# FHE ARCHITECTURAL FORRUNI

AUGUST 1944

# AUGUST 1944

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

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VOLUME 81. NUMBER TWO

# DESIGNIN

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# FORUM OF EVENTS

POSADAS PRINTS WERE ISSUED IN VAST NUMBERS

Chicago Art Institute's Posada show highlights the growing interest in our native artistic traditions.

The simple plywood and glass display case attached to the freestanding wall adds interest and increases stability.

Reverse side of wall is jet black. It forms an admirable background for Posada's favorite death's heads.



To accommodate a brief, explanatory exhibition entitled "Who Is Posada?", Mies Van der Rohe recently redesigned the small Gallery of Art Interpretation at the Art Institute of Chicago. The simplicity of line, freedom of space and contrast of texture, typical of Van der Rohe's work, seem especially well adapted to gallery design and to the work of Posada in particular.

Educationally, the idea of a condensed introductory show to familiarize patrons with the background and technique of the artist represented in the main exhibition halls, is an excellent one. In the case of the Gallery of Art Interpretation, Van der Rohe has done an outstanding job. Due to some unfortunate earlier remodeling when a large room was subdivided, the gallery to begin with was very high, badly proportioned and badly lit. Van der Rohe throughout his treatment stressed horizontal lines and black and white contrast. Prints on the blank wall spaces are hung in a narrow strip. The deep, black baseboard cuts the wall height. A freestanding wall baffles the light and conceals two large unsightly windows. This independent element, black on one side and white on the other, serves as a simple but important device for tempering an ill-proportioned space and lending character to the exhibit proper. Some carefully placed display cases round out the design.

(Continued on page 6)

COLUMN

WAINSCOT

DOORS

THE designers of public buildings, terminals, hospitals have proved the exceptional adaptation of Formica laminated plastic surfaces to such uses as column coverings, wainscot, doors and counters. The materials has been used for those purposes in a very impressive list of buildings.

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OUNTERS



### FORUM OF EVENTS



Virtually unknown in the U.S., Posada's nineteenth century prints display daring contrasts of dark and light and undisguised economy of line which should have won him recognition in this country long before now. Known as "print-maker to the Mexican people," Posada never suffered from artistic ambition. He was, for the better part of his life, a salaried employe of a Mexican publisher and conducted a sort of picture journalism of his own for the illiterate peons, the people to whom he belonged. He appealed primarily to the violent emotions of the Mexican peasant, depicting political scandals, crimes, fires and accidents in such a way as to make text superfluous. His zinc engravings were usually printed on cheap paper, some of them reproduced millions of times. In Mexico he is called the greatest popular

(Continued on page 114)



NOTE CLARITY AND PRECISION OF MIES VAN DER ROHE'S EXHIBIT DESIGN



Man murdering his sister.



Mother murdering her child.



### POSTWAR DESIGN OF THE MONTH

Dreamed up by an uninhibited visionary whose name is best witheld for personal security reasons, is this mobile bedroom that pulls out, like a dresser drawer, into the night. Since its creator ignores a solution as simple as that of rolling back the roof, it must be assumed that the device is solely for the use of apartment dwellers. Whatever its purpose, the structural complications are appalling and the social implications, worse. The theme of organic community planning is certainly developed to its peak. Telephoning the tenants upstairs and asking him to kindly roll out his room might provide a few minutes' privacy, but imagine what morale will be when the town's snappiest blonde will be on full view any clear morning complete with rejuvenating cream, chin strap and curlers.



Samuel Marks, Architect. Noel Flint and C. W. Schonne, Associate Architects

## BEAUTY . . . . DEMONSTRATED BY ADAPTABILITY TO MODERN CONCEPTIONS

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s BEAUTY only SKIN DEEP?

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FITTINGS

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11

## PRODUCTS AND PRACTICE

DEHUMIDIFYING-the remedy for mildew, dampness and the discomfort caused by high humidities.

High relative humidities with their excess of water vapor have long been a problem connected with summer heat and cooler building areas such as basements. Condensation is always a problem where warm, humid air comes in contact with cool surfaces. This condition is most prevalent along both coasts and in the southern states where extremes of discomfort are reached in hot weather. Mildew, mold and rust in closets, stock-rooms, bank vaults, museums and similar places are caused by condensation of moisture in the air. It ruins wall paper, causes buckling window sills and woodwork, and hastens food spoilage. If uncontrolled, it can damage chemicals, and other products during the process of manufacture.

### CONDENSATION CONTROL

One of the most common problems is that of basement moisture. Most people think that air circulation will cure condensation, but opening the windows of a cellar often aggravates this condition. If the outside air is dry, the situation will be improved. But hot, humid air flowing in from the outside will merely increase condensation.

For instance, air at a temperature of 90° F. containing 90 per cent humidity will hold 1.921 lbs. of water vapor for each thousand cubic feet of air. If air of this temperature and humidity were drawn into a cellar where the temperature was only 70° F., the air, upon cooling to cellar temperature, could hold only 1.151 lbs. of water vapor at 100 per cent humidity. This means that for every thousand cubic feet of air drawn into the cellar approximately  $\frac{3}{4}$  lb. of moisture must drop out somewhere. Condensation occurs first on objects with a cooler surface than the surrounding air.

Since all these difficulties are caused by excess humidity, the obvious way to overcome them is to remove the moisture. This can be done by mechanical action, but the cheapest and simplest way is by contact of wet air with a dessicant or dehydrating agent.

There are two types of dessicants in common use for this purpose: *adsorbers* which condense water vapor on their inner surfaces, but can be reactivated, and *absorbers* which change chemically or physically as they absorb water. Silica gel and activated alumina are examples of the first type. Dry calcium chloride is the most widely used of the second type, although solutions of



**RELATIVE HUMIDITIES** of over 50 per cent are considered too high for comfort. In both coastal regions summer humidities are extremely high, in the western half of the country, low, and in the eastern part they vary around the median. Map is based on reports from 200 first order weather bureau stations over a period from 1899 to 1938.

lithium chloride, calcium chloride and others are sometimes employed.

### CHEMICAL ABSORBERS

Small dehumidifying units which efficiently remove water vapor from a limited amount of air use blocks or flakes of calcium chloride almost exclusively. The chemical, which must be constantly replenished, may be contained in either bags, baskets or wire cylinders equipped with trays to catch the moisture as it drops down. Each pound of calcium chloride is capable of absorbing 1 to 3 lbs. of water depending on its efficiency-the amount of surface area exposed. The general efficiency of a unit depends on the amount of chemical employed as well as its rate of absorption. A unit containing 10 lbs. of the chemical can remove 1 to 3 gal. of water from a space of 800 to 1,000 cu. ft. High humidity will cause fast chemical action, lowered humidity will slow the action.

These units are most effective in stock rooms, closets, game rooms, record vaults, dark rooms, food storage spaces and other relatively small closed areas.

Prices range from 49 cents for a small, closet-sized cake of chemical to about \$25 for the largest basement unit with separately purchased chemical. However, one dehydrator—even a large unit employing 40 lbs. of calcium chloride—may not be very efficient in a really humid cellar. Two to four smaller units placed in the dampest parts of the room should be more effective than a big one in eliminating wet walls, mustiness and dripping pipes.

For the maximum efficiency in bank vaults, one unit for every 1,000 cu. ft. is recommended. The triple V-shaped basket type of dehydrator, suspended from a wooden frame, has been so successful that department stores are now buying the chemicals for them in carload bulk. Some builders use these units in their model houses so that prospective buyers will not mistakenly believe that the basement leaks.

One objection to these small dehydrators, however, is that they use up the chemical so quickly. If a 49 cent unit lasts a week, it is not taking enough moisture out of a closet. A 10 lb. unit used in a very wet basement should last just two days. With a compressed block chemical costing \$2.00 this equals \$1.00 a day, an expensive proposition. The loose chemical bought in 100 lb. lots costs between 23/4 and 3 cents a pound, a more economical solution.

#### LARGER UNITS

These bag and basket dehumidifiers are good as far as they go. Small cabinets filled with the same chemical, but having fan-controlled circulation, are better. Large fan-equipped units the Calorider or the Kaufman chemical dehydrator—are necessary for such large areas as museums, laboratories and extended basement space. They, too, are the absorber type using calcium chloride flakes, but their action is automatically controlled by a humidistat which starts and stops the fan motor to maintain any desired humidity. They are recommended for spaces of 5,000 to 50,000 cu. ft. and range in price from \$65 to \$800 depending on their size.

A successful application of the Kaufman model is in the Museum and Library of Cranbrook Academy of Art at Bloomfield Hills, Michigan. This building has a volume of 337,000 cu. ft. In 1943, six chemical dehydrators with a total air delivery volume of 3,700 cfm. were installed. Their initial cost was \$1,834, their estimated operating cost 24 cents an hour.

Critics of these chemical dehydrators are apt to predict that the machines will eat themselves away in a short time because of the corrosive action of calcium chloride. However, Mr. Kaufman is able to explode this theory. He reports that three of his dehydrators have been drying air containing acid vapors 24 hours a day and often seven days a week since 1933, with only minor repairs costing about 5% per year.

#### SUMMER COMFORT

Dehumidifying as a means of eliminating injurious condensation is important. But it has another function with a more direct effect on personal comfort. On humid summer days people feel hotter than they would if humidity were low. This debilitating effect may be eliminated by dehydration of the air. Dehumidification has therefore always been an integral part of summer air conditioning. In spite of this, many architects have been disappointed in the development of air conditioning equipment, and a general complaint has arisen that air-conditioning is cold and clammy.

In the past the two functions of dehumidification and cooling were handled together, with humidity reduction depending solely on the amount of temperature reduction accomplished. Since humidity and heat in air fluctuate quite separately, this has been the cause for much of the dissatisfaction with air-conditioning.

The newer method, however, separates the two functions so that they work independently of each other. If the day is hot and dry only the cooling unit is turned on. If cool and humid, only the dehumidification unit, for dehydration of air alone provides comfort up to a temperature of 80° to 83° F. Regardless of how the relation between cooling load and dehumidifying load may fluctuate, desired indoor conditions can be maintained. There





**DNE POUND BAG** of dessicant (above) can be used either in or out of its carton to remove moisture in small areas. Water drips from carton into pail or from bag into carton, depending on method used. Double basket (right) is efficient because of great surface exposure afforded the loose chemical.





**CANISTER MODELS:** Water-Sorber unit (left) employs 10 Ibs. of chemical blocks in a small model, 40 lbs. in the larger size, is equipped with its own container for catching water as it drips down. Airite dehydrators (center) come in closet and basement sizes, the former pine-scented. Dry-A unit (right), designed to stop mildew, rust and dampness in bank vaults, holds chemical in metal grilled casing, lasts for a year without refill.

### FAN - EQUIPPED DEHYDRATORS:

1.) Water-Sorber circulator provides cabinet for dehumidifying unit and fan to circulate dry air, can hold fairly low humidity in spaces up to 2,000 cu. ft. 2.) Solvay Air-Dryette is a simple cabinet dehydrator equipped with fan. 3.) Kaufman dehydrator, a large cabinet with fan and humidistat control, is effective for dehumidification of areas from 5,000 to 50,000 cu. ft. 4.) Calorider units, for spaces of 5,000 to 8,000 cu. ft. also have fan and humidistat control. Portable model is shown.





### PRODUCTS AND PRACTICE





SILICA GEL DEHUMIDIFIER is a large and efficient unit used for extensive areas and particularly effective as part of air conditioning. Bryant and Carrier models are almost identical. Wet air hits a rotary drum (upper right) covered with silica gel which adsorbs moisture, dry air is ejected. Drum rotates, coming in contact with hot air which removes water from gel, then with cool air which reduces heat so gel can again adsorb moisture. Lower diagram illustrates auxiliary equipment and flow of air necessary for effective dehumidification.

is also a saving in energy and decreased wear when the two systems are operated separately and only when needed.

Another point, brought out by a test at the University of Illinois' Research Residence, is the fact that standard moisture load calculations are not accurate. In one instance, moisture calculated on the basis of incoming air and room occupants amounted to 5,240 BTU per hour. Actual moisture obtained from the air, however, fluctuated between 9,640 and 11,620 BTU per hour. This discrepancy is explained by the fact that moist air not only leaks into a structure through openings, but moisture itself permeates all materials in amounts dependent on the difference in vapor pressure between inside and outside air. Because of this error, many of our air conditioning systems today carry excessively high humidities.

### CHEMICAL ADSORBERS

The adsorption method of dehumidification is most commonly used in airconditioning where cooling and dehydration are separated. The usual dehydrating agent is silica gel, a glasslike substance composed of small capillaries upon the inner surface of which water vapor condenses. The process can be reversed and the adsorbent freed of its moisture by passing through it a stream of hot air.

Units employing this type of dehydration can, of course, be installed separately without a cooling system and are a most powerful dehumidification source. In different sizes they handle from 460 cfm. to 6,000 cfm.

AIR

The units are made in two basic ways. A stationary bed type places the silica gel in two screened trays. Valves pass the wet air through one batch of gel while the reactivating agent is passed through the other batch. At intervals air and reactivation medium are automatically exchanged.

The rotary bed type is more common and is used in both the Carrier and Bryant dehydrators. Here a cylinder or drum is filled with silica gel through which three independent air streams flow as the drum revolves. One stream is the wet air to be dehydrated, the second is heated air to reactivate the gel. The third stream cools the gel sufficiently so that it can again adsorb moisture. These three operations occur simultaneously.

The hot air necessary for reactivating the gel requires an air heater powered by gas or steam. Some sort of coolant is also needed to provide a temperature reduction in the air after it leaves the silica gel bed. City water or well water below 70° F. may be used if there is an adequate supply. Refrigerated compressor units are effective but would probably cost more to maintain.

These adsorbing dehydrators are relatively expensive, requiring a complete engineering job for installation. Including duct work and electrical work in the cellar, a small one would cost approximately \$900. Prices are gradually descending, however. A 500 cfm. unit formerly had a list price of \$900, now is down to \$410.

Because of their relatively high initial cost, these installations are prohibitive to most homeowners and find their greatest usefulness in industry. To supply a less expensive method of dehumidifying combined with cooling, the Kaufman chemical unit, already discussed, may offer possibilities. An idea that has been worked on, but not yet merchandised, is to combine the unit with heating and cooling apparatus in one cabinet. Using city water at a temperature of less than 70° F., a unit equivalent to a threeton refrigeration job could be operated for less than 10 cents an hour, including water, chemical and power costs. It is doubtful whether this water cooling would be effective on a really hot day, however.

H. W. Heisterkamp of the Bryant Heater Company, which makes a silica gel dehumidifier, feels that the automatic features of the continuous silica gel machine justify its higher cost for the larger 3 ton installation discussed above, since it eliminates the manual replenishment of calcium chloride, the disposal of the vitiated chemical, and holds operating cost to a minimum.

Even though Heisterkamp and Kaufman differ in their opinion of the best dehumidification method, they both agree that all dehumidifiers will come into more and more universal use. As a protection against dampness and mildew, and as a necessary part of the attack on summer heat, they have been found invaluable.

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The business interior of the future, with its general and private offices, reception lobby and conference rooms, must be more than just attractive in appearance. It must be efficient in layout and arrangement—quiet and restful to work in.

Also, because of the ever-changing needs of business, it must be so constructed that the inevitable alterations and rearrangements can be quickly and economically carried out without ruining the original decorative scheme.

IS RECEPTION LOBBY is part of a complete office out, as shown above. The J-M Unit Office System is d throughout. Note particularly the Transite Wall hels around the elevator doors—the rail-height Tranenclosure for the receptionist—the display case cut o the Transite Partition.



eception

This ideal can be realized very effectively with the use of the J-M System of Unit Office Construction. For this System provides ...

- ... Acoustical ceilings which have the added advantage of allowing for flush-type, fluorescent lighting.
- ... Movable, salvageable walls, easily erected and re-located.
- . . . Resilient floors, made of units which permit easy office alterations.

These three J-M Building Materials, which are united to form the Unit Office, permit a wide variety of colors and decorative effects. They are remarkably durable and are quick and easy to maintain. Furthermore, they provide complete flexibility in rearrangement. You write only one specification—you gain one manufacturer's responsibility.

A new brochure, "Unit Offices by Johns-Manville," is available on request. Write: Johns-Manville, at 22 East 40th St., New York 16, N.Y.

1



MOVABLE WALLS. J-M Transite Walls are strong, sturdy, durable. They provide a complete system of dry-wall construction—are even used to finish the *interior* of the

outside building walls. Can be taken down and relocated almost overnight with complete salvage. Available for any height—even for low railings and counters. Made of asbestos and cement, they have a smooth, hard surface. Fireproof. Last indefinitely. May be left in original gray finish, painted or decorated.

ACOUSTICAL CEILINGS. Ceilings of the J-M Unit Office System are sound-absorbing acoustical units which permit hung ceiling construction, concealing airconditioning ducts, overhead conduit, etc. Since the units are demountable, this service equipment is readily.



ment is readily accessible. J-M acoustical units are easy to clean, easy to maintain. They have a high light reflection coefficient. An added feature is an exclusive method of construction which allows the use of flush-type fluorescent lighting.



COLORFUL, RESILIENT FLOORS. J-M Asphalt Tile Flooring completes the J-M Office System. Quiet and com-

fortable to walk on, they are easy to clean, easy to maintain. Made of asbestos and asphalt, they will withstand hard wear and give years of service. Manufactured in small units in a wide variety of plain and marbleized colors, permitting a great many designs and patterns. The individual units make it simple to extend or patch the floor.

# Johns-Manville Init Office Construction

# GRACIOUS LIVING ....



## On a Modest Scale



As an interpretation of gracious living, the "home in the country" need not be extravagant in size or price. It can find expression in small houses designed with taste and attractively situated. New forms of transportation, together with the trend toward decentralization of industry, promise interesting developments in the "pocket" estate.

Stran-Steel framing systems provide an excellent building medium to accomplish this concept. They are flexible in application—lend themselves to economies of modern building technique—impart durability and permanence to homes that stand for a way of life.

Equally adaptable to apartments, large scale housing projects, commercial buildings and specialized structures, Stran-Steel is well qualified to serve the new era of building.

# Setting the fashion FOR POSTWAR STORES



Interior view of air conditioned Wallachs men's store in Brooklyn, N. Y.

ULTRA-MODERN and completely air conditioned, Wallachs men's clothing salon in Brooklyn, N. Y., is a good example of the postwar store. Here, year-round air conditioning provides maximum comfort for customers and creates an incentive to buy. Furthermore, it improves working conditions... increases efficiency and bolsters morale.

Tanaa

Owners are well pleased. The investment in air conditioning has already proved profitable. It has permitted better display of merchandise ... eliminated dirt and dust ... reduced cleaning costs and, as radiators are unnecessary, the store interior has a neater, more orderly appearance. Compared with other stores of the Wallachs chain, where conventional heating systems are used, it is

"Freon" safe refrigerants are used in most heavy-duty refrigeration and air conditioning systems. reported that the additional cost for indoor climate control is negligible.

The air conditioning installation consists of two store-type units of 3<sup>3</sup>/<sub>4</sub> tons and 5 tons capacity. "Freon" safe refrigerants are used exclusively. Air brought through an exterior wall grille is filtered, cooled or pre-heated as required, and evenly distributed by concealed ducts.

In planning the system to maintain temperature at  $80^{\circ}$  and 50%relative humidity, Abbott, Lester & Co., Inc., air conditioning engineers, considered window exposure to the sun, lighting requirements and the average number of people in the store. Today, store owners everywhere recognize the value of air conditioning. It's a business asset. And tomorrow—after the war—they'll demand it. For air conditioning is no longer a luxury. "It is essential," states architect Morris Ketchum, Jr. "Without elimination of ventilating windows and transoms, it is impossible to design a modern store front simply and inexpensively."

Plan today on air conditioning your postwar structures. Write for data on "Freon" safe refrigerants. Build up reference files now. Kinetic Chemicals, Inc., Tenth & Market Streets, Wilmington, Delaware.

LAY YOUR PLANS TODAY FOR AIR CONDITIONING TOMORROW



## BUILDING REPORTER



PREFABRICATED STAIRCASE BY THE YARD IS ADAPTABLE TO A VARIETY OF PLANS



PLASTIC SUCKED ON GAUGE FORM

Hedrich-Blessing



**BASEBOARD RADIATION** which introduces heat through continuous radiant panels substituted for the conventional baseboard, is a new development of the Crane Co. Panels of suitable size and number would provide the necessary amount of heat in relation to size of room and outdoor climate. This system permits freedom in use of floor and wall space and in arrangement of furniture. It is applicable to new or old homes at reasonable cost.

PREFABRICATED STAIRCASES of molded plywood for postwar homes may be bought ready-made by the yard, if the prediction of Dr. George Stern of the Virginia Polytechnic Institute's Wood Research Laboratory is realized. The development in the manufacture of molded monocoque and semi-monocoque structures makes prefabrication and mass production of them economically feasible. The construction of the complete staircase, of treads, risers, and horses as a single unit offers many advantages. The prefabricated stairway would cost less, yet it would be as strong or stronger than conventional construction. Having no joints or cracks it would be easier to clean, and squeaks could not develop from friction between wooden parts. Top quality veneers used on both surfaces would make the back of the stairs just as attractive as the front. Molded with mass-production speed and economy, the staircase would be ready for installation upon reaching the building site. Several models might be produced that would be adaptable to a variety of house plans. Harris Armstrong's design (illustrated above) is one sample.

#### **NEW PRODUCTS**

**TRACING VELLUM** with automatic shading features.

Name: Craftint Doubletone Tracing Vellum.

Features: A patented shading feature incorporated into a tracing vellum allows the draftsman to shade his tracing in record time and makes it simple to add depth and contour to the drawing with a brush stroke. Using this vellum the draftsman outlines his tracing with PREFORMED PLASTIC, a tough, highstrength material which can be formed easily into complicated shapes is the result of joint research of the Westinghouse Research Laboratories and the Mellon Institute of Industrial Research. According to its makers, this plastic material has a degree of strength and formability never before achieved. In its original state it is a soup-like mixture of wood pulp, water and a phenolic resin. The pulp is wood which has been beaten and cooked to eliminate tars and other natural adhesives, leaving only the cellulose fibers. This mixture is whipped together in a machine where blades beat the resin into the hairlike wood fibers. Fine copper gauze is fashioned into the form of the finished product, fitted to the end of a suction pipe and dipped into the mixture. The pump sucks the mixture to the gauze form in an even layer. Peeled off and dried in a warm oven, it is then placed in a heated mold and pressed into its final shape. Different amounts of pressure make different varieties of plastic, ranging from a cork-like substance to a dense, strong material resembling hardwood.

a pen or pencil as he would on any ordinary tracing paper or cloth. To incorporate a cross-hatch shading, he applies a brush dipped in a fluid provided by the Craftint Co. The cross-hatch appears instantly and becomes an integral part of the drawing. A second, lighter tone, which consists of a series of diagonal lines may also be incorporated into the same drawing by applying a

(Continued on page 154)

TO THE ARCHITECTS who are now planning 930\* HOSPITALS

WINDOWS

REVOLVING DOORS



ARCHITECTURAL



HOSPITAL FOR CHRONIC DISEASES, WELFARE ISLAND, N.Y., YORK & SAWYER, BUTLER & KOHN, Associated Architects

Let the Leaders ALUMINUM FABRICATION IN BRONZE AND help you with your Post-War Plans!

Whether you are planning hospitals, schools, court houses, or any other type of building

for post-war construction, let General Bronze help make the job easier for you.

For more than 25 years we have worked closely with hundreds of leading architectural firms on both large and small building projects. From this extensive experience we have learned what features architects want in windows, doors and architectural metalworkwhat kind of help architects appreciate most-what makes their job run easier and

Today we are producing for Victory. Tomorrow, however, with enlarged facilities and newly acquired techniques in mass production we will produce in standard sizes new and finer windows at greatly reduced costs.

In the meantime, if you are working on post-war building plans, we suggest that you let us help you with your detailing. There's no obligation. For complete information on General Bronze products consult Sweet's or write for the name of our nearest representative.

GENERAL BRONZE CORPORATION

FIVE CONSECUTIVE ARMY-NAVY "E" AWARDS



34-19 TENTH STREET LONG ISLAND CITY, N.Y.

AUGUST 1944



THE WORLD'S LARGEST MAKER OF HARDWOOD FLOORS



AMERICA'S MOST BEAUTIFUL FLOORS THE PROPERTY OF THE PROPERTY O



## Bruce Streamline Flooring with the New Bruce Finish

### WHAT IS THE NEW BRUCE FINISH?

Here is a new deep-seal floor finish that brings out the full beauty of the wood by developing its natural grain and figure. Deep penetration, the secret of this floor finish, seals the pores of the wood against dust and dirt and produces a longlasting, lustrous finish that will not scratch, peel or chip.



Half of this panel is *surface* finished the ordinary way and the other half Bruce deep-seal finished. A coin scraped across both finishes will chip and mar the surface finish but leave the Bruce finish unharmed. The floor in the home of tomorrow will be beautiful—durable —economical—and easy to clean. That prophecy is *sure* to come true because such a floor is Bruce Streamline Flooring with the new Bruce Finish.

Six years of research, development and use before and during the war by the world's largest makers of hardwood flooring have proved this modern floor for modern building.

Owners will be enthusiastic over Bruce Streamline Flooring with its new Bruce Finish because of its many extras—its streamline styling, its damage-resistant qualities, its ease of maintenance, and its rich glowing beauty.

Architects and builders will like it because it permits faster progress—as much as 3 to 5 days saved on a house job because Streamline Flooring is ready for use the moment it's laid—no sanding, no finishing required. And with it they will give their clients a better floor with a better finish at a cost lower than an ordinary hardwood floor finished on the job.

Yes, here is a flooring you can specify with assurance—a flooring proved by years of service, yet as modern as the home of tomorrow itself.

### E. L. BRUCE CO. Memphis, Tenu-

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NOT if You Install Marlite

PLASTIC-FINISHED WALL PANELS . FOR CREATING BEAUTIFUL INTERIORS

Blurmites begin their destructive action on interior wall surfaces as soon as the walls are constructed. But when plastic-finished Marlite paneling is installed, Blurmites never get to "first base." Why? Because Marlite has an *exclusive bigb-beat-bake finish* that permanently seals surface against dirt and moisture.

ALKALIS

Modern Marlite is a reputation-maker for those who install it. Marlite's charming and attractive surface wins immediate customer approval; is durable, versatile and moderate in cost; quickly and easily installed for new construction or remodeling; easy-toclean and never needs repairing or refinishing; immediately available on suitable priorities.

Build post-war reputations by building with Marlite . . . be sure to keep your customers satisfied in the "days after Tomorrow." Write today for new sample folders—and remember Marsh Engineers are ready to help with plans and specifications!

\* Blurmites — destructive agents harmful to the finish of many wall, ceiling and counter surfaces.

Mariite normally is manufactured in plain-colors, tile-patterns, horizontaline, genuine wood-veneers, marble-patterns plus a complete line of matching moldings . . . for all types of interiors in all types of buildings.



ES<sup>\*</sup>in *Your* Post-Victory Buildings?



WALL PRODUCTS, Inc.

81 MAIN ST., DOVER, OHIO

duty-ful

# A Room with a View...

### DESIGNED WITH TRUSCON STEEL CASEMENTS



Just as soon as our wartime contracts are completed, we will swing into production of Truscon Residence Steel Casements, in standard types and sizes to enhance and harmonize with all architectural treatments. These graceful steel windows will provide many features to encourage creative architectural designs, to please the prospective builder.



## MANY STRUCTURES OF THE 194X PERIOD NOW DOT THE AMERICAN SCENE

**BAR-GRILL** 

LIBRARY

LABORATORY

### **RETAIL STORE**

OFFICE-STORE

HOSPITAL

SCHOOL





11

This advertisement, published as a tribute to the

far-sighted designers of pre-Pearl Harbor days, was prompted by Architectural Forum's impres-

sive May issue which featured "New Buildings

for 194X" by prominent architects. In the main the facades call for panels or slab treatment in contrast-

ing tones. Alberene Dark Stones meet the demand for permanent exterior Flander's Bar-Grill, Philadelphia, Pa., Tilden, Register & Pepper, Architects; Virginia Black Serpentine Facing and Bulkheads.

Central Public Library, Brooklyn, N. Y., Githens & Keally, Architects; Alberene Black Serpentine Spandrels.



U. S. Dept. of Agriculture, Regional Research Laboratory Building, Wyndmoor, Pa., Alberene Tremolite Mullions.

Cord Building, Beverly Hills, Calif., Burton L. Schutt, Architect; Alberene Black Serpentine Facing and Bulkheads.

Branch Building, Queensborough Gas & Electric Co., Valley Stream, N. Y., Voorhees, Walker, Foley & Smith, Architects; Alberene Black Serpentine Facing and Bulkheads.

U. S. Naval Hospital, Bethesda, Maryland; Navy Dept., Architects; P. P. Cret, Consulting Architect; Alberene Black Serpentine Panels.

Public School No. 114, Bronx, N. Y., Eric Kebbon, Architect; Alberene Black Serpentine Paneling.

stones...economical because they can be supplied as thin as 7/8". Alberene Stone Corporation of Virginia, 419-4th Ave., New York 16, N. Y., Quarries and Mills, Schuyler, Va.

Alberene

BLACK SERPENTINE PERMANENT, NON-REFLECTIVE, ECONOMICAL

"Start an architect on a plan now" ....



24



OWI Photo by Palmer in an Allegheny Ludlum plant

## Stainless Steel Carriers FOR WAR'S VITAL LIQUIDS

### HAND BOOK OF SPECIAL STEELS

Newly revised and reprinted a comprehensive book on the properties, uses, and best methods of handling, treatment, etc. of tool, stainless and other alloy steels. Plenty of tables to facilitate quick reference and selection. 136 pages, pocket-sized, latest data.



W&D A-9333

WHO'S to say what job is more vital than another, when the chips are down? Those Allegheny Metal tubes aren't gun barrels, but they carry charges quite as potent in the overall picture. Much stainless tubing has gone into the manufacture of high-octane gas, synthetic rubber, magnesium, food and dairy products, etc.—and in more minute sizes, it is indispensable in aircraft fuel and instrument lines, drug and medical work and similar uses.

In each case, the job was a function of stainless steel's ability to withstand corrosion or heat, or impart greater strength and reliability. Where can Allegheny Metal -either in tubing, bars, wire, sheets, strip, castings or forgings—operate to improve *your* products? Our Technical Staff is at your service.



Allegheny Metal also handled by all Joseph T. Ryerson & Son, Inc. warehouses

BOOKS

The "glory that was Rome" varies quite a lot, depending on how you look at it: two recent books.





BAKER MARCUS EURYSACES WAS BURIED HERE



INVASION POSTDATES ROME'S RUINS

FIRST SWASTIKAS PREDATE HITLER



A HANDBOOK OF GREEK & ROMAN ARCHI-TECTURE, by D. S. Robertson. Cambridge University Press. Second Edition. 407 rp., illustrated.  $6V_2 \times 9V_2$ . \$7.50

ROMAN TOWNS, by Ernest Nash. J. J. Augustin, New York. 201 pp., 138 photographs. 7 x 10. \$6.00

It may seem more than coincidence that these two books have appeared at a time when Italy is figuring so prominently in the news. Scholars, however, have not as a rule been unduly troubled by the problems of timing their publications, and in this respect Messrs. Nash and Robertson are to be judged more fortunate than foresighted.

It would be difficult to find two books dealing with roughly the same subject matter which bring to it a greater diversity of approach. The *Handbook of Greek and Roman Architecture* belongs in that group of texts familiar to all who have been through the standard courses on architectural history. It is filled to the brim with footnotes, cross references and appendices. It quotes implications by Diodorus, nods assent to the theories of Koldewey and Puchstein, gives skeptical attention to a claim of Dörpfeld, and resuscitates Vitruvius with proper academic reverence. All of this makes for fine scholarship, but also, unfortunately, rather tough reading. There is, for instance, the matter of the older houses at Pompeii: "consisting of various rooms grouped axially and symmetrically around a central space, which is obviously that described by Vitruvius as the atrium, a feature which, he declares, was unknown to the Greeks. Vitruvius distinguishes five types of cavum aedium, by which he clearly means five alternative methods of roofing the atrium: namely, the Tuscan, the Corinthian, the tetrastyle, the displuviate and the testudinate. Vitruvius and Varro regard the atrium or cavum aedium as a room, the chief room of the house. This view has been challenged in modern times . . ." and so on. One gathers that Professor Robertson's book was written by an archaeologist for archaeologists.

Roman Towns is a picture book. Its photographic illustrations are good and they have been well reproduced. Roman building, seen through the lens of Mr. Nash, has a richness, vigor and (Continued on page 28)

THE ARCHITECTURAL FORUM



## Key West reports,

"Aluminum in excellent condition"

Aluminum windows, doors, entrances, spandrels, grille-work, stairs and railings continue to contribute to the distinctive beauty of this structure. Installed twelve years ago, all of this aluminum is in excellent condition today. Its lasting ability has helped hold down upkeep costs, in the face of material and man power shortages. In those buildings to be constructed as part of the war effort—housing projects, hospitals, recuperation centers, sewage treatment plants and other public works—aluminum will provide these same advantages. Plan on including aluminum for its fine appearance, long life and ease of maintenance. ALUMINUM COMPANY OF AMERICA, 2166 Gulf Bldg., Pittsburgh 19, Pa.



### BOOKS

(Continued from page 26)

contemporary meaning that is entirely lacking in the conventional history book. The reader can sense without difficulty the reactions of the Roman builders to sunlight, terrain and materials. The column capital, in these illustrations, is not a dry-as-dust product of archaeology and mathematics, but a comprehensible part of a way of building. While the author has not neglected his words, it is the pictures which tell their story with steady clarity and occasional dramatic impact.

It is possible that the reader may see more in Mr. Nash's photographs than he did. In the introduction he points out our debt to classical building culture in terms which could hardly be more reactionary. "Greek columns and pilasters, Roman vaults and arcades," remarks the author, "are not only reserved for museums and public buildings. They are such common elements in modern architecture that any simple dwelling may exhibit them." That classical building forms have been widely used is true, of course. But this represents no "debt" on our part, for their use has been almost invariably inappropriate, and the period in which they last appeared marked the end of a century of architectural degeneration which was without parallel. The Romans built well, and we can still learn from them, but the lesson is not of the copybook variety: we can learn from Roman building only if we look at it in Roman terms. And the lesson would certainly be wasted if modern building were approached in any other than modern terms.

Professor Robertson's handbook and Mr. Nash's picture book represent the extremes of possible approaches to ancient architecture. The latter is handsome and reasonably instructive, and was unquestionably designed for the general reader; the former is suitable only for a minute group of specialists. It will doubtless be inflicted upon many classes of architecture students because we still have educators who believe that the worse the pill tastes the more good it does.

For the many writers who amuse themselves by producing books on ancient building (presumably they don't make any money out of it) there exists an opportunity to make a very real and fairly important contribution. We are in the middle of a revolution in building. Those who are being trained to take their places in the work of producing a better architecture should be given a chance to understand and appreciate our architectural heritage. The hand-

(Continued on page 150)

## IN THE FORUM

**Completely reversing** traditional architectural posture, Alfred Shaw, designer with Naess and Murphy of Chicago's new and only subway (p.

82), keeps his head underground and his feet in the clouds. This preoccupation with the nether regions resulted in a construction job which completely denied the forces of gravity. Contrary to predications of



oldtimers, the loop did not slide, lubricated by wet clay, into the tubes. Pressure of the advancing shield, however, lifted the floor of a bargain basement, reducing the values of ladies underwear and the opinion of the experts. To a firm which has whipped up huge Navy constructions from Puget Sound to Bermuda along with many another whopper, a subway merely involves a transition from skylark to mole.

**Depending on his mood,** Zareh Sourian, designer of the Seafare Restaurant, (p. 102) may prefer either his collection of primitive art or his array of cigar bands. Of the latter, his most priceless collector's items were purloined from stogies belonging to Churchill and J. P. Morgan. We were unable to discover whether these bands were solemnly autographed presentations or just fugitives from a heedless white wing. Whatever the source, Sourian points out to lustful penthouse tenants that "cigar bands take the place of etchings, with much less expense."





Spark-plug behind "Syracuse on Trial", the radio program publicizing Syracuse, N. Y.'s Postwar Plan (p. 79), is B for Barney, L for Lee, Finn. As general idea man and chaser-upper of Broadcastable Bigwigs, Barney is largely responsible for the tremendous success of the program. His technique of airing pro and con arguments on red hot local issues makes him feel like a Bergen whose Charlie McCarthys have all started to talk out of turn. Even such prosaic subjects as the Community Sewage System bring forth shouts and table poundings in Syracuse. Barney attributes his carmine complexion to the 17 weeks he has boiled in this sort of hot water, but we wonder if it may not be a well-justified blush of pride over the program's award from Ohio State University.

Like the wooden pigeons on the fence, the brothers Roberto from Brazil used to be two, but now they are three. Former designs bore the mark of Marcel and Milton, but the IRB building (p. 65) is also credited to Mauricio. Although the third Roberto served his apprenticeship by helping his brothers design furniture and other oddments, he could not join the firm until he wore long trousers week days as well as Sundays.



Quite out of character with Robert Patterson's editorial policy are the red window shades in his

Daily News Building. Responsible for this insouciant dash of color is designer Robert Carson whose latest color scheme—for Gotham's Fifth Avenue hosiery shop—was inspired by the sun beiges and bronze glo's of ladies' stockings. (p. 99) As architect for Rockefeller Center, Carson probably lured the Rockettes into a private display of shades the well-dressed gam will wear.



# OR MODERN

enhance its beauty





(Above) Architect, Harold Spitznagel. (Below) Architect, Samuel Marx. Photographs: Hedrich Blessing.

Much has been predicted for the "home of tomorrow".

Certainly, there's one prediction that can be made with assurance: a very great many of the homes of tomorrow will be built of brick and tile.

And whether these homes be traditional or modern in design, they will possess the beauty that has always characterized brick and tile.

They will possess more. Permanence. Fire-

safety. Low first cost. Economy of upkeep.

Architects who design tomorrow's homes will be aided by a new development—modulardesigned brick and tile—which promises important improvements in building practices in the post-war era.

Write for literature, including complete specifications for facing tile interiors. 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



## **Helps You Plan Better Kitchens** and Sell Homes Faster

When you plan new homes, specify and install Gas Ranges bearing the CP Seal of Certified Performance. For women will judge your new homes by the equipment they find in the kitchen.

CP Gas Ranges are built by leading manufacturers and tested by the American Gas Association Laboratories to meet the highest uniform performance specifications of engineers and home economists alike. They combine the best features of all cooking appliances in one. Every range meeting the rigid CP standards is labeled with the famous CP Seal to provide a consumer buying guide.



New CP Gas Ranges for your postwar homes will be certified by leading manufacturers and gas utilities to provide cooler, cleaner kitchens, the most advanced automatic controls and big savings in time, food, fuel and money. That's why the CP Seal is the symbol women will look for on the Ranges in your completely equipped homes.

For complete information about Gas Ranges bearing the CP Seal, ask your dealer or Gas Company or write Association of Gas Appliance and Equipment Manufacturers, 60 East 42 Street, New York 17, N.Y.

### CP GAS RANGES FOR YOUR NEW HOMES WILL BE MADE BY THESE MANUFACTURERS

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

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



### NOTHING BABIES YOUR CLIENTS ....



Helping people live comfortably is *your* business. Making beds and furniture more comfortable is *our* business.

Foamex improves sitting and sleeping comfort like *nobody's* business. It cradles your clients on millions of air-breathing cells, that float every muscle to blissful relaxation.

It's cooler to sit or sleep on, because it breathes. Cleaner. Dust-proof. Damp-proof. Odor-proof.

Foamex replaces all the old style innards of mattresses and upholstering with one molded unit of buoyant latex foam.

That means comfortable seats can be much more easily built-in with Foamex. It also means

ANOTHER CONTRIBUTION TO A BETTER WAY OF LIFE by

any *Foamex*-upholstered chair or sofa will hold its shape and comfort years longer. *Foamex* never needs restuffing. There's no stuffing in it. Nometal to sag, either *Foamex* is sag-proof.

Sorry, you can't have *Foamex* for civilian use right away. It's strictly military. But you can put *Foamex* into postwar comfort plans. Remember, it's more restful—it's more efficient—it's made only by Firestone.

P.S. The ideal covering for Foamex seats-Velon\* upholstery fabric. Makes smarter colors practical.

For the best in music, listen to the Voice of Firestone every Monday evening over the entire NBC coastto-coast network.

stone
# SA MARTER SS

### ABSORB AIR-CONDITIONING NOISES

with CONSTICAL AND INSULATED DUCT



WCKY-Radio Studio , Cincinnati





Offices-Burkhart Mfg Co., St. Louis



Finke Furniture Store, Evansville, Ind.



Kroger Grocery & Baking Co., Laboratories, Cincinnati

N radio studios, hospitals, churches, theaters, hotels, offices, homes—wherever quiet working and living conditions are required—this all asbestos, prefabricated duct will eliminate noise from the air conveying system.

Careyduct is a development of the Carey Research Laboratory and scientific field testing. It is a natural sound absorber—a non-conductor of sound, and non-resonating. It "quiets" fan noises and cuts down speaking tube effects and eliminates "cracking" due to changes in air pressure. By effectively absorbing noises, it permits the use of smaller duct sizes with higher air velocities. This also solves difficult installation problems where space is limited.

Besides its absorption of noise, Careyduct has many other advantages over older and less efficient methods. It is *fireproof;* is quickly installed; absence of noise in erection (unavoidable in handling metals) permits installation in occupied buildings such as hospitals, stores, banks, etc.; conserves metals; neat and compact; can be painted to match walls and ceilings; costs no more, frequently less, than insulated metal duct.

For technical details and further information, send for "Careyduct Manual." Address Dept. 20.

### THE PHILIP CAREY MFG. COMPANY

Dependable Products Since 1873—LOCKLAND, CINCINNATI 15, OHIO In Canada: The Philip Carey Company, Ltd., Office and Factory: Lennoxville, P. Q.

Children's Hospital, Cincinnati



Vocational and Industrial Training Schools include the art of handling Careyduct in their courses on sheet metal work.

Residence, Glendale, Ohio





Mass housing requirements after Victory will be met by plans laid now—planning shared by designers in scores of different fields. For electrical products, SuVeneer Clad Metal in its form of *copper* inseparably bonded to steel, offers the important new advantage of copper's conductivity *plus* a strong backbone of steel... and low cost, easy fabrication, complete dependability.

Wherever you'll wish to use copper with the strength of steel, war-proved SuVeneer Clad Metal invites your interest—now!



CORPORATION CARNEGIE · PENNSYLVANIA

# A NEW DESIGN FOR LIVING

**B**OHN engineers, engaged entirely on war work, foresee great changes in post-war homes of the future. Wider use of light alloys will make possible greater beauty, simplified architecture, and lowered costs. Girders, pillars, and innumerable beautifying effects made of light alloys produced by Bohn, will mean new designs for more attractive living. Remember the name Bohn—headquarters for light alloys and their many advanced applications.



BOHN ALUMINUM AND BRASS CORPORATION, DETROIT, MICHIGAN GENERAL OFFICES-LAFAYETTE BUILDING Designers and Fabricators-ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS

## **History is Being Made...**

## This ANNOUNCEMENT Is Important to You!

Through outright purchase, the nationally known Norman Boosey Manufacturing Company of Detroit, Michigan, has become an important division of the American Skein and Foundry Company of Racine, Wisconsin.

For the past half century, Boosey products have been acknowledged leaders in their field . . . recommended by America's foremost architects and sold through recognized plumbing supply jobbers. The acquisition of the broad Boosey line gives the American Skein and Foundry Company a most complete line of plumbing and drainage specialty products. Backed by the vast resources and extensive manufacturing facilities of American Skein, the Boosey line is destined to reach new horizons.

Manufacture of Boosey products will continue to be conducted in Detroit as formerly. However, as soon as conditions permit, all manufacturing facilities will be transferred to the main plant in Racine, Wisconsin, where all other American Skein and Foundry Company products are manufactured.

The established policy of distributing through recognized plumbing supply jobbers will be strictly adhered to. Address all communications to

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Manufacturing Co.

DIVISION OF

**General Sales Offices:** 420 North La Salle St. Chicago 10, Illinois

## **AMERICAN SKEIN and FOUNDRY COMPANY**

## LETTERS

Reactions to "Built in U.S.A.," the exhibition at the Museum of Modern Art . . . comments on the Moses attitude toward planning . . . the AIA and public housing.

### UNMISTAKABLE LINES

### Forum:

. . . Your recent editorial comments on the various buildings published are refreshing. Unvarying praises of even the most banal architecture doesn't make for either good reading or confidence in the FORUM's selective ability. I'm happy to see you indulge in a little healthy criticism. Your coverage of the Museum's selections is excellent. There is one thing that needs amplification. In my opinion the work of architects who do their own drawing such as Wright, Saarinen, Gropius and Van Der Rohe should be evidence enough that it is impossible for the so-called "big" office to do good work. Too many big business, big name, architects should not be dignified by the name "Architect." They haven't touched a pencil in years and if they did, wouldn't know what to do with it. They set themselves up as some sort of Jehovian critic, with good men in their employ who do all the work. They are so utterly stupid that they even imagine that the work done by their underlings is their own work. How in hell can you do architecture if you don't draw? Wright's working drawings are quite often blocked out by draftsmen, but the unmistakable lines of the master are superimposed and obliterate the weaker drawing beneath. Anyone who has seen either Saarinen or Van Der Rohe draw knows the impossibility of architecture by remote control. "Big Business" architects might make for building but not for architecture, and finally their preoccupation with staying in the middle of the road, with avoiding "criticism" has made their buildings a series of characterless bromides.

WILLIAM A. GANSTER

### MUSEUM PIECE

Waukegan, Ill.

#### Forum:

After looking over the Museum of Modern Art Show in your magazine, I dozed off with the following din in my ears:

Designers lead Bohemian lives

And scorn home living with legal wives

They cook in a casserole with chives And never eat with forks and knives Each and all is a gay deceiver And tells his cat he cantilever After a night with U. S. Chianti They awake with a head in their shed roofed shanty

Divide their time between smocks and sex

God help us in 194X.

GUSTAVUS Q. PIXY

### ON MOSES MANIFESTO

In the New York Times Magazine of June 25 Robert Moses launched a blistering attack on long range planning and "the long haired planners" who promote and practice it. Following are two of the letters provoked by the short haired Commissioner's invective.—ED.

#### Forum:

My attention has been called to Mr. Robert Moses' recent article in *The New York Times* Magazine Section. I have just returned from a study of TVA's latest activities, and it will not surprise you that under the impression made by such truly great planning achievements the Moses affair faints to relative insignificance.

Along with a number of more brilliant men, I have also the honor of being attacked by Mr. Moses. In my work done over a number of years I dared an approach to problems of planning which Mr. Moses finds to be at variance with his own. This he takes as a personal insult. In a somewhat wordy description he manages to misconceive my intent as perhaps a layman might. He finds it fair and permissible to publish as my work a curiously miscopied and distorted illustration, which is a mere caricature of what I did. Yet he is enough of a crystal-gazer to derive from a short news item in Time magazine the correct figures on costs of suggestions embodied in an elaborate scientific approach. I don't mind that.

But I am disgusted with the undignified wholesale mud-slinging at men like Frank Lloyd Wright, Saarinen, Gropius, Mumford, Mendelsohn, Berle, Tugwell, and others meant though not named. These are some of the most brilliant and deserving men in the field. Whatever one's attitude to details of their teachings, their names stand for solid achievement and masterly efforts of genuine sincerity. It is a matter of common decency to deal with other people's work on the basis of facts and merits. But Mr. Moses evades every issue. For reasons and arguments he substitutes flippant remarks and malicious insinuations which he could not possibly sustain. This sort of dirt throwing and petty name calling does not provide an opportunity for decent discussion.

The purport of Mr. Moses' article seems to be that a reputation for "getting things done" is to be taken as an assurance of infallibility for unqualified amateurism and as a license for denouncing as subversive any disagreement with a successful public official. Moreover, this raises the question of whether "getting things done" is to be the final criterion of achievement, over and above the "what" that gets done. It may be explained that at a certain stage of recent history some inevitable drawbacks of democratic processes led to a somewhat inflated estimate of action for the sake of action alone. But it is worth while remembering that at the present moment and for years and years with sacrifice yet untold, we are trying to get undone at least some of the things that the "most successful getting-things-doners" of our time have managed to achieve "over there." They too did spectacular things, not just immediately concerned with warfare. They reached for the stars, but they did not reach the grass roots.

HERMANN HERREY

New York, N. Y.

### Forum:

In Mr. Moses' article in the New York Times of June 25, he has erred in condemning architects as dreamers and "long haired planners" and his article does not seem to justify itself.

Civic planning and achitecture are universal subjects, not confined to any one country or man. It is only by the assimilation of ideas, which usually culminate from dreams, that we can progress, whether it be in the immediate field of architecture, civic planning or any other specialized profession.

From the beginning, throughout the world, civic planning has been done by great architects who have successfully contributed to their own particular epochs.

(Continued on page 120)



# eems like everybody wants better walls and ceilings

VERY MORNING hundreds of letters and postcards tumble n our mailbags.

m every state in the union they e—asking for information on how e-cover cracked plaster and carry repair and modernizing jobs with on Panels.

### N NATIONAL ADVERTISING Appears in these Magazines

AMERICAN HOME TTER HOMES & GARDENS LADIES' HOME JOURNAL McCALL'S HOUSE BEAUTIFUL HOUSE & GARDEN PARENTS' MAGAZINE HOUSEHOLD MAGAZINE PATHFINDER FARM JOURNAL SUCCESSFUL FARMING

### What does it mean?

It means that millions of American homes have a cracked plaster problem. It means that millions of home owners are exasperated with the dirt, the delay and the mess of replastering — and the cracks that so often come back. Millions want to end these troubles—once and for all. And in their new postwar homes, they want *crackproof* walls and ceilings.

No doubt about it! A huge postwar market is building up in these homes for lumber dealers, job contractors, builders and architects. A market which is being developed and readied by Upson National advertising totaling over 130,000,000 advertisements this year. While today we are working our hardest to supply Upson Panels to our armed forces in adequate quantities, our advance planning is going forward too.

In making your own future plans, you are fully justified in figuring on a good volume of business involving Upson Panels. The Upson Co., Lockport, N. Y.



STRONG-BILT PANELS — approximately  $\frac{3}{8}$ " thick — for new construction. KUVER-KRAK PANELS —  $\frac{1}{4}$ " thick — for covering cracked plaster. UPSON PROCESSED BOARD —  $\frac{3}{16}$ " thick — for display and general utility uses. DUBL-THIK FIBRE TILE — for kitchen and bath.



## THIS\* SKILL is yours to BORROW NOW



There has been such a welter of words—both written and spoken . . . about postwar home building, that many seem to have lost sight of the great pent-up volume of public and private building construction which is also waiting the "go" signal.

This volume of building will also run into almost fabulous figures. And this type of multiple-story construction immediately calls for fast, efficient transportation between floors...that's where Dahlstrom enters the picture.

You can save time and prevent much delay later, by borrowing our skill and knowledge of Elevator Entrance design and manufacture *NOW*. We have a competent staff\* of designers and technical specialists ready to give you expert assistance... to give you and your projects a head start when the war stops. We invite Architects and others of the building profession to utilize our facilities and experience.

Illustrated above: One of several Dahlstrom Elevator Entrances in the Louisiana State Office Building, Baton Rouge, La. Office of Edward F. Neild, Architects.



Branch Offices: NEW YORK, CHICAGO, PHILADELPHIA, BOSTON, CLEVELAND, ATLANTA, SAN FRANCISCO Representatives in Principal Cities



THE STARS IN THIS FLAG denote the many months that Dahlstrom's production facilities have been devoted to the war effort. During those months, innumerable items—from ships doors to bomber equipment have gone forth to help "fight the good fight."

### Design 'em now and when building begins See to it homes have weather built-in!



**PEOPLE** in all income groups want home air-conditioning after the war. The Gas industry plans to meet this demand with units that (1) Heat more efficiently in winter. (2) Cool the entire house in summer. (3) Provide ventilation all year 'round.

### A <u>CP</u> Gas range in a kitchen new Will make your house a dream come true!



**WOMEN KNOW** you've given them the most modern kitchen when they see . . . a Certified Performance Gas range that's famous for precision cooking ... a silent Gas refrigerator ... in a streamlined kitchen, scientifically planned for greatest convenience. And just as important as all the rest Gas for hot water... folks know it's best!

FOR YEARS, nothing has even come close to equalling the modern automatic Gas hot water system. People know that, upstairs and downstairs, it means "all the hot water they want, whenever they want it."

## This is the house that Gas

**TODAY**, in the great laboratories of the Gas industry, technicians are working to make it possible for architects and builders to offer houses of greater comfort, convenience and economy after the war. People are now being told about these new developments, as well as about the established advantages of Gas, in wide national advertising. In designing the post-war homes you plan to offer, we suggest that you consult your local Gas company for complete information on Gas equipment and Gas service. AMERICAN GAS ASSOCIATION

THE MAGIC FLAME THAT WILL BRIGHTEN

YOUR FUTURE

runs!

AUGUST 1944

37

**"BUILT BY OIL-O-MATIC".** Behind these three words is a record of more than twenty years of dependability, economy, performance, and owner satisfaction *world-wide* in scope. Through the years, its mechanical excellence has inspired architects to specify Oil-O-Matic for automatic heating jobs of the most exacting types.

YOU CAN Expect More DIL-D-MATIC

Experience has proved the importance of the man behind the installation—the local authorized Oil-O-Matic dealer. You will find him a man *factory-trained* in the highest type of installation and service. You will find him well versed in every type of heating—*all* fuels... *all* heating systems. Oil-O-Matic's basic mechanical excellence, backed by a strict policy of responsible representation, has resulted in a degree of product acceptance unapproached by any other oil burner. For your clients, Oil-O-Matic means the utmost in performance, economy and *dependability*. Client good will means the utmost in professional satisfaction for you. When it comes to product... when it comes to installation... you can expect *more* from Oil-O-Matic.

T-O-MA



HEATING

ILLINOIS

WILLIAMS OIL - O - MATIC BLOOMINGTON CORPORATION

This hangar opening is neatly and adequately taken care of by four standard Crawford upward-acting doors, individually 10 ft. high by 12 ft. wide, and separated by three easily removable aluminum multion strips which slip-lock into floor studs. Other glazing patterns may be used. Wire glass if desired.

hangar door economy...

**BETWEEN** the lines of the unfolding story of this war it isn't difficult to read the story of aviation coming of age. The postwar world—with thousands trained to handle planes and new hundreds of thousands accustomed to travelling in planes —will indeed be an air world.

Thousands of new hangars, public and private, will dot the land—and, though we have been up to our ears in the battle of production for war, we have been thinking of Crawford Door applications for hangars.

It is not too early for you to be thinking about this same subject. We have some unusual slants on efficiency and economy quite naturally, too, since we have worked so long with similar problems for residential garage and industrial applications. We understand hangar door requirements, but you won't find our minds closed to special considerations you may present. Can we be of help to you? Just drop us a line—there's no obligation.

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

UPWARD-ACTING DOORS Residential Garage Doors Commercial & Industrial Doors Hand or Power Operated Doors Karaw-Fir Doors



Share the Profits of the YPS PEACETIME KITCHEN BUSINESS YPS dealers will have the advantage of: Continuous national advertising, factory supervised training which gives them the "know how" to sell more kitchens with lower sales cost, dealer helps, displays, beautifully illustrated catalog, and other tools with which to interest prospects.

Youngstown Kitchens.

Please send me YPS booklet, "Get Acquainted with Your Kitchen Business."

### YOUNGSTOWN PRESSED STEEL DIVISION MULLINS MFG. CORP., Dept. AF-844, Warren, Ohio

Name Street City.

State

# THERE IS A NEW TREND IN STORE DESIGN





### PIETRO BELLUSCHI'S conception of a shoe store

"The design for this shoe store was conceived as an effort to exploit, in a more definite and organic way, the idea of the open front. This same idea has in many cases fallen short of success, because the attention of the onlooker was divided and confused between an interior which was not designed to be seen from the sidewalk, and an exterior front which hated to lose its identity. It seems that a thoughtful use of glass, and a carefully laid out interior would show the inherent possibilities of the open front plan, and its probable impact as an advertising medium."

isch.

The importance of *quality* in the materials used for store construction cannot be over-emphasized. Especially in view of the trend toward "opening up" the store with larger areas of glass. Pittsburgh Glass and Store Front Metal can be specified with confidence for such work. Their excellence is unquestioned, their design possibilities almost limitless. They are supplied through a nation-wide system of branches and dealers which assures prompt service.

"Consult an architect ... plan now for postwar store modernization." This is what hundreds of thousands of merchants are being urged to do by Pittsburgh Plate Glass Company in advertisements running regularly in 21 magazines.

FREE

Two perspectives, plan and details of this design—on a 21 x 25 inch sheet. It is the fourth of a series of store designs by some of America's leading architects. Mail the coupon now.



Pittsburgh Plate Glass Company. 2223-4 Grant Building, Pittsburgh 19, Pa.	
Please send me, without obligation, your sheet showing more complete drawings of the Shoe Store by Pietro Belluschi.	
Name	
Occupation	
Address	
City State	
"DITTERUPCH" stands for Quality Class and Paint	

### ITTSBURGH GLASS FOR STORE FRONTS AND INTERIORS

# How to get long life... lower maintenance cost i

## THERE ARE TWO KINDS OF FLUORESCENT LIGHTING

The older, more common kind of fluorescent lighting is *hot cathode; cold cathode* is the newer type, of which Zeon fluorescent lighting is the outstanding example. Both are a great improvement over incandescent lamps—they give more even, diffused light... better illumination ... three or four times as much light per watt. But *cold cathode* has some marked advantages, which in some installations are of supreme importance. Perhaps the most important advantages are the long lamp life and low maintenance characteristic of cold cathode lighting.

## Why COLD CATHODE is preferre



# Auorescent LIGHTING INSTALLATIONS

### HERE IS THE DIFFERENCE BETWEEN THE TWO KINDS

*Efficiency*: lumens per watt of hot cathode is slightly higher than that of cold cathode; both outputs are much higher than that of incandescent lamps. *Lamp Life*: hot cathode lamps last two or three times as long as comparable incandescent lamps; cold cathode lamps from 10 to 30 times as long. *Auxiliaries*: hot cathode requires several auxiliaries; cold cathode only one auxiliary—a transformer; series circuits, with much less wiring. *Flexibility*: hot cathode made in straight lamps, fixed lengths, fixed light output; cold cathode lamps available in standard units or in any length, unusual shapes; light intensity variable by controlling current.

Long life and low maintenance are important advantages of cold cathode fluorescent lighting systems. The exceptionally long life of Zeon tubular lamps means that lamp replacement occurs only at long intervals. The fact that cold cathode operates with fewer auxiliaries and a minimum of wiring leaves fewer spots where any trouble can develop. As a result, far less maintenance is required; maintenance costs are much lower; manpower is used more effectively.

Zeon cold cathode fluorescent lighting offers high levels of even, practically shadowless illumination; greater flexiblity in design and installation; exceptional economy in operation. In designing systems for immediate installation, *specify Zeon*; in blueprinting for post-war installations, *plan to use Zeon*. Ask Federal Electric Company, Inc., for suggestions and help in solving your lighting problems.



LIGHTING DIVISION

### FEDERAL ELECTRIC COMPANY, INC.

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> Branch Offices: Cincinnati • Dallas • Duluth • Houston • Indianapolis • Kansas City Louisville • Milwaukee • Minneapolis • New Orleans • New York • Philadelphia

### NGER LAMP LIFE

means fewer changes of lamps, less inconvenience and trouble with burned-out lamps.

### WER MAINTENANCE COST

because lamps seldom need replacing; fewer auxiliaries, less wiring to make trouble.

#### STANT STARTING

without overload; cold eathode lamps start instantly on their operating voltage.

### **DNSTANT LIGHT FLOW**

with no flicker; minimum of shadow; maximum of even, diffused illumination.

### WER AUXILIARIES

Only transformer and minimum of wiring are needed with cold cathode lighting.

### REATER FLEXIBILITY

in shapes, sizes, colors, and output; standard units or custom-built installations.

## Tomorrow's Popular Restaurants are on Architects Drawing Boards <u>Today</u>

Cor

Modern Air Conditioning is an *essential* of the postwar restaurants which many owners have commissioned their architects to plan today.

PLAN 6161 RESTAURANT

Charmo

The restaurant management knows that diners-out seeking comfort in summer usually become year-round patrons of the restaurants where they find it.

Undoubtedly you are doing your share of planning postwar restaurants, stores, theatres, offices . . . and placing Modern Air Conditioning very near the top of the list of essentials. Modern Air Conditioning means Westinghouse—and its years of pioneering research and engineering experience.

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

For executives, architects and engineers now planning postwar building and modernizing, dependable data and competent application engineering assistance are ready. Phone your nearest Westinghouse office, or write on your letterhead to Westinghouse Electric Elevator Company, 150 Pacific Avenue, Jersey City 4, New Jersey.

### HERMETICALLY-SEALED FOR DEPENDABILITY

Westinghouse pioneered the Hermetically-Sealed Compressor. Hermeticallysealed means light weight · small size · low maintenance and operating costs · high efficiency · long life.

Vestinghouse Conditioning

Westinghouse presents John Charles Thomas · Sunday 2:30 E. W. T., N. B. C. "Top of the Evening" · Mon. Wed. Fri, 10:15 E. W. T., Blue Net.

NOW! NOULATED Picture Window An Thermologiums with the BONDERMETIC SEAL

D. J. C. Parsons, Architect

Here's an easy way to put more comfort and more beauty — thus, more salability — in the homes you design, build or finance.

Thermopane—the new windowpane that insulates—enables you to use big picture windows without excessive heat transmission.

Thermopane is an important aid to *Daylight Engineering* because it makes the provision of highly desired large glass areas thoroughly practical whatever the climate. It's a new, efficient feature that home buyers will recognize as a forward step in house construction.

This insulating windowpane fits into a modified single sash, just like an ordinary single pane of glass—except that the rabbeting will be grooved somewhat wider to accommodate Thermopane's slightly greater thickness.

Thermopane's efficiency is explained in the four important features shown at the right. We have prepared a book which gives further facts such as sizes, thicknesses, types of glass, and other important matters pertaining to the use of Thermopane. Write now for your copy. Libbey-Owens Ford Glass Company, 984 Nicholas Building, Toledo 3, Ohio.

### 4 important features of Thermopane

**O** INSULATING AIR SPACE. The layer of air inside the Thermopane units is scientifically cleaned, dried and hermetically-sealed at the factory. This sealed-in air gives Thermopane its high insulating efficiency.

BONDERMETIC SEAL. This patented, weatherproof, metal-to-glass seal bonds the two panes of glass into one unit to prevent dirt and moisture from entering the air space.

**3** CLEAR VISION. The dry air is sealed in with the patented bond to prevent frost or condensation from forming on the inner surfaces of the panes of glass.

ONLY TWO SURFACES TO CLEAN. The glass surfaces inside a unit are specially cleaned at the factory . . . and stay clean!





No investigation has been made by General Electric Company regarding the patent situation on these design or construction suggestions,

#### FOR THE POSTWAR DEPAR STORE

**GENERAL ELECTRIC** brings you one more in its series of postwar lighting perspectives by outstanding designers and architects. In the belief that such visualizations may be both helpful and stimulating to you, G-E presents here lighting ideas for tomorrow's department store by Graham, Anderson, Probst and White, Chicago.

### In the opinion of this firm -

"Tomorrow's lighting will do much to energize department store selling . . . add to its effectiveness . . . give it dynamic force.

"In our thinking it should first provide pleasing over-all illumination . . . attractive to the store's customers . . . restful to its sales people.

"But it should also provide for attention-getting light on merchandise displayed . . . lighting that invites buying.

"To achieve these objectives we suggest several new types of lighting fixtures . . . fixtures that incorporate the use of the fluorescent lamp with its large area, low brightness and high efficiency, for general illumination; plus built-in filament

> spotlights that may be focussed on featured merchandise displays."

> A NEW BOOKLET: "Lighting Goes Dynamic" reveals stimulating new ideas on department store lighting by Graham, Anderson, Probst & White. A copy will be sent you on request. Write General Electric, Dept. 166-AF-8, Nela Park, Cleveland 12, Ohio.

An alternate fixture idea, with a vertical arrange-ment of the lamps, and plastic diffusing shield. Ad-justable spotlights housed in

top section are directed on special displays.

**G·E MAZDA LAMPS** GENERA ELECTRIC







Section of suggested lighting unit, right. Utilizes fluorescent lamps with their large area, low-brightness for general illumination, and adjustable spotlights or reflector lamps to feature special displays. Has "egg-crate" louvers and translucent sides.

Marine,





BUY WAR BONDS AND HOLD THEM

THE Modern METHOD OF JOINING COPPER AND BRASS PIPE

# ANOTHER ONE-PIECE Silbraz

## made with **Walseal** valves and fittings

IN this large modern housing development, as in many present-day building projects, Walseal valves and fittings were the natural choice of both architect and builder. This modern method of joining copper and brass pipe or tubing has won increasing acceptance because of its unquestioned strength and its economy in eliminating maintenance and repairs.

Walseal products for making leakproof Silbraz joints are made with a ring of silver brazing alloy incorporated into each port. When heated with an oxyacetylene torch, this alloy melts and flows out to form a strong Silbraz joint between the pipe and fitting or valve. Silbraz joints are the strongest parts of the pipe line. They cannot break or creep under any pressure, temperature, or shock which the pipe itself can withstand.

For full details on Walseal valves, fittings, and flanges – as well as Walworth's complete line of valves and fittings – write on your company letterhead for a free copy of Catalog 42.

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PIPE RUN

Walseal bronze valves are made in gate, globe, angle and check types, in sizes up to 3 inches.



Walseal bronze fittings are made in all standard types in sizes up to 12 inches.



A ring of silver brazing alloy is incorporated in the ports of every Walseal product.

## INSULATION ALONE IS NOT SUFFICIENT

### FOR THE WALLS OF TOMORROW'S HOMES

BECAUSE of new standards of heat control, tomorrow's homes must have walls with effective insulation. But insulation alone is not sufficient. Air-conditioning, for instance, may create a serious problem in walls, unless safeguards are provided at the outset.

This problem is MOISTURE WITHIN THE

WALLS. Tomorrow's homes should be so constructed that moisture condensation within the walls is reduced to a minimum.

The Approved Insulite Wall of Protection not only provides effective insulation...but, by its scientific construction, safeguards against internal moisture condensation.

The drawings to the right explain, in general terms, the reasons. As an architect, you'll want the complete story. Consult Sweet's Architectural File, Section 10, or better yet, write for free "Scientific Facts" booklet.





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SCIENTIFIC

UI DING AUTHO

**OUTSIDE THE STUDS**, Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite has a bracing strength four times that of wood sheathing, horizontally applied. **INSIDE THE STUDS,** Sealed Lok-Joint Lath furnishes a second wall of insulation. The patented Lok-Joint provides a strong, rigid plastering surface, prevents joints from opening under trowel pressure.

Structural Insulation

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

MADE EXCLUSIVELY FROM WOOD



# ECONOMY IS IMPORTANT-



RETAIL BUILDINGS such as this one for Safeway Stores, are economical to build, rapidly erected, long lived. For this 57'x 100' building, trusses were designed for 10 lb. dead load; 40 lb. live load; 10 lb. ceiling load; and erected on the forms before concrete side walls had been poured. Architect: Barrett & Logan. Contractor: Knott, Rogers & Dunbar.



WAREHOUSES call for utility plus economy. This structure for International Harvester Co. is 188'x 266'; called for 32-62' roof trusses. Engineer: Sam Murray. Contractor: General Construction Company.



## ... BUILD WITH TIMBER STRUCTURES

OUR organization has been working with contractors, engineers, architects since the thrifty 30's. The business rule then is a good business rule now-build well and economically.

Wood, properly designed, fabricated, assembled and erected has achieved both of these objectives. Our experience has proved time and again that timber trusses and heavy framing provide a logical answer to reasonable building costs for structures of varied types and sizes in many major industries.

In addition to economy, products of Timber Structures have the advantages of strength, permanence, ready source of supply. Whether your construction plans are immediate or post-war, our experience is at your disposal. Inquiries are welcomed on the use of wood or other structural materials. Booklet on typical Timber Structures jobs is yours for asking.



Chrysler Airtemp "Packaged" Air Conditioning

### A New Comfort For Funeral Chapels

A new comfort and restful atmosphere . . . cool, clean, dry air and an absence of odors . . . are provided funeral chapels by Chrysler Airtemp "Packaged" Air Conditioning. The scientific circulation of air, with temperature and humidity properly controlled, is easily obtained by the famous Chrysler Airtemp Radial Compressor, which is hermetically sealed in a bath of oil.

Quiet and trouble-free, these self-contained units, singly

or in multiple, will meet the requirements of over 80% of all air conditioning applications. The simplicity and adaptability of Chrysler Airtemp "Packaged" Air Conditioning are winning the hearty endorsement of architects throughout America.

When you are making plans and estimates for air conditioning, domestic heating or commercial refrigeration, Chrysler Airtemp will be glad to cooperate.



# SMOOTH, <u>Flat</u>, Metal-Faced Plywood At lower cost

## -now made possible by new metal-to-wood gluing techniques

**New methods** for durable bonding of thin sheet metal to light, strong plywood backing enables you to specify modern metal surfaces for many new uses—flat or curved decorative interior panels, doors, work surfaces, exterior wall or roof panels.

The metal "veneer," glued to the wood over the entire contact surface, is flat and smooth, unmarred by bulges or signs of mechanical fasteners. Costs are cut by using *thin* metal and foolproof modern glues which set at low pressures and at room temperature, eliminating expensive hot-pressing operations.

The metal-to-wood bond, tested cold at  $-40^{\circ}$ F., hot at 160°F., and after 24 hours submersion in seawater, develops complete durability. Shear tests show high strength and high wood failure.

This glue makes durable metal-to-wood gluing possible. Cascophen RS-216 is easy to handle. It re-WEEP (IGHTLY CLOSED of lightly class day of the quires only low pressures, cures at room Daniel story to from teacher temperature-yet the bond is completely waterproof, heatproof, and moldproof. CASEIN COMPANY OF AMERICA, Dept. AF-84 Division of The Borden Company Mail this coupon for complete 350 Madison Avenue, New York 17, N.Y. Gentlemen: information on modern metal-Please send Service Bulletin No. 22 on gluing metal to wood. We're interto-wood gluing techniques. ested in this type of construction for use as Name of Company. Street Address State Zone\_ City Send literature to Mr.

## a distinctive departure from the conventional radiator **Modine** *onweetors* ... entirely in keeping with the modern buildings you're planning today

### ... and you can SPECIFY Modines NOW

You're going to heat those postwar buildings you're designing today. Actual building construction is postponed, of course, until the war is won...

But you don't have to postpone the heating specifications.

Modine Copper Convectors—as modern as your own building designs—can go into those "specs" right now. All detailed data is ready ... types, dimensions, etc... in complete catalog form. Recessed in the walls, or fully exposed, Modine Convectors are smartly modern, most attractive in appearance. And quite unobtrusive ... blending with any room interior.

Concealed copper heating unit combines compactness with high heat capacity—to give room added floor space as well as fast, even heating, new comfort, cleanliness, convenience—and all the proved superiorities of steam or hot water heating systems.

wortors



PROJECTION RECESSED TYPE MODINE COPPER CONVECTOR Illustrations show one of the four styles of Modine Standard Enclosures. Others are Floor Cabinet; Regular Wall Cabinet; Sloping Top Wall Cabinet. Modine also has a new line of enclosure specifically designed for institutional application.

MODINE MANUFACTURING COMPANY

Write for





NEET'S

1736 RACINE STREET, RACINE, WIS.

e



Look in your phone book for Modine representative's name —"Where to Buy It" section.

53

A J. Bragg. Anadow Lane, Green-TTECT-W. Stanwood Phillips, New York, N. Y. HEATING CONTRACTOR-J. W. Semple, Stamford, Conn.

Note three zones clearly shown in illustration at right.

4

OWNER

# Forced Circulating WATER HEAT

RFECT

Sizy des .

FORCED Hot Water Heat which permits precise control of temperature, saves labor and material in installation and assures utmost fuel economy throughout its lifetime, is the ideal method of heating any home. In larger residences and apartment buildings, however, the ease with which the system may be zoned with Thrush equipment makes those advantages more important than ever. The beautiful home shown here has three zones and is arranged so lower temperatures can be carried in the garage and other areas without af-fecting comfort in the living quarters. The record shows a surprising saving of oil since its installation. What a boon Thrush Zoning has been to the owner under rationing! Home owners everywhere will thank you for telling them about Thrush Zone Control. Get all the facts now from your wholesaler or write Popt. H-8.

THRUSH & COMPANY ... PERU, INDIANA

THRUSH FLOW CONTROL VALVE

THRUSH WATER CIRCULATOR

THRU

# Hospital

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DIAN NG

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## What's going to happen



TUNE IN: "The G-E All-Girl Orchestra," Sunday 10 P.M., E.W.T., N "The World Today" news, every weekday, 6:45 P.M., E.W.T., CB

## when the Girls come home?

HERE ARE 18 million women in industry today.

They live in a world of work-saving wonders. The chanical arms, hands, and eyes of industry are part heir daily life.

They see manual work all but eliminated. Routine ks taken over by wheels and levers. Drudgery done machines—by efficient machines.

sn't it probable that many of these women will also nand more and better labor-saving equipment in the nes they plan to buy after the war?

Electric ranges, dishwashers, washing machines, autotic heating, and other modern equipment offer the usewife an opportunity for more leisure and more nfort. Doesn't it seem likely, therefore, that the ne buyer is going to insist upon some of this longedequipment built right into her new home?

### Planning with an ear to the ground

fore the war many homes were built, financed, and d with electrical appliances built right in.

It was the beginning of a trend. And the demand ich caused that trend is now stronger than ever. ading publications in the construction field predict at more and more homes will be offered to the prosctive buyer completely equipped with range, refrigator, dishwasher, etc. Successful builders tell us that built-in labor-saving devices, adequate wiring, and sufficient outlets for the use of electrical appliances, increase consumer acceptance. This applies to houses under \$5000 as well as more expensive houses. It is well worth your consideration.

## Will the buyer be willing to pay for this equipment?

It's only natural to step on the brakes hard where additional costs are concerned. What are the facts?

First, most electrical appliances have completely disappeared from the market during the war.

On top of this, savings have climbed to an all-time high of 84 billion dollars. Chances are they will continue to increase until the war ends.

This means two things. First a dammed-up buying urge in every section of the country. Second, the greatest buying power in history waiting to satisfy that urge.

### Let's work this out together

We are laying our plans now to provide the equipment such a development will demand. And, of course, we're interested in exploring the problem from every point of view.

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## Funny-looking nail helps stop plaster cracks!



**T**'S called the Gold Bond Floating Wall Nail. It's used between panels of Gold Bond Gypsum Lath to fasten the lath to the studs so that they're not rigidly attached to the framing members but "float." The result is that only the severest strains of settling walls in new homes are transmitted to the plaster walls and the danger of plaster cracks is all but eliminated.

But that isn't all the Floating Wall System will contribute to new houses built after the war. Room-toroom noise is also considerably reduced because the head of the Floating Wall Nail is padded with felt. Greater privacy is assured. Furthermore, the Floating Wall System gives a one-hour resistance to fire. The Gold Bond Floating Wall System is something you'll want to remember in planning post-war plaster walls. But it is only one of many Gold Bond ideas for better-built post-war structures. Among them are the Two-Inch Solid Partition System and the Gold Bond Hollow Wall System for apartment houses and hotels which save space and reduce costs. And there is the complete Gold Bond line of over 150 building materials for better building of all kinds.

For complete information on the Gold Bond Floating Wall System or other Gold Bond products, see Sweet's or write us today! National Gypsum Company, Buffalo 2, New York.



## THE MONTH IN BUILDING . . . NEWS

Controls eased in housing war centers (page 60) . . . Construction Advisory Committee will go to work with WPB (page 60) . . . Land acquisition bill ruffles Parliament (page 60) . . . Guaranteed down-payments for G. I. Joes (page 62) . . . Texas town will clear its slums on a pay-as-you-go basis (page 64).

### BREATHLESS MONTH

As the last Liberty Ship that would come from West Coast yards splashed into San Francisco's Bay, reconversion vied with the Presidential campaign as the No. 1 domestic issue. Building looked hopefully at WPB's new Construction Requirements Committee and its first official Construction Advisory Committee — the machinery, at least, was readying to smooth the road back.

Building's front had moved into Normandy, where Building men in tin helmets did the job they were trained to do under German artillery fire. Britishers cleared away the new ruins the robot bombs brought, arguing noisily about the bill at last before Parliament to speed rebuilding. July was a tense, breathless month—not until V-day would the nation really get its breath again.

### SPOT RECONVERSION

"The time for discussion is past and there is no satisfactory alternative but action." Thus Senator Harry Truman, hero of more than one piece last month, crisply summed up the case for a reconversion start. Backing Donald Nelson's forthright decision to make maximum reconversion use of what materials are available, the Truman Committee could claim a good share of the credit for blasting the formidable opposition to Nelson's controversial reconversion order No. 4. Opening the way for spot authorization of civilian production, this order was of more than general interest to Building men. By giving regional WPB offices the power to authorize a production start on civilian goods where materials are available, the order might well set an operational pattern that will cover Building jobs once the general procedures for modification of L-41 are established.

Effective in mid-August, the spot authorization order will certainly speed the production of Building equipment. On the "essential" list of items that will bring a regional WPB blessing are: lighting devices and supplies; builders' hardware; plumbing fixtures, fittings, and trim; gutters and downspouts; electric space heaters, unit heaters and ventilators; hot water storage tanks and water tanks; hot water heaters and generators. Main factor that will limit the production possible under order No. 4: it will at first apply only to plants having a labor force of less than 250; in serious labor shortage areas this figure will be further reduced.

Spearhead of the military and War Manpower Commission resistance to this reconversion step ahead was the fear that it would provoke the shift of thousands of war workers to jobs promising a postwar future. But more than half of the country's population lives in communities classed by WMC as labor surplus areas. And although WMC still cherished the hope that part of the surplus labor would move to labor-short areas, a more realistic outlook was that production cut-backs would soon cancel out the present estimated shortage of 200,000 workers in war-vital industries.

Somewhat less clear was the root of big industry's reluctance to take up Donald Nelson's first reconversion offers. The Truman Committee seemed to see a number of "selfish business groups that want to see their competitors kept idle until they finish their war contracts." Nor could the automobile industry, looked to with housebuilding as a major source of quick-starting postwar jobs, agree among itself to get busy on the 2,000,000 cars for which WPB said it could soon find the materials. Said the auto boys publicly and piously: they were much too busy with war work. Said they privately: Donald Nelson, essentially a distribution man, really did not understand production facts of life; it was simply not feasible to run automobiles down one line, tanks down another. Said the less-restrained part of the press: the auto makers were not anxious at this time to show each other their postwar production hands.

## NEWS



HARLOW LEWIS: program

### **BUILDERS' PICK-ME-UP**

It was time, the National Housing Administrator thought, to offer a little cheer and comfort to the housebuilders whose doleful laments were ringing in NHA's ears. Even the present small trickle of war housing jobs would dry up by September. Would housebuilding simply have to mark time while WPB wrestled with the hydraheads of reconversion? Last month the NHAdministrator offered housebuilders a small pick-me-up: H-2 housing.

This was a plan to loosen the strings on building in war communities where need amounts to a general "hardship." Under the new terms, occupancy will no longer be limited to in-migrant war workers, but will still be mainly confined to those doing an essential war job. In areas where construction costs are zooming, selling prices may be lifted from the present \$6,000 ceiling to \$7,500 and monthly rents from \$50 to \$62.50. WPB limitations on room sizes, amount of material used, etc., remain unchanged.

Patently an attempt to please almost everybody, the H-2 plan, like most such efforts, failed to please anybody very much. The AFofL was the first to register annoyance. The price lift, AFofL said, would force workers to buy homes of "substandard wartime priority construction at inflated prices. . . . The NHA's housing program has been projected and developed behind closed doors." Replied the NHAdministrator: "On local programs involving in excess of 300 dwelling units, at least half will be rental housing. . . . Existing limits of maximum sales prices and monthly shelter rents will remain in force except in a few exceptional areas. . . ."

Private builders were not pleased to note that a certain amount of public housing will get in the swim. As inheritor of the remnants of the old USHA Reni News Photos



JOHN McTIGUE: performance

program, the Federal Public Housing Authority had suspended work on some 195 low-cost housing projects for which loan commitments totaling \$94,048,000 had been issued. A limited amount of this work will be resumed, where projects are located in congested war centers.

Mainly a morale-boost for the present, the H-2 program will not be ready to go into operation until mid-September. Best news about H-2 housing for builders was the indication that it is only the first of a series of relaxations to come, all aimed to keep housebuilding going at its present level until more normal operations can be resumed.

### ROUTING BUILDING BACK

Taking a look at the organizational machinery that had sent Building to war, WPB concluded last month that some new and broader-gauge machinery will be needed for routing Building back again. Promptly WPB went to work setting up a Construction Requirements Committee, whose job will be to sort out the needs of every segment of the construction industry, tie them together in a program that will be good for Building, good for the national economic health.

To give Building itself a voice in policy-making, WPB also moved to organize the first official Construction Advisory Committee, whose members will represent contractors, architects, engineers, materials and equipment manufacturers. Harlow Lewis, who became director of WPB's materials control division after ten years of broad experience in construction engineering, will chairman the group.

Responsibility for moving the turn-on program developed by the Construction Requirements Committee will rest with WPB's Facilities Bureau, headed by John B. McTigue. Trained as a civil engineer, McTigue left his own building and real estate business to go to work on administration of L-41, basic building limitation order.

Before these two men and their industry advisors looms a policy-making and policy-implementing job of formidable proportions. Since 1942 WPB's measuring rod for material allotment to Building has been clear-cut: war need. But there would be no clear-cut rule for reconversion priority. Building's go-ahead would have to be measured against jobs created, weighed in terms of need, evaluated in its many complex relations to the rest of U. S. production.

### UTHWATT AND ALL THAT

The flying bombs made much more noise - both in the British Parliament and in the U.S. press. But dodging into shelters and digging each other out for the first time since the big blitz of 1941, Londoners might take what comfort they could from the news that official wheels were at last moving briskly in the direction of postwar rebuilding. Under the terms of the land acquisition bill before Parliament last month, the blind bombs were at least serving to increase the area where a reconstruction start would be immediate. Anxiously awaited by many a British city whose plans for rebuilding are ready, the government's bill would give local authorities greatly increased powers to acquire at 1939 prices bomb-damaged or slum areas and any "over-spill" area necessary for a large-scale rebuilding job. It also prescribed the terms of national financing aid.

When the long-promised bill was finally introduced with the full benefit of Tory sponsorship, it threatened briefly to bring down Britain's coalition government. Long committed to outright land nationalization, the Labor Party saved its principles and saved the government by refusing to vote on the measure that seemed to the Laborities to go but a poor half of the way in the right direction. Said Socialist Moelwyn Hughes: "The Tory reformers who welcome this bill so delightedly are trailing through this House the skirts of the widow who put every penny into buying her home-but the big property owners lurk behind those skirts." By withholding their near-200 votes, the Laborites refrained from blocking the bill but effectively opened the way for considerable pruning of any hedges planted by special interest groups during the careful revision in committee that must precede final passage by Parliament.

**Slim Purse?** Some of the dissatisfaction with the government's bill lay in the funding procedure it proposed. Local authorities would borrow funds for land purchase; the Treasury would make grants covering interest for two years. For an additional eight years (or in exceptional cases, thirteen years) the Treasury would have authority to continue grants until the redeveloped land reaches its full income-earning capacity. This relatively slender financial aid, many felt, would hamper local authorities in going as far towards wholesale rebuilding as most Britishers now believe is necessary. And while protagonists of land nationalization did not welcome splitting off consideration of bombscarred and slum-pocked land from the whole problem of future land use, the expediency of this move was approved by local authorities anxious to get to work on the most urgent part of the job.

After some 18 months of clearing its throat, the Ministry of Town and Coun-



BULLDOZER levels beach while landing craft unloads supplies



DAMAGED DOCKS and railroads are swiftly repaired

Building's newest front is with Allied troops in Normandy, where beachheads look like any bigtime construction job except for the tin hats of men busy laying landing strips and railroad ties. Within range of enemy artillery fire, these construction gangs, already supplemented by willing French civilians, work feverishly to complete bridge installations and airfields on land just wrested from the Germans. Reconstruction and repair of en-



**BAILEY BRIDGES cut erection time** 

emy facilities blasted by bombing raids, shelling, and retreating Jerry demolition squads require a major part of Allied time and energy. Bulldozers and scrapers together with astronomical amounts of materiel have been ferried across the Channel from England since invasion eve for the most ambitious construction venture undertaken by combined British and American forces since engineers stormed with troops onto the beaches of Italy. try Planning simultaneously released its notion of procedure that would cope with the much larger question of public control of all future land use. It was too much to hope that legislation dealing with this portentous matter would be speedily formed, but the White Paper as a statement of official policy—would at least give both Parliament and the press something tangible to get their critical teeth into.

Scottuthiow. While popular approval of plans for rebuilding British cities has seemed to increase in proportion to the boldness of the action proposed, all public planning discussion has been accompanied by an angry refrain sounding something like Scottuthlow on this side of the Atlantic. For the last three war years the British government has contemplated solemnly and, above all, silently the recommendations of the Scott report for sound use of agricultural land, the Barlow proposals for planning of industrial location, and the Uthwatt report, which attempted to devise a formula for public control of future development without shattering in entirety the rights of individual land ownership (see Arch. Forum, Nov. '42, Aug. '43, Nov. '43). The Ministry's White Paper covers the ground initially ploughed up by Uthwatt, but veers even more sharply from any direction that might end up at land nationalization.

Full of compromise as it undeniably was, the Ministry's White Paper—especially when considered as the product of Tory thinking—would undoubtedly jolt the imagination of U. S. land planners. Even if it turned out, as some feared, to be no more than a sop to popular pressure, the Paper at least established official recognition of two basic principles. These were:

The public has the right to regulate use of land in the community interest.
The development value of land is socially created and belongs to the community.

These principles are implicit in the complex procedure proposed by the White Paper for 1) compensating the land owner for loss if the public interest demands that he be denied permission to develop his land; and 2) levying a betterment charge against the increased value of land where permission for private development is granted by local authorities.

British willingness to come to grips with these ancient and tangled questions has naturally been sharpened by an emerging new popular sense of the right of all to benefit in more equal measure from the use of the national land — a sense born of the obvious fact that there has been small inequality in the burden of "defending our island whatever the cost may be."

(Continued on page 62)

## NEWS

 Life Photo

**ROSENMAN** lets the record speak



TAFT ponders housing future

### CAMPAIGN HOUSING PITCH

That the New Deal-initiated slum clearance program has been an effective votegetter is well known to many an urban politico. That there is formidable opposition to continuance of this program from an important group of voters who do not live in slums is also well known. Taken either way, the matter of federal aid for low cost housing is part of the glittering stuff of which political campaigns are made. It surprised nobody that the platforms emerging from the efforts of both parties in Chicago last month left campaign orators free to pitch their housing notions in any key that might sound sweet to the hometown audience.

Headed by Senator Robert Taft (Rep., Ohio) who has for a long time peered earnestly at housing matters, the Republican platform-builders declared themselves for "stimulation of state and local plans to provide decent low cost housing properly financed by the Federal Housing Administration, or otherwise, when such housing cannot be supplied or financed by private sources." This was not unpleasing to the National Association of Real Estate Boards or to its energetic president, John Galbreath, whose day-and-night devotion to the Bricker campaign had ended in a sickbed for himself, the Vice-Presidential nomination for his Columbus neighbor. Congratulating itself on an appearance before the resolutions committee. NAREB observed: "These statements might be more clear and forthright, but on the whole they move in the direction that NAREB wants to pursue."

In somewhat heady enthusiasm, the National Association of Home Builders told its members that the platform was a significant tip-off. The Federal Housing Administration, NAHB said, would soon take unto itself another Title, offering special insuring aids to finance the rehousing of slum dwellers. Unfortunately, FHA last month seemed never to have heard of the matter.

Judge Samuel Rosenman, who once scrambled a dozen federal housing eggs to serve up the National Housing Agency, seemed not to have his mind on housing when he drew up the Democratic planks. The Democrats' claim to having "saved farms and homes from foreclosure" was the only platform hint of the volume of Administration-sponsored legislation that resulted in the Home Owners' Loan Corporation, the Federal Housing Administration, the United States Housing Authority. While the Democrats said they were anxious to "aid the home-ownership of familysized farms," they let their record speak for itself on housing for urban voters.

### G. I. DOWN-PAYMENTS

If only ten per cent of U. S. veterans take up the government's offer to help them buy a home, there will be at least 1,000,000 customers in the postwar housing market. There will be some \$2,000,-000,000 in government-insured down payments to step up the promised housing boom. It was easy to see that the market potential of the veterans' benefit act would be enormous. It was also easy to see that the time limit fixed by Congress on housing loan applications was not calculated to do the building industry any good.

As the housing loan provisions are set up, service men who want to take advantage of government guarantees must apply for a loan within two years after their discharge or within two years after war's end, whichever turns out to be longer. In no case may loan applications be delayed more than five years after war's end. This adds up to the fact that bulk of veterans' home purchase will be concentrated in the first three years after the war, a period when pent-up housing need will send over-all demand sky-high. To the housebuilding industry, this looks like a sure-fire way to recommence the familiar cycle of initial overbuilding, eventual mortgage collapse.

To veterans themselves, the time limit means a good deal more. Majority of service-men are 26 and under. According to Federal Housing Administration figures, most Americans become home buyers between the ages of 30-40. For servicemen who must get readjusted to civilian jobs, home ownership may have to be postponed longer than the usual expectancy. It was oppressively clear that present terms of the bill will force many veterans either to buy homes before they are ready to or to forego the benefits of this easy-buying plan. If loan privileges were extended over a 15-20 year period, both veterans and the housebuilding business might benefit in larger measure.

Private lending institutions contemplated last month the prospect of a possible \$16,000,000.000 worth of loans to veterans — an amount equal to 80 per cent of the \$20,000,000,000 total of all U. S. home mortgages now held by savings associations. Naturally the lenders pored anxiously over the somewhat tangled provisions outlined by a cautious Congress. While actual lending operations would take their shape from the regulations now being drafted by the Administrator of Veterans' Affairs, the Servicemen's Readjustment Act of 1944 had set up the skeleton of two types of housing loan plans:

**Plan 1.** Ex-G.I. Joe will go to any local lender and apply for any amount up to the full purchase price of property he wants to own. Of this loan, the Administrator of Veterans' Affairs will guarantee 50 per cent or \$2,000, whichever is smaller. This guarantee will presumably take the place of the down payment usually required for lender security and will undoubtedly have the effect of increasing lenders' enthusiasm for high percentage loans. Interest rate on the entire loan may not exceed 4 per cent; amortization may not exceed 20 years.

**Plan 2.** The veteran will apply for two separate loans. The primary loan must be "approved by a federal agency to be made or guaranteed or insured by it." The second loan will provide down-payment money and will be guaranteed in full by the Veterans' Administration in an amount not to exceed \$2,000 or 20 per cent of the purchase price of the property. Rate of interest on the secondary or down-payment loan must not exceed the interest on the principal loan by more than one per cent.

Who Will Lend? Plan two's stipulation that the primary loan must be approved by a federal agency gave rise to substantial speculation as to what kind of lending institutions would be eligible. First analysis was that FHA insurance would be imperative. Closer scrutiny indicated that a home loan made by a national bank or a federally chartered lending institution would probably meet the qualifications. But a general feeling that the Federal Housing Administration might turn out operational prime mover persisted, and a good many lending institutions not already on FHA's approved list scurried to get into the fold.

A veteran may borrow governmentguaranteed money not only to purchase a home, but also to repair or improve a house he already owns, to refinance a delinquent home mortgage, to pay back taxes on his house, to buy a farm, farm equipment, or business property. Not much repair and improvement loan business is expected to be set off by the Act. Banks are likely to be fairly cool, for example, to loaning a veteran \$200 to paint his house or buy a new refrigerator-with interest pegged at 4 per cent and only 50 per cent protection. Under FHA's Title I, the lender can collect around 9 per cent on short-term improvement loans and get much better protection.

Interest Peg. Major lift to a broader housebuilding market can be expected to emerge from the proviso pegging interest on housing loans at 4 per cent— FHA maximum permissable interest rate is now  $4\frac{1}{2}$  per cent. While lenders are apt to be more than lukewarm to the diminished interest ceiling, the enormous volume of veteran business will be enough to put an end to quibbling.

### COMMISSIONER SAMPSON

Commissioner Robert Moses, his short hair still ruffled from a vitriolic, N. Y. Times-sponsored clash with long-haired planning theorists, lunged headlong into New York's zoning problems, emerged with new recommendations that were little less than anathema to the city's realtors. Briefly, the zoning resolution now before the Moses-led City Planning Commission proposes to reduce area coverage all along the line. Coverage in the dense "A" district (office and commercial buildings) will be thinned down to that of the present "B" district; the present "B" district to that of the pres-ent "C" district; the present "C" district to the coverage of the present "D" district, and that of the "D" district will be reduced to a reasonable extent, but not so as to conflict with the present "E" district. (Most of Manhattan is in the "B" area district. Under the new proposal these dwellings will occupy only 65 per cent of inside lots, 80 per cent of corner sites.) As to height, where buildings can now be constructed to the full width of the street, it is proposed to reduce the maximum to seven-eighths of the street—and so on.

Built in a restricted retail district. New York's Empire State Building covers 100 per cent of its lot. If the zoning amendments now proposed had been in effect when Empire State was a-building. coverage would have been reduced from 83,898 to 56,034 sq. ft. There would also have been a slight additional reduction in gross area due to the lower setbacks required. Typically, interior lot buildings on 60 ft. streets now attain a height of about 16 stories. According to the new height restrictions, such buildings could probably not have more than 11 stories, assuming an uncovered portion of the lot at the sides.

Said the City Planning Commission: "These changes are by no means revolutionary . . ."

Wrote Ralph A. Brooks, chairman of the city planning committee of the West of Central Park Association (with restraint): "In reducing the productive power of the land between  $12\frac{1}{2}$  and 30 per cent... there is no assurance that tax assessors will recognize this fact when taxable land values are being determined."

Cried one enraged property owner (without restraint): "This is going to cost me \$900,000!"

Replied the Commissioner: "Can I help it if you made a bad investment?"

Due to be acted upon around September 1, the Zoning Resolution is undoubtedly a step-however hesitant-in the right direction. It met with more or less qualified approval from the press and the New York Chapter of the American Institute of Architects. Said the latter's Arthur Holden, in an inevitable mood: "Questions will inevitably be raised, as for example in the case of needed ground floor coverage in the more intensive business zones. . . . Congestion doesn't pay in the long run. Immediate protection is essential before architects begin to file their plans for construction by private enterprise. . . . Ways should be sought to reduce the impact of hardships inevitably imposed both upon the public and upon the individual property interests by those changes. . . .'

By the month's end, the cantankerous Commissioner was well on the way to being as unpopular with New York's well-trimmed real estate interests as he has managed to become with long-haired U. S. planners.

### SELF-SUPPORTED SLUM CLEARANCE

From the little-explored arithmetic of land values comes many a surprising answer to problems usually measured in sociological terms. Last month such an answer came from Laredo, Texas, where one-fifth of the city's residential district sprawls in ugly slums along the gullypitted Arroyo Zacate. Reporting on a slum clearance scheme for Laredo that will pay for itself, the *Engineering News-Record*, with characteristic moderation, called the Laredo plan "sufficiently challenging to warrant re-examination of many slum clearance projects now calling for large subsidies."

About half the Mexicans who live in Laredo's Tortilla Flat own their tumb-(Continued on page 64)

**PREFAB** in reverse is the process illustrated in these photographs from FPHA. Workmen are dissecting a typical war dwelling to find out how demountable a non-demountable house really is.



## NEWS

Engineering News-Record



SLUMS like this amount to one-fifth of the residential area of Laredo. Tex. Builder Zachry has figured out how to replace them all with 4-room modern houses plus park space with no helping hand from anybody, except for a slight lift from FHAinsurance (see below).

ling shacks, lacking water, lights or sewers; the rest rent. Outside hydrants, serving a group of dwellings, are the water supply. Only 150 of the 2,550 dwellings along the winding arroyo are judged habitable by present standards. High rate of tuberculosis and other disease among the slum dwellers menaces the health of the entire city.

Looking with some boldness and imagination at this 600-acre slum, a local builder, H. B. Zachry, said that no subsidy would be needed to:

▶ Rehouse the slum dwellers in 2,500 fireproof, masonry, two-bedroom, modern homes—at a cost of \$3.50 per week per house, including taxes, interest, amortization.

Install electric, water, sewer and gas lines.

▶ Regrade and replat the entire tract; provide a paved street system including many winding lanes.

Create a string of lakes in a park setting and many sizes of park plots.

Channel and landscape the arroyo; build five new bridges to span it.

Give employment to hundreds of Laredo war veterans.

Zachry's arithmetic was as simple as his plan was bold. Existing ordinances empower the city to condemn all property within the area as a slum and to transfer title to a redevelopment corporation. Land owners would trade existing lots for new improved lots, lose one-fourth of their land in the process. This land would be used for parks and for some new building sites. Proceeds of the sale of additional building sites would be used to pay 50 per cent of the assessed valuation of property destroyed.

New houses built will have a value of \$2,600, but mass construction methods will cut the cost to \$1,650. FHA has given some assurance that increased value of the improved lot plus the \$1,000 equity in each house resulting from construction savings will be sufficient down payment to qualify for mortgage insurance.

Street, park and sewer improvements will be paid for by a special municipal bond issue of \$500,000 to be amortized solely by the taxes from the \$3,000,000 increase in values in the area. Utilities will be self-supporting.

Zachry believes that construction work should be opened to competitive bidding, hopes to come off lowest bidder himself. His firm is now at work on legal and engineering preliminaries, will proceed with site improvement whenever the city authorizes formation of a redevelopment corporation.

In some aspects, Zachry's scheme to rebuild the slums of Laredo is amazingly reminiscent of Alfred Rheinstein's proposal to rebuild the high-priced land of New York (see ARCH. FORUM, May, '44). Both proposals turn on one fundamental: the increased value of land pooled and replanned for efficient community use can launch self-supporting new development.

### HOUSING DREAM WORLD

Unnerved by the bogey of a miracle home that seems to float in a million consumer heads, the National Association of Home Builders last month took steps to initiate antidotal publicity. NAHB's premonition that the postwar home market may turn out to be locked in a technical dream world was confirmed by the findings of Manhattan researcher Daniel Starch.

Covering middle-class families with an average income of \$3,027 in nine major cities, the Starch survey found 45 per cent ready to build or buy a home soon after the war. But more than half of all families interviewed expect to get a superhouse, bursting with mechanical miracles, at a cost of about \$52 monthly under FHA financing. Sourest part of the Starch survey is its conclusion that a big block of families are determined not to buy a house that bears any marked resemblance to the best seller of 1941. Plans to build or buy will be abandoned, Starch said, by:

▶ 54 per cent if they can't have complete air conditioning.

62 per cent if they can't have electronic controls to simplify housekeeping.
53 per cent if plastic plumbing isn't in the house.

▶ 25 per cent if movable partitions and outside walls fail to show up.

All this sounds as if the \$6,000-home customer had worked himself into a captious and peremptory mood not seen before outside of the custom-built trade. It was enough to prompt the home builders to call in publicity man Steve Hannigan, give him the job of persuading the public that it is perfectly possible to keep house without benefit of electronic eyes and movable walls.

#### EARNINGS

The 1944 drop in construction reflected itself in no uniform pattern in the midyear reports of materials manufacturers. July brought these samples:

▶ The Mengel Co. earned in the first half of 1944 a net profit of \$413,000, equal after preferred dividends to 80 cents per share on outstanding common stock. Same period last year Mengel earnings stood at \$281,000 or 48 cents per common share.

▶ Celotex Corp. and wholly-owned subsidiaries reported a net profit for the six months ending April 30 of \$209,092, equal to 17 cents a share on 755,472 shares of common stock outstanding. Celotex profits for the same period last year amounted to \$481,657, or 63 cents a share on the 638,410 common shares then outstanding.

National Gypsum Co. and subsidiary counted net profits at the year's half as \$494,770, or 26 cents per share of common stock. This compares with \$442,-658, or 22 cents a common share, for the first half of 1943.

### MUNICIPAL PANG

Mayor LaGuardia said he had an open mind on the matter. But the Mayor, like any other New Yorker, was profoundly attached to the five cent subway fare that has long strung the five sprawling boroughs together. With the subways \$50,000,000 in trouble, the beloved five cent fare looked closer than it yet

(Continued on page 130)


# IRB BUILDING, RIO DE JANEIRO, BRAZI

A new government agency sponsors architecture of significance and promise in the largest Lat American republic. Architects: Marcelo, Milton and Mauricio Roberto.

Museum of Modern Art, Kidder Smith



The Institute of Retirement and Pensions building (Industriários) was designed by Marcelo and Milton Roberto and shows louver treatment similar to that on IRB. Industriários is a government agency comparable to the United States Social Security Board and is said to be undertaking a construction program of low cost homes with funds contributed by industrial workers throughout Brazil.

Interesting to North American observers is the fact that government agence in Brazil are now using modern architecture, as our own government has do in some housing developments and temporary war structures in Washingt D. C. More interesting is the realization that in scale, construction and aesthe quality, the government buildings in Rio de Janeiro—to which IRB is a ne worthy addition—outclass much of the work that has been done in this count The completeness of the planning, elegance of the material and finish, and general maturity of the design, make this example one to be studied with ca

While not an exclusive policy with the Vargas regime, the modern trend design has met with semi-official approval. Typical of the battle of the styles the juxtaposition in Rio of the Ministry of Education and the Ministry Finance, both new buildings, the one startingly modern, the other richly of servative. The Ministry of Education (see Arch. Forum, Feb. '43) was design by several of the leading modern architects of Brazil, with Le Corbusier consultant. Brazil's new architecture, however, is not modeled exactly on famous Swiss architect's theories (although it will be noticed that the Robe brothers share his fondness for the classical rules of composition). In the of of these official buildings, it is, rather, a clever blending of the regular, form ist architectural block with ingenious methods of insulation against heat a glare, occasional structural innovations—like the use of stilts to free valua circulation space at ground level—and with some attempt to create a mo mental though irregular facade.

In the IRB building all these tendencies are apparent, together with prai worthy and interesting efforts by the architects to create flexible interiors a to solve the difficult problems of circulation and lighting. In addition to practical value (especially great in a climate like Rio's) the ingenious fe stration has contributed largely to the appearance of the building, and vari to the facades—which vary with the requirements of orientation. The circution system has been most successful and is probably the building's great contribution to architectural advance. Technically, too, the idea of facing reinforced concrete structure with prefabricated walls was a bold and imagitive step, and one that will undoubtedly be adopted elsewhere.

Created in 1939, the Instituto de Resseguros do Brasil (IRB) operates in l reinsurance and in the so-called elementary forms of insurance: fire, mari inland, disability and accident, aviation and other hazards. Seventy per c of its capital is subscribed by state social security corporations, created by federal government under the direction of the Minister of Labor, Industry a Commerce; the remaining 30 per cent is subscribed by all the insurance co panies in Brazil in proportion to their capital. Its management is in the har of Dr. Joao Carlos Vital, who was appointed by the President of the Repub-He is assisted by a technical council of six members, three of whom are gove ment representatives, the other three being elected by the insurance compani-

Dr. Vital has studied insurance methods in the United States and visited t country in 1941 for the purpose of obtaining building materials and equipme for both the IRB and the Institute of Retirement and Pensions, illustrated the photograph at the left.







SITE of the IRB building has extensive views of Sugar Loaf Mountain and Guanabara Bay. Built on the outskirts of a district which has been rapidly developed in the past five years for government, office and apartment buildings, it adjoins a commercial airport and a street of 12-story residential buildings. The land, formerly hilly, was graded almost level, and is still in process of development. It is a convenient location for the government quarter, being near the Avenue President Vargas and other through traffic arteries. This area, like others in Rio, was the scene of a building boom in 1940-41; since Brazil entered the war the boom has come to an abrupt halt. The interim period before building starts again should provide an opportunity for the authorities to perfect their plans and make an attempt to control rising land values and rentals, which are turning many fine old sections of the town into a speculator's beehive.

Architects of the famed Brazilian Press Association building, Marcelo and Milton Roberto recently took into the firm a third brother. Mauricio. The IRB is the first important result of the triple partnership. Previously the two brothers had designed the Institute of Retirement and Pensions headquarters (illustrated on p. 66) and a hangar for the Santos Dumont Airport, which adjoins the IRB site. All Brazilian modern architects, including the Robertos, owe a debt to the teaching of the able scholar Lucio Costa, formerly critic of the School of Fine Arts in Rio, and generally accepted leader of the new movement in design. While omitting reference to certain capricious details, like the projecting windows of the president's office on the eighth floor, the Roberto's own story of the planning of IRB reveals its character in an especially interesting way. "Select the techniques, choose the materials—remember the limitations of the human eye, recall the eternal rules of the proportions—and then send for the muses" is how they describe their method. The result, in the case of the IRB, they term "a building of lyrical quality, with something of a Venetian flavor . . . an adventure in composition." . . . "The classical rules make things a lot easier," they explain. "Like metre and rhyme in poetry, proportion in architecture can be used as an exploring instrument." The result can be seen on the opposite page—a well-balanced combination of horizontal and vertical elements which house compactly the numerous functions of a busy government bureau, at the same time providing shopping facilities, mezzanine and recreation floors, and a luxuriant roof garden—all in one trim architectural package.

"The IRB is a typical reinforced concrete building," the brothers go on to say. "The dry mounted external walls were applied here for the first time in reinforced concrete by simpler methods than any used before. They stood without harm through a long series of storms which providentially came to test them. The bipartitioned window worked out as expected, too . . . By concentrating the sanitary installations and the elevators and making them independent of the facade we established two independent horizontal circulations (for public and employes). This arrangement, in the opinion of experts who visited the IRB, is an important contribution to the problem of office building design. . . . Strangely enough, the height regulations of the nearby airport were very useful. They forced us to dispense with an elevator tower . . . an improvement . . . and to make every centimeter count on the vertical. This was accomplished by the skillful detailing of our engineer, Paulo Fragoso."

The brothers' method of using *brise-soleil* in vertical slats, on concrete supports cantilevered out beyond the window wall, (used before on the Press Association building and others) still seemed to them the best method of heat and glare protection. This treatment of screening and fenestration is of particular technical interest and illustrations of its adaptation for the IRB building will be found on the following pages.



IN BRAZIL SUN SHINES FROM NORTH





"The exterior walls could have been thus, very modern of course"

- and -
-eh-
P

But in Riothere is much sun and much light. According to scientific computations we concluded that the walls should be thus:



"Nevertheless, everybody knows since Sullivan, about the advantage of a window with a full horizontal development."



"The windows might have been made this way. But the rear part of the room would have been badly lighted unless the glass panel was carried up to the ceiling. Therefore we have done this:"

-	

In this way the whole room is well lighted. In cold weather when air conditioning is not used, the upper part supplies the ventilation required, while the lower part is used exclusively to provide light and view.



The exterior walls of the building—wood, glass and fiber cement interspersed with stone-faced columns—were erected in 19 days, which may be considered something of a record. In this country the lavish amount of wood used would be prohibited by fire regulations within city limits. The panels of fiber cement were pre-coated with thin plaster of a light green color. The wood—plywood and solid parts—was ordered from the state of Santa Catarina in the south, cut to measure and in specified quantities and the required sections made up in Rio, in such a way that no material was wasted. A similar process was used in every part of the building, which was completed in eleven months.

The divided window is the fifth experiment that the Robertos have made in fenestration. Their sketches on this page show the reasoning behind the separated glass areas—lower panes for illumination and view, and upper ones, which are movable, for ventilation in winter and reflected light from the ceiling. These windows are used on the south and eas sides, where there is no necessity for louvers.







TING DIVISION OFFICES HAVE LONG DIVIDED WINDOW ON SOUTH SIDE FOR ILLUMINATION AND VIEW OF THE BAY







VIEW UPWARD THROUGH BAFFLE SYSTEM



PLAN

Projecting windows on east side have floor-to-ceiling fenestration and are equipped with interior sun blinds for occasional use.

Tools, hardware and some building material, including pipe and electric wiring, were imported from the U. S., as were the majority of the business machines and typewriters. On some of the floors, walls and columns, the architects, who confess to a liking for the color and play of materials, used marble, granite, stone and ceramics—not arranged as decoration but to emphasize architectural intent. The native granite of Brazil is pinkishgrey, the sandstone orange or brown; marble is usually imported. Cement comes from a large modern plant just outside Rio. The Robertos, like all Brazilian architects, work closely with the building industry. They are deliberately free with materials, being concerned to break down established practice and regulations which prevent the development of an experimental architecture.

The reinforced concrete floor construction has an over-all thickness of 12 inches, made up of a reinforced concrete slab, standard beam construction and a ceiling of precast concrete slabs, with an air space between for piping and conduits. A detail of the floor is shown below.





ITERS AND OTHER BUSINESS MACHINES WERE BOUGHT IN THE U. S. BY BRAZILIAN GOVERNMENT TRADE BUREAU







CORRIDOR FOR CALCULATING MACHINES

Where business machines are used, ceilings and walls are lined with sound absorbing material, and machines are separated by double screens of Acousti-Celotex. By means of hinges, the screens are easily moved to any position, and provide an interesting alternative to the usual partition, allowing for free circulaiton of air and proper lighting.

The eighth floor plan below shows the president's office, conference room, advisory office and accounting division. Notice the treatment of the circulation—the separate elevators for employes and visitors, which discharge and pick up their passengers at street level at opposite ends of the building; also, in the photographs, the difference in ceiling treatment between the conference and calculating rooms.



CONFERENCE ROOM HAS CURVED GLASS BLOCK WALL, LEATHER CHAIRS





HINGED ACOUSTI-CELOTEX SCREENS IN CALCULATING AND RECORDING MACHINE SECTION PROVIDE INSULATION



T'S OFFICE HAS SPACIOUS AND COMFORTABLE APPEARANCE, VENETIAN BLINDS, ARCHITECT-DESIGNED FURNITURE



The roof garden—so seldom attempted by modern architects—here lives up to its name. An abstract pattern of flowers, reeds, white sand, rubble and water spreads itself with a delightful carelessness over the free space between the machine and storage rooms. On the walls which partially enclose it the painter Paul Werneck has designed vivid mosaic panels. Below, the ninth floor provides several types of recreation and amusement. There is a club, a bar for refreshments, a library, and a nursery for the infants of the employes. Adjoining the library is an auditorium, the roof line of which has been designed to coincide with that of the elevator penthouse. This has been made possible by stopping the elevators at the ninth floor, thus avoiding a projecting tower. With one whole floor and the roof given over to recreation, the IRB may be said to have established a precedent in the provision of amenities for its employes and the architects a standard for any future planning of this kind.









The elevators do not go up to the roof garden They stop at the 9th floor. You reach the roof garden via a flight of stairs.



RN ADAPTATION OF THE TRADITIONAL ITALIAN PERGOLA FRAMES VIEW ACROSS BAY TO SUGAR LOAF MOUNTAIN



PLANNED AUDITORIUM FORMS PART OF NINTH FLOOR RECREATIONAL SYSTEM. PROJECTION BOOTH IS SEEN AT LEFT

### PREFABRICATED WINDOW WALL

MARCELO, MILTON & MAURICIO ROBERTO, ARCHITECTS

### DESIGN DATA 19. THE ARCHITECTURAL FORUM



### PLANNING WITH YOU



Gene W. Logan

Syracuse, N. Y. is a convert to controversy. Instead of leaving postwar planning issues buried with planners and councilmen in the proverbial smokefilled room, debatable questions have been thrown smack in the face of the public. Every Sunday at 2:30, from January to May of this year, the radio program, "Syracuse on Trial", has aired both sides of red-hot local issues in a series of make-believe courtroom discussions. Leaders of divergent schools of thought have been put on the stand as witnesses to hash out their differences before a judge and jury.

Entered in the Eighth American Exhibition of Educational Radio Programs at Ohio State University, "Syracuse on Trial" was selected as the best program in the public discussion group. The judges in their citation described it as: "Community problems dramatized in unique fashion and slanted at local interests and actually initiating steps towards solution. Seldom has radio used 'courtroom technique' to better advantage." Even more important, results prove that citizen participation in planning-the only way to achieve a successful program-is really catching on in Syracuse.

#### THE WHY AND HOW

All this fanfare started back in January, 1943 when the editors of *Fortune* and THE ARCHITECTURAL FORUM picked Syracuse as a city of typical American growth with typical American problems, discussed with Syracusans the potentialities of postwar planning.

Starting point was the distribution of a questionnaire called "Be the Mayor for a Minute", results of which disclosed that Syracuse citizens believed overwhelmingly in postwar planning now. They rated as most important traffic and housing improvements, then in decreasing importance city services, Without citizen support no planning program can hope to get beyond the blueprint stage. Recognizing this fact, Syracuse, N. Y. has instigated a unique radio show (see cut) which places plans directly before the public. Its technique of putting local authorities on the air to battle out their conflicting opinions gives the program more than ordinary listener appeal. In addition, all Syracusans are urged to voice their own ideas on the problems under discussion. Results show that this method of rousing an apathetic citizenry has been successful in Syracuse, could be adapted by planners elsewhere to publicize their efforts.

schools, flood control, playgrounds and agriculture. A sales tax now as a means of paying for the postwar program was favored by 81 per cent of those answering the questionnaire.

With this encouragement and knowledge the Syracuse-Onondaga Postwar Planning Council started in to work. They surveyed, interviewed and analyzed, finally came up with definite proposals for the improvement of postwar Syracuse.

To inform the public of their findings, they tried direct mail folders and public meetings, but neither were effective. Then came the brain wave of using the air waves and things began to happen.

The three men behind this idea— Kenneth G. Bartlett, Director of station WFBL at Syracuse University, Bernard L. Finn and F. Ware Clary, respectively coordinator and chairman of the Public Participation Committee for the Postwar Planning Council—worked out the series of programs. Three weeks in advance they would decide the issue for a particular Sunday discussion. The first program tackled the problem of jobs for returning soldiers, the second was on traffic questions already found to be uppermost in the minds of the citizenry.

After deciding on the subject, witnesses who were specialists in the field had to be rounded up and persuaded to testify. The committee recruited three or four local experts per program, discussing with them what they wished to say. A writer, often Finn, then whipped the first draft testimony into shape, giving it over-all direction, significance, as well as dramatic effect.

Real judges and lawyers were selected for each program by the Bar Association and the juries, a cross section of the county, were chosen by OCD officials.

Explains Director Bartlett: "We tried to give the illusion of a public hearing adapted to radio. We dramatized in the first five minutes the problem that was to be discussed. From that time on we tried to create the feeling that the city was being tried in respect to a given problem. The judge would address the jury and give it the issues it was asked to decide. The lawyer for the planners then would call his witnesses. The other attorney represented 'the man in the street'. He would not always take a negative attitude, but he would take an inquiring one and was reasonably critical. Each witness was examined and cross-examined; and for the last six or seven minutes the jury was invited to question any witness.'

The jury's final decision, although known beforehand, was a completely honest vote, taken at rehearsal. While seeming completely spontaneous, the program was actually planned, written and rewritten to the last period in stormy sessions including every member of the cast.

A coincidental telephone survey taken during the last three programs showed a listening audience of about 20,000 in the city alone, not counting towns in the country or listeners in the secondary service area. This is 33.7 per cent of all the radio sets turned on.

Newspaper publicity took a gigantic leap with the initiation of the program, and many of the discussions were continued in the editorial and letters section of the papers—proof that Syracuse citizens were doing some thinking. Included were word-for-word reprints of some of the more spicy pieces of testimony that the programs brought forth on questions like housing, taxes or even community sewerage.

Perhaps the most tossed about testimony was on the question: "What are we going to do about Onondaga Creek and Lake?" Everyone had his own idea about the lake's pollution-most people



**AIR-VIEW** of Syracuse shows complicated streets, haphazard distribution of business buildings and homes. If the Planning Commission backed by Syracuse citizens has its way, postwar photo-

graphs will reveal two central traffic loops, rezoned business and residential sections, adequate and convenient parking space, more parks and playgrounds.

Photo: Fairchild Aerial Survey

erroneously blaming waste from a chemical company, few realizing that sewage contamination was largely responsible. The radio session clarified the reason for the unsavory character of Lake Onondaga and proposed a method for purifying Syracuse sewage.

Great fuss and controversy was also caused by the subject: "What are we going to do about our towns and villages?" The need for unifying functional operations of city, towns and counties had long been evident to community leaders, but when consolidation was formerly put up to the voters they threw it out. With Mayors of all the small towns airing their views on the radio, people started taking notice. Most important, the program forced leaders to clarify their own thoughts and got them on record.

#### HOLDING PUBLIC INTEREST

One of the main reasons for the radio venture's success was its method of presentation. For instance, a skeptic at the beginning of each program took away from the sweetness and light effect, made Syracusans more willing to listen to what came later. This technique is shown in the program, "What are we going to do about traffic?":

"VOICE: Well, Brother, I always say-Accidents are like the weather-always with us, no matter what! I say, what's the sense of . . . . (Fade)

ANN: Consider, Mister, the full facts in the case . . . In the last ten years, 660 persons were killed on the roads and streets of this county. That, sir, is the reason Syracuse is on trial to find out what we are going to do to make our streets and roads safer and more convenient."

Presenting conflicting opinions was also a major factor in the program's effectiveness. The more fight in Syracuse citizens, the happier was the committee. For the housing discussion, two opposite factions were represented and their beliefs ironed out before judge, jury and listening audience.

"ADCOOK (attorney for the P.P.C.): I understand one possible solution is in public housing projects. How do you feel about them?

SKEELE: I don't like them for three main reasons: First: they cost more money than they would if built for private ownership. Second: They don't return tax revenue to the city. Third: I don't favor government home ownership. Private ownership is far more desirable ....

THOMPSON: ... I am concerned with poor housing conditions only because they are breeders of juvenile delinquency and adult crime—of human misery and hopelessness—of bad health conditions—in short, because they are a social menace. I can take this viewpoint because I don't make my living by building or selling or renting houses. Both Mr. Skeele and Mr. Eagan, on the other hand, would go bankrupt in short order if they worked with my thought in mind but offering an honest value and making a reasonable profit.... *ARONSON:* Now, Mr. Thompson, I understand you to say that you hope private enterprise can at least partially eliminate the substandard home. Now —what I'd like to know is this—if this doesn't work out 100 per cent—would

you be in favor of another public housing project. . . . *THOMPSON*: If that were the only way

of providing decent living conditions for the needy, I certainly would.

ARONSON: But you don't think that it's the ideal solution?

THOMPSON: No.... The Authority is working on an idea now which will make it possible for the occupant himself to own the home he lives in. He will buy it on installments paid along with the rent. Much like all the other plans of this kind which are so successful today....

ARONSON: Wouldn't you have to have government help for such a scheme? THOMPSON: To some extent Our

THOMPSON: To some extent. Our hope, however, is that the plan will entail no public expense other than the government's guarantee of bonds issued by the Authority. In other words—it might be possible to get along without a subsidy for a considerable part of such an undertaking."

#### YOUNG PEOPLE TAKE PART

The programs did not limit themselves to battling out the sewage and housing problems, however. Two of the series were devoted to juvenile delinquency, one from the adult point of view, one put on by the boys and girls themselves. In this program high school pupils told what they considered wrong with their set up:

"ANN: Syracuse and Onondaga County are on trial!

*VOICE 1:* O.K., what's the question this week?

ANN: Is Syracuse giving its youth a square deal?

*VOICE I*: What's the matter with the deal we're getting?

VOICE II: Are you kidding?

VOICES: Ask us about the deal! We got a few answers!

Ask us! I dare vou!

You said it!

ANN: O.K.... So we will ask you. It's your story from now on ... you write your own answers to the question, "Is Syracuse giving its youth a square deal?"

How are you going to answer that question? Let's see . . .

Control: (Dissolve scene in sound.) MOTHER: Now be good girls and have a good time.

GIRL 1: But Mother, there's absolutely nothing to do!

*GIRL 2:* (Sings.) No dates, no nothin ... Well, Sis, I suppose we could always go some place and drink beer!

MOTHER: Girls!

Control: (Dissolve scene in sound.) GIRL 3: Well, what are we going to do?

GIRL 4: I'd like to go roller skating but the rinks are too crowded.

*GIRL 5:* And I'm sick of the movies. *BOY 1:* Well, let's go some place and dance. Let's go down to . . .

GIRL 3: My mother won't let me go there.

BOY 2: What about. . . .

GIRL 4: Unh Unh . . . my dad says definitely not!

GIRL 5: What about one of the hotels? BOYS: Take it easy!

On my dough!

I've got ninety cents!

VOICE II: But that isn't all . . . we're

not just looking for a good time . . . a good time we can *afford* . . . there are other things, too.

BOY 1: Not enough sports ... no places to play, and not enough equipment.

GIRL 1: And not enough supervisors. VOICE 1: Do you have any gripes against the schools?

BOY 1: (Dubiously.) Wel-l-l-

BOY 2: Sure we have.

ALL: That's right ... sure ... I'll say we have ....

BOY 2: For one thing ... we have to take a lot of darn silly courses.

GIRL 1: And sometimes the teachers aren't much better.

BOY 1: And there are a lot of courses we should be getting that we don't have. GIRL 3: The school courses aren't revised . . . to train us for the kind of jobs coming after the war. . . .

*BOY 3*: What about a new gym for Nottingham?

BOY 4: What about any gym ... even an old second-hand one ... for Vocational? We don't have anything but a classroom with the seats taken out.

*VOICE I*: Wait a minute now . . . What *are* we going to talk about?

*ALL*: (Pause.) Better places to go after school. Better fields . . . Better gyms . . . better courses to study.

JUDGE: (Pounding with gavel.) Order in the court! (Instant silence.) Mr. Clerk, what is the meaning of all this noise and confusion in this court?

CLERK: Your Honor, these are the young people of Syracuse. They are here to raise the question . . . " Is Syracuse giving its youth a square deal?" They have, by their own choice . . . by the decision of hundreds of high school people throughout the city . . . decided that one of the principal implications of that question deals with the lack of adequate spare time activities . . . another with the curriculum of the schools themselves."

#### FINANCING AND REPORTS

The next to the last radio session got down to cases on the subject of financing. Methods of taxation were hashed out, and grievances aired about present tax systems. The jury's report at the end of the program stated: "The jury votes 6-0 that our future community prosperity demands relief of the real estate tax burden; and 5 to 1 that additional sources of funds should be provided *now* to provide the money for postwar unemployment; favors a state sales tax 4 to 2."

The last program tied a knot in the series by reviewing all the proposals and asking "What are we going to do about our postwar plans?" Reported John Williams, secretary of the Chamber of Commerce Employment Research Committee: "Our estimates show that business and industry will provide 117,-000 jobs here 12 months after the end of the war. This is about 10,000 more jobs than were available in 1940. We believe this is the most important problem facing our or any community. We think we're going to be ready with jobs for returned veterans. That's our report!"

Wendell Field, representing agriculture said: "After studying the needs of agriculture we recommend the construction of an Agriculture Center in Syracuse. We also ask for price policies that will place agriculture on an equal footing with industry and labor...."

Other recommendations included:

"To guide the future location of industry, business and residential sections, we recommend that a General Plan of Land Use be adopted...."

"We suggest that the city acquire the Army Air Base as a future Municipal Airport..."

"We recommend a downtown Civic Auditorium, possibly as a community memorial to the veterans of all our wars. We also suggest a sports center to be built by private enterprise..."

"We point to the desirability of more convenient and inexpensive parking space . . ."

"We recommend that playgrounds be made a part of the plan for new developments before they are built up . ..."

"We suggest for study a plan to bring home ownership within the reach of some families who cannot now afford to own a home . . ."

"The pollution of Onondaga Lake should be stopped . . ."

#### WHAT TO DO ABOUT IT

All these and more proposals were reviewed, but it never did become quite clear what Syracuse was going to do about these plans. Said William P. Tolley, Chancellor of Syracuse University and Chairman of the Postwar Council: "We shall propose to the Planning Council that it designate committees, charged with the responsibility of following through and making periodic reports upon progress or difficulties encountered . . ." Coordinator Finn maintains that the postwar plans will have been pulled together by next fall when the discussion will probably go back on the air again.

Although the Syracuse postwar program is not perfect-is in fact more a series of conventional improvements than a long-range planning venture-its method of approaching the public has separate importance and worth. Ever since the radio program's start, requests have come piling in, mainly from public planning or housing groups in other cities. Most recent request came from Melbourne, Australia, others include Washington, New Haven, Philadelphia, San Francisco, Boston, Detroit, and Albany. Of 500 printed copies of the scripts, almost 250 have already been sent out. The phenomenal success of the Syracuse radio series has intrigued other cities. They will find it a good pattern on which to base their own efforts towards public awareness and participation in city planning.



CHICAGO SUBWAY Latest of our cities to install an underground transportation system, Chicago boasts new devices for public convenience and comfort.



Photos: Hedrich-Blessing



MID-BLOCK ACESS RELIEVES STREET CONGESTION

In the face of a prodigious increase in population and an historic record in building development, Chicago's transportation facilities have long lagged far below standard. They are perhaps best characterized by the rickety fame of the Elevated Loop. Chicago, America's second largest city and the hub of her national railway network, has had no subway and appallingly obsolete surface equipment. As a start in the direction of adequate municipal transportation the city's Initial System of Subways, only a small part of an eventual city-wide network, was opened to the public last fall. Built entirely from public funds but without taxes or special assessments, the new underground is, both from engineering and architectural viewpoints, a distinct advance over recent projects in other cities. While few of its features are revolutionary, a number of new, well utilized devices point to a consistent improvement in the techniques of underground transport.

The completed line which covers one and a half miles, and cost \$11,000,000, serves only the downtown area but connects with outlying elevated lines. It is a low level subway running north and south (eventual east and west connections will be either high level or surface transportation). The location of the tubes called for mezzanine landings connected with the platforms below by escalator. These intermediate central stations will also serve as connections with future branches. In plan, the traffic control at these points has been well handled. The channels are wide and clearly labeled. Walls were designed in tangents and curves for easy flow. Red composition floors, mechanically scored in 3 ft. spacings, contrast pleasantly with the grey, structural glass wall facings. Ceilings of plywood-formed concrete, painted a pale green, provide excellent light reflection. Free-standing columns on the mezzanine level are covered with black marble, rounded at the corners. Both interior and exterior illuminated signs are equipped with green fluorescent tubing.

Four color schemes, red, blue, green and brown, occur at succeeding stations in rotation for easier recognition by the habitual patron. Platform columns are steel H's, exposed except for painting. The Chicago subway is the first to have fluorescent lighting in the tubes as well as the stations. Aside from a pleasant absence of shadows and glare, the natural diffusion of light also serves as a safety measure for train motormen. In the tunnel there is no glare in the direction of oncoming trains. The brightly lit stations do not create a blinding contrast. Ventilation is another important feature. Between the tunnel and the surface there are 69 vent shafts augmented by 26 electrically operated fans and while the combined equipment produces more than the required amount of fresh air, it insures comfortable temperatures within the subway during the hot summer months.

Among the many architectural problems were the limitations on critical war materials. All doors, rails, signs and trims were originally designed for execution in aluminum, instead of iron and steel as built. However, most of these were installed only for temporary use and will be replaced after the war. The compact turnstiles were purchased long before Pearl Harbor.

13

Smooth riding qualities result from special track design. Half of the ties are imbedded in concrete and the heavy rails rest on rubber insets in the tie plates. The subway has only four curves, which can be run at nearly top speed. No grade exceeds 3 per cent.

Anticipating its postwar role as a nucleus of industry and transportation, Chicago has taken an overdue but impressive step toward solving the problem of adequate mass transportation.



VITREOUS WALLS ARE CLEANLY, INDESTRUCTIBLE





WIDE PLATFORMS ARE LOCATED BETWEEN TRACKS IN TWIN TUNNELS. ESCALATOR SHAFTS ARE BLACK MARBLE





FOUR ENTRANCES CONNECT MEZZANINE AND SIDEWALK. PASSAGES WILL PROVIDE TRANSFER TO FUTURE LINES



Public conveniences include soundproofed telephone booths in which privacy is assured without the use of doors. Agent's booths are entirely plate glass at eye level and are set in as pieces of furniture. Low turnstiles and fencing eliminate the old style "corral" appearance. Many of the downtown stations have direct connections with adjacent store basements.



## **HOUSE** in Chester County, Pa. Using the stone foundations of an old farmhouse Architect Oscar Stonorov designs a large country home for his own family.







OPEN STAIRS APPEAL TO THIS ARCHITECT





STORY LIVING ROOM USES FORMER BASEMENT OF 150-YEAR-OLD FARMHOUSE, IS ON LOWEST OF THREE LEVELS



NEW STONE WALL IS FOR CHIMNEY FLUE

The two Pennsylvania houses in this portfolio (see also p. 94) represent widely different ways of living and points of view. Yet both architects started with a similar existing condition: 18th century masonry foundations and some walls.

The large and expensive country house Architect Stonorov has designed outside Philadelphia for himself and his family is an elaborate structure. And the architect has even more elaborate postwar plans for it: the dining room is to become a music room, the kitchen a dining room (with a new farm kitchen added), the playroom a children's living room.

While the house is literally built on the foundations of the past, the architect's appreciation for this past has not held him from his real wish for a modern house. His attempt to pour new wine into old bottles may seem a stunt to some members of the Pennsylvania DAR, but there is a very forthright contrast between what he has done and what he has left, as in the old barn standing near the house. And he gets a quality that would not have been achieved with a new house.



ORIGINAL FARMHOUSE WALLS CONTRAST AGREEABLY WITH THE MODERN CONSTRUCTION



PLAYROOM-BEDROOM WING HAS STILT SUPPORTS



PLAY AREA ON UPPER TERRACE AT SOUTHWEST

The studio, connected by a passageway to the main house at the balcony level, was built over a vaulted root cellar of 1780 vintage. The old farmhouse was the nucleus for the living room of the main house. Part of the first floor was ripped out to provide the volume needed for the two-story living room. Second floor frame construction was generally retained from the old house.

CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls - cement plaster on 18 in. stone walls, furring, Rocklath, U. S. Gypsum Co. and plaster. Frame walls - cypress vertical siding, building paper, wood sheathing, studs, Rocklath and plaster. Floors - fir, plywood, pine or cement on sub-floor. ROOF - built-up slag surface, Certain-Teed Products Corp. INSULA-TION: Roof - 4 in. mineral wool. FIRE-PLACE DAMPER — H. W. Covert Co. SHEET METAL WORK: Flashing—Toncan metal, Republic Steel Co. Leaders --cast iron. WINDOWS: Sash-steel casement, Michael Flynn Mfg. Co. Glass double strength, quality B, and plate, Pittsburgh Plate Glass Co. FLOOR COV-ERINGS: Kitchen and bathrooms - linoleum, Congoleum-Nairn, Inc. WALL COV-ERINGS: Bedrooms, library and halls plywood and plaster. Bathrooms - Flexboard, Johns-Manville. HARDWARE -P. & F. Corbin Co. ELECTRICAL IN-STALLATION: Wiring - Romex. Fixtures — Kurt Versen. KITCHEN EQUIP-MENT: Cabinets — Berger Mfg. Co. Ventilating fan - Emerson Electric Mfg. Co. BATHROOM EQUIPMENT - American Radiator - Standard Sanitary Corp. HEATING: Hot water system. Regulator - Minneapolis-Honeywell Regulator Co.

HOUSE IN WINCHESTER, MASS. The lakeside home of a Harvard professor, within easy reach of the University and nearby shopping centers. G. Holmes Perkins, architect.



LIVING AND BEDROOMS HAVE VIEWS OVER THE LAKE. PLANTING IS CONCENTRATED ON LOW TERRACES GARAGE FLANKS MAIN ENTRANCE AND IS APPROACHED BY SEPARATE DRIVEWAY



Photos: Ezra Stoller

The house is located on a narrow lot, extending down to the shore of Mystic Lake. Complete privacy of the garden terraces is afforded by a protecting children's wing on one side and by evergreen planting on the other. There is a boat dock and a small beach for bathing on the lake front. The landscape architect was Christopher Tunnard, who collaborated with the architect on the site planning.

The tightly-built, compact style of this small residence is characteristic of a tendency among modern architects in New England to modify earlier experimental methods of design. Note the regularity of the fenestration. absence of cantilevers, and elimination of waste space in the planning of the interiors. CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls — wood studs, vertical wood siding. Floors — pecan parquet and white oak. ROOF AND DECKS — tar and gravel, Koppers Co. IN-SULATION — insulating wool, Red Top, U. S. Gypsum Co. FIREPLACE DAMPER — H. W. Covert Co. WINDOWS: Sash and screens — Hope's Windows, Inc. Glass — plate and quality A, Pittsburgh Plate Glass Co. KITCHEN EQUIP-MENT: Refrigerator — Kelvinator Div., Nash-Kelvinator Corp. BATHROOM EQUIPMENT — Kohler Co. HEATING — filtering, humidifying with oil burner, Bryant Heater Co. Regulator — Minneapolis-Honeywell Regulator Co.





VIEW OF THE LIVING ROOM REVEALS TRIM INTERIOR FINISHES, PARQUET FLOOR, AND STANDARD AALTO FURNITURE





## HOUSE IN BUCKS COUNTY, PA. In the land of old stone houses Architect Paul



NOTE HOW ARCHITECT HAS COMBINED MASONRY WITH A LIGHT, EASY WOOD CONSTRUCTION OVER THE WINDOW

PARTLY EXCAVATED BEDROOM WING HAS VARIED ROOF SLOPES

CHARMING NORTH COURT USES OLD STABLE





small one-story house that is a new variation of the ancient local tradition.



SIMPLE STONEWORK REPEATED IN LIVING-DINING ROOM FIREPLACE



Quite different from the expensive and expansive Pennsylvania house previously shown (see p. 87) is this little house—another contemporary dwelling that grew out of the ruins of an 18th century barn near Philadelphia. There is no attempt at sophistication here, and the result has a freshness and a not unpleasing awkwardness. This house does not have the polished look of a "machine for living"; but it is marked with those comforting qualities that have come to be associated with the term "handicraft".

A carriage shed with its wood roof structure still in place was the part of the old barn left standing.

This was used for a garage and workshop, and the slope of the existing roof determined the new roof slopes. The stable of the old barn had only its stone walls intact, so this area was developed into the pleasant open court. The main living section was built at the south of the court, and consists of a kitchen at the garage and entrance end, and a living-dining room with a partitioned study at the other end. The two bedrooms and bath are in another wing added to the west of the court. The basement is under the living room wing.

For reasons of economy and interest in the growth of his own house, the owner served as his own general contractor and did what manual work he could. The final cost of the construction was therefore lower than it would have been had a more conventional program been followed.

CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls - stone; interior - cedar siding, Vaporseal, Celotex Corp., studs, Rocklath and plaster, U. S. Gypsum Co. Floors - oak. Ceiling - Celotex, Celotex Corp. ROOF - mineral surface asphalt, WINDOWS - Andersen Frame Corp. FLOOR COVERINGS: Kitchen and bathrooms - linoleum, Congoleum-Nairn, Inc. PAINTS-Pratt & Lambert, Inc. WOOD-WORK: Trim - white pine. Cabinets -U. S. Plywood Corp. Doors - Curtis Co.'s, Inc. Garage doors - Crawford Door Co. HARDWARE - Schlage Lock Co. ELEC-TRICAL INSTALLATION: Wiring - BX and Romex. Switches and fixtures - Hart & Hegeman. KITCHEN EQUIPMENT: Range, refrigerator -General Electric Co. BATHROOM EQUIPMENT - American Radiator-Standard Sanitary Corp. HEAT-ING - coal fired warm air; stoker - Carrier Corp. Grilles-Tuttle & Bailey. Regulator - Minneapolis - Honeywell Regulator Co.

### HOUSE NEAR SAN FRANCISCO, CALIF. Architects John Ekin Dinwidd



BEAUTIFUL LOT DOMINATED BY SPREADING ELMS DETERMINED HOUSE SHAPE AND LO RESTRICTIONS OF Δ

DISTANT VIEW OF SHIELDED SUMMER TERRACE IS SEEN FRO

A BLANK NARROW FRONT FACES THE STREET



Henry Hill fit a long, low, narrow house to a small plot and achieve a delightful freedom.



OVERHANGS LONG WALK FROM FRONT GATE TO LIVING ROOM ENTRANCE

Severe restrictions served to guide the planning of this small, elongated house, but they did not serve to stunt or warp in any way its free plan and attractive appearance. The small lot with its row of elms that have been preserved, the unusually tight setback ordinances, and the nearness of a neighboring house determined the placing.

The successful plan that results has an extremely open central living space both inside and out, with working and sleeping areas kept separate and private. To insure privacy of the living room on the street side, and to keep out the hot sun, a beautifully textured stone wall without windows was used. The room opens onto a winter terrace on the south and a protected summer terrace on the northwest.

Flat ground, heavy rainfalls and spongy soil made it practicable to eliminate the basement and put the furnace on the first floor.





CONSTRUCTION OUTLINE: STRUCTURE: Exterior walls — redwood, sheathing, Brownskin paper, Angier Corp., studs; interior - Duali plywood, U. S. Plywood Co. and plaster. ROOF — tar and gravel. IN-SULATION: ROOF — rockwool. FIRE-PLACE DAMPER - Richardson Mfg. Co. SHEET METAL WORK: Flashing — gal-vanized iron. Gutters and leaders — cop-WINDOWS: Sash - steel, Soule per. Steel Co. Glass — crystal sheet. FLOOR COVERINGS: Halls — carpet. Kitchen and bathrooms-linoleum, Armstrong Cork Co. PAINTS - W. P. Fuller Paint Co. HARDWARE - Russell & Erwin Mfg. Co. ELECTRICAL INSTALLATION: Wiring - General Electrical Co. Fixtures - Karl von Hacht. KITCHEN EQUIPMENT: Range and refrigerator — General Electric Co. BATHROOM EQUIPMENT - American Radiator - Standard Sanitary Corp. HEATING-hot air system. Water heater - Hoyt Heater Co.



THREE BEDROOMS ON PULLMAN-LIKE CORRIDOR

ONE END OF LIVING ROOM HAS MASONRY WALL CONTINUING THROUGH ONTO OPEN WINTER TERRACE



**HOSIERY SHOP** A design by Carson & Lundin proves that a small conventional space need not be a hindrance in creating an outstanding merchandising background.

The job of designing a small display and sales area within a typical, rectangular store space seems simple enough. And yet even in large cities there are only a very few shops that have adequately solved the problems of display, storage and the mechanics of selling. The hosiery shop shown on these pages is one of them.

The solution is brilliant in its simplicity: the merchandise is displayed where it can be seen by prospective customers both in and outside the store. The storage units are placed within shortest possible walking distance from the sales area, and, with a few neat tricks, are made inconspicuous almost to the point of invisibility. And finally the entire job was designed with a fine feeling for scale, which gives the sales area great spaciousness and helps attract customers from the crowded sidewalk. Photos: Gotscho-Schleisner



OPEN FRONT SHOWS ENTIRE SHOP. NOTE UNUSUAL DISPLAY COUNTERS



The standard plan for a shop of this kind has consisted of helf-lined walls, across which would run a continuous couner. The center area, presumably, might contain a few chairs or the customers. The sales clerks, as a result, would be kept unning around in circles between their merchandise and nd their customers, while the latter would never dare to never the store unless they were sure they were going to buy omething. Wandering around just "to take a look" was imossible in such a plan.

A glance at this shop shows how efficiently all these probems were solved. The display is extremely informal: anyne can wander in, look around, and if she decides to buy omething, the small display stand serves as a sales counter -and a private one at that. The merchandise storage has even placed in the center of the store, easily accessible from my given section of the shop proper. These storage cases have been faced with mirrors, so that, visually, they seem to add to the space rather than reduce it. The same concept of spaciousness has been furthered by large expanses of Dan Cooper fabrics, which can be changed to conform with the seasons. A heavy chenille carpet of deep brown covers the entire floor.

Sole criticism of this job might be directed against the novable furniture and lamps, which seem uncomfortable and shapeless in an otherwise finished design. Furthermore, the tightly symmetrical layout within a basically assymnetrical shell — note the bulkheads to one side — might be puestioned. However, compared with what has gone before t, and on its own merits, this shop is an unqualified success.





STORE IS CONVENTIONALLY FURNISHED

WINDOWS ALSO ACT AS DISPLAY CASES





SECTION THROUGH STOCK CASES



EXPANSE OF FABRIC CREATES SOME CONFUSION WHEN REFLECTED IN MIRRORS AND COUNTER TOPS





COUNTERS ARE GROUPED AROUND STOCK CASES
RESTAURANT Combining architecture and sculpture, Zareh Sourian designs a fish bar and restaurant which competes with New York's most successful eating places.







THE VIGOROUS SEA-LIFE SCULPTURE ADDS TEXTURE AND ENLIVENS DINING



"COLONIAL" FRONT IS AWKWARDLY PROPORTIONED









CULPTURES BY CAPARN, HEBALD, HOVANNES, KANE, ACROIX, NAKIAN, SIMKHOVITCH, SOURIAN, WINGATE





The vocabulary of modern design has become rather clearly efined, and it is as much available to the decorator as it is to ne architect. This restaurant is, of course, a decorator's job. While such a label is in no way intended as adverse criticism, does mean that such design is almost entirely "applied" sing the shapes, forms and some of the good taste achieved y our best contemporary architects.

In the sea-food business there are probably very cogent easons for masquerading your front with a colonial facade owever paper-thin. The less said about this, the better. wen our colonial contemporaries will probably agree. Once uside, however, we find a rather charming eating place with ome beautiful, silvered wood, extracted from a 175-year old arn, and a neatly arranged collection of largely submarine culpture. The sculpture, incidentally, is a major point of interest in the design. Mr. Sourian engaged a bevy of sculpors, each of whom produced a plaster cast representing his is her conception of, or reaction to, fish. All this work was nified into a decorative but unobtrusive design, and while he lighting of the sculpture might have been better, the whole ob is a great success as far as designer-artist collaboration oes.

This collaboration has been extended to a mosaicist as well s an ichthyologist, so that the end result, which is charmingly interlaced with some discreet plant life, is about as close to be Aquarium as any restaurant we know.



FOUR SLANTED COLUMNS SCREEN CASHIER'S DESK





ELABORATE AQUARIUM DIVIDES BAR AND RESTAURANT

The plan of this restaurant is admirable. Through the window passers-by can see a bar, which however, serves nothing more intoxicating than clam juice. This bar is separated from the main eating area by the ichthyologist's contribution: a fish tank. To the rear, the more savory aspects of the kitchen mechanism are open to inspection—a very nice idea indeed—while dishwashing etc. goes on in another area. Control and service seem to function very well, and the informality of the table arrangement — with round and square tables mixed — is pleasant.

If one were to criticize this design, one might go back to the old trouble that accompanies major jobs by many designers. There is a little bit too much of everything — every trick of the trade, every idea, and every little gadget is incorporated, and this does lead to a certain restlessness. On the whole, however, there seems to have been some restraint in the general design, though this can not be said of some of the decoration. There is some neat faking of columns — all of them are lally pipes, though some are made up to look like heavy timber supports, while others are clad in mosaic — and one of the latter is altogether fake. All of this, however, does not seem criminal, and the design has enough charm and humor to see it through.

FINISHES AND EQUIPMENT: FOUNDATIONS — brick and wood veneer. FLOORS — oak; kitchen and dishwashing room — tile, Atlas Tile & Marble Co. SOUND INSULATION—U. S. Gypsum Co. and Johns-Manville. GLASS—I. Schwartz Glass & Mirror Co. FLOOR COVERING food bar — linoleum, Armstrong Cork Co. WALL COVERINGS — wood; kitchen and dishwashing rooms tile. PAINTS — Benjamin Moore Paint Co. LIGHTING FIX-TURES — Kurt Versen, Century Lighting, Inc.







NG FORMS OF SUPPORTING MEMBERS AND AN ASSORTMENT OF UNRELATED MATERIALS DETRACT FROM BASIC DESIGN

ZAREH SOURIAN, ARCHITECT



A HONEYCOMB RACK CONTAINS BAR BOTTLES



**GARAGE** A parking and store building in Philadelphia emphasizes the profitability and practicability of this type of enterprise. The Ballinger Co., Architects and Engineers.

A garage in the very center of the downtown district of any large city is in itself an important urban achievement. While this building in Philadelphia has little to commend it architecturally, it does represent an advance in city planning.

The Board of Directors of City Trusts administers the properties of the late Stephen Girard, of which the site for this building was one. Demolition of the existing buildings began in 1940. The new building was to contain parking area for 600 cars on the third and fourth floors. and the roof. The street level and second floor were to be rented out to stores, to help cover annual taxes of \$100,000. The dual-purpose building, which resulted, can pay for itself, and is a going concern. To Philadelphia motorists-among them the tenants of Howe & Lescaze's nearby PSFS building, the garage is a great boon.

The architecture of this garage is, of course, another matter. But apart from the obvious sterility of the design, the structural insincerity and the fatuous modernistic frills, this design raises a problem worth discussing: how can the apparent need for loud, commercial egocentricity be combined with architectural order and organization in a building that is going to house several different types of stores? An attempt was made here to arrive at a certain degree of standardization in this respect. At least the storage fronts are all uniformly high, and roughly on the same level.

CONSTRUCTION OUTLINE: STRUC-TURE: Exterior walls-masonry steel reinforcing. ROOF AND DECK COV-ERING-H. H. Robertson Co. SOUND INSULATION-acoustic tile. GLASS-Libbey-Owens-Ford Glass Co. WALL COVERINGS: Lobby - Weldtex, U. S. Plywood Co. ELECTRICAL INSTAL-LATION: Wiring-conduit. Switches-Trumbull Electric Mfg. Co. Boxes-Appleton Electric Co. Fixtures-Solar Mfg. Co. Sound equipment-RCA Mfg. Co., Inc. PLUMBING: Fixtures-American Radiator-Standard Sanitary Corp. Flush valves - Sloan Valve Co. Photos: William Rittase







THIRD FLOOR



SECOND FLOOR



ST FLOOR





TYPICAL FLOOR AND RAMP LANDING



RAMP HAS ADEQUATE NATURAL LIGHT



GRADE ENTRANCE AT BASE OF TOWER



ALLEY SIDE OF BUILDING DISPLAYS TRUEST ARCHITECTURAL EXPRESSION



The layout of the parking facilities is interesting. An octagonal tower contains the service ramps, and is accessible from an alley in the back of the building. In this alley, at the foot of the tower, is a gas station. On the fourth floor are car-washing facilities, and the roof has been used for parking as well. This is a truly modern conception, and there is no reason why this roof area should not serve for helicopter landing. OVERFLOW OF CARS CAN BE PARKED ON ROOF



**THEATER** A California movie house designed by William Pereira, Walter Wurdeman and Welton Becket shows a fine integration of architecture, engineering and advertising.

Movie theaters to date have been afflicted with a number of handicaps which have stultified good design in that field. For one, the display problem on the exterior was rarely solved. Also, the confusion with the legitimate theater produced a type of movie house that retained many of the characteristics of the theater and succeeded only too well in looking decidely "illegitimate."

This theater is probably one of the best movie houses built in the U. S. It is a functional job in the sense that it considers the qualities of vision and sound, as well as the advertising needs of a not-so-young but still bragging industry. Built on a 65 ft. lot, it seats over 900 people at minimum cost per seat, and includes a 20 ft. store on the street side. That side is very attractively handled, and the views on this page show how carefully the problems of night illumination and billboard display were considered.



GENEROUS CANOPY IMPROVES APPEARANCE AND PROVIDES USEFUL SHELTER





DESPITE A RELATIVELY HIGH SEATING CAPACITY, BROAD AISLES AND COMFORTABLE CHAIRS GIVE A SENSE OF RO



ANGULAR FACADE OF PROJECTION ROOM GIVES THE IMPRESSION OF A FUNCTIONAL SOLUTION

The rear wall of the auditorium has an interesting arrangement of broken wall surfaces, into which the doors do not seem too well integrated. The projection room, to the rear on the second floor, breaks into the slanted wall surfaces with its apertures, and assumes the character of a control unit for the entire building. In view of the otherwise forward-looking attitude of the architects, it might be questioned whether the traditional rear projection room will continue in use, or whether translux screens will be generally adopted. However, with a screen of this size, existing translux equipment might have required a very deep projection room, and proved uneconomical as a result.

The rather baroque curves of the raised curtain seem surprisingly incongruous in so beautifully simple an auditorium. But this is merely a detail which does nothing to mar the general effectiveness of this eminently successful piece of work. LUSH CURTAIN IS SOP TO THE CARRIAGE TRADE







#### OFFICES OF W. L. PEREIRA, ARCHITECT W. WURDEMAN AND W. BECKET, ASSOCIATE ARCHITECTS



LOBBY IS DECORATED INFORMALLY

The auditorium block has been designed unusually well. Determining factors have been maximum seating capacity and ideal visual and oral conditions. The acoustical system, which appears to be very functionally worked out, takes account of the probable future use of "Fanta sound" — first encountered in "Fantasia." The side walls are covered with alternate horizontal strips of plaster and Silicair, baffled vertically. The large, hung ceiling slants upward toward the screen and forms the support for a heavy satin curtain, semi-circular in shape, which embraces the entire screen end of the auditorium. This curtain is henna-red, and the walls and ceiling are in shades of turquoise blue. The net result is a hall in fine scale, with decorative effects limited to broken wall surfaces and a playful pattern of ceiling lights.

The lobby is a little more lavishly furnished, with Weldtex walls and redwood doors. The lighting is well considered and intimate: there is a gradual transition of light areas from the brilliantly lit exterior canopy, through the normal-intensity illumination of the foyer to the subdued atmosphere of the auditorium proper.



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#### FORUM OF EVENTS

(Continued from page 6)

artist North America ever produced, a prophet of revolution paralleling Spain's Goya and France's Daumier Among his deepest admirers are Diege Rivera and José Clemente Orozco both of whom show a clear Posada influence in their painting.

Throughout Posada's work run blood turmoil and horror. His most popular figure is the death's head, important to the pious ignorant peasant as a powerful symbol of active occult forces. Using his work to satirize contemporary Mexican life, Posada wielded a forceful and vitriolic weapon.

Blown up to several times their original size, the drawings still retain boldness and exactness of line. There is no question that a specially designed setting for the work of this relentless father of modern Mexican art must needs be direct and strong in itself. Van der Rohe used Posada's own blatant black and white, his simple lines, to blend the vigor of peasant art and the forthright simplicity of contemporary architecture.

#### COVENTRY

Plans have been prepared by Sir Giles Gilbert Scott, R.A., for the reconstruction of the Coventry Cathedral, an early blitz victim. Signifying practical cooperation between the local Anglican and Free churches, the scheme features a Christian community center located outside the cathedral but connected with it

British Combine



**Coventry** in ruins

by a chapel of unity which will belong to both the Free Churches and the Anglicans. The plan also includes numerous other common buildings. In his design for the cathedral proper, Sir Giles (Continued on page 116)

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#### FORUM OF EVENTS

(Continued from page 114)

reverts to one of the earliest principles of church architecture and incidentally, one that was recently employed in an

British Combine



Sir Giles Scott's plan

extremely modern American church (see ARCH. FORUM July '44) — that of erecting the walls around an altar located in the midst of the congregation.

#### CHANGE OF ADDRESS

The executive offices of the Chicago Housing Authority have been moved to the eleventh floor of the Fisher Building, 343 S. Dearborn St., Chicago 4, Ill.

#### REQUEST FOR LITERATURE

The General Panel Corporation, 103 Park Ave., New York City, desires data, samples and catalogues for AIA file, also any other items of interest in the prefabrication of buildings and panels.

#### NOTICE

Since the sudden death of Gilbert Rohde, Peggy Ann Rohde (Mrs. Gilbert Rohde) has decided to continue his work in industrial design, product development, store modernization and interiors. Mrs. Rohde has taught art and design. For the past eight years she has been actively engaged in design and administrative work with her husband.

#### DIED

H. EDWARD MANVILLE, SR., industrialist and former chairman of the board of Johns-Manville Corp. Born in Neenah, Wis., he was the son of the late Charles B. Manville, founder of the original company bearing the family name. Mr. Manville served the firm in many capacities, including the presidency, for 50 years. Ill health forced his retirement from active business in 1939.

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August, 1944

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We believe that the features of Fenestra Windows (shown at the right) are important factors to consider in providing proper fenestration-in giving your clients the most window performance for their money.

Our engineers will gladly discuss the values of these and other Fenestra features with you. And they can help you choose the right type of window for your particular school plans-for every room in the building. When may we discuss it with you?

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GREATER BEAUTY-architectural beauty is accentuated by the neat, narrow lines of the steel frames and by fine hardware appointments.





GIVEN a few days relief from front-line battle, the first thing our soldiers head for is a bath — any old kind of bath! It's a wonderful relaxer and pepper-upper. When victory comes, naturally these men will join the millions of people who will build new homes or remodel their present ones. Bathtubs, lavatories and sinks will be in great demand.

Then you can give the home-owner extra value by specifying or installing *Formed* Iron Plumbing Ware. These beautifully styled fixtures are light though strong, have an extra-glossy porcelain finish that resists staining, and are exceptionally easy to clean and keep clean. If you want to achieve interesting color

HELP FINISH THE FIGHT -WITH WAR BONDS

Yanks enjoy a tub-bath somewhere in Italy

effects, you can select from a variety of colors — or you can specify the everpopular white.

#### METAL BASE IS IMPORTANT

Many architects and builders will be glad to learn that these *Formed* Iron Fixtures can be porcelain on ARMCO Enameling Iron — the *original* enameling iron and the most widely used metal base for this exacting purpose. It will help assure lasting satisfaction for your clients. The American Rolling Mill Company, 2221 Curtis Street, Middletown, Ohio.



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ASPHALT TILE for the halls, stair landings, and utility rooms where economy, resistance to wear, and attractiveness are desired. Armstrong's Asphalt Tile is unaffected by alkali, may be used on concrete subfloors in contact with the ground.



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## ARMSTRONG'S RESILIENT TILE FLOORS

## LETTERS

(Continued from page 34)

At the present moment in Russia China, England and in many parts o our own country, there are groups o architects who are giving their time and efforts towards the future planning o their cities, and it seems strange tha similar groups of architects cannot be organized in New York, which is cer tainly a city worthy of such study and badly in need of it, without being stamped "long haired planners."

I have strongly advised all of the senior students I have had who have won competitions to go abroad or who have left New York to go to their own communities, to start immediately to study the conditions of their locality analyze it and work up any ideas they may have toward the betterment and future planning of that town or city.

Certainly architects have the right to think and to contribute their thoughts in drawings or models for the better ment of their communities — and they will go right on doing so. I never saw an idea yet that did not start with a dream.

LLOYD MORGAN, Architec. New York, N. Y.

#### THE INSTITUTE ON PUBLIC HOUSING

Said THE FORUM'S editor in a talk to the Philadelphia Chapter of the A.I.A.: "Large scale housing, both private and public, remains more a myth than a promise. O course, it is a complicated problem, but i fairly shrieks for solution. And where is the architect? He is in the extraordinary position of having his national organization in its postwar platform publicly oppose a public housing program. . . ."

#### Forum:

A

... There have been individual archi tects opposed to such housing and some criticism of procedure and results as expressed in the Statement of the Committee on Postwar Reconstruction in 1943, but the record indicates no un favorable action by the Institute.

You might have confused the plat form for Postwar Construction of the Producers' Council published in the Octagon, December 1943, with the policy of the Institute; or you might have interpreted Mr. D. K. Este Fisher's statement before the Lanham Committee as being in opposition to public housing, which it definitely was not. Institute action, on the contrary, has repeatedly been in support of federal housing.

If members of the profession individually and collectively have been constructively critical it would seem to be a healthy sign, but criticism does not con-(Continued on page 122)



• There are a lot of unanswered questions about tomorrow's homes—how they should be built and what should go in them. In many cases there will be several different methods of obtaining the same results—a question of choice. In other cases, new conveniences and refinements will have to be weighed against the factor of cost.

But there is one feature you can incorporate in your planning <u>right</u> <u>now</u>—the Square D Multi-breaker. The fuss and bother of fuses simply doesn't fit into the modern scheme of things. The Multi-breaker eliminates fuses completely, yet costs little more and sometimes actually less than the fusible equipment it replaces.

Your nearby Square D Field Engineer will be glad to work with you in setting up the best electrical specifications for any type or size of homes you are planning.

DETROIT



The Multi-breaker eliminates fuses completely. When a short circuit or dangerous overload occurs, the circuit is cut off automatically. A simple movement of the shockproof lever restores current. There are no delays—nothing to replace.

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MILWAUKEE



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WOOD THAT'S

## LETTERS

(Continued from page 120)

note opposition to or denial of the need for publicly financed housing for those of extremely low income. My observation in substantiation of official action is that the majority of architects are on the side of public housing.

I am sure that Mr. D. K. Este Fisher, as Washington representative of the A.I.A. will be very pleased to furnish you with the facts relating to the Institute's position.

ROY F. LARSON

#### Philadelphia, Pa.

#### Dear Mr. Larson:

In a sense both of us are correct. It is a fact that the Institute has never approved as a body the report of its Postwar Planning Committee under the chairmanship of Walter MacCornack. It is also a fact that this report, which was printed, widely distributed, and widely assumed to be the views of the Institute, lambasted public housing from one end of town to the other. Since the Institute has not, as far as I know, acted upon the report, the silencegives-assent school of thought perhaps warrants my statement. The lack of action warrants your interpretation. My purpose in saying what I did, frankly, was to needle the Institute into taking a position. I am confident that if and when it does, it will be the correct position.

But this is a helluva time to keep quiet about it, when the real estate men, the producers and practically every other organization identified with building have joined hands to throttle any public housing program whatever. The fact that much of the propaganda released by these organizations has been distorted and malicious is unimportant beside the fact that if we are going to have prosperity, full employment and decent living standards after the war, no rational and informed person with whom I have discussed this matter sees the remotest possibility that the entire housing need can be taken care of by private enterprise.

I should greatly prefer to see private enterprise do all of it, but in the face of existing urban land costs and building costs and taxes and various other impedimenta, it is difficult to see a realistic and acceptable solution for families of the lowest incomes without some federal assistance. As a matter of fact, our existing slums have been operated for years by private enterprise under very heavy subsidies.

My interest is in seeing an over-all attack on the housing problem, and in seeing the American Institute of Archi-

(Continued on page 126)



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This is the B Type AC Thermag Circuit Breaker Unit. Capacities 15 to 50 Amp., 120 Volt AC. It combines the time-delay action of the proven THERmal trip with the fast MAGnetic trip. The circuit breakers are made in individual pole units, but can be furnished with a cross bar to operate as a double pole main breaker or branch circuit breaker with one operation, with individual trip per pole on overload or short circuit. (Circuit Breakers are NOT sold separately.)

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LETTERS (Continued from page 122)

tects spearhead such a program. The assumption of professional status places responsibilities, as well as privileges, on the architect's shoulders.

As for criticism, of course, I am for it. In fact, I am as strongly for criticism as I am against quibbling.

Howard Myers, Editor New York, N. Y.

#### OSCILLATING MODERNISTIC

Forum:

... I have been subscribing to THE FORUM for seven years and find it increasingly useful and well worth keeping adequately filed for reference.

During university days your magazine was a definite source of inspiration and instruction in good contemporary architectural design in a country where as yet modern examples are few and far between. At present I am working with the City Planning Board of Toronto, principally on redevelopment area studies and so appreciate your articles on town planning.

Your publication is a definite asset in attempting to sell the contemporary approach to a public armed to the pocketbook with either a distinct historical bias or a conception of modern architecture oscillating between the corner hamburger store and a species of brittle Georgian with windows cleverly moved to the corners of the building.

Thanks for your help in attempting to alleviate the approach nostalgic and the approach "modernistic."

JAMES A. MURRAY

Toronto, Ont.

#### BROTHERLY COLLABORATION

Forum:

... I would like to take this opportunity to congratulate you on the "Planning With You" series of articles. THE FORUM is doing inestimable service in presenting such enlightening factual answers to the very questions everybody is asking: "How can it possibly be done?" "Who can give the lead?" and "Where is the money going to come from?" Naturally I turn to THE FORUM for much powerful information....

In England today Americans and British are brothers of the same family. It is about time the politicians realized that this union can prove one of the greatest and most lasting rewards for the sacrifices, sorrow and privations we are suffering. From our brotherly collaboration can spring a better social order.

PAUL A. CROFTON SLEIGH London, England





After-Victory homes will sell faster if the are equipped with modern, automatic *ele tric* water heaters! Study these advantage

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The clean, care-free efficiency of electric lights won the women. Everyone wanted their new homes wired for electric lights.



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**BEFORE THE WAR**—the speed, safety, cleanliness and convenience of Electric Cookery had already won millions of women. In 1940, 450,000 Electric Ranges were sold—in 1941, 780,000... with over 3 million now in use!

AFTER THE WAR—modern housewives will insist on electric cooking. So plan now to build in wiring for electric ranges. The added cost at the time of building is negligible . . . and its sales value will be tremendous.

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# "In the gloaming when the lights are low"

HAT'S our old friend, Bill Bjones, up to now? Well, for one thing, he's not enjoying one of the greatest boons of modern living—good lighting.

Poor fellow! His home is *inadequately* wired to carry the electrical loads imposed by modern lighting and electric appliances.

So, with other loads on his circuit, he just isn't getting enough current. Adding lamps isn't the answer ... better wiring is.

Anyway, the Bjones' home is no exception to the rule that approximately 95% of the homes in America are inadequately wired for present electrical loads—not to mention the greatly increased loads that will come in postwar years. And now's the time to start thinking about modernizing the electrical wiring in existing homes—and properly wiring the millions of new homes that will be built after Victory!

The Westinghouse Better Homes Department offers you valuable help in this direction, in the form of *free technical* advice on:

Selection and application of fixed electrical equipment in 194X homes.

Dimensions and clearances, for proper installation and access for servicing.

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Refer your electrical problems to the Westinghouse Better Homes Depart-



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ment. Our Advisory Staff will give you authoritative information, promptly.

Here's a new book that will help you explain the urgent need for "bette wiring for better living" to prospects fo home modernization and for new homes



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Here is the solution to what long has been a perplexing problem to architects — a wood one-hour fire door in any face veneer, so that the beauty and adaptability of wood can be applied to *all* openings.

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## MONTH IN BUILDING

(Continued from page 64)

had to becoming ten cents. The Mayor thought he saw a way out. His plan: a city-wide transportation tax, levied against rents and mortgage interest. The plan's most controversial aspect: a tax of 40 cents a week, deducted from the pay check of every commuter.

While the proposed transportation levy promised easement of real estate taxes, hitherto drawn against to make up the subway deficit, it failed to arouse much enthusiasm from real estate interests. While the Brooklyn Real Estate



BOSS HAGUE: nobody can tax but me

Board was "glad that the Mayor realizes the need for raising money to finance the transit lines," it nevertheless believed that the "solution lies in establishing a self-sustaining fare rather than imposing additional taxes."

Jersey City's tax-sensitive Mayor Frank Hague led the yelp of protest from commuters outraged by the prospect of turning over 40 cents weekly to New York City's budget. Here Mayor LaGuardia had stepped firmly on a prominent municipal corn.

Using the speedways and transportation paid for by the metropolitan budget, suburbanites by the thousands have escaped from municipal taxes. Many a city, contemplating its swollen services. has vainly sought for ways to swell its tax levies proportionately.

Mayor LaGuardia's bid to tap the pockets of commuters had precedent in Philadelphia, first city to seek supplementary revenue through a tax on wages. Some \$40 million in debt in 1938, Philadelphia can now count annual surpluses, point pridefully to its homegrown cure for budget ailments: a one per cent tax on earnings of both residents and commuting workers and on net profits of all unincorporated busi-

(Continued on page 134)



His breadth of experience, practical skills and established organization enable him to bring all of the elements and factors of construction together at the right time. His executive ability is specialized for exercising complete supervisory control over the entire construction program.

The multi-phase services of the general contractor are your assurance that a properly "packaged" structure will be delivered at the specified time, cost and quality.



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Dust-catching device mounted on Allis-Chalmers Motor, 250 hp 230 v 400/1200 rpm, d-c 75° C. Rise.

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Since forced ventilation of this motor was necessary, it also was imperative that the air circulating through it be cleaned of potentially damaging dust and grit. For this purpose, the Allis-Chalmers Manufacturing Company developed this application of Fiberglas\* Dust-Stop\* Air Filters.

This installation indicates the versatility of Dust-Stops. There are lit-



erally thousands of similar applications, either designed by the equipment manufacturer or devised by the user to solve a particular problem of dust control.

These are standard replaceabletype Dust-Stop Air Filters. They are the same that have been accorded the acceptance of leading heating, ventilating and air conditioning engineers. They are installed in the conditioning systems of homes, industrial plants, commercial buildings, hotels and other institutions from coast to coast.

Maintenance is no problem for the

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

user of Fiberglas Dust-Stop Air Filters. When cells have become loaded to capacity, they are discarded and easily replaced at low cost with new, clean filters readily available from suppliers in every community.

For complete information on Dust-Stops and their many uses, write: Owens-Corning Fiberglas Corporation, 1913 Nicholas Bldg., Toledo 1, Ohio. In Canada,

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RGLAS\*

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All-welded cantilever bridge on the new Hartford, Conn. By-pass. Structure is 330 feet long with 79-foot roadway and 170-foot central span between piers. (Photo courtesy State Highway Department of Connecticut.)

## WELDING HELPED SOLVE THIS DIFFICULT DESIGN PROBLEM with a \$6,600 Cost Saving

THE Jordan Lane Bridge of the Hartford By-pass presented many complicated design and construction problems because of the sharp angle of intersection with local traffic lanes beneath and the necessity for maintaining maximum clearance with a minimum grade and height of approaches.

The use of modern welded construction not only aided materially in solving these problems but also effected savings of 24% in steel used and \$6,600 in cost compared with careful estimates for riveted construction.

> The same advantages of welding which proved so valuable on this job and in building the

ships of our merchant marine and Navy, as well as on hundreds of other wartime construction projects, offer the architect new opportunities for economy, versatility, weight saving and space saving in the design of post-war buildings.

Air Reduction, pioneer in welding, is well along in planning to further the application of these processes to peacetime construction.

The results of this planning and the vast experience of Airco's Engineering Service Department are available through field representatives in principal cities. A letter, phone call or telegram to your nearest Airco office — or to the New York office, Dept. AF—is your key to this service

\* BUY UNITED STATES WAR BONDS \*





## THE SPARK THAT GOT A COLD SHOULDER

This spark was a persistent little guy, glowing around just looking for a place to light and start trouble. It came to rest on a certain wood beam . . . but here it got the cold shoulder. Discouraged, it finally flickered out, leaving nothing to be remembered by.

Behind this small episode is the big story of an advantage Du Pont Chromated Zinc Chloride holds over one of wood's enemies—fire.

A certain amount of resistance to fire has always been known as a characteristic of "CZC"-treated wood. It has only been recently, however, that standards have been developed that make it possible to determine the degree of fire resistance which can be imparted to wood by this chemical treatment. This information, developed by the Underwriters' Laboratories, is available in report form to those who are concerned with specifying materials of construction.

Of course, "CZC" possesses other advantages that make it the all-round wood preservative for modern construction. It resists decay, repels termites. It is paintable, odorless and clean to handle.

You'll do well by your buildings and clients when you investigate "CZC" treatment for all wood that is expected to give long service and low maintenance cost. Write E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Department, Wilmington 98, Delaware.

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Makes Wood Resist Decay—Repel Termites—Retard Fire



Fiat suggests the corner shower as the ideal type for economical bathrooms in small homes, or as the second bath in medium priced homes. Fiat's postwar line of shower cabinets will include a low cost corner shower as shown on these bathroom layouts. Architects, builders and contractors can plan future building on the basis of a Fiat standard size, exceptional value corner shower, constructed so as to be built in as an integral part of the bathroom.

 These bathroom layouts show the space saving possibilities of the Fiat corner shower. Even the smallest bathrooms can accommodate this type of shower cabinet.

#### AVAILABLE NOW FOR IMMEDIATE DELIVERY

No. 85. Best shower made under wartime material restrictions. Full size 36" x 36" x 78".



#### MONTH IN BUILDING

(Continued from page 130)

nesses and professions conducted in the city.

Carl H. Chatters, executive director of the Municipal Finance Officers Association, has endorsed the Philadelphia plan as a sound means of obtaining revenue "from persons as well as property in those communities where real estate ownership is not a fair basis for distributing the burden of local government costs." Municipal tax structures, Chatters said, do "not give proper recognition to the fact that local government protects and gives value to intangible wealth as well as to real estate, and that individuals, regardless of the ownership of property, receive substantial benefits from local governments primarily in protecting their lives, their health and the physical properties on which they are dependent for existence."

When war migration brought thousands of newcomers to Philadelphia as to every war center, the municipal income tax proved a major boon. Few cities had a ready-made device for spreading the cost of increased services and facilities among the in-migrants who brought need for them. In 1942 Philadelphia's levy on earnings yielded \$24,-762,041-27.8 per cent of the total city revenue and equal to 57.1 per cent of the total real estate tax receipts.

If New York makes a move to shift any of its fiscal burdens from real estate, it will be voter's choice. Mayor LaGuardia proposed a 1945 referendum to choose between the transportation tax, a 10 cent subway fare, or a continued underwriting of the subway deficit from real estate taxes.

#### UPDATING

"If a builder has built a house for a man and his work is not strong and if the house he has built falls in and kills the householder, that builder shall be slain."

Earliest and severest building code on record, this was King Hammurabi's dictum for Babylonian builders. Newest addition to the long history of building regulation comes from Indiana, where the Administrative Building Council adopted the first state code covering air conditioning. Based on three years of study undertaken by Indiana members of the American Society of Heating and Ventilating Engineers and the Indiana Air Conditioning Council, the comprehensive new heating, ventilating and air conditioning code will set up uniform standards for equipment used in theaters, department stores, hospitals, factories and office buildings.

Carefully pruning and remodeling its (Continued on page 138)

# FOR BRIGHTER

## WATCH WOODWORK

SPACIOUS windows—built-in cabinets and cupboards—doors that save steps and increase convenience! These are some of the things that America wants in postwar dining rooms for brighter, better living tomorrow!

You can give tomorrow's homeowners enduring value with windows, doors, frames and woodwork of durable, toxic-treated Ponderosa Pine. *Pre-fit* windows that are truly weathertight. Doors and frames that enhance home value through the years. Woodwork with lasting charm and distinction. And, above all, economy—the economy of stock woodwork designed for easy installation and low maintenance. To keep abreast of the modern trend, watch woodwork!

#### SEND FOR THIS FREE BOOK

You'll find this postwar idea book, "The New Open House," full of suggestions on planning windows, doors and woodwork for postwar homes. A copy is yours for the asking—mail the coupon!





PONDEROSA PINE WOODWORK Dept. ZAF-8, 111 West Washington Street Chicago 2, Illinois Please send me a free conv of "The New Ones

Name.....

Please send me a free copy of "The New Open House."

# ENTER: SUNSHINE, THROUGH

#### ANDERSEN

#### COMPLETE WOOD WINDOW UNITS

It is apparent in the advanced home designs of progressive architects that we have become another civilization that worships the sun. Through expansive WINDOWALLS, walls of windows, windows that function as walls, sunshine streams in to give the interior of the home a sunbath.

But more than sunshine comes through WINDOWALLS like these. These windows can be operated—permitting ample ventilation. For while worshipping the sun, we also want more and more fresh air. Yet we want comfort in colder months—comfort that is achieved by superior weathertightness.

These WINDOWALLS are composed of Andersen Double Hung Window Units in a home in Minneapolis, Minnesota.




# Montgomery Elevators

NEW BUILDINGS now being planned will utilize new materials and techniques. And where passenger and freight elevators are required, new problems will arise. For assistance in solving these problems you can depend on Montgomery. For nearly 50 years Montgomery Elevators have been giving dependable service in thousands of buildings throughout the country. Accurate records show that practically no major repairs have ever been required. Too, original cost of Montgomery Elevators is generally lower than that of other comparable makes. If you are planning a specific project, we invite your elevator problems.

**MONTGOMERY MANUFACTURES** a complete line of passenger and freight elevators, electric dumbwaiters and special equipment for vertical transportation.



#### MONTH IN BUILDING

(Continued from page 134)

obsolete building, plumbing and electrical regulations, Indiana readied in all four new codes to update construction practices, open the way for improved materials and methods. Indiana was ready, said the Building Council, to deliver better postwar buildings for less money.

Salisbury, Md., also got busy last month on a new building code. Reason: city officials could not find the original copy of their 18-year old code, dropped an enforcement case for lack of any legal proof that the building code ever existed. Anyway, they agreed, it was high time to go to work on a new one.

#### FARM LAND THREAT?

The National Farmers Union already had a temper up about the government's program to dispose of surplus war real estate. In assignment of the sales job to the Reconstruction Finance Corporation, the farmers' group saw the threat of "further control of agriculture by big interests," predicted domination of disposal policies by the National Association of Real Estate Boards.

Late in July the Surplus War Property Administrator, W. L. Clayton, sought to soothe the farmers' rising temper with the announcement that the government will sell surplus farm lands in family-size parcels and to farm purchasers who will cultivate the land themselves. Former owners will get first choice, Clayton said; anybody with a speculative gleam in his eye will be firmly shown the door.

#### HAPPY MORTGAGE MARRIAGES

Biggest inhibition for the average wouldbe home-owner is the danger of foreclosure over the long and unforseeable span of mortgage indebtedness. Biggest headache for the average lender is the periodic loss of prime loans to rival financiers. Last month the Mortgage Bankers Association took a look at a well-packaged formula prescribed as a cure for both inhibition and headache.

Authors of the copyrighted Home Owners Safety Loan Plan apparently feel that a mortgage contract, like a happy marriage, can be so administered as to benefit both parties in increased proportion for every year it lasts. Under conventional mortgage practice, the borrower frequently finds no special security in his initial contract, may traipse away at any time to take up a more attractive proposition. Under the Safety Loan Plan the borrower may earn the right to three one-year deferment periods during which he pays only interest and taxes.

(Continued on page 142)

Now Wakefield brings you the New BEACON

Efficient fluorescent for office or drafting



Designed for high quality fluorescent lighting at lower cost, the BEACON is especially effective for lighting essential offices or drafting rooms. Provides smooth, shadowless light to help handle paper work faster and reduce eyestrain.

Maintenance is easy; no horizontal surfaces on which dust can collect. Hinged louvers simplify lamp replacement. Etched, ribbed glass on the side panels gives smooth, pleasing light; louvers diffuse down-light. Ballasts are only partially enclosed; this makes for cooler, better operation.

Available in stem suspension or close-up mounting for lowceiling areas. See our catalog in Sweet's for details, or write us.



# New air conditioning technique is complete departure from past methods and practice

here is what I have new six conditioning technique As seen from the architects' and owners' viewpoint here is what I hope new air conditioning technicule will bring into effect particularly to commercial building operations.

building operations.

C.

design.

B.

Location of entire conditioning equipment includ-ing heating units (boilers, etc.) moved from

Location of entire conditioning equipment includ-inf heating units (boilers, etc.) moved from to basements to middle heights of buildings or to roofs. This is to reduce instellation costs and subsequent operating and maintenance costs.

Using, for example, an office building of large typical floor area, the sizes of central station equipment and vertical and horizontal anexe re-mist be reduced in order that initial space reequipment and vertical and norizontal auct work must be reduced in order that initial space remust be reduced in order that initial space re-quirements and operating and maintenance expense will be lowered even while distribution of nerti-and clevible exongh to allow relocation of nertiwill be lowered even while distribution is ample and flexible enough to allow relocation of parti-tions without cutting into ceilings.

Typical office space must have mechanical of selectivity of control to suit the vagary of an individual tenant.

D. All equipment must definitely become lighter in dead weight.

In accomplishing the thoughts expressed herein, a com-plete departure must be made from past methods and design.

I cannot overemphasize this

Manuel Lance

WALTER W. AHLSCHLAGER & ASSOCIATES

ARCHITECTURE ENGINEERING CONSOLTANTS

REAL ESTATE

212 S. ST. PAUL. DALLAS DIAL R-6871

This message is presented by Carrier Corporation, Syracuse, New York, as a contribution to the information on air conditioning in post-war architecture.





# All Over the Country They're Planning to Use MORE WINDOWS ....By Curtis

**F**<sup>ROM</sup> coast to coast, architects and builders have recognized the trend toward *more windows* in post-war homes. To meet that trend, they are including Curtis Silentite "Insulated" Windows in the plans they are making for the dwellings of tomorrow.

It's easy to see why! Silentite Windows are backed by a three-quarter century of research and experience. They go further than any type of window, we believe, in meeting modern needs for beauty weather-tightness—easy operation and fuel economy. They are economical to install—making it possible for you to specify more windows in the house and yet keep costs moderate. Silentite Windows will by available in a complete line—for every type of home-



A well-proportioned bay will add space and increase charm in any home. Made of durable Ponderosa Pine, Silentite window units are pre-fit for easy, economical installation.



Expressing the modern trend, Silentite corner windows will help to add distinction and livability. Several sash styles available.



Large size windows are becoming more popular. And when they go to the floor, as here, the effect is very beautiful. These are stock size Silentite units, insulated to save fuel.



Tomorrow's kitchens can have plenty of light, air and cheer. Silentite casements—wood, of course—bave proved their superiority.

Here are some Curtis suggestions for your post-war planning.

#### Curtis Introduced-

... the first successful window improment in nearly 300 years with the Silentite line. Today, Curtis research is constantly directed toward developing still greater window improvements. That is why it is worth your while to keep in touch with Curtis on windows and stock architectural woodwork.



Name	
Address	
City	



is Often Judged by the Bathroom and Kitchen

When you show a prospect a new home, he is better able to visualize the bathroom and kitchen as livable rooms because they are completely equipped, with the exception of accessories.

Because of this, many builders wisely center their selling on these two rooms and are able to suggest the quality of house by the quality of the equipment in the bathroom and kitchen.

Repeated tests have proved that your prospects recognize the name Crane as standing for the finest in plumbing. Why not put this recognition to work in the homes you are planning?

The Crane postwar line will include newly styled plumbing fixtures to suit modern tastes not impractical, queerly designed innovations. Crane equipment of the future will possess the same tested quality and beauty that have led to nation-wide recognition of the name Crane.

When war conditions permit the production of these new fixtures your plumbing contractor or Crane Branch will be in a position to furnish you complete information.

> CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5 VALVES • FITTINGS • PIPE PLUMBING • HEATING • PUMPS

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

The Quality of the Homes You Build



This is an illustration of the Oklahoma County Jail, Oklahoma City, another Stewart equipped jail. The architects were Layton & Forsyth. Numbered among the list of Stewart equipped prisons are such famous penal institutions as: U.S. Penitentiaries at Atlanta, Ga., and Alcatraz Island, Calif., State prisons at Raleigh, N. C., Richmond, Va., Jefferson City, Mo., Canon City, Colo. In addition there are many city and county jails and prisons. Right now the Stewart organization is engaged in war work, but our engineers will be glad to work with you on future plans. Complete information for any size installation will be furnished on request. There is no cost or obligation. The Stewart Iron Works Co., Inc., 1165 Stewart Block, Cincinnati 1, Ohio.



#### MONTH IN BUILDING

(Continued from page 138)

No deferment period would be offered until 50 per cent lender protection has been established. F. M. Murphy and R. J. Mitchell, the experienced mortgage men who devised the plan, have worked out careful charts showing safety zones for mortgages of various rates of interest and based on the percentage of loan to appraised value. Permissible deferment periods would be cumulative and would constitute a sizeable bulwark between a temporarily distressed borrower and loss of his equity.

For the lender, Safety Loan sponsors promise these advantages:

Borrowers would not be likely to forego earned credit accumulations by seeking refinancing elsewhere.

▶ Because the new owner of a property may take over the earned credit rights of the former mortgagor, he will not be much tempted by another contract.

▶ Right of deferment will be clearly established; the lender will save a lot of time investigating individual requests for extension of terms.

No change in present mortgage contracts need be made. A Supplemental Agreement, intended to apply to both new and existing contracts, will modify the penalty default provision to provide for deferment periods.

With the U. S. Savings and Loan League also casting a thoughtful eye on the problems of the mortgagor (see ARCH. FORUM, June '44), it looks as if the postwar home buyer may get a better financing bargain than he has yet had.

#### **REGIONAL VIEW**

"No metropolitan area in the Puget Sound country can be considered apart from the Northwest region as a whole."

This is the hopeful planning philosophy basic in a comprehensive report now on the desks of the city council of Tacoma, Wash. Working for more than two years, the Mayor's Research Committee on Urban Problems had gone beyond its assignment, set specific recommendations for meeting Tacoma's needs in the broad framework of a unified program for development of the Sound area and the whole region. Said the thorough-going committee:

The city needs neighborhood park-playfields, school relocation, a new library and auditorium, freight and passenger airport facilities, truck highways to relieve traffic congestion, downtown parking facilities.

The area needs dual purpose and scenic highways, decentralization of industry to encourage agricultural production, a program to prevent stream pollution, cooperative industrial and resident sewer and drainage districts.

The region needs agricultural and marine research in food, raw materials, mineral resources; an efficient highway system: railroad modernization; a Columbia Puget Sound sea-level canal for freight transportation; airport facilities.

#### DEWEY CABINET

When Thomas Dewey was building the gangbusting legend that was later to speed his rise to political distinction, bright young lawyer named Herman Stichman was the District Attorney' choice to see cases of unusual legal com plexity through the courts. Last month Governor Dewey moved to make his one time teammate Commissioner of New York State's Division of Housing. Clear ing up unfinished business to be read for what might be ahead, the Governo had filled at last the only vacant pos in his state cabinet. Approved the New York Herald-Tribune: "The appoint ment is perfectly in line with the Dewey policy of placing young, vigorous men in key positions without regard to politi cal considerations."

It was clear even to confirmed Dewey doubters that the Governor owed Re publican Stichman no political debts Whether it was a political consideration that had delayed Dewey for the last yea and a half in naming a housing commis sioner was not so clear. Housing-con scious Governor Herbert Lehman, who helped to push financing measures fo slum clearance through the legislature and his appointee, Housing Commis sioner Edward Weinfeld, left the servic of the state simultaneously. Ira Robbins who had served the Division of Housin and the earlier State Board of Housin as counsel for many years, was name acting commissioner by Governo Dewey. Upstate Republicans, never en chanted by state loans to municipa housing authorities, began to do a cer tain amount of wishful thinking: some day, maybe, the Division of Housin would simply get left out of the budget

Evidence of some enthusiasm on th part of Governor Dewey for the state' housing finance operations, Commis sioner Stichman's appointment was also in the light of his record, heartening t those whose advocacy of the state pro gram has been more apparent. The new Commissioner's flair for following problem to its logical conclusion cam to public attention for the first time a Yale Law School, where Stichman' talents won him second and third yea prizes for highest class standing, editor ship of the Yale Law Review, and ap pointment upon graduation as an assis tant United States District Attorne under Emory R. Buckner. New Yor newspaper readers were introduced t (Continued on page 144)



iver so easy to clean is the Nairn Treadlite Floor # 2956 in this children's room in the Paterson General Hospital. Border insets of plain linoleum are in gay colors.

# Naim Linoleum provides modern floors – quiet, sanitary, colorful, long-lasting – in Paterson's General Hospital

orful and practical is the floor of Nairn Veltone Linoleum 967 in this semi-private room. Wide border, Plain # 1131.



Doctors, nurses, patients — all applaud the architect's choice of Nairn Linoleum Floors in the Maternity Section of the Paterson General Hospital. They all enjoy the quiet and resilience of these floors. They appreciate the cheerful, soothing colors of Nairn Linoleums. They marvel at how easy it is to keep clean and sanitary.

Here again Nairn Linoleum demonstrates the *reasons* why it is the first choice for floors in tomorrow's modern hospitals and institutions.

Even though these better floors are scarce today, keep specifying Nairn Linoleum for both floors and wall in such jobs now on your "boards."

A handbook on linoleum specifications has been prepared for your use. May we send you your copy?

CONGOLEUM-NAIRN INC., KEARNY, NEW JERSEY.

For modern floors and walls NAIRN LINOLEUM easy to maintain,

colorful, permanent, resilient.

Refer to Sanymetal Catalog 17/12, Sweet's Architectural File for 1944, for complete information on Toilet Environments.

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Includes New Types for Post War Installations CATALOG No. 82 Create an Element of Refinement w Sanymetal Porcena (Porcelain on St Ceiling Hung Toilet Compartments. The sign and construction details for the r ceiling hung toilet compartments, as wel the usual standing types, may be obtai from Sanymetal's Catalog in Sweet's from the Sanymetal Representative your city. Use Sanymetal Porcena (Po lain on Steel) Toilet Compartments to sure of strictly modern toilet room envir ments, and to insure against obsolesce

Sanymetal Porcena (Porcelain on Steel)

THE SANYMETAL PRODUCTS CO., INC. 1701 URBANA RD., CLEVELANL TOILET COMPARTMENTS FO POST-WAR INSTALLATIONS

# Complete Information on Toilet Room Environments for BUILDINGS OF THE FUTURE \* \* \* \* \*

Designs for the future are soon to become those of the present. Frills, furbelows, and flourishes are on the way out. A late pre-war trend toward blending utilitarian features with aesthetic treatments has its full development yet before it. Equipment and materials that are likely to result in obsolete environments are to be avoided in the buildings of tomorrow. The virtue of simplicity, cleanliness and good taste will not be denied expression. A persistent public, inspired by the possibilities of a bright future, will set the keynotes for tomorrow's structures. From now on, the architects, engineers, builders and manufacturers who achieve progress will be those who correctly interpret this growing sentiment and prepare to satisfy it.

Your inspection of Sanymetal Toilet Room Environments Catalog No. 82 is cordially invited. Therein will be found the illustrated meaning of the foregoing message with complete information on six modern types of toilet compartments you will want to use to develop toilet room environments for all types of buildings of the future. Sanymetal Catalog No. 82 is contained in Sweet's Architectural File for 1944, or you may procure your own private copy by mailing the coupon.

#### THE SANYMETAL PRODUCTS CO., INC. · 1687 Urbana Road, Cleveland 12, Ohio



# What will our POSTWAR BUILDINGS be like ?

shoreland Hotel, Chicago, Ill., J. F. Eppstein, Architect.

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as

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#### OUR HOMES, SCHOOLS, HOSPITALS, OFFICES AND FACTORIES?

One thing is certain! The buildings of tomorrow will be streamlined for efficiency and designed for living – and they will take full advantage of America's newest building materials.

Many of them, no doubt, will display shimmering panels of Insulux Glass Block.

That would be only natural; for a panel of Insulux is both decorative and practical.

Insulux transmits natural daylight -without objectionable glare. It provides privacy. It reduces heat loss and condensation. It keeps out noise and

> dirt. It is easy to clean-and to keep clean. And it adds to the cheerfulness and general attractiveness of the building.



Guaranty Bank & Trust Co., Alexandria, La.

For technical data, specifications, and installation details, see our section in Sweet's Architectural Catalog, or write: Insulux Products Division, Dept. 57, Owens-Illinois Glass Company, Toledo, Ohio.

ardinal Hayes High School, lew York, N. Y., Eggers & Higgins, Architects.

nsulux Glass Block is a unctional building material -not merely a decoration. is designed to do certain hings that other building a terials cannot do. Investigate!



Residence in Dallas, Texas, Renolds Fisher, Architect



a structural material ... Modern wood products are making important contributions to better, more economical construction.



Metal Timber connectors make it possible to join wood members; utilize 80% or more of the working strength of wood.

Modern structural glues make possible Glued Laminated Wood roof trusses, arches, plybeams

and other structural members.



Glued wood laminated framing

members combine roof and side-

wall in a unit, giving stronger,

more wind-resistant buildings.

New processes for the tre of wood extend its serv broaden its uses, and i its value in many fields.



#### enables you to serve more markets

THE VERSATILITY of lumber in meeting a wide range of structural needs is well demonstrated by the glued laminated wood arch. It has been used to build a variety of military structures where use requirements call for large spans free of posts and braces, such as swimming pools, drill halls, and airplane hangars.

Having served so efficiently in these structures it is only natural that the arch will be used much more extensively to serve civilian needs. The glued laminated wood arch, engineered for the job, will find application in many urban and commercial structures. Churches, community halls, school gymnasiums, riding academies, theaters, recreation centers, garages, and many other types of wide post-free structures can be built economically with the laminated arch rafter.

An unusual application in the farm field is the machine shed shown here.

Laminated framing members are but one of the many developments for which Engineering in Lumber is responsible. Others, equally important, bring to modern construction the economy, adaptability, and versatility of lumber.

When civilian construction is active again, those who design with wood will be in position to serve clients more efficiently and more economically. For Engineering in Lumber is continuously developing new and better values in homes, farm buildings, and commercial structures.

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**4-SQUARE LUMBER** 

steel timber connectors the structural efficiency raming. They are availwide variety of shapes.

#### BOOKS

(Continued from page 28)

A CHART FOR CHANGING CITIES. The California Housing and Planning Association, San Francisco, Cal. 20 pp.  $6\frac{1}{2} \times 9\frac{3}{4}$ .

An excellent semi-professional report made to the State Planning Association by the Urban Redevelopment Committee which has three primary purposes: 1) to determine the primary causes that produce slums and blighted business districts, 2) to analyze the major causes, tempo and direction of population movements, and 3) to suggest corrective measures and create better conditions for future metropolitan centers. Cath-



The changing countenance

erine Bauer, Howard Moise, L. Deming Tilton and Frank Rose were mostly responsible for the large amount of work summarized concisely on these few short pages.



OUR NATIONAL CAPITAL, A Portrait in Pictures. By Mary Eleanor Browning. Hastings House, New York. 101 pp. Illustrated. 6 x 8. \$2.

If anyone has missed the excellent steel engravings on our folding currency, here is a complete collection plus some landmarks overlooked by the Treasury.

"New emphasis," says the jacket blurb, "has been placed on Washington, D. C. both as a living city and as the seat of government." Unfortunately, Miss Browning missed the timeliness which left her publishers breathless. Her photographic portrait of wartime Washington is dramatically climaxed by a shot of the Jefferson Memorial showing two Waves advancing briskly on the camera. Otherwise, the content is as dead as any of its Greek porticos. Presented in an inferior Sam Chamberlain fashion, the reproductions have all the arty fuzziness of a ten cent postcard.

The captions are irresistible; equalled only by Fitzpatrick Travelogues:

"Through this impressive stone gate way Mrs. John B. Henderson . . . passed daily to her turreted castle."

Such gentile nostalgia may be manna for Washingtonians so no mention is made of wartime paper restrictions. However, before attempting another cardiograph of the nation's pulse the author should expose herself to the latest story on the Pentagon Building.

Mary E. Browning



**Theseus in Arlington** 



Georgetown's blighted charm



#### What is INDERON?

INDERON is a new material. combining the advantages of two other proven materials -fir plywood and plastics. It is composed of three basic ingredients: strong, durable Douglas fir veneers, a plastic-impregnated fibrous film, and an internal adhesive of thermosetting resin. INDER-ON is neither a plywood nor a plastic. It is, in effect, an alloy which possesses the qualities of a true plastic at a cost comparable to finished plywood. It is manufactured in modern West Coast plywood plants, where Douglas fir veneers, phenolic adhesives and resin-impregnated paper are chemically united

in high-heat, high-pressure presses.

#### What are the advantages of INDERON?

Because INDERON combines the best qualities of both plastic and plywood, it is available in larger sheets and can be produced cheaper than an ordinary plastic. Yet it is permanently insoluble and affords a marked resistance to chemical or mechanical destructive elements. In strength value it compares favorably with aluminum. It is dimensionally stable, inexpensive, easy to work, and requires no surface protection. In peacetime application it will be available in permanent colors, designs and patterns all of which will be an integral part of the product itself!

#### How can you plan to use INDERON?

At present, INDERON is available only for Army-Navy uses. When it is no longer so urgently needed for war, INDERON will serve a wide range of uses in many industries. For example: IN-DERON is ideal for marine application. It will resist salt water, terrific strains, impact blows, abrasion, corrosive and toxic fumes. In the building field, INDERON will serve as roof, walls, floors and built-ins for tomorrow's homes. It will be applied to special packaging, to prefabrication, to furniture, to many another field. *Learn more about INDERON* --Write NOW!

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Washington Veneer Co. Olympia, Washington manufacturers

Chicago Sales Office: 9 So. Clinton St., Chicago 6



#### BOOKS

(Continued from page 28)

books, with their indigestible farrago of names, dates and places can't do it: like telephone directories they are occasionally useful but hardly instructive. Neither can the picture books, although they come a little closer. Histories are needed which tell their story in contemporary terms, which explain past building as the reflection of cultures, techniques and social systems. The job would be a difficult one, and it could not be done by the old-line professors. But it would be a great service to the cause of modern architecture.

THE MISSING TECHNICIAN In Industrial Production, by John Gloag. George Allen & Unwin, Ltd., London. 108 pp., 15 plates. 5 x 71/2. 7s. 6d.

John Gloag is an irrespressible English gentleman who has books the way guinea pigs have offspring. He has poured out a stream of volumes on houses, German propaganda, furniture, the future of craftsmanship and other assorted subjects at a rate equalled only by the late Edgar Wallace. This achievement does not include magazine

Zanesville, Ohio, Plant	
Chio, Plant	U.
Award	
All	
FOR HIGH ACHIEVEMENT	
IN WAR PRODUCTION	

We are proud, in behalf of the men and women of our Zanesville, Ohio, Plant, to accept the Army-Navy Production Award for high achievement in the production of materials needed for the War Effort.

We appreciate, too, that this is an honor not lightly bestowed and will endeavor to continue producing to the very best of our ability.

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Irvington, New York Zanesville, Ohio Export Dep't: 50 Church Street, New York 7, N. Y. articles, nor the short history of the United States, nor his survey of home life from the year One. Mr. Gloag, in short, is quite a man, although the theory advanced that England would have no paper shortage if he took a vacation may be exaggerated.

Hero of the present volume is the "missing technician" — the industrial designer in Britain. Mr. Gloag, according to the blurb on the jacket, is peculiarly well qualified to write on this subject too, because he is a director of an advertising agency and a consultant on industrial design.

The theory of this book is that the good designer and the industrialist can work together productively. It is made clear that the industrial designer is not a man who slicks up the outside after the product has been finished, but a technician who understands production, capable of integrating function, material, manufacture and appearance. It is also pointed out that the architect's training "gives the profound, far-reaching interest in, and knowledge of, a diversity of materials, which, in alliance with a creative imagination, can produce unconventional but highly effective and convenient articles."

In connection with the problem of bringing designer and industrialist together, Mr. Gloag worked out an interesting device known as the Design Research Committee, of which several have functioned successfully with manufacturers. A typical committee consists of staff members and outside specialists who include industrial designers and a variety of technicians. Illustrations show new designs produced by this collaborative method.

In addition to describing these special committees, the author goes into detail about methods of working, fees, the effect of new materials on design, etc. The plate section at the back of the book contains a number of first-rate examples of design improvements in industrially produced articles.

For the professional in the field this book has little to offer, with the possible exception of a few new sales arguments. The audience to which it is addressed — primarily manufacturers should find it an exceedingly readable and informative presentation of the case of the industrial designer.

**A New Era for Building** is only Marking Time. J. A. Zurn Manufacturing Co., Erie, Pa. 31 pp. Illustrated. 12 x 9. \$1.00.

A first-rate brochure on community planning written, appropriately enough, for the lay public. It is as realistic and convincing as any yet to appear, planning commissions notwithstanding. Published by a manufacturer of plumbing products, it also amounts to an encouraging glimpse of the standards of tomorrow's industrial sagacity. Kellog Division, American Brake Shoe Company Building, Rochester, N. Y. John B. Pike and Son, Inc., Builders.





Factory buildings require the latest in improved working. conditions — abundant laylighting, unhampered vision and conrolled natural ventilation — available with upton Metal Windows. Weather-tight and asy to operate, Lupton Metal Windows are the esult of over forty years experience in metal vindow design. For dependability and service .. for complete satisfaction ... specify Lupton.

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The Sloan Valve Company has been working around the clock in the War effort since Pearl Harbor. Not only do we now make a Sloan VICTORY Model Flush Valve, which has conserved thousands of tons of copper, but we are producing millions of parts for airplanes, tanks, armored vehicles, anti-aircraft fire control, etc., in addition to vast quantities of ammunition fuzes of various kinds.

Because of this War work, which involves machining to micro-tolerances on a mass production basis, the Sloan Flush Valve of tomorrow will be better than ever before. Already we have a new and improved Flush Valve completely tested and approved ready for peacetime announcement and production.

Sloan Flush Valves have been precisionmade water measuring instruments for over a third of a century. Their success is bespoken by the fact that there are more Sloan Flush Valves sold than all other makes combined.

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MAINE THE THOMAS LAUGHLIN CO., PORTLAND

MARYLAND SOUTHERN GALVANIZING COMPANY, BALTIMORE

MICHIGAN RIVERSIDE FOUNDRY & GAL KALAMAZOO GALVANIZING CO.

MINNESOTA LEWIS BOLT & NUT CO., MINNEAPOLIS

MISSOURI COLUMBIAN STEEL TANK CO., KANSAS CITY MISSOURI ROLLING MILL CORP., ST. LOUIS

NEW JERSEY DIAMOND EXPANSION BOLT CO., INC., GARWOOD L. O. KOVEN & BROTHER, INC., JERSEY CITY INDEPENDENT GALVANIZING COMPANY, NEWARK

NEW YORK

ACME STEEL & MALLEABLE IRON WORKS, BUFFALO THOMAS GREGORY GALVANIZING WORKS,

MASPETH, (N. Y. C.) ATLANTIC STAMPING CO., ROCHESTER

OHIO

THE WITT CORNICE COMPANY, CINCINNATI THE FANNER MFG. CO., CLEVELAND THE NATIONAL TELEPHONE SUPPLY CO., CLEVELAND INTERNATIONAL-STACEY CORP., COLUMBUS

THE NEWARK GALVANIZING CO., NEWARK COMMERCIAL METALS TREATING, INC., TOLEDO

OREGON GALVANIZERS, PORTLAND

#### PENNSYLVANIA

LEHIGH STRUCTURAL STEEL CO., ALLENTOWN AMERICAN TINNING & GALVANIZING CO., ERIE PENN GALVANIZING CO., PHILADELPHIA HANLON-GREGORY GALVANIZING CO., PITTSBURGH OLIVER IRON & STEEL CORPORATION, PITTSBURGH

> RHODE ISLAND JAMES HILL MEG. CO., PROVIDENCE

WASHINGTON

ISAACSON IRON WORKS, SEATTLE

WISCONSIN ACME GALVANIZING, INC., MILWAUKEE

ENDURANCE is a quality of first importance where uninterrupted service is a requirement.

Continuous tests in field and laboratory have proved the economy of the Hot-Dip Galvanizing method in rust prevention. Time after time it has paid dividends in savings made in maintenance and repair.

Hot-Dip Galvanizing provides

the thickest possible coating of zinc to iron and steel. If you are making items of these metals, you can be assured of the galvanizing job being done in accordance with the highest quality standards adopted and practiced by the members of this Association.

HOT-DIP GALVANIZED

WILL IT RUST?

Steel Tanks

American Hot Dip Galvanizers Association, Inc., First National Bank Bldg., Pittsburgh 22, Pa.

TOT-CIP GALVANIZING

Not just Galvanis

#### BUILDING REPORTER

(Continued from page 18)

second chemical. Solids are put in the drawing with India ink or pencil and the final result is white, black and two tones of gray. Copies of these tracings may be reproduced either photographically or with blue print, Ozalid or Black-and-White equipment.

Manufacturer: The Craftint Mfg. Co., 210 St. Clair Ave., N.W., Cleveland, Ohio.

PLYWOOD AND PLASTIC COMBINED to form structural product.

#### Name: Inderon.

Features: Inderon is a structural product that combines the qualities of plywood and plastics by facing panels of Douglas fir plywood with plastic laminates under a pressure of 250 to 300 lbs. per sq. in. at a temperature range of 300° to 330°F. At present used exclusively for military purposes ranging from shipping containers to table tops on which parachutes are folded, its postwar uses are far-reaching. It is highly resistant to salt water, terrific strains, corrosive and toxic fumes, and extreme abrasive action. It has great strength and dimensional stability, coupled with the fact that it is inex-



pensive and easy to work. These quali ties will give it wide industrial appli cations in the fields of packaging, prefabrication and furniture manufactur ing. It is smoothly surfaced, resistan to slivering, and chemically stable Manufactured at present in only one color, experiments show it will be available in a wide variety of perman ent colors and patterns. It therefore should prove useful for exterior con struction, interior wall paneling and for built-in features. It can be made into walls for prefabricated housing with the wallpaper design a permanent washable part of the wall itself. Manufacturer: Buffelen Lumber & Mfg

Co., Tacoma, Wash.: Washington Veneer Co., Olympia, Wash.



FREEZING CABINET for home and farm use.

Name: Freezing Cabinet.

*Features:* This unit was designed for home and farm use after an extensive survey to determine what type of freezing cabinet the housewife will need and desire after the war. It has three pullout drawers, two of which will be used for freezing and storing foods, one for storage only. Several other models will also be available.

Manufacturer: Seeger Refrigerator Co., St. Paul, Minn.



PRINT DRYERS for over-all drying. Name: Model B-8.

Features: This compact, electrically heated dryer has been designed for economical "over-all drying" of blue prints or black-and-white prints. Provided with standard heat regulation, the dryer is also equipped with variable speed drive motor and controller. This permits instantaneous speed changes over a range of 6 in. to  $3\frac{1}{2}$  ft. a minute, to *(Continued on page 158)* 

# Delightful to live in



HOME OF MISS PATRICIA DETRING, BEL AIR, CALIFORNIA

# .. summer or winter

This unusual home ... designed by Burton A. Schutt, A.I.A., and built by Frank A. Woodyard...makes the

most of its elevated site for view and sunshine ... and of PAYNE heating and ventilation for year-around comfort. \* More than 150,000 pre-war PAYNE-equipped homes bear witness to the confidence in PAYNE quality and performance shared by architects, contractors, owners, coast to coast.



After Victory– PAYNE ZONE-CONDITIONING Maschaed in winter ... controlled by some or individual rooms. Write for folder, prepared for information of be available after victory, but nows we Zone-Conditioning models will be available after victory, but nows LET'S ALL BULY MORE WAR BONDBS

Payme FURNACE & SUPPLY CO., INC., BEVERLY HILLS, CALIFORNIA



RUN ALONG, MR. ASTROLOGER

# ...we're telling them about postwar



#### CASE HISTORIES IV-"Invasion Pipeline"

 $\sqrt{}$ Hundreds of *miles* of invasion pipeline has been produced at our Norristown Plant to meet the Army Engineers' urgent need of supplying fuel to the fighting troops and newly captured air bases.

√ Fabricated from light weight steel tubing in 4" and 6" diameters, equipped with patented quickconnection couplings, tested to high pressure, and camouflaged—these pipelines can be easily transported, laid down and connected at high speed.

 $\sqrt{}$  They have assured the steady flow of essential fuel to the North African, Sicilian and Italian Fronts.

 $\sqrt{}$  This is another way our plants are helping to get on with the war.

# bathrooms

You see, these men are interested in the *practical* aspects of bathrooms the beauty, comfort and convenience that not only help to safeguard the health and serve the comfort of home-buyers, but actually help to *make home-buyers!* 

The Wilmington we show here, with its larger-than-average basin area, concealed front overflow, recessed fittings and optional towel bars, met their desires exactly in 1940. Then the war called us to more urgent tasks. A high point of development then, it is also a clear promise of finer developments to come in Case twicefired vitreous china fixtures.

This is not the time to reveal the details of those coming developments. We're working on them earnestly. The important fact is that they'll be ready when they're needed.

For the present, nearly all Case plumbing fixtures are available for Government-approved new building or remodeling, and for essential maintenance and replacements.

W. A. Case & Son Mfg. Co. Buffalo 3, N. Y. Founded 1853.



LIFETIME PLUMBING FIXTURES

IT'S NOT OVER YET-BUY MORE WAR BONDS!

# a necessary feature for tomorrow's home

THE HOME OWNER of tomorrow will demand every modern feature which enhances pride of ownership. Certainly he will insist upon the ultramodern detail that permits the flush, unbroken interior surfaces provided by SOSS INVISIBLE HINGES.

No longer need surfaces be marred by those unsightly gaps and projections wherever hinges are necessary. Soss Invisible Hinges are out of sight when the door is closed. The use of Soss hinges beautifies doors, cupboards, folding partitions—and widens the opportunity for modern, unusual design. Write for full details.

SOSS MANUFACTURING COMPANY 21767 HOOVER RD. DETROIT 13, MICHIGAN



#### BUILDING REPORTER

(Continued from page 154)

accommodate all types of work under various drying conditions. Features include steel framework which eliminates heat warping, specially woven seamless band with no joints to deface prints, heavy seamless copper revolving drive that can be chromium plated. Steel-clad, refractory insulated, Nichrome heaters, nickel contacts, and asbestos insulated nickel wire are used to form this long-lived heating and control unit. The dryer is available in two sizes for handling prints of 26 in. and 44 in. widths. The 26 in. dryer, operating on 110 v. AC or DC current is 40 in. long, 28 in. wide and 13 in. high. The 44 in. dryer, operates on the same current, and is 58 in. long, 28 in. wide and 13 in. high.

Manufacturer: Peck and Harvey, 4327 Addison St., Chicago 41, III.

### **PLASTIC** retains unusual properties after forming process.

Name: Micarta 444.

*Features:* Micarta 444 is a laminated, phenolic plastic used in conjunction with a hot-forming process to produce intricate shapes as tough and reliable as the pre-shaped material. After rapid

WELL, WE WON'T

E BACK TILL

IT'S OVER,

OVER THERE.



YOU remember Mr. Cohan's song from the first war, don't you? And it still holds good, too. Much as we'd like to get back to our regular, normal business, we've still got a war on. And although it looks as though we were winning it, it's still got to be won.

So—for the time being, we are a little bit A. W. O. L.—at least, from your point of view. But, just as soon as we wind this thing up, F. H. Lawson will be back on the market with the kind of quality products that you know F. H. Lawson can make.

#### THE F. H. LAWSON COMPANY Cincinnati 4, Ohio

Lawson BATHRODM CABINETS 126 YEARS of QUALITY Lawson

★We really don't like to make wooden bathroom cabinets, because the metal cabinet is so much better and we're used to making only the best. But, since we have to make wooden cabinets for the duration, we at least have the satisfaction of knowing that our Warwood Cabinets are the best wooden cabinets made.

YOUR PART IN THE GREAT OFFENSIVE IS TO BUY MORE BONDS NOW



heating until it is soft, flat sheets of the plastic, can be bent or drawn. A 1 in. square bar of Micarta 444 will stand a tensile "pull" of 13,000 lbs. and can carry a compression load of 30,000 lbs. without cracking. Even at temperatures as high as 170° F. it will not wilt, but actually gains in impact strength. Now it is being used exclusively in the aircraft industry, but postwar designers, engineers and manufacturers will find it a practical material whose appearance and structural characteristics give promise of diverse applications.

Manufacturer: Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

#### **ONE-COAT WHITE PORCELAIN FINISH** for commercial use. Name: Mirac.

Features: A commercially successful one-coat, one-fired, direct-to-steel white porcelain finish has been achieved in the enameling industry. This white opaque enamel has characteristics of the finest white cover coat and the adherence qualities of a good ground coat. It can be used in production in any well equipped enameling plant, requiring neither special bond or pickling equipment, nor special handling. It has excellent adherence and can be fired at 1500°F. Result: a brilliant, highly opaque finish.

Manufacturer: Pemco Corp., 5601 Eastern Ave., Baltimore, Md.

QUICK-FREEZE CABINET has 15 cu. ft.

Name: Quicfrez.

Features: This attractively styled, modern unit has been designed to meet the farmer's requirements. An interior freezer plate arrangement provides a compartment in which warm articles can be frozen separately from previously frozen foods. This special compartment has a capacity of 21/2 cu. ft. Five separate frozen storage compartments provide 121/2 cu. ft. giving a total capacity of 15 cu. ft., or space for 750 lbs. of food. The compact, efficient 1/3 H.P. cooling unit in the Quicfrez operates on standard 60 cycle, 110 v. current, and runs on low power requirements. Completely set up and ready to plug into a light socket, the unit is 941/2 in. wide, 281/4 in. deep and 35 in. high. Manufacturer: Sanitary Refrigerator Co., Fond Du Lac, Wis.

(Continued on page 162)

APCHITEC

THE

# Don't build high fuel bills into your chimney

**TKE** lots of other families 1 at this time, you may be figuring on building a new home after the war.

If so, it is important to know that skimping on your chimney can be one of the costliest mistakes you could make -if you build a chimney too small for bituminous coal.

Fuel bills can be far more than your taxes-or the interest on your mortgage.

So it's wise to plan for a thrifty fuel.

Almost half the homes in the United States are heated with bituminous coal.

And with the efficient new heating plants now being planned it will be convenient as well as thrifty to use.

Better make a note to talk this over with your architect.

# BUY MORE WAR BONDS **BITUMINOUS COAL** Institute

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

### Consider these advantages of using BITUMINOUS COAL:

#### ECONOMY

the average delivered cost of bituminous coal is less; costs less to use.

#### CONVENIENCE

modern stokers take the drudgery out of "tending the furnace" by making that an almost completely automatic operation.

#### CLEANLINESS

bituminous coal burned properly and with the proper combustion methods is a clean, odorless fuel.

#### AVAILABILITY

bituminous is mined in 24 states in the Union - and there is estimated to be enough of it underground to last three thousand years.

#### EFFICIENCY

clean-treated, properly sized bituminous

provides even, uniform temperatures. FLEXIBILITY

bituminous coal meets every home heating requirement and at less cost.

# ARCHITECTURAL CONCRETE

offers extra appeal in food plants

New Architectural Concrete building of Blue Plate Foods, Inc., at New Orleans, expresses cleanliness and streamlined efficiency. August Perez, architect; Joe Miller, structural engineer; Lionel F. Favret, contractor, all of New Orleans.

Architectural Concrete industrial buildings can be designed to express the ultimate in meticulous cleanliness—to reflect the dignity and high standards of famous institutions.

Architectural concrete performs both structural and architectural functions at moderate cost. In addition to firesafety, weather resistance and rugged strength, concrete construction helps achieve architectural distinctionan added business asset. And the durability of concrete is reflected in low maintenance long life at low annual cost.

Forty-page illustrated booklet, "Concrete for Industrial Buildings," will be helpful in planning improvements for the postwar period. Free in United States and Canada.

BUY MORE WAR BONDS

PORTLAND CEMENT ASSOCIATION Dept. 8-7, 33 W. Grand Ave., Chicago 10, III.

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

# Why Millions of Women Plan to Have

All in Favor BENDIX!

the One-and-Only BENDIX in "Homes of Tomorrow"



Many experts question whether any new home will be truly complete without an automatic home laundry. The one-and-only Bendix occupies just 4 square feet of floor

space! Compact, smart, modern! Even now, over 300,-000 pre-war Bendix machines are in daily use in homes and apartments coast to coast, and women by the millions are planning to own a Bendix when they are again available. For the Bendix solves the laundry problem once and for all. It eliminates set-tubs. It fits anywhere. It helps sell the house, and increases the value and desirability of the property. In many states, the Bendix Home Laundry is eligible for FHA financing. And women know that the Bendix is truly unique—for it washes, rinses and damp-dries clothes *automatically* at the click of a switch. Their hands never even touch water. It is as neat, as beautiful, as desirable as the home of tomorrow. No wonder more women want the Bendix than the 5 next most popular makes of washers combined!

#### EXCLUSIVE DESIGN PERMITS INSTALLATION AND OPERATION ANYWHERE . . .



- KITCHEN The Bendix is streamlined to be a part of the modern electric kitchen. Finished in white porcelain.
- PLAYROOM The Bendix makes possible a smart recreation room in place of an old-fashioned, unsightly laundry.
- BATHROOM Harmonizes readily with gleaming bathroom equipment. Takes only 4 square feet of floor space.
- BASEMEN<sup>1</sup> Just another of the many spots where the Bendix fits conveniently—gives efficient operation.
- one-and-only Bendix is a perfect addition anywhere.

#### BENDIX HOME APPLIANCES, Inc., South Bend, Indiana The People Who Pioneered and Perfected the Automatic "Washer"

MAKERS OF THE ONE-AND-ONLY BENDIX . . . NOT AFFILIATED WITH ANY OTHER ORGANIZATION OF SIMILAR NAME

#### BUILDING REPORTER

(Continued from page 158)

### MOISTURE-PROOF PLASTIC for electrical insulation.

Name: Fosterite.

Features: Fosterite, a tough, moisture proof plastic, is being used to protect components used in radar and radio equipment against harmful moisture penetration. This impregnant, which is almost as fluid as water, completely fills every tiny space in electrical windings and coils. A second, special coating form of this material can be applied to the apparatus, leaving no air gaps through which moisture can seep. Since this plastic contains no liquid solvent which would boil off, it fuses into an impenetrable solid when heated.

Manufacturer: Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

**INFRARED LAMP** with improved filament. *Name*: Birdseye Lo-Glo Infrared Heat Lamps.

Features: An improved tungsten filament, of coil-coil construction, known as the Lo-Glo MM filament has been introduced in Birdseye Infrared Heat Lamps. Burning at a lower than usual color temperature, it reduces spectral glare and increases the radiant energy

# FOR HOSPITAL FLOORS-CLEAN, COLORFUL, DURABLE TERRAZZO



Terrazzo floor made with Atlas White portland cement in Duke Hospital, Duke University, Durham, N. C. Horace Trumbaur, architect; Atlantic Marble and Tile Co., Charlotte, N, C., terrazzo contractor.

IN FLOORS of fine Terrazzo made with Atlas White portland cement, architects find that atmosphere of dignity, rest and quiet, combined with durability and strict cleanliness, which hospitals require. Terrazzo floors in entrances, reception rooms, offices, corridors, wards and other rooms have the durability and fire safety of concrete, plus ease of cleaning and unfading beauty.

The beauty of Terrazzo lies in its limitless latitude for design, and in the unfading clarity of its coloring. For faithful reproduction of colors and design, insist on a matrix of Atlas *White* cement to set off the colors of the marble aggregates to best advantage. In the matrix, whether tinted or in its natural white, lie the blending or contrasting overtones which assure the clear, true colors of fine Terrazzo.

For further information, see Sweet's Architectural File, 1944, Section 13-5, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Bldg., New York 17, N.Y.

The matrix is as important as the marble chips





output of the lamps. Shape of the filament eliminates "cold spots" and produces a better focused, and more effective pattern of infrared rays. The lamps also have a heat-proof Superlok base and ceramic heat reflector disc.

Manufacturer: Wabash Appliance Corp., 335 Carroll St., Brooklyn 31, N. Y.

### BALLAST for instant-starting fluorescent lighting.

Features: This high-voltage, Tulamp ballast, applies 450 v. to the lamp at starting, striking an arc between the lamp cathodes and eliminating the need for separate starter equipment. Delivering rated watts to the lamp at nominal current voltage, uniform light output is closely maintained even when the circuit voltage varies within the recommended operating range. This design provides high power factor, gives excellent correction of cyclic light flicker, and incorporates special filters for supression of radio interference. Available in 40 w. ratings for use on 118 v. circuits, it is housed in a case that allows the leads to be brought out either the end or the bottom, permitting flexibility of installation and utilization of present fixture designs.

Manufacturer: General Electric Co., Schenectady, N. Y.

#### PORTABLE WELD TESTING MACHINE performs three weld tests.

Features: This portable weld testing machine performs the Transverse Tension Test, Guided Bend Test (a complete 180° face or root bend) and the Longitudinal All-Weld Metal Tension Test. It can provide accurate data on tensile strength and on the ductility of weld specimens, as determined by the three tests. Because of the unit's light weight, it can perform weld tests right on the job. Operating on the principle of the hydraulic jack, a hand operated pump transmits pressure through a hose to the plunger. Jaws for making the Transverse Tension Test, and plunger and die for the Guided Bend Test are supplied with the machine.

Manufacturer: Air Reduction Sales Co., 60 E. 42nd St., New York 17, N. Y.

(Technical Literature, page 168)



Rodin's "Le Penseur"

**EMPLOYMENT** that results from expressing and utilizing ideas for the betterment of mankind is founded upon principle and must, from the very nature of its unlimited source, continually unfold productive, self-respecting jobs for men of many skills. Ideas now unfolding to engineers and architects for building of the future provide assurance of gainful employment for millions of men. Ideas, not billion dollar appropriations, make employment.

A Bra for Building Is Only Marking Time

In its specialized field, the Zurn Organization is researching, inventing, designing, making and testing one device after another in a continuous endeavor to improve building and plumbing drainage systems. The inspiring idea is to supply Engineered Protection for Human Health and Modern Structures. Although giving its utmost to the war effort, this organization has its vision fixed upon the requirements of the structures of tomorrow, in which it perceives a productive, self-respecting job for every one of its employees and for several million others who will serve the building and construction industry.

Now available upon request: "A New Era For Building is Only Marking Time", a presentation of some influences which may affect the planning of construction in the immediate future.

Form No. 44-71

BUILDING . PLUMBING DRAINAGE PRODUCTS

J.A. ZURN MFG. CO. \* ERIE, PA., U.S.A.

# If it's





#### OTHER MODERN FEATURES OF BRIGGS BEAUTYWARE

- Smartly styled functional design.
- · Color in a wide range of pleasing pastels.
- easier handling.
- · Serpentine embossed flat safety bottom on all Briggs Bathtubs — a patented feature minimizing the hazards of slipping.
- Unvarying dimensions an aid to installation.
- Integral one inch flange permitting waterproof flashing, tub to walls.

Convright 1944

BRIGGS MANUFACTURING COMPANY, DETROIT 11, MICHIGAN

to H.

... and at no extra cost!

Briggs, a decade ago, decided that Briggs Beautyware would be of one quality-the highestacid resisting . . . easy to clean and easy to keep clean.

0

20

This decision was a refusal to subscribe to the "Dual Standards" of quality maintained for years by Plumbing Fixture Manufacturers who offer acid resisting only at a premium over the price of regular porcelain enamel.

Acid resisting porcelain enamel protects the fixture from surface etching and stains caused by acids found in fruits, vegetables, medicines, and many other liquids present in the home.

Architects and Builders are becoming increasingly alert to the exclusive features of Briggs Beautyware,

which assure "Client Satisfaction." The postwar budget will buy more quality when Briggs is specified.



Right - for those who wear the Purple Heart

low he's on his way. The hospital train will take im to convalescence close to home and family.

'his hospital on wheels is staffed and equipped to andle his every need on the journey. Throughut, it is flooded with a new kind of light—cool nd glare-free fluorescent. It is easy on the eyes f wounded men. It helps doctors and nurses o their jobs.

This lighting equipment, like everything else in the hospital train, is the last word. Fixtures and lamps are manufactured by Sylvania, which means they are built to one standard—the highest mywhere known.



### ight - for the blessed event

Whom the new baby looks like will be decided under fluorescent — and this softly diffused light will rest Mother's eyes.

Cool, comfortable fluorescent, with its high efficiency and accurate color control, will find many uses in the modern postwar hospital. And this new kind of light is the most economical known.

Fluorescent light that is engineered to hospital needs will be a specialty of Sylvania — pioneer in lighting, pacemaker in the fluorescent field. It will, of course, be made to Sylvania's one standard — the highest anywhere known. Sylvania Electric Products Inc., 500 Fifth Avenue, New York 18, N. Y.

# SYLVANIA ONE STANDARD-THE HIGHEST ANYWHERE KNOWN

#### RADIO TUBES

- Sylvania was first to develop a complete line of 1.5-volt radio tubes which draw their power from a simgle dry cell battery. This made the camero-type portable radio set the rage of 1938. It also aut in half the battery weight our boys in the military communications services have to carry afield.



### ELECTRONIC DEVICES

television set will be a cathode ray tube. This electron tube is one of many types that Sylvaria is even now producing. Wark in the field of electronics is a definite part of Sylvania's activities.



LAMPS AND FIXTURES Sylvania is pioneer in lighting — pacemaker in the fluorescent field. Sylvania is the leading manufacturer of fluorescent fixtures. Sylvania lamps in Sylvania fixtures give fluorescent performance at its finest — light that is right.



BUY WAR BONDS

FOR THE DURATION

YOUR BEST NEW-BUILDING PLANS DESERVE Bathe-Rite SHOWER CABINETS



SHOWER FACILITIES will be on the "must" list of one out of three new-home builders! This known demand, plus takenfor-granted shower needs on public, commercial and institutional buildings, makes BATHE-RITE SHOWER CABINETS an important factor in your new-building plans.

So, for your own future benefits, and for the satisfaction of your clients, you'll want to check the reasons why BATHE-RITE is the *quality standard* in modern prefabricated shower convenience. Their popularity has always been based on superior strength and durability, greater beauty of design, and a wealth of features that speeds up installation. This combination of advantages recommends BATHE-RITE Shower Cabinets for all your new-building plans.

Learn how Bathe-Rite Shower Cabinets can help you in designing bathing facilities. Write for bulletins, specifications and prices.

### MILWAUKEE STAMPING COMPANY 827-5 South 72nd Street Milwaukee 14, Wisconsin

I'M READY TO PROVIDE A WOOD FLOOR FINISH THAT NEVER NEEDS RE-SCRAPING!

### proved over a period of 30 years

### Ready now for post-war construction

Lo assure your owners of floors of enduring, troublefree beauty, MINWAX-the complete penetrative stainwax finish-is ready to serve now and in the post-war period. For more than 30 years, MINWAX Wood Finish has been doing this job so well that many architects consistently specify it for homes, institutions, public buildings, housing and war plant construction.

With MINWAX, re-scraping is eliminated, because a MINWAX finish is in the wood. Worn spots, when and if they occur, can be easily retouched without laps with a little more MINWAX. The usual waxing and simple care which are given any fine floor make a MINWAX floor increase in beauty and serviceability with passing time.

To most owners, accustomed to the commonly used "surface" finishes, MINWAX is that "something new and better" they want for that post-war home or building, but to architects, painters, and floor finishers, it is an old and familiar friend.

SEE SWEET'S-or write for more complete architectural specifications and data sheets to MINWAX Company, Inc., 11 West 42nd Street, New York 18, N. Y.

#### For the 27th consecutive year our COMPLETE CATALOG IS IN SWEET'S

BACK THE INVASION! BUY BONDS - MORE THAN BEFORE



# NOW A TRANE TRAP WITH PRE-WAR FEATURES!

THE RETURN OF THE COUPLING IN THIS NEW S-1 TRAP CUTS 6 STEPS OUT OF STEAM FITTING

YESTERDAY ... 10 STEPS. When materials were shorter than manpower, Uncle Sam required a radiator trap that took 10 different steps to install-1. Screw the trap on the return piping. 2. Then secure the special right and left hand threaded pipe nipples. 3. Screw the right hand thread into the heater, counting every turn; then unscrew again. 4. Screw the left hand thread into the trap, again counting every turn. 5. Screw the nipple into the heater or trap (whichever took most turns in steps 3 and 4 above) and leave an equal number of threads at either end. 6. Pray that trap and heater were lined up so fittings engage easily. 7. Grab nipple with wrench and tighten, hoping that threads in both trap and heater will become tight at same time. 8. Try to connect a complicated line-up like this in one straight ine. 9. Try the whole procedure over two or three times in an attempt to align an almost impossible arrangement. 10. Cuss Tojo and Hitler for making such ime-consuming operations necessary.



**TODAY**...4 STEPS. Now that a radiator trap with brass inlet coupling is permitted, it takes less than half the time to install the new Trane S-1 Trap. All the steamfitter has to do is: **1.** Screw the trap on the return riser. **2.** Screw the coupling into the heater. **3.** Screw the coupling on to the trap. **4.** Tighten the coupling and, presto, the job is done.

PRE-WAR FEATURES ... In addition to the manpower saving coupling, the Trane S-1 Trap has plenty of pre-war features such as-the same carefully constructed bellows used in the Pre-War Trane Trap, instead of less efficient war-time diaphragms, usually found in other traps... the same sensitivity of the Pre-War Trane Trap which makes it possible for the convector or radiator to heat to full capacity. This means fuel saving ... Parts that are interchangeable with the Pre-War Trane Trap and that will be interchangeable with the Post-War Trap ... Plus a War Feature that is found in few other traps, all of which must use cast-iron bodies. The cover of the Trane Trap is attached by a gasket-bolt arrangement instead of the usual screw top. No chance that rust will make maintenance impossible by sealing up screw type cover.

Trane S-1 Traps complying to government limitation orders and incorporating pre-war Trap features are available for all repair jobs and for all permitted new construction. They can be shipped from stock now.

### TECHNICAL LITERATURE

KITCHEN EQUIPMENT. Kitchen Maid "Package" Units. 6 pp., 3½x6%. This illustrated folder describes kitchen units which are now available for separate use or assembled into combinations. Typical wall, base, sink and utility units are illustrated, as well as different combinations. Features such as quiet non-stick drawers: doors that do not warp or swell: 3 in. toe space under base unit, are also illustrated and described. The Kitchen Maid Corp., Andrews, Ind.

ADHESIVES. 3-M Adhesive Data for Sealing— Insulating—Adhering—Sound-Deadening—Coating, 6 pp., 8/2x11. This booklet will help those using adhesives and coating materials, impregnators, spray-on insulators and sound-deadening compounds to select the correct material. Data on various formulae as made by the company are in easy reference style, and include information on viscosity, color, bonding range, characteristics, methods of application, uses, etc. Minnesota Mining & Mfg. Co., St. Paul 6, Minn. ELECTRICAL. More Capacity Through This Speedy Square D Panelboard Conversion Plan, 16 pp., 4%x834. Illustrated pamphlet describes a unique method of converting obsolete and inadequate electric light and power panelboards to full efficiency and modernity without disturbing the box or conduit. Illustrations of "before" and "after" cases are accompanied by a discussion of each. Square D Co., 6060 Rivard St., Detroit 11, Mich.

WOOD CONSERVATION. Progress in American Forest Management, 32 pp., 8½x11. What is being done to assure an adequate supply of timber for future application is covered in this booklet. The problem of who owns American commercial forest land is included together with discussions of increased production of new wood, selective harvesting, examples of progress in forest management, etc. Many photographs are used for illustrations. American Forest



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Products Industries, 1319 18th St., N.W. Washington 6, D. C.

ington 6, D. C. INSULATION. Mineral Wool: Blankets, Block. Insulating Cement, and Pipe Insulation for Heated Industrial Equipment, Commercia Standard CS 117-44, 28 pp., 8x10½. A stand ard which provides minimum requirements for mineral Wool blankets, blocks, insulating comaterial, thermal conductivity, density, standarsizes and tolerances, it also lists the recommended minimum insulation thickness requirefor various operating temperatures and recommended methods of product installation. Application of the various forms of mineral wool products is further amplified by cross section drawings. Thickness tables by individual products, suitable at various temperature limits and by temperature ranges up to 1600° F. are giver and thermal conductivity (K) is specified for each product at various mean temperatures i conjunction with density requirements. National Bureau of Standards, U. S. Dept. of Commerce, Washington 25, D. C.

merce, Washington 25, D. C. LUMINESCENCE. The ABC of Luminescence 24 pp., 8½x11. This brochure discusses in ABC language the characteristics, properties limitations and applications of inorganic lumi nescent pigments. It offers a clear explanation of the principles of luminescence and the prace tical application of these principles in the form of activated fluorescent and phosphorescent pigments. Definitions of luminescent terms, durability of the pigments, applications to plastice textiles, etc. are also covered. Activating lighsources for excitation of luminescent pigment are illustrated and explained. The New Jerse Zinc Co., 160 Front St., New York 7, N. Y

WINDOW UNITS. Thermopane, a New Transparent Insulating Glass Unit for Tomorrow Windows, 14 pp., 8½x11. Informative bookle describes the important features of Thermopane the windowpane that offers transparent window insulation. Its hermetically sealed structure an function are illustrated and explained. Section are devoted to the research and field installs tions behind this development, and to how special glasses can be adapted in the thermopan unit for meeting special applications. The com fort, convenience and economy of its use it homes, schools, offices and commercial building are illustrated and explained. Sizes, thicknesse and weights of double and triple units are liste in simple form. Libbey-Owens-Ford Glass Co. Toledo, Ohio.

AR CONDITIONING. Heating, Piping and Ai Conditioning Contractors National Assn. Engr neering Standards, Part IV, Fourth Edition 38 pp., 8½x11. The basic data necessary for calculation of load requirements for comfor air conditioning are presented in handy, easil used form. The booklet contains the definition of terms used in discussing air conditioning an examples showing the application of psychre metric relations, and also showing the metho of calculating the load for comfort air condition ing. Charts and tables give the necessary dat on which these calculations are based. Heating Piping and Air Conditioning Contractors Na tional Assn., 1250 6th Ave., New York 20 N. Y. Price \$1.00

PLASTIC. Continental Marco-Board, A Net Laminated Plastic, 6 pp., 8½x11. Illustrated brochure describes the advantages and applicibility, war uses, fabrication, etc., of this laminated plastic being produced at present for miitary purposes with Fiberglass and cotton ducas filler materials. Different resins used, wha Marco-Board is, what it looks like, how supplice etc. are discussed. Postwar plans for "custor tailoring" as to type of resins and filler materia to meet specific applications are also covered Properties of various types of board are als included. Continental Can Co., Inc., 100 E 42nd St., New York 17, N. Y.

D00RS. Recommended Commercial Standard fo Standard Stock Ponderosa Pine Doors, TS 3728, 33 pp., 8x10½. This standard provide minimum specifications for quality and con struction of house, garage, cupboard, combination, summer, storm and toilet doors and sid lights made of Ponderosa Pine. Requirement for material, workmanship, sticking, sizes, toi erances and grading are covered, together witi illustrations and layouts for 120 different de signs. National Bureau of Standards, U. S Dept. of Commerce, Washington 25, D. C.

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Paul Olsen, industrial designer, would like t receive information on all products, tools an machinery connected with building.



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