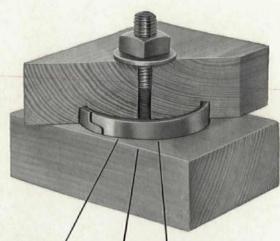
## PENCII PONIS

APRIL 1942

## Lumber

Speeds
VITAL CONSTRUCTION
through
IMPROVED METHODS



THE Teco Connector system of wood construction has brought about an epochal advance in the structural use of lumber . . . releasing steel in vast quantities for the war effort . . . presenting an unlimited new field for service and activity to architects, engineers and contractors. Lumber takes over!

As a result of the Teco Connector system of wood construction, lumber can be used more effectively and economically than ever before in designing, engineering and construction. A simple invention, simple to use, the Teco Connector distributes the bearing area of stresses at joints over almost the entire width of the member, giving more rigid/and stronger joints with less material. It has made possible the swift and economical construction of thousands of defense structures, including large and small factories — army chapels — pre-fabricated houses — hangars — dry docks — wood trusses with clear spans of 180 feet and more — graceful wood towers more than 300 feet high. It opens the way for meet-

ing many of the current requirements for commercial and industrial construction.

Every individual or organization interested in the expanded possibilities of the Teco Connector system of wood construction can make immediate use of practical working material available. Any qualified structural engineer can design for the use of Teco Connectors and competent carpenters can use them in building with commonly available lengths and dimensions of lumber. Write to-day for full details.

#### WEYERHAEUSER/SALES COMPANY

First National Bank Building . Saint Paul, Minnesota









The use of 200 Teco Connectors releases more than a ton of steel, enough for approximately 400 army rifles, or 50 heavy machine guns.

#### **TECO Timber Connectors Save!**

SAVE STEEL . . . One pound of Teco Connectors replaces 11½-12 pounds of steel.

SAVE LUMBER . . . 80% to 100% of the working strength of lumber

is utilized instead to from 40% to 60%.

SAVE MONEY . . . There is a saving up to 331/3% in cost as compared to steel, and up to 45% as compared to traditional wood truss construction.

SAVE TIME . . . Trusses can be speedily fabricated on the job out of standard lengths and dimensions of lumber.

Copyright 1942, Weyerhaeuser Sales Company

Pencil Points, published monthly by Reinhold Publishing Corporation at East Stroudsburg, Pa. Publication office, East Stroudsburg, Pa. Editorial and Advertising Offices, 330 West 42nd Street, New York, N. Y. Yearly subscription \$3.00, single copies 50 cents. Entered as second class matter, July 8, 1941, at the Post Office, East Stroudsburg, Pa., under the Act of March 3, 1879. Volume XXIII, No. 4, Dated April, 1942.

This is one of a series of advertisements telling what leading Consulting Engineers think of modern steam heating.



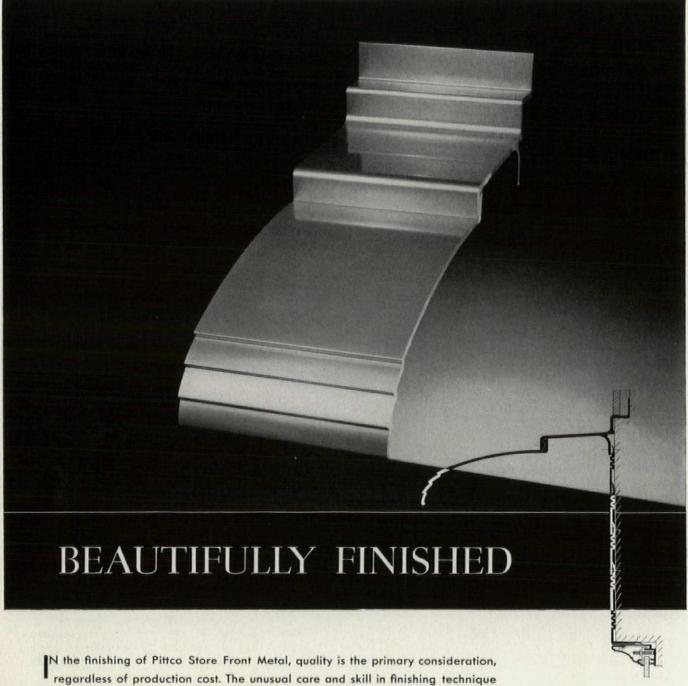
Frank Sutton, New York Consulting Engineer. Member of American Society of Mechanical Engineers, American Society of Heating & Ventilating Engineers and the Society of Consulting Engineers. B. A., E. E., Columbia University.

"In my opinion," writes Frank Sutton, "steam is the most flexible medium for heating large groups of buildings because with it you can obtain everything required for many varied types of service. Complete control over each building can be obtained with modern central steam heating control, with or without extensive zoning. Comfortable heating is provided at an enormous saving by comparison with earlier uncontrolled and now obsolete installations. By the use of appropriately located pressure reducing valves, steam is made readily available for laboratories, clinics and similar facilities and for heating domestic hot water."

Frank Sutton designed and specified a "Controlled-by-the-Weather" Webster Moderator System of Steam Heating to improve the heating of fifteen buildings on the campus of Alfred University, Alfred, N. Y. It is an outstanding example of the heating improvements and economies that can be effected by modernization of the older-type low pressure steam heating systems.

WARREN WEBSTER & COMPANY, Camden, New Jersey Pioneers of the Vacuum System of Steam Heating Est. 1888: Representatives in 65 U.S. Cities

STEAM Heats America . . . .



N the finishing of Pittco Store Front Metal, quality is the primary consideration, regardless of production cost. The unusual care and skill in finishing technique applied to every piece of Pittco Metal, result in a finish reminiscent of that characterizing the finest types of metal craftsmanship. Pittco finishing equipment is modern and complete in every detail. And whether the Pittco finish is Alumilite on aluminum, or polished, satin or statuaries on bronze, it is marked by the same high degree of uniform excellence. An examination of any Pittco Metal installation will confirm these statements. Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

#### **PITTCO STORE FRONT METAL**

PITTSBURGH PLATE GLASS COMPANY

"PITTSBURGH" stands for Quality Glass and Paint

#### DETAIL

Unretouched photograph of the hood member of a Pittco awning bar, showing typical quality finish. Like all Pittco mouldings, it is solid and strong, yet designed for pleasing balance of line and plane. Awning bar: 60. Hood members: PX 119 and PX 120. A Great New Advance in Fluorescent Lighting



INTO every fluorescent lamp, just before completion, goes a little blob of mercury. Not too little, because the lamp needs a minimum amount to operate efficiently; not too much, because then, in time, the excess deposits itself on the surface in the form of dark streaks and splotches.

To make sure the quantity is accurately measured, Hygrade engineers have produced the "mercury bomb"—a tiny metal container of mercury, weighed to the thousandth of a gram. Heated to the bursting point before the lamp is sealed, the "bomb" explodes—releasing mercury vapor in the precise volume required for best results.

Thanks to this exclusive fluorescent development, Hygrade Lamps are unique in being virtually free of "mercury shadow"—they remain "bright to the last inch." But the "mercury bomb" is only one of the reasons for the superiority of Hygrade Lamps.

They give more light — a greater output of lumens per watt.

They have a smoother coating texture — something you'll readily observe if you compare them with other lamps.

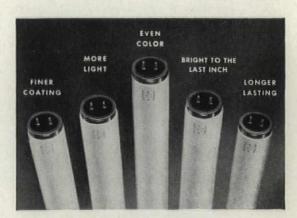
You can see, too, that they're more uniform in color—each lamp producing the same color of light.

And they last longer — a fact Hygrade users well know.

Good as these lamps are in any fixture they're even better when used in Hygrade "Miralume" fixtures—a complete "package" that's unit-engineered—lamps, fixtures and accessories made for each

other by Hygrade - with every part performing in harmony with the rest.

So when you recommend Hygrade Fluorescent Lighting, you're not only doing right by your client—you're building your own name as well. If you haven't yet received our free file-size kit—containing catalogs, prices and complete technical specifications on all Hygrade Fluorescent Lighting Equipment—write today to Dept. P-4.



#### HYGRADE SYLVANIA CORPORATION

Makers of Hygrade Incandescent Lamps, Fluorescent Lamps, Fixtures, Starters, Sockets and Sylvania Radio Tubes

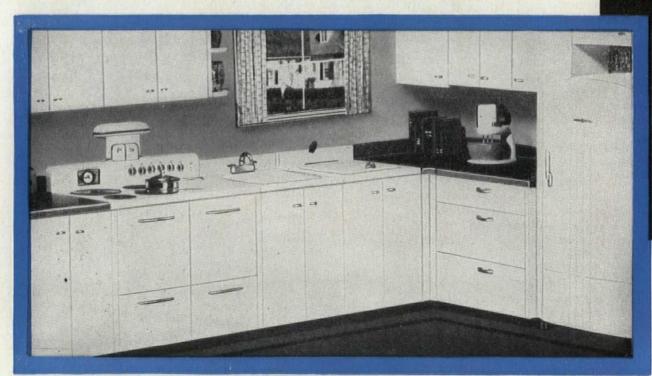
# "Aw— who ever heard in a \$4000 house!"

For years builders have installed complete G-E Kitchens in low cost homes. Here's why!...

THOUSANDS OF OWNERS have reported that they have found it costs less from the very first month to live in a home with high quality equipment.

The buyer of a \$4,000 home can least afford poor kitchen equipment, wasteful heating plant or skimpy wiring system. He, of all clients, needs most the economies of lower operating costs, lower maintenance costs, and longer life that are possible only with efficient, high-grade equipment.

THE BUILDER PROFITS too! Establishing a reputation for building better low-cost homes that cost less to live in is a wise move that pays dividends. Safeguarding your clients' interests safeguards your own, because the homes you design and build today are the homes that build your reputation for tomorrow.



This kitchen is but one of many arrangements possible in a new \$4,000 home.

Write for book with complete details on operating equipment for small hames.







Good will plus!-Busy housewives everlastingly appreciate the time-saving, work-saving, money-saving advantages of a G-E Electric Sink that washes and dries the dishes and disposes of garbage electrically.



Automatic Heat—Folks who live with a General Electric Furnace - residents of the mill district as well as the boulevard-report savings in fuel bills from 25 to 50%. That's vitally important in times like these!













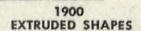












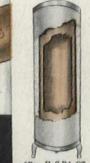
Introduction and develop-ment of the extrusion process for architectural bronze and nickel silver.

#### 1922 ANACONDA BRASS PIPE

Introduced and promoted Brass Pipe for plumbing. Later developed Anaconda 85 Red Brass Pipe after a nationwide 10 year study of water cor-

#### 1927 **EVERDUR\* METAL**

Commercial development of high-strength, weldable copper-silicon alloys leads to use for water tanks.



#### 1932 "ELECTRO-SHEET" COPPER

New process makes wide, thin copper available for low-cost, lasting, damp-proofing, weather-proofing and concealed flashing.

## Highlights of ANACONDA SERVICE to the building industry

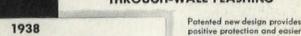
#### 1934 10-OZ. ECONOMY COPPER ROOFING

New narrower, lighter weight roofing sheets make economical, long lasting, copper roofs available for small and medium sized homes.



#### 1938 COPPER WALL PANELS

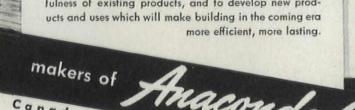
A new dry-construction, pat-ented wall facing, weather tight, non-absorptive, erected without solder or caulking compounds; allows free movement to prevent buckling. Panel walls can be dismantled and re-erected in another location.





#### 1942 ANACONDA RESEARCH

This program of The American Brass Company is carrying on in many varied directions to improve efficiency and usefulness of existing products, and to develop new prodpositive protection and easier installation at reduced cost.



Anaconda Coppe In Canada: Anaconda American Brass, Ltd., New APRIL 1942

#### THE THRESHING FLOOR

The belief of Pencil Points that the architectural man can be of service in the Victory Program—whether he has his name on an architectural contract or simply agrees to devote his skill and professional ability to the salaried job before him—is being proved by early results in Washington. The sustaining effort that Willis A. Vogel is leading there, as Technical Personnel Adviser on behalf of the men of the profession, is finding acceptance with the potential employers—agency heads, personnel managers, other advisers in the Victory Program, and authorities of the continuing bureaus. The Editors of Pencil Points are reassured by the first successes of the Pencil Points' effort on behalf of the profession. For the architectural man, Mr. Vogel is making friends in high places. The architectural man, himself, appreciates the effort and has been quick to tell us so. Below are excerpts from some of the hundreds of letters received.

#### FROM THE EAST

#### DWIGHT N. FOSTER Canton, Mass.

"Your proposal to crusade for our recognition comes like a warm south wind of hope, May it prosper and bear merited fruit."

#### CHARLES N. KENT New York

"You have undertaken a most needed job in your attempt to mobilize the Architectural Profession for the work in which they will be most useful."

#### CARL R. TRAVER Rochester, N. Y.

"Congratulations! I think your letter is a masterpiece and a worthwhile piece of work."

#### MAURICE COURLAND New York

"May I hearby endorse and encourage you in this enterprise. I firmly believe that this step will greatly benefit the architectural profession, as well as constitute a vital contribution to our national war effort."

#### W. T. McCARTHY Brooklyn, N. Y.

"Just a word of commendation for what you are trying to do for the Architects. If there is a forgotten man, he is it."

#### JOHN STONE THORNLEY White Plains, N. Y

"Unquestionably, this latest effort on your part will help to build up a deeper spirit of friendliness and understanding between the profession and your fine publication. In fact, I trust that in time the Architectural group as a whole will officially acknowledge Pencil Points as its mouthpiece in matters of National interest."

#### S. TYSON HALDEMAN Brockton, Mass.

"'Hooray' for PENCIL POINTS. Keep up your good work."

#### WILLIAM EMERSON Boston, Mass.

"Hearty congratulations and approval of the step you have taken."

#### CARL E. SEGERBERG Middletown, Conn.

"Your efforts in behalf of the architectural profession, as described in your letter of February 10th, is most commendable and deserves the whole-hearted support of the architectural profession and all those connected with it. For many years the architectural profession has been sort of a Pearl Harbor, and your efforts to help it and possibly rescue it is greatly appreciated, and I am most grateful to you for it."

#### JOHN HOWARD STEVENS Portland, Maine

"Good Work!"

#### GEORGE R. KRABER Newtonville, Mass.

"Timely and to the point."

#### JOSEPH T. SIBLEY Bronxville, N. Y.

"This is a swell idea."

#### DAVID PORTER New York

"I think that you have started a grand work."

#### T. FLOYD LORENTZEN Englewood, N. J.

"Your proposal to bring those in the Architectural profession to the attention of those in need of such services is urgently needed. My congratulations."

#### FROM THE WEST

#### EDWARD M. BURROWS Cincinnati, Ohio

"You are to be congratulated in this enterprise of going 'to the Washington Front for every member of the Architectural Profession in the United States'."

#### LAMBERT J. SOUCEK, JR. Downers Grove, Ill.

"I am sure the profession, and I hope you will also, benefit by this timely service."

#### H. SPITZNAGEL Sioux Falls, S. D.

"Your program for recognition of the architect in connection with the war effort is to be highly commended. Your letter crystallizes thoughts which have probably been in the mind of many a member of the profession."

#### GEORGE B. MAYER Cleveland, Ohio

"I want to take this opportunity to tell you what a fine idea I think it is."



Careful planning—tested, adequate equipment—an experienced organization, capable of meeting problems quickly and safely—these are pre-requisites of effective speed. In foundation work, effective speed, the speed with which safe bearing strength is developed most economically, has such an important influence on project schedules and total costs that the choice of a contractor for the substructure merits thoughtful consideration. Raymond has demonstrated its ability to get things done with effective speed and net economy—is particularly well experienced, organized and equipped to serve you today.

#### THE SCOPE OF RAYMOND'S ACTIVITIES

includes every recognized type of pile foundation—concrete, composite, precast, steel, pipe and wood. Also caissons, construction involving shore protection, ship building facilities, harbor and river improvements and borings for soil investigation.

#### RAYMOND

CONCRETE PILE COMPANY

Branch Offices in Principal Cities

140 CEDAR STREET • NEW YORK

#### WATER SYSTEM ENGINEERS



• When you feel the need for consultation with capable water system engineers, men ideally prepared to help you are at your service at Fairbanks, Morse & Co.

Whatever the nature and scale of your problem, F-M engineers can give you effective aid or reassuring confirmation of your own conclusions. For these men have the broadest possible experience.

That's because they work with the most complete line of water supply equipment. The F-M line includes everything from fractional horsepower, package unit, automatic systems for small rural homes or country cottages, to huge pumps, motors, and Diesel engines for the largest municipal or industrial pumping plant. And the F-M trademark is one that clients respect.

For data for your files, or for consultation without cost or obligation, simply write Fairbanks,

Morse & Co., Dept. D188, 600 S. Michigan Ave., Chicago, Illinois.



#### FAIRBANKS • MORSE & CO.

Manufacturers of Precision Equipment for 112 Years

#### JEROME ROBERT CERNY Chicago, Ill.

"My heartiest congratulations on the excellent, cooperative stand that your magazine has taken in regard to architects and their work in this Victory program."

#### A. H. MORRELL Clinton, Iowa

"A commendable, worthwhile, and timely effort."

#### DAVID L. SOLTKER Chicago, Ill.

"I believe this is a fine thing that you are doing."

#### WALTER O. KRUSE Davenport, Iowa

"Your letter to the architectural profession, under date of February 10, promises to perform an outstanding service to those architects who have, under the present necessary restrictions on private work, been forced to shut down their work shops."

#### HORACE M. COY Toledo, Ohio

"Our firm wishes to take this opportunity to thank you for the assistance and cooperation extended the architectural profession during this emergency. We feel that the efforts being made by your publication in the interest of the architects will be long remembered and appreciated."

#### J. C. TAYLOR Hibbing, Minn.

"It certainly puts your company in an outstanding class to take an interest in architects, draftsmen, designers, etc., who are experienced and anxious to serve their country."

#### WALTER BOSCHEN St. Joseph, Mo.

"Good luck to you."

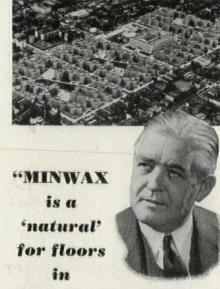
FROM THE FAR WEST

#### SAM W. HAMILL San Diego, Calif.

"Allow me to commend you for your effort on behalf of the profession."

#### WILLIAM J. GAGE Beverly Hills, Calif.

"Let me say you have summed up the situation exactly."



#### Defense Housing"

W ITH a record of use on more than 55 defense jobs, is it any wonder that the selection of MINWAX on new defense housing projects is so general?

Architects know that MINWAX meets the present demand for SPEED and ECONOMY. They also know that their contractors can get prompt deliveries.

This is no time for experiments. Products that are proved — time-tested—are, naturally, on the "preferred" list. Minwax Flat Finish meets U.S.H.A. specifications for stainwax finish for Defense Housing. It will pay you to investigate. We'll be glad to send you complete information. Minwax Company, Inc., 11 West 42nd Street, New York.

#### FACTS ABOUT MINWAX FLAT FINISH

- The original Penetrative Stainwax Finish
- . Seals, Protects and Preserves
- Finish becomes part of wood, resists mars and scratches
- Can be retouched and renewed without lap
- · In clear and 11 colors

Specified by architects for more than 30 years



#### Goal Ahead

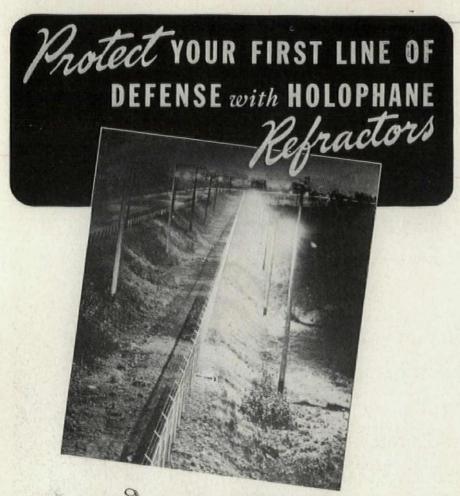
Like every thinking American, we are all out for Victory—Victory at the earliest possible moment.

Most of the 41 years of Youngstown's history have been years of peace. Like you, we look forward confidently to that day when steel can turn from its terrible work of destruction to the constructive task of restoring the foundations and rebuilding the structure of our national health and prosperity and happiness.

Victory when it comes must be unqualified, and complete. Victory calls for hard work—unstinted, total effort. So let us devote every machine and every ounce of manpower to the winning of the war. That is American Industry's task for TODAY—not tomorrow, but NOW.

THE YOUNGSTOWN SHEET AND TUBE COMPANY YOUNGSTOWN, OHIO

25-31E



**FENCE LIGHTING** is an indispensable factor in any effective system of plant protection. Holophane Refractors, designed for this purpose, have been installed in over 350 major armament plants in recent months.

WHY REFRACTORS? ... They control the light vertically and horizontally, shaping the light to the specific job needs ... Made of heavy prismatic glass, they are durable and impervious to the effects of time and weather. Their high output efficiency and controlled distribution permit wider spacings to reduce operating and maintenance costs.

Three types of refractors are most widely used for protective lighting; (1) 2-Way asymmetric, for fence lighting; (2) C-Way asymmetric, for roadways; (3) Symmetrical, for yards and gates.

WRITE FOR COMPREHENSIVE BOOK of specifications and installation methods for protective lighting, sent without cost or obligation.

Complete units, equipped with Holophane Refractors, are made by
GENERAL ELECTRIC CO. PHILADELPHIA ELEC. & MFG. CO.
Schenectady, N. Y. Philadelphia, Pa.

LINE MATERIAL CO. Milwaukee, Wis. WESTINGHOUSE ELEC. & MFG. CO. Cleveland, Ohio

HOLOPHANE CO., INC. Lighting Authorities Since 1898 342 MADISON AVE., NEW YORK HOLOPHANE CO., LTD., 385 YONGE STREET, TORONTO, CAN.

YOUR PLANT IS SAFER WITH HOLOPHANE REFRACTORS

#### HARRY K. KRAEMER Los Angeles, Calif.

"Sure think you are doing great work with this."

#### CHESTER H. TREICHEL Oakland, Calif.

"I want to congratulate you and PENCIL POINTS for taking up this fight, and wish you success."

#### KENNETH KAUFMANN Los Angeles, Calif.

"We congratulate you on your selfelected crusade and tender our best wishes and hopes for success."

#### EDWARD M. GENTER West Los Angeles, Calif.

"I am wholeheartedly in favor of your sincere efforts."

FROM THE SOUTH

#### MARION I. MANLEY Miami, Fla.

"Please accept a word of commendation for your attempt to reach the whole of the Architectural profession with your questionnaire cards."

#### GEORGE CAMP KEISER Winter Park, Fla.

"I think you are doing a splendid job, both for the country and for the profession."

#### MORELAND GRIFFITH SMITH Montgomery, Ala.

"It is an excellent project you are undertaking."

#### THEODORE S. MAFFITT Palestine, Texas

"It is very heartening to learn that someone has a definite idea about the use of Architects in the Victory Program of our great country."

#### LAWRENCE W. MARKES Miami, Fla.

"Much success in your endeavors on our behalf."

#### J. W. NORTHROP, JR. Houston, Texas

"May I heartily commend your effort to get some action for the multitude of Architects, formerly in private practice, whose opportunity to earn an honest living has been wiped out by priorities and governmental control of the markets and the building industry in general."



#### Blast furnace - air conditioning = more iron

At the Woodward Iron Co., Alabama, in the first blast furnace where modern air conditioning was applied, as much as 27% more iron has been produced. Its quality is more uniform. And thousands of tons of coke are being saved. Result—every four months the air conditioned blast furnace produces enough extra iron for another first-line battleship.

Here is a typical new *industrial* application of Carrier Air Conditioning, illustrating the remarkable progress now being achieved through control of the temperature, humidity, and cleanliness of air.

520-TON CARRIER CENTRIFUGAL REFRIGERATION MACHINE is the heart of this new "dry blast" method of iron production. Coupled with a spray-type dehumidifier, it "conditions" 2700 tons of air fed to the blast furnace each day extracting up to 30 tons of moisture eliminating unpredictable temperature variations in the reduction zone.

Over 1000 Carrier Centrifugal Refrigeration Machines are now at work.. many in key defense plants making aircraft engines, explosives and munitions, food processing and storage, laboratory research and testing, parachute and flying equipment. They also make possible complete, low-cost air conditioning for "black-

Carrier
Air Conditioning
Refrigeration

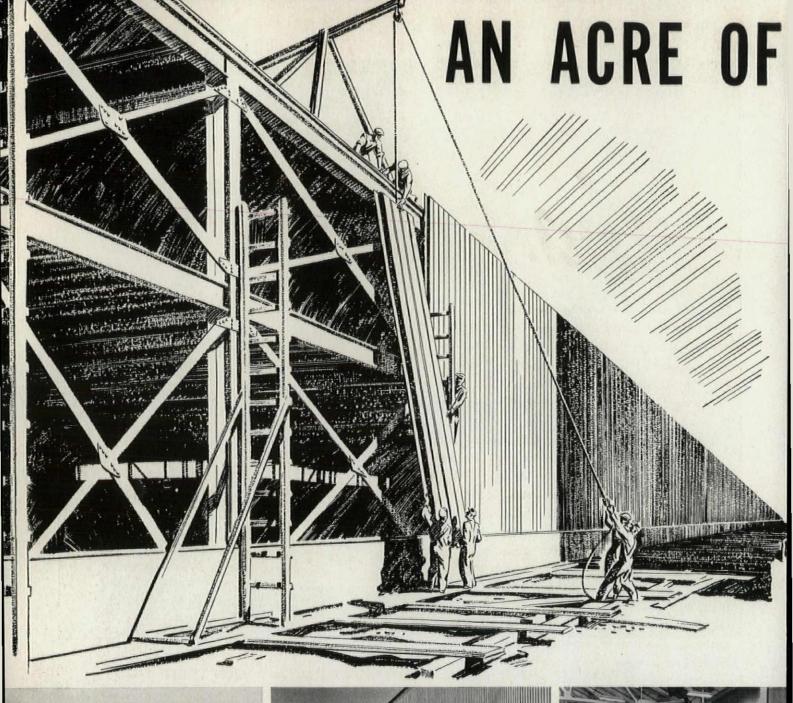
out" plants, hospital operating rooms, and bomb protection shelters.

Carrier engineers in principal manufacturing centers work hand in hand with architects, engineers, and executives in helping select equipment, perfect new methods of installation—apply time and money-saving, tested "short-cuts", thus insuring the success of the finished job. For refrigeration or air conditioning data, call your Carrier representative.



The Navy "E", one of the U.S. Navy's most coveted honors, has been awarded to Carrier Corporation for excellence in war production.

Carrier Corporation, Syracuse, New York WEATHERMAKERS TO THE WORLD





Speed With Prefabricated Units — Units (up to 50 square feet of wall area) arrive at the job site in a truck...ready to be erected at the rate of one every nine minutes. No delays because of weather; no waiting for wet materials to set.



Fine Architectural Appearance — Q-Panels offer a wide variety of designs. They consist of flat and fluted steel plates (either surface may be used outside) with insulating board sandwiched between. With 1½-inch of insulation, these panels have an insulating value of .14 Btu's per square foot, per degree temperature difference, per hour.



Good-looking, Easily Cleaned Inter Walls — are provided by the flat plate of Q-Panel. Nothing needs to be added excepaint. Architectural relief may be had who desirable, by turning the fluted side of unit to the interior.

ROBERTSON



## FACTORY WALL IN 3 DAYS

## that's Quick

YES, but none too quick to meet the "All-Out" production demands of American Industry today. Because Q-Panels can be quickly delivered and quickly erected, they are being specified and used in one urgent plant project after another. Although they are ideal for "Blackout" plants and additions, they also meet the design and engineering needs of Daylighted Structures.

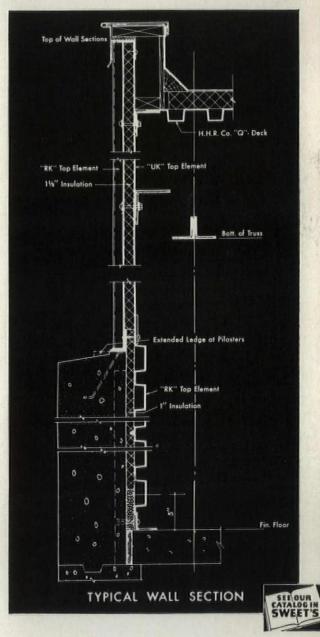
Every Q-Panel section is a complete insulated structural unit for wall or partition. It is provided in standard two-foot widths and in any length up to 25 feet. Thus, one section (which can be placed in 9 minutes) is equal to 50 square feet of wall. Interlocking joints at the edges of the units are caulked to make airtight, weathertight walls.

SPEED characterizes Q-Panel construction from the very beginning. The units arrive at the job site, prefabricated, ready to take off the truck and erect. Only six bolts are necessary to fasten a unit to the structural frame. Q-Panels constitute "dry" construction . . . which facilitates winter building. There is no waiting for wet materials to set, no hazards from combustible forms. It is a permanent form of construction; yet, Q-Panels may be salvaged and used again, an important factor for peacetime adaptations of war production plants.

The cross section at the right indicates the salient features of Q-Panel wall construction. Further details, estimates, etc., will be gladly furnished. Usually, plants incorporating Q-Panels for walls and partitions also use Q-Floors and Q-Roof Decks.

Versatility of Use—Q-Panel construction is well suited to use in a wide variety of structures... aircraft buildings, munitions plants, warehouses, powerhouses and other types of manufacturing buildings.

H. H. ROBERTSON COMPANY
FARMERS BANK BUILDING ... PITTSBURGH, PA.



## PANELS

H. H. Robertson Company, Farmers Bank Building, Pittsburgh, Pa.

- Please send me literature regarding Q-Panels and Q-Units for Walls, Roofs and Floors.
- ( ) Have a Robertson Field Engineer give me Engineering Data.

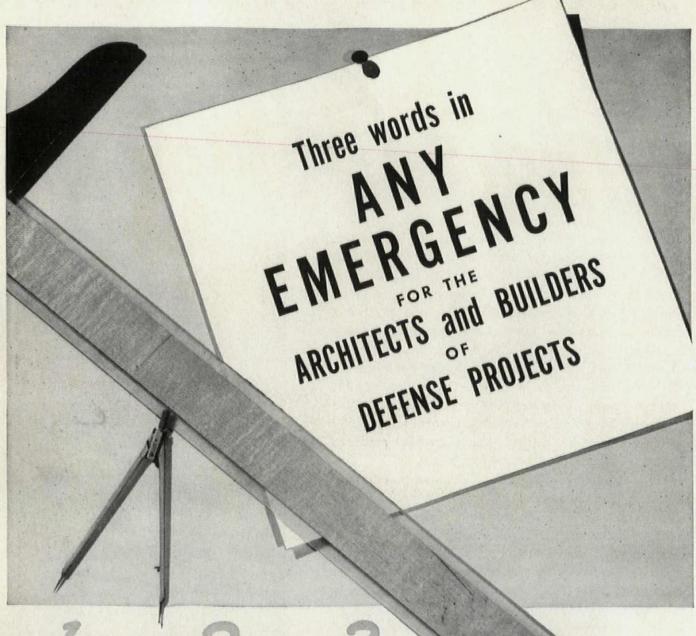
Name

Firm

City

Address

State



#### BARRETT SPECIFICATION ROOFS

WITH wartime plant construction involving many new and complex problems that must be solved fast and right the first time, those three words have the signifieance today of sound information to the architects and builders of defense projects.

Written into the specification for any type of flat roof project, BARRETT SPE-CIFICATION ROOF means that one of your difficult problems has been solved immediately and completely, in all details of materials and installation.

It means that you have specified a roof

of proven quality, made of Barrett Specification coal-tar pitch and felt with fire-safe gravel or slag wearing surface.

It means that this roof will be applied according to Barrett Specifications by a Barrett Approved Roofer, selected for his proven experience, integrity and workman-

It means that the roof you've specified will be "delivered" to you, installed, bonded, and inspected by Barrett experts.

In short, it means that your entire roofing problem has been solved . . . fast, and right the first time!

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK

2800 SO. SACRAMENTO AVE., CHICAGO, ILL.

BIRMINGHAM, ALA.

BUILT-UP ROOFS...SHINGLES AND SIDINGS...ROLL ROOFINGS...ROCK WOOL INSULATION...WATERPROOFING...BLACKOUT PRODUCTS



ONE OF AMERICA'S GREAT BASIC BUSINESSES

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



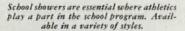
# Ith

How about the Battle of 1952?

WE are all deeply concerned with the battle of 1942. Properly so, but we must not overlook the struggle that will confront the boys and girls in our schools today who will face the gigantic task of straightening out a war-torn world.

These boys and girls who will be fighting the battle of 1952 will need good minds, stout hearts and healthy bodies.

Gleaming washrooms, adequate shower baths, properly designed sanitary equipment—these are all important factors in preparing young America to face the future stoutly. When you specify Crane plumbing in your school plans, you are assuring your clients of sanitary equipment that will last—equipment that will help tomorrow's men and women win their battle.





Crane lavatories are made in vitreous china and porcelain enamel on cast iron in an ample selection of sizes and designs,



The complete line of Crane urinals enables you to choose exactly the right style and type for each installation.

## CRANE

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PLUMBING • HEATING • PUMPS
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NATION-WIDE SERVICE THROUGH BRANCHES AND WHOLESALERS IN ALL MARKETS

## Extra Value-Low Cost

#### In Stock Residential Woodwork

Here's the woodwork to help you make small homes attractive!



One of twenty-five Curtis stock entrances

—Design C-1729. Low priced.

Today's small homes need true architectural beauty no matter what their size or price! That's a good way to protect their value!

Curtis has your answer—stock architectural woodwork . . . a complete line of entrances, doors, mantels, china cabinets, kitchen units, stairways, to suit the style of any home and the pocketbook of its owner. This woodwork is extra value at low cost!

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\_\_\_\_\_



Inexpensive Curtis china cabinet to make any dining room charming. Design C-6521.

## CURTIS

CURTIS WOODWORK IS SOLD BY RELIABLE DEALERS EVERYWHERE 

## ANSWER: The roof in the foreground is a Johns-Manville ASBESTOS Roof



Starting in the building at the right, fire gutted the next two structures (see photo below), but a J-M Asbestos Roof saved the bank on the corner.



Although the low fire wall of the bank offered little protection, the flames were stopped by the J-M Asbestos Roof.

A STRONG WEST WIND was blowing through the town of Chelsea, Oklahoma, when fire broke out in a tavern in the business district. Breaking through the roof of the two-story structure, the flames quickly spread to a theatre next door, then to an auto-parts store. Both buildings were completely gutted.

Next building in the row, the First National Bank, was protected by a J-M Asbestos Built-Up Roof. Though the low fire wall (see photo) offered practically no protection from the roaring blaze, the asbestos roof resisted the fierce heat and the bank was saved.

This is a striking example of the effective fire protection offered by J-M Asbestos Built-Up Roofs—protection which is more important today than ever before. And because asbestos has the durability of stone, long exposure to sun, rain and weather has little effect on these roofs. Rotproof, they need no periodic coating—require little if any maintenance.

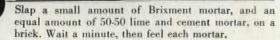
For further details and specifications write Johns-Manville, 22 East 40th Street, New York, N. Y.

JM JOHNS-MANVILLE Smooth-Surfaced ASBESTOS BUILT-UP ROOFS

THE ROOF
WITH THE SAFETY
FACTOR

## Prove BRIXMENT is BEST!







Test each mortar. You will find that the Brixment mortar stays plastic far longer than the other mortar. This proves greater water-retaining capacity.

## BRIXMENT Mortar Has Far Greater Water-Retention!

WATER-RETAINING CAPACITY is the ability of a mortar to retain its moisture, and hence its plasticity, when spread out on porous brick.

High water-retaining capacity is of extreme importance in mortar. If the mortar does not have high water-retaining capacity, it is too quickly sucked dry by the brick; the mortar stiffens too soon, the brick cannot be properly bedded, and a good bond cannot be obtained.

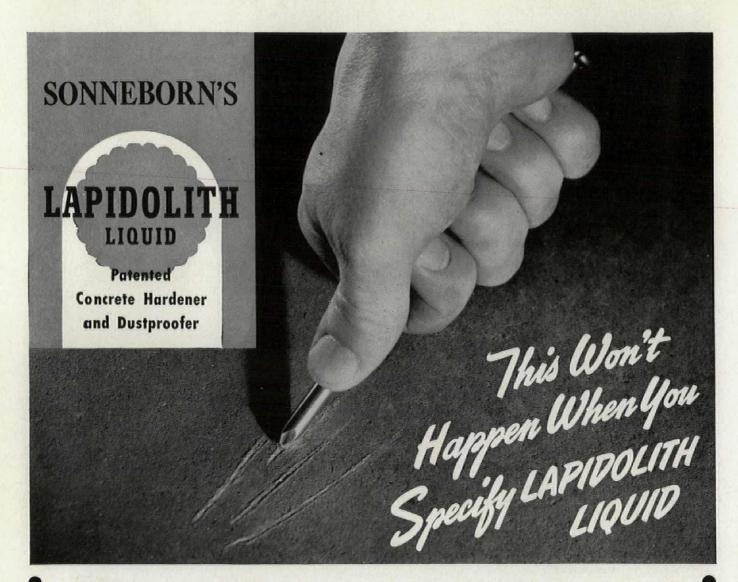
Brixment mortar has extremely high water-retaining capacity. It strongly resists the sucking action of the brick. Brixment mortar therefore stays smooth and plastic when spread out on the wall. This permits a more thorough bedding of the brick, and a more complete contact between the brick and the mortar. The result is a better bond, and hence a stronger and more water-tight wall.



## BRIXMENT

For Mortar and Stucco

Louisville Cement Company, Incorporated, Louisville, Kentucky. Cement Manufacturers for Over a Century.



TODAY—more than ever, you have to be sure that the concrete floors in the building you are designing will stand up under heavy-duty use.

Once production begins, hours lost, whether due to the necessity of repairs or to the labor expended in keeping concrete floors dust-free—means money lost.

A twenty-five year performance record shows that a Lapidolized concrete floor is capable of withstanding the hardest punishment to which industrial floors are exposed.

The new patented features found only in Lapidolith assure even greater effectiveness

-deeper penetration, and greater hardness.

Tests conducted in outside engineering laboratories amply demonstrate that Lapidolized concrete is more than twice as hard as untreated concrete.

Lapidolith Liquid is easy to apply and its use on new or old floors will not interfere with the occupation or use of a floor.

Write today for the free booklet, "Concrete & Lapidolith," with a Lapidolized sample which is suitable for a paperweight. It gives accurate, factual performance data. It shows why Lapidolith Liquid is the wisest choice for protecting old and new concrete floors.

Where Results Count-Count on Sonneborn

#### L. SONNEBORN SONS, Inc.

88 LEXINGTON AVENUE

NEW YORK, N. Y.



Auditorium, Public Service Building, Wisconsin Electric Power Co., Milwaukee, Wis.

## ESLAM FUNCTIONAL FLOORS Tile-Tes

#### PROBLEM:

What floor to use in a large public space to be used for meetings involving large groups?

#### SOLUTION:

Use Tile-Tex for the following reasons-

- 1. Its rugged asphalt-asbestos structure is built to withstand foot traffic, dragging of furniture, and cigarette-butt heeling.
- 2. Its closely knit surface texture cleans easily and inexpensively. 3. Its first cost is unusually low.
- 4. Tile-Tex facilitates functional design with its sixty colors and fifteen sizes.

#### CONCLUSION:

The attractive Tile-Tex floor illustrated above meets the functional requirements of this auditorium area. Its pattern is in scale with the size of the room, and its geometrical layout makes possible "chair spacing." Long life, low initial cost, and economical maintenance are additional values inherent in this floor, built to fit the uses of the room.

If you wish, call on us for suggestions as to how Tile-Tex floors can be designed to meet use requirements of the buildings you design.

#### The Tile-Tex Company

101 Park Avenue, New York . Chicago Heights, Illinois

Our constant objective is to furnish the architect with an honest, steadily improved product that will enable him to design architecturally correct floors which can be installed and maintained properly at minimum cost.

## All Buildings of the Wauwatosa, Wis., High School

by Architects Herbst and Kuenzli, Milwaukee

heated with 4 big

## KEWANEE

No. 943 Steel Boilers

with total capacity of 178,680 Sq. Ft.

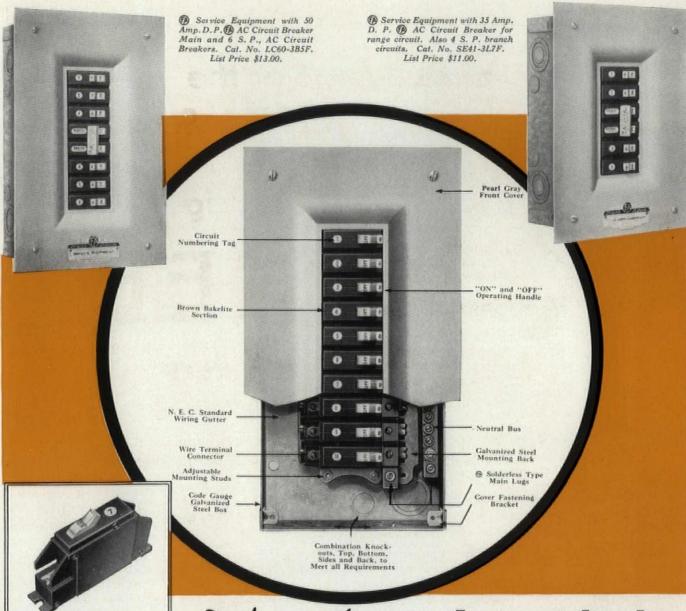
Also Kewanee now has 23 boilers in 20 Wauwatosa public and parochial schools as follows, some of them having been on the job since 1921.

CITY SCHOOLS	KEWANEES		Junior-Senior High			
Washington 2	# 313	Smokeless	First Unit1	# 943	Stoker	
Woodrow Wilson1	# 318	Smokeless	Second Unit 1		Stoker	
Jefferson-Aetna Park . 1	#316	Smokeless	Third Unit &			
Jefferson, 2nd Unit 1	#318	Smokeless	Lincoln2	# 943	Stoker	
Ludington 1	# 413	Updraft	Hi School Building Group 4 #943 Kewanees in Central Heating Plant, hi-brick set for Stoker.			
Washington 1	# 313	Smokeless				
Blaine	# 312	Smokeless	TOWN SCHOOLS	KEWANEES		
St. Jude's Catholic Church and School 1	# 937	Smokeless	Craig1		"C"Smokeless	
St. Anthony's	11 301	2000	LaFollette1	11	"C" Smokeless	
Parochial1	# 760	"C" Smokeless	Underwood 1	The same of the same	Updraft	
McKinley 1			Washington 1		"C" HiFb	
Roosevelt			Grade, Dist.#11	#7L74	Stoker	
Hawthorne Jr. High 1			Lane 1	# 7L83	Stoker	

And in addition to the above 419,880 sq. ft. Kewanee Boiler capacity in schools serving Wauwatosa district's 27,000 population . . . throughout the United States burning coal, hand or stoker fired, oil and gas

10,385 Schools are Heated by 15,289 Kewanee Steel Boilers

KEWANEE BOILER CORPORATION KEWANEE, ILLINOIS
Branches in 64 Cities: Eastern District Office: 37 W. 39th St., New York City
Division of American Radiator and "Standard" Sanitary Corporation



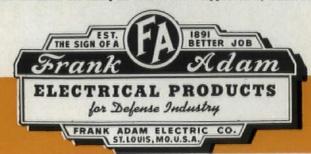
Defense Housing has priority

Defense housing will require a lot of residential building equipment. It will be needed in a hurry—quick delivery will count. And quick delivery you will get when you specify

#### **Type AC Circuit Breaker** SERVICE EQUIPMENT and LOAD CENTERS

Their exceptionally neat appearance appeals to Architects—and Contractors like the easy wiring and connection features. Owners appreciate the modern protection against overload—and the fact that there are only two handle positions — ON and OFF.

The rust-proofed cover is finished in attractive pearl gray lacquer . . . Solderless lugs of improved type, ample knockouts and plenty of wiring space in the one-piece steel box, make for easy installation . . . For alternating current—single phase two wire, single phase three wire, or three phase four wire, solid neutral feeder systems . . . Capacities: 15 to 50 amperes, for 120 volt AC service. Circuit breakers are unit pole construction. Approved by Underwriters' Laboratories.



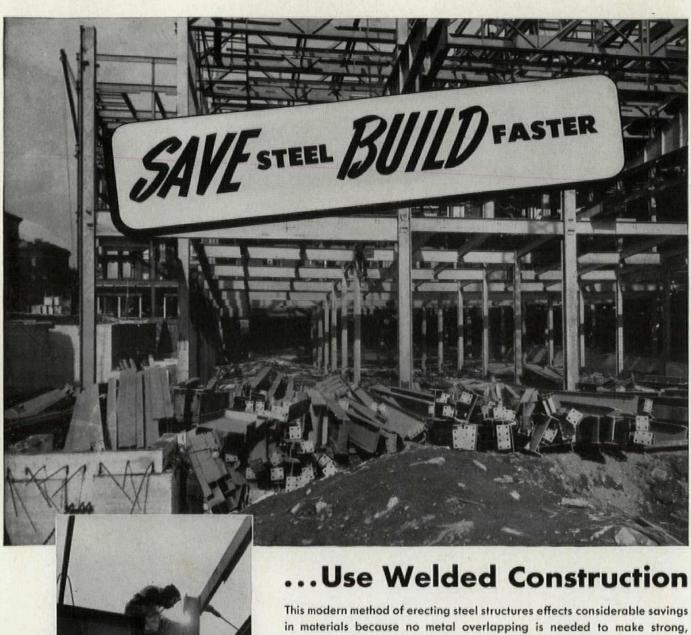
#### Write for **Bulletin 63**

The heart of this equipment is the (A) Type AC Circuit Breaker -a single pole breaker of unique

design, assembly and method of enclosure. Each breaker is fully enclosed in moulded bakelite. Good for long and satisfac-

tory service.

Sixteen pages of illustrations, dimensions and prices, together with suggested specifications (same Bulletin includes Fuse Type Service Equipment and Enclosed Cutouts)...Frank Adam Electric Company, St. Louis, Mo.



permanent connections. Welded construction speeds up building time by eliminating punching and drilling . . . by reducing difficult shop handling of heavy awkward pieces.

Other advantages also appeal strongly to architects, designers and draftsmen. Welding permits greater freedom of design . . . facilitates remodeling . . . makes additions easier by reducing to a minimum the number of existing walls, floors and beams which must be removed.

The services of Air Reduction's Applied Engineering Department for consultation on design problems is at your service.

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#### It's up to American Industry

From all over the world, frightened, helpless eyes peer through the mists of war toward American smokestacks. Will children die of hunger? Will rifles in men's hands have bullets? Will the air above them swarm with friendly planes . . . or hostile? It's up to American industry.

Because Koppers cuts across the whole American industrial scene like a common denominator, every new job for American industry puts fresh responsibilities on Koppers and some Koppers product.

Ships gliding down the ways with the hopes of civilization clinging about their bows, have been speeded into the service with bronze propellers from Koppers foundries. The plane soaring protectively above you probably has Koppers piston rings. The carriages of the anti-aircraft guns that rumble comfortingly past on their way to the coast were possibly built by Koppers.

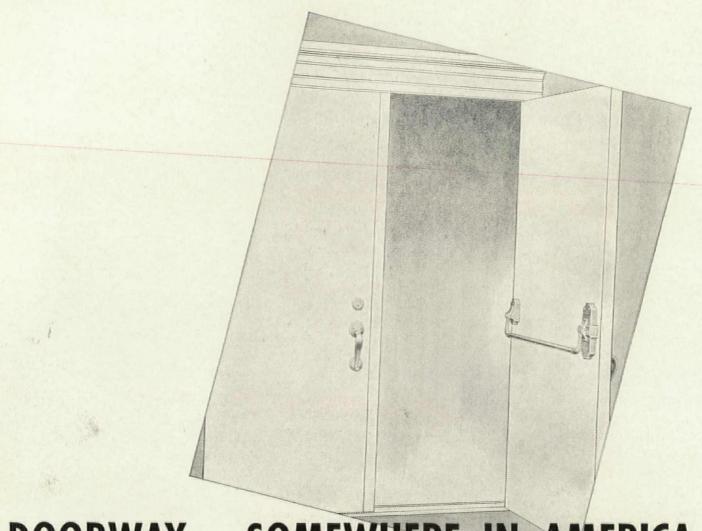
Beneath all these, at the very roots of almost every one of the herculean tasks American industry is performing, is that great storehouse of energy—coal.

Koppers is mining vast quantities of coal for fuel. Koppers coke ovens are transforming much of that coal into coke, gas and the flood of other products which eventually mean munitions, drugs, plastics, synthetics, rubber and other indispensables.

With the lives of boys from your home and our homes at stake . . . and the hopes of engulfed nations in the balance . . . every word from an American factory becomes the world's greatest news story. It's up to American industry. Koppers Company, Pittsburgh, Pa.

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THE INDUSTRY THAT SERVES ALL INDUSTRY)



## DOORWAY ... SOMEWHERE IN AMERICA

This defense plant doorway is more than a mere means of entrance and exit. It is an emblem, a symbol of the great program which is readying America to defend herself.

Many thousand such doors are Von Duprin equipped, for, where life is precious and danger ever present, safe exit is recognized as vital. No matter whether the Von Duprin devices are of the standard types used on schools and theaters, or special models for ammunition plants and test chambers, they afford safe, sure, instantaneous exit. And more! As the millions of men engaged in forging the arms for victory pass through these doorways, Von Duprins help

the arms for victory pass through these doorways, Von Duprins help to instil a feeling of security and confidence—a priceless asset to the morale of an embattled nation.

**VONNEGUT HARDWARE CO., INDIANAPOLIS** 





## FACTORY PLANNING IN ENGLAND TODAY calls for GIASS

C. Howard Crane, Noted Architect, Gives This Authentic Answer On The Problem Of War Plant Design.

Architect Crane-who designs aircraft, munitions and other industrial plants for the British Government-recently arrived in this country for a brief visit. To American architects he brings the latest and most authoritative data on war plant design to come from the embattled British Isles. His remarks are of vital importance to every architect engaged in designing plants for war-time production—and after.

Architect Crane says: "Very few windowless buildings are being constructed. We have found them too expensive to build and operate. We keep in mind that such construction, for one thing, necessitates air ducts, fans and other mechanical equipment requiring metals that are more urgently needed for other defense purposes.

"Solid walls are particularly dangerous under bombing conditions and insofar as blackout is concerned, we have found a much more efficient method

of construction.

"First of all, exterior walls to a height of eight feet are of blast-wall design, 14" thick. Above that height, regular steel sash is used in the walls. Temporarily, about one third of the sash area is being glazed, the remainder of the panes being filled in with asbestos, so that after the war these panels can be removed and glazed, and the building used in a normal manner.

"We want to use natural daylight and air as much as possible. Too, in case of bombing, such walls are more quickly repaired and, of course, less costly.

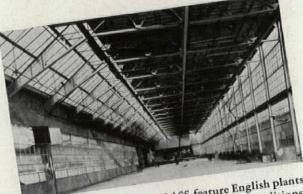
"The most effective blackout method is accomplished by painting the glass in fixed sash wall areas black. Windows, to assure light and ventilation during the day, are not painted but are provided with black curtains.

"There is a visible trend here to a type of building we feel sure is the best under all circumstances—the modern skeleton frame, either steel or concrete, with great windowed areas... While war is a horrible thing, it should serve to create a world of beautiful, completely utilitarian types of buildings everywhere." Libbey Owens Ford Glass Company, 1328 Nicholas

Building, Toledo, Ohio.



THESE NEW AIRCRAFT FACTORIES "somewhere in England" are typical, English wartime plants. All were designed by Mr. Crane.



GREAT EXPANSES OF GLASS feature English plants operating day and night under bomb-raid conditions.





LIBBEY · OWENS · FORD GLASS COMPANY Quality Flat Glass Products

## How to keep BEAUTY within the BUDGET

WHEN YOU'RE SPECIFYING MODERN OFFICE FLOORS





YOU won't need to juggle figures to get smartness and style in your floors when you choose Armstrong's Asphalt Tile. This modern resilient flooring material will give your client a colorful, attractive floor, plus the low initial cost and economical upkeep he demands.

Armstrong's Asphalt Tile stands up, too. It's standing up in hundreds of office reception areas where service is unusually hard. It can take the punishment of tramping, scuffing feet and come up smiling.

That's why so many architects specify this floor—not only for reception rooms and other office interiors, but also for stores, restaurants, and some residential rooms. Armstrong's Asphalt Tile is always first choice for basement areas because it is safe to use on concrete subfloors in direct contact with the ground.

It's easy for you to plan distinctive color schemes by using any of the 41 plain or marble colors available in Armstrong's Asphalt Tile. Because it is hand-set, a tile at a time, intricate designs or odd-shaped rooms present no complicated installation problem. For only a little extra, you can have special insets.

Before you forget, look up the facts about this easily-installed material in Sweet's. Or write for free illustrated booklet: "Low-Cost Floors with a Luxury Look." Armstrong Cork Company, Building Materials Div., 1206 State St., Lancaster, Pa.

This floor says, "Welcome"—and because it's Armstrong's Asphalt Tile, it will keep on saying it for years. It is serving in the lobby of the California Door Company, Los Angeles. Wm. P. Neil Company were the architects, and the installation was made by L. D. Reeder Company, resilient tile contractor of Los Angeles.

#### ARMSTRONG'S ASPHALT TILE

The low-cost floor (A) with the luxury look

MADE BY THE MAKERS OF ARMSTRONG'S LINOLEUM





## TRANE IS ON ACTIVE DUTY IN THE TRAINING CAMPS



#### TRANE SLOPING

The sloping top feature of this Convector is especially adaptable where it is desirable to prevent the Convector from being used as a seat or shelf. Wide selection of sizes in this and other Trane Convector models.



#### TRANE HERMETIC

VALVES
The simplest valve of its type. Truly packless and leak-proof. Easily operated. Ideal for service on Convectors, radiators, and other heating equipment used on two-pipe steam vapor or vacuum heating systems.



#### TRANE PROJECTION

UNIT HEATERS
Ideal for large areas—
shops, hangars, etc.—
Trane Projection Unit
Heaters are widely used
in military, naval, and
industrial construction.
Trane also manufactures a complete range
of Propeller and Blower
Type Unit Heaters.

TRANE "keeps 'em comfortable" in army training quarters. In the array of buildings found at any army center—at Fort Benning, Fort Lewis, Fort George Meade, Camp Barkeley, Camp Holabird, and the many other major army bases throughout the country—you will find Trane Heating, Cooling, and Air Conditioning equipment exactly meeting the specific requirements of the individual buildings.

#### **How Trane Serves**

Trane Convectors are helping hospitals maintain cleanliness, Trane Coils are providing the correct air conditions to camp theatres. Trane Unit Heaters and Steam Heating Specialties are making barracks more comfortable. Trane Projection Unit Heaters are diffusing warmth in chapels. Other Trane products for specialized applications are used where correct temperature and humidity conditions are desired. Even the moth proofing room is served at one base.

How many applications are there for Trane equipment in an army camp? Count the number of buildings in any one of them, and you have the answer!

#### What Is Your Problem?

Trane is geared for the war program, and the Trane representative near you is ready to show you how Trane equipment fits into your own construction picture—industrial, military, or naval.

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MANUFACTURERS OF HEATING . COOLING . AIR-CONDITIONING EQUIPMENT . 85 BRANCH OFFICES



## WHERE THERE'S A WALL THERE'S A WAY . . .

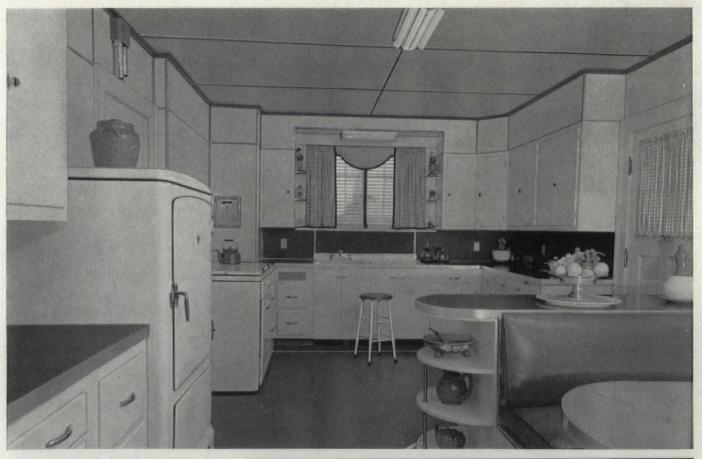
to modernize interiors at low cost

YOU CAN GIVE ANY ROOM new life—new sparkle—by remodeling with Armstrong's De Luxe Monowall. This gleaming finish for walls and ceilings makes decorative planning easy . . . installation quick and inexpensive. Its beautiful colors and its durable, easily cleaned surface make an instant hit with clients—whether home owners or businessmen.

Decorative possibilities with Monowall are almost unlimited. There are 33 harmonious colorings, including smart plain colors as well as wood-, marble-, and tile-designs. The large size boards keep the number of joints to a minimum . . . permit many "one-piece" wall installations. Channels and moldings of plastic, wood, or metal—furnished by Armstrong—can be used for smart decorative treatment.

Monowall's light weight avoids the need for structural reinforcement—often a source of extra cost and time in remodeling. Old plaster walls and ceilings, if firm, are suitable for the application of Monowall—as are gypsum board and most other types of bases. Litter and dust in remodeling are practically eliminated, and most rooms can be completed in a day's time or less—ready for immediate occupancy.

SEE SWEET'S . . . and write today for a free sample and complete information about Armstrong's De Luxe Monowall. Armstrong Cork Co., Building Materials Div., 911 Concord St., Lancaster, Pa.



A FAR CRY from Grandma's old-fashioned kitchen is this up-to-the-minute room in a Buffalo home. The gleaming, spotless walls and ceiling are Armstrong's De Luxe Monovall—Ivory No. 21. Decorative treatment like this seldom requires removal of old plaster, other wall bases.

#### ARMSTRONG'S MONOWALL

TEMSEAL SHEATHING . TEMLOK LATH . TEMLOK DE LUXE INTERIOR FINISH

#### FOR AUDITORIUM OR ENGINE TEST CELL...



Architect, Richard J. Neutra-Acoustical Distributor, Sound Control Company

GOLD BOND ACOUSTEX was selected for the walls of new Emerson Junior High in West Los Angeles because it is perfectly adapted for modern decorative design, and is one of the few materials rugged enough for side wall construction. Acoustex comes in seven smart colors and a variety of sizes . . . is fireproof, vermin-proof, and repaintable, and moderately priced.



Gold Bond has the right material for every sound control problem

THERE'S a big difference in acoustical problems. Your next job may be more like an airplane engine test cell than Emerson Junior High. But regardless of its nature, you'll find Gold Bond has the right material for your exact requirements in sound absorption, decoration and cost.

Today, Gold Bond is solving new sound control problems in a hundred different fields—from restaurants to rifle ranges. All this experience is at the service of the Gold Bond acoustical distributor in your community . . . to help you select the best material . . . to supervise the installation . . . and to guarantee the results.

Specify Undivided Responsibility
Efficient sound control service is
just one example of how Gold Bond
research has set the standards for
the wall and ceiling industry. They
have developed more than 150
better products—including lath,
plaster, wall paint, insulation, wallboard, lime and sheathing. 21
modern plants and 300 trained representatives are at your service. And
when you write specifications, remember that the responsibility for
all products lies with a one reliable
organization when you specify
Gold Bond exclusively. That means
no buck-passing.

Refer to Sweet's, or write for standard specifications on all Gold Bond sound control products. National Gypsum Company, Buffalo, New York.





# Austin-designed army aircraft assembly plants in Texas and Oklahoma have more than 20 Oildraulics

Efficient vertical transportation in these new Aircraft Assembly Plants, designed by The Austin Company, is assured by a battery of 18 heavy-duty Rotary Oildraulic Elevators, similar to the unit illustrated at the right. In addition, several giant Levelators (shorter travel, material-handling Oildraulic jacks), will speed up production on the "line."

These extremely modern Elevators are designed for today's streamlined buildings. Penthouses are eliminated because the cars are pushed up from below—not pulled up from above. This conserves material and lowers over-all building cost, not by saving the cost of the penthouse alone but also by the elimination of heavy load-bearing supporting columns in the elevator shaftway walls.

Speeding up the flow of materials through a plant is one of the outstanding features of Rotary equipment. Extremely accurate and rapid landing stops, made possible by Rotary's automatic floor leveling, permit faster car loading and unloading. "Do it Oildraulically" has become a thinking habit with the keener production plant layout engineers.

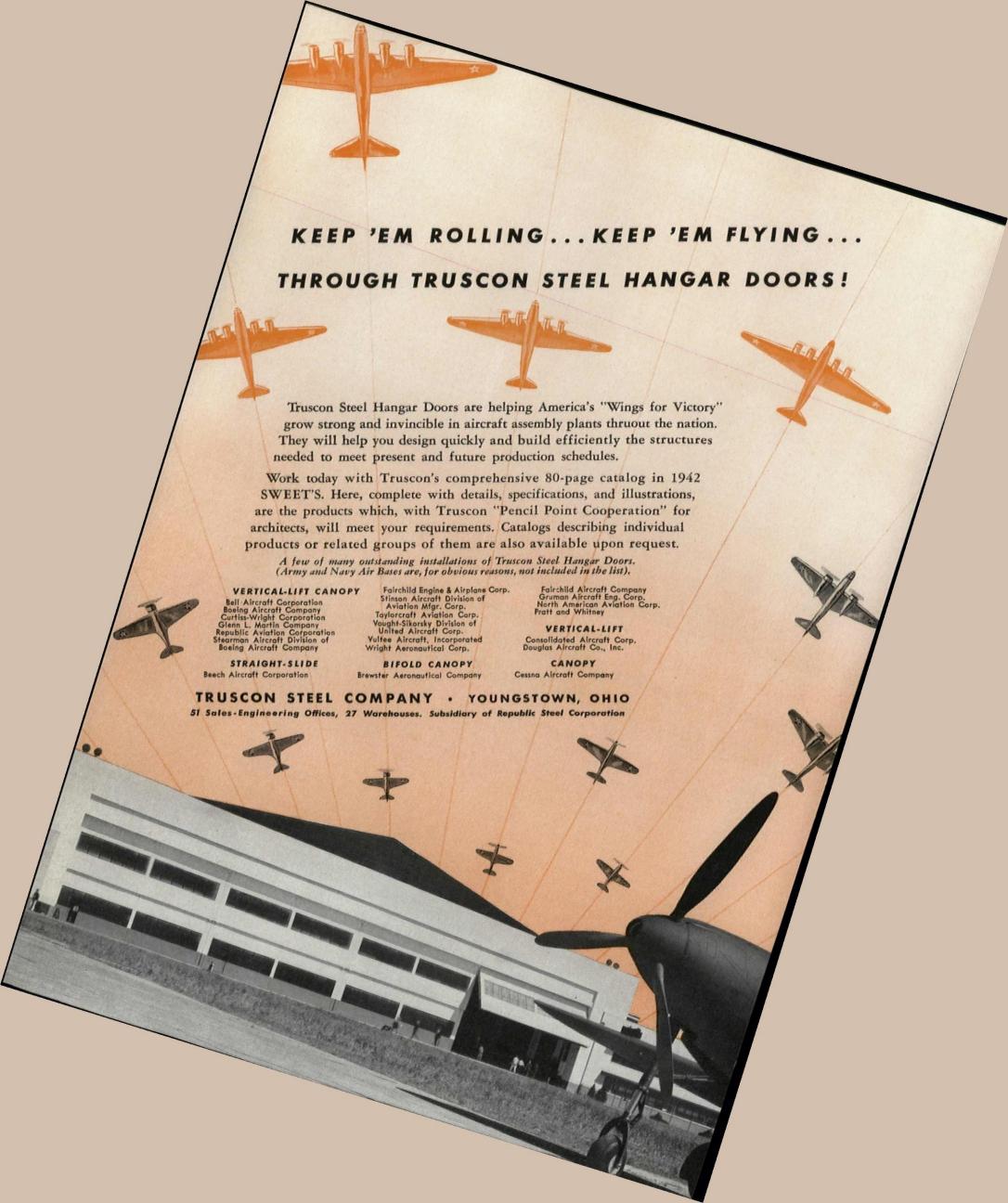


Progress photo of The Army Aircraft Plant being constructed by the Austin Company in Texas. A similar structure is being erected in Oklahoma by the Manhattan-Long Company. Both will be served by sturdy, dependable Rotary Elevators.



A heavy duty Rotary Oildraulic Elevator similar to those installed in the Army Aircraft Assembly Plants.

ROTARY LIFT COMPANY, 1079 Kansas Street, Memphis, Tenn.
Please send me the free booklet RE-301 con- taining complete. Architect's layout and specifi- cation data on Rotary Elevators (A.I.A. File 33).
NAME
FIRM
ADDRESS
CITYSTATE



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TECTURAL MEN			

## SELECTED DETAILS

THE WORK	OF A.	MUSGRAVE	HYDE,	GEORGE	KOSMAK	WITH	RUTH	
GERTH, AND	PAUL	LASZLO						2.

## DATA SHEETS PREPARED BY DON GRAF

PRINCIPLE	S OF BLACE	KOUT,	BLACKOUT	AND	SHADES,	BLACKOUT	RIGID	
SCREENS, 1	BLACKOUT	WITH	VENTILATI	ION				

## HERE, THERE, THIS, AND THAT

NEWS	FROM	THE	FIELD,	COMPETITION	ANNOUNCEMENTS,	AND	BOOK
REVIE	WS. ET	rc.					

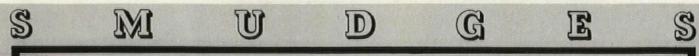
#### COVER DESIGN BY GUSTAV JENSEN



KENNETH REID, EDITOR, CHARLES MAGRUDER, MANAGING EDITOR ALFRED E. GALL, ASSOCIATE EDITOR DON GRAF, TECHNICAL EDITOR

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R. Penleigh Boyd's editorial here reprinted from SMUDGES, published monthly by the Architectural Students Society of the RVIA in Melbourne, Australia, will perhaps shock many of our readers. But this is by no means an impossible forecast of the situation a few years hence in this country, UNLESS ARCHITECTS ACT NOW. Their Future is being determined Today.





# OF THE ARCHITECT

One dawn last December, Japan attacked U. S. bases without warning, and the Pacific was set afire. Today Australia waits, the flames engulfing her neighbouring islands, licking towards her shores. Australia waits, knowing that tomorrow she may hear for the first time the roar of bombers and bombs; may see for the first time flames and death and horror in her own cities.

For two years the profession of Architecture has been clinging to its Collins Street offices by stringing out petty jobs, as a man hanging over a jagged ravine grasps a tuft of grass at the edge. That day, last December, someone kicked away its fingers.

Let us examine the remains that today lie in the valley.

The position of the profession now cannot be gauged by statistics of the number of architects still in practice, the number of draftsmen who will be privately employed if defense work is forthcoming; it can best be judged by the attitude of the practitioners still clutching their offices together—and more pertinently, by the attitude of the potential practitioner of tomorrow—the student of today.

The young men of architecture know that the profession is, for good or for bad, gone for good.

It died because in peace it could not produce good architecture; in war it could not provide worthy national service.

The typical client is blamed for the former, the Government for the latter. It is of little importance what the difficulties were; the test was whether the profession could surmount them. Everybody knows it could not.

The young men have left the profession. They were torn away, it is true; but today they care little. They cannot see ahead the future that once kept them toiling in the small hours of the morning on proportion-theories. They cannot see themselves, as they once envisioned, in the consulting room with a client who wants a 16 square house.

They do not see the architectural profession in the future that appears so dimly ahead. They do not see a thousand small self-satisfied offices, backbiting, jealous, cutting each other out under a mask of 6 per cent. They do not see a Georgian home for a pundit, a Tudor palace for a newlyrich. They do not see an architecture ruled by money.

Neither do they see an extension of the present type of Government Architectural departments, glorified private practices producing inglorious architecture.

They see, in the birth of a new world after the war, an architecture ruled by the same principle that must surely rule the whole of that world—Plan. The principle is as clear and inevitable as the details are as yet indistinct. There will be a National Planning Committee; beneath it will be district planning units; beneath them the designers, who are neither architects nor builders, but both.

There will be schools for architects which teach building. There will be permanently established research laboratories to investigate and produce new techniques.

Yesterday's world denied architecture. It was an afterthought; a nice thing (like poetry) for those who like that sort of thing.

Tomorrow's world will start with planning, will flourish through architecture. With the passing of the architect, architecture will be born to the earth.

The architect is dead—Long live architecture!

HE BURNING EDITORIAL reinted on the facing page comes from country under the direct and immeate threat of active attack. Such contions are conducive to clear perception realities. We, who have not yet fully ced these realities, will do well to pont the significance of the statements om "down under." If you find in them note of pessimism concerning the aritect as he has been, you will likewise serve a confidence and faith in the ture of Architecture.

The architects of this country, tother with all other classes of people, undergoing a test. It is a test of aracter upon which may depend the tcome of the War. As Hitler perved in the beginning, and as his opnents discovered later, this War is war between nations. It is rather a olution reaching into each country divide it and reaching into each man intensify the struggle between his od and bad impulses. Under the ess of this War, the true character of h man will be inexorably revealed. meeting the present situation he will dominated either by the mean and ish side of his nature or by the genus, warm-blooded spirit of sacrifice. is too late to change our characters w at a moment's notice. We are what are and our behavior will show it up.

Vill the majority of architectural mento to the occasion and prove their single desire to serve their country and people? In order to do this many of mento must modify their habitual ways doing things. Many of them must see their offices and accept salaried is in Government bureaus or in big porate organizations. Many of them st serve in the technical branches of my and Navy. Many of them must be places in other things than architer. Some, of draft age, will be we into active military service.

These things are regrettable, but they st be faced. They are inherent in situation. We will fight as hard as know how for the principle that the Is of the profession must be applied ctively in the architecture of our natal Victory and that where they are needed in the Victory Program, they st be applied to prepare for the postperiod.

Thatever may be his lot, let each arectural man look forward, not back, rmined to be ready for the inevietime when Architecture will been a more vital part of the social ic than it has been in our memory.

## GIVE US A MAN!

AS FAR BACK AS NOVEMBER, 1940, and on several subsequent occasions, we have urged that the building industry be coordinated and treated as an essential unit in the prosecution of the War Production Program. We have urged repeatedly that there should be a single powerful authority in Government vested with control over the allocation of the building industry's resources and given responsibility to keep them replenished and ready for action where needed.

Toward the end of 1941, the OPM recognized, somewhat half-heartedly, the need for some sort of coordination and appointed a "Construction Industry Advisory Committee." We inquired several times for a statement from OPM naming the members of this Committee, giving the date of their appointment, and establishing its functions. We were told that no announcement would be made and that the Committee was "merely informal." As near as we have been able to discover in the ensuing months, the Committee has been inactive, infrequently consulted. It has had no authority and no assurance that any of its "advice" would be heeded.

Again we urge upon the Government agency now known as WPB that it recognize both the importance and the essential unity of the building industry by creating that "single, powerful authority" to coordinate and direct it.

The industry itself is far flung. It is loosely organized. It is divided into many parts. It cannot by itself take the initiative as a body. It needs direction from above, from men who have access to all the facts of the general plan and are thus in a position to determine the most efficient utilization of the industry's forces.

As things stand now, in spite of a huge construction program (running fifty per cent behind schedule, according to Sullivan Jones), there remains a large force of architects, engineers, builders, sub-contractors, and building labor not being used. The situation should have been taken care of before this. The need becomes more imperative day by day. The sooner a construction authority (with powers analogous to those of Donald Nelson, though on a smaller scale) is created, the better. And let there be a single man at the head of it—a far-sighted, impartial man who understands the building industry and the importance of preventing its disintegration. Anything less than this will only continue the present inefficient confusion.

OUR READERS are asked to be patient when the magazine does not appear promptly. War-time conditions are causing delays beyond the control of editors. Postal deliveries have been subject to unpredictable delays and we hardly need to add that technical publications attempting to inform readers on subjects relating to the Victory Program have had their publication schedules knocked awry by censorship procedure.

WHEN 100% OF THE NATION'S

PLANNING SKILL is called for by the

War effort, then, AND ONLY THEN,

will postwar planning be inconsistent

with an all-out drive to Victory!

\*

Is post-war planning incompatible with the War effort? Are these two things to be considered as ALTERNATIVES? Must we choose between two essentials to the Nation's safety? Or can we have both?

The British have for two years defended their homes from a holocaust of German attack. Their preoccupation with the War has been far greater than

ours. But the British have deemed it wise while carrying on a life and death struggle, to make operative an intelligent postwar planning program — utilizing that residue of architectural and other technical skills not required

for either present defense or future attack.

The things the British are doing to modernize the building industry, so it will no longer be the most backward segment of their economy, are things undertaken with a LONG-RANGE PROGRAM IN MIND. Sir Ernest Simon of the Ministry of Wo. ks and Buildings has drawn a plan for a 30-year program for the rebuilding of Britain! Outside of the Government there are a number of private agencies that are also making a contribution to postwar planning in England.

It was the considered opinion of the twenty-four world famous authorities who met at FORTUNE magazine's 10th "Round Table" that perhaps the greatest single outlet in America for postwar investment and employment lies in housing and urban development. . . . If nothing is done actively . . . until after the War, a great opportunity to absorb workers will be lost. The men who subscribed to this conclusion were representative of the highest type of economic thinking that could be assembled for the purpose of considering the after effects of World War II.

Yet some of the pundits who represent the American people in the halls of Congress referred to the Beiter Bill as "intellectual boondoggling"! The House defeated this bill on February 19th. The bill provided for funds to be utilized by the National Resources Planning Board, an important aspect of whose activities vitally concerns the successful development of plans for that very same housing and urban development!

These Congressmen who pompously condemned postwar planning as boondoggling are members of the same congressional set that boondoggled away precious months fighting against necessary steps of preparation for the contingencies of war. They are the same men who voted pensions for themselves at a time of national sacrifice, and who have done everything they could think of to obstruct and frustrate the building up of our national unity and our war organization. Boondoggling indeed!

To say that all those who oppose American postwar planning are impelled by selfish or otherwise suspicious motives would be to do a great injustice. Some of the objectors are undoubtedly short-sighted. Still others are possi-

bly autointoxicated by the intense exertion of their own theatrical flag-waving. No one who opposes postwar planning NOW, however, if he will completely inform himself and honestly evaluate the evidence, can take issue with the clear logic of the following statement by the Honorable James J. Davis of Pennsylvania, who says:

"First and foremost there must be an all-out effort in the discharge of our vital obligations to the Nation at this time of its great need. The war abroad can only be won on the industrial front.

"But second, we should keep in mind in our determination to win the War, that this is not an 'end' objective. National security, the preservation of a representative democracy, with free enterprise as an instrumentality of national progress—that is what we are fighting for."

FORTUNE has said:

"Each time that Peace is born again into this world there is rejoicing. The people who wake to find it sleeping on their doorstep celebrate.

"And then the troubles begin. War machinery stops. Production sags. Prices slump. There are mouths to feed. There are debts to pay, and to collect. The boom is over. We are walking down Normality Street once more, and the concrete is hard and cold underfoot.

"Peace is far from being born, at the moment. The indications are that we shall have ample time to prepare for it. And if we begin to prepare now we may be able to justify two wars in one generation."

WHEN TODAY WAS TOMORROW, men failed to prepare for it. Now, panicked by Pearl Harbor, shall we fail to prepare for the time when TOMORROW WILL BE TODAY?

## TURNER CONSTRUCTION COMPANY

GRAYBAR BUILDING
420 LEXINGTON AVENUE
NEW YORK

BOSTON PHILADELPHIA

March 24, 1942.

Pencil Points, #330 West 42nd Street, New York, N. Y.

Gentlemen:

FOUNDED

1902

Subject: Post-Emergency Adjustment.

I believe that in general more grief results from too little planning than from too much planning. This applies to Government, business and even to personal affairs. We are always too engrossed with the present to worry sufficiently about the future.

I agree that our all important job today is the winning of the war and we should not be diverted from this objective. But, are there not many wise heads who, while they would like to be helping the war effort, are not being given the opportunity, largely because younger men are being sought? I am strongly of the opinion that helpful planning by such men can be accomplished without sacrificing the war effort. Everybody surely pictures an almost chaotic situation when Peace suddenly stops the wheels of war production.

I am also of the opinion that it is the positive duty of every leader of Government, business and labor today to support a program of planning to avoid as much as possible the distress that is almost inevitable without it. We should urge all the organizations within the Building Industry to establish a national body to make studies and to formulate a post-war program for our own segment of the national economy.

Many fear that such a national body might be more concerned with the changes in our capitalistic system than in formulating a program that would preserve it. Such fears may have justification, but we all must use our influence toward the prevention of such a trend, if there is such a trend, rather than let the fear prevent any action. I believe our Government is in a mood to proceed along sound lines both as to legislation and as to personnel intrusted with such a program and we should give it our support.

very truly yours

. Archer Turner President.

JAT.M

# MEET BLANDFORD OF NHA

The venerable brick and brownstone building at 1600 "I" Street has a brand new black and bright gold sign by its entrance proclaiming it to be the home of the brand new NATIONAL HOUSING AGENCY. We entered to see, by appointment, the brand new Administrator inside-Mr. John B. Blandford, Jr. We found a man of forty-five, ruddy-complexioned, black-haired, and in the pink of vigorous health. Here was the man labeled by President Roosevelt as a young man of amazing administrative ability. His new assignment is to bring order out of what has been an ever-increasing chaos of separate Federal agencies dealing with different aspects of the National housing picture. To succeed in this he will need all the strength and firmness he possesses, for he will be assailed by the importunities of all the divergent interests that have pulled in so many different directions to have their own way about housing.

In our opinion, based on what he has already done, Mr. Blandford has the capabilities required for the job. His experience since graduation as a mechanical engineer from Stevens Institute of Technology has included service as an engineer with the Texas Company in Texas and Virginia; as Assistant to the City Manager of Petersburg, Virginia; as Director of Governmental Research in Newark, New Jersey, and later in Cincinnati; and as Director of Public Safety in Cincinnati. From 1933 to 1939 he was General Manager of the Tennessee Valley Authority. From 1939 to the date of his new appointment, he was Assistant Director of the Federal Bureau of the Budget. In all of these positions he has demonstrated exceptional ability as an executive and coordinator. His success in this field is based on an unusually well developed understanding of people, plus a keen and logical mind.

We asked him about the set-up of the new agency, the division of its functions, and its future policies so far as they could be formulated at this time. It is hardly necessary to point out that organization of the Agency is requiring a good deal of his time and must proceed to a definative stage before any but broad policies can be stated.

The division into three operating bureaus has already been well-reported in the press. The divisions are known as the Federal Public Housing Authority, the Federal Housing Administration, and the Federal Home Loan Bank Administration. They are headed respectively by Commissioners Herbert Emmerich, Abner Ferguson, and John Fahey. Mr. Emmerich supplants Leon Keyserling, former Acting Commissioner, now General Counsel for NHA.

These three operating divisions are under the direction of the central administrative group headed by Mr. Blandford. The administrative functions include coordination of the whole Agency, policy making, determination of need for housing, and programming of its activities. There will probably be set up as accessories to the administrative group several sections for research in housing and urbanization and in building technology.

There has been a great struggle between the advocates of temporary war housing and permanent housing for war workers so planned that it could be used after the war. Mr. Blandford is not likely to yield to the urgings of either group of enthusiasts, preferring to base the decision upon each project on the circumstances surrounding it. He mentioned two special considerations which will affect these decisions; namely, the very real shortage of certain building materials and the transportation of workers to and from their places of work as affected by the gasoline and rubber shortages. Definitely, however, the housing for war workers is regarded as one of the most urgent needs of this time and nothing will be permitted to interfere with or delay the carrying out of the program. We asked about community facilities, schools, shops, community centers, etc., the absence of which has given rise to very serious difficulties in some of the projects already built. Mr. Blandford is definitely aware of the absolute need for these items in any sensible housing program and may be depended upon to cooperate closely with FWA, officially designated to provide these facilities.

The regional set-up already established by the USHA will be taken over and strengthened by the FPHA. So far as possible it will be the developing policy to select architects, engineers, and planners through the regional offices rather than through Washington. Similarly the regional offices of HLBA and FHA will be strengthened and tied in with the new regional offices of NHA where need will be determined and the housing programmed.

Mr. Blandford expressed a strong intention to consult the people of the localities involved in future housing projects. He is conscious that much trouble has been caused in the past by arbitrary decisions, made in Washington, which were resented by the local communities. In this desire for cooperation with local people he is following a direction which he found most effective in the successful and harmonious development of the TVA, where the field organization becomes thoroughly acquainted with local conditions, basing decisions on real understanding of local points of view. We left with a firm conviction that a strong hand, directed by a liberal and practical mind, has been placed in a position to guide the development of housing in this country. The War has made more people than ever conscious of the real need for adequate homes for all, built into wellplanned communities. The post war period will bring with it the greatest job of national rehabilitation that has ever confronted us. It is well to know that there is at last a unified agency that shows consciousness of the impending need and determination to prepare for it by and through the performance of its immediate function.



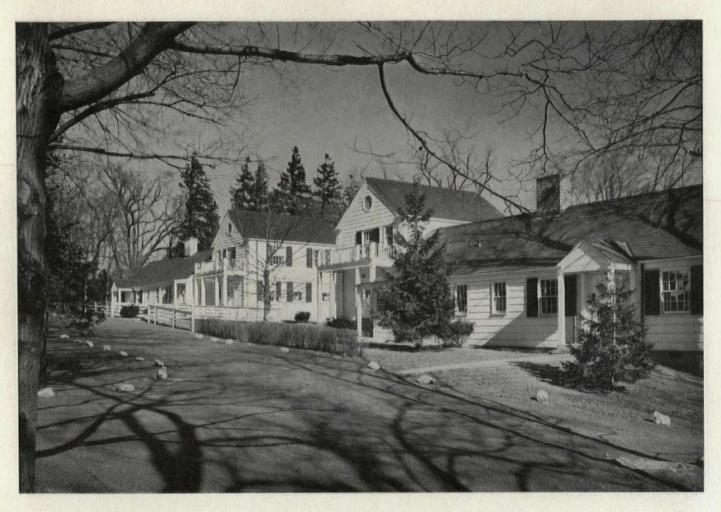
# SUSSEX GARDEN APARTMENTS

BY HOLDEN, McLAUGHLIN & ASSOCIATES, ARCHITECTS

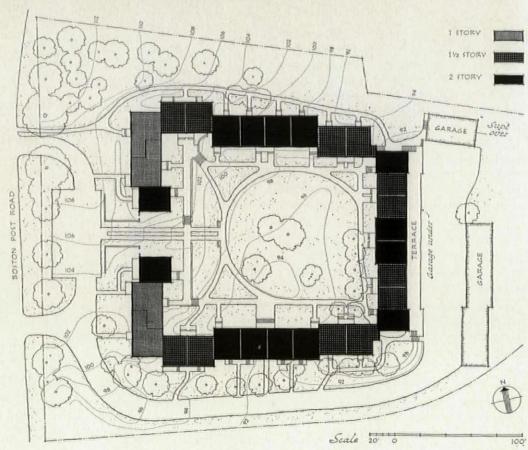
The Sussex Garden Apartments, a 30-family building at Rye, New York, was designed by Holden, McLaughlin & Associates, Architects, of New York, for Caroline Craig Darlington and Charles F. Darlington who desired to convert an obsolescent suburban property which they owned into a modern rental investment. The program seemed especially feasible because the site was convenient to Rye schools and the railroad station; the rolling land also being enhanced by a number of fine shade trees and well-grown shrubbery that had been cultivated for a quarter of a century as a residential setting. Here is an instance of the changing status of many of the older places on thoroughfares of once-exclusive communities - those aging homes that now seem to the motorist speeding past to have only the air of stagnation rather than the dignity of repose. Although a new use was found for the land, the architectural character of Sussex Garden is in key with that of the private homes on either side.

This particular site, fronting on the Boston Post Road, with right-of-way of the New York, New

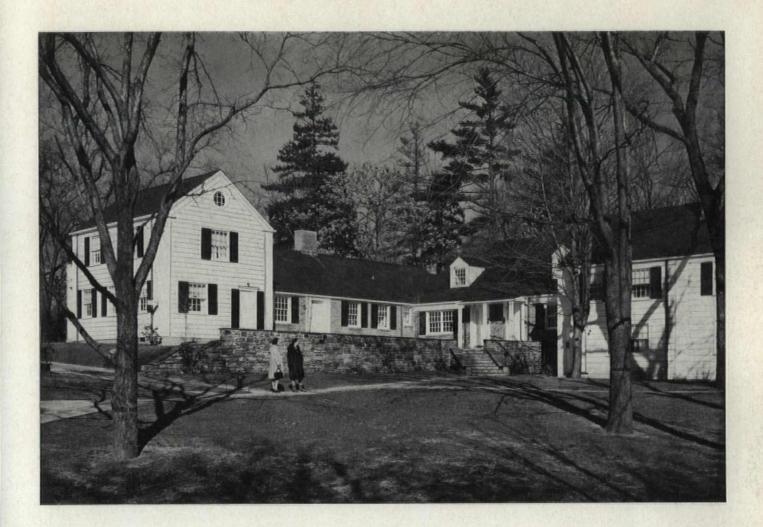
Haven & Hartford Railroad as well as the rightof-way of the proposed Pelham-Portchester Parkway at the rear, suggested a solution that would create a sheltered private area for residents of the apartments and their guests. Since it was desired to provide acoustical obstructions to the intermittent noise of the railroad as well as the traffic on the Post Road, and also to preserve the fine shade trees on the property and the general contours, the quiet interior court seemed a logical solution. The buildings on the west side, facing the Boston Post Road, were made one-story units to keep them below the line of noise from the traffic. In addition, a driveway, visitors' parking area, and a high screen of evergreens were introduced between the buildings and the Post Road. The Apartments of the east unit at the rear of the property were given a different baffle treatment. An outer row of garages was constructed to serve as a sound buffer between the building and the near-by railroad. Sound from the garage court itself is cut off from the dwellings by a broad terrace extending over the inner row of garages.



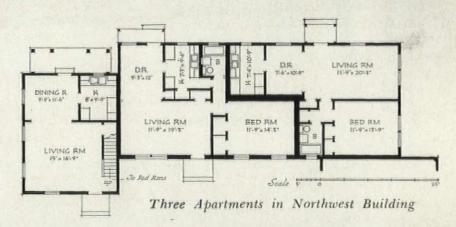
The plot plan of this 30-family project (right) indicates the careful disposition of the various units to preserve the fine shade trees on the property. The upper left corner of the quadrangle, as shown here, was the site of an old-fashioned house that faced Boston Post Road, and was representative of the older places in this suburban community. Between the one-story units at the front of the project (photograph above) and the heavy traffic on the Post Road, the architects put in a generous planting plot and a "baffle wall" of Douglas firs



SUSSEX GARDEN APARTMENTS-A SUBURBAN RENTAL GROUP



Only pedestrian walks were introduced within the quadrangle—automobile circulation being directed around the south side of the group of buildings. The dwellings have both front and rear entrances so that this provision for privacy does not interfere with their accessibility. (Photographs of the project are by Rodney McCay Morgan, New York)

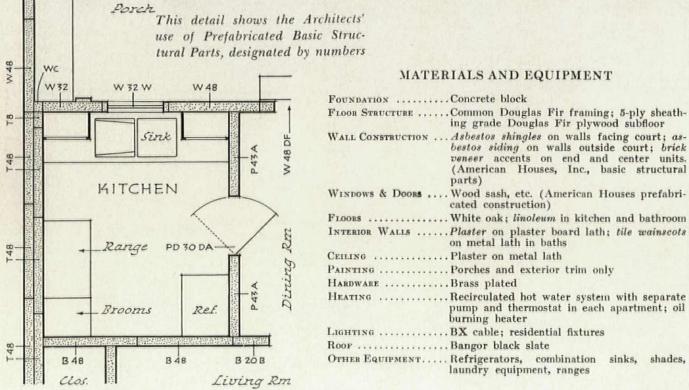


Privacy of the interior quadrangle was further guaranteed when the architects kept automobile circulation entirely outside the buildings—around the south side to the garage court in the rear. It should be noted, however, that a sufficiently wide entrance to the quadrangle was provided on the west side so that fire-fighting apparatus, ambulances, or other vehicles required in emergencies could reach any one of the dwelling units. The garage court also is used as a service court since the laundry, the superintendent's office, and the heating plant all are located, together with the inner row of garages, under the east unit. Ample

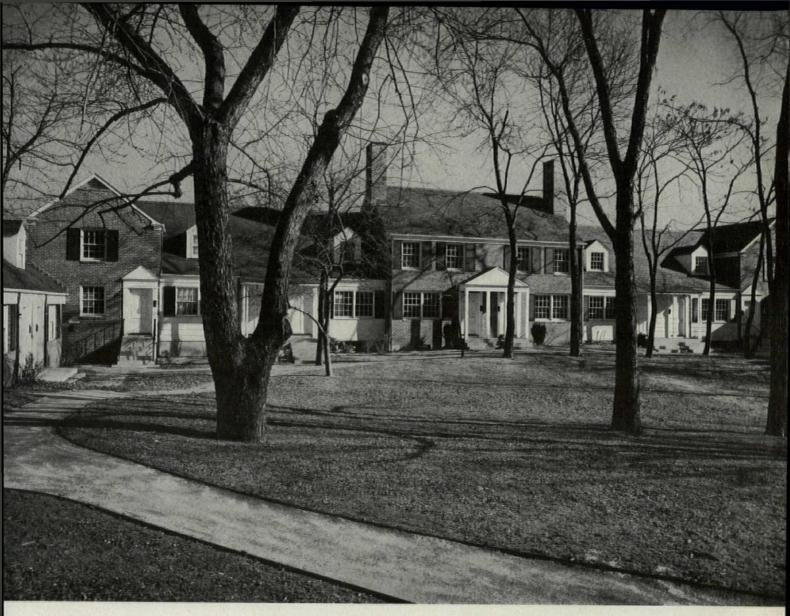
space for storage is provided for in a large cellar under the south unit.

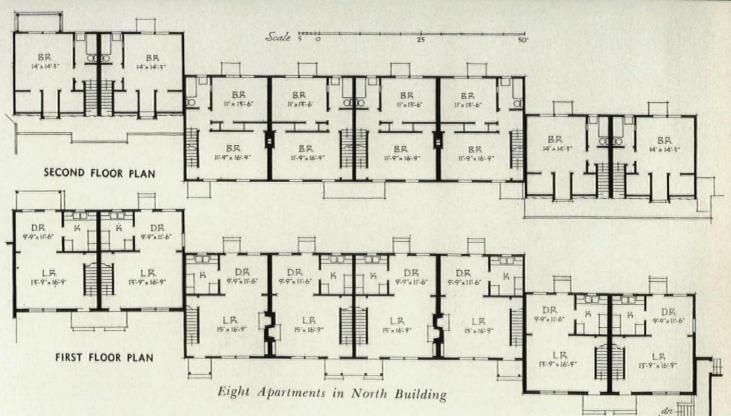
The construction of this project involved the use of a number of basic units prefabricated by American Houses, Inc. It is the third project in which the architects have applied the principle of prefabricated design to a group of cottage-type apartments, where individuality of units is emphasized by separate entrances and omission of public halls. The builder was Arthur Olson, Inc., of New York, and Sussex Garden is owned and operated by Sussex Garden Corporation, of which Alice Darlington is president.





SUSSEX GARDEN APARTMENTS-A SUBURBAN RENTAL GROUP





HOLDEN, MCLAUGHLIN & ASSOCIATES, ARCHITECTS, NEW YORK

APRIL 1942

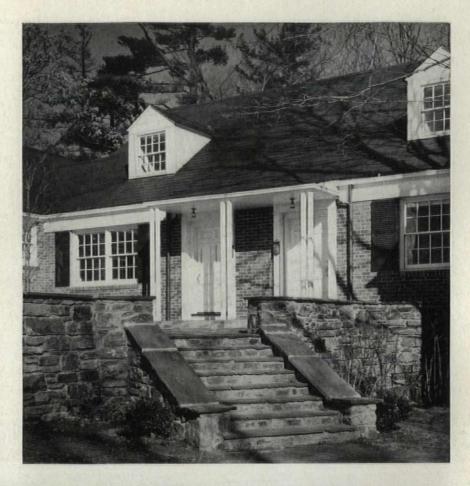




Bordering the south and east sides of the Sussex Garden property is the right-of-way of a proposed Pelham-Portchester Parkway, so the architect's thoughtful handling of the south façades (photos above and left) will not go unnoticed by passersby. There is variety in the roof treatment, where the ventilation louvers were used as decorative accents, and in the rear porch entrances of the apartments, each given individuality. The roof is Bangor black slate and the siding is asbestos

SUSSEX GARDEN APARTMENTS-A SUBURBAN RENTAL GROUP

Within the quadrangle, field stone walls and broad steps (right) dramatize the various levels of the site. Brick was used to emphasize the end and center motifs, contrasting effectively with the asbestos shingles on the walls facing this sheltered area. The dwelling units of the east section at the rear of the project are protected from noises in the garage court by the introduction of a broad terrace above the garages. In addition, the outer row of garages (from which the lower photograph on this page was taken) also was built as a noise baffle





HOLDEN, McLAUGHLIN & ASSOCIATES, ARCHITECTS, NEW YORK

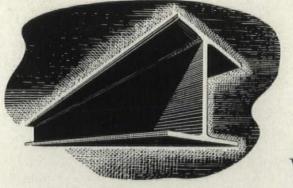
APRIL 1942

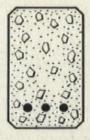


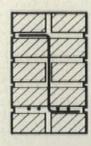


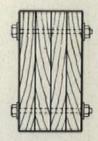
The pleasant scale of the interiors of the dwelling units is evident in the photographs here showing one of the living rooms, looking toward the dining room (above) and toward the entrance and stairway (left). The walls are plastered on plaster board lath—metal lath being used on the ceilings—and floors are of white oak. In the kitchens and bathrooms, floors are covered with linoleum and the walls in the bathrooms are tiled. The apartment shown here was furnished as a model apartment. (Photographs by Morgan)

SUSSEX GARDEN APARTMENTS-A SUBURBAN RENTAL GROUP









# WHAT CAN WE USE?

Most of the accompanying suggestions do not involve substitutes; they do concern alternate methods, many of them equal to or better than established practice, all designed to minimize the use of scarce materials. Varying conditions, local and national, make precision impossible. Accordingly, the table is inspirational rather than mandatory. However, it embodies the current WPB Critical List as well as recommendations of other government agencies, few of whom have "approved" lists though all now permit variation from standards. In developing and rediscovering such construction methods we may well find ourselves fostering better practice—rooms, fixtures, structural members may be redesigned for modern requirements.

For instance, a single-family Victory House, says WPB, can have warm air heat only. To use efficiently the restricted types and small sizes of heaters permitted, the Victory House, speaking bluntly, must be insulated, double-glazed, and designed spatially so that heated air can circulate freely. War is doing to the lowest-cost house what twenty years of peace failed to accomplish.

The table deals with construction only; data on equipment will follow in the future. And the future may bring absolute bans on some items, or more types of buildings. Until it does, however, a broad principle to follow in designing everything from foundations to weatherstripping is: Eliminate metal, rubber and cork!

	CONSTRUCTION RECOMMENDED BY:				
STRUCTURAL LOCATION	VICTORY HOUSING AGENCIES	VETERAN'S ADMINISTRATION			
CEILINGS & SOFFITS Lath and plaster Suspended	Non-metallic lath wherever possible; paint-dipped ferrous lath permitted only for fire-resisting construction and then only if gypsum lath is not permitted. No horizontal corner beads permitted.	Wood lath and plaster.  Not permitted except to concea plumbing; for this use wood furring gypsum lath and plaster.			
CHIMNEYS <sup>2</sup>	Non-reinforced masonry unless required for large installations or earthquake resistance; flue-liners advisable.				
DOORS (See "Hard- ware") Cabinet Closet Exterior  Fire (including frames and bucks) Garage Interior	Flush doors without pulls or knobs are preferred. If essential, make light in weight. Use wood, with minimum glass; glazing points are scarce. Wood core, 30 gage ferrous sheet metal covered, permitted in multi-family dwellings where required by code. Hand-operated only. Omit where possible.	Kalamein doors; Kalamein or pressed steel bucks. Wood,			
DUMBWAITERS, ELEVATORS		No substitutes for standard cabs, cables, doors, etc., including all equipment and controls.			
EXPANSION JOINTS		Copper.			
FIREPLACES	Ferrous uncoated metal dampers; omit metal throats, dampers if possible, linings; use masonry lintels.				
FILASHING Fittings, hangers, cleats	Compo, where possible; design without breaks, etc., to reduce amount needed; where essential, up to 26 gage phosphate treated or galvanized iron, 1½ oz. per sq. ft. (total) zinc; or 2½ lb. hard lead; 4 lb. soft lead. Galvanized iron where exposed to weather, otherwise no metallic coating.	Steel, coated with baked-on pitch.			

	CONSTRUCTION RECOMMENDED BY:					
STRUCTURAL LOCATION	VICTORY HOUSING AGENCIES	VETERAN'S ADMINISTRATION				
FLOORS Construction	Concrete: Use thicker slabs, deeper beams, to minimize reinforcing; use highest permissible steel stresses; use concrete block, etc., for bar chairs, spacers, etc. Lay lowest floor directly on grade, and design so reinforcing can be omitted. Use reinforced concrete saddles for bearings under beams where possible.  Wood: Use wherever possible. Omit all plywood.  Steel: Following accessories only are permitted—bearing plates under 6 lb.; joist hangers in multi-family dwellings only.	Concrete beams and slabs (wood forms) or hollow tile and concrete.				
Finish —rubber —terrazzo —tile	Eliminate. Reduce weight of finish to minimum.  Eliminate reinforcing in bed where possible.	Eliminate. Plastic divider strips except in hospital operating suites, where brass is required.				
—wood	Use where possible.					
FOUNDATIONS Footings, walls, columns, piers, etc.	Reinforcing permitted in masonry only where variable soil conditions require, for earthquake resistance, for multi-family structures over 2 stories, or in Puerto Rico and Virgin Islands. Use highest steel stresses permissible; design structure (i.e., concrete) to minimize amount of steel needed. Substitute mass concrete or masonry, unreinforced, (columns, piers, walls, footings, etc.) for steel, lally columns, reinforced concrete.					
FRAMING MEMBERS AND SYSTEMS Beams, Struts <sup>2</sup> , purlins Columns <sup>4</sup> Lintels  Trusses <sup>2</sup> Miscellaneous	Use wood or reinforced concrete. Use wood or mass concrete, masonry, etc. Use masonry arches for all except masonry veneered walls over wood—in these, steel angles are permitted. Reinforced concrete okay if essential. Use wood trusses, with or without metal connectors; use reinforced concrete only where required for earthquake-resistance, etc. Anchors, dowels, cleats, timber connectors, bolts, tie rods, etc., joist hangers—okay in quantities small as possible.	Wood, for roof construction.  Obtain central office advice.  Asphalt-coated steel ties, etc.				
HARDWARE Builders'	Federal specifications, modified: Use plastics, glass, etc., where possible; prefer ferrous to non-ferrous metal where metal is essential. Omit all unessential items. Omit unessential doors, reduce number of butts per door to minimum; if closet doors needed, use lightweight cupboard type on pivots, with bullet catches, wood	Current Emergency Alternate Federal Specifications, except omit brass trim.				
-Letterboxes	knobs.  Permitted only for multi-family dwellings, then of steel or cast iron only.  Perforated strap iron, embed in foundation and nail to					
—Anchors, sill  —Area Gratings —Nails and Screws	sill. Omit now, install later. Zinc coating okay in Hawaii, optional for roofing and sheet metal elsewhere; electrolytically zinc-coated optional for external wall finish; iron, non-metallic coat-					
-Roofing Nails -Ties	ing in general. Cement coated. Cement dipped, metal.	Zinc-coated steel.				
INSECT SCREENS AND SHIELDS Screening Termite Shields	Full length permitted, but eliminate where practicable (for addition later); or use ½ slide screens for sash; ½ screened, ½ solid doors; wood frames and painted steel or thin coat galvanized wire only permitted.  Same metals as flashings, but attempt to eliminate by proper design; metal permitted only in Florida, Alabama, Mississippi, Louisiana, Texas, Hawaii. Extend	Wood frames, bonderized steel wire.				
	flashing to form shields where masonry slabs on grade abut wood construction.					
INSULATION Acoustic Thermal	Lathing devices of iron with no metallic coating permitted where codes require sound insulation. Required to maintain low heat loss required for approved types of heating systems; mineral wool or glass wool preferred. Omit metal foil.	Rock-cork, or fiber board.				
LOADING PLATFORMS	Wood or concrete.					

	CONSTRUCTION RECOMMENDED BY:				
STRUCTURAL LOCATION	VICTORY HOUSING AGENCIES	VETERAN'S ADMINISTRATION			
PAINT AND WOOD PRESERVATIVES Exterior } Interior }	Avoid zinc pigments. Omit aluminum paint. Substitute creosote for preservatives using zinc on all surfaces not requiring additional painting.				
PROTECTION Fire	Devices, such as exit devices, fire-door fixtures, etc., where required by fire regulations: ferrous metal, no metallic coating.				
Lightning Termites X-ray	See "Insect Screens and Shields."	Copper. Lead.			
RETAINING WALLS	Mass concrete or masonry, unreinforced unless earth- quake-resistance essential.				
ROOF CONSTRUC- TION AND FINISH Gutters, leaders	Wood frame construction. Built-up roofing, wood or compo shingles, slate, etc. Gravel stops of wood plus 50-lb. felt; omit copings or use masonry, compo, etc. Omit items requiring metal.  Use wood gutters or wide eaves to eliminate them; ½ rd. gutters, galvanized iron 26 gage maximum if essen-	Wood frame construction.			
Ventilators	tial; standing gutters built of wood and membrane are permissible; scuppers and downspouts (if essential) may be galvanized iron—omit where possible. Galvanized iron strainers only for leaders connecting to sewer.  Metal as for gutters. Eliminate if possible.				
SKYLIGHTS	Wood sash.	Wood sash,			
STAIRS Carriages Rails	Wood for single-family; reinforced concrete for multi- family over 2 stories high; steel only if concrete not permitted locally. Wood; steel if essential in multi-family dwellings over 2 stories high; prefer reinforced concrete to steel if	Reinforced concrete,			
Treads, Risers	permitted. Wood or concrete as for "Carriages."	Terrazzo finish, omit metal nosing round juncture of treads and riser			
WALL CONSTRUC- TION AND FINISH Exterior finish Framing Interior finish	Do not use stucco if it requires metal lath base; if essential, use nonferrous-coated metal lath except California from San Francisco south.  Wood.  Wood grounds and screeds, non-metallic lath and plaster except where fire regulations require, and except for bedding tile, for cement plaster in baths; galvanized				
Masonry, solid Masonry, veneer	lath not permitted at all. Vertical corner beads only; paint-dipped generally, galvanized only for severe exposure. Corner reinforced 2½" on each face of internal angles or where two types of plaster abut. Stone, brick, block or concrete without reinforcing. Wood frame, ferrous ties with bituminous coating.				
WATERPROOFING Foundations Floors at grade Spandrels Shower pans	Non-metallic waterproofing or dampproofing; membrane.  Membrane.	Membrane generally.			
WEATHER- STRIPPING <sup>8</sup>	Non-metallic.	Obtain central office advice.			
WINDOWS AND GLAZED OPEN- INGS Frames and Sash —Casements —Double hungs	Double-glazing advisable.  Wood; only 1 fastener per pair of casements.  Wood; weights or balances for ferrous metal permitted.	Wood, except where fire hazard exists: consult central office about ste			
Glass Block	Okay but set in wood frames, omit metal reinforcing.	here.			

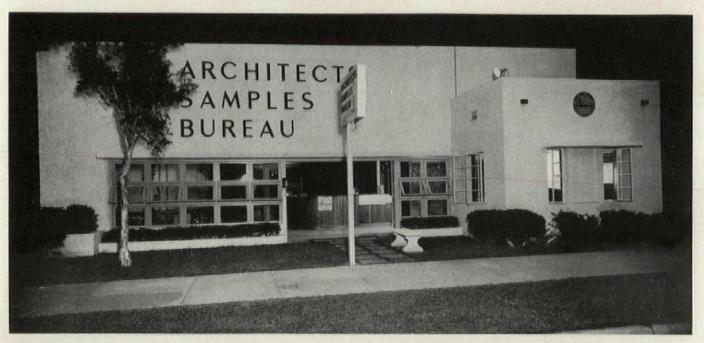
NOTES: 1—Venturi stacks as used for some industrial plants reduce necessary height.

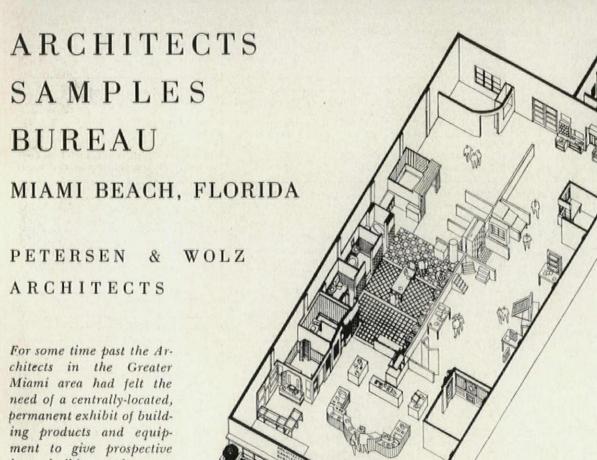
2—Wood-and-plywood, or wood trusses, connector-joined, have been successfully used in many types of construction; also laminated arches and trusses, cellular arches, mill construction, etc.

3—Consider precast concrete, gypsum, etc.

4—Omit lally columns.

5—Consider newer developments such as wood-and-glass units (no metal even for pulleys); concrete weights with heavy aggregate.





chitects in the Greater Miami area had felt the need of a centrally-located, permanent exhibit of building products and equipment to give prospective home builders a chance to inspect, under one roof, the various manufacturers' products which contribute to the comfort and economy of well-planned homes. The Architects Samples Bureau, organized in 1937 to provide such a service, moved into its present new building in 1939

This isometric drawing shows the interior layout of the building. The Bureau is owned partially by the Architects of the Greater Miami area. Its policy is controlled by an Architectural Board of five members



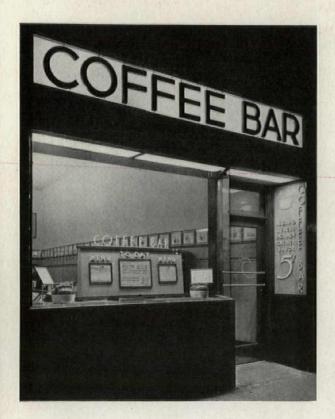


visitors, since income is derived from rental fees paid by the manufacturers and distributors of the many products exhibited. Courteous attendants explain the different displays and give the visitor any information desired. Shown in the upper photograph is the information and reception desk where a complete architectural file is maintained for the use of architects, builders, and the public. The other photographs show several of the many manufacturers' displays on the floor, A conference room is provided for the exclusive use of architects and builders. From time to time, the Bureau maintains exhibits of work designed by architects in the Greater Miami area. All advertising and literature from the Bureau bears the following suggestion: "You owe it to yourself to consult a reliable Architect and Builder and use proven materials"

No admission fee is charged



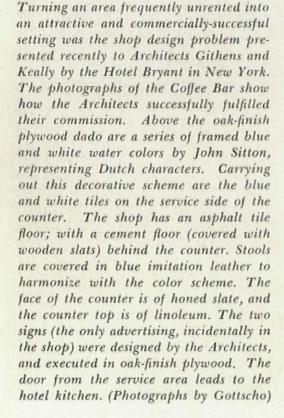
APRIL 1942



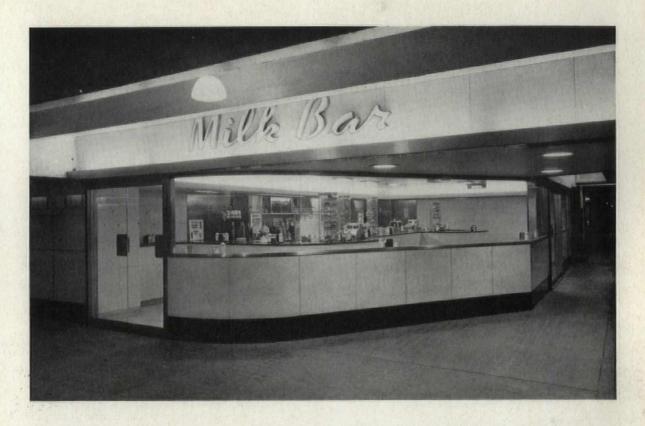
# HOTEL COFFEE BAR

ALFRED MORTON GITHENS AND FRANCIS KEALLY, ARCHITECTS





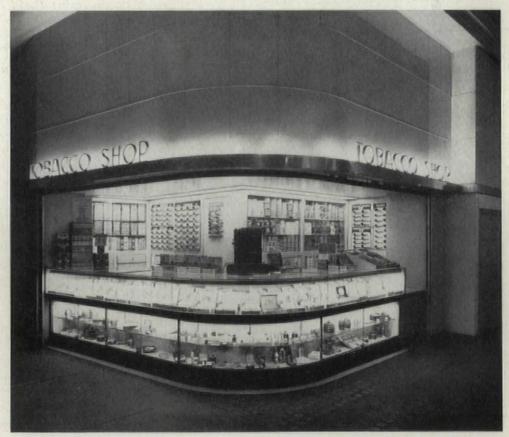


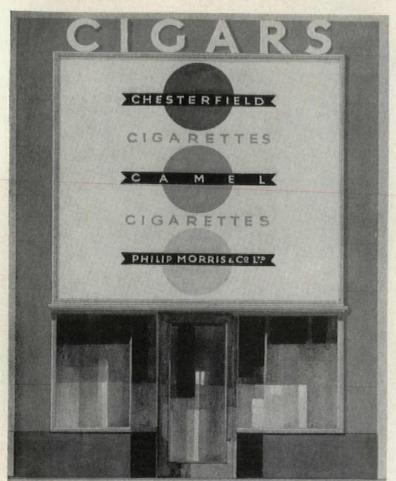


# RAILROAD TERMINAL SHOPS

The new shops shown herepart of the construction for modernization of the lower concourse of New York's Pennsylvania Station-are now in operation. The shops, operated by the Union News Company, provide compact but ample work and storage space. Both follow the character which Loewy has established for other shops on the same concourse. The Milk Bar, utilizing hitherto wasted area, has a structural glass exterior of deep red and contrasting ivory. Free-standing, white enameled letters identify the Bar. The open-front Tobacco Shop has a creamcolored structural glass front, glass counter top, and natural wood and bronze trim. Stock compartments are concealed behind display cases lighted from within by fluorescent lights. A bronze-lettered sign surmounts the outer frame. (Photographs of both shops are from Cambon Studios)

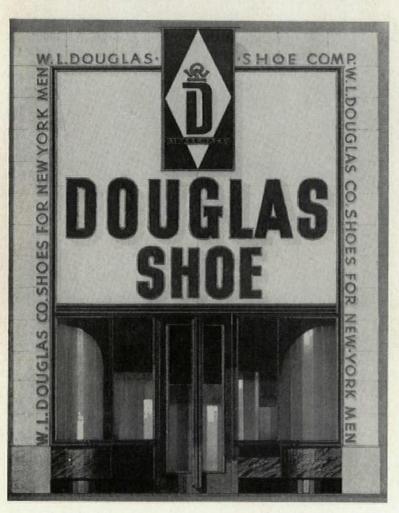
RAYMOND LOEWY, DESIGNER





# SHOP FRONTS

DESIGNED BY S. MILLET



Design feature of these two shops is the wellbalanced arrangement of architectural lettering. In the Tobacco Shop the store-identifying word is of painted metal, while the cigarette brand identifying letters are of painted transparent colors against a white transparent glass background. The shop has a gray limestone front and chromium trim. In the Shoe Store the background is of sandblasted limestone, with bronze letters. The bronze-bordered letters in the transparent yellow painted glass background are of painted transparent blue glass. The door and all trim is of bronze, while marble and black granite are used under the show windows. In discussing the design of these shop fronts, Mr. Millet made the following observations: "The thoughtless repetition of the same façade covering is boring. It must not be forgotten that a modern store front competes with others on the same street. To distinguish the shop from others in the same area, the use of lettering plays an important role. Only when the trinity-exhibition area, wall surface, and lettering-are studied by the architect and combined as a unit will a complete advertising effect be achieved. Any other ornament besides lettering may be beautiful today, but in time to come may be repulsive to the passerby. Lettering always attracts him and leads his eye to the display window. However, the use of fancy lettering or enlarged handwriting effects should be avoided because this would become boring and eventually lose the effect for which it was originally created. Well-arranged lettering gives a freedom of movement which distinguishes the shop. The traditional forms of the block and Renaissance type, or a type of finely-formed impression, will accentuate the firm name. Chain stores should avoid standardized shop fronts and try to accent their identity by a change in the color, shape, lighting, and lettering arrangement on the shop front"

# OUR CAMPAIGN BEGINS

## THE JOB SITUATION IN WASHINGTON

In the belief that there is rapidly developing through the country an increasing shortage of available technical skills and high-class personnel, Pencil Points has undertaken, as recounted in the February and March issues, a cam-paign in Washington. We have engaged Willis A. Vogel, an architect, to be in Washington to do everything possible to further the utilization of architectural skills by the Government in carrying on its War Program. At this writing Mr. Vogel has been in Washington for a little over two weeks and during this time he has made substantial progress in interesting officials of various Government Departments in tapping the reservoir of skilled manpower represented in our employment census files.

Mr. Vogel's report of his first two weeks' activities to date is covered in the following statement:

in the following statement:
"Everywhere I have found a sympathetic and even enthusiastic response to the idea of making use of architectural men. I have had an excellent reception at the War Production Board, at the Civil Service Commission, at the National Roster of Scientific and Specialized Personnel, and at the Federal Works Agency. I have given the names of several hundred men having special qualifications to the officers of both the U. S. Civil Service and the War Production Board. They have promised to make contact with these men to inform them of jobs that need to be done and for which qualified men are becoming scarce. "Next week I shall be in touch

with the technical division of both Army and Navy and have no reason to believe that I will not succeed there also in developing their interest.

"A new Civil Service category, Superintendent of Construction, has been announced under date of March 30. Salaries range from \$3200 to \$6500 a year, and there are no age limit qualifications. Circulars and application forms for this unassembled examination may

be obtained from the Secretary, Board of U. S. Civil Service Examiners, at any first- or second-class post office; except in cities having U. S. Civil Service District Offices, where such application forms may be had.

"A Bill has just been introduced into Congress by Representative Vinson authorizing the Secretary of the Navy to proceed with the construction of certain public works and authorizing the appropriation of \$1,000,000,000 for the establishment and development of Naval shore activities by the construction of such temporary or permanent public works as the Secretary of the Navy may consider necessary, including buildings, facilities, accessories, and services. The work covered by this Bill will be handled under the direction of the Bureau of Yards and Docks.

"I turned up an immediate need for a number of draftsmen at Wright Field, Dayton, Ohio. Some of the men might be interested in applying directly to Mr. Kenneth Marcuson, U. S. Civil Service Representative in Dayton. The adaptability of architectural men for this work and also for ship and boat drafting has been proven and the officials with whom I talked reported that the men so far employed in this capacity were entirely satisfactory.

"Since I am using the cards daily and making recommendations in every possible place, it will be important for me to know as completely as possible whenever men on our list are satisfactorily placed. I urge every man who is registered with us to inform us promptly when he gets work so that needless correspondence can be eliminated.

"The regional set-up started by USHA has been carried over into FPHA. From now on all architects seeking to do public housing for war workers should have the record of his architect-engineer organization on file with the director of his region. I attach a list of the directors, with addresses."

## ADDRESSES OF FPHA REGIONAL OFFICES

- Region I —Sumner K. Wiley, Regional Director
  24 School Street
  Boston, Massachusetts
- Region II -John Taylor Egan, Regional Director 270 Broadway Building, New York
- Region IV John P. Broome, Regional Director
  Georgia Savings Bank
  Building
  Peachtree and Broad
  Streets
  Atlanta, Georgia
- Region V -F. Charles Starr, Acting Regional Director 201 North Wells St., Chicago, Illinois
- Region VI -Marshall W. Amis,
  Regional Director
  Electric Building
  7th and Taylor Streets
  Fort Worth, Texas
- Region VII—Langdon W. Post, Regional Director
  Humboldt Bank Building
  785 Market Street
  San Francisco, Calif.

"I am distinctly encouraged to believe that there is an increasing desire on the part of Government bureaus to get every available technical man into some position where he can be of maximum value. In dealing with the officials I have made it a point to emphasize the versatility of architectural men and to urge the upward revision of salary rates, in recognition of the inequity of some of the existing schedules. I have found some officials receptive to this suggestion and have reasonable hope that it will be acted upon in some instances."

# WASHINGTON REPORT

## COMPILED BY A. D. TAYLOR OF CLEVELAND

## GENERAL OBSERVATIONS

Of outstanding interest to members of the technical planning professions, concerned in the program of housing for war workers, is the complete reorganization of the housing agencies heretofore administering different parts of this program. The centralization of authority and of administrative procedure now placed in the hands of the Administrator of the National Housing Agency, while creating very temporary confusion as to responsibilities and procedures in the different housing agencies, is re-sulting in increased efficiency and economy in planning and in construction, and will speed up the general program.

One agency (The United States Housing Authority) because of its experience in housing, its well-qualified personnel and its efficient organization will now be expanded in personnel and responsibility to administer the entire program of housing for war workers, largely through decentralized Regional responsibilities. The new agency, headed by the new Commissioner, Herbert Émmerich, will be designated as the Federal Public Housing Authority. (It is one of the three major divisions—Federal Public Housing Authority, Federal Housing Administration, and Federal Home Loan Bank Administration-of the National Housing Agency.)

As rapidly as is practicable the other housing agencies (Construction Division of the FWA, Farm Security Defense Housing, Mutual Ownership Defense Housing Division, Defense Homes Corporation, and Public Buildings Administration) will be absorbed in the Federal Public Housing Authority.

## FWA HOUSING

A very extensive program of prefabricated or demountable housing was allocated to the Construction Division of the Federal Works Agency. This list of projects, as announced in the releases published by the FWA Office of Information, is generally as shown in the tabulation on this page. Those projects in List A are being developed with the funds made available under the legislation designated as Public Act 9. Projects in List B are being developed with funds made available under the Lanham Act.

So far as can be ascertained at the time of preparing this report, the agencies, through which contracts have been awarded to members of the technical planning professions, will continue to administer the work of preparing plans and specifications under the supervision of the Commissioner of the Federal Public Housing Authority. When the plans and specifications are completed, to the point of procuring competitive

bids or negotiating a contract for construction, projects will be placed under the Regional Offices of FPHA (see top of third column, page 172, March issue of Pencil Points) having jurisdiction over the area in which any respective project is located. It is possible that some projects may remain in the agency in which the planning was initiated, until the construction contract has been awarded, before transferring the project to the Regional Public Housing Authority Office. This question has not been definitely determined.

It is certain that on new projects practically all of the negotiations for the employment of the services of Engineers, Architects, and Landscape Architects as "prime contractors" providing professional services, will be through the Offices of

## LIST A

Newport News, Va5300	Granite City, Ill 300
Norfolk-Portsmouth, Va 4300	Springfield, Ohio 250
Norfolk, Va3450	Burns City, Ind 250
Kingsbury-LaPorte, Ind3150	Pryor, Okla 250
Vallejo, Ćal	Bremerton, Wash 225
Ogden, Utah	Hartford, Conn 225
Charleston, S. C	Shreveport-Minden, La 200
Norfolk, Va1800	Rockford, Ill 200
Norfolk, Va 900	Sandusky, Ohio 200
Bremerton, Wash 775	Radford, Va 200
Dayton, Ohio 750	East Alton, Ill 200
Charleston-Louisville, Ind 750	Sebring, Fla 193
Portsmouth, Va 750	Paso Robles, Cal 150
Little Rock, Ark 600	Vinita, Okla 150
Texarkana, Texas 500	Roswell, N. M
Wilmington, Ill 500	Sacramento, Cal 125
Crab Orchard, Ill 400	Highley, Ariz
Burlington, Iowa 400	Milan, Tenn 100
Parsons, Kansas 400	Sturgeon Bay, Wisc 100
Charleston, S. C 410	Wagoner, Okla 100
Elkton, Md	Mineral Wells, Tex 100
Jackson-Flora, Miss 350	Humboldt, Tenn 50
Pulaski, Va 300	Trenton, Tenn 50
Weldon Springs, Mo 300	Greenport, N. Y 50
Orange-Beaumont-Pt. Arthur, Tex. 300	Campo, Cal 30

## LIST B

San Diego, Cal	Bath, Me 150
Wichita, Kan	Newark, Del 150
New London, Conn1600	Victorville, Cal 140
Hope, Ark 200	Moultrie, Ga
Stamford, Conn 200	Midland, Tex 125
Shreveport, La 200	Portland, Me 100
Valdosta, Ga 190	Pittsfield, Mass 100
Hartford, Conn 175	Mission-McAllen, Tex 95
Sumter, S. C	Tuskegee, Ala 30

the Regional Directors on all projects for which such individuals have not been employed to date.

Under this procedure the identity of the former agencies will gradually be merged into the Federal Public Housing Authority under that name.

## EMPLOYMENT STATUS IN HOUSING AGENCIES

The reorganization of the Housing Agencies will involve the combining of existing units into one Agency, so far as Victory Housing is concerned. In view of this procedure, and of the tendency to de-centralize into Regional Offices the functions which have hereto-fore centered in Washington, it is likely that additional opportunities will develop for employment of qualified men for field supervision, inspection work, and for office work in the Regional Offices.

The increasing tendency to use the services of members of the technical planning professions engaged in private practice should increase the opportunities for employment of private offices. Such employment, if the program of decentralization becomes a general procedure as now contemplated, will be procured through the Regional Offices; whereas, on that part of the program concerned heretofore with prefabricated housing through the Construction Division of FWA, such employment was procured directly through the Washington office. It also seems quite likely that, with few exceptions, employment of professional offices will be largely confined to the immediate sections of the country in which the project is located.

It is also quite unlikely that all of the individuals now employed in the different Housing Agencies in Washington will remain on the payrolls working in Washington after the reorganization is completed.

## COMMUNITY BUILD-INGS FOR HOUSING PROJECTS

On many of the larger Housing Projects and on some of the more isolated housing projects in con-nection with Ordnance and other plants, Non-Dwelling Community Buildings (i.e., Hospitals, School Buildings, Garages, Gas Stations, Management Offices, Post Office, Recreation Buildings, Theatre, and Stores) must be constructed. The funds for these buildings may come

from the monies appropriated under the Lanham Act (in which three percent of the total appropriation for any project may be used for Community Buildings), from the appropriations for De-fense Public Works, and from the funds made available to the President under Public Act. No. 9 (in which there is apparently no standardized limitation on the funds to be expended for Non-Dwelling Community Facilities).

This part of the program will probably be administered through the Public Buildings Administra-tion under the Federal Works Agency, and an increasing tendency will prevail for the employment of architects in private practice on such projects. The limita-tions on this part of the program are determined by the immediate

# EMPLOYMENT RESTRICTIONS

funds available for such purposes.

So much confusion in procedure, delays, and inefficiency have occurred because of transfers in personnel among different agencies and among different Victory construction jobs, that some of the Government Agencies (the War Department and the Navy Department in particular) have adopted regulations making it very difficult for transfers to be procured, pending the time that such individuals may be released because services are no longer required on a specific project. The practice (which was much too frequent) of transferring from one agency, or from one project to another agency or project at will, can no longer be adopted, and it therefore is important that those seeking employment on Victory Projects should know in advance that they are expected to accept such employment for the duration of the project. Many members of the technical planning professions are meeting with disappointing experiences (and rightly so) because of this regulation.

FEES FOR TECHNICAL PLANNING SERVICES A condition has recently developed in the United States Housing Authority (now the Federal Public Housing Authority), which directly concerns those members of the Technical Planning Professions who are providing, or who expect to provide, technical services in the

design and supervision of housing

(other than of the prefabricated

type) for war workers.

This condition is concerned with the division of responsibility and the respective fees to be paid to Architects, Mechanical Engineers, Electrical Engineers, Civil Engineers, and Landscape Architects working on housing for war workers, under Lanham Act funds.

The Professions of Architecture, Engineering, and Landscape Architecture, through conferences extending over a period of months, finally developed a joint statement covering respective responsibilities and collaborative procedures. The USHA, in 1938, published a statement in which recommended schedules of fees for the services of Architects, and for the services of representatives of other Technical Planning Professions, were adopted. These schedules were generally followed on USHA-Aided Housing Projects and, with modifications, were adopted as a basis for determining the fees to be paid to the respective professions on Vic-Housing Projects, under Lanham Act funds.

In February of 1941 a revised procedure was adopted whereby the Architect, for his part of the services in planning Victory Housing projects was paid a fixed fee, plus reimbursable costs for drafting room work and for miscellaneous items of overhead. This table of fees was based upon a fixed fee of so many dollars per dwelling unit

as follows:

## SCHEDULE A

900			=:	_	_		-		
Number of Dwe	ellin	ng	1	Ji	ni	ts		F	ixed Fee
(Up to	2)								
50									\$2,750
100									
200									4,750
300									6,000
400									7,250
500									8,500
600									9,750
700									11,000
. 800									12,250
900									13,500
1000									14,750

It will be noted from this tabulation that the Fixed Fee (exclusive of reimbursable cost) paid to the Architect for his specific Architectural services (including collaboration on the Site Plan work) ranged from \$55 a unit on a project of 50 dwelling units, down to \$14.75 a unit on a project of 1,000 dwelling units.

While this schedule of fees for specific Architectural Services was in effect on Victory Housing Projects, the schedule of fees publicly adopted by the USHA for the Supplemental Services of Engineers and Landscape Architects on similar projects was 60 percent of the schedule of fees in effect up to that time. These definite schedules were clearly stated to the members of the Technical Planning Professions through the published documents of the USHA, and provided an equitable basis of remuneration, clearly understood and generally followed by the representatives of the different professions engaged in this work.

About March 10, 1942, the United States Housing Authority published a document entitled, "Schedule of Architect's Fees, Defense Housing Projects" in which the Housing Authority established a "Lump Sum" fee which covered "all Architectural, Engineering, and Landscape Architectural Services required under the Architect Contract." This fee includes supervision during construction, and is as follows:

Estimated	Architect's Lump Sum Fee					
Construction Co						
\$ 100,000		\$ 4,000				
250,000		7,500				
500,000		12,000				
1,000,000		19,500				
2,000,000						
3,000,000		40,000				
4,000,000		48,000				
5,000,000		55,000				

Under the procedure now adopted, the problems of the USHA (now the Federal Public Housing Authority) are simplified, in that a single contract is made with the Architect who in turn is expected to employ (without having any stated schedule of fees for supplemental services available), the services of Mechanical Engineers, Electrical Engineers, Civil Engineers, and Landscape Architects. The absence of any statement from the Housing Authority as to the schedules of fees on the basis of which the Architect should employ these Supplemental services is creating complications, misunderstandings, and inequitable procedures. Unfortunately, the entire situation, wholly unintentional upon the part of the Housing Authority, has reverted to a condition which is most undesirable and which ought to be corrected.

The basis on which these Lump Sum Fees have been determined is quite evident to those who, for the past three or more years, have studied carefully the questions concerning fees for Technical Planning Services on Victory Housing Projects. The question of whether or not this total fee is adequate is not a point at issue at the present time, when everyone is interested in performing his part in the Victory Program. Based upon the very limited information now made available to the professions in establishing the new schedule of fees, the question of whether or not there will be an equitable distribution of this "Lump Sum Fee" among the professions whose members are required to provide services on these projects is very definitely at issue.

Undoubtedly the procedure adopted by the Housing Authority in arriving at this total fee was somewhat as follows:

## (A) Fee for Specific Architectural Services.

Fixed Fee based upon table of fees in "Schedule A".

Plus 100 percent of "Architect's Fixed Fee without supervision" as set forth in Addendum No. 1, dated December 26, 1941, from USHA. ("Records of Architect's cost in preparing plans and specifications . . . . indicate that an amount exactly equal to the Architect's Fixed Fee without supervision, will serve generally as a liberal and equitable limitation for payroll costs.")

Plus an amount (approximately \$2,000 on a 500 dwelling unit project) allowed for supervision services during construction,

Plus an amount (approximately \$1,000 on a 500 dwelling unit project) for blueprints, supplies, and miscellaneous overhead expense.

(B) Fees for Supplemental Services (Mechanical Engineer, Electrical Engineer, Givil Engineer, and Landscape Architect.)

These fees were evidently established on the basis that prevailed for supplemental services on Victory Housing Projects (namely, 60 percent of the schedule of fees used during 1940 and 1941 for the services of the foregoing professions). This fee does not include supervision.

To these fees for supplemental services there is added an amount which varies with the size of the project, to be paid as remuneration for supervision during construction. (This ranges from \$750 for Mechanical Engineering, and an equal amount for Landscape Architect supervision, to approximately \$1,000 for Engineering supervision on a 500 dwelling unit project.)

Many Architects are being em-Victory Housing ployed on Projects, not having any thorough knowledge of the schedules of fees, nor of the divisions of responsibility, as established by the collaborative and joint procedure of official representatives of the Technical Planning Professions. The result is that (without any further explanation than that which is now contained in the recently-issued schedule of March 10, 1942) an unfortunate condition exists which can only be corrected in a proper way by some explanatory statement from the Government Agency which has thus established this schedule of "Architect's Lump Sum Fee.

## SPECIALIZED TECHNICAL ABILITIES

Many questions are asked about the possibility of entering the armed forces and being placed in positions where specialized technical ability may be used to maximum advantage. With the present procedure for determining the kind of service for which any man is best qualified, there is a strong possibility that his services will be used to maximum advantage, commensurate with his ability and experience, after he has joined the Army or the Navy.

#### PUBLICATIONS

The Federal Public Housing Authority will probably release a series of bulletins covering the subject of "Standards for Defense Housing (Lanham Act Projects)". These bulletins will cover the following subjects: Site Selection, Survey Requirements, Site Engineering, Dwelling Design, Structural Design, Plumbing, Electrical. These bulletins have been made available to the Local Housing Authorities, and will undoubtedly be available through the Office of Information, Federal Works Agency.

March 16, 1942

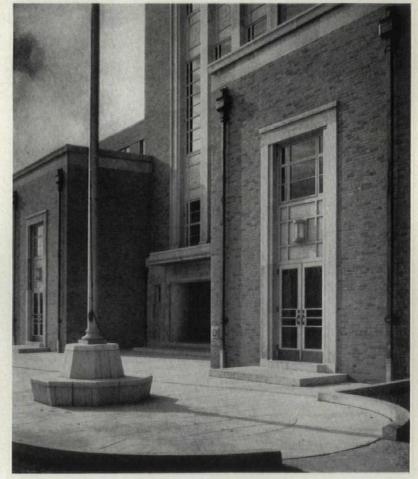
<sup>\*</sup> Total estimated construction cost of work for which the Architect is to prepare plans and specifications, not including demolition or allowance for contingencies.

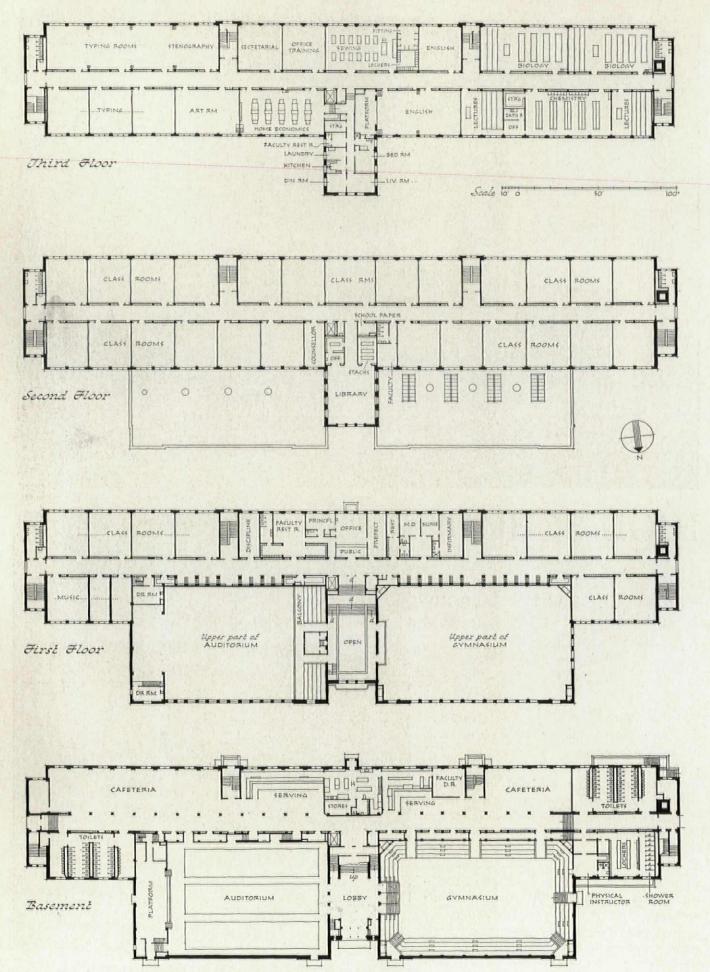


# HIGH SCHOOL

HENRY D. DAGIT & SONS
ARCHITECTS

This Catholic high school for girls, in Philadelphia, owned by The Archdiocese of Philadelphia, has academic facilities for 3,000 students. Built of reinforced concrete on a structural steel frame, the building is faced with salmon-colored brick in a full range of shades, and trimmed with Indiana limestone. The main entrance doors and door frames (see detail at right) are of bronze. Each Class Room, as well as the Auditorium, Gymnasium, and Cafeteria has a loud speaker connected with the office so that announcements and special lectures may be broadcast to the entire student body. Class Rooms for academic subjects are on the first two floors. On the third floor are the Science Laboratories and the necessary rooms for Vocational Training

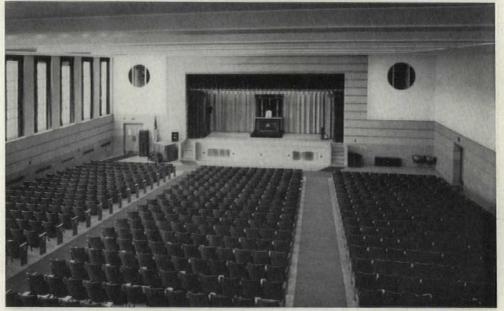




LITTLE FLOWER CATHOLIC HIGH SCHOOL FOR GIRLS -

The plan of the building was so disposed that the Entrance Lobby is in the middle of the building, with the Auditorium and Gymnasium on either side. For special events, such as Commencement exercises, the Lobby doors to the Auditorium and the Gymnasium can be thrown open, making both rooms available to accommodate the guests. When either the Auditorium or Gymnasium is used at night the doors from the Lobby to the school proper can be locked, making it unnecessary for visitors to go through the school. A Cafeteria and Kitchen facilities are provided on this floor. The top photograph shows the Lobby which has a terrazzo floor and glazed terra cotta wainscoting in buff, with crimson trim. The special glass lighting fixtures are trimmed with chromium. The Auditorium (center photograph) is also used as a Chapel for the students. The wainscoting of glazed terra cotta is also of buff, with green trim, topped with buff plaster walls, sand-finished. The Gymnasium (right) has a buff color, glazed structural tile wainscot, and concrete bleachers for the fixed wood benches. Corridors, stair halls, and toilets have terrazzo floors, and buff-color, glazed structural tile wainscots. All interior woodwork is of plain, sawed red oak. A centrallylocated Library is on the second floor in the main entrance wing. (All photographs are by William M. Rittase)

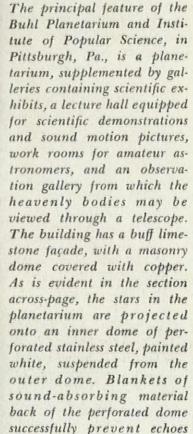


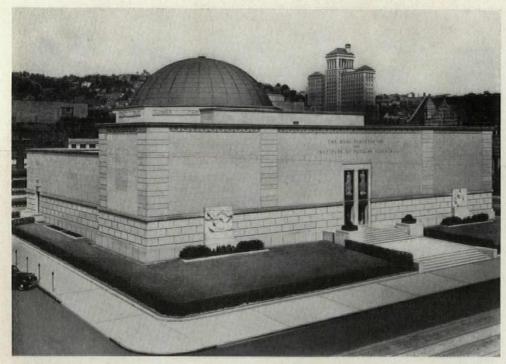




DESIGNED BY HENRY D. DAGIT & SONS, ARCHITECTS

## BUHL



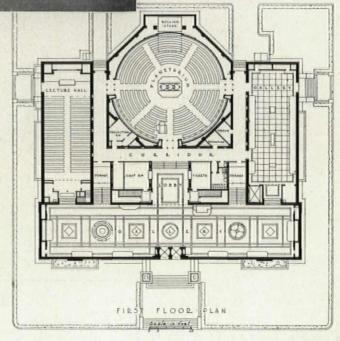




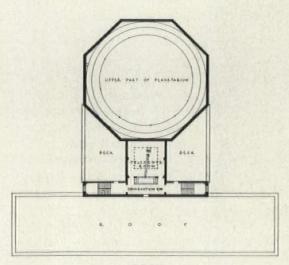
## INGHAM & BOYD

## ARCHITECTS

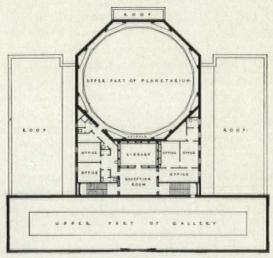
Pictured above is the Main Gallery of the building. Grouped about the walls are exhibit cases which are frequently changed. The clock is above the foyer leading to the Planetarium. The floor in the gallery is of patterned terrazzo, and the wainscot is of gray and yellow Sienna marble. At the east and west ends of the room the marble is carried up to the ceiling. The building is mechanically ventilated and all of the principal rooms are air conditioned



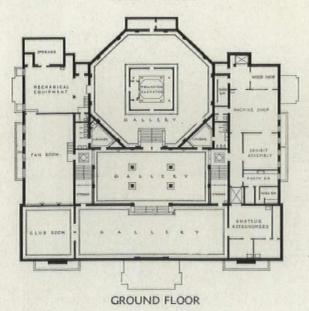
# PLANETARIUM, PITTSBURGH

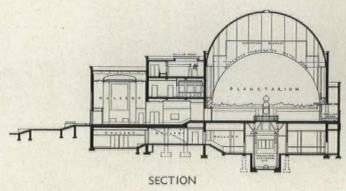


ROOF



SECOND FLOOR





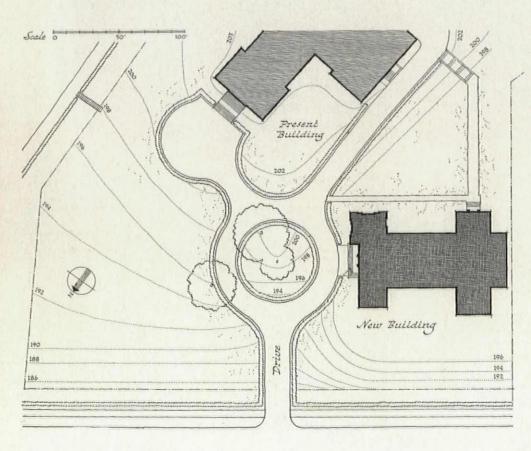
Above the main entrance doors are two bronze sculptures, covered with gold leaf, and set against panels of red granite. The figures are by Sidney Waugh, sculptor. One represents a Mingo Indian—native to the Pittsburgh region—who holds a bow and arrows in one hand, and snowshoes in the other. The other figure is of a research laboratory scientist. About this figure are representations of modern science—a cathode ray tube, a microscope, a laboratory still, and a globe. Four limestone sculptures by Mr. Waugh adorn the exterior of the building. The figures represent Night, Day, The Earth, and The Heavens. (Photographs by Newman-Schmidt Studios)





Newly-erected on the grounds of the Oblate Scholasticate at Brooklands, Washington, D. C., is this two-story-and-a-half building. The Oblates are a religious order of the Catholic Church, and were founded more than 125 years ago in France. The exterior of the building is covered with stonefaced random ashlar on a brick backing. Coping and architectural accents are of limestone. Windows on the first floor are wood sash with copper screens. The second floor windows are steel sash

# CHAPEL

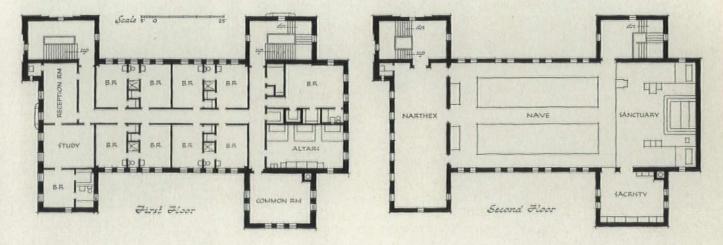




# AND DORMITORY BUILDING

DESIGNED BY JAMES C. FLAHERTY, ARCHITECT

The Chapel of Our Lady of the Miraculous Medal, shown in the photograph at the top of this page, is on the second floor of the building. The Chapel is dignified and simple in design, in the character of the missionary chapels maintained by the Order all over the world. On the first floor are ten Bedrooms, one of which has an adjoining study and a Reception Room. There is also a private chapel on this floor. A locker room, heating facilities, and a recreation room are located in the basement. (Photographs by Louft & Wolf, Washington)



APRIL 1942



Missionary priests of this Order are serving all over the world, and the murals by Nelson Chase which enrich the narthex of the Chapel are portrayals of their far-flung activities. The stained glass windows in the narthex are memorials to leading men of the Order, and were all designed by Francisco Ruocco. The narthex will also be used for

exhibitions of war clubs, totem poles, and other native mementos collected by the missionaries in Africa, Ceylon, Canada, Alaska, and other parts of the world. Central motif of the main altar in the chapel is a large bronze medal (see photo below), symbolic of the Oblate Order. The medal is hung against a blue and gold dossal. The reverse of the medal is incorporated in the wrought ironwork under the altar table



CHAPEL AND DORMITORY BUILDING - JAMES C. FLAHERTY, ARCHITECT

#### PENCIL POINTS DATA SHEETS

Prepared by DON GRAF, B.S., M.Arch.

#### PENCIL POINTS DATA SHEETS

#### **PRINCIPLES** OF BLACKOUT

Index No.

F 19 k CONSTRUCTION

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

Reference: "Blackouts," U. S. Office of Civilian Defense, for sale by Supt. of Documents, Washington, D. C., 25¢. (Now undergoing revision.)

**SOURCES OF LIGHT** to be blacked out include light from industrial activity, street lights, store fronts, factory roof skylights, entrance lights, windows, electric signs and vehicle lights. These may be turned off completely, dimmed, painted, shaded, or screened so that no glow is visible from the complete store of the complete

Light reflecting surfaces may be more difficult and include glass of windows, roof and wall surfaces, roads, rivers and lakes. These may reflect the light from the moon, stars, fires or flares. Some of these may be minimized by shields limiting light dispersion or by applying matter than the start of th

**PREPARATION.** The securing of blackout material in localities where there is a shortage and its installation should be discouraged until such procedure is advised by the Civilian Defense Authorities, in order that available supplies may be diverted to locations where they are most needed. However, well considered planning should be completed and be ready to be put to use when called for.

GENERAL. Reflected light and unscreened illumination from plants and cities identify localities to enemy aircraft, enabling them to locate specific air raid objectives. Shutting off all electric power at the source, to create a blackout, would also cut of necessary power and light required for transportation, elevators, hospitals, key control rooms and other important

Consequently, individual lights and circuits will be turned off. Exposed lights in houses, stores, and other occupied buildings will be turned off except in rooms where windows have been obscured. Necessary street lighting will be reduced to the degree authorized by local authorities.

OBSCURATION MATERIALS. Paint is the cheapest and most easily applied blackout material. Applied to the exterior side of glazing it obscures and reduces reflection. Paint must be opaque. Should the glass break, lights must be extinguished until an opaque panel is installed. Paint offers no protection against splintering glass.

Adhesive treatments, utilizing heavy opaque papers, fabrics and card-board provide obscuration and a degree of glass splinter-proofing. See Data Sheet F19h.

Covered lightweight frames and sheet materials of metal or weather-resisting wall board may be used to cover the entire window area on the inside. Tight fitting screens may also be gas-tight by using cotton or sacking impregnated by a cellulose solution, or rubberized cotton fabric.

**ESSENTIAL POINTS.** Screens placed on the room side, if tough enuf, have glass splinter resisting qualities but do not prevent exterior reflection of the glass.

Screens used on the outside take care of reflection but need glass splinter protection in the form of close metal mesh or netting.

Since glass may be broken, any interior screens should be weather proof. Scotch or gummed tape must be kept available to repair any damage to the screens. Where paint is used for obscuration, metal or heavy cardboard replacements must be available in case of glass breakage.

Curtains, shades or other pliable materials must be weighted to prevent any wind from blowing them out of position.

Room sides of screens may be painted or papered to match the room

When installation is complete it should be checked from the outside, from all angles, to be sure no light escapes.

Since blackout is necessary only during the night, screens will be subject to considerable handling and must be of substantial materials.

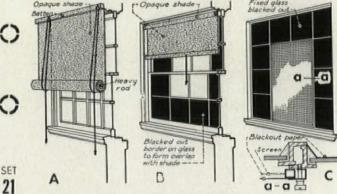
#### BLACKOUT AND SHADES

Index No.

F 19 I CONSTRUCTION

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

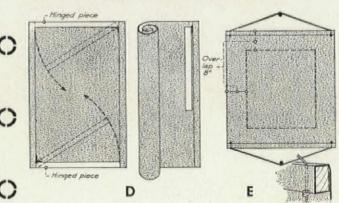
Ordinary lightproof, lightweight shades or blinds are not durable or weatherproof. They should be weighted at the lower edge. These types are not intended for areas that may be repeatedly bombed.



(A) Roller blind, permanently fastened to face of wall.

(B) Typical window using lightproof shade within the reveal. Glass must be painted with at least an 8" border, to insure overlap. Shade must be close to glass. Mesh required for glass splinter protection.

(C) Steel sash with fixed glazing blacked out. Stock screen attached to sash frame resists splinters and has opaque material attached to it. APR 1942



(D) Screen with hinged corners to facilitate removal and rolling up. May be stored in closet during the day. Held in place by wedging the upright members inside the interior reveal.
(E) Hung type of opaque, pliable material must be stretched tightly over opening and have sufficient overlap. May be rolled up and stored during the day.

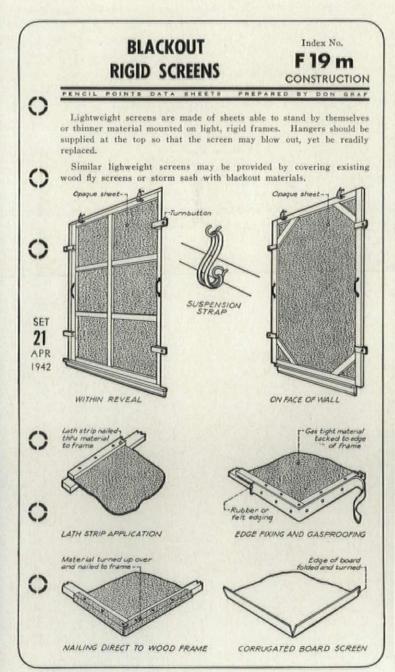
SET

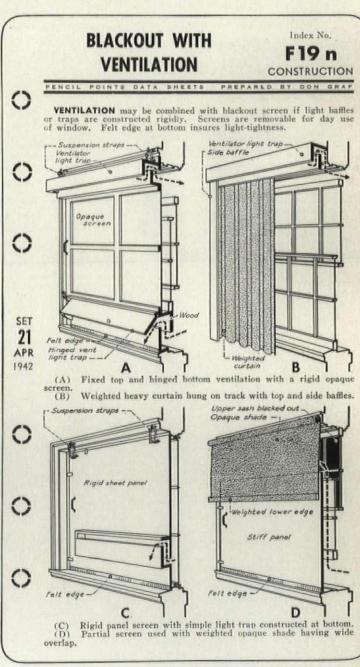
21

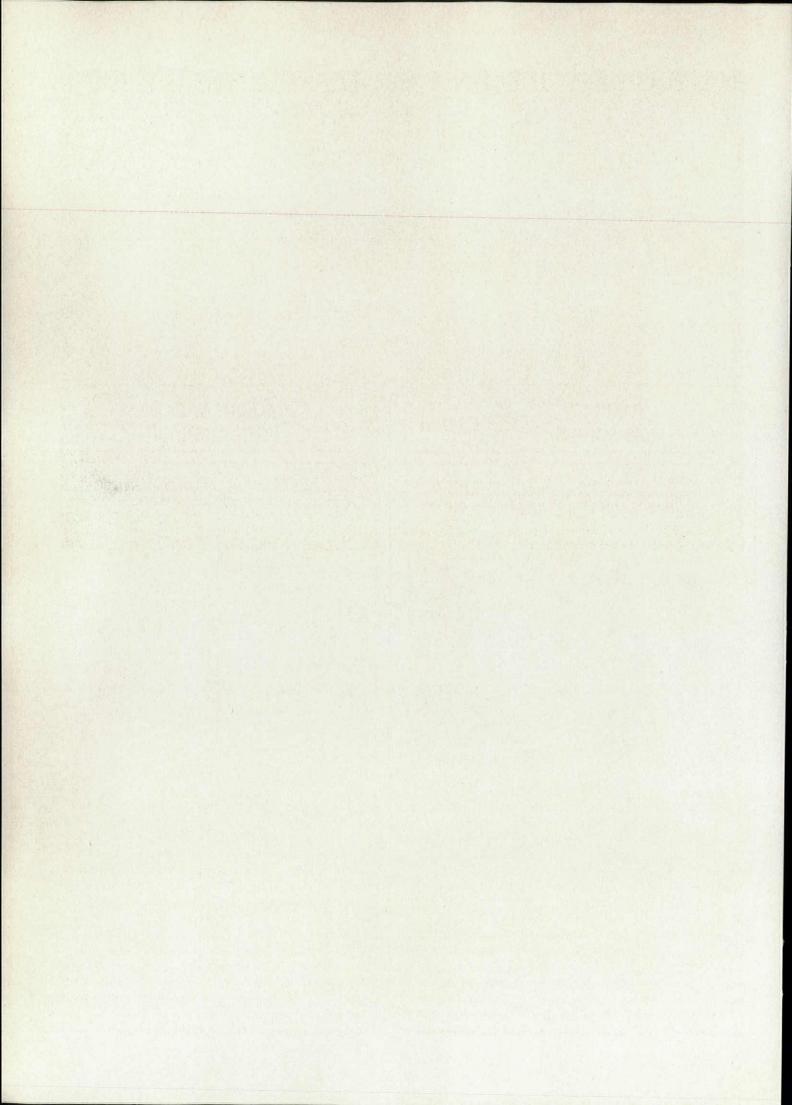
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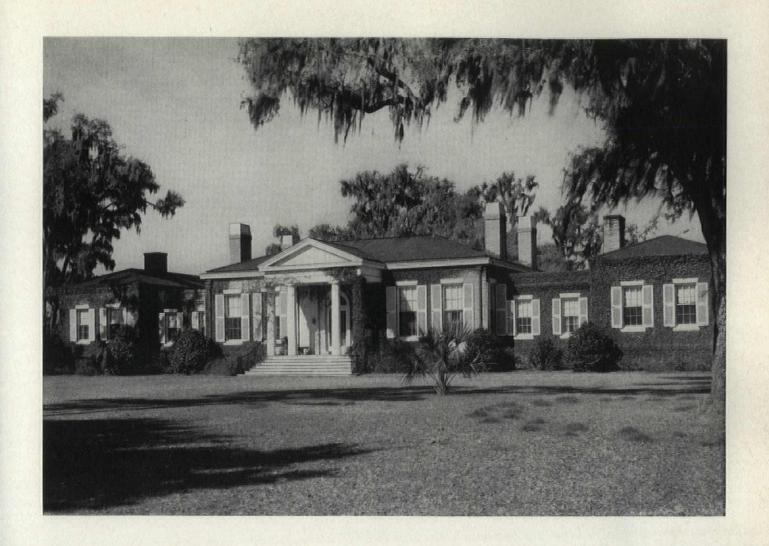
1942

#### PENCIL POINTS DATA SHEETS









#### "CLAY HALL" PLANTATION

SCROGGS & EWING, ARCHITECTS, AUGUSTA, GEORGIA

Reminiscent of many ante-bellum plantation homes in the South is "Clay Hall", residence of Percy K. Hudson in Yemassee, South Carolina. The building, which is in the tradition of the Greek Revival both in plan and exterior design, was erected on the site of the original plantation home of the same name, close to the Combahee River and to the tidewater Coosaw River which formerly flooded the rice fields of the plantation. The foundation walls of the plantation house were built entirely from English-made bricks, obtained from the white-washed-brick slave quarters on the estate. The brick was used just as it came from these houses. Time-tempered face brick for the walls of the house came from an abandoned

rice mill on the premises. Portico columns on both fronts are also of brick, plastered with stucco. The roof is covered with Virginia slate.

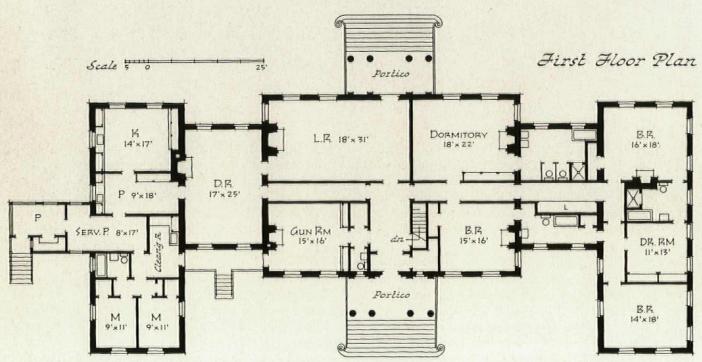
The garden front, shown on this page, has stone steps and a portico identical with the entrance front shown on page 221. From the steps overlooking the garden there is a panoramic view of the river beyond the wide lawn shaded by live oaks and planted with many other trees and shrubs,

The estate, which includes a squash court, duck blinds, stables, kennels, garages, etc., has its own electric plant, as well as its own sanitary and water system. All the necessary mechanical equipment is housed in a separate building, including the heating equipment for the residence itself.

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Situated approximately two miles from the public road, the building is approached through a grove of moss-hung live oaks of enormous size. The driveway ends in a circle at the entrance steps. (See Portico detail across-page.) Robert W. Tebbs photos



"CLAY HALL" PLANTATION IN YEMASSEE, SOUTH CAROLINA -



BY SCROGGS & EWING, ARCHITECTS, OF AUGUSTA, GEORGIA

APRIL 1942



Rooms in Clay Hall are spacious, and ceilings are high. Though this plantation house is but one story, there is a well-ventilated attic, insuring comfort in the warm season. Most of the interior floors are covered with random-width, wide oak planks. The Dining Room (photograph at left) has a scenic wallpaper, and other principal rooms are decorated in a semi-formal style. The Gun Room (see plan on page 220) is paneled with vertical, stained boards



"CLAY HALL" PLANTATION - SCROGGS & EWING, ARCHITECTS

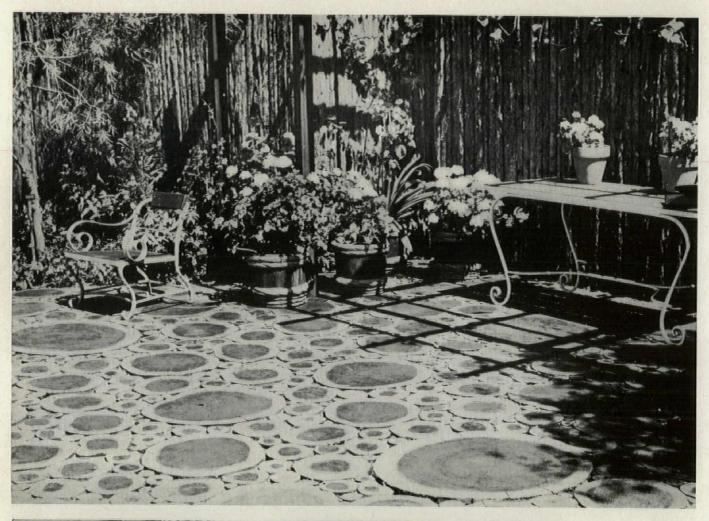
#### SOME LANDSCAPE DETAILS

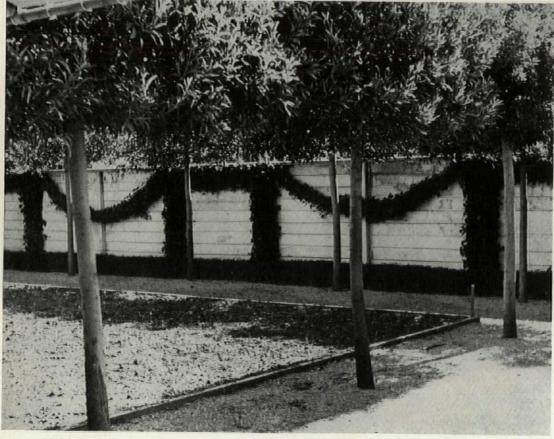
DESIGNED BY THOMAS D. CHURCH, OF SAN FRANCISCO

This brick terrace in the garden of Mr. and Mrs. John Baldwin, at Woodside, California, was designed to curve to one side of the house axis. From here, the owners have an unobstructed view of the distant hills. The lawn inset provides a verdant island in the patterned terrace surface. Potted plants, indigenous to the locality, mark the terrace perimeter

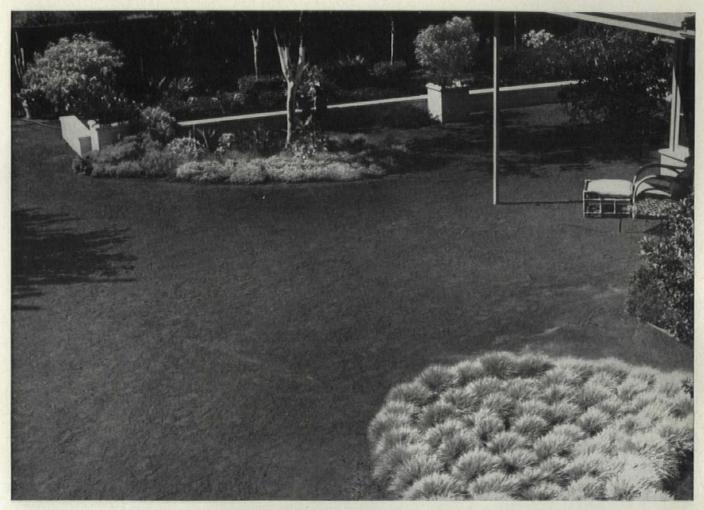


APRIL 1942





LANDSCAPE DETAILS BY THOMAS D. CHURCH, SAN FRANCISCO



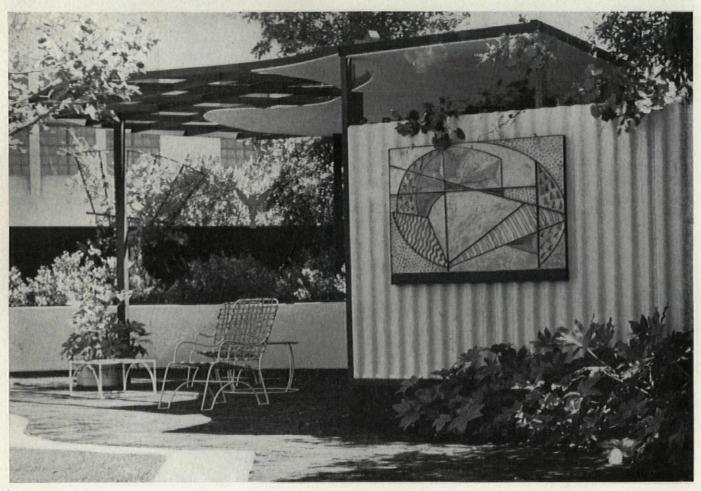
Illustrated across-page, at the top, is a corner of an Exhibit Garden at the 1940 San Francisco Fair, designed by Church. The wattle-type fence is of redwood bark. The paving sections, which are cut from various diameters of redwood logs, form an interesting terrace pattern. Acrosspage is Church's suggestion for the treatment of a neighbor's fence. Acacias are trimmed at fence height to screen the house next door. The ivy is trained in a rope pattern. In the garden for Mr. and Mrs. Hervey Parke Clark, at Woodside, California, (photograph above) the brown gravel terrace is surrounded by a seat-height wood wall. Free forms of gray plant material are inset in the terrace. Shown at right is a brick garden wall and inviting concrete step treatment.



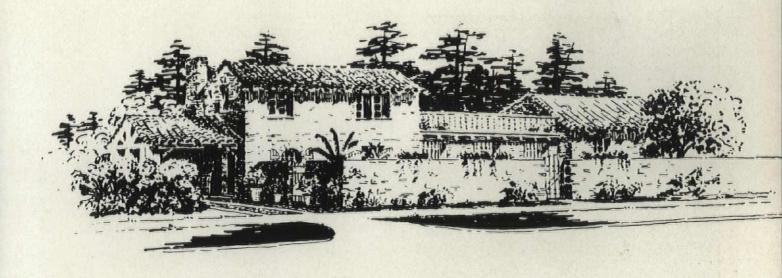
LANDSCAPE DETAILS BY THOMAS D. CHURCH, SAN FRANCISCO



The covered passageway across a brick terrace (photograph at left) is in the garden of Mrs. Vincent Butler, of Pasatiempo, California. The photograph illustrates not only the value of trimming trees to open a view; also the decorative value of branch structure in a garden composition. Below is Church's treatment of a shelter over a terrace. The half solid and half lattice treatment of the shelter achieves distinctive shade and pattern value. On the corrugated asbestos-covered board fence is a concrete and iron mural, executed by Florence Swift. Paving blocks here are of wood, with a brick border

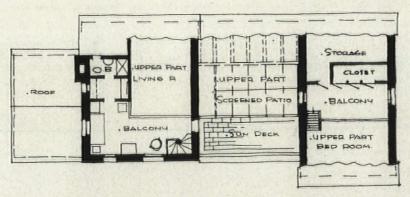


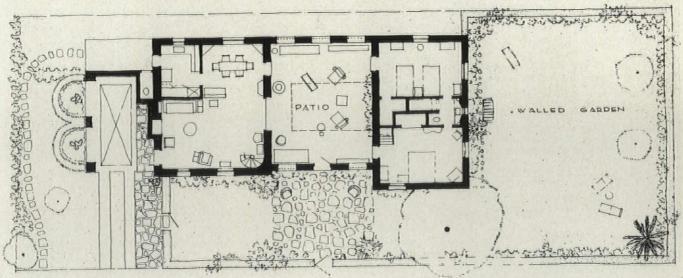
LANDSCAPE DETAILS BY THOMAS D. CHURCH, SAN FRANCISCO



#### HOUSE IN CORAL GABLES

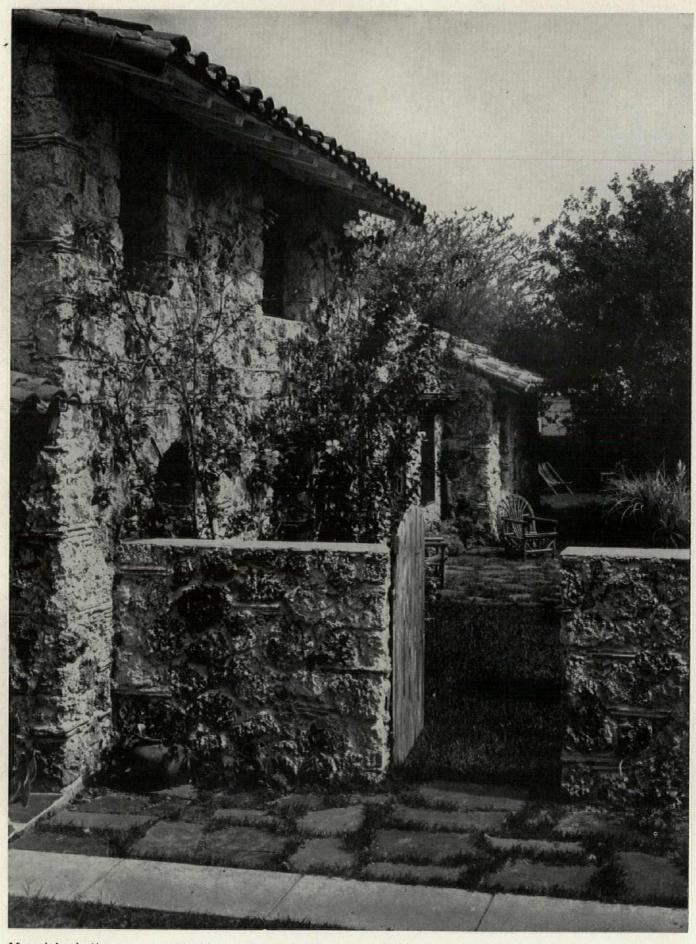
E. DEAN PARMELEE, ARCHITECT





Important factor in the design of this story-and-a-half residence for J. W. Evans in Coral Gables, Florida, was the extensive use of such local materials as coral rock and cypress. The plan was kept open to make the most of the sub-tropical climate, and creates the atmosphere characteristic of informal living

APRIL 1942 227



Materials indigenous to Florida were used wherever possible to enhance local character of the house RESIDENCE FOR J. W. EVANS IN CORAL GABLES, FLORIDA



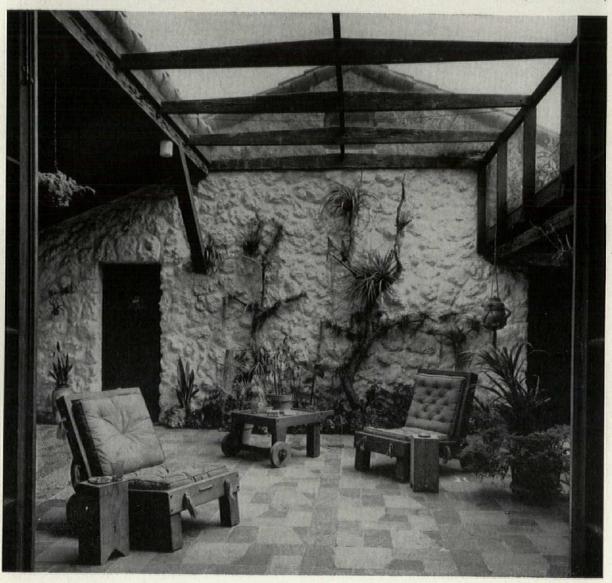
The walls are of coral rock, laid with random strips of red tile placed horizontally. Walls of the Patio, which is paved and screened, (below) are whitewashed coral rock. The roof is of Cuban tile



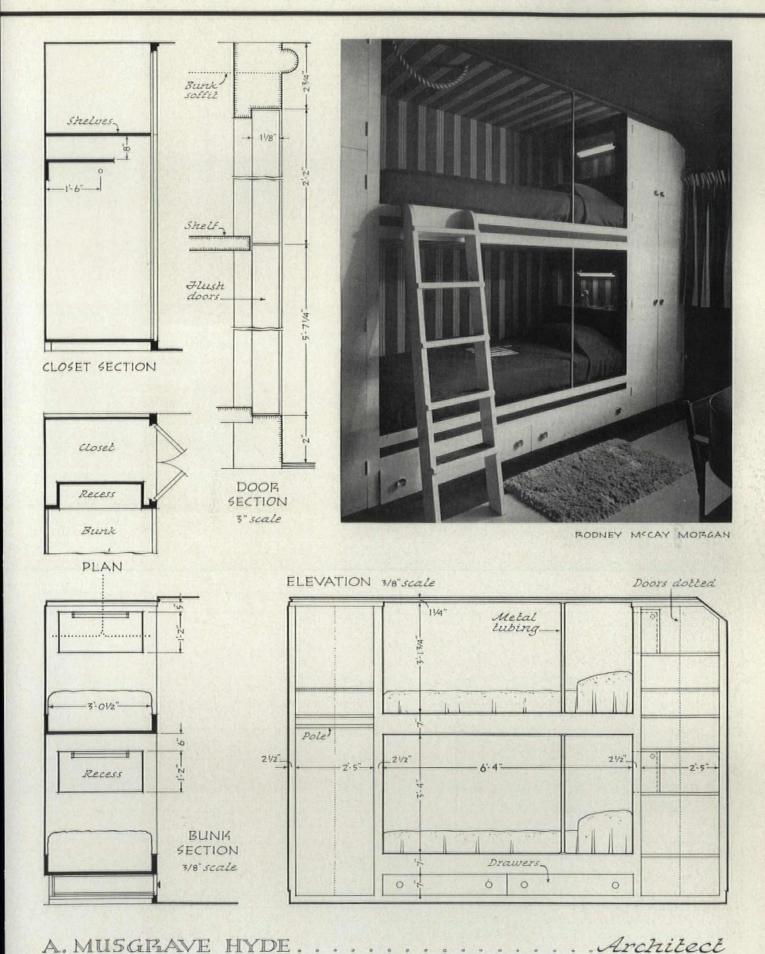
Screening is nailed to the exposed cypress frame. All the interior walls and ceilings are of cypress DESIGNED BY E. DEAN PARMELEE, ARCHITECT, OF MIAMI



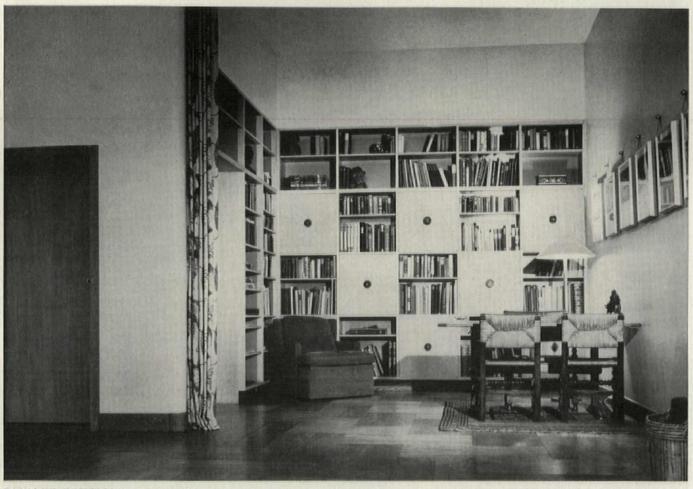
The care-free atmosphere suggested by the layout of the house is conducive to comfortable living. Vermont slate, in variegated colors, covers the floor of the screened Patio (photo below)



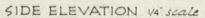
FLORIDA RESIDENCE BY E. DEAN PARMELEE, ARCHITECT

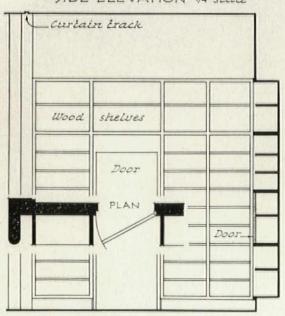


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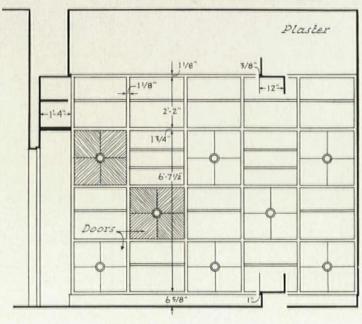


RICHARD GARRISON

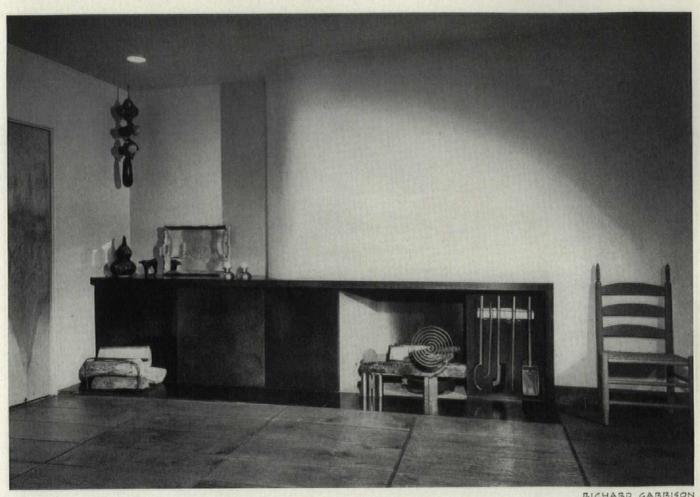




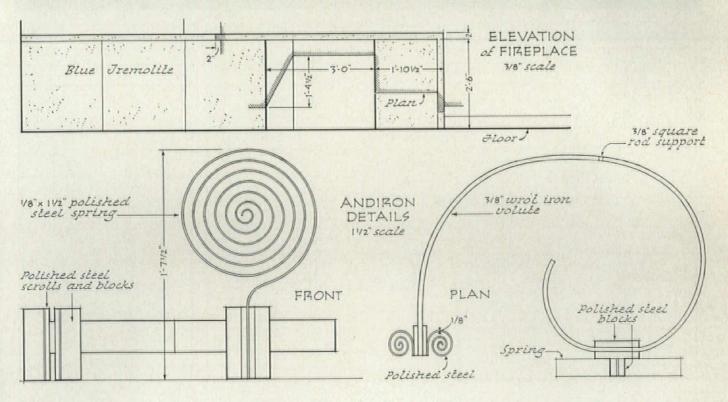
REAR ELEVATION 1/4" scale



GEORGE KOSMAK Architect RUTH GERTH Designer

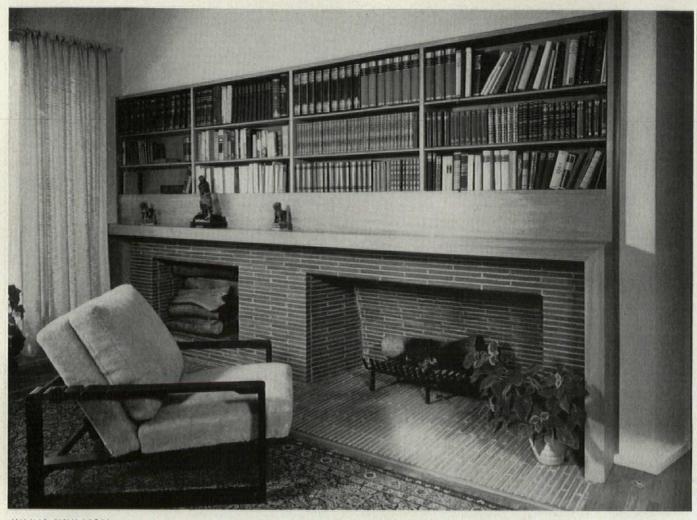


RICHARD GARRISON

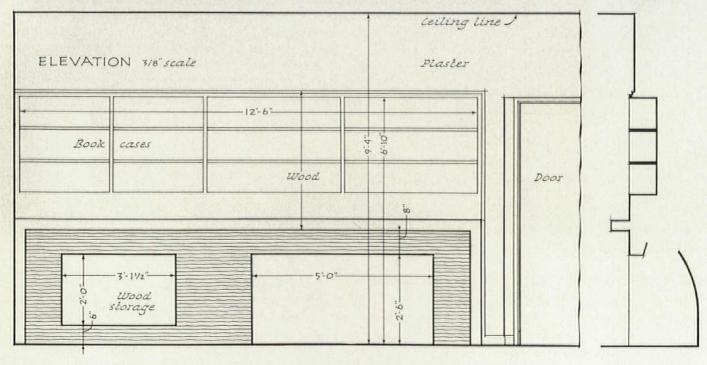


GEORGE KOSMAK Architect

RUTH GERTH Designer



JULIUS SHULMAN



PAUL LASZLO..... Designer

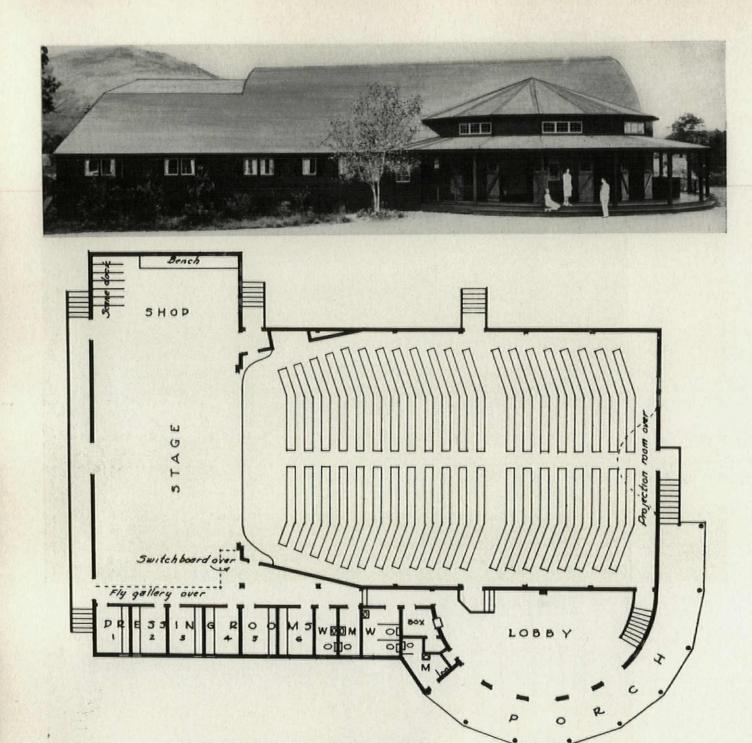
SECTION 3/8" scale

S



WOODSTOCK PLAYHOUSE ALBERT EDWARD MILLIKEN, ARCHITECT

A SUMMER THEATER





The design of the Woodstock Playhouse, a summer stock theater at Woodstock, New York, suggests a modified type of barn construction. The roof is supported on six semi-circular fir trusses, with intermediate arches built of spruce. The absence of posts permits unobstructed vision throughout the theater. The interior is lined with rigid insulation board, in natural color, furred out from the roofers and sheathing. The lobby framing (see detail photograph on page 235) is particularly effective. (All photographs from Lipgar Photo Studio, Kingston, N. Y.)

A SUMMER THEATER - BY ALBERT E. MILLIKEN, ARCHITECT



#### BRISTOL YACHT CLUB

DESIGNED BY NORMAN FRANCIS HERRESHOFF

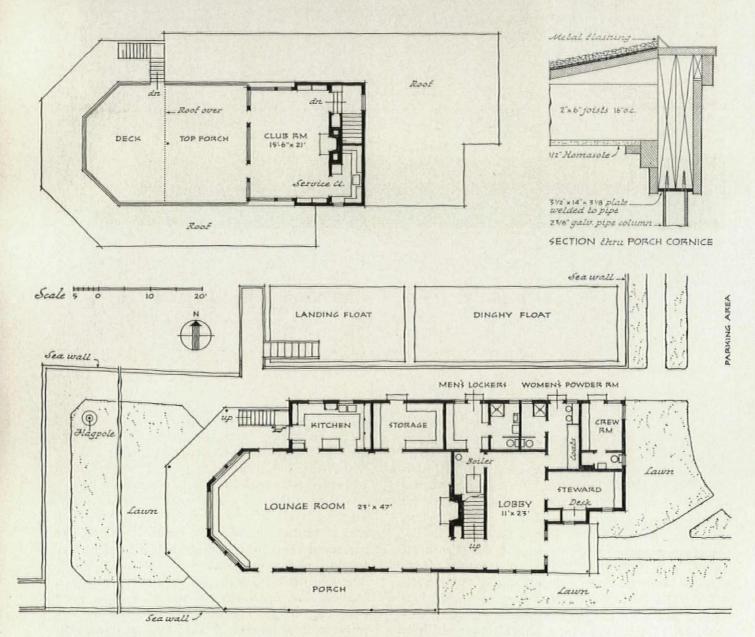
The Yacht Club in Bristol, Rhode Island, was built in 1939 to replace a 45-year-old building which was swept away by a New England hurricane. The building, which is covered with asbestos clapboard, was designed so that both upper and lower Club Rooms command a fine marine view. Entrance to the Club House is through a Lobby which is enameled white to suggest the trim neatness of a boat. Off the Lobby are the men's lockers, the Women's Powder Room, and the Steward's office, The Women's Powder Room is finished in dull grey-blue, with salmon-colored stools and curtains. Beyond the Lobby is the Lounge which is paneled with fir plywood and finished with clear

wax. Furniture here is covered in dark green leather. Decorative accents are provided by dull, coarse-textured, blue-green curtains, pine tables, and small rattan pieces. Also on the main floor are a kitchen, a crew's room where the paid hands may wash up and sit around and a storage room for oars and other small gear. In addition to this storage room there is a storage shed on the property for outboard motors, etc.

The Club Room on the second floor is paneled in beaded pine sheathing, and waxed. Furniture here is covered in maroon and light tan leather. Decorative accessories include dull rust curtains, rattan tables and lamps, and natural color blinds.



No plaster was used in the building. Instead, fir plywood and beaded pine sheathing were used on the first floor Lounge and the second floor Club Room. Steel diagonal braces in the kitchen partitions are anchored in the foundation to strengthen the building against storms of hurricane velocity. (Photographs by Richard Garrison, New York)



A YACHT CLUB DESIGNED BY NORMAN FRANCIS HERRESHOFF

# Roof Skylight Scale 5 0 10 Skylight SUN DECK Covered section

Sun Deck

# GARAGE 117'x 19' Sunks B.R. B.R. ONNER M. OWNER L.R. and D.R. 14'x 27'

Main Floor

TANIA & PUMP RM

Sécel girders

FLOAT

Hoist over

Foundation

#### BOAT HOUSE

#### EDWIN A. KOCH, ARCHITECT

A glassed-in living-dining room, open passageways to permit the free circulation of air, a broad sun deck, and a wood-burning fireplace are some of the best features of this boat house, named by the architect, "Bridging Weekends." On either side of the two-car garage are gates to passageways, one of which leads to the living-dining room, the other to the kitchen. The owner's stateroom, the maid's room, the two guest rooms, as well as the kitchen, all face these passageways. Skylights admit the necessary light and air to the two bathrooms. The combination living-dining room is enclosed by sliding windows

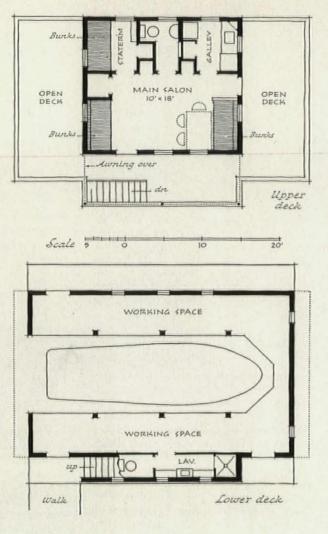


#### BOAT HOUSE

#### EDWIN A. KOCH, ARCHITECT

Comfortable living quarters for a man and his family are provided in this boat house designed for week-end use and as a summer vacation retreat. The frame structure is covered with waterproof plywood, and the roof deck is insulated. The lower deck could provide additional sleeping space through the use of hinged berths along the wall, as well as housing the family speedboat. A stair from the landing stage leads to the upper deck, where a trap door is used to close off the stair well. Living quarters consist of a lounge, a private stateroom, and bunk space for four, in addition to kitchen, toilet, and closet facilities. Three large open decks surround the Main Saloon





A hinged gangplank leads to this boat house which is anchored about fifty feet offshore. Since the boathouse is not built on piles, permanently in place, but is floated on oil drum pontoons, it is possible to change its location whenever and wherever the owner desires

#### PAINTING SPECIFICATIONS

BY W. C. WOODYARD

EDITOR'S NOTE—Mr. Woodyard is manager of the Architectural Department of Pratt & Lambert, Inc., Chicago, where for more than 25 years he has been rendering a technical and decorative service to architects. For the past 12 years he has set up painting programs for insurance companies and for property management companies in the Southwest and Central West.

Decoration is an integral part of architecture; it is one of the trinity -form, pattern, and color-that af-fords the means of decorative expression. It is the last finishing touch to a work of creative art. Instead of affording a climactic note, all too often the architect's creative dream reaches a disappointing anticlimax in the painting and deco-rating job. Shall we accept this result as the inevitable? Is it reasonable to assume that craftsmanship in painting and decorating is a lost art, and reconcile ourselves to unsatisfactory painting work? Is it fair to the painting fraternity to assume that there is no inherent desire or pride in craftsmanship in painting work as in other crafts if such pride in craftsmanship has a chance to survive in competition? In the final analysis, is it not more logical and constructive for the architect to accept responsibility for outlawing poor work and encouraging a higher standard of craftsmanship by more scientific definition of what will be exacted on the job? In fact, is that not the architect's only recourse in dealing with this prob-lem? Let us examine the basic economics of painting.

We may view today varnished office building trim that has stood up for 25 to 30 years without any refinishing, that is in almost as perfect condition today as the adjoining marble walls. We may view enameled woodwork—much of it that has stood for 15 to 20 years, that is beautiful to see and touch. We may view floors in residences that have been maintained for 15 or 20 years with occasional recoatings, thereby avoiding recurrent, messy, floor-sanding jobs. By contrast, we have also observed the costly piling of coat upon coat on varnished trim until the character of the original wood is lost. We have seen the repeated painting of enameled trim until the delicate details of the moldings were lost with the many smudgy coats of paint or enamel. We have observed miserable-looking floors that were a continuous source of expense and dissatisfaction. An architect cannot be responsible for the way a building is taken care of after he has turned it over to his client, but he does accept responsibility for the beauty and durability of the original paint job, and the character of that original job may preclude or necessitate continuous recoatingrecoatings that are costly from the standpoint of expense, but even more costly from the standpoint of inducing premature obsolescence resulting from too many coats of paint, varnish, or enamel.

What has science contributed to the problem of sound painting results? It may perhaps be best summed up by the statement that there has probably been a greater advance in the technological efficiency of paint products during the past decade than in any period in its history. Take, for example, the priming or foundation coats to which a large proportion of unsatisfactory painting results are at-tributable. Wood, plaster, iron, brick, tile, and cement are diverse in composition and character, and from the standpoint of adhesion, absorption, moisture retention, and other qualities offer varying finishing problems. Scarcely more than a decade ago the same priming coat was applied to all surfaces with varying results. Years of intensive research of the materials to be finished, as well as the finishing materials, have resulted in prime coats with far greater adhesion, sealing, moisture resistance, rust inhibitive or other qualities as required by the particular surface. The same research has carried through to the undercoats and finishing coats.

#### **HUMAN FACTOR**

It is well to view the problem from the standpoint of the conscientious contractor who is trying to build a reputation for quality work, and yet is faced with the problem of surviving in a trade that is unequaled in the possibilities for evasion. It is unfair to condemn the painting fraternity as a whole because of unsatisfactory painting work, since there is just as much reason for a painting contractor to take pride in the quality of his handiwork as in any other trade. A far more constructive course would be to encourage conscientious work by improving specifications and supervision.

Frequently, the painting contractor finds he must look beyond the plans and specifications in arriving at his estimate, if he expects to get the job. Many specifications are impractical of fulfillment to the letter, and some architects are touchy about criticism of the adequacy or practicability of the specifications they write. Some specifications are overly liberal in their provisions for the number of coats to be applied, possibly as a hedge for bargaining purposes in case of later changes or additions, instead of covering possible changes in alter-

nate provisions.

Often the specifications are not patterned to fit what the job will stand and, instead of adjusting specifications to fit the pocketbook, an effort is made to lower the contractor's figure. Such a practice invites evasion and compromises control over the results.

The net result is that the conscientious contractor is frequently not only forced to gamble on the amount and quality of work that can be or will be exacted, but, being human and anxious to get the job, he is also forced to gamble on how much his competitor is likely to discount what is actually going to be exacted.

The primary purpose of a specification is to define adequately the work contemplated. We do not expect to get something for nothing; we are concerned only with getting what we pay for. The greatest encouragement an architect can offer the conscientious, honest contractor is clear, specific, comprehensive specifications that can and will be enforced, with the enforcement features safeguarded.

#### ENAMEL WORK

There are many ways in which an architect can avoid evasion of a coat or two on the work. Take enamel work for example. While 5-coat enamel work is still extensively specified by architects, it is totally unnecessary because of improvements in wood primers and undercoatings, and we will therefore illustrate our point with a 4coat enamel job. How often has an architect found himself powerless to prove his condemnation of a completed enamel job that he knows is unsatisfactory. He judges the finished job, but he cannot lift off coat by coat to determine the number and character of coats applied. Improper first coaters may have been applied, ropey flat paints may have followed instead of modern, free-flowing enamel undercoatings. It is almost impossible to definitely prove the short cut of one or two coats even though the job may be unquestionably unsatisfactory. On the other hand, a priming coat is easily identified, a second coat of a modern, free-flowing undercoating looks very different from a prime coat, a third coat of gloss enamel is obviously identifiable, and the final eggshell enamel coat is, of course, different. But it may be claimed that the contractor works in various parts of the building and we may still miss seeing the evasion of one coat. The clever contractor who is bent on evasion will willingly recoat all rooms in which there is a complaint and still miss a coat on the major part of the work.

We often make superintendence of painting work a very arduous task when it can be made a very simple matter. Ask the contractor to assume responsibility for checking himself by inserting such a safeguard in the specifications:

"All work in which a coat of material has been applied must be inspected and approved by the superintendent before the application of the succeeding specified coat; otherwise, no credit for the coat applied will be given, and the contractor automatically assumes the responsibility to recoat the work in question. The painting contractor will furnish the superintendent with a report of the particular coat applied when completed for inspection and approval to comply with the above."

This is offered as an illustration

of the many provisions that may be inserted in specifications not only to safeguard the architect's interest, but to encourage contractors who are endeavoring to maintain higher standards in painting work.

The specification of products is always a problem to the architect. Policy in this regard varies. Specifications by analysis are unsatis-factory and rarely resorted to because there is often a chemical change in the treatment and fusion of ingredients, and it has not proven possible to define adequately the highly-important factor of processing in manufacture. Furthermore, in a formula specification, it is necessary to determine just what the raw ingredients should be, and the proportions that should go into a product. No two of the foremost half dozen paint technicians in the country are in complete agreement as to the most efficient formulation of the various kinds of paint.

#### FORMULA SPECIFICATION

The main reason that the architect avoids using a formula specification is because he does not choose to assume the responsibility and relatively high cost of determining whether the dozen or more different products that go into his specifications measure up to the formulas he has selected. Some architects believe the soundest policy is to specify outright the product de-sired, on the theory that this method offers the best protection to their client. Others are much opposed to specifying a product ex-clusively and specify a given prod-uct or approved equal. This is likewise a sound procedure provided the word "approved" is not omitted, and provided that cheaper products are not approved, because the latter course is not in the interest of the client, and is unfair to contractors who have taken their time to bid on the higher grade materials. Still other architects specify three or four brands, or "equal." The latter course leads to more confusion in deciding how many and which particular products are in a given category of equality, if they are in fact equal.

After all, isn't the main objective to set up a standard of quality for a client's job and a common standard on which to get competitive contractors' bids, rather than to attempt to rate manufacturers?

Definitely specify the product which you believe best adapted for the work, as you would probably do if you were writing a specification for your own home, incorporating as a part of your specification the following:

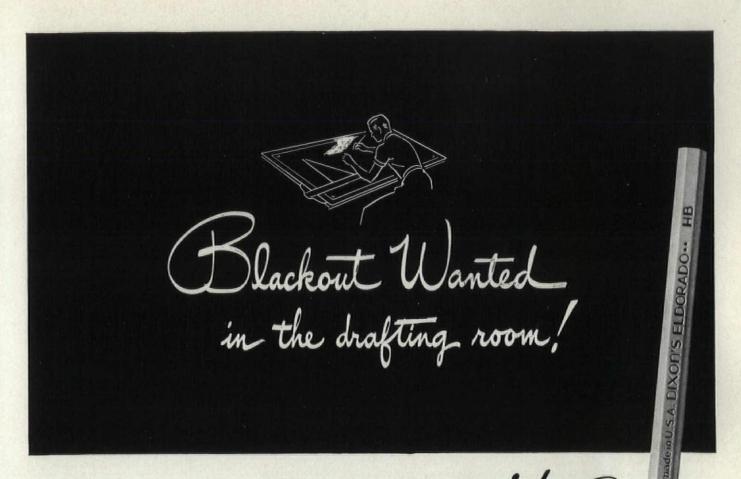
"The bids to be considered must include a bid on goods herein specified, but contractor may submit alternate bids on materials which he considers fully equal to those specified; provided he appends the name of the manufacturer and explicit designation of each product he offers as a substitute, stating the amount to be added to or deducted from bid for such substitution. The architect reserves the right to award the contract to the lowest bidder on the goods specified, or any accepted substitutes, proposed in the alternate bids submitted as above. After the award, no substitution of materials for those mentioned in the accepted bid will be permitted."

The basic bid on such a standard commits all contractors to one bid on exactly the same thing, permitting a fair comparison of figures.

If a contractor wants to effect a savings for himself on material costs in an "or equal" or open specification, he normally waits until he gets the contract before making the request. Under the terms of the above specification he must offer one figure based on the architect's standard. If there is a savings to be effected in the use of a cheaper alternate, the client gets the benefit of the savings. In any event, the choice of the alternate or the architect's standard is left to the architect, and the matter is settled when the contract is let, without the time-consuming barterings over approvals which often follow after the contractor has secured the job.

There is a steadily-changing evolution in finishing materials and painting technique, and the architect needs technical guidance in securing the best results. The architect seeks the highest quality materials, seeks to take advantage of the development of science, and seeks such guidance and cooperation if it is offered and given with a high sense of integrity of purpose, and with the realization that the architect and manufacturer share a common interest in the high quality of the finished result.

A large variance in the range of bids on painting specifications, sometimes as great as 50 to 100%, offers a challenge to specification writing. It has proven possible to bring bids within a narrow range. Nothing is attained in the way of results by condemning the painting fraternity; we must share responsibility in elevating standards. That may be accomplished by anticipating and giving study and definition to the many controversial situations which arise, and by a more comprehensive and detailed definition of what will be exacted.



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The Department of Architecture at Carnegie Institute of Technology, Pittsburgh, Pa., is fortunate in having the facilities of space and shop instruction to afford students first-hand experience in the realistic presentation of one of their own design efforts. The two structures shown here (above, "Vacation House to cost less than \$1,000"; below, "Recreation Center for a Girls' Camp") were designed, built, and landscaped by sophomore architects, and decorated and furnished by students in the Department of Interior Decoration. Students are given the project as a competition in the first half of the sophomore year, and the actual building is undertaken in the second half of the year. Architects lay brick, erect wood framing, and prepare and install doors, windows, and interior finish. Students of decoration collaborate in designing furniture and decoration. After the structure is painted the architects spread soil, plant grass seed, and distribute plants. This project is opened to the public for an evening late in the spring term, after which everything is dismantled. What material is salvageable is stored away for future use. Photographs are by Russell P. Hay, Inc.



#### BOSTON NOTES

Architectural registration began in February with the distribution of application blanks to all known Massachusetts practitioners, great and small. Governor Saltonstall's selection of the five-man board had a reasonably statewide cast, chairmaned by John T. Whitmore, secretaried by Robert A. Gaston, Jr., and staffed by Henry J. Tessier, Israel T. Almy, and G. F. Springall. With the application blank (on its return trip) goes a bona fide check for \$25 and one's photographic likeness. And remember to dispatch

these items before January 1, 1943, because Grandpa and the Old Year lose their preferred status simultaneously. After that only the bright young men who know their thermo-couples and Aufgepoople's Theory of the Elastic Modulus may feel very cocky about gaining certificatory stature. In passing, if any Bostonian lacks a suitable photograph of himself let him stop in at one of the Scollay Square shooting galleries enroute to the Old Howard. The snaps will be developed and printed while Hinda Wassau is doing her stuff; will be ready at curtain-fall. They cost little, and

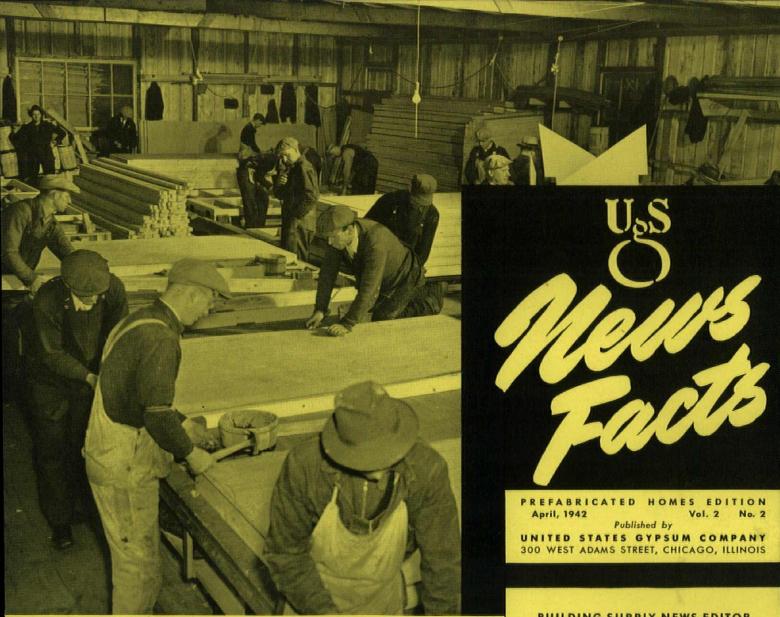
#### HERE, THERE, THIS & THAT

if you detect a dissipated look in them it's probably your own fault.

There has been some harp-twanging on familiar tunes concerning interrelated architectural groupsemployer, employe-and the hope for greater common effort. Gist of a recent deliverance, from one who ought to know, likened the sus-picion of ulterior motives and fear of losing autonomy to world situations where realism bucks emotional group antipathy. It can be shown that, without abrogating group identity, all architectural organizations may be formed into an alliance to secure their threatened profession's right of existence. Probably nobody will deny the urgency, or that it is national rather than sectional, or that it cannot be fought at a distance. This belief and principle will be given a trial if the independent Massachusetts State Association of Architects asks its members how they would like to affiliate with the A.I.A. for defensive purposes. It's ten to one they'd be a welcome addition to the power rating of the A.I.A.'s Washington task force, for the Institute has undoubtedly observed that there is more strength through numbers than joy, pedigrees, or pure reason.

The Boston Society of Architects, and the State Association, held elections in January, with William Roger Greeley following William Emerson as president of the first named organization. In MSAA. President John T. Whitmore and Treasurer Samuel T. Dubitsky continue their second year of service, the new elections concerning these men and offices-Charles R. Hoyle, Vice President; Wm. Bradford Sprout, Jr., Secretary; Directors Clifford C. Allbright, Israel T. Almy, George H. Burr, Robert Allen Gook, Bernhard Dirks, Godfrey K. Downer, S. S. Eisenberg, Arthur Englund, Walter H. Gaffney, S. Tyson Haldeman, J. Ray-mond Hampson, William F. Sawyer, Harry M. Seabury, and Richard J. Shaw. At the annual meeting "Joe" Leland voiced encouraging hopes for our war effort in the building industry, based on his intimate knowledge of the national scene. Later, at the dinner, Willard F. deLue, Night Managing Editor of the Boston Globe, talked

(Continued on page 58)



Panels for the prefabricated homes in Halifax were constructed at the mill and trucked to the site of the development.

### Canadian WAR HOUSING

Early in 1941, Wartime Housing Limited was organized. Supplied with funds by the Canadian Government, Wartime Housing proceeded to let contracts for large group housing projects to provide living accommodations for workers in rapidly expanding war industries.

Architect W. L. Somerville wanted a workman's small home—comfortable, sturdily built, insulated, and fire-resistant—yet low in cost. Speed of construction suggested the importance of using power saws, planers and other tools. Large assembly units

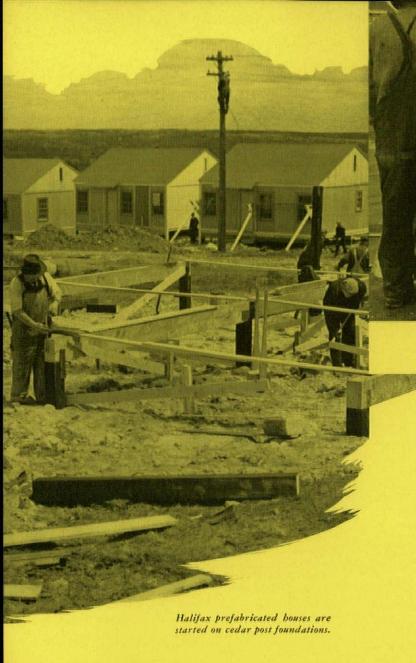
for the floors, walls, and roofs would not only be quickly erected, but would also provide a maximum of salvage value. In the method adopted after careful study, these sectional houses come to the building site in floor, wall, ceiling and roof panels—assembled at the mill in downtown Halifax. Carloads of materials pour into the mill from railroad cars, and truckloads of house units rumble down the main street to hasten Canada's war effort. The houses are rolling into place almost 10 a day.

# SEES PREFABRICATION GROWTH

In the current issue the editor of *Building Supply News*, a leading dealer publication, points out that if it were not for the war, prefabrication might be 20 years longer in coming.

Perhaps one of the principal reasons that the economies of power tool construction had not been realized has been the absence of pressure together with a sufficiently large volume for testing methods. As the BSN editor points out, "Huge government defense housing orders will give prefabrication a chance to make mistakes and correct them and to work out more practicable ideas."

The work of the American Standards Committee on Modular Planning will receive a tremendous impetus by any developments in prefabrication.



The floor panels are placed over the foundation and bolted together, providing a finished floor.

#### FOUNDATIONS

Cedar posts are driven below frost to form the foundations for the house. On these posts are placed beams to supply bearing for the ends of the floor panels. An intermediate line of support provides two bays of 12'-0" span.

#### **FLOOR PANELS**

First come the floor units or panels 4'-0"x12'-0", framed with 2"x8" joists with cross supports of 2"x4"s. They are covered with a moisture-resisting board over which tongue and groove fir flooring is nailed in place. Under this firm floor, Red Top Paper-Backed Insulating Wool is tucked snugly between 2"x4"s and stitched in with a Bostitch staple gun. With Red Top Insulating Wool between ground and floor, the house

Dividing partitions assembled in sections at the mill are then put in place ready for Sheetrock Wallboard.

After installation of electric wiring and plumbing, Red Top Insulating Wool is tacked snugly in place, using a Bostitch stapler.







Exterior wall panels prefabricated at the mill, including windows and doors, are then bolted into position to form the outside walls.



The ceiling panel with Sheetrock attached is placed in its position on top of the walls and dividing partitions.

will be warm and comfortable, free from draughts or moisture in the coldest weather.

The floor panels are clamped together over cedar post foundations and then bolted from underneath and strapped to the posts. This provides a firm platform 24'-0"x24'-0", and the house floor is then ready for side wall panels.

#### WALL PANELS

The side wall panels are framed in 2"x4"s with windows already in place. The outside is covered with a weather-proofed plywood with overlapping edges to cover panel joints. This exterior is painted with a special synthetic resin paint in various colors after the house has been completely assembled. The inside of these wall panels is left unfinished to provide for wiring on the job. The wall panels are bolted upright and are also tied into the dividing partitions which frame the first floor—ready for ceilings.

#### **CEILING PANELS**

Now come the ceiling panels, 4'-0"x12'-0", and framed in 2"x4"s (with double depth frames used for 2-story houses to

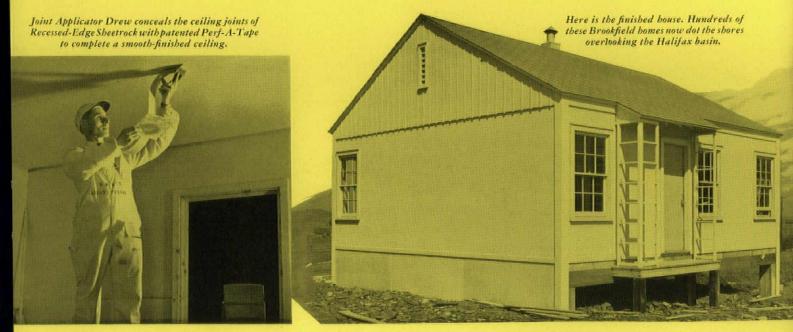
carry floor loads). Mr. Lang, Superintendent, saved several hours in construction time by attaching %"x4'x12' fire-proof Recessed-Edge Sheetrock wallboard to ceiling panels at the factory. This provides a clear sweep of ceiling over the entire area—supported by side wall panels and dividing partitions. No cutting, fitting or overhead nailing. And what a good-looking, smooth ceiling in every room!

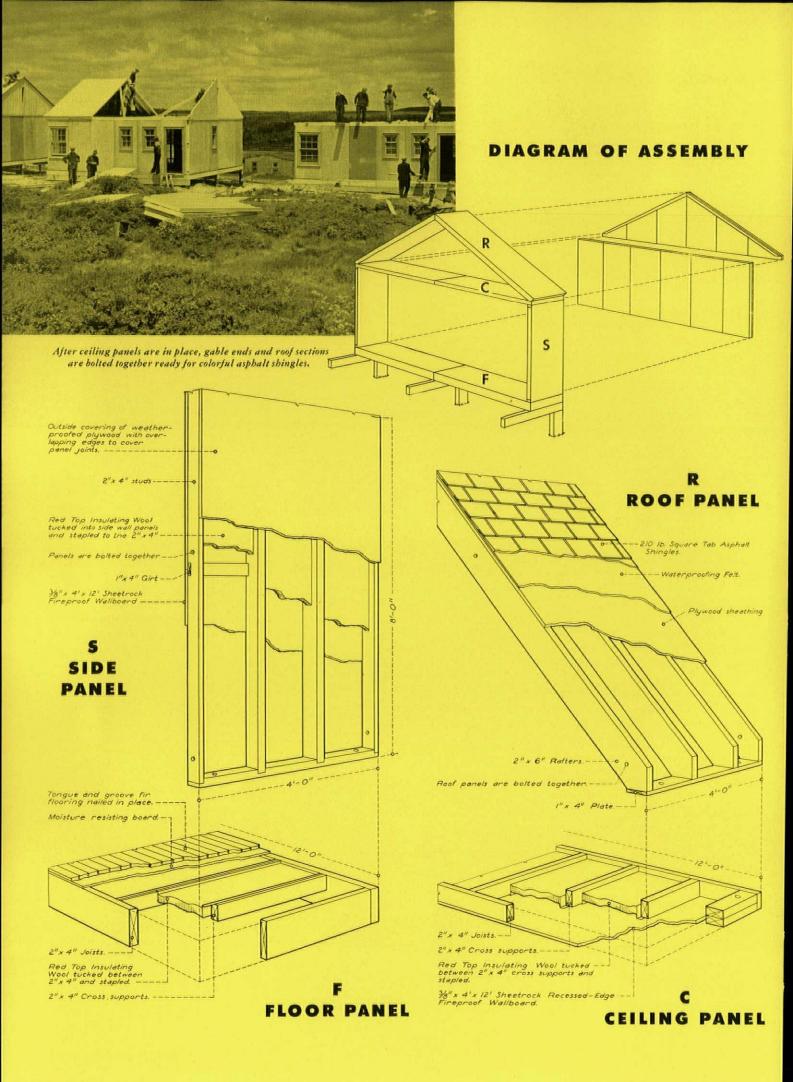
#### **ROOF PANELS**

Roof panels are next—covered with plywood sheathing and bolted in place from the inside. The roof covering comprises 210-lb. square tab asphalt shingles in beautiful colors—red, green, blue-black, etc.—similar to the United States Gypsum Company's double-coverage roofs. Here is fire resistance combined with beauty at low cost, and plenty of wear against the rugged northeast storms that sweep the coast.

#### INTERIOR PARTITIONS

Most important is the finished interior of this little home. The ceilings are in place with Recessed-Edge Sheetrock





#### (INTERIOR DECORATIONS, CONTINUED)

wallboard, the outside wall frames are now wired, and the interior partition frames divide off living room, kitchen and two bedrooms. Here are the next operations:

Red Top Insulating Wool with moistureresistant paper-backing is tucked into the side wall panels and stapled to the 2"x4"s—also in the ceiling panels over the Sheetrock wallboard. Now the house is completely wrapped in a blanket of Red Top insulation—floors, walls and ceiling. Here is comfort and important fuel savings, not to mention the reduced cost of the heating unit.

Next, large panels of fireproof Sheetrock wallboard, %"x4'x12', are slid into the living room which is 12'-0"x15'-0". Holding the sheet up in horizontal position to the wall, window and door openings are marked and cut out by sawing down the scoring across a straight edge. Presto! one half the wall is nailed in place. The same for the upper half and, except for a molding strip over the horizontal joint, we have a seamless wall—no joints to treat—no breaks over windows or doors. And there is no waste! Cut-outs for doors and windows are used in closets.

In the next room we find the 12-foot length must be trimmed 2" off the end. A sharp knife or linoleum cutter drawn along a straight edge and off comes the narrow strip. Such close trim is made possible by new reinforced core fibers interlacing with the gypsum in Sheetrock wallboard for added strength.

#### INTERIOR FINISH

Dividing partitions are then covered both sides with Sheetrock applied horizontally and forming rooms whose side walls are ready for decoration.

For smooth, jointless ceilings, Mr. Drew, joint treatment applicator, with helpers, closes up the panel joints of Recessed-Edge Sheetrock with patented Perf-A-Tape, sold exclusively with Sheetrock. The perforated tape is cut to desired length and after an application of the Perf-A-Tape Cement, the tape is set in position by drawing the flexible 4" Sheetrock knife over the seam. Later, Mr. Drew comes back and applies a finish coat of cement. Nails which do not occur at joints are driven home with a hammer so that nail head is slightly below surface, and then spotted with cement. This leaves a smooth, unbroken surface ready for the painter.

Now we have smooth walls and ceilings of Sheetrock. Not a joint is visible anywhere . . . because even the corners are treated with Perf-A-Tape and cement. Indeed, it is a cozy, sanitary and fireproof interior with the lasting quality against the wear and tear that houses get when occupied by growing families.



Removing old style porch from USG Research Remodeling House. Eugene Yoita, Chicago, Architect.

## REVEALED BY USG PROJECT

PARK RIDGE, ILLINOIS—The "USG Remodel Research House" project of the U.S. Gypsum Company will bring before the public the value of modernization when the building of a new home is not possible—as well as to show the advisability of retaining an architect to design and supervise remodeling.

A later issue of News-Facts is planned to present the new information developed by this project on the subjects of fire protection and fire insurance ratings, insulation, heating and ventilating, illumination, electrical and gas service, household utilities, family health and safety, home comfort and efficiency, interior design, decoration and furnishing.

The tearing out that has been required by the re-planning of the house is now completed. The installation of the new work has begun. Complete photographic records and cost records, room by room, are being meticulously kept. This information will be available to all those architects who are shifting from new building to modernization because of priorities.

Architect Eugene Voita is supervising the statistical records of labor and materials involved in each phase of the modernization. News-Facts will present the quantities of materials and man-hour units of labor so that similar work throughout the country can be accurately estimated on the basis of prevailing local material prices and wage scales.

The home will be modernized to meet the needs of a typical middle income American family of four, chosen on the basis of United States Department of Labor statistics and other studies on urban housing.

# Save Plails

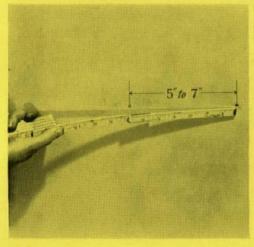
#### WITH SHEETROCK AND GYPLAP

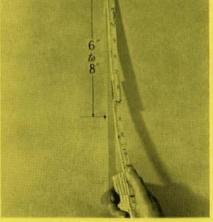


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With Sheetrock interiors, nails may be spaced from 5 to 7 inches apart on ceilings—should not be closer than %" to edge of board. On walls, space nails 6 to 8" apart. By using Gyplap on outside walls and Sheetrock inside, you cut nail requirements to the minimum.



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- **V** I make the blueprints for the production line—in fact, I design the production line itself.
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#### PUBLICATIONS ON MATERIALS AND EQUIPMENT

of Interest to Architects, Draftsmen, and Specification Writers

The publications mentioned here are  $81/2 \times 11$  unless otherwise noted, and will be sent free upon request to Pencil Points readers by the firms issuing them. When writing, please mention Pencil Points.

INSULATION — Reyn-O-Cell cellular fibre cotton insulation for the home—what it is, its construction, how it is applied—is described in a 3½ x 6¼ pamphlet from Reynolds Metals Co., Building Products Division, Federal Reserve Bank Bldg., Richmond, Va.

HEATING UNITS—Three 4-page descriptive catalogs have been issued by Fitzgibbons Boiler Co., Inc., 101 Park Ave., New York, on its various defense housing heating units. The catalogs give construction and operating features on the 80 FWA model, a coal burning warm air furnace; 400 Series steel boiler in either steam or hot water for oil, gas, stoker, or coal handfiring; and the three models of its Directair direct-fired air conditioner for residential heating.

CONTROL DEVICES—A 56-page, two-color catalog, No. 8301, from Brown Instrument Co., Wayne & Roberts Aves., Philadelphia, Pa., presents a comprehensive source of information on automatic control devices for industrial processes. Photographs illustrate the various controls and safeguards. Complete specifications and informative details are given for all types.

AIR CONDITIONING – Vol. 1, No. 1, of Aspiration, new house organ of Anemostat Corp. of America, 10 E. 39th St., New York, is a 4-page folder, issued primarily for the firm's sales force. The issue contains a description of various instruments used in the air conditioning field, a brief history of the firm, and a biography of the firm's New York representative.

HISTORICAL—Effective piece of institutional advertising is the historical sketch of Devoe & Raynolds Co. Inc., 44th St. and First Ave., New York, entitled "The Colorful Years." The history of this paint manufacturing company (founded in 1754) has been reproduced in a 64-page booklet, 7 x 10, illustrated with photographs and reproductions of historical documents from the company's files.

ROAD BUILDING—A 9 x 12 booklet, 40 pages, "Better Roads Ahead", from the Hercules Powder Co. Inc., Naval Stores Department, Wilmington, Del., contains a number of articles from leading technical journals telling the story of Vinsol-treated cement, which imparts to concrete resistance to scaling and disintegration, PLUMBING FIXTURES—A condensed catalog, 24-pages, "Styled Plumbing", shows a representative collection of Eljer plumbing fixtures of vitreous china, enameled cast iron, and brass for homes and multiple housing projects, commercial and institutional buildings, may be had from Eljer Co., Ford City, Pa.

Also published by the same firm: 81/2 x 6 booklet, 24 pages, showing in actual color the various bathroom fixture combinations made by

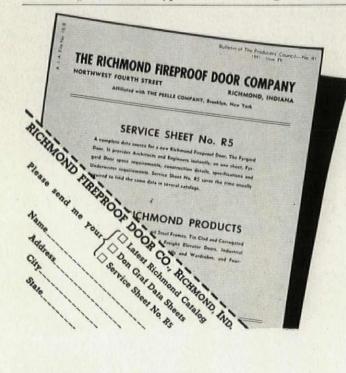
the firm.

GLASS BLOCKS—Plate Nos. 2 and 3 (Kitchen and bathroom respectively) showing the use of its Insulux glass block have been issued by Owens-Illinois Glass Co., Toledo, Ohio. Each single-sheet plate contains installation and construction information.

PLUMBING DRAINAGE MAN-UAL – A 240-page pocket size manual, including 191 pages of detail drawings in blueprint form and 24 pages of typical specifications covering drainage products for all types of buildings, may be had from Josam Mfg. Co., 303 Empire Bldg., Cleveland, Ohio,

AIR CONDITIONING EQUIP-MENT – General Electric Čo., 5 Lawrence St., Bloomfield, N. J., has published a catalog on central plant air conditioning and refrigeration equipment. The catalog is arranged in five sections – water cooled condensing units, evaporative condensers, air conditioners, coils, general—has charts and tables, specifications, other engineering data.

(Continued on page 52)



## Write now for this helpful folder.

SERVICE SHEET R-5 IS A COMPLETE DATA SOURCE FOR A NEW IMPROVED DESIGN OF FIREPROOF DOOR, THE FYRGARD DOOR.

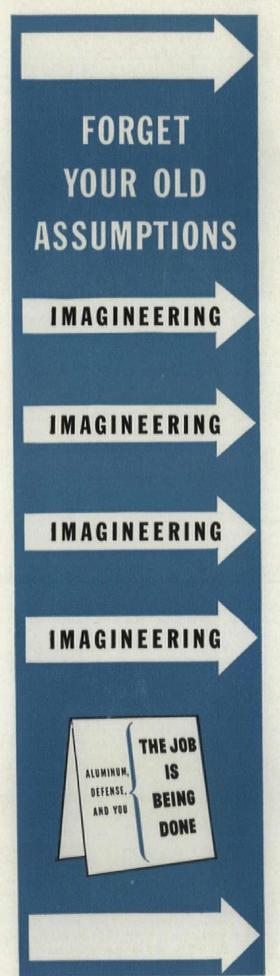
THIS SHEET Gives space requirements, large scale construction details, specifications and Underwriter requirements.

Have you received your set of RICHMOND Don Graf Sheets or our latest catalog?

THE RICHMOND

NORTHWEST FOURTH STREET

FIREPROOF DOOR COMPANY RICHMOND, INDIANA





IN THESE DAYS an advertisement is no place either for hosannas or sermons about production. Every man knows how well he is doing the job that is before him. Deeds, not words, are the measure.

**BUT WORDS CAN BECKON** beyond the realms of immediate duty.

**IMAGINEERING** is such a word. We coined it to make the needs of the future a reality, here and now. It is a way of describing what a man can do about the day when. . .

HOW DO YOU DO IT? You let your imagination soar and then engineer it down to earth. You think about the things you used to make, and decide that if you don't find out some way to make them immeasurably better you may never be asked by your customers to make them again.

YOU FORGET YOUR OLD ASSUMPTIONS. For instance, you may be one who used to assume that aluminum was too expensive. Even if you were right then (and you may not have been) the price trend of aluminum knocks those assumptions into a cocked hat.

WERE YOU ONE who used to assume that structures behaved exactly the way the theory said? Have you looked into the new answers the mammoth testing machine in the Aluminum Research Laboratory has found for that one?

DID YOUR OLD PRODUCT GROW like Topsy? More than one designer is Imagineering with this point of view: My product was in a groove. I couldn't get it out, because I didn't dare get too far away from last year's model. Now's my chance to start from scratch, and let tradition be hanged.

THAT IS THE KIND OF THINKING that will make jobs in the future. It is the kind we can help with: help with ideas and with know-how. Will you invite us?

Aluminum Company of America, 2198 Gulf Building, Pittsburgh, Pennsylvania.

#### ALCOA ALUMINUM





FOR GREATER TOUGHNESS

EVERY ROLL PRINTS AT THE SAME SPEED

• You don't have to change the speed of developing and printing equipment to conform to variance in speed in different rolls of paper. Not with Vapo-paper because every roll of Vapo-paper prints at the same identical speed and it's uniform in color as well. That uniformity is important today when every print must be right. But, that's not all. Vapo-paper will stand up under hard usage, stand up in your files too, because its rag content makes it tougher. With Vapo-paper's exclusive emulsion all the lines come up keen, sharp and trim, the solids are solid in Post red or true blue. Two speeds-regular and fast. For uniform speed and uniform color, for Prints with brilliance, sharpness and long life - order Vapo-paper for a free trial today.

GET YOUR FREE TRIAL NOW

At our expense, prove to yourself the superiority of Vapo-paper. 'Phone your nearest POST Dealer for your free trial supply of the new, improved Vapo-paper. Or send for your supply direct to The Frederick Post Company, Box 803, Chicago, Illinois. In making your request please include the following information. Are you equipped to produce dry developed prints? Would you prefer regular or fast, blue line or red line Vapo-paper?

Another POST Production Booster PHONE OR WRITE YOUR NEAREST POST DEALER

INSTRUMENTS . EQUIPMENT . BLUE PRINT PAPERS

KINDRED SENSITIZED PRODUCTS



PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 50)

USES OF GLASS-Shortage of metals, plastics, and other materials as a result of the war program has led to the search for products that might readily prove a substitute or alternate for critical materials. To report what part glass might play in this transition, Pittsburgh Plate Glass Co., Pittsburgh, Pa., has issued a 30-page booklet enumerating some of its products and giving a short description of each, together with availability information, properties, and a suggested list of uses.

PROTECTIVE LIGHTING - A 3 x 6 folder, No. 101, 8 pages, from Goodrich Electric Co., 4600 Belle Plaine Ave., Chicago, Ill., illus-trates the various styles of porcelain enameled floodlights for plant protection available from the firm. Discussed is the Elipso Standlite fixture, designed for high intensity and sharply-defined lighting around property lines without illuminating buildings and grounds.

HEAT DIFFUSERS-A new series of specification information sheets on its heat diffusers may be had from Carrier Corp., Syracuse, N. Y. Four single sheets give descriptions, roughing-in dimensions, specifications on units for heating and ventilating of large enclosures.

GAS-OIL INTERCEPTOR - A 4page folder (A.I.A. File No. 29-C-4) from Josam Mfg. Co., Empire Bldg., Cleveland, Ohio, describes the firm's Series G automatic eject-ing-type gas-oil interceptor which intercepts and discharges oil, gasoline, etc., from drainage lines.

LIGHTING-Some of the ways in which better light can play a most important role in the Victory program is outlined in a 12-page, 5 x 7 booklet, "How Light Can Help", available from General Electric Co., Lamp Department, Nela Park, Cleveland, Ohio.

TERRAZZO AND MOSAIC-An informational kit (A.I.A. File No. 23-E) containing data and specifications on terrazzo and mosaics may be had from National Terrazzo & Mosaic Association, Inc., 1420 New York Ave., N.W., Washington, D. C. The seven sheets are in a folder for convenient filing.

(Continued on page 54)

EVERY SQUARE FOOT OF

#### KOOLSHADE\* SAVES MANY TIMES ITS **EQUIVALENT IN CRITICAL MATERIALS** AND AIR CONDITIONING COSTS!

... in fact, 100 sq. ft. of KOOLSHADE Sun Screen saves approximately 1 TON of cooling capacity requiring 200 to 400 lbs. of equipment!



KOOLSHADE SUN SCREEN is a fine-mesh bronze fabric made like a tiny Venetian blind. Keeps out sun heat but lets in plenty of glareless light!

• It takes less equipment...and costs less money...to keep heat out than to cool it. That's why KOOLSHADE Sun Screen is being made a part of more and more Air Conditioning jobs every day -in essential plants, offices and Government Buildings.

Engineers calculate that direct sun heat through windows is 1/4 to 1/2 of the total load on cooling equipment. (See chart of typical figures at right.) KOOLSHADE stops 80% to 85% of that sun heat outside ... enables smaller cooling units to produce identical results with sizeable NET SAVINGS in both original and operating costs, in power consumption and in critical materials.

Where Air Conditioning is not now planned (or cannot be obtained) KOOLSHADE alone will keep buildings many degrees cooler, increasing workers' efficiency and boosting production. Then, when mechanical cooling is added later, the same KOOLSHADE will be there to insure greatest cooling efficiency.

Ingersoll

#### MALS

\*Registered Trade Mark, Property of Ingersoll Steel & Disc Div., Borg-Warner Corp.

Ingersoll Steel & Disc Division, Borg-Warner Corporation, Dept. K4, 310 S. Michigan Avenue Chicago, Illinois. Please send (without charge) yo stration Kit and also complete Screen literature.	our Sun Heat Demon-
NameFir	m
Address	
Charles and the charles are the charles and the charles are th	Cases



#### HERE'S HOW KOOLSHADE CUTS THE COOLING LOAD AT TOLEDO STAMPING & MFG. CO.

BARE GLASS

SUN LOAD ON

WINDOWS

• This chart of actual engineering figures shows how KOOLSHADE reduces the total cooling load by more than 44%... not an unusual percentage on either large or comparatively small jobs such as this at Toledo Stamping & Mfg. Co.

9636 B.T.U. VENETIAN BLINDS

OF TOTAL LOAD

SUN LOAD ON WINDOWS

> 5588 B.T.U.

NOTE THAT KOOLSHADE REDUCES SOLAR LOAD THROUGH WINDOWS 88.35%

KOOLSHADE SUN SCREEN

SUN LD. ON WINDOWS 1122 B.T.U.

#### BALANCE OF COOLING LOAD

Sun heat on roof at 3:00 p.m. Outside air one change total heat-4 people - heat gain through walls

9664 B.T.U.

#### BALANCE OF COOLING LOAD

Sun heat on roof at 3:00 p.m. Outside air one change total heat-4 people - heat gain through walls

9664 B.T.U.

#### BALANCE OF COOLING LOAD

Sun heat on roof at 3:00 p.m. Outside air one change total heat-4 people - heat gain through walls

9664 B.T.U.

19300 B.T. U. MAXIMUM LOAD PER HR.

15252 B.T.U. MAXIMUM LOAD PER HR.

10786 B.T.U. MAXIMUM LOAD PER HR.

KOOLSHADE savings are proportionate to window areas involved and savings
up to 200 TONS OF COOLING CAPACITY have been obtained on actual installations. What this means in costs and materials saved is obvious when it is noted that
each ton of cooling capacity takes 200 to 400 lbs. of equipment.

#### PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 52)

LUMBER-A 32-page, 8½ x 113½ catalog from Timber Engineering Co., 1337 Connecticut Ave. N.W., Washington, D. C., shows pictorially the part that forest products industries have played in the country's preparations for the current war.

ROOF VENTILATORS—A 34-page loose-leaf catalog (A.I.A. File No. 12-K) bound in a heavy paper cover, describes the line of roof ventilators made by The Burt Mfg. Co., Akron, Ohio. Diagrammatic and schematic drawings show mounting, flashing, and construction details, while tables show ventilator capacities.

Also available: 3½ x 6¼, 4-page folder giving fabrication details and description of the firm's ventilators made from asbestos-protected

steel.

PAINT SELECTOR — A handy means of selecting the best paint, without detailed technical study of properties of all finishes that might be suitable for a given application, is provided in the Valdura Paint Selector, issued by American-Marietta Co., 43 E. Ohio St., Chicago, Ill. The Selector folds to letterhead size, contains information on properties of and all application data necessary to choose from 43 paint, enamel, and varnish products.

ROTARY SWITCHES — Rotary type instrument, control, transfer, and auxiliary switches are described and illustrated, and various combinations listed, in a new 16-page Catalog No. 7140 from Roller-Smith Co., Bethlehem, Pa. Diagrams of connections and switch developments are shown for each switch listed.

BATHROOM EQUIPMENT — A 40-page catalog, "Glorifying the American Bathroom", illustrates the complete line of bathroom cabinets, accessories, mirrors, and electric heaters made by Miami Cabinet Division, The Philip Carey Mfg. Co., Middletown, Ohio. Complete layouts are suggested for guest bedrooms, master bedrooms, small family and large family bathrooms, together with a selection of equipment for low-cost homes.

MARINE PLUMBING — Catalog No. 42, from J. A. Zurn Mfg. Co., Erie, Pa., presents the firm's line of marine drainage products, other helpful information for buyers of such products for naval, cargo vessels, passenger, and pleasure crafts.

FLOOR MAINTENANCE — A 4-page folder (A.I.A. File No. 25-B-1) from G. H. Tennant Co., 2530 N. 2nd St., Minneapolis, Minn., describes the Tennant system of care for wood, asphalt tile, linoleum, terrazzo, marble, and concrete floors.

UNIT HEATERS—The Electric Air Heater Co., Mishawaka, Ind., has a 4-page folder (A.I.A. File No. 31-K-3) on its Electromode model commercial and industrial electric unit heater. Specifications, installation diagrams, and capacity ratings are included.

Also from the same firm: Bulletin No. 15, a 2-page sheet, on the Electromode portable electric heater for industrial use.

(Continued on page 56)



## The Barcol OVERdoor A GOOD INVESTMENT FOR WAR PRODUCTION PLANTS...

GET enduring, efficient door service and keep maintenance at a minimum by using Barcol OVERdoors with Barcol Electric Door Operators. Barcol hinged-roller construction is an outstanding feature of this free-running, non-sticking door that closes tightly yet opens easily. Thousands of industrial installations testify to the success of the Barcol OVERdoor for industrial service. Ask your Barcol representative for detailed information.

See our Catalog in SWEET'S (Architectural and Industrial)



#### BARBER-COLMAN COMPANY

100 MILL STREET • ROCKFORD, ILLINOIS
SALES, INSTALLATION, AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

## Now... RU-BER-OID Perforated Felt with

## Double Valve Action!

. . another safety factor for built-up roofs

OUTLET valves let air escape — help prevent blistering!

INLET valves let asphalt seep in, tightly sealing felts to each other and to roof deck!

Ruberoid goes a step further to safeguard the life of Built-up Roofs.

Ruberoid's newest innovation is not just Perforated Felt, but Perforated Felt with *inlet* as well as *outlet* valves. The felt is punctured alternately from the upper and lower side of each sheet. Result, *double* valve action!

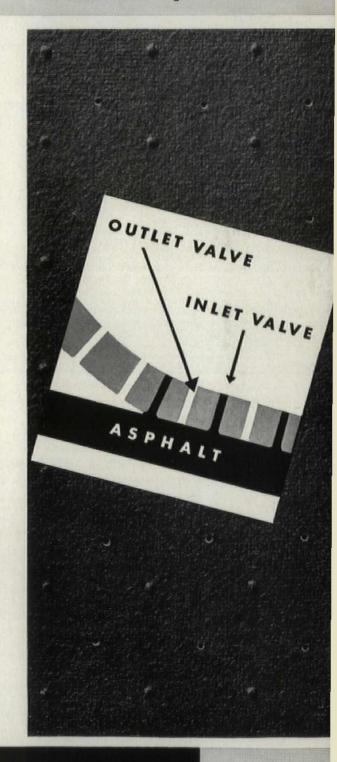
The outlet valves permit the instant escape of air containing moisture or water vapor from between the sheets before the sheets start to "set." This is a safeguard that practically eliminates blistering!

The *inlet* valves permit the ready seepage of hot asphalt from the next mopping as it is applied to the sheet. This penetration grips the underlying mopping. As a result, all holes are completely sealed and felts adhere tightly to each other and the roof.

RU-BER-OID Perforated Felts with double valve action may be obtained in both Asbestos and Asphalt. This new feature provides built-up roofs of unusual strength and long life.

RU-BER-OID Perforated Felt has been used on jobs running back to five years. The appearance of the jobs and the absence of blisters are ample evidence that double valve action will stand up under actual field practice. Its adoption by architects and owners can be recommended, not as a substitute for good workmanship, for there is no such thing, but as an improved practical aid to it. We urge you to write for full details. Address Dept. PP-4, The Ruberoid Co., 500 Fifth Avenue, New York, N.Y.

\*Patented









#### PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 54)

SLIDING DOORS—Specifications, installation diagrams, and full information on Sav-A-Space sliding doors for homes, office buildings, hotels, and apartments, are contained in an 8-page folder from the Fir Door Institute, Tacoma Bldg., Tacoma, Wash.

WOOD LATH — Data on the grades, lengths, application, and coverage of Western Pine lath is contained in a handy 4-page folder, No. 308, 3 x 6 inches, available from Western Pine Association, 510 Yeon Building Portland Oregon.

ROLLING DOORS-A new 40page catalog (Bulletin No. 31) from The Kinnear Mfg. Co., 820 Fields Ave., Columbus, Ohio, illustrates and describes the many types of steel and wood rolling doors and partitions made by the firm. Photographs show the types of doors, together with specifications, construction and installation details. Dimension data is included in a series of tables.

PAINT SPECIFICATIONS—Sherwin-Williams Co., 101 Prospect Ave. N.W., Cleveland, Ohio, has issued a new 16-page book containing complete instructions and specifications on the painting of building interiors and exteriors. Color samples of different types of paints and varnishes are included. A tabulation is made of the proper finish for all interior and exterior industrial maintenance work, Information is also given on finishing methods used on homes and commercial buildings.

PIPES AND FITTINGS—Bulletin No. 550 from United States Stoneware Co., Akron, Ohio, is a 12-page catalog on acid-proof pipe and fittings. The book discusses the chemical analysis and physical properties, presents engineering and technical data, describes caulking processes. Cross section diagrams of various types of pipe fittings, together with dimensioning data, are included.

BUILDING INSULATION—Fourpage descriptive folder from Kimberly-Clark Corp., Neenah, Wisc., on its Kimsul—a sheeted, laminated, compressed and asphalted insulating material. Photographs show typical installation details.

MASONITE PRODUCTS—A 20page catalog from Masonite Corp.,
111 W. Washington St., Chicago,
presents the 1942 Presdwood products specifications for Tempered
Presdwood, Presdwood, Presdwood
Temprtile, mouldings and friezes,
other Masonite products. Each
product is discussed from the point
of view of material, framing, nailing and cementing application,
joint treatment, finish. Typical installations are shown.

EVAPORATING CONDENSERS—Latest technical information on its Type 9Q evaporative condensers is contained in a series of leaflets recently issued by Carrier Corp., Syracuse, N. Y. The 2-page sheets describe equipment designed to supplant water-cooled condensers and water-cooling towers in refrigerative systems, and also to cool liquids in various industrial applications.



Anything that contributes to Worker Efficiency is of untold value NOW!

WING Revolving Unit Heaters bring a sensation of fresh, live, invigorating warmth to workers, increasing their sense of comfort; which tends to speed their efforts and at the same time make them more accurate in their work.

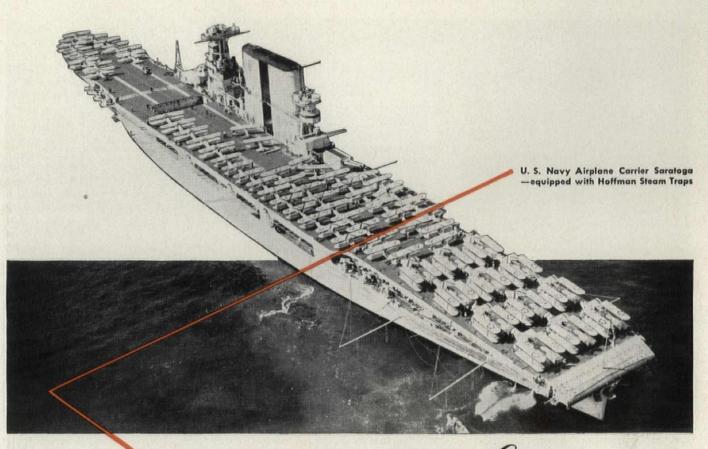
The reasons why this is the modern method of heating industrial plants are given in detail in WING Bulletin HR-1, a copy of which will be sent on request—or you can see it in SWEET'S Engineering and Architectural Catalogs

L. J. WING MFG. CO., 150 W. 14th St., NEW YORK, N. Y.



WING Revolving UNIT HEATERS





## HEATING at Sea

WHERE FUEL IS VITAL TO DEFENSE, HOFFMAN TRAPS CONSERVE IT

At sea, a vessel's range of usefulness is bounded strictly by its fuel supply. Full value from every ounce of steam, in these days, is a positive demand!

Any heating plant is sparing of fuel in direct proportion to the efficiency of its control equipment. That the Navy plane carrier, U. S. S. Saratoga, far-ranging unit of our first defense line, is equipped with Hoffman Steam Traps is a clue to anyone planning a new or modernized heating plant. For on land or sea, Hoffman Specialties assure full utilization of steam and conservation of precious fuel.

For a quarter century, heating engineers have specified Hoffman Products...because every refinement of design which adds to performance is included in them—at no greater cost!

Hoffman Valves, Traps and Pumps are thus a quality, time-tested line of products. Apply any standard of measurement you choose . . . efficient operation . . . dependability . . . service life . . . or what experienced heating men say of them, and you will have shown yourself why Hoffman is the choice in so many installations.

The Hoffman line is complete. From this single source you can satisfy every specialty requirement of a steam heating system ... and receive that extra guarantee which comes only with undivided responsibility for satisfactory operation.

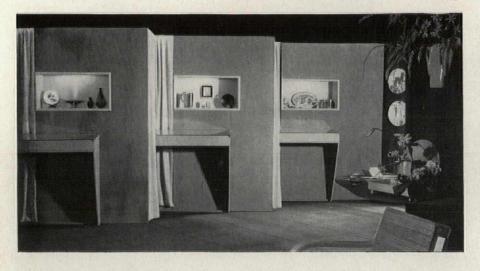
Write for information on Hoffman Controlled Steam or Hot Water Heating Systems and for counsel on heating problems. Hoffman Specialty Company, Dept. pp-4, Indianapolis, Ind.



### HOFFMAN Con

Controlled Head

Healing
STEAM HOT WATER





(Continued from page 42) about the need for a "Ten Dollar Architect." He suggested that professionals might descend from Parnassus, humanize themselves where necessary, and break into the consciousness of ordinary people who have small architectural problems. Two hour's work for a ten dollar bill, giving advice on the little things which puzzle many a house-holder bent upon improving his castle. "A few weeks ago I was looking for architectural advice . . ." said Mr. deLue, and in a twinkling Tom McDonough whipped out a card and had it passed up to the head table. The subject was provocative, as *Ben Adams Buck* will testify, for he claimed to have surveyed the field and found too much competitive free advice being given by companies with something besides service to sell.

Caldwell Moise, Jr. has voiced an opinion that even if you forget the proper functioning of architects and draftsmen for the duration, it should be possible to employ their talents in many special war jobs where engineering training is now demanded. We all agree. This belief assumes the basic adaptability and intelligence of architecturally trained men, even if they don't bear the charmed tag of a wellknown technical school. It might assume that if the burden of proof is on the arck, he should be able to dredge up a champion who could arrange a green light for the proving of it. But could you? The writer, working for the Architectural League of Boston (after June 17, 1940) in an effort to anticipate and aid the selfsame conversion of draftsmen through special training or sympathetic interest from on high, got nowhere fast. General

Feature of the recently-concluded annual exhibition of the New York Society of Craftsmen was the grouping of exhibits functionally into rooms and "corners." The idea was worked out in collaboration with Ernst Payer, Architect, who designed the backgrounds and display cases. The exhibition included examples of ceramics, enamels, bookbindings, metals, jewelry, needlework, weaving, and sculpture. Rodney McCay Morgan photographs

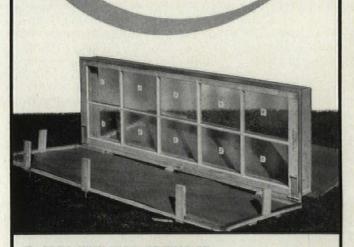
impression gleaned from that investigation was that if you could threaten to tell how a man beat his wife, the beater's human interests might be broadened beyond their usual restricted sphere. Subsequently a great engineering office expansion reduced this emergency in a measure, but even now there are those who still feel an ingrained (Continued on page 60)







1 PELLA CASEMENT UNITS arrive on job scientifically crated. The entire frame and sash are well protected against nicks and bumps. Easy to handle. Easy to unpack.



2 EACH UNIT 100% ASSEMBLED at factory including hardware, weatherstripping, Rolscreens and Dual Glazing (if specified). No waiting for hardware, sash weights, etc.



3 PRE-FITTING AT FACTORY enables unit to be lifted right into rough opening. Weathertight installation completed in about 30 minutes. No cutting or fitting necessary.

THERE are over 300 distinctive combinations possible with Pella Casement Units! Ventilating units can be supplied in stock sizes 1, 2 or 3 lights wide and up to 5 lights high to set singly or in combination with other fixed or ventilating units. Muntins can be omitted at no extra cost. Corner and angular mullions of any degree can be specified

Pella construction utilizes steel for strength and wood for beauty. Welded steel frames are of 16-gauge, rust-proofed steel—full jamb width 5-5/16". Frames are faced with clear White Pine (other woods if desired). Genuine White Pine sash—toxic treated. This construction protects against sagging and assures perfect closure at all times.

Orders being shipped promptly

## PELLA CASEMENTS ROLSCREENS \* VENETIAN BLINDS

SAVE DRAFTING TIME!
New! 22 loose pages of scaled details on Pella Casement Units. Suitable for tracing right into your plans. All types of installations, Come in A. I. A. File Folder. Send for your FREE set! Supply limited!



Rolscr	een Company	Dept.	142, Pella,	Iowa
YES!	Please send	me that	handy FRI	EE Set of
	file-size Deta	ills on	rella Casem	lents.

Name	
City	State

#### (Continued from page 58)

itch for more responsibility and a chance to use their initiative and special skills more freely than they are permitted at the sign of the 4 Aitche. Pencil Points has attacked the immediate "talent release" problem from a new angle, and we are particularly interested because here at last is a champion whose interest is nationwide and as closely identified with the slogger as with the master.

Stanley Setchell and the talented Mrs. S. are now property holders in exclusive Wellesley, that suburb of conspicuous consumption, where men are slaves to lawns. We had just been selecting a sunny room for ourselves at the local Town Farm when Doug Gass told us about it.

Prefabrication Expert Prentice Bradley has returned to the Modular Service Association after six months of Canadian supervision at a big Homasote housing project. When you mention "jig table" to most of us it suggests the middle phase of a Spanish dancer's night out, but to Bradley it's nothing but a mess of notches and slits and humorless precision. LEON KEACH

#### EDUCATION SPEEDS UP

Colleges throughout the country, spurred on by grants from the U. S. Office of Education, have taken the initiative in providing courses for architects and engineers interested in wartime construction.

A course in Defense has been proposed at Columbia University, New York, in the sponsoring of which the New York Chapter, A.I.A., participated. The course will cover such subjects as aerial photography, protective concealment of plants, blackouts, bombing techniques, etc. The enrollment will be limited to forty students, and there will be no fee for instruction.

The School of Architecture and Allied Arts, New York University, New York, has announced five intensive and practical drafting courses to prepare architectural and engineering draftsmen for the more specialized drafting positions in Civil Service, or in private engineering and construction organizations engaged in the war program. Courses, which began April 1, are being given in Electric Light and Power, Heating and Ventilating, Plumbing, Structures (reinforced concrete, steel, wood), and

Ship Construction, A ranking architect or engineer with background and experience in office and field practice is in charge of each course, assisted by experienced draftsmen for individual supervision and criticism.

At Pratt Institute, Brooklyn, N. Y., a new series of lectures began the Institute's second year of bombardment protection courses under Government sponsorship. Courses will be offered continuously as long as the emergency lasts. Each series lasts five weeks. Practising architects and engineers who have the new problem of designing bombresistant shelters, providing protec-tion for industrial equipment, and of designing industrial camouflage installations are invited to attend the lectures at the Institute's Department of Architecture. Lecturers for the courses include James C. Boudreau, Director of the Institute's Art School, who discusses aerial photography and protective concealment; C. C. Briggs, Super-visor of the Department of Architecture, who discusses the effects of bombing, the design of structures to resist shock and fragmentation, and the new permanent changes in structures and planning brought about by the war; William J. Mc-



## AN OFFER-

with a very small string attached!



Let us send you, with our compliments, two Venus Pencils in whatever degrees you select. We do this because we want Venus to speak for itself, right in your drawing hand.

Now, the string. It's simply this. We ask you to forget pencil names and reputations, prejudices and inclinations, hearsay, habit and present preference. Just try VENUS on its own merit for

the kind of work you are doing, and let VENUS speak for itself. You'll find its absolute smoothness and precise grading to your liking. There's a mighty good reason why more artists, architects and engineers buy VENUS than any other drawing pencil.

Just drop us a postcard giving us your name and title, your firm name and address. Specify the two degrees you wish to try.

ENUS The AMERICAN Drawing Pencil

AMERICAN-MADE FOR 35 YEARS

AMERICAN PENCIL COMPANY, Dept. A2, 500 Willow Avenue, Hoboken, N. J.

Guinness, engineer and coordinator of bombardment protection courses at Pratt; Erling F. Iverson, who has studied air raid shelters abroad and has designed several shelters in this country; and Konrad F. Wittmann, architect and authority on industrial camouflage.

Pratt Institute has also announced that an optional summer term of architecture will be offered beginning June 2. The Department of Architecture will henceforth operate on a basis of three terms of sixteen weeks so that students who exercise the summer option will be

able to complete the regular fouryear course in two and two-thirds years. This speed-up of the architectural program has been arranged for the benefit of students (eligible for military service or in line for defense work) who are anxious to complete as much of their education as possible before being called to service.

At the Rome (N.Y.) Free Academy, a course in advanced structural design is being given under the supervision of *Syracuse University* as part of the National Defense Training Program, Instruc-

tor is Sidney F. Borg, of Turner Construction Co., contractors on the Rome Air Depot. The course is being given without tuition to either students or employers, and will prepare students to design more complicated structures than are met with in ordinary practice. Students in attendance are employees of Turner Construction Co., the U. S. Engineer's Office, and of various plants in the vicinity of Rome.

In accordance with the general policy now adopted by the *University of Michigan*, the College of Architecture and Design will offer a full summer semester program of fifteen weeks. All essential required courses in the curriculum will be available to entering students and those already in residence so that they may thus accelerate their programs. Many students, the University feels, will want to do this summer work preparatory to special work with the armed forces.

The Yale University Department of Architecture also has adopted a new curriculum. The unified a new curriculum. course of study fits in with the University's accelerated war program also, and enables a student to get his professional education in three and one-half years instead of the usual five years. The Yale program will stress the interrelation of every course in the department, and provide automatic synchronization of the work in theory, design, and construction. The twin objectives of the new curriculum will be to prepare architects for immediate wartime services and for post-war reconstruction through government bureaus as well as private clients. The program will be put into operation during the summer term which starts July 6. Dean Everett V. Meeks, in announcing the revised program, said, "While war problems and the structural and engineering side of architecture will be stressed, the vision of the peace to follow and their roles in it should be generating now in the minds of the architects.'

A short summer course in City and Regional Planning will be held at the Massachusetts Institute of Technology during the three weeks beginning Monday, July 13. The program, sponsored jointly by the Institute and the American Society of Planning Officials, will be divided into four sections: City and Regional Planning, Planning Legislation, Planning Administration, and Techniques of Planning. Further details on the courses may be had from Professor Frederick J. Adams, M.I.T., Cambridge, Mass.

## New Critical List NOW PROVIDES For WEISWAY Cabinet Showers



Typical Weisway installation shows how these leakproof cabinet showers provide a complete, self-contained bath, in a three-foot square or less, in old or new buildings.

★ Already widely used in remodeling for defense living quarters, Weisway Cabinet Showers now have unquestioned priority rating for both new and remodeled defense housing — whether large-scale projects or individual home.

The official defense housing list of critical materials specifically authorizes this type of bath...and thus gives further recognition to the special adaptability of Weisways to our urgent housing needs. Weisway Cabinet Showers save in many ways,\* while providing a complete, leak-proof bath in a 3-foot square or less.

In the Weisway line you have a range of models to meet various needs, high quality workmanship, guaranteed leakproof construction in every model! Our new catalog booklet, with full color illustrations, gives complete information about "Weisway Cabinet Showers for Defense Living Quarters."

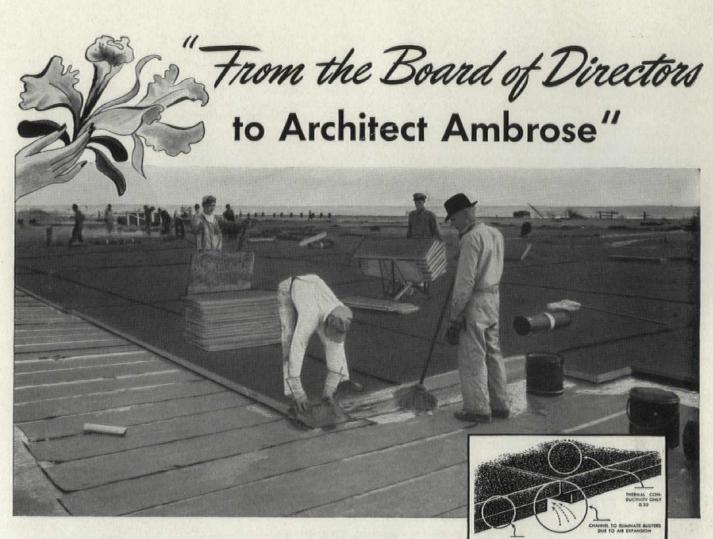
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#### COMPETITION ANNOUNCEMENTS

LONG AND AVERY PRIZES AWARDED

At a dinner held March 19, the Architectural League of New York awarded the Henry O. Avery and Birch Burdette Long prizes to the winners in a competition for small sculpture and architectural rendering. The citations made for the Long award were:

"For examples of distinguished and varied types of presentation in water color, a prize of \$100 to J. FLOYD YEWELL."

"For a group of delightfully brilliant pencil drawings, decorative as well as realistic in character, a prize of \$100 to Louis C. Rosenberg."

"For excellent, clear cut pencil drawings vividly suggesting structural form, honorable mention to WILLIAM JEN- The following citations were made for winners in the Henry O. Avery Prize award:

"For his small figure entitled Air Raid, its highly original and pertinent subject matter, combined with great beauty of execution, a prize of \$50 to Aristide B. Cianfarani."

"For his small model of Lafayette, perfection of handling and originality of treatment and beauty of design, a prize of \$50 to Donald De Lue.

"For her small bronze entitled Cock Crow, originality of technique and most distinguished handling of material and color, honorable mention to KATHARINE W. LANE.'

Two cash prizes were given to winners in each classification, since the Avery and Long prizes had not been awarded by the League for

the past several years.

Prizewinners and honorable mention winners, as well as other contestants, had their entries on display at the League until April 4. On exhibition were drawings in various media, from the office sketch of the architect to the completely rendered presentation of the professional illustrator. The small sculpture exhibit included a variety of subject matter and technical execution. The exhibit was the first of its kind devoted to rendering and small sculpture. Contestants for the awards were members of the League, the National Sculpture Society, and other professionals in the metropolitan New York area.

The Jury for the selection of the prizes was made up of Hugh Ferriss, Arthur Loomis Harmon, and Chester B. Price for rendering; Margaret French Cresson, Eleanor M. Mellon, and Wheeler Williams for sculpture. The Committee on Arrangements was made up of Margaret French Cresson, Hugh Ferriss, Wheeler Williams, and Chester B. Price, chairman.

#### BACK TO THE CAMPUS!

Architects whose principal offices are in Michigan were given an opportunity to enter a competition for a campus arrangement and architectural design for the proposed three-block extension of Wayne University (Detroit) campus, and for the design of a student center building. Cash prizes total-ling \$4,000 will be awarded. Pro-grams may be had from *Branson* V. Gamber, professional adviser, 3500 Guardian Building, Detroit, Mich., on or before April 11. The competition, which will close on June 1, has been approved by the A.I.A., and is sponsored by the Detroit Board of Education.

(Continued on page 68)

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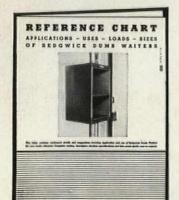
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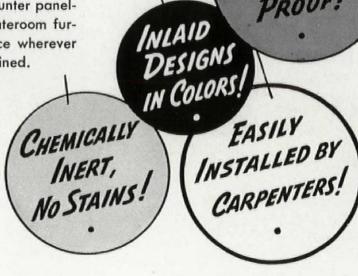
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DECORATION ON A BUDGET John E. Maier, Brooklyn, New York, was awarded first prize of \$250 and the A.I.D. Defense Housing Medal in the national competition for the design of defense housing interiors, sponsored by "Interior Design and Decoration" magazine, the American Institute of Decorators, and the Public Buildings Administration. Mr. Maier's solution called for decorating and furnishing a four-room, low-cost defense housing unit with modern furniture on a budget of \$466.22.

The second prize of \$150 was given to Bill Atkinson, of Manlius, New York, for a modern decorative scheme on an \$812.48 budget. Deering Davis, A.I.D., of Minneapolis, Minnesota, took third prize of \$100. His decorative scheme called for Early American furnishings and was based on a \$246.51 budget. Seven honorable mentions were given for decorative schemes designed for budgets from \$421.78 to \$966.70.

Incorporating selections from current offering of manufacturers, department stores, mail order houses, and other domestic furnishings establishments, the entries embraced complete furnishings and decorative schemes for four rooms—living room, dining alcove and two bedrooms. Lowest cost of a complete furnishings scheme entered was \$246.51; highest, \$1200.

tered was \$246.51; highest, \$1200. Serving on the jury of award were: Harry V. Anderson, Publisher of the magazine, chairman; PBA Commissioner W. E. Reynolds; Nancy V. McClelland, A.I.D. President; Gladys Miller, Interior Designer and Defense Housing Consultant; Virginia Conner, Interior Designer; Edward Rowan, Assistant Chief, PBA Fine Arts Section; Gilbert Stanley Underwood, Architect; Spence Wildey, Industrial Designer; Frederick Rahr, Color Consultant on Defense Housing; and Mrs. David Banghart, wife of a defense worker, and occupant of a defense housing unit.

#### SYRACUSE SCHOLARSHIPS

The Department of Architecture, Syracuse University, Syracuse, N. Y., has announced five available first-year scholarships to be granted by competition on July 11. One \$400 and four \$200 scholarships will be granted. Scholarships may be held for five years. Further details may be had from *Professor L. G. Dillenback*, Director of the Department of Architecture.

#### ROME COMPETITION

Nine architectural students have been selected to participate in the final competition for the cash prizes offered by the American Academy in Rome. Of the 46 competitors who submitted solutions to the problem which called for a design for permanent officers' quarters and recreation center at a military base on a large island in the Far East, the following nine will compete for the cash awards:

Charles S. Bicksler and Charles Goldberg, Pennsylvania State College; Edward L. Burch, Karl J. Holzinger, Andrew E. Kuby, Jr., and Hollis Lyon Logue, Jr., University of Illinois; Raoul A. Ibarguen, University of Pennsylvania; Allen R. Kramer, Cornell University; Walter S. V. Litwin, Catholic University and Armour Institute.

The final competition will extend over a period of five weeks beginning April 11. Cash prizes will be given in lieu of the Academy's usual award of a two-year fellowship for study and travel in Eu-



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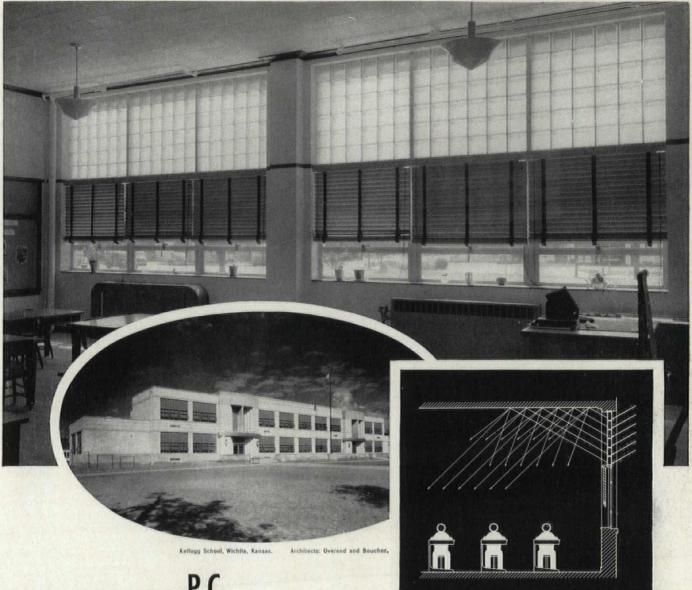


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(Continued from page 68)

rope. The winner of the final competition will receive a cash award of \$1,000; second, third, and fourth prizes of \$100, \$50, and \$25 respectively will also be awarded.

The program was written by Robert A. Willgoos, Associate Architect of the U. S. Engineer Board, Camouflage Section. Members of the Jury of Award were William Pope Barney, J. André Fouilhoux, Ernest A. Grunsfeld, Jr., Alfred Easton Poor, and Eric Gugler, chairman.

#### SCULPTURE COMPETITION

The Liturgical Arts Society, New York, recently announced to seventy-six American sculptors that, on the basis of photographs of their work submitted last fall, they had been selected to compete for a statue of "Christ, the Light of the World." This statue will form the main element in the architectural design of the façade of the new building, now completed, which will house the national headquarters of the National Catholic Welfare Conference in Washington, D. C.

Each competitor is to submit a 30-inch model of the final statue, which will be of bronze and over 15 feet in height. The models will be judged early in July by the following jury: Frederick Vernon Murphy and Barry Byrne, Architects; Lee Lawrie, C. Paul Jennewein, Gaetano Gecere, Sculptors.

wein, Gaetano Cecere, Sculptors.

The prizes offered are: \$1,500 first prize; \$500 second prize; five additional prizes of \$200 each. The winner will be awarded a contract to make the finished bronze statue, and for this work he will receive

an additional \$6,000 fee.

#### BRIDGE PHOTO COMPETITION

The American Institute of Steel Construction, 101 Park Ave., New York, will award a plaque to the most beautiful steel bridges built during 1941. A jury of nationally known architects and engineers will make its selection from photographs. Designs which will be considered the most æsthetic solution among monumental bridges, medium-sized bridges, short span bridges, and movable bridges, will be selected for the awards.

Builders and owners of such structures are requested to submit photographs to the Institute not later than May first. The following data should accompany the photographs: name of bridge, location, total cost, date completed, date opened to traffic, span length, roadway width, and name of fabricator, engineer, and owner.

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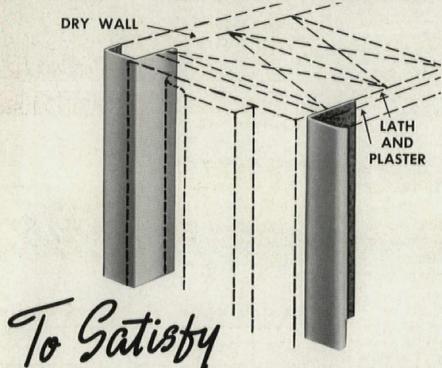
VINCENT MISCOSKI, Draftsman, 1808 Potomac Ave. S. E., Washington, D. C. (Data for A.I.A. file.)

OTTO G. HOFER, Structural Draftsman, 5541 Fulcher Ave., North Hollywood, Calif. (Data for complete A.I.A. file.)

GEORGE J. STERN, Structural Draftsman, 803 N. Occidental Blvd., Los Angeles, Calif. (Data for complete A.I.A. file.)

WILLIAM W. WOLF, Architect, 875 Bush St., San Francisco, Calif. (Data for complete A.I.A. file, and prices.)

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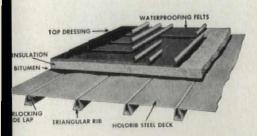
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The South In Architecture, (The Dancy Lectures, Alabama College 1941), by Lewis Mumford. (\$2,51/2" x 81/2", 147 pages—Harcourt Brace & Co., New York)

To these times Lewis Mumford has brought a scholarly study of the fiber of American culture. For to-day's confusion and sacrifice he sees the need for understanding anew the progress and the civilization that Americans are defending.

"Thomas Jefferson was one of the last true figures of the Renaissance". In his devotion to the classical forms of the Roman Empire he brought to the comparative wilderness of America the outward beauty of the universal architecture of his time. Yet his plans were influenced by the demands of frontier life. He founded a university where the intimate relation between teacher and student was to be paramount, yet this teaching was to be tempered by the university of its classic habitation. Jefferson lived in his time, in the past, and truly into the future.

The South gave H. H. Richardson his birth but to the North he gave his architecture. This was an architecture closely related to the American scene. He expressed the spirit of the age in which he lived, that of the robust Empire Builders. His architecture was one of feeling and emotion, not of reason as was Jefferson's. Richardson was a regional architect but he took a universal form of architectural expression. To him that form was a logical method of treating all architectural problems. Richardson, not the Romanesque, was the primitive source of modern architecture.

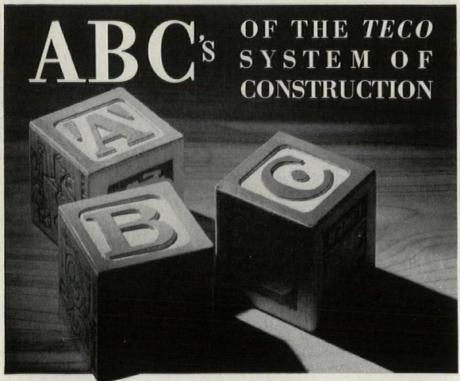
Mr. Mumford's discussion of the work of these two eminent Southern architects leads him to the social implications of their work for our day. If with him "We are in-terested in the South's contribution to architecture . . . precisely because we believe that this civilization is worth saving, precisely because we believe in human continuity; and we must consider what has been happening to our civilization as a whole, in order to safeguard that future, that destiny, that free play of the human spirit, in which we emphatically believe", then these lectures are a worthwhile part of the literature of today's Architectural thought.

JOHN C. SEWARD

CIVILIAN DEFENSE OF THE UNITED STATES, by Colonel R. Ernest Dupuy and Lieut. Hodding Carter (\$2.50, 320 pages, 51/2" x 81/8", Farrar & Rinehart, New York)

From the title and the military rank of the authors it might be assumed that the content of this book is technical information prefaced with the usual generalities on the character of Air War and thus dated with the now familiar diagrams of bombs not dropping vertically. It is in fact nothing of the kind. Your writer, for one, is profoundly grateful and hastens to recommend its reading to all those hundreds of thousands in the United States who are anxious to participate in one way or another in this total war in which we all find ourselves. The narrow con-notation of "Civilian Defense", which has been given these two words by specialists in structural precautions or similar specialized anti-war activities, is dissipated by the authors.

(Continued on page 74)





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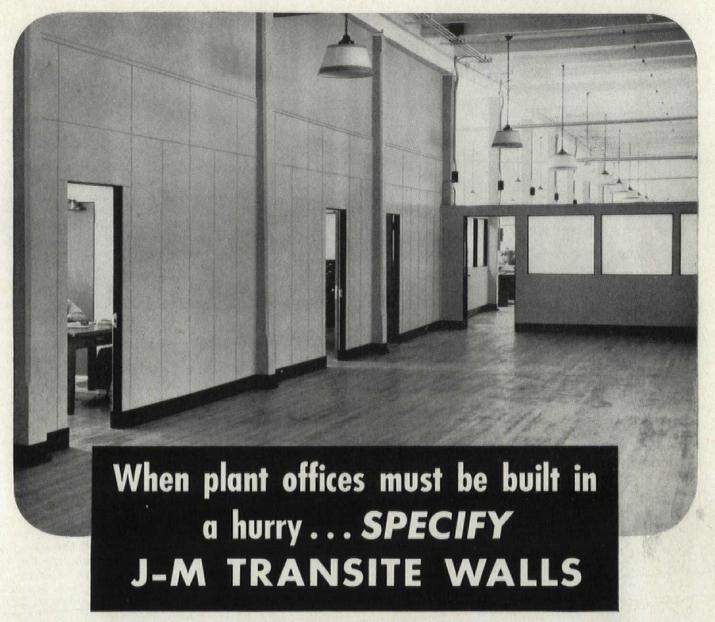
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(Continued from page 72)

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described as "Women in War."

The description of the various agencies, and an easy translation of their terms of reference into words that any layman can understand, makes the book particularly valuable. Here you can find out what war organization is-why such organization came into being, and what the civilian can do to make it click. If you are suffering from confusion or complacency, here is something to cure either or both.

SERGE CHERMAYEFF

A MANUAL OF AIRBRUSH TECH-NIQUE, by J. Carroll Tobias. (164 pages, illustrated. American Photographic Publishing Co., Boston.)

Written in a conservative manner, this book is especially for the airbrush neophyte. It describes the principle and construction of the airgun, illustrates the different types on the market, and tells how to choose the "brush" best suited to a particular sort of work. The beginner will be made familiar with the various air-sources available, advantages of each, and can then make his own choice.

The manual gives quite complete instructions for handling the airbrush outfit, as well as for troubleshooting and recognizing symptoms due to improper adjustment.

A set of numbered lessons, all illustrated and described, will acquaint the beginner with the various motions used in "wielding the gun," and the different effects possible to attain - all arranged in order of difficulty.

Upon mastery of the exercises, advanced work is presented, such as: photo-retouching, commercial illustrations, wash drawings, freehand airpainting, portraiture, execution of novelty effects, render-ing for industrial design, fashion drawing, architectural drawing, etc.

The choice of illustrations, for the most part, might have been somewhat less unfortunate, especially for a book published in this decade. The general smack of the pictures is non-bell-ringing as more dramatic work representative of so wonderful a medium should have been used, rather than, for example, some prosaic, unimaginative visuals of touched-in tombstones and lavatory doors. The greeting cards, lettering, photo work sam-ples, architectural, and fashion airbrush work could easily have stirred the reader's pulse. It must be said, however, that a number of exceptionally excellent and dynamic illustrations were used, though these had already been well publicized before use in the Manual.

A greater unification of the chapters and subject matter would no doubt simplify the reading, as would a more up-to-date format.

To the prospective airbrush artist who cares not for the over-conventionality of layout of this volume, etc., etc., but who desires a working knowledge of his new equipment from one who has no doubt spent a good many years behind his "gun," this book can be recommended. FELIX GILBERT



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#### THE MART

W. H. SANDS, Architect, 56 Columbia Place, Mount Vernon, N. Y., has for sale a number of back copies of the following magazines: Pencil Points—1920-1940; Architectural Record—1916-1932; Architecture - 1932-1934; Architectural Forum-1920-1932. Not all issues are available. List on request.

J. THEODORE BLOMQUIST, Architect, 232 Herman St., Hackensack, N. J., wants to sell the following copies of PENCIL POINTS: June 1920-Nov. 1936.

BENJAMIN W. BURGER, 150 Nassau St., New York, has the following copies of PENCIL POINTS for sale at \$1 each: Feb., Oct., 1927; Sept., Oct., Dec., 1928; June, Dec., 1929; March, May, July, Nov., Dec., 1930. Mailed on approval.

WM. L. BAILY, Architect, 411 Lancaster Ave., Haverford, Pa., has for sale Ware's "Georgian Period", published in 1898, complete in new portfolio covers, with the exception of a few unimportant plates. Original cost \$60; will sell for \$15. List of other architectural books for sale is available on request.

FIVE LARGE DRAWING BOARDS, used, in good condition. Have horses and drawers. Price reasonable. Clarence A. Currie, 323 Sound Beach Ave., Old Greenwich, Conn.

H. S. CONROW, Architect, 110 W. 2nd St., Wichita, Kans. has the following magazines for sale: PEN-CIL POINTS-Jan.-May, Nov., Dec., 1937 - 1941; American Architect -1936-1937, except June and Aug., also Jan., Feb., 1938; Architectural Forum — April 1937-Mar. 1938, Apr. 1939-Mar. 1940; Architectural Record - Jan. - Dec., 1937 - 1941; House Beautiful-June, 1939-May, 1940. Will not break the continuity of any one magazine.

### HOW MEDUSA white PORTLAND CEMENT



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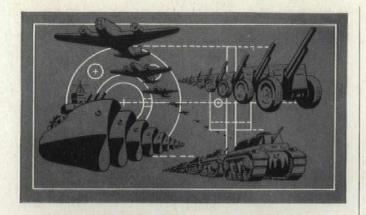
#### PERSONALS

ALBERT KAHN, Architect, was awarded the medal of the Philadelphia Chapter, A.I.A. at an exhibition of architecture and allied arts, held recently at the Philadelphia Art Alliance. The medal was presented in recognition of his outstanding work in the design of many of the nation's important war plants.

ROBERT S. HUTCHINS and CALEB HORNBOSTEL, New York Architects, were recently appointed to the faculty of the Cooper Union Art Schools.

JOHN D. ROCKEFELLER, JR., was recently awarded the second Medal of Honor for City Planning "for distinguished contribution to the Plan of the City of New York." The medal was awarded jointly by the A.I.A. New York and Brooklyn Chapters, the A.S.L.A. New York Chapter, and the A.S.C.E. Metropolitan Section.

LEO MATZNER, Architect, has moved his office from 211 W. Front St. to 1266 Salem Road, Plainfield, N. J.



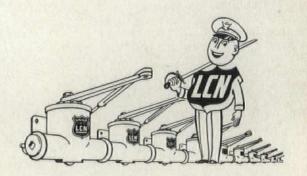
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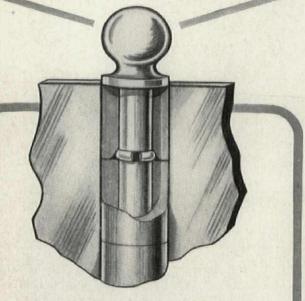
We have been making quality door closers for a long time—and making friends in the bargain. With your cooperation and understanding, we'll do our part of the big job and go back to full time on door closers when the big job's done. LCN, 466 West Superior Street, Chicago.



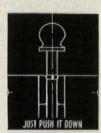
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Catalog No. 61, showing all the many hardware types and lines available from Stanley, will be invaluable as a reference book. Write for a copy, and use it as your guide to good hardware. The Stanley Works, New Britain, Connecticut.

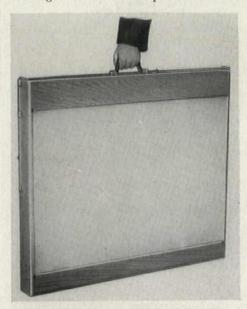
#### STANLEY

HARDWARE

#### NEW PRODUCTS

#### PORTABLE TRACING BOARD

Cool daylight fluorescent lamps furnish even, glareless light for this new portable drafting board made



by Hamilton Mfg. Co., Two Rivers, Wisc. Adjustable stop rods hold board place when it is used on an inclined surface. board The measures 36 by 31 by 33/8 inches, is made of white pine with a Manolac finish, and designed for 110 volt A.C. only. This portable tracing board

can be used on any drawing surface.

A leather handle, bolted to the top edge, makes it easy to carry this board which has a 24 by 36-inch plate glass tracing surface.

#### CONCRETE RODDING MACHINE

The Whiteman Mfg. Co., 3249 Casitas Ave., Los Angeles, Calif., has developed a portable concrete



rodding machine to aid in the laying of cement floors, slabs, and walks. The machine enables the operator handle concrete of a l" slump, and uses the same standard screeds that are used when rodding is done by

Thetwo

rod sticks of the machine ride the headers. Driven by the gasoline engine, the rod sticks make five-inch transverse strokes in opposite directions. During the power-driven transverse movement, a steady forward pull by the operator provides a uniform rate of advance, leaving a pour that has been simultaneously leveled and vibrated and ready for the final finish.

The rodding action puddles and vibrates the con-crete into a solid mass through the entire depth and over the whole area, brings the moisture to the surface.

#### ASPHALT TILE

A low-cost flooring developed primarily for industrial use is a new type of asphalt tile designed by Armstrong Cork Co., Lancaster, Pa., to prevent the accumulation of static electricity. Known as Conductive Asphalt Tile, it provides a surface condition which results in less than 0.1 megohm resistance to static electricity under certain specific conditions. It is suitable as a resilient flooring in arsenals and other industries where static electricity, or the presence of an open flame, presents a safety hazard.

open flame, presents a safety hazard.

The product is supplied in tile form so that individual units can be easily replaced. It is said to be non-slip, moisture-resistant, odorless. Conductive Asphalt Tile is manufactured of high-melting-point asphalt and mineral ingredients, reinforced with tough fibres, and comes in black in the following gauges:

1/8", 3/16", 1/4", and 3/8".

#### BLACKOUT COATING FOR PLANT WINDOWS

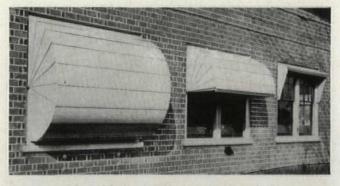
A blackout coating for industrial plant windows and skylights, which provides complete opacity and a gloss-free surface, has been announced by the Carbozite Corp., First National Bank Building, Pittsburgh, Pa. The coating is not a paint, but a smooth-flowing liquid coating which can be sprayed or brushed on quickly. When dry, it leaves a dead black, gloss-free surface, said to be resistant to all corrosive atmospheres and liquids.

Black-out Black is soluble in gasoline, kerosene, naphtha, or any light petroleum solvent, and consequently will dissolve and wipe off glass without disturbing other painted surfaces. It is also readily removed with a putty knife or similar scraper as its coating remains flexible and is easily removed in a single layer without the use of any solvent or soften-

ing agent.

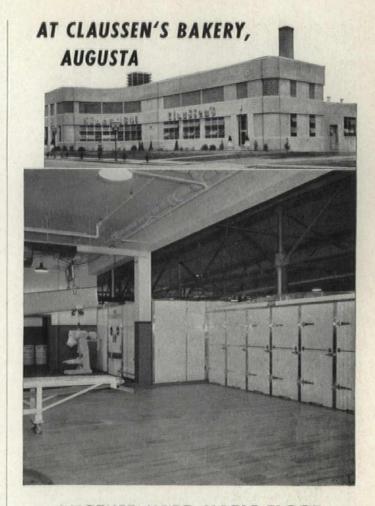
#### BLACKOUT AWNING

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simply as the old-time roll top desk, is being manufactured by Acklin Stamping Co., Toledo, Ohio. To conserve space when this Meta-Fold awning is raised, it has been designed in segments of Galvannealed steel that nest together in a telescopic manner. Each segment is sealed from the other by a light-proof, noise-absorbent gasket. The entire awning is rust-proof and fireproof, and can be provided with an inside lock.

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