UNIVERSITY OF HAWAN

MPRZ

THE ARCHITECTURAL FOR ROLL MANAGEMENT OF RECORD TO THE ARCHITECTURAL

NOVEMBER 1943.

Stumped by Acoustics ?...

READ THIS PROOF OF RESULTS

Saint Benedict's Rectory 2215 Bruing Hark Road Chicago, 3111.

September 23, 1943

James L. Lyon Co., 201 N. Wells Street Chicago, Illinois

Gentlemen:

Regarding the Acousti installation in Saint Benedict's Church: I consider sound conditioning the most important improvement one of the ever been made in my church building, and certainly one of the I consider sound conditioning the most important improvement that has ever been made in my church building, and certainly one of the finest things I have been able to do for my parishioners. Before sound conditioning, delivery of the announcements and reverber. Sound reverber as a trial on both the briest and the listener.

Before sound conditioning, delivery of the announcements and reversed to all concerned, as well as being an entirely ineffectual communication to all concerned, as well as being an entirely ineffectual communication. ated so that the words overlapped and were garbled. It was nerve-wracking communication loud speaker at concerned, as well as being an entirely ing an aid, a condition.

between a priest and his people. Instead of such an annoying condition. between a priest and his people. Instead of being an aid, a loud speal arrangement only increases the faults of such an annoying condition. I had Acousti-Celotex installed, and immediately the faults

I had Acousti-Celotex installed, and immediately the faults the altar and above the altar pulpit and above During special in the pulpit and above During special placed up. Microphones placed from either location. The prayers can be heard to be heard clearly from either prayers can be heard services, such as the Stations of the Cross, the prayers can be heard services, such as the Stations of the Cross, the prayers can be heard services, such as the Stations of the Cross, the prayers can be heard services, such as the Stations of the Cross, the prayers can be heard services. make it possible to be heard clearly from either location. During spending of the Cross, the prayers can be heard services, such as the Stations of the church. In addition to the convenience and lack of strain, sound to the convenience and lack of strain, sound to the parishioners to t In addition to the convenience and lack of strain, sound to the convenience and lack of strain, sound to made it possible for the parishioners to a fuller degree conditioning has made it possible for to a fuller degree enter into the celebration of the Mass without difficulty that the celebration of the services without difficulty by being able to follow the services without difficulty. services, such as the Stations of the church. enter into the celebration of the Mass to a fuller degree by being able to follow the services without difficulty.

I have no hesitation in recommending sound conditioning as the cure-all for any church or auditorium that is beset I have no hesitation in recommending sound conditioning that is beset the cure-all for any church or auditorium that is beset with faulty accustics

with faulty acoustics.

Walter L. Fasnacht

St. Benedict's R. C. Church, Chicago, Illinois, Sound Conditioned with Acousti-Celotex.*

THE Acousti-Celotex* Distributor in your city is a member of the world's most experienced organization in the sound conditioning of churches, auditoriums, hospitals, theatres, schools, offices and factories. Take advantage of his knowledge and experience. His advice is yours without obligation and he guarantees results. If you do not know his name, a note to us will bring him to your desk.

Sound Conditioning with ACOUSTI-CELOTEX

Sold by Acousti-Celotex Distributors Everywhere

In Canada: Dominion Sound Equipments, Ltd.

CHICAGO

THE CELOTEX CORPORATION .

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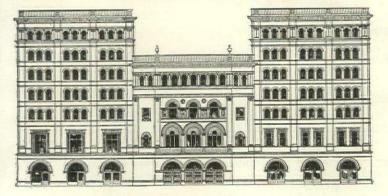
VOLUME 79—NUMBER FIVE

VOLUME 79-NUMBER FIVE

FORUM OF EVENTS



INTERIOR COMMEMORATES LAVISH NINETEENTH CENTURY



CREAKING BACKSTAGE FACILITIES BELIE TRADITIONAL POMP





Piz Inc

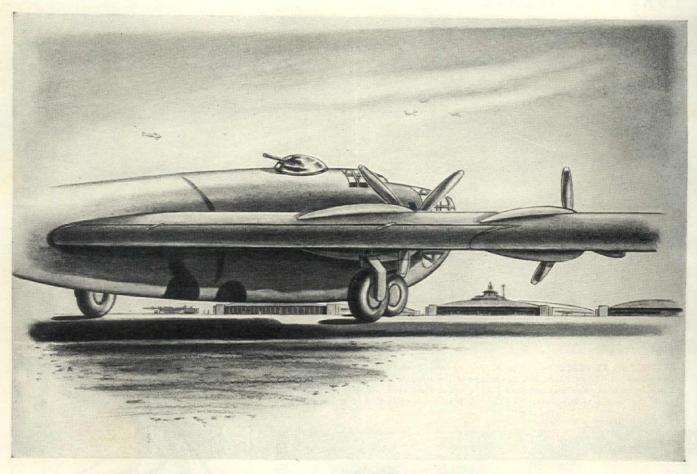


THE EARS OF MANY VS. THE EYES OF FEW

DIAMOND JUBILEE finds the regal old Metropolitan Opera house struggling to meet the demands of a clamorous public.

Sixty years ago the greatest fortunes in America built, organized and reserved the Metropolitan Opera as a monument to social prestige. From the outset it has retained the highest musical standing, but after the turn of the century the expansion of New York's social ranks and contraction of most individual incomes left the harrassed directors no alternatives but bankruptcy or public subscription. The choice of the latter resulted in an immense stimulation of public interest and increased demand for seating space. An inadequate attempt to solve this problem was made a few years ago when the grand tier of boxes was sacrificed for a greater number of balcony seats. However, subsequent nation-wide broadcasts and lowered prices have so swelled the popularity of the opera in America that the existing building is hopelessly (Continued on page 124)

Photos: Pix Inc.



YOU NEED A REAL DOOR FOR THIS BABY'S CRADLE

Thanks to Peelle—the finest name in doors—shops and hangers for even the biggest planes need have no door problem! For, Peelle doors, hundreds of feet wide, are daily winning the admiration of the aviation industry in many famous plane-building and servicing establishments.

Built to meet today's exacting conditions. Backed by some fifty years of door-construction experience. Thus, whether it's an urgent present need or as yet a blue printed project, the NEW Peelle Plydoor is bound to solve your door problem.

The NEW Peelle Plydoor fits any opening, quickly installed, easily operated and economical, too. Prefabricated under a new principle of wood construction, stronger per pound than steel. So light it can be manually operated—glides up out of the way—or rolls back like a telescope into a self-contained unit. Can be added easily to buildings already constructed. And, best of all, you can get your NEW Peelle Plydoor now!

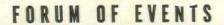
Take advantage of the Peelle experience and skill. It will pay you to let us send you complete data!

PEELLE

47 Stewart Avenue

THE FINEST NAME

Brooklyn, N. Y.

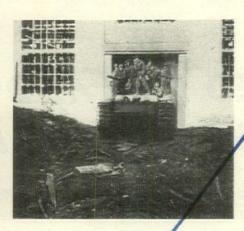




STALINGRAD AT PEACE was one of the newest Soviet industrial cities. The elongated plan (right) took full advantage of the Volga's transportation facilities. Each industrial zone was paralleled by a residential area with its own schools, park and access to the river. The famous tractor plant is shown at upper right.

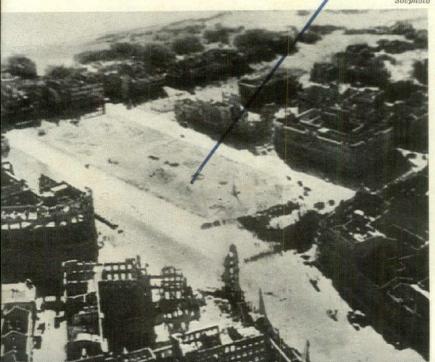
Photos: Paramount Pictures, Inc.

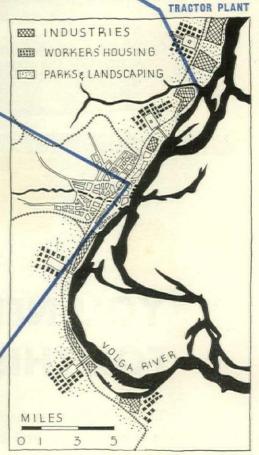




STALINGRAD AT WAR. Completely devastated by the Germans, the wrecked city dwarfs the horror of the London blitz. Photo below shows what is left of the publis square in the upper picture as viewed from opposite corner. Tractor plant workers (above) manned repaired tanks and held of German assault.

Souphoto





Sonnhoto

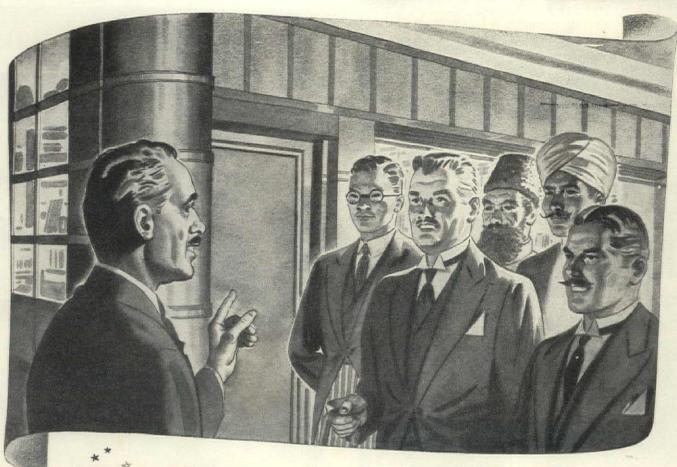
STALINGRAD

"The City That Stopped Hitler"

A city under bloody seige, grimly defended by its inhabitants, has been made the hero of an outstanding war film—and without benefit of Hollywood direction. Released by Paramount, this Russian-produced picture shows at perilously close range the tactics of the widely publicized battle. It should do much to bring home to the American mind the extent of Russian courage, endurance and sacrifice.

The city itself was not laid out as a military stronghold but it is interesting to see that because of the widely separated industrial sections along the left bank of the river, it was possible for the Russians to keep the factories going in the sections of the city which they held. At the outset the Germans purposely avoided bombing the factories. Later, 7,000 direct hits in the area of one

(Continued on page 126)



HEN THE PEACE CONFERENCE

comes to Washington...



...the delegates from war-blasted nations will find their faith in man's power to create a better world refreshed by the atmosphere of beauty and achievement captured in monuments to Washington, Jefferson and Lincoln, in stately administrative buildings, and the libraries, museums, archives, and galleries of art.

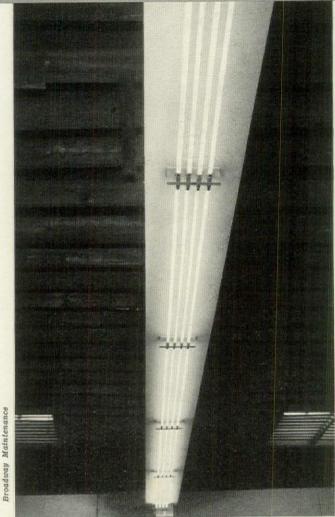
Should they be curious about details and materials in such newer Washington struc-

THE FORMICA INSULATION CO. 4620 Spring Grove Ave., Cincinnati, O.

tures as the Supreme Court Building, Social Security Building, Naval Medical Center, National Airport and Washington Statler hotel, they will find a colorful enduring decorative laminated plastic, Formica, has been used freely both for paneling, and as tops for tables and fixtures. The ever broadening use of Formica in the brighter days to come will greatly help America's unsurpassed architects carry new beauty to ever greater heights.



PRODUCTS AND PRACTICE



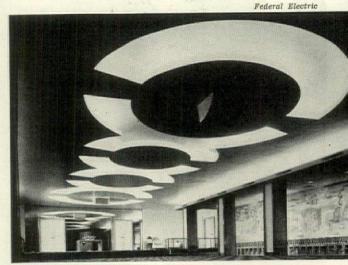
COLD CATHODE TUBING MOUNTED DIRECTLY ON CEILING

COLD CATHODE FLUORESCENT

Versatile lighting that is both functional and decorative

It is increasingly apparent that lighting is more important than the lamp: that design for artificial light has become an integral part of buildings, influencing and even changing the total design. For this reason it must be planned at the same time as the building, with due consideration for the amount of light needed in various rooms for specific purposes. A broad selection of materials is at the disposal of the lighting designer. His choice, arrangement and use of these lamps determine the effectiveness—both artistically and functionally—of the lighting scheme.

Naturally, the first step in selecting an illuminant is to be familiar with the various types available, to know what their essential components are, how selection of each will affect interior design, and vice versa. Obvious as this statement is, it assumes renewed importance when another type emerges. Cold cathode lighting, or Zeon, is one of the newest forms, about which little is generally known. This lighting has its origin in the familiar neon signs used on Main Street and Broadway for the last twenty years. Made of transparent tubing in which various gases are enclosed, signs were confined to a limited number of primary colors. The



DRAMATIC lighting in Congressional Room of Washington's Hotel Statler depends on the cold cathode tubing of various colors, concealed in decorative coves.

Electrical Products Cons.



FUNCTIONAL illumination for a large grocery store. Long rows of exposed tubing cover entire ceiling, distribute adequate light to every part of the store.



ARCHITECTURAL lighting with fluorescent sign tubing—forerunner of cold cathode—effectively outlines curved canopy.

COMPARATIVE EFFICIENCY OF INCANDESCENT AND FLUORESCENT LAMPS

How Watts are Expended	40-Watt FLUORESCENT DAYLIGHT 4 ft.—Dia 11/2 in.		40-Watt INCANDESCENT (Vacuum)		60-Watt INCANDESCENT (Gas filled)		60 Watt—150 MA COLD CATHODE FLUORESCENT Dia.—1 in. Length 7 ft. Daylight	
Heat	Watts	%	Watts	%	Watts	%	Watts	%
Radiation	17.4	43.5	34.4	86.0	40.2	67.0	21.8	43.8
and Conduction	13.6	34.0	3.2	8.0	15.0	25.0	19.2	38.5
Light Output	9.0	22.5	2.4	6.0	4.8	8.0	9.0	18.0
Total Lumens	1,70	00	436		672		2,226	
Lumens Per Watt (Tube Only) Brightness Candles	42.3		10.9		12.7		37.1	
Per Sq. In	3.9 to 4.	.5	1,328		7,800		3.3	

introduction of fluorescent-coated tubes gave a greatly increased range of colors, including several shades of white. As such, it was first used in interiors for creating novelty effects. It is now developing into a highly scientific and efficient method of overall lighting.

Like neon sign tubing, cold cathode lighting may be pencil thin, long in length and curved. For lighting applications, however, somewhat larger tubes are generally used, and they are becoming standardized at 20 and 25 mm. (25 mm. equals 1 in.) These diameters are smaller than those ordinarily used in hot cathode fluorescent lamps.

While fluorescent lighting has been widely used since its commercial introduction in 1937, roughly only 2 or 3 per cent (out of a total of 36 million lamps) are cold cathode fluorescent. Until a year ago cold cathode lighting was entirely custom built. Recently it has made rapid strides in a variety of commercial and industrial applications, and it is now available in standard packaged form. From all indications it seems possible that it may have in the future even more widespread acceptance than hot cathode as a method of illumination.

Fluorescent and incandescent lighting

The two types of fluorescent lighting are similar in several respects. Both employ a phosphor-coated tube in commercially practicable lengths from 2 to 12 ft. Both operate on similar electronic principles: An electrical discharge of mercury suspended in the rare gas radiates ultra-violet light, which in turn excites the phosphor

coatings, producing more than twice the amount of visible light as an incandescent lamp with the same current input.

Unlike the incandescent lamp "the spectral quality for white light can be varied without appreciable loss of life, efficiency or change of wattage."* Fluorescent lamps have a wide range of colors with higher lighting efficiency. They eliminate to a large degree the glare of bulb lighting and its accompanying heat radiation. Both of these are an improvement in lighting for over-all seeing. On the other hand there are situations where a concentrated light source is required or preferred for certain purposes-pin points of brilliance for commercial display and theatrical effect, concentrated highlighting in the midst of even-qualitysurrounding light. Incandescent will remain as an important element in lighting design to do some jobs that cannot be done by any other method.

Differences between hot and cold cathode

Hot cathode and cold cathode fluorescent are as different technically as carbon and tungsten lamps. However, there is less difference than the two fluorescent industries would lead one to believe. In all probability, some of these will decrease as research in both fields advances.

The comparison on the next page shows rather clearly the advantages and disadvantages of both fluorescent types. 'Further development of each may change this entirely. The trend

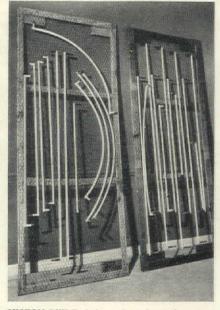
(Continued on page 140)

*"Cold Cathode Fluorescent Lighting," compiled by Victor H. Todd and the Sisco Staff, published by Swedish Iron and Steel Corp., 17 Battery Place, New York, N. Y., 1942.



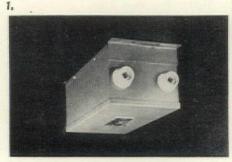
FIXTURE contains four 8 ft. lamps for high-level illumination in an office of the Higgins Shipyards in New Orleans.

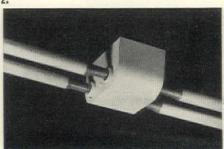
Federal Electric

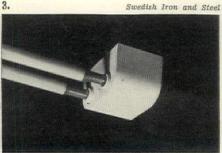


CUSTOM-BUILT tubes of various sizes and shapes are delivered to the job mounted on wire racks to prevent breakage.

PACKAGED ACCESSORIES for standard cold cathode lamps which snap into the spring sockets. Simple, interchangeable parts permit quick replacement, assembly in various patterns. Transformer box (1) has two porcelain housings for 20 and 25 mm. dia. tubes. Intermediate box (2) connects parallel lines of tubing. End electrode box (3) completes tube circuit by a cross Jump inside the box.





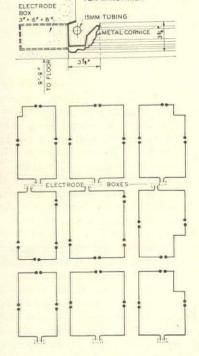




Frink Corp.



RECESSED TROFFERS in ceiling form attractive pattern, provide efficient light without glare. Glass panels diffuse the light and improve its distribution.



LAYOUT for a cove installation in paneled office of Maurice J. Sullivan, President of American Can Co. Small-diameter tubes run along beams in irregular lengths and shapes. Each group of tubes terminates in an electrode box from which there is a lead to the transformer concealed below the floor. Usually, transformers are located right next to tubing.

COMPARISON OF

HOT CATHODE FLUORESCENT AND COLD CATHODE FLUORESCENT

Coated tungsten electrode—preheated before arc is struck	Coated pure iron shell—arc struck by high voltage			
Fixed standard lengths-11/2 to 5 ft.	Varying lengths-2 to 12 ft. and over			
Fixture lighting, some built-in instal- lations	Linear, curvilinear and custom-built lighting			
Fixed light output—cannot be dimmed	Variable light output—can be dimmed or brightened			
Larger diameters—5% to 21/8 in.	Smaller diameters-8 to 25 mm.			
Low voltage, high milliampere, critical to room-temperature changes	High voltage, low milliampere, wide temperature range of operation			
Multiple auxiliaries—starter, reactor, wiring for each lamp	One auxiliary—transformer			
Efficiency—42 lumens per watt	Efficiency—39 lumens per watt (Electrical Testing Laboratories rating)			
Flickering start, stroboscopic effects, darkening of tube	Instantaneous starting, minimum stro boscopic effect, less darkening			
Shorter operating life—2,000 to 2,500 hrs. (Incandescent—750 to 1,000 hrs.)	Long operating life—8,000 to 20,000 hrs			
Standard colors	Unlimited range of colors and shades			
Lower installation cost—due to mass production	Higher initial cost at present			

BUILDING REPORTER

NEW PRODUCTS

PATCHING material for floors.

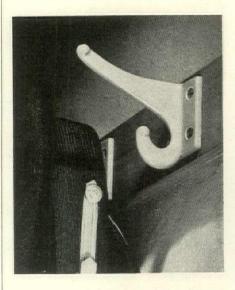
Name: Emeri-Crete.

Features: Developed to meet the demand for a ready-mixed material when water is added, this new compound is intended for filling cracks, small depressions, ruts and other imperfections in concrete or cement floors. It contains pure emery in small particles mixed with a special quick-setting binder. Floor can be used in six or seven hours after repair has been made. It is claimed that patch will not shrink, has great adhesive properties and makes a permanent repair if properly applied. Manufacturer: Walter Maguire Co., Inc., 330 W. 42nd St., New York 18, N. Y.

PLASTIC HOOKS for Navy.

Name: Tenite Coat Hook.

Features: Replacing brass and bronze formerly used in Navy and Merchant Marine ships, new plastic hooks are regulation Navy copper brown in color. They will be made for postwar civilian use in standard hardware colors of red, green, blue, ivory and black. Each hook



is injection molded in one piece in a four-cavity mold die.

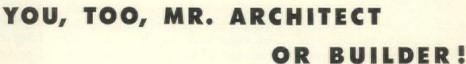
Manufacturer: Molded by Pyro Plastics Co., Westfield, N. J. for Bureau of Ships, U. S. Navy.

FLUE to replace masonry chimneys. *Name*: Vitroliner Flue.

Features: Approved by Underwriters for all types of fuel, coal, oil and gas, new flue replaces standard masonry chimney. Over 17,000 installations have been made in defense housing. It is claimed that it gives double the draft of a conventional masonry chimney. Flue consists of lengths of acid-resisting, vitreous enamel coated, heavy-

(Continued on page 144)

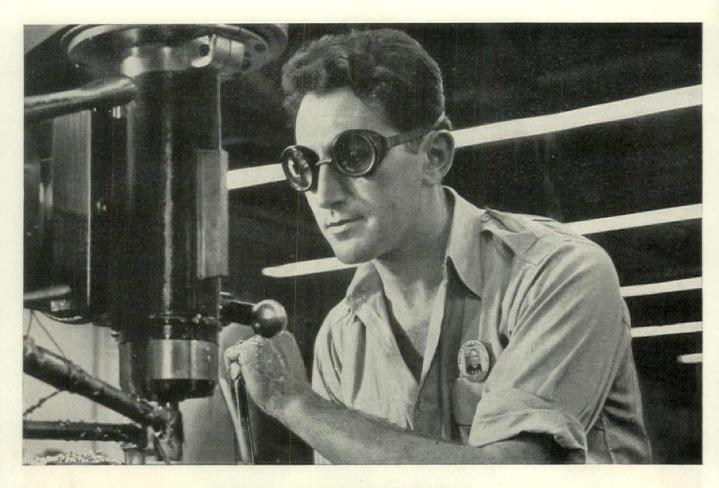




The ZOURI Store Fronts advertisement above is typical of those which are appearing regularly in 22 leading trade magazines—encouraging the merchants of America to plan their store fronts of tomorrow—today! But this involves you, too, Mr. Architect or Builder, for the merchants depend upon you for design and construction. So let's all work together by planning now for post-war prosperity. When ZOURI store front construction is again available, you can be sure that it will be even finer and offer more possibilities for good design than ever before. ZOURI STORE FRONTS, NILES, MICHIGAN.

9

GET A HEAD START! PLAN TOMORROW'S STORE FRONTS TODAY! SEE SWEET'S



No "SHADOWTAGE" here

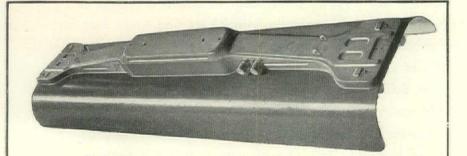
"Shadowtage" means sabotage due to shadows on the working plane — especially when they blur delicate machining operations held to tolerances of 1/10,000th of an inch.

The best-known answer to "shadowtage" is the scientific installation of shadowless and glare-free fluorescent lighting. It is our job to supply the fluorescent and incandescent lighting equipment that is helping to speed war production all over the country.

Aggressive and independent Sylvania research developed and introduced the first successful fluorescent installation — forerunner of war plant fluorescent by the thousands of miles of lamps today.

And now — years ahead of time — Sylvania is producing the fluorescent fixture of the future. A revelation in simplicity and adaptability, one standard fixture meets any industrial lighting requirement. Similar developments may bring economical fluorescent lighting into American homes after the war.

For industrial fluorescent lighting equipment, designed to work together, specify Sylvania Fluorescent Lamps, Fixtures and Accessories for replacements and authorized new installations.



THE FIXTURE OF THE FUTURE. This new fixture, which can challenge comparison with any other in the fluorescent field, is much more than a design to save critical war materials. Its non-metallic reflector has an efficiency of 86 per cent — actually more than that of enameled metal. The streamlined top housing, constructed like a cantilever bridge, encloses the ballast—protects it from dust—provides cooler performance.

SYLVANIA

ELECTRIC PRODUCTS INC.

Executive Offices, 500 Fifth Ave., New York 18, N. Y.

Incandescent Lamps, Fluorescent Lamps, Fixtures and Accessories, Radio Tubes, Cathode Ray Tubes, Other Electronic Devices



Conserves more than 5½ pounds of copper.

Saves water.

- Amazing
 endurance to
 both use and
 abuse.
- Corrosion resistant.
- Fewer parts.
- Shipping weight reduced by 2½ pounds.

Fifty freight cars, each carrying 80,000 pounds, approximates the amount of copper being saved annually* by the new Sloan VICTORY Flush Valve

Here is the Valve that really saves critical material. More than $5\frac{1}{2}$ pounds of copper per valve is now diverted to direct war uses.

This amazing reduction in the use of precious copper was brought about through the use of malleable iron and plastics for component parts of the Valve. All malleable iron parts are attractively finished with a baked-on protective coating both inside and out—and a plastic sleeve now lines the iron body to provide a smooth, wear-resisting surface for the moving parts.

While the Sloan VICTORY Vacuum Breaker is all-plastic, no change was made in the functional design of the original Sloan V-100-A which was the first vacuum breaker to be approved by the N.A.M.P. Its outer shell, now of transparent plastic, permits *visual inspection*, thus assuring the ultimate in protection against back-syphonage.

In the new VICTORY Valve, the Sloan Valve Company has applied its every resource to produce a high quality flush valve and vacuum breaker which, in cooperation with the War program, uses the irreducible amount of precious copper.

Remember: it is patriotic to specify Sloan—the flush valve that uses the least amount of critical metal.

*(based on 1942 production figures)

SLOAN VALVE COMPANY

4300 West Lake Street, Chicago, Illinois

SLOAN VICTORY TYPE FLUSH VALVES

ANACONDA After 16 years' service



Specified and Used throughout for Hot and Cold Water Lines ANACONDA BRASS PIPE

George W. Kelham,
Architect

Hunter and Hudson.
Consulting Engineers

Dinwiddir Construction Co.
George Contractors

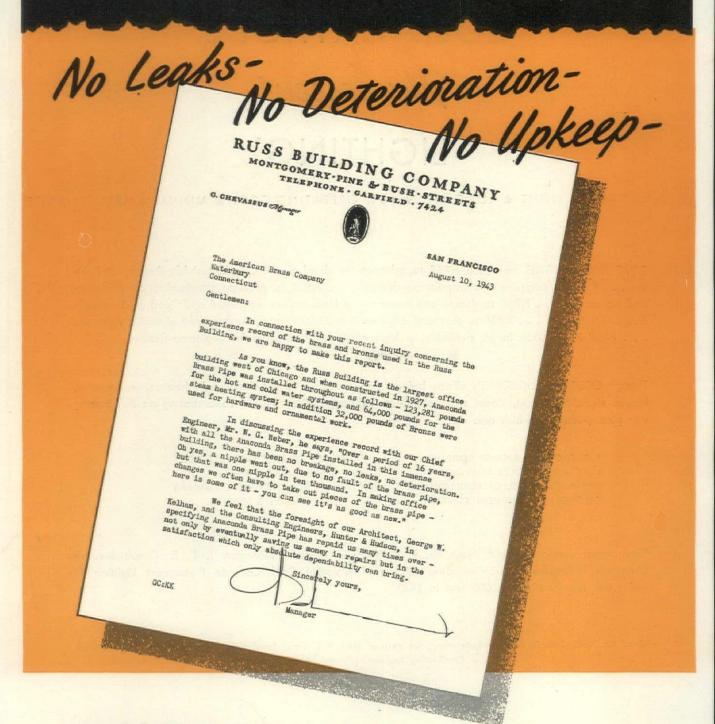
Frederick Snook Company Plumbing Contractors

Congral Offices: Waterbury, Conn. Offices and agencies in principal circus

Reprint of advertisement published by The American Brass Company in 1927, while the Russ Building was under construction.

BACK THE ATTACK WITH AN EXTRA WAR BOND

in the Russ Building...



That's the beginning of a performance story of the nearly 100 tons of Anaconda Brass Pipe which was installed when San Francisco's famed Russ Building was constructed in 1927.

It isn't a record. Rather it is an example of the durability and dependability of Anaconda Brass Pipe. In recent years, as manpower and material shortages made maintenance problems increas-

ingly difficult, the wisdom of specifying rustproof, corrosion-resistant pipe has been proved time and time again.

THE AMERICAN BRASS COMPANY

General Offices: Waterbury 88, Connecticut Subsidiary of Anaconda Copper Mining Company In Canada: Anaconda American Brass Ltd., New Toronto, Ont.



Anaconda Copper & Brass

When Planning Good Lighting, A Good Source To Remember-

COLONIAL COLD CATHODE

Fluorescent

LIGHTING*

INSTANTANEOUS LIGHT * LONG LIFE * LOW OPERATING COST * MINIMUM MAINTENANCE

COLONIAL LIGHTING has been FIRST to advance the development of cold cathode fluorescent lighting . . . FIRST to engineer new transformer designs . . . FIRST to promote standardization of lamps and equipment . . . FIRST to design and manufacture Underwriters' approved and listed cold cathode fluorescent fixtures . . . FIRST to plan and engineer installations saving the maximum of critical materials . . . NEW FIRST soon to be available, a high efficiency transformer for two lamp fixtures.

Though COLONIAL LIGHTING's efforts before the war were directed toward theaters, restaurants, homes, churches, offices, stores and special-use lighting, TODAY we are concentrating on illuminating war plants, some of which are:

I. T. E. CIRCUIT BREAKER COMPANY LINDE AIR PRODUCTS COMPANY LINE MATERIAL CO. OF PENNSYLVANIA C-O-TWO FIRE EQUIPMENT COMPANY FEDERAL ELECTRIC PRODUCTS, INC.
CROWN CAN COMPANY
CAMBRIDGE INSTRUMENT COMPANY
HENRY DISSTON & SONS

"The record speaks for itself," says Mr. R. J. Wensley, General Manager, I. T. E. Circuit Breaker Company, Philadelphia, Pa., "we used 40 feet of Colonial Cold Cathode Fluorescent Lighting in 1941; 400 feet in 1942; 40,000 feet in 1943."

*Send for "Cold Cathode Fluorescent At War," the story of the I. T. E. Circuit Breaker Company installation, reprinted from "Iluminating Engineering", and other data.

COLONIAL Lighting

Our Engineering Service for present and postwar applications available without obligation

NORTH BERGEN, N. J.

WHERE DO THEY GO FROM HERE?



They go forward—not back but forward—unless they're mistaken about the America that they have defended.

Ten million of them, more or less. They'll want jobs. It's said that more of them will find these jobs in the building and allied industries than in any other. There's responsibility for you!

Married or getting ready to marry, they'll want homes. What kind of homes? Homes that are easy and pleasant to look at, and easy and pleasant to live in. They'll be sort of counting on more value for their money. There's opportunity for you!

Certainly the recent past will make bathrooms and kit-

chens more important than ever to them. That's where our opportunity and our responsibility will lie, and we expect to do justice to both—when the time comes.

Meanwhile, you'll understand that the craftsmen who made Case products for you, are now busy making them for these boys, for the war. W. A. Case & Son Mfg. Co., Buffalo 3.



CASE PLUMBING FIXTURES HOT WATER SYSTEMS

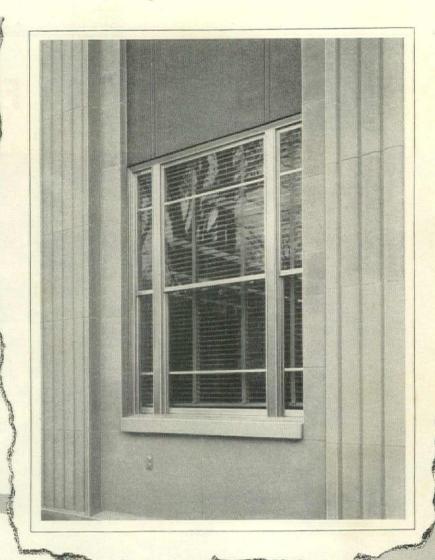
Give-all you can-to the National War Fund

Adlake Aluminum
Window in National
Guardian Life
Insurance Co. Building
Madison, Wisconsin
Law, Law and Potter
Architects

REESELE

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



Controlled by Johnson

In a recently completed southwestern Aircraft Plant—already producing bombers for our air armada—an intricate system of air conditioning maintains exact temperatures to keep personnel efficiency high and facilitate delicate manufacturing operations.

The Automatic Temperature Control equipment, manufactured and installed by Johnson, stands vigil over the entire system.

"Heating-cooling" thermostats, actually two thermostats built into one case, are the "brain" of the installation. During winter heating, a rise in temperature closes louvred dampers in the conditioning system. For summer cooling, the action is reversed, rising temperature causing the system to introduce

Whatever your problem in air conditioning, beating, humidifying or process control, contact the nearest Johnson office, or write for bulletins covering equipment in which you are interested. In either instance there is no obligation.

Top illustration: Johnson pistontype damper control actuates the Johnson return air dampers

Lower illustration: Johnson valve on booster heater coils in ducts which carry super-heated air to outside walls, where winter heat losses are greatest.

BACK THE ATTACK-BUY MORE BONDS

JOHNSON

Automatic TEMPERATURE AND CO

Control

JOHNSON SERVICE COMPANY, MILWAUKEE 2, WIS. - DIRECT BRANCHES IN ALL PRINCIPAL CITIES

An Oasis in a Sea of Flame...



TAKES ANY FORM OF DEC-ORATION—Any finish that is sprayed, brushed or pasted on may be successfully applied on Sheetrock: or it may be purchased already decorated—ready to apply



"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

"Fire-Sealed" WALLS AND CEILINGS

Every 4 minutes of the night and day ... destroying flames sweep some home away ... along with it go the priceless possessions of a lifetime, and sometimes even life itself.

It is high time to call a halt to "tinder-box" walls and ceilings that may only add fuel to the flames. Sheetrock*, the fireproof wallboard, is made from mineral gypsum that cannot burn. It acts as a barrier to the spread of fire and provides a "fire-seal" to protect the building framework—"an oasis in a sea of flame."

Sheetrock makes enduring pre-cast walls and ceilings that take any form of decoration or texture, with joints cocealed by Perf-A-Tape* joint system made a part of the decoration we beveled-edge Sheetrock.

You may buy the board already do orated in pastel shades or woodgra effects. The job is completed as soon the board is applied.

Twenty-five years have served to pro Sheetrock every step of the way practical building application. Resear and development have kept it wahead of the times as a modern building material of beauty that saves time, lab and protects from fire.

*Trademarks Reg. U. S. Pat. 0



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 . PLAST

FIREPROOF GYPSU.

The World's most widely used Mineral for building Fire-Sealed Walls and Ceilings

GYPSUM FIREPROOF ROOF DECK AND PARTITION

SIMPLICITY is your assurance of EFFICIENCY



SIMPLICITY is vital in time of war-less material-less assembly-less maintenance.

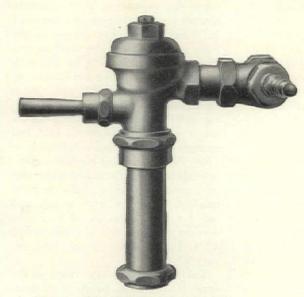
The six SIMPLE operating parts illustrated above do the work of upwards of a dozen in the average valve.

The SIMPLICITY of the Coyne & Delany Flush Valve was readily recognized and developed an instant acceptance in all types of war construction.

The SIMPLICITY of the changes made in the Victory model and from tests of the materials substituted, we are convinced that we have added to the high efficient performance record of the Coyne & Delany peacetime valve.

This SIMPLICITY concretely has lowered the operation cost on all projects where our valves are installed as all non-critical parts are interchangeable with the previous essential metal parts.

We will be pleased to send you Booklet #D-11 giving complete information.

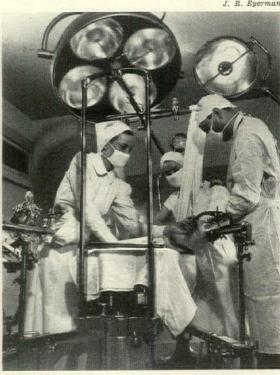


Victory Model DELANY FLUSH VALVE equipped with No. 50 DELANY VACUUM BREAKER

Coyne a Delany Co.

BROOKLYN N.Y.





KAISER'S HEALTH PLAN PRODUCED EXCELLENT BUILDINGS. IT MAY BRING WIDESPREAD HOSPITAL CONSTRUCTION

KAISER WAKES THE DOCTORS. By Paul de Kruif. Harcourt Brace & Co., New York, 158 pp. Not illus, 51/2 x 8, \$2.00. Architects as well as the medical profession will sooner or later be forced to focus their attention on the development and results of the prepaid medical plan now in practice at Henry Kaiser's various plants and shipyards. It has so revolutionized and expanded the scope of medical care for the lower income brackets that it promises to foster a postwar boom in at least one field of building. The thousands who have already benefited by the Kaiser plan are not going to forget its advantages when the war is over, when the swollen



FIRST SYMPTOMS ARE COVERED TOO

industrial centers again shrink to normal proportions, when the individual medical practitioner again comes into his own. The author implies that they will take up where Henry Kaiser left off and eventually force the acceptance of similar medical cooperatives by doctors, communities, legislative bodies and industry. If and when this comes to pass the standards for hospital design and equipment will be radically changed as well as the methods for paying medical expenses. However, the book points emphatically to the fact that the Kaiser plan is conducted throughout as a private undertaking and should not be confused with socialized medicine.

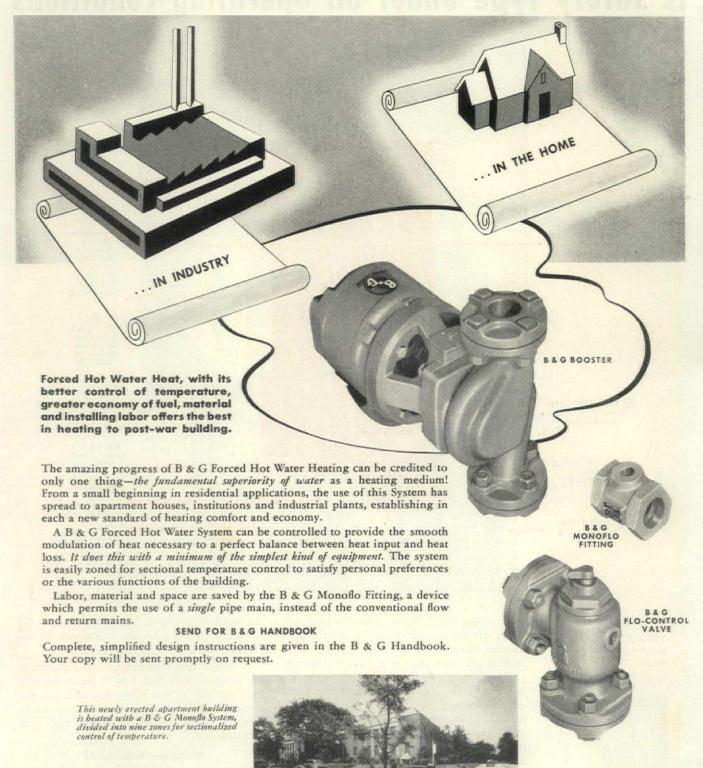
De Kruif refers caustically to the prewar attitude of the medical bigwigs, citing an instance of a few years ago when the Committee on the Costs of Medical Care reported to the nation that the price of good medical care was beyond the pocketbooks of millions, The Journal of the American Medical Association editorially branded this statement as "socialism and communism-inciting to revolution." This, the author points out, expresses the general attitude of the professional politicos toward cooperative prepaid medical plans or, for that matter, toward any group medicine which was not conducted as charity or research. It was in the teeth of such opposition that the Kaiser plan was inaugurated.

It is strange but characteristically shrewd that Henry Kaiser should have taken the experience of a relatively obscure young physician who pioneered in desert construction camps as the basis for the present day medical centers which function side by side with his great industrial undertakings. Its initial success at the Grand Coulee Dam project has been repeated at Vancouver, Richmond and Portland. In the desert young Dr. Sidney Garfield had mortgaged his savings and soul to prove that a complete medical service, centralized and streamlined under one roof, could be made available to great numbers for a few cents a day, and pay for itself. His initial enterprise was not elaborate but it accomplished all and more than its originator expected.

Today, under the supervision of the same Dr. Garfield, hundreds of thousands of Kaiser employes have access to the latest developments and most skilled technicians of modern medicine. The modern hospitals erected near the various plants and shipyards parallel in comfort and equipment the nation's most expensive institutions. There are no questions asked, no preliminary examinations, no bans on chronic or infectious diseases. All workers are eligible. For all this, and voluntarily, the workers pay seven cents a day. Though in other hospitalization

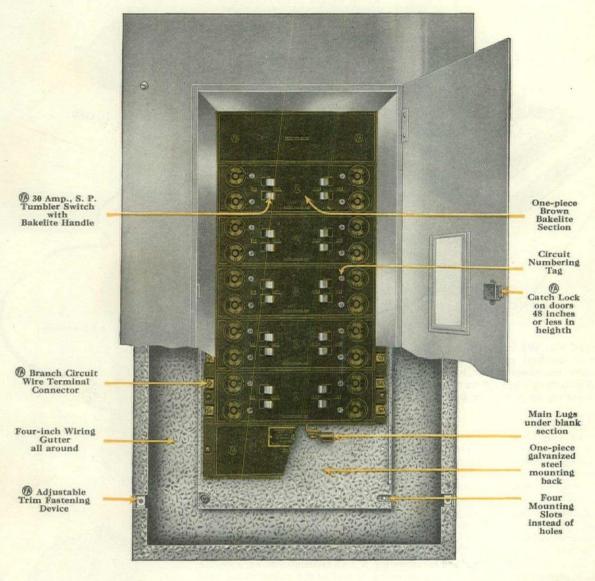
(Continued on page 134)

THE HEATING SYSTEM OF TOMORROW PROVED ITSELF BEFORE THE WAR



B&G MONOFLO
BELL & GOSSETT CO. SYSTEM

This (A) Lighting and Appliance Panelboard is safety type under all operating conditions



This shows the rugged yet simple design of the (A) 30 ampere Tumbler Switch used in (A) LNT1P Panelboards.



Each section is of Bakelite, molded in one piece. There are no removable covers to fall off or become loosened by tampering . . . All parts, including the switches, are applied from the rear . . . The switch frames, main contact members to bus, and the required rivets to secure other parts, are molded into the section . . . Screw connections have been reduced to the minimum to assure uninterrupted service. The connection between the main bus bar and the branch circuit switches is accomplished by means of a new design clamp contact, which also contains the branch circuit switch contacts as an integral part. Direct copperto-copper contact is thus secured without the use of screws or other accessories.

Each section contains four @ 30 ampere, single pole, heavy duty tumbler switches, with plug fuse connections...Branch Circuit tumbler switches

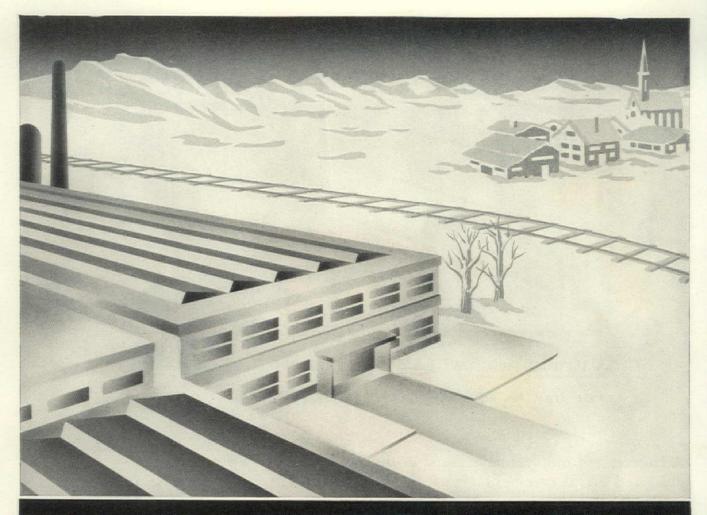
are rated 30 amperes, 250 volts DC, and are of the quick-make, quick-break type, with double-break contacts.

® Panelboards, for surface or flush mounting, are available with from 4 to 42 branches; with main lugs only, or with safety type main fuse disconnect, or ® Shutlbrak safety type main switch. They are fully approved by Underwriters' Laboratories, Inc.

Write for Bulletin 67

It contains complete descriptions, specifications, sizes, wiring diagrams, and prices...Frank Adam Electric Company, St. Louis, Mo.





How to raise a plant in WINTER... at wartime speed!

It's winter. It's cold. A vital war plant must be built quickly. If this job were yours, how would you get it ready on time?

One way to get the best of winter weather and to meet wartime construction schedules is to use Atlas High-Early cement. It gains strength rapidly and produces serviceable concrete in much less time than is required with normal portland cement. Forms often can be stripped in twenty-four hours instead of the customary 3 to 5 days... and then reused again. Heating, protection, and curing time is slashed as much as 70%.

Atlas High-Early often saves

costs too...costs of forms, of equipment, of heating, and of manpower.

You can depend on Atlas High-Early this winter wherever time and labor savings are essential. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, New York.

OFFICES: New York, Chicago, Albany, Boston, Philadelphia, Pittsburgh, Minneapolis, Duluth, Cleveland, St. Louis, Kansas City, Des Moines, Birmingham, Waco.



Monarch Machine Tool Company, Sydney, Ohio, needed a sizable addition to their plant by April 1. Work started January 17. The contractor chose Atlas High-Early cement. Mean temperature during concrete placement stayed below freezing—fell as low as 10°F. Concreting was completed thirteen days ahead of original schedule date.

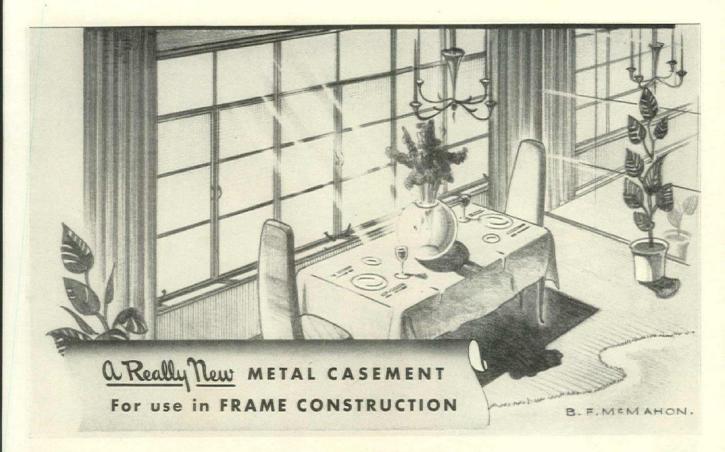


SAVE TIME IN WARTIME WITH

Atlas High-Early Cement

A UNIVERSAL ATLAS PRODUCT

AF-H-59

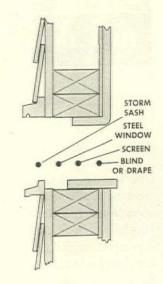


Architects and builders have asked us time and again for a properly designed metal casement primarily intended for use in 6" frame walls. This new Mesker Metal Window will provide everything you . . . and frame-house owners . . . want!

- 1. Designed to accommodate inexpensive outside storm sash and inside screens.
- 2. Eliminates the need for inside trim by permitting plaster or dry wall material to return directly to the sash.
- 3. Allows space for recessing venetian blinds within the window opening.
- 4. Draw curtains and drapes can still be added on the face of the interior wall.

... all within 6" frame construction!

This new Mesker Metal Window will be ready for your post war projects. Plan now to incorporate it in your future frame-house plans!



Meaker-Brothera

424 SOUTH SEVENTH STREET - ST. LOUIS, MO., U. S. A.

ESTABLISHED IN 1879 . OVER



YEARS OF METAL WINDOW RESEARCH

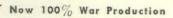
CASEMENT WINDOWS . MONUMENTAL WINDOWS . INDUSTRIAL WINDOWS . SCREENS . INDUSTRIAL DOORS . DETENTION WINDOWS . REINFORCING MESH GRATING



Before drawing "After Victory" home plans, get full information concerning the complete line of Emerson-Electric Home Cooler Fans.... Turned on after sundown, these powerful, quiet home coolers expel excessively hot air trapped in the attic and living rooms, draw cooler outside air into and through the house from open windows and doors. This vital circulation is assured without expensive special construction features or complicated mechanisms. Write for complete information. Emerson-Electric home cooler fans and kitchen ventilating fans will again be available "After Victory" in the same dependable quality which has characterized all Emerson-Electric equipment for more than 53 years.

THE EMERSON ELECTRIC MANUFACTURING CO. SAINT LOUIS

Branches: New York . Chicago . Detroit . Los Angeles . Davenport







ELECTRIC

KITCHEN VENTILATOR FANS

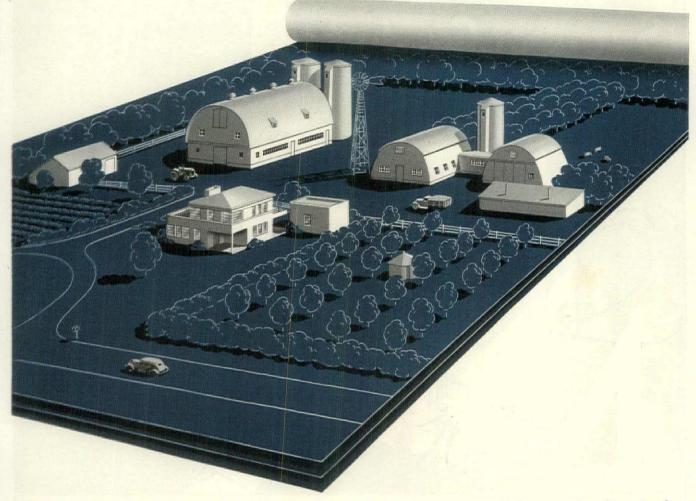
A "must" in all post-war homes! The ruggedness, long life and operating efficiency of Emerson-Flooriekinskes world to the control of the cont

Electric kitchen ventilators have been proved in thou-sands of homes through-

out the country ... 9-inch, 10-inch and 12-inch sizes.

HOME COOLER FANS VENTILATORS

EXPANDING THE SCOPE OF STEEL



While new materials will play an important part in the post-war world, their promise for the future is no more inspiring than that of established materials for which new uses and new methods of application are being developed in war production.

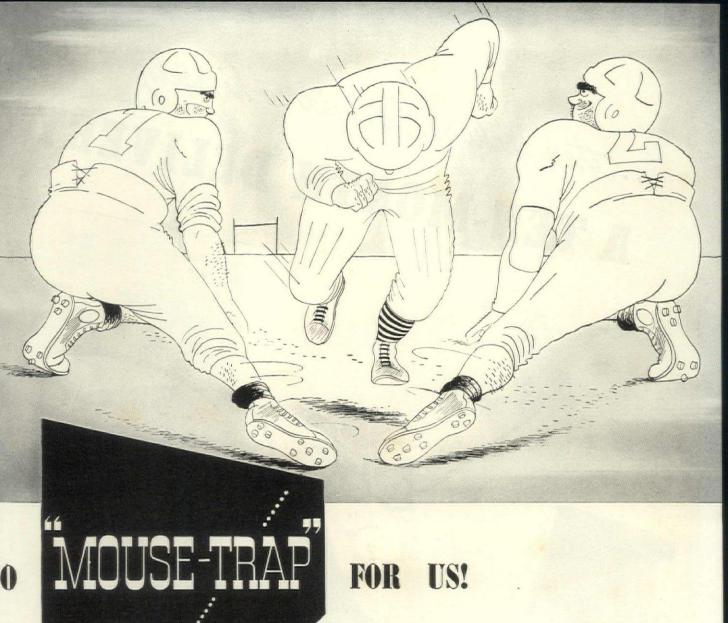
Strip steel by Stran-Steel is a case in point.

It is not a new material, yet under the stimulus of important military building assignments its scope has been greatly expanded. Stran-Steel engineering and experience make strip steel a more versatile, more economical material . . . well qualified to serve the building industry in the era that lies ahead.

STRAN STEEL

DIVISION OF GREAT LAKES STEEL CORPORATION
1130 PENOBSCOT BUILDING, DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION



Gridiron fans know the "mouse trap"... the "sucker play" that lures an unsuspecting lineman through a big hole ... then traps him from behind.

We're carrying the ball strong for war now. Our factory wheels are a-buzz with activity to get out an ever-mounting volume of precision small parts for planes, tanks and fighting machines.

But we're not running with our head down. Even with the mounting crescendo of busy machinery in their ears, our engineers are preparing the blue prints for peace...getting ready to quickly take up the slack of eventually slowing war production by a speedy switch to new and better products for YOU to use and sell.

When that day comes, LCN and far sighted business men all over America will avoid another "mouse trap"...the need for makework programs. In their place we will have real jobs and real opportunity for every worker...the American answer to the start of a new era.

NORTON LASIER COMPANY · 466 West Superior Street · Chicago





BIG PIECE OF NEWS the Prime Minister read to the House of Commons—the 10-months' delivery of a couple hundred ships.

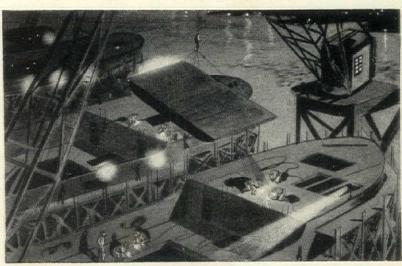
Again the old formula: BIG name in the NEWS...made big by Big Production.. production made big by RECOURSE TO ARC

WELDING (remembering Webster's short definition of RECOURSE as "a going to for aid or protection").

So the President has written the formula into the history of the world: "Here there had been developed a welding technique... with speed unequaled."

THE LINCOLN ELECTRIC COMPANY . CLEVELAND 1, OHIO

"A Welding Technique" he said * * "with speed unequalled in the history of merchant shipping" ... and this, Mr. Prime Minister, is what he meant:



SHOP FABRICATION. Ships welded on a production line by assembly line methods-faster welding by positioning the welding-pre-fabrication of large sections-upside-down assembly-dozens of shortcuts make up this technique, recourse to which has revolutionized shipbuilding.

MASS PRODUCTION. If ships can be put on a mass production basis, think of the speed and economy in producing products less bulky. If speed alone were the only benefit of welding, recourse to it might be debatable. But consider these additional benefits:

LESS STEEL

saves 375,600 tons. costs money.

LESS HULL FRICTION

On these 200 ships, re- A welded Liberty ship leaving 18% more cargo carcourse to arc welding New York would reach Sicily rying capacity is pro-40 hours quicker than its vided by weight-cut-Steel is critical. Steel rough-skinned sister of equal ting through recourse horsepower.

INCREASED CARGO

to are welding.

to 20 Ships a Month order that the general unanding we reached, during anding we reached, during anding we reached, during a second of the properties of the process of the proc order that the general un-

I have furthermore suggested to them that this be increased to

We have been allocating to British services on a voyage-to-voyage basis large American-controlled ships. What American controlled ships. What twenty. American-controlled ships. What I am now suggesting to you, and what I am directing the War Shipping Administration to car a Shipping Administration to car a substitution to the extent of the substitution to the for the control of the control of

hant

and

xtravaexperiot to be sible. To result in

r on your equal im-f shipping

afford this.

shipping

war program.

Details of the arrangements we can properly leave to national weight of the combined ment through the Combined Majorities of the Combined Majo

FRANKLIN D. ROOSEVELT.

ARC WELDING

Sampling TOMORROW

Right here and now — ceivable condition, not "beyond the horizon" — there is already being applied one im-

proved technology in building—Kentile. This new asphalt tile is now made in unlimited quantities, is available without priorities, and is being installed daily on thousands of jobs all over the country. On these small and large jobs acute observers have noted some amazing things. They have seen how speedily and economically these tiles were installed. They have discovered, under every con-

ceivable condition, the amazing durability of this RESILIENT tile—so remarkably fabricated that it resists cracking, abrasion and wear better than any "hard" material. They have seen the thousands of patterns already devised with these tiles (made in 44 colors and 15 sizes), then realized the millions of other patterns still possible. All in all, they have found 14 distinct advantages to Kentile.

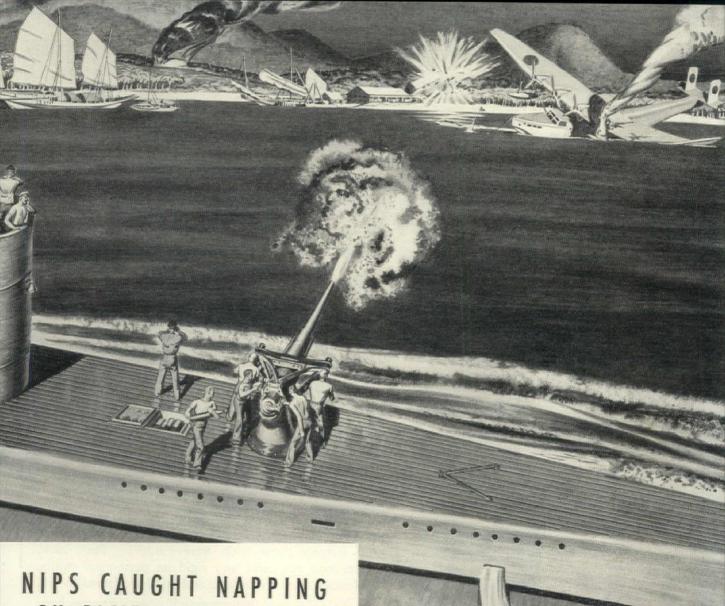
We will gladly send a color book which lists all technical and artistic aspects of Kentile to any qualified person requesting it on his letterhead.

KENTILE

Cisphalt Tile

Trade Mark Reg.

DAVID E. KENNEDY, INC. . 58 SECOND AVE., BROOKLYN 15, N. Y.



ON PACIFIC ISLAND "X"

Surfacing silently, a U. S. submarine in a surprise early morning call pours blazing destruction on a Japanese island base. The noted naval authority, Fletcher Pratt, helped us prepare this picture.

In U. S. submarine raids and on every battlefront, large quantities of Westinghouse-made weapons and equipment are in the fight. On the production front, Westinghouse Air Conditioning and Industrial Refrigeration provide correct conditions of temperature, humidity and air cleanliness to make possible uniform quality, high precision, fewer rejections, faster output.

When the war is won, a thousand new-day benefits will result from Westinghouse "Conditioning". Better products at lower cost, greater year 'round comfort and convenience-better living for all.

In helping solve "conditioning" problems, Westinghouse offers years of experience with thousands of varied installations. The exclusive, hermeticallysealed compressor assures long life, economy, dependability. Inquiries are invited from producers of war materials and from postwar planners.

WESTINGHOUSE ELECTRIC & MFG. CO. 737 Page Boulevard Springfield, Mass. Plants in 25 Cities... Offices Everywhere



HOT SHOT. Gunshot is tested in manufacture by plunging alternately in hot and refrigerated liquid baths. If small, invisible cracks exist, this shock test enlarges them to visibility.



FATAL CROSS HAIRS. Periscopes for U.S. submarines are intricate devices requiring extreme precision in manufacture. Uniform accuracy is effected by maintaining constant air conditions.



SEEING AT SEA. Delicate lenses and small parts of binoculars are protected from possible damage due to excess humidity, temperature and dust, during grinding and assembly, by air conditioning.



LISTEN! Extreme precision required in manufacture of devices for communication, detection and sensitive control instruments is made possible by maintaining constant temperature, humidity and air cleanliness with air conditioning.

Tune in John Charles Thomas, NBC, Sunday, at 2:30 P.M., E.W.T.

Westinghouse

GEARED TO A THOUSAND WARTIME NEEDS

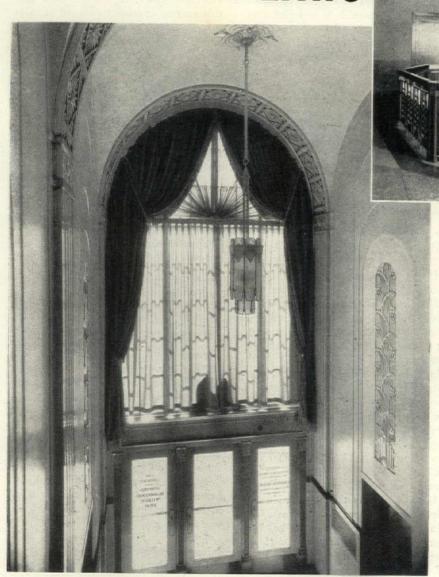


Asbestos Sweet's, Or write for brochure TR-22A, Johns-Manville, Transite Walls 22 E. 40th Street, New York 16, N. Y.

J-M Transite Movable Asbestos Walls—J-M Acoustical Materials-J-M Asphalt Tile Floors-are making an important contribution to speeding up war production in offices and plants everywhere.

MICHAELS PRODUCTS building industry. Then they may fashion in metal the kine for TOMORROW'S

Craftsmen here at Michaels look forward to the day when the period of "marking time" shall have ended for the may fashion in metal the kind of products necessary to meet the requirements of tomorrow's plans of architect and builder. But winning the war comes first, and until the day of victory Michaels' entire facilities will continue to be dedicated unreservedly to the production of war essentials.



MICHAELS PRODUCTS

Fixtures for Banks and Offices Welded Bronze Doors Elevator Doors Elevator Enclosures Check Desks (standing and wall) Lamp Standards Marquise Tablets and Signs Name Plates Railings (cast and wrought) Building Directories **Bulletin Boards** Stamped and Cast Radiator Grilles Grilles and Wickets Kick and Push Plates Push Bars Wrought Iron and Bronze Lighting Fixtures Wire Work

Cast Thresholds Extruded Thresholds Extruded Casements and Store Front Sash Exhibit Cases Parking Meters Bronze and Iron Store Fronts Bronze Double Hung Windows

Bronze Casement Windows Bronze Markers and Plaques



THE MICHAELS ART BRONZE CO., Inc., Covington, Ky. Producers of a wide variety of Bronze, Steel and Aluminum products

LETTERS

Vanport City's architecture . . . More on Saarinen and The City . . . Correction from HOLC . . . Future for the small town architect.

"BASTARD MODERN"

Forum:

I didn't know that the so-called modern movement had jelled sufficiently to become a style. If such be the case how could you truly have "bastard" modern?

I am referring to your statement "Architects describe Vanport's buildings as 'Bastard Modern.'" Like Aesop's cat who started out to lick the world, when you use the term Architects in such fashion you take in a great deal of territory.

Small groups or schools will call anything not sired by "Just to be different" out of "Form follows function" or other stock in their stable, a bastard. Such a term however would not be applied by the architectural profession as a whole, as you imply, to any sincere effort in a movement. . . .

FRANK ROEHR Whitehouse & Church, Architects

Portland, Ore.

This statement was made by Architect Wolff. Thus the caption was self-inflicted by the designers of the project, not to the profession at large.—Ed.

CALLING ALL CARCINOMAS

Forum:

I note with interest your able review of Eliel Saarinen's book The City in the June issue of ARCHITECTURAL FORUM, and the carcinoma comment in the September Letters section. I take no man at what he says but rather at what he does, and I find that Eliel Saarinen has done exceedingly well. It will be well worth an architect of the world's time to visit Saarinen's creative work at Cranbrook, Bloomfield Hills, Mich., where his constellation of campus buildings challenges the symphony of the stars. Call it organic evolution or perfect pitch, or absolute abstractionism, or what you wish, it does follov the pattern of nature in its orderly rythmical growth, and it is anything and everything but carcinomatous.

Fortunate it is for all of us that there are yet great masters of technique like Saarinen, who can mold the materials of a physical world into a symphony of spiritual symbolism, wherein the least

infinitesimal speck of stardust is yet a keystone in the arch of the universe.

Unscientific? Hardly can we call Nature unscientific when she is the Mother of all the Arts and Sciences. Rather that our scientists would recognize that theirs is a humble part in the great pattern of the Universe, and adjust their thinking to the rhythmic heart beats of an inner psychic force that is greater than all the physical forces in the world. Man's destiny is inexorably a part of organic evolution and man's purpose is to aid and abet God and Nature in all her forms. The organic will always mold and form the inorganic to the evolutionary pattern of the Earth. We can only humbly help in the great process. And while Eliel Saarinen's book may cause caustic comment among his contemporaries, his three dimensional work at Cranbrook and other equal shrines on earth

THOMAS E. HADLEY, Architect Detroit, Mich.

HOLC'S LIQUIDATIONS

Forum:

The September issue of The Architectural Forum carried a confusing and disturbing story on the Home Owners' Loan Corp., to the effect that it has been "directed by Congress to unload \$3½ billion holdings," and that it can already count up sales amounting to \$1½ billion, "more than half the homes in its foreclosure books."

In the first place, the HOLC was never ordered to "unload its holdings"; Congress rejected a plan for forced liquidation of the HOLC.

Second, the entire mortgage and property holdings of the HOLC now amount to about \$1,600,000,000. The liquidation of HOLC cumulative investment in mortgages and properties of \$3,485,000,000 has taken place in an orderly manner over several years.

In the third place, the HOLC has been compelled to acquire by foreclosure and voluntary deed only 196,-017 properties of the more than a million homes it refinanced during the depression. More than 88 per cent of these 196,017 properties have been sold. The remaining 22,920 properties, more than nine-tenths of which are in the Northeastern States where real estate recovery has lagged, are being disposed of as rapidly as possible, as conditions permit, with due precautions against "dumping" them on the real estate market. As you know, it is only within the last year and a half that the situation has been such in this group of states that anything like reasonable prices could be obtained for homes, particularly the older properties. With the recovery in the market which has taken place, HOLC has been able this year to improve its record of sales greatly. In our New York region, which comprises the states referred to. in the three months ending September 1st, we have been able to dispose of 4,334 properties compared with 2,289 in the corresponding months of 1942. HOLC advertising, which has been carried on in cooperation with the brokers in effecting these sales presumably is the explanation of your writer's confused versions of this campaign. . . .

JOHN H. FAHEY, Commissioner National Housing Agency Federal Home Loan Bank Administration, Washington, D. C.

Lacking an alibi for its error, The Forum can only regret that a last-minute rush to the printer apparently resulted in a temporary editorial blackout. The sound administration of HOLC is as well-known to Forum editors as to Forum readers.—Ed.

INFORMATIVE SUPPLEMENT

Forum:

As a new subscriber I have been asked to inform you of my business connection with building. I didn't see my occupation listed, but this is quite understandable since "Carpenter in a Boat Shop" is a somewhat doubtful heading under which to include subscribers to an architectural publication.

Actually, carpentry is not my chosen business, nor do I intend to remain at it any longer than the necessities of war demand.

I find The Forum an inspiring and informative supplement to the study of design. In addition to this The Forum's coverage of modern housing developments serves me with an intelligent and reliable source of enlightenment on this subject.

(Continued on page 36)





There is Toughness and Strength to Spare in This Full-Wall Size Panel

See the dramatic proof pictured above?

A 60-pound bag of sand was dropped again and again from a distance of 6 feet on to a Strong-Bilt Panel supported on 28 inch centers. Result: no harm to the panel.

Can you visualize what would have happened to boards made of a brittle or crumbly material? The fact is that Strong-Bilt Panels will withstand an impact up to 6 times that of boards with a mineral core, as verified by an independent testing laboratory.

This is the board which, after years of testing, has scored such an amazing success on great housing projects from coast to coast—the board which brought dry-built, full-wall construction to the front.

In full wall sizes, Strong-Bilt Panels have enabled leading builders of mass housing to reduce building time, provide efficient insulation, cut comparative costs, and produce crackproof walls of lasting beauty. Their use eliminates the 1,000 pounds of moisture which may be introduced into the building of an average six-room house.

In like manner, Upson Strong-Bilt Panels will enable you to build a better postwar home-faster, and with added dollar value whether you are building one or a thousand homes.

Booklets picturing advantages and methods applicable both to conventional and prefabricated construction will be sent on request. Write The Upson Company, Lockport, N. Y.

Upson Quality Products Are Easily Identified By the Famous Blue-Center

ight 1943 —The Upson Company



(Continued from page 34)

I earnestly regret that at this time I can add neither financial nor political support to the cause of city planning in which The Forum is taking so active a part. Please be assured that this project has my most heartfelt approval. Along with this goes the hope that in the not too distant future I may be in a position to contribute more materially to better living through better design. I can't help but feel that The Forum will play no small part in helping me realize this ambition. . . . ROBERT N. MORRELL

Lakewood, Ohio

SMALL TOWN SHINGLE

Forum:

Now that architect-readers of the architectural journals have been served a mess of discouraging letters, articles, etc., to the effect that through complacency, etc., etc., architects are destined for hell and their position in future society is shaky, I should like to help to bring the picture into balance by the submission of the following discovery which I have made. It is offered as a suggestion to architects—especially young architects—in small communities who are wondering what they will do come war's close

. . . Nearly two years ago, like many other young architects I suddenly found myself away from home, out of architecture, and doing the next best thing as a draftsman in an ordnance plant for Uncle Sam. At the same time I found myself in a community awakened from its deep prewar slumber by many war workers (FORUM, June, '41). This community, a typical American town, has as a result of the past three years' experience been realizing that had they been prepared when the blitz of construction workers descended upon them, their town would have benefited in a great big way rather than just-being-able-to-make-it.

Now, having come to like this little community, I have concluded that it would be as good a place as any in which to hang out a shingle after the war—providing I could put on and adequately finance a selling campaign in the meantime, during spare time.

Shortly after getting started upon this program, I was surprised to find, even in such an isolated section as this, the leaders were fairly buzzing with talk about future building. Having observed during the last few years the pitfalls, mistakes, etc., in building and city planning and construction, they are, also to my surprise, not interested in listening to a sales talk—

(Continued on page 120)

A LETTER FROM THE PUBLISHER

Dear Reader:

FORUM Circulation classifications would mystify your local draft board. Probably George Seufert is the only master of our circulation cryptograms. If George were playing instead of working with his file cards he could deal 2,766 bridge hands before running out. So. . . .

Taking out the first two cards in the "Smith" subscriber file, for instance, we find Albert L. of Jacksonville and Alex W. of Denver. Their classification numbers, C-1 and C-9, show them to be architect and engineer respectively. This is natural enough: The Forum has more architect and engineer readers today than ever before in its history. But many of the 12,773 subscribers in this group may be surprised to learn that they account for only a third of the total circulation. Bernard Smith, whose card comes next, is a lawyer whose interest in building grew out of his concern with investment problems. If you haven't read his article on postwar homes in the July Harper's, you should.

The classification number for Burt Smith (Oswego, Ore.) is C-5, which indicates that he is one of the 5,890 builders who depend on The Forum. Byron Smith of Winnetka is a realtor—there are almost 2,600 in his group.

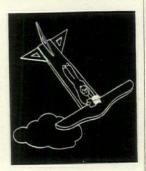
The building materials business of Charles A. Smith of Stockton, N. J. is just ten years older than The Architectural Forum: it goes back to the early 80's, when the family flour mill added lumber to its inventory.

Copies for Chloethiel Smith are sent to La Paz, Bolivia, where she teaches architecture in the university. Her next-door file neighbor takes us clear back to Manhattan, for Clyde F. Smith is head of the real estate department of the Drydock Savings Institution. He gets his Forum at home in Bronxville, to have more time to read it. The Forum banking-finance group (1,530) is potent. For example, it includes 50 executives in the 25 largest insurance companies.

Believe it or not, there are two H. B. Smiths. both with the U. S. Engineers. Hadden, known as "The Goat" to his intimates, operates out of Fisher's Island, N. Y. The other H. B. holds the rank of captain, is stationed in Puerto Rico.

This little tour of the Smiths could go on for some time—The Forum has 240 of them, in the U. S., South Africa, Australia, South America and England. Their classifications run from Architect to Zoner, but they all have two things in common besides their name—one way or another, Building is their livelihood, The Forum one of their liveliest interests. H.M.

P. S. Messrs. Jones: No offense, please—we have 116 of the Jones family, and to prove our objectivity, let me add that our Western Manager is Richard Norman Jones and our Business Manager, Charles Elmo Smith. If your name is neither Smith nor Jones, it is included at least once among the 35,965 FORUM subscribers unless it is Zuropatkin of Moscow who died last year, or at least he let his subscription die, and we can come to no less distressing conclusion.



C-1



C-



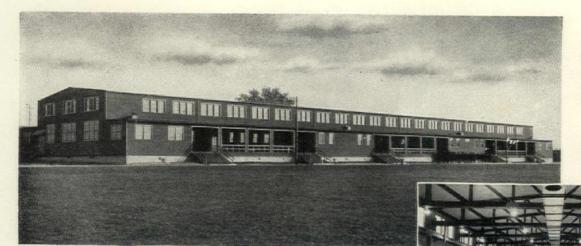
R-1



M-2



B-2



One of seven, 5000men Mess Halls at Sampson, New York. Architect-Engineers Shreve, Lamb & Harmon.

Below: Interior of huge 435-foot Mess Hall

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The largest naval training station in the East is equipped to serve 105,000 meals in 24 hours.

Considered the finest naval training station in the world and substantially completed in six months, this great naval station of 35,000 inhabitants with its utilities, facilities, laundries, bakeries, schools, drill halls, swimming pools, etc., was ready to receive the first group of recruits after a night and day work period of four months.

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Dormitories (Farm Security Administration)
—in many different localities

Navy Housing-South Charleston, West Virginia

Defense Housing-Point Pleasant, West Virginia

Cantonments-Camp Upton, New York

Cantonments-Mitchell Field, New York

Cantonments-Fort Hamilton, New York

Housing Projects-Philadelphia, Pa., Reading, Pa., Sampson, N. Y., Harrison, N. J.

Send for illustrated brochure No. 29

GENERAL CONTRACTORS

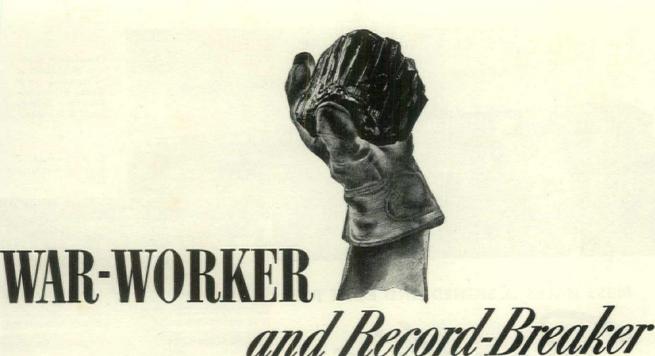
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NOVEMBER 1943



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It goes off to the wars in the same garb in which it sees the light of day.

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And, for all its man-made difficulties, coal itself is doing its full part to help win the war.

It was on the job when the first bomb hit Pearl Harbor, and will still be there when the last fighting man steps off the train at his home station.

Today it develops more power - hauls

more trains—warms more homes, offices and buildings—turns more wheels—generates more light and power than any other fuel—and does it at lower cost.

Though the armed forces and other war industries have drawn some 70,000 trained men from the mines, more coal was brought to the surface in 1942 than in any previous year.

Again in 1943, the first nine months of the year set a new record for coal production, topping any like period in history.

Coal is "public energy No. 1," now as in the past—and those who produce it work shoulder to shoulder with other American industries in an honest effort to meet their every obligation as employers, as suppliers to the public—and as good citizens.

BACK THE ATTACK . WITH WAR BONDS

BITUMINOUS COAL

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How the Paintriotic Paint Helps the Patriotic Architect...



1 "Well, we built 'em the way you designed 'em . . . so I'm glad they meet with your approval. Of course, now that they're up our next job is to make 'em last. A reputation for building well can be made in wartime just as in peace. After all, a building well built is also a building well-painted . . . "



2 "I'm not taking any chances on that. There's no substitute for good paint. And by "good paint" I mean Dutch Boy White Lead. Doesn't crack and scale . . . doesn't let you down when you need real weather-fight. Yet it is low priced per mixed gallon of paint . . . and you can use it on concrete, stucco, brick, plaster and wallboard as well as on the wood . . ."



3 "Why I've seen old homesteads and meeting houses still in good shape after two hundred years because they were protected with white lead. And every time I look at one I can see the Dutch Boy standing guard over it, just like his white lead ancestors used to do. Only Dutch Boy is even better in whiteness, body and hiding power . . ."



4 "Thanks for the boost, Mr. Architect. You'll be able to 'see' me even better when I tell you that today you can also specify Dutch Boy in ready-to-use paint form. My new paint is pure white lead, ready to spread. And it comes two ways—special 'Exterior Primer' for extra sealing, hiding and whiteness and 'Outside White' for extra-durable finishing coat and general painting.



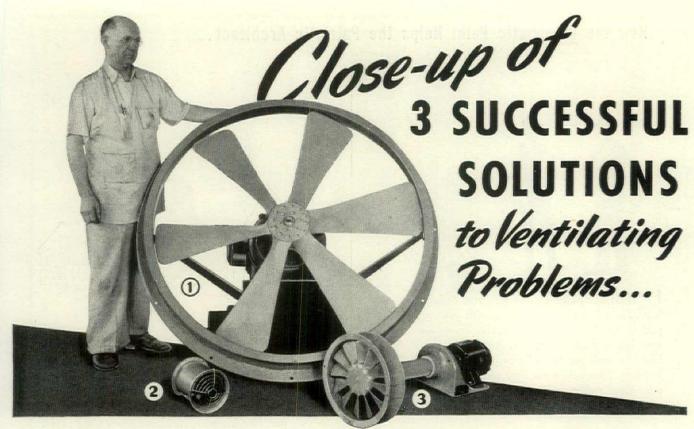
"Together they're setting a standard for two-coat protection and brightness—even on new wood.

"But whether you use the two paint forms or the paste 'lead' you'll be glad to hear that there's no shortage of white lead — no change in Dutch Boy quality."

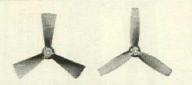
Be Paintriotic . . . make things last with

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.),



Every ventilating problem has a solution. The trick lies in knowing the most direct route to the correct answers—and that's where Propellair representatives can help you. Shown above are three interesting Propellair units that are definitely solving three types of problems....



AXIAL-FLOW, AIRFOIL PROPELLERS

Propellair-designed to move maximum air with minimum horsepower. Air-flow is even over whole blade, not just the tip. Blades are non-overloading.

EXTRA-VOLUME CURVED ENTRANCE RING

This scientifically curved ring moves more air than straight-edge rings. Permits utilization of airfoil, airmovement principle in ring as well as propeller.



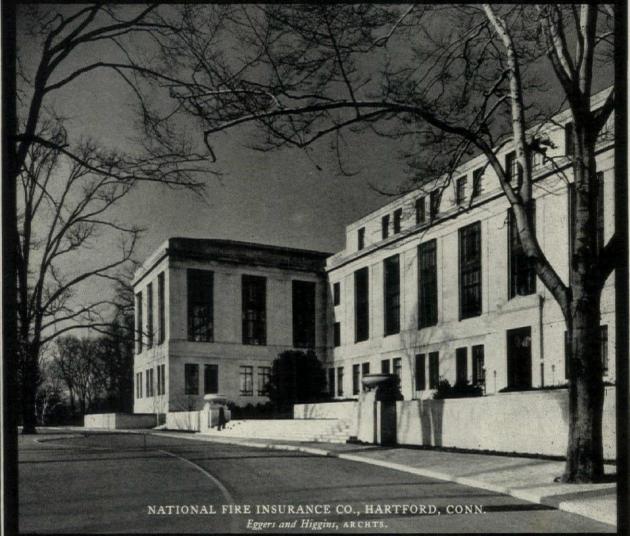
- This problem involved the ventilation of a large area. It called for the use of a fan with great capacity, very high efficiency and good pressure characteristics. Propellair installed the big model with six "S" type airfoil blades, driven at 1140 RPM by a 10 HP Uni-Shell motor. The installation moved 44,000 CFM and the problem was solved.
- Here the distribution of heat in fighting planes demanded a small, very light-weight unit with capacity to move a large volume of heated air at high altitudes. Propellair developed the model shown, weighing less than six pounds, and using only 1/6 HP. It has proved a complete success, moving 450 CFM at 20,000 ft. altitude. Modifications of this unit are available for commercial applications.
- 3 A manufacturer had been unable to cope with explosive and corrosive fumes. A heat problem also was present. Propellair installed an extension-shaft unit with twelve axial-flow, airfoil section blades. In this unit, shown above at right, ball bearings in a tubular housing carry the shaft extension and permit the fan to operate in a duct, with motor outside the duct. Since the day of installation there has been no trouble with fumes or excess heat. The same construction is available up to 60" diameters.

Many other Propellair units are pictured and described in our informative 72-page catalog. Write for your free copy.

If you have a pressing industrial ventilating problem, you should have our Propellair catalog No. 10-V. It contains many pages of technical tables, charts, diagrams and other valuable information for architects, engineers and plant men—and of course describes and illustrates the complete Propellair line. We will mail the catalog on request or, if you prefer, we will ask the nearest Propellair ventilating specialist to deliver your copy personally and at the same time discuss your specific problems. Write!



The Name HOPE'S Guarantees 1818 WINDOWS 1943



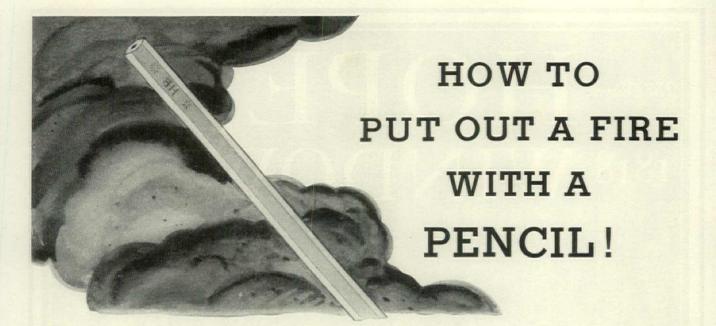
After Pearl Harbor, Hope's equipment and personnel were speedily converted 100% to war time requirements, but final Victory will find us with new developments of great interest produced by our war experiences and with the same reliable service to our customers as always.

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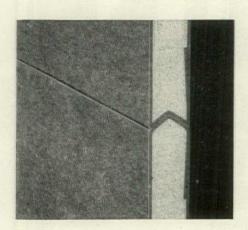
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41



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today's construction methods where complete wall sections are often fabricated right on the job. Ample supplies of both are available now for your wartime projects. Write for information.



GOLD BOND GYPSUM SHEATHING . . . insures permanent fire protection for wood frame houses at low cost. It won't warp, expand or contract. Comes full 1/2" thick with core of solid gypsum rock. Long edges are Tongue and Groove for snug, windproof, joints. May be used with any exterior finish.

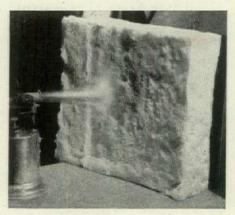


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THE MONTH IN BUILDING . . . NEWS

Building men take a fresh look at postwar directions (this page) ... Tax-conscious Congress pinches public housing pennies (page 44) ... FWA may build service facilities near war plants (page 45) ... Senator O'Mahoney says another WPA is not the postwar employment answer (page 47) ... Winter shortage of both coal and fuel oil looms (page 104).

TREND

Old man Building, resting from his war labors, puffed on a cheap cigar (the best he could afford) and tried to look relaxed. But it was easy to see that his heart was beating a little too fast, his mind straining a little too hard to find a way through the fog blanketing the future. For one thing, no one could guess how much longer the war would last. For another, no one was sure whether any building would be permitted before war's end even if material and labor supply gradually eased. And no one seemed to know how long it would take the manufacturers of building products to convert (estimates ran from six months to a year-and-ahalf, but so far it was all guesswork).

There were other and larger problems which had to be solved and, surprisingly enough, for once various organizations were trying to stake out the problems and to think through to their solution. That some of the postwar programs seemed at cross purposes was unimportant beside the fact that such programs were actually taking shape. Sooner or later they would jell and even if some of the differences remained differences, at least Building could start the postwar job with some sense of direction.

Home Builders. Convinced that their war assignment (never a lush one) was over, the National Association of Home Builders, strengthened by its recent merger with the National Home Builders Association, was working overtime to make sure that down payments would stay at 10 per cent, that interest would keep down, that appraisals would be liberal, that government war housing would be demolished and that public housing would never again raise its ugly, however social, head. But their program had a positive side, too. Houses had to be better, had to be completely equipped, had to be loaded with new sales gags and "by God, had to be cheaper!" Fritz Burns, dynamic young NAHB president, conducted a continuous membership safari, preaching progress to the unbelievers. Frank Cortright, the Association's executive vice-president, kept one long leg stretched down Pennsylvania Avenue to the Capitol, just to make sure Congress kept faith with free enterprise.

Public Housers. For their part, public housers in and out of government were so quiet that their opponents sensed something sinister in the offing. Actually, nothing more sinister was afoot than an attempt to appraise realistically their postwar chances. Organized labor. which should give public housing more than academic support, was perhaps too concerned with the war picture to get heated up over the future and even its lip service had a detectable lisp. Congress was definitely swinging right. On only one thing were public housers agreed-they had a long tough battle on hand. Canny Bryn Hovde, president of the National Public Housing Conference, politic-wise Catherine Bauer, NPHC vice-president, and Hugh Pomeroy, head man of the National Association of Housing Officials, were not unaware of the size of the job ahead.

Architects. Like public housers, the architects were suffering from apparently incurable schizophrenia. Nothing like a unified postwar program for the profession seemed in prospect. But, over-all program or not, many an individual and here and there a group was showing leadership and acumen in organizing local programs. And more and more offices were actually sharpening pencils as clients lit the green light on plans for buildings to be constructed in 194X.

City Planners. Happiest but most harassed of all Building men were the city and town planners—the venerable law of supply and demand was in their favor and through oversight, no doubt, the government had neglected to place a ceiling on planners' fees. Walter Blucher, head of the American Society

NEWS

of Planning Officials, and many of his proteges needed only one more thing to call it heaven, and that was sleen.

Bankers. What Building Money was thinking depended mostly on whether you happened to run a savings bank, a life insurance company, or a savings and loan association. Insurance men with a big stake in metropolitan real estate were naturally concentrating on urban rehabilitation, in which they were getting highly effective support from the Urban Land Institute through its potent spokesman, Hugh Potter. Some of the original bloom had been rubbed off the rental housing peach by Metropolitan's headaches over Stuyvesant Town, but good guess was that more than one way to skin a peach would emerge before the fruit rotted. Savings and loan associations cast an eye on the postwar possibility of wrapping the house and its equipment in one financing package. Big New York banks sought the legal right to invest in urban redevelopment companies.

Manufacturers. Unlike other Building men, most of the manufacturers were still up to their ears in war work. Nevertheless, they, too, were tempted to peer into the future, occasionally took time out to blast the "crack-pot and screw-ball" visions of tomorrow's house which magazine editors (and not a few advertisers) persisted in dishing up to an apparently delighted public. Through their revitalized Producers' Council, rumors leaked that this group was readying its own postwar program. If so, such stalwarts as the Council's president, Douglas Whitlock, and his aide-de-camp, Jim Follin, kept tightlipped on their intentions.

Dealers. Contrary to rumor and reason. the retail distributors of building materials and equipment looked as if they would come through the war hiatus with surprisingly few casualities. Chain yard operators had closed down unprofitable outlets, and many a favorably located yard had cushioned its seat with huge cantonment orders. others with the increasing demand from farmers for small prefabricated buildings. What troubled them more than current financial worries were the mounting threats to their postwar position. But that the dealers lacked neither the courage nor the bounce to meet new competition the war had proved to everybody.

* * *

On the whole, the Building front was still remarkably quiet. If hell was a-simmerin' chances were it might be several months before it really got a-poppin'.

REBUILDING SELF-STARTER

An earnest opponent of the let-Uncle-Sam-do-it school of city rebuilding, New York architect Daniel Paul Higgins is convinced that some kind of self-starting apparatus is needed to get the complex and cumbersome machinery of urban rehabilitation underway. Last month Higgins spoke his mind to large New York property owners, urged them to pool their interests in rundown districts by forming neighborhood development companies. His workmanlike proposal:

"Institutions can pool their holdings by turning over title in blighted area real estate to a development company whose stock or bonds they would take in return. This would put the ownership of the blighted areas under single control. The development company can then cooperate with the city and state authorities to produce officially approved plans for rebuilding.

"In return for the social benefits to the community and the economic improvement of the city, the development company should have certain protection



HIGGINS challenges "isolationism"

for the money of others for which its members are trustees. As an example, the principle of the insurance of mortgages already in force through the Federal Housing Administration could also be applied here.

While many of New York's property owners were too preoccupied with their new rent control worries to give the Higgins formula more than cursory attention, those with an eye on the future agreed that interest-pooling might make both dollars and sense.

HOUSING TROUBLE AHEAD?

Frightened by mounting tax figures, many a Congressman last month reached nervously for the familiar battle

cry of government economy. The National Housing Agency and the War Manpower Commission feared that the House Appropriations Committee, meeting behind closed doors in executive session, might also reach for a cleaver. whack it down hard on the \$200 million war housing appropriation which the NHAdministrator has long requested, never got. That public housing held out its needy hand while Congress nerved itself to extract taxes on an enormous scale was admittedly bad timing. How bad it might prove to be was still undetermined in late October. but outlook was that economy-minded Appropriation Committee members were all of a mind to shave the appropriation down to a piddling \$50 million. While the NHAdministrator still might get his funds boosted by carrying the fight to the House floor or the Senate, muttered cloakroom opinion held small promise of leniency.

Need Shifts Westward. While myopic Congressmen pinched war housing pennies, plant operators in critical areas pointed to mounting labor turnover and War Manpower officials urged a step-up in housing allocations. With war production emphasis shifting from munitions to expanded output of aircraft and ships, the West Coast, the Southeast and the Southwest showed the blackest spots in the war housing picture. In Los Angeles, private builders telegraphed Washington that they were prepared to build 30,000 houses over the next year; NHA moved to lift the allotment to private enterprise by 12,000 units. But, however willing private capital might be to undertake permanent housing, it was plain to almost everybody that if Congress failed to overcome its reluctance to appropriate any more money for federal building, the whole temporary construction program-the only economical housing solution in some booming war centers -would have to be abandoned.

West Coast war housing already completed ran into a small but unforseen dilemma. In Richmond, workers still lined up for "hot beds" while several hundred units in the Maritime Commission-Kaiser housing project stood vacant. Reason: Overtaxed Western railroads have not yet brought in enough furniture to equip the units.

Although a last minute snag loomed in the Senate, federal aid for private building's part of the job was assured in mid-October. While most Senators were ready to give the bill to extend FHA insuring aids smooth clearance, Senator Charles L. McNary (Rep.,

Ore.) proposed the addition of a no-discrimination amendment. Calculated more to create Administration embarassment and to precipitate delaying Senate debate rather than to achieve for Negroes any rights which they do not already have under basic FHA law, the McNary proposal was smothered for once, if not for all, after a momentary anxious flurry.

As the War Manpower Commission took the last steps short of a labor draft to stabilize employment in critical war areas and to assure the transfer of non-essential workers to needed occupations, the war housing program looked increasingly less like a job of housing only in-migrants. For some time private builders have urged that NHA liberalize its definition of inmigrancy. Last month there were signs that in areas where housing programs are adequate, this requirement for tenant eligibility is being quietly eased. Postwar FPHA? The Federal Public Housing Authority took time out from its budget worries to announce that regional offices would review applications for postwar low-rent projects from local housing authorities. While FPHA said it was merely accumulating a possible postwar shelf, that both authority and funds must be granted before action can be taken, promptly from the National Association of Home Builders came the charge that FPHA was trying to "build up pressure in many localities for a new federal program."

ABSENTEE ANSWER

Women war workers stay away from their jobs nine times as often as men. War Manpower officials, probing into the alarming rise of feminine absenteeism, emerged with a new respect for a program that the Federal Public Housing Authority has been doggedly plugging in the face of considerable opposition: provision of store, service and child care facilities in war housing projects. So clear was the need to aircraft manufacturers employing thousands of women workers that last month they appealed to the Federal Works Agency, urged that FWA extend its job of providing public facilities in war communities to include store and service buildings near war plants.

Early in the war housing program Assistant FPHA Commissioner Lee F. Johnson decided that new-built communities remote from established shopping centers would have to be supplied with facilities of their own. But there were plenty of obstacles. Under the law FPHA cannot spend more than 3 per cent of project cost for non-dwelling facilities; WPB looked askance at priority applications for commercial buildings, for a long time refused to





FPHA COMMERCIAL UNITS at Portland, Ore. (above) and at Windham, Ohio are good-looking and economical structures, built from standard plans.

give them a go-ahead. While FPHA has by now signed leases for the operation of 150 stores in 39 projects and has many more under construction, it cannot under the limits of the Lanham Act provide such facilities except in connection with publicly built housing projects, cannot supply store buildings at the doorstep of war plants, where workers can stop on their way home. The Federal Works Agency, however, took another look at its war-spending authority, decided it had the right to build store buildings, may soon respond with some.

From its venture into commercial leasing, FPHA may actually make a little money. Most leases are based on percentage of gross sales, according to this pattern:

Food stores, 1-2%. Drug stores, 2½-4%.

Barber shops, beauty parlors, 7-10%. Laundry, dry cleaning and shoe repair services, 6-10%.

Some leases are at a flat rental rate; in a few cases this has been set very low to attract a badly needed service. No equipment is furnished unless the tenant is unable to obtain it. Leasing preference is given to local business (of 38 government-built food stores, only 11 are chain-operated), and in locating its commercial projects FPHA has tried not to step on the toes of already established retailers. Rule-of-thumb: a war worker ought not to be expected to walk more than a half-mile to shop.





JOHNSON early saw the need

Construction of commercial buildings is, of course, temporary. Standard FPHA plans call for the accommodation of all stores and services under one roof. A small commercial group costs about \$35,000, provides up to 8,900 sq. ft. of floor space, meets the estimated service and shopping needs of 299 families. FPHA figures that 18,800 sq. ft. cost about \$70,000.

Present operators hold no purchase options on store buildings; FPHA, which must dispose of them within two years of war's end, will be free to bargain with any takers where there is prospect of permanent use.

PLAZA PURCHASE

Last month the nation's most fabulous investment trust—Atlas Corp.—closed its hand firmly around the most distinguished of American hotels. Outdistanced in surface glitter by many newer, taller towers, New York City's Plaza has no American rival for wellbred luxury, dished up in a grandly unostentatious manner. Outdistanced in

NEWS

personal glamour by practically any big-time trader you could name, shy, soft-spoken Floyd Bostwick Odlum, head of Atlas, has no present equal as a man who knows how to pick up sterling investments at bargain prices.

Since Odlum not only foresaw the depression but built a \$100 million corporation in the middle of it, smart

Associated Press



ODLUM buys his first hotel . . .

Underwood & Underwood



. . . New York's regal Plaza.

investors have been willing to place high bets on his ability to stick his finger into many a strange financial pudding, unerringly pull out the plum. In the course of absorbing the portfolios of 22 nervous investment trusts during the lean years of 1930-33 Odlum acquired holdings in the Hotel New Yorker, but acquisition of the Plaza marks his first direct purchase of hotel property. With him in the deal is C. N. Hilton, owner of the lavish Town House in Los Angeles.

Carried on the books of its former owner, U. S. Realty & Improvement Co., at the admittedly unrealistic value of \$13 million (land, buildings, furnishings, equipment), the Plaza is mortgaged to Metropolitan Life for \$6,800,000. While never dangerously close to the bankruptcy epidemic of the early '30's, the sumptuous hotel has struggled under an annual deficit for the last

decade, finally climbed out of the red by a slender \$2,756 profit for the first six months of 1943.

The late Frederic Sterry, who dreamed of a luxury hotel in the U.S. that would match the famous hotels of Europe, persuaded backers to put up close to \$15 million to build the Plaza in 1907, went to Paris to buy its furnishing. He also persuaded famed Henry Hardenbergh to design it. Scarcely had other New York hotel owners recovered from this dazzling outlay, when Sterry was off again to Europe, negotiating for weekly steamship delivery of French milk-fed lamb, snails and fresh soles from Burgundy, hams from Westphalia. When Jay Gould engaged the Plaza's ballroom for his daughter's debut at a cost -unprecedented in 1907-of \$100,000. the whole nation reeled from the blowout. When on the Plaza's opening day Mrs. Patrick Campbell lit a cigaret in the tea room she simultaneously ignited one of the most firmly entrenched moral standards of U. S. polite society. But that is about as close to a major scandal as the Plaza has ever come. Its unswerving gentility is as traditional as its faultless cuisine and service.

Odlum, whose choice of a midnight snack is much more likely to be a slice of sugared bread in his own kitchen than filet mignon bearnaise in the Persian Room, announced no startling plans. Policies responsible for the hotel's "unique standing and prestige would," he said quietly, "be continued."

WHEELBARROW STORY

Rumor: The Army and Navy have over-bought construction equipment, are now dumping vast amounts at sacrifice prices under the threat of Congressional investigation. Fact: Still under-supplied, the Army and Navy have been all but fighting each other for tractors and excavating shovels, finally set up a joint arbitration committee to determine which was in greater need of the odd lots of construction equipment now being redistributed by the Utilization Branch of the Treasury Procurement Division.

Sifting the dumping stories, Treasury officials convinced themselves that WPA wheelbarrows were, as usual, at the bottom of this gaudy rumor of federal extravagance. When the WPA and the CCC quit business, the Treasury's Utilization Branch got the job of disposing of equipment owned by these agencies, sold some wheelbarrows in New York at junk prices. Promptly through Brooklyn junk yards a hot tip spread: Cast-off GI wheelbarrows are

re-selling at fancy prices. Treasury men said the dingy wooden-handled wheel-barrows would bring prices anything but fancy. WPB's Construction Machinery Division helped to discourage rumor-mongers with the announcement that mounting lend-lease and overseas military requirements call for the production of 21 per cent more construction machinery in 1943, even though U. S. building has this year slumped by 43 per cent.

PLUMBING GALLUPOLL

Justifiably anxious to produce bathrooms that will fit into the bright new postwar world, Crane Co. laid its corporate finger on the public pulse, last month confided to the bathroom trade that in both plumbing and houses the public taste has not varied appreciably from the American suburban ideal of 1941. Although suffering from a strange compunction, which must have been an appreciable handicap in a long plumbing career, to refer to toilets as "closets" and to avoid the whole subject as much as possible, Crane has nevertheless managed to get together a rough idea of the way the average man feels about his plumbing by Gallupolling 200,000 home owners.

That few of us really know our own minds about plumbing is one of Crane's incidental conclusions. Take colored fixtures, for example. Fifty-six per cent said they preferred them, but here Crane felt obliged to take things rather sternly in hand. Colored plumbing has been on the market since the 1920'sas a matter of fact, Crane put it therebut practically nobody buys it. Average customer talks a lot about colored fixtures, the firms says, finally decides he really meant a colorful bathroom. Most-72 per cent-said they liked the familiar shower-over-tub arrangement; only 18 per cent thought they could get along without a tub if they had two small bathrooms; 72 per cent want an extra shower in the basement.

Crane-sampled taste in kitchen design:

90% want the sink located under the window.

53% prefer a medium-sized 10 x 12 ft. kitchen; 32% vote for a 14 x 16 ft. kitchen; only 12% want a small one.

OPPOSITION NOW AUDIBLE

Although the frequently misunderstood National Resources Planning Board issued many a recommendation that made its opponents see red, it did not at any time suggest federal ownership of the development rights on all nonbuilt-up land and a federal tax on the increase in value of developed areas as a necessary first step for sound land use in the U.S. But when the Uthwatt Report on Compensation and Betterment last year proposed (Forum, Nov. '42, p. 49-52) that Great Britain adopt such national powers, there was at first less audible jaw-dropping than might have been expected. Conservative British policy was apparently to hope that presently this new bogey of socialized land use would disappear if everybody pretended it wasn't there at all. Speeches of government leaders were significantly absent of any reference to the document prepared at the request of the Ministry of Works as an answer to one of Great Britain's most imperative postwar questions. For a time the building societies and other interests most concerned seemed to feel a certain diffidence about projecting their opposition in the face of an uncommon popular sympathy with almost any motion for decisive action to clear the decks for postwar rebuilding. But private opposition, while slow to get underway, has mounted steadily, is by now both vocal and unqualified. Last month The Economist mourned:

"The growing campaign against the Uthwatt Report, and the hesitancy of the Government, suggests that the Uthwatt scheme, which was called for and drafted as 'a matter of urgency', has now little chance of being adopted. Inevitably, the discussions must turn back to the more radical and more thorough alternative which the Uthwatt Committee set aside—nationalization or, more precisely, the progressive vesting in the community of property rights in land, as and when need for effective planning of land-use requires it."

PLANNING: HERE TO STAY

Senator Joseph C. O'Mahoney's enthusiasm for facts is matched only by his enthusiasm for stalking the corporate giants of U. S. business. Back in Washington last month after an investigating swing around the West Coast, the Senator from Wyoming happily tossed the Senate Postwar Economic Policy and Planning Committee a few firecracker facts, gleaned from his survey as chairman of its subcommittee on industrial reorganization:

From June 1940 to March 1943 more than 70 per cent of all prime contracts issued by the government went to 100 corporations. At the head of the class is General Motors Corp. with contracts amounting to \$8½ billion, 8 per cent of all contracts awarded.

►Big war plants now operated by these corporations have been largely paid for by the U. S. public. Of 17,478 war plant expansions, 2,426 were government financed at a cost of \$15½

billion while 15,052 were privately financed at a cost of \$4½ billion.

O'Mahoney forsees a struggle for the postwar world between the "advocates of arbitrary private power in the field of commerce and industry and the advocates of arbitrary government power." He is equally sure that "planning has come to stay" and that the "task of those who wish to preserve the traditional principles of the demo-

(Continued on page 48)



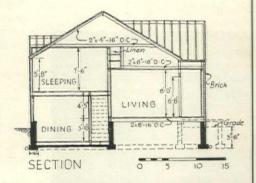
VOTE FOR TRI-LEVELS

Plotting 46 homes to be built at a Michigan naval base, Architect Walt B. DeGree wondered about the tastes of the Navy flying instructors who would move into them, could gather only that they were a "temperamental, intellectual and discriminating lot." DeGree, who sometime ago developed the low cost Tri-Level house to pack six rooms into a shell no bigger than an average four-room one-story structure (FORUM, Sept., '41), is convinced that the broken floor level design yields the best possible low cost housing buy. But,

edgy about the requirements of his unknown market, DeGree cautiously programmed only 40 per cent Tri-Levels.

After the first few units were up, the Navy instructors arrived, took a look, almost universally called for Tri-Levels. So gratified were Architect DeGree and Builder Bernard O. Hallis (Cooke Construction Co.) by the popularity of their pet design that they cheerfully took on the heavy paper work involved in changing specifications for FHA commitment, switched to Tri-Levels, retained only a few conventional houses.

BASIC TRI-LEVEL PLAN is to shave down waste space by putting the laundry, kitchen, and dining room six steps or $2\frac{1}{2}$ ft. below the grade level living room and library, adding two more bedrooms and bath at a third level seven steps up from the ground floor stair landing. Copyrighted, the plan has been widely used by builders through a franchise arrangement with the Cooke Construction Co.







CONVENTIONAL HOUSE (I.) takes same amount of ground space as Tri-Level.

NEWS

cratic system is to find the way to make management responsive to popular controls." Incentive taxation, used to stimulate postwar investment of private funds in productive enterprise and to encourage small business ventures, would be one step in this direction, he thought. A wise federal incorporation law setting up good conduct standards for private business would be another. To limit arbitrary government power, the Senator proposes the creation of a new judicial system with the right to review all federal administrative decisions affecting private business.

With the national government now carrying a debt of \$146 billion, states and cities must take the leadership in financing public works to provide employment in the transition period, O'Mahoney believes. Magnitude of the federal debt burden may be gauged by 1943 interest charges amounting to nearly \$3 billion, a sum equal to the entire federal income tax payment made by individuals in 1942. State governments, on the other hand, show an improved fiscal condition; total debt of all the states now amounts to less than \$3 billion, against this may be charged budget surpluses and sinking funds adding up to over \$1 billion.

Glad was O'Mahoney to find that the people of California, Oregon, and Washington are already taking steps to assume financial responsibility for postwar public works. California, he told the Senate Committee, has appropriated \$13½ million for highway planning, \$1½ million for the preparation of plans for public buildings, and has set aside one-tenth of state income and sales taxes as a postwar reserve fund.



O'MAHONEY: line on big business



HOUSING AT THE MIKE (I. to r.): Ben Grauer, program chairman, Lewis H. Brown, Norman Bel Geddes, John B. Blandford.

PROPHETS DIVIDED

As a bid for the serious-minded radio audience, NBC's Inter-American University of the Air has been more than moderately successful. That the half-hour, Saturday night consideration of postwar problems ("For This We Fight") now boasts more than 50 per cent of the listening audience is something of a surprise even to NBC. Last month NBC trotted out the hopeful postwar topic, "Better Homes and Cheaper." Around the mike: NHAdministrator John B. Blandford, Designer Norman Bel Geddes, Johns-Manville President Lewis H. Brown.

Argument was politely lukewarm. Geddes cracked, "Homes in 1947 may even be as good as they should have been in 1937-but weren't," looked enthusiastically to postwar mass production. Brown thought many new inventions in design and materials are needed before prefabrication can be widely used, said it would take "several years" after war's end for designers and engineers to do the readving. Blandford hoped that the "development would be evolutionary rather than revolutionary. so that not only the materials industry but the lending institutions and labor could make the adjustments that may be required."

Geddes on postwar building materials: "I think there will be a new material, a composition material. It will combine the outer wall—the weather wall—and the inner supporting frame with its inner wall. The whole wall will probably be only 2 in. thick instead of 8 in. It will contain the heating and ventilating, wiring for lighting, telephones, radios, etc. I think this new construction will be of just one material, not 8 or 10 as it is now."

Brown on postwar building materials: "The essence of what Mr. Geddes is talking about is efficient insulation to make the wall weatherproof. But I rather imagine that immediately

after the war we are going to build the great bulk of the houses out of older materials "

Geddes: "I have a little bit of imagination. . . . "

NEWS NOTES

Demountability Test. Two hundred demountable houses will soon be on their way from a site near an Indiana munitions plant to a new location at Clinton, Ohio. First large-scale house moving job to be undertaken by the Federal Public Housing Authority, the transfer will yield the first check of the cost of moving demountable construction. Henke Construction Corp., Chicago, will do the initial job of dismantling and re-erecting 200 houses at a fee of \$384,000, which includes transfer. site preparation, and construction of a recreation building. Plans are to move 1,000 more houses to the new site.

Willow Run. "One of the outstanding failures of this war," is what union spokesmen called Ford's Willow Run bomber plant in a letter addressed last month to President Roosevelt, War Secretary Stimson and Senator Harry S. Truman. That housing lack is a primary factor in breakdown of production at Willow Run is earnestly argued by union officials, hotly denied by the local interests responsible for smothering FPHA's early proposal to build 31,000 housing units in the area. Only about 10,000 federally-built dwelling units are now available. Workers not accommodated in these live in trailer slums, tar-paper shacks, the roofedover basements of abandoned buildings -or drive 60 miles each day to reach the plant from Detroit.

Eviction. While New Yorkers, caught in a sudden and late-coming housing pinch, last month scrambled to find apartments, from one decaying Queens

(Continued on page 100)

PLANNING WITH YOU

This new department takes its title from the pamphlet Forum editors issued two months ago to advocate immediate preparation of city and town plans for postwar execution. Already over 40,000 copies of the pamphlet have been distributed to private citizens by interested organizations and individuals in the U. S. and Canada. The pamphlet has fired a spark, and as more people see it, orders come with every mail. You are cordially invited to join us in the useful art of pamphleteering by sending your order (see next page) today in time to catch the fourth edition of "Planning With You" as it goes to press.

But if this campaign of developing public support for physical planning is to get anywhere, it must develop as a sustained program in each community—meetings, articles in the press, radio talks, exhibits and as many other activities as enterprising FORUM readers can concoct to stimulate and aid these efforts.

This department will report significant local programs, print excerpts from the press and speeches and in other ways attempt to help. Forum readers are particularly requested to inform us about programs in their communities.

An outstanding local program promises to stem from Publisher Henry Doorly's Omaha World-Herald. Mr. Doorly, a national leader in the newspaper world, has been devoting much of his time to studying postwar problems. Recently he assigned one of the paper's top writers, Edward Morrow, to do a series of articles on the theme "What Will We Do With Omaha?" Subjects in this series are indicated by these typical headings: "Construction Would Allay Peace Shock"; "Home-Building May Be Postwar Boon to Omaha"; "Postwar Public Works Program Is Big Need"; "Omaha Should Plan Now for Super-Airport"; "Planning Now May Avert Future Blight"; "Developing Blighted Areas Needs Public Financing." We publish, by permission, two chapters from the World-Herald's series.

PLANNING NOW MAY AVERT FUTURE BLIGHT

Fifty years from now Fairacres could be one of Omaha's worst slums.

This could happen if Omaha had no planned development, or zoning.

For 23 years Omaha has had zoning. It has not been perfect, but at least it has held back the blight which normally touches one neighborhood after another. This blight kills cities from the center out.

Omaha shows the effect of this blight. But it has come so slowly that many haven't noticed it.

You can see how the blight hits by walking through the neighborhood running from 17th Street and Capitol Avenue around 20th and Chicago Streets. Back in the nineties this was Omaha's finest residence section. The Millards, the McShanes, the Creightons and the Giffords lived there. They had fine horses in their big barns. They had coachmen and several maids. They and their children did a lot of entertaining in their big houses.

Now the neighborhood is one of the worst in Omaha. That is no matter of opinion. The federal housing census shows that, in general, this area has the greatest congestion of population, lack of bathing facilities, etc., in Omaha.

Now, why did this district go downnill?

There were many reasons. The neighborhood was too close in, especially after the horse and buggy went out of

Photo: John Lewellen



PUBLISHER DOORLY
He answers his own questions

fashion. The expanding commercial area encroached upon it. The old families moved away.

You can see the earlier stages of the Blackstone hotel—the district, incidentally, to which many of the old families moved when they left the 17th and Capitol Avenue neighborhood.

In the Blackstone district there were—and are—big homes, with fine yards and shrubs and flowers. For years all the neighborhood was pleasant. Then the blight began to touch it. A factor, probably, was that there were commercial districts nearby.

Anyway, many of the owners sold

their homes and moved out. The homes were too big, generally speaking, for new buyers. They were ideal for boarding houses. Or they could be cut up into apartments.

Because many families remained who wanted a quiet, single-family neighborhood, the city zoning commission resisted the transition to a boarding house district. Finally it had to bow. To have insisted that boarding houses be absolutely barred would have been, in effect, to confiscate the property, for it was saleable only for boarding house or apartment use.

If the trend continues, the Blackstone neighborhood will gradually go downhill. The zoning commission has retarded its decline. But it will never really come back as a residence district.

Now Fairacres has all the makings of a slum. There are big houses there—houses so big nobody will want them for single-family occupancy once the blight has hit. Ideal for boarding houses, or to be cut up for "housekeeping rooms." This may seem fantastic at the moment, but 50 years ago the people who lived around 17th and Capitol couldn't have believed their neighborhood could ever become what it has become.

Now the disease that makes cities die from the center out is a common one it has hit almost every American city but it probably is not incurable. England has shown, and some of the old New England cities have shown, that pleasant neighborhoods can remain pleasant neighborhoods for generations. Old family homes can be passed on from generation to generation. Many old New England homes now modernized, are as lovely as the day they were built.

In England and New England there apparently was a sort of informal zoning. Also, there was not the pressure for change that exists in the middle west.

Because of this pressure for change, we midwesterners apparently must do our zoning by law. This zoning by law is growing. More and more it is recognized that a man cannot do anything he wants to with his property, provided that what he wants to do will injure his neighbors. If this principle becomes firmly enough established. Fairacres may remain a pleasant residential section for generations.

To do its job properly, the city planning commission needs a better understanding of what it is doing. The commission members, who do a hard job without pay, are aware of what is happening to Omaha. They are trying to turn the tide. Generally they get little thanks. If they refuse to permit a man to put up a filling station on a corner lot in a fine residential section, they earn the applicant's enmity and usually get little thanks from those they have protected.

At present the commission is engaged in the job of re-zoning Omaha. The job needs doing. Omaha's original zoning map was prepared in 1920, and the firm that did the job thought Omaha would be a city of 400 thousand by 1940. Because of this, the old map provides for two or three times as much commercial property as Omaha needs. This must be corrected, unless many residential neighborhoods are to be hurt by unneeded commercial building nearby.

The commission will hold neighborhood meetings, to explain the new zoning, and the people of Omaha can do a lot for their city, and for themselves, by attending the meetings and finding out what zoning is all about

DEVELOPING BLIGHTED AREAS NEEDS PUBLIC FINANCING

If Omaha is to be made over into a modern city—one designed for present day living—one of the first jobs must be to clear out the crowded, rundown sections around the downtown area.

But, economically, it can't be done. Here you have a paradox.

To understand it, let's take the case of the old McShane home at 1906 Chicago Street. The home was built more than 50 years ago by Levi Carter. who founded the Carter Lead works. He is the man after whom Carter Lake was named. In the gay nineties, while this was still a fashionable neighborhood. T. J. McShane bought the place—a fine 14-room house with a big barn for horses and buggies.

The neighborhood went bad and the McShane family and the other old families moved away. Now the neighborhood is filled with boarding houses and big old homes cut up for "light housekeeping" rooms.

The McShane house stands on a corner lot 132 x 144 ft. The lot is on the assessor's books at \$5,495. As property presumably is assessed at 70 per cent of its actual value, this would make the right the McShane lot is worth \$7,800.

We can forget about the old house, which is so run down that it is assessed at only a thousand dollars. All right the McShane lot is worth \$7,500

Suppose we start in redeveloping the neighborhood. Who is going to buy the McShane lot at \$7,800? Somebody who wants to build a new home? Not if he is in his right mind. The prospective home-builder can buy an acre in Fairacres for much less. And even if the home-builder could get the McShane lot free he wouldn't use it to build a new home. Because of the blighted neighborhood a new home on the day it was finished wouldn't be worth half what it cost.

We might, of course, start homebuilding there if we could clean up the whole neighborhood. Any redeveloping job must cover a big area—ten or



The old McShane home . . . a typica example

fifteen blocks at least.

But can we afford to buy the land? Not the McShane lot, certainly. And not any other lot in the neighborhood, for they are all on the same plane. The McShane lot was picked at random, not because it was especially highpriced.

It should be added here that the land in the neighborhood is not held high solely because of bad assessing or because the owners are obstinate. It is held high because, in theory at least, it has commercial possibilities. Some time it might be worth its tax price as commercial property. But can we afford to let it stand as it is, waiting for it to become commercially valuable? In any case, it is worth very little as residential property.

One thing is clear: We can't afford to buy the land for single family dwellings. Then—until the day when it may become a factory site—what can we afford to buy it for?

There is a sort of rule of thumb in the building business that a building should cost five times as much as the land. The McShane lot is worth \$7,800. Five times that is \$39,000. A \$39,000 building is clearly an apartment house. About a 12-family apartment house, to work out.

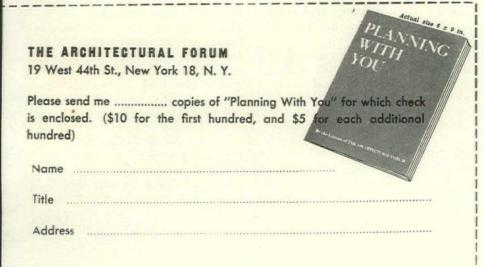
OK, we build a 12-family apartment house on the McShane lot. Presumably, we do the same sort of thing with the rest of the neighborhood, for a single good apartment house in that neighborhood obviously wouldn't work.

Now, when we build a 12-family apartment on the McShane lot, we get what the experts call a concentration of 27.5 families per acre on the lot. That is a lot of people in that space.

If you went on building such apartment houses in areas like this you soon would reach a queer end. You would find that such concentrations would cover 9.8 per cent of Omaha's area. Taking the land in the city of Omaha now used for residential purposes, you would need only 31 per cent of it—if everybody lived in apartments such as the one on the McShane lot. In other words, more than two-thirds of Omaha's present residential area could go back to farmland.

Obviously this isn't what we've been aiming at. Our whole idea these days

(Continued on page 114)



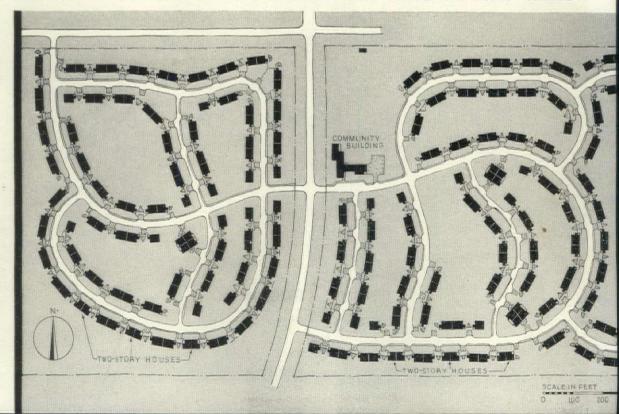
CHERRY POINT HOMES, NORTH CAROLINA

JOHN J. ROWLAND AND EDWARD D. STONE, ARC HITECTS; ALLEN J. MAXWELL, JR., ASSOCIATE



SEMI-DETACHED HOUSES FOLLOW CURVING ROADS, WITH PARKING SPACE FOR EACH FAMILY

LAND WAS CHEAP, SO ARCHITECT PICKED THIS "WANDERING-THROUGH-THE-WOODS" SCHEME





FEW TWO-STORY, FOUR-BEDROOM UNITS AFFORD EMPHASIS AND VARIETY. LOWER FLOOR IS BRICK VENEER



Excellent design, a flat site and plenty of trees produced an informal grouping of distinction

Built for officers and civilian personnel of a marine air base, this project is located on approximately 45 acres of scrub pine bought for \$25 an acre. Sewer and water lines are connected with adjoining Navy facilities and light and power was furnished by the REA. Intended for permanent occupancy, the 270 units were built by the FPHA and leased to the Navy. Together with an adjoining war housing project of 100 houses, a new theater and shopping center close to one corner of the property, and a proposed development of 500 additional units now in the planning stage, they constitute the nucleus of a new small town.

Semi-detached dwellings are used throughout the project, varying in size from one to four bedrooms. One, two and three bedroom types are all one story high, with some of the one bedroom type grouped in blocks of four apartments. A few four bedroom, two-story houses, scattered through the development, add much to its interest and variety, as does the use of concrete block walls for all of the houses on certain streets. All of the buildings have low-pitched

shed roofs, with broad overhangs to shade and protect the windows. Another design feature is the use of large areas of fixed glass, flanked by operable windows, in some of the rooms.

The buildings were designed to be trimmed in white, with dark gray, deep red, and deep green walls. Military considerations, however, dictated that for the present only dark gray and black be used on the exteriors, to reduce their visibility from the air. Even these drab colors have failed to diminish, in any important respect, the effectiveness of the excellent design and detailing.

Because of its modern design, the project was variously dubbed "Plywood Manor" and "Splinterville" during construction by the people of the area and prospective tenants. It has never lost these names, but those who lived in it have found it attractive and adequate. One tenant, a Captain who has lived in Marine Corps housing in all parts of the world, reports that the project provides the most favorable conditions he has so far encountered.

JOHN J. ROWLAND AND EDWARD D. STONE, ARCHITECTS

ALLAN J. MAXWELL, JR., ASSOCIATE

CLARENCE W. BAUGHMAN, LANDSCAPE ARCHITECT

E. THOMAS NICHOLS, MECHANICAL ENGINEER

H. L. COBLE, GENERAL CONTRACTOR

Photos: Ezra Stoller



TO RELIEVE MONOTONY, SOME ONE STORY HOUSES HAVE CONCRETE BLOCK WALLS

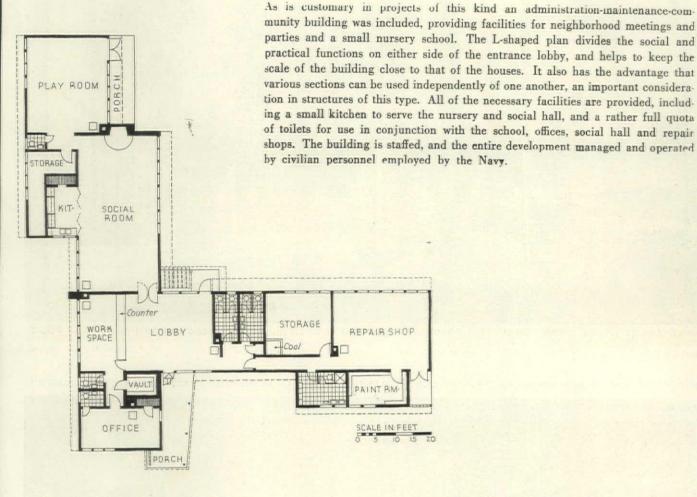
NOVEMBER 1943

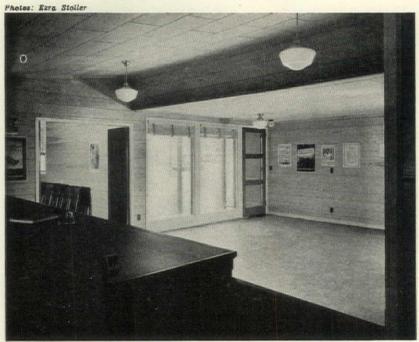


STREET VIEW OF COMMUNITY BUILDING SHOWS OPEN EFFECT OF CENTRAL LOBBY, GLAZED AT FRONT AND BACK



In the administration building, architects applied the idiom of the houses to a larger problem



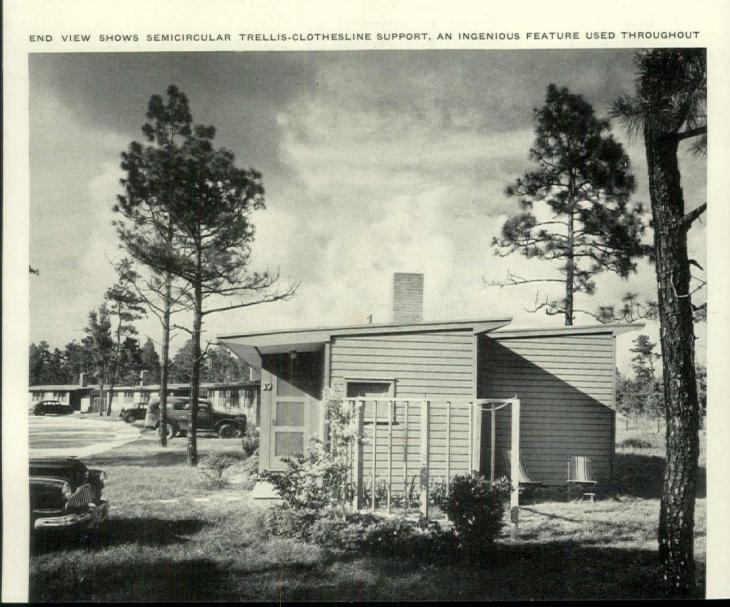


LOBBY INTERIOR HAS WOOD WALLS, SLOPING ACOUSTICAL TILE CEILING

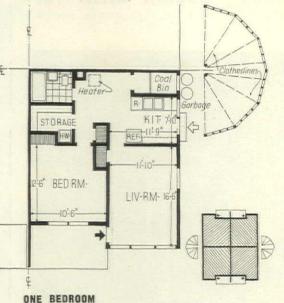
CONSTRUCTION OUTLINE: STRUCTUREredwood siding, California Redwood Assn.. gypsum lath and sheathing, U. S. Gypsum Co. Floors-Peerless Flooring Co. ROOFS -Barrett roofing, The Barrett Co. IN-SULATION - Armour Insulation Co. Ceramic tile—Cambridge Tile Mfg. Co. PAINTS—John Lucas & Co. and Harwood Bros. Inc. HARDWARE - Lockwood Hardware Co. ELECTRIC INSTALLA. TION: Panels-Trumbull Electric Mfg. Co. PLUMBING: Bathroom fixtures-Kohler Co. Pipes-Charlotte Pipe & Foundry, Keasbey-Mattison Co. and Bethlehem Steel Co. Pumps-Fairbanks. Morse & Co. KITCHEN EQUIPMENT: Ranges-Norge Div., Borg-Warner Corp. Refrigerators-Philco Radio & Television Corp. Heaters-Sears-Roebuck & Co.

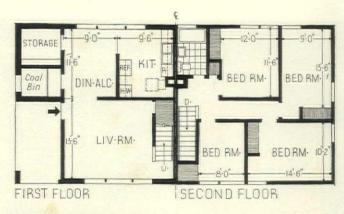


HANDSOMEST HOUSE TYPE COMBINES TWO ONE-BEDROOM APARTMENTS. PLAN IS ALSO USED IN BLOCKS OF FOUR

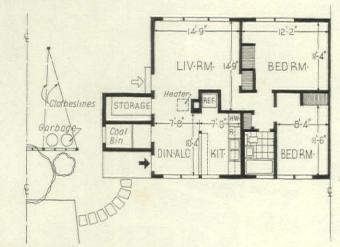


Unit plans offer an unusual variety of accommodations in a number of interesting arrangements





FOUR BEDROOMS (2 STORY)



TWO BEDROOMS



THREE BEDROOMS

Unit plans were developed in such a way as to be serviceable directly from the street, and provide the following features:

- ▶ Drying yards, coal delivery and garbage receptacles between the houses and screened from the street by trellises.
- Single entrance near kitchen and in most cases through dining alcove to conserve space (single entrances are used in all but one of the plans).
- ▶ Generous storage closets, including closet for coal storage large enough to accommodate the space heater in summer.
- Living rooms at the back of the houses in most cases, to enjoy the open space at the centers of the large blocks.
- ►Dwarf partitions between kitchens and dining alcoves, and between living rooms and kitchens, to increase the feeling of space.

Kitchen shelving does not run to the ceiling and therefore is more useful than the same quantity of shelving in the normal position. Exposed brick chimneys within the houses are merely painted, saving a good deal of expensive furring and adding a decorative note to the interiors.







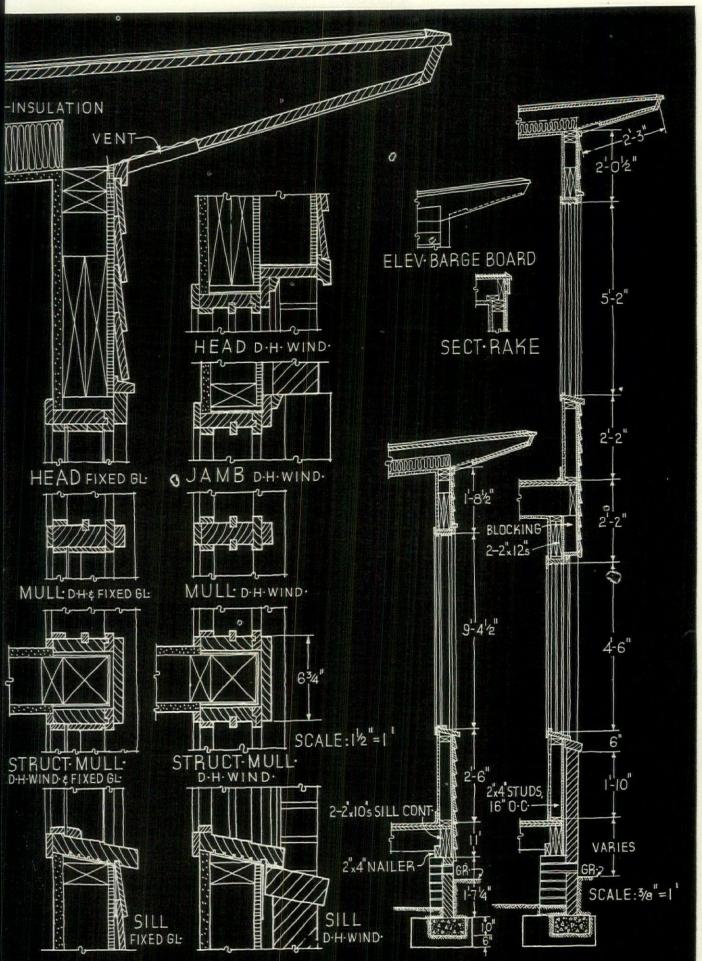
INTERIORS ILLUSTRATE USE OF DWARF PARTITIONS AND OPEN PLANNING TO INCREASE APPARENT SIZE OF ROOMS

WINDOW AND WALL DETAILS

JOHN J. ROWLAND, EDWARD D. STONE, ARCHITECTS

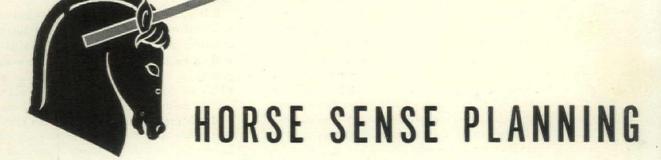
DESIGN DATA 10.

THE ARCHITECTURAL FORUM



SECT: FRAME WALL SECT: BRICK VENEER WAL

SECTIONS-ISTORY & 2 STORY UNITS



Architects Albert Mayer and Julian Whittlesey propose a new way for private enterprise to help in solving the pressing problems of our urban areas, and at the same time, solve some problems of its own. No substitute for city planning, it is intended to supplement rather than supplant action of a broader type.

The centers of our cities are declining in population, business and industry. Former outskirts lose to newer, more remote suburbs. Most of our towns, large and small, are unpleasant to do business in, wasteful of people's time and a strain on their nerves.

The evidence of this condition—some of it masked at the moment by war booms—lies in the increased and increasing vacancies, fore-closures, tax delinquencies, piecemeal and wholesale demolition, and just plain decay characteristic of urban real estate. In all but a few of our centers of population, most of those who can afford to, have moved outside the corporate limits, and once outside resist strenuously any attempt to make the wealthier suburbs help with the tax bills of the city itself—although one of the reasons these are so large is the cost of servicing peripheral development.

There is much talk of correcting these tendencies through urban redevelopment and city planning. Everybody agrees that something must be done to make U. S. cities pleasanter and easier places to live in, but almost everyone conceives this vital task as the job solely of public agencies, which can be done only on an enormous scale and paid for only by a large dip into the Federal pocketbook. As to just what form this large scale action shall take at some misty postwar date there is much less agreement. Some look to urban redevelopment corporations, operating on the borrowed public power of eminent domain or, contrarywise, a

planned process of decentralization. Others propose direct Federal purchase of urban land, public housing, or improved park systems and express traffic routes. Still others simply wait for a miracle. Meanwhile, once gracious neighborhoods pass into disreputable old age, down-at-the-heel districts settle solidly into slums, and the dirty collar of blight around our central urban areas progressively widens. This deterioration is progressing so rapidly that it threatens to determine the fate of the city before preventive action is taken. At best, there will be little time in which to decide on the alternative measures.

However these larger proposals turn out, it is unlikely that at the end of the war any or all of them will have so captured the imaginations of the state legislatures, city officials, investing and construction interests, and the general public that they will dominate the future of urban growth. Ultimately, of course, a broad and varied attack will be necessary in order to achieve any degree of success, but now and in the future, interim policies and private activities will play a considerable role in the development or further disintegration of our cities. Horse sense planning makes no claim to grapple with the larger issue of city planning or its more extensive objectives. It is concerned only with modest enlightened practices which must in the future characterize every large scale project attempted by private enterprise. Beginning now, it should be translated into our urban building,

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and day to day thinking, regardless of when we attempt more drastic surgery. Even when the larger proposals of city planning do develop, it will be the day to day habits of design and building on a private scale which will give quality and texture to this larger planning.

PLANNING BY PRIVATE ENTERPRISE

Private enterprise cannot, unaided, accomplish the wholesale rebuilding of cities, but the enlightened self interest of only a few property owners can revitalize entire neighborhoods. Private action cannot revamp the municipal park system, but it can create neighborhood centers and playgrounds without the need for subsidies. It cannot solve the city's traffic problem but it can provide off-street parking and loading to its own financial advantage and to that of the community from which it derives its income. Better stores and store values need not await the broad measures of urban redevelopment; private action can create better shopping conditions by planning for the forgotten pedestrian.

The field of horse sense planning varies from what might be called sub-city-planning down to the modest window box. The exploitation of roofs and their dramatic views, the creation of outdoor places to dine and meet, the use of balconies, trees, hedges and window boxes—these city planning gadgets have the same part to play in a neighborhood as they have in the sale of a house. Horse sense planning is the homely task of making portions of our cities easier and pleasanter places to live in, making available to many city dwellers the conveniences and amenities now enjoyed by only a few.

It is a job that will give the builder or investor who undertakes it a competitive advantage in attracting and keeping tenants—commercial as well as residential—in minimizing turnover, in getting increased rentals. It may soon be a job which no large property owner can disregard without losing out entirely in the rental market. And it is pre-eminently the job of the architect, who must provide the necessary guidance, imagination and design talent to see that it is properly carried out.

Horse sense planning holds that rapid obsolescence of buildings and neighborhoods is not inevitable, but simply the result of the ultraindividualistic, anarchic and atomic viewpoint which has characterized speculative urban development—a viewpoint which can be, and must be changed. And, while the larger measures necessary for mass replacement of urban dis-

MISCELLANEOUS EXAMPLES: BALCONIES







Only a handful of our apartment buildings have balconies, despite the fact that city dwellers like porches as much as people who live in the suburbs. They use them for dining in summer, to give the baby his sun and air, to grow plants on, or just for sitting outside. Where balconies have been provided, they have been an immediate success. In the larger of the two buildings illustrated (which faces Central Park) seventh floor apartments with balconies rent for \$250 more a year than similar sixth floor units which have an enlarged dining alcove instead. The second building overlooks the East River, and like the first, provides apartments with outdoor space for a large proportion of the tenants.

MISCELLANEOUS EXAMPLES: KUUTS

tricts may have to await the end of the war, planning to assure the future healthfulness of neighborhoods now perilously close to the skids can begin at once.

PLANNING AND PROFITS

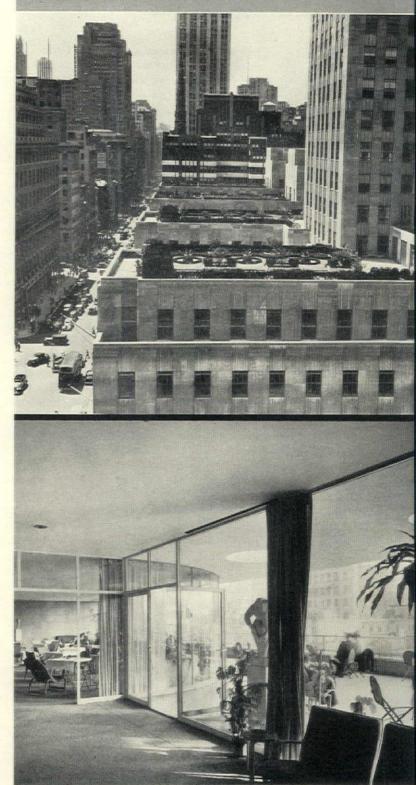
The major thesis of horse sense planning is that only in the very short run does anything prove profitable to the individual investor or financial institutions which is harmful to the neighborhood or city. While our cities were still expanding, this was sometimes not the case. The more the builder crowded his land, the better off he was. Any suggestion that he consider the civic implications of this practice looked like arrant nonsense, if not a demand for outright philanthropy. But now that our cities have reached their maturity, now that in-city areas must compete for public favor with outlying developments, now that the fiscal consequences of unsound urban economics are becoming painfully evident, it is getting clearer every day that if we try to continue business as usualwhich means real estate speculation as usualit will not be very long before such business will shrink to the point where it will not be worth continuing.

Large scale developments, like the Metropolitan's huge housing projects and Rockefeller Center in New York have shown that this is no mere theory, but may be expressed very directly in a draining off of tenants to redeveloped areas. Such examples are, in fact, prime instances of the practicability of the horse sense planning approach. This is not to suggest that the approach is limited to the large investor and financial institution exclusively, although we may look to such organizations for leadership in the planning process, since it is a technique they must understand for their own economic survival. Large or small, only the best standards we know can produce a property that will pay as a long-term investment. And only the closest possible approximation of such standards. worked out with the best means aavilable, is capable of protecting existing investments against the competition of new development, whether this takes place within the city or outside it.

BASIC PROBLEMS

Here are some of the problems common to all cities for which we believe there are adequate and simple horse sense solutions:

Sound land use. A good look at our cities must result in the immediate discard of the landcrowding tradition caused by, and in turn the cause of, inflated land prices. With population no longer on the increase, with desperately deflated land prices, we can and must build more sensibly. Soon the airplane will increase enormously the amount of land area available for development, and we will find that land-price



The most congested parts of our cities have a huge undeveloped territory in their neglected roofs. Most of us see the city from street level most of the time, or look out of a fourth-floor window into somebody else's fourth-floor window or a blank wall. But from our roofs you can really see something, really grasp the sweep and majesty of a great city. Here is a prime opportunity for private enterprise, where the investment required is measured more in imagination and daring than in dollars. Office building roofs offer ideal spots for luncheonettes, recreation and relaxation; with appropriate facilities, they can be made a source of added income as well as drawing cards for the rental office. Apartment house roofs can be developed for tenants use with a small expenditure for planting, deck chairs and shelters. Dozens of owners have already done this, and found it a real rental feature. This practice can and should become much more general. Illustrations show members' lounge atop the Museum of Modern Art, New York, and Rockefeller Center's famed International Gardens.



deflation is permanently with us. Let us take advantage of it, let us not keep on crowding land just because we always have. Open spaces, green spaces, good light and good view in our homes and offices are no philanthropic luxury but a necessity to prevent overbuilding and foreclosures. It has long been possible to demonstrate that the maximum legal use of a given plot, while it produces a maximum investment, seldom results in the maximum percentage return on the money invested. In many cases, additions to services, such as parking or recreation facilities, will be the best use for land, not as a stop-gap, but permanently.

Planning gadgets. Cities have never properly developed and exploited the types of amenity peculiar to them and certainly have not done so for the bulk of the population, who have accordingly moved away when they could. For instance, the burden of proof rests with the architect and builder as to why every apartment house tenant cannot have a sizeable balcony, in some ways pleasanter and certainly more dramatic than the suburban porch. In most of our cities there are few if any out-of-door places where people can meet and dine. Not enough use has been made of city roofs, although some New York apartment owners have proved to their own satisfaction that it pays to improve roof space and invite all tenants to use it. We have all laughed for years at the gadgetry of the home developer: the fancy tile, the funny plaster arches, the useless doodads. But these gadgets often sell the house. It's time to stop laughing at gadgets and make worthier use of them. Hedges, window boxes, street trees, backyard planting are the city developer's gadgets, on a plane below the city planner's blueprint, but valuable instruments for achieving urban liv-

Making room for the pedestrian. In our desperate effort to accommodate the automobile we have constantly widened roadways in the centers of our cities, narrowed sidewalks and generally bumped the pedestrian around. Most central shopping is done by pedestrians and we must restore the sidewalk if we want good competitive shopping conditions, if necessary, by setting new buildings (or just the shop fronts) well back of the legal property line, as in some parts of Rockefeller Center. To make room for pedestrian traffic on our downtown streets, we must relieve the pressure of automobile traffic by supplying off-street parking and loading facilities.

Neighborhood unity. City dwellers may have lost the habit of living in neighborhoods but they haven't lost the need for the easily available facilities that a well-integrated community, like a small town, can provide. Nearby shopping and service facilities, easily available recreation, the opportunity to live near one's work—these are the things that add up to a socially and

economically stable neighborhood. Horse sense planning may not be able to provide all of these for all city districts, but it can begin now to revitalize urban communities, supply as many of the missing elements of unity as possible.

LIMITATIONS

More preventive than remedial, horse sense planning is subject to a number of limitations. Its accomplishments, as we have already pointed out, must be largely restricted to districts that are not yet substandard. Nor does our proposal touch one of the basic dilemmas of our cities: the fantastic tax structure. It makes no attack on the sizeable problem of providing housing for low income groups.

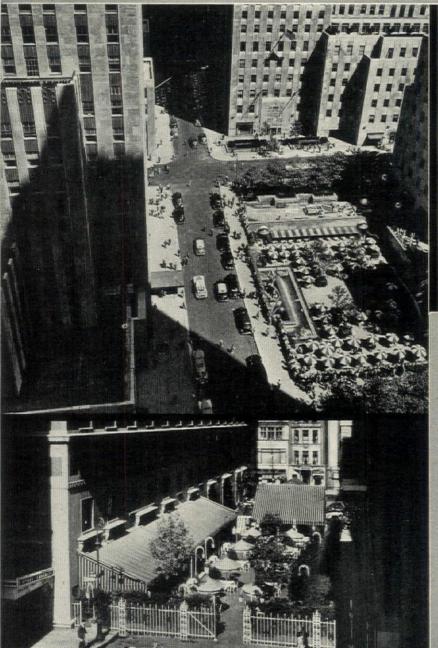
Large and concentrated property ownership, an important factor in all redevelopment schemes, is uncommon in most urban communities. While atomic land ownership presents a less favorable condition for horse sense planning, the intelligent cooperative effort of a group of small property owners might achieve much the same result.

It is also true that while the need for such an approach to urban development may be painfully clear to owners of existing properties. it may not be so clear to those responsible for new urban building. In many instances, the control of such development is still in the hands of speculators who have no intention of holding the property for more than two or three years, or at the most, five years, and who plan to borrow 60 or 70 per cent of the funds required to carry it out. This type of real estate operation has in the past led to a state of mind which might be called "envelope mindedness"—that is, a desire to build to the last inch of the "envelope" prescribed by the building or zoning law. It will probably continue to do so in the future. Its evil effects can only be counteracted if investors and financial institutions become convinced that their normal practice of advancing the major part of the capital for a real estate development, money that will be invested for many years, without demanding a corresponding amount of control over how their funds are to be invested, is foolish and unsound. Such investors have a real stake in the future of the neighborhood and city which the speculator can often afford to ignore. One of the results of horse sense planning should be to prove that large investors and property owners (whether banks or estates or insurance companies) should study the proper use and intensity of use of the properties in which they have or plan to have heavy investments, and then advance money only on developments and buildings which are sound from the long-range standpoint, not only for civic reasons, but for economic survival.

PRACTICAL DEMONSTRATIONS

Essentially specific action to meet specific need,

MISCELLANEOUS EXAMPLES: OUTDOOR DINING

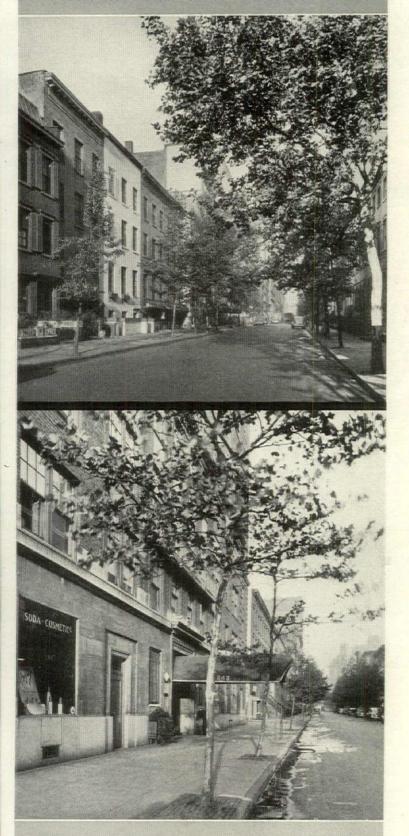




People like to dine and drink out of doo in fine weather, and the city is a good place for it. The congestion and verve and un believable variety of the throngs on our cistreets is fantastic and illogical, but a sig to watch. Yet there are few cases where urba facilities for outdoor dining have been provided as a matter of planning or even as b lated afterthoughts. Those which do exist a crowded and popular. A fine example planned facilities of this type, Rockefell Center's sunken garden (above, left) is use in spring and summer for dining and drinkin for roller skating in the fall, and ice skating winter. It is a revenue producer as well as focal center for this huge commercial "neig borhood." Other popular Manhattan exam ples include swank Chatham Walk (left) the Grand Central area, and the low-price cafeteria of the Central Park zoo (above

horse sense planning cannot be described in a vacuum. We have, therefore, chosen to illustrate our modest proposals by applying them to a city in which the need is particularly acute, and at the same time, particularly complex: New York. Some of these solutions have already been carried out; others are advanced in the hope that they may prove realistic enough to merit actual execution. Some of New York's problems will, of course, be shared by no other city. Its present congestion and pattern of development is absurdly high and it is burdened with higher assessed property values than any other American city. On the other hand. many of the horse sense solutions to these problems are equally applicable to smaller cities and towns, although they may not in every instance he so sorely needed.

In addition to the miscellaneous examples on these pages, our practical demonstrations of the horse sense planning technique have been grouped under five headings. The first deals with the problem of creating self-contained neighborhoods, not by wholesale reconstruction, but simply by stimulating tendencies in this direction which already exist. The second shows a series of private parks and playgrounds, created in connection with small apartment developments, which have paid handsome dividends in increased rentals. The third and fourth sections, parking by private action and better shopping conditions will be presented next month. The fifth, dealing with what is called underenvelopic development, or the science of building less than the law allows, is the subject of the final article of the series.



There is no real reason, why city streets cannot rival their suburban counterparts in greenery, as these two examples of private-enterprise planting on congested Manhattan Island demonstrate. Street trees cost only about \$70 each, and add immeasurably to the attractiveness of urban neighborhoods. That they are a worthwhile investment for the owner of rental property is attested by the owner of the apartment house shown in the lower picture, who planted the entire block on which his building is located at a cost of \$1,500—or one-tenth of one per cent of the cost of the building. The money spent for this purpose has produced, in decreased vacancies, a better return than any other part of his investment.



CREATING SELF-CO

In its most ambitious application, hor

THE INNER DISTRICTS of New York have a vitality rarely matched elsewhere; there are still large numbers of people on whom its urban attractions exert a powerful appeal. In recent years a good many high and medium-priced rental apartments and a few private houses have been built, while in most other cities the outward movement of wealthy and middle-class citizens has not been counteracted to the same extent. Boston's inner town, for example, presents a rich cultural and entertainment pattern, but has not developed any new housing accommodations to check the exodus of the well-to-do citizenry to suburbia. In some cities, such as Cleveland and Detroit, inner decay has proceeded to such a point that much more drastic rehabilitation will be called for. We claim no monopoly on ingenuity and advance the following detailed ways-and-means studies as illustrative rather than definitive.

One of the simple principles of planning for better cities on which almost everybody agrees is that urban communities must be crystallized as unified neighborhoods equipped with comprehensive shopping and recreational facilities. Self-contained neighborhood units have important and obvious advantages for the renter, the property owner, the city as a whole. They mean that the city can cut down its outlay for traffic control, public transportation, and parking facilities; they are the best kind of safeguard for every real estate investment within their boundaries. To achieve such unity we need not build an entirely new community from the ground up. Actually, and surprisingly, we find certain sub-areas in our conglomerate city which almost fill the bill, almost completely click into place, need only one or two new elements to become reasonably useful, integrated centers. They will not, of course, have all the elements of unity that ideally might be wanted. Their physical boundaries will not be sharply defined as they might be if we started from scratch, but their areas of influence will be quite recognizable. And the improvements needed to weld them further together can be undertaken privately and with profit by interests whose stake in the neighborhood is sufficiently large so that the work to be done is not a primary but a buttressing investment.

CASE STUDIES

To show how the simple techniques of horse sense planning might be applied to existing neighborhoods, we have chosen three sub-areas of New York City:

▶ The Thorneycroft area in Queens, developed within the last five years, an economically and socially homogeneous district, full of apartment

ED NEIGHBORHOODS

nning aims to crystallize communities within our cities, taking advantage of existing conditions.

houses for small business men and middle-class salaried workers, with some individually-owned row houses.

▶ The Brooklyn Hill area, largely untouched by blight, where large single-family houses built a generation ago predominate with an admixture of a few large apartments introducing a middle-class element not unlike Thorneycroft. This neighborhood adjoins the Equitable Life's huge new Brooklyn development.

The hospital-research-educational area in Manhattan north of the Queensboro Bridge, stretching from Third Avenue to the East River, within walking distance of the teeming center of the city. Here are apartment homes for high-salaried and distinguished professionals as well as semi-slum tenements housing service workers from the swank Park Avenue and Fifth Avenue districts close by.

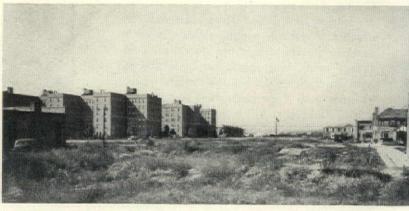
None of these areas can be said to be typical of New York, but all of them are excellent examples of the kind of district where horse sense planning is likely to get off to a good start. Admittedly we have chosen the three best neighborhoods we could find to illustrate our point. All of them have enough vitality so that much new development has taken place in the last fifteen years. In all three there are large and concentrated property interests with a real stake in the future of the neighborhood that are able to afford the moderate investment required to assure this future. In each instance-and this illustrates a basic principle of horse sense planning-only a few simple elements are needed to pull them over the hump. Finally, they have been chosen because they present different problems and suggest different applications of the horse sense planning technique.

1. THORNEYCROFT

Photos: Tom Leonard



MAP (above) shows the locations of the three New York areas selected for study: one a newly-developed section in the Borough of Queens, the second a considerably older portion of Brooklyn, the third on congested Manhattan Island. All three present a number of problems which vex realtors and developers all over the country, and to which practical horse sense solutions are not hard to find.



2. BROOKLYN HILL



3. HOSPITAL-RESEARCH CENTER



THORNEYCROFT AREA

Situated on both sides of Queens Boulevard, a main traffic artery, within ten minutes' walk of an established shopping center, this area was developed in large apartment buildings as a result of the opening of the new Independent Subway. Not on an express stop, it has not been subject to the violent complications of sudden over development. Owner-occupied row houses, some built before the coming of the subway, supplied the first air of permanence to the neighborhood. A few small taxpayer store buildings have sprung up to provide the available local shopping facilities. Flushing Meadow Park, left over from the World's Fair. is beyond easy walking distance for children.

The present development is scattered, and lies in the midst of a vast amount of vacant land much of it held in large parcels. Two pressing questions are: 1) What is going to happen to all this unused land? 2) What can be done to make the area a real community, and forestall the familiar cycle of development, overdevelopment and decay? More apartment construction is certainly not the answer; it would merely represent competition for that which already exists. Why should not those who already have a large stake in the community, and who own much of the surrounding land, develop it in a fashion that will help the neighborhood in a positive way, give it a competitive advantage over other similar sections?

In the entire area, there is only one block now used for recreation: a tennis club. Owners of small apartments, sensing this deficiency, have already developed makeshift facilities to meet the resulting need. Sitting gardens, playlots, basement snack bars, handball courts and children's play schools have been wedged in here and there as afterthoughts, and tenants pay good money to use them. None of these, however, is situated or conceived so as to have an integrating effect on the neighborhood as a whole.

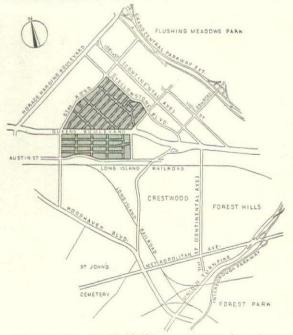
Since the residents are fairly prosperous, and the vacant land fairly cheap, it would make sense for the larger property owners to parallel these efforts by developing one or two of the vacant blocks to provide the sorely-needed community facilities not now close at hand. A good location for a development along these lines has been shown on the neighborhood map. Such a project could be worked out on a self-sustaining basis to provide focus and neighborhood character for the present scattered development. It would also be likely to attract retailers and service establishments. Admittedly, this one development would not solve all of the problems which face the Thorneycroft area, but it would he a good start.



A good portion of the district has been developed in six-stery apartment buildings under FHA financing with relatively low land coverage. Queens Boulevard, an important traffic route, is in the foreground.



In the remainder of the area, small, divided land-ownership resulted in high coverage apartment development alongside vacant property destined to remain vacant for some time, a chronic Queens paradox.

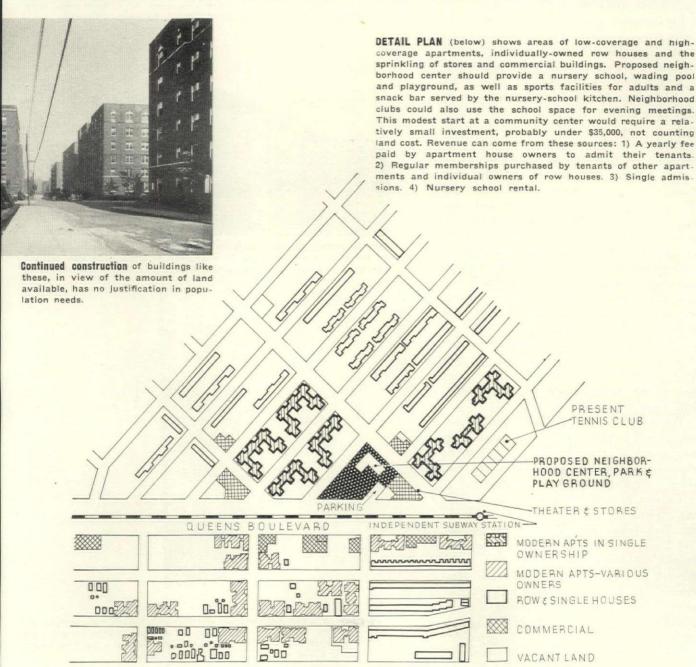


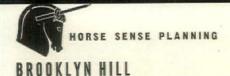
Thorneycroft's 40-odd blocks are situated in a large, practically vacant area, surrounded and bisected by the main traffic arteries connecting Long Island's north and south shores with Manhattan and Brooklyn.



Spanning both sides of the boulevard, most of the development took place as the result of the opening of a new subway. There are a few scattered store buildings, but relatively little com-

mercial development. Site of the proposed community and recreation center is the irregular block just behind the existing theater-store-building at the right hand end of the picture.





Two trends are indicated in this neighborhood: further large developments such as the Equitable or affiliated interests will undertake, and miscellaneous small developments by small owners. Too much of the former type of building would tax the economic capacity of the neighborhood—leading to vacancies, foreclosures and the ultimate destruction of its essential value. Such a destructive tendency can be avoided by horse sense planning, by making the most of potential factors already at hand.

What does the neighborhood really need in the way of new construction? It can well use good shopping centers of a purely local character. More parking space and garaging will be needed, as will convenient parks and playgrounds. It must also try to preserve, by intelligent alteration, a significant quota of its charming row houses and some of its large homes.

The favorable effect of a park upon local realty values is well known, but in the development of Brooklyn Hill it would be wise to recall the history and character of New York's famed Gramercy Park. It was created many years ago when a neighborhood association of owners gave up a block of city properties for a small park. It is tax exempt and maintained by neighborhood membership fees. The fact that the park preserved the neighborhood against the northrushing stream of business and fortuitous changes more than compensated the owners and the city. A pattern of similar parks and shopping centers offers Brooklyn Hill not only insurance against blight, but also a means of establishing a highly desirable community.

Preserving the neighborhood charm is a task primarily for small-owner development. To retain it, Brooklyn Hill cannot much longer rely on continued single family occupancy of its large mansions and row houses. But it would be calamitous to have a rash of six-story, 70 per cent coverage apartments, as happens all over New York sooner or later. Alteration of the existing houses into apartments would prevent overbuilding of the section.

The shopping center, park-playground undertakings will do most to create a functional community out of Brooklyn Hill. The building alteration idea will do most to preserve the character of the district and keep it distinctive.

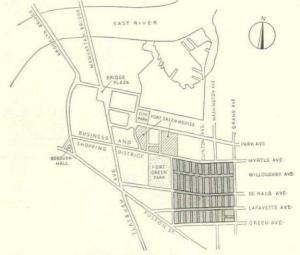
The city, by indicating a willingness to make tax adjustments, could do much to encourage the development of parks and playgrounds. The Equitable Life Assurance Society, with the biggest investment in Brooklyn Hill, could, through its loan policies, encourage individual owners to preserve the small structures. Furthermore, by participating in the creation of parks, playgrounds and shopping centers, Equitable could realize important good will advertising and at the same time bolster its investment.



The neighborhood is one of substantial mansions built a generation ago. Large families and incomes are now broken up but most of the more modest row houses are still individually occupied. Magnificent trees along many of the streets give the district a pleasantly sedate character.



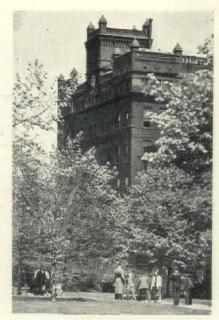
Some fashionable private schools are in the area, also numerous churches. As far as any neighborhood in a gridiron-patterned city can be, the district is in a backwater of surface traffic.



Like many an urban neighborhood, Brooklyn Hill has no rigid boundaries. Aside from the natural insulation provided by Fort Greene Park on the west, the limits shown on the map are based primarily on lines where character of house and occupany begins to change.

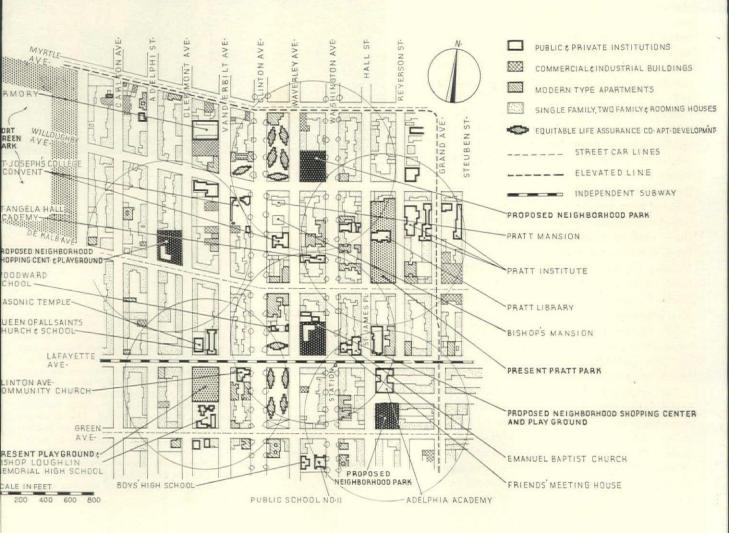


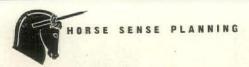
The tall buildings of Equitable Life Assurance Society's 2,000 unit rental development supply a focus for the neighborhood. The opening of a new subway which connects the district with Brooklyn and Manhattan business centers was a potent factor in the selection, of the site.



Handsome Pratt Institute and its park offer something of a barrier against the encroaching blight on the eastern limits of the district.

DETAIL PLAN (below) indicates where assessment and zoning conditions permit the logical establishment of six permanent open places. Two of these are already guaranteed, namely the Bishop Loughlin School playground and Pratt Park. Two others, which are proposed, should be commercial and park developments combining local shopping and recreation. Two others, proposed, should be simple parks maintained by neighborhood membership fees. Not only would this pattern of open spaces be functionally needed, it would preserve the neighborhood's present quiet character which now attracts the large scale investor and which the residents are so fearful of losing.





HOSPITAL RESEARCH AREA

Representing central urban living at its best and almost at its worst, this area is largely populated by doctors, research workers and teachers who rub housing shoulders with domestic and service workers. Living condition-range from high cost apartment buildings offering dramatic views of the East River and midtown skyscrapers, to dingy tenements. There are cooperative apartments, limited dividend housing and two small projects for Rockefeller Institute employes. Two major property owning interests are represented.

Unlike our other samples of horse sense planning, this Manhattan area can be crystallized into a neighborhood by no simple and obvious formula. Its pattern is fixed and determined. It lies too near the magnetic center of town; its land values and assessments are mostly high; its densely developed semi-slums are well established. But horse sense planning can undertake two of the improvements obviously needed. The first is a neighborhood center for hospital and research workers. One of the large hospitals has already tentatively planned and located such a center. This location is partly slum and partly vacant.

Secondly, the river views and use of the esplanade should be fully developed for both high and low income residents. River girted Manhattan has no eating place, cafe or beer garden on either side except one high priced place several stories above the river. Two locations are shown, each with plenty of room for parking and outdoor eating, and each with an existing footbridge connecting it with the esplanade.

There is also a need for medium priced, semi-private investment housing under \$25 rent per room per month. With the aid of New York's urban redevelopment laws, this can fill the gap between high rents and subsidized low rents. Under present conditions research and school workers either cannot live nearby or must share expenses with colleagues in quarters of inappropriate arrangement and formidable price. Housing for salaried employes of the neighborhood offers a stable market. The area has blighted sections which would be suitable for such a purpose.

Beyond the realm of private enterprise and horse sense planning, but urgently needed, is a low rent publicly subsidized housing project to rehouse present low income slum dwellers.

The neighborhood has already accomplished social and economic integration of varying income levels and a desirable absence of stratification which can seldom happen except in a great city. By a few easily obtainable and economically feasible improvements it can easily meet most of the objectives of a planned community.



The mass of Cornell Medical Center dominates the neighborhood and contrasts with adjacent slums and unused property.



The area now has numerous small parks and playgrounds, is within walking distance of Central Park.

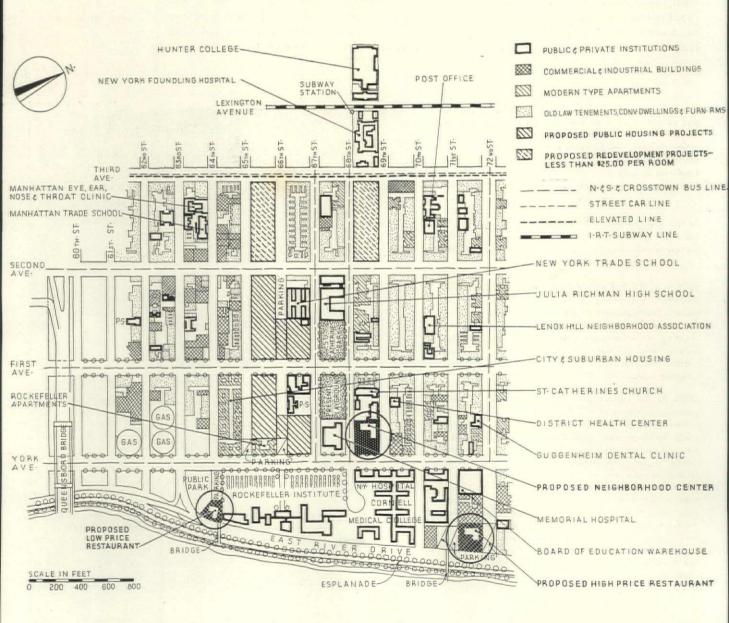
DETAIL MAP (right) shows existing conditions and proposed improvements. The area includes some of New York's most expensive apartment houses and numerous medical and educational institutions. Despite these august buildings, much of the neighborhood is in an advanced state of blight. The first measure advocated by horse sense planning is the creation of a neighborhood center shown in the circle in the middle of the map. This should include and stimulate other improved shopping facilities which will be needed in this neighborhood. Two proposals are made for restaurants of different price levels located on the East River Drive. Housing projects, both public and semi-private are suggested where the most concentrated blight conditions now prevail. Parking can be somewhat improved by the use of dead end streets on the river and by closing other streets where housing projects are indicated.



In spite of the new esplanade the neighborhood needs to be further opened to the river.



Rockefeller Institute occupies a large site on the water but is not so massive as to form a barricade between the river and the neighborhood.





PRIVATE PARKS AND PLAYGROUNDS

A practical means of maintaining realty values and establishing competitive rental advantage

NEXT ON OUR LIST of horse sense planning possibilities is the need for small parks and playgrounds, a need shared by most cities. The atomic building with a 100 ft. frontage is, of course, too small to help itself, but in an apartment development of reasonable size, located more than a few blocks from a park, it becomes a practical possibility to set aside a private park area. Though there are numerous examples which prove the desirability and feasibility of such arrangements developers have been generally slow to grasp the realization that a few square feet of unbuilt land in the center of the city do not necessarily represent lost building returns. On the contrary, owners who have pioneered in the provision and maintenance of private parks find by their rental records that these, besides attracting prospective customers, considerably lessen tenant turnover. They find city dwellers, accustomed to regard landscaping as reserved for the very rich, pathetically enthusiastic over any small green space.

Better off in total park space than many another city, New York has 22,470 acres or about three park acres for every 1,000 population. However, a disportionately large amount of it is in large concentrated park areas, some in the central part of the city, more in outlying sections. Many people find these parks too far away for easy daily use, beyond the cruising range of the baby-carriage, for instance.

Lack of space harms the economics of the individual building operation, harms the neighborhood, has a cumulative harmful effect on the entire city. Grave meetings of real estate owners and associations consider the weighty question, "Why do people leave Manhattan"? A high powered public relations counsel succeeded in selling one group of real estate interests the idea of hiring him to advertise the advantages of life in metropolitan New York. Provision of some little horse sense parks would certainly be more effective than this naive advertising and would immeasurably cheer up city streets.

CASE A. The owners planned a 16-story building on a plot of almost an acre with a 325 ft. frontage. They decided to leave 5,000 sq. ft. with a 50 ft. frontage for a tenants' park. The following cost estimate was the basis for their decision:

Land cost of park \$75,000 Cost of park improvement 5,000

\$80,000

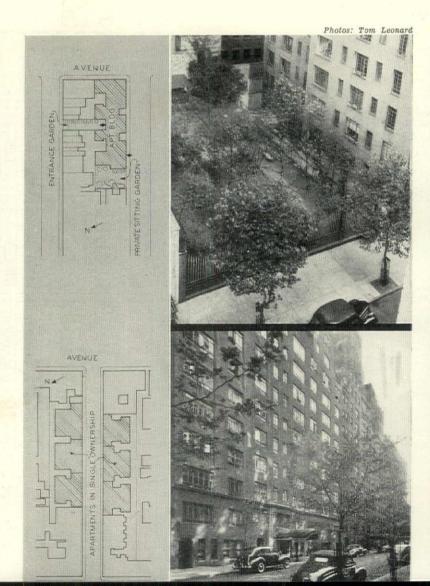
Annual charges of 15% (Taxes, amortization, 10% on investment) \$12

10% on investment) \$12,000 Annual maintenance 1,000

612 000

Built on a 275 ft. frontage the building had 900 rooms, the apartments renting for about \$30-35 per room per month. Yearly charges on the park were paid by lifting the rent schedule only \$1.20 per month per room. The resulting attraction more than offset the slight rental increase and the owners found that the park space lessened the tenant turnover, reducing annual reconditioning costs.

CASE B. The owner's property was well over an acre with two frontages of 300 ft. on opposite sides of the street. As often happens in New York, these higher grade buildings were hacked off a near slum district but the obvious need for a park-playground was not enough to keep the owners from building the job up solid. Since the nearest playground is six blocks away and to reach Central Park the children from this apartment project must cross five through avenues, a small park would have given the buildings sizeable competitive value. An area twice as big as that used in Case A would have increased the rental slightly less than \$2 per room, per month. The contrast in feeling between the two buildings can be seen from the photographs. It would be interesting to check the books and find out which investment paid better.



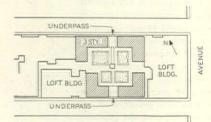


GASE C. This private playground, was created by a slight but important departure from the conventional scheme for similar FHA developments. The addition of one small unit to the usual five apartments per floor made possible the use of eight buildings instead of nine. This consolidation permitted a staggered arrangement on the site and provided three large open spaces, each with real frontage and fine diagonal views and breezeways through the development. A slight increase in the plot was justified by low land values and approved by an owner who knew value of space versus congestion. This arrangement which includes a playground, two sitting parks and valuable garage space is good example of horse sense on the part of both investor and architect.



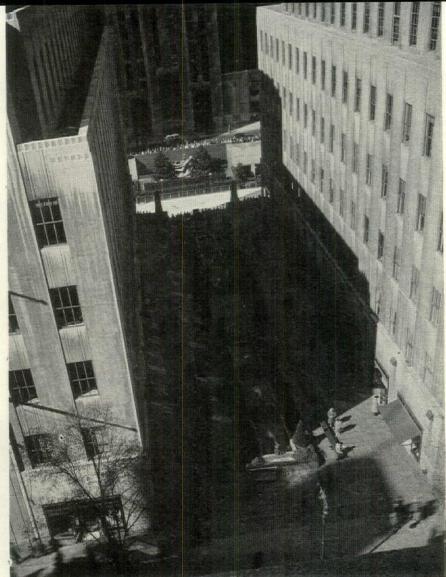
CASE D. The owner's property was at the end of a block facing a noisy avenue and located four blocks from the nearest public park. The avenue frontage was developed with 2-story store and apartment buildings. A sizeable portion of the remaining plot was devoted to garden purposes with frontage on a side street, the main apartment building having somewhat greater frontage on the other side street. The rear of the stores are terraced and designed to form a part of the garden scheme. Rental value of the apartments in the development has been greatly bolstered by this small landscaped area. When the cost of the garden can be shared by a further extension of the existing development or by neighboring owners, it will become a self-sustaining part of the investment. On the other hand, the loss of the park in favor of added building coverage would be a net loss to the neighborhood values established.

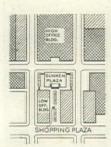
Wolcott Andrews, Landscape Architect



CASE E. This apartment development is in the heart of the garment district and surrounded by high loft buildings. The casual visitor is surprised to find in this area a residential spot which offers a quiet park and reasonable rents. The developer was an original thinker. To him the value of the park was immediately evident and he was wise enough to avoid adding to the already depressed loft buildings of the neighborhood. New apartments in this area were a definite departure and would never have succeeded had not the investor created his own residential atmosphere by virtue of a low density development and a significant park area. In his wake there soon followed another apartment developer to invade the heart of the garment center. Residential values were thus re-established in this difficult area where the success of any type of development had been problematical.







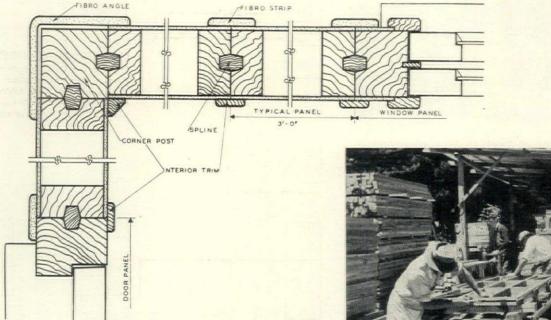
Tom Leonard

CASE F. To those familiar with the open plan of Rockefeller Center it is not simply another group of office buildings but rather a complete and exceptionally attractive business community. The fact that all the building masses are exposed on four sides for maximum light and view is but one of the plan's many attributes. The numerous planted areas are also of major importance to the achievement of the Center's distinctive atmosphere. The promenade which connects Fifth Avenue with the runken plaza offers a secluded and leisurely shopping place convenient to the busiest section of town. The promenade store frontage created by the present layout is six times the avenue frontage sacrificed, while the front foot rental on the plaza is half that on the avenue. The net gain in store rental is obvious. As part of the plan, which opens the interior of a large city block, the

promenade is further enhanced by a striking vista and some of the city's most beautiful seasonal planting which attracts large numbers of visitors and, consequently, prospective shoppers. This type of establishment occupying the stores along the concourse and the permanence of the rental record can best demonstrate the success of this arrangement from a purely commercial standpoint. Though office rent in Rockefeller Center is considerably higher than in competing office buildings a continuous ratio of more than 99 per cent occupancy has been realized. To tenants its prestige and attractiveness are worth higher rentals; to the management, the good will and advertising value of the landscaped areas more than compensate additional maintenance costs despite the fact that the difference is made up by lower tenant turnover and steady, high returns.

In its December issue, THE FORUM will present the second article in the Horse Sense Planning series, dealing with Parking by Private Action and Better Shopping Conditions.

PREFABRICATION



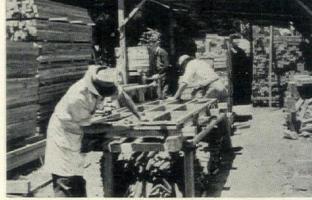
PREFABRICATION DOWN UNDER

"Sectionit," Australia's contribution to the manufactured house, indicates that prefabrication is progressing along similar lines all over the globe.

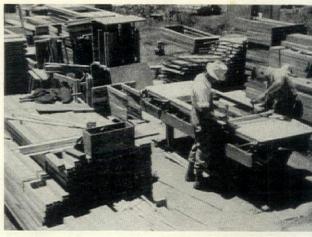
The prefabricated, sectional house is by no mean-exclusively a U. S. development. As a matter of fact, wood panel houses have been common in a number of European countries for years—most notably in the U.S.S.R. and Sweden—and have achieved broader acceptance there than was true in this country, at least up to the beginning of the war. Now, from the opposite side of the globe. comes news that prefabricated construction is gaining considerable popularity in Australia, through the medium of a system of construction developed by Vandyke Brothers, of Punchbowl, New South Wales, and known as "Sectionit."

The Sectionit system, while similar in many respects to methods of panel construction already well known in the U. S., is worth studying for its excellent details and a number of interesting and unique features so far not used here. Vandyke Brothers have also developed a series of basic plans affording considerably more variety than is common in U. S. prefabrication practice, while at the same time maintaining an unusual degree of standardization of structural parts and service elements.

Based on a series of standard wall panels measuring 3 x 9 ft. and incorporating doors and windows. the Sectionit system employs factory-fabricated. wood panel frames covered on both sides with fiber



PANEL FRAMING IS ASSEMBLED ON JIG TABLES

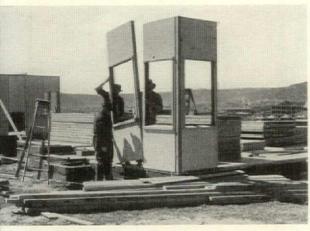


INSTALLATION OF DOUBLE-HUNG WINDOW FRAMES

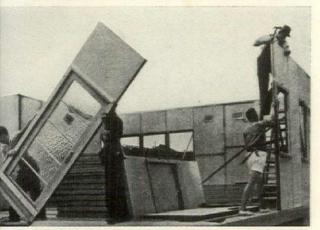


COMPLETED PANELS STACKED FOR SHIPMENT

PREFABRICATION



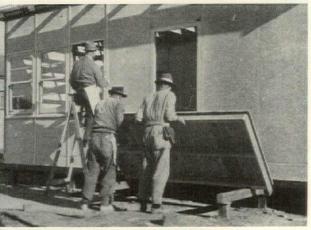
SITE ERECTION OF TYPICAL WINDOW PANELS



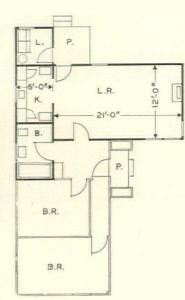
LARGE GLAZED DOOR USED IN LIVING ROOM

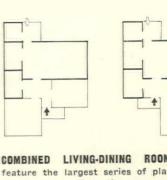


SPECIAL PARTITION UNIT FITS UNDER ROOF

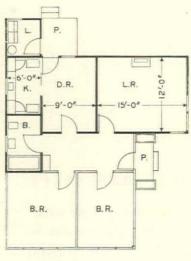


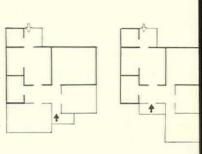
PORCH FLOORS ARE FABRICATED AS A UNIT



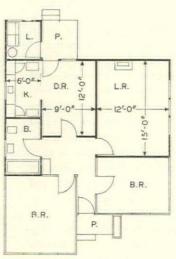


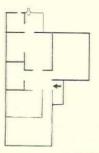
feature the largest series of plans used. Five alternative arrangements of the two bedrooms are shown, making possible a considerable variety of exterior appearance.



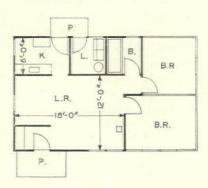


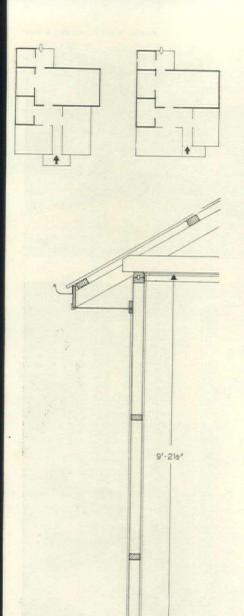
SEPARATE DINING ROOM is provided in three versions, each with two bedrooms. Large hall would be considered wasteful in U. S. housing of this size and price bracket.





THIRD BASIC ARRANGEMENT places living room parallel to standard kitchen-bath-laundry unit, is available in two forms. House for war workers (below) is similar in many ways to units used in this country.







COMPLETED "SECTIONIT" GROUP EMPLOYS A VARIETY OF BASIC PLANS

board. Floors (except for a special precast concrete section under kitchens and laundries) are framed with precut joists, and roof panels are supported on widely spaced, precut rafters. Framing members are placed on 18 in. and 3 ft. centers, to coincide with panel joints. Windows are double-hung, and doors are fitted complete with hardware at the factory. Exterior joints and corners are covered with fiber batten strips, and interior joints finished with narrow wood beads.

COST

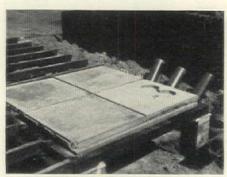
TERMITE SHIELD

It is, of course, extremely difficult to make any comparison between Australian building costs and our own, but a recent project in which the Sectionit system was used for 40 houses for war workers alongside 40 other houses of identical design and conventional construction provides interesting data on the relative cost of the two types in a specific instance. In this project, according to an official report of the N.S.W. Department of Public Works, the price for the prefabricated units averaged £610 per house, as compared with £643, or a saving of £33 per house.

At the current exchange, the cost works out to about \$2,500 per unit for a plan which is very similar to the typical two bedroom, basementless house built in this country, but somewhat more generous of space and more elaborately finished.

UTILITY SECTION

One feature of the Sectionit houses which will probably interest U. S. builders and prefabricators is the construction and planning of the kitchenlaundry-bathroom section. For this part of the plan, a standardized combination of the three spaces requiring plumbing has been developed which is repeated in all of the plans used, and works equally well in the typical fourroom, war housing unit shown at the bottom of the facing page and the larger, more elaborate plans intended for regular peacetime use. Finished in tile, this portion of the house has tile floors set on 3 ft. sq., precast concrete slabs, which in turn rest on wood sills. This feature, which produces a durable and water-resistant floor, was included in the war housing units mentioned in the cost figures given above.



PRECAST floor slabs are used as a foundation for tile floors in kitchens and laundries. The 3x3 ft. slabs rest on wood sills, set below the top of the floor Joists.

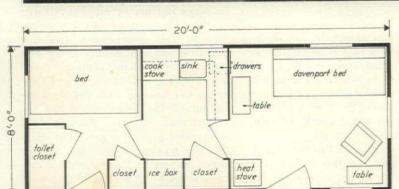


KNOCKOUT holes for plumbing connections are provided in duplicate for use in left-hand and right-hand plans. Unused hole is filled with cement.



COMBINATION sink and countertop is feature of the compact kitchens, which are identical in all of the houses. Cupboards are built-in.



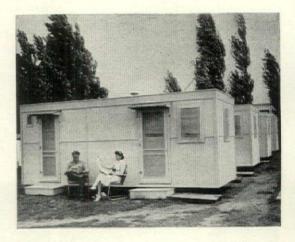


Grounded by wartime restrictions, the trailer is evolving into a prefurnished, prefabricated house that meets a present need and offers interesting postwar possibilities.

Completely assembled at the factory, this compact three-room house is transported on special running gear and mounted on six concrete blocks, requires no other foundation. Manufactured by the Kosy Coach Co. of Kalamazoo, Mich., it is being used for emergency housing of war workers where conditions call for facilities which can be set up quickly and which have a high salvage value. A central kitchen divides the plan into two rooms, one used for sleeping only, the other as a combination living-bedroom. Two outside doors provide independent access to each of the rooms. Running water is provided in the kitchen and, where utilities are available, a toilet and washbowl is installed in the bedroom closet, which has a sidewall ventilator. Outside finish is asbestos cement, interior floors are linoleum.







INGENIOUS DESIGN makes the most of available space through use of built-in furniture. Large picture shows flush drawers in end of living-bedroom, which slide back into the "dead" corner under the kitchen counter, smaller pictures a view of the kitchen (top), bedroom (center), and a completed group of homes. Coaches are thoroughly insulated, heated by space heaters. Inside floor-to-ceiling dimension is 7 ft.

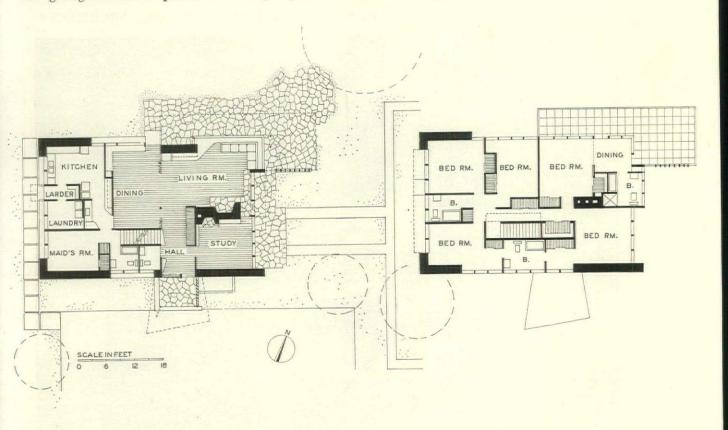
HOUSES

HOUSE IN TORRESDALE, PA. OSCAR STONOROV, EDMUND BACON, ARCHITECTS



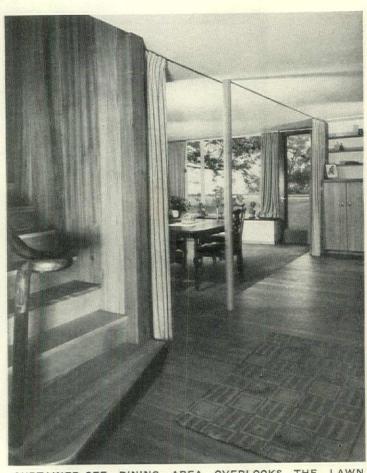


Designing this house presented a major problem in reconciling a view to the north with proper orienta





ENTRANCE HALL IS DECORATIVE AND EFFICIENT



CURTAINED-OFF DINING AREA OVERLOOKS THE LAWN

south. The result, executed in glass, native stone and natural wood, is both workable and livable.



BALCONY IS MOST STRIKING DESIGN FEATURE

Many of the familiar features of the contemporary house appear in this design: the organization of walls and windows into distinct and separate elements, use of the cantilever for the second floor balcony, the open ground floor plan, and so on. An abundance of glass on both levels, the downstairs terrace and second floor balcony places the emphasis on the south side of the house. Aside from the natural desirability of such orientation, a magnificent view of the Delaware river on the same side required that the important rooms of the house be open in this direction.

The property is located in a residential section which dates back two centuries.

Both interiors and exteriors reflect the growing desire for a more substantial and rich treatment within the contemporary framework. Typical devices used to meet this requirement are the granite blocks (taken from a 19th century building) of the exterior, the use of patterned glass, and the many walls veneered in handsome woods. The plan which coalesces the living space permits easy entertainment on the first floor without disturbing the normal routine of the house. The surroundings of fine trees also serve to enrich the design through the logical placing of big windows. The curtains which divide the downstairs spaces add further texture to the rooms.



NOTE EXTENSIVE USE OF RICHLY GRAINED WOOD VENEERS IN LIVING ROOM

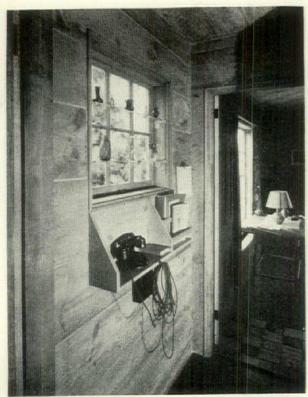
CONSTRUCTION OUTLINE:

STRUCTURE: stone, furring, Rocklath, U. S. Gypsum Co., and plaster. Frame wall-redwood. ROOF-builtup, slag surface, Bird & Son, Inc. Deck -Traffic Top, Celotex Corp. INSULA-TION: Roof-glass wool bats, U. S. Gypsum Co. FIREPLACE: Damper-Old Style, H. W. Covert Co. SHEET METAL WORK: Flashing - Toncan metal, Republic Steel Co. Leaders and ducts-galvanized iron. WINDOWS: Sash-steel casement, J. S. Thorn Co. Glass-double strength, quality A and plate, Hires Turner Glass Co. Glass blocks - Pittsburgh-Corning FLOOR COVERINGS: Kitchen and bathrooms-linoleum, Armstrong Cork Co. HARDWARE-P. & F. Corbin Co. ELECTRICAL INSTALLATION: General Electric Co. Fixtures - John Franklin Garde. BATHROOM EQUIP-MENT - American Radiator-Standard Sanitary Corp. Cabinets - Charles Parker Co. HEATING-warm air system, filtering and humidifying, Westinghouse Electric & Mfg. Co. Grilles-Hart & Cooley. Regulators-Minneapolis-Honeywell Regulator Co. Water heater-Anchor Post Fence Co.

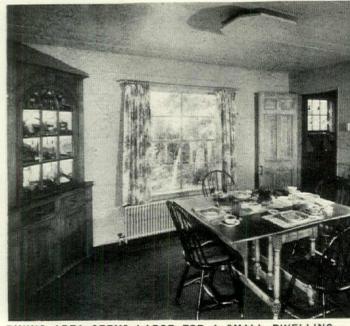
NOVEMBER 1943

HOUSE IN WESTON, MASS. Architect Eleanor Raymond makes the most of a lin



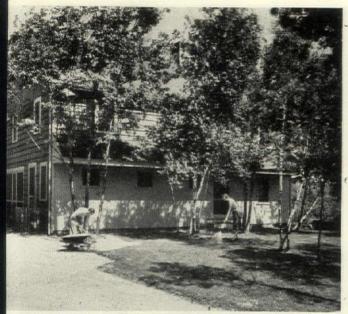


SIMPLE TELEPHONE STAND AT BOTTOM OF STAIRS



DINING AREA SEEMS LARGE FOR A SMALL DWELLING

get and a windfall to produce an attractive, compact dwelling

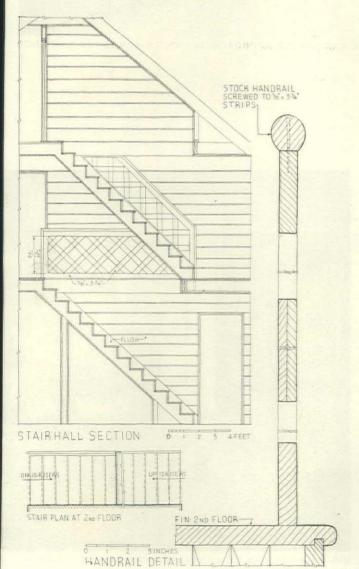


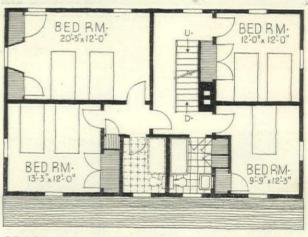
SOUTH VIEW SHOWS CANOPY SHADING FIRST FLOOR

Utilizing a quantity of hurricane lumber, which the owner had on hand, Architect Eleanor Raymond designed an extremely economical and compact house. The most interesting feature of the plan is a central heater room, and ample provision of utility spaces. Questionable, however, is the position of the stair: By reversing it, direct access to the second floor from the entrance hall would have been gained, and the living area would have been increased.

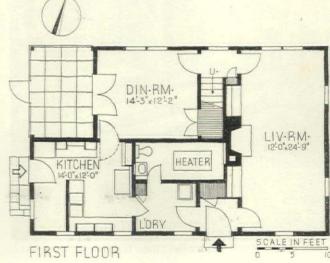
The neatness of this thoughtfully considered plan is reminiscent of a compact housing unit. For use in housing, this plan, with little change, could in fact be doubled up to form a semi-detached building.

CONSTRUCTION OUTLINE: FOUNDATION—concrete. STRUCTURE: Exterior walls—rough-sawed boards; inside—studs, matched boarding or Sheetrock, U. S. Gypsum Co. ROOF—red cedar shingles. INSULATION—aluminum foil. SHEET METAL WORK: Flashing—copper. WINDOWS: Sash—double hung. Glass—quality B, single strength. FLOOR COVERINGS: Kitchen and bathrooms—linoleum. PAINTS—Samuel Cabot & Sons. WOODWORK—pine. HARDWARE—Sargent & Co. HEATING—hot-water, one-pipe, oil-fired system.

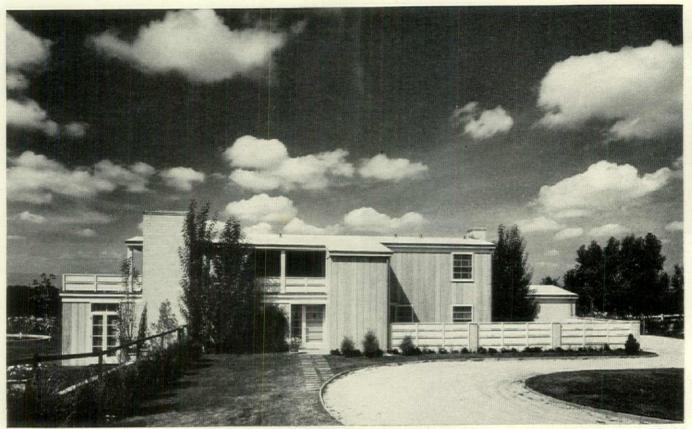




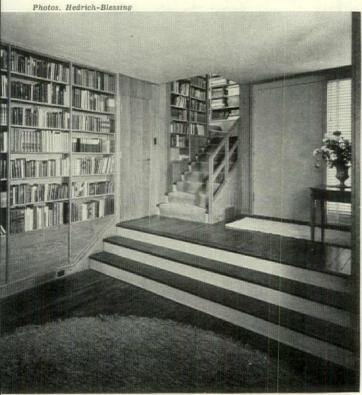
SECOND FLOOR



HOUSE IN DENVER, COLO. Architect Burnham Hoyt introduces an unorthodox plan



MAIN ENTRANCE MARKED BY FLAGSTONE PATH. SERVICE YARD FACES APPROACH, IS PARTLY SCREENED BY FENCE



STEPS LEAD INTO COMBINATION DINING ROOM-HALL



DINING AREA CAN BE CURTAINED OFF FROM ENTRANCI

ides good views, informal dining facilities, excellent bedrooms.

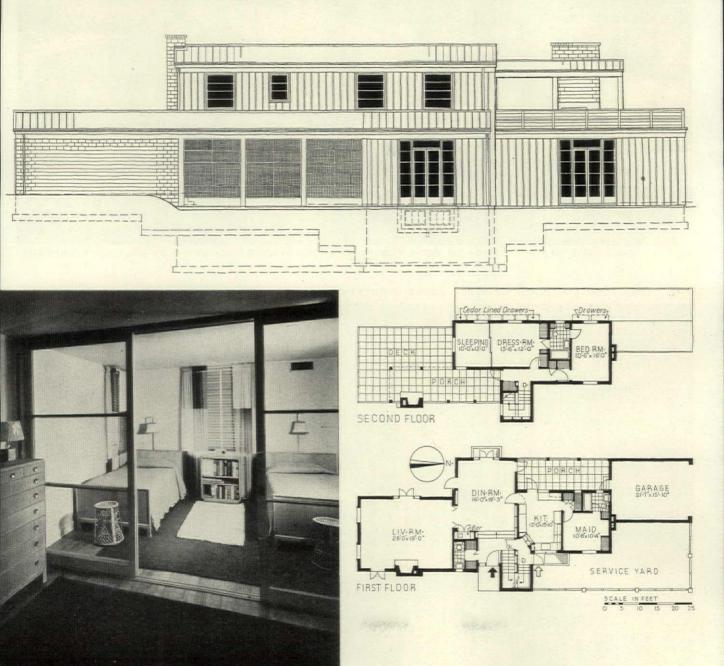
The plan of this house was dictated by the access road to the north and the best view to the west. The focal point of this view is Mt. Evans, and the entrance door and a large facing window are on an axis with the mountain. To achieve the resulting dramatic effect on entering the house it was necessary to compromise to some degree in the plan. Thus the hall serves as a dining room, whose function is impaired somewhat by becoming the circulation link between living quarters and the rest of the house. To counteract this in part, a large curtain was provided to screen off the dining space.

The plan of the second floor is admirable. Bedrooms have cross-ventilation, and extend to a generous sleeping deck, from which the fine mountain panorama can again be seen. The fireplace serves for outdoor cooking. A dressing room is separated from one of the bedrooms by glass sliding doors, to assure warmth on winter mornings when the bed-

room windows have been left open during the night.

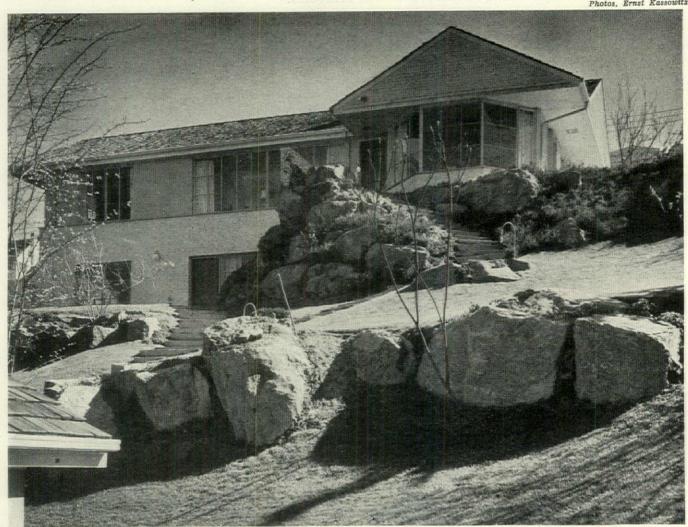
On the first floor the living room too is well ventilated, and a screened dining porch constitutes an attractive feature. The design composition of the whole building has a deliberately informal character, which at times seems almost accidental. Vertical redwood boards fastened with battens and brass screws fit well into the rural setting.

CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls—redwood; inside—studs, plaster. ROOF—asbestos shingles, Johns-Manville. Deck—canvas covered with Elaterite, Elaterite Paint & Mfg. Co. FIREPLACE: Damper—Colonial Fireplace Co. INSULATION: Outside walls—Spray-O-Flake Co. Living room—Celotex Corp. Roof—rockwool, Johns-Manville. WINDOWS: Sash—double hung, wood. DOORS—Roddis Lumber & Veneer Co. and Kinnear Mfg. Co. HARDWARE: Yale & Towne Mfg. Co. HEATING—warm air, filtering and humidifying, Modern Hearth furnace, Thompson Mfg. Co. Stoker—Iron Fireman Mfg. Co.



SLIDING SCREENS DIVIDE BED AND DRESSING ROOMS

HOUSE IN SEATTLE, WASH. Architect Paul Thiry fits a simple plan into an irreg



NORTH VIEW SHOWS GARDEN ACCESS TO BOTH FLOORS, CHANGES IN GRADE ACCENTED BY BOLD ROCK GARDENS

THE LIVING ROOM FIREPLACE BETWEEN DOORS IS QUESTIONABLE, RESULTS IN AWKWARD FURNITURE GROUPING



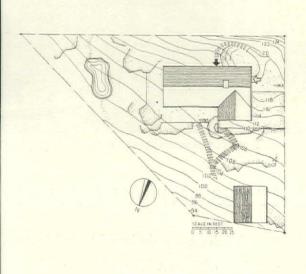
o turn a difficult garden area into a dramatic and successful feature.



TEPS FROM HIGH APPROACH LEAD DOWN TO PLAYROOM

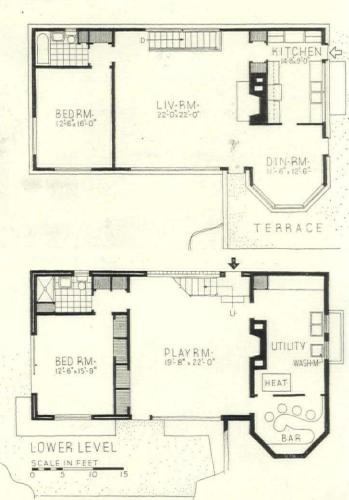
This house has a plan almost naive in its simplicity. Using nearly identical layouts on both levels, the architect has produced an economical and workable arrangement whose most striking feature is the disposition of the house on an unusual site. Through shrewd planning both floors were given direct access to the garden. This produced a level service entrance to the second floor kitchen, a fact that greatly influenced the plan. The family's private living quarters are on this level, while the lower playroom serves for informal entertainment.

An additional advantage of the plan is the economy of construction and the excellent cross-ventilation and cross-lighting obtained. While the ample windows facing toward the north view are orderly and well designed, the south side of the house is less interesting from a design viewpoint.

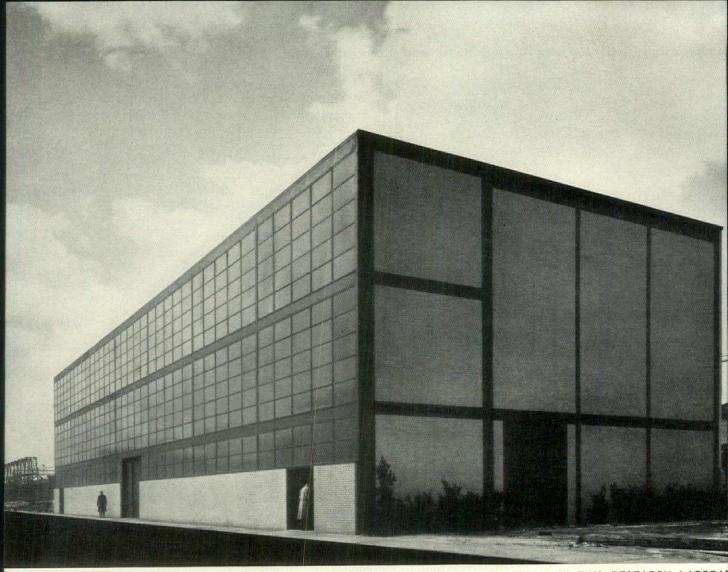


LOWER ENTRY. NOTE FLAGSTONE STEPS OUTSIDE

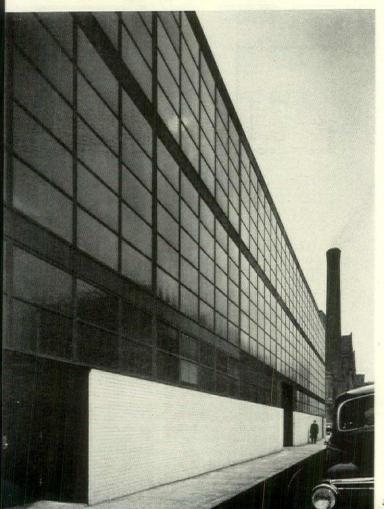




CONSTRUCTION OUTLINE: FOUNDATION-concrete. Waterproofing-Flintkote Co. STRUCTURE: Exterior walls-brick veneer; inside-studs, plaster board and plaster, U. S. Gypsum Co. ROOF-shingles. INSULATION: Attic floor and roof-rockwool, Johns-Manville. FIREPLACE: Damper-Superior Fireplace Co. SHEET METAL WORK-Armoo, American Rolling Mill Co. WINDOWS: Sash and screenssteel, Fentron Steel Works. Glass-quality A, Pittsburgh Plate Glass Co. Glass blocks-Pittsburgh-Corning Corp. FLOOR COVERINGS: Kitchen-linoleum, Armstrong Cork Co. Bathrooms-tile, Pomona Tile Mfg. Co. WALL COVER-INGS: Bedrooms-wallpaper, HARDWARE-Yale & Towne Mfg. Co. ELECTRICAL INSTALLATION: Wiring-knob and tube. Switches-Harvey Hubbell, Inc. Fixtures-Seattle Lighting Fixture Co. LAUNDRY EQUIPMENT: Washing machine-Bendix Home Appliance Co. BATHROOM EQUIP-MENT-American Radiator-Standard Sanitary Corp. HEAT-ING-warm forced air, filtering, Pacific Automatic Heating Co. Regulators-Minneapolis-Honeywell Regulator Co. Water heater-Wesix Electric Heater Co.



THE USE OF STEEL, BRICK AND GLASS IS EXPRESSED WITH UNUSUAL DIRECTNESS IN THIS RESEARCH LABORA

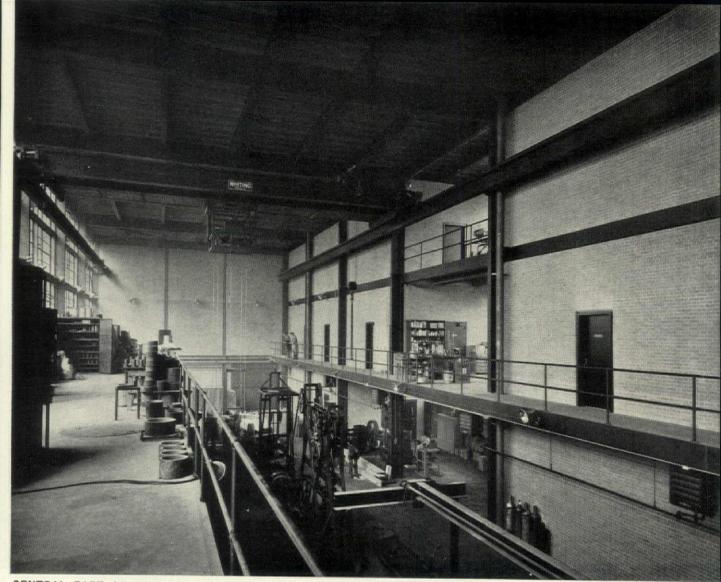


METALS AND MINERALS

A research laboratory designed to tackle a wide variety of industrial problems: Mies van der Rohe's first building in the U. S.

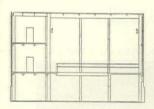
This building for the Armour Research Foundation was built to house a variety of industrial research activities. These involve the use of delicate precision apparatus, such as spectrographs and other devices for measurement and analysis, and fairly heavy industrial equipment, including several types of furnaces, presses and metal rolling mills. This equipment, moreover, is by no means fixed or permanent. Consequently the primary and major requirement was a flexibility comparable to that of a modern factory.

The laboratory was designed to become part of a large educational group which will be built after the war. It is of special interest to those who have followed the development of modern architecture, for it is the first executed work of Mies van der Rohe in this country. Like his earlier buildings in Europe, the laboratory is distinguished by the utmost simplicity in the handling of structure and materials.

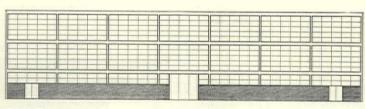


CENTRAL PART OF BUILDING HAS BEEN LEFT OPEN FOR ITS FULL HEIGHT TO GAIN NEEDED FLEXIBILITY

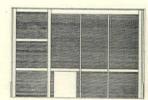
ARCH BUILDING, ILLINOIS INSTITUTE OF TECHNOLOGY



SECTION

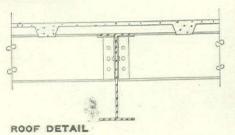


FRONT



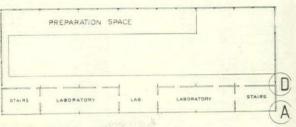
SIDE

RESEARCH BUILDING

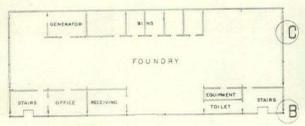




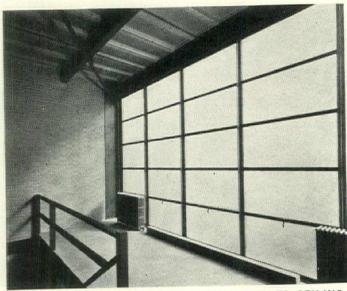
ROOF STRUCTURE IS COMBINATION STEEL AND CONCRETE



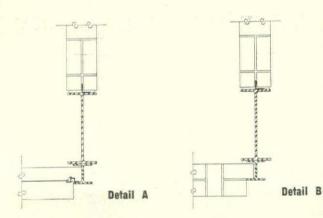
UPPER FLOOR



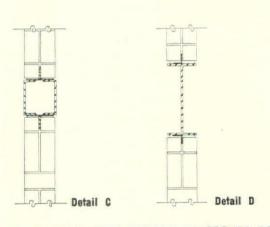
GROUND FLOOR



STANDARD WINDOW EXTENDS FROM FLOOR TO CEILING



The details of the construction of the research building were worked out with the utmost care to insure that all of the different materials produced a thoroughly integrated structure. It was because of this care, illustrated by the details and photographs on this page, that the exposed structure has a design interest rarely found in a building of this type. Detail C, for example, is a steel box, formed by two channels, which appears on the large exterior photograph. Other drawings show a number of solutions for typical conditions.



PARTITIONS HAVE BEEN OMITTED WHEREVER POSSIBLE



THREE MEDICAL BUILDINGS

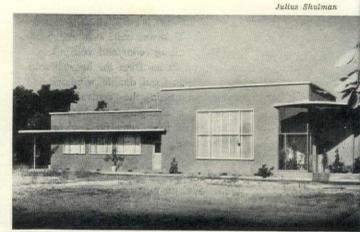
A comparatively new building type, again illustrating the trend towards decentralization. In these structures, doctors get more and better space, improved facilities for work and the handling of patients—and for less rent.

The three medical buildings presented here happen to have been built in California; their significance, however, is neither local nor regional. It is part and parcel of a nation-wide trend which has already manifested itself in many fields besides medicine.

It has long been the habit of doctors to maintain offices in downtown business blocks. The buildings illustrated suggest what has been happening to that habit, and one of the architects. John Dinwiddie, explains why: Doctors, like so many others inside and outside the professional fields, are leaving the downtown areas to escape high rents, to gain space for parking, and to obtain quarters more suitably designed for their purpose. It should be added that such buildings, in addition to their economy, have a distinct promotional value which cannot be ignored by a profession which has very few opportunities to advertise.

The medical building, which occasionally includes so many different doctors that it takes on the character of a miniature medical center, is sometimes a neighborhood unit, but more often not. The area towards which this building type seems to gravitate lies between the business center and the older residential sections. Since this is also the area which, in typical U. S. cities, has been declining most disastrously in values, the rapid increase in popularity of the medical building suggests that other types might be developed which would function equally satisfactorily in this location.

These buildings bring up another point: the advantages of the modern design approach in providing workable plans, good daylight and the necessary privacy. To judge from the three examples, an up-to-date, integrated medical practice seems to demand an equally consistent and forthright architectural solution.



J. R. DAVIDSON, DESIGNER





E. MONTGOMERY PIERCE, ARCHITECT



JOHN EKIN DINWIDDIE, ARCHITECT

A special-purpose design for two groups of doctors, incorporating excellent equipment and a high degree of professional "sales appeal."

Two sets of offices are combined in this building, one for a group of three pediatricians, the other for an equal number of obstetricians. It will be noted that the two office groups are completely separated, except for the waiting room which is shared by both.

Located on Los Angeles' fashionable Wilshire Boulevard, the building was subject to some curious zoning restrictions which required, among other things, that a major portion of the front be at least 20 ft. high unless a pitched roof were used. This was met, as the illustrations indicate, by a high waiting room and vestibule.

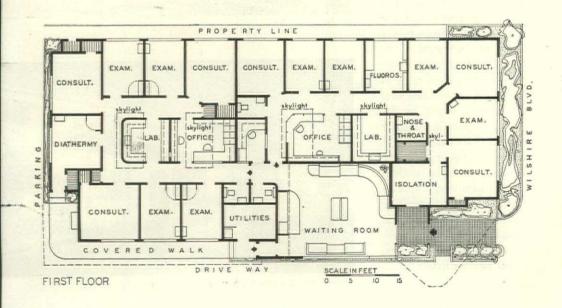
Because of the noise and fumes from the heavy boulevard traffic, the building has fixed double windows and is ventilated by equipment in the centrally-located utility room. For both air changing and heating the system is divided into three zones, one for each of the office groups, one for waiting room and business office.

CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls stucco; inside-wood studs, Celotex Corp. lath, plaster. Floors -pine sub-floor, linoleum covered, Armstrong Cork Co. Ceilings-U. S. Gypsum Co. Buttonlath and plaster, 1 coat Accoustipulp, Acoustipulp, Inc. ROOF-mineral surfaced capsheet, Paraffine Co.'s, Inc. SHEET METAL WORK—Armoo, American Rolling Mill Co. INSULATION—Red Top rockwool, U. S. Gypsum Co. WINDOWS: Glass-double strength, Libbey-Owens-Ford Glass Co., Factrolite, Mississippi Glass Co. WALL COVERINGS (waiting room)-oak paneling. HARD-WARE-P. & F. Corbin. PAINTS-Sherwin-Williams Paint Co. ELECTRICAL INSTALLATION: Wiring-BX. Switches and flouroscopy equipment-General Electric Co. PLUMB-ING: Pipes-cast and wrought iron. Toilet fixtures-Crane Co. HEATING AND AIR CONDITIONING: Gas forced-air with ten minutes air change through filter, Payne Furnace & Supply Co. Grilles-Hart & Cooley. Water heater-Crane Co.



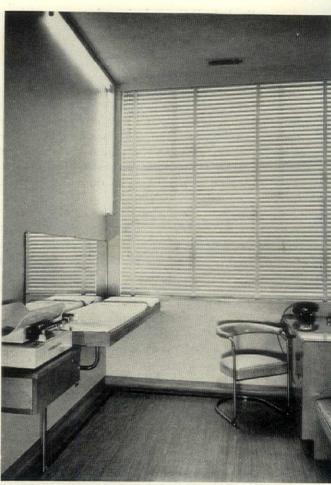
HANDLING OF CORNER ENTRANCE IS UNUSUAL, EXCE

J. R. DAVIDSON, DESIGNER

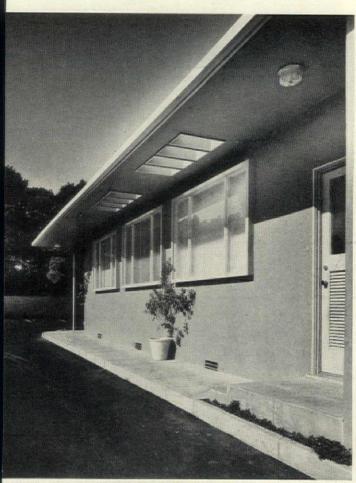




TRA CEILING HEIGHT IN WAITING ROOM IS IMPRESSIVE



BUILT-IN FURNITURE WAS DESIGNED FOR OFFICES



VERED WALK LEADS TO PARKING SPACE AT THE REAR



SKYLIGHTS ILLUMINATE INSIDE ROOMS, CORRIDORS

A medical building designed to provide a variety of health services for a small community in California.

Redlands is a typical small California city which has grown slowly and steadily. The site chosen for this building lies between the business center and one of the older residential sections, and it was decided to follow a residential character in the design. A low-pitched roof extends sharply to shade the horizontal window bands, while high planting boxes tend to emphasize the long, low lines and the domestic scale.

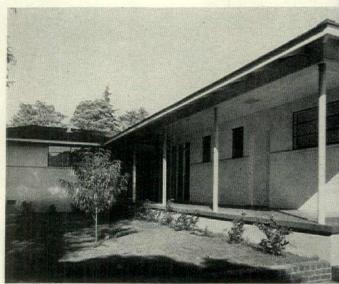
The plan shows a series of consultation and examination rooms for the use of the various doctors, while some of the elements, notably the reception and waiting rooms and the X-ray unit have placed for accessibility to all offices.

High bands of windows combine good lighting with privacy, while a certain amount of structural glass block is used where additional protection is required. As in most buildings of this type, the parking space is located at the rear, isolated from the main structure by a small projecting wing and by planting strips.

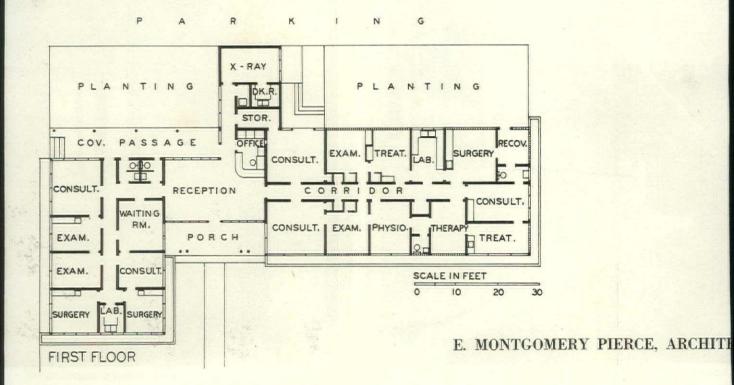
CONSTRUCTION OUTLINE: FOUNDATION: Concrete. Waterproofing-emulsified asphalt, Johns-Manville. STRUCTURE: Exterior walls-brick, glass block above, Owens-Illinois Glass Co. Interior-studs, Celotex Corp. plank and stucco. Floorsplywood on sub-floor. ROOF-red cedar shingles. SHEET METAL WORK-Toncan galvanized iron, Republic Steel Corp. INSULATION: Ceilings-4 in. rockwool. Sound insulation-Celotex Corp. WINDOWS: Sash-Druwhit Co. Glasssingle strength, quality B., Pennvernon and plate, Pittsburgh Plate Glass Co. FLOOR COVERINGS: Main rooms-Broadloom carpet. Other rooms-linoleum, Armstrong Cork Co. HARDWARE-Schlage Lock Co. PAINTS-W. P. Fuller & Co. and The Reardon Co. ELECTRICAL INSTALLATION: Wiring and switches- General Electric Co. Fixtures-Strickley-Stein & Gerard. BATHROOM EQUIPMENT-Crane Co. PLUMBING: Vent and water pipes-galvanized steel, Fritz Moon Tube Co. HEATING-forced air, gas fired, Pacific Steel Heating Div., U. S. Radiator Co. Water heater-Crane Co.

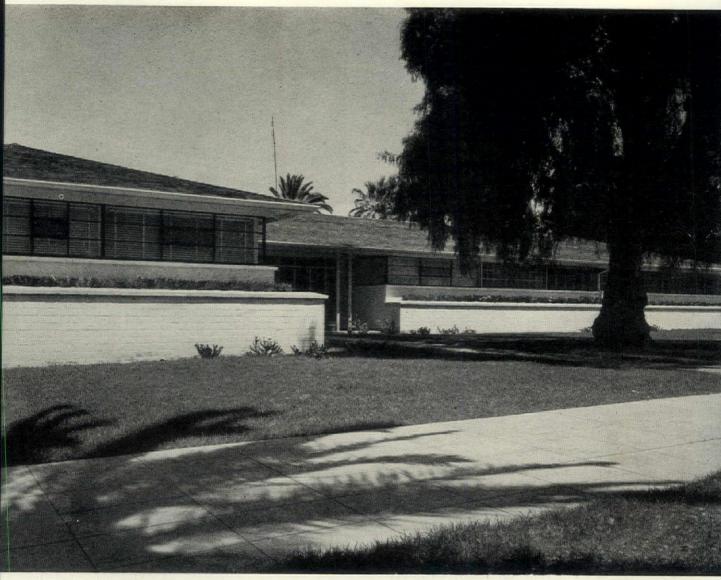


MAIN ENTRANCE IS DEEPLY SHELTERED WALL OF GL

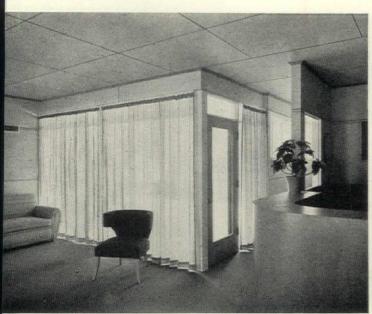


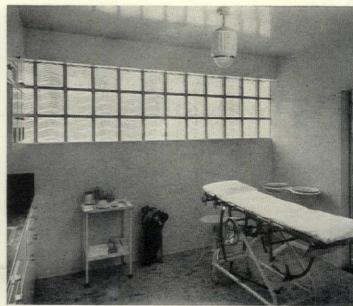
PATIENTS ARRIVING BY CAR USE THIS AS AN ENTRAN





SHAPE OF BUILDING AND LOCATION OF ENTRANCE WERE DETERMINED IN PART BY THE OLD PEPPER TREE





INTERIORS SHOW A MARKED EFFORT TO ACHIEVE THE HYGIENIC SIMPLICITY OF THE TYPICAL HOSPITAL

A building designed to meet three problems: high rents; parking; provision of suitable workshops for a group of medical specialists.

Mr. Dinwiddie's description of the building covers both requirements and solution with admirable clarity: "The doctors are all in individual practice, but it was required that the first floor be laid out in such a way that, should they so desire, three tenants could operate as a group. The first floor occupants are all internalists with a wide variety of practice calling for X-ray, diathermy, metabolism equipment and dark rooms, to mention a few.

"The second floor was devoted to ambulatory patients necessarily. There are two dentists, who work on slightly different lines. One of them, for example, required a very complicated laboratory with a work table at which the doctor and his technician could work jointly, facing each other. This floor was designed so that additional offices might be extended to the full length of the building.

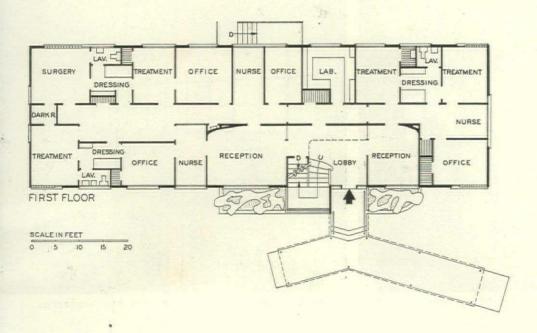
"All rooms are soundproofed to some extent by the use of plaster board which is attached to the studs and joists by spring clips. In addition, floors have a heavy quilt insulation. The soundproofing, while not complete, nor intended to be so, is surprisingly effective."

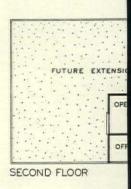
CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls—stucco; inside—studs, U. S. Gypsum Co. Rocklath and plaster, stucco finish. Floors—T. & G, linoleum finish, Armstrong Cork Co. ROOF—5-ply asphalt and felt. SHEET METAL WORK: Flashing—copper. Remainder—galvanized iron. INSULATION: Ceilings—rockwool. WINDOWS: Sash—casement, Detroit Steel Products Co. Glass—Libbey-Owens-Ford Glass Co. Glass blocks—insulux, Owens-Illinois Glass Co. HARD-WARE—Russell & Erwin Mfg. Co.—PAINTS—W. P. Fuller & Co. ELECTRICAL INSTALLATION: Wiring—flexible conduit. Switches—General Electric Co. Fixtures—Karl von Hatch. PLUMBING: Pipes—cast and wrought iron and copper. HEATING: Warm air system—Aladdin Heating Corp. Water heater—Ruud Mfg. Co.



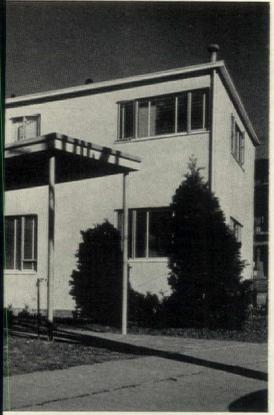
THE BUILDING HAS BEEN DESIGNED FOR FUTURE EXPA

JOHN EKIN DINWIDDIE, ARCHITECT
GARRETT ECKBO, LANDSCAPE ARCHITECT

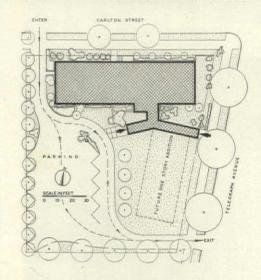


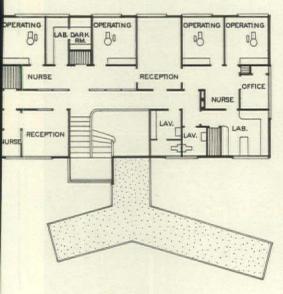


THE ARCHITECTURAL FORUM



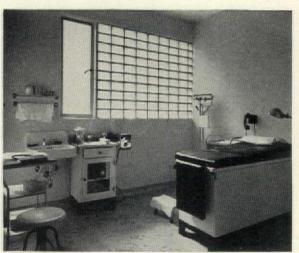
TH THE FIRST AND SECOND FLOOR LEVELS







STAIR HALL REFLECTS IMPORTANCE OF THE UPSTAIRS OFFICES



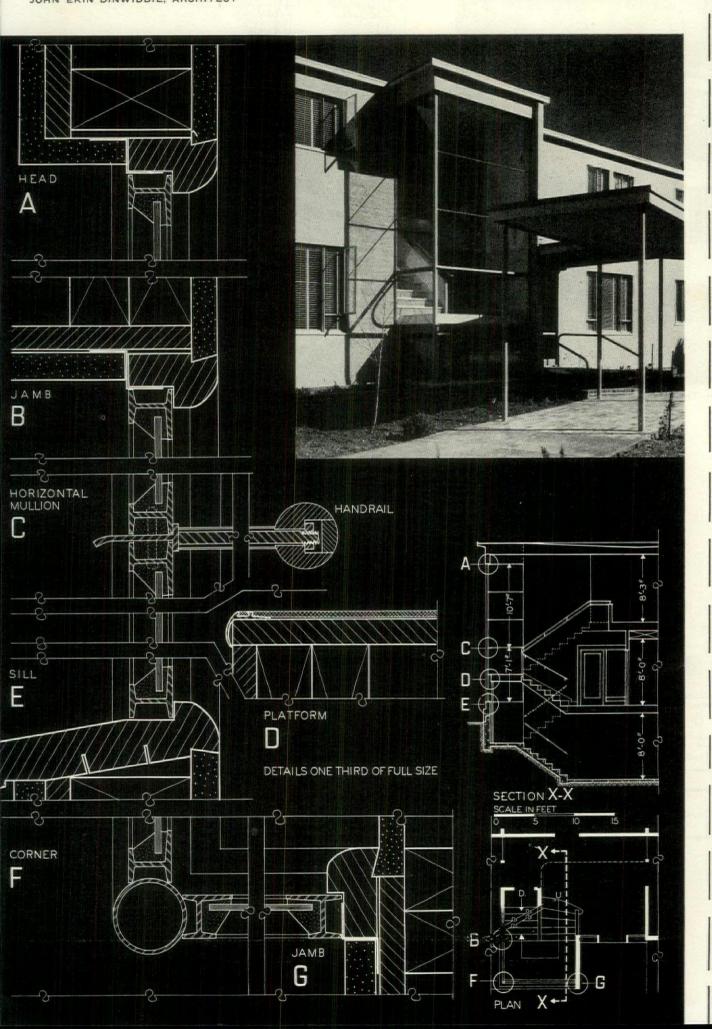
TREATMENT ROOM HAS DAYLIGHT WITH PRIVACY

STAIRHALL WINDOW

JOHN EKIN DINWIDDIE, ARCHITECT

DESIGN DATA 11.

THE ARCHITECTURAL FORUM





EARING SUPPORT

(Only Ro-Way has this Improvement)

The sheave wheels have to carry the entire dead weight load of any overhead type of door on which they are used. To make sure the sheave wheels on Ro-Way Doors will always stay in perfect alignment and that there will never be any twisting or sagging of the sheave wheels to cause friction, we perfected this "Crow's Foot" Outer Bearing Support.

When you install a Ro-Way Door you know it will give extra service because this extra engineering care has gone into its manufacture. Users appreciate more and more the extra values Ro-Way gives without any extra cost. That's why Ro-Way Overhead Type Doors are specified today by so many leading architects and demanded by so many contractors and builders.

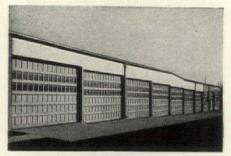


Warehouse of American Stores Co., Baltimore, Md. Equipped with 7 Ro-Way Overhead Type Doors. Consolidated Engineering Co., Contractors.

Other Exclusive Features of Rō-Way Doors Include:

- "Friction-Reducing Track". Rollers ride well away from the track side walls.
- "Double-Thick-Tread" Track Rollers with 7 ball bearings to each roller.
- "Zip-Lock"—allowing quick, easy adjustment of Twin Torsion Springs.
- "Tailor Made" Springs. Each power-metered to the weight of the door it is to operate.
- Rust-proof Hardware—all Parkerized and Painted after fabrication.

Write for Ro-Way's 88-page "Time Saving Specification Book" for Architects. Please attach professional card or letterhead. See our catalog in Sweet's.



18 Ro-Way Overhead Type Doors were installed in C. D. Kenny Warehouse, Baltimore, Md. Installation by Kirson Construction Co., Contractors.

ROWE MANUFACTURING CO.

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Galesburg, III., U.S.A.

There's a Rollay for every Door way!

"BACK THE ATTACK - WITH WAR BONDS"



CONVERT THEM FASTER WITH LINOLEUM FLOORS!

TODAY, when you're fighting against time to convert outmoded "white elephants" into multiple-family dwellings for war workers, don't let old floors hold up the work. They will if you waste time trying to repair and refinish them. But they won't if you give them new life with long-lasting Armstrong's Linoleum.

These Armstrong Floors can be laid down right over old floors. It takes no longer than a few hours to transform the floor of an averagesize room. Floor patches where partitions were changed, and repairs to old worn boards can be completely hidden. And once an Armstrong Floor is cemented firmly in place, the work is finished,

and the floor ready for years of wear.

To meet your decorating needs, Armstrong's Linoleum Floors are available in a choice of colors and designs, all moderately priced. They'll bring beauty and modern smartness to any room. They'll help to make your remodeled job a model job!

SEE SWEET'S FOR INFORMATION

If you'll turn to your copy of Sweet's, you'll find plenty of helpful information on quickly installed modern floors of Armstrong's Linoleum. And, for samples and file-size specifications, just write to the Armstrong Cork Company, Floor Division, 2311 State Street, Lancaster, Pennsylvania.



RMSTRONG'S LINOWALL

custom laid or



standard design

MONTH IN BUILDING

(Continued from page 48)

mansion, slowly rotting under an ancient burden of honeysuckle, 27 tenants were evicted. Summoned to the tightlyshuttered Astoria home, by neighbors' complaints of strange smells and noises. public health officials found Victorian carved bedsteads and great gold mirrors, dimly reflecting rubbish-littered floors. Upstairs they found sixteen Pomeranians, four Skye terriors, seven Persian cats. Their landlord: elderly Manhattan recluse Anna Leary who turned up laden with dog biscuits, explained, "This is my way of expressing myself." Removing the strange tenants, the American Society for the Prevention of Cruelty to Animals remembered that seven years ago it had found 40 dogs in the mansion, only four years ago had been called upon to remove another 25, hoped that Magistrates Court would help Miss Leary to find another means of self-expression.

Cooperative Management. From Dayton, Ohio came the news that the hopeful mutual ownership plan is making progress; residents of FPHA's 500-unit Greenmont Village took over complete operation of the project under a lease that carries an option to purchase within two years.

Biggest Builder. The Army's emergency construction, real estate acquisition, and maintenance program now represents an outlay of approximately \$11 billion, the War Department announced. Real estate leased or purchased by the Army amounts to about \$370 million.

Biggest Landlord. Concerned is Congressman Homer D. Angell (R. Ore.) about the large slice of his beloved Northwest now owned by the federal government. Said he: The U.S. owns 70.9 per cent of all the land in Idaho. 61.5 per cent of Montana, 59 per cent of Oregon, and 45.9 per cent of Washington.

Empty Houses. Local authorities in Great Britain have been given broad powers by the Ministry of Health to requisition large empty homes or other premises suitable for conversion to house families living in unsatisfactory conditions. Property owners will have a chance to rent or re-occupy before requisitioning is applied. Tenants will be charged an economic rent, based on cost of requisitioning and repair work. Commented the Architect's Journal: "We are unlikely to return to the days when the spacious Victorian and Edwardian bourgeois mansion will be used for its original purpose. Yet thousands of

(Continued on page 102)

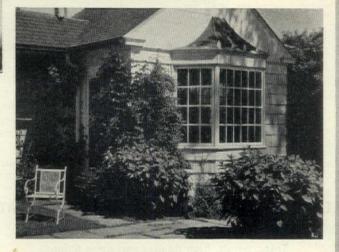
NEWS ABOUT GLASS from "Pittsburgh"



AFTER THE WAR, it is expected that the trend toward "clear vision" entrance treatment in store fronts will continue from the point where war-time building restrictions interrupted it. This treatment usually involves Herculite Doors, made of tempered plate glass. They are tough and sturdy, permit vision into the store, and are extremely inviting. Architect: John M. Hatton.

OPERATING ROOM WALLS

of Carrara Structural Glass have hair-line joints and fewer of them. Hair-line joints ... because of Carrara's ground edges. Less joint area . . . because Carrara can be installed in larger slabs than most materials. Thus, Carrara walls insure greater freedom from dirt and germs when walls are washed down. And the recommended Jade color of Carrara is such a soft, restful shade, that it helps prevent eye-discomfort among doctors and nurses. Architect: Tillman Scheeren, Jr.



WINDOW TREATMENTS in homes, whether large

or small, depend in large measure for their effectiveness on the glass used to glaze them. Pennvernon Window Glass has won the approval of architects for home glazing . . . because, for a sheet glass, it has unusual clarity, surface beauty and freedom from defects.

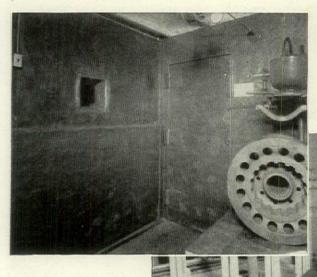
PITTSBURGH PLATE GLASS COMPANY . PITTSBURGH, PA.

"PITTSBURGH" stands for Quality Glass and Paint

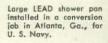
For TIME-DEFYING Construction Use TIME-PROVED LEAD

The extreme durability of LEAD has made it the accepted material for many uses in construction . . . and LEAD can be obtained readily for all essential purposes — water services, calking, plumbing, water-proofing, roofing, flashing, and chemical equipment. There are no WPB restrictions on LEAD for military and civilian projects and repairs.

Proof against costly corrosion, LEAD has the flexibility required to take up movement and settlement. In doing away with the ne-



LEAD-lined X-ray room in industrial plant, where castings, forgings, and other materials are examined for flaws.



cessity for many joints and special fittings, LEAD pipe offers further substantial savings.

Use LEAD to build faster and better and to assure prewar excellence in wartime construction... at the same time conserving more critical metals. Its high salvage value makes LEAD attractive even for temporary construction.

To keep posted, read our free magazine "LEAD", containing the latest information on LEAD and government rulings on its use. We shall be happy to send you the current issue, and place your name on our mailing list.

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Soil, waste, vent, water service and chemical pipes.
Traps, bends, floor flanges and other fittings.
Roofing, flashing, gravel stops, waterproofing.
Came or glazier's lead. Calking lead and lead wool.
Chemical equipment.

LEAD

INDUSTRIES ASSOCIATION

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MONTH IN BUILDING

(Continued from page 100)

this type of building still stand unused. Here surely, in the adaptation and full, if only provisional, use of such buildings lies one valuable source of supply of that temporary housing which will somehow have to be found during the first difficult years of demobilization and reconstruction."

Blueprint Replacement. At the Norfolk Navy Yard inexperienced ship builders who can't read complicated blueprints follow simple photographs instead. Speed of production has proved the value of the photo method, officers said. Navy Yard photographers took pictures of every part of the first ship completed and its details of construction, assembled about 200 negatives, printed enlargements on heavy mat paper. Photos showing each job operation were posted throughout the yard.

Convinced that house plans involving new techniques are unintelligible to 85 per cent of the people using them, Purdue University's active Housing Research Division has developed pictorial plans—isometric illustrations with construction parts distinguished by color. Tomorrow's Town reports Purdue experiments demonstrating that use of the new plans cuts down wasted time and spoiled materials to the tune of a 15 per cent saving in construction cost.

Washington Checkerboard. Somebody would have to move out, said the State Department, finding its great gray Victorian cupboard bare of any more space to give the bulging Budget Bureau, other of the President's executive offices. Ax promptly fell on the Passport Division, housed as long as oldest clerks can remember in choice high-ceilinged rooms fronting on the White House lawn. Fighting removal to a one-time prison building across the street, division chiefs mourned their stately, mirrored-wall offices, regretted most of all the cozy fireplaces-handy. they explained, for burning confidential papers.

DESIGN FOR DETROIT

Swollen Detroit, where 48 per cent of all newcomers plan to stay on after the war, confronts postwar planning problems on a gigantic scale. One of them: the city's outworn structure with its-familiar pattern of inadequate housing (even before war congestion, 70,781 of the city's 414,658 dwelling units were-judged substandard), blighted central districts, random growth. Acknowledging their professional responsibility for

(Continued on page 104)

FIAI

. . . a name identified with the beginning of modern shower cabinet design

All branches of our military forces, Army, Navy, Marines, Wacs and Waves, as well as thousands of war production workers living in federal housing projects and remodeled dwellings, have enjoyed modern bathing during the war period with the

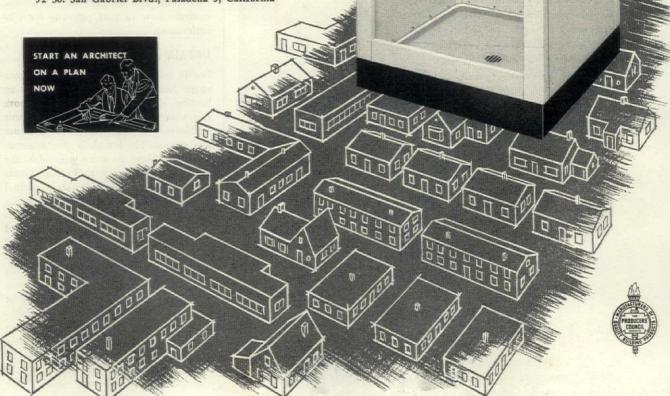
Fiat Volunteer SHOWER CABINET

Fiat designed this war shower before Pearl Harbor and named it the Volunteer because it was ready when the call came for a shower using the minimum of critical materials.

Plumbing contractors prefer the Volunteer because it can be erected on the job faster and with less labor than any other shower cabinet available today. Only 18 minutes of one workman's time is required to completely set up the Volunteer.

FIAT METAL MANUFACTURING CO.

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MONTH IN BUILDING

(Continued from page 102)

city planning leadership, Detroit's architects organized a Civic Design Group, are now turning out blueprints for a stack of redevelopment projects ranging from a downtown transportation terminal to a comprehensive residential community. Undertaken as a civic contribution and A.I.A.-sponsored, the work will be widely exhibited. Hope is that it will go far to stimulate public

Wide World



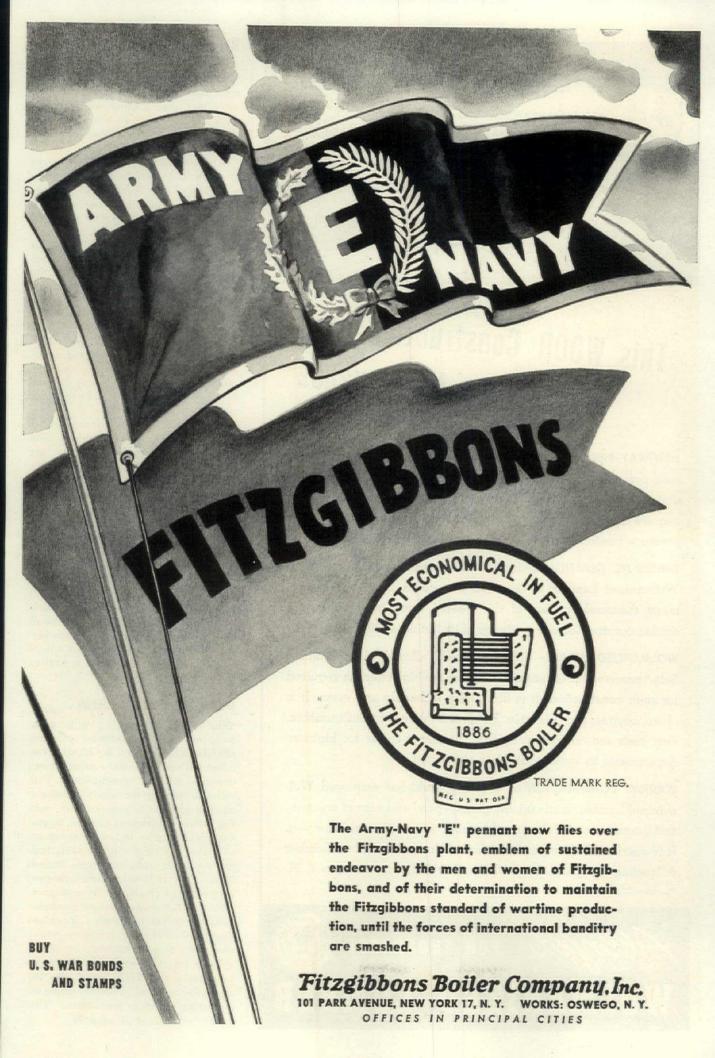
SAARINEN helps redesign Detroit

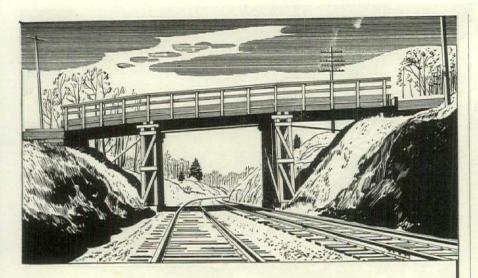
interest in Detroit's imperative needs, at the same time give architects some needed training in large scale planning. The group boasts a distinguished consultant: Eliel Saarinen, who for a long time has taught his Cranbrook students how to plot patterns for city betterment.

UNFAIR AND UNWARMER

Docile building owners, who last year spent hundreds of dollars converting heating equipment from oil to coal, this year had words hotter than their buildings were likely to be for whoever was responsible for their predicament. Painfully clear to everybody was the unpleasant prospect that this winter coal bins might yawn emptier than fuel oil tanks. Last fall OPA shook a big stick over owners able but reluctant to convert oil heating systems to coal, said that the unconverted would be denied fuel rations. By spring OPA was saying that there would be no rationing discrimination against home owners who had failed to convert; in August conversion requirements were withdrawn for hotels, apartments, office buildings using less than 10,000 gallons of fuel oil; last month OPA took the lid off for everybody and the year-old conversion program was dead. The

(Continued on page 106)





This WOOD Construction Is Easy on Maintenance

HIGHWAY BRIDGES made of Wolmanized Lumber*, like this railroad overpass, are proving their added worth in these days when maintenance men and materials are hard to get. These structures require much less attention, because of the ability of this vacuumpressure treated wood to resist decay and termite attack.

THERE'S NO QUESTION about the advantages gained by using Wolmanized Lumber in this kind of service. Records covering many thousands of feet of this treated wood on bridges and similar construction are evidence of its lasting ability.

WOLMANIZED LUMBER—ordinary wood "alloyed" with Wolman Salts* preservative for endurance—has the high strength required for such construction. It is light, easy to handle and erect. It is clean, odorless and paintable. The preservative is noninflammable. First costs are comparatively low, making it easier for highway departments to replace obsolete structures.

WARTIME CONSTRUCTION all over the world has employed Wolmanized Lumber to advantage, giving speed and ease of erection, and permanence. Wolmanized Lumber will do the same for you. It is distributed through the lumber industry. American Lumber & Treating Company, 1647 McCormick Building, Chicago 4, Ill.

*Registered Trade Marks



MONTH IN BUILDING

(Continued from page 104)

tight coal supply set some befuddled users to thinking about reconversion; OPA felt obliged to warn anybody trying this double-take that he would get no fuel oil rations.

Would there be coupons for coal in the new OPA ration books? Undersecretary of the Interior Abe Fortas said coupon rationing wouldn't work for coal, amount that may be delivered to retailers and consumers has already been limited. Said Fortas: "American mines are half a million tons behind weekly production schedules." But the United Mine Workers warned that coal rationing will be necessary unless the War Labor Board approves a satisfactory wage agreement for the nation's coal miners. Said UMW pointedly: "American coal miners can produce all the coal the nation requires. An adequate coal supply, however, is dependent upon a square deal for American coal miners."

Washington fuel administrators would have more to worry about than U. S. furnaces. Estimates were that Germany had sent Italy 1,000,000 tons of coal a month; somehow the U. S. would have to take over this extra load.

All in all, the surest way to keep warm was to weatherproof. A Federal Housing Administration study pointed to these fuel facts: More than 44 million gallons of oil and more than 1 million tons of coal could be released for war use, if only 3 per cent more homes heated with these fuels are completely weatherproofed before winter. With 75 per cent of all houses unweatherproofed, consumers spend about a third of a billion dollars every year in heating the outdoors.

MORTGAGE RAIDING CHECK

Their collective purse fat with investment money, life insurance company officials met last month in Chicago, commiserated with each other about present dearth of alluring opportunities. With war risks jostling the secure outlines of many a prudent investor's policy, with the federal government now the biggest financial backer of industrial expansion as well as the chief supplier of agriculture's capital needs, mortgages insured by the Federal Housing Administration have emerged clearly as the most profitable and safest place for an insurance company to put its money. Prickliest thorn on the FHA rose is that everybody else wants to pick it, too.

For a long time insurance companies have hoped that FHA would stop the aggressive trend of portfolio raiding by restricting mortgage prepayment. This

(Continued on page 108)



This picture shows how easy it is to install GIANT SIZE



Easy as rolling out a rug. That's one reason why GIANT Size KIMSUL* saves time and labor wherever it is used in prefabricated construction.

Workmen simply roll out the KIMSUL blanket, and stretch it taut over the framing members. Then it's a quick and easy job to nail the flooring, sheathing, or wall paneling right over the insulation. Once installed, KIMSUL can't sag, shift, sift, or pack down. KIMSUL saves money, too, because it's inexpensive to buy, store, transport, and install.

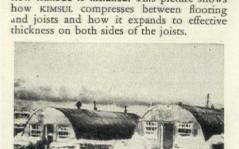
No other Insulation like KIMSUL

Kimsul has come to be known as one of the most effective insulations ever produced. It is the only insulation that is delivered compressed to 1/5th its installed length. This means only 1/5th as much transportation, only 1/5th as much storage, only 1/5th as much handling. Kimsul has a thermal conductivity of .27 Btu/hr./sq. ft./deg. F./in. Kimsul is also treated to resist fire, moisture, and mold...clean and free of dirt and abrasive matter. Then, to make handling still easier, GIANT Size KIMSUL comes in widths of 4' and wider in some specifications by 250' long. . . . Everything is explained in detail in

the new book "KIMSUL, for Modern Protection Against Heat and Cold." Use the handy coupon today for ordering your copy of this valuable book.

FOR VICTORY
BUY
UNITED
WAR
BONDS
STAMPS

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



How KIMSUL is Installed: This picture shows

America's armed forces benefit through KIMSUL. In prefabricated military huts in the Arctic, KIMSUL helps to keep our fighting men more comfortable in sub-zero weather.



Warmer in winter...cooler in summer. That's why famed Quonset military huts are insulated with KIMSUL . . . in the Arctic and in steaming tropical jungles.

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Please have a KIMSUL Representative call.
☐ Send free copy of new illustrated book "KIMSUL for Modern Protection Against Heat and Cold."
Name
Street
CityState

KIMSUL IS A KIMBERLY-CLARK CORPORATION PRODUCT

NOVEMBER 1943

How you can get more heat with less fuel

In normal times fuel conservation is figured in dollars saved. But not so now. This is war... Today Uncle Sam allots to building owners in rationed areas a certain amount of fuel—and it's up to him to get along as best he can within that ration. Seven out of ten large buildings in America (many less than ten years old) can get up to 33 per cent more heat out of the fuel consumed!

We didn't pick that figure out of the air. We've got the facts to back it. Webster Engineers surveyed thousands of buildings to give owners an accurate estimate of the extra-heat-per-unit-of-fuel to be achieved with a Webster Heating Modernization Program.

Take the first step now toward geting more heat out of your fuel ration next winter. Write today for "Performance Facts," a free booklet containing case studies of 268 modern steam heating installations—"before-and-after" facts as told by the building owners themselves.

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.



MONTH IN BUILDING

(Continued from page 106)

FHA has been reluctant to do, feeling that any loan in which the government has an interest must not restrict the freedom of the borrower. But lenders themselves might do much to keep rival companies from filching premium loans. L. Burgess Meredith, alert vice president of the National Life Insurance Co., told the Chicago conferees. Warned Mr. Meredith: "Encouragement given to raiding by the absence of prepayment restrictions, aggravates competition and encourages high valuations . . . This. in turn, accelerates inflation of real property values and may ultimately result in hardships not only on financial institutions, but also on the FHA." Meredith's remedy, based on National Life experience: Better relationship between the lender and the borrower; reduced interest rates where payment records are good and margin of safety has been increased by principal repayment or neighborhood improvement. Said he: "Perhaps it sounds fantastic to suggest that a lender approach a borrower offering a reduction in rate ... We have done this in a number of instances, and not only have we succeeded in keeping the loans, but in exchange for the reduction in interest rate have obtained certain advantages."

PREFAB FUTURE

Sample of the large destiny ahead for prefabricated construction in the rehousing of Europe's bombed-out millions are 624 sectional frame houses and two prefabricated hospital buildings sent by the Swedish Red Cross to Norway's distressed civilian population. Norwegian homes have been

PREFAB HOUSES sent by Swedish Red Cross line street in Molde, Norway. bombed or occupied, and, with a good deal of hospital space pre-empted for German military use, epidemics are mounting. Donated by the Swedish Norway Relief fund as gifts to local communities, the houses cost about \$1,250,000, have been sold to occupants at prices ranging from \$3,000 for a single house to \$5,000 for a double. The easily-transported prefabricated material was shipped from Sweden; Norwegian communities paid for foundations, raising of the houses, sanitary installations. A single house is built in two stories (wood panels are two stories high), has four rooms, kitchen and bathroom, with an extra kitchen added on the second floor because practically all houses must accommodate two families.

NEW NAME, OLD PLATFORM

For a long time prefabricated housing manufacturers have wrestled vigorously with the Federal Public Housing Authority's technical division in a vain effort to shake off what many of them feel as a throttling grip. FPHA has never produced standard plans that take real advantage of the construction economies made possible by prefabrication, the manufacturers contend. Some lost interest in trying to adopt their systems to what they call FPHA

(Continued on page 110)

Photos: Swedish-American News Service







To answer their questions on postwar homes

WATCH WOODwork!

City.

Right now these questions are going on in the minds of thousands of postwar home planners. Actual surveys show that they have definite ideas and desires on what they want their postwar homes to be.

You can give them the answers to many of these questions with doors, windows, frames and woodwork of Ponderosa Pine. Here's how:

MORE SPACE - People want more space - and more windows -in their postwar homes. Windows of Ponderosa Pine provide an answer to both needs. Such windows, available in a great variety of stock sizes, make it easy and economical to have the bays, corner windows and window groups which add so much to the feeling of spaciousness in a home.

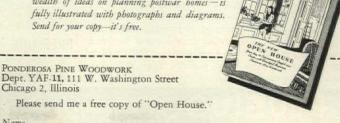
WEATHER-TIGHTNESS - Precision - made for proper fit . . . easily weather-stripped . . . Ponderosa Pine windows help cut down air leakage . . . make possible the weather-tightness which the war has taught people to value. Remember, too, wood is a natural insulating material . . . and that storm windows of wood will be readily available in stock sizes.

DURABILITY—Wood has proved itself a durable building material -and modern toxic treatment can make windows, doors and woodwork of Ponderosa Pine even more lastingly satisfactory! Ponderosa Pine, too, takes and holds paint easily-a big advantage from the standpoint of maintenance.

BEAUTY-Stock windows, doors and frames of Ponderosa Pine express the beauty and charm of correct architectural design . . . and modern manufacturing methods make this charm available for any size or style of home for less.

SEND FOR THIS "IDEA BOOK"

This booklet-"The New Open House"-contains a wealth of ideas on planning postwar homes - is fully illustrated with photographs and diagrams. Send for your copy it's free.



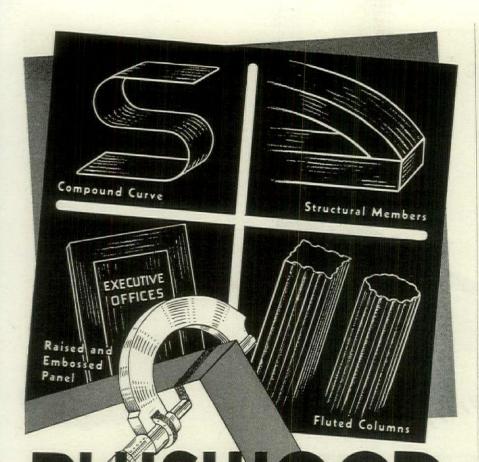
State

iderosa I

BEST IS YOURS . . . WITH PINE

Dept. YAF-11, 111 W. Washington Street Chicago 2, Illinois	
Please send me a free copy of "Open House."	-
Name	***********************
Address	

NOVEMBER 1943



A Wood Alloy

is a New Engineering Material that can be made to your order

For the post-war era, Pluswood offers you a brand new technical material, high in aesthetic value, with an exciting weight-strength ratio. A wood alloy, made by a chemico-mechanical process, it possesses structural strengths exceeding those of many metals. A non-conductor with amazing qualities of density and toughness, Pluswood can be made to your pre-determined engineering description. Thick or thin, pliable or rigid, this wood of new wonders is available in thickness ranging from 16 inches to 1/16 of an inch, and in any size up to 7 feet by 18 feet. Highly resistant to swelling, shrinking, corrosion, fire, and thermal shock-Pluswood will retain its dimensional stability so completely that only micrometer measurements indicate changes.

A dependable, responsible organization stands behind Pluswood from forest through saw mills, veneer mills and factory - established by the Lullabye Furniture Corporation, since 1897 America's foremost manufacturer of juvenile furniture. Pluswood maintains a laboratory service that you are urged to use without obligation. Write today for an engineering data bulletin that will give you more complete information.

WOOD Select northern birch or maple — cut from vast tracts of timber reserves in northern Wisconsin and Canada.

RESIN Impregnated into veneers by methods and techniques developed by Pluswood re-

HEAT 300 K. V. A. high frequency electrostatic generating unit—largest in the country for this purpose—delivering 540,000 B.T.U.'s per hour.

PRESSURE Largest and most powerful press in the plywood industry—with total pressing capacity up to pressing capaci

SWOOD Incorporated Oshkosh Wis.

Associated | NORTHERN HARDWOOD VENEERS, Inc., Butternut, Wisconsin LULLABYE FURNITURE CORPORATION, Stevens Point, Wisconsin ALGOMA FOREST PRODUCTS, Ltd , Bruce, Ontario, Canada

MONTH IN BUILDING

(Continued from page 108)

whimsies, found the Army and Navy easier customers to please; others found a good market for minimum housing among large industrial users of migrant or temporary labor. But a few staved in the Washington battle, hoped that organization as the Prefabricated Home Manufacturers Association would help their offensive. Recently the Association reorganized, got a slightly tonier title: Prefabricated Home Manufacturers Institute. New president: Prefab Pioneer Walter H. Ahrens, Tulsa, who developed demountable housing in



AHRENS leads prefab battle

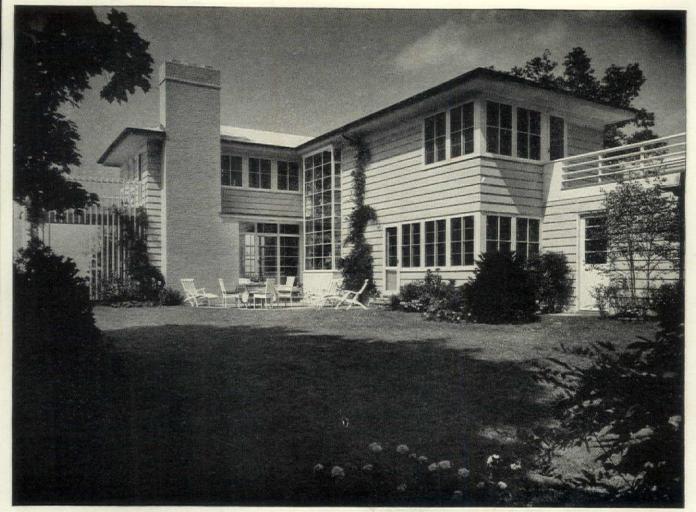
1919 for use in Oklahoma oil fields, where bad housing was one of the main reasons for labor dissatisfaction and strikes.

The new Institute said it represents over 60 per cent of industry capacity, loftily dedicated itself to the "advancement of health, happiness and security for increasing numbers of families by making available homes of greater quality, comfort and economy", promptly went to work on a lengthy memorandum to show FPHA exactly why Institute-endorsed standard plans are more efficient than the plans the Authority has adopted as standard for prefabricated construction.

SOUNDINGS

October's harvest of postwar forecasts was plentiful. Among them:

- ►The National Association of Real Estate Boards' 41st semi-annual survey, pointing to a national construction backlog of more than \$30 billion. (In 287 sample cities NAREB found definite plans for construction amounting to \$11/2 billion.)
- ►A. F. of L. President William Green's estimate of need for 15 million new homes in the postwar decade, with employment prospects for 2 billion construction workers and 5 million others supplying building materials.



Photograph by Maynard Parker

DESIGN FOR DAYLIGHT ENGINEERING

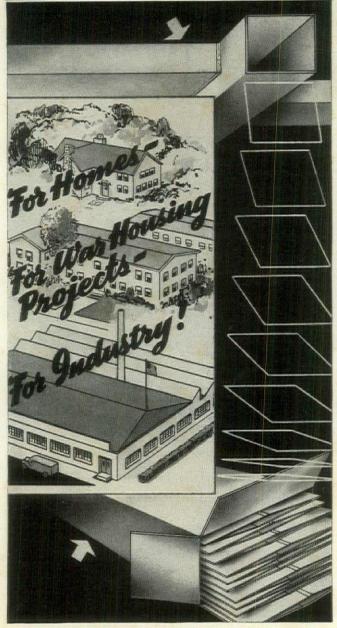
One glance at the exterior of this home tells you that it is designed with daylight engineering in mind. Before you step inside you know that the rooms will be bright and cheerful... that there will be a distinctive air of spaciousness that only a generous use of glass can provide.

Through use of corner windows and large window areas completely around the house this home employs many of the principles of daylight engineering. Add to this exterior design the use of decorative glass in the walls inside and the home becomes flooded with welcome daylight throughout. Panel mirrors, too, materially help stimulate the effect.

Daylight engineering is one of the most important "wants" of tomorrow's home builders. And it is the one convenience that is within the means of every home. For it costs no more to build with glass than it does with any other material. High-quality Libbey Owens Ford Glass and Blue Ridge Decorative Glass are available for every daylight engineering need. Libbey Owens Ford Glass Company, 22113 Nicholas Building, Toledo 3, Ohio.



DEFINITE ADVANTAGES in SAL-MO SUPPLY DUCT for Warm Air Heating, Ventilating and Air Conditioning Systems



- 1. Each SAL-MO SUPPLY DUCT carries the Underwriters' "IN-SPECTED" label for Heating, Safety and Permanence.
- 2. The unique folding feature of this DUCT saves space in cars, storage and transferring to jobs.
- 3. SAL-MO SUPPLY DUCT embodies built-in insulation, insuring years of fuel saving.
- Superior lightness (less than 8 oz. per square ft.) combined with superior strength (Mullens Test over 400 lbs. per square inch) assures ease in handling and structural stability.
- Fabricated entirely with insoluble adhesives, weather and high humidity will not separate it.
- 6 Manufactured in 26 standard sizes (Areas from 26 square inches to 448 square inches — in 4-foot time-saving lengths) allowing for all types of installations.
- 7. Also furnished in flat sheets containing from 11 to 24 square feet which can be easily rolled or scored on the job.

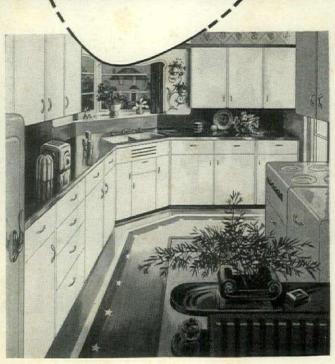
SALL MOUNTAIN COMPANY

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THE PERFECT HOME..

NEEDS A PERFECT KITCHEN



Bilt-Well "Nu-Style" Kitchen Cabinets are superbly designed, stoutly constructed and conveniently arranged to meet the most discriminating taste. Likewise, they are readily adaptable to new construction or remodeling—easily and quickly installed in any desired location in any kitchen, regardless of size or arrangement.

Now is the time to secure complete information on these modern "Nu-Style" kitchen cabinets. Your request for literature implies no obligation.

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MANUFACTURERS OF

NU-STYLE unit wood kitchen cabinets





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HEGEMAN-HARRIS CO., INC., General Contractor, New York City

Lyt-all, the
Universal Wall
Coating, aids
in the rehabilitation of our
Service Men.

Charge of Construction, the U. S. Naval Hospital at St. Albans, Long Island, is an example of the therapeutic value of Pratt & Lambert color in war time. In this instance Pratt & Lambert Paint and Varnish serve not only to decorate and protect, but also indirectly aid in the rehabilitation of our Service Men.

Lyt-all, the Universal Wall Coating, and other Pratt & Lambert Paint and Varnish products are known from coast to coast for their unvarying excellence and their outstanding durability. And durability is a prime requisite in hospital painting.

On large or small-scale projects, P&L Paint and Varnish provide practical decoration with true economy in first cost and maintenance. Ask the P&L Architectural Service Department nearest you to give you full details about Lyt-all and other P&L paints and varnishes.

PRATT & LAMBERT-INC., Paint & Varnish Makers
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White carnations are no lovelier than a home painted with Eagle pure White Lead in pure linseed oil.

And the time-and-weather-defying hide of a bull elephant comes no tougher than this century-old paint. White lead outlasts all other types of paints, and Eagle is the finest white lead money can buy!

In a year marked by necessary changes and substitutions, you can confidently specify Eagle White Lead because it still maintains its uniform high quality... is every bit as pure as it has been since 1843... and is still available in sufficient quantities for your clients' needs.

This master paint anchors a beautiful film of unqualified toughness *into* the surface to be preserved. It does not crack or scale, but ages gracefully, slowly preparing itself for eventual repainting.

The cost of Eagle White Lead paint is only \$2.67 per gallon of finish coat, and \$2.14 per gallon of primer, based on national average cost of Eagle pure White Lead and pure linseed oil. In your city it may be even less.

THE EAGLE-PICHER LEAD COMPANY, CINCINNATI, O.

Member of the Lead Industries Association



PLANNING WITH YOU

(Continued from page 50)

is to get people more spread out, not to jam them in. We already have been concentrated in Omaha in a manner that's ridiculous, considering land costs.

So we say we won't build apartments up solidly. We will leave plenty of space for small parks, for playgrounds, so the people can get out and breathe. Something like Logan Fontenelle homes, where only 17 per cent of the ground area is covered by buildings.

Well, at Logan Fontenelle homes the concentration is still 21 families per acre. Using this base, we would need only 40 per cent of Omaha's present residential area. The other 60 per cent would be unused. So that gets us nowhere.

Now where are we? We want to redevelop the area. In the old McShane area, because it is close in, we can stand a heavier concentration of population than that for the city as a whole (around 8.5 families per acre at present), but we cannot stand the concentration needed to make the land pay.

The obvious answer to all this is that the McShane lot simply is not worth \$7,800. Its tax assessment has been held up for years on the theory that it's valuable because it's close in. A good argument could be put up that it's less valuable because it's close in.

Anyway, we run into a practical obstacle. The McShanes, who still own the place, have come to think the land is worth a good deal as possible commercial property. The tax assessment has encouraged them to think this.

If you wanted to buy the McShane land, or any land in the neighborhood, the price probably would be about what we've figured. Maybe somewhat lower, but not much.

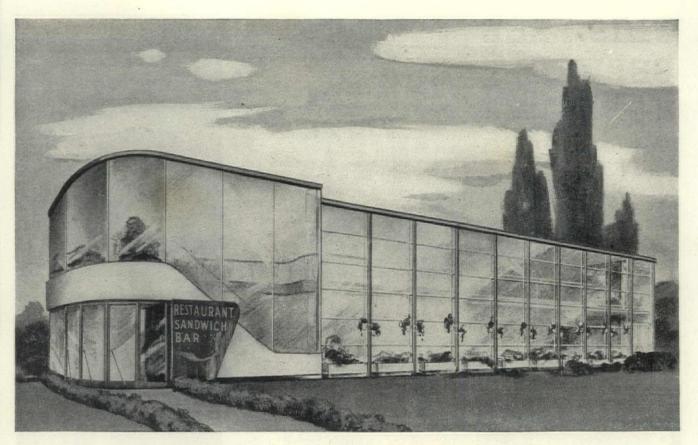
Also, if you set out to do a job of redeveloping, and needed every piece of land for eight or ten blocks around, you probably would run into someone who either wanted a fantastic price or didn't want to sell at any price.

So if you are going to redevelop you probably need governmental aid—the use of the right to condemn land—to assemble enough to make it worth while.

You can take it for granted that the land will cost more than it's worth—more than it's worth for single-family dwellings, anyway. And probably more than it's worth for a properly spread out multiple-housing development.

The Wagner Bill in Congress would solve this problem by making federal grants with which local communities could buy up the land in blighted

(Continued on page 116)



Walter Hesse, of the firm of Bloch and Hesse, well-known New York architects, is the designer of many famous restaurants and stores in New York and other eastern cities. A restaurant sandwich bar similar to the one shown above was designed by Bloch and Hesse for Gimbel Bros. New York store.



Frevuew of the Restaurant of the Future: with Special Attention to

DINING IN AIR-CONDITIONED COMFORT

• What will the restaurant of the future be like? Here is how Walter Hesse visualizes it. "Everything will be planned with the comfort and convenience of the customer in mind. Hence, functionalism will receive chief consideration.

"Air conditioning will of course be one of the most important features. Quiet—absolutely noiseless, gentle air conditioning. Providing an invigorating, comfortable atmosphere. Without any trace of food odors. Tempting patrons to more enjoyment—happier meals and bigger checks."

Restaurateurs know from experience that air conditioning—that is dependable and efficient air conditioning—is a guarantee of getting more business-and holding it.

In the past, competition has been between the air conditioned restaurant and the restaurant without any air conditioning. With practically all restaurants of the future air conditioned, the advantage will be held by the restaurant with the better type of installation. Thus the selection of equipment takes on greater importance.

More attention will be given to cooling capacity and the location and type of grilles so that the circulation of conditioned air will be gentle and even. Smooth, silent operation without pulsation or noise will be a definite requirement.

Restaurateurs who have had experience with Carrier equipment know that it meets these requirements and offers many other advantages in economical, trouble-free performance. Architects have found the cooperation of Carrier engineers to be most helpful in planning, estimating and installing air conditioning systems.

Air conditioning equipment offering features never before available is now being planned on the drafting boards of Carrier designers. This equipment will be ready for the restaurateurs of the future as soon as peace comes.

Architects and restaurant owners are invited to discuss now, how this improved equipment can be adapted to their post-war plans.

CARRIER CORPORATION, Syracuse, N. Y.

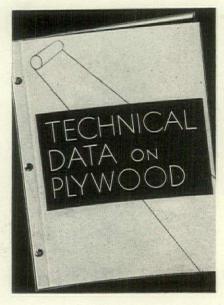
AIR CONDITIONING



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keeps more than
10,000 architects
and engineers
supplied with
latest data on
plywood . . .



Have your name added to our mailing list today

"Technical Data on Plywood" is a loose-leaf-type engineering handbook on Douglas Fir Plywood. As new studies are made, additional chapters are sent you for inclusion in your handbook. This free service enables you to maintain an authoritative plywood file and facilitates your designing, specifying and working with Douglas Fir Plywood. If you would like to receive this handbook service, write Douglas Fir Plywood Assn., Tacoma, Washington.



PLANNING WITH YOU

(Continued from page 114)

areas. Then the communities would sell it back to private developers at a good deal less than it cost to assemble the property. This would be an outright subsidy of course. The theory is that the social gains would make the subsidy worth while. An economic argument might also be made. Blighted land is often an expense to a city. On a good deal of it taxes go unpaid, the land goes through one tax sale after another, and there is little public revenue to be derived.

One trouble with the federal grant system is that it may make for much red tape, with Washington experts by the battalion making rules. Some rules are plainly needed, for nobody wants to spend money to clear a slum without assurance it won't become a slum again in a few years.

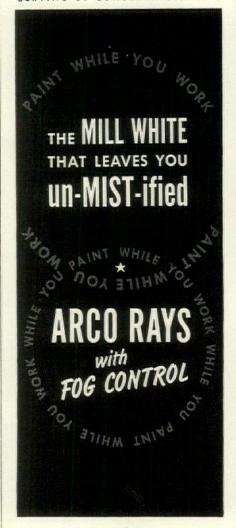
There are other methods offered. New York, for example, is offering tax exemptions for many years to those who will clear and rebuild bad areas. This method has its drawbacks, too. Using the new tax exemption method probably would not eliminate the need for the city to lend its power of condemnation. Without this power, it probably would be impossible to assemble enough land for a useful redevelopment project.

Anyway, if we are to make Omaha a city for modern living, and consequently clear out the bad close-in areas, we are going to have to pick some method, and a city planning group probably can decide which is best.

There is another phase of the problem that almost inevitably will come in. This involves the whole tax assessment system. The close-in areas, as we have seen, are almost certainly over assessed, even though some may have future values. So are many buildings in Omaha's once-busy jobbing or wholesale district. At the same time many new homes in Omaha are scandalously under assessed. The Country Club district is one of the worst.

Equalizing the tax load is not an easy job. County Assessor Joe Stolinski has tried it, and got little but abuse for his pains. He raised Country Club assessments, for example, and people whose houses still were assessed at far less than their real value howled bloody murder. Stolinski still is anxious to do the job, apparently, and probably would welcome the backing of an aggressive civic committee.

One thing is certain—you can't cut the values of over assessed property without boosting the values of under assessed property and without raising hell with the city, county and schools. SERVING BY CONSERVING ... No. 10



WHILE Arco Rays is being sprayed on your factory walls, work goes on just a few feet away. "Mist" and "splatter" are reduced to a minimum, and what little there is falls harmlessly to the floor, where it can be swept or wiped up with a dry cloth.

Arco Rays is but one of Arco's long list of maintenance specialties—mill whites, floor treatments, metal protectives, wall paints—products that have played a vital conservation role in three generations of American industry. Write for full details.

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magic...?

logic?

Pressure of 1700 tons changes the basic materials of natural wood — cellulose and lignin — into perhaps one of the most versatile materials serving America's war industries today. This unique material is Masonite* Presdwood.*

No magic. But much logic! Simply, it is this: Wood's strength comes from its lignin-locked cellulose fiber. But in the tree the fiber lies in parallel layers, making for uneven strength. *Interlace* the fiber, lock it together with pressure in its own cement-like lignin, and the product will be strong in every direction!

The Masonite process starts by exploding hardwoods and softwoods, leaving the cellulose undamaged and the lignin intact. The resultant fibrous mixtures, of varying degrees of plasticity, are then reassembled . . . far stronger than wood . . . subjected to different heats and tremendous pressures . . . thus producing Masonite Presdwoods.

These hardboards are easily worked. They can be bent, and machined with accuracy on wood-working tools to almost any shape or contour. Their glass-like smooth surfaces provide for perfect painting with regular paints, bakedenamel finishes or lacquers.

Masonite ligno-cellulose hardboards now serve in more than 500 different

Masonite ligno-cellulose hardboards now serve in more than 500 different war uses, releasing quantities of rubber, steel, aluminum and other strategic materials for other vital purposes. There's little left for civilian purposes today. But these versatile hardboards will be plentiful in peacetime for your buildings . . . for sturdy exteriors, walls and ceilings, furniture, cabinets, counters and hundreds of other jobs. Masonite Corporation, 111 W. Washington Street, Chicago 2, Ill.

*Trade-mark Reg. U. S. Pat. Off. "Masonite" identifies all products marketed by the Masonite Corp.

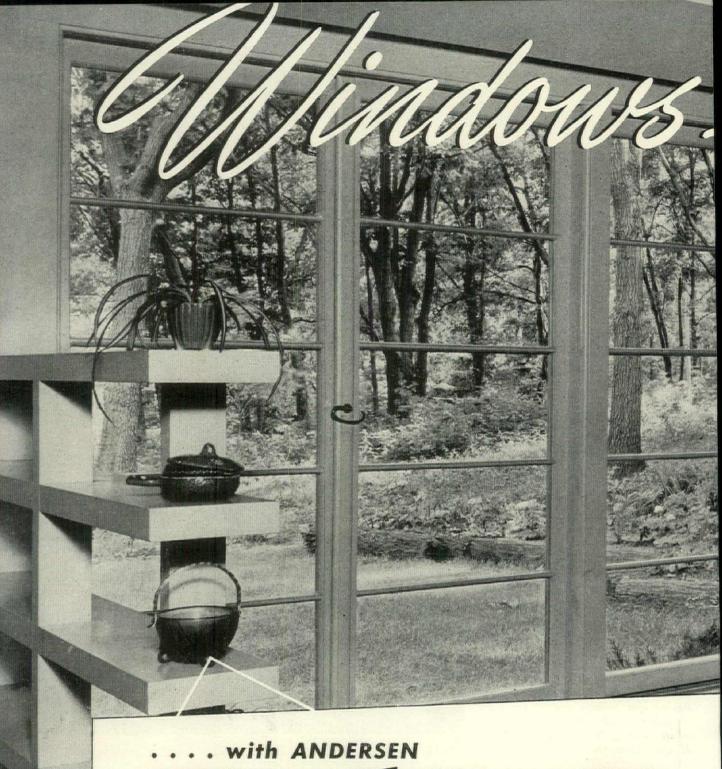
COPYRIGHT 1943, MASONITE CORPORATION

MASONITE PRESDWOODS





HE LIGNO-CELLULOSE HARDBOARDS



COMPLETE WOOD WINDOW UNITS

Windows will be walls, and walls will be windows in the 194X home. Window-walls of Andersen Complete Wood Window Units will frame changing outdoor scenes as living pictures. But the function of windows will not stop there...for, as walls, windows must protect the comfort of the inside by providing a thoroughly weatherproof yet transparent barrier. Yes, windows...as window-walls...will play an increasingly important functional part in the 194X home. So today architects

and builders already planning the 194X home look to Andersen Complete Wood Window Units for smoothly-operating, integral parts of the entire structure. Further, Andersen makes this promise—though new designs and new developments may occur, Andersen Windows will meet the design and construction requirements of the 194X home. Sold through regular millwork channels. For details, consult Sweet's architectural catalog, or write directly to the Andersen Corporation.

Andersen Corporation

BAYPORT . MINNESOTA

WAKE UP THE WALLS

of the 194X HOME

FOR TOMORROWS

HOME

BONDS TODAY

ONLY THE RICH CAN AFFORD POOR WINDOWS



Rom Maine to California, architects have specified Anchor Fence for tough war plant protection jobs. They've counted on Anchor's exclusive features to give them faster fence erecting, greater strength, easier moving when necessary.

Anchor Fence can be quickly erected in any soil, in any weather, even when the ground is frozen. The exclusive, patented "Drive Anchors" hold the fence permanently erect and in line, resist terrific force, yet can be speedily moved without loss of post foundations in case of plant expansion.

Get the facts about Anchor Fences . . . see how they give extra protection, long life, low maintenance costs. Mail coupon below for Free Industrial Fence Catalog and name of nearest Anchor Fence Engineer. No obligation.

ANCHOD	NATION-WIDE SALES AND ERECTING SERVICE
ANUMUN	Anchor Post Fence Co. 6635 Eastern Ave. Battimore, 24, Md. Please send me Anchor Catalog and name of near- est Anchor Fence Engineer. No obligation, of course.
Name	* * * * * * , * * * * * * * * * * * * *
Address	
City	State

LETTERS

(Continued from page 36)

the selling has been done already by the mere existence of the need. Instead, they want to talk about their needs and sell me their program in hopes I'll be around and on hand to furnish the necessary services. This healthy, and I must say, happy state of affairs is also prevalent in other communities in this state. What with talk sweeping the country about postwar planning, I am reasonably certain that a golden opportunity exists in nearly every small town of ten to twenty thousand population.

And why are these little communities apt to want to sell you rather than you sell them? First and second among reasons too numerous to mention here, most any town regardless of size is anxious to bring in all possible new trade and at the same time, keep what trade they have. This means new people—preferably, people of various sorts and businesses. Almost every town, as a result of the need to attract new trade, and also as the result of lack of adequate planning, feels the necessity of bringing in professionally trained men among those new people. They look upon the presence of an architect, a professional engineer or both as an asset to the town just as they regard as an asset the presence of a specialist M.D., attorney, or other specifically qualified individual. The presence of such people in a town is an attraction in itself.

There are many more hundreds of small towns throughout the country than there are architects and professional engineers. Surely there is future business in all of them if one would merely do something about it. True, there isn't much glamour or much in the way of fancy fees to be had out of "small town stuff," however, if a fellow wants to, he can make it big time. Just look around and see how many small-town lawyers, bankers, doctorsyes, even a few architects-are currently governors of their states, nationally prominent in business or professional leadership, etc. The part of the whole picture I especially like is that in a small town, a fellow can make a good living, eat and be happy-really living-with his family and his neighbors' families. And boy! do these things make the difference between happiness and unhappiness for you, the important thing after all.

There is business and a good time in a small town. Take a look at it, fellows.

CHARLES A. PEARSON, JR., Architect Radjord, Va.



We are fortunate in being able to help win the war with the same plant, policies and personnel that we had before Pearl Harbor.

This activity is giving us a wealth of inspiration for new applications of civilian lighting after the war.

We'll be here, ready to serve better than before and on time as usual.

Allard Hendrickson Co.,

Lighting Fixtures
Illuminating Engineers
337 ADAMS STREET
BROOKLYN, N. Y.



FOR POST-WAR CONSTRUCTION specify "MINWAX" for Wood Finishing

"Performance" still stands as the best criterion for product specification. When the war came along, the performance record of MINWAX Flat Finish, covering a period of over 30 years, resulted in its selection on more than 90 war projects. Now with post-war planning before us, what better assurance could any architect have than MINWAX'S pre-war and war record of success? Here are a few of the "reasons why":

- Speed MINWAX Flat Finish offers the answer to the demand for speed with proved serviceability, dependability and appearance.
- Serviceability It creates a finish that cannot be marred or scratched and can be maintained with the greatest ease.
- 3. Economy Because of simplicity of application, one material creates the complete finish. It offers one of the most economical fine finishes available.
- 4. Dependability Its proved record of performance has led to its selection by architects, painters and contractors on hundreds of housing, war bases and essential war projects.

Write for complete information to
Minwax Company, Inc., 11 West 24nd Street, New York 18, N.Y.

FACTS ABOUT MINWAX FLAT FINISH

- the original penetrative finish
- seals, protects and preserves
- finish does not mar, scratch or powder
- with ordinary care maintains its beauty for the life of the wood
- in clear and 10 non-lapping colors

COMPLETE CATALOGUE IN SWEET'S





... using STEEL ... where STEEL is best ... means greater

RIGIDITY in BATHE-RITE SHOWER CABINETS

THAT'S why there can be no successful "skimping" of STEEL — where Steel is necessary — a fact that the War Production Board recognizes in allowing the 24 pounds used in BATHE-RITE Cabinets.

Project Contractors have reason to know the extra value of Bathe-Rite's Steel Frame construction. For they have found that, while saving time, labor and money in Bathe-Rite's "quick-assembly" features are important, the final measure of value is the strength, sturdiness and rigidity of the finished assembly. . . . Long-life service and complete satisfaction in use.

Today, Bathe-Rite Shower Cabinets are proving their EXTRA VALUE — from every standpoint of easy installation, appearance, convenience, sturdiness, rigidity, long life — in new, remodeled, renovated homes, and in factories, institutions, hospitals, schools. After the war this reputation for quality will be more important than ever — remember Bathe-Rite.

Bathe-Rite "Steel-Framed" Shower Cabinets

Made in two standard sizes to fit all needs. Comply with W.P.B. regulations.

WRITE OR WIRE FOR DETAILS. Give name of project and quantity required, if possible. Delivery assured on any quantity.



Bathe-Rite Division
MILWAUKEE STAMPING COMPANY
827-5 South 72nd Street
Milwaukee 14, Wisconsin

Bothe-Rite "STEEL FRAMED" SHOWER CABINETS

3ip! 3ip! 3ip!

and another Grand Rapids Invizible is Installed!



Inquire now about our competent engineering service on the installation of Grand Rapids Invizible Sash Balance in window assemblies especially suited to mass production of double hung window units for prefabricated homes in housing projects. This service will help you and help the nation's war effort, as well as prepare you with invaluable post-war planning knowledge. knowledge.

GRAND RAPIDS HARDWARE CO. GRAND RAPIDS MICHIGAN

Space-saving

K-VENIENCE-

Clothes Closet Fixtures

. . will be absolutely a "must" in post-war housing, the obvious solution to neglected clothes closets, the demand for more closet space and truly useful, modern fixtures.



& VOGT

MFG. CO.

Photograph Courtesy Architectural Forum

Dept. F-11 Grand Rapids, Mich.

KNAPE

* They keep all ap-

parel in handy reach, closets neat and orderly. Fixtures for shoes, hats, ties, trousers, skirts, towels, suits, belts, gowns, coats. Tracks, slides and rollers for doors, drawers and shelves.

A Book That Belongs in Every Architect's Office



MATERIALS and METHODS of ARCHITECTURAL CONSTRUCTION

By Charles M. Gay and Harry Parker

Do you know the latest uses of pressed wood, plastics, structural glass? Do you have the latest tables on strength of materials and properties of structural steel?

This vital information is included in this practical book, rewritten to keep architects and builders abreast of current practices in architectural construction. Also discusses foundations, floor and roof construction, metal timber connectors, reinforced concrete and concrete design. Every architect and builder should own a copy. Send for yours today!

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Gay and Parker's MATERIALS AND METHODS
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CONSTRUCTION on ten
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end of that time, if I
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postage: otherwise I will
return the book postpaid.

Name		
Address .		
City and	State	
Employed	by	 AF-11-43





Men of Mercy...

TWENTY DOLLARS

THESE were great Americans. They are gone...but through you their power is still great. You have some of these portraits in your purse or in your billfold. They hold the power to spread compassion and comfort throughout the world.

There are children to be clothed in Russia...broken spirits to be mended in Greece...prisoners to be cheered and comforted in barbed-wire enclosures.

There are needy neighbors right here at home to be helped—many of them indirect casualties of this war.

There are torpedoed seamen to be warmed and fed on the docks.

There are wounded lying on the plains of China who need medical supplies.

Take some of these bills from your pocket now. Then

send as many of them as you can afford on an errand of great mercy...for war relief through the National War Fund.

When you give this month, to your community's war fund, you also give to the National War Fund. You give ONCE for ALL these agencies listed below. Your gift is divided in many ways... in proportion to the need! Some will go to the needy here in your own town. Some will go to relieve distress and sustain the morale of our allies. Some will go to provide the comforts and pleasures of home for our own troops, through the USO.

Look at the names of the agencies below. You have given to many of them before...small gifts perhaps when your heart was touched. Add up what you gave before...then double it. You cannot give too much. The need is so great.

Give ONCE for ALL these USO
United Seamen's Service
War Prisoners Aid
Belgian War Relief Society
British War Relief Society
French Relief Fund
Friends of Luxembourg
Greek War Relief Association
Norwegian Relief
Polish War Relief
Queen Wilhelmina Fund
Russian War Relief
United China Relief
United China Relief
United Yugoslav Relief Fund
Refugee Relief Trustees
United States Committee for the
Care of European Children

NATIONAL WAR FUND

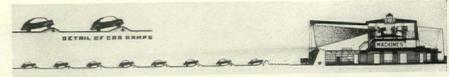


FORUM OF EVENTS

(Continued from page 2)

obsolete. The structure defies any effective alteration.

The opera house proper was ambitiously patterned after the imperial theaters of Europe. It is almost an exact replica of La Scala in Milan. The entire structure was built around (and for) the tiers of boxes, leaving the rest of the audience cramped and craning. In recent years even the fortunate boxholders have come to look with envy on modern theaters with well planned seating but remain staunch

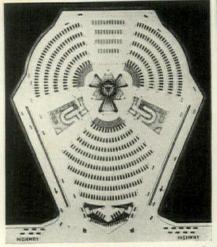


DETAILED PARKING PLAN BY DESIGNERS A. F. ADAMS AND W. F. CLARK

supporters of the Metropolitan in its long standing rivalry with La Scala for the title of the "greatest opera house in the world." Italy must now rebuild her famous theater and it will be interesting to see what form it takes. Still more interesting will be the Metropolitan's answer to this challenge.

MOVIES, MOTORS AND MOTIVES

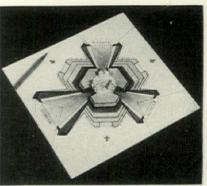
Hovering in front of an outdoor movie screen in the family helicopter may be one of the neater postwar tricks, but apparently the designers of this tri-stadium, triple-show, drive-in theater believe that peacetime pampering will develop a tremulous, terricolous, carminded public. The proposed plan



PLAN FOR TRI-STADIUM THEATER

which provides for such mass paralysis is as confusing as the following explanation offered by the designers:

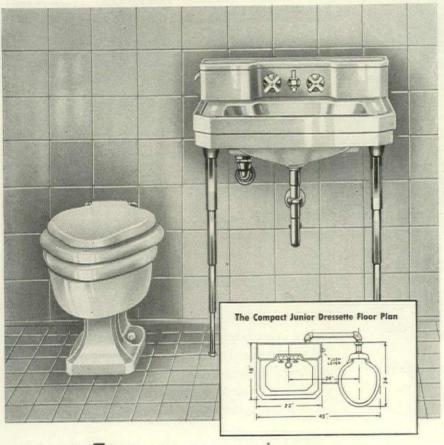
"It is only natural that people will take advantage in an informal manner and seek diversion and recreation with children in parks and areas having easier circulation and facilities for food and drink, at one price for parking, than to park and then walk into a theater and sit through some feature they have recently seen previewed."



MODEL OF REVOLVING PROJECTOR

True or false, the projector shown permits the simultaneous showing of three different parts of the program. Non-addicted movie goers can see a newsreel without having to sit through the "B" picture.

(Continued on page 128)



For YOUR POSTWAR PLANNING



In your postwar homes, you will want to combine luxury, quality and modern style with moderate price. Beautiful fixtures like the Eljer Dressette meet those requirements.

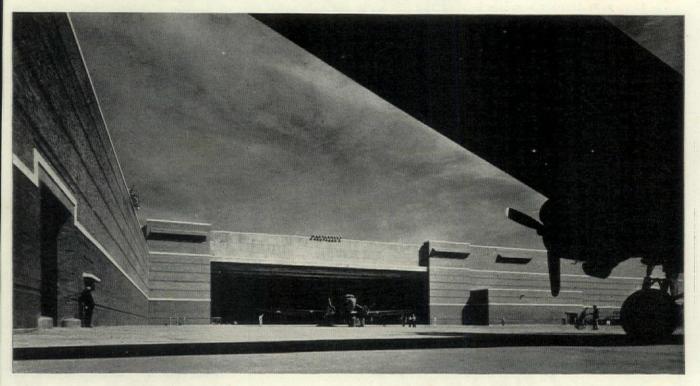
Because the full capacity closet tank is ingeniously concealed in the lavatory, the closet itself becomes less conspicuous. It is easier to clean around, and saves wall and floor space. Folder with sizes and roughing-in diagram available on request.

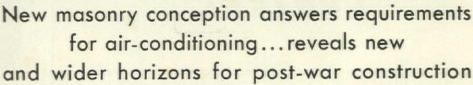
ELJER CO. · FORD CITY, PA.

Write for our Condensed Catalog

THERE ARE OVER 5 MILLION ELJER FIXTURES IN USE

Two Miles of "Breathing" Walls Built of Brick and Tile!





17,000,000 bricks in nearly two miles of "breathing" windowless walls enclose the new Douglas Aircraft Plant at Oklahoma City, Oklahoma—and provide complete insulation and air-conditioning.

Builder of this new aircraft plant was The Austin Company. Asked by the U.S. Army to make limited use of vital war materials—and yet design the huge plant with "controlled" conditions—this company conceived the "breathing" wall. The wall breathes by means of a continuous ventilating flue nearly two miles long.

A new idea in masonry—it holds great promise for factory and other build-

ing designs of the future.

And there is still more promise for the future contained in recent announcements of clay products manufacturers. These manufacturers have accepted the 4-inch modular unit for brick and tile. The "breathing" walls of the future and all other buildings of brick and tile will be more easily designed by architects and more economically erected by builders.

We will be glad to send you a folder describing in detail the "breathing" wall at Douglas Aircraft Plant. Address Structural Clay Products Institute, 1756 K Street, N.W., Washington 6, D.C.



AFTER THE WAR...

IT WILL BE BUILT OF MODULAR-DESIGNED

BRICK AND TILE



125

FORUM OF EVENTS

(Continued from page 4)

of the plants did not keep the workers from producing defense equipment.

The film's most dramatic sequence is the heroic stand at the huge tractor plant which had been converted to the manufacture of tanks early in the war. It was here that the Germans first attacked and drove to within one-third mile of the factory buildings. At that time there were no Russian troops within the city; the plant contained only 167 tanks which had been brought in for repairs. Assisted by men from



CLEARED PUBLIC SQUARES MAKE TENT VILLAGES FOR RETURNING WORKERS



If your post-war product or service requires accurate temperature control it will pay you to know that the White-Rodgers Hydraulic-Action principle provides dependable accuracy regardless of:

- Changes in ambient temperature.
- · Changes in altitude.
- · Off-level mounting of control or its sensitive bulb.

Today the White-Rodgers Hydraulic-Action principle of temper-

ature control is at work for the Army, the Navy, and firms engaged in essential wartime activities. Tomorrow its advantages will again be available for peacetime service.

Consult us on your post-war control problems and we'll gladly show you how H-draulic-Action can be applied.

SERIES 150

Heavy duty line voltage room thermostat for use on unit heater and air conditioning installations. No relay necessary on most installations.



WHITE-RODGERS ELECTRIC CO.

1292k CASS AVE.

ST. LOUIS, MO.

Controls for Heating . Refrigeration . Air Conditioning

the steel plant further down the river, the workers at the tractor plant organized in groups working on 24 hour shifts (twelve hours of fighting, twelve hours of repairing tanks). The battle raged furiously for two days during which time the workers managed to counterattack and hold the district until troops could reach the city.



INDUSTRIES ARE QUICKLY REVIVED

Ten days after the final defeat of the Germans, Stalingrad citizens were pouring back into their city. The brilliant victory was no more stirring than the civilians' determination to rebuild their factories and homes and carry on the fight from their war plants. Construction and repair crews, consisting mostly of women, were energetically clearing up the debris on the very heels of the Germans. Tent colonies sprang up in every cleared spot. Bakeries were first to open, then restaurants and groceries. Within a few weeks gutted Stalingrad was seething with construction.

Now, a year later, the population is nearly a quarter of a million; men and women are courageously recreating the industrial facilities of the city. The government has also allocated money to be lent to those who want to build private homes and supplies the necessary building materials. Russia is not waiting until after the war to rebuild. In spite of the crushing blows which the Germans dealt to Stalingrad, its value to industry, communications and morale will soon be as great as it was before the German blitz.

(Continued on page 128)



homes when necessary materials are again available.

The more wisely you guide their selection of materials, the more surely you can give them snug, comfortably efficient homes, fire resistant, weatherproof, good-looking-throughout the years to come.

We are advising these people to consult you in the opening sentences of the new brochure "85 Ways to Make a Better Home". Its sixteen big, colorfully illustrated pages are a veritable treasure house of suggestive

applications of steel products in home building. You will want to have a copy at your elbow to show your clients the many advantages of steel as a construction material-how steel saves time in construction, especially the prefabricated steel items that can be installed so quickly and easily.

Your free copy of "85 Ways to Make a Better Home" awaits your request. Just fill in this convenient coupon and drop it in the mail today.

ONE AIM ... VICTORY ... BUY BONDS

United States Steel Subsidiaries 621 Carnegie Building, Pittsburgh, Pa.

Please send my free copy of "85 Ways to Make a Better Home".

City____AF43A

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



FORUM OF EVENTS

(Continued from page 126)

EXHIBITIONS

THE MUSEUM OF MODERN ART will open a large exhibition of Romantic Painting in America on November 17th which will occupy the entire second floor. More than 200 pictures will be shown representing about 120 artists. The greater part of the exhibition will be devoted to the work of about 75 contemporary painters including Atherton, Austin, Bellows, Blanch, Burchfield, Davies, Feininger, Graves. Hopper, Marin, O'Keeffe, Watkins and others. Three eighteenth century artists, (West, Copley and Trumbull) and 42 nineteenth century artists will be represented. The historical section will include about one third of the exhibi-

Cooperating with the War Production Board's desire to curb the unnecessary consumption of civilian goods the annual Christmas exhibition of useful objects will not be staged this year. Instead, the Museum will open a Christmas Sale of Pictures under \$75 on December 8th. About fifty paintings and numerous drawings and prints will be available.



OUR ANTI-AIRCRAFT TRACERS OVER ALGIERS

U. S. ARMY SIGNAL CORPS PHOTO

PATTERN FOR VICTORY

Von Duprin devices, too, are made on the Victory pattern. War-precious bronze and brass have been eliminated . . . yet the devices still have all their traditional character . . . their ample strength, their quick action, their sturdiness and safety. You can apply them to a building with complete assurance. They will stand up and deliver . . . they will provide sure, positive, instantaneous exit under any emergency . . . they are true Von Duprins!



FEDERAL DRAFTING JOBS

The U. S. Civil Service Commission badly needs draftsmen for work in federal agencies active in the conduct of the war. Salaries range from \$1,652 to \$3,163 per year.

Naval, electrical, mechanical and topographical draftsmen are the most sought after but men and women experienced in any allied field are urged to apply. Though the need for draftsmen is greatest in Washington there is a comparative scarcity in all parts of the U. S. and its possessions. All appointments will be made in accordance with the War Manpower Commission policy. Applications can be obtained from post offices, regional offices of the Civil Service Commission, or by writing to this agency's central office, Washington 25, D. C.

G. I. GROOMER II



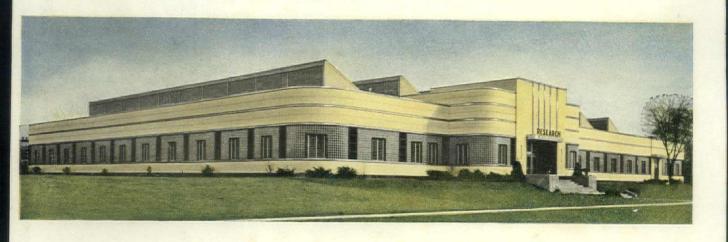
As a contrast to the omnipresent poster, the Army has ingeniously devised this means of warning its men against thoughtless talk. It presents an unpleasant supposition for any soldier who stops to straighten his tie and because of its personalized admonition is bound to be remembered.

OMISSION

Apologies are due for the omission of proper credit to R. Newton Mayall who acted as site planner on the Boston rural development project in the October issue.

DIED

MARSDEN HARTLEY, 66, in Ellsworth. Me. A noted landscape and marine painter, Mr. Hartley will be remembered by New Yorkers for the annual one man shows which he held there for nearly 30 years. His works were first shown by Alfred Stieglitz in 1908 and won many awards in subsequent years, the latest, a government competition last March.



We took our own BUILDING TONIC

Above: The ARMCO Research Laboratory at Middletown, Ohio, has 8100 sq. ft. of cream-colored porcelain enameled sidewalls with contrasting black porcelain enameled pilasters and stainless steel trim.

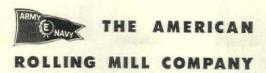
Right: This front view shows the ARMCO Stainless Steel marquise, doors and decorative bands. These contrast interestingly with the porcelain enamel.

Porcelain enamel has been used by architects and contractors to give department stores, theaters, restaurants and other structures an inviting, modern appearance.

- Our own Research Laboratory reflects this modern architectural note.
 As producers of the original enameling iron (ARMCO Ingot Iron), we know the many advantages of architectural porcelain enamel. So we invested in this attractive light-weight facing material for the three street sides of the building.
- Porcelain enamel permitted us to select the exact color scheme we wished. And because it does not fade,

rust or wear off, and is easy to clean, there has been practically no upkeep cost since 1937 when the building was erected.

 Today, of course, architectural porcelain enamel cannot be obtained. War needs for iron and steel sheets must be met first. But victory will see this durable and adaptable material return to its well-earned place in architecture. Then we shall be able to offer you new technical data that will be useful in your postwar designing. The American Rolling Mill Company, 2661 Curtis St., Middletown, Ohio.







Photograph Courtesy Corbetta Const. Co., Inc.

Large Lupton Sliding Type Hangar doors were installed in these buildings completed in record time by the Corbetta Construction Co., Inc. Each door leaf was made in three sections for shipping, Sections were assembled in the field and erected by Lupton installation men.

Doors form two ends of each building.



Lupton doors help complete building in record time . . .

The dependable production and shipping schedules maintained for Lupton products insure the perfect coordination required for today's high-speed building construction.

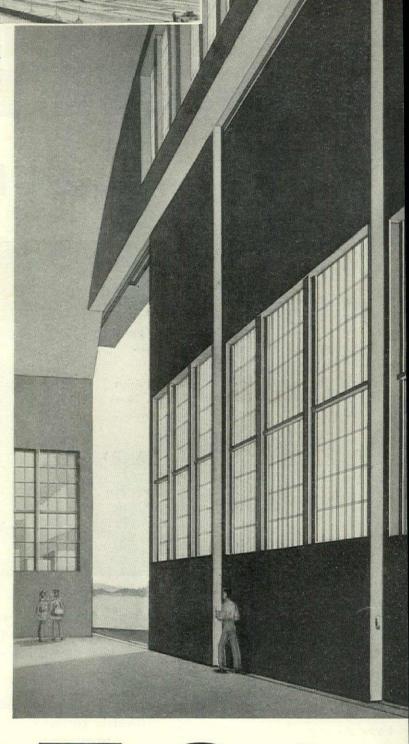
Lupton engineering and accurate manufacturing standards insure trouble-free operation and minimum maintenance costs.

Today, Lupton is better equipped than ever to serve you in the fabrication of metal doors and windows for your post-war buildings.

> Now Supplying Hangar Doors and Other Materials for the Armed Forces.

> > See our Catalog in Sweet's

MICHAEL FLYNN MANUFACTURING CO. Allegheny Ave. at Tulip St., Philadelphia 34, Pa.



LUPTON

METAL WINDOWS SINCE 1901

STEEL HANGAR DOORS

Where do you stand

on these 7 keys

to post-war profits?

The president of the nation-wide organization which compiles building construction statistics wrote recently that the principal factors which should produce great postwar economic expansion and prosperity are these seven. They are the markets which you should cultivate now for future orders.

2 "Aviation

1 "Automotive revival . . .

(This could result in construction or basic changes in buildings all over the country, as well as in Detroit and might mean business for you in your own community).

inthetic materials, etc ...

(Despite the great wartime expansion in manufacturing facilities for synthetic rubber, plastics, lighter metals, etc., the postwar conversion period will bring need for new construction, new roofs, etc).

(If national income continues high it is expected to bring a bigger demand for homes over \$6,000. Customers for these homes will expect dry basements, which may mean a bigger market for coal tar waterproofing. They will also expect decayresistant, termite-proof woodwork, which will call for pressure-treated timber).

1 Public works

(The virtual suspension of many civilian public works projects during the war has created a potential reserve of work which would normally have been done this year or last year. This adds to the deferred construction market).

4 Low-cost buildings-

(The development of private flying, the

growth of aerial freight lines may bring

the need for all sorts of building construction, much of this, too, in your community).

(Many of these low-cost buildings will have flat roofs and this will open up new need for coal tar pitch built-up roofs. Many of them will want pressure-treated timber as a protection against decay and termites).

6 Blighted urban areas

(This can lead to large-scale demolition of run-down districts, and housing, commercial and industrial construction. Much of it may be planned as a self-liquidating guarantee of post-war employment).

In almost every community, there are post-war planning bodies which are working on one or more of these sources of future business.

We are sure you will interest yourself in their work and take a part in it. From it may spring your orders in the future.

We also hope in the post-war planning work you do, you will raise your voice in favor of durable construction ... and, in roofing, that may mean coal tar pitch materials, and in general building construction, the use of pressuretreated timber products.—Koppers Company and Affiliates, Pittsburgh, Pa.

THE INDUSTRY THAT SERVES ALL INDUSTRY

(Continued from page 20)

policies such expensive treatments as X-ray, insulin and radium are sparingly provided, the Kaiser plan includes all these plus many other services in unlimited amounts for the initial cost. The term of hospitalization is determined only by the length of time it takes to cure the patient. The benefits seem staggering but the secret is simple. Through facilities and equipment pooled between a group of doctors, the duplicated expenses of private practitioners are erased. The hospitals themselves are attractive enough to make workers eager to join (to date they have subscribed 95 per cent). Furthermore, companies underwriting workman's compensation policies readily see the advantage of lowered absenteeism and quicker cures and contribute enthusiastically to the plan.

The doctors, for the most part young specialists, are paid excellent salaries. They have no overhead and are not faced with the lean years which precede an established practice. Yet they have at their disposal the finest equipment, and need not stint themselves out of consideration for the patient's slender bankroll.

With this evidence placed before the public, it seems likely that similar plans will spring up rapidly and in large numbers. This does not mean that in the future only super-enormous medical centers will be built. Here, as always, proportion does not indicate quality and the Kaiser hospitals are not huge. However, it may mean that the days of fashionable nursing homes and private hospitals are numbered. Even the few extremely rich may in the future be unable to afford the diversity and expense of medical treatment which great numbers will have for a few cents a day.

Paul de Kruif was quick to realize the magnitude of Kaiser's challenge to doctors and society itself. In his usual lucid manner he has traced the events from the beginning of Dr. Garfield's desert practice to the prepaid medical plan which was finally accepted by the California Physicians Service for the workers' families. Throughout the book the reader senses the drive and organizing power behind each Kaiser undertaking. Though at a glance the plan may appear Utopian, de Kruif's analysis of operations shows that it is as much good business sense as building Liberty ships. Kaiser did not underestimate the importance of good health on the morale and efficiency of his worker-army, but neither did he originally visualize the plan as philanthropic. His hospitals not only pay for themselves, they operate at a substantial profit. Today one of them is in the singular position of being a self-endowed institution.

If all that de Kruif attributes to the plan is true, and there is no reason to believe otherwise, then it may well mark the beginning of a movement which has not only great social implications but would bring about widespread hospital construction. Sweden and Finland with their own versions of group medicine have built hospitals and clinics which, in proportion to population, far surpass the number constructed in this country. Architects, not necessarily immune to disease, will probably read the book as a matter of general interest. However, if medical plans similar to Henry Kaiser's are adopted by communities, states or industry, then this book has helped to open for them a hitherto unsuspected trend in building.

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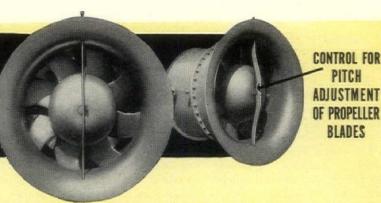
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THE OLD CHURCHES OF LONDON. By Gerald Cobb. Charles Scribner's Sons, London. 116 pp. 84 plates, 35 illustrations. 6 x 83/4. \$5.00

Until bombings gutted many of the city's historic churches, Londoners tended to take them entirely for granted.

(Continued on page 134)

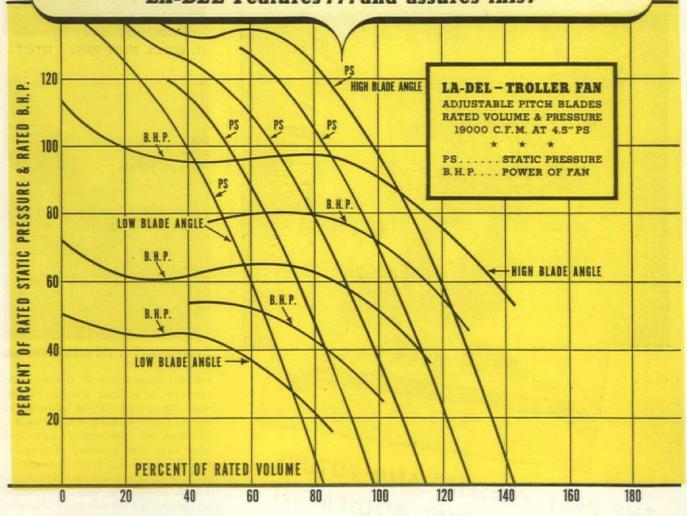
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PIONEERS IN THE DESIGN OF AXIAL-FLOW FANS FOR EFFICIENT AIR CIRCULATION *

(Continued from page 132)

However, with true human perversity, interest reached its height only when unrestrained vandalism threatened to wipe the entire city out of existence.

In this volume the author offers not only a valuable record of the original edifices but also a full illustration of their distinct, indigenous craftsmanship and fittings. An unusual number of photographs and drawings include familiar facades, but serve primarily to emphasize this point.

The subject matter was limited to

London because the city contains most of Sir Christopher Wren's best work and because London's churches differ so decidedly in character from those of the surrounding country. Most of the latter date from medieval times or after the rapid growth of the suburbs which began in the seventeenth century.

Wren's numerous and diverse churches take up more than half the book and are given a more thorough treatment than other buildings. The author claims this to be the first detailed account of how the famous architect built and furnished his churches. This statement is somewhat misleading. Although excerpts from the original



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accounts bring out such characteristic practices as building steeples in two stages to permit future addition of spires or other elaborations, it is more a collection of construction data and labor costs than a record of progress and development. Little attempt is made at esthetic comment. The introduction provides a compact historical background but the text itself is limited to the outline of seventeenth century architectural and construction practices. Since the author considers his book merely the starting point for a more exhaustive treatise to be published after the war, it is only fair to emphasize that it contains a vast amount of relatively unobtainable information.

I AM THINKING OF MY DARLING. By Vincent McHugh. Simon and Schuster, New York. 292 pp. 51/2 x 8, \$2.50.

The opportunity to review two novels centering around the architectural profession within a period of three months is staggering. The Fountainhead was the first, reviewed in August, 1943.

(Continued on page 136)



OF SEDGWICK LIFT EQUIPMENT This book, just off the press, will be found interesting by all who contemplate any provision for vertical lift equipment in their structural plans for present or future needs. In these pages you will find portrayed a consistent development in design and utility which clearly demonstrates the high value of Sedgwick engineering in maintaining "a step ahead" to meet the steadily growing demand for lift equipment of all types growing demand for till equipment of all types and character. We shall welcome your request for a copy of this book.

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William Lescaze, architect, is credited with the first modern skyscraper (for the Philadelphia Savings Fund Society), and the first use of glass brick in a facade. Outstanding examples of his work include Columbia Broadcasting's Hollywood Studios, the Ansonia (Conn.) High School, and Longfellow Bldg., Washington, D. C.

FROM A PILOT SEAT...AND RUBBER-LIKE SAFLEX...SOLID COMFORT, MASS PRODUCED?

STRONG, lightweight pilot seats of plastics-bonded plywood now in quantity production for the U. S. Air Forces were the principal inspiration for this interesting suggestion for 194X by well-known, New York Architect William Lescaze.

Wartime success, however, in converting Monsanto's Saflex from its original function as a tough, resilient interlayer for safety glass into what amounts to a new and promising synthetic rubber, also interested Mr. Lescaze and led him to include Saflex in his "specifications".

Making use of war-stimulated bagmolding techniques, the chair Mr. Lescaze visualizes would be quickly and easily formed on inexpensive molds with little or no waste of material. It would be upholstered with a resilient, sponge-like Saflex and covered with a waterproof, washable, Saflex-coated fabric.

The sketches below illustrate details.



Wood plys, coated with a Resinox phenolic bonding resin, would be laid up on simple, inexpensive wood molds, tacked in place.



Molds would be covered with rubber bag and air evacuated to form snug fit. Entire assembly then goes into pressure chamber.



Removed from mold, chair is one tough, resilient, monolithic piece. Sponge-Saflex cushion would be slipped on frame like an envelope.





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No one can say today with certainty that a chair such as Mr. Lescaze has suggested will ever be produced. It is certain, however, that wartime advances in plastics materials and techniques will exert a strong influence over the shape of many things to come. That is why it will pay you to add "The Family of Monsanto Plastics, A Guide for Product Designers," to your postwar file now. Its 24 pages are packed with facts on one of the largest and most versatile groups of plastics produced by any one manufacturer. Simply write: Monsanto Chemical Company, Plastics Division, Springfield, Massachusetts.

(Continued from page 134)

The sudden discovery of this romantic appeal remains unexplained but so far there has been no reason to encourage similar publicity. This time an attempt is made to portray the city planner. The resulting injustice only serves to further our belief that architects should be immortalized only by historians.

The theme is New York during the postwar, post-Moses period, completely undermined and disorganized by a mysterious fever. The disease is peculiar in that it manifests itself in an ab-

solute lack of inhibition and an unusual degree of happiness. The victims go blissfully about forgetting the drudgery of their daily routines and indulging in the execution of their most deep-seated repressions. Anyone can figure out the more obvious consequences and these suffice. Utter confusion results and at times the sinful aroma of burning flesh is quite noticeable.

Into this chaos steps the commissioner of city planning, (a timely and literary-minded germ having removed the mayor almost immediately). That he in particular should have been called on to take over can be attributed partially to his bottomless comprehension

of medicine, sex, municipal administration, psychology and food, and incidentally to a certain familiarity with the maps of the five boroughs.

To organize the city in its death struggle, the commissioner uses brilliant strategy and dashes from sector to sector, from conference to bedroom, in a super-equipped car. He also has a nodding acquaintance with half the city's population which, in his incessant sprints over the lot, prove very helpful in avoiding literary cul-de-sacs.

Interwoven with the municipal schizophrenia is the problem of finding the the actress-wife who is off, infected, doing all the things she always wanted to do. These are numerous, and conveniently arranged to take the commissioner off his administrative beat. The trail is sandwiched in between offical rounds and unofficial philanderings, the only fever symptom to which the hearty planner succumbs.

To know the elusive wife becomes an obsession with the reader early in the book and remains a strong enough incentive to pull him through most of the ensuing quicksand. Her character, skillfully portrayed by oblique suggestion, is dynamic and the only comeen the book can boast.

The story bowls along through a mass of disconnected incidents with staccato movement and color provided in singularly incomplete phraseology, supposedly in the best modern fashion. Toward the end, a few well-rounded sentences would have been wonderful.

The situation, created by such an elfish fever on the loose, is in itself so humorous the reader is disappointed to find that the consequences he anticipates in his own mind never quite materialize. Apparently for the sake of sophistication the natural farce is underplayed, creating an impression of self-consciousness which extends to some presumptuous and scholarly courses in bacteriology. To do justice to his omni-science the author should have permitted himself a considerably more ostentatious volume. However, something must be said for the touches of realism, some sharp pathos and sensitive descriptions of New York in its everchanging moods though they establish an independent philosophical theme which is neither justified nor integrated. After nearly 300 pages of trying to take a bearing the reader will be ready to compliment Mr. McHugh on the uncanny reality of the fever and go off to take his own temperature.

From the angle of propaganda it may be desirable to have the city planner of tomorrow painted in this worldly fashion but familiarity with his habits will lead his confreres to trust the planning to Moses, the tending to LaGuardia and the medicine to DeKruif.



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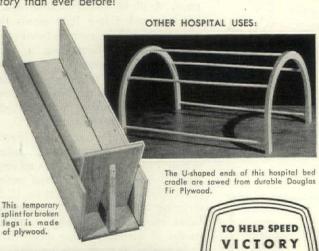
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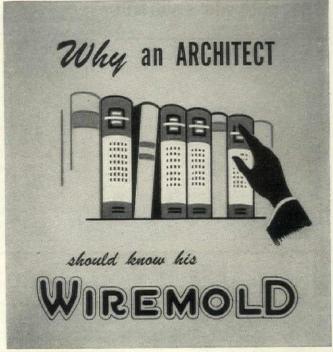
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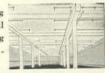
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PRODUCTS AND PRACTICE

(Continued from page 7)

towards over-all even-quality lighting, which permits flexibility of design seems to indicate cold cathode. Its design possibilities are almost unlimited. Standardization of certain elements, mass production and open competition will lower initial costs; further research will improve its lighting efficiency and introduce more safety devices to permit general application.

Designing with cold cathode fluorescent

The background of cold cathode in the sign industry is but a small indication

of what it may do in the future. England and France have used it for about ten vears with considerable success and efficiency but with questionable artistry. Playful applications of sign lighting to illumination have ranged from hot dog stands and theater marquees to some of the distinguished architectural lighting effects at the two 1939 World Fairs. On the West Coast custom-built lighting was worked in with the structural details or general layout of the interiors. Perhaps the most sophisticated application was in the recently completed Hotel Statler in Washington, D. C. Twenty thousand feet of lighting was installed in the special function rooms in ceiling

and wall coves, columns, furred ceilings, backs of benches, table lamps and fixtures. Most of the tubing was arranged in series of two or more colors with transformer dimmers, making possible a wide variety of color and intensity of effects. In combination with the cold cathode lighting, other types of light distribution and source were used—indirect, direct, incandescent and hot cathode fluorescent.

The war restricted its further application to interior lighting until it was revealed that cold cathode actually used less strategic materials and required less maintenance than hot cathode. A year ago 2,000 transformers were released by the WPB for demonstration installations. These are proving themselves in such large installations as the IT-E Circuit Breaker Co. in Philadelphia, Pa., Higgins Shipyards in New Orleans, La., the Watertown Arsenal at Watertown, Mass., Naval Training Station, Great Lakes, Ill., and Wm. Filene's Sons Co., Boston, Mass.

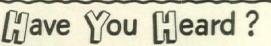
The nation-wide interest awakened in cold cathode has led to the necessity of creating certain standards for the industry and led to the formation of the Fluorescent Lighting Association for the promulgation of these standards. Lamps (tube and housing) are gradually becoming standardized at 8 ft. lengths, 20 and 25 mm. diameters. These stock-size tubes may be bent into four standard curves.

Electrode housings are now made in white porcelain—could be made of glass. A plastic cover to conceal the housings and diffuse light across the connections will be manufactured postwar. Electrodes themselves, a pure iron shell, are strong in comparison with the fragile tungsten electrodes of hot cathode lighting. Wherever there is excessive vibration, cold cathode tubing has a distinct advantage.

Because of the longer life inherent in the nature of the iron shell, tubes require little maintenance, less relamping. There are several large maintenance companies throughout the U. S. servicing industrial and commercial lights, street lights and signs. An extension of this maintenance service will undoubtedly increase the number of cold cathode installations. Use of standard housings and tubes for large installations permits relamping with spare units.

Transformers, which are installed between any two tubes, are becoming smaller in size with Underwriters' approval of the elimination of the extra metal jacket when they are mounted out of the way. Plans to provide all recessed transformers with louvers for ventilation will eliminate the danger of their generating too much heat. At-

(Continued on page 142)





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PRODUCTS AND PRACTICE

(Continued from page 140)

tractive designs have been made for incorporating the transformer into the linear lighting design or in a fixture.

One of the chief advantages of cold cathode lighting is that the tubes form their own circuits: for example, twelve 8 ft. lamps operating on a 12,000-volt transformer may be run out into the room in a double line of six tubes; they operate in series from this one outlet and do not require individual wiring as do hot cathode lamps. A general trend today is the use of 230-volt primary

wiring to the transformer, which in large buildings saves copper, both in wiring and in the transformer.

Dimmers can be attached to transformers, controlling light output—to step it up or down. This characteristic makes for flexible lighting design, as it has often been difficult to determine the exact amount of light desirable in a room before it is painted, decorated and furnished. It also permits varying the colors and intensities—applicable in such cases as restaurants, night-clubs, theaters and hospitals.

An objection to cold cathode raised by some—danger involved in high voltage transformers—is a problem which



COLD CATHODE FOR SHOWCASES

should be carefully evaluated. Naturally, transformers should not be handled by the inexperienced layman. Like all electrical equipment, cold cathode has to meet with the rules and regulations of national and local authorities. Safety devices are constantly being improved: at present all metal parts have a positive bond to ground and no live parts are exposed. A recent device cuts off the current when a tube is broken or removed from its socket, if this has not already been done at the source. More of these devices will be forthcoming. The fact that cold cathode has been widely used in store show cases and refrigerator display cases refutes the statement that it is not safe.

With the development of standards will come improvements in lighting efficiency, and with greater volume of production, lower costs. And despite the standardization, cold cathode still lends itself to custom modification.

Architectural lighting

Definite progress has been made in lighting design with the use of cold cathode. Its innate possibilities were indicated in the outdoor signs from which it stems. The linear quality of pencil-thin tubing that runs around curves, curlicues and corners has been applied to room contours to achieve both an over-all and decorative effect. Tubing is easily concealed in showcases, coves near the ceiling, on the wall and furred ceilings, for direct and indirect lighting. An adaptation of the indirect-lighting cove is the hanging cove running down the center of the ceiling with translucent glass or plastic sides and bottom, which yield both direct lighting downward and indirect on the ceiling. Long double lines of tubing may or may not have reflectors. Without reflectors, tubing should be mounted not less than 8 ft. from the floor. High-reflecting strips may be painted behind the tubes, or the entire ceiling may be covered with a highreflecting paint. Recessed coves or troffers in the ceiling, or wall panels covered with diffusing glass offer an inconspicuous vet efficient type of lighting. Old incandescent fixtures may be relamped with cold cathode, enormously improving the light efficiency.



PHOTO, COURTESY RILCO LAMINATED PRODUCTS

Delivered on the Dot . . . LAUCKS-GLUED ARCHES

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... by-passing critical materials... are delivered on time
to hundreds of wartime construction jobs today.

Thus glue chemistry and practical gluing experience combine again to do an outstanding production job. Another example of the way I. F. Laucks, Inc., is helping many of the largest makers of laminated construction.

Whether you are making or specifying laminated arches and beams, boatcraft, aircraft, or housing, etc. Laucks—world's largest makers of waterproof and water resistant glues—can help you. For Laucks glue and Laucks service—wire, write or phone America's glue headquarters.

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 Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.



LAUCKS CONSTRUCTION GLUES

Consult LAUCKS—America's Glue Headquarters

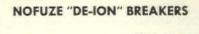


Whether in khaki or "civvies", Nofuze Breakers provide circuit protection that can be accurately fitted to job conditions.

Today, when most Westinghouse Breakers are "mobilized" to protect war circuits, they are keeping current flowing safely, with minimum interruptions in war production.

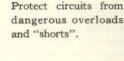
When peace comes, with its equally great problems of conversion to civilian goods, Nofuze Breakers will permit economical and speedy change-overs. For example: In the larger frame sizes, trip units are removable and interchangeable. Thus if your conversion results in heavier or lighter loads, the present trip unit can be quickly replaced with one of the required trip rating. It's as easy as that.

Ask your Westinghouse representatives for help on your war circuit problems. Or write direct to: Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., Dept. 7-N. J-60539





Prevent harmless overloads from interrupting war production.





Restore service instantly with just a flip of the switch.



Westinghouse NOFUZE CIRCUIT PROTECTION

BUILDING REPORTER

(Continued from page 8)

gauge metal pipe with welded seams, and bell and spigot joints, insulated with a high temperature prefabricated Fyrex asbestos insulation. Flue is supported from the ceiling joists (maximum weight—100 lbs.). It can also be installed for floor heaters. Safety is not dependent on air circulation between flue and insulation. A patented slip joint allows for expansion and contraction of flue. A spacer ring in roof jack automatically keeps flue a safe distance from roof. The outer metal

casing completely covers and protects insulation. Vitroliner is made in stock sizes from 3 to 10 in. diameter, 6, 12 and 24 in. in length, 45° and 90° elbows, standard tees with cleanout cap and drain connection.

Manufactuer: Condensation Engineering Corp., 2515 Archer Ave., Chicago.

LUNCH BOX for hot and cold foods.

Name: Mealpack Container.

Features: Designed to provide nutritious meals for war workers, this new-style lunch box will be available postwar for caterers, restaurants, bus and airlines, etc. Hot and cold foods packed side by side may be served up to five hours afterward. Container consists of china-



ware food and beverage compartments with paper lids insulated within a pressed steel cover. A menu is enclosed for worker to order the next day's meal, which simultaneously authorizes charging his account. From these menus the kitchen or caterer may audit exact marketing and food preparation needs for the next day. An important advantage of the system is the saving in dining and kitchen space in plant designs, as available kitchen equipment within a radius of several miles can be employed. Manufacturer: Mealpack, Inc., 152 West 42nd Street, New York 18, N. Y.

PLASTIC line of bathroom fixtures. Name: San-Duro All Plastic Fixtures. Features: Highly stylized and matching accessories include soap dish, tooth brush and tumbler holder, towel bar, faucet handles, etc. Each item designed from a durability and utility angle, and several innovations are apparent.

Manufacturer: Eclipse Plastic Industries, Inc., 5151 North 32nd St., Milwaukee, Wis.



PAINT PROTECTOR prevents saponifying. Name: Rapid-Seal.

Features: One of the common causes of paint failure on concrete and plaster is saponification — the paint turning into soap by the reaction of lime. This paint protector of gum prevents this chemical reaction or remedies it. One coat is sufficient to provide a smooth, hard coating to the paint, and it is claimed to triple the wearing qualities of the surface.

Manufacturer: Evercrete Corp., 19 West 44th St., New York 18, N.Y.

(Continued on page 146)



WHAT CAN Calcium Chloride DO For WINTER CONCRETE?

Cold weather concreting need not be slow, expensive, and hazardous. The addition of Solvay Calcium Chloride to cold weather concrete speeds up operations through quicker set and high early strength—cuts costs by shortening the protection period—reduces freezing hazards by furnishing extracold weather protection. In addition, it increases final strength—provides uniform dependable curing—saves on forms and equipment—increases density and hardness.

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Solvay Calcium Chloride has been used in concrete work for over 25 years. Tested or approved by the National Bureau of Standards, Highway Research Board, American Road Builder's Association, Portland Cement Association, Investigating Committee of Architects and Engineers. For complete story of what Solvay Calcium Chloride will do for cold weather concrete write for free 48 page booklet today!

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 - 4 Produces soft light with better seeing qualities ends eye-strain
 - 5 Highly efficient—30 to 40 lumens per watt
 - 6 Instantaneous starting no starters or ballasts needed
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 - 9 Made in standard units for easy replacement
 - 10 Large range of colors for color control

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BROADWAY MAINTENANCE Corp.

47-47 35th Street, Long Island City, N. Y. 353 Halsey Street, Newark, N. J.



BUILDING REPORTER

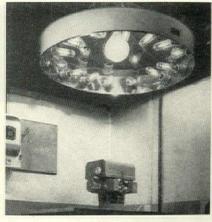
(Continued from page 144)

GYPSUM BOARD for concrete forms. Name: Gypsum Formboard.

Features: Although still in an experimental stage, this new gypsum board, now substituting for lumber, is turning out better looking concrete molds and saving labor. The board is specially coated so that the concrete will not adhere to its paper surface. Consequently, this gypsum board does not have to be oiled as does lumber.

Manufacturer: National Gypsum Co., Buffalo, N. Y. SIMULATED SUNSHINE GENERATOR will perform accelerated fading, aging and weathering tests.

Features: A combination of fifteen lamps of various spectral energy emissions closely approximates summer sunlight. It is now being used by the Folmer Graflex Corp. to test light tightness of photographic apparatus for the armed forces. Future use includes extensive tests on dyes, paints, varnishes, roofing materials, textiles and rubber, or any other materials that must resist the influence of sunshine. The fifteen lamps in the unit are a combination of two types of mercury vapor lamps and one 1,000 watt tungsten incandescent lamp, mounted in a chromium re-



flector. Radiations cover an area of 1,256 sq. in.

Manufacturer: Hanovia Chemical & Mfg. Co., Inc., Newark, N. J.

LIGHTWEIGHT FLUORESCENT unit of improved channel strength.

Name: Super-Illuminator.

Features: To compensate for WPB steel limitations, a die-formed, one-piece full channel has been developed with unique metal bends. These provide channel strength on the horizontal and on the torque. All wiring auxiliaries are enclosed. Flexible supports allow quick reflector removal, and starter switches are accessible without removing lamps. Reflector is formed of Masonite and finished in baked synthetic enamel. New unit comes in sizes for two and three 40-watt and two 100-watt lamps. Manufacturer: The Edwin F. Guth Co., 2615 Washington Ave., St. Louis, Mo.

CEMENT ADDITIVE improves weather resistance of highways, airplane runways.

Name: Vinsol.

Features: A tablespoon of this pine wood resin added to each sack of cement during grinding has been found to eliminate surface scale caused by freezing, thawing and salt applications for ice removal. Test roads, on which strips of resin-treated Portland cement were laid side by side with untreated concrete, have been constructed in fifteen states. These roads show that in states where the strip of untreated concrete has deterioriated due to winter conditions, the resin-treated concrete strip has been unaffected. The problem of surface scale, which first affects the top 1/4 in. of a concrete road, has always confronted highway engineers, and in recent years the use of chemical compounds, usually chlorides, to remove ice has increased this deterioration. Scaling exposes the coarse aggreate which not only mars the appearance of a road but also impairs riding qualities for traffic.

Manufacturer: Hercules Powder Co., Wilmington, Del.

(Technical Literature, page 148)



installed at Douglas Aircraft Chicago Plant

Over 400 Herman Nelson Vertical Shaft Propeller-Fan Type hiJet Heaters are supplying comfortable temperatures in working areas at the mammoth new Chicago Plant of the Douglas Aircraft Company. Because Herman Nelson

hiJet Heaters provide heat where it is wanted and when it is wanted, without waste of fuel or space, they are vitally important to the world's largest exclusive cargo-plane manufacturing plant. In addition to many models, sizes and arrangements of hiJet Heaters, The Herman Nelson Corporation manufactures Autovent Fans and Blowers for industrial, commercial and public buildings. Thus practically any heating or ventilating problem can be most satisfactorily and economically solved with Herman Nelson equipment.



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Ceco STEEL Windows

CECO STEEL PRODUCTS CORPORATION, MFG. DIVISION, 5701 W. 26th St., Chicago

NOVEMBER 1943 147

TECHNICAL LITERATURE

SOUND EQUIPMENT. Sound Equipment, 28 pp., 85x11. Attractive catalog lists and illustrates complete line of amplifying, recording and intercommunication systems. Bell Sound Systems, Inc., 1183 Essex Ave., Columbus, Ohio.

FIRE CODES. National Fire Codes for Flammable Liquids, Gases, Chemicals and Explosives, 1943, 504 pp., 6x9. Present code, which supersedes the 1938 edition, brings together for convenient reference the many standards dealing with the various phases of regulation of these hazards. Codes are purely advisory, but are used widely as a basis of law, in addition to their general use as a guide to good practice and for insurance purposes. It specifies measures that will provide reasonable fire safety without prohibitive expense or interference with established industrial processes and methods. Compiled by Robert S. Moulton, Technical Secretary, National Fire Protection Assn., 60 Batterymarch St., Boston 10, Mass. Price \$3.

PRESERVED WOOD. Economical and Permanent Construction with Pressure-Treated Wood, 26 pp., 8½x11. New book is designed to serve as a guide in material selection and has many excellent illustrations of typical installations in specific fields. One section explains the processes by which lumber is treated to protect it. Another suggests the engineering service offered by the company to determine the proper treatment of lumber to assure permanence under severe conditions. Wood Preserving Div., Koppers Co., Pittsburgh, Pa.

GYPSUM BOARD. Multiple Unit Hog House Plan, 4x9 folder. One of easily constructed farm structure plans with Gold Bond Gypsum boards.

Gypsum Roof Planks, 6 pp., 8½x11. Laminated planks can be nailed directly to wood joists. Folder includes specifications and construction details.

Gypsum Sheathing, 4 pp., 6½x7. Folder describes how gypsum board can be used as a temporary exterior board or as sheathing under wood, stucco, shingles or brick. National Gypsum Co., Buffalo, N. Y.

PLYW00D. In Service on All Fronts, 16 pp., 8½x11. Attractive booklet emphasizes the many new developments which the war has brought to the plywood industry, and stresses peacetime applications of these developments. It includes more than 30 photographs illustrating wartime uses, showing not only flat plywood products but molded, metal-faced, waterproof and tubular products as well. U. S. Plywood Corp., 616 West 46th St., New York, N. Y.

WOOD AND PAPER. War Products Division Research and Development, 28 pp., 83kx11. Handsome booklet describes war activities of company and products it has developed for war effort that will have many postwar applications. Kimberly-Clark Corp., War Products Div., Neenah, Wis.

FORESTS. A Bibliography of Literature and Visual Aids for the Study of Our Forest Resources and Their Conservation, 10 pp., 6x3. This enlarged educational bibliography lists materials for teaching forest resources and conservation. It describes and illustrates the three supplementary texts, forest map, forest products chart, series of four posters and motion picture on U. S. forests. American Forest Products Industries, 1319 Eighteenth St., N. W., Washington 6, D. C.

ENAMEL, Porcelain Enamel, the Lifetime Finish, 24 pp., 8%x10%. Booklet presents useful data on porcelain enameled iron. It gives engineering information, methods of making and drawings of how to design products of this material. The American Rolling Mill Co., 139 Curtis St., Middletown, Ohio.

CONTROLS. Photoswitch Electronic Level Controls, 4 pp., 8½x11. Folder describes a series of rugged electronic relays for control of liquids and powders. Types are available to provide single level indication and control, on and off pump control at two levels, boiler feedwater control and tank condensate signals. Installation merely requires attaching the probe fitting to surface of tank. Photoswitch Inc., 77 Broadway, Cambridge, Mass.

PUMPS. Westco Industrial Pumps, Catalog No. 43, 60 pp., 8½x11. Handsome catalog with duotone illustrations gives a complete description of turbine-type pumps. Pomona Pump Co. Div., Joshua Hendy Iron Works, 206 East Commercial St., Pomona, Calif.

AIR CONDITIONING. Air Recovery—Heat Recovery, 8 pp., 9½x11¾. With tables, charts, illustrations and examples, bulletin describes equipment to use and reuse properly conditioned air, effecting savings in fuel. W. B. Connor Engineering Corp., 114 East 32nd St., New York 16, N. Y.

CONSERVATION. Industrial Heat and Power Conservation Manual, 20 pp., 8½x11. This manual gives practical engineering methods of calculating and reducing preventable heat and fuel losses and nine typical examples of savings. Heat loss estimate sheet has a simplified method of surveying losses and of savings that can be effected in plant concerned. Prepared by Industrial Mineral Wool Institute, 441 Lexington Ave., New York, N. Y.

FUEL CONSERVATION. Less Fuel vs. Comfort, 1 p., 17x22. In connection with the ASHVE fuel conservation program, this article has outlined conservation measures and given a check list of 57 items which will improve heating plant performance, reduce heat loss from buildings and provide for effective operation of heating system. American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York, N. Y.

DRAFT CONTROL Preferred Draft-A-Justor Converts Boiler Stack Losses into Savings, Bulletin No. 800A, 16 pp., 8½x11. Timely bulletin shows how, by installation of a simplified, automatic draft control device, it is claimed it is possible to effect savings of 10 to 30 per cent in fuel consumption of natural draft boilers. Given in bulletin are data en effects of this control of draft on boiler efficiency, maintenance, firing control and control of fly ash and cinder nuisance. Preferred Utilities Co., Inc., 1860 Broadway, New York 23, N. Y.

REQUEST FOR LITERATURE

Wolf & Glucksman, Engineer and Architects, 850 Broad St., Newark, N. J. would like to receive samples and literature of building materials, relating specifically to postwar residential building.



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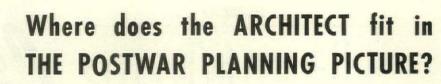
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- 2. Getting the planning work into capable hands.

By capable hands we mean architects and engineers—men with whom planning is a lifetime business—whose experience can be, and should be, employed now to design projects that will provide immediate postwar employment.

This suggestion is not, frankly, a stroke of altruism on our part. Rather, it is the result of our firm belief that American business will be more stable, more secure, in the postwar period if the building industry, America's No. 1 peacetime employer, is ready—with blueprints and specifications—for immediate conversion to peacetime activity.

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THIS WAY. when your boy comes home he'll have a job..immediately

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There must be many jobs for many returned soldiers; and America naturally looks for them first to her number one employer of the past, the huge Building Construction Industry (comprised of hundreds of relatively small firms). This industry will provide almost countless postwar jobs quickly, if . . .

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If you will use your personal influence to see that plans for many kinds of postwar buildings are started soon, and are completed and ready before the war ends, so construction can begin quickly: plans for your new, better, more eco-

nomical home; for your new factory or factory. addition; for your local schools and hospitals; for apartments and hotels; for commercial buildings and stores; for farm buildings, etc. Good planning often takes lots of time.

Fortunately, numerous talented architects and engineers, most of them outside the area of military service, are available to start plans right now. Please call in your architect; ask your school and hospital boards to act; urge your authorities (municipal, state, federal) to begin forward planning now . . . for full postwar employment quickly.

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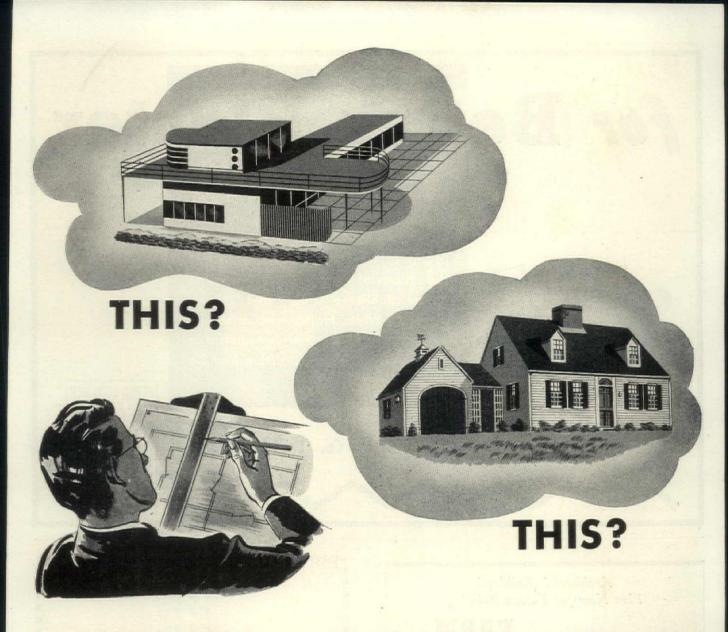
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NOVEMBER 1943

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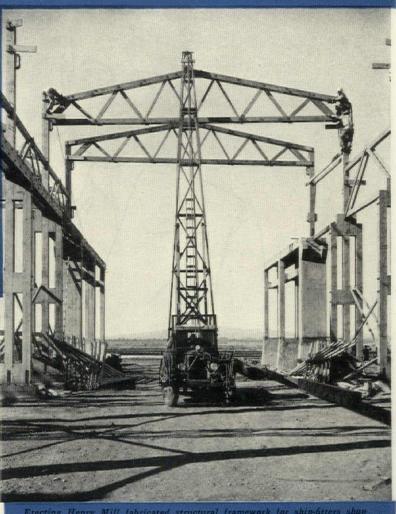
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Main Office and Plant: 3001 North Starr St., Tacoma 1, Washington



7½ million men will be employed in immediate postwar construction -if American business makes its plans now!" Statement by ERIC A. JOHNSTON President, Chamber of Commerce of the United States

How can private industry open up fields for employment during the difficult transition state after the war? "Well, there's one industry which won't have a reconversion time lag to Well, there's one industry which won't have a reconversion time lag to overcome—if we all plan now! That's the construction industry. In war and plan now! of machines, materials and mannower. All the peace, it uses the same type of machines. overcome—if we all plan now! That's the construction industry. In war and peace, it uses the same type of machines, materials and manpower, the construction industry will need to go to work immediately are the construction industry will need to go to work immediately are the construction industry will need to go to work immediately. peace, it uses the same type of machines, materials and manpower. All the construction industry will need to go to work immediately are the contracts for the iob. Just as there will be a great accumulated demand for construction industry will need to go to work immediately are the contracts for the job. Just as there will be a great accumulated demand for tracts for the job. Just as there will there be a huge backlog of requireconsumer goods after the war, so will there be a huge housing and public ments for rebuilding and expansion of plants. for new housing and ments for rebuilding and expansion of plants. consumer goods after the war, so will there be a huge backlog of requirements for rebuilding and expansion of plants, for new housing and public works which have been deferred.

"Employment in new construction, exclusive of maintenance and repair work,
will reach a neak after the war of three million men—an the site. In addition. Employment in new construction, exclusive of maintenance and repair work, will reach a peak after the war of three million men—on the site. In addition, another four-and-one-half million will be employed off the site, in the production and transportation of materials.

"That's seven-and-a-half million good jobs immediately after the war for carpenters, plumbers, bricklavers, architects, electricians, engineers and a

That's seven-and-a-half million good jobs immediately after the war for carpenters, plumbers, bricklayers, architects, electricians, engineers and a host of others—enough jobs to take up the slack in the transition period and prevent mass unemployment.

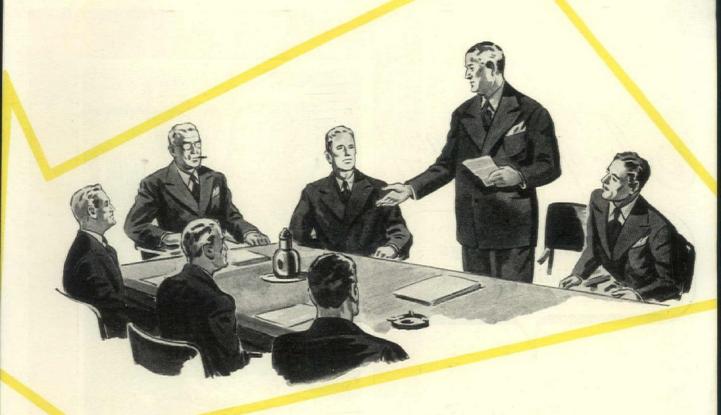
"But those men won't be put to work rebuilding America for a long time individual business men, who war unless we plan today. —all of us. And it means city, county after the war unless, manufacturers—all of us. And it means city, retailers, wholesalers, manufacturers—all of us. And it means city, and state governments. Private building will account for about two and state governments. retailers, wholesalers, manufacturers—all of us. And it means city, county and state governments. Private building will account for about two-thirds of postwar construction—it's the American business man's responsibility. and state governments. Private building will account for about two-thirds of postwar construction—it's the American business man's responsibility to plan with his architect and engineer right now!" TRUSCON STEEL COMPANY, Youngstown, Ohio

of postwar construction—it's the American busines to plan with his architect and engineer right now!"

SUBSIDIARY OF REPUBLIC STEEL CORPORATION



Prepare Plans Now! What are your postwar building requirements? How big-bow difficult-how accurately planned is the job? To get it done right-on time-and at the lowest possible cost, you must plan with your architect and engineer during the months ahead. Call them now!



AMERICAN BUSINESS LEADERS ARE ROUSING AMERICAN BUSINESS MEN TO Planning-action NOW!

• Through the medium of Truscon-sponsored messages, the leaders in American national life are spurring responsible individuals and organizations to—

"Start planning with your architect and engineer right now!"

These messages are appearing regularly in Business Week and Modern Industry . . . two important business and industrial magazines that reach hundreds of thousands of people responsible for tomorrow's construction.

Last month, Major General Philip B. Fleming, Federal Works Agency Administrator, sounded the "Plan Now!" keynote in this new Truscon series. This month, well-known Eric Johnston, President of the United States Chamber of Commerce, lends the weight of his support to the worthy campaign. And month after month voices of authority will carry on.

Truscon is planning now, to help get more planning jobs immediately . . . and to have new and better Truscon Steel Products for immediate postwar construction.

Are you planning

or doing Rube Goldbergs for that building boom?



THESE DAYS, many home builders are filled with bright ideas about tomorrow.

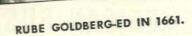
At the drop of a pencil, they'll tell you:

"A building boom is on the way sure thing!

"Thousands of war workers, now in trailers, or temporary shanties, will be on the hunt for nice new homes...Thousands more now with the Fighting Forces will come back, marry 'the girl' and want to set her up in a modern house...Yes—two thirds of America is crying to be rebuilt the minute the war is over!"

That's true.

But the building industry won't boom after the war because of need alone—any more than it boomed before the war when the need was almost as great. It's up to the home-building industry to light the fuse.



With fan (I) flapping across the table, and weight (A) clunking past diners' ears, and gears (C and D) and ratchet (F) screeching overhead, this air conditioner would more likely terrify timid guests than cool overheated ones. Even back in the 17th century, people dreamed and planned new gadgets for the home — most of which (needed or not) never got built.



But-how?

Architectural Forum says: "Arouse public opinion and guide the planners in gradually making each community into a better place for your wife, your children, your neighbors, and you."*

And the editor suggests the way to do it is to reach "an informed group of active citizens in every community."

The most economical and effective way to reach this "informed group of

active citizens" is through the pages of TIME—the first-choice magazine of community leaders—the magazine they turn to for information to help them think ahead and plan ahead and see the shape of things to come. The magazine they believe in and vote their favorite over all the others they read.

*From "Planning With You," a 16-page illustrated booklet about post-war building which TIME will be glad to send you on request.



THE GATEWAY



TO THE BUILDING MARKET



War and postwar buildings can have the same economic and structural advantages which the architects for the new central building of the Piedmont Sanatorium, Burkeville, Va., obtained with the use of architectural concrete.

Architectural concrete was selected to create an attractive, firesafe building embodying all essentials and insuring maintenance at low annual cost.

The economy and broad adaptability of architectural concrete to practically any desired form or mass recommends its use for construction of schools, hospitals, public buildings and factories.

Rugged strength and structural continuity are inherent in architectural concrete because walls and ornamentation are cast integrally with frame, floors and roof in one fire-resistant material.

Our construction superintendents and engineers will gladly assist architects and consulting engineers to get the maximum economy and service from architectural concrete in the design and construction of war or postwar buildings.

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

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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.

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Wood is often referred to as the *rediscovered* material, due to its development by science for plastics, laminations and heavy construction.

Engineering science that developed the Teco Connector System of timber construction is responsible for the position timber occupies as a leading heavy construction material

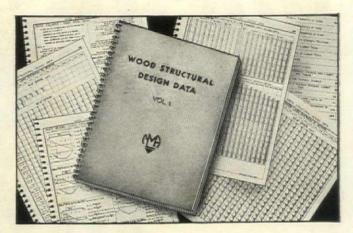
The Teco timber system serves our war effort . . . it will serve you in peace times too.

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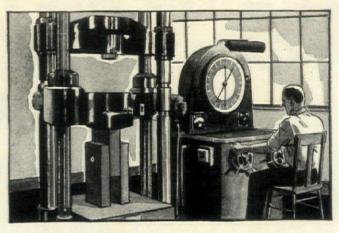
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The TECO Ring Connector spreads the load on a timber joint over practically the entire cross-section of the wood ... brings the full structural strength of lumber into play.



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Fuel is a vital weapon of war. It is imperative that boiler plants fired with fuel oil, transfer every last heat unit to useful power or heat.

To make sure that your heat or power plant is delivering all the steam of which it is capable with the least possible fuel consumption . . . check your operation against the ten points listed opposite.

All mechanical parts of burners should be kept clean and in good operating condition. Worn parts should be promptly replaced. Keeping equipment in good condition will save you many times over the cost of replacements.

Temperature of oil supplied to burners should be watched carefully. Bunker "C" or No. 6 oil should be supplied to burners at a viscosity of 150 SSU for best atomization.

Atomizers should be properly adjusted for best position with relation to air register throat.

No more air than is absolutely necessary for complete combustion of the fuel without objectionable smoke should ever be supplied to the burners. If at all possible a recording flue-gas analyzer should be installed, if a recording analyzer is not installed, frequent analysis of combustion gases should be made with a hand analyzer.

The fire side and water side of boiler surfaces should be kept clean, as soot on the first and scale on the second will reduce boiler efficiency. A definite schedule for cleaning tubes should be established.

Uptake gas temperature should be checked against boiler manufacturer's guarantees. Too high a temperature in the uptake is usually an indication of a dirty boiler.

Boiler baffles should be maintained in good condition. Leakage through baffles will allow partial short-circuiting of the gases, which will also cause a high exit gas temperature.

Boiler settings, tube doors, explosion doors and boiler entrance doors should be kept airtight. Infiltration of air through any of these parts causes a serious loss in efficiency.

Test checks should be made frequently on the overall efficiency of the boiler plant.

Auxiliary equipment such as feed water heaters, pumps, etc., should be maintained in the best possible condition.

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Lumarith and Vimlite are non-shattering, extremely light in weight, easily installed, and resistant to adverse conditions. Lumarith is a clear transparent with a light transmission value over 90%. Vimlite is a wire-based plastic, tough, lasting, transmitting sunlight in a diffused non-burning pattern.

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BONDS

The "OVERHEAD DOOR", with tracks and hardware of Salt Spray Steel, is built for years of fast, uninterrupted service. Designed as a complete unit to fit any opening, this quality, weathertight, tamperproof closure is a positive "must" in thousands of war production plants. And when homes are built again, The "OVERHEAD DOOR", with the Miracle Wedge, will be available for residential use.

