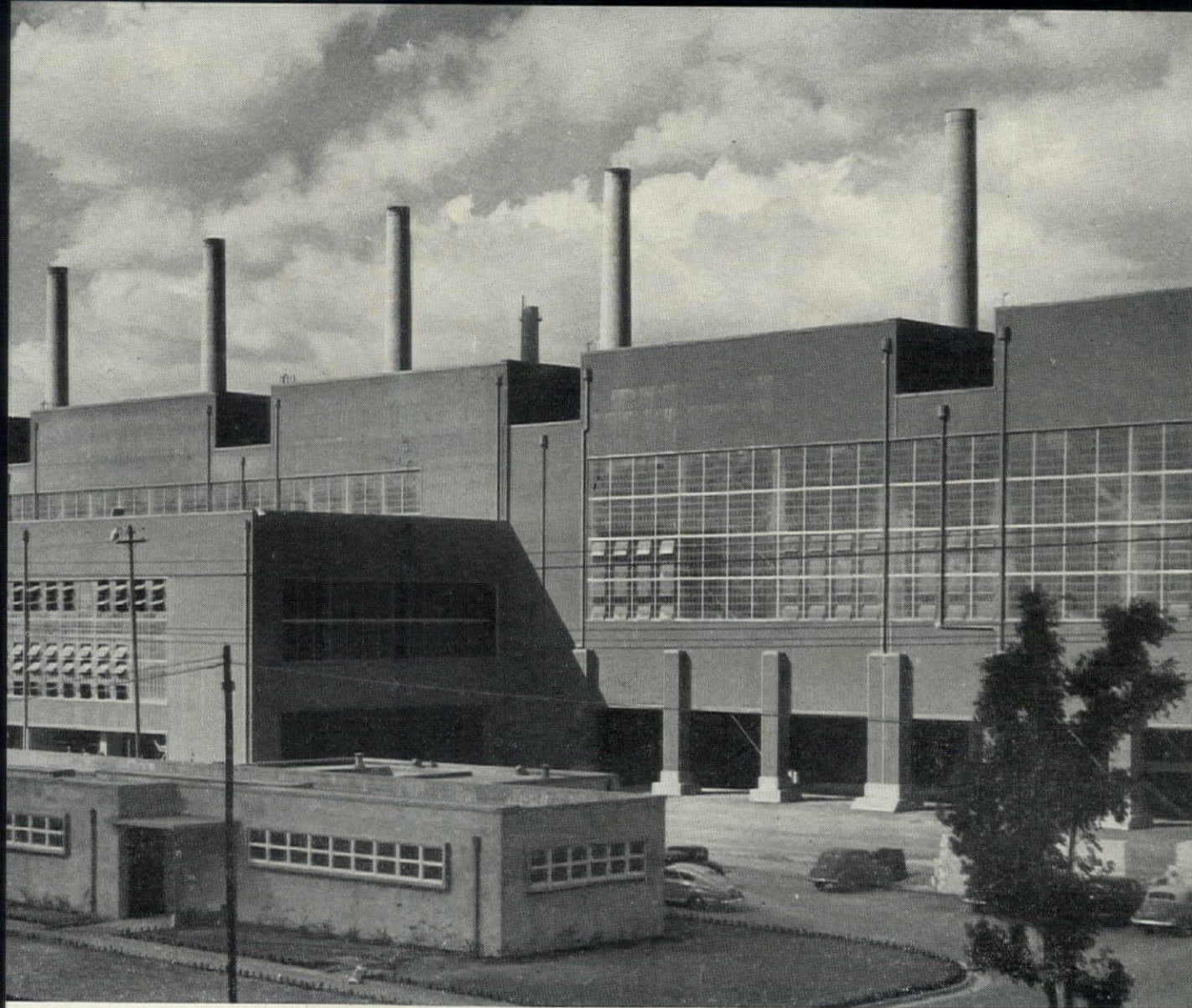


OPEN HEARTH BUILDING WHOSE FURNACES CONVERT PIG IRON INTO

OFFICE OF DONALD R. WARREN, ENGINEER; BIRGE M. CLARK &

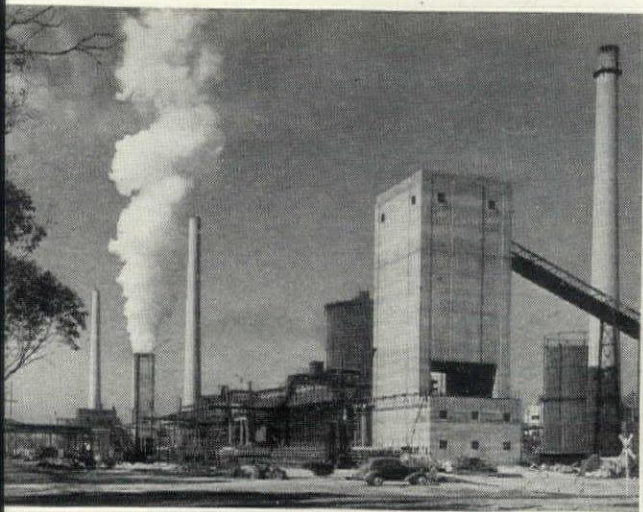


STOCKPILES OF RAW MATERIALS, CONVEYOR AND BLAST FURNACE



ON NATURAL ILLUMINATION, EMPLOYS GRAVITY VENTILATION TO EXHAUST VAST QUANTITIES OF INTERNAL HEAT

K, ARCHITECTS



ORANGE TOWER LOOMS ABOVE 90 BUSY COKE OVENS



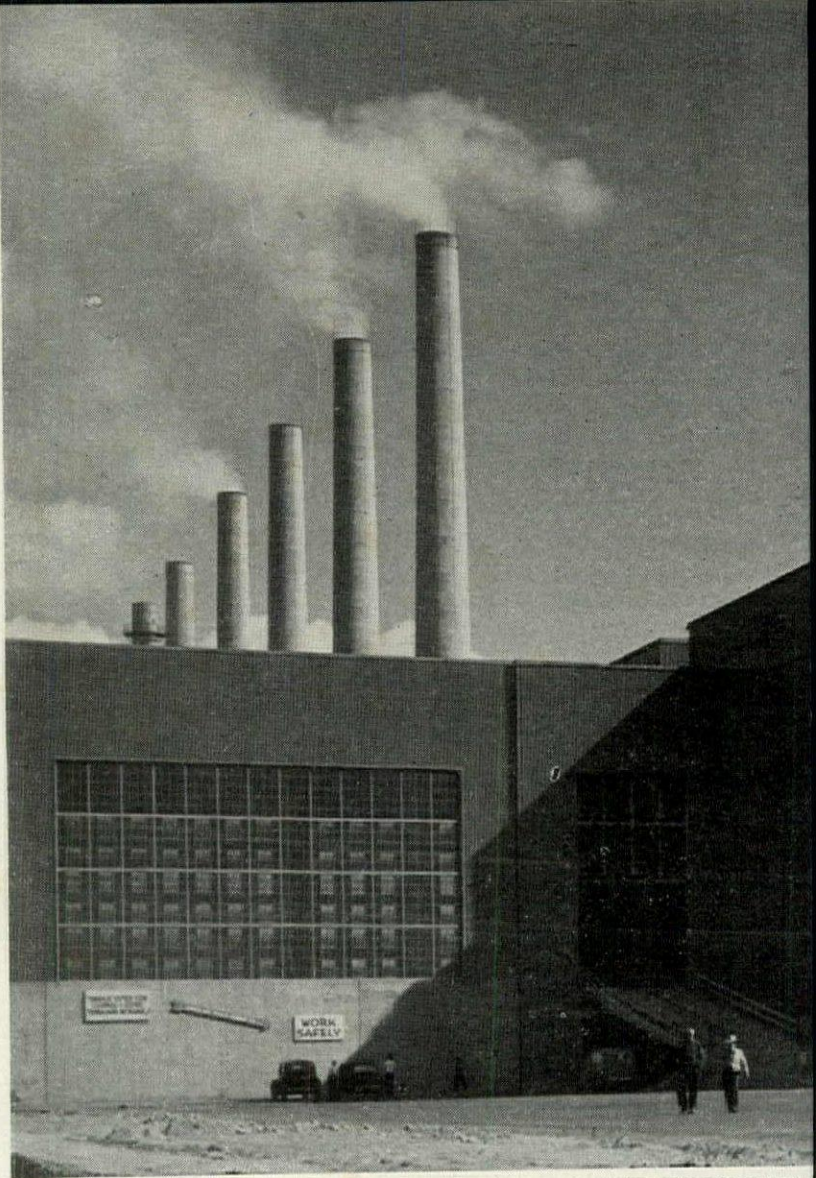
CHARGING MACHINE PUSHES MIXTURE INTO FURNACES

The basic design problem of the open hearth was to provide adequate lighting and ventilation.

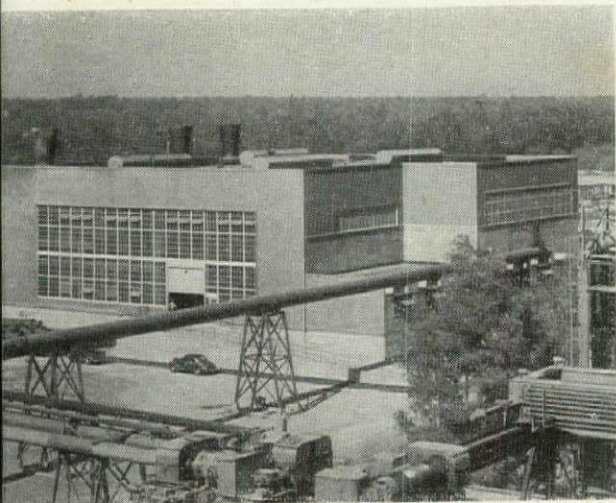
Exceptional lighting and ventilating facilities are a feature of all plant structures. The lower part of the open hearth building is opened to a height of eight feet, providing outside air intakes for the ventilator system. Air changes over the six furnaces are approximately 100 per hour, and for the entire building an average 10,000,000 cfm. is removed. Working comfort is thus maintained in spite of the extreme heat generated.

The huge number of windows makes artificial lighting superfluous except for night work.

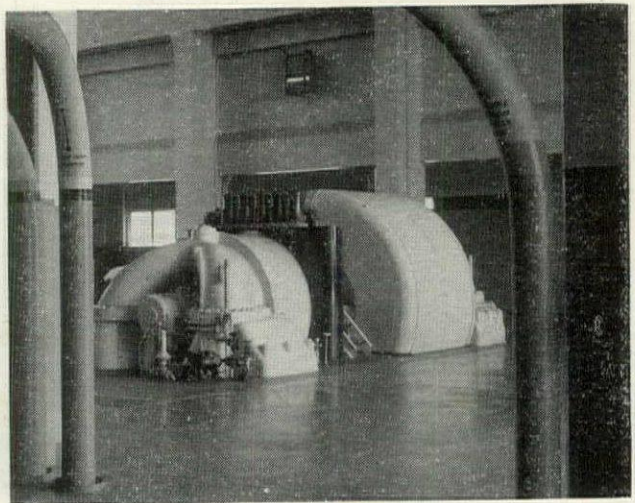
Open hearth and other large mill buildings are framed in steel covered with metal siding. They harmonize with the reinforced concrete powerhouse and similar buildings. Concrete is used for these structures instead of the usual brick because Kaiser's plant is situated in an earthquake area. Water towers are also built of this material since even a steel mill must practice war economy of steel.

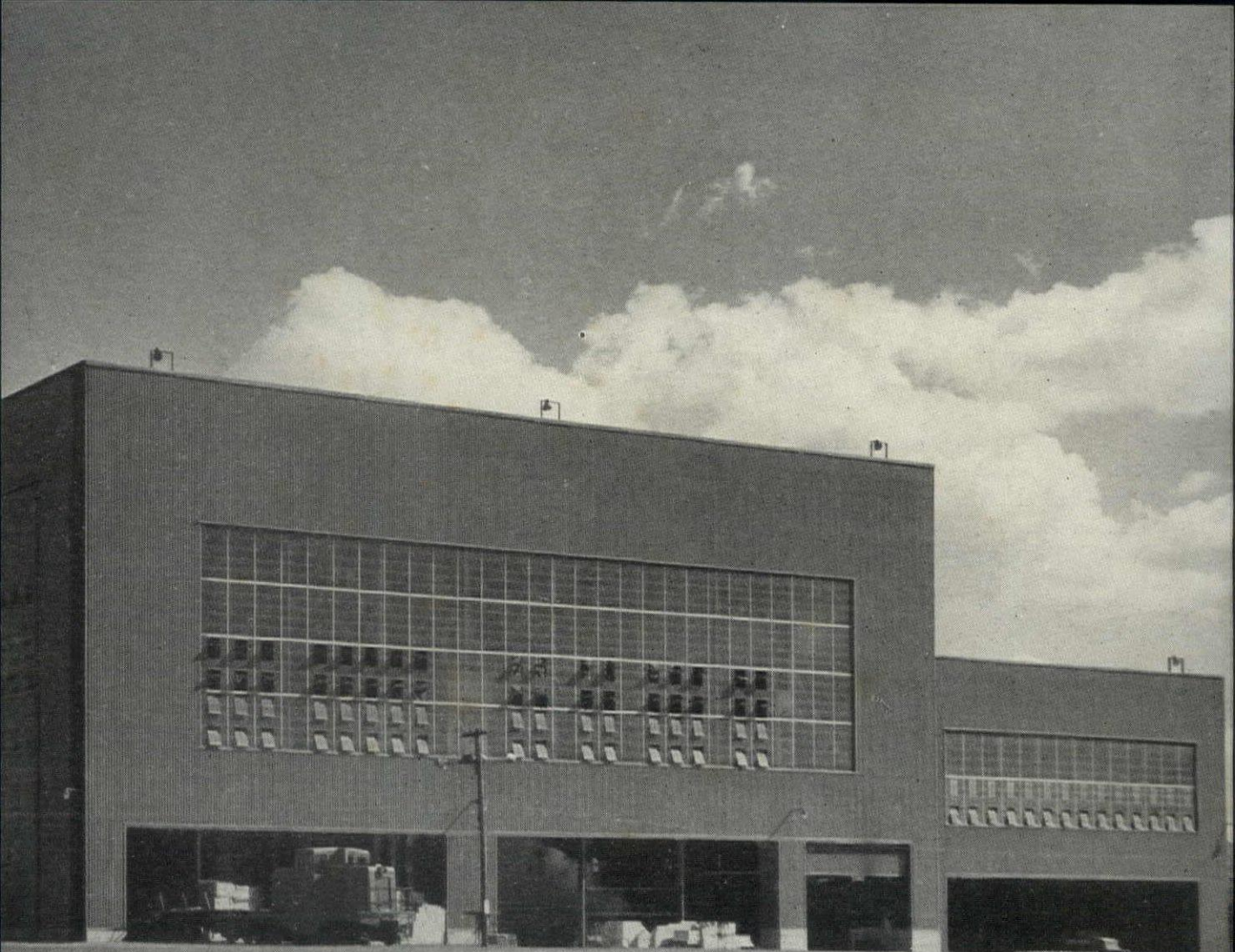


LIGHT STREAMS INTO OPEN HEARTH BUILDING (ABOVE) THROUGH THE

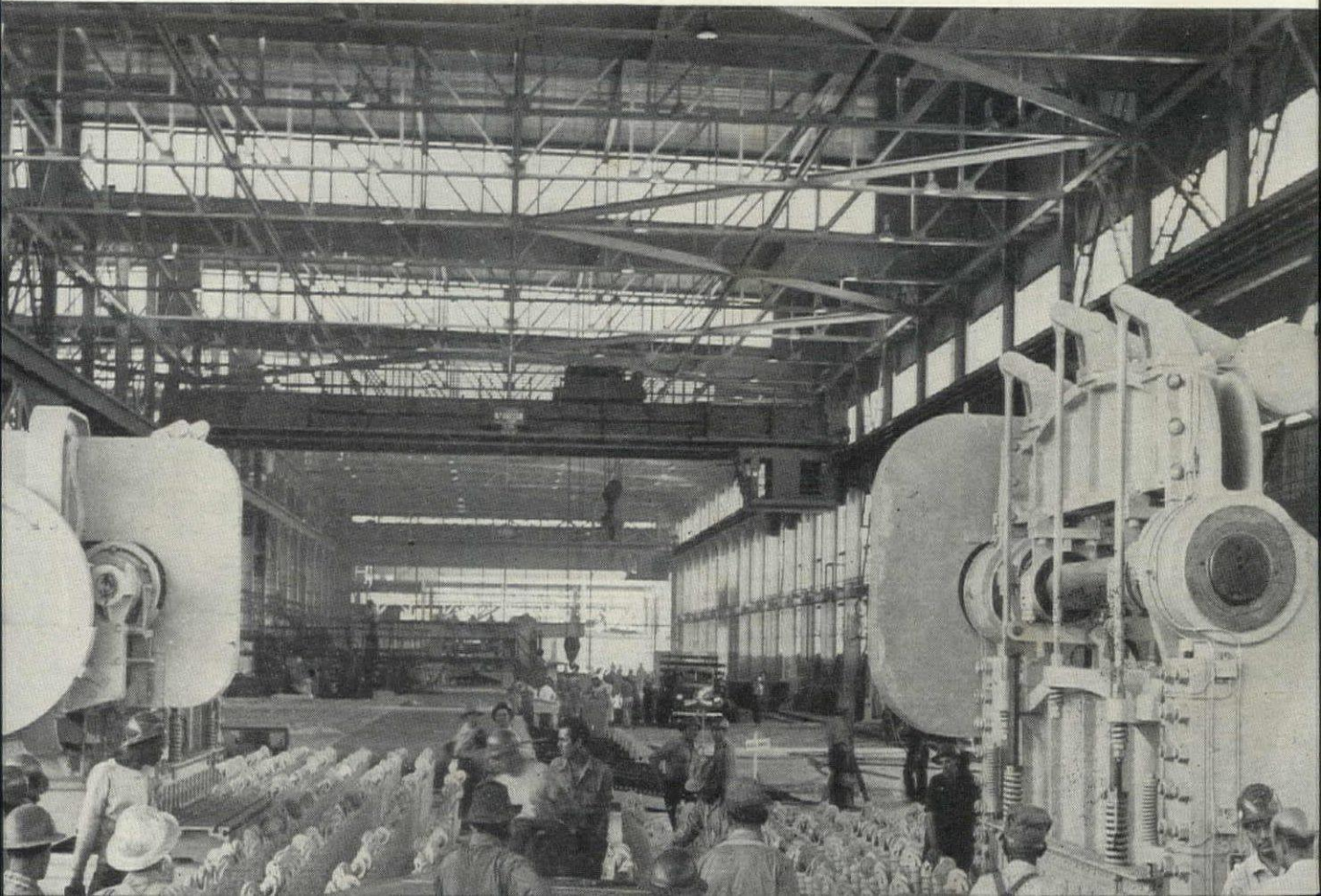


VIEW OF POWERHOUSE AND TURBO-BLOWERS WHICH SUPPLY AIR BLASTS FOR MAKING PIG-IRON





WINDOWS ALONG FULL-WIDTH MONITORS. SAME SYSTEM ILLUMINATES HUGE PLATE CLIPPING MACHINES SHOWN BELOW



Administration building has a 100 ft. square patio, as large as half a New York City block.

Clean but uninspired, the Administration Building does not measure up to the design standard of the factory buildings. The basic structure is good, but the main features of the design seem rather meaningless. Blocks of masonry applied here and there for dramatic effect have no real function, although a stairway to the roof gives the tower a slight excuse for being. In this respect the hospital is the better building, as it is free of clutter.

The Administration Building has several interesting features, however. The patio provides good interior circulation and a wide overhang prevents glare. This is important because of the continuous windows. Rooms are large and separated by cross partitions of plywood and glass which can be moved to suit changing office requirements. Continuous rows of fluorescent lamps provide illumination when necessary.

Like other plant structures, roof slab and columns are of reinforced concrete.

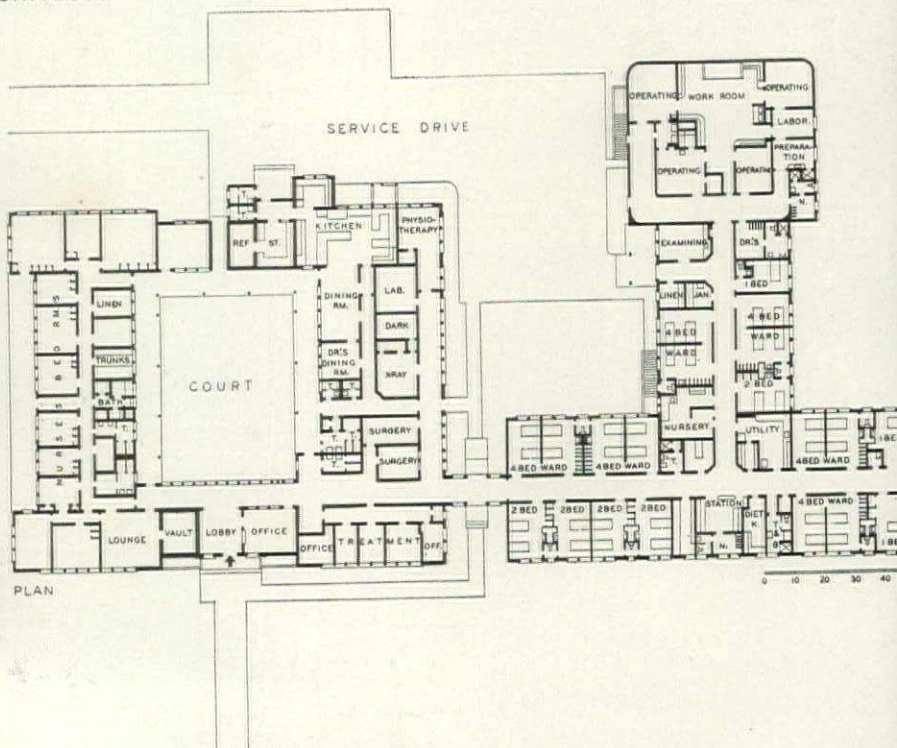


ADMINISTRATION ENTRANCE IS FLANKED BY UNNECESSARY STONE TOWER

BIRGE M. CLARK & DAVID B. CLARK, ARCHITECTS

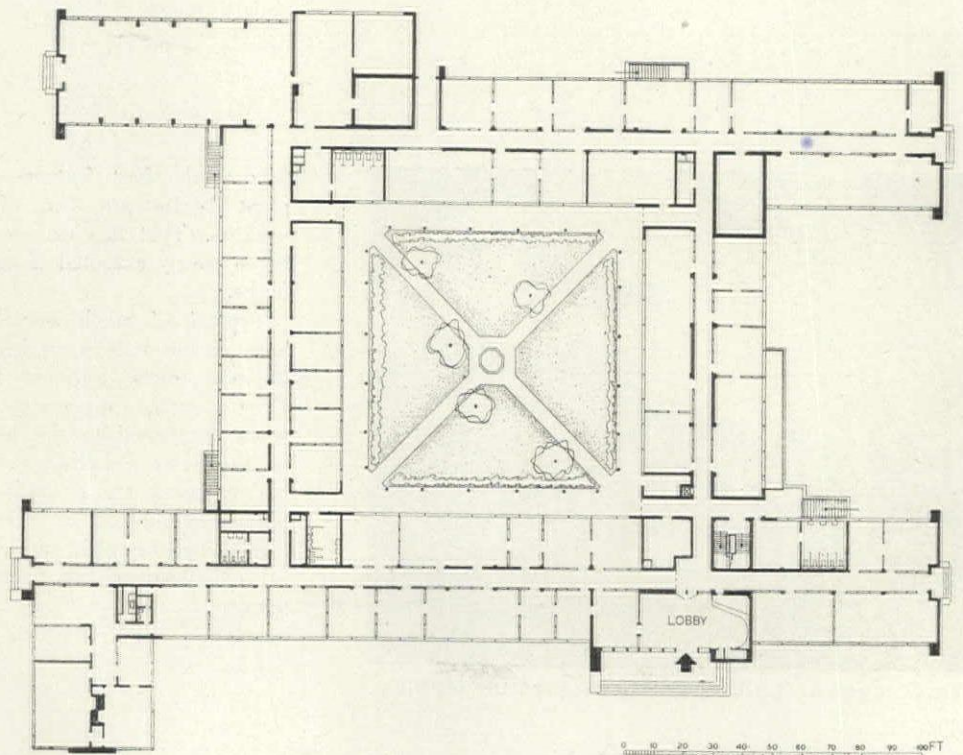


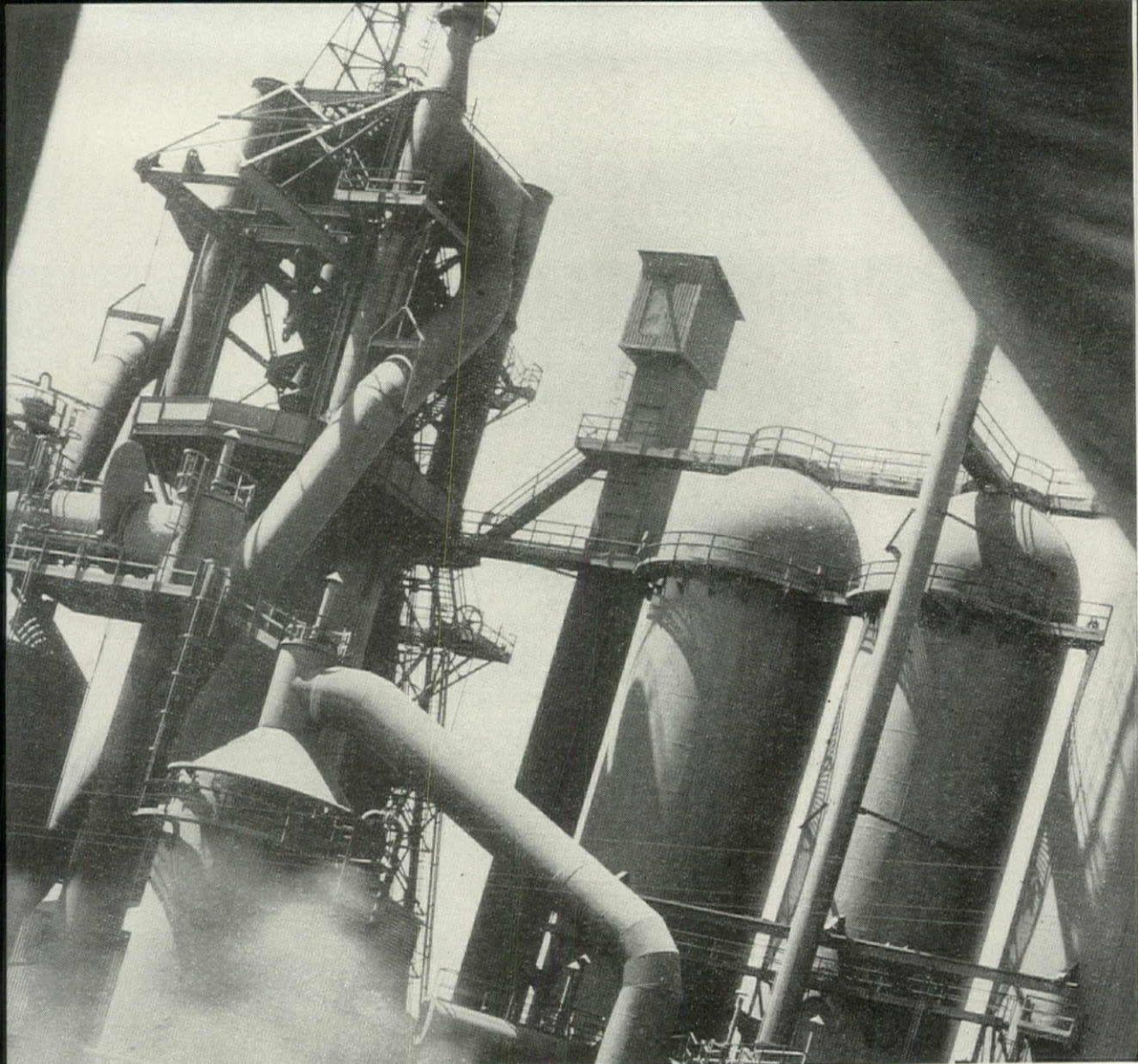
ROOF SHADES HOSPITAL'S WINDOWS





WINDOWS ARE UNINTERRUPTED BY STRUCTURAL COLUMNS, ROOF IS CANTILEVERED FROM CENTRAL CORRIDORS





"BIG BESS" BLAST FURNACE AND HOT BLAST STOVES FORM POWERFUL DESIGN AGAINST SKY

Photo for "Fortune" by Andreas Feininger



TIRED COLONIAL HOUSING CONTRASTS UNHAPPILY

One of the best features of the Kaiser plant is its provision of housing for workers. That this excellent idea should be so poorly executed is one of its worst faults.

Typical of much so-called traditional housing, the units are weird caricatures of Colonial—rows of dreary conventionality. They become especially inappropriate when contrasted to the modern majesty of the factory buildings. The hospital and cafeteria are related to the over-all plan. But the sad little houses (not designed by the plant architects) emerge as complete misfits. Only redeeming feature is their natural adornment, the eucalyptus trees, supplied not by Kaiser but by God.

PLANNING WITH YOU

Taking the public behind the scenes gets them behind the plan; City Planning Commissions are making publicity work for them.

City Planning Commissions are now sweating over blue prints in 67 per cent of all U. S. cities of more than 25,000 population. Many of these agencies have been around for years, operating with only limited success. In the past they have surveyed, analysed, and proposed with all the fanfare of a bed of oysters making pearls. Little publicity heralded their investigations of traffic problems, slum clearance, parks, housing, water supply and sewerage systems. Many failed to understand that city plans will never become realities without the interest and active support of the townspeople.

At last, however, the idea has dawned that planning agencies must let the public in on their plans. Joe Doakes really doesn't enjoy weaving in and out of traffic in search of a parking space, nor does he like the smoke and dirt which send his laundry bills skyhigh. He is not pleased that his children must cross a main thoroughfare to get to school, and he is not proud of the 50-year-old monstrosities which pass for homes in his town. If he is told what can be done about these things, he'll work hard to see improvements put through.

Understanding the importance of public support for such projects, THE ARCHITECTURAL FORUM last August issued its booklet, "Planning With You." Aimed specifically at the average citizen, it advocated long-range planning for city improvement, with individual projects undertaken as a part of the whole, emphasized cooperation between citizen and planning agency. This booklet's phenomenal success is at least partly responsible for the flurry of pamphlets and newspaper articles which City Planning Commissions and Chambers of Commerce have sent out in recent months.

Almost every approach has been used to awaken civic interest—pamphlets, window displays, public discussions, newspaper publicity. *The Chicago Sun* ran a series of articles on all angles of the housing situation urging "Chicagoans to come to grips with housing needs, and to pursue vigorous positive policies which will make this city a better place for its citizens."

This is merely one sample of an effective publicity method which can be sponsored by any wide-awake planning commission. There are many others.

For instance, the City Plan Commission of St. Louis reports that 3,000

copies of their pamphlet, "St. Louis After World War II", were printed and distributed to the public.

In Wallingford, Conn. the New England Town Meeting took over, voting \$75,000 for postwar plans.

The Denver Regional Association decided to issue a series of short reports on the different phases of its planning project. "The collaboration of community groups thus made possible is expected to result in the preparation of a comprehensive plan for the Denver Area," they explained.

Obviously the oyster bed attitude is on its way out. Not only are the commissions telling the public what's doing, but they are asking the public to help. A mimeographed pamphlet from Austin, Texas says: "Would it not be well for the people to decide what character of city Austin of the future should be?"

This is a question every city must decide before constructive planning can be done. Planning Commissions can help out by submitting their ideas for public approval.

The Regional Plan of Tucson, Arizona has already worked out a clear view of its city's goal. The Plan now invites public membership through a direct mail folder, puts out a newspaper reprint and a mimeographed report to acquaint Tucson citizens with what must be done.

The December issue of the report says: "Let's be sensible and recognize that this is a home town, a University town, a retreat for people from all over the world who . . . like desert sunshine . . . space and friendliness."

"So far we've just muddled along, We've let a few stores and junk piles damage certain residential values; we've put our schools on main streets where traffic is a menace. We have done mighty little about parks and less about playgrounds.

"We want you to talk about these

THESE PAMPHLETS and newspaper articles are selling new cities to the citizen. Planning Commissions all over the country are behind the campaign—proof that public support and cooperation is now considered essential for the success of city planning. Outstanding examples from this publicity barrage are Cleveland's illustrated booklet, Cincinnati's "Your Town Today and Tomorrow", San Francisco's slick-paper folder, newspaper publicity from Grand Rapids and Wallingford, Conn. "A Chart for Changing Cities" is put out by the California Housing and Planning Association.

Price Can... THINGS WE NEED
PRESENTED BY THE CITY
PLANNING COMMISSION

YOUR TOWN TODAY AND TOMORROW
The Grand Rapids Herald

REAL ESTATE
BUILDING & WANT ADS
Welch Tells Realtors of Postwar Plans
Advs General Participation
We Can Be Masters of Our Civic Destiny
Tables to Conduct Real Estate Club
Realtors Digest

SAN FRANCISCO CHAMBER OF COMMERCE
The Road Map to
A GREATER SAN FRANCISCO

A CHART FOR CHANGING CITIES



RESERVE FUND ESTABLISHED BY VOTE OF TOWN MEETING FOR USE IN POST-WAR ERA
\$60,000 Will Be Taken From Cash Surplus
And \$15,000 From Tax Increase Will Be Added--Non-Partisan Committee To Be Named To Decide Use Of Money In Future Date

PLACES TO LIVE

8¢ A DAY FOR EVERY CLEVELANDER

Just the price of...

- Half a pack of cigarettes
- or
- A streetcar ticket
- or
- Two apples
- or
- That extra cup of coffee.

That's all it will cost to plan and build the

THINGS WE NEED

AFTER THE WAR - WHAT?
WILL YOU STAY IN SAN DIEGO?
WILL YOU CONTINUE WORKING?

These questions may be one can help in plan San Diego's future, with involvement for all who wish to work—where to San Diego new industries to provide more postwar jobs. (You can't before on after shifts or during rest or lunch period. Packed by your employer. Your personal attention will be asked to answer?)

THANK YOU

POSTWAR PLANNING BUREAU
 SAN DIEGO CHAMBER OF COMMERCE

BECAUSE of my general and particular interest in this region

BECAUSE we must be ready to guide post-war development

BECAUSE I am needed to build the Tucson of the Future, an Arizona community designed for happy prosperous living

I WISH to become active in the Regional Plan

I ENCLOSE \$1 for membership.

NAME _____

ADDRESS _____

THE REGIONAL PLAN

FOR THE TUCSON AREA

ENDORSED BY

- Pima County
- The City of Tucson
- Post War Committee
- Chamber of Commerce
- Planning Commission
- Tucson Regional Plan
- Sunshine Club
- Garden Club

THE FUTURE OF YOUR CITY

MANY TECHNIQUES are used to promote interest in postwar planning. The booklet, "What We Need in Cleveland" combines small amounts of text with story-telling pictures. (2nd from

left) Chicago's Planning Commission reprints housing articles from the "Chicago Sun." A San Diego war plant hands out questionnaires to workers. Tucson sends membership reply cards.

things, to get more people to understand that the Plan is theirs. At this stage enthusiasm has to be of a very durable order. One thing can be done, though: send us your ideas for the betterment or improvement of the Tucson area."

The Plan has already received a good many ideas. A fully worked out proposal to make Tucson color conscious came from a local artist. He thought some of the raw colors slapped on houses and stores were "offensive to the eye, hard on the nerves and not good for business." His set of colors was in harmony with the natural hues of desert rocks, plants and skies.

San Francisco's Chamber of Commerce took an entirely different tack from Tucson in deciding what their future city should be. "The Road Map

to a Greater San Francisco", a four-page printed folder, urges citizens to make their city the greatest foreign trade center on the Pacific, the center of wholesale and jobbing territory, the management and financial center of the West, the western focal point for air traffic, the agricultural center of the Central Pacific Area, headquarters for the mining industry, not to mention the most desirable place in America to live, work and do business.

This large order emphasizes: "Unless every citizen understands (the plan) thoroughly, talks it and lives it, San Francisco can never hope to be more than a fraction of the city it can be."

The little village of LaGrange Park, Ill. has not trailed behind the larger cities. After extensive study, its Planning Committee prepared a tentative plan for future development. Instead of pamphlets publicising their work, they sponsored a series of informal public hearings. Each resident property owner and a few tenants were invited to attend the meeting for the particular district in which they lived. Thus the common problems of each district were discussed in reference to the best interests of the village.

In other towns, many presentation methods have been tried out and many found successful. City planners can improve their own programs by getting a line on what others have done.

In Detroit the Architects Civic Design Group arranged for public exhibitions of their work on postwar plans.

One of San Francisco's exclusive stores, the White House, last month devoted its windows to city planning

displays—the "Road Map" from the Chamber of Commerce, the Shoreline Development Plan from the City Planning Commission, and Francis Lloyd and Hervey Parke Clark's plans for a conversion housing project (see ARCH. FORUM, Oct. '43).

Naturally all this violent activity takes money, New York spent \$91,000 on an exhibit to publicize their \$700,000,000 improvement program. Of the 157 cities which reported the amount they expect to spend developing postwar plans in 1944, almost one-half planned to spend more than \$10,000 each. Two-thirds planned to spend more than \$5,000—an amount sufficient to secure some technical advice. Torrington, Conn. with a population of approximately 27,000 appropriated \$50,000.

It is clear that cities all over the country are becoming more plan-conscious. From the quiet sunshiny "home town" of Tucson, to the humming industrial center of Detroit, each community is developing its blueprint for the future. New towns and cities are taking shape, but only with the discussion and approval of the people who will have to live in them.

If legislation is necessary to carry out the plans, an enlightened public will know which way to vote—and will make sure the right measures are passed. Citizens will no longer tolerate wasteful projects destined for the scrap heap. Every improvement will be a step toward the goal of a beautiful, healthful and efficient city. A long-term plan and active citizen participation are essential. How does your town measure up?

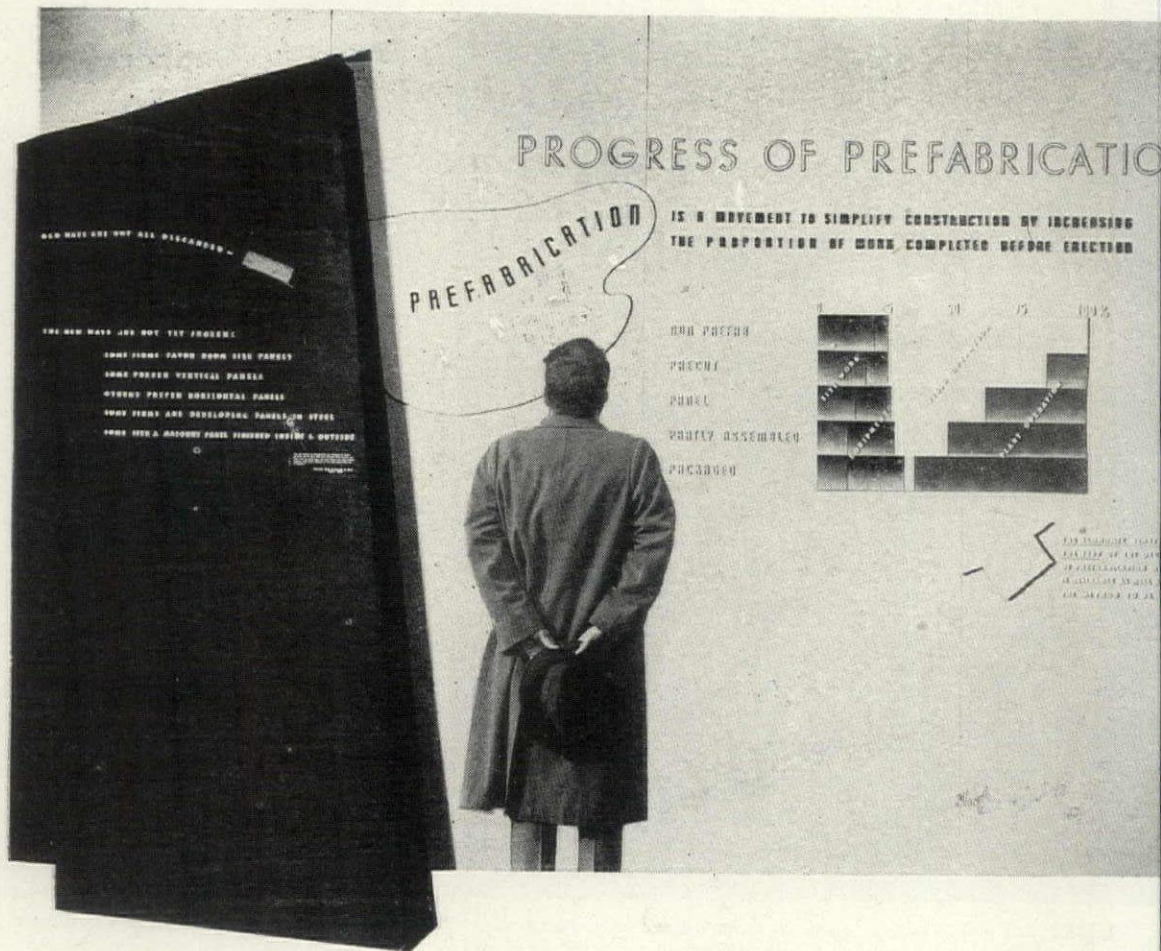
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PLANNING WITH YOU

By the Editors of THE ARCHITECTURAL FORUM

THE FORUM'S now famous pamphlet continues to break records—close to 150,000 copies now distributed. Order today—\$10 for the first 100, \$5 for each additional 100 copies ordered simultaneously.

THE ARCHITECTURAL FORUM
 19 West 44th St., New York 18, N. Y.



PREFABRICATION CONFERENCE

New York's Architectural League stages a prefabrication exhibition and conference calling together leading architects, engineers and prefabricators for an exchange of ideas.

Boldly lettered on the theme panels at the gallery entrance of the exhibition recently sponsored and staged by the Architectural League, was the dogma of all uplifted prefabricators: "Prefabrication is a movement to simplify construction by increasing the proportion of work completed before erection. . . The economic benefit is the test of the degree of prefabrication which is desirable, as well as the methods to be used." This last tenet was amply and materially backed up by the diversity of commercial exhibits and conflicting viewpoints at the accompanying conferences.

Speakers and audiences were drawn from industrial and commercial groups, architecture, engineering and the arts. Despite 35 speeches viewpoints failed to resolve themselves because of the manufacturer's preconceived construction theories on the one hand, and the architect's ingrained reluctance to accept mass-produced buildings on the other. Robert B. Connor, speaking at the opening luncheon conference, described prefabrication and the technique of scientific research as "the most important tools we architects have in solving the design problems of the immediate future. On the other hand, the power to organize physical potentialities for a desirable end is the essence of design. . . It is particularly desirable to derive from this exposition the understanding that production and design are indivisible parts of a successful result." At the same meeting Robert L. Davison asserted that, "Much of the misconception concerning prefabrication has arisen from failure to . . . recognize



AMONG the exhibits was General Panel's graphic presentation of their prefabricated Packaged House, developed for them by Konrad Wachsmann and Walter Gropius. It consists of standard panels, completely equipped and finished, which act as both material and supporting elements for the building.

the significance of all permutations and combinations . . . of three factors: 1) the proportion of work completed before erection, 2) person or organization doing the building, and 3) intended use of the building."

MARKETS AND METHODS

The second meeting, an industrial conference, was presided over by Arthur C. Holden. Available opinion on shop production favored a house a day, or a total production of about 300 houses a year, as sufficient to pay for a shop over a period of time. It was estimated that an investment of \$15,000 in equipment would produce more than \$2,000,000 in houses per year. As might be expected, no definite assertion was made that a house can be built at a single point and shipped to all parts of the country. It was generally agreed, however, that some parts can be shipped hundreds of miles while others must be limited to as little as a 50 mile radius for economic reasons.

While certain firms such as Gunnison displayed a take-it-or-leave-it attitude and stuck to their limited number of models, most manufacturers advocated several, flexible basic designs. Sears Roebuck was cited as having started with 20 fundamental plans which evolved into 800 variations. Builders, department stores and individual agencies were equally supported as distribution outlets.

In view of the meeting's industrial overtone, discussion of the architect's future role in prefabrication was particularly interesting. It was asserted that an individual job \$18,000 or more can afford an architect, also a prefabricated development of 200 to 300 units. On prefabricated models,



INSULATING VALUE, moisture resistance and accoustical properties of Weldwood are emphasized in the U. S. Plywood exhibit. This product is particularly adaptable to semi-prefabrication and is manufactured in several qualities designed for interior walls and exterior siding.

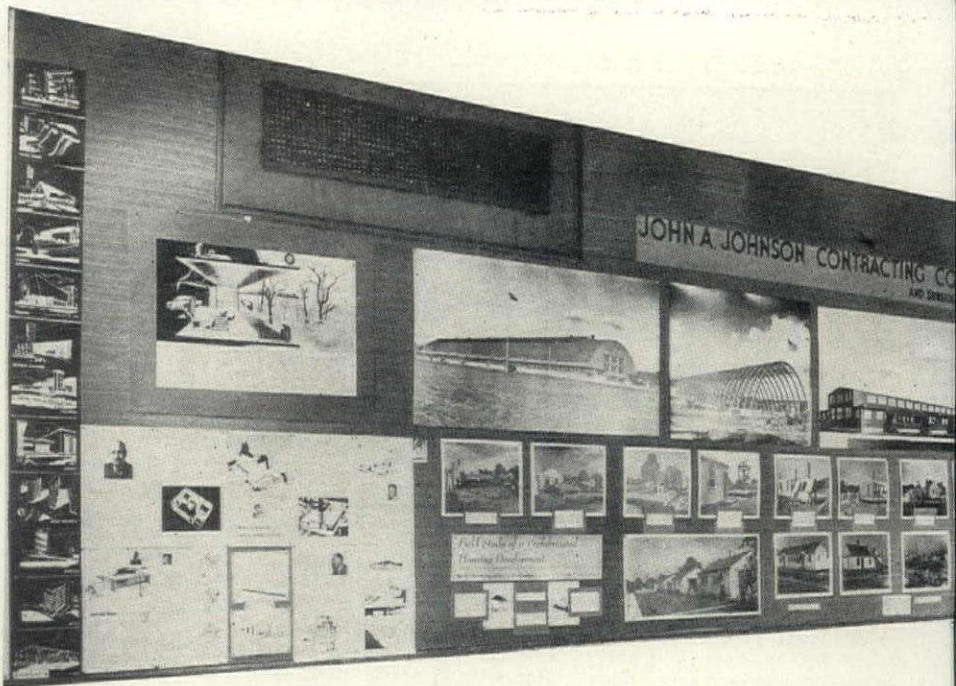
repeated wholly or in parts thousands of times, any amount of design talent could be afforded.

AESTHETICS IN ACTION

What Can the Arts Contribute to Prefabrication? keyed a later conference presided over by Wallace K. Harrison. Skirting the neckline of long hair, this series of discussions proved primarily the impractical approach of many designers to a clear-cut and realistic challenge. Most cheering among the speakers were Grosvenor Atterbury and Harvey Wiley Corbett.

Plunging directly at the heart, Atterbury announced, "I want to lay the ghost of standardization as a Frankenstein freezing architecture into cheap, standard shapes." The ghost, of course, turned out to be the architect's failure to understand that with prefabrication, he deals with the collective aspects of the poor man's house—that group composition and harmony are more important to the general effect than is the design of the individual unit. Corbett, claimed that the large, standardized production of dwellings would eventually improve their function and appearance as it has already improved the automobile. He said, "I think there is just one thing prefabrication can contribute to aesthetics. Through mass production it can employ the ablest designers. We talk about these little houses but prefabrication is just in its infancy. If we set aside what is ugly, much can be done."

Also leaning heavily on composition in the prefabricated picture were landscape architect Arthur Brinkerhoff and architect Eero Saarinen. Said Brinkerhoff, "There is a

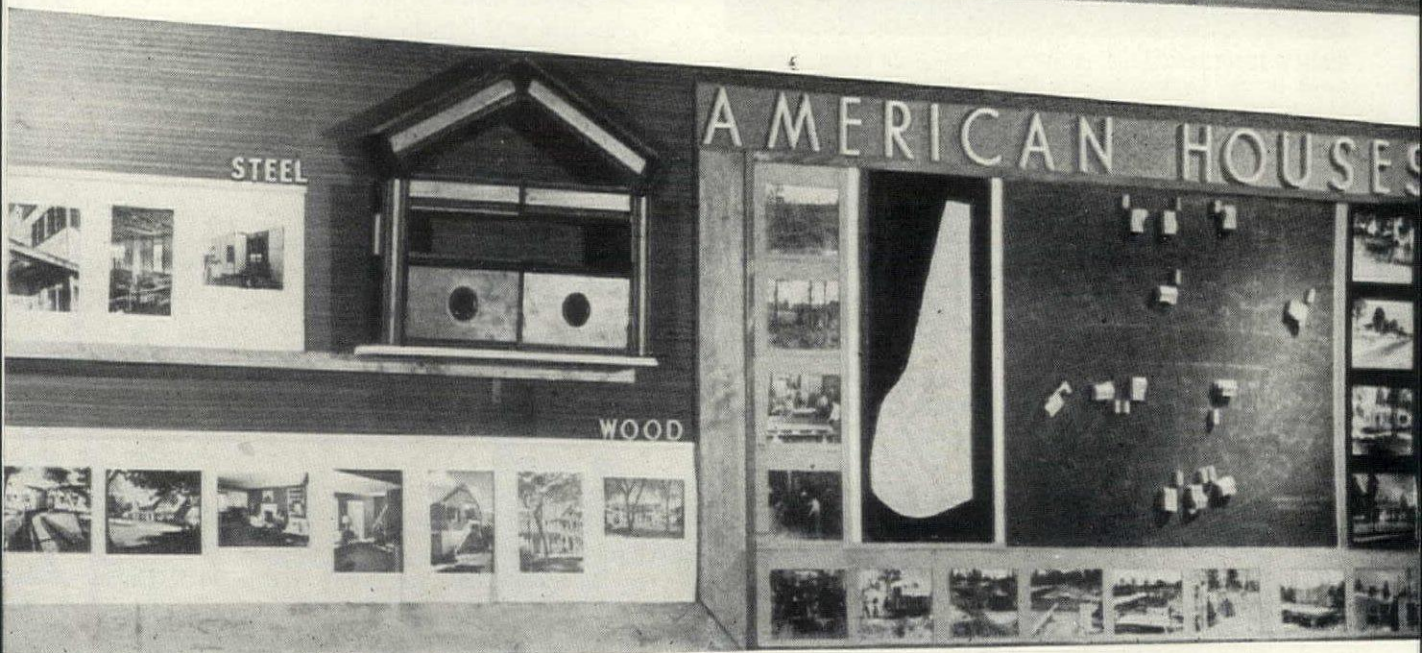


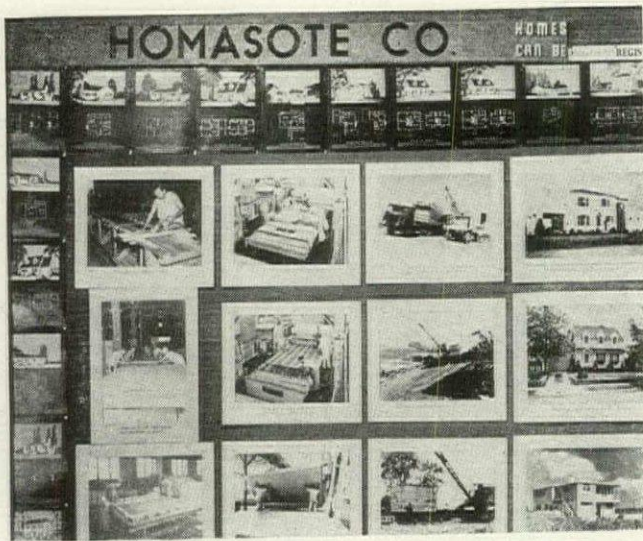
HEAVY CONSTRUCTION executed with prefabricated laminated arches and the early study for a prefabricated housing development were featured in the exhibit of the John A. Johnson Contracting Corp., and its various subsidiaries.



TYPICAL PREFABRICATED HOUSES and one interior view of the factory which is equipped to turn out a finished house every 25 minutes comprised the Gunnison Company's simple exhibit.

STEEL AND WOOD are shown as basic materials in the manufacture of American Houses. This firm also exhibited a well designed site plan for a prefabricated development to emphasize the possible flexibility of arrangement.

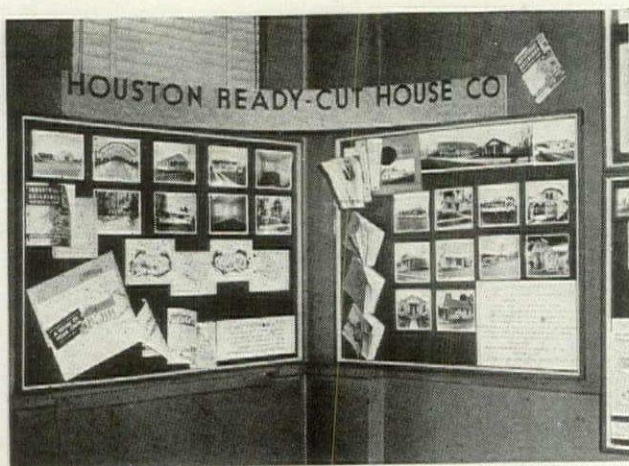




VARIATIONS IN DESIGN and finish characterize the Homosote exhibit. This material is adaptable to the construction of apartment houses, barracks, homes, stores and service buildings.



HIGHLY SUCCESSFUL and much used Cemesto board was featured in the Celotex display. The construction system which uses horizontal panels was developed by the Pierce Foundation.



EXTERIOR AND INTERIOR PANELS, manufactured in standard 4 foot units constitute the prefabrication system exhibited by the Houston Ready-Cut House Co.

unique type of person whom you have to attract; the average person of the less cultured group. The majority do not have good taste, but the natural human reaction is of vital importance. . . It isn't necessary to have unique features. To assure the sale of land it must appeal to humans. Prefabricated houses could be utilized and humanized in aspect if the development is well planned." Warned Saari-nen. ". . . we should not, in prefabricating the home, try to imitate the old home. We have come to a certain point in the planning of bathrooms and kitchens but we have done nothing to the bedroom. Closet space could be more practical than it is. Getting those practical things in is one of the most important things and one we should not forget." While the themes of planned neighborhoods and humanizing the mechanical aspects of a development appear to have little direct bearing on successful, down to earth prefabrication methods, they are infinitely more pertinent than the woman's angle as introduced by designer Helen Koues and decorator Nancy McClelland.

Emissaries from the arts, John Gregory and Leo Fried-lander showed understandable reluctance to mention their own calling, sculpture, in the same breath with prefabrication. In fact Mr. Gregory came right out and said, "Don't!"

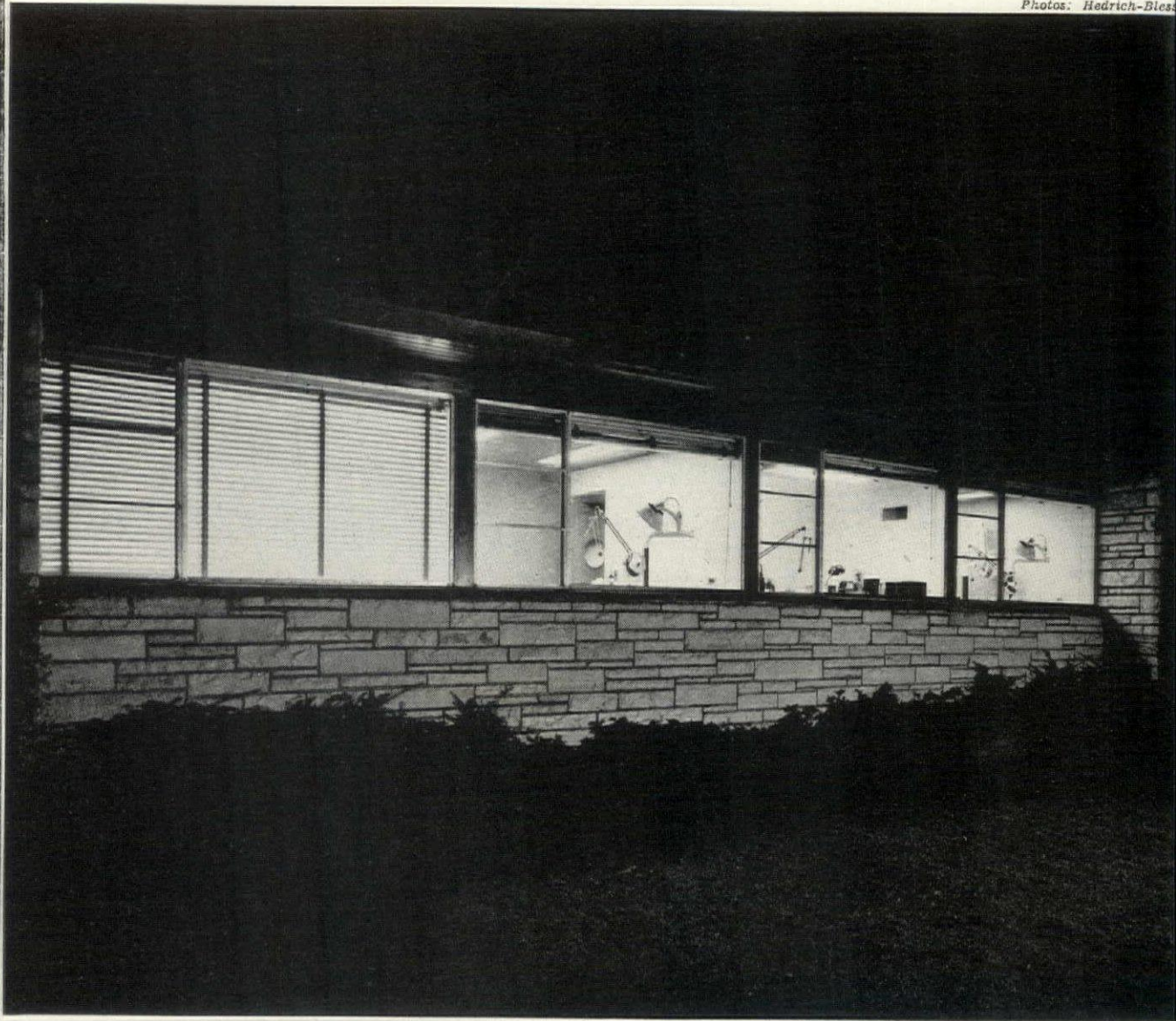
LUMINARIES AND LAMENTERERS

Along slightly more concrete lines and with professional consistency, lighting experts Stanley McCandless and H. E. De Andrade plugged better illumination. McCandless saw lighting as an important but negelected factor in improved aesthetic standards for prefabrication.

The conference's most popular renegades were Buck-minster Fuller and Antonin Raymond. Mr. Fuller contented himself with the reproachful reminder that there are some 30,000,000 people outside the U. S. who have no houses left. Emphasizing the pressing need of these homeless families immediately after the war, he said, "There is obviously room for every ingenuity. Man can demonstrate no jealousy about whose ways are going to be tried. We have room for all ideas because we will be able to use all." His candid opinion of the conference, however, was saved for THE FORUM's letters section (page 34).

The outspoken Mr. Raymond announced that after sitting through four hours of discussion, he considered the result zero. Said he, "Prefabrication hasn't gotten anywhere."

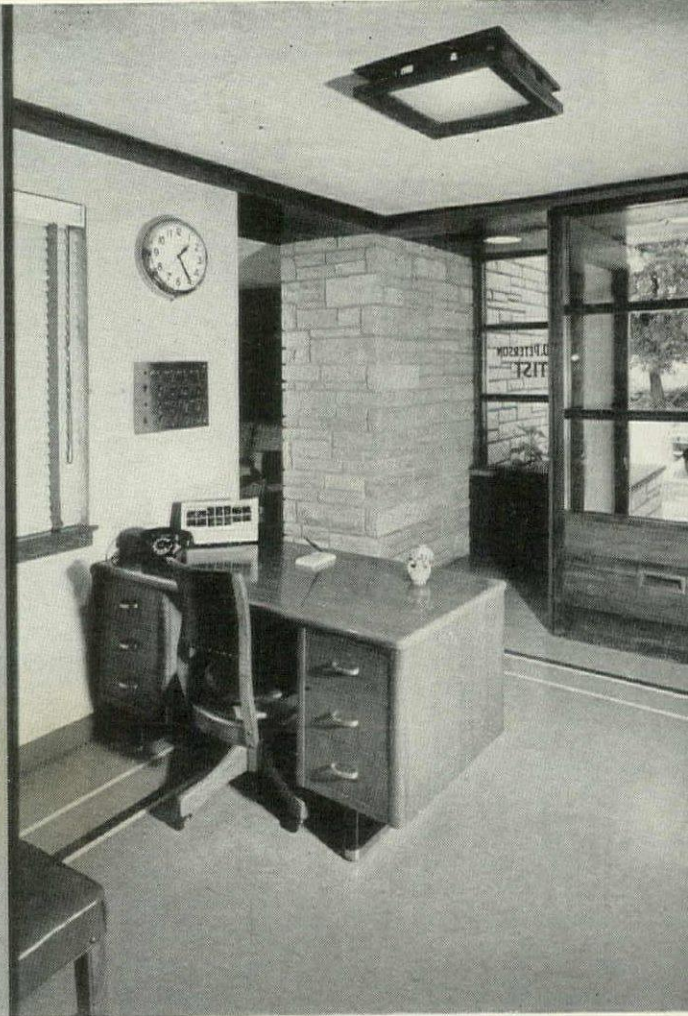
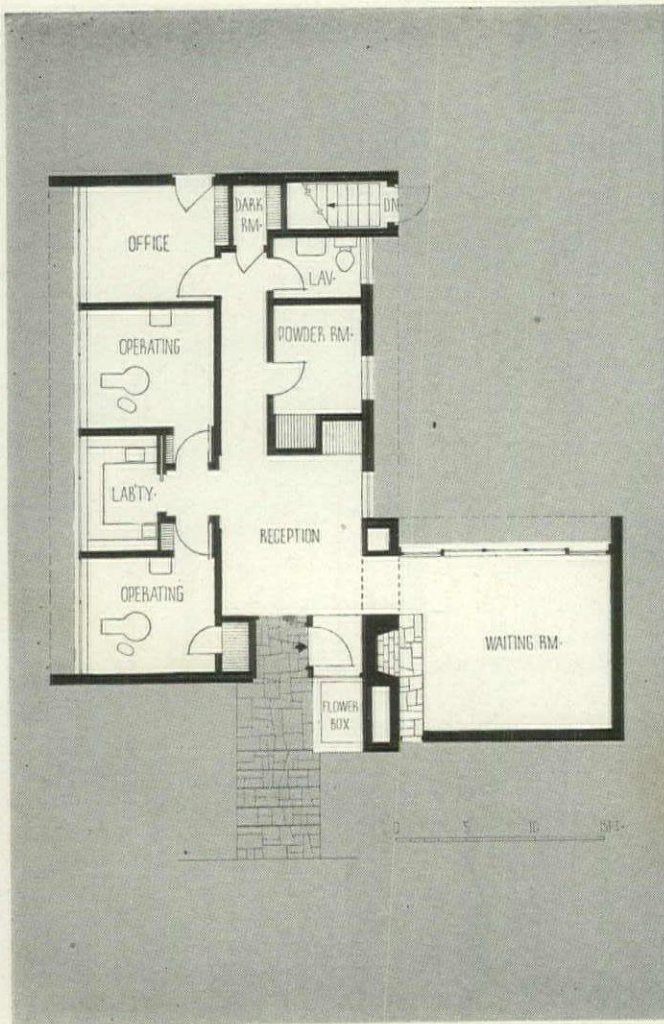
The significance of the meetings, paradoxically, was their insignificance. Prefabrication *has* made progress, and will continue to do so, the Cassandras notwithstanding. The conferences and the exhibition, which involved so much labor on the part of so many people, again demonstrated that Building has yet to become conscious of itself as an industry. However, the recent purchase of the Gunnison Housing Corp., by U. S. Steel (see News Section page 56) may indicate a new awareness to big industrial terms. The teamwork and collaborative attitude which is the trademark of true industrial operation was almost entirely negated "by the individual speakers' defense of their own activities. Architects and other profesionels still must learn to function as a part of a team. And because small house design standards are so appallingly low, manufacturers will have to discover for themselves that merchandising involves more than hiring a corps of salesmen. In putting on its show and conferences, the Architectural League broke wide open a Pandora's box of confusion and conflicts. At this stage of prefabrication's development it is hard to see how it could have performed a more useful service.



TWO DENTAL CLINICS a private, one story building outside Chicago and a compact professional suite in a New York office building.



1.
SUBURBAN DENTAL OFFICE
CHICAGO, ILLINOIS
PERKINS, WHEELER & WILL, ARCHITECTS



LOGICAL, SIMPLE PLAN IS CLOSED ON THE STREET EXCEPT FOR WINDOWS FLANKING THE ENTRANCE AND FIRE

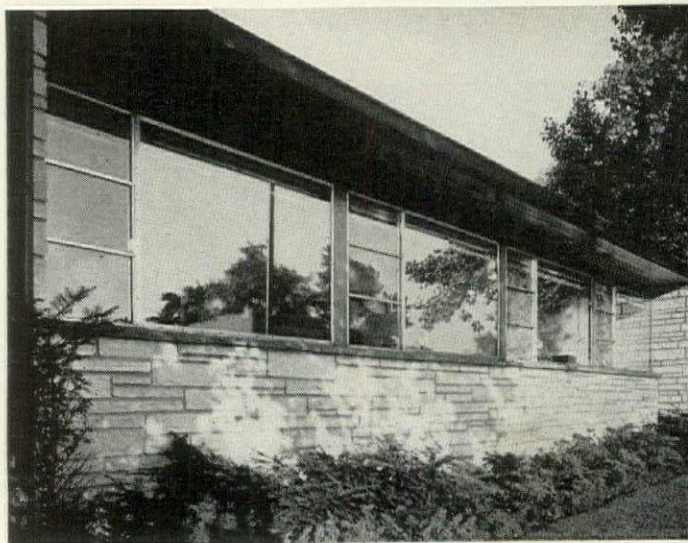
Consistent with the medical profession's current inclination to abandon high rents and parking difficulties identified with downtown offices (see ARCH. FORUM, Nov., '43), is this private, suburban dental clinic which accommodates an average size dentist's office. For such a building definite promotional value lies in the attractive and utilitarian architectural treatment. The site is an ample one, located on a corner of the main traffic artery connecting Chicago and Milwaukee. The prominent position and easy access have already proved profitable.

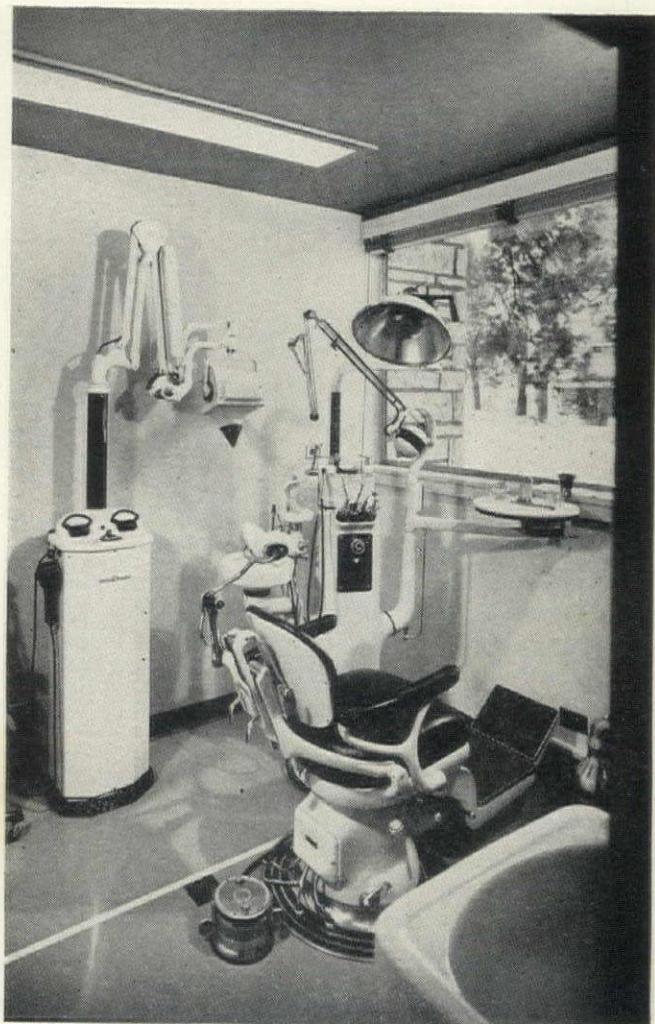
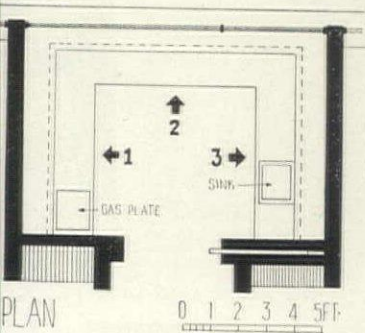
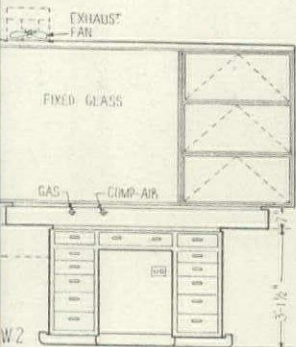
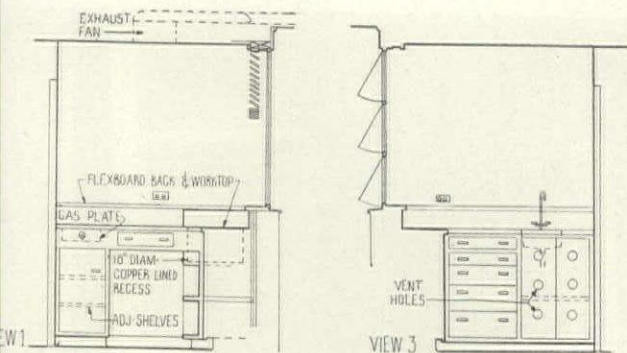
Two operating rooms, a laboratory, dark room and office comprise the work space. A proportionately large area has been allotted to the patients' comfort and relaxation. The large waiting room which shields the adjacent terrace from the street, has sliding glass panels so that both indoor and outdoor areas may be used in good weather. Required access to the operating and waiting rooms accounts to some degree for the generous reception room provided at the expense of the powder room and lavatory beyond. The laboratory, which can be closed off by a sliding door, is conveniently located between the operating rooms.

The total building cost was somewhat under \$11,000. Since no further expansion is anticipated, the liberal use of space seems warranted and proportionate to the dimensions of the site.

PERKINS, WHEELER & WILL, ARCHITECTS

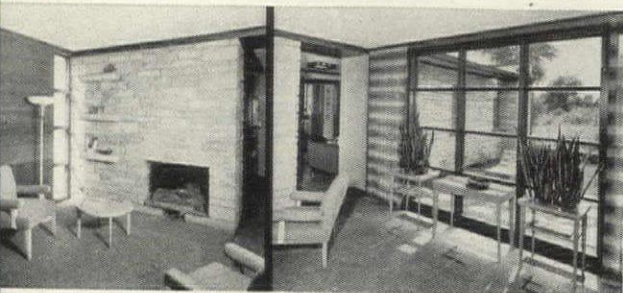
ALL WORK SPACE FACES EAST THROUGH UNBROKEN WINDOWS



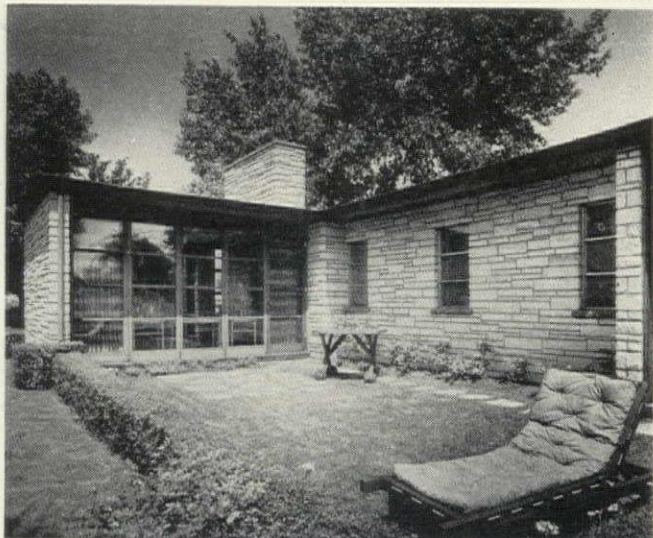


STANDARD EQUIPMENT IS USED IN OPERATING ROOMS

ING-ROOM FIREPLACE AND LARGE SLIDING PANELS . . .



OPENING ON OUTDOOR TERRACE ADD A DOMESTIC TOUCH



2

MIDTOWN DENTAL OFFICE

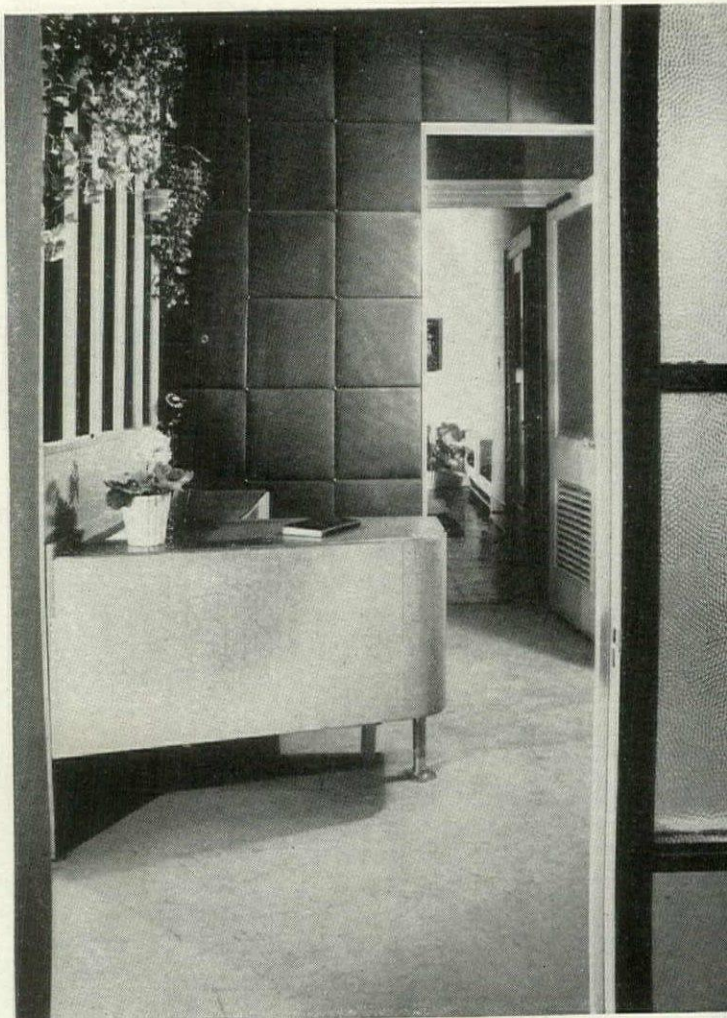
NEW YORK CITY

ELROY WEBBER, ARCHITECT

Recognizing that contrary to a medical operating room, requirements of overall asepsis are negligible in a dental clinic, both the architect and the dentist sought to avoid the conventional hospital atmosphere in the design of this professional suite. All standard equipment has been concealed or replaced by built-in cabinet work. The net effect is smooth, informal and relaxing.

The compact plan was worked out with moderate alterations to a typical New York office building layout. Available windows, front and rear, were all used for work space. Since dentistry often requires long waiting periods, the five operating rooms can be used for the simultaneous treatment of as many patients by three or more doctors. Along the same lines, a common X-ray room, used for only a few minutes at a time, increases efficiency and cuts the expense of duplicate equipment. The central location of the reception desk, convenient to the operating rooms, office and waiting room, permits one nurse to serve the entire clinic. Interior space was utilized for the waiting room which receives light through a glazed panel separating it from the adjoining operating room. The individual treatment of powder and rest rooms increases the capacity of both.

As much equipment as possible was put out of the way in the walls instead of being prominently displayed as is the usual practice. The dental unit and dentist's work cabinet are built in on either side of the room requiring it to be narrow for easy access. The plumbing connected with the dental unit is entirely concealed behind a wall panel. As opposed to the conventional installation with connecting pipes running under the floor, this feature greatly reduces the initial expense and simplifies maintenance problems. The chair is the only piece of equipment which rests on the floor. Instead of the usual model, obviously patterned after a surgical table, it has cushioned leather upholstery and accommodates the patient in the maximum comfort possible under the circumstances. While the chairs were custom made from the architect's designs, the cost was not above that of standard equipment. In addition to these innovations, bright colors in the operating room upholstery, wall panels and cabinet finishes successfully elude much of the grim foreboding usually associated with hospital white.

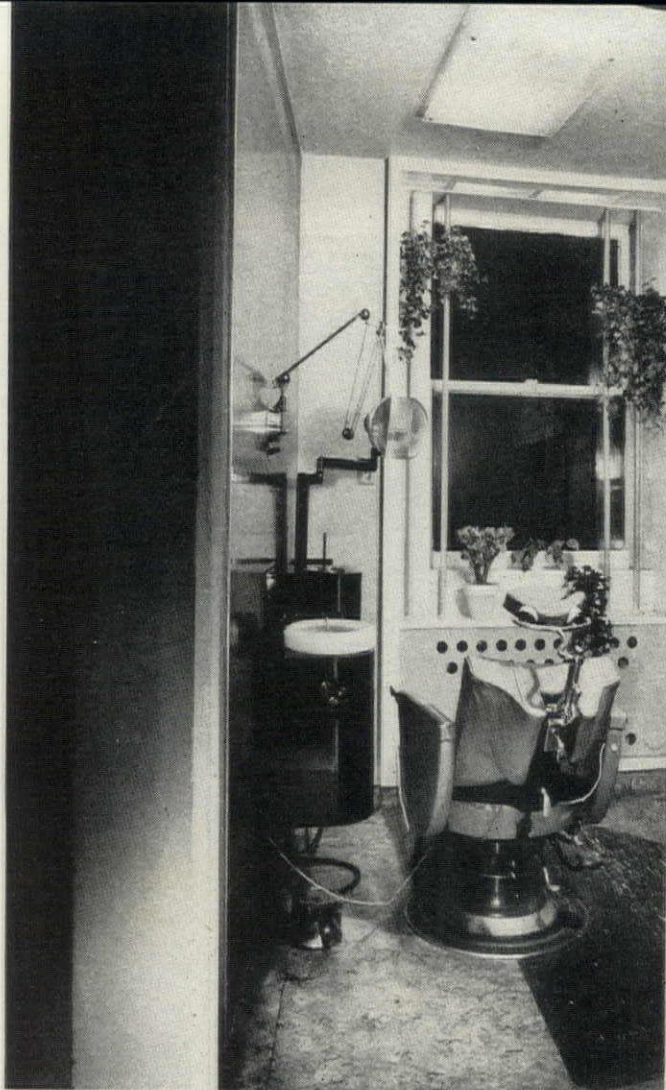


LEATHER UPHOLSTERED WALL BACKS CENTRAL RECEPTION
PATIENTS' COAT CLOSET IN WAITING ROOM HAS LIGHTED CEILING





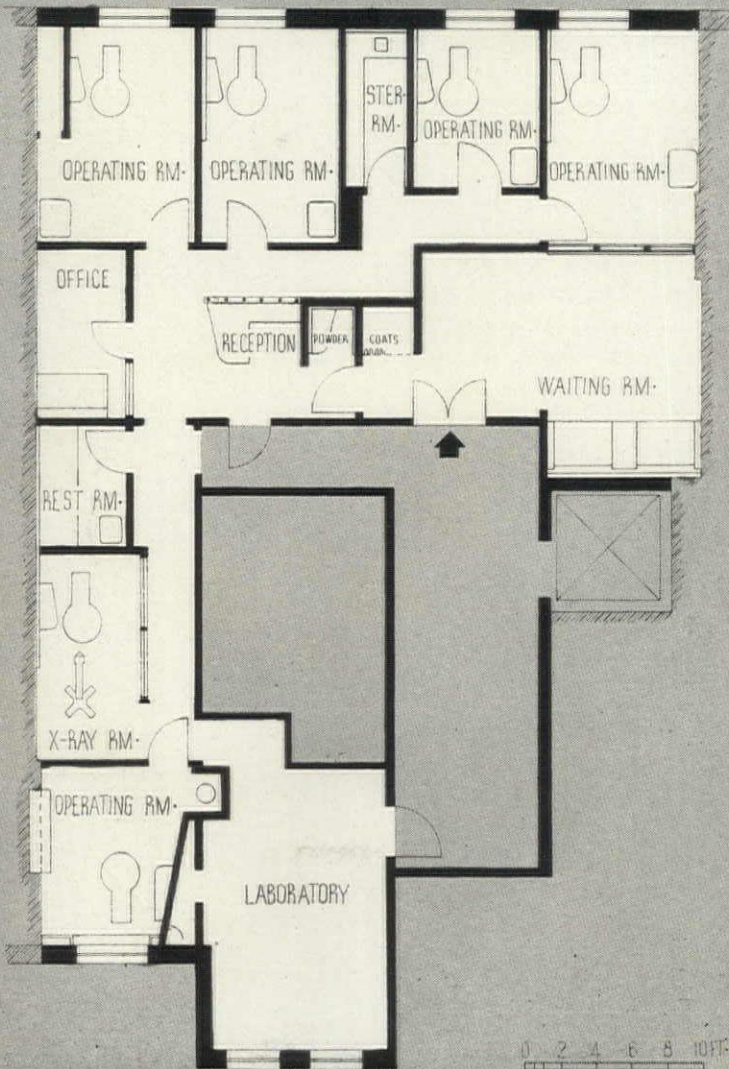
EQUIPMENT IS CONCEALED IN WALLS



GLAZED PANEL ABSORBS SOUND



FINISHES AND EQUIPMENT: INTERIOR PARTITIONS—plaster board, U. S. Gypsum Co. FLOOR COVERINGS—linoleum. WALL COVERINGS—Marsh board panels, Marsh Wall Products Co.; one room—rubber linoleum. FURNISHINGS—Artek-Pascoe, Inc. Cabinet top—Micarta, Westinghouse Electric & Mfg. Co.

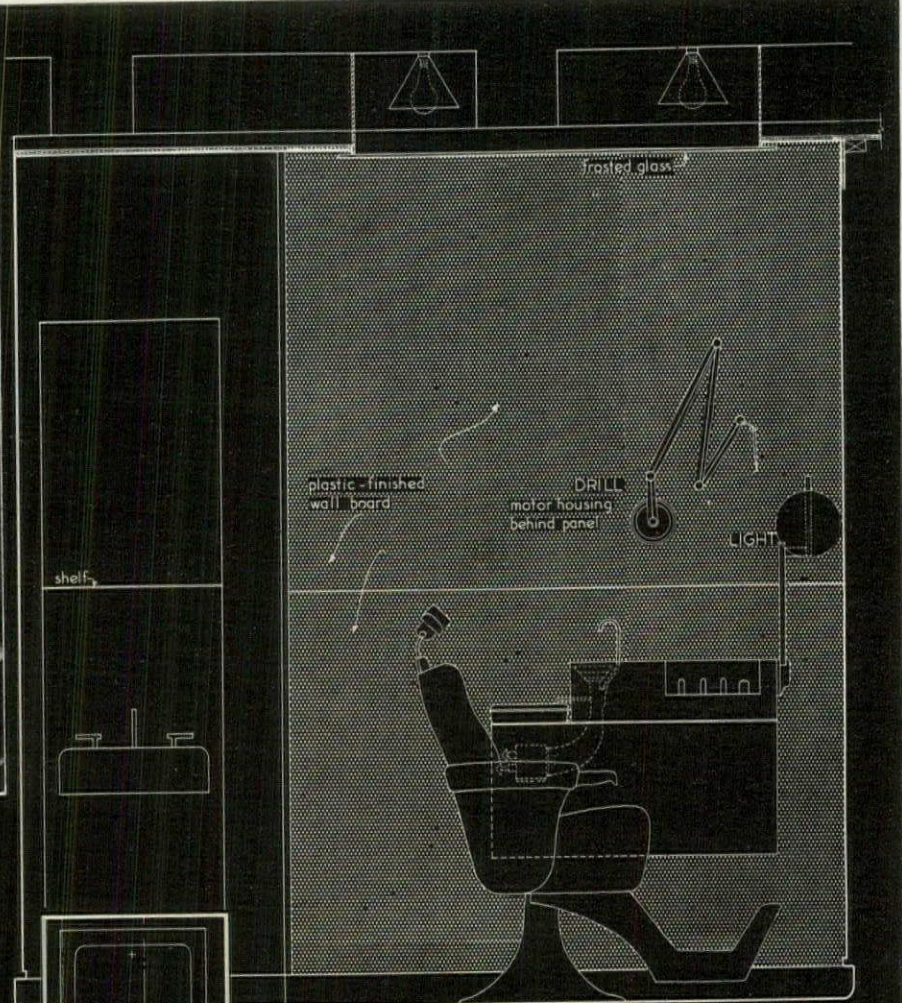
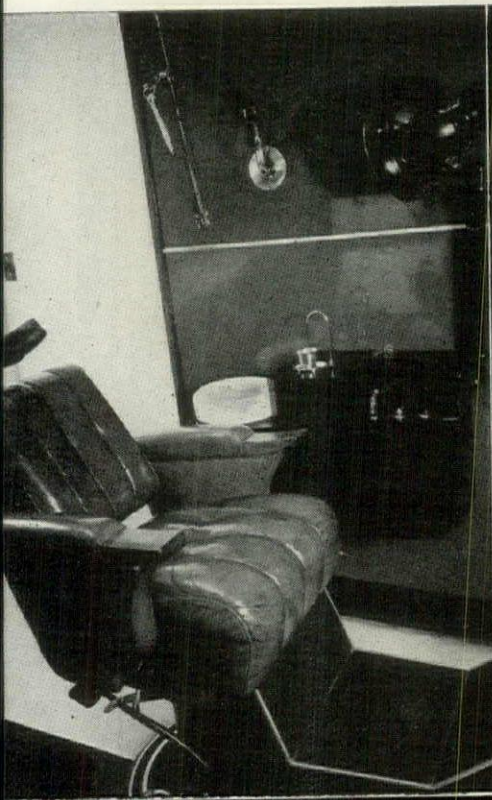


DENTAL OPERATING ROOM

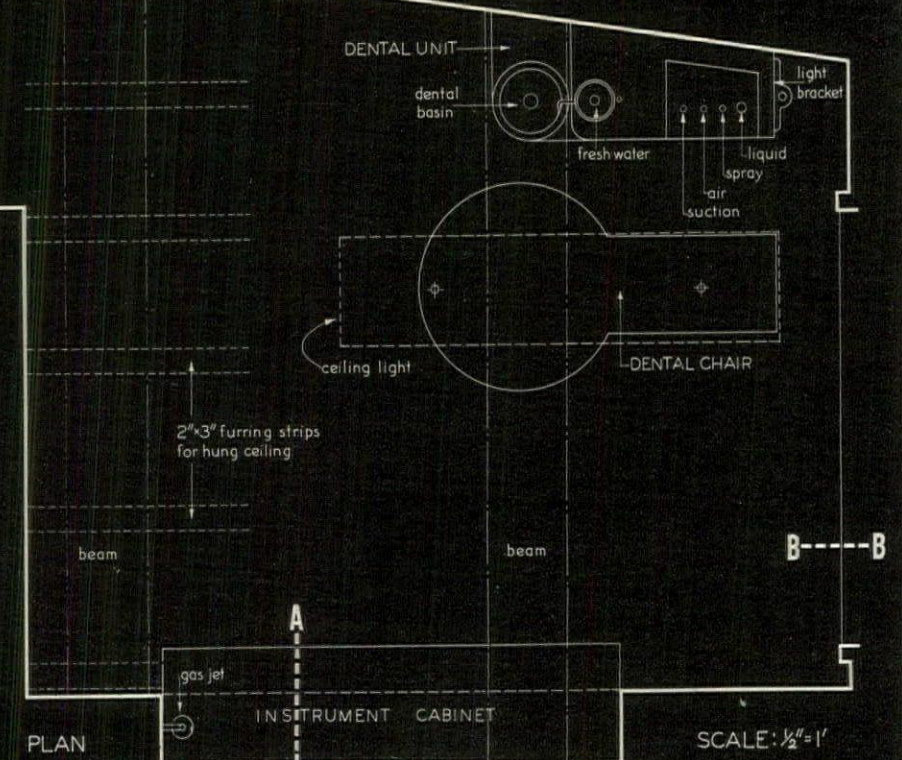
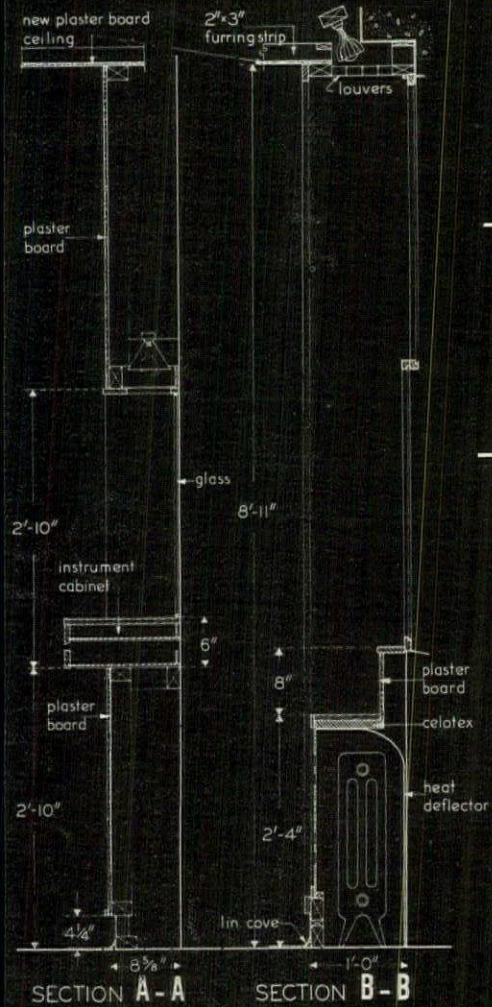
ELROY WEBBER, ARCHITECT

DESIGN DATA 17.

THE ARCHITECTURAL FORUM



ELEVATION OF WALL WITH DENTAL UNIT
SCALE: 1/2" = 1'



SCALE: 1/2" = 1'

"BUILT IN U. S. A. 1932-44"

The Museum of Modern Art opens a show and publishes a book on the best modern U.S. architecture of the past dozen years. A first-rate birdseye view of the achievements of contemporary building.

ON the 24th of this month the Museum of Modern Art is opening a big retrospective exhibition to mark its fifteenth anniversary. "Built in U.S.A., 1932-44", the architectural section of the show, contains 47 structures which demonstrate very clearly indeed that a good part of the battle for modern building has been won. For the general public, as well as the more backward sections of the building professions, they constitute a decisive answer to the question of acceptance of the contemporary approach. It has been accepted.

What gives this exhibition its unmistakable impact is not novelty. This is not the first show of selected buildings—not even the first dealing only with modern buildings. But it happens that the period covered by the exhibit, 1932-44, is also the period of maximum development of modern architecture in the U.S. Thus the collection of work in this particular show represents an attempt to evaluate an entire movement, which is something quite different from the conventional public pat on the back for good work. Coupled with this grandiose objective is the fact of the Museum's prestige, which is considerable.

If "Built in U.S.A." is considered on the basis of the selections made, it is easy to find grounds for disagreement: there is no known method of picking a list of buildings that will satisfy everyone. Nevertheless, it is probable that any fair-minded critic would find that most of the choices were good choices. From the viewpoint of THE FORUM's editors, the collection shows two weaknesses. One is evidence of a tendency to pick names rather than buildings: there are several examples which would have probably been omitted had the architects been less prominent. The other weakness is a little harder to describe. It might best be summed up, perhaps, as a habit of looking at architecture the way one looks at painting. It is an approach which considers the building as a kind of abstraction which is supposed to conform in its appearance with certain preconceived ideas of form. There are examples in the group whose selection could be explained on no other basis.

That these shortcomings should exist in a museum is not surprising. The very idea of a department of architecture in such an institution is fairly new, and its problems are considerable. There is a tradition in art criticism, and the field has attracted outstanding people; architecture does not yet offer a precise parallel. Moreover, it is difficult and expensive to dramatize building, for the exhibitor is always dealing with a representation—never with the thing itself. The architecture show must depend upon drawings, photographs and models. Compared with an exhibition of painting or sculpture, where the original can be displayed, it inevitably attracts less interest.

That the Museum is aware of these problems was amply demonstrated by the procedure of selecting the buildings. Practically every U.S. architect with one or more modern buildings to his credit was asked to send in nominations for the exhibit. In addition, the country was combed for good work that might have escaped the roving eyes of the architectural press. If the majority of the buildings seem to have been wisely chosen, therefore, this is due in large part to the conscientious effort to get a cross-section of competent opinion.

All this, however, is of secondary importance. What the exhibition reveals about modern architecture in America is more to the point. The excellence of the buildings is

there to be seen. Their superiority on every count to the older types can be demonstrated. But it is surprising to find that the collection as a whole shows a remarkably tentative, almost experimental character. The indication of a design trend is clear enough, but evidence of a mature tradition is lacking. Compared with similar work in Scandinavia, for example, most of the buildings lack assurance and ease. Their designers seem to have tried too hard, for the results are frequently self-conscious in their straining for modernity.

A good example of the kind of thing that prompted these observations is the use of the cantilever. The cantilever is a very handy structural device for extending a span without end supports, but in many of these buildings it is employed for no particular reason, unless it was to show that the architect was in favor of cantilevers. Other technical elements are sometimes handled in an equally naive manner.

Many of the buildings look highly standardized—almost machine-made. This “look”, like that of the ground-free building, is pleasing to most modernists. But to achieve this appearance, conventional construction has often been made very complicated. Here we see the architect trying to anticipate developments in construction and fabrication which are not yet in existence, a procedure which marks an architecture that is still in transition.

Those whose political tendencies verge on the chauvinistic will decry the European influences seen again and again in these buildings. There is nothing discreditable in the European influence. Europe never hesitated to learn from Wright and the Chicago School and there is no reason why we should not repay the compliment. The very conditions of Western civilization make an architectural isolationism impossible. This does not mean that we must head for another “International Style”. There are thousands of ways of developing any basic idea, and regions and nations will continue to demonstrate this fact.

While the trends in design are clear, their current manifestations in this collection of buildings are exceedingly diverse. At one extreme there is the almost classic formalism of the work of Gropius and Breuer, and the treatment of a building as a perforated box. At the other is the work of Wright, where the very bones of the building are exposed to become a peculiarly exciting, dynamic kind of architecture. There is the carpenter-like simplicity of the West Coast group, a modern glorification of the barn and the woodshed. These differences, however, are rarely clear-cut, for there is an endless overlapping of the different lines of approach. Here again we see the mark of a transitional architecture still in the process of developing its own “style”.

Head and shoulders above all the work stand the three buildings of Frank Lloyd Wright, who, at an age when most men exchange the drafting stool for the wheel chair, is still showing the younger generation what vision really means. Wright's buildings are the most magnificent abstractions of our time, in which space, landscape, materials and construction have been merged with a strength, clarity and poetic insight that is unique. His building for the Johnson Wax Company should have been in the exhibition. It was omitted because of a rule that no architect be represented by more than three jobs; this absurd strait-jacket regulation would never have been adopted had the Museum been as concerned with getting the buildings as it was with including all the proper names.

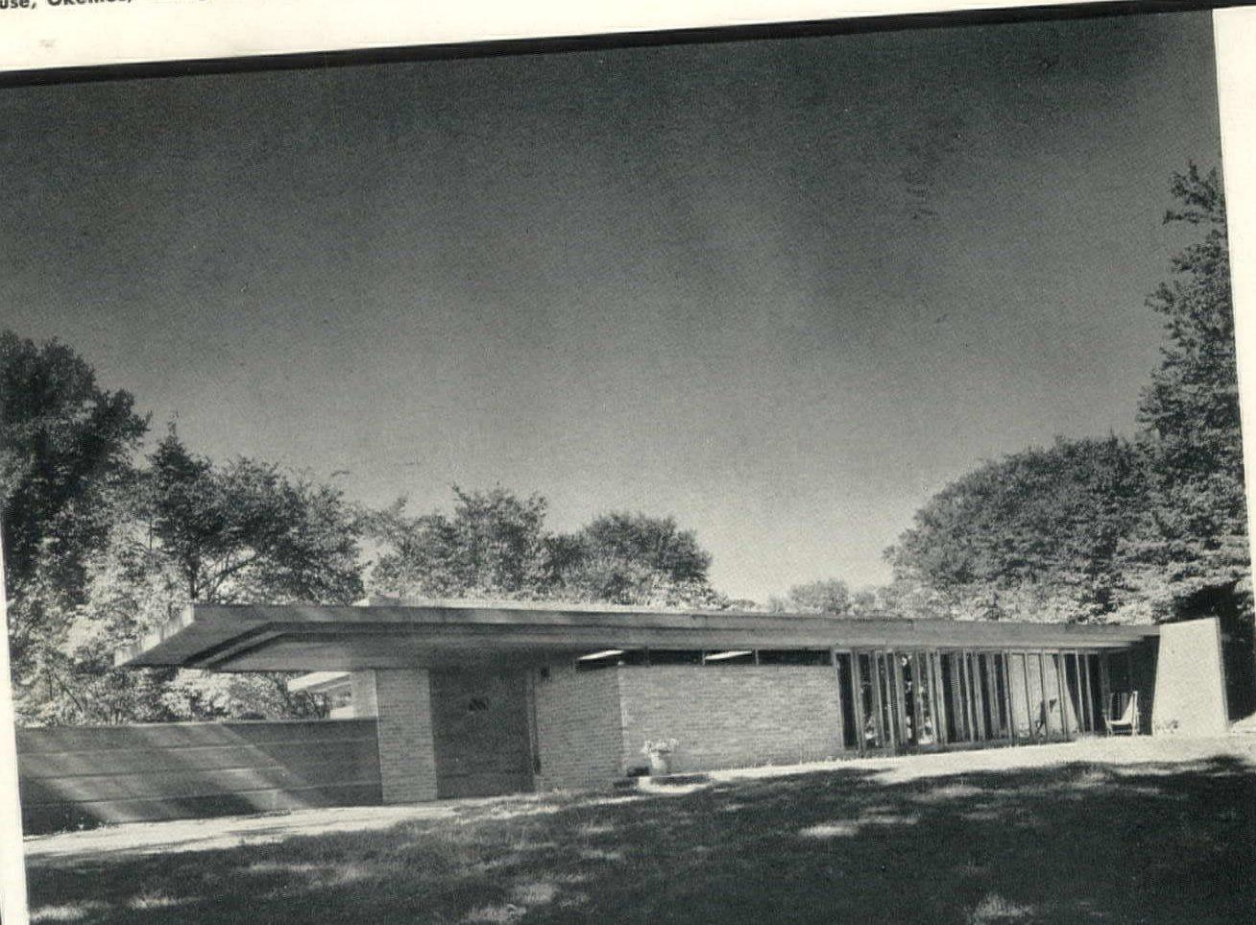
Transitional or not, “Built in U.S.A.” shows real achievement and tremendously exciting perspectives. If American architecture could move so far so fast, this in itself is guarantee enough for the future. Producing a contemporary architecture in this country was not easy. Lacking a long-established tradition, we have always been uncertain and afraid of change where matters esthetic and cultural were concerned. After a persistent, long-term collective effort the first major obstacle—that of acceptance—has been overcome. The problem now is to develop a contemporary architecture that is fully worthy of the aims it has set for itself. To this effort, “Built in U.S.A.” makes a real and important contribution.

“Built in U.S.A., 1932-44”, edited by Elizabeth B. Mock, published by the Museum of Modern Art, contains photographs, plans and critical analyses of the 47 buildings in the exhibition. While 36 of these buildings have already been published in *THE FORUM*, or are scheduled to appear, the editors believe that the collection is well worth having in book form. Through the courtesy of the Museum, the book will be available to *FORUM* readers at \$2.40, a discount of 20 percent from the list price. Due to the paper shortage, only a limited number can be sold in this manner. Checks should be made payable to *THE ARCHITECTURAL FORUM*.



1

ES 1. Frank Lloyd Wright, architect: "Falling Water," house for Edgar Kaufmann, Bear Run, Pennsylvania, 1937. Forum, January 1938. 2. Frank Lloyd Wright, architect: Winkler House, Okemos, Michigan, 1939. To be published in a coming issue.

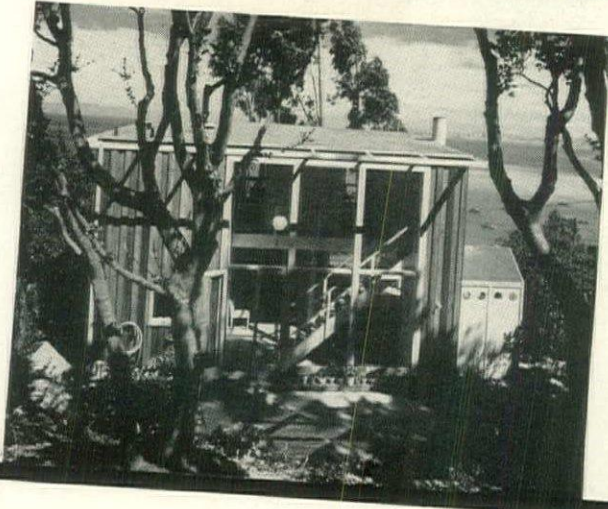


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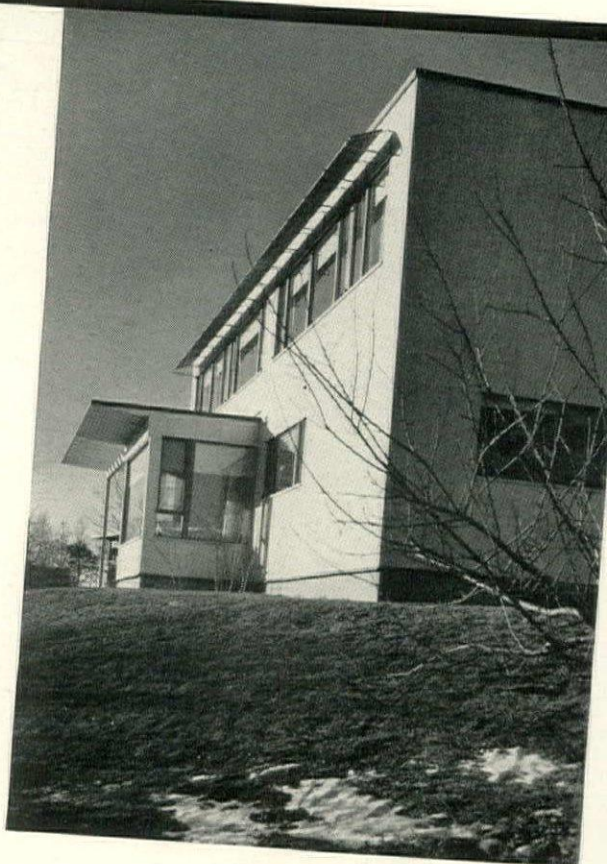
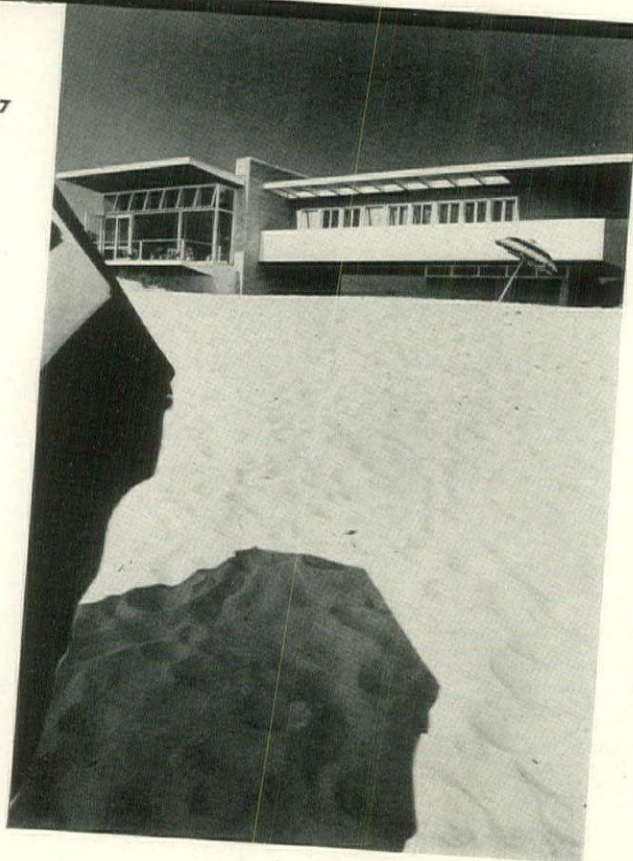
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HOUSES

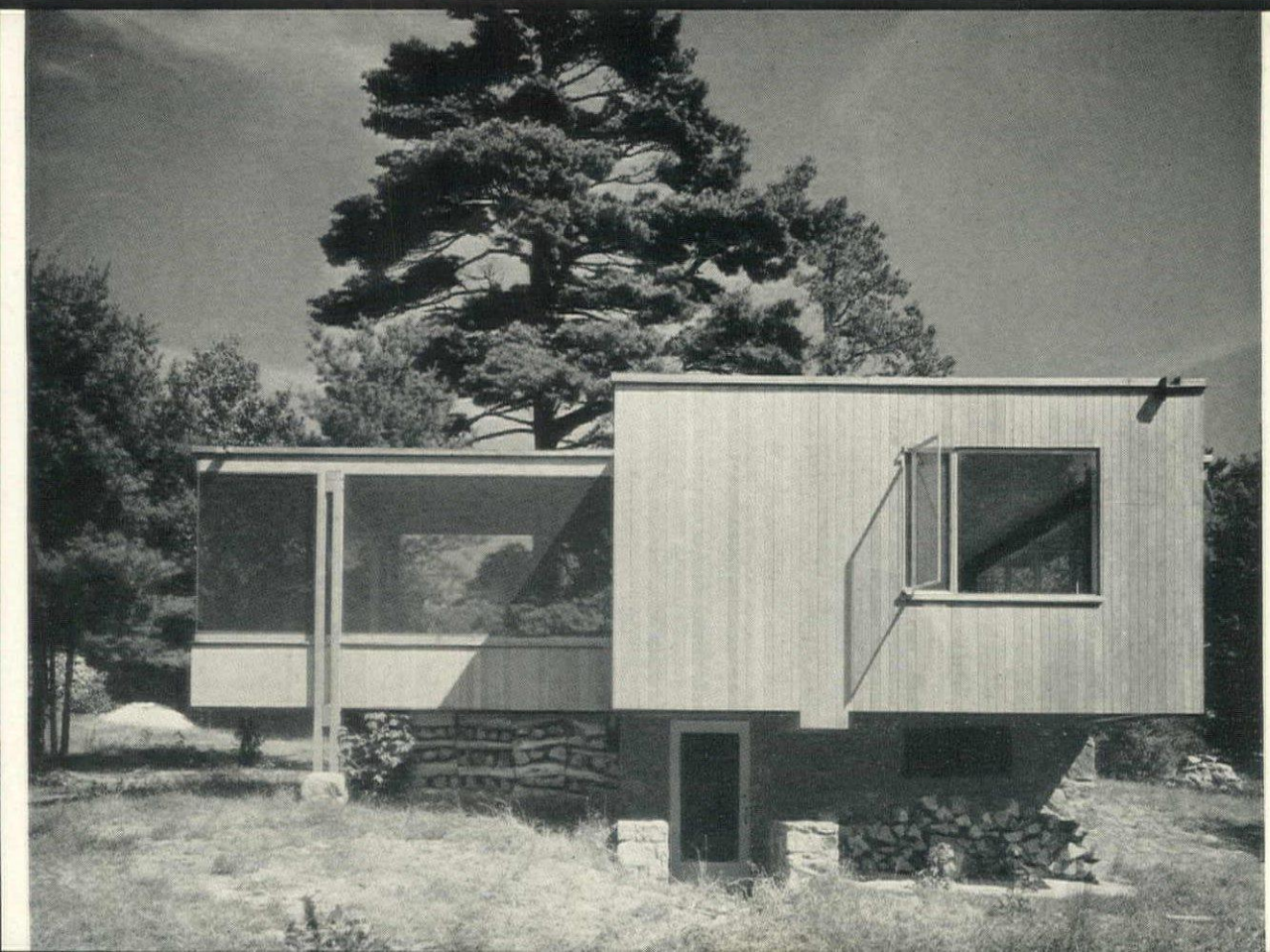
3. Philip Johnson, architect; S. Clements Horsley, associate: House for Philip Johnson, Cambridge, Massachusetts, 1942. Architectural Forum, December 1943. 4. John Yeon, designer; A. E. Doyle & Associates, architect: House for A. R. Watzek, Portland, Oregon, 1937. 5. Gardner A. Dailey, architect; Marie Harbeck, landscape architect: House for Marvin L. Heckendorf, Sausalito, California, 1939. Architectural Forum, May 1941. 6. John Funk, architect: House for Marvin L. Heckendorf, Modesto, California, 1939. Architectural Forum, May 1941.

7

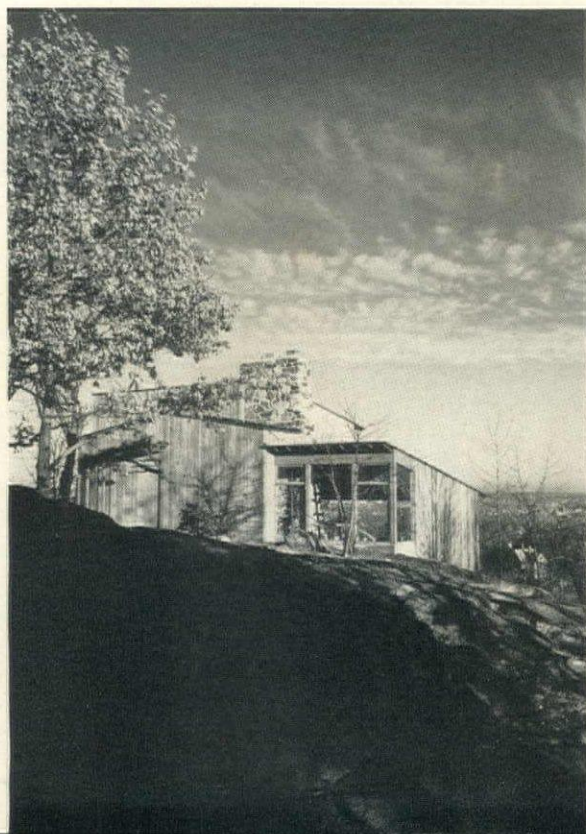




Architectural Forum, March 1941. 7. Vincent G. Kling, architect: House for A. J. Peaslee, Mantoloking, New Jersey, 1941. Architectural Forum, March 1942. 8. Walter Gropius and Marcel Breuer, architects: House for James Ford, Lincoln, Massachusetts, 1939. 9. Edward D. Dineen, architect: House for A. Conger Goodyear, Old Westbury, Long Island, New York, 1940. Architectural Forum, July 1941. 10. Walter Gropius and Marcel Breuer, architects: House for Henry G. Chamberlain, Weyland, Massachusetts, 1940. Architectural Forum, November 1942.







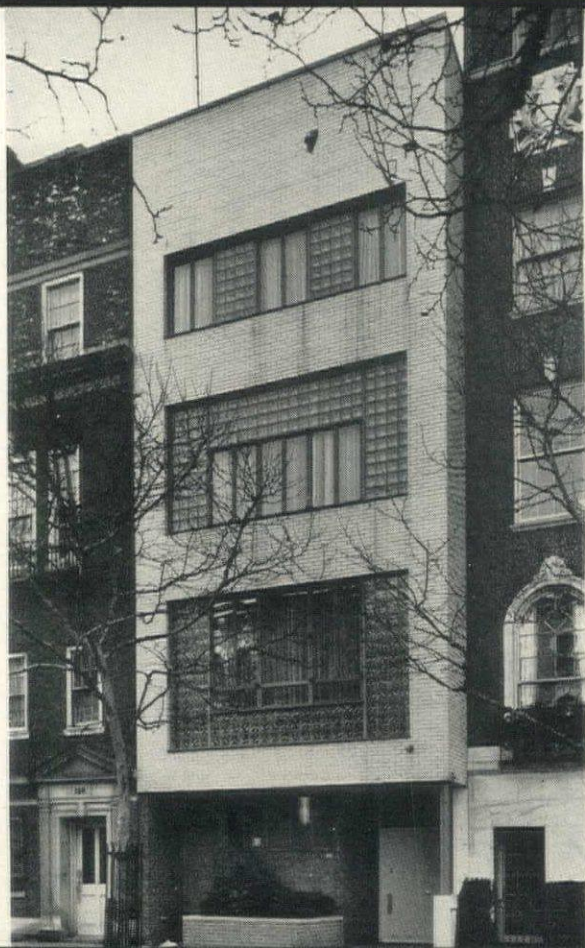
13

OUSES

11. George Howe: House for Clara Fargo Thomas, Mount Desert, Maine, 1939. *Architectural Forum*, December 1939.

12. Harwell Hamilton Harris: House in Fellowship Park, Los Angeles, California, 1935. *Architectural Forum*, April 1937.

Carl Koch: Group of eight houses on Snake Hill, Belmont, Massachusetts, 1941. *Architectural Forum*, June 1941. 14. William Lescaze: House for Edward A. Norman, New York City, 1941. To be published. 15. Gregory Ain: Dunsmuir Flats, Los Angeles, California, 1939.



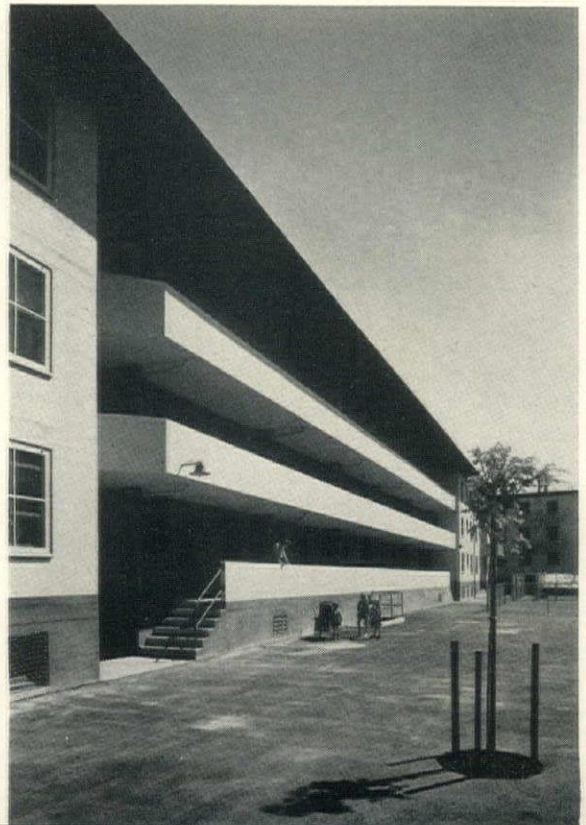
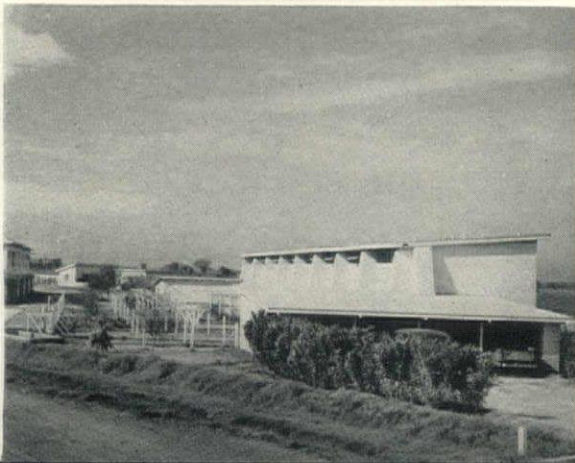
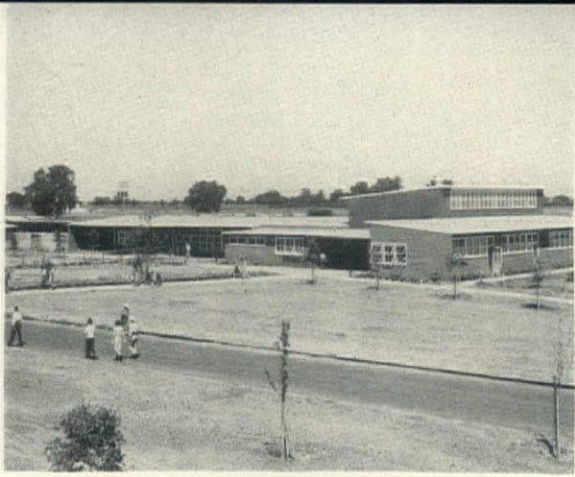
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HOUSING

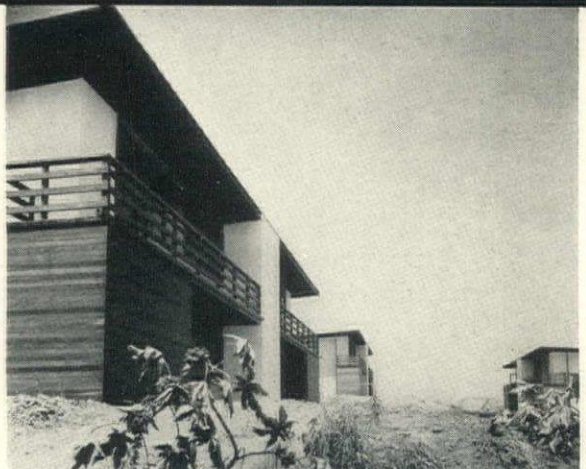
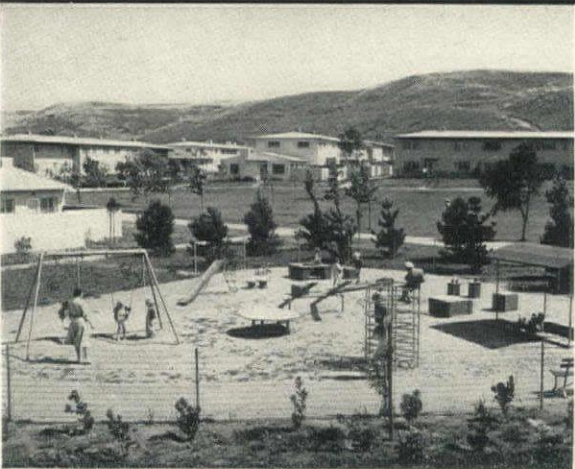
16. Hugh Stubbins, Jr.: Defense Housing (FWA Division of Defense Housing), Windsor Locks, Connecticut, 1941. *Architectural Forum*, October 1941. 17. Howe, Stonorov & Kahn: Carver Court (FPHA permanent war housing), Coatesville, Pennsylvania, 1944. To be published. 18. Vernon DeMars, architect; Nicholas Cirino, site engineer: Rural Community (FSA), Woodville, California, 1941. 19. Burton D. Cairns and Vernon DeMars: Agricultural workers' community (FSA), Chandler, Arizona, 1936.





20

Architectural Forum, January 1941. 20. Harry A. Thomsen, Jr. and William Wilson Wurster, architects; Thomas D. Church, landscape architect: Enciclopedia Gardens (USHA low-rent project), San Francisco, California, 1943. 21. Reginald D. Johnson and Wilson, Merrill & Alexander, architects; Clarence S. Stein, consulting architect: Baldwin Hills Village (FHA), Los Angeles, California, 1942. 22. Richard J. Neutra, architect; Lewis E. Wilson, consultant: Channel Heights (FPHA permanent war housing), San Pedro, California, 1943. Architectural Forum, March 1944.



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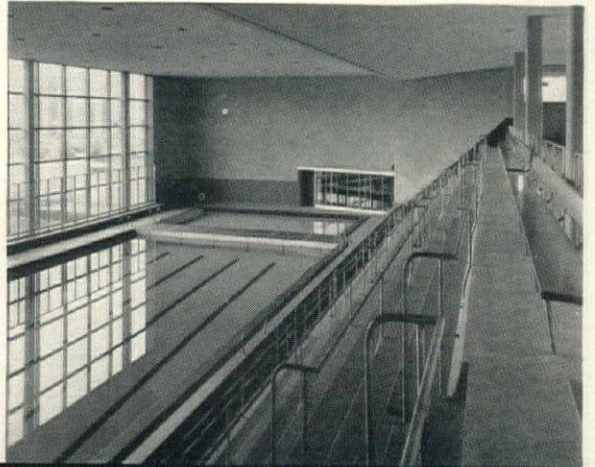
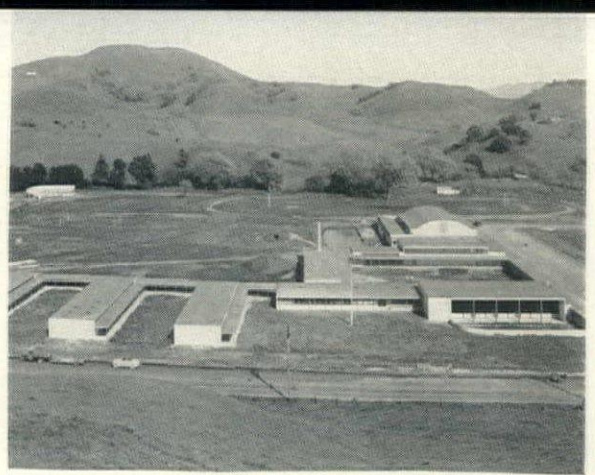
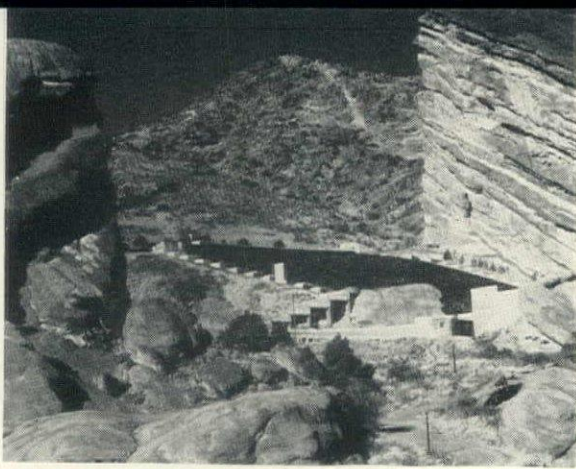


EDUCATION

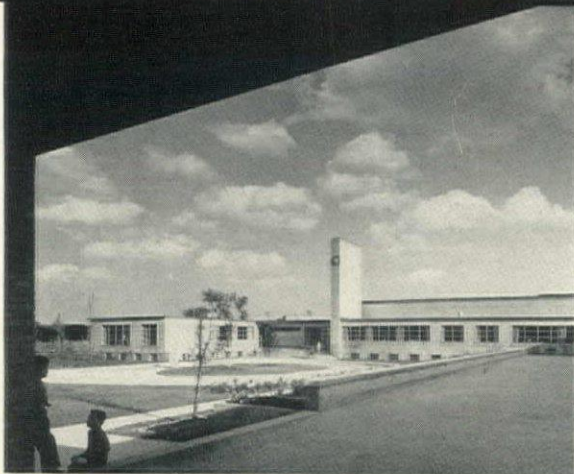
23. Frank Lloyd Wright: Taliesin West, Maricopa Mesa, Paradise Valley (near Phoenix), Arizona, 1938. To be published. 24. Gardner A. Dailey: U. S. Merchant Marine Cadet Basic School, Coyote Point, San Mateo, California, 1942. Architectural Forum, September 1943. 25. Burnham Hoyt: Red Rocks Amphitheater for the City and County of Denver, Morrison, Colorado, 1941. To be published. 26. Ernest J. Kump Company: Acalanes Union High School, Lafayette, California, 1942. 27. Richard

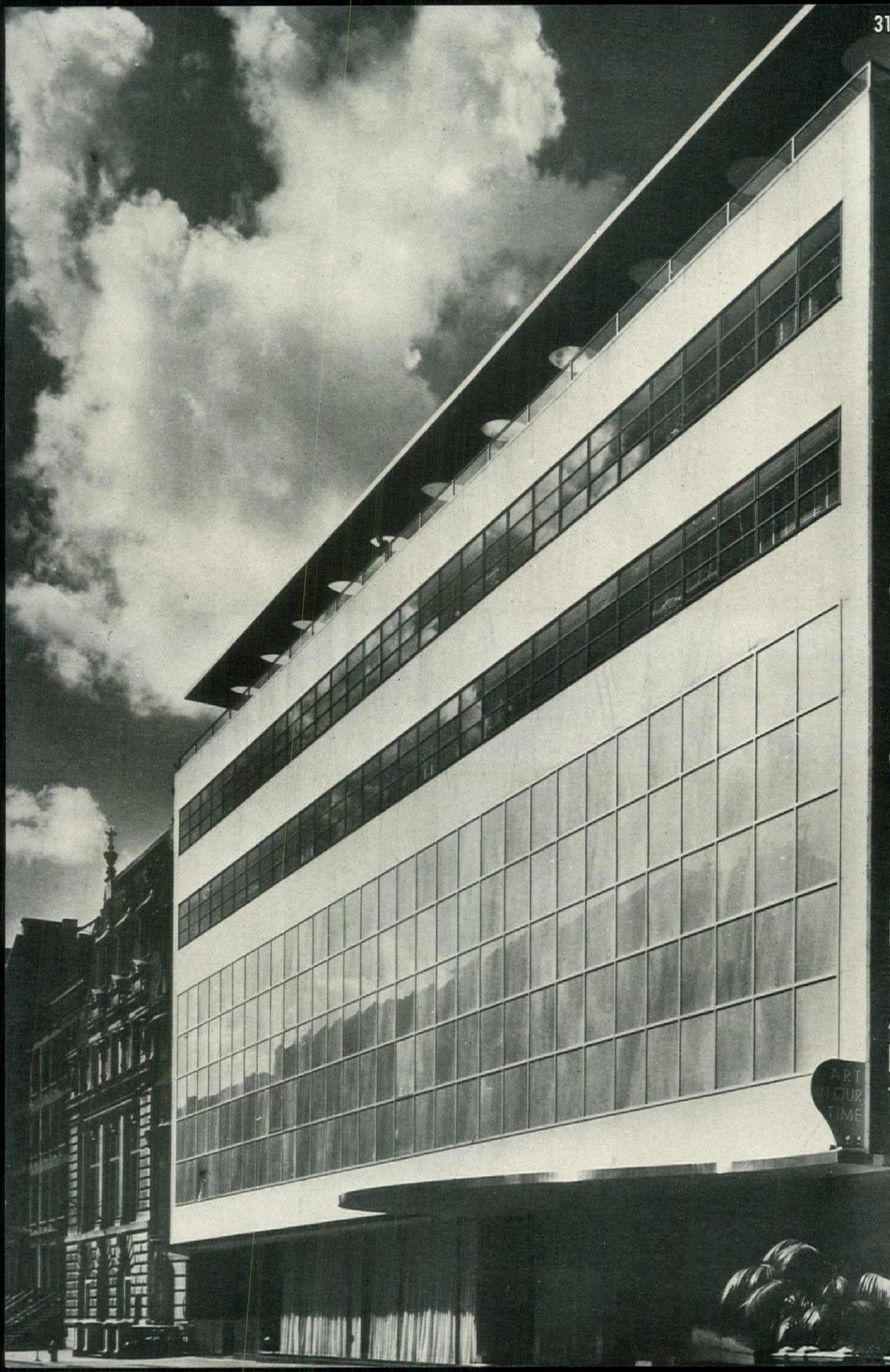
24





25. **Leutra: Experimental School, Los Angeles, California, 1935.** *Architectural Forum*, August 1937. 26. **Leutra: Experimental School, Los Angeles, California, 1935.** *Architectural Forum*, August 1937. 27. **Leutra: Experimental School, Los Angeles, California, 1935.** *Architectural Forum*, August 1937. 28. **Lawrence B. Anderson and Herbert L. Beckwith: Swimming pool, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1940.** 29. **Eliel and Eero Saarinen; Perkins, Wheeler and Will, architects: Crow Island Elementary School, Winnetka, Illinois, 1940.** *Architectural Forum*, August 1941. 30. **Skidmore, Owings & Merrill: Main Reception Building, Great Lakes Naval Training Station, Great Lakes, Illinois, 1942.** *Architectural Forum*, March 1943.





ART HOUR TIME



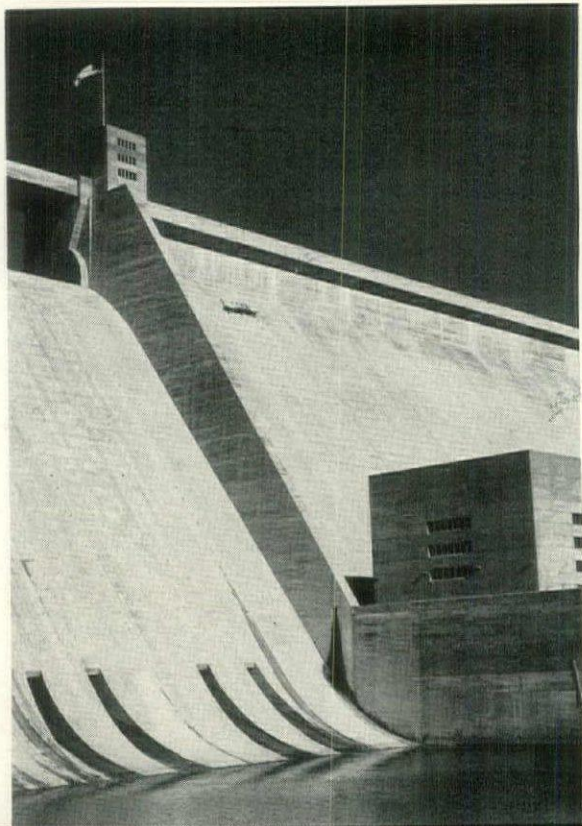
32

PUBLIC 31. Philip L. Goodwin and Edward D. Stone: The Museum of Modern Art, New York, N. Y., 1939. Arch. Forum, Aug. '39. 32. William A. Ganster and William L. Pereira: Lake County Tuberculosis Sanatorium, Waukegan, Ill., 1939. Arch. Forum, Sept. '40. 33. Franklin and Kump, Jr.: City Hall, Fresno, Calif., 1941. To be published. 34. Dept. of Borough Works, Office of the Borough President of Manhattan: Ely Jacques Kahn and Robert Allan Jacobs, exterior design: Municipal Asphalt Plant, New York, N. Y., 1944. Arch. Forum, Mar. '44.

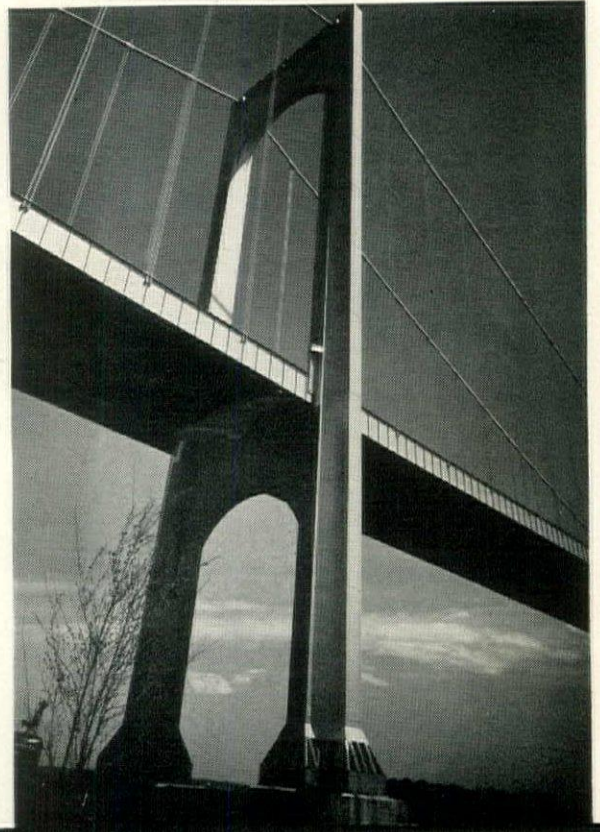
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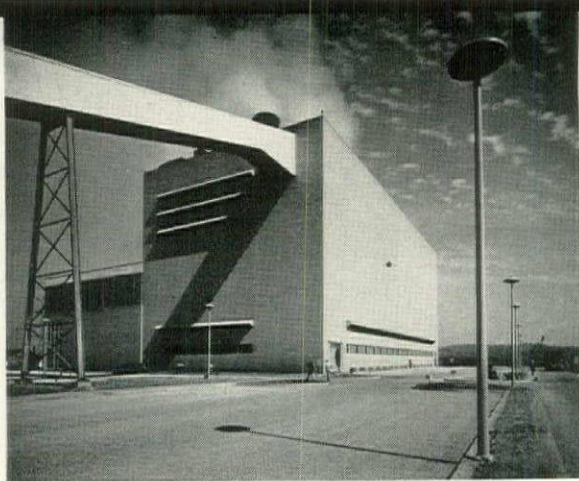
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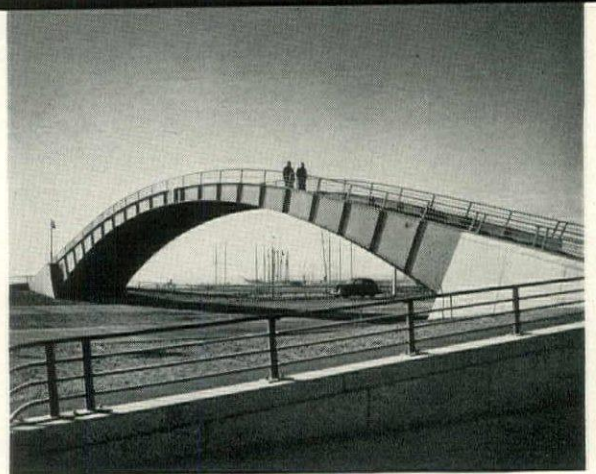
36

PUBLIC

35. Tennessee Valley Authority and Bureau of Reclamation: Dam and Powerhouse, Norris, Tenn., 1936. Arch. Forum, Aug. '36. 36. Triborough Bridge Authority: Bronx-Whitestone Bridge, New York, N. Y., 1939. Arch. Forum, Sept. '39. 37. Tennessee Valley Authority: Watts Bar Steam Plant, near Dayton, Tenn., 1942. 38. New York City Parks Department: Belt Parkway Footbridge, Brooklyn, N. Y., 1939. 39. Engineering Division, Chicago Park District: Pedestrian Passerelle, Lincoln Park, Chicago, Ill., 1940. To be published



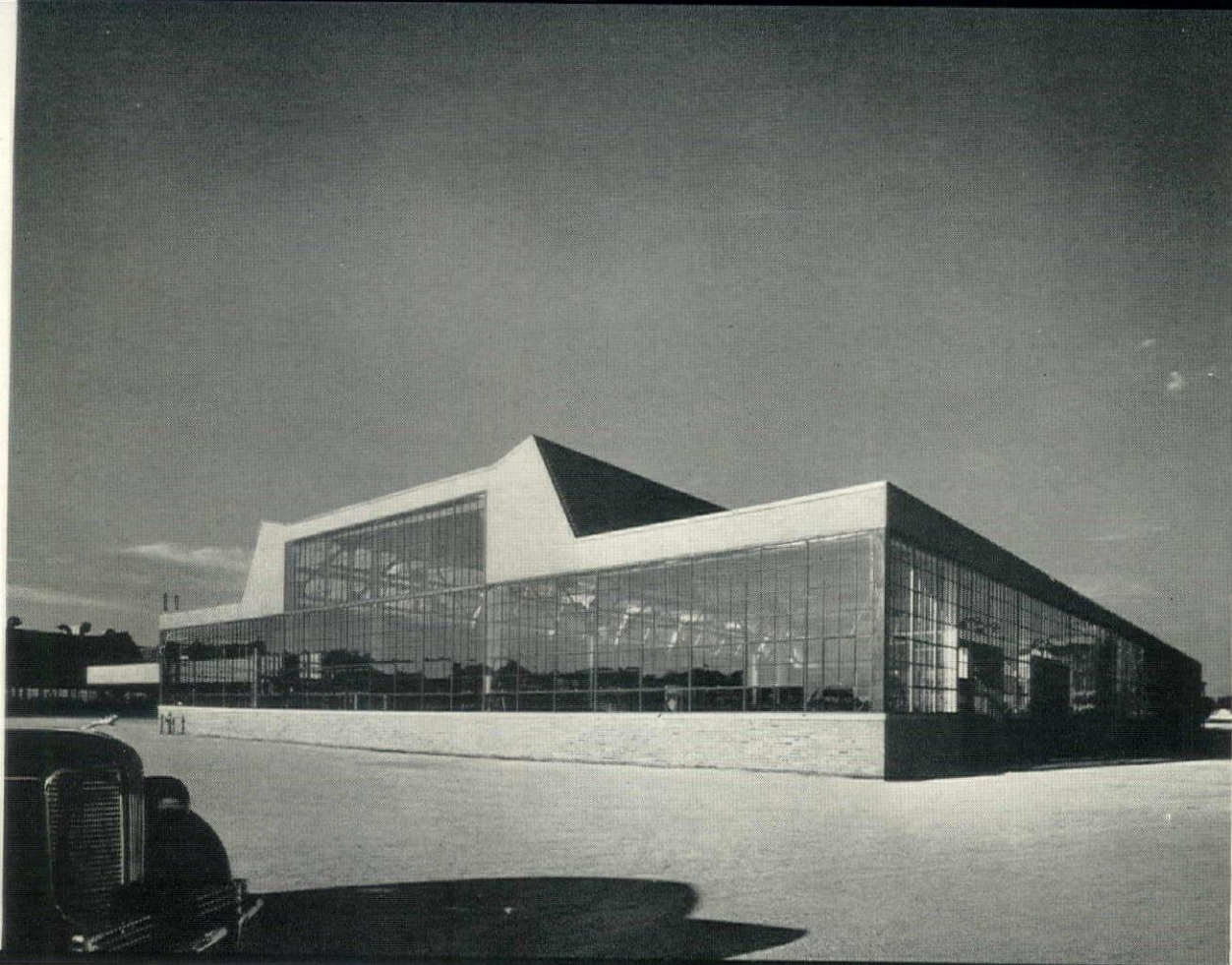
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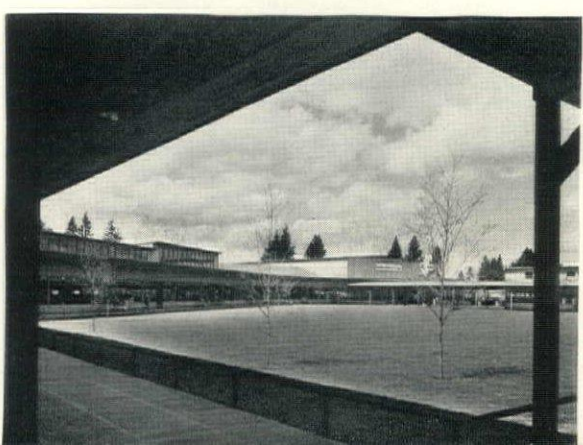
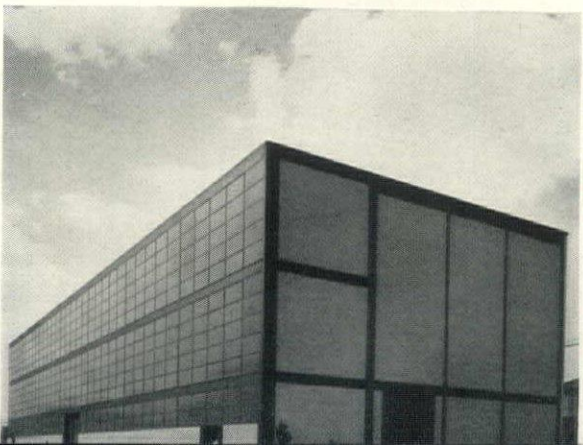


BUSINESS

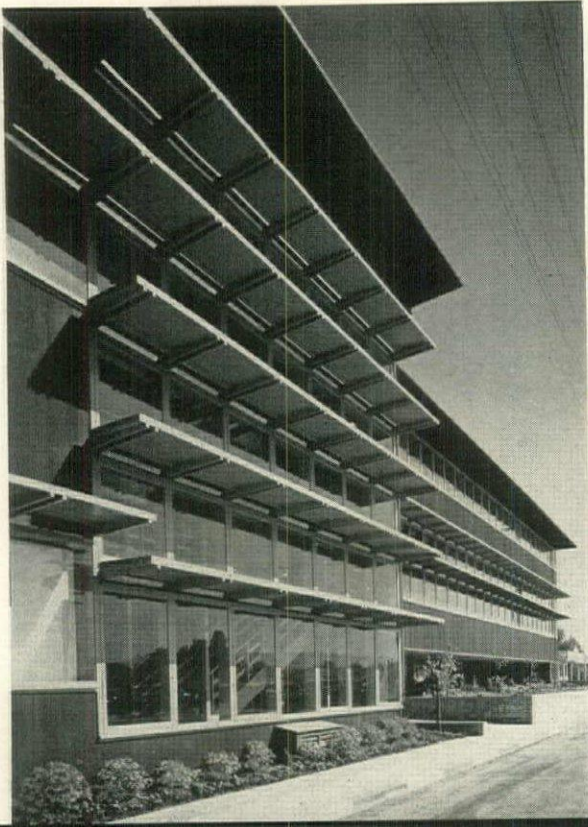
40. Albert Kahn Assoc. Architects and Engineers, Inc.: Dodge Truck Plant, Detroit, Mich., 1938. Arch. Forum, Aug. '38. 41. Raphael S. Soriano: Garden Center, Hallawell Seed Co., San Francisco, Calif., 1943. Arch. Forum, Aug. '43. H. Stokes Redden, architect; John G. Raben, designer: Sears Roebuck & Co., Los Angeles, Calif., 1939. Arch. Forum, Feb. '40. 43. Mies van der Rohe: Metallurgical Research Bldg., Chicago, Ill., 1943. Arch. Forum, Nov. '43. 44. J. Pietro Belluschi: Shopping Ctr., Vancouver, Wash., 1942.



42



44



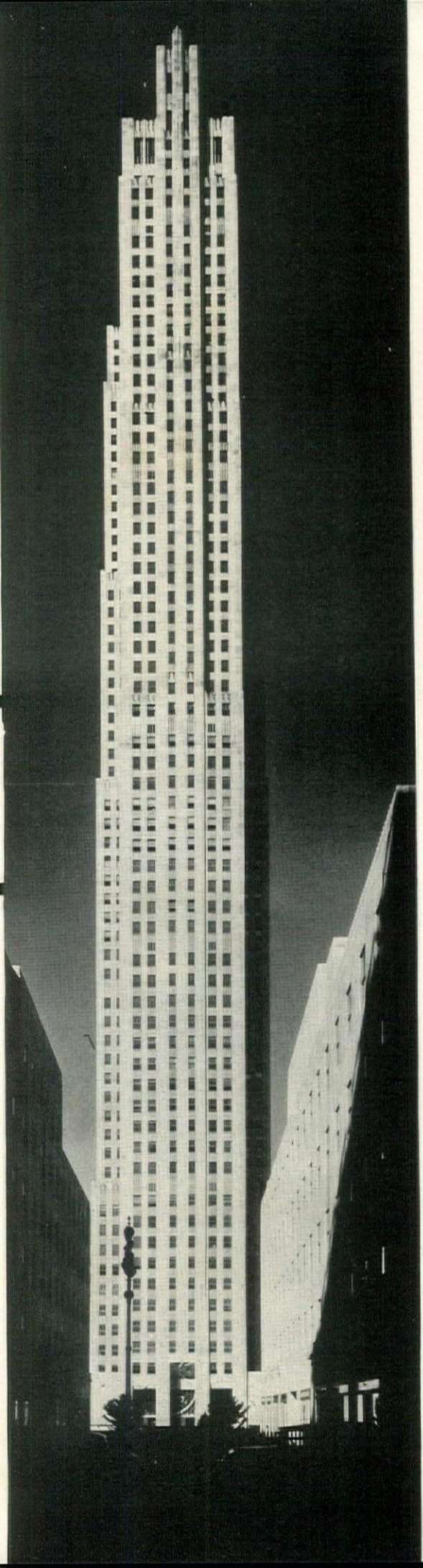
45

45. William Wilson Wurster: Schuckl Office Bldg., Sunnyvale, Calif., 1942. Arch. Forum, July '43. 46. Rockefeller Center Architects*: Rockefeller Center, N. Y., 1931-40. Arch. Forum, Oct. '33 et seq. 47. Howe & Lescaze: Savings Society Bldg., Philadelphia, Penn., 1932. Arch. Forum, Dec. '32.

*Reinhard & Hofmeister, Corbett, Harrison & MacMurray, Hood & Fouilhoux.

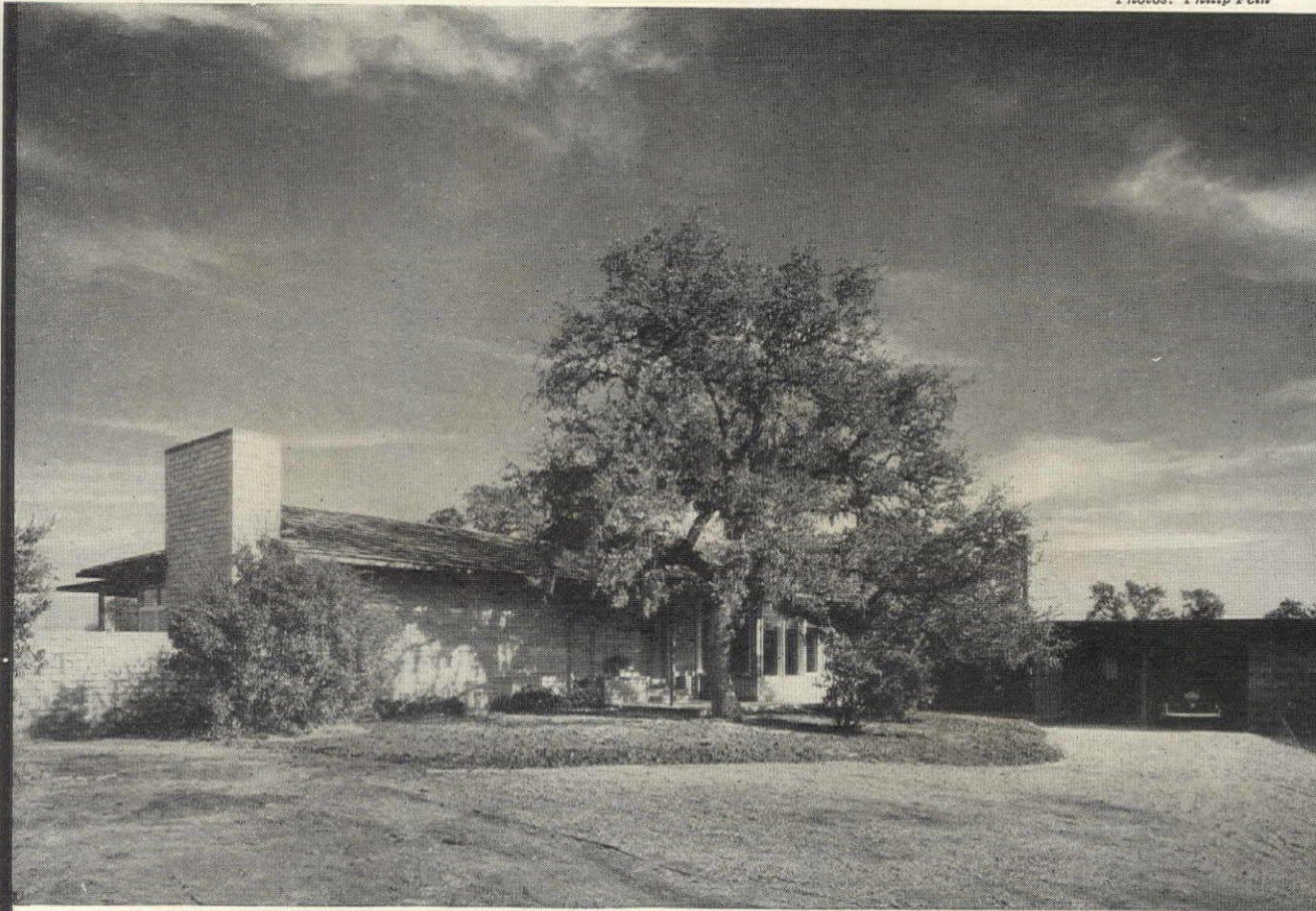


47



HOUSES

Photos: Philip Fein



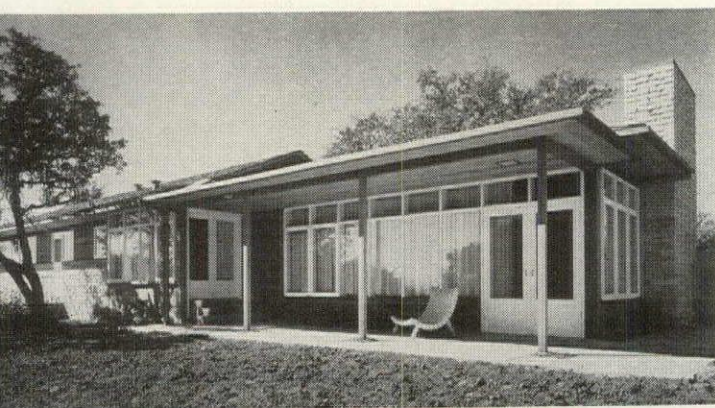
HOUSE IN PASO ROBLES, CALIF., MARIO CORBETT, ARCHITECT
THOMAS D. CHURCH,
LANDSCAPE ARCHITECT
RINO LANZONI,
INTERIOR DECORATOR



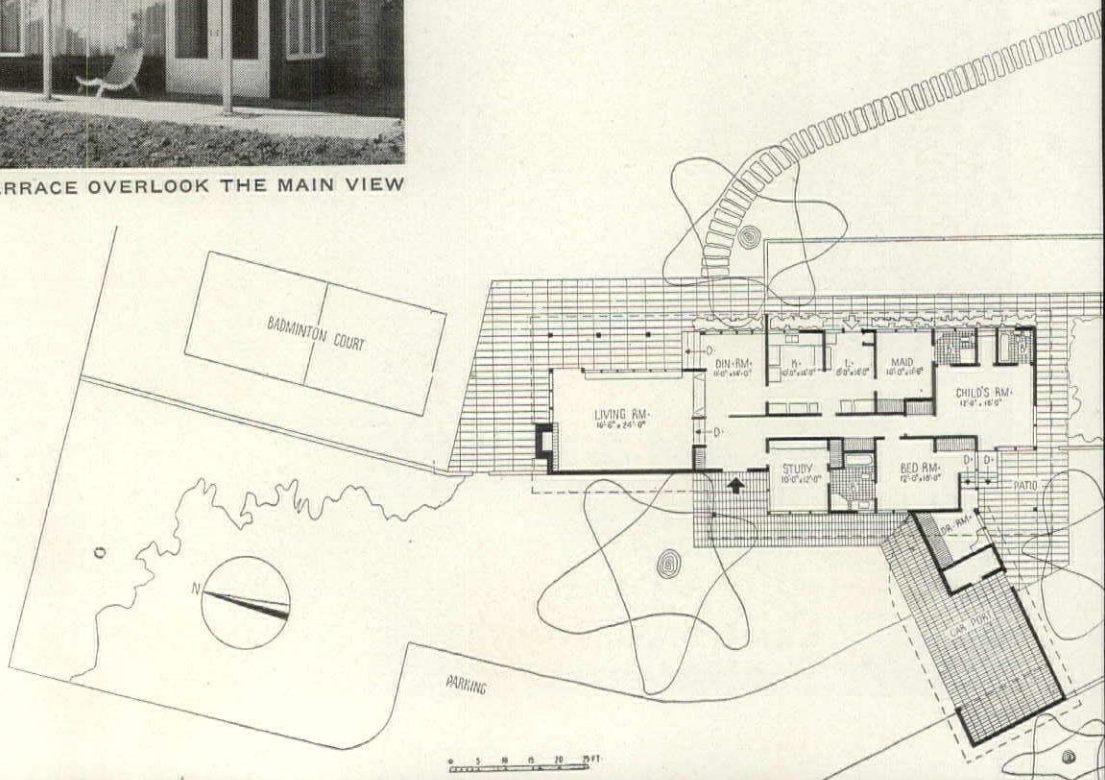
For this hilltop house in Paso Robles, Mario Corbett produced a contemporary design with trac



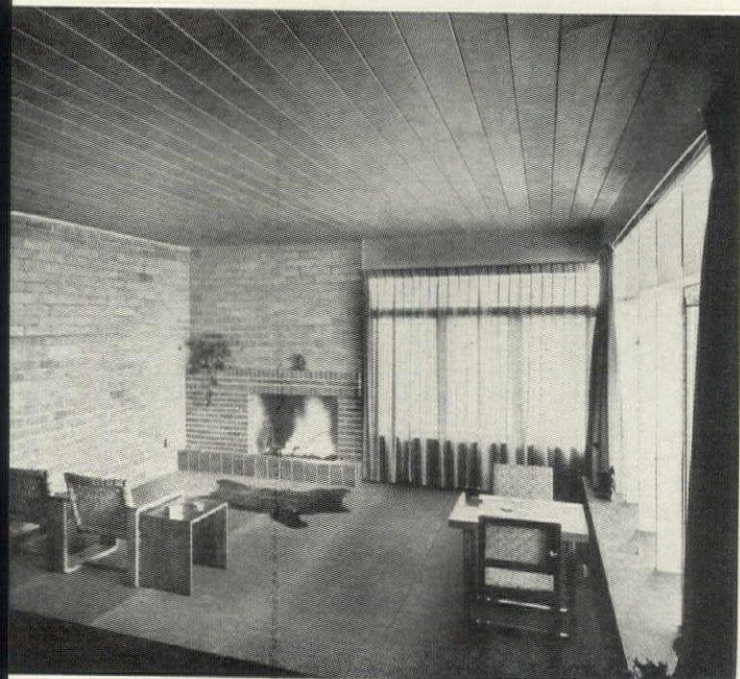
DROPPED LIVING ROOM, UNCLUTTERED FURNISHINGS AND LOW PARTITIONS GIVE FEELING OF SPACIOUSNESS



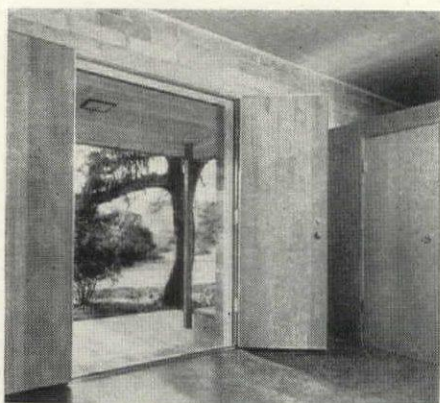
LIVING ROOM AND TERRACE OVERLOOK THE MAIN VIEW



character. A direct and handsome solution.



STRUCTURAL MATERIALS PROVIDE THE MAIN "DECORATION".



FRONT DOORS ALSO OPEN TO VIEW



CHILD'S ROOM HAS GOOD PLAY SPACE

"The site of this house," says Mr. Corbett, "is a hilltop, in the heart of the California mission country. It was the desire of the clients that the house should have something of the local traditional character, without sacrificing any of the advantages of contemporary design. Materials are native.

"A solid masonry wall faces the road, affords privacy, and serves as the strongest element in the design. The rest of the house—light redwood and glass—opens to a panoramic view of the little town and the hills below. The den on the west side, which is virtually a glass room, serves the lawyer-owner as an office for country clients who persist in after-hours calls. This room opens to yet another view of almond orchards and valleys."

Maintenance of the "local traditional character" to which Mr. Corbett refers is obviously a matter of atmosphere rather than detailing, which is as it should be. The rough simplicity of the materials, which include plank ceilings and exposed inside brick walls, and the easy informality of the plan are definitely in the tradition of the area. Interiors which seem rather bare in the photographs would appear quite warm and livable in actuality, due to colors and textures and changing views which cannot be rendered in black and white. The quiet, sparsely furnished rooms are also part of a "tradition" which goes back directly to the old missions in the neighborhood. Cost of the house, completed just before civilian building shut down, was around \$15,000 exclusive of the five-acre lot.

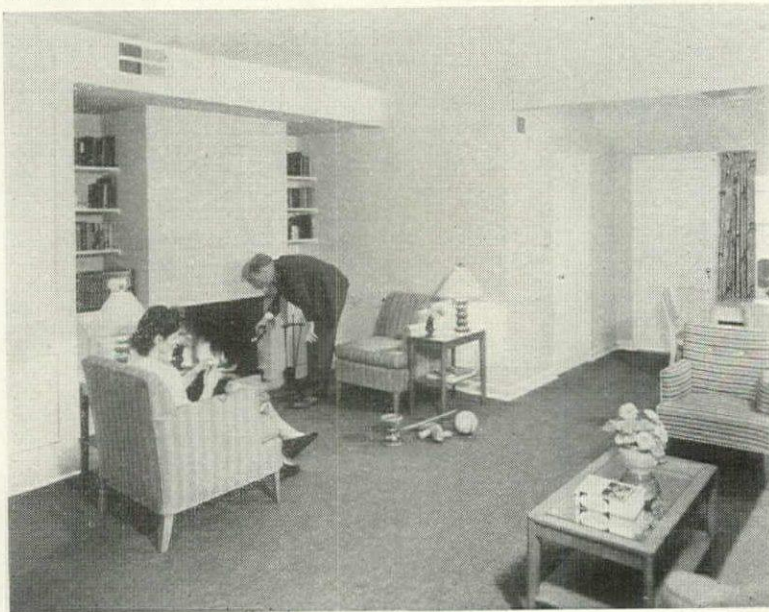
CONSTRUCTION OUTLINE: FOUNDATION: concrete. STRUCTURE: Exterior walls—hollow concrete block, Basalite, Basalt Rock Co., and redwood. Interior—plaster. INSULATION—Palco, The Pacific Lumber Co. FIREPLACE: Damper—Richardson Mfg. Co. SHEET METAL WORK: Gutters—redwood. Flashing, leaders and ducts—galvanized iron. WINDOWS: Sash—sugar pine. Glass—Pittsburgh Plate Glass Co. Weatherstripping—Chamberlin Metal Weather Strip Co. FLOOR COVERINGS: Living room—Chinese grass matting. Bedrooms—carpet. Kitchen and bathrooms—linoleum, Congoleum-Nairn, Inc. PAINTS—W. P. Fuller & Co. and Samuel Cabot, Inc. WOODWORK—Oregon pine, Taylor & Wheeler. HARDWARE—Russell & Irwin Mfg. Co. ELECTRICAL INSTALLATION—General Electric Co. Fixtures—Boyd Fixture Co. KITCHEN EQUIPMENT: Range and refrigerator—General Electric Co. Sink—Kohler Co. LAUNDRY EQUIPMENT: Washing machine and drier—Bendix Home Appliance Co. BATHROOM EQUIPMENT—Kohler Co. HEATING—Forced gas warm air system, summer switch, Biltwell, Fraser-Johnston Co. Grilles—Hart & Cooley. Regulator—General Controls Co. Water heater—General Electric Co. GENERAL CONTRACTORS—Taylor & Wheeler, Fresno, Calif.

HOUSE IN WILMETTE, ILL. In this small house Architect L. Morgan Yost has made



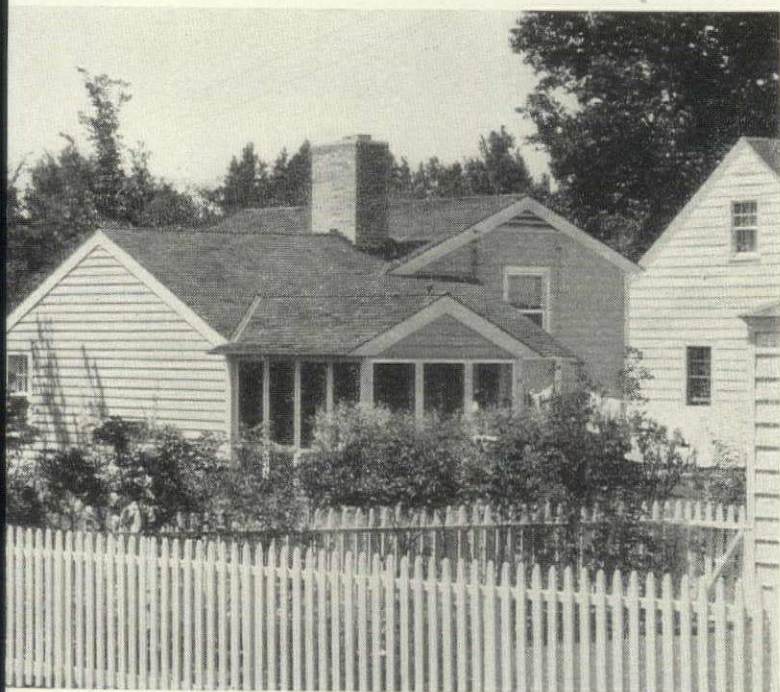
FRESH HANDLING OF TRADITIONAL DESIGN ELEMENTS. WINDOW GROUPING ELIMINATES THE NEED FOR SHUTTERS

INTERIORS DO LITTLE TO SATISFY THE INTEREST DEVELOPED BY THE PLAN AND THE EXTERIOR DESIGN



Photos: Frank Willming

resting attempt to give life and logic to an old design formula.

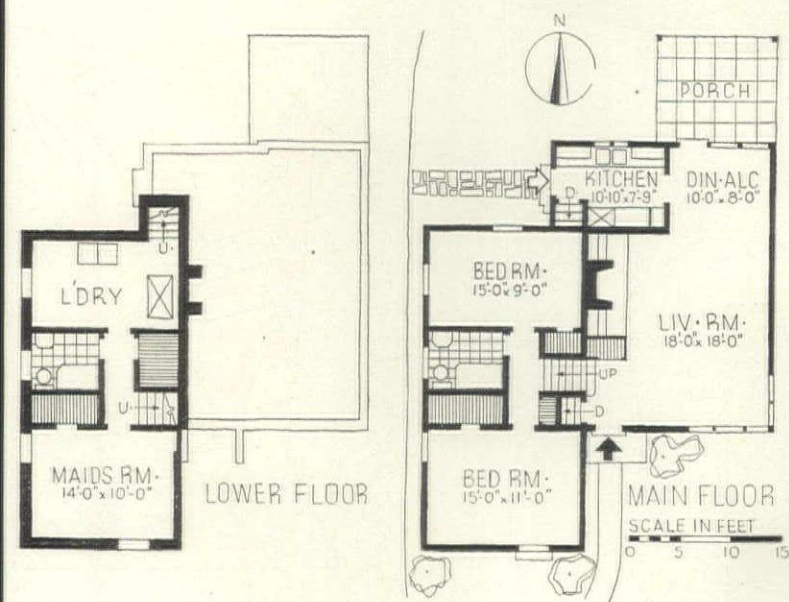


HOUSE FROM THE REAR LOOKS VERY MUCH LIKE ITS NEIGHBORS

In many respects this house and its situation might be labeled "typical." It occupies a plot 50 x 125 ft., a common size for houses in the \$6,000 to 7,000 price range. It is a wood frame box, and is surrounded by other houses of the same type. This set-up could be duplicated in almost any town or suburb in the country.

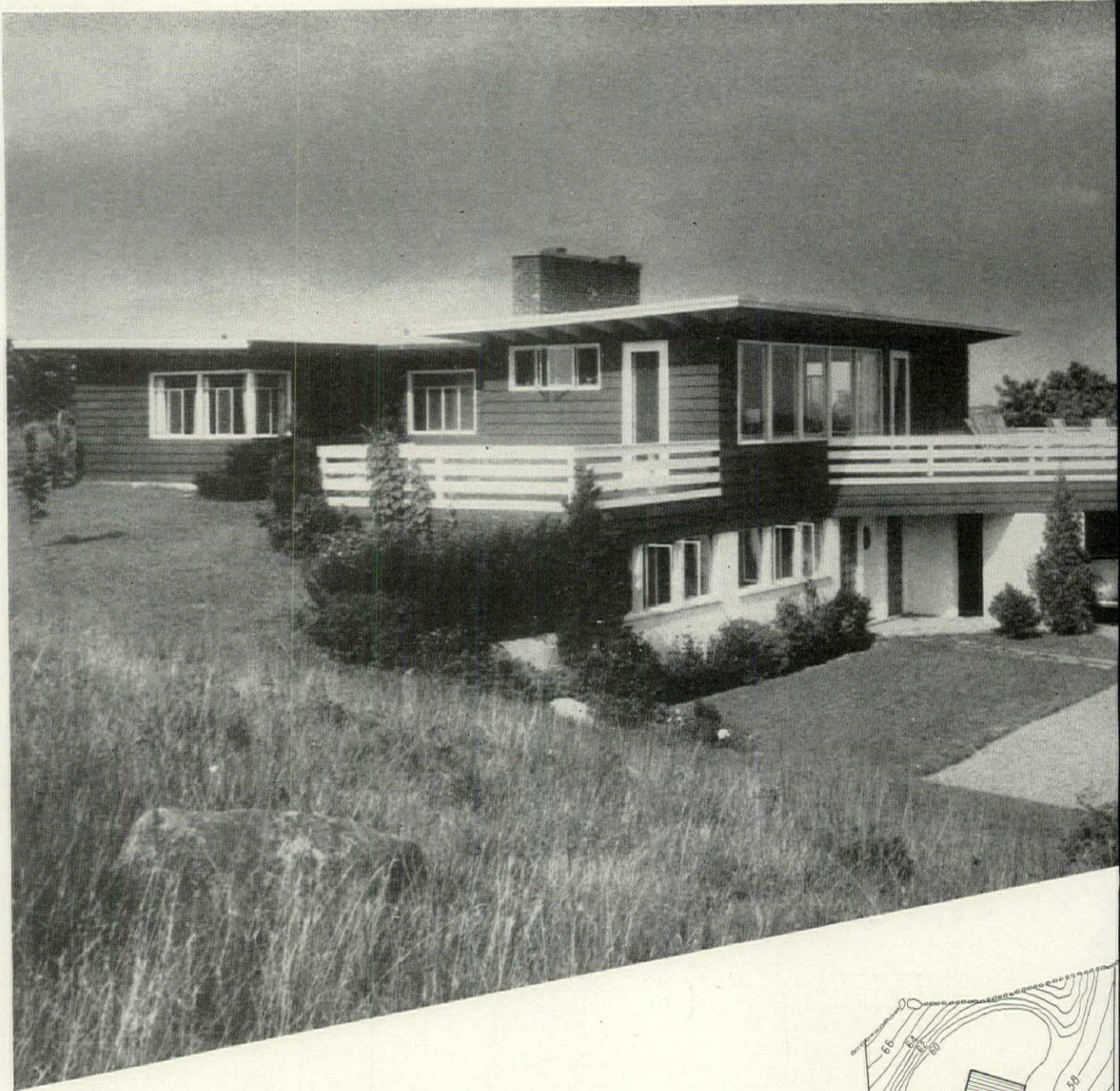
The interest in this example stems from the manner in which it has departed from the small-house norm. It uses stock Colonial elements, but they are not arranged in a conventional manner. The windows in the bedroom wing, for example, are organized into a single design unit through use of an oversize flower box. Those in the living room are also handled as a group. The general treatment of the front is modern, even though the separate parts are not. Thus we have here a good example of variation on a traditional theme to get a more contemporary appearance. The plan, with its placing of bedrooms on half levels off the living room, further emphasizes this feeling.

The mortgage was placed with the First Federal Savings and Loan Association of Wilmette.

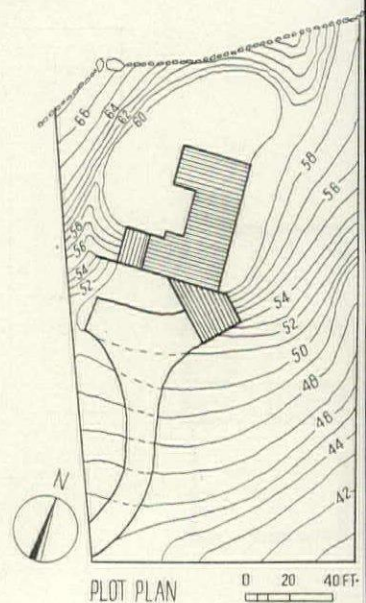
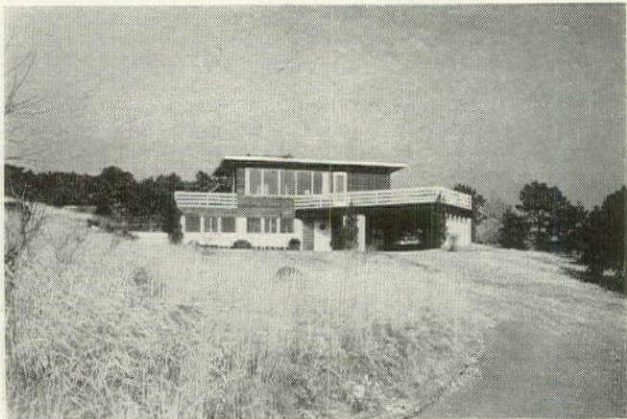


CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls—white pine clapboard, Bildrite sheathing, Insulite Co., studs and lath. Floors—concrete slab and oak. ROOF—cedar shingles. INSULATION—Johns-Manville and Insulite Co. SHEET METAL WORK—Armco iron, American Rolling Mill Co. WINDOWS: Glass—Lustra glass, American Window Glass Co. FLOOR COVERINGS: Living room—carpet, Philadelphia Carpet Co. Kitchen and bathrooms—linoleum, Armstrong Cork Co. PAINTS—U. S. Gypsum Co. and National Lead Co. HARDWARE—P. & F. Corbin. ELECTRIC SWITCHES—Bryant Electric Co. KITCHEN EQUIPMENT: Range—Universal, Landers, Frary & Clarke. Sink—Kohler Co. BATHROOM EQUIPMENT—Kohler Co. Cabinets—Hess Warming & Ventilating Co. HEATING: Warm air system, filtering and humidifying, Rudico, Rudy Furnace Co. Grilles—Hart & Cooley. Regulator—Minneapolis-Honeywell Regulator Co. Water heater—Par-X, The Everhot Heater Co.

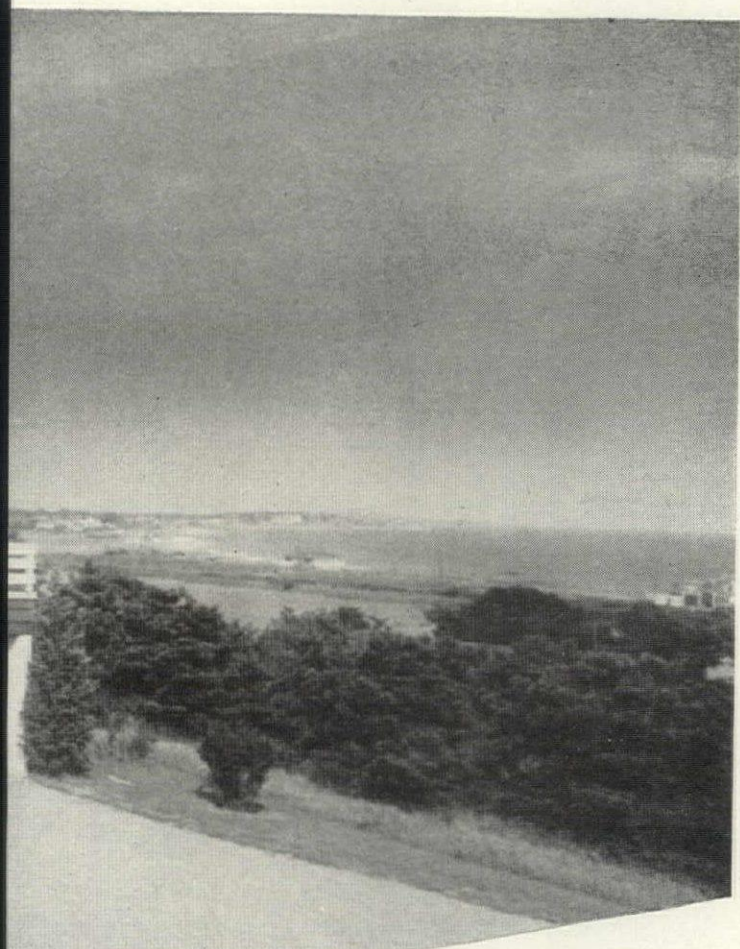
HOUSE IN FALMOUTH, MASS. Architect Peterson builds himself a house to pr



Paul Davis



t roofs can be done even on Cape Cod, b) radiant heating works.

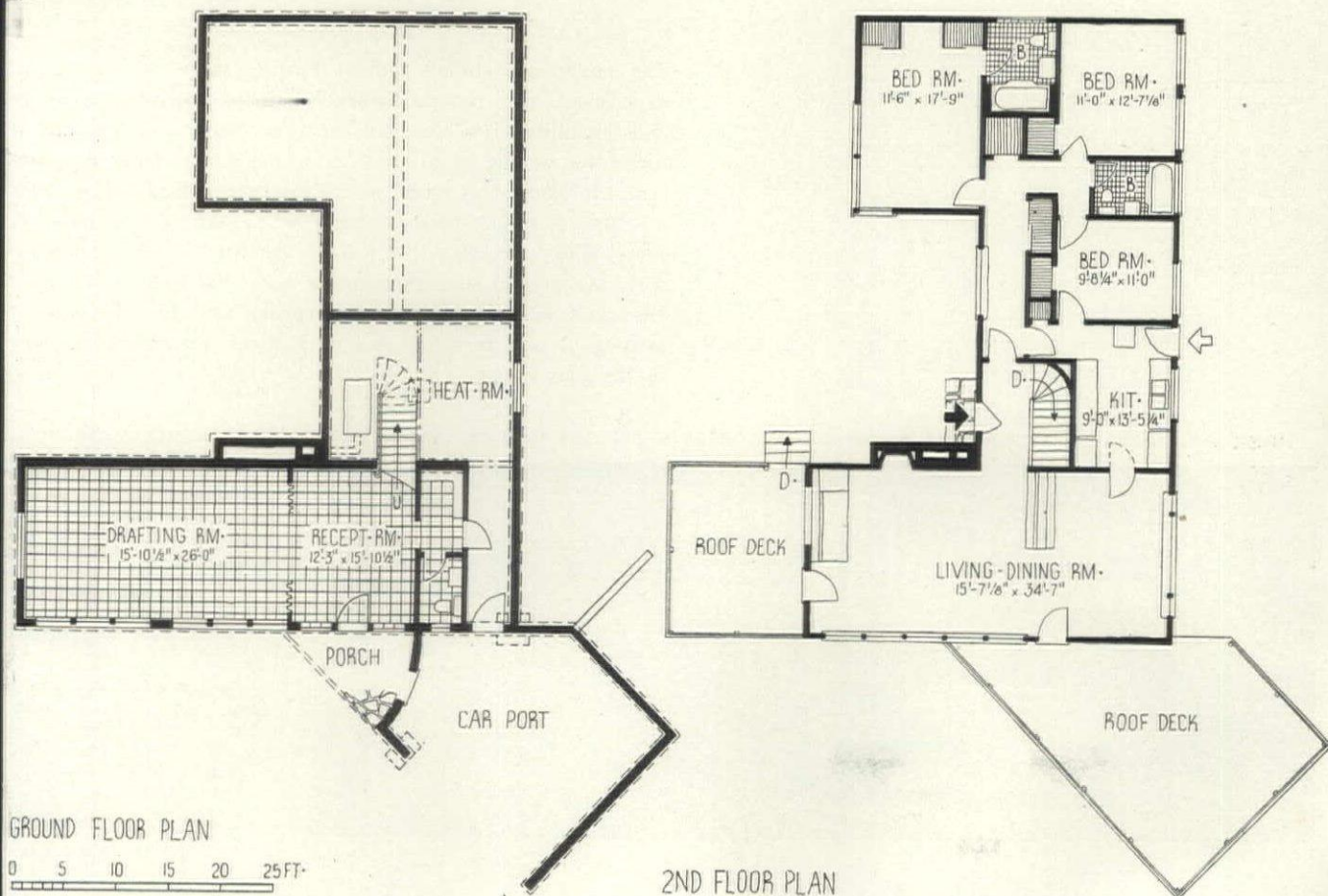


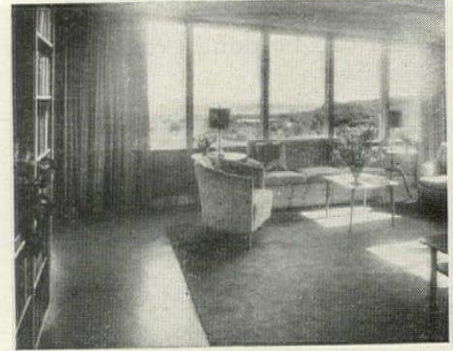
Ernest Peterson occupies a rather peculiar position on Cape Cod: he designs modern houses successfully in what is probably the country's strongest center of architectural conservatism. Almost five years ago he did a small subdivision in Falmouth which shocked the natives but gave the owner considerable financial satisfaction. In later houses the contemporary approach persisted, but with a growing tendency to adopt the more warm and informal character of the best work in California.

Perhaps the best example of this trend is the house illustrated. Since he was client as well as architect, it presumably expresses his current preferences. While the flat roof is still frowned upon by Cape Codders, the general appearance should not be for it reflects the influence of a strong tradition in its rambling plan and its intimate scale.

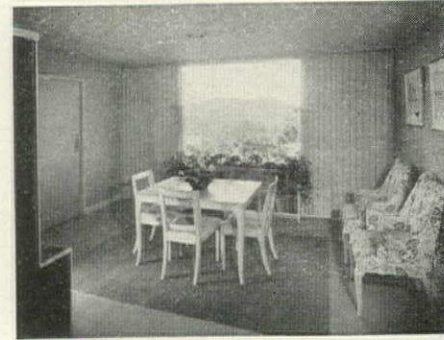
The house was built on a little knoll overlooking Vineyard Sound and it makes excellent use of the drop in grade. Carport, entrance and drafting room are on the lower level, giving the living and sleeping rooms all the privacy they require. The main floor plan is exceedingly well organized, with the stair hall so located that it gives direct access to the bedroom wing, kitchen and living room without interfering with activities in any of them.

The mortgagee was the Security Federal Savings and Loan Association, Brockton, Mass.



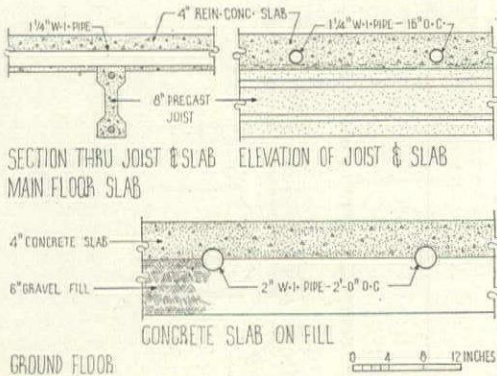


LIVING ROOM HAS SOUTH EXPOSURE



VIEW OF DINING AREA LOOKING EAST

DINING STORAGE CABINET SERVES AS Baffle BETWEEN TWO AREAS



The architect installed radiant heating more or less as an experiment, and reports favorably on its operating economy and flexibility. His comments are interesting: "I find that a thermostat setting of 60° to 62° is satisfactory in the bedroom zone. In the living room, where we have a large glass area, a setting of 68° is normally required. . . At no time have we found floors uncomfortably warm, even with a -15° temperature. As to fuel consumption, we have 300 gallons left over from last winter's ration, which speaks well for this type of heating. I plan to use it in four postwar jobs which are now in the plan stage."

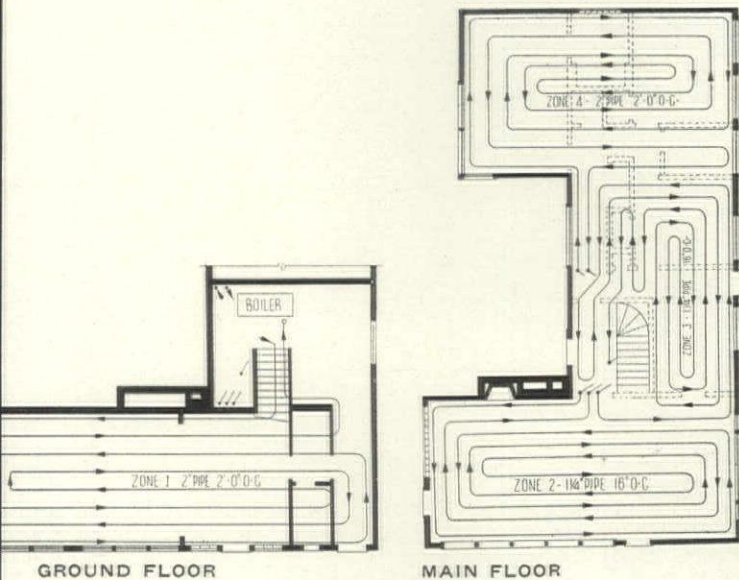
THREE PROGRESS PHOTOGRAPHS SHOWING SUCCESSIVE STAGES IN THE INSTALLATION OF THE HEATING COILS





THE ARCHITECT'S OFFICE, ADJOINING THE MAIN GROUND FLOOR ENTRANCE. NOTE THE FLEXIBLE PARTITION

CONSTRUCTION OUTLINE: FOUNDATION: Concrete. Waterproofing—R.I.W., Toch Bros. STRUCTURE: Exterior walls—red cedar siding, Vaporseal, Celotex Corp., fir studs; inside—Celotex Corp. lath and plaster. ROOF—5-ply tar and gravel, The Barrett Co. Deck—5-ply smooth surface and Celotex Corp. Traffic Top. INSULATION: Outside walls and roof—Celotex Corp. FIREPLACE: Damper—Donley Bros. SHEET METAL WORK—16 oz. copper. WINDOWS: Sash and screens—Fenestra, Detroit Steel Products Co. Weatherstripping—Chamberlin Metal Weather Strip Co. Glass—plate and double strength, quality B, Libbey-Owens-Ford Glass Co. FLOOR COVERINGS—asphalt tile, Tile-Tex Co. WALL COVERINGS: Living room—Fabrikoid, E. I. du Pont de Nemours & Co. Bedrooms and halls—wallpaper, Katzenbach & Warren, Inc. PAINTS—Benjamin Moore Paint Co. WOODWORK: Trim—pine. Cabinets—steel, General Electric Co. Doors—Rezo, Roddis Lumber & Veneer Co. HARDWARE—Schlage Lock Co. ELECTRIC INSTALLATION: Wiring system—BX and conduit, General Electric Co. Switches—Hart & Hegeman Electric Co. Fixtures—Service Electric Co. Radiator—Standard Sanitary Corp. KITCHEN EQUIPMENT: Range, refrigerator and cabinets—General Electric Co. Sink—American Radiator-Standard Sanitary Corp. Ventilating fan—Signal Electric Co. BATHROOM EQUIPMENT: American Radiator-Standard Corp. HEATING—Radiant heating system, A. M. Byers Co. Boiler and stoker—American Radiator-Standard Corp. Boosters & Valves—Bell & Gossett. Radiators and regulator—American Radiator-Standard Sanitary Corp.



GROUND FLOOR

MAIN FLOOR

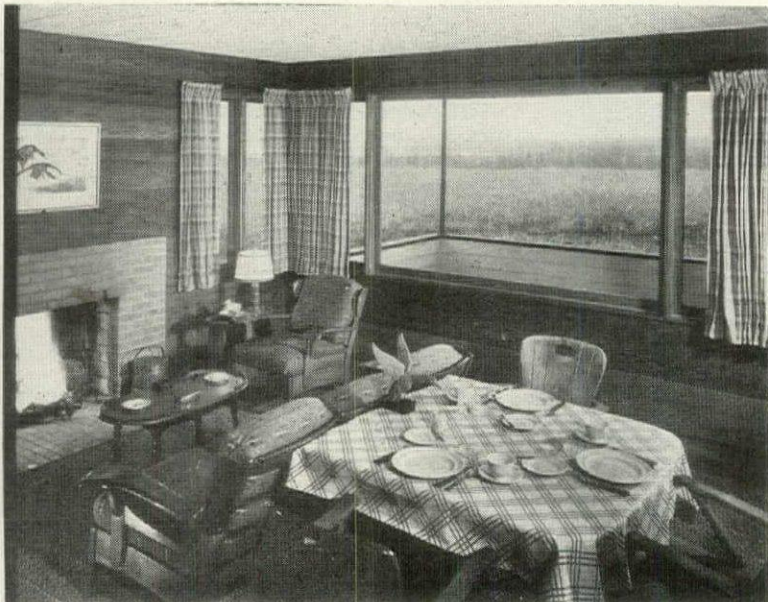
HUNTING LODGE IN HENRY, ILL. A superlative hunting lodge, with many ex

Photos: Hedri

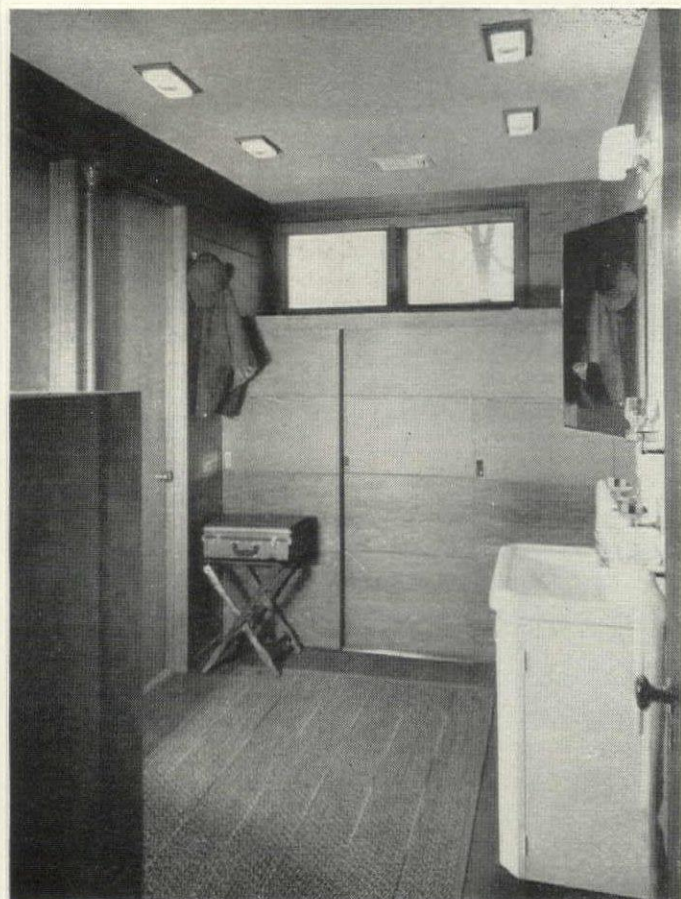


MODERN DESIGN SHOWS ITS APPROPRIATENESS IN A RUSTIC SETTING USUALLY RESERVED FOR THE LOG CABIN

LIVING ROOM EMPHASIZES SOLID COMFORT WITHOUT FRILLS

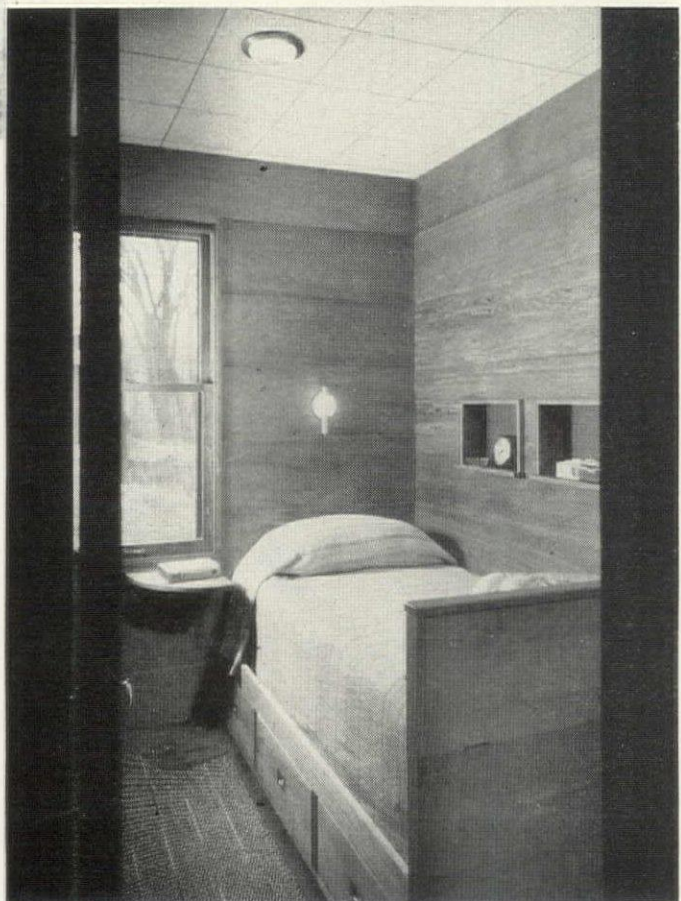


for the small house. James F. Eppenstein, architect.



LOW CLOSET WITH WINDOW ABOVE IS A FIRST-RATE IDEA

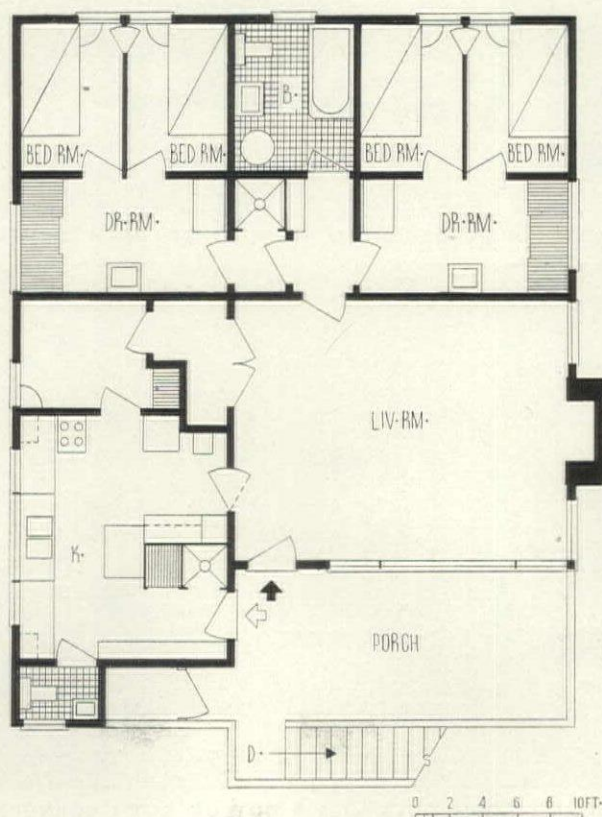
TINY BEDROOM UNITS CONTAIN ALL NEEDED AMENITIES



While this lodge was designed as a luxury-type vacation house, it has a number of features well worth consideration in the average small house. Most impressive in its convenience and compactness is the bedroom-bath-dressing arrangement, where four minimum bedrooms are linked with dressing and bathing facilities so planned that there would rarely be any congestion. Each dressing room has its lavatory, and the shower is independent of the main bath. The bedrooms are placed in pairs so they can be connected from inside, if desired. The provision of book alcoves, reading lights and night tables in the sleeping rooms gives them an air of comfort which is all out of proportion to their size.

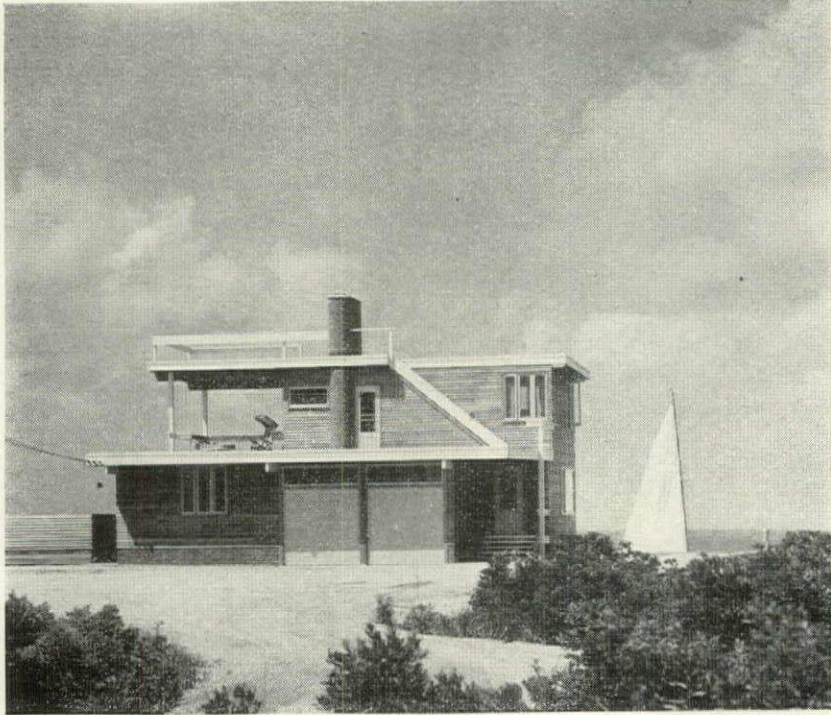
Considered for itself, the lodge is a distinguished solution inside and out. The problem of handling a one-story house raised several feet off the swampy ground has been solved with directness and skill. Equally direct and assured is the general treatment of a structure whose main virtue is simplicity without the fake rusticity that usually accompanies such buildings.

CONSTRUCTION OUTLINE: FOUNDATION—Concrete piers. STRUCTURE: Exterior walls—siding, Celotex Corp. sheathing, studs; inside—redwood finish; floor—wood joists; ceiling—V-grooved tile, Celotex Corp. roof—5-ply tar and gravel. INSULATION: Outside walls—sheathing, Celotex Corp.; ground floor—1½ in. mica pellets; attic floor—rock wool. Weather stripping—spring bronze. WINDOWS: Fixed, double hung and casement, hinged on inside; Glass—double strength "A" grade plate; screens—bronze. PAINTS: Walls, floors and sash—Minwax Corp; Ceilings and exterior—National Lead Company. ELECTRICAL INSTALLATION: Wiring system and switches—General Electric Company; Fixtures—built-in lenses, Luminator, Inc. HEATING AND AIR CONDITIONING—Warm air with filtering and humidifying, Henry Furnace & Foundry Co. GENERAL CONTRACTOR—Gorey & Hemb, Evanston, Ill.



BEACH HOUSE of standard seaside construction. Designed by Kenneth Day, Architect.

Photos: C. V. D. Hubbard



THE HOUSE SEEMS HIGH AND CHUNKY FOR ITS SEASIDE LOCATION



NOTE OPEN DESIGN OF THE FIRST DECK LEVEL



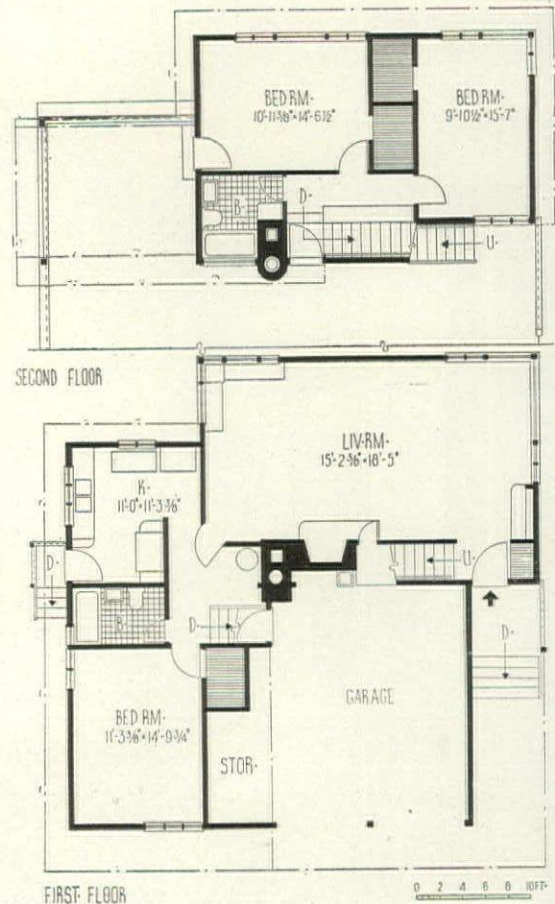
LIVING ROOM GETS VIEWS OUT OF BOTH CORNERS

"The site," writes Mr. Day, "determined most things in this house. Locations on the New Jersey coast are very powerful locations. The sun glares on the water, the mosquitoes are hell, the land and the water are flat, salt is everywhere, and the air is salty wet. The vegetation is peculiarly lovely in an odd way.

"The scheme evolved strictly from a consideration of what was wanted up-stairs and what down. A one-story house would clearly be better looking in this landscape, but the mosquitoes, alas, forbid. You must apparently sleep on the second floor unless you are a couple of maids, and you must have a deck at the third floor level. The third floor deck shouts for an outside stair from the second floor up, so there we are.

"Construction is absolutely standard Jersey shore, which is not without interest for the foreigner. Piles under walls; a bulkhead on three sides, about 20 ft. from the walls; ground floor about three feet above bulkhead level; masonry up to ground floor; frame house above."

The job was completed by George Wharton Pepper, Jr., architect, after Mr. Day joined the Navy. The general contractor was Floyd Cranmer, Beach Haven, N. J.



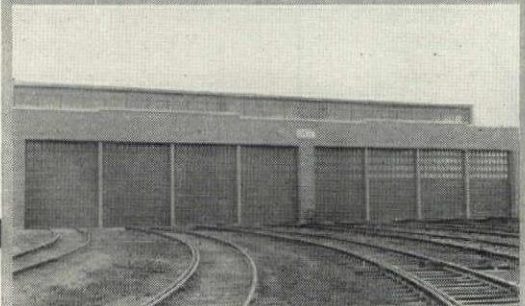
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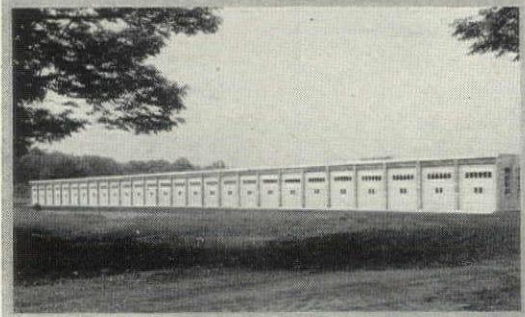
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Ro-Way Doors can be made for railroad shops, munition factories and for all other types of industrial plants.



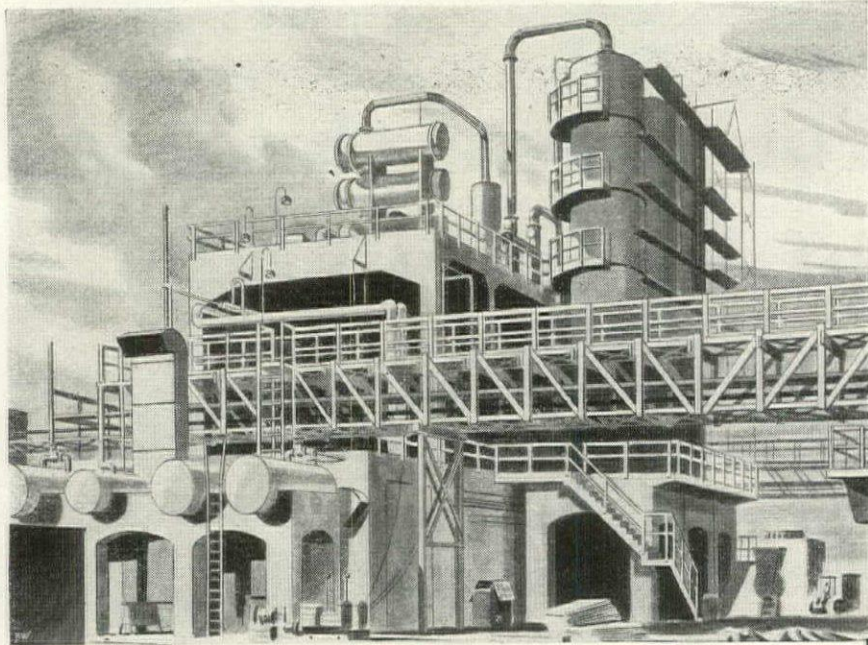
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WIDELY USED in the war effort for structures where fire hazards exist—warehouses, blimp hangars, loading platforms—this flame-proof lumber promises to be equally valuable in postwar construction. So, too, does Wolmanized Lumber*: ordinary wood made highly resistant to decay and termite attack by impregnation with Wolman Salts* preservative. A long history of successful performance proves the reliability of the vacuum-pressure process employed in treating with either compound.

CONSIDER Minalith-treated lumber as a means of combating fire: Wolmanized Lumber for protection against decay and termite attack. All of the usual advantages of building with wood are retained. The wood is clean, odorless and paintable. These two types of treated lumber will be available, just as soon as the war permits, through regular trade channels. American Lumber & Treating Company, 1647 McCormick Bldg., Chicago 4, Illinois.

*Registered trade marks

WOOD THAT'S



FOR SAFETY AND ENDURANCE

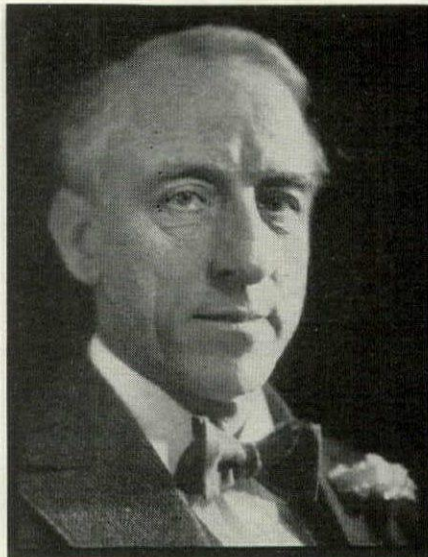
AMERICAN LUMBER & TREATING COMPANY

MONTH IN BUILDING

(Continued from page 60)

much you paid for urban real estate it would always happily turn out to be worth more.

Joseph Day's life is the kind of story Americans love. His father, a soda water manufacturer, died when he was five. Equipped with only a public school education, Day got his first job at a salary of about \$5 a month. At

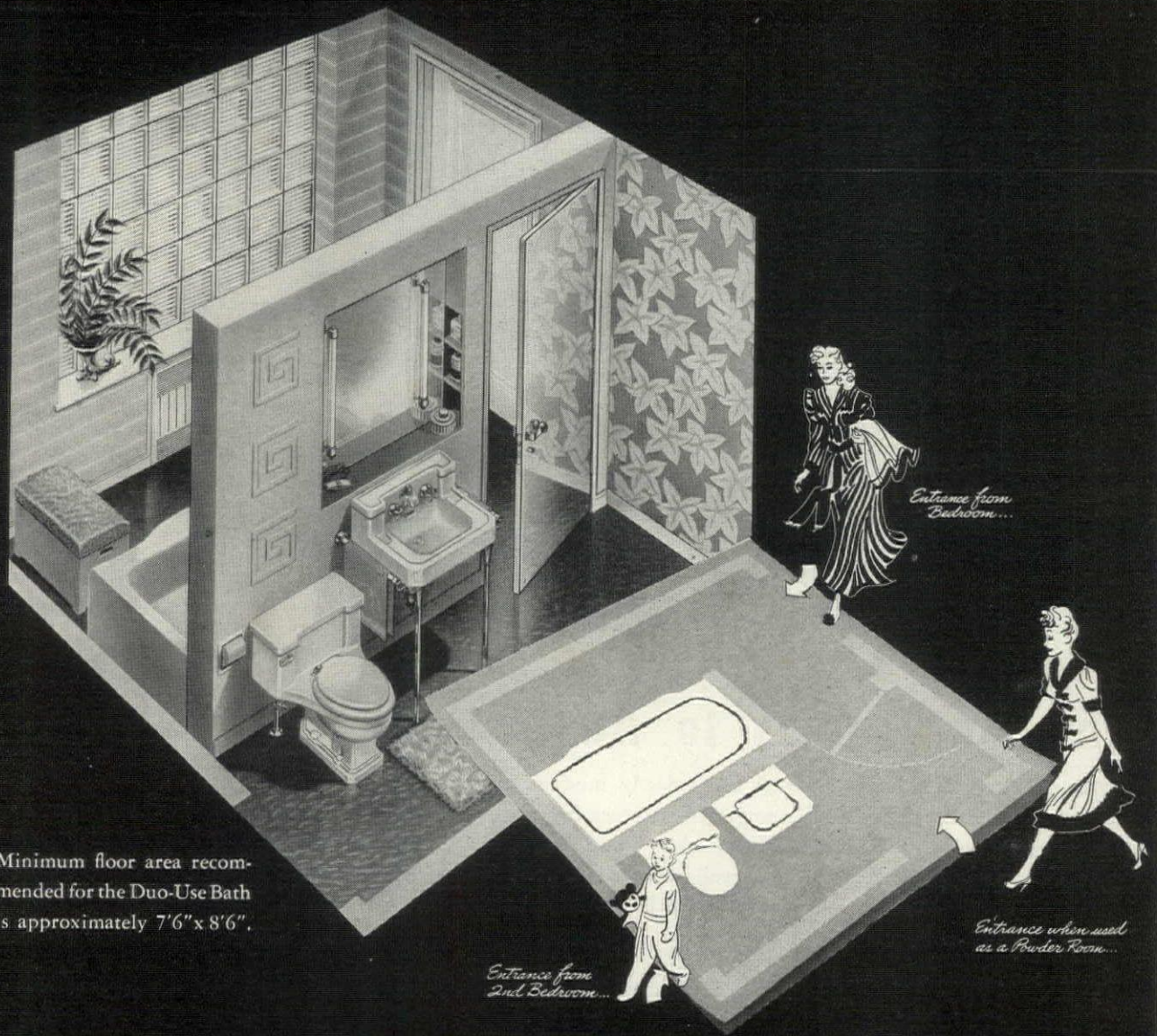


DAY brought the sun to New Yorkers

the age of 21 he went into business selling real estate and life insurance, almost immediately began establishing and breaking sales records. Apogee of his career as an auctioneer without parallel was the sale in a single day of \$26,000,000 worth of real estate. Probably more responsible than any other one man for the exodus of New Yorkers to suburban Westchester, Day himself was seldom lured by the charms of suburbia and maintained his home in Manhattan's Gramercy Park neighborhood until his death.

Although his most spectacular real estate developments — Manhattan, Brighton and Oriental beaches — grossed a million and a quarter dollars even in a depression year, Day was a good deal less fascinated by their impressive effect on his ledger sheets than by their function as a playground for crowded New Yorkers. Most summer Sundays he was out on the beach himself, happily exchanging quips with his customers, and justifiably enjoying the success with which he had brought the sun and sea within reach of the thousands trapped by the city's canyons. Day's last big deal was transfer of Manhattan beach to the federal government for use as a Coast Guard recruiting station at a price reported at \$5,500,000. He had developed the 118-acre

(Continued on page 112)



Minimum floor area recommended for the Duo-Use Bath is approximately 7'6" x 8'6".

"Standard" DUO USE Bath...

THE BATHROOM of the *future* can be made more attractive —more useful and more practical. The Duo-Use Bath points the way. It can be a bath and powder room in one. Two persons can use it at the same time, without sacrificing privacy.

The plan is simple. Divide the bathroom into two compartments each a complete unit, with the bathtub and shower in one, the lavatory and water closet in the other. The door between the two compartments provides privacy.

Both compartments can be in use at the same time. When

"Standard" Plumbing Fixtures and AMERICAN Heating Equipment currently available only under government regulations.

desired as a powder room the doors to one bedroom and the bath section can be closed.

If space permits, the walls heretofore used for fixtures can be used for cabinets reaching from the floor to any practical height, housing the toilet and dress accessories convenient to have at hand. More versatile decorative schemes are also possible.

The "Standard" Duo-Use Bath is ideal for the one bathroom home as well as for multiple bath installations.



AMERICAN RADIATOR & Sanitary
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MIAMI WOOD CABINETS



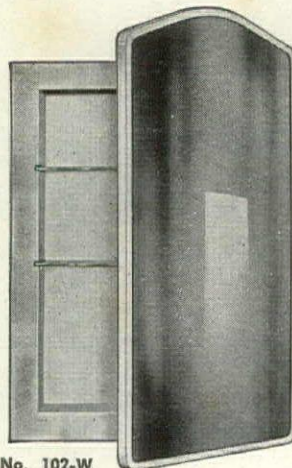
Show Bathrooms to Advantage

Miami Wood Bathroom Cabinets are smartly modern in every detail — of trim, streamlined beauty, with mirrors framed in steel (by permission of WPB). These attractive Wood Cabinets, now available in quantity, are doing a real wartime job . . . "filling the gap" left by discontinued production of Miami Metal Cabinets for the duration.

Prompt shipments. New illustrated folder, giving complete information, sent on request. Write Dept. AF.

3 Attractive CABINET MODELS

The MIAMI Line consists of three smartly designed, completely equipped wood cabinet models; also wood-framed wall mirrors in six sizes . . . Cabinet bodies are made of kiln-dried hardwood, with joints double-locked, glued, and tenoned; door back of moisture-proof composition board; mirrors framed in STEEL, finished to match cabinets.



No. 102-W

BUY MORE WAR BONDS . . . END IT FASTER!

MIAMI CABINET DIVISION

The Philip Carey Mfg. Company — Dependable Products Since 1873

MIDDLETOWN, OHIO

MONTH IN BUILDING

(Continued from page 110)

property at a cost of about \$8,000,000. Day was never bound by the real estate rule-book and his last departure from conventional procedure was the launching of rental developments for Negro war workers. While this was his first attempt to find in real estate procedure a partial easement of the complex social problem of U. S. race tension, Day always had a tendency to feel that in real estate deals of one kind or another might be found solutions to many of the world's major problems. Believing that World War I was caused by Germany's need of land, Day was convinced that the whole present cycle of world catastrophe might have been averted had Germany followed his suggestion: to offer France an irresistible price for a large parcel of her northern land. At the time, he unsuccessfully tried to buy full-page newspaper ads to bring his proposition to Germany's attention.

That Joseph Day's death marked the death of a real estate epoch was a fact not lost on the discerning among his colleagues. "Subdivision" had been replaced by "urban redevelopment" as the word of the hour; the old lure of the roofless but temporary values realized when land and property can be traded like any other commodity had everywhere given way to a more sober prospect. Big investors were learning to build real property for continued ownership, in a way that would ensure a limited but safe return. To mortgagees, big and little, sound use of both urban and suburban land was beginning to seem an investment consideration almost as imperative as a six per cent return.

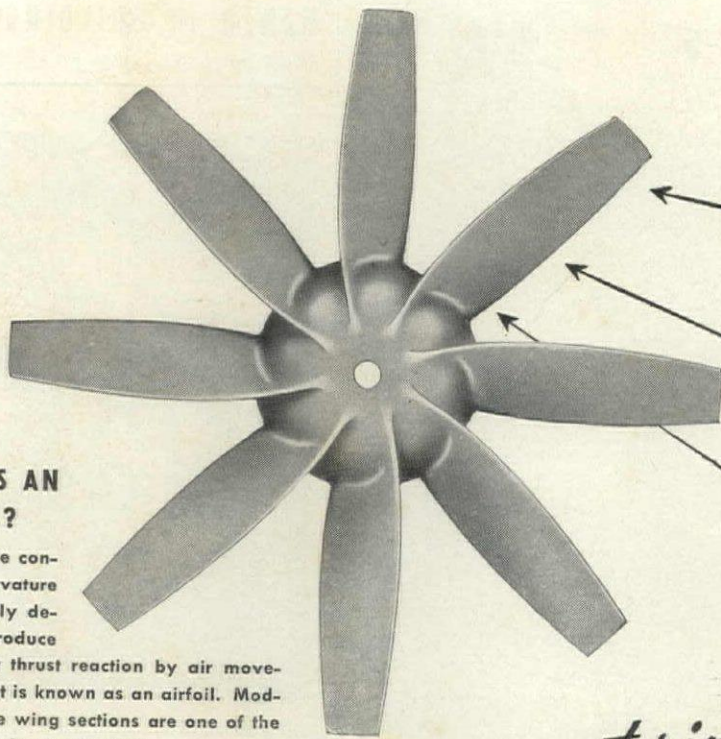
TREND

Many a large investor, pondering his fat portfolio of foreclosed mortgages, has wondered what to do with the large city mansions on which no family wants to pay taxes. Last month CIO unions emerged as a taker of impressive proportions, began moving into the one-time homes of the very rich.

To the United Auto Workers at a price of \$50,000 went the late Edsel Ford's Detroit house. UAW's Medical Research Institute will remodel the property, but had no plans for using the swimming pool and boathouse on the estate.

Like another small signal of the century of the common man, the double bronze doors of a New York mansion just off 5th Ave. swung open to United Electrical, Radio & Machine Workers.

(Continued on page 114)



1

The tip is a high-speed airfoil section.

2

A higher-lift, lower-speed cross section is used midway between the hub and tip.

3

A high-lift, slow-speed section is required near the hub.

WHAT IS AN AIRFOIL?

Any surface containing curvature scientifically designed to produce a lifting or thrust reaction by air movement over it is known as an airfoil. Modern airplane wing sections are one of the best-known forms of airfoil.

Scientifically correct since 1930

**PROPELLAIR'S AIRFOIL BLADES
MOVE AIR WITH LESS POWER**
Because each blade section is a Perfect Airfoil

By scientifically varying the camber (curvature of blade surface), the chord (width of airfoil section), and the pitch (the angle of attack), Propellair engineers developed a fan-blade design that utilizes every square inch of blade surface and produces a uniform velocity over the area within the circle described by the blade tips.

Like an aircraft wing, both surfaces of Propellair fan blades produce air movement. The back or top side produces a lift or suction which accounts for about 60% of the air movement. The front or under side produces a thrust which accounts for about 40% of the air movement.

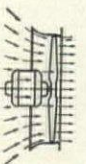
Airfoil propellers require minimum torque for rotational movement. This, combined with utilization of

the entire blade area, makes it possible for Propellair fans to deliver maximum air movement per horsepower input.

Have you a problem involving excess moisture, fumes, dust or heat? Then ask Propellair engineers to offer a solution! No obligation. Or, for complete information on Propellair airfoil, axial-flow fans, send for Propellair catalog No. 10.

CURVED ENTRANCE RING

This Propellair feature makes possible the utilization of the airfoil air-movement principle in the entrance ring as well as the propeller. More air per horsepower is delivered.



Mail This Coupon Today!



PROPELLAIR, INC., Springfield, Ohio

(AF2)

Please send me complete information on Propellair Ventilating Equipment.

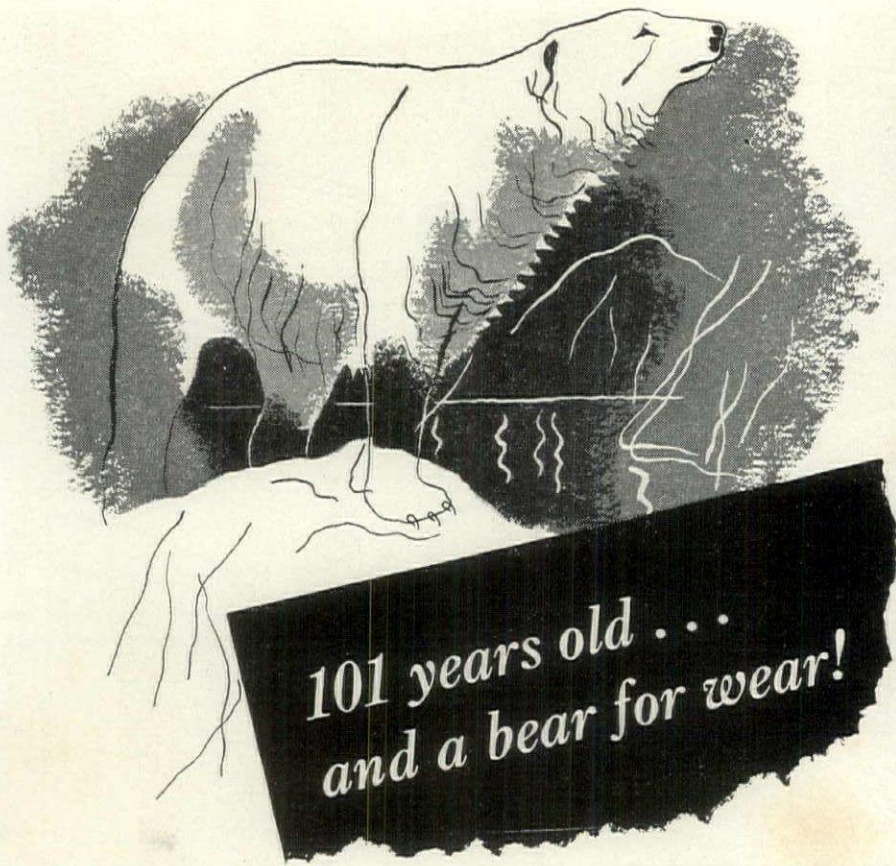
Name.....Dept.....

Firm Name.....

Street Address.....City & State.....

My ventilating problem involves:

Heat Fumes Moisture Dust



The long-lived King of the northland, weather-proofed by Mother Nature, has a likely rival in Eagle Pure White Lead, admired these 101 years for its tough, weather-wearing properties, and for its beauty.

Since 1843 in America, there's been no finer white lead than Eagle White Lead.

Eagle's beauty on interior or exterior work is complemented by the sturdy protection it gives these surfaces. And the "mechanics" of this protection are simple.

Eagle White Lead unites chemically with linseed oil to create a tough, elastic paint film that does not crack or scale. When temperature changes make the under-surface contract or expand, *this paint film contracts and expands with it!*

Then, Eagle White Lead wears by slow, even chalking. This leaves a perfect surface for eventual repainting without burning or scraping. Great hiding power, good coverage and ease of mixing and application are other practical and money-saving qualities of Eagle.

There is sufficient Eagle White Lead to go 'round. You may recommend it confidently to your clients.

★ *Speed the Invasion — with MORE War Bonds!* ★

THE EAGLE-PICHER LEAD COMPANY, CINCINNATI (1), OHIO



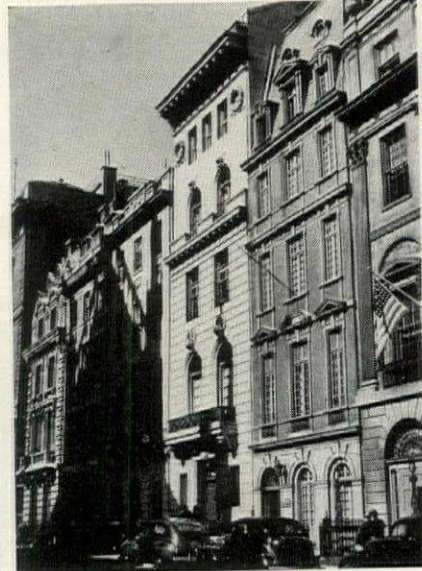
**EAGLE
WHITE LEAD**



MONTH IN BUILDING

(Continued from page 112)

—Charles Phelps Cushing



CIO UNIONS BUY valuable New York property (white house, above) and Detroit home of the late Edsel Ford (below.)



The union got its new headquarters, once valued at \$300,000, for a price of \$60,000, planned substantial remodeling of the marble-paneled, high-ceilinged structure. Built by merchant John Peirce in 1904 on a site bought from the Vanderbilts, the East 51st St. house was once the home of Eugene Meyer, publisher of the *Washington Post*.

SEABEES SOLUTION

Island airfields for Pacific warfare must be built almost overnight. But they must also be built strong enough to support the weight of heavy bombers. Looking for one answer to both of these problems, the Navy's Civil Engineer Corps found it close at hand. Seabees put their power shovels to work at digging live coral from the sea, used the minute living organisms to build needed hard-topped runways.

Now U. S. warplanes take off from a score of airstrips that are actually alive and are kept so by continuous application of salt water. Fresh water kills the organisms and the coral loses the cohesive quality which makes it almost

(Continued on page 116)



THE BEST LAID PLANS

. . . are plans which have had years of architectural "know how" behind them. That's why, if you're planning a hospital or school you'll find these Mesker Books of Windows invaluable. Drawing on Mesker's sixty-five years of precision experience, these books were written *by an architect for architects*. They contain many new Hospital and School Window uses and treatments, as well as helpful architectural renderings. What's more, we *guarantee* that the Mesker Windows you specify you'll get! Write for your Mesker Book of Hospital or School Windows *today*, for paper shortage limits quantities and requests will be filled as received.



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Architect _____

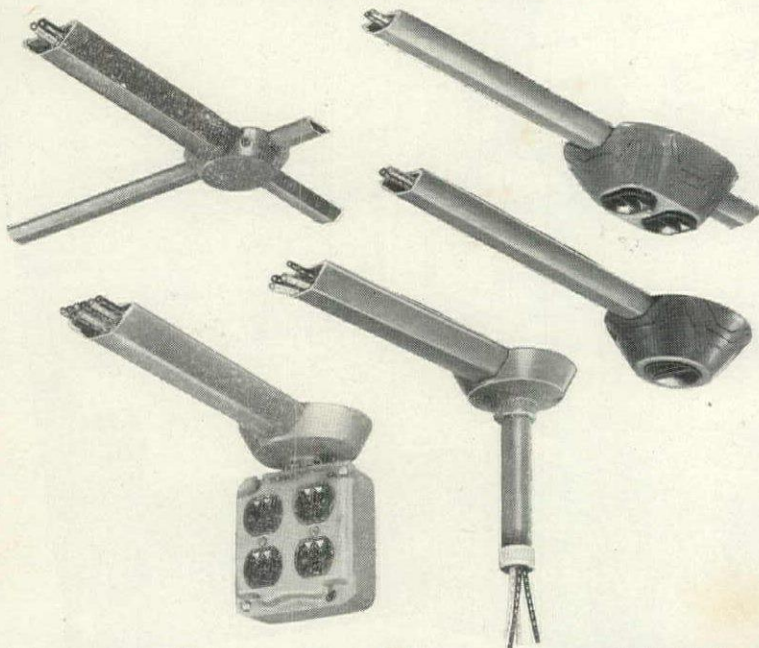
Address _____

(Give Street Number or P. O. Box No.)

City _____ State _____

AF 54

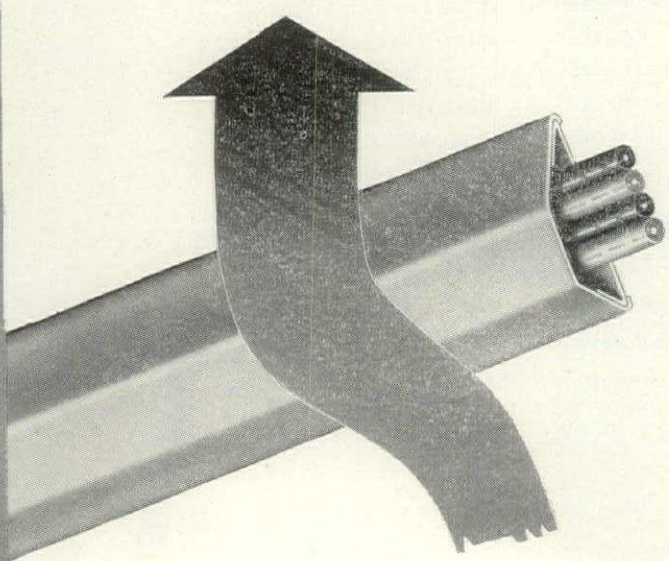
**National Electric
PRODUCTS CORPORATION**
Pittsburgh, Pa.



substantial fittings for every need . . .

FLORDUCT

*You may safely
wire on top of the
floor where necessary*



MONTH IN BUILDING

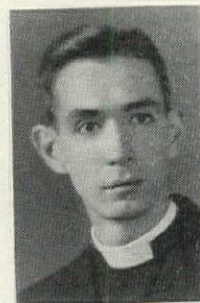
(Continued from page 114)

as satisfactory as concrete. Constant maintenance of the field is, therefore, necessary to counteract the effect of fresh water rain.

The Japanese also use coral from the South Pacific atolls to build airfields, but it is dead, and captured airfield will not stand the weight of heavier U. S. bombers. Lacking power machinery and depending mostly on hand labor, the Japanese are forced to use only skeletal remains of living coral organisms, sometimes add concrete.

INAUDIBLE GOD

Last month a churchman said a mild but earnest word about the churches that would be built after the war. Writing in the *Witness*, weekly publication of the Episcopal Church, the Rev. Mas-



MASSEY SHEPHERD Jr.

sey H. Shepherd, Jr. hoped that tomorrow's churches would look less like monuments or museums, more like a solution for the requirements of a congregation of worshippers.

Few would argue the Rev. Mr. Shepherd's major

contention:

"American architects have to their credit many noble examples of their talent, but churches are not among them. Unlike the homes and office buildings which they design, their religious edifices lack a functional conception; that is, the structural plan and ornamentation are not related to the purpose for which the church is used, which is, purely and simply, the liturgy. . . One of the most distinguished architects of our generation never bothered, for example, about the acoustical properties of the edifices he designed. In about 50 per cent of them the word of God is inaudible."

To most architects, the modest suggestions of this liturgical scholar would make good construction sense:

"Be sure to insist that the altar, the lectern and the pulpit be placed where every worshiper can see them and hear every word said at them.

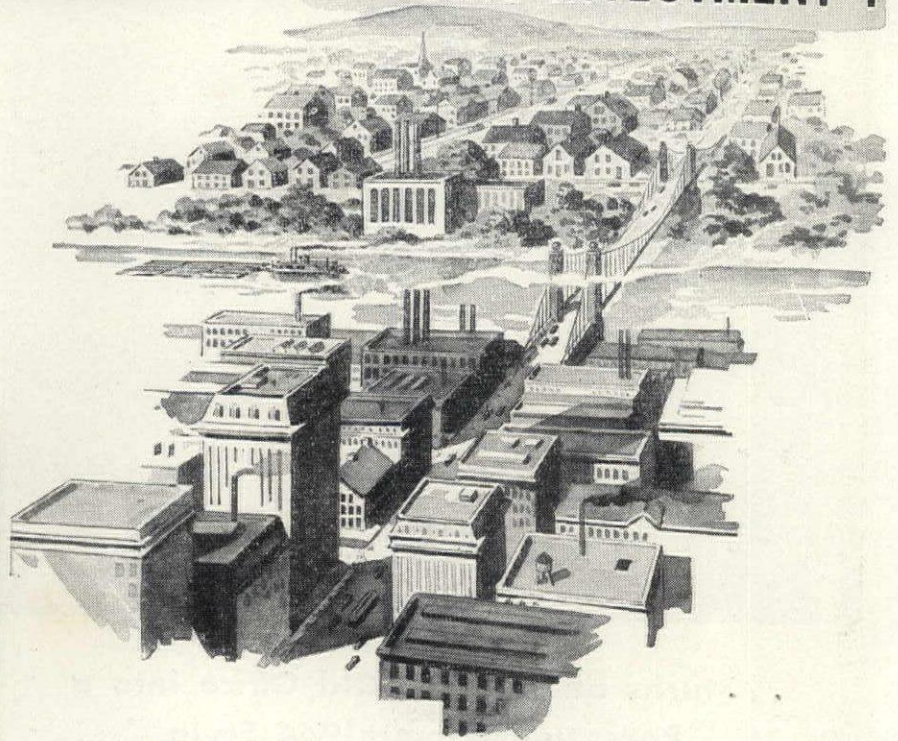
"Don't be afraid to let in plenty of God's free sunshine to illuminate our hymnals and prayer books. Windows are intended to give light, not to obscure it. Stained glass is not uniformly edifying.

"Avoid high-vaulted ceilings. The worshippers' attention is focused hor-

(Continued on page 118)

Help PROTECT...

... YOUR COMMUNITY'S BUILDING INVESTMENT !



Specify **Carey** LONG-LIFE Products

BUILT-UP ROOFS

Individually engineered and built to withstand temperature extremes, salt air, chemical fumes, etc. A nationwide organization of Carey Approved Roofers at your call.



CAREYDUCT

The All Asbestos Insulated and Acoustical Duct. A natural sound absorber. Muffles fan noises. Permits use of smaller sizes with higher velocities.



ROCK WOOL INSULATION

Saves fuel and transportation... aids the war program.



ASPHALT SHINGLES — INDIVIDUAL AND STRIP

Protect property against weather and damage. Available in wide range of colors.



ROLL ROOFINGS

Wear longer... cost less per year.



ASBESTOS-CEMENT WALLBOARD

Easy to apply... reproof... rot-proof.



To maintain unimpaired for the duration America's tremendous national asset in homes, commercial, industrial and governmental buildings — is a vital need in our wartime economy.

In meeting this need, Architects and Engineers are in the front line of defense. They are performing an important service in educating their communities to the importance of making necessary repairs quickly — before the damage can spread; also through proper maintenance of property to prevent damage.

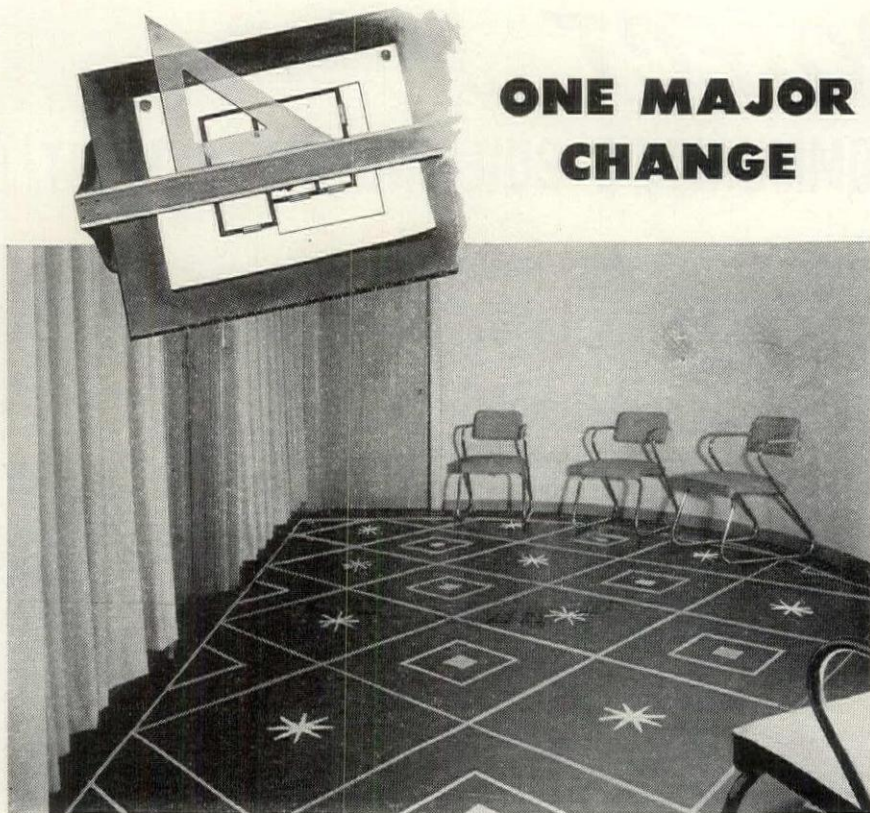
Carey Products provide economical service and lasting satisfaction because they have the inherent quality that makes them wear longer thereby reducing upkeep and conserving manpower.

Through continuous research and testing, this high quality has been rigidly maintained. In addition, many notable advances in building materials and their methods and processes of manufacture have been developed in the Carey Laboratories and Plants. Specify Carey Products for utmost service and satisfaction.

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Dependable Products Since 1873

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ONE MAJOR CHANGE

... turns an 80-Year-Old Office into a Reception Room—1944 Style

MODERNIZING an office in a building constructed before Abe Lincoln became President isn't an easy task at any time—and it's particularly difficult today when materials are so hard to get. Yet that's the job architect Carl Conrad Braun undertook in remodeling the New York showrooms of the Bestform Foundations, Inc.

In the face of these difficulties, however, Braun was able to bring the Bestform offices up to date with only one major change . . . and without intricate alterations or hard-to-get materials. That change, a simple one to make, was the smartly designed new floor illustrated above, a floor design carried out easily in rich, colorful Armstrong's Linoleum. This, plus repainting and a slight change in lighting, was the only alteration made in remodeling this interior.

Though the Armstrong Floor was economical to install, it

brought to the whole interior a modern charm and distinction. This floor design specified by the architect and carried out in Armstrong's Linoleum has brought complete satisfaction to the client.

WIN CLIENT SATISFACTION

This same client satisfaction can be yours if your remodeling plans have the performance backing of Armstrong's Linoleum Floors. These floors are available in a choice of colors which allows freedom of design. And, once properly installed, they'll give service that's a credit to any architect.

If you'd like more information on long-lasting, economical Armstrong's Linoleum Floors, turn to your copy of the 1944 Sweet's Catalog. And, for samples and file-sized specifications, simply address the Armstrong Cork Company, Floor Division, 2305 State Street, Lancaster, Pennsylvania.



ARMSTRONG'S LINOLEUM

Made by the makers of

Armstrong's Monowall, Temlok,  Cushiontone, and Asphalt Tile

MONTH IN BUILDING

(Continued from page 116)

zontally, not vertically. Besides, what the parish wastes in heating a skyscraper will make a tidy sum for missions.

"Give the organ enough breathing space. A small organ in a large chamber praises God with as joyful a noise as a large organ in a small chamber. And do not embarrass the instrument by making its stately pipes objects of veneration.

"Make a rule forbidding permanent memorial furnishings and ornaments. We can honor the beloved departed in more serviceable ways.

"Our historic heritage is precious indeed; but do we have to make the parish church look like a bit of medieval England transplanted? Remember our Church has in her official title the 'U.S.A.'"

"Most people can read these days; hence our buildings need have few illustrations. Men educated in a scientific age will not recognize or appreciate too much allegorical symbolism."

NEWS NOTES

Labor Peace. AFofL and CIO building trades unions in New York shook hands last month, promised to settle all future jurisdictional disputes by the arbitration of a joint committee. Beaming Mayor LaGuardia hoped the pact would remove one of the bumps on which his postwar construction program might stumble, reminded that it affected 700,000 workers, thousands of small contractors.

Gobbledegook. Plain talking for straight thinking is the first Maury Maverick policy to go into effect at the Smaller War Plants Corporation. Said the new SWPC head to his staff: "No more lengthy memoranda; no more gobbledegook language. Anyone using the words 'activation' or 'implementation' will be shot." Nor does Mr. Maverick like "patterns," "effectuating" and "dynamics". He is tired of hearing about "pointing up" programs and "finalizing" contracts that "stem from" district, regional, or Washington "levels." If Mr. Maverick's word surgery spreads, the government ought to save a lot in printing bills.

Planning Gospel. Charged with delay in planning for a freeway through the city, Baltimore's Mayor turned to the 14th chapter of St. Luke for defense. Quoted he: "For which of you intending to build a (freeway) sitteth not down first and counteth the cost whether he have sufficient to finish it? Lest haply, after he hath laid the

(Continued on page 120)

A MILLION VIBRATIONS



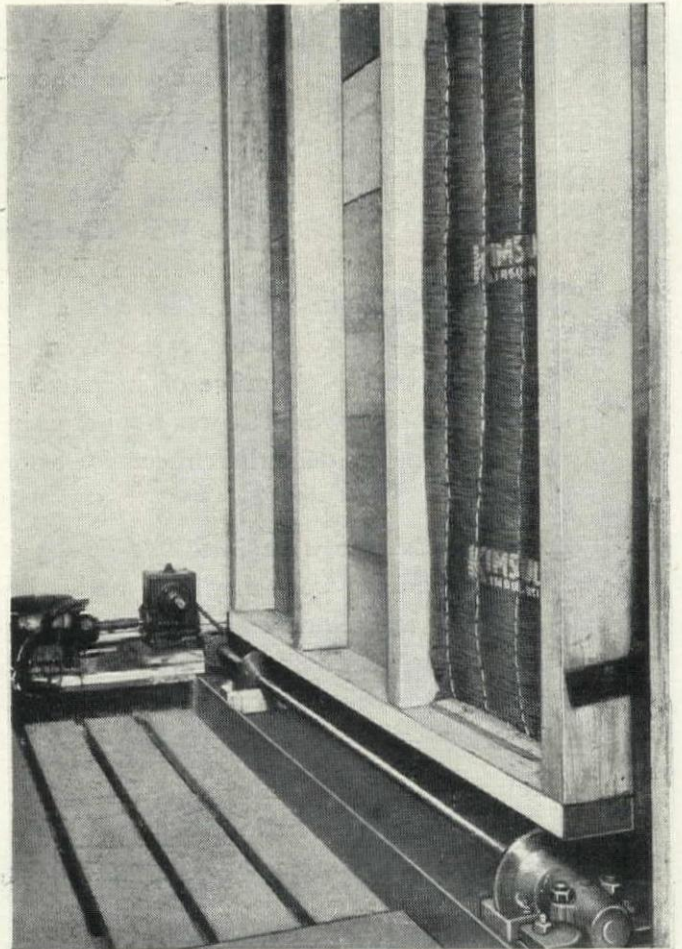
-and KIMSUL* is still going strong in this laboratory test

Not in a hundred years would an insulation material normally undergo so much shaking. Shown here is a KIMSUL blanket in the stud space of a testing apparatus, where the material was viciously vibrated over a million times. This test *proved* the permanence of KIMSUL. At the ordeal's end, the blanket was still taut, still retained its most efficient density throughout, was still good as new.

KIMSUL "Stays Put"

This scientific insulation, once installed, keeps its shape, won't sag, pull out of position, pack down or settle. The reason: rows of rugged stitching reinforce the blanket, control its density, prevent further stretching after KIMSUL has been pulled taut.

Furthermore, KIMSUL is a heat-stopper extraordinary, has the splendid thermal efficiency of 0.27 Btu/hr./sq. ft./deg. F./inch (J. C. Peebles). When you specify this inexpensive, easier-to-apply insulation, you know the job will be right—forever!



KIMSUL blanket has withstood over a million vibrations in stud space of this laboratory testing apparatus. KIMSUL stayed good as new, did not sag or pull away. Here is convincing proof of its permanence.

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

A PRODUCT OF
Kimberly Clark
RESEARCH

KIMBERLY-CLARK CORPORATION
Building Insulation Division
Neenah, Wisconsin

Please send me my FREE COPY of the new illustrated book, "Save Man-Hours and Man-Power on Every Job."

Also have a KIMSUL representative call.

AF-544

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Address.....

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

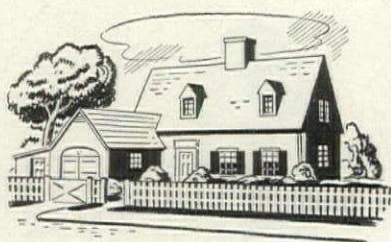
Architect

Contractor

Builder

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

Investigate



TILE-TEX Wall Tile Now— for postwar houses

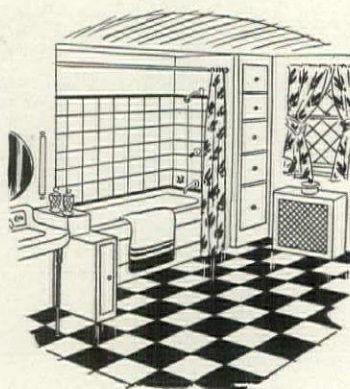


Right now many architects are planning residences that will be built as soon as the guns stop shooting. *Now* is the time to get the facts about Tile-TEX Decorative Wall Tile. Here is a plastic composition tiling specifically designed as a modern wall treatment and available in a superlative range of attractive colors. Prior

to the war, Tile-TEX Wall Tile was fast becoming the choice of discriminating residential architects for bath and kitchen wall treatment.

The materials that went into Tile-TEX Wall Tile have temporarily gone to war—they'll be back. New improved manufacturing techniques discovered during the war years will make Tile-TEX Wall Tile even more colorful, more sanitary and more desirable as a wall treatment.

Investigate Tile-TEX Wall Tile now. Find out how this decorative plastic wall tile will enhance the beauty and utility of the homes you design. Send for the colorful booklet "Decorative Walls by Tile-TEX," containing complete color charts and data on this remarkable wall treatment.



★ The Tile-TEX Company

101 Park Avenue, New York City • Chicago Heights, Illinois

foundation and is not able to finish it, all that behold it begin to mock him saying "This man began to build and was not able to finish."

Foreclosure Finis. With the sale last year of more than \$150,000,000 in housing acquired by foreclosure during the depression, life insurance companies were near the end of a long job. Since 1929 nearly a billion dollars worth of urban housing—dwellings for about one million persons—came into possession of the companies through default, the Institute of Life Insurance said.

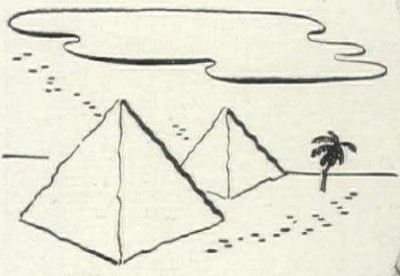
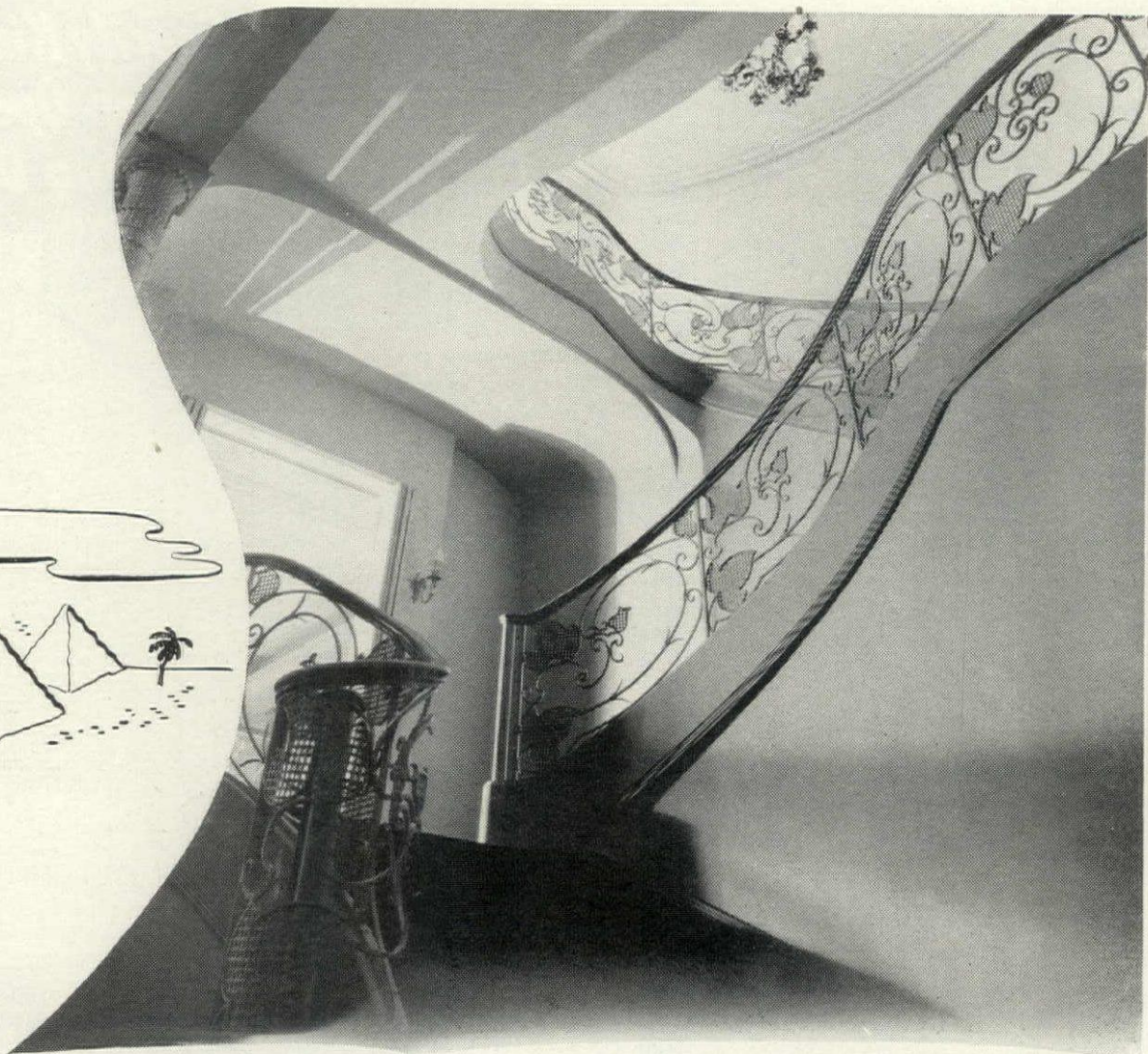
Air Plan. Airfields within the reach of every community of 1,000 or more is the goal of the Civil Aeronautics Authority, which plans a national network of 6,000 airports. If Congress approves, villages can expect to get L-shaped fields with 1,800-foot runways; major cities will get all-direction landing strips with mile-long paved runways. Financing, CAA said, will involve federal, state and municipal cooperation.

Time on Hand. Present building slowdown means time to get ready for the pick-up ahead, the Association of California Architects thinks. Recommending a thorough overhauling of the San Francisco building code, the Association got firm editorial support from the *San Francisco News*. Pointing to unit kitchens and unit bathrooms as one of many new building devices barred by the city's present code, the *News* said that, failing code revision, "San Franciscans will go into the postwar period—when all sorts of new ideas, new materials and new methods seem likely—tied to the period when football players wore shin-guards and long hair, and a buggy was transportation."

Pity the Poor Slum Owners. That slum properties can and often do pay a good investment return is one of the obvious blocks to rebuilding for better use. Last month in Detroit facts underlined the profit still to be found in slums. Acquiring sites for two postwar housing projects, the city turned over management of the slum buildings to its real estate department. Result: a \$175,000 operating profit, which will be used to help pay for postwar rebuilding.

Demand Index. More than 2,000 would-be home owners have joined postwar home building clubs and are saving for a down-payment, the United States Savings and Loan League reports. In the spontaneous and rapid growth of

(Continued on page 122)



DURABLE ○ ○ DEMONSTRATED BY MORE THAN 6,000 YEARS OF SERVICE

For many years, plaster has been doing its job—and doing it better—expressing enduring beauty in sweeping, unbroken surfaces—flowing curves and contours—ornamental relief in molds and casts—quiet dignity resulting from sound-absorbing acoustical plaster.

...And over all gypsum plaster acts as a fire-armor, protecting lives and property—shielding the structural members over which it is applied with a fireproof coat of gypsum, a mineral that will not burn.

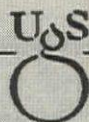
Just add up the complete advantages of gyp-

sum plaster—its fire protection, flexibility, enduring beauty, sound absorption, ease of application and decoration. You have a material as old as the Pyramids—modern as tomorrow's sunrise—that fits economically into established building practice.

PLASTER DOES IT BETTER

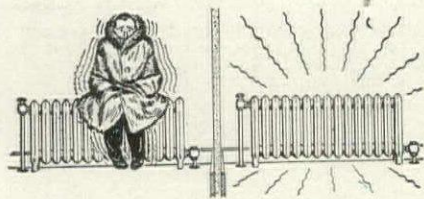
... And at the very top of the list—Red Top* Plasters have won their way to leadership through research and development. No wonder gypsum plaster is the most widely used wall and ceiling material in the world—“Plaster Does It Better.”

*Trademark Reg. U. S. Pat. Off.



UNITED STATES GYPSUM
300 WEST ADAMS STREET, CHICAGO, ILLINOIS

This famous trademark identifies products of the United States Gypsum Company—where for 40 years research has developed better, safer building materials



All Radiators Get Adequate Heat

You can't blame distant, cool radiators on fuel rationing when the radiators nearer to your boiler are scorching hot. But you can place the blame on an unbalanced, uncontrolled heating system which is eating up your supply of rationed fuel.

Webster Moderator Systems of Steam Heating with Webster Radiator Orifices assure quick heating-up, full control of steam, and balanced distribution of heat to every radiator... regardless of its distance from the boiler. Overheating, underheating and costly waste of rationed fuel are ended.

More Heat With Less Fuel

Webster engineers have discovered through surveys of thousands of buildings that seven out of ten large buildings in America (many of them less than ten years old) can get up to 33% more heat from the fuel consumed with the Webster Heating Modernization Program.

Let us show you how to obtain more heat with less fuel this winter. We have a free booklet containing case studies of 268 modern steam heating installations. Write for "Performance Facts" and compare the great savings in fuel obtained with the Webster Moderator System of Steam Heating. Address Dept. AF5-44.

WARREN WEBSTER & CO., Camden, N. J.
Pioneers of the Vacuum System of Steam Heating
Representatives in principal Cities : : Est. 1888



Shown above is the small Control Cabinet of a Webster EH-10 Moderator System; central heat control of the pulsating flow type. It can be used to automatically operate a motorized valve in steam mains, or directly control burner or stoker of your boiler.



Making Boosters for
U.S. Army Ordnance

Webster

Steam Heating

MONTH IN BUILDING

(Continued from page 120)

these clubs, the League sees a parallel of a similar movement in 1831, when many communities banded together to save funds for home building. Result: establishment of the first savings and loan associations, which did not become investment institutions for several decades.

Insulation Test. Insulation — usually omitted — back of recessed radiators can cut as much as 7 per cent off the winter fuel bill, said University of Illinois engineers, whose tests show that heat loss for each square foot of recess equals as much as that for 16 square feet of insulated wall.

Victory Icebox. Manufacturers and WPB agree that the "victory model" ice refrigerator has been a big success. No changes in materials or specifications will be made in the order for 821,000 ice boxes in 1944. The Office of Civilian Requirements will get 600,000 of these for distribution; the National Housing Agency will get 221,000. Last year 663,000 ice boxes were manufactured.

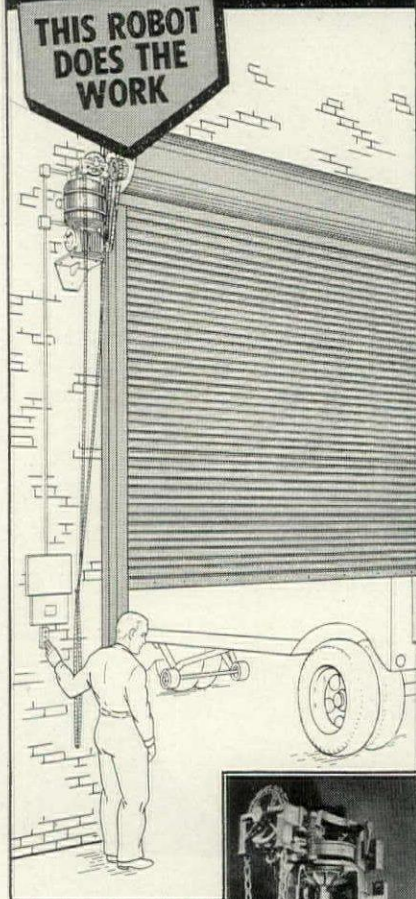
Landlord's Worry. Looking deep into its venerable conscience, the Church of England denied last month that rents it receives are "tainted money." But weakness in the criminal law makes it difficult for the church to attempt to stamp out prostitution in the property it owns, a special committee said. Church commissioners receive rents "from lessees whose character is beyond reproach" but have no control over tenants to whom the lessees may rent. Under investigation was the 600-acre Paddington estates, near London's tony Mayfair.

Empty Tenements. Full employment has emptied Manhattan's poorest buildings, according to New York real estate dealer, James Felt, who says vacancies of more than 25 per cent are frequent in many substandard blocks. To drain off the rest of the tenants, Felt urges rigid enforcement of the Multiple Dwelling Law as soon as the war ban on construction ends.

Smaller Houses. Real estate researcher James C. Downs, Chicago, finds in these statistics a tip to postwar planners, builders, and long-term investors: In 1870 there were 25.07 domestic servants per 1,000 population in the United States. In 1880 the ratio had dropped to 21.45, and by 1943 there were only 14 servants for every 1,000 Americans. Present wartime labor shortages have accelerated the trend toward compact homes requiring little service.

Specify Kinnear Motor-Operated Rolling Doors

THIS ROBOT DOES THE WORK



With this efficient robot on the job, Kinnear Rolling Doors are raised and lowered by merely touching a button! Door traffic is speeded up, and since doors are not left open through neglect, heating and air-conditioning costs are substantially reduced. Added to the space-saving efficiency, the protection, and eye appeal of the rugged Kinnear inter-locking-slat construction, this means thorough door satisfaction for any client! Check a few construction features of the rugged Kinnear Motor Operator: machine-cut gears of chilled nickel bronze, worms of nickel steel, bronze and graphite oilless bearings — proof that it's engineered for long, faithful service! And every Kinnear Motor Operator is matched to the load requirements of the particular door which it is to operate. Write for full information today! The Kinnear Manufacturing Company, 1640-60 Fields Ave., Columbus 16, Ohio.

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WAYS IN
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SCHOOL WINDOWS



Jamestown High School, Jamestown, N. Y.

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FULL INFORMATION AND DETAILS OF THE STEEL WINDOWS ILLUSTRATED CAN BE OBTAINED BY APPLYING TO OUR HEAD OFFICE IN JAMESTOWN, N. Y. OR TO ANY BRANCH OFFICE OR REPRESENTATIVE. OUR ENGINEERING DEPARTMENT WILL BE GLAD TO PREPARE SPECIAL DRAWINGS TO SUIT UNUSUAL CONDITIONS ON REQUEST.

The finest buildings throughout the world are fitted with HOPE'S WINDOWS

HOPE'S WINDOWS, INC., *Jamestown, N. Y.*

BACK THE ATTACK ☆☆☆ BUY WAR BONDS

"or equal"

"Or Equal" to Go

Architects and building materials makers collaborate in eliminating a troublesome clause from specifications.

Joint meetings now being arranged in some 20 cities by local chapters of the American Institute of Architects and the Producers Council, national organization of manufacturers of building materials and equipment, will promote immediate practical application of the council's plan to eliminate the trouble-breeding "or equal" clause from construction specifications.

● **Quality at Minimum Cost**—Bane of the architect, engineer, general contractor, and subcontractor, the "or equal" clause had its genesis in the laudable attempt to obtain specified quality for the owner at minimum cost. A named product in the contract proposal was followed by the "or equal" phrase to permit bidders to submit the lowest obtainable price, based either on the named product or on another of equivalent quality.

Because what constituted an equivalent product frequently was subject to debate, a high-quality product often had to compete in price with one of inferior quality. When the "equal" product was in the borderline zone of debatable quality, the opinions of the architect and contractor clashed. One of them had to concede to the other, with resulting money loss to the contractor or with possible quality sacrifice on the part of the owner.

● **Only One Specified** — Under the new plan, the architect or engineer writing the specifications names the product on which the base bid is to be offered. General contractors, and through them the subcontractors, are free to submit proposals for alternative products, providing additions or deductions to be applied to the base bid if such alternative products are adopted.

With base bids and alternate estimates in hand, the owner and his architect or engineer decide which products to accept for incorporation in the structure, and these products are specified in the contract finally signed.

● **Based on Experience** — The plan, approved by the council in 1942, was adopted in principle by the architects in their annual convention last May. To put the adopted principle to work, local A.I.A. chapters and Producers Council clubs soon will hold their joint meetings, inviting the cooperation of organized engineering, contractor, and sub-contractor groups.

Certain architects and engineers for some time have eliminated the "or equal" clause from contracts, and the plan now advocated is based on the procedure which has proved most satisfactory to them.

From Business Week, January 15, 1944

The American Institute of Architects, as stated in the clipping from a recent issue of Business Week shown at left, adopted a plan in 1943 to eliminate the "or equal" clause from their specifications and to substitute a "base bid and alternate bid" type of specification.

The Herman Nelson Corporation has maintained for over thirty years that base bid and alternate bid specifications are the only ones which allow architects and their clients to obtain at the lowest cost the equipment best suited to their needs. The following is quoted from a Herman Nelson Catalog published in 1930:

"Value of equipment is not determined by cubage, weight or appearance, but by service. The standard for quality can only be fixed by naming a specific article. The more or less common practice of attaching the words 'or equal' in an effort to permit competition defeats the real purpose of the specifications unless they clearly state that the determination of equality shall rest solely with the Committee, its Engineer or its Architect. To be fair, the rules governing competition must be clear and definite and not subject to individual interpretation. The 'or equal' clause sometimes lowers the



The Herma

Manufacturers of Quality Heat

General Office

Factories at Mo

ARCHITECTS DECIDES

should go



t of building but it *always* lowers its
ue.

rchitects and Building Committees who have
n 'through the mill' will probably not challenge
y of these statements but they may counter with this
osition: 'Yes, but if we specify exactly what we want,
v are we to be protected against unfair competition,
nology, or exorbitant prices by the manufacturer of the
icle specified?' This question is a reasonable one. Several
utions have been suggested but it has been found that the
st practical one is the use of *alternate* bids, wherein the
cifications provide that if the bidding contractors desire
submit proposals on substitute systems or equipment, they
y do so, but shall file their bids based upon the plans and
cifications and shall state in same the deduction or addi-
n to be made in case such substitutions are accepted. The
cifications should further provide that no substitution will
allowed after contracts are let. This method provides for
competition, insures reasonable costs and places the de-
mination of both quality and price in your hands."

e Herman Nelson Corporation congratulates the Ameri-
Institute of Architects and the Producers' Council for
work which they are doing to promote the plan of base
and alternate bid specifications.

In 1941, The Herman Nelson Corporation published a booklet which they furnished to school authorities. This booklet outlines the various types of specifications with their advantages and disadvantages and may be used by architects in discussion of specifications with their clients. A copy of this booklet can be obtained by returning the coupon below.



Herman Nelson Corporation

Heating, Ventilating, and Air Conditioning Products

Moline, Illinois

Chicago, Illinois

THE HERMAN NELSON CORPORATION, MOLINE, ILL.

Yes I am interested in obtaining a copy of your booklet "Your Specifications an Asset or a Liability?"

YOUR NAME HERE PLEASE

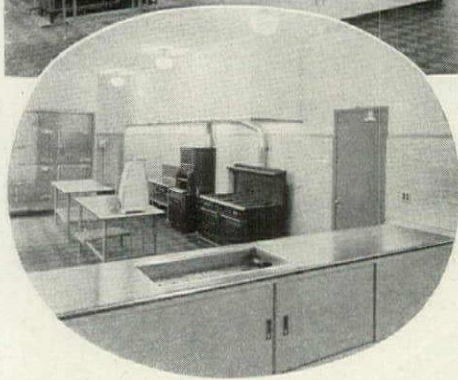
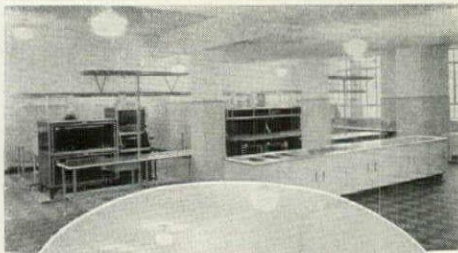
TITLE

COMPANY

ADDRESS

CITY

STATE



Kitchen—Holy Cross College

*Institutional Architects
and their Clients Avail
Themselves of . . .*

JOHN VAN RANGE Food Service Engineering

While the plans for the new kitchen of Holy Cross College at Worcester, Massachusetts, were still in the formative stages, the architects and administrative officials of the College called upon the engineers of the John Van Range Company for technical advice and co-operation.

The kitchen was laid out in detail before construction work had progressed so far as to require costly structural changes. Provision was made in advance for necessary plumbing, gas, electrical and air conditioning intakes and outlets. Then every unit of the equipment was designed, manufactured and installed by the John Van Range organization, with substantial economies in cost and the assurance of continuing economies in maintenance and operation.

Because of the highly specialized character of kitchen engineering, many outstanding architects avail themselves of the services of our staff whenever problems of this kind are on their boards. The service is given freely and without obligation.

The John Van Range Co.

EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD

Branches in Principal Cities

328 EGGLESTON AVE., CINCINNATI, O.

PRODUCTS AND PRACTICE

(Continued from page 14)

possible with such powerful wiring.

This revolutionary plan is a step far beyond the prewar minimum standards developed by the National Adequate Wiring Bureau. Wiring a house according to NAWB standards costs very little extra. In one St. Louis case-study the difference between an adequate and inadequate wiring job came to 1.15 per cent of the total cost of the house. The Westinghouse wiring system would be at least twice as expensive. Even so, the cost of wiring is such a small percentage of the total building expense that it would hardly be worth quibbling over. The saving of electricity by the adequately wired system in the St. Louis house would produce an estimated saving of 6.3 per cent of the house cost during the FHA 25-year payment period. The Westinghouse system could not save much more, but its extra cost would be offset by greatly increased comfort and convenience to the homeowner. He would get more than his money's worth in service.

After the war, women who have worked in war plants under modern conditions of lighting, heating and air-conditioning are going to want the same comfort in their own homes. With the probability of many women remaining in industry, there will be an increased demand for houses wired to permit greater use of labor-saving household appliances.

The banker will insist on adequate wiring for a sound investment, since it will greatly influence the resale value of houses. The building manager and the realtor will want better wiring to eliminate a basic and expensive headache. And the manufacturer of electrical equipment cannot hope to do business unless houses are wired to accommodate his products.

Since wire manufacturers will have no reconversion problem, the very first postwar houses can be adequately wired. Actual appliances will not be available for some time. But if houses built immediately after the war are properly wired while under construction, they will be able to carry the increased electrical load of appliances later on. Modernization of existing wire systems should also be accomplished as soon as possible after the war. Inadequately wired houses will be quickly out-moded.

But if adequate wiring is provided, everyone will enjoy the increased comfort and convenience of electrical living in 194X.

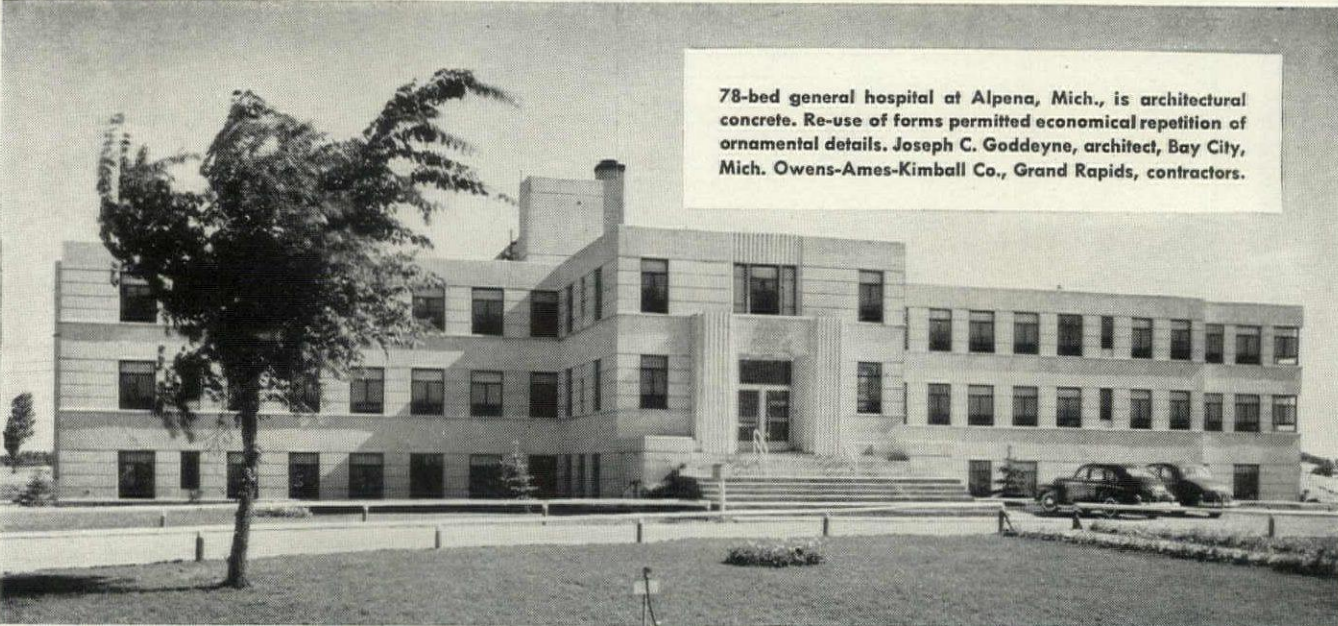
with **ARCO RAYS**
The MILL WHITE with
"fog control"

PAINTING a plant no longer means large areas shut down and priceless production time lost—not if you paint with Arco Rays, the Mill White with "fog control". Because Arco Rays atomizes at extremely low pressure, it sprays with a minimum of fog and splatter. Only machines immediately adjacent to the painting need be covered up and a dry cloth is all the cleanup that is required.

ARCO RAYS is one of Arco's long list of maintenance specialties—mill whites, floor treatments, metal protectives, wall paints, concrete and masonry coatings—products that have played an important conservation role in three generations of American industry. Write for details.

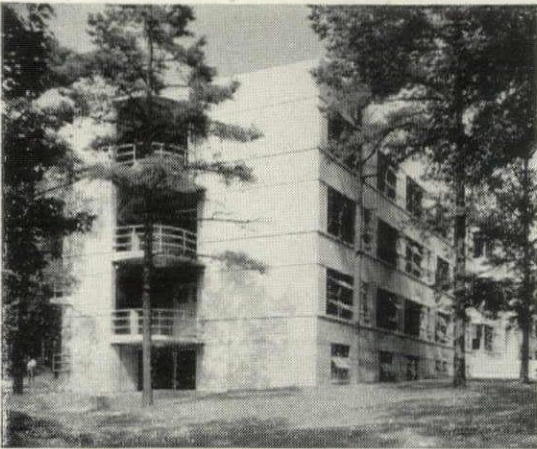
THE ARCO COMPANY
CLEVELAND, OHIO • LOS ANGELES, CALIF.

ARCO
Paints for Industry



78-bed general hospital at Alpena, Mich., is architectural concrete. Re-use of forms permitted economical repetition of ornamental details. Joseph C. Goddeyne, architect, Bay City, Mich. Owens-Ames-Kimball Co., Grand Rapids, contractors.

ARCHITECTURAL CONCRETE *for* HOSPITALS



enables architects to stay within limited budgets; design attractive, firesafe, rugged buildings; insure low maintenance expense and low annual cost.

Literature on most recent design and construction practice for architectural concrete mailed free in United States and Canada. See Sweet's Catalog, 4/33.

PORTLAND CEMENT ASSOCIATION

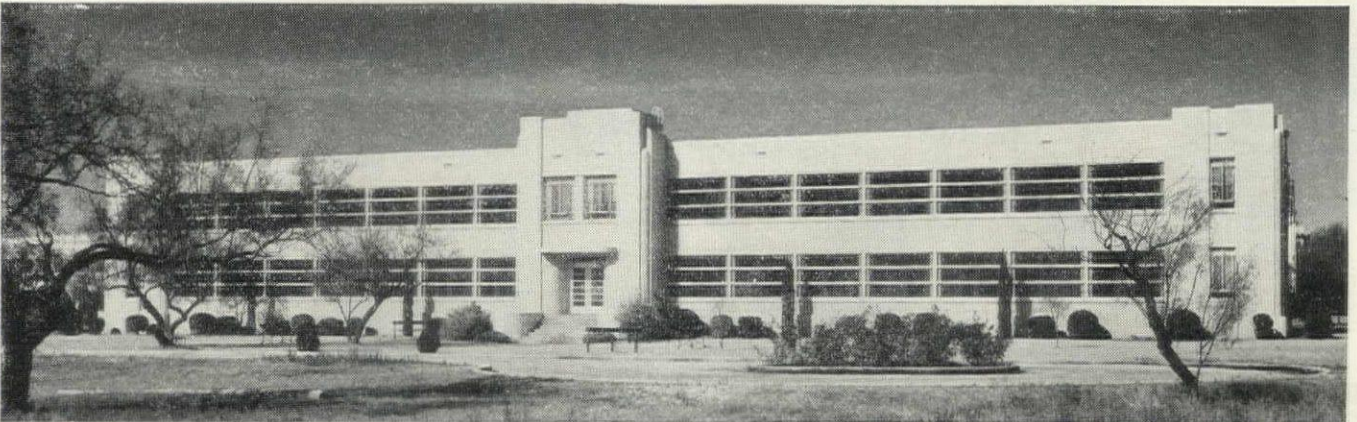
Dept. 5-7, 33 W. Grand Ave., Chicago 10, Ill.

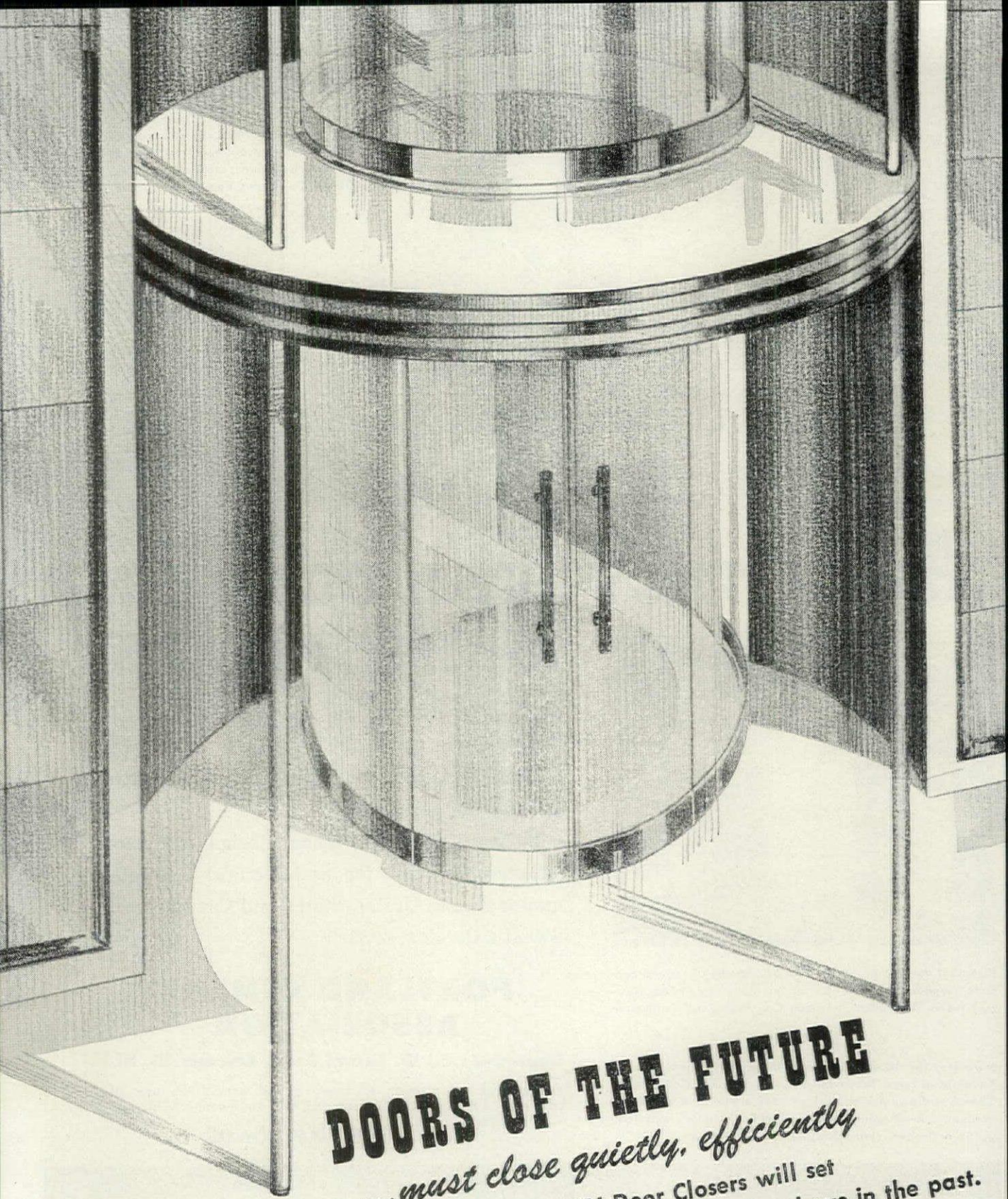
A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

BUY MORE WAR BONDS

Piedmont Sanatorium, Burkeville, Va., is one of several concrete hospitals designed by Williams, Coile and Pipino, Newport News, Va., John T. Wilson Co., Richmond, Contractor.

Dormitory No. 10, one of newest of 35 architectural concrete buildings at Texas Tuberculosis Sanatorium, near San Angelo. Smooth walls formed against plywood are finished with white portland cement paint. Leonard Mauldin, architect, and Templeton & Cannon, contractors, both of San Angelo.





DOORS OF THE FUTURE

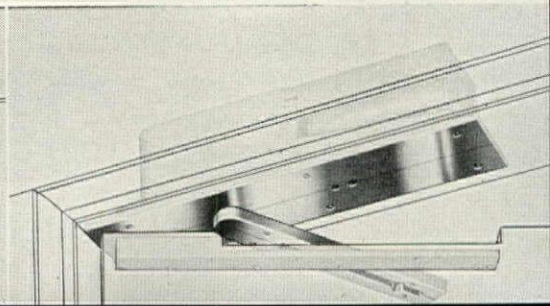
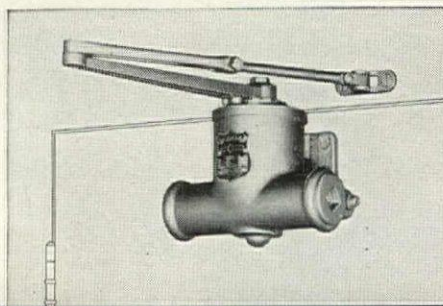
...must close quietly, efficiently

Design and mechanism of LCN Door Closers will set the standard for the future, as they have in the past.

NORTON LASIER COMPANY
466 W. SUPERIOR ST., CHICAGO



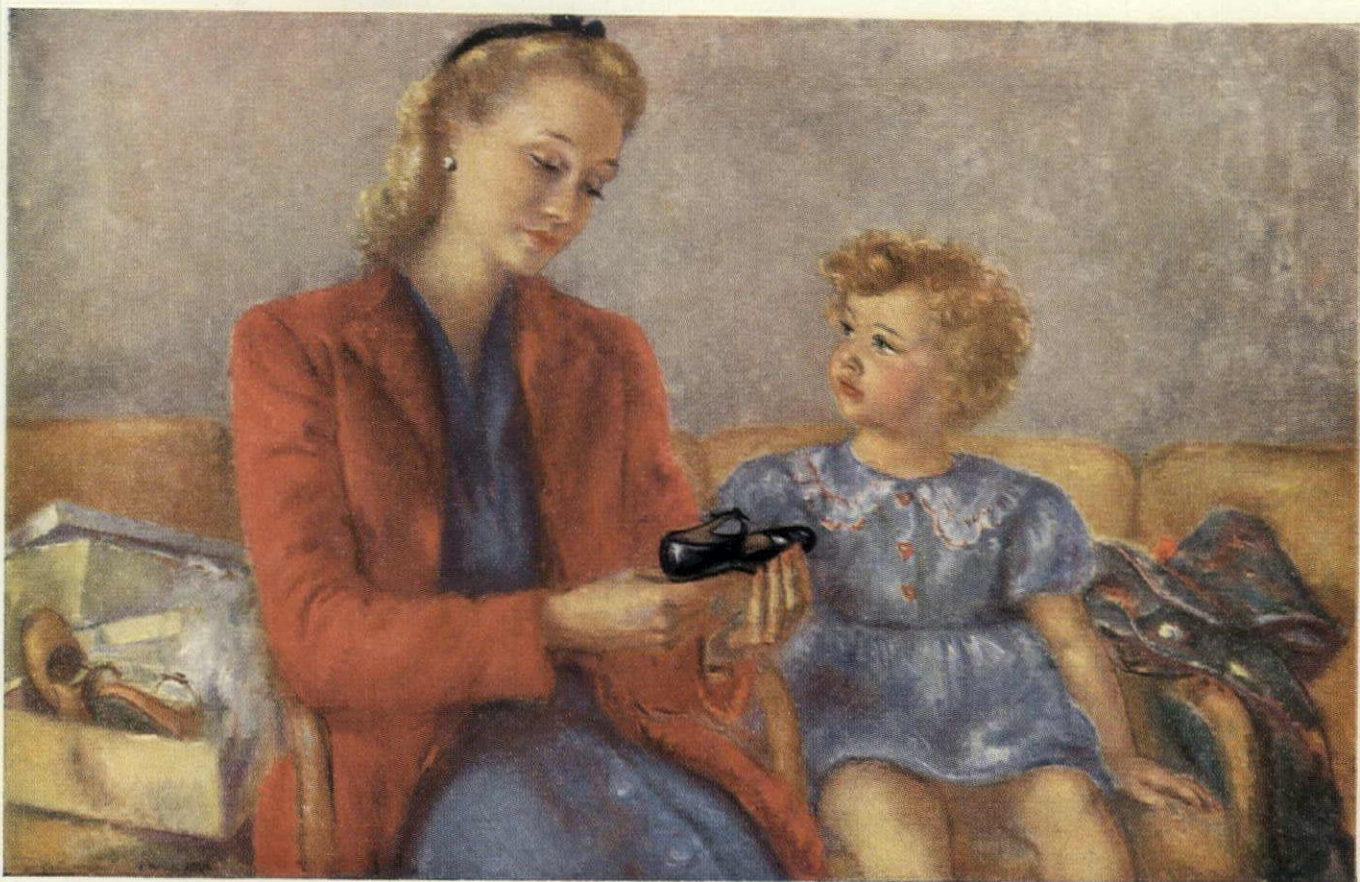
DOOR CLOSERS



Copyright 1944, Norton Lasier



HE *earns the wage*



Painted for McCall's by Clara Klinghoffer

SHE *administers the wage*

He provides the means with which to feed, clothe, house and educate the family. But it is she who administers his earnings. *She* is the one who decides where 85% of America's consumer buying power will go. Naturally, responsibilities so entirely different create different reading interests.

Out of these differences the women's magazines were born—and

they now fill a place, and do a job, unapproached by any other magazines published. That McCall's is read by one American Woman out of every five is no accident but the direct result of *this* magazine's ability to think the way women think.

Surveys show enormous numbers

of McCall's readers are already "thinking" about their postwar homes. Some will build, many will remodel, nearly all will purchase some new furnishings or equipment. Obviously, what they do will be determined, to a large extent, by what they see in the editorial and advertising pages of McCall's, the magazine that thinks the way women think.



McCall's

THREE MAGAZINES IN ONE

We're just little people

We're not brass hats.
We're not big shots.
We're just plain folks . . . but
We're the folks who made this country!
And we're the folks who will save it!

Save it from *two* things it's *got* to be saved from now.
The first thing is the Enemy. The second's
something that doesn't look very dangerous, but is.
It's the danger of Prices Getting Out of Hand.

Here we are this year—after we've paid our taxes—with
131 billion bucks in our pockets.
But only 93 billion dollars' worth of goods to buy.
That leaves 38 *extra* billion dollars.

Sure, the easy thing to do is to take that 38 billion
and start running around buying things we don't need,
bidding against each other . . . forcing prices up and up!

Then people want higher wages. Then prices go up some more
—and again wages go up. So do prices again.

And then where are we!

But us little guys—us workers, us farmers, us businessmen
—are not going to take the easy way out.

We're not going to buy a single, solitary thing that we can
get along without.

We're not going to ask higher wages for our work,
or higher prices for the things we sell.

We'll pay our taxes willingly, without griping . . .
no matter *how much* in taxes our country needs.

We'll pay off all our debts now, and make no new ones.

We'll *never* pay a cent above ceiling prices.
And we'll buy rationed goods only by exchanging stamps.

We'll build up a savings account,
and take out adequate life insurance.

We'll buy War Bonds until it pinches the daylight
out of our pocketbooks.

Heaven knows, these sacrifices are chicken feed,
compared to the ones our sons are making.



Use it up . . . Wear it out.
Make it do . . . Or do without.



Craw-Fir-Dor

SELF-ENERGIZING • ONE PIECE • OVERHEAD TYPE

GARAGE DOOR

Two factors assure you an even better post-war **Craw-Fir-Dor**

1—The Crawford Door Company (maker of Craw-Fir-Dor Hardware)

is today gaining valuable experience by manufacturing precision airplane parts.

2—Crawford hardware is being further improved through constant research.★

★ Every feature making for easy installation, long life and trouble free operation is being rigidly tested in the Crawford Door Company's engineering research department.

REMEMBER

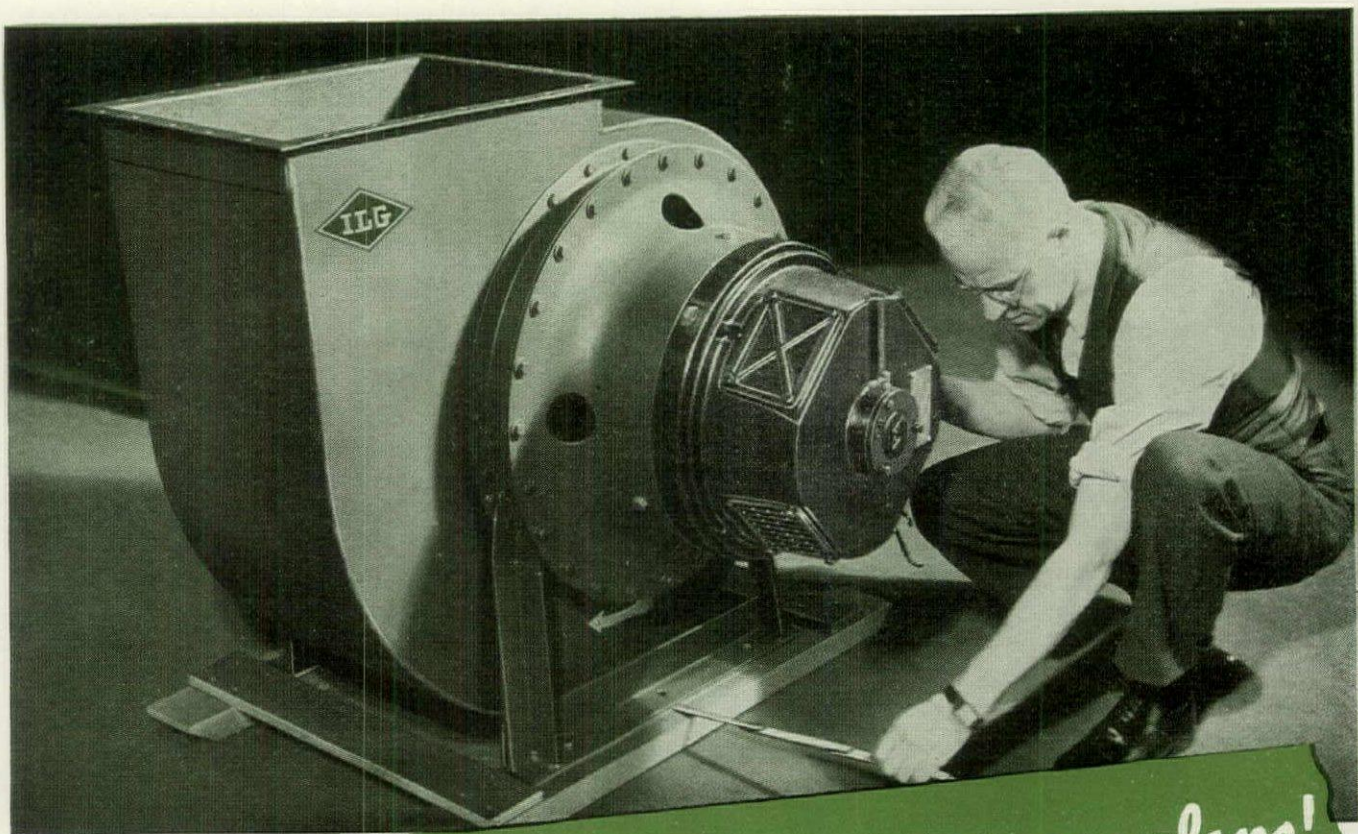
—Craw-Fir-Dor is economical, dependable, easy to install. Architects, builders and customers approve Craw-Fir-Dor.

For special residential or industrial installations, write

CRAWFORD DOOR CO.
DETROIT, MICH.

who make a complete line of sectional overhead-type doors.

FIR DOOR INSTITUTE
Tacoma 2, Washington



put this blower in your post-war plans!

Designed specifically for installation aboard ship, where every inch counts, these new "CC" type all-steel welded ILG Blowers will be available just as soon as Uncle Sam's wartime requirements are handled. Even in this illustration picturing the unit with a marine motor you can see the many advantages of ILG's compact construction... direct-connected motor partially recessed into blower side (no belts, no pulleys, no separate motor mounting)... wheel mounted directly on motor shaft for single operating unit with fewer wearing parts..."factory-set" alignment to lengthen bearing life and prevent vibration... a self-

contained blower which is tested and shipped completely assembled, ready to roll or suspend into position. Saves you time and money all along the line—installation, operation and maintenance! For your post-war plans, get details on this new Blower from nearby Branch Office (consult classified directory) or write us.



New 88-page ILG-BOOK helps you design fan and blower applications... pictures problems solved in 48 installations. Free if you clip coupon to your letterhead.

ILG ELECTRIC VENTILATING CO., CHICAGO 41, ILL.
2899 North Crawford Avenue, Offices in 38 Principal Cities

Send FREE copy of new "ILG-BOOK"

Firm Name _____

Individual _____ Title _____

Street _____ Zone _____

City _____ State _____

The day the war is over



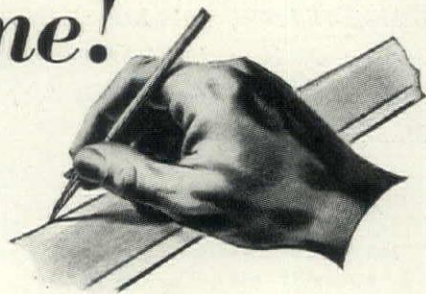
Many jobs will be needed...

Much construction will be needed...

Plans and specifications should be made NOW.

Call in your architects, engineers and general contractor.

This is Blueprint Time!

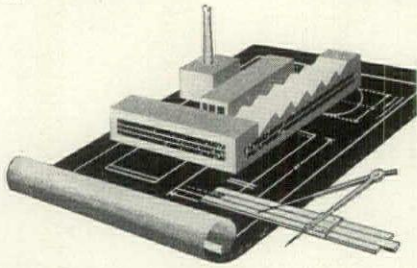


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SKILL, INTEGRITY AND RESPONSIBILITY IN THE CONSTRUCTION OF BUILDINGS, HIGHWAYS, RAILROADS AND PUBLIC WORKS

Reduce Operating & Maintenance Costs



with
**B-H ROCKWOOL
INDUSTRIAL
INSULATIONS**

Produced from high temperature and moisture resistant black rockwool, B-H insulations have an unusually low thermal conductivity. Because black rockwool is physically and chemically stable—will not deteriorate or break down under service conditions—B-H products maintain their high efficiency. Designed for specific services, they can be quickly and efficiently applied.

Whatever your insulating problem, it will pay you to consult Baldwin-Hill. Let B-H insulations help you do a better job—more economically.

Baldwin-Hill Co., 591 Klagg Ave., Trenton 2, New Jersey. Plants in Trenton, New Jersey; Kalamazoo, Michigan; Huntington, Indiana.

A Product for Every Service

- MONO-BLOCK**—effective up to 1700°F
- BLANKETS**—effective up to 1200°F
- PIPE COVERING**—effective up to 1200°F
- INSULATING CEMENT**—effective up to 1800°F
- FELTS**—from sub-zero to 800°F
- KOLDBOARD**—effective from -150° to 300°F
- SOUNDLINER • FILL • WEATHERSEAL**
- BONDITITE • ASBESTOS CEMENTS**
- DIATOMACEOUS EARTH PRODUCTS**

Baldwin-Hill
COMPANY
BH
HEAT & COLD INSULATIONS

FORUM OF EVENTS

(Continued from page 6)

disturbing the intervening program on view from the other section. Offices, camera rooms, dressing rooms, sponsor's observation rooms and other facilities are provided on the first floor below the auditoriums and control room.

A welded, rigid frame, steel structure supports the circular roof as well as several cantilevered television cameras. With one of these cameras mounted on the pivotal column at the center of the revolving stage and the others on the sides, it is possible to cover every part of the stage at any distance and from any angle. The same cameras, directed toward the audience, permit visual broadcasts of audience participation. Flexibility of studio illumination is increased by the use of water-cooled mercury vapor lamps operated by remote controls.

According to the Austin Company, facilities of this model will only be required in larger cities where the more ambitious network programs originate. Studios for secondary stations would be treated similarly but on a less elaborate scale.

PARTNERSHIPS

A new and promising industrial design team was created when Harold Van Doren and Associates of Philadelphia and Toledo, joined forces with Roger L. Nowland, Peter Schladermundt, and Katherine B. Gray, the former partners of Norman Bel Geddes. Offices will be in New York, Philadelphia and Toledo.

News Pictures



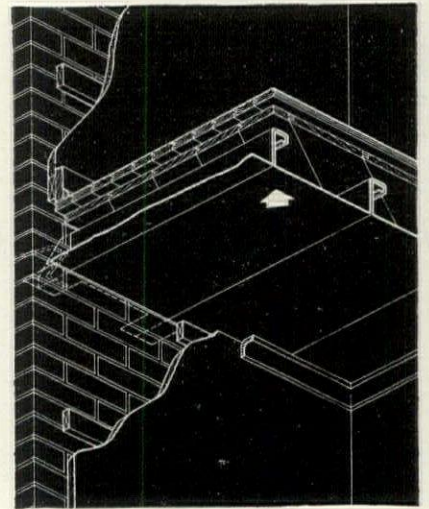
SCHLADERMUNDT NOWLAND
VAN DOREN GRAY

The new partners' individual records furnish a clue to what may be anticipated from this firm. Peter Schladermundt, before becoming a partner and design director of Norman Bel Geddes & Co., was chief designer of the New York Central "Mercury" and "Twentieth Century" streamliners while in the Office of Henry Drefuss. Harold Van Doren is author of the standard text, *Industrial Design* and winner of

(Continued on page 136)

STEELOX

panels save time



You can save construction time in your postwar work by using STEELOX floor-ceiling panels.

These interlocking units do two jobs at once by making a firm base for sub- and finish-flooring on the upper side, and a complete, ready-to-paint ceiling on the lower. Two men can lay 20 square feet in three minutes.

STEELOX panels will save money and time in other ways, too. They are easy to insulate, incombustible, and reduce the thickness of floor-construction by 50%. Write for a copy of the useful design and installation manual on STEELOX panels... on your business letterhead, please. Building Sections Dept., The American Rolling Mill Company, 1611 Curtis Street, Middletown, Ohio.



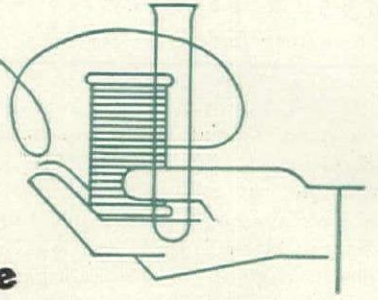
STEELOX

interior of

VELON*

every color practical

everything durable



"Interior of *Velon*" will be a feature of postwar for homes, offices, institutions—as well as for trains, planes, buses, cars.

It will mean an endless variety of colors—*practical in even the most delicate shades*—for upholstery and seating, for draperies, curtains, paneling, window screens, and for any kind of colorful trim.

It will mean not only new beauty—but a *new durability*, too! For *Velon*, in every form, has a unique ability to "take it" day after day, year after year, and always look new.

It can be wiped sparkling clean and dry in a few seconds, with water or with cleaning fluid. And *Velon* is highly resistant to fire, grease, acids, alkalis, solvents—is virtually indestructible.

Keep your eye on *Velon*. It will be a key word in your *basic English!*

P. S. For completely modern seats, make the cushioning *Foamex*.

ANOTHER CONTRIBUTION TO A BETTER WAY OF LIFE by

Firestone

*TRADE MARK • PRONOUNCED VEL-LÓN

FORUM OF EVENTS

(Continued from page 132)

the 1941 American Design Award; Mr. Nowland, special lecturer on product development and design at MIT, collaborated in the design of the first successful dive bomber, the Curtiss-Wright "Hell Diver", and was chief design engineer of the Futurama for the New York World's Fair. Miss Gray was office manager and director of information at the Fair.

NORMAN BEL GEDDES & Co. has recently added three partners; Robert L. Newman, Jr., who will be executive direc-

tor; Frederick H. Boynton, Controller, and Major Nathaniel B. Wales, Technical Director. Mr. Newman was formerly with Twentieth Century Fox Film Corp. Mr. Boynton has been for the past eleven years a staff member of Ernst & Ernst. Major Wales invented the Kelvinator refrigerator and founded that company. He is also the inventor of the Bendix Washing Machine and was recently assistant chief and consulting engineer to the Combat Vehicle Section of the Ordnance Department.

APPOINTMENT

Dr. L. N. Duncan, president of the

Alabama Polytechnic Institute, Auburn, Ala., announces the appointment of C. Turpin Bannister as Dean of the Institute's School of Architecture and Allied Arts. Mr. Bannister is a graduate of the School of Architecture, Columbia University and has done post graduate work at Harvard. In 1928 he held Columbia's Perkins-Boring Fellowship for foreign study and in 1937 was the first recipient of the AIA's Henry Adams Fellowship for advanced research in medieval architecture. Mr. Bannister joined the architectural faculty at Rensselaer Polytechnic Institute, Troy, New York in 1932.

FELLOWSHIP

The School of Fine Arts, University of Pennsylvania, announces that the John V. Horn Fellowship in Architecture providing \$1,000 will be available for the fall and spring terms of 1944-45, for graduate students in architecture.

AWARD

For excellence of design of the Jefferson Memorial in Washington, D. C., Eggers & Higgins, New York architects, were recently awarded a certificate of merit by the Washington Board of Trade. Certificates of this type are awarded by the Board to owners, builders, architects or designers of new or remodeled buildings in the metropolitan area of the Capitol erected within the last two years and found worthy of commendation.

EXHIBITION

Dutch architecture, old and new, is featured at an exhibition which opened recently at the Octagon house, national headquarters of the American Institute of Architects. Thirty by forty inch enlarged photographs were furnished by the Netherlands Information Bureau. Local architects were responsible for the arrangement of the show.

CLASSES FOR VETERANS

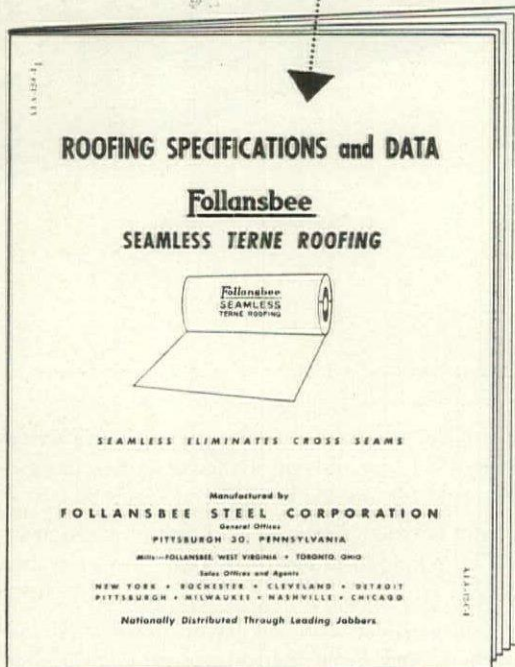
Dr. Nicholas Murray Butler, president of Columbia University, recently announced that the School of Engineering is opening its spring session courses free of charge to men and women engineering students who have been discharged by the armed forces.

Dr. Butler described the plan as being "designed to bridge over an emergency period in education. . . It is our hope that we can aid these men and women over the critical period of waiting until federal funds are provided for them to continue their engineering studies. It is highly desirable both for morale and education, that those who desire to do so be given the opportunity to resume their studies. . . It is also particularly important that

(Continued on page 140)

Send for this booklet now

Contains specifications, application details and important facts on roofing which the Architect can use to advantage. Free on request.



This booklet
should be
in your files
to assist you
in post-war
planning.

FOLLANSBEE STEEL CORPORATION

GENERAL OFFICES • PITTSBURGH 30, PA.



Sales Offices—New York, Rochester, Cleveland, Detroit, Milwaukee. *Sales Agents*—Chicago, Indianapolis, St. Louis, Nashville, Los Angeles; Toronto and Montreal, Canada. *Plants*—Follansbee, W. Va. and Toronto, Ohio

ELECTRICAL SHEETS & STRIP • ALLOY BLOOMS, BILLETS, BARS, SHEETS & STRIP • COLD ROLLED SHEETS & STRIP • POLISHED BLUE SHEETS SEAMLESS TERNE ROLL ROOFING

How Coleman Is Making It Easier To Design *More Salable Post-War Homes*

**THESE COLEMAN ADVANCEMENTS GIVE PRACTICAL HELP!
— IN PROVIDING AUTOMATIC HEAT, MORE LIVING-SPACE—
"HOUSE-SELLING" EXTRAS, INSIDE LIMITED BUDGETS**

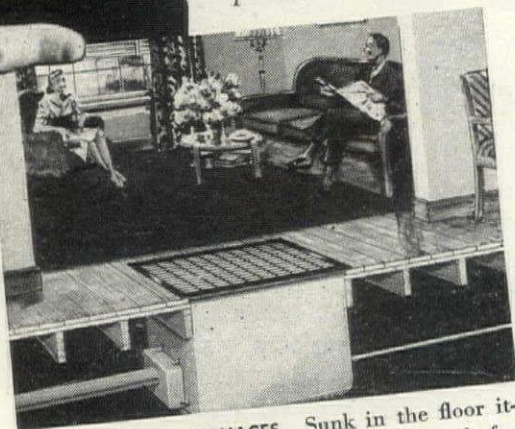
These Points Of Coleman Leadership Are IMPORTANT TO ARCHITECTS:

In 1941, Coleman led all others in sales of warm-air heating units. This leadership in sales came from leadership in design. Coleman's greater public acceptance will help sell Coleman Heat-Equipped homes. But more important, Coleman models will help you build homes with the "extras" people are going to demand.

For instance, the perfected Coleman Floor Furnace, and the new super-compact central-plant designs, require no basement. If you design a basement as part of the house, it can be extra (and highly salable!) living space. Or, you can divert the money for excavation to "more upstairs."

Most important: These Coleman heat plants will be fully automatic, to meet the demands of an estimated 80% of new home builders. Yet, with their low price and low cost for gas or oil, homes from \$2500 up can afford this luxury.

Get the whole picture! Write for your copy of Coleman's booklet, now going out to thousands of your prospective post-war customers: "The Inside Story Of Tomorrow's Home Heating." Full of meat for you, as well as home owners; and it's free. Write today!



COLEMAN FLOOR FURNACES. Sunk in the floor itself! Needs no basement. Improved principle for even heating; better circulation; warm floors. A practical, low-cost way to "area" heating; oil and gas models.



ADVANCED SUPER-COMPACT CENTRAL PLANT. Occupies space 2 feet square, yet delivers extremely large heat output. Gravity or blower types, oil and gas models. Goes anywhere in basement or first floor.

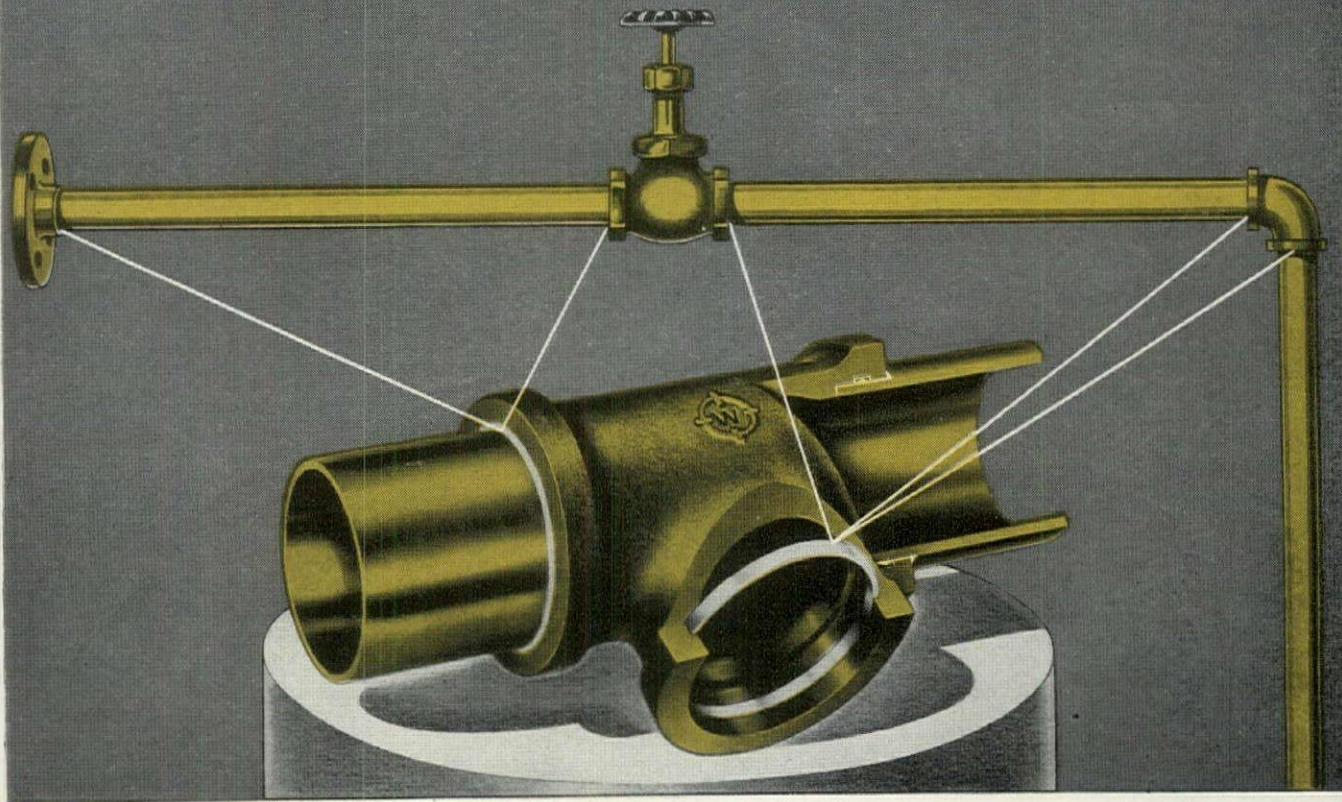
WATCH
THIS
NAME

THE "HOT" NAME IN HOME HEATING

Coleman

THE COLEMAN LAMP AND STOVE COMPANY • WICHITA • CHICAGO • PHILADELPHIA • LOS ANGELES

THE *Modern* METHOD OF JOINING COPPER AND BRASS PIPE



walseal

* VALVES
FITTINGS
FLANGES

makes joints stronger than the pipe itself

Save your clients the nuisance and cost of frequent pipe joint repairs by selecting Walseal products wherever brass and copper pipe is used. Walseal bronze valves, fittings and flanges make threadless connections that are leakproof and permanent — stronger than the pipe or tubing itself.

The ring of silver brazing alloy that is incorporated into the port openings of each Walseal product melts when heated with an oxyacetylene torch. This alloy penetrates both pipe and fitting thereby making

a strong, one-piece joint. This Silbraz* (silver-brazed) joint cannot break or creep under any pressure, temperature, or shock which the pipe itself can withstand.

Walseal valves and fittings can be easily installed. In cramped quarters their easy installation is a particular advantage.

For full details on Walseal valves, fittings, and flanges—as well as the complete line of valves and fittings made by the Walworth Company — write for a free copy of Walworth Catalog 42.



Walworth Catalog 42 gives data on all Walworth products, and includes 78 pages of helpful engineering information. Send for your copy.

* Registered Trade Marks.



WALWORTH

valves and fittings

60 EAST 42nd STREET, NEW YORK 17, N.Y.



DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

**YOUR CLIENTS WILL WANT
DURABLE SHEET METAL WORK
ON S-DAY**



WHEN Surrender Day came in the other World War, ARMCO Ingot Iron was well known to architects and their clients. Roof drainage systems, roofing and siding, ventilators, duct-work and other sheet metal installations that go back to 1919 are in good condition today—25 years later. This highly refined iron has the longest service record of any low-cost iron or steel sheets.

Where post-war structures will require painting, plan to use ARMCO Ingot Iron Galvanized PAINTGRIP Sheets. These Bond-erized sheets have a neutral surface film

that takes and preserves paint. It insulates the paint from the zinc—retards drying out of paint oils and prevents early peeling. Exposure tests show that good paint lasts several times longer on PAINTGRIP than on ordinary galvanized metal.

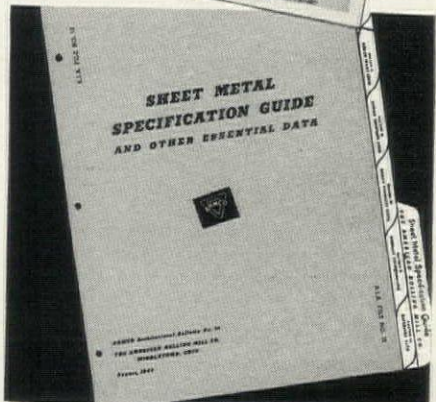
Your clients can get ARMCO Ingot Iron for essential repair work now; but after the war you can specify it freely whenever

**HELP FINISH THE FIGHT—
WITH WAR BONDS**



you want an inexpensive metal that will give long service with low upkeep cost. The American Rolling Mill Co., 1311 Curtis St., Middletown, O.

FOR EXPORT: THE ARMCO
INTERNATIONAL CORPORATION



Write for your "GUIDE"

This 42-page portfolio gives quick information on architectural applications of ARMCO Ingot Iron and other Armco special purpose sheet metals.

It covers general specifications, cost comparisons, and advantages of Galvanized ARMCO Ingot Iron, ARMCO Galvanized PAINTGRIP and ARMCO Stainless Steels.

Methods of installing galvanized metals and stainless steel are shown. Convenient reference data includes tables on standard gage weights, thermal expansion coefficients and many other helpful facts.

If you are an architect or contractor, write us on your firm letterhead and we'll send you a copy without charge. The American Rolling Mill Company, 1311 Curtis Street, Middletown, Ohio.

SPECIAL PURPOSE STEELS FOR TOMORROW'S BUILDINGS

FORUM OF EVENTS

(Continued from page 136)

those who have outstanding scientific and technical ability complete their education without delay. If the war is prolonged, their services will be essential in carrying on American war production."

ANNIVERSARY

For a decade and a half the Museum of Modern Art has presented an uninterrupted sequence of exhibitions most of which remain unchallenged in quality and importance. Painting and sculp-



MUSEUM PUBLICATIONS THAT SET A NEW STANDARD FOR ART BOOKS

ture, architecture and planning, industrial art, photography, dance and theater design have been reviewed. From the aspects of material, selection and presentation, these shows and the many

circulating exhibitions have not only provided contemporary art with the necessary stimulus of widespread public interest, they have also taught the art-conscious public to expect more than the epitaphic finality of a dozen great masters cluttering the walls of a single room. They have been highly instrumental in eliminating the old belief that acres of art constitute the basis of a cultural education. The various books published in connection with the major exhibits originally established an unparalleled standard for museum publications and have succeeded in producing a nationwide attempt to improve the interest and quality of programs and brochures.

To celebrate its fifteenth anniversary the Museum will present its largest and most comprehensive exhibition, *Art in Progress*, to open May 24th. Although the principal concern will be the development of modern art in its various phases during the past fifteen years, some sections will review the forerunners of today's art; some will foreshadow postwar developments.

Aside from the Museum's selection of the 47 best buildings of the last ten years, an important feature will be the industrial design section assembled and installed by Serge Chermayeff. It will trace the development of many tools, instruments and labor-saving devices. The newest object will be an inflated chair made of flexible plastic very much stronger than rubber. The entire chair frame and cushion, when folded and deflated, can be carried in a briefcase.

CORRECTION

In February the FORUM, describing the expansible house design invented by William B. Stout, said: "Recently ordering 12,000 houses from Palace Corp., the Federal Public Housing Authority said more orders may follow."

Further investigation indicates that Palace Corp. has built approximately 12,000 housing units of various kind for government agencies during the last two and one-half years but that recent orders for 12,000 houses have not been placed with Palace by FPHA. The FORUM regrets this mis-statement of facts.



A Hint FROM AIRCRAFT CARRIERS TO ARCHITECTS AND ENGINEERS

Since December 7, 1941 Sedgwick equipment has gone to sea on hundreds of ships. As aircraft elevators on carriers—as continuous-feed ammunition hoists on destroyers, DE's, battleships, cruisers, troop transports and merchant vessels—as between-deck elevators, galley Roto-waiters and deck machinery on every kind of ship. Efficient? Accurate? Reliable? It has to be! Sedgwick Roto Drive does the job.

Roto Drive is an exclusive Sedgwick development that is the main reason for the successful operation of Sedgwick equipment.

It is not a product. It is a principle of operation based on the controlled movement of an endless chain.

Because it is so simple it has many uses in many fields where the movement of men, material and merchandise poses perplexing problems.

We think Roto Drive can help solve those problems. But we don't ask you to take our word for it. We don't expect you to.

We hope instead that you're skeptical—that you will require proof of Roto Drive's adaptability and performance. We hope you will want to see how Roto Drive can serve to solve your problems and your client's problems.

All you have to do is send for a Sedgwick engineer. We think you'll be convinced that the Sedgwick Roto Drive can solve your "man" handling and materials handling problems by doing the job better and faster.

You will see, too, how Roto Drive helps keep costs down by increasing efficiency through safer, surer, trouble-free operation.

"MEN WHO KNOW ARE SOLD ON SEDGWICK"

Sedgwick MACHINE WORKS, Inc.

140 WEST 15th STREET NEW YORK 11, N. Y.

Since 1893 designers and manufacturers of specialized lifting equipment

ELEVATORS • HOISTS • ROTO-WAITERS • MATERIALS HANDLING EQUIPMENT

PROJECT IN STEEL



The practical and profitable replacement of run-down buildings with modern multiple dwellings will undoubtedly involve many innovations in building methods and materials. It is an assignment for which Stran-Steel is ideally suited.

This light-gauge steel framing material is so versatile and adaptable that architects find it answers many problems of advanced design. Its strength, lightness, resistance to sagging and dry-rot, and the economies it effects in materials, time and labor are of special importance to investment-wise builders.

Stran-Steel's extensive experience in the production of framing systems for multiple dwelling projects, group housing and allied structures, as well as in the manufacture of all-steel military buildings, will be of particular usefulness to the construction industry.



Manufacturer of the U. S.
Navy's Famous Quonset Hut

STRAN STEEL

DIVISION OF GREAT LAKES STEEL CORPORATION
1130 PENOBSCOT BUILDING, DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

Post-war planning for warriors

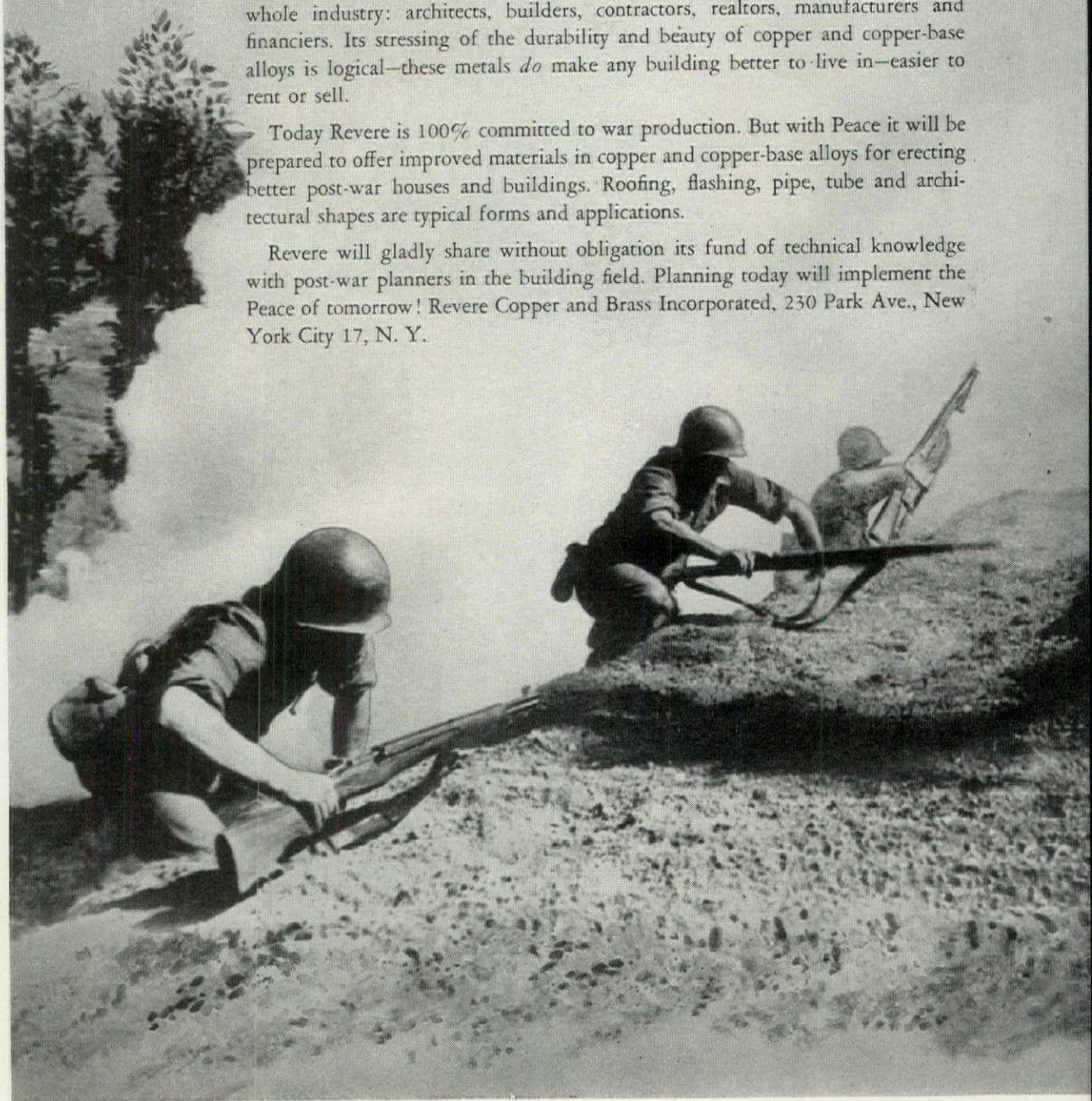
Today is not too early to think of tomorrow "when the boys come marching home again". How can they best be honored? How best can the community express its gratitude and at the same time keep alive the glory of their sacrifice and service?

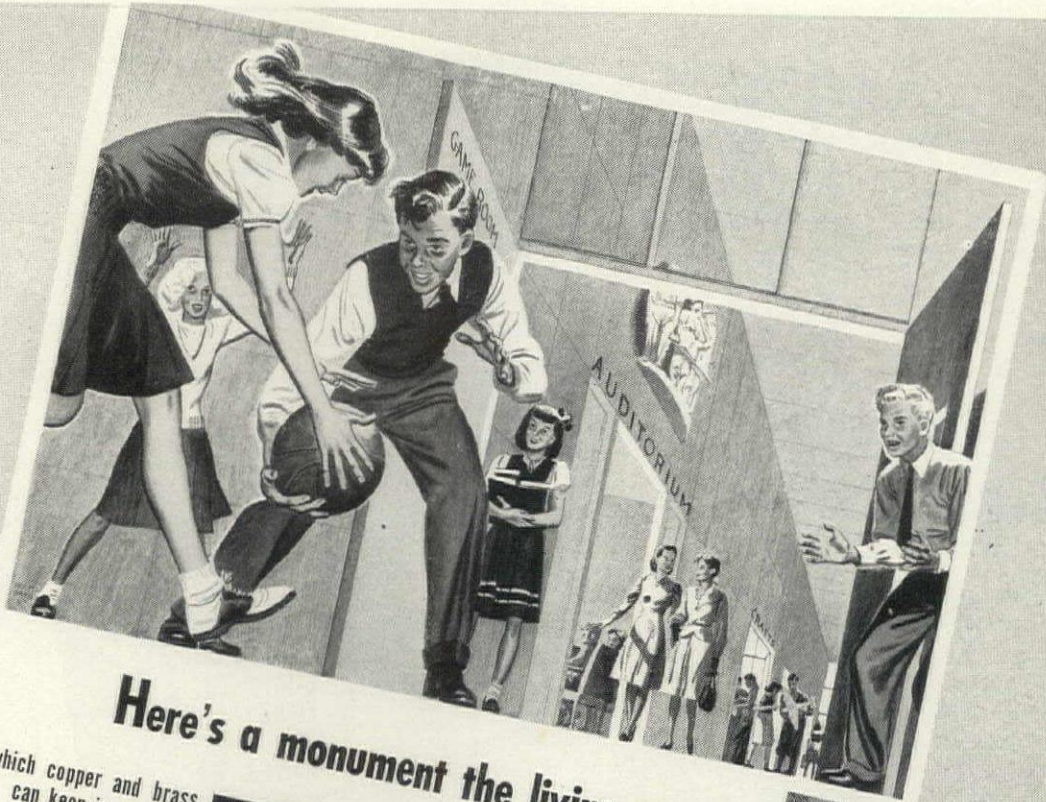
We believe that Mr. Dinwiddie's proposed Church Community House provides a solution of considerable significance and highlights a well-defined trend in future war memorials.

Revere feels that its current national advertising featuring the ideas of various architects and designers on the over-all subject of post-war building benefits the whole industry: architects, builders, contractors, realtors, manufacturers and financiers. Its stressing of the durability and beauty of copper and copper-base alloys is logical—these metals *do* make any building better to live in—easier to rent or sell.

Today Revere is 100% committed to war production. But with Peace it will be prepared to offer improved materials in copper and copper-base alloys for erecting better post-war houses and buildings. Roofing, flashing, pipe, tube and architectural shapes are typical forms and applications.

Revere will gladly share without obligation its fund of technical knowledge with post-war planners in the building field. Planning today will implement the Peace of tomorrow! Revere Copper and Brass Incorporated, 230 Park Ave., New York City 17, N. Y.





Here's a monument the living can use

— which copper and brass can keep in use



comfortably accommodated. Likewise Veterans organizations. Many church or community functions involve a luncheon or are flexible and include a modern kitchen. A small Library, a Game Room and Nursery Room also enter into the design. The Entrance Lobby is provided, too.

Already many communities are planning how best to honor their war heroes. I have instead of some conventional monument, why not plan to build a Church Community House? It could honor all veterans and, in addition, become the very heart of all those cultural and social activities designed to build better community morale. It might be denominational, interdenominational or even undenominational — depending upon circumstances.

fought for the Great Cause. Here a has-relief, plaques, pictures and other recordaments could extol their sergotten. They sought to preserve and perpetuate be not forgotten.

Reverse is glad to help plan Tomorrow. Naturally, if fee base alloys must play an in protection, improve heating at different ways, they make an to rent, or to sell.

Naturally, in this limited space barest outline of a Church House could be given. If you FREE a detailed, illustrate just write today to Reverse.

JOHN E. DINWIDDIE

BUY MORE WAR BONDS

REVERE
COPPER AND BRASS
Founded by Paul
Executive Office: 230 Park Ave.



“— which copper and brass can keep in use”

In designing his CHURCH COMMUNITY HOUSE—described on the opposite page—Mr. Dinwiddie has made free use of copper and brass. Such a building must be built to last for many years. Hence, copper is naturally employed in give adequate weather protection, season in and season out, in sunshine and in storm. In this connection, the use of copper for the visible flashing or coping—edging the roof—is highly significant.

are standard for both new building and remodeling. They're specified for roofing, flashing, gutters, downspouts, weather stripping, terrazzo-proofing. Ideal for non-rusting hot and cold water lines; heating and air conditioning lines; storage tanks; thresholds, window frames, doors and for many other uses. Reverse copper, brass or bronze accessories add beauty inside and outside the house. Copper gives longer life to any building anywhere, any time, because it protects, preserves, perpetuates.

Elsewhere, among many uses, bronze, a copper alloy, serves to make window and door frames tight and trim. It is also employed in the hot and cold water system and for air conditioning and refrigeration.

After Victory, Reverse products will again be available for all building purposes. Distributors throughout the U.S.A. will be then able to supply builders and contractors. Why not begin shaping now your plans for post-war days? We'll be glad to discuss, without obligation, any particular building problem you may have. Write Reverse Executive Office.

BUY MORE WAR BONDS TODAY
REVERE
COPPER AND BRASS INCORPORATED
Founded by Paul
Executive Office: 230 Park Ave., New York 17, N. Y.

This advertisement appears in The Saturday Evening Post, April 15, 1944.



"Pardon me, but is this place air conditioned?"

Won't this also be their question when movie-goers go shopping?

MILLIONS of movie-goers have had personal "demonstrations" of air conditioned comfort—and from that experience has come a new yardstick for measuring rental values.

So in this cartoon . . . reproduced from a G-E advertisement in *Better Theatres and Modern Theatre* . . . there's more truth than frivolity for architects and for business management also.

Forward-looking groups are "writing" air conditioning into the plans for more and more of tomorrow's buildings. You too might like to know more about the ways in which the public's growing interest can help to stimulate postwar rentals.

You will find definite advantages in turning to G-E for air conditioning equipment . . . the advantages resulting from G-E's unified responsibility in the design of all important system components . . . and from widespread installation and servicing facilities through authorized dealers and contractors. You'll find new features, too, in G-E postwar equipment—such features as greater economy, compactness, and flexibility.

☆ BUY WAR BONDS ☆

General Electric Company, Air Conditioning and Commercial Refrigeration Div., Section 4135, Bloomfield, N.J.

Air Conditioning by
GENERAL  ELECTRIC

Hear the General Electric Radio Programs: The "G-E ALL-GIRL ORCHESTRA," Sundays 10 P. M., EWT, NBC . . . "THE WORLD TODAY" News, Every Weekday, 6:45 P. M., EWT, CBS



After Wartime
Fuel Shortages...

Just Try to Sell a "Porous" House!

No one has to *sell* insulation anymore.

People have learned the value of insulation the hard way.

Caught in the trap of wartime fuel shortages, they discovered the truth of the old saying, "you pay for insulation whether you use it or not."

All too many found their porous, heat-leaking walls and ceilings cold and uncomfortable and wasting precious fuel.

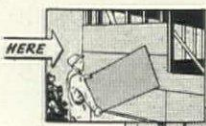
So they're wiser today... they've *suffered* from uninsulated rooms. They're ready to accept the idea of a completely insulated house... insulation all around... the Flintkote way.

In the Flintkote Insulated Wall, your clients get effective thermal insulation, *plus* structural strength and rigidity!

And all in one simple, labor-saving method of construction... at one low cost!

When you design homes to *sell* after the war, figure on Flintkote's Insulation Board Products: Asphalt Sealed Sheathing, Insulation Lath and Decorative Tile and Plank, made in the most modern and up-to-the-minute scientific plant in the industry.

Use Flintkote Insulation Board Products



Outside walls, sheathed with Flintkote Asphalt Sealed Sheathing will give you 2 to 3 times the insulation value of ordinary wood sheathing. Providing structural strength, this asphalt coated product builds as it insulates.

... AND HERE ...



Inside walls and ceilings are resilient to shock and movement when Flintkote Insulation Lath is used as a plaster base. An ideal insulator, it provides a much stronger plaster bond than ordinary wood lath.

Living rooms, dining rooms and bedrooms are made beautiful with Flintkote Decorative Insulation Tile and Plank adding color to walls and ceilings. In green, buff, white and the famous Decoblend (blending coral tones). Flintkote's "blind nailing joint" conceals all nail heads.



AND HERE...

AND HERE

Interior walls and ceilings of attic and basement "extra" rooms insulated with Flintkote Building Board and Decorative Tile and Plank have a practical light-reflecting finish.



THE FLINTKOTE COMPANY

30 Rockefeller Plaza, New York 20, N. Y.

Atlanta · Boston · Chicago Heights · Detroit
East Rutherford · Los Angeles · New Orleans · Waco

Figure on FLINTKOTE for 'Forty-Four!

air. ~~may be costing you~~ plenty!

The air in your plant may be costing you plenty. Air-borne particles, 100 times smaller than the eye can see, cause shutdowns, ruin products, contaminate atmospheres and reduce the efficiency of your employees.

Conventional air cleaners can't remove these microscopic particles. But Westinghouse PRECIPITRON, cleaning air electrostatically, traps particles as small as 1/250,000 of an inch . . . even removes haze, welding fumes, tobacco smoke.

Really clean air is vital to production . . . to good working conditions and good health. Check the advantages of PRECIPITRON now . . . for war production or for early postwar uses in other fields. Westinghouse Electric & Mfg. Co., Dept. 7-N, East Pittsburgh, Pa.

J-04002

A new principle for cleaner air

Dirt, smoke and soot—

passes through an electrostatic field

receives a positive (+) charge

and is drawn to a collection plate of opposite polarity (-)

where it remains until flushed down the drain.



Westinghouse Precipitron

PLANTS IN 25 CITIES OFFICES EVERYWHERE

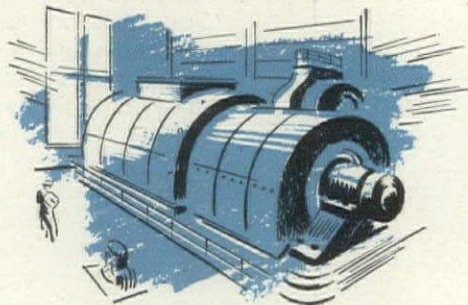
Precipitron Applications



MACHINERY & PRECISION INSTRUMENT PLANTS . . . Precipitron sweeps the air clean of tiny abrasives and corrosive particles that damage superfinished surfaces. In binocular assembly for example, Precipitron prevents dust from entering the enclosure between lenses which would later settle on lens surface.



TEXTILE MILLS . . . Installed in mills as part of the air humidifying and distributing system, Precipitron removes damaging particles before they soil yarn or thread. All smoke, dirt, soot and dust is banished during drying, spinning, and winding operations. Precipitron operation is simple . . . noiseless.



STEEL MILLS—POWER PLANTS—SUBSTATIONS . . . Precipitron effectively reduces maintenance shutdowns by eliminating the excessive dirt on machine windings which causes temperature rises and fires . . . prevents electrical breakdowns caused by leakage over the surface of dirty insulation . . . keeps machine ventilating systems dirt free.



CHEMICAL PLANTS . . . In plants where microscopic specks can cause imperfections in products and processes . . . or wherever miasma-free conditions are essential . . . Precipitron is a necessity. For example, Precipitron is being used in military photographic labs where a speck of dust might hide a Nazi factory in an aerial photo.



LABORATORIES . . . Regardless of outside air conditions, laboratories equipped with Precipitron enjoy perfectly cleaned air. The risk of errors in analysis . . . damage to sensitive equipment . . . threat to manufacturing or assembly operations due to dirt-laden air is positively eliminated.



MACHINE TOOL INSTALLATIONS . . . Oil mist caused by high-speed cutting, grinding and machining is dispelled by Precipitron. Condensation of oil on lighting fixtures and bus ducts is eliminated . . . oil coolant can be recovered for re-use. Exhaust air is cleaner than surrounding shop air and can be re-circulated.

the Electronic Air Cleaner



BOOKS

(Continued from page 28)

POSTWAR PLANS OF THE UNITED NATIONS.
By Lewis L. Lorwin. The Twentieth Century Fund, New York. 298 pp. 5 x 8. \$2.50

This book is not quite as electrifying as its title. The fact that the United Nations actually have some postwar plans down on paper will be news to a great many readers. Anyone who knew this in advance is either clairvoyant or the possessor of inside information. However, the Twentieth Century Fund is not one to tamper with facts and they say it is so.

What the book actually contains is a condensed review of the programs and goals for postwar reconstruction as they have been stated by governments and organized groups. It presents the social and economic plans of the United Nations, including those of the governments in exile. It is only fair to warn the reader right now against getting his hopes up. As might be expected, most of the plans are conspicuous by their incompleteness and their apparent lack of international coordination. But since the book makes no attempt to judge or evaluate, it succeeds in fulfilling its primary aim: to assist the cause of the United Nations

by presenting the clearest possible summary of the various plans and programs for a postwar settlement on the basis of common aims and ideas.

Logically enough, the United States has the greatest number of individual proposals with a refreshing variety of viewpoints. Grouped together and viewed with dispassion, the final effect is positively quaint. Most of the organized private groups appear to have been caught napping and for lack of a quick answer, they simply dusted off their prewar principles, cleared their throats and took up where they dozed off. A few defiant groups like the A.F. of L. and the C.I.O. baldly state that they have not as yet formulated any postwar plans. This abandonment appears to be exclusively an American trait—or maybe it is just our innate honesty. At any rate, everyone else seems to have done a good deal more thinking and organizing.

Construction, housing and planning appear to be subjects of importance the world over. The interest lies not in the familiar activities of the United States and Great Britain but in the remarkably complete plans of some of the seemingly remote countries.

Defying the discouraging plight of the homeland, the Belgian government in-exile has an extremely active Commission for the Study of Postwar Problems under the authority of the Prime Minister. Its housing policy, an integral part of the public works program, includes not only the provision and improvement of dwellings but also the supplying of house furnishings and equipment. It will be incorporated with city and rural planning. One proposal under consideration is that of developing new villages on the fringe of large urban agglomerations. These villages would be semi-public institutions financed by interest-free state loans to be repaid in thirty year installments. The properties would be restricted in regard to sale and would provide workers with a house and plot suitable for small-scale gardening during periods of unemployment, etc. During such periods, payments on the property would be suspended and its use regarded as a part of the unemployment benefits.

Australia, Belgium and Czechoslovakia are all examples of a united and determined effort. The contrast of these programs to the garbled attempts being made in other corners of the world are stimulating and indicative. Survey or no survey, the fact remains that it is extremely interesting to find out just what is going on and what can be anticipated in the various countries. The relative importance of eco-

(Continued on page 152)



GLUE NEWS

that is Good News!

Monsanto, major producer of chemicals and plastics . . . and Laucks, "America's glue headquarters" . . . now united.

What is the significance of this recently announced joining of interests between two organizations that have served the construction field so long?

It means that the Laucks organization will be *better equipped than ever before* to supply its specialized service, tailored to individual needs and problems. To the *continuing and expanding* Laucks research and manufacturing facilities, the broad research-and-raw-materials resources of Monsanto now are added, helping us help you all the more.

The same highly specialized

Laucks technical co-operation . . . the same thorough-going study of individual problems in Laucks laboratories . . . the same trained and experienced field, plant and laboratory personnel . . . *all remain unchanged.*

Replacing *nothing* but adding to *everything* involved in Laucks service . . . *that's* the glue news that is good news from America's Glue Headquarters!

I. F. LAUCKS, Inc.

LAUXITE RESINS—LAUXEIN GLUES—
LAUX REZ resin sealer and primer.

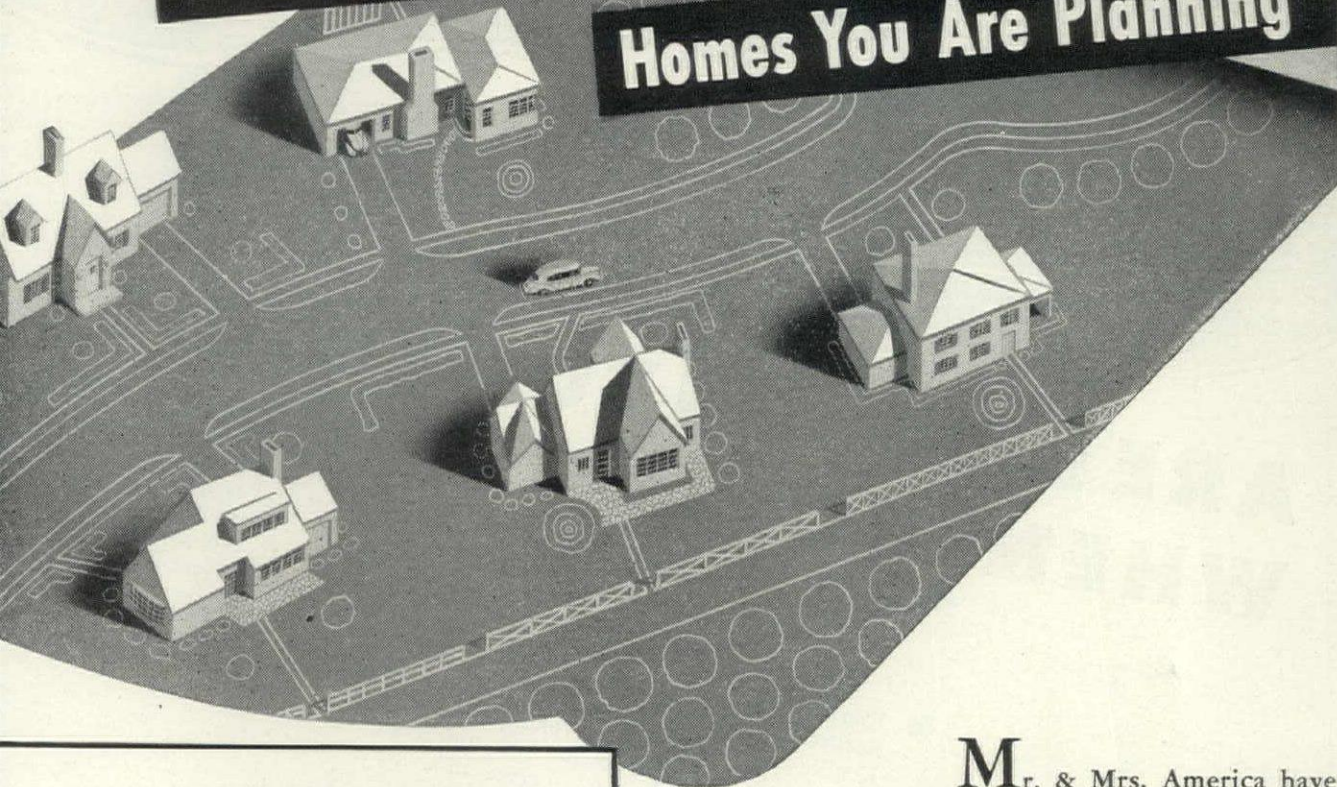
CHICAGO (2) 6 N. Michigan Ave.; LOS ANGELES (1) 859 E. 60th St.; SEATTLE (4) 911 Western Ave. *Factories*—Seattle, Los Angeles, Portsmouth, Va., Lockport, N. Y. *In Canada*—I. F. Laucks, Ltd., Granville Island, Vancouver, B. C.; Hercules-Lauck-Merritt, Ltd., Stanbridge, Que.

LAUCKS CONSTRUCTION GLUES

CONSULT LAUCKS . . . AMERICA'S GLUE HEADQUARTERS

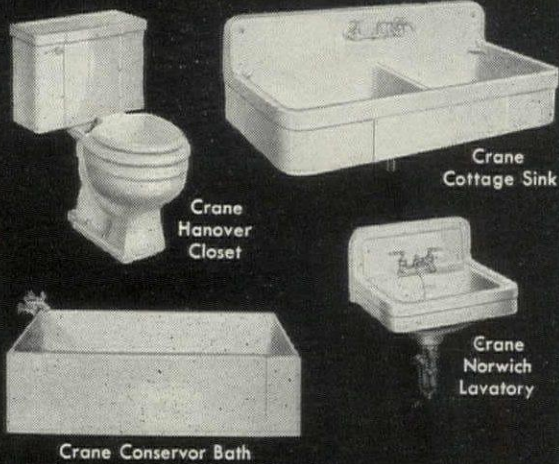
Include **CRANE QUALITY** in the

Homes You Are Planning



Quality Plumbing NOW AVAILABLE

The bathroom and kitchen fixtures shown here are typical of the many non-critical plumbing items you may obtain now without priority for today's construction projects. Orders will be filled as rapidly as production facilities permit.



Mr. & Mrs. America have definite ideas about the plumbing for their postwar homes! They want *quality*—more beauty, more comfort, more convenience. That's why it's good business—shrewd foresight—to include Crane quality plumbing in the homes you are planning for tomorrow.

There's another reason, too, why Crane plumbing will have powerful appeal for your postwar prospects. For Crane has made extensive, nation-wide surveys to determine what people will want in plumbing equipment. Findings of this survey will be embodied in the Crane line of tomorrow—a line that is already far past the experimental stage.

Through colorful, national advertising, Crane is today stimulating a desire for new homes—"pre-selling" your future customers by urging them to step-plan their homes now. And to translate that desire into action, a portfolio of ideas on bathroom and kitchen planning is being offered.

Let Crane products work *for* you to make your postwar sales more profitable!

CRANE

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS



ARE **FACTS** YOUR GUIDE WHEN BUYING FLOOR

- Kentile, because of its composition, never "holds" dirt and is hardly ever stained. Plain soap-water mopping cleans it — fast and easy. Occasional waxing improves its appearance but is not necessary. Not even greases, of *any* kind, will affect the special Grease-proof Kentile.
- Kentile is virtually wear-proof. For instance, Kentile laid in Rockefeller Center corridors ten years ago is still excellent. Kentile bears 1,000 pound rolling loads without denting or marking. Its resistance to moisture and alkali makes Kentile just as long lasting on concrete in contact with earth.
- Kentile offers an *unlimited* number of beautiful patterns and color combines. Set tile by tile (not in sheets), Kentile's 15 tile sizes and 44 plain or richly marbelized colors make possible designs to enhance *every* interior. The colors go through to the back — cannot rub off.
- Kentile is one of the *lowest cost* floorings made in America.
- Kentile is available now, without priorities — speedily. Authorized installers are established everywhere. No other material can be laid faster or with less fuss and dust.
- Kentile floors, laid tile by tile, can always be inexpensively altered in separate areas.
- Kentile is unusually comfortable and quiet underfoot (being resilient) and remains that way because it never becomes uneven or hard.
- Kentile — smooth and slick to the eye — really affords a safe, sure-tread, non-slipping surface.



Kentile offers 14 advantages. At least know about ALL of them. Without obligation write for Kennedy's free, interesting, helpful color book about floors. Write to DAVID E. KENNEDY, Inc., 58 Second Avenue, Brooklyn 15, N. Y.

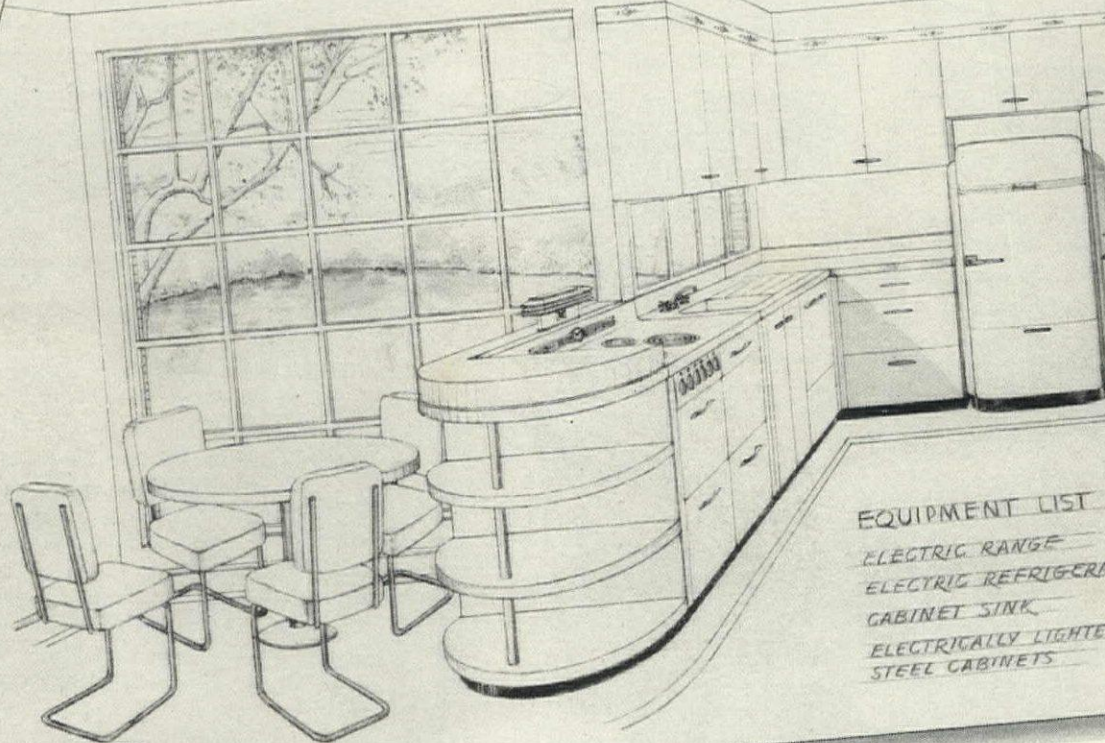
KENTILE

Asphalt Tile
Trade Mark Reg.



BE MODERN, MISTER! Is your thinking about asphalt tile still back in the days when architects said "never use asphalt tile on wood"? If so, you've been old-fashioned for about three years. There once was some sense to that prejudice — when asphalt tile was occasionally made too brittle and installing techniques had not been perfected. But nowadays Kentile is regularly laid right on to reasonably firm wood floors with boards up to 3" wide and on almost any kind of wood floor when our asphalt underlayment or Plywood is used. It stands up perfectly, is wearing excellently in hundreds of such cases. Ask us for proof.

TYPICAL HOTPOINT ELECTRIC KITCHEN
FOR A \$5,000 HOME



EQUIPMENT LIST
ELECTRIC RANGE
ELECTRIC REFRIGERATOR
CABINET SINK
ELECTRICALLY LIGHTED
STEEL CABINETS

77%

of Postwar Homes will be priced to include ELECTRIC KITCHENS

"More than seven out of ten postwar homes will cost \$3,000 or over."

That is the prediction of the United States Chamber of Commerce.

Buyers of those homes will be able to afford Hotpoint Electric Kitchens. And results from Hotpoint's advertising during the past two years show that they want them.

NEW POSTWAR HOMES, to be truly modern, must have new kitchen equipment. Appliances in the average kitchen today—like the average automobile—are well beyond the replacement age.

Postwar home buyers don't want the old-style stripped kitchen, but one that is "planned"—complete with all equipment new and modern. To American

women today, "a home is only as modern as its kitchen."

Take advantage of this trend. Homes with Hotpoint Electric Kitchens are complete homes...they create satisfied clients...they move faster, because they are truly modern. And financing costs for speculative building are reduced by faster turn-over.

Hotpoint offers you two advantages.

First, modern, finest quality electric kitchen equipment. Second, "Hotpoint Kitchen Planning Service," by an expert staff of kitchen designers—especially for builders and architects. Write for details today.

Edison General Electric Appliance Co., Inc., 5651 West Taylor Street, Chicago 44, Illinois.

In most states, all Hotpoint Kitchen equipment can be included in F. H. A. loan.

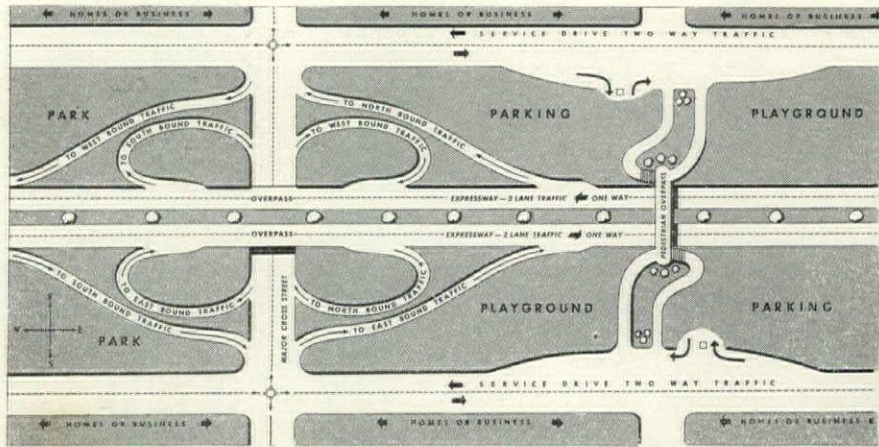
ELECTRIC Hotpoint KITCHENS

REFRIGERATORS • RANGES • WATER HEATERS • WASHERS AND IRONERS • CLOTHES DRYERS • AUTOMATIC DISHWASHERS • ELECTRASINK • STEEL CABINETS

BOOKS

(Continued from page 148)

conomic versus social measures, the formulation of sound and unsound reconstruction policies are evident. As far as trying to deduce the road which will be followed in our own country, by circumstantial evidence it can be assumed that one guess is as good as another. If the reader's interest is limited to our domestic problems, the book still offers one dividend: the names of the 32 United Nations can be found right on page one.



EXPRESSWAY AND INTERSECTION ADAPTABLE TO LONG RANGE PROGRAMS

MODERN HIGHWAYS. By G. Donald Kennedy. 32 pp. Illustrated. 12x9.

This pamphlet issued by the Conference Committee on Urban Problems, U. S. Chamber of Commerce, is a sort of motorized *Planning With You* (see ARCH. FORUM, Aug. '43) which offers an elementary lesson in traffic appreciation patterned after *Freeways for the Region* issued last year by the County of Los Angeles. While *Freeways for the Region* proposes specific measures for the county taxpayers, *Modern Highways* simply outlines the procedure for highway planning in any American community. It seems, however, that after the widespread newspaper publicity accorded to highway engineering, safety drives, etc., the general public is capable of understanding a more thorough and far reaching treatment of the subject. As it is, the average reader does not close the covers with the conviction that he has grasped the entire picture of modern highway construction and urban traffic control. It all seems too simple to be true, and is. If, however, there still remain a few individuals who don't know about the hazards of busy intersections and haven't heard about express highways and postwar planning, then the Conference Committee has the answer for them.

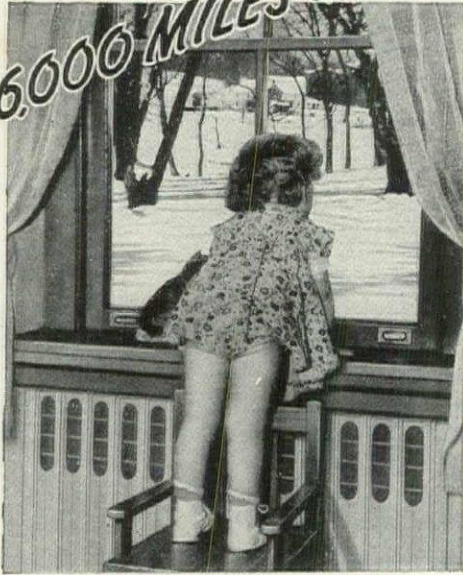
MATERIALS AND METHODS OF ARCHITECTURAL CONSTRUCTION. By Charles Merrick Gay and Harry Parker. John Wiley & Sons, Inc., New York. 622 pp. 5½ x 8. Illustrated. \$6.00

The new edition of this ten year old text book contains for its principal attribute correlated treatment of materials and practices. It is presented as a convenient reference book rather than an exhaustive treatise.

The subject matter is admirably arranged for quick reference to a specific point or more leisurely study of broader subjects. It was further compiled to assist in preparation for Civil Service and state board examinations.



186,000 MILES PER SECOND-
WITH
NO
DRAFTS



Did you ever hear of anything traveling that fast without creating a draft?

Radiant Rays, the kind you get from the sun or a Burnham Radiator, do exactly that — giving off their Radiant Warmth to everything in their path.

With Radiant Heat, you feel the COMFORT but not the HEAT — so specify Radiant Heat and be sure to include Burnham Boilers and Radiators.

Burnham Boiler Corporation

Irvington, New York Dept. J
Zanesville, Ohio, Dept. J

Export Dept.: 50 Church St., New York 7, N. Y.



GOOD THEN...

The passing of years has proved from the very first the wisdom of architects' preference for Truscon "Clerespan" Steel Joists. This exceptional product meets the requirements of great floor areas without obstructing columns, and with a maximum of safety in roof construction.

READY AND BETTER WHEN...

Nearly three years of armament production has given Truscon new experience and skill in steel design and fabrication.

We shall be prepared to supply improved Truscon "Clerespan" Steel Joists when our wartime duties are fulfilled and civilian building again is resumed.

TRUSCON

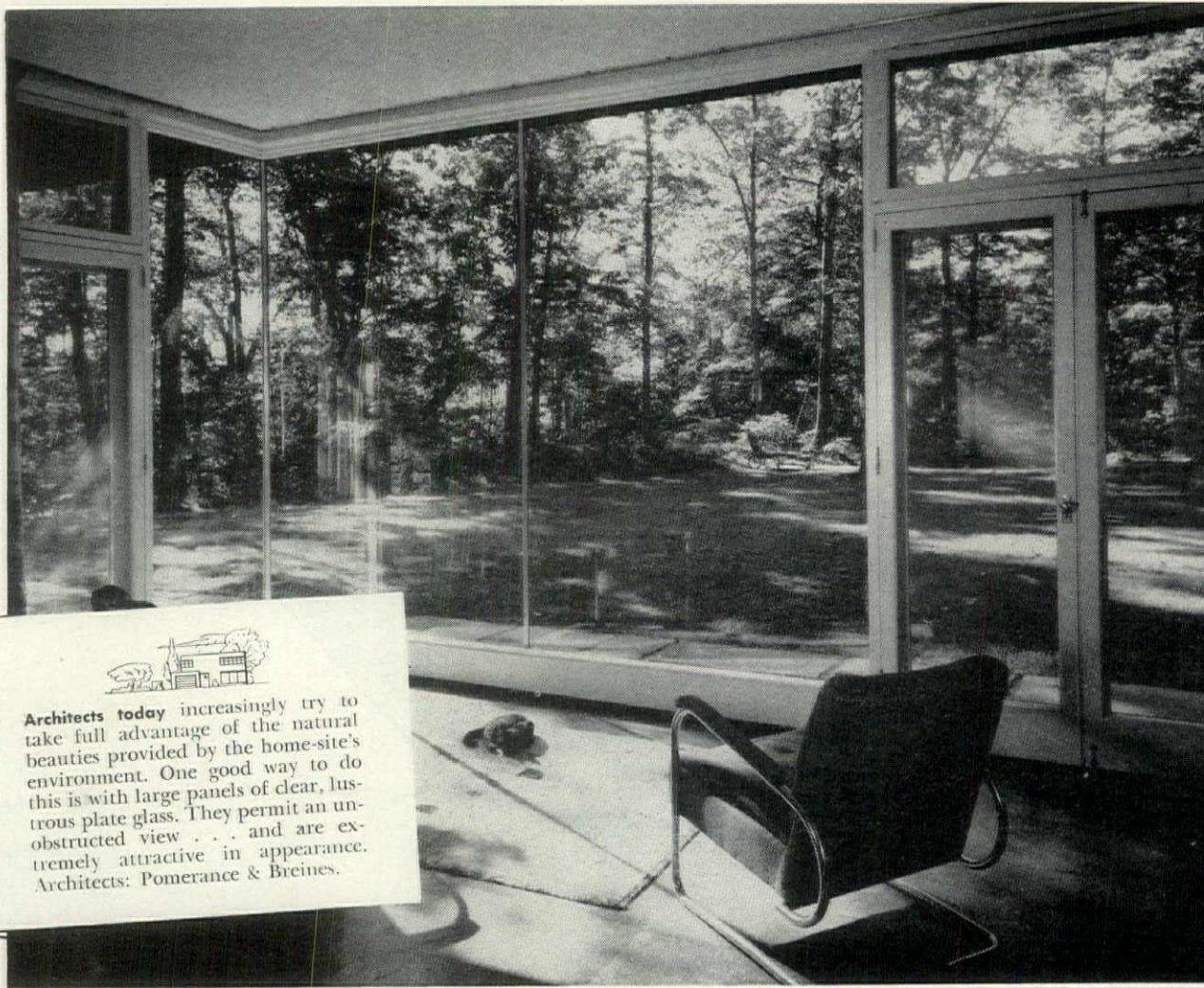
Steel Company

YOUNGSTOWN 1, OHIO

Subsidiary of Republic Steel Corporation

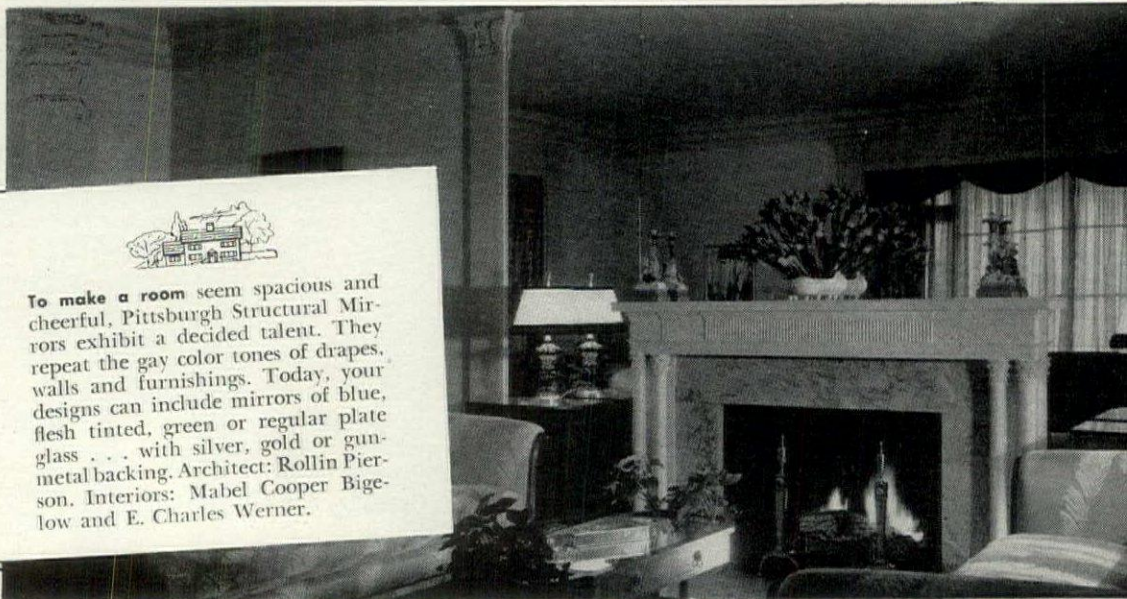


Residential Double-Hung and Casement Windows, Intermediate Casements; Detention, Donovan Awning Type, Maximal Louver Type, Projected, Pivoted, Double-Hung, and Continuous Windows (and Operators); and a Complete Line of Steel Joists, Metal Laths, Steeldeck Roofs, Reinforcing Products, and Steel Doors for Buildings and Hangars.

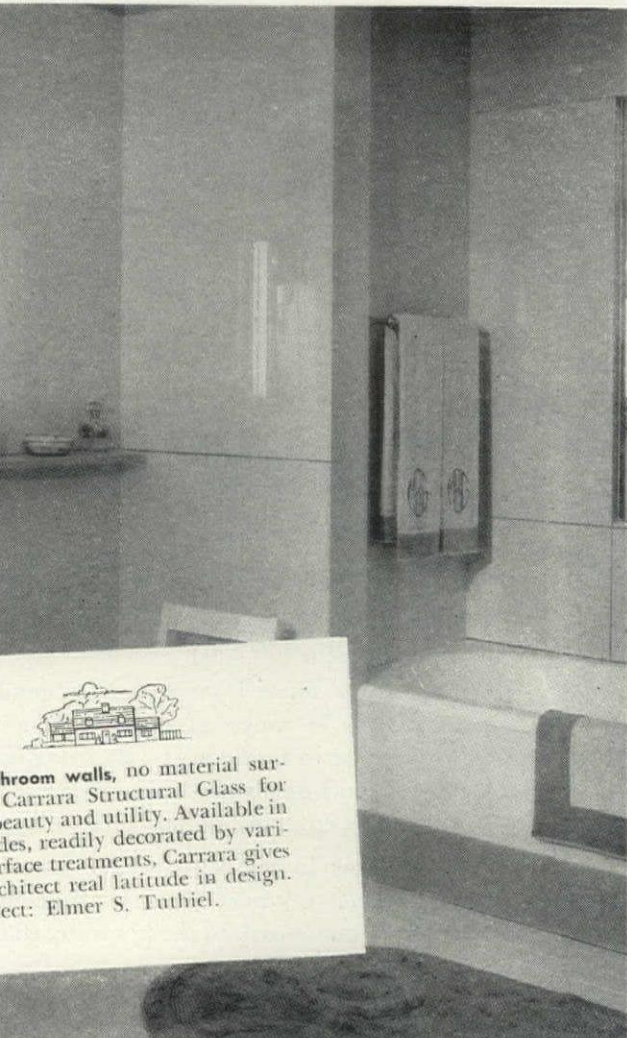



Architects today increasingly try to take full advantage of the natural beauties provided by the home-site's environment. One good way to do this is with large panels of clear, lustrous plate glass. They permit an unobstructed view . . . and are extremely attractive in appearance. Architects: Pomerance & Breines.

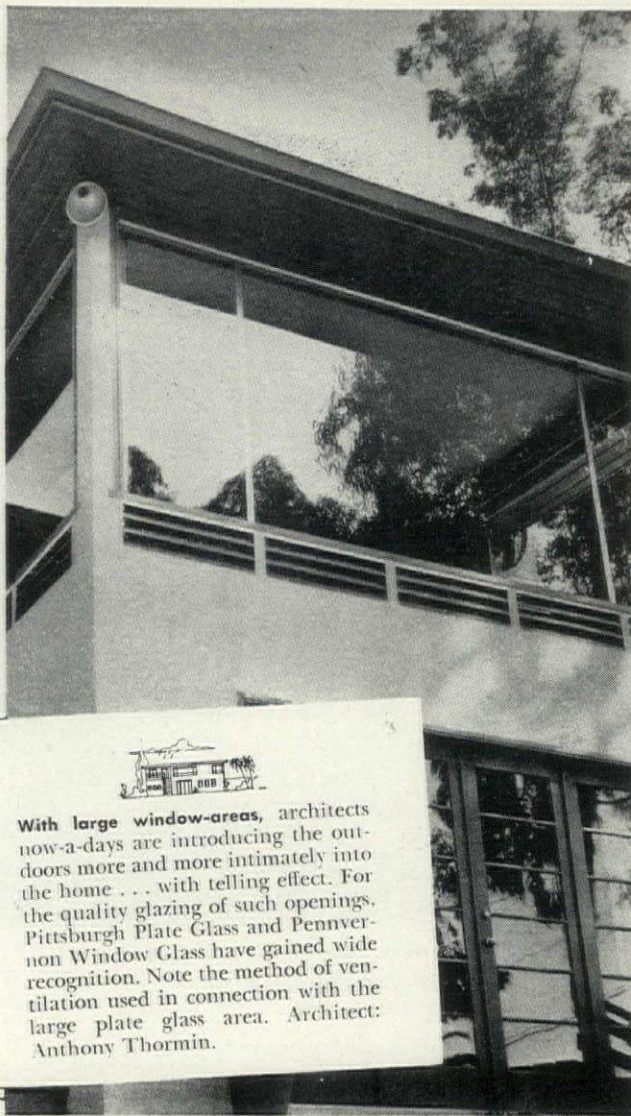
Interesting ways to use GLASS




To make a room seem spacious and cheerful, Pittsburgh Structural Mirrors exhibit a decided talent. They repeat the gay color tones of drapes, walls and furnishings. Today, your designs can include mirrors of blue, flesh tinted, green or regular plate glass . . . with silver, gold or gun-metal backing. Architect: Rollin Pierson. Interiors: Mabel Cooper Bigelow and E. Charles Werner.



 Bathroom walls, no material sur-
Carrara Structural Glass for
beauty and utility. Available in
tiles, readily decorated by vari-
surface treatments, Carrara gives
architect real latitude in design.
Architect: Elmer S. Tuthiel.



 With large window-areas, architects
now-a-days are introducing the out-
doors more and more intimately into
the home . . . with telling effect. For
the quality glazing of such openings,
Pittsburgh Plate Glass and Pennver-
non Window Glass have gained wide
recognition. Note the method of ven-
tilation used in connection with the
large plate glass area. Architect:
Anthony Thormin.

residences...



PITTSBURGH stands for Quality Glass and Paint

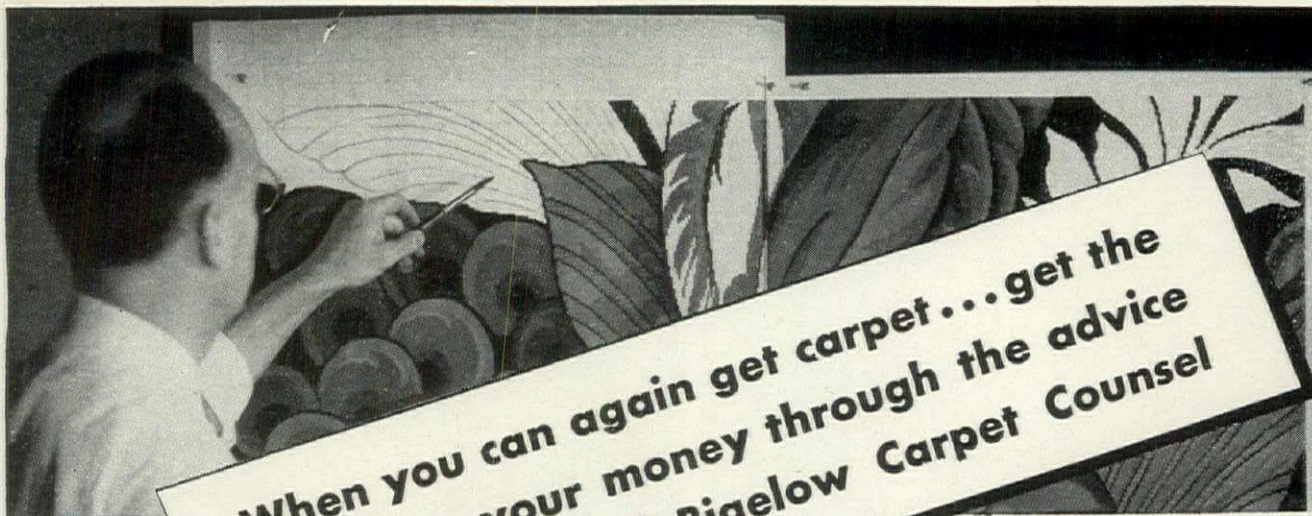
Design it
inter with **PITTSBURGH GLASS**
THE ACCEPTED LINE FOR EVERY ARCHITECTURAL USE

PITTSBURGH PLATE GLASS COMPANY

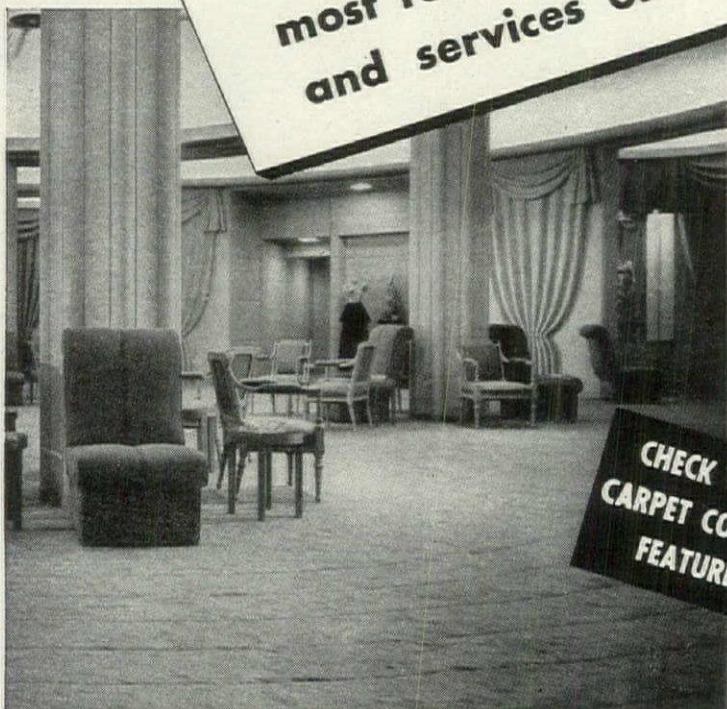
We believe you will find much to interest
you in our new, illustrated booklet of ideas
showing the use of Pittsburgh Glass in archi-
tectural design. Send the coupon below for
your free copy.

Pittsburgh Plate Glass Company
2125-4 Grant Building
Pittsburgh 19, Pa.
Please send me, without obligation,
your new booklet entitled: "Ideas
for the Use of Pittsburgh Glass in
Building Design."

Name.....
Address.....
City..... State.....



When you can again get carpet... get the most for your money through the advice and services of Bigelow Carpet Counsel



This beautiful showroom for women's clothes at Marshall Field & Co., Chicago, has Bigelow Crescendo Lokweave on the floor.

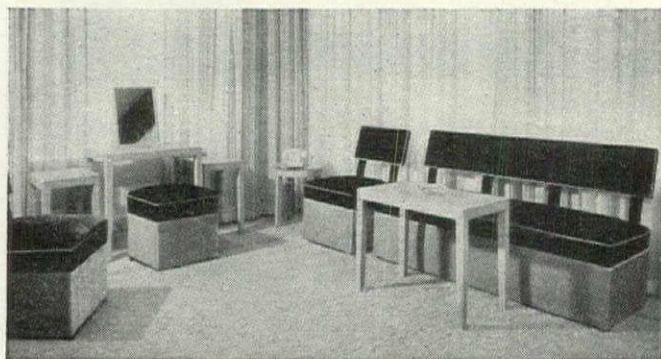
Before the war, hotels, theatres and stores saved money, time and trouble when they bought carpet by using Bigelow Carpet Counsel.

Carpet Counsel offered pattern recommendations from a wide range of designs. It gave estimates of wear in traffic areas. By using Carpet Counsel, you knew you would get the most from every floor covering dollar.

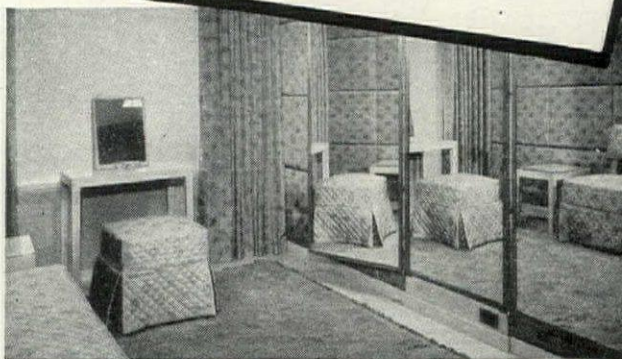
When Bigelow looms again weave contracts for carpet, let Carpet Counsel eliminate time- and money-wasting guesswork in the planning stage.

CHECK THESE CARPET COUNSEL FEATURES

1. THE RIGHT CARPET FOR THE RIGHT TRAFFIC AREA
2. COLORS AND PATTERNS FOR EVERY TYPE OF ROOM
3. NO EXTRA COST PER SQUARE YARD



One of the striking fitting rooms at Marshall Field's. The floor is covered with Chamfur Lokweave.



Another of the well lighted Marshall Field's fitting rooms showing an interesting decorative treatment.

"When it comes to carpet come to Bigelow"

BIGELOW-SANFORD CARPET CO., Inc.

140 MADISON AVENUE, NEW YORK 16, N. Y.



rooms too, Have Faces that Stay Young



FIREPROOF—Made from Gypsum rock that will not burn. Sheetrock walls and ceilings form a fire-armor that fights the spread of fire and protects the building framework underneath.



"WELDED WALLS"—Panel joints concealed and welded together by Perf-A-Tape . . . stronger than the panels of Sheetrock themselves.



VERMIN-PROOF—Sheetrock has a mineral core . . . it does not attract or support vermin of any kind.



WON'T WARP OR BUCKLE—Sheetrock is like a stone wall. It does not twist and pull out of shape with changes in temperature and humidity conditions.

SHEETROCK

Fireproof WALL AND CEILING PANELS

"My face is my fortune" . . . might well be said by Sheetrock* . . . and it can be the good fortune of everyone who uses it in walls and ceilings. For here is beauty that endures . . . that outlaws telltale "wrinkles" and "crow's feet" . . . changes the complexion of old rooms completely and builds smart new ones . . . with "walls and ceilings that stay young."

Over the smooth, scuff-resisting, ivory surface of Sheetrock, an infinite variety of finishes and treatments is possible. Choose your color, texture, design and treatment. Whether it be paint, wallpaper,

or any finish that is sprayed, brushed or pasted on, it may be successfully applied over Sheetrock. Joints may be concealed with Perf-A-Tape* or the beveled edges featured as a planned part of the decorative scheme with "Panel-Wall" method.

—and under this surface-beauty is a core of gypsum—a mineral that will not burn—that fights fire at every turn. Truly, here is a modern material that has won its way to preference. Proved in the past with an eye to the future, Sheetrock is today the best known name—and the most widely used gypsum wallboard in the world.

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



UNITED STATES GYPSUM

300 WEST ADAMS STREET, CHICAGO, ILLINOIS

This famous trademark identifies products of United States Gypsum Company—where for 40 years research has developed better, safer building materials

GYPSUM WALLBOARD • SHEATHING • LATH • PLASTER

FIREPROOF GYPSUM

The World's most widely used Mineral for making Fireproof Wall and Ceiling Products

GYPSUM FIREPROOF ROOF DECK AND PARTITION T

GYPSUM PRODUCTS • STEEL • INSULATION • ROOFING • PAINT

(Continued from page 36)

country. Much has already been written about postwar planning,—so much in fact that many of us are in a maze of uncertainty as to what it really means. One thing emerges from the welter of argument, however. Economic readjustment, improved health services, social security and the rest are hollow and meaningless unless the "average" man has decent living conditions. The preservation of "our way of life," whether in your country or mine or any other is not good enough. Our way of

squalor and misery amid plenty must of necessity give way to a fuller existence, and it is undeniable that the place of the architect and town planner is of prime importance in planning for the new world, and it follows that such magazines as THE FORUM are and must continue to be in the vanguard of the battle for a better world.

GORDON CHALMERS

Johannesburg, South Africa

Forum:

... I can assure you that the building program in South Africa is to be a very large one for the postwar period

wonderful industries and new materials, will or should collect a large share of the market. . . .

LT. H. D. ABERY

Pretoria, South Africa

OUTRAGEOUS MORTGAGES

Forum:

I can't say "dear sirs" because I believe you must be a mixed crowd these war days. Will you please send THE FORUM to my attorney, as I believe the time has come to give him some good building training. . . .

... What is the biggest problem of the modern architect—selling a functional design or getting some bank to supply mortgage money without making you change your design? The speculative house builder has given the public a chance to buy exactly what the mortgage companies have permitted him to build. I wouldn't be surprised if they endowed our best architectural schools in order to be sure no one designs ideas which would obsolete existing design and jeopardize existing mortgage values.

HARRY W. MILLER

Kenmore, N. Y.

ONE MORE PLAN

Forum:

Your articles on planning are excellent and timely.

In my opinion, the reason cities and towns are not redesigned, scrapped and changed to meet conditions is due usually to the fact that civil governments do not last as long as private management and are subject to the whim of the voters who do not recognize the importance of change.

Europe, because of the destruction of many of its cities, is going to emerge with properly planned cities that will function far better than the old ones. These new cities will compete in international trade. City planning in the U. S. is more than ever important. Your suggestions as to how to publicize the importance of city planning are very good.

Every city and every town in the U. S. should have a planning commission. In my humble estimation the authority of these commissions should go so far as to control the architecture of all the structures that are put up in a town. Such commissions, by constantly emphasizing the importance of the recommendations, will ultimately succeed in securing the support of the majority of citizens.

S. F. B. MORSE

Del Monte Properties Co.
Del Monte, Calif.**Is This a Tank of Oil You Saved?**

Coast Guard Photo showing forward gun crew helping to keep the sea lanes open somewhere in the Atlantic.

YOU don't have to wish you could get in the fight. You're in it! We're all in it! Someone saved enough oil to furnish that shell for that Coast Guard gun. Someone saved enough oil to move that cutter another knot toward victory. Was it you?—or wasn't it?

Think of the oil used by the supply ships to carry food to the men already on foreign soil—on twenty-two battle fronts beyond three mighty oceans. Think of the oil that must be used to guard beleaguered convoys through sub-infested seas. Think of the fuel that's lost when the convoys "don't get through."

This war—your war—is fought on furnace fires, on hammers and presses and lathes that must have fuel. It is fought on fueled wheels, fueled wings, fueled tanks, fueled trucks and half-tracks, by all this—and by the indomitable grit of the men who got to the front on fuel.

Dare you, back home, waste fuel? Don't let apathy stop you! *Do something* about fuel saving!

Fuel Saving
Starts With
CONTROL

An explanation of the Control exercised by Dunham Differential Steam Heating is contained in our Bulletin 614A. May we send it? Address The C. A. Dunham Co., 450 E. Ohio Street, Chicago 11, Ill. Toronto, Canada; London, England



This Advertisement Dedicated By

DUNHAM**SYSTEMS OF STEAM HEATING**

to a better understanding of the urgency of conservation in fuel use

DUNHAM MAKES FUELS GO FURTHER

FIAT

Corner Shower

FOR FUTURE

{ **ECONOMICAL
BATHROOMS**

FOR ECONOMY OF SPACE
FOR ECONOMY OF COST

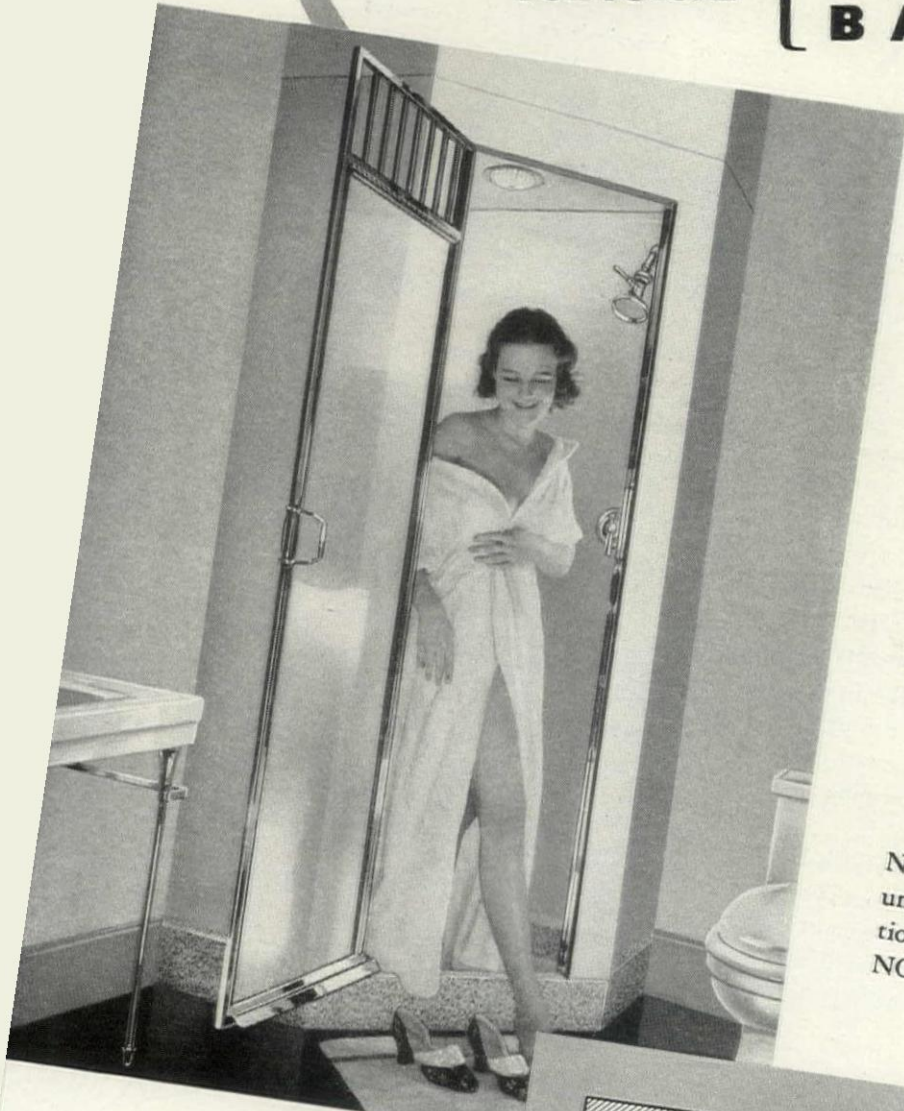
Fiat suggests the corner shower as the ideal type for economical bathrooms in small homes, or as the second bath in medium priced homes. Fiat's postwar line of shower cabinets will include a low cost corner shower as shown on these bathroom layouts. Architects, builders and contractors can plan future building on the basis of a Fiat standard size, exceptional value corner shower, constructed so as to be built in as an integral part of the bathroom.

AVAILABLE NOW FOR
IMMEDIATE DELIVERY

NO. 85. The best shower made under wartime material restrictions. Full size 36" x 36" x 78".

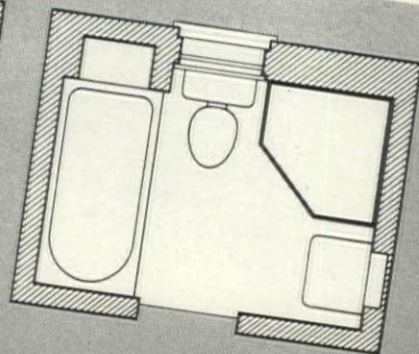
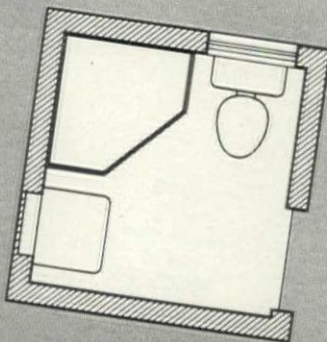
NO. 80. VOLUNTEER.

Size 32" x 32" x 75".



These bathroom layouts show the space saving possibilities of the Fiat corner shower. Even the smallest bathrooms can accommodate this type of shower cabinet.

Write for new booklet
"Why Take a Shower Bath?"

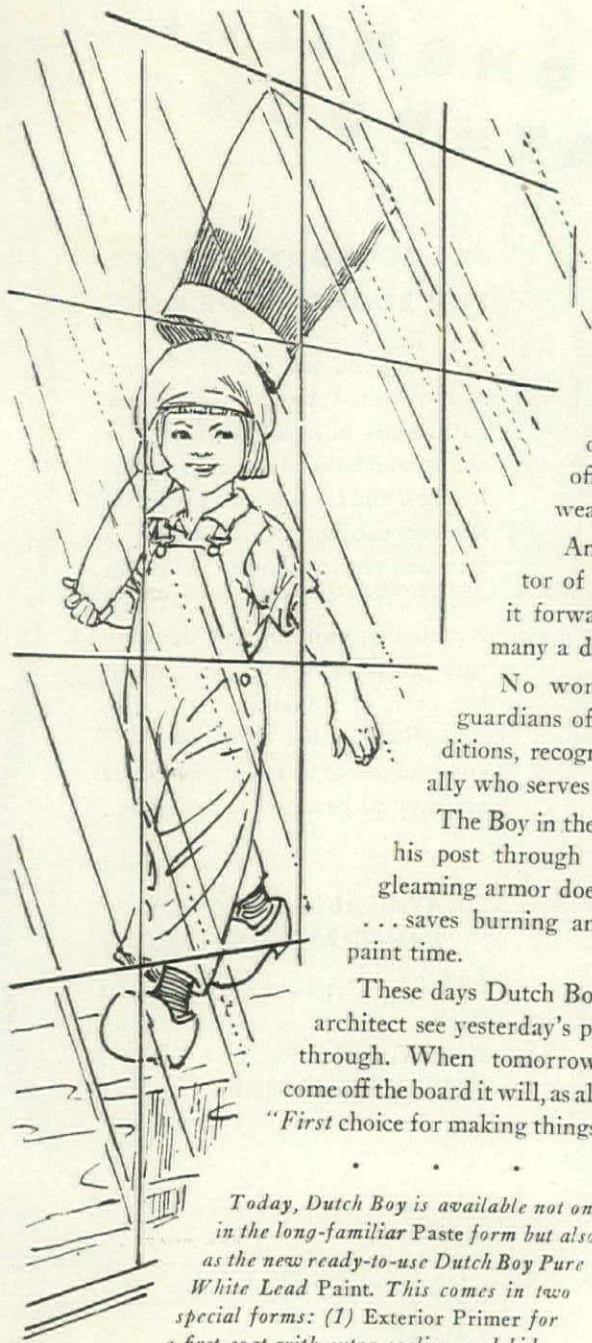


FIAT METAL MANUFACTURING COMPANY
1205 Roscoe St., Chicago 13, Ill. 21-45 Borden Ave., Long Island City 1, N. Y. 32 S. San Gabriel Blvd., Pasadena 8, Calif.

MAY 1944

ON GUARD, Rain or Shine,

in the WAR AGAINST WEATHER.



Many of America's earliest structures are still standing today—landmarks to the simple honesty with which they were built and to the wisdom that dictated regular painting with pure white lead.

Year in, year out . . . through countless nights of rain and sleet, endless days of cold and heat . . . they've fought off the worst that three centuries of weather could offer.

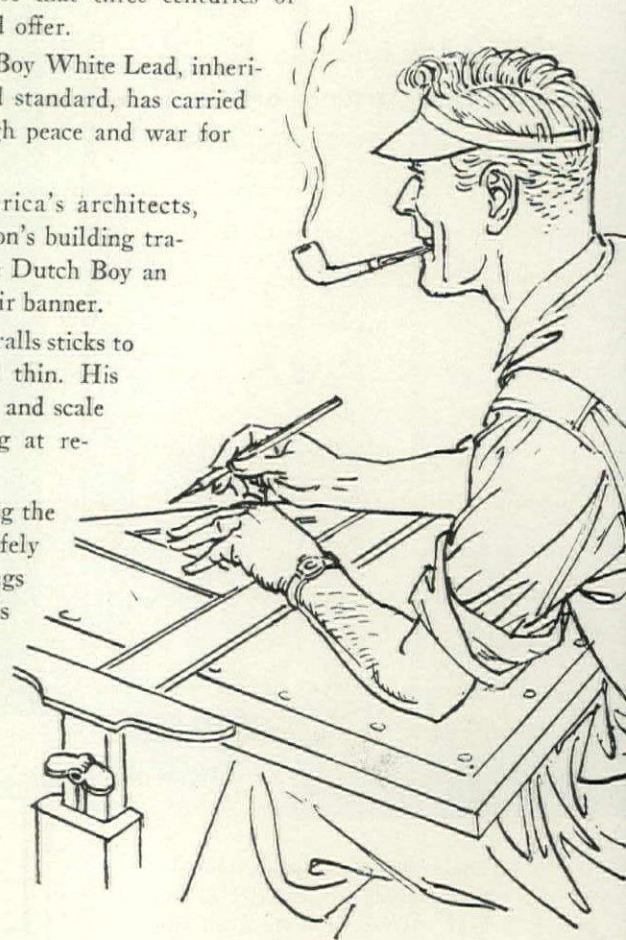
And Dutch Boy White Lead, inheritor of this proud standard, has carried it forward through peace and war for many a decade.

No wonder America's architects, guardians of the Nation's building traditions, recognize in the Dutch Boy an ally who serves under their banner.

The Boy in the Blue overalls sticks to his post through thick and thin. His gleaming armor doesn't crack and scale . . . saves burning and scraping at re-paint time.

These days Dutch Boy is helping the architect see yesterday's property safely through. When tomorrow's buildings come off the board it will, as always, be his "First choice for making things *LAST.*"

Today, Dutch Boy is available not only in the long-familiar Paste form but also as the new ready-to-use Dutch Boy Pure White Lead Paint. This comes in two special forms: (1) Exterior Primer for a first coat with extra sealing and hiding power and (2) Outside White for an unusually durable finishing coat or for general painting. Together they set a standard for two-coat protection—even on new wood!



PASTE OR PAINT

Specify

DUTCH BOY PURE WHITE LEAD

NATIONAL LEAD COMPANY—New York, Buffalo, Chicago, Cincinnati, Cleveland, St. Louis, San Francisco; Boston (National-Boston Lead Co.); Pittsburgh (National Lead & Oil Co. of Penna.); Philadelphia (John T. Lewis & Bros. Co.).

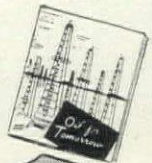
THE *Facts* ABOUT **OIL** FOR TOMORROW'S *Better Living*



OIL is the fighting fuel! On all fronts it powers our machines of war as they move forward . . . on land, in the air, on and under the seas. This intense preoccupation with all-important war needs has made oil the target of innumerable controversial statements, of countless rumors. However, oil burner owners whose tenacious loyalty has survived both rationing and rumor, deserve the facts about this overwhelming favorite among automatic heating fuels. Facts about new sources like the oil shales of Colorado which hold a potential 100-billion barrels of shale oil . . . New strides in producing oil from coal—a source which *alone* will yield sufficient petroleum products from *all* our needs for hundreds of years to come and, at the same time, meet *all* our usual requirements

for coal . . . New techniques in re-working old pools (Improved methods are expected to *quadruple* the amount of useful oil now extracted). All of these are over and above the yield of hitherto unworked oil fields—estimated to hold a potential 100-billion barrels—more than *twice* the amount used by the entire world since oil was discovered nearly 100 years ago. You can count on oil for tomorrow . . . you can count on even finer Oil-O-Matic products that will convert this abundant fuel into superlative comfort . . . economically, efficiently, automatically.

Send for your free copy of this booklet "Oil for Tomorrow" — the complete, factual story of the abundant fuel. Includes color map showing present and potential oil sources. Write for your copy today — now.



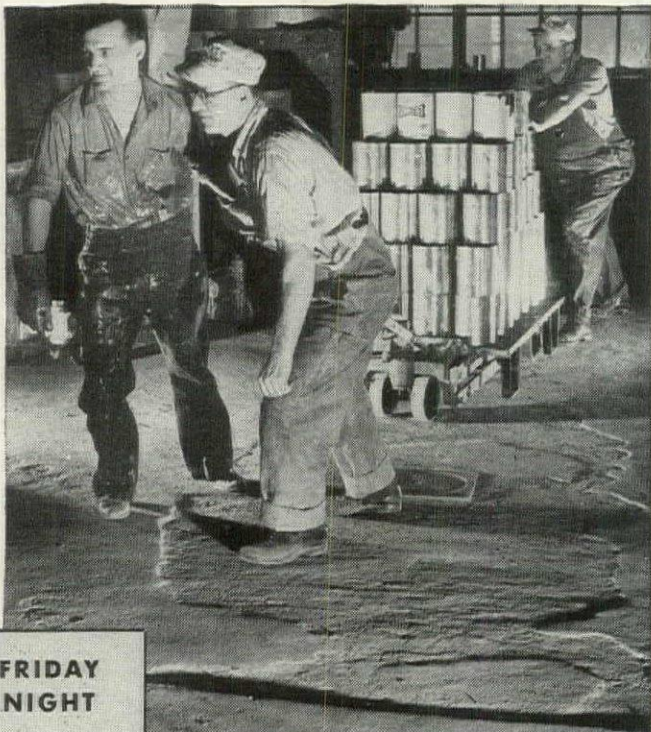
BUY WAR SAVINGS STAMPS AND BONDS ★



WILLIAMS
OIL-O-MATIC
HEATING

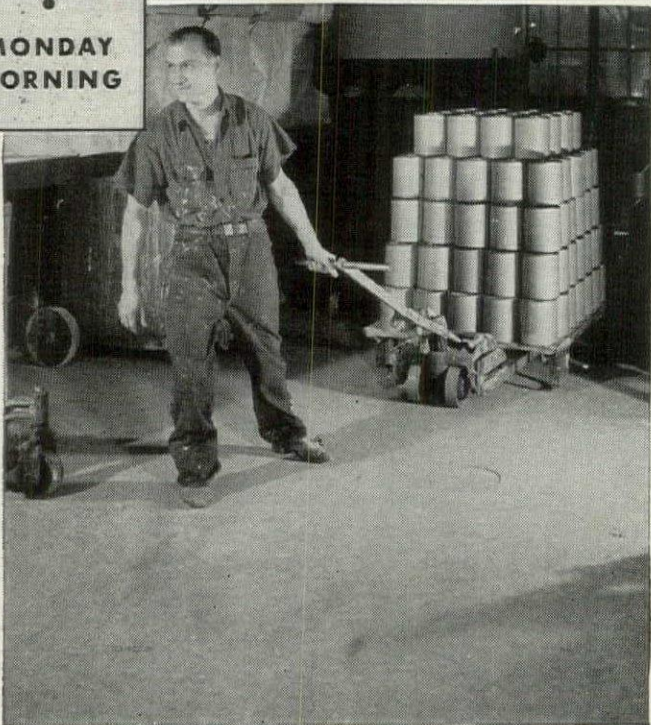
**WILLIAMS OIL-O-MATIC
HEATING CORPORATION**
BLOOMINGTON, ILLINOIS

THE BONDS YOU BUY TODAY
ARE YOUR GUARANTEE OF A
Better Tomorrow!



FRIDAY
NIGHT

MONDAY
MORNING



**'INCOR' ASSURES DURABLE,
NON-DUSTING
HEAVY-DUTY CONCRETE**

HOW can I make sure of durable, non-dusting floors? By using a good mix—and curing the concrete thoroughly. But job conditions often make it impossible to keep concrete wet 5 or 6 days. 'Incor' 24-Hour Cement solves the problem, by curing *thoroughly* in 24 hours.

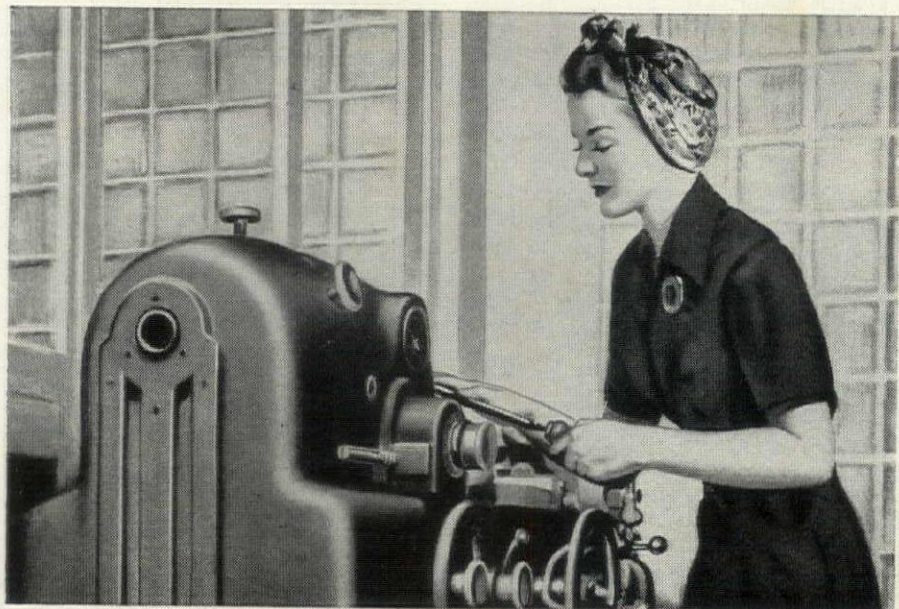
Place 'Incor' concrete today—heavy-duty floors in use tomorrow! No plant tie-ups—no marred floors in new structures. Same advantages apply in rapid plant reconversion. Insist on 'Incor'* 24-Hour Cement for quality, speed, economy. *Reg. U. S. Pat. Off.

**Specify 'Incor' 24-Hour Cement
for wear-resistance...watertight
concrete . . . earlier occupancy.**

LONE STAR CEMENT CORPORATION

LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS
15 MODERN MILLS, 25-MILLION BARRELS ANNUAL CAPACITY . . . OFFICES: ALBANY • BIRMINGHAM
BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS • JACKSON, MISS. • KANSAS CITY
MO. • NEW ORLEANS • NEW YORK • NORFOLK • PHILADELPHIA • ST. LOUIS • WASHINGTON, D. C.

17 Years' Outstanding Performance . . . 'INCOR' . . . America's FIRST High Early Strength Portland Cement



*Working
for today*

This girl and her sisters—millions of them—are now veterans of the war plants and factories, their efficiency equal to that of the men they replaced, and their output an increasingly important factor in the drive for victory. Enthusiastically and steadfastly they work at their appointed tasks, winning the plaudits and the gratitude of a nation still at war.

NORGE

HOUSEHOLD APPLIANCES

*Planning
for
tomorrow*

Here at Norge we, too, are working for victory, with our facilities devoted to the production of more than forty items for war. And Norge refrigerators and other appliances in millions of American homes are contributing their bit by conserving and preserving foods, lightening household labors and otherwise adding to the efficiency of war-busy people. But as we work for war today we look ahead and think and plan for peace tomorrow. The Norge postwar products—Rollator refrigerators, gas and electric ranges, washers and home heaters—will be better designed, better engineered and better built because of new lessons learned and new skills developed. They will be, even more so than formerly, *products of experience—better products for the better world to come.* Norge Division, Borg-Warner Corporation, Detroit 26, Michigan.



A BORG-WARNER INDUSTRY

NORGE is the trade-mark of Norge Division, Borg-Warner Corporation, Detroit, Michigan

BETTER PRODUCTS FOR A BETTER WORLD



**When it's over — see Norge
before you buy...meanwhile
BUY MORE WAR BONDS**

*"...for outstanding
production of
war material."*

NATIONAL APPLIANCE CONSERVATION PROGRAM

"BETTER CARE—LESS REPAIR"

BUILDING REPORTER

(Continued from page 16)

work of two conventional fluorescent fixtures of the two 40 w. "F" type. Starting is instantaneous, and no starters are necessary. Special sockets offer easy installation and replacement of lamps. This fixture is designed for surface, suspension or continuous row mounting. The non-metal reflector is tough, moisture and heat resistant—finished in chip-proof white enamel inside and gray outside.

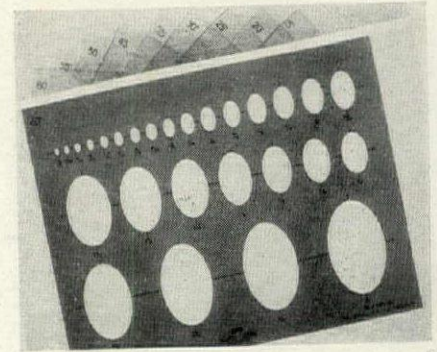
Manufacturer: Mitchell Mfg. Co., 2525 N. Clybourn Ave., Chicago 14, Ill.

PLASTIC RESIN BOARD has many probable postwar uses.

Features: Because of its light weight, great tensile strength and ability to withstand strains and vibrations, this new plastic board is an ideal material for aircraft construction. The hard, transparent surface of the resin—which may have either a dull or brilliant luster—assures permanence to the finished material. Artistic effects are achieved by changing the color or design of the fabric or paper base. The color of the resin can also be changed. The board is washable and is not affected by gasoline, oils, acids, most alkalis or alcohol. Possible postwar

uses of the material may include wall paneling, flooring, table tops, house furnishings, and luggage.

Manufacturer: United States Rubber Co., 1230 6th Ave., New York, N. Y.



ELLIPSE GUIDES speed three-dimensional drawing.

Features: A new series of precision-cut ellipse templates, which eliminate the geometrical development of ellipses by the plot method, are saving time on production illustration jobs. These celluloid guides meet professional accuracy requirements, and are made in a set of 10 with angles from 15° to 60° by 5° increments. Templates of 60°, 55°, 50°, 45° and 40° have ellipses from 1/8 in. to 3/8 in. increasing by 32nds, then by 16ths to 1 in., then by 8ths to 2 in. Those of 35°, 30°, 25°, 20°, and 15° progress in the same way, but start with sizes of 5/32 in., 3/16 in., 7/32 in., 1/4 in., and 3/8 in.

Manufacturer: The A. Lietz Co., 913 S. Grand Ave., Los Angeles 15, Calif.

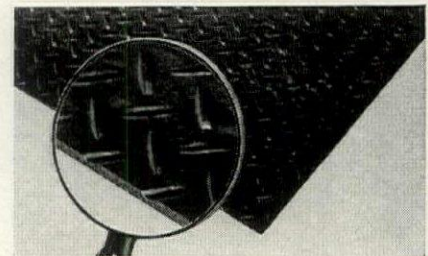


HORSE, VICTORY MODEL

With none of the manners or style of show breeds, this horse from the cow country is symbolic of war days, when men and animals are judged by what they do, not by how they look. He is intelligent, compactly put together, well muscled, built to carry a rider through the miles of a long day.

He is a good deal like the Victory model Von Duprin devices, which are made for just one thing . . . to do a hard job well! Built of tough malleable iron, these Von Duprins are sturdy, safe, reliable. In any emergency, under any conditions, they will let the people out of your buildings. They are, in very truth, real Von Duprins.

Von Duprin
TRADE MARK REG
DIVISION
VONNEGUT HARDWARE CO., INDIANAPOLIS, IND.



PLASTIC MATTING affords non-slip surface.
Name: Ameritred.

Features: This solid friction type mat, made by firmly binding friction compound together by a plastic, lies flat and affords a non-slip surface. It is ideally suited for use in building entrances, shower rooms, halls, stairs, etc.—where rubber matting was formerly used. Black in color, it comes in easily handled sheets, 29 x 63 x 9/64 in. These can be trimmed to fit small or odd shaped areas.

Manufacturer: American Mat Corp., 1708 Adams St., Toledo 2, O.

WATERPROOFING SOIL for roadways.
Name: Stabinol.

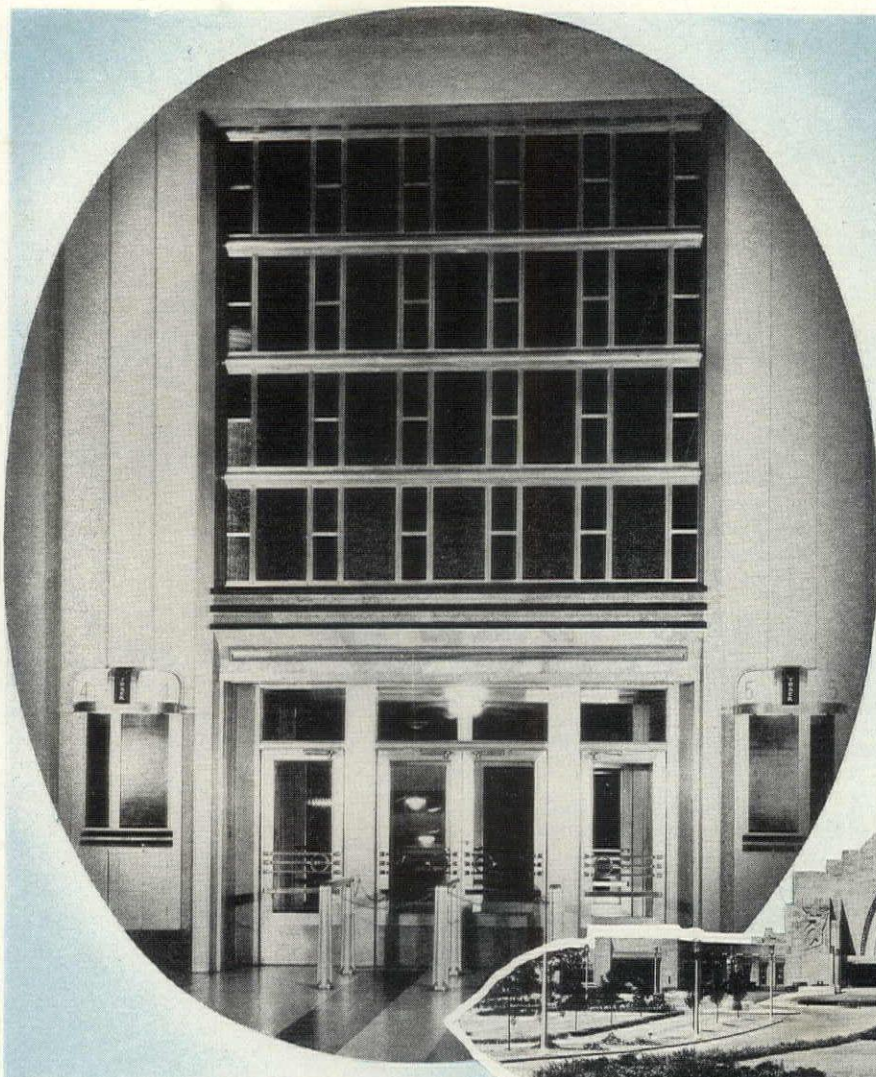
Features: A chemical method of preventing mud by making soil water-

(Continued on page 168)

Let's Look at the Record

Cincinnati Union Terminal employs a lot of Alcoa Aluminum:

Doors, frames, transoms and trim for all main entrances and exits for vestibules, lobby, waiting room, etc.—exterior storefronts, window sills—grilles, frames and louvres for ventilating ducts—hand rails, brackets and fascia for stairways—ceiling of marquees—counter screens, wickets and signs for ticket windows and information booths—frames for bulletin and train announcement boards—radiator grilles, lighting fixtures, concession screens and gates—miscellaneous trim.



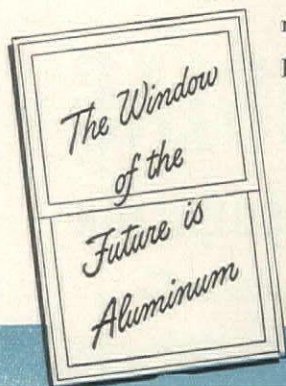
"After eleven years . . . the aluminum installations have met all expectations"

Permanence, ease of maintenance and low up-keep; Alcoa Aluminum was selected for much of the exposed metal work here because it offered these advantages. Eleven years of service have proved the wisdom of this choice.

"In no instance has aluminum failed to live up to expectations", reports Mr. J. C.

Bussey, Maintenance Engineer for the Cincinnati Union Terminal.

The superior performance of aluminum here and elsewhere is helping to ease the manpower situation during the war. It's an excellent reason for including Alcoa Aluminum products in your postwar designs. ALUMINUM COMPANY OF AMERICA, 2166 Gulf Building, Pittsburgh 19, Pa.



ALCOA ALUMINUM

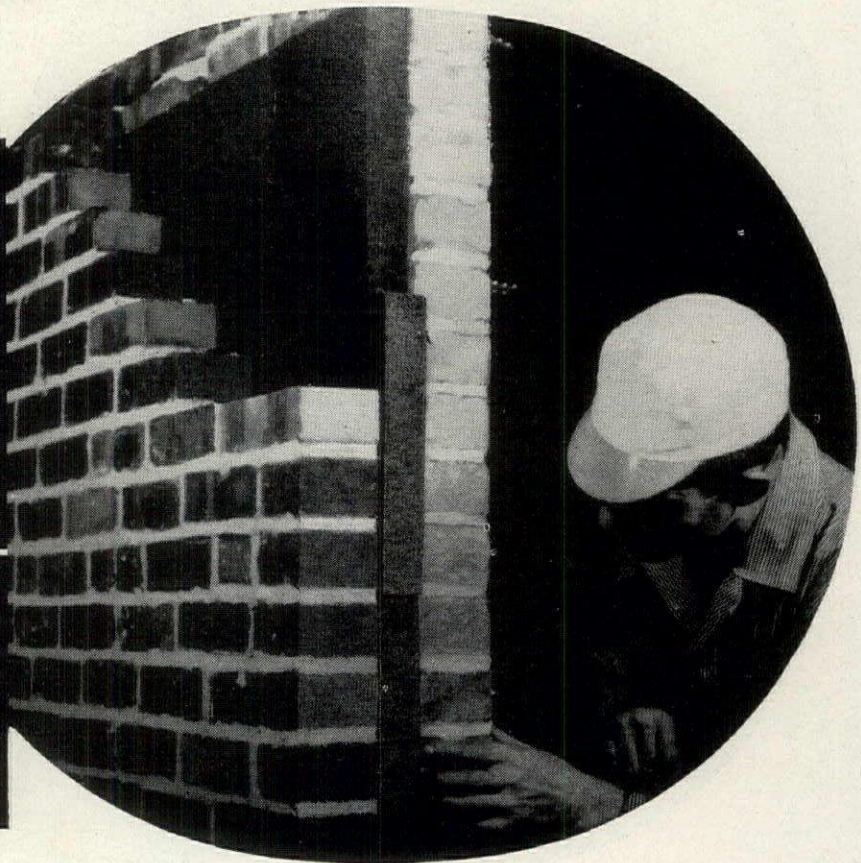


Reg. U. S. Pat. Off.

Now! A core wall insulation

that is also
a vapor seal
and
a water stop

PC
FOAMGLAS



WHEN you specify PC Foamglas Insulation for core walls, you insure efficient, trouble-free control of temperature and humidity levels in the enclosed area—permanently.

This cellular material—nine parts air hermetically sealed in one part glass—is actually part of the wall itself, tied in to brick or block backing and to whatever type of tile, block or brick facing you specify. It is insulation, vapor-seal and water-stop—combined in one product.

PC Foamglas blocks will support many times their own weight with-

out danger of cracking or crushing. They cannot settle, pack down, mat, bundle or absorb moisture, as do other materials which deteriorate to the point where insulating efficiency is destroyed, and expensive repairs and replacements result.

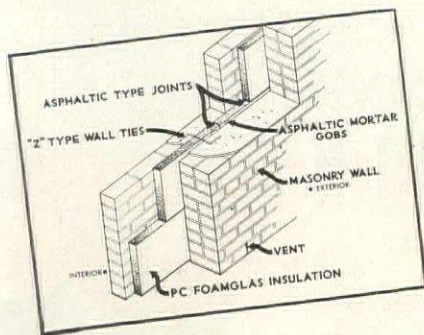
PC Foamglas cannot deteriorate. It is glass and is, therefore, impervious to acid atmospheres, fumes, vapors, moisture—common causes of deterioration in other insulating materials.

It does not slip, swell, shrink, warp or rot, is vermin- and fire-proof.

PC Foamglas—installed in textile, food, chemical and processing plants, on roofs and in floors as well as in core walls—will maintain desired temperature and humidity levels as long as the structure stands.

Our representatives will be glad to consult with you regarding your clients' particular needs for insulation. Write today for free and complete information—you will incur no obligation.

Pittsburgh Corning Corporation,
2176-4 Grant Building, Pittsburgh,
19, Pennsylvania.



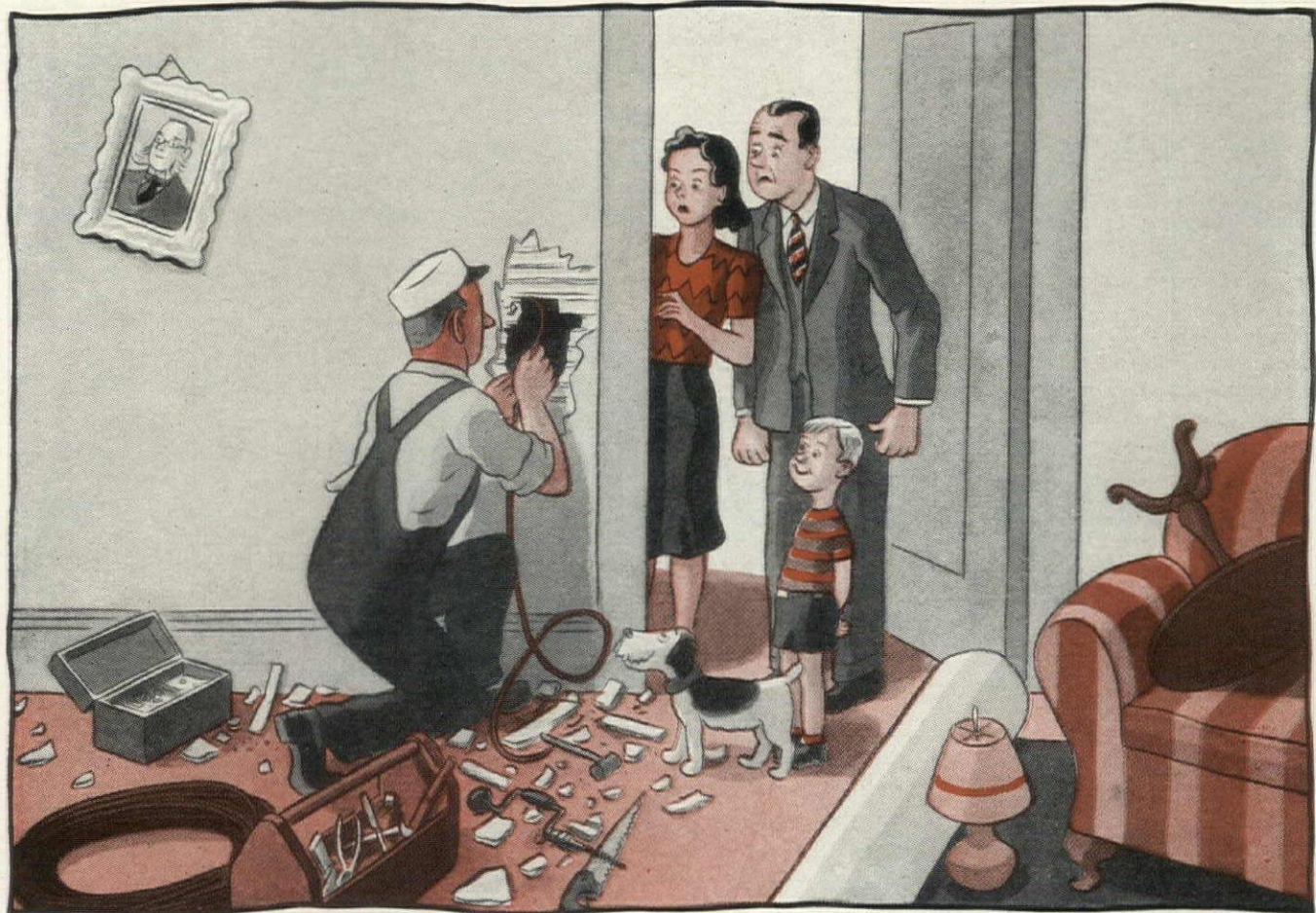
• The detailed drawing is part of a data sheet which tells architects what they want to know about PC Foamglas Insulation as an integral part of core walls.

PC FOAMGLAS

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

PERMANENT INSULATION

*9 parts air hermetically
sealed in 1 part glass*



What's wrong with this picture?

LISTEN to the sad story of Mr. and Mrs. Bjones and the dream home that turned into a nightmare.

When Bill Bjones built his new home it certainly *looked modern*—tiled bathrooms—brass pipes—venetian blinds—everything up-to-date in every way.

Well—everything but the *electric wiring*. (This was hidden inside the walls and didn't matter much anyway, said Mr. Bjones to the Little Woman.)

So the Bjones built their home. And then things began to happen . . .

Whenever Mary Bjones turned on more than two electrical kitchen gadgets, a fuse would let go. (Bjonesy got a fine crop of callouses running up and down the cellar stairs all the time!)

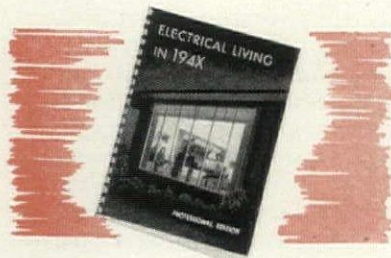
Every time the electric refrigerator started up, Bill grabbed his O.C.D. helmet and dashed outdoors—looking for the blackout. The future certainly looked mighty dim to Mr. and Mrs. B . . .

And that's where we came in—just as the local wireman started to put in a lot of new circuits that Mr. Biones found out, alas, had been needed all along . . .

All this mess and confusion—and needless expense—could have been avoided *if the proper*

number of electrical circuits had been installed when the home was built!

To help you plan ahead for the *greatly increased electrical loads* in postwar homes—to help you explain the urgent need for *better wiring* to present and prospective home owners



—we have prepared a new book, "Electrical Living in 194X."

This big, colorful, 64 page book tells your prospects all about electrical loads in 194X homes—lighting and lighting controls—cir-

cuit protecting devices—entrance equipment and distribution panels.

"Electrical Living in 194X" is free! But the supply is limited. Get your copy now, by writing to the Better Homes Department (AF-54), Westinghouse Electric & Manufacturing Company, Pittsburgh 30, Pa.

And don't forget the Better Homes Department Six-Point Advisory Service!

Our housing experts will be glad to give you technical advice on the selection, application, and arrangement of fixed electrical equipment in 194X homes—dimensions and clearances, for proper installation and easy access for servicing—placing of lighting outlets and controls—location and size of electric wiring, water supply and drainage lines.

Send in your problems to the Westinghouse Better Homes Department. You'll get complete, authoritative information—promptly.

Westinghouse

Plants in 25 Cities Offices Everywhere

WESTINGHOUSE PRESENTS *John Charles Thomas, Sunday, 2:30 p.m., E.W.T., NBC. "Top of the Evening", Monday, Wednesday, Friday, 10:15 p.m., E.W.T., Blue Network*

BUILDING REPORTER

(Continued from page 164)

proof has been proved by use on roads, landing fields and other construction projects. Stabinol, a resin compound is mixed with the top few inches of soil. Result: a waterproof surface. Water will drain off or evaporate for Stabinol-treated soil resists penetration of surface water. Usually about 1 per cent of Stabinol is required to the total amount of soil to be treated and roads laid down with this stabilizer more than five years ago are still waterproof. Stabinol's chemical control of ground

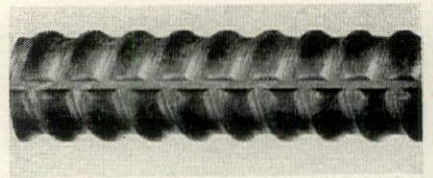
moisture also prevents growth of grass and weeds, which will aid in the treatment of parking lots and tennis courts. The color of the "stabilized" soil remains the same as the original.

Manufacturer: Hercules Powder Co., Wilmington, Del.

REINFORCING BAR offers greater bearing area.

Name: Inland Hi-Bond.

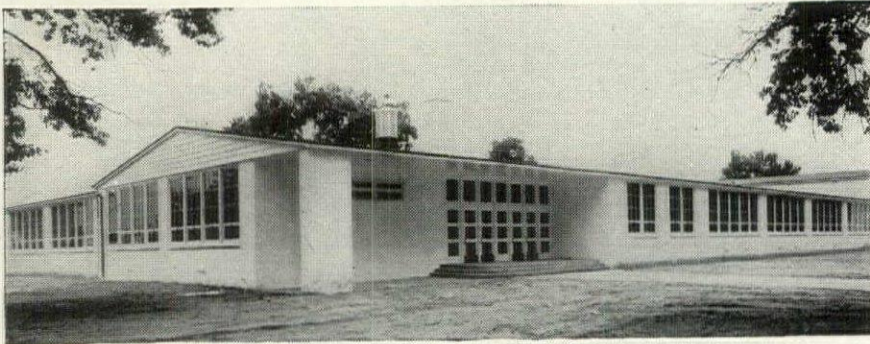
Features: Inland Hi-Bond reinforcing bar increases the effectiveness of reinforcing steel in concrete through improved load transfer. Reversed double helical ribs of proper height, extend between diametrically opposed longi-



tudinal ribs. The helical ribs are closely spaced and so dimensioned as to provide potential bearing and shearing areas. Besides having the proper relationship to each other, these areas are properly proportioned to the effective strength of the bar.

Manufacturer: Inland Steel Co., Chicago, Ill.

ARMORED AND BEAUTIFIED WITH ATLAS WHITE



Knox High School, Knox, Indiana. Architects, Phelps & Peck; contractors, Tonn & Blank, Inc.; both of Michigan City, Indiana. Masonry walls effectively shielded against weather with a decorative finish of factory-prepared portland-cement paint, made with Atlas White cement.

THE dual requirements of any paint—to protect and beautify the surface—are effectively and economically met when factory-prepared cement paint made with Atlas White is used on exterior and interior masonry work. It penetrates the pores of concrete, concrete masonry, stone, brick or hollow tile to form an effective shield against moisture and weather. Its hard surface resists dirt and dust, and can be easily cleaned, making frequent repainting unnecessary.

Its colors are as durable and true as its protective armor. When other than natural white is desired, the base of Atlas White portland cement gives full color value to the pigments used, whether delicate pastel tones or

deep, rich hues are desired.

It is economical to apply. First coat coverage, 15 to 25 square feet per pound, depending upon the porosity of the surface. Second coat coverage is about 30% more per pound. It is prepared by a number of manufacturers in a wide range of colors including white, and furnished in conveniently sized packages ready for mixing with tap water on the job. Manufacturer's instructions for mixing and applying should be followed.

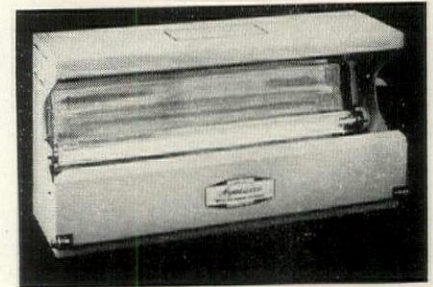
For further information, see Sweet's Catalog, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

Factory-prepared paint is preferable

AF-P-2



ATLAS WHITE CEMENT
for PORTLAND CEMENT PAINT

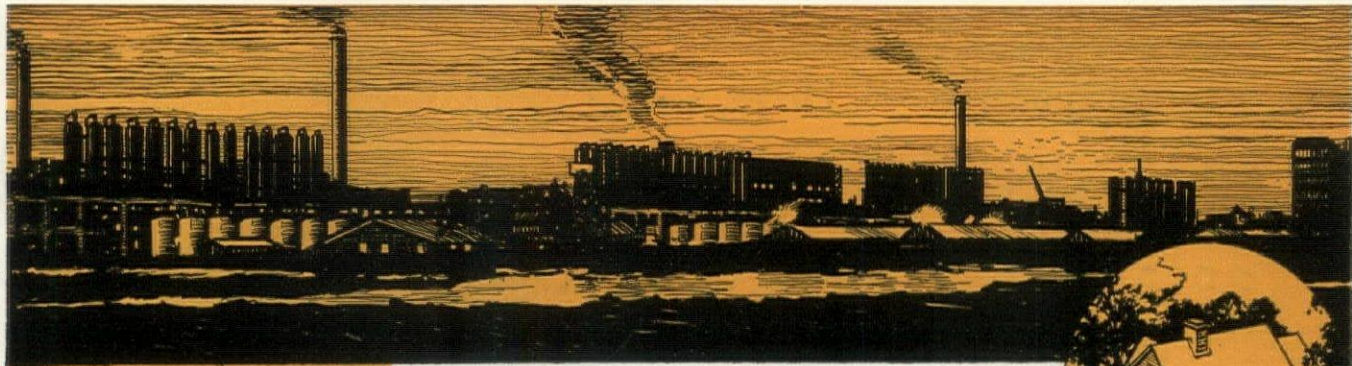


ULTRAVIOLET GERMICIDAL RADIATION for industrial and commercial use.

Name: Hygeaire.

Features: Germicidal effects of ultraviolet rays, widely used in the hospital field to disinfect the air, have been made economical and practical for offices and industrial plants. The fixture, a combination of a germicidal tube and a patented reflector, is designed to project a zone of protection across an area above eye-level. Airborne bacteria and viruses are carried into the zone of ultraviolet rays by convected air currents, giving to the

(Continued on page 174)



ELECTRICAL EQUIPMENT

for the *Mammoth Plant* or the *Modest Building*

In post-war planning which involves expansion, modification or otherwise changing plant set-up or arrangement, the electrical system will doubtless require changes also. Ⓢ Engineers can be of great assistance in working out plans and specifications for economical and efficient service. Architects, engineers, and management are invited to submit their electrical problems — without obligation.

In the planning of new homes, stores, commercial or public buildings, or of remodeling existing structures, Ⓢ Products deserve consideration.

Load Centers and Service Equipment for homes . . . Panelboards for stores and commercial buildings . . . Switchboards — Feeder and Plugin Busduct distribution systems — Distribution Panelboards for power and light, for large and small plants . . . no matter what the requirements, Ⓢ can fill them . . . And Ⓢ Products are not only *approved* by Underwriters' Laboratories, Inc. They *exceed* the Laboratories' requirements.

Should standard Ⓢ Equipment not suit your purposes, we design and build equipment that will fit your specific needs.

More than fifty years of experience in keeping abreast or ahead of developments in the electrical field have given us the "know how". Use it to advantage — and without obligation.

Bulletins Are Available

on most of the Ⓢ Products listed at the left. Write for the ones in which you are interested — and for the name of the nearest Ⓢ Sales-Engineer . . . Frank Adam Electric Company, Box 357, St. Louis, Mo.



PRODUCTS

- Ⓢ **Busduct**
Feeder and Plugin Types
and Plugin Devices
- Ⓢ **Duct**
for Wire and Cable
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Cabinets**
Standard, Column and Dust-tight
Types with Switch and Fuse,
or Circuit Breakers
- Ⓢ **Service Equipment**
Standard or Special
Switch and Fuse or Circuit
Breaker Types
- Ⓢ **Switchboards**
for Light and Power Distribution
Switch and Fuse, or Circuit
Breaker Types
Stage and Auditorium Lighting
Control
Marine Switchboards
- Ⓢ **Shutlbrak Switches**
Enclosed Safety Type
- Ⓢ **Knife Switches**
- Ⓢ **Quikheters**
Built-in or Portable

Frank Adam
ELECTRIC COMPANY
ST. LOUIS

MODERATE IN PRICE . . . MODERN IN DESIGN

The **PIERCE** GOLD SEAL Coal-Fired BOILER

for water, steam, vapor

★ The most universal boiler we have ever developed in more than 100 years of boiler manufacture. Designed and manufactured prior to the war.

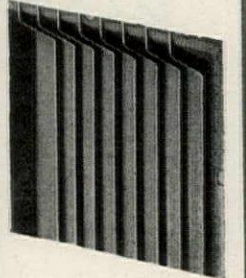
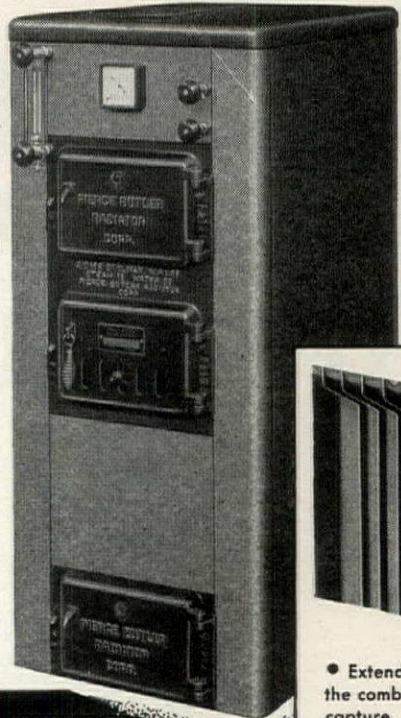
★ Made in sizes to fit every home up to 7 rooms.

★ Burns either hard or soft coal.

★ Three-pass heat travel, plus 60% more heating surface, delivers MORE heat per pound of coal burned.

★ Built-in domestic hot water heater.

Write or wire today for complete description and specifications.



• Extended surfaces in the combustion chamber capture more radiant and convected heat from the flames and burning gases.



PIERCE BUTLER RADIATOR CORP.
SYRACUSE, 6 N. Y.

Member — Institute of Boiler and Radiator Manufacturers

Wall Marks of *Quality*

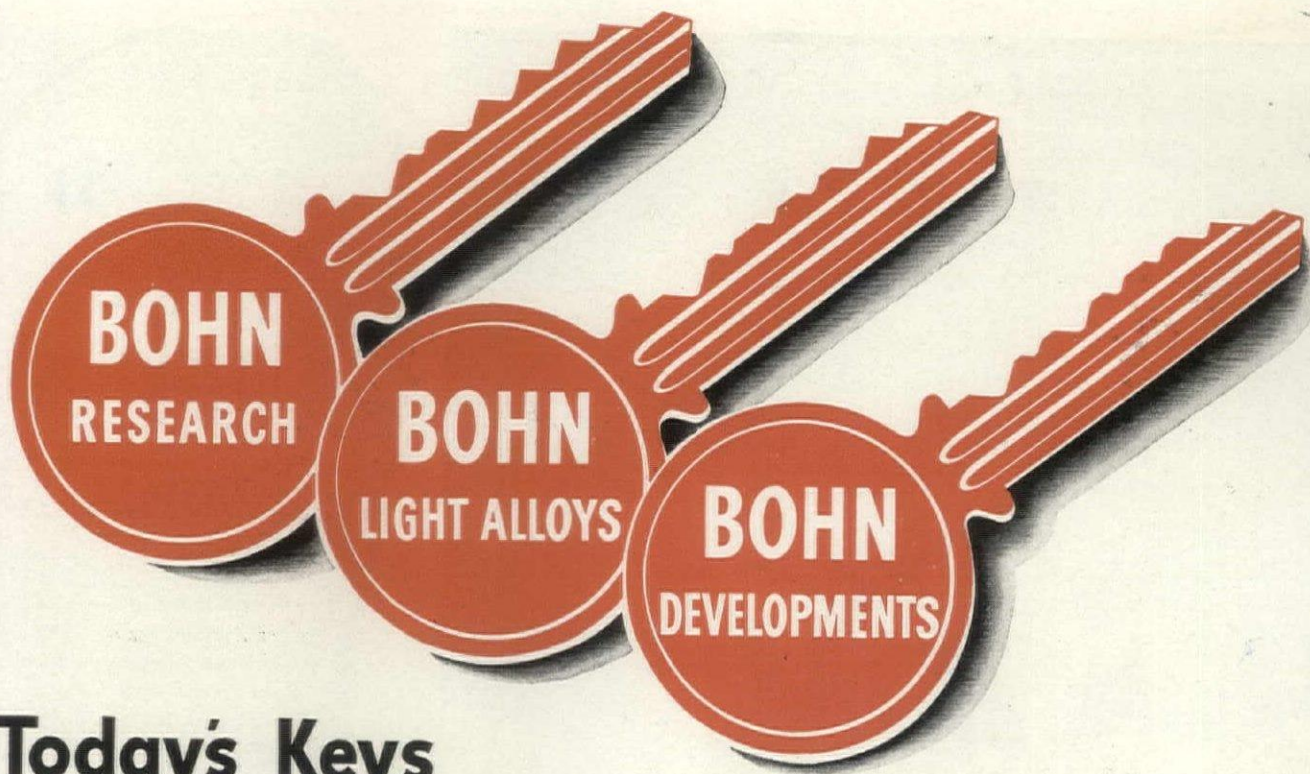


There are no finer finishing limes than the original "Ohio White Finish" and its famous twin "Hawk Spread." Made from rock quarried from the heart of the world's purest deposit of dolomitic limestone, both are always fresh—make a pure white easy working putty—spread far.

For the protection of architects, dealers and plasterers, both brands are always packed in bags marked with distinctive Red Zig Zag Stripes.

For literature describing our complete line of Ohio lime products, write to:

The Ohio Hydrate & Supply Co.
Woodville, Ohio



Today's Keys that Will Open the Markets of Tomorrow

Today every American has one aim—to win the war. The Bohn organization is dedicated 100% to that policy.

During this period of all-out-for-war-production, Bohn engineers are making exhaustive studies and conducting extensive research by which they are developing new applications for Bohn aluminum, magnesium and brass alloys.

Bohn light alloys are lighter—tougher—stronger. For years Bohn's advanced engineering experi-

ence has been most helpful to many leading American manufacturers. The post-war world will see a large variety of new products, in many of which Bohn light alloys will play an important part.

Remember the name Bohn—one of the world's foremost sources for non-ferrous alloys and aircraft-type bearings. These products will be most useful in America's merchandising plans of the future.

KNOW THE NAME

BOHN

BOHN ALUMINUM AND BRASS CORPORATION • DETROIT, MICHIGAN
GENERAL OFFICES—LAFAYETTE BUILDING
Designers and Fabricators
ALUMINUM • MAGNESIUM • BRASS
AIRCRAFT-TYPE BEARINGS





Can you afford an architect

THE TRUTH IS, you can't afford to build *without* an architect! You must have his expert help unless you are prepared to face unforeseen expenses, such as repairing cracked walls, patching roof leaks, replacing unsatisfactory materials. The architect will design a house that avoids such heartaches—that fits your pocketbook as well as your dreams.

Stock plans, which as your dreams. A possible saving, may actually cost more than architectural service, because of things which go wrong. Remember, that plan was drawn by someone who had never seen your lot or met your family. And such cut-and-dried affairs are often devoid of good taste.

The architect will translate your hopes into your own personal home—not just a house. He will supervise it as it grows, protect your interests. There are literally hundreds of ways he can save you his total fee. Send for our new booklet telling how you two can best work together.



If you served on the board of a hospital or school, you would insist on an Architect-Engineer before building. Your home represents as important an investment—protect it the same way!

Plan your house now!

START RIGHT—
WITH AN
ARCHITECT.

EDWARDS

SINCE 1872
ELECTRICAL SIGNALING

Bells · Chimes · Telephones · Alarms
for Homes, Offices, Schools, Hospitals

FREE . . . GET THIS NEW ILLUSTRATED BOOK!

EDWARDS AND COMPANY, NORWALK, CONN.

Please send copy of book "How to Plan Your New Home."

Name _____

Street _____

City _____ State _____

(Save Postage—Paste Coupon on Penny Post Card)



ATTENTION ARCHITECTS!

• Here is the third of a series of advertisements now running in *Time* and *American Home*, reaching over 4,000,000 families. This series tells the public of the architect's place in their postwar building plans. It's part of Edwards' campaign to stimulate business for the architect, to create happier living through better building. This campaign is endorsed by the American Institute of Architects.

• That the public is interested in this message is best proved by its overwhelming response—thousands of prospective home builders have already written for copies of the booklet "How To Plan Your Home".

• Any architect who has not seen this booklet is invited to write for copies now. Limited quantities are available, imprinted with the architect's name if desired. You'll find these booklets a valuable means of keeping in touch with the prospective client—they're of real help to him, and a constant reminder of your place in his plans.



TO GIVE THEM MORE CLOSET AND

STORAGE SPACE!

MORE closet and storage space! That's a "must" for thousands of families now planning their postwar homes, surveys indicate. Cramped wartime housing conditions have emphasized an acute need for more "places to put things!"

Doors, frames and woodwork of durable, toxic-treated Ponderosa Pine will enable you to meet that need—easily and economically. In these products you will find the precision manufacture and the assurance of quality that postwar home builders will want. Here, too, is *variety* of architectural style to fit every need and preference. That is why Ponderosa Pine will help you make tomorrow's interiors more useful and more convenient. And that, too, is why it's worth your while to *watch woodwork!*

WATCH WOODWORK!



CLOSET PLANNING SUGGESTIONS IN THIS FREE BOOK

You will find "The New Open House" a helpful source of ideas in planning better closets for postwar homes . . . as well as windows, doors, frames and other woodwork. Write us today for your free copy of "The New Open House."



PONDEROSA PINE WOODWORK
Dept. ZAF-5, 111 West Washington Street
Chicago 2, Illinois

Please send me a free copy of "The New Open House."

Name

Address

City State

Ponderosa Pine
WOODWORK

THE BEST IS YOURS . . . WITH PINE

BUILDING REPORTER

(Continued from page 168)

protected space the germicidal effect of 100 air changes an hour. The Hygeaire system is a new tool with which to combat absenteeism. Low initial and operating cost, ease of installation and tube replacement are worthwhile features.

Manufacturer: American Sterilizer Co., Erie, Pa.

BUILDING WIRE for wet locations.

Name: Type SNW Flamenol.

Features: Having a thermoplastic in-

sulation with low moisture absorption, this small diameter building wire is designed for use in raceway systems where there is much moisture. It is high in dielectric strength, resistant to oils, acids and alkalis, and flame resistant. The wire is self-protecting, requiring no braid. It has a hard, smooth, finish, and is striped for grade identification. The small diameter of the wire allows more conductors to be used in one conduit or permits the use of smaller conduits.

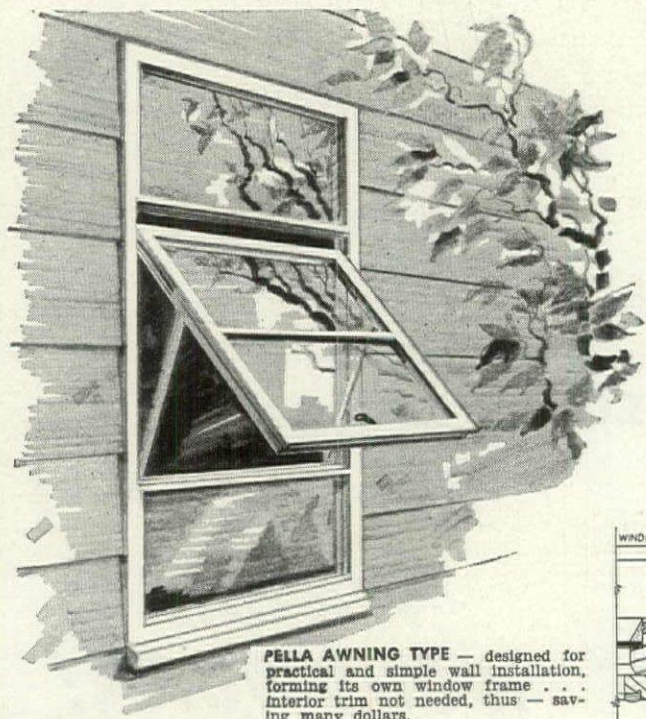
Manufacturer: Appliance and Merchandise Dept., General Electric Co., Bridgeport, Conn.

PORTABLE TELEPHONE BOOTHS made of Marlite.

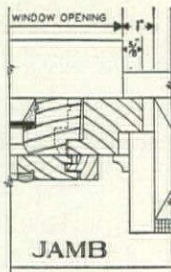
Name: Phon-O-Quiet.

Features: Engineered primarily for use in war plants, and made of Marlite pre-finished paneling, these portable units conserve essential materials and reduce costs, without sacrificing appearance and long life. Use of the Phon-O-Quiet eliminates 75 per cent of factory noises.

Manufacturer: The Fetch Co., Buffalo, N. Y.



PELLA AWNING TYPE — designed for practical and simple wall installation, forming its own window frame . . . interior trim not needed, thus — saving many dollars.



LOW COST Pella

"AWNING WINDOWS"

For Standard 2x4 Frame . . . Thin Wall . . . Masonry Construction

Made by Makers of Famous Pella Casement Windows

**No FRAMES
SASH WEIGHTS
BALANCES**

White Pine Sash . . . Toxic Treated . . . These extremely ingenious windows set right in the studding! They do not require any frames, sash weights or balances. Units come completely assembled so no fitting is necessary on the job . . . Flush type lock handle is an exclusive feature. Units can be glazed with standard size lights. Available

with screen and storm sash—inside screen and storm sash are interchangeable; top hinged or channel guided. Pella "Awning" Windows comply with Federal Housing Authority Specifications . . . **WRITE FOR FREE DETAILS!** Mail a post card TODAY! Ask for your FREE set of full-size details on Pella "Awning" Windows. Address Dept. 254

IDEAL AND EASY TO ADAPT FOR SPECIAL JOBS LIKE THESE



MULTIPLE UNITS of Pella "AWNING" WINDOWS made to your specifications are available when quantities warrant. Wide range of combinations possible. For schools, office buildings, etc. upper sash can be made to ventilate.

Patent No. 135609

"4-CYLINDER" HOUSE designed by Arthur T. Brown, A. I. A. of Tucson, Ariz. incorporates Pella "AWNING" WINDOWS. Pella's broad, horizontal lines give house the appearance of greater size.



ROLSCREEN COMPANY, PELLA, IOWA

Pella RolSCREENS * Pella Venetian Blinds * Pella Casements



CIRCULAR SLIDE RULE 6 in. in diameter.

Name: Monitor Circular Slide Rule.

Features: Small, accurate and light in weight, this slide rule is especially adapted for carrying in the brief case. It is indestructible and can be cleaned by washing. The scales are finely graduated on a white vinylite disc, 6 in. in diameter. There are four scales on the front side of the rule, log, C, D, and CI or C inverted scale. Sine and tangent scales and A and D scale for finding squares and square roots are on the reverse side.

Manufacturer: Tavella Sales Co., 27 W. Broadway, New York 7, N. Y.

PUTTY for aircraft use.

Name: No. 228-711.

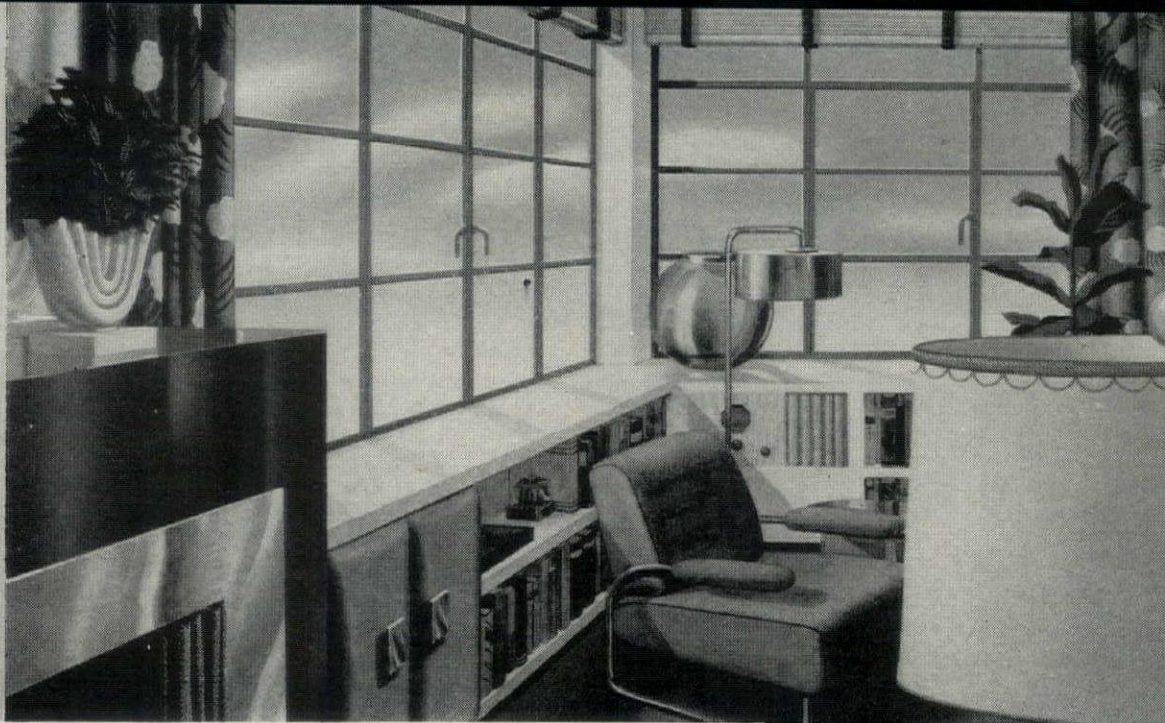
Features: This new flexible, high-adhesion aircraft putty is fast-drying, low in shrinkage and weighs less than conventional putties. Developed for filling dents and cracks between riveted aluminum sheets forming aircraft wings, it has a buttery consistency and displays no tendency to flow. Thus the desired surface contour is maintained. **Manufacturer:** E. I. du Pont de Nemours & Co., Wilmington 98, Del.

PLASTICIZER finds wide use in synthetic rubber field.

Name: Paraplex G-25.

Features: Paraplex G-25 marks another step in chemistry's effort to perfect the application of synthetic rubber. This plasticizer has shown unusual promise

(Continued on page 178)



Plan for permanent
Beauty · Comfort · Economy
with Steel

STEEL WINDOWS add an attractive note to outside views of the well-planned home. They keep colorful rooms cheerful and comfortable—lend equal distinction to large and small homes—are a wise choice in terms of lasting satisfaction and economy.

You can plan more efficient, durable homes by making full use of fireproof steel structural members and fabricated home equipment. Enameled accessories for kitchens, bathrooms and laundries owe the permanence of their smooth, colorful surfaces to the proper sort of steel base. Improvements in heating, ventilating and air conditioning owe their new efficiency to the steels of which they are made.

You can check over the most important uses of steel in home building—which seems destined to be the architect's most profitable post-war field—in our convenient booklet, "85 Ways to Make a Better Home." It points out the most important ways in which steel helps you to plan more efficient, more durable homes—for less money. We shall be glad to send your free copy of the booklet upon request.

CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago

COLUMBIA STEEL COMPANY, San Francisco

TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham

United States Steel Supply Company, Chicago, Warehouse Distributors

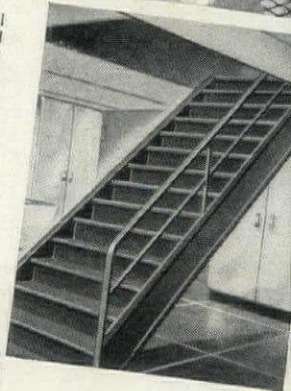
United States Steel Export Company, New York



Metal Lath—Smooth, colorful walls keep rooms bright and trim looking. Avoid unsightly cracks even if the house settles, by specifying durable metal lath.

Cellular Floors and Ceilings—Strong, rigid horizontal cells readily accommodate electric and plumbing connections, furnish a permanent base for any type of floor-surfacing, are fire-resistant and structurally strong.

Steel Stairs—Delivered in one piece, easily and quickly installed, the modern steel stairway is fire-resistant, stands all sorts of wear and tear throughout the entire life of the house.



UNITED STATES STEEL



HEY, Mary! HERE'S JUST THE THING FOR OUR NEW HOME... ZONE-CONDITIONING

PAYNEHEAT advertising, in 25 magazines, reaching millions of readers, tells about the post-war successor to old-fashioned central heating...

Payne ZONE-CONDITIONING

Healthful circulation of fresh air... gas-heated in winter; cooling, refreshing in summer... *controlled by zones or individual rooms.* ★ Architects, Builders: Investigate before you specify! (Available after we complete our war production job.)



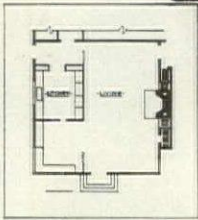
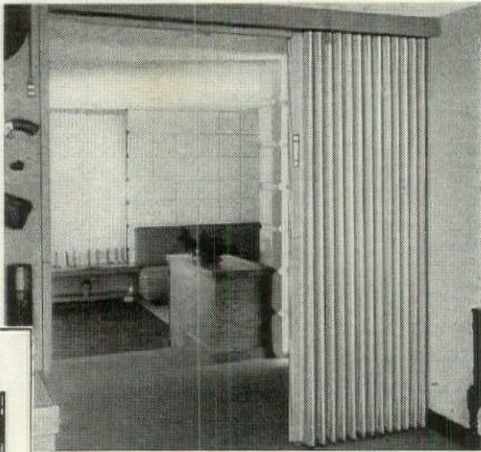
PAYNEHEAT

NEARLY 30 YEARS OF LEADERSHIP

BACK THE ATTACK
BUY WAR BONDS



Payne FURNACE & SUPPLY CO., INC., BEVERLY HILLS, CALIFORNIA



Specify

A NEW ADVENTURE IN FLEXIBLE LIVING

Modernfold, the accordion-type door, brings new flexibility to the residence. In the diagram above, note how easy it is to convert the dining alcove into a quiet study, sewing room or playroom for the children. Complete privacy is offered. When Modernfold is in the folded position, these

rooms become a spacious and livable unit.

In addition, Modernfold makes any room irresistibly attractive. A variety of colors makes it possible to match any color scheme. In your homes for 194X, specify Modernfold, the "wall that moves."



NEW CASTLE PRODUCTS

1613 I Street, New Castle, Indiana
Modernfold Doors, 424 Madison Avenue,
New York City
Export Department:
Utility Building, Fort Wayne 2, Indiana



Through KEEPING UP WITH The Times!

In wartime as in peace, leading architects rely on Cabot's Collopakes (Colloidal Paints) to give buildings extra protection and long lasting beauty. Today as in the past, Cabot's quality Collopakes are made from the purest paint pigments ground to a sub-microscopic fineness and united inseparably with the oil. This exclusive Collopaking process forms a durable, even paint film which shows no brush marks — insures greater covering and hiding power — a fresher, brighter, non-fading color.



"WHITE HOUSES" — Free, informative booklet illustrated with many prize-winning houses painted with Collopakes. Write for your copy and color cards today! Samuel Cabot, Inc., 1269 Oliver Bldg., Boston, Mass.

CABOT'S
DOUBLE-WHITE AND GLOSS COLLOPAKES

"THAT'S worth its weight in ration points!"



War has brought home the real value of EMERSON-ELECTRIC Kitchen Ventilators

Unpleasant odors, excessive heat and greasy vapors are whisked right out of the kitchen by an Emerson-Electric Ventilator. It prevents their circulation to the living rooms and checks the formation of dirt-catching film on windows, curtains, furniture and furnishings.

As a result, there is less cleaning and laundry to send out—less dusting, scrubbing and washing to be done.

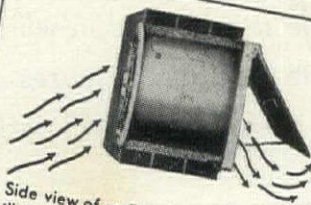
The woman lucky enough to own an Emerson-Electric Kitchen Ventilator appreciates it today, as never before—

because it reduces the wear on home furnishings and saves her so much valuable time for other important activities.

Emerson-Electric Kitchen Ventilators will again be available after Victory. So, the woman who doesn't own one is buying War Bonds today, and writing "Emerson-Electric Kitchen Ventilator" at the top of her postwar shopping list.

THE EMERSON ELECTRIC MANUFACTURING CO.
SAINT LOUIS 3, MO.

Branches:
New York • Chicago • Detroit • Los Angeles • Daveport



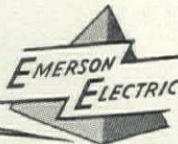
Side view of an Emerson-Electric Ventilator showing how greasy vapors, cooking odors and excessive heat are drawn from the kitchen, quickly and thoroughly.

ARE YOU MAKING EVERY BIT OF WASTE FAT WORK FOR VICTORY?

- 1 Use all fats, oils and fat drippings until you've extracted every bit of good from them.
- 2 Then strain fats into a clean, smooth-edged can.
- 3 Take each canful to your meat dealer. He will pay you 4c and 2 meat ration points for every pound of waste fat... which will then be sent to war.



TODAY Emerson-Electric power-operated gun turrets and electric motors for aircraft are in active service on all battle fronts of the world.

EMERSON  **ELECTRIC**

MOTORS • FANS • APPLIANCES

FROM APRIL 1944 ISSUE OF AMERICAN HOME MAGAZINE

Send for catalog giving full information on Emerson-Electric Kitchen Ventilators and Home Cooler Fans.

BUILDING REPORTER

(Continued from page 174)

in polyvinyl chloride cable compounds and cable lacquers, wire enamels, vinyl resin fabric coatings, hot-melt compositions, aircraft gaskets, and caulking and sealing compounds. It possesses high resistance to oils, gasoline and heat. Compounds in which it is used are essentially non-volatile and exhibit low flammability, good plasticity, water resistance and excellent stability on exposure to ultraviolet rays. Paraplex G-25 is a saturated polyester—a

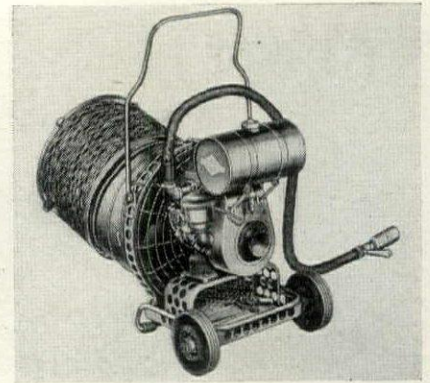
soft, tacky, viscous liquid which pours slowly at room temperature.

Manufacturer: Resinous Products & Chemical Co., 222 W. Washington Sq., Philadelphia, Pa.

SELF-POWERED PORTABLE VENTILATOR

designed for aircraft use.

Features: This portable self-powered ventilator consists of a pressure-type fan driven by a small gasoline or electric motor connected to a collapsible canvas duct. Air is propelled through the duct to the area to be ventilated. Air delivery at 3400 RPM. is 4500 CFM. without duct assembly attached, and 4000 CFM. with duct assembly



attached. Mounted on wheels, the unit is 24 $\frac{5}{8}$ in. high, and weighs 87 lbs. Designed for cooling the interior of planes where it either blows outdoor air in or drives hot air out, the unit has also been found useful for drying out bilges and engine rooms of boats, for driving out gases and fumes from confined spaces, and—without the duct—as a man cooler and insect repellent. *Manufacturer:* The Herman Nelson Corp., Moline, Ill.

SKIDPROOF PLASTIC for floor surfaces.

Name: Saf-T-Dek.

Features: Saf-T-Dek is a plastic material containing non-skid aggregate which prevents slipping on floors, steps or walkways. Applied with a trowel to a thickness of about 1/32 in., it can be used as a covering over steel, concrete or wood surfaces, provided they are free from any contaminated elements such as grease, oil or loose texture surface. Resistant to traffic, it also withstands weather remarkably well. It is used on established walkways, steps, around machinery, on slippery docks, and receiving platforms. Available in gray and red.

Manufacturer: Truscon Laboratories, Inc., Detroit, Mich.

HEAT INDICATOR for indicating temperatures of engines, liquid lines, air or gas ducts and rooms.

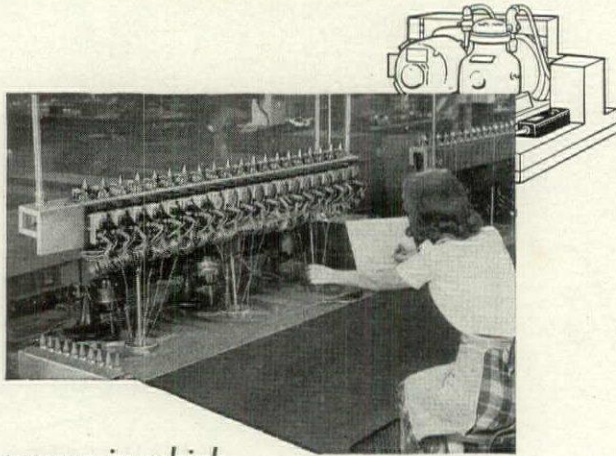
Name: Telatemp.

Features: Telatemp was developed for the purpose of remotely indicating temperatures of engines, liquid lines, air and gas ducts, and rooms. It consists of a cycling type mercury tube protected by a metal housing, and a small light panel assembly for mounting. The immersion thermostat threads into the cylinder head, coolant or oil pipe, and is made in $\frac{3}{8}$ in. pipe and other standard threads. The thermal element is protected against dust, dirt and moisture and will withstand shock, vibration and change of altitude. A green and red light system indicates normal and danger signals.

Manufacturer: Vapor Car Heating Co., Inc., Railway Exchange, Chicago, Ill.

(Technical Literature, page 182)

LEAVING NOTHING TO CHANCE



One of the many ways in which

White-Rodgers assures you that every control will perform as promised.

8 EXCLUSIVE FEATURES OF WHITE-RODGERS HYDRAULIC-ACTION TEMPERATURE CONTROLS

1. May be mounted at any angle or position, above, below or on level with control point.
2. Hydraulic-Action Principle incorporating solid-liquid filled bulb and capillary provides expansion force comparable to that of a metal bar.
3. Diaphragm motion uniform per degree of temperature change.
4. Power of solid-liquid charge permits unusually sturdy switch construction resulting in positive contact closure.
5. Heavier, longer-wearing parts are possible because of unlimited power.
6. Dials are evenly and accurately calibrated over their entire range because of straight-line expansion.
7. Controls with remote bulb and capillary are not sensitive to change in room temperature. Accuracy of control is not affected by temperature changes in surrounding area.
8. Not affected by atmospheric pressure. Works accurately at sea level or in the stratosphere without compensation or adjustment.



Part of the final check of every White-Rodgers temperature control is the cold bath immersion test. Here, in constantly circulating fluid of predetermined temperature the controls are checked for positive switch contact and reaction to temperature changes. At this stage, too, final adjustment of the dial is made so that the calibration thereafter is always accurate.

This, and other testing equipment, has been operating since the first White-Rodgers Control was built — operating to assure accurate temperature control to you — and to safeguard White-Rodgers' reputation in the heating and refrigeration fields.



WHITE-RODGERS
ELECTRIC CO.

1292E Cass Ave.

St. Louis, Mo.

Controls for Heating • Refrigeration • Air-Conditioning

50,000 Influential People



See this message **EVERY** month

If you act now he'll come home to a job

Everyone agrees that there are a tremendous number of potential postwar jobs for service men in the building industry. But men can't get and pay rates on potential jobs. They'll stand around job-right away when they come home.

The best thing about it is that something can be done—by you and thousands of other Americans—to have them the planning that your community needs to balance any postwar boom, school, hospital or public building. Get the site chosen, the legal matters straightened out, the finances arranged, and the architect well plans worked out to the last blueprint. Many services have, since available, right now—to help you get your ideas into workable plans. Remember, you'll get your new building quicker if all done before the war when materials are again available.

And don't you agree that it's the duty of every one of us to do all we can to have jobs ready when the boys come home?

DETROIT STEEL PRODUCTS COMPANY
 Now Chiefly Engaged in War Goods Manufacture
 Dept. AF-5, 2252 East Grand Blvd., Detroit 11, Mich.
 Pacific Coast Plant: Oakland, California

Fenestra SUGGESTS
 WINDOWS • DOORS • ROOF DECK • FLOOR DECK • METAL SIDING • AND OTHER BUILDING PRODUCTS

START AN ARCHITECT ON A POSTWAR PLAN NOW

Fenestra's advertisement in the May 22nd issue of Newsweek will be the 12th in our continuous series to encourage postwar planning. Newsweek is read by thousands of businessmen, school and hospital officials, and government authorities—the men whose decision to start planning must precede the actual placing of work on your boards. We hope that it has helped to get plans started, so that when the boys come home, jobs will be ready.

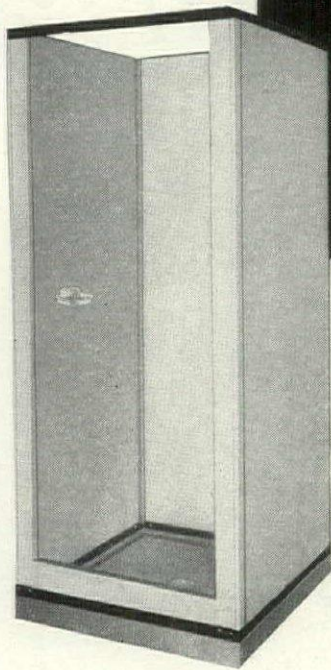
DETROIT STEEL PRODUCTS COMPANY
 Now Chiefly Engaged in War Goods Manufacture
 Dept. AF-5, 2252 East Grand Blvd., Detroit 11, Mich.
 Pacific Coast Plant: Oakland, California

AFTER MONTH

Fenestra SUGGESTS

WINDOWS • DOORS • ROOF DECK • FLOOR DECK • METAL SIDING AND OTHER BUILDING PRODUCTS

START AN ARCHITECT ON A POSTWAR PLAN NOW



*For Planned
New Bathing
Facilities...*

Bathe-Rite
**SHOWER
CABINETS**
promise EXTRA value
and satisfaction

★ ★ ★



You may have noted this trend—surveys show **ONE-THIRD** of those planning new homes or home improvements plan on installing one or more **SHOWERS!**



This “daily shower of good health” will figure prominently in your future building planning. One reason is the new millions who have enjoyed shower bathing conveniences in new war homes, military bases, factories and other buildings where **BATHE-RITE** Shower Cabinets are already installed.



Bathe-Rite Shower Cabinets have **set the quality standard** in modern, low-cost bathing facilities. Their well earned popularity today has been built on superior quality, strength, appearance and durability—features that come only from “know-how” in designing, fabrication and installation. That’s why **your** clients will always be satisfied when you specify “Bathe-Rite” for any type of building.

Write for latest bulletins
and prices.

**YOU BUY RIGHT
WHEN YOU BUY**
Bathe-Rite

Bathe-Rite DIVISION
MILWAUKEE STAMPING COMPANY

827-5 South 72nd Street

Milwaukee 14, Wisconsin

**For those better-to-live-in
homes you are
designing...**



Plan this
**BETTER
WATER**



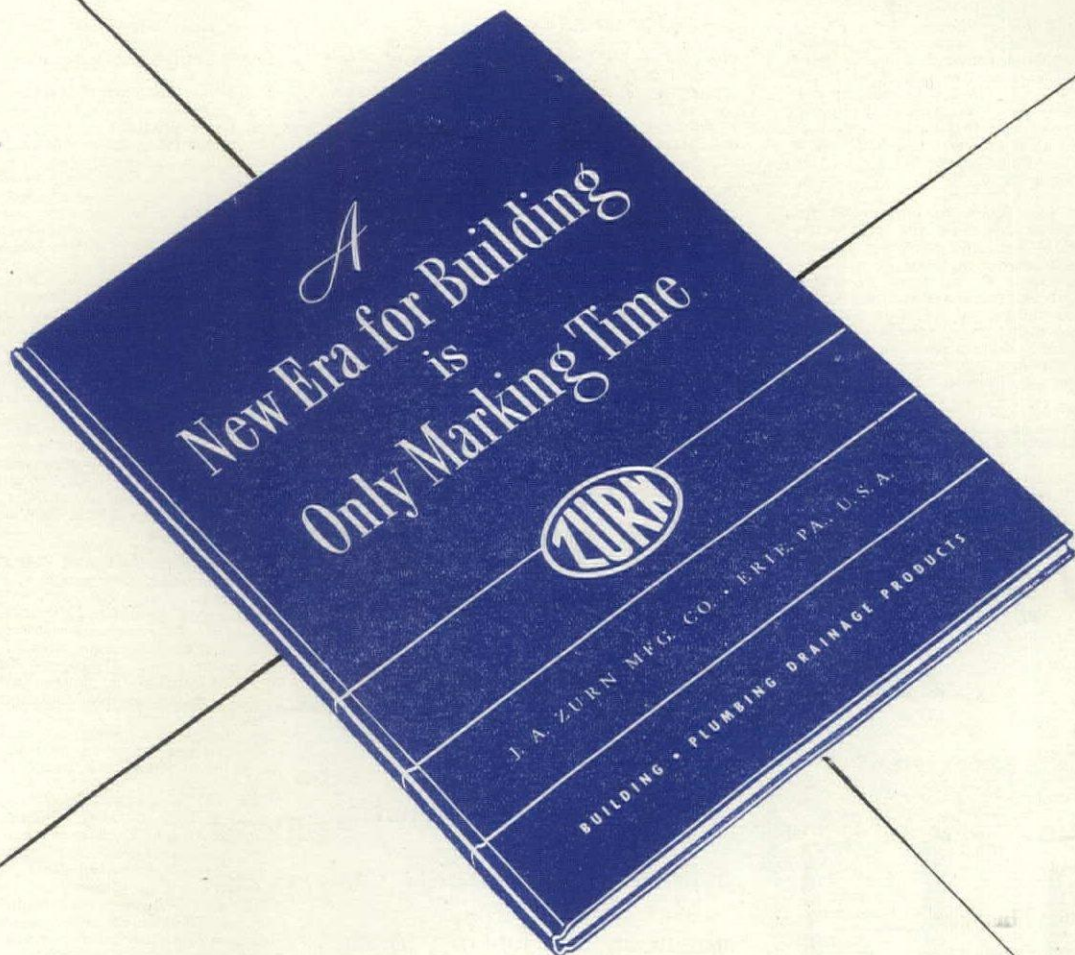
EVER stop to think how vital water is to the well-being of a household? It’s used for drinking, cooking, dish-washing, scrubbing, bathing, shaving, laundering, heating. If the water’s hard and turbid it means skimpy suds, scummy deposits in bath-tub and on dishes, unpalatable foods, scaled-up heating coils and cooking utensils, wasted soap and fuel, worn-out linens.

The Permutit* Home Water Conditioner makes it easy for any family to enjoy soft, sparkling water from every faucet. It’s simple to install, requires little attention. Plan now for this important contribution to better post-war living. Write for details to The Permutit Co., Dept. AF, 330 West 42nd St., New York 18, N. Y. In Canada: Permutit Company of Canada, Ltd., Montreal. *Trademark Reg. U. S. Pat. Off.

PERMUTIT

THE HOME APPLIANCE THAT
MAKES WATER **SOFT**





FOR THOSE WHO THINK IN TERMS OF THE FUTURE

★ An irrepresible urge to attain a higher standard of living is at work influencing the planning of structures for tomorrow—structures that will provide environments in which people may live and work and shop and play exuberantly. In this book entitled "A New Era For Building is Only Marking Time," it is a privilege to present the results of our research and study along these lines. If you are an active member of a professional or a civic group interested in planning a brighter future now for your community, you are invited to request a copy of this book of which a limited edition is now available.

J. A. ZURN MFG. CO. ★ ERIE, PA., U.S.A.



BUILDING • PLUMBING DRAINAGE PRODUCTS

Form No. 44-48

TECHNICAL LITERATURE

SHOWERS. *Why Take a Shower Bath*, 30 pp., 5½x8. Informative and entertaining booklet describes the personal features of shower bathing. Amusing illustrations trace the history of shower bathing from ancient Greece to the modern shower. Practical data on shower equipment includes suggestions for installations, what to look for in selecting a shower bath, and uses of the shower bath. Fiat Metal Mfg. Co., 1205 Roscoe St., Chicago 13, Ill.

CURBING. *A White Guide to Safety*, 30 pp., 8½x11. This book describes the safety advantages of white concrete reflecting curbing. Cast-in-place and precast methods of manufacturing and installation of two types of curbing are discussed and illustrated. Principle of light reflection and advantages of reflecting curbs are covered. Specifications cover different types of curbing, installation, curing, inspection, etc. Cross section details illustrate different curb construction, tools and equipment. Universal Atlas

Cement Co., 135 E. 42nd St., New York, N. Y.

WELDING & CUTTING. *A Presentation of Welding and Cutting Equipment* by Victor, 15 pp., 8½x11. A pictorial presentation of Victor's welding and cutting apparatus. Descriptions and advantages are offered with recommendations for uses of each. Victor Equipment Co., 844 Folsom St., San Francisco, Calif.

CONCRETE MIXER MAINTENANCE. *A Guide to the Wartime Care and Maintenance of Rex Moto-Mixers*, 21 pp., 5x7. A wartime manual of pointers and recommendations for maintenance of Moto-Mixers and truck mixers in general. It covers such subjects as cleaning, oiling, water control, operating hints and general maintenance and repair work. Amusing illustrations describe operations of cleaning, oiling, etc., and detailed sketches and charts show mixer mechanisms such as the water pump, mixing drum brake, transmission, and charging hopper assembly. A lubri-

cation chart and concise check-up list are included for handy reference. Chain Belt Co., 1600 W. Bruce St., Milwaukee, Wis.

KITCHENS. *Kitchen Predictions*, 16 pp., 5¼x7½. This attractive package of ideas presents proposed new products for the kitchen of tomorrow. Many colorful pictures illustrate plastic and glass streamlined kitchens, the use of glass block partition walls and glass packaging for food. Sketches of other improvements to be expected include plastic refrigerators, electric-eye operated kitchen doors, button window-control, and waste pulverizers. Owens-Illinois Glass Co., Toledo, O.

SAWS. *New Ways to Make Money in the Lumber Business With DeWalt Custom-Cut Methods*, 23 pp., 8½x11. Illustrated catalogue describing to the lumber dealer advantages of placing lumber in the hands of the consumer in a more usable form, or "custom-cut." Some of the methods recommended to create new markets for the lumber dealer include pre-working lumber, rendering cost-cutting services to contractors, providing fabricated farm buildings, making and selling wood products not now available, making home accessories, and improving yard methods. Cutting operations with the different saws and flexibility and ease of working lumber in these new methods, are shown. DeWalt Products Corp., Lancaster, Penn.

WATERPROOFING—FLOOR TREATMENTS. *Horn Waterproofings, Dampproofings, Floor Treatments, Technical Paints*, 8 pp., 8½x11. Catalogue describes the products Hydratite, a stearate compound to make concrete water resistant; Hornex, a concentrated rubber latex, for non-extruding expansion joints; Hydratite Plus, which reduces brick absorption and mortar shrinkage; Colorundum, which gives color and durability to cement floors; and other products. A helpful chart describes waterproofing, protective, and decorative coatings for every institutional requirement. A. C. Horn Co., Long Island City, N. Y.

FIRE TESTS. *Retardant 2766, Application No. 41C1373, June 15, 1943, Report on Fire Hazard Classification of Douglas Fir and Southern Yellow Pine Impregnated With Chromated Zinc Chloride—Grasselli Chemical Dept., E. I. du Pont de Nemours & Co., Wilmington, Del.* 64 pp., 8½x11. This report deals with chemically impregnated lumber. It includes a discussion of various retentions and their success in decreasing the combustibility of the lumbers. Examinations, preparations, test methods and conclusions are described and illustrated with photographs and charts. Flame spread, smoke density, and analysis of fumes as contributing factors are covered in the tests. Equipment used is also illustrated and explained. Underwriters' Laboratories, Inc., 207 E. Ohio St., Chicago, Ill.

ROOFING. *Roofing Specifications and Data, Follansbee Seamless Terne Roofing*, 11 pp., 8½x11. This booklet, prepared especially for the convenience of architects and builders, contains specifications for Terne roofings, with seam and application details. Fundamental properties of the roofing are discussed as are the appearance, durability, weight, expansion, and tensile strength. Diagrammatic drawings show different seam constructions. Detail drawings illustrate various roofing and window applications such as flashings, gutters and copings. Follansbee Steel Corp., P. O. Box 1258 Pittsburgh 30, Penn.

INSULATION. *Conservation of Fuel For War*, 15 pp., 5¼x8¼. A treatise on the importance of conserving fuel by reduction of heat loss from industrial equipment. Descriptions are given of loose, granulated, blanket, block, board and pipe-covering types of mineral wool insulation. Included are examples of places and equipment with which each should be used for best results. The Industrial Mineral Wool Institute, 441 Lexington Ave., New York 17, N. Y.

GENERATOR PLANTS. *Essential for all Power and Lighting Requirements—Master Portable Gas-Electric Generator Plants*, 39 pp., 8½x11. Engineering manual which describes the design, manufacture, uses and features of different models of portable gas-electric generator plants. Illustrations and general specifications including engine specifications are shown for a number of different models. Also included is information for selecting the correct size set for various kinds of loads, and a complete discussion of loads and power factors illustrated with tables. Master Vibrator Co., 200 Davis Ave., Dayton 1, O.

REQUESTS FOR LITERATURE

Robert H. Peiffer, Industrial Designer, 719 Park Ave., Rochester, N. Y. would like to receive information on products that can be utilized in the design of furniture, household novelties and "iftwares."

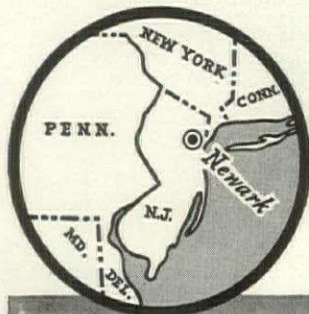
Plan your post-war buildings IN NEW JERSEY



Today many future-thinking architects, industrialists and engineers are looking to the New Jersey area with definite plans for many new peacetime building projects.

With 83 years of experience concentrated in the New Jersey zone, the Wm. L. Blanchard Co. is ready to render close, personal service to large and small organizations alike.

Send for our illustrated brochure — "BUILDING . . . FOR FOUR GENERATIONS"



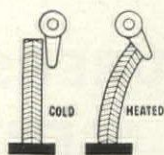
Wm. L. **Blanchard** Co.

45 POINIER STREET
NEWARK 5, NEW JERSEY

Builders Since 1860



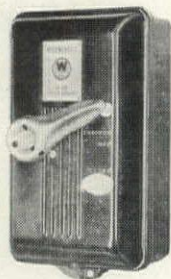
Wild arcs tamed *Quick!*



CALLING THE TRICK is the job of this Westinghouse Bi-metal Element. Two metals which react differently to heat are bonded together. Threatening overloads cause the Bi-metal to bend, tripping the interrupting mechanism and opening the circuit—before any damage is done.



TAMING THE ARC is the job of the "De-ion" arc quencher. It consists of parallel metal plates in the form of a grid. The arc is drawn into the quenching chamber . . . divided into segments . . . smothered between the plates—in the space of a half cycle.



When current's on the rampage, a circuit breaker has to function *fast and sure*—every time!

Westinghouse "De-ion" Circuit Breakers are built for just such hair-trigger protective action. They pass harmless overloads without interruption, but let danger threaten, and quicker than a blink of the eye—the circuit's opened . . . the arc is quenched. Burns and pits are minimized; contacts stay cleaner, last longer.

Once the disturbance is cleared, service is instantly restored by a flip of the indicating handle. No waiting—no repairs—no parts to replace.

Protect equipment and circuits with Westinghouse "De-ion" Circuit Breakers. Ratings up to 600 amperes; enclosures for nearly every type of service. Call your Westinghouse Representative today. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., Dept. 7-N.

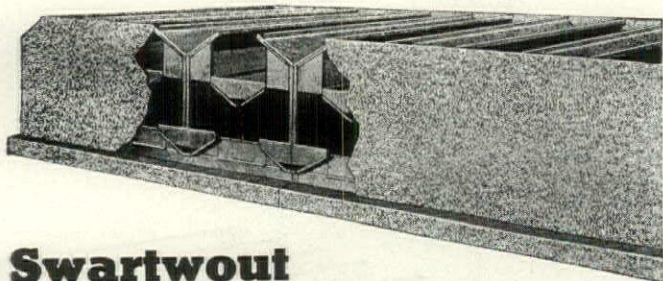
J-21298

Westinghouse

PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE



"DE-ION" CIRCUIT BREAKERS



Swartwout

AIRMOVER-

An effective industrial ventilating system that assures positive results

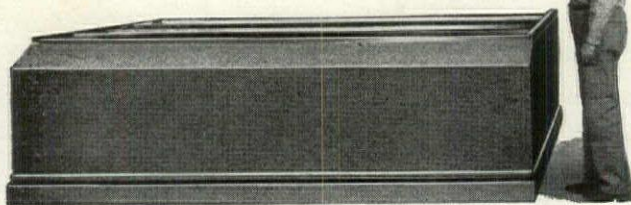
Even under the most difficult steel mill conditions . . .

Used most successfully on open hearth, plate mill, merchant mill and other steel mill buildings where "tough" smoke and heat conditions prevail.

Enormous quantities of heat, smoke and fumes are *moved* rapidly through the efficient AIRMOVER. Comfortable working conditions are provided in all areas. AIRMOVER spreads out over heat-laden sections or entire buildings—provides ready escape, *assisted by harnessed natural principles*, for the surging volumes of unwanted atmosphere.

Large steel mills, forge shops and foundries are finding Swartwout AIRMOVER not only a "production-speeder" but extremely economical as well. Ask for the facts.

THE SWARTWOUT CO.
18511 Euclid Avenue, Cleveland 12, Ohio



AIRMOVER is only 32" high — can be custom built for special requirements.



Swartwout

Specialists in Air Movement
by *Natural* Methods

BLUEPRINT FOR PEACE

... in the kitchen



ROPER


"America's Finest Gas Range"

• Post-war kitchens will be different. They'll be in keeping with your ideas of a more attractive, yet more serviceable room.

The post-war Roper gas range will be different, too. Even more beautiful, it will do more things better than they've ever been done before. That's what your clients will want.

GEO. D. ROPER CORPORATION, Rockford, Illinois, manufacturers of ROPER, "America's Finest Gas Ranges" for all gases including L. P. (Liquefied Petroleum) gas.

ROPER
GAS RANGES

SPECIFY WAR BONDS NOW * A ROPER  GAS RANGE LATER

WANTED MANUFACTURERS' AGENTS

In anticipation of postwar building activity, many progressive manufacturers of building specialties are seeking new representatives, domestic and foreign.

THE ARCHITECTURAL FORUM will be pleased to act as intermediary; agents are invited to register their interest.

Address George P. Shutt, Advertising manager
THE ARCHITECTURAL FORUM
19 West 44th Street
New York 18, N. Y.

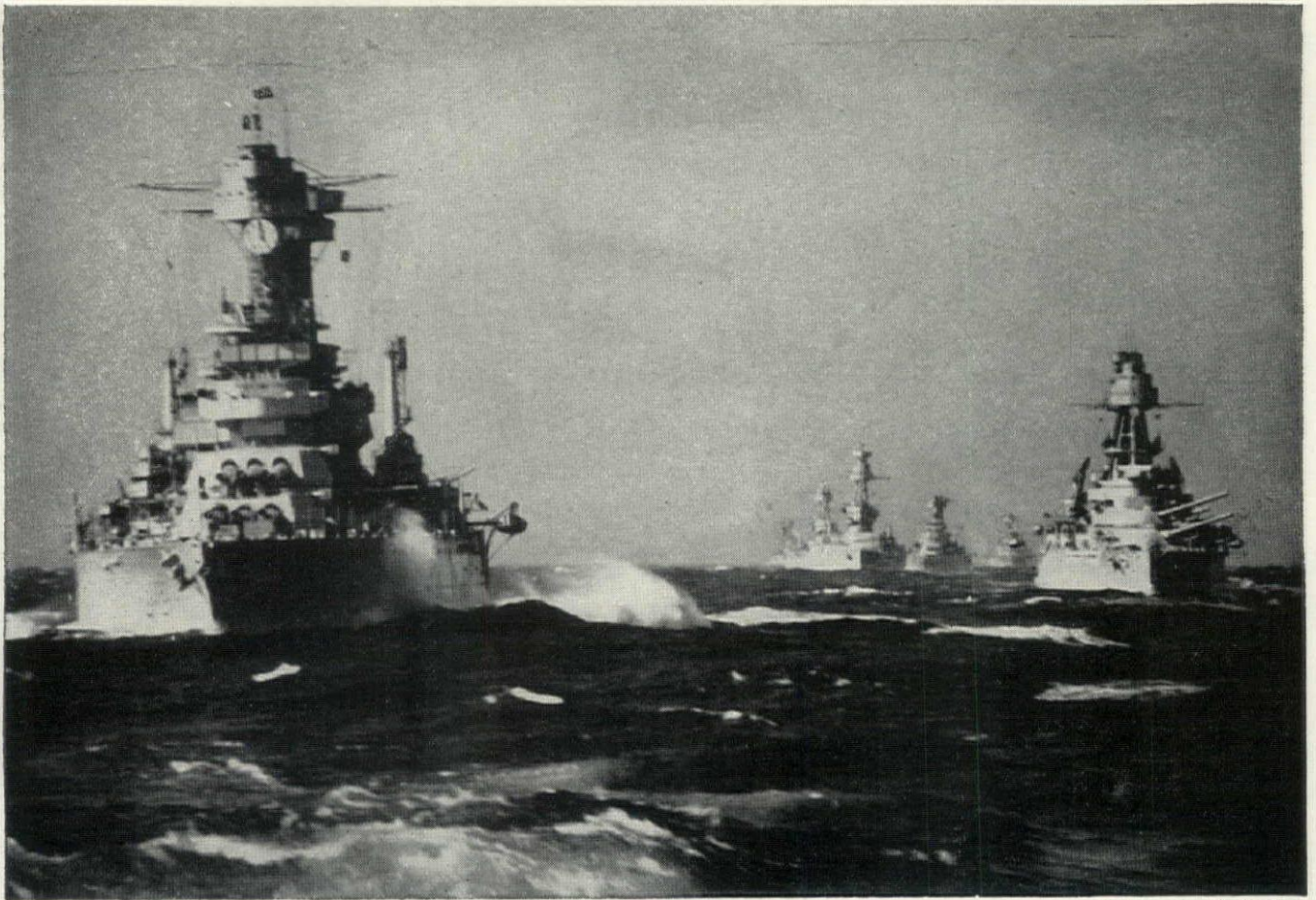
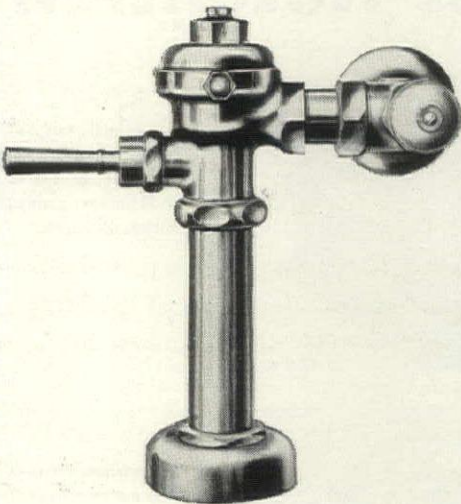


Photo courtesy U. S. Navy

SERVING THE SEVEN SEAS



The DELANY FLUSH VALVES meet the requirements of the U. S. Navy and Maritime Commission and are being supplied in large quantities for installation in all types of water craft where personal sanitation facilities are required.

The DELANY FLUSH VALVES have been always popular for marine use because of their extreme simplicity.

The action of salt water is exceptionally hard on the operating parts of a flushometer. The fact that DELANY FLUSH VALVES have only SIX working parts (compared to the usual upward of a dozen) reduces the need for maintenance due to break downs, stoppage, etc. Any repairs are made in a few seconds, by an inexperienced seaman.

Investigate DELANY FLUSH VALVES for any job, on land or sea, where long range performance counts.

SINCE 1879
Coyne & Delany Co.
BROOKLYN N.Y.

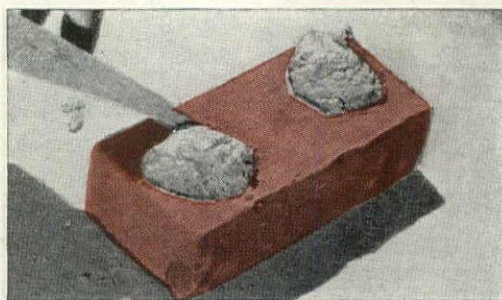


BRIXMENT Mortar Has Better Water-Retention

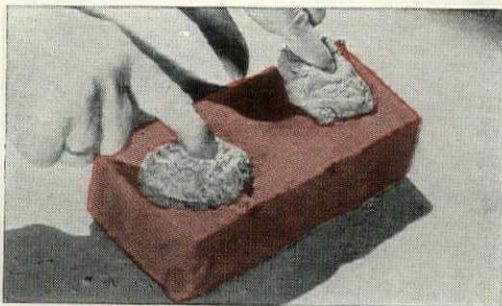
● Water-retaining capacity is the ability of a mortar to retain its moisture, and hence its plasticity, when spread out on porous brick.

High water-retaining capacity is of *extreme importance* in mortar. If the mortar does not have high water-retaining capacity, it is too quickly sucked dry by the brick; the mortar stiffens too soon, the brick cannot be properly bedded, and a good bond cannot be obtained.

Brixment mortar has extremely high water-retaining capacity. It strongly resists the sucking action of the brick. Brixment mortar therefore stays smooth and plastic longer, when spread out on the wall. *This permits a more thorough bedding of the brick, and a more complete contact between the brick and the mortar.* The result is a better bond, and hence a stronger and more *water-tight wall.*



Slap a small amount of Brixment mortar, and an equal amount of 50-50 lime and cement mortar, on a brick.



Wait a minute, then feel each mortar. You will find that the Brixment mortar stays plastic far longer than the other mortar. This proves greater water-retaining capacity.

LOUISVILLE CEMENT COMPANY, Incorporated
 General Offices: Louisville 2, Kentucky
 Cement Manufacturers Since 1830

GIGANTIC "OIL SELECTOR"

makes possible Improved Quality Control
in Pittsburgh Paints

Architects will be interested in this important
development which yields high-grade drying
oils, superior to nature's best . . .

THIS 70-foot tower is an important landmark in
paint-making. Built by Pittsburgh in 1943, this
is the only oil selector of its kind in the world.

INSIDE THIS TOWER, A REMARKABLE TRANS-
FORMATION TAKES PLACE IN NATURAL OIL.

It is literally taken apart—molecule by molecule—by
a special solvent which cascades down the tower
while the oil rises in a continuous flow. This process
is known as "molecular selection."

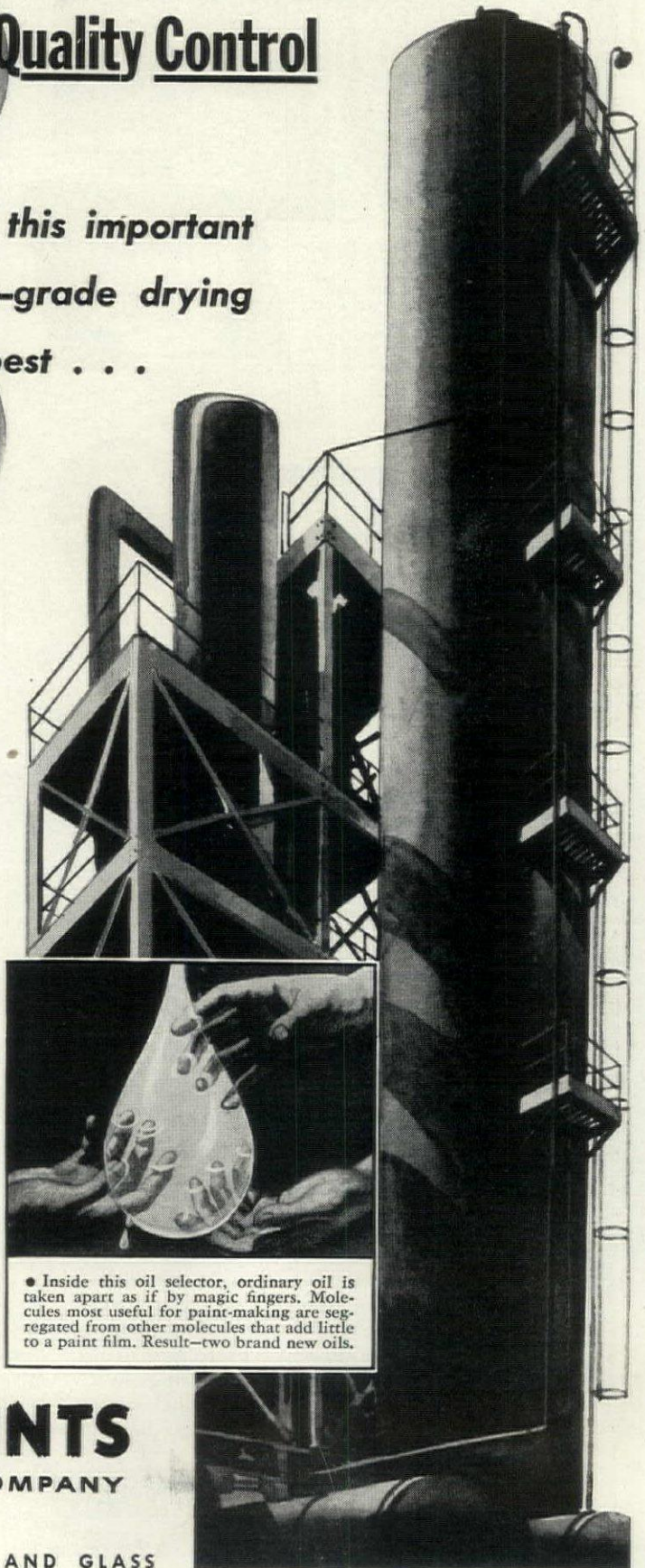
*Molecules ideally suited for making superior paints
are segregated into a brand-new selected oil which
possesses important advantages:*

THE DRYING IS VASTLY IMPROVED.

*Since this selected oil does not vary in quality, uni-
formity of paint performance is assured.*

In addition, Pittsburgh Paints are fortified with
exclusive "Vitolized Oils." Tests show that "Vitolized
Oils" remain in the paint film long after application
—keep it *live*, tough and elastic.

Only in Pittsburgh Paints will you find this unique
combination of improved oils. For long-lasting paint
jobs—the kind that reflect credit on your professional
judgment—specify Pittsburgh Paints. Pittsburgh
Plate Glass Company, Paint Division, Pittsburgh, Pa.



● Inside this oil selector, ordinary oil is
taken apart as if by magic fingers. Mole-
cules most useful for paint-making are seg-
regated from other molecules that add little
to a paint film. Result—two brand new oils.

PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY

PITTSBURGH PENNA.

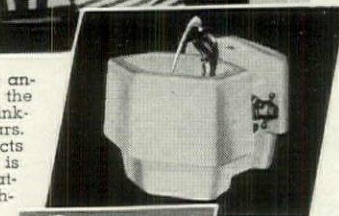


PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS



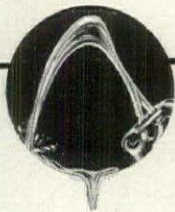
The children may not know the answer, but they've been getting the protection of Halsey Taylor Drinking Fountains for years and years. School authorities and architects know the answer to sanitation is found in their many patented features that promote maximum health-safety and sanitation. Write.

THE HALSEY W. TAYLOR CO.
Warren, Ohio

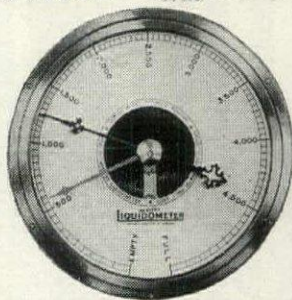


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THOSE WHO CAN'T AFFORD TO MAKE ERRORS IN MEASURING VALUABLE STORED LIQUIDS CHOOSE —



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REDUCE REFRIGERATION CONDENSING COSTS ★ ★



Trims that Spell
BEAUTY
in Every Interior

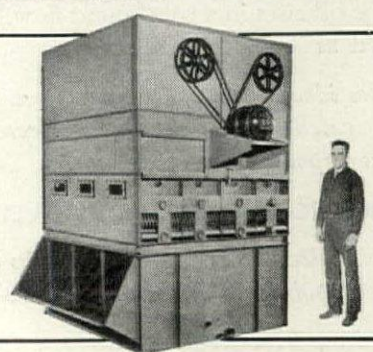
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Metal Trims
trademarked
CHROMEDGE

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

— and in addition to their own longer lasting beauty, metal trims trademarked Chromedge add permanence to the eye-appeal of modern interiors. They give all-metal protection to the smart newness of floor and wall coverings. With metal trims trademarked Chromedge, you're sure of the most in utility as well as beauty!

The B & T Metals Company
COLUMBUS 16, OHIO

80-Ton
Capacity
YOUNG
Evaporative
Condenser



★ If your refrigeration and air conditioning costs are high because condensing water is: (1) limited in quantity (2) comparatively high in temperature (3) now increased in cost . . . replace the water-cooled condenser with a Young Evaporative Condenser. In designing new installations, consider the savings that result from reduced power and cooling water consumption. For other advantages and for the solution to condensing problems, consult the nearest Young application engineer, or write to the staff at the factory.

YOUNG

BUY BONDS
PRODUCE MORE
SALVAGE SCRAP
WIN THE WAR

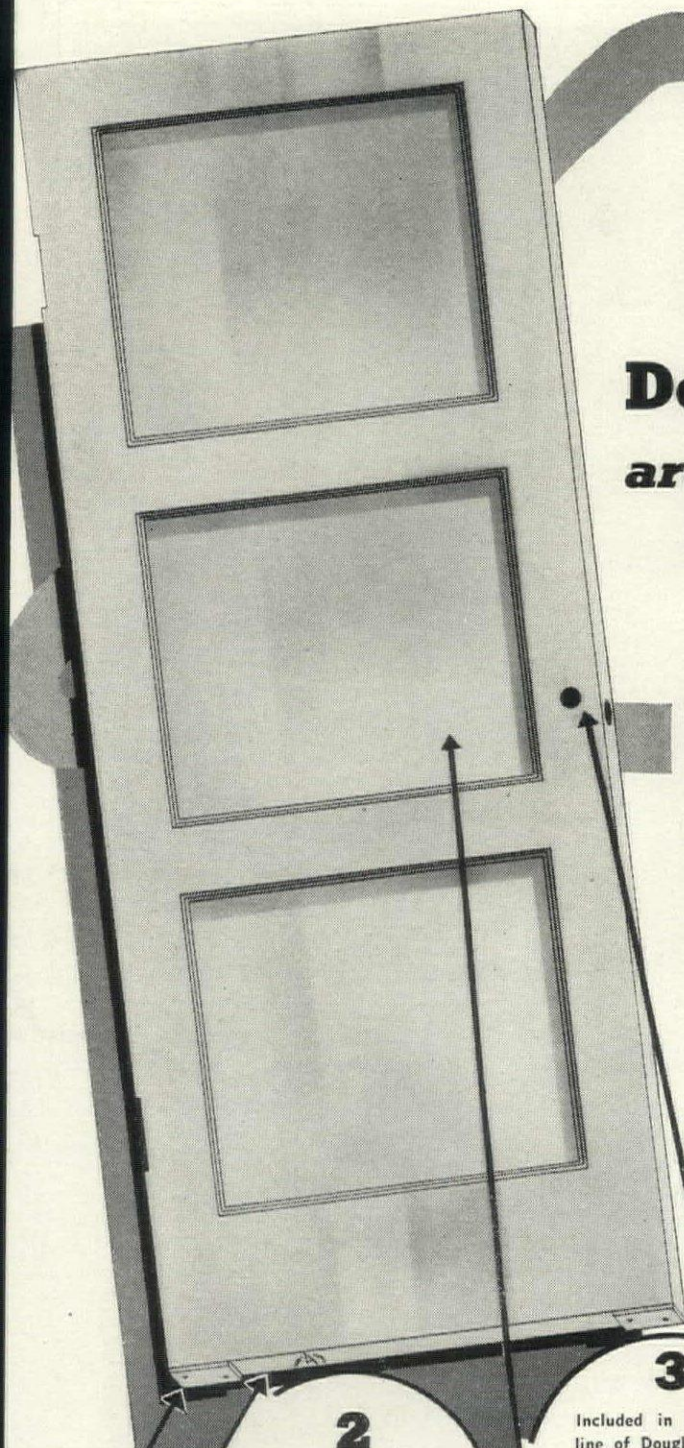
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Manufacturers of Oil Coolers • Gas, Gasoline, Diesel Engine Cooling Radiators • Intercoolers • Heat Exchangers • Engine Jacket Water Coolers • Unit Heaters • Convectors • Condensers • Evaporators • Air Conditioning Units • Heating Coils • Cooling Coils • and a Line of Aircraft Heat Transfer Equipment

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Application Engineers in Principals Cities

These New, Improved Douglas Fir Doors* are adaptable to all types of buildings!

Yes—basic 3-panel designs make famous Douglas Fir Interior Doors adaptable to all types of building . . . and the new FACTRI-FIT line makes these fine doors available COMPLETELY machined, gained and mortised. Precision tools do the job; the doors fit better and look better. Check these five advantages!



1

FACTRI-FIT doors are scuff-stripped for protection in handling and shipping. Added assurance that the doors will reach the job **READY TO HANG.**

2

Every door is grade-marked, easy to order, specify and supply. Guess-work and confusion are eliminated.

3

Included in the stock line of Douglas Fir Interior Doors are basic 3-panel designs—attractive, all-purpose designs, adaptable to every type of building.

4

New FACTRI-FIT doors may be ordered completely machined if you wish—gained, and bored for locks or mortised by high-speed precision tools.

5

The new FACTRI-FIT line offers Douglas Fir Interior Doors pre-fit at the mill—trimmed, ready to hang. Trimming and fitting are eliminated.

FACTRI-FIT

Precision-Built
Douglas Fir Doors

* Now available only for war needs and other essential building.

FIR DOOR INSTITUTE

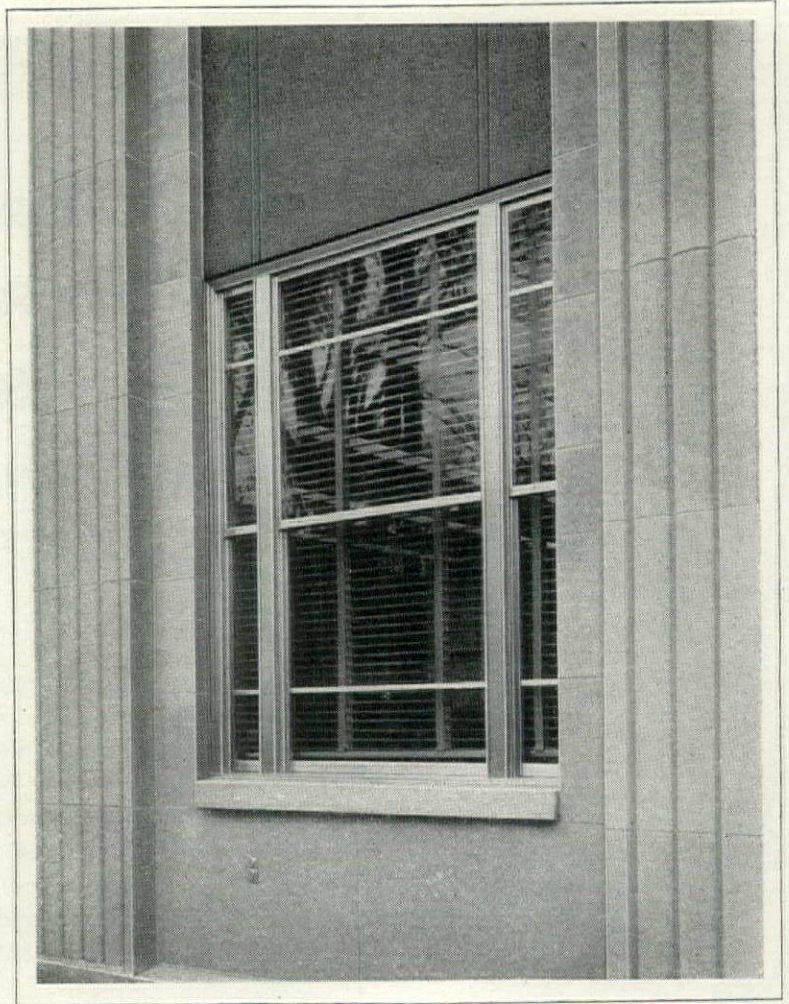
Tacoma Building • Tacoma 2, Wash.

Remember!
NATURE MAKES
DOUGLAS FIR
Durable!

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

Write for catalog showing complete line of TRU-FIT Entrance doors and other new specialty items.

Adlake Aluminum
Window in National
Guardian Life
Insurance Co. Building
Madison, Wisconsin
Law, Law and Potter
Architects



Windows...

*in Harmony with
Good Design*



WHEN PEACE COMES... wartime developments will be converted rapidly to peacetime uses. You will be flooded with new and untried materials. Some will be good. Some won't. But on this you can depend: Long before the war started, Adlake Non-ferrous Metal Windows had a background of successful application in all types of construction. That does make a difference when it comes to building windows that are in harmony with good architectural design



THE ADAMS & WESTLAKE COMPANY

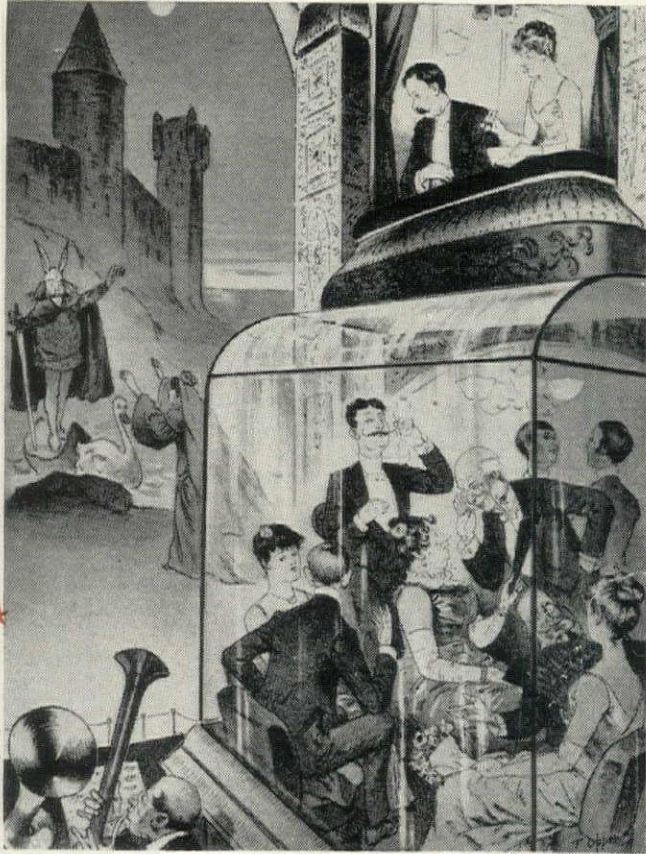
ESTABLISHED IN 1857

ELKHART, INDIANA

NEW YORK · CHICAGO

MANUFACTURERS OF ADLAKE NON-FERROUS METAL WINDOWS

DOODLED IN 1886. "Puck" readers thought this plate-glass conversation-box would be a fine idea—got many a guffaw out of it, got nothing else. Theater parties *continued* to chat, chuckle, chaff in the ears of the audience. For, like many another building idea, this early, squirrely preview of sound-proofing never got built.



Are you doodling
or planning for that building boom?

HOUSING EXPERTS REPORT that American builders are starry-eyed and boom-happy about our housing needs for tomorrow.

"America will require as many as 1,600,000 new homes a year for a full decade after the war," they croon. "Big boom coming!"

Could be. Maybe there *will* be a boom after the war.

But, as every clear-headed builder knows, *need* alone doesn't build houses. Mr. Ira S. Robinson, acting New York State Housing Commissioner, puts it this way:

"... there can be no constructive program to meet postwar housing needs without instituting immediately a definite plan..."

And after your plans are made they must be sold to the kind of people who can buy homes and the building materials that go into them—the kind of people other people copy.

These are the people builders think of when they think of the readers of TIME.

For 57.5% of all TIME-reading families own their own homes (the national home-owning figure is 47.2%). And 21.7% of them own *other* real estate too.

What's more, the readers of TIME are America's million most influential family heads.* Not only do they buy building materials for themselves, but many of them also have a powerful say-so in the sale of building products. For

example, federal, state, and city planning commission members—leading realtors in 60 cities—architects—and members of the Mortgage Bank Association—

all vote TIME their first-choice magazine.

*Among them are executives and engineers, government officials, mayors, bankers, architects, and 22 other groups of leaders who recently voted TIME America's most important magazine.

TIME
 GATEWAY TO
 THE BUILDING MARKET



Window Planning Begins Now!

The end of the war cannot be foreseen, nor can one foretell the great political problems of its aftermath. But one thing is certain: American manufacturing ingenuity will be taxed to supply the pent up demand for merchandise by the American public.

So, planning begins now! Time, an ever important factor in the consideration of profits, will be doubly valuable in a hectic post-war reconstruction era. That is why, in window planning, the Grand Rapids Invisible Sash Balance must be given prime consideration. Simplicity, rapidity and ease of construction — smooth, dependable performance, and other equally commendable features — puts the Grand Rapids Invisible out in front in any planning of window assemblies.

Note: Sash pulleys will be available as soon as materials are released.

At present governed by government priorities. Send for catalog for information and delivery details.

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS • MICHIGAN

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The advertising pages of THE ARCHITECTURAL FORUM are the recognized market place for architects and all others engaged in building. A house or any building could be built completely of products advertised in THE FORUM. While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This THE FORUM does.

| | |
|--|------------------|
| Adam, Frank, Electric Co. | 169 |
| Adams and Westlake Company, The | 190 |
| Aluminum Company of America | 165 |
| American Brass Company, The | 22 |
| American Lumber & Treating Company | 110 |
| American Pencil Company | Opp. 32, Opp. 33 |
| American Radiator & Standard Sanitary Corporation | 111 |
| American Rolling Mill Company, The | 132, 139 |
| Andersen Corporation | 2, 3 |
| Arco Company, The | 126 |
| Armstrong Cork Company | 118 |
| Assn. of Gas Appliance and Equipment Mfrs. | 45 |
| Associated General Contractors of America, Inc., The | 131 |
| Baldwin-Hill Company | 132 |
| Bathe-Rite Division | 180 |
| (Milwaukee Stamping Company) | |
| Bell & Gossett Co. | 15 |
| Bigelow-Sanford Carpet Co., Inc. | 156 |
| Bituminous Coal Institute | 33 |
| Blanchard, Wm. L., Co. | 182 |
| Bohn Aluminum and Brass Corporation | 171 |
| Borg-Warner Corporation, Norge Division | 163 |
| Briggs Mfg. Company | 23 |
| B & T Metals Company, The | 188 |
| Burnham Boiler Corporation | 152 |
| Byers, A. M. Company | 7 |
| Cabot, Samuel, Inc. | 176 |
| Carey, Philip Company, The | 117 |
| Carnegie-Illinois Steel Corporation | 175 |
| (United States Steel Corporation Subsidiary) | |
| Celanese Celluloid Corporation | Cover III |
| Celotex Corporation, The | Cover II |
| Coleman Lamp and Stove Company, The | 137 |
| Columbia Steel Company | 175 |
| (United States Steel Corporation Subsidiary) | |
| Connecticut Telephone & Electric Co. Division | 24 |
| (Great American Industries, Inc.) | |
| Coyne and Delany Co. | 185 |
| Crane Co. | 149 |
| Crawford Door Company | 18 |
| Detroit Steel Products Company | 179 |
| DeWalt Products Corporation | 29 |
| Douglas Fir Plywood Association | 43 |
| Dow Chemical Company, The | Opp. 16 |
| Dunham, C. A. Co., The | 158 |
| Eagle-Picher Lead Company, The | 114 |
| Edison General Electric Appliance Company, Inc. | 151 |
| Edwards & Company | 172 |
| Eljer Co. | 11 |
| Emerson Electric Manufacturing Co., The | 177 |
| Fiat Metal Manufacturing Company | 159 |
| Fir Door Institute | Opp. 130, 189 |
| Firestone | 135 |
| Fitzgibbons Boiler Company, Inc. | 39 |
| Flintkote Company, The | 145 |
| Follansbee Steel Corporation | 136 |
| Formica Insulation Company, The | 5 |
| Frigidaire Division | 194 |
| (General Motors Corp.) | |
| General Bronze Corporation | 32 |
| General Electric Company | 20, 21, 42, 144 |
| General Motors Sales Corp. | 194 |
| (Frigidaire Division) | |
| Grand Rapids Hardware Co. | 192 |
| Great American Industries, Inc. | 24 |
| (Connecticut Telephone & Electric Division) | |
| Great Lakes Steel Corporation | 141 |
| (Stran-Steel Division) | |
| Hoffman Specialty Co., Inc. | 46 |
| Hope's Windows, Inc. | 123 |
| Horn, A. C., Company | 38 |
| Houston Ready-Cut House Co. | 53 |
| ILG Electric Ventilating Co. | Opp. 131 |
| Insulite Company, The | 50 |

YING INDEX

| | |
|--|------------------------|
| Kennedy, David E., Inc. | 150 |
| Kimberly-Clark Corporation | 119 |
| Kinnear Mfg. Co., The | 122 |
| Kitchen Maid Corp., The | 193 |
| Laucks, I. F., Inc. | 148 |
| LCN Door Closers | 128 |
| Libbey-Owens-Ford Glass Company | 40, 41 |
| Lincoln Electric Company, The | 30, 31 |
| Liquidometer Corp., The | 188 |
| Lone Star Cement Corporation | 162 |
| Louisville Cement Co. | 186 |
| Masonite Corporation | 48 |
| McCall's | 129 |
| Mengel Company, The | 47 |
| Mesker Bros. | 115 |
| Miami Cabinet Division | 112 |
| (The Philip Carey Company) | |
| Michaels Art Bronze Co., Inc., The | 27 |
| Milwaukee Stamping Company | 180 |
| (Bathe-Rite Division) | |
| National Electric Products Corporation | 116 |
| National Gypsum Company | 54 |
| National Lead Company | 160 |
| Nelson, Herman Co. | 124, 125 |
| New Castle Products | 176 |
| Norge Division, Borg-Warner Corporation | 163 |
| Ohio Hydrate & Supply Co., The | 170 |
| Overhead Door Corporation | Cover IV |
| Pacific Steel Boilers | Opp. 17 |
| Payne Furnace & Supply Co. | 176 |
| Permutit Co., The | 180 |
| Pierce Butler Radiator Corp. | 170 |
| Pittsburgh Plate Glass Company | 17, 37, 154, 155, 166 |
| Pittsburgh Plate Glass Company, Paint Division | 187 |
| Pluswood Incorporated | 52 |
| Ponderosa Pine Woodwork | 173 |
| Portland Cement Association | 127 |
| Propellair, Inc. | 113 |
| Revere Copper and Brass, Incorporated | 142, 143 |
| Rolscreen Company | 174 |
| Roper, Geo. D. Corporation | 184 |
| Rowe Manufacturing Company | 109 |
| Sanymetal Products Co., Inc., The | 133 |
| Sedgwick Machine Works, Inc. | 140 |
| Servel, Inc. | 134 |
| Soulé Steel Company | 44 |
| Stran-Steel Division | 141 |
| (Great Lakes Steel Corporation) | |
| Structural Clay Products Institute | 10 |
| Swartwout Co., The | 184 |
| Sylvania Electric Products Inc. | 8 |
| Taylor, Halsey W., Co. | 188 |
| Tennessee Coal, Iron & Railroad Company | 175 |
| (United States Steel Corporation Subsidiary) | |
| Tile-Tex Company, The | 120 |
| Time | 191 |
| Timken Silent Automatic Division | 19 |
| (The Timken-Detroit Axle Co.) | |
| Todd Shipyards Corporation | 51 |
| (Combustion Equipment Division) | |
| Truscon Steel Company | 153 |
| United States Gypsum Company | 121, 157 |
| United States Plywood Corporation | 47 |
| United States Radiator Corporation | Opp. 17 |
| United States Steel Corporation | 163, 175 |
| Universal Atlas Cement Co. | 168 |
| (United States Steel Corporation Subsidiary) | |
| Upton Company, The | 35 |
| Van Range, John, Co., The | 126 |
| Victor Electric Products, Inc. | 49 |
| Viking Manufacturing Corporation, The | 9 |
| Vonnegut Hardware Co. | 164 |
| Walworth Company | 138 |
| Webster, Warren & Co. | 122 |
| Westinghouse Electric & Manufacturing Company | 25, 146, 147, 167, 183 |
| White-Rodgers Electric Co. | 178 |
| Williams Oil-O-Matic Heating Corporation | 161 |
| Young Radiator Company | 188 |
| Zurn, J. A. Mfg. Co. | 181 |

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Modern Kitchen

IS AVAILABLE NOW!



**FOR WAR HOUSING—
POST-WAR PLANNING**

● Here's a Kitchen Maid modern kitchen—a combination of units from its line of advanced cabinetry which is available today for war housing; ready to be specified in peace-time plans as well. With Kitchen Maid's factory producing 50,000 war kitchens, there is no serious re-conversion problem, and the entire line will be quickly available for all residential purposes after V-Day.

Developed before the war, proved by extensive war housing experience, this new cabinetry is the fulfillment of present and early post-war needs. It is constantly being specified for projects of all types. And *composite construction* is the principal reason for its wide acceptance.

Made of hardwood, plywood, and other compositions, Kitchen Maid Cabinetry combines all the advantages of the best materials available—each used where it serves best, gives greatest strength and longest life. Remarkably flexible, too—with standard units to fit practically any arrangement. Before planning another war or post-war job, see your Kitchen Maid dealer, or—

WRITE FOR THIS NEW FOLDER



The Kitchen Maid Corp., 445 Snowden Street, Andrews, Indiana.
Please send new folder on "Kitchen Maid War and Post-War Cabinetry."

Name _____

Address _____

Architect Builder

Dealer Owner



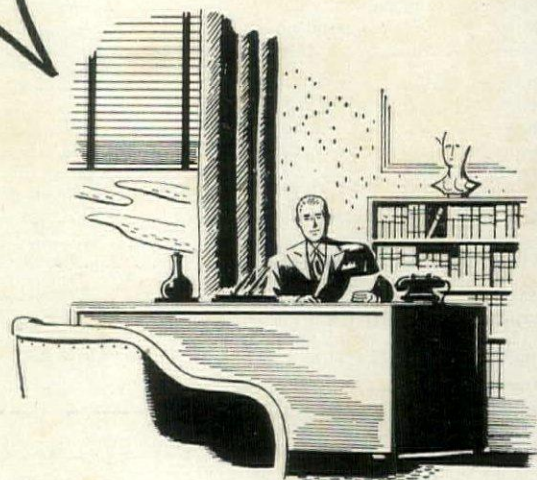
KITCHEN MAID
FOUNDER OF MODERN KITCHEN UNITS

"During times like these...we
have an even better appreciation
of Frigidaire dependability"

*Typical of expressions from owners and
managers of rental properties everywhere.*

Many owners and managers of rental properties are citing economy from an operating standpoint, fewer complaints from tenants, and longer life as the reasons why their choice will again be Frigidaire.

To continue to make Frigidaire products America's first choice is our goal for the future. The fulfillment of our plans must await Victory. But one thing is certain: *there will be more and better Frigidaire products for more people—and in their making, more jobs for more men!*



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Just out. "101 Refrigerator Helps" published for *all* refrigerator users. Offers tenants many new tips on both care and use of their refrigerators. Get free supply from any Frigidaire dealer, distributor or branch office. Find name in Classified Telephone Directory or write Frigidaire, 400 Taylor Street, Dayton 1, Ohio. In Canada, address 146 Commercial Street, Leaside, Ontario.

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Every Sunday Afternoon, NBC Network



in War Production

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Division of

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Peacetime Builders of

ELECTRIC REFRIGERATORS • RANGES • WATER HEATERS
HOME FREEZERS • ICE CREAM CABINETS
COMMERCIAL REFRIGERATION • AIR CONDITIONERS
BEVERAGE, MILK, AND WATER COOLERS

FORMULA FOR SUNSHINE



Lumarith glazing invites the sun indoors. It brings you sunshine almost as you get it in the open air—ultra-violet rays and all.

When production for civilian use is resumed, you will find Lumarith plastics a better answer to certain glazing problems. In transparent sheets which are flexible, non-shattering and extremely light in weight, Lumarith will fill some important roles around the farm and home—in storm sash, interior skylights, greenhouses, portable buildings and sun rooms, for example.

A coating of Lumarith plastic over wire mesh produces Vimlite*. This glazing material (in rolls) provides economical protection and diffused light transmission wherever absolute transparency is not required or desirable: poultry houses, cold frames, amateur greenhouses, draft screens and portable housings.

Although these Celanese synthetics are sold only on war priority today, they are worth knowing more about. A descriptive booklet containing samples is yours for the asking. Write for it—it will help you plan. Celanese Celluloid Corporation, *The First Name in Plastics*, a division of Celanese Corporation of America, 180 Madison Avenue, New York City 16.

R_v By formula, synthetics can be made to possess definite characteristics. As, in the case of Lumarith glazing plastics, transparency, flexibility, lightness and the ability to transmit the short ultra-violet rays are specified and then the formula is developed. This principle of specific design is the basis of the growing importance of synthetics in our everyday life.

Lumarith*

A CELANESE* PLASTIC

Reg. U.S. Pat. Off.

TUNE IN The Celanese* Hour—"Great Moments in Music"—Columbia Network, Wednesdays, 10 P. M., E. W. T.



DEPENDABLE DOORS for TODAY and TOMORROW

In war production plants, the fast operating "OVERHEAD DOOR" meets all demands for superior service. Weathertight and tamper-proof, it may be depended upon for continuous, smooth performance year in and year out. The "OVERHEAD DOOR" is built as a complete unit to fit any size opening. It will also be available for residential use when homes are built again.

TRACKS AND HARDWARE OF SALT SPRAY STEEL

Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales — Installation — Service.

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