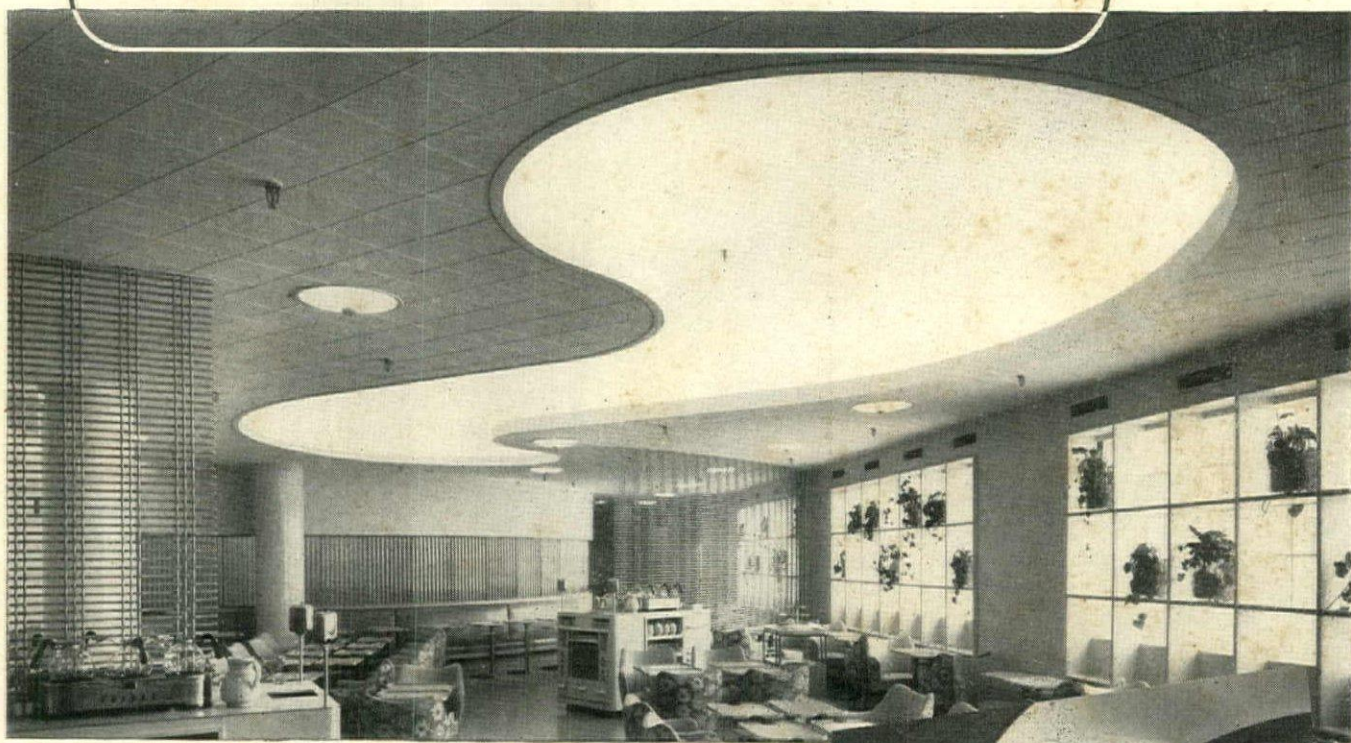


MAY 1943

Charles Eames . . Doug
las Orr . . Holabird &
Root . . Gruentbaum &
Krummick . . Simon
Breines . I. Rosenfield
Mies van der Rohe . .
Lorimer Rich . . Hugh
Stubbins . . Perkins
Wheeler & Will . . John
& Sarah Harkness . .
Stonarov & Kahn . . I.
Gordon Carr . . Pietro
Belluschi . . Moore &
Charles . . Hutchins . . Reisner &
las Orr . . Sharpe . . Chermayeff
Root . . Gruentb. Group . . Carl Koch &
Krummick . . Simon John Johanson, Carl
Breines . I. Rosenfield Horowitz . . An
Mies van der Rohe . .
Lorimer Rich . . Hugh
Stubbins . . Perkins
Wheeler & Will . . John

No Wonder Baltimore War Workers Exclaim

*"Have You Seen
HUTZLER'S STORE?"*



Architect: James R. Edmunds Jr.

Eleanor LeMaire, New York City, Designer

QUIET, CONVENIENCE, BEAUTY

Make a Miracle of Modern Merchandising

HUTZLER BROTHERS' Department Store in Baltimore has torn a page from the book of the future—given its patrons the benefit of tomorrow's ideas today. These photographs convey something of the beauty and convenience which thrill hard-working, victory-minded Baltimore women when they take time off to relax—to renew their spent energy for the big job still ahead. But only those who have sensed the serene quiet of the place can know what a relief it is—how it contributes to a sensation of restfulness and peace!

CELOTEX
SOUND CONDITIONING

COPYRIGHT 1942, THE CELOTEX CORPORATION

Sold by Acousti-Celotex Distributors Everywhere
In Canada: Dominion Sound Equipments, Ltd.

BACK OF THE QUIET IN HUTZLER'S STORE . . .

Providing Celotex Sound Conditioning service for Maryland, Virginia, and the District of Columbia, Hampshire & Decker, Inc., maintain offices in Baltimore and Washington. Back of the quiet in Hutzler's Store is the experience gained by this firm in completing over 7,000,000 square feet of acoustical installations since 1929. Similar experience is available to architects through any member of the nation-wide Celotex Sound Conditioning organization.

THE CELOTEX CORPORATION • CHICAGO

M A Y 1 9 4 3

NEW BUILDINGS FOR 194X

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A series of specially prepared designs, covering a majority of those building types—both public and private—which are high on every U. S. city's list of projects for postwar construction. While the designs vary widely in scope, character and manner of presentation, they exhibit more important similarities: an understanding of the implications of the postwar abundance of power, metals and plastics; a recognition of the importance of flexibility in planning and construction; and a new approach to the individual building as a unit in an integrated community. Significant too are the many concrete suggestions that prefabrication may have as much to offer the large commercial or public building as the small house.

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In Military Service:
Robert W. Chasteney, Jr.
William J. Conway
Robert Hanford
Joseph O. Hazen, Jr.
George B. Hotchkiss, Jr.
S. Chapin Lawson
Amnon Rubenstein
A. Banks Wanamaker

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Publisher, Howard Myers; *General Manager,* Ruth Goodhue; *Advertising Manager,* George P. Shutt.
THE ARCHITECTURAL FORUM is published by Time Inc., Maurice T. Moore, Chairman; Roy E. Larsen, President; Charles L. Stillman, Treasurer; David W. Brumbaugh, Secretary. Publication and Subscription Office, Orange, Conn. Subscription may also be sent to 330 East 22nd Street, Chicago, Illinois. Executive, Editorial and Advertising Offices, 19 West 44th Street, New York. Address all editorial correspondence to 19 West 44th Street, New York. Yearly subscription, payable in advance, U. S. and Possessions, Canada, Cuba, Mexico, South America, \$4.00. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All copies mailed flat. Copyright under International Copyright Convention. All rights reserved under the Pan American Copyright Convention. Copyright, 1943, by Time Inc. Printed in U. S. A.

FORUM OF EVENTS

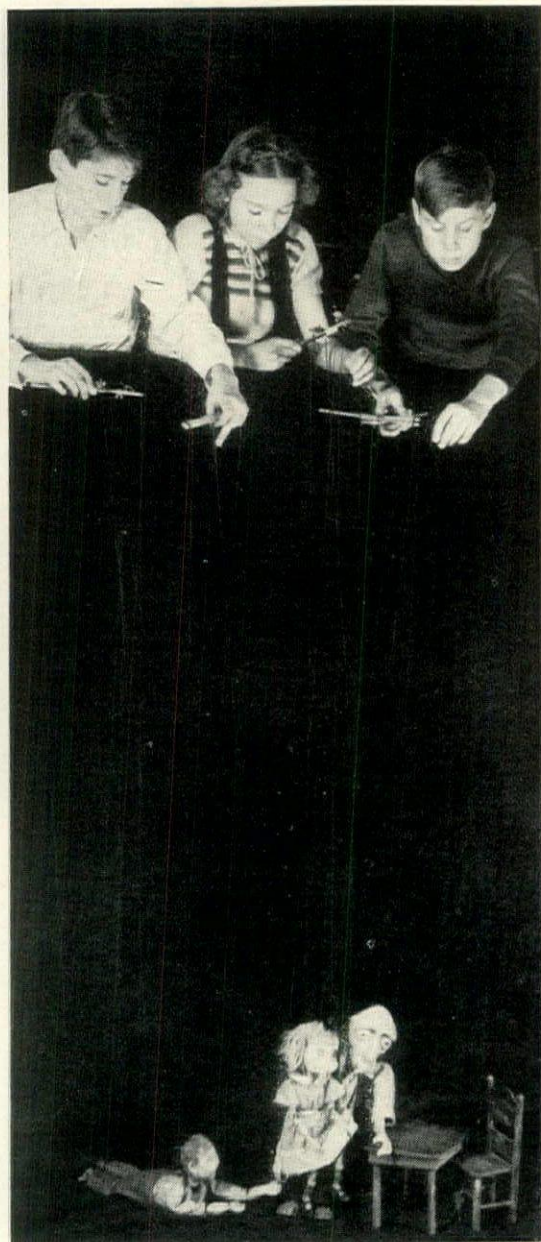


LITHOGRAPH TECHNIQUE DEMONSTRATED IN GRAPHIC ARTS STUDIO

A MUSEUM EXPLAINS . . .

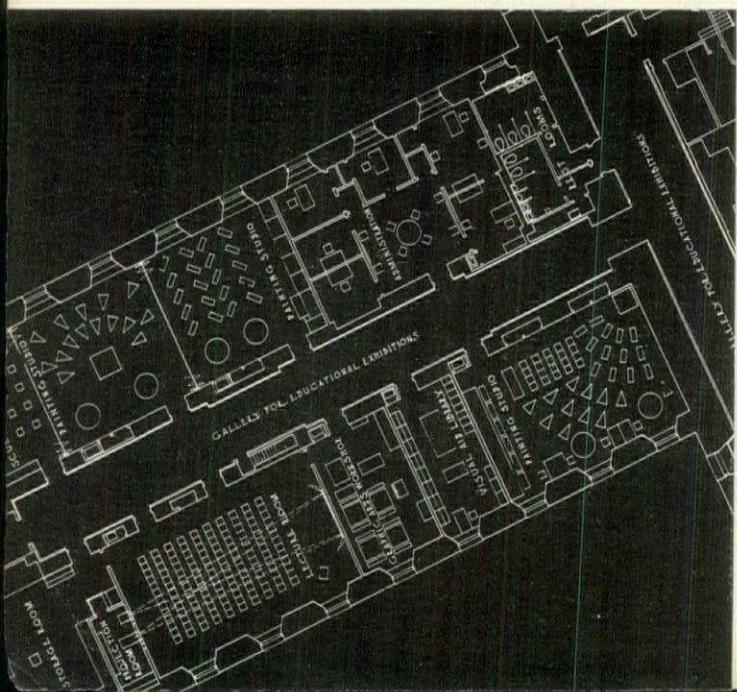
Until recently, museums have been satisfied to exhibit, and have cared little whether the exhibits were understood by the public. To change museum-going from an enigma to an experience, museums all over the country have started to explain, using every conceivable educational technique. The Philadelphia Museum of Art is one of the latest, and excels by virtue of its well-designed new quarters and its all-embracing program. To adults it presents lectures and films; for children it has started a complete school, in which they can paint, sculpt, engrave and make puppets. Films in particular are a great success: 2,000 see them every weekend, relate what they see to the other arts.

The studios and workshops have movable plywood screens, colored by painter Karl Knaths. Results: bright and cheerful places to work in, and endless lessons in color relationship. Goal of the educational program: creation of intelligent museum-goers, perhaps discovery of outstanding talent.



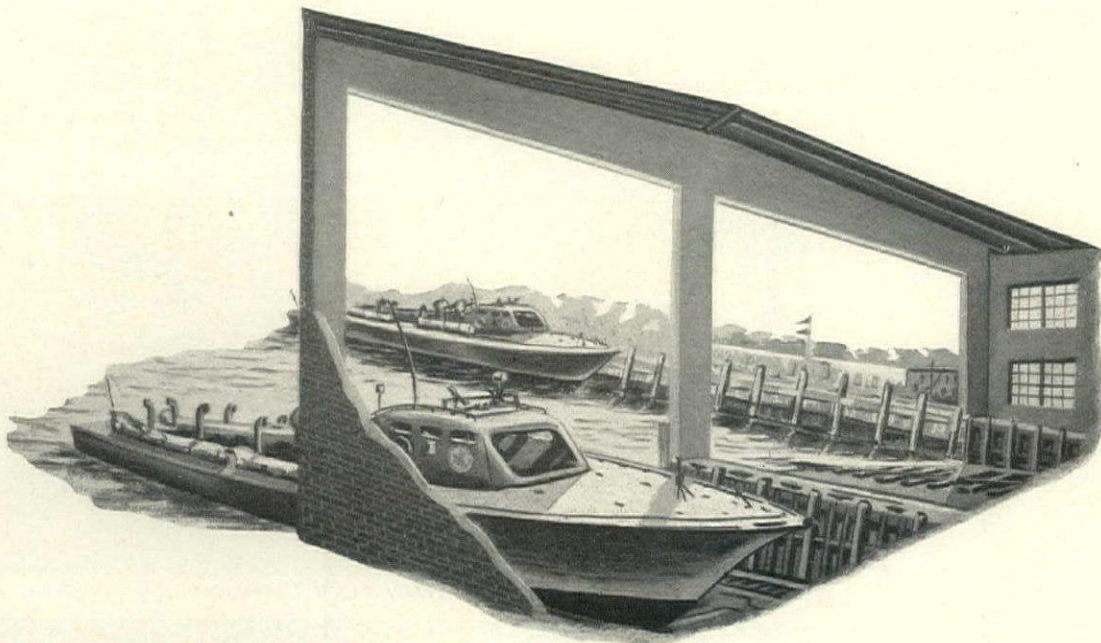
REHEARSE FOR A CHRISTMAS PUPPET PLAY

EXTENSIVE FACILITIES OF THE EDUCATIONAL DIVISION



THE VISUAL AID LIBRARY FOR FILMS, SLIDES AND EXHIBITS





You supplied the **DOORWAY...**

Electric Boat Co. . . . another Peelle installation completed ahead of schedule

Quickly installed and easily operated, the NEW Peelle Plydoor fits any size opening. Whether it's a Flying Fortress hangar, a mosquito boat nest or a jeep factory, this prefabricated hollow cell door is the perfect answer.

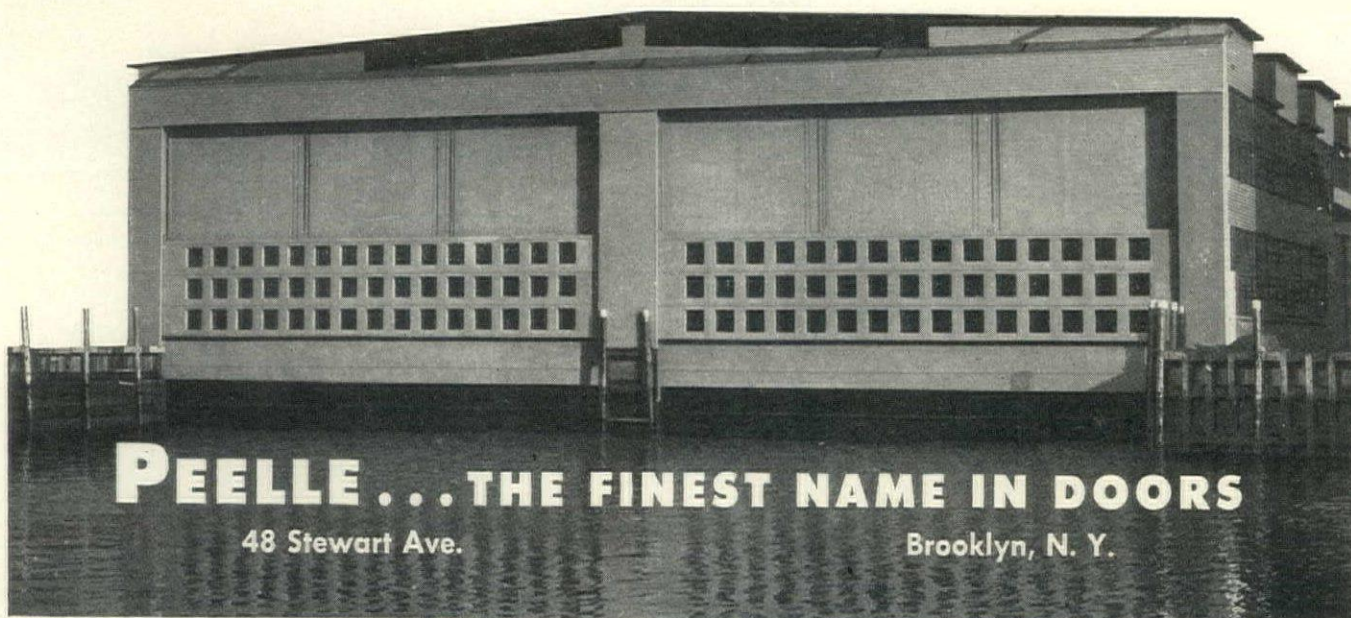
In six months, more than 35 Peelle installations have been made in airplane hangars alone. Bonded plywood, over strong wood framework, makes a sturdy, weatherproof door of maximum strength and minimum weight.

The Peelle Plydoor is stronger per pound than steel, and has a large factor of safety over the 30 pound per sq. ft. wind load specified by engineers. So light it can be manually operated in

a jiffy . . . glides up out of the way . . . or rolls back like a telescope into a self-contained unit. Can be added easily to buildings already constructed. You supply the doorway . . . Peelle has the door. Prefabricated under a new principle of wood construction and using a minimum of critical materials, the Peelle Plydoor can be delivered almost immediately . . . one week from finished drawings to shipment.

A complete staff of Peelle engineering advisors, backed by nearly a half-century of valuable door construction experience, will be glad to help you solve your door problems. Write for complete specifications and information.

Peelle had the door



PEELLE... THE FINEST NAME IN DOORS

48 Stewart Ave.

Brooklyn, N. Y.

FORUM OF EVENTS



LIKE A ROMAN ROAD THE HIGHWAY CUTS THROUGH DREARY CITY. . . .



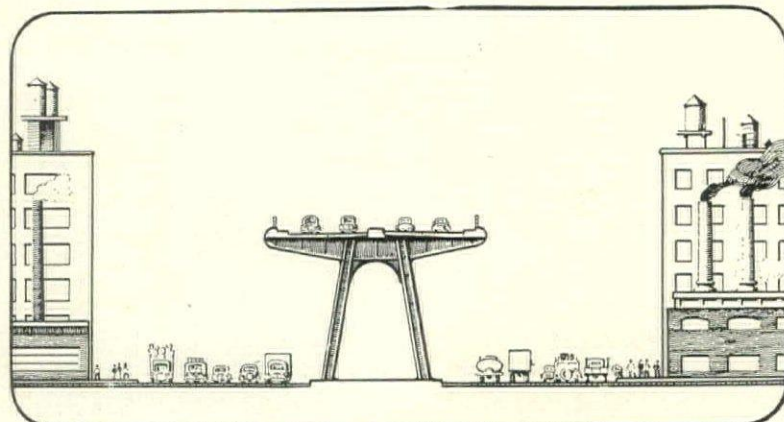
. . . . AND SWEEPS ACROSS ITS INCONGRUOUS CONFUSION AND DECAY.

PATTERN FOR THE FUTURE

Among the magnificent bridges and elevated highways designed by American engineers, the Gowanus Elevated Parkway ranks very close to the top. Constructed as one of the last links in the belt system surrounding New York City, the project was undertaken under the sponsorship of the Triborough Bridge Authority, whose Chairman is Robert Moses. Designed as a peacetime project, the parkway now serves a very busy war area.

In this century, throughout the world, engineers have been the first to grasp the spirit of our time. This project is certainly one of the best examples our machine civilization has produced to date. It is functionalism, pure and simple, and there has rarely been a more esthetically perfect example. There is a new scale to this structure that is truly contemporary, and next to it the incongruous disorder of our environment is shown up as hopelessly indefensible. Sweeping through the old city and over it—it is the first real taste of the coming urbanism.

(Continued on page 174)



FOUR TRAFFIC LANES BOTH WAYS FOR FAST AND SAFE TRAVEL.



*You can't wash away
its' Beauty!*

NOW that wartime conservation requires that you step up your maintenance of the Formica surfaces in your establishment, washing them frequently, waxing them occasionally, you can be sure that they will take it. For Formica is hard, non-porous, chemically inert. It will stand years of rubbing, won't absorb stains from coffee or other colored liquids, won't be spotted by cleaning solutions.

You can come through to the end of the war with your Formica-surfaced equipment in excellent shape, if you do a thorough maintenance job now. At that time new Formica of greater beauty and adaptability will be available. If you are planning after the war renovation now, we will be glad to send you detailed information that will enable you to include Formica in your plans.



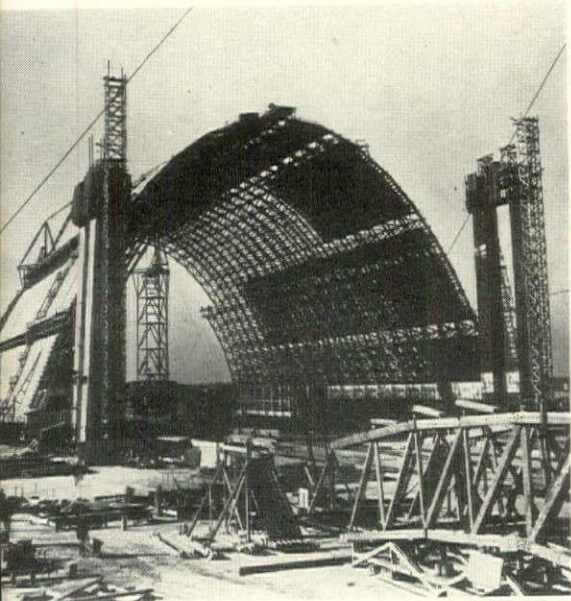
The Formica Insulation Company
4620 Spring Grove Ave., Cincinnati, O.

FOR FURNITURE AND FIXTURES

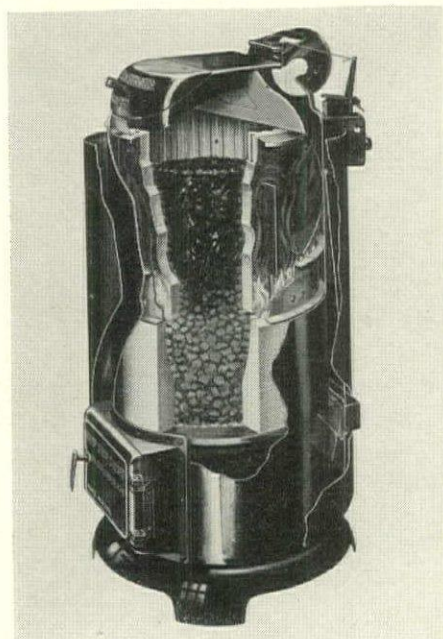
Building Reporter



1. PREFABRICATED FLOORS OF GLUED CONSTRUCTION ARE LAID ON FLOOR JOISTS BEFORE THE WALLS ARE ERECTED



2. TIMBER BLIMP-HANGAR FOR NAVY



3. RADICAL-DESIGN MAGAZINE HEATER

TECHNICAL NEWS

Glued floors. To speed construction of war workers' homes in Bremerton, Wash., glued floor sections are now factory-fabricated by Prefabco Products Co., Seattle, Wash. Newly developed glued construction of 4x6 units is a departure from nailed floor technique: Strips are glued to the back of hardwood panels with a Laucks Glue Gun, forming sections of finished flooring. Insulation covers the back of units. Panels are supported by ordinary wood joists, and covered with glued Sisalkraft paper to protect the prefinished surface from dirt and dampness during the erection of walls.

Largest wooden arch structures in the world have been recently designed by the Navy's Bureau of Yards and Docks to house the Navy's growing blimp fleet (2). Rigid arch-type construction was chosen for clearance requirements and for favorable stress distribution. Flame-treated timber structure consists of 51 spandrel-braced arch ribs on 20-ft. centers. Arches have a 246-ft. span and 133-ft. rise and are mounted on a 24-ft. high, A-frame concrete base. All timber connections and splices are of the lap type for which 4-in. split-ring or shear connectors and $\frac{3}{4}$ -in. bolts were used. Rolling segmental doors set in concrete towers are separate.

In the course of erection windstorms pulled down the central portion of several arches. These accidents were not the result of faulty design, but indicated that adequate bracing must be quickly installed and roof sheathing speeded up to better distribute wind loads.

Polygonal ammunition warehouse, based on wood pipe construction, has been developed by Armco Drainage Products Assn., Middletown, Ohio. Doweled and interlocking joints give this 26-ft. structure the same strength and rigidity as the drainage pipe, same economical use of short-length lumber.

NEW PRODUCTS

MAGAZINE HEATER incorporates new combustion principles (3).

Name: Conservator Circulating Heater.

Features: Because of complete combustion of coal and coal gases, this new-type heater is said to operate more efficiently and economically than other units which burn solid fuel, and even other magazine heaters. Several unique features contribute to this greater operating efficiency: Solid and volatile elements burn in separate chambers. A measured quantity of air enters through a thermostatically controlled opening near the bottom of the unit. Part of this air is used to burn coal at the grate level. The balance is conveyed by a tube to the top of stove, where it forces volatile gases down through coal and into the outer combustion chamber through slits and louvers in the firebrick wall of inner chamber. Another thermostatic control supplies the correct amount of preheated secondary air to this outer combustion chamber where mixture is ignited. Thus, maximum heat is extracted from coal through a double burning process. Outer casing of heater permits the entrance of room air at bottom and ejection at top, thereby forcing circulation of warm air throughout the house. Unit is now available for auxiliary or permanent installations in homes.

Manufacturer: Caloric Gas Stove Works, Trenton & Tioga Sts., Philadelphia, Pa.

ASBESTOS-CEMENT BOARD can be used for all building purposes.

Name: Stonewall Board.

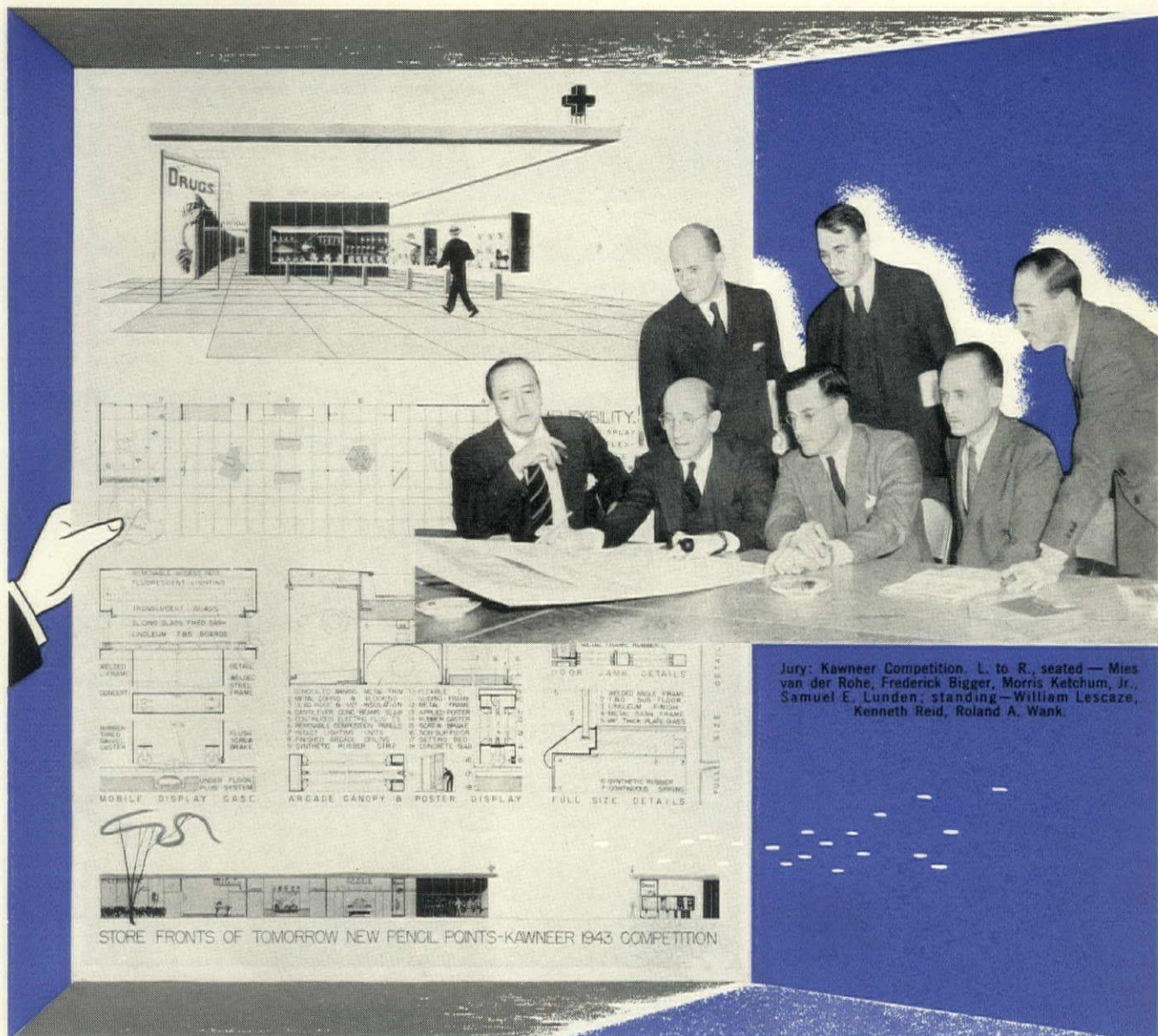
Features: This all-purpose building material has been introduced to help meet the need of building materials which will take the place of sheet metal and various forms of lumber now scarce or under governmental restrictions. It can be used for air-conditioning and ventilating ducts,

(Continued opposite page 193)

LOOKING AHEAD—

THE STORE FRONT OF THE FUTURE is very much the business of The Kawneer Company. Having originated the store front idea back in 1905, and having pioneered many important store front developments, Kawneer is now working on the better Kawneer Store Fronts of tomorrow.

The recent Kawneer-New Pencil Points Architectural Competition revealed interesting new trends; other research is pointing the way to improvements of great importance. Kawneer production facilities, now devoted 100% to the war effort, will again be directed to the manufacture of superior store front construction.



Jury: Kawneer Competition. L. to R., seated — Mies van der Rohe, Frederick Bigger, Morris Ketchum, Jr., Samuel E. Lunden; standing — William Lescaze, Kenneth Reid, Roland A. Wank.

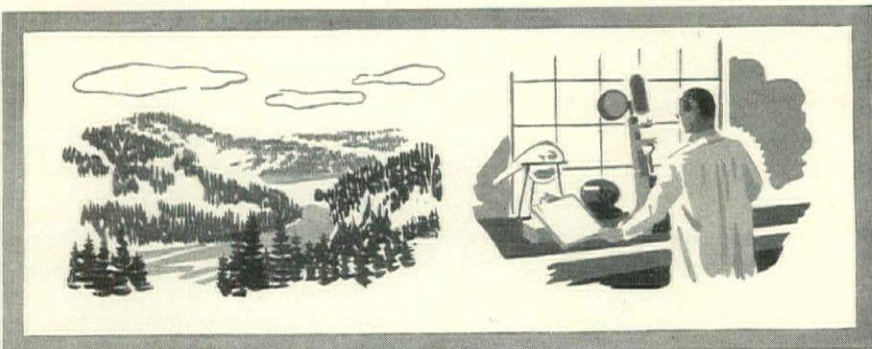
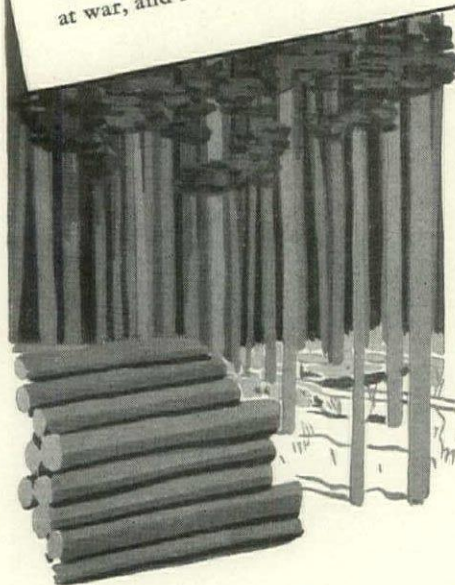
Kawneer

ORIGINATORS OF THE
RUSTLESS METAL STORE FRONT
AND ALL-ALUMINUM RESIDENTIAL WINDOW



STALWART SOLDIERS FROM THE NORTH

These crop trees, a natural resource of the northwoods, and thousands like them, are transformed by modern science and engineering into products that build comfort and protection for the United Nations at war, and for civilians in peace time.



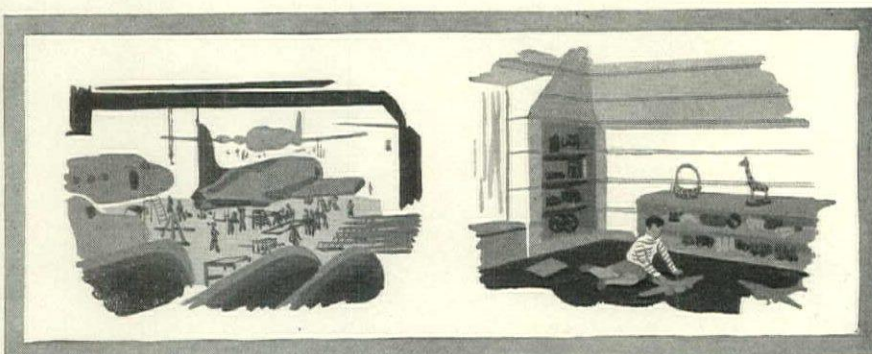
● The average person thinks of trees only in connection with lumber. But from the cellulose fibres of trees (not the trees used for lumber) come a multitude of useful products. Clothing, surgical dressings, even fuel to run automobiles—these are a few of the more unusual products being made from wood today.

● More than a quarter of a century ago, in the mills of the Minnesota and Ontario Paper Company, at International Falls, Minnesota, scientists, working in research laboratories, discovered a method of fabricating wood fibres into boards that were superior, for many building purposes, to wood as nature made it.



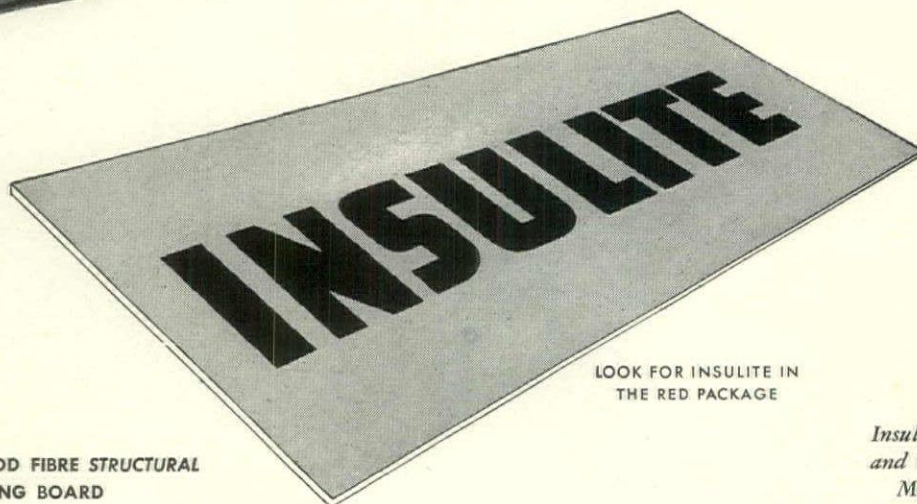
● Logs are placed into giant machines that tear them to pieces leaving only the sturdy fibres. Then the fibres are processed into boards — called INSULITE. These boards have a bracing strength four times that of ordinary wood sheathing, horizontally applied.

● Insulite has many important uses. Today, in many corners of the world, the advantages of Insulite are bringing comfort to our fighting men, thousands of whom are housed in barracks built of Insulite. Insulite is moisture-proofed, wind-proofed, provides sound control, and is treated against termites, rot and fungi.



● Insulite has many structural advantages. Today, speed in building is highly important. The large panels of Insulite are rapidly applied or nailed into place. The saving in building time is apparent when you consider the large area the panel of Insulite covers in one operation. This bomber factory is only one war plant that was erected and completed in record time with Insulite.

● In home construction Insulite finds its widest use. Because Insulite insulates as it builds, walls constructed with Insulite save fuel in winter, make rooms cooler in summer. When used to finish attic interiors, like the one shown, Insulite provides attractive walls and ceilings that require no plastering, papering or painting. Walls of Insulite are also easy to clean.



THE ORIGINAL WOOD FIBRE STRUCTURAL
INSULATING BOARD

LOOK FOR INSULITE IN
THE RED PACKAGE



Insulite Division of Minnesota
and Ontario Paper Company
Minneapolis, Minnesota



FLOORS OF THE FUTURE

What Will They Be?

You read much about the "house of tomorrow"—predictions that new forms of glass, metal, plastic, and plywood will be found in every room . . . that kitchens will be mechanical wonders . . . that bathrooms will be like those in the movies . . . that windows will wind up and down like those in an automobile . . . that roofs will slide back and forth at the owner's command.

What about the floors? What kind of flooring will be used in the "house of tomorrow"? Of one thing you can be certain . . . that it will be made of hardwood. No satisfactory substitute has been found for hardwood floors. No other material has its warmth, beauty, economy,

durability, and other desirable qualities.

You can also be certain that the new postwar flooring will be a product of E. L. Bruce Co., world's largest makers of hardwood flooring. The two major flooring improvements of the past 25 years have been developed in our plants—first, unit-wood block flooring for use over concrete; later, prefinished strip flooring known as "Streamline."

Our wood experts, engineers, and chemists are continually conducting research work to produce a better hardwood flooring to match the improvements in other building materials. We can't tell you now what the new postwar flooring will be. But you may rest assured it will be a Bruce product.



E. L. BRUCE CO.

Memphis, Tennessee



ARC WELDING

Sheds a New Light on Building Plans for 194X

ARC WELDING . . . symbolized by the "man-behind-the-mask", hero of the present great struggle for getting more ships, planes, tanks and guns faster . . . is not new to the building industry. But it does have a new significance!

The shipyards and war factories of America have placed this wholesale slasher of precious time, materials and costs in the spot-light for the admiration of a hundred million people. To millions of Americans arc welded construction now is the ne plus ultra. Watch them clamor for it in 194X.

By the light of the bright, war-winning welding arc, alert planners of buildings for 194X are seeing clearer than ever before how to get the jump on competition. They will use these basic advantages of arc welded construction to win their battles for post-war business:

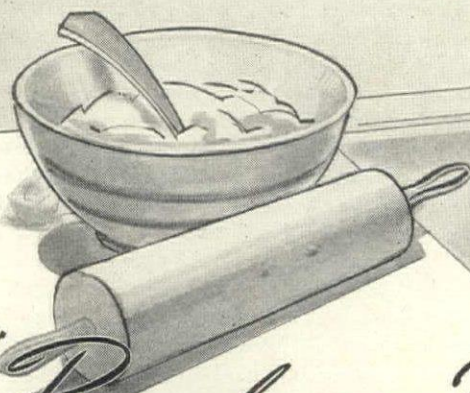
1. Freedom of ingenuity to design better-looking and more functional buildings.
2. Lower costs by fuller use of pre-fabrication.
3. Lower costs by using strength of steel 100%.
4. Lower costs by simplifying fabrication and erection.

Are you improving your knowledge of this efficient construction process to aid in your post-war planning? Studies in Structural Arc Welding will be sent you free on request. **THE LINCOLN ELECTRIC COMPANY**, Cleveland, Ohio.

LINCOLN

*If you worked
in the kitchen*

**YOU'D WANT
PERMA-GLOSS TOO!**



"Remember me?"

I'm the housewife who works with the equipment you install in the kitchen. I use the Perma-Gloss sink and tray. I clean them. I want them to clean easily. I don't want to worry about chipping, cracking or staining. In specifying the 'Technical details' don't overlook me and my convenience.

"Take a tip and supply Perma-Gloss—it meets my requirements and if it meets mine, it will satisfy your other customers."

Through installations in Government housing units, dormitories and camps, Perma-Gloss is making new friends by the thousands. "After-the-war" customers are learning Perma-Gloss advantages now—they will insist on Perma-Gloss in new homes.



PERMA-GLOSS

- ▶ is light weight—easy to install
- ▶ is strong and durable—will not dent or craze
- ▶ is acid proof thruout, not merely acid resistant
- ▶ has no enamel to peel or chip—no iron to rust
- ▶ will withstand thermal shock
- ▶ is inexpensive

For detailed information send for our latest Perma-Gloss bulletin.

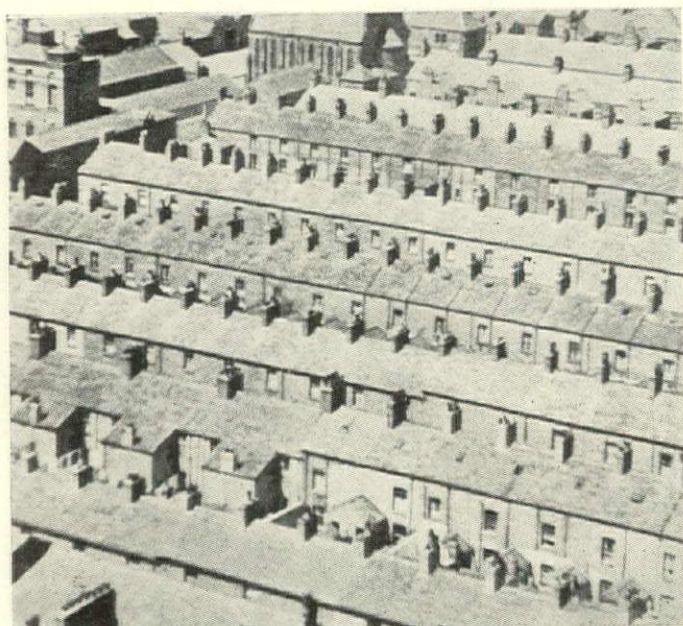
BUY MORE WAR SAVING BONDS

General Ceramics Co.



**SANITARY WARE DIVISION
METUCHEN, NEW JERSEY**

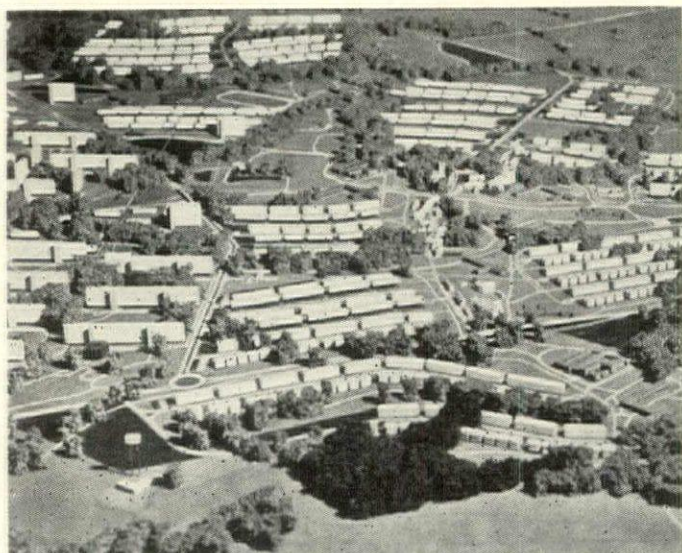
BOOKS



YESTERDAY: SQUALID MEMENTOS OF THE PAST CENTURY.



TODAY: LITERAL DISINTEGRATION OF CITIES & TOWNS.



TOMORROW: FREE, OPEN PLANNING ON A HUMAN SCALE?

REBUILDING BRITAIN, published for the Royal Institute of British Architects, Lund Humphries, 12 Bedford Square, London W.C.1., illustrated with photographs and drawings, 7¼ x 9¾, 3/6.

LIVING IN CITIES, by Ralph Tubbs, Penguin Books, Harmondsworth, Middlesex, illustrated with photographs and drawings, 7 x 8¾, 1/—.

50 FACTS about Social Services in Britain, published by British Information Services, 30 Rockefeller Plaza, New York City, illustrated, 4 x 5¼, free.

During the past few months a series of books has appeared, in which certain fundamentals of reconstruction and planning have been restated. The most important of these, *Can Our Cities Survive?* by José Luis Sert, (ARCH. FORUM, Jan. 1943, p. 18) represented a general attitude. Mr. Sert recapitulated all the things that have been said during the past twenty years, and restated them forcefully, because they clearly needed restating. Although an increasing number of people are being made aware of the decay of their environment, the vast majority, even today, has been numbed by the impact of this decay, and has ceased to notice it.

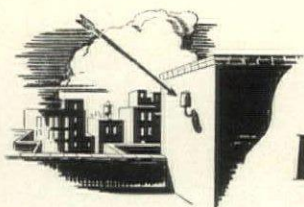
Rebuilding Britain and *Living in Cities* are still fairly general statements. Both have been published as propaganda pamphlets of the best kind in conjunction with exhibits of the same names. They are therefore addressed to the people of England, and since they assume this people to be intelligent and articulate, they make interesting reading for experts as well. In *Rebuilding Britain* the emphasis is not so much on the development of cities to date as on the end product of this development, which it documents in photographs of appalling squalor. Mr. Tubbs, however, in *Living in Cities*, has developed a more logical argument. Half his pamphlet is devoted to a review of city planning of the past. He shows himself to be keenly aware of the indivisibility of cultural and social evolution. There are charming reproductions of tapestries, woodcuts and fashion prints, that show more clearly than any architectural detail the spirit of an epoch. Both booklets come to similar conclusions: the absolute, imperative need for physical planning to prevent the collapse of our civilization. Never has this fact been more urgently stated than in the photographs of destruction in English towns and cities. And rarely has a people seen with such clarity the need for reconstruction, as their environment literally began to crumble.

Mr. Tubbs quotes Robert Bridges, a poet, to give a definition of the choice before us:

"—among Bees and Ants are social systems found so complex and well-order'd as to invite offhand a pleasant fable enough: that once upon a time, or ever a man was born to rob their honeypots, bees were fully endowed with Reason and only lost it by ordering so their life as to dispense with it; —some I have seen will choose a beehive for their sign and gloss their soul-delusion with a muddled thought, picturing a skep of straw, the beekeeper's device, a millowner's workshop, for totem of their tribe; Not knowing the high goal of our great endeavour is spiritual attainment, individual worth, at all cost to be sought, and at all cost pursued, to be won at all cost and at all cost assured;"

Both booklets are permeated with this democratic attitude, stressing that planning is an activity related to individual

(Continued on page 154)



Look on the roof of The Best Heated Building in Town

Here is the symbol of heating "Controlled-by-the-Weather."

It is the Outdoor Thermostat of the Webster Moderator System, an automatic central control that is saving precious fuel for hundreds of America's best heated buildings and releasing much needed transportation facilities for other purposes.

The Webster Moderator System supplies steam *continuously* to all radiators, automatically changing the heating rate with changes in outdoor temperature. No "off" and "on" heating. No annoying "now hot — now cold" conditions.

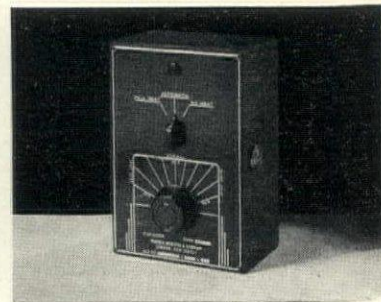
"Control-by-the-Weather" prevents wasteful overheating . . . reduces costly window opening in periods of mild weather. Radiator temperatures may vary from 212° to 150°, or even as low as 90°, depending on the need for heat.

The Webster E-4 Moderator System is a steam heating control that anybody can understand. There are just four control elements—an Outdoor Thermostat, a Main Steam Control Valve, a manual Variator and a pressure Control Cabinet. These elements, plus small metering orifices to assure each radiator its share of steam, result in the highest expression of comfort and economy in modern steam heating.

WARREN WEBSTER & CO., Camden, N. J.
Pioneers of the Vacuum System of Steam Heating : : Est. 1888
Representatives in principal U. S. Cities : : Darling Bros., Ltd., Montreal



Outdoor Thermostat automatically changes heating rate when outdoor temperature changes.

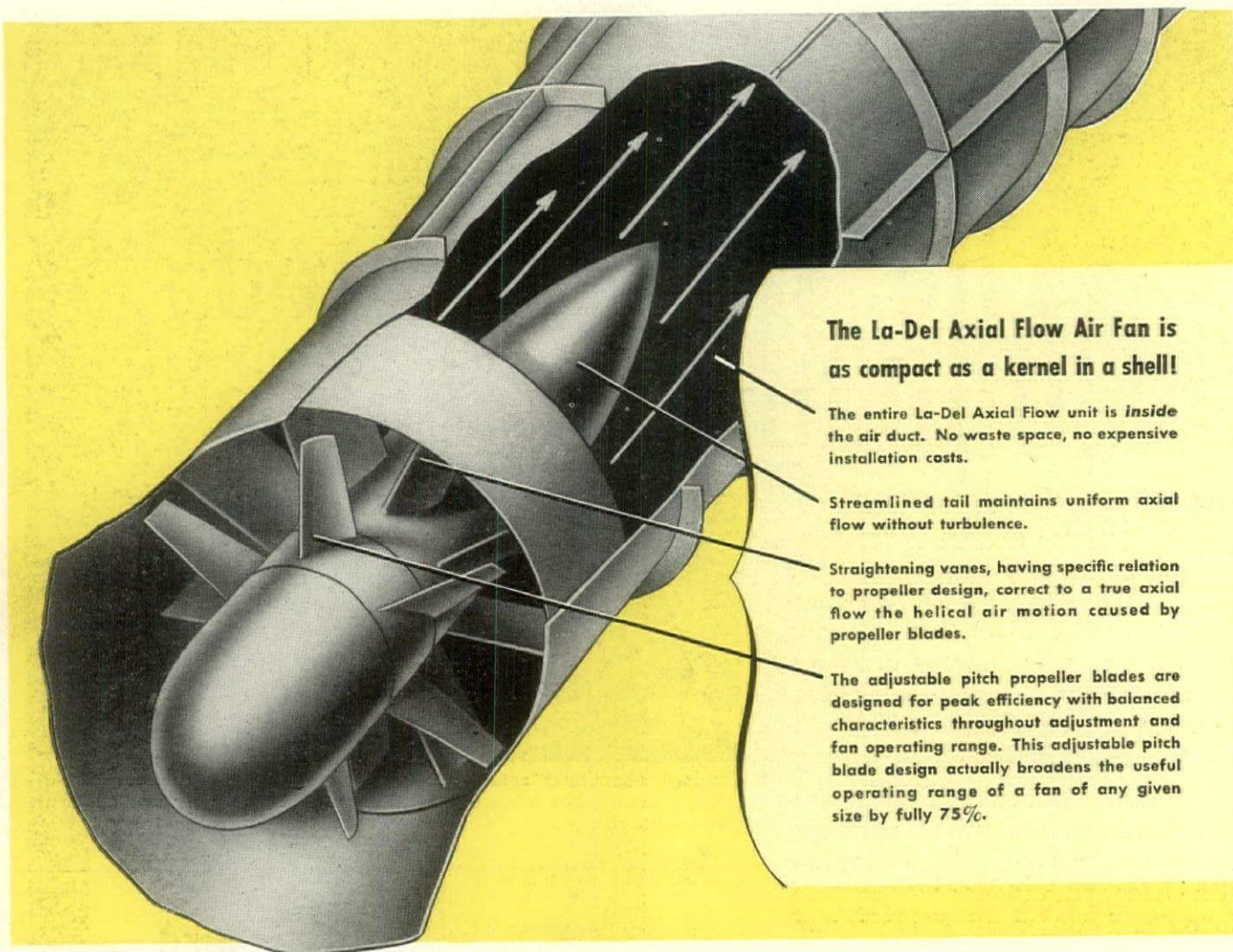


Variator provides desirable manual operation to supplement automatic control.



For men who are planning building construction or modernization both now and after the war, we have a free book giving case studies of 268 modern steam heating installations—banks, hospitals, hotels, apartments, office buildings, industrial plants, large buildings of every type. These are reports on actual installations of the Webster Moderator System, with photographs of buildings, proof of heating comfort, savings in dollars and cents. Study this 75-page book at your leisure. Your nearest Webster Representative will call only if you invite him. Write for "Performance Facts" today.

ARMY E NAVY
Webster
Steam Heating



The La-Del Axial Flow Air Fan is as compact as a kernel in a shell!

The entire La-Del Axial Flow unit is *inside* the air duct. No waste space, no expensive installation costs.

Streamlined tail maintains uniform axial flow without turbulence.

Straightening vanes, having specific relation to propeller design, correct to a true axial flow the helical air motion caused by propeller blades.

The adjustable pitch propeller blades are designed for peak efficiency with balanced characteristics throughout adjustment and fan operating range. This adjustable pitch blade design actually broadens the useful operating range of a fan of any given size by fully 75%.

New . . . SCIENTIFIC, SPACE-SAVING ECONOMY FEATURES YOU SHOULD KNOW ABOUT **LA-DEL** AXIAL FLOW AIR FANS

Study well the distinctive features of the La-Del Axial-Flow air movement system, as portrayed here. For this is the most modern and efficient of all air propulsion methods, destined to make possible new efficiencies and economies in all types of commercial, industrial and maritime construction!

The La-Del Axial-Flow air movement principle is a development of Dr. Troller, Director of the Guggenheim Airship Foundation, Akron, Ohio. Dr. Troller's research in the field of aerodynamics is well known to engineers throughout the world. La-Del Axial Flow Air Fans rapidly are becoming standard equipment for air movement in mines and naval vessels of all types. La-Del facilities today are devoted almost entirely to the wartime demands of the nation.

Write for Bulletin No. 116 giving additional facts about the La-Del Troller Axial-Flow air movement principle, for reference in the planning and construction of your peacetime developments.

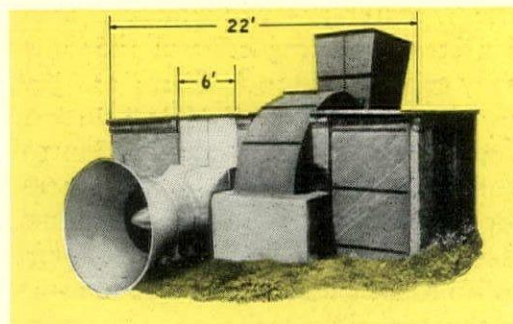


ILLUSTRATION OF LA-DEL SPACE-SAVING EFFICIENCY. Small dimension, 6 feet, dramatically indicates width of La-Del Axial-Flow Air Fan in contrast to 22 feet width of old, inefficient type of mine blower fan it replaced. Greater air-moving capacity, greatly lowered power costs, much lower initial costs, are important La-Del features.



LA-DEL CONVEYOR & MFG. CO.

New Philadelphia, Ohio

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



Once again . . . let Flintkote experience lighten your load

After Victory . . . when you start on those new buildings for 194X . . . let all our experience start working for *you*.

During World War I, Flintkote engineers developed the first asphalt strip shingles, learned how to apply mineral surfaces in a variety of attractive colors.

Since 1940, Flintkote has pioneered with an improved Cold Process for built-up roofs of bonded quality. New insulation board products have been developed and made available. New materials have been created to meet war-time needs . . . blackout and camouflage coatings, asbestos-cement board and a versatile new 4-in-1 utility board.

You can depend upon Flintkote engineering for good materials of asphalt, asbestos-cement, wood fibre, rock wool and other ingredients for roofing, siding, waterproofing, insulation and decorative interiors. Flintkote industrial products supply mastic flooring and coatings to protect metals against corrosion.

Get jobs under way quickly by calling the nearby Flintkote office, before you specify materials for your 194X jobs. The Flintkote Company, 30 Rockefeller Plaza, New York. Branches in Atlanta, Boston, East Rutherford, Chicago Heights, Detroit, New Orleans, Waco, Los Angeles and London.

FLINTKOTE

ANNOUNCING

OF THE FENESTRA

WINNERS OF SMALL HOUSE WINDOW COMPETITION

DESIGN PLACED FIRST

Frank F. Polito and Evald A. Young, Oscoda, Michigan,
\$500.00

DESIGN PLACED SECOND

T. Y. Hewlett, Toledo, Ohio, \$300.00

DESIGNS MENTIONED

Karl Kamrath, Houston, Texas, \$50.00
Royal Barry Wills, Boston, Mass., \$50.00
Robert Arthur Jones, St. Simons Island, Ga., \$50.00
Walter Jon Shelly, Jr., Lawrence, Kansas, \$50.00

WINNERS OF HOSPITAL WINDOW COMPETITION

DESIGN PLACED FIRST

Percy Cashmore, White Plains, N. Y., \$500.00

DESIGN PLACED SECOND

William G. Moeckel, Wilmington, Delaware, \$300.00

DESIGNS MENTIONED

A. Ralph Curry, Kansas City, Mo., \$50.00
G. Edwin Shofner, Memphis, Tenn., \$50.00
Lee Charles Mielke, Chicago, Ill., \$50.00
Wendell Clough, Perrysburg, Ohio, \$50.00

JURY OF AWARDS

Edward G. Conrad, A. I. A., Cleveland
Robert B. Frantz, A. I. A., Saginaw
Branson V. Gamber, A. I. A., Detroit
Amedeo Leone, A. I. A., Chairman, Detroit

John N. Richards, A. I. A., Toledo
Alfred Shaw, A. I. A., Chicago
R. W. Weed, Detroit Steel Products Co., New York City
C. William Palmer, A. I. A., Detroit, Professional Adviser

REPORT OF JURY OF AWARDS

HOUSE UNIT—FIRST PRIZE—A simple and well proportioned unit which seems to meet the scale of the small house. Its horizontal dimension makes for easy sliding. Muntins, if desired for architectural effect, might be wider so as to count in the pattern of the window. The unit size is such that it is easily adaptable to a sash without muntins if one so desires. The frame for the sliding screen might be simplified. Weather stripping should be provided at the meeting rail.

HOUSE UNIT—SECOND PRIZE—This design of a sliding unit was one of the few submitted which the jury felt the competitor had made an effort to develop, which might be manufactured and made available for the \$5,000 house. The details are simple, well studied and easily erected. However, the general appearance and pro-

portion of the unit are too reminiscent of the existing standard casement window.

HOUSE UNIT—MENTION—An imaginative scheme submitted by a contestant having a fine sense of delineation. Allowing for the use of hermetically sealed plastic glass, it is not quite clear how the plastic is held to the frame. The operating stability of the ventilating sash is questionable with the use of the piano hinge and the nylon chord. The remote control for the spring gearbox at the sill suggested by the designer is not in keeping with the cost factor involved in the problem at hand.

HOUSE UNIT—MENTION—A scheme which shows originality in the use of plastic material for the window area and minimum use of metal for the frame. No provision

Fenestra

POST

THE WINNERS

ARCHITECTURAL COMPETITIONS

is made for the disposal of water accumulating in the sill section. The operating handle detail is questionable. The application of this extremely modern type of window to a traditional basic house seems somewhat incongruous.

HOUSE UNIT—MENTION—A well developed scheme showing a vertical sliding sash unit of light gauge metal which provides two-thirds opening in the window. It was the general opinion of the jury that the unit was not large enough for the use of three receding sash, as well as being excessive in cost for the type of window called for in the program. Objectionable sight lines might develop when the window is fully opened with the movable sash behind and in front of the middle stationary unit.

HOUSE UNIT—MENTION—A scheme cleverly presented showing the use of "large area of glass suggesting the feeling of space" outside the house. This is an interesting solution, yet it seemed to the jury that it lacked practical detailed study. The aluminum sections shown seem inadequate in size for the large areas of glass involved. The lift-lock would be awkward to operate from the floor and its material is not clear. The horizontal sliding sash detail is not shown. The removable storm-pane unit is much too cumbersome to be held by screws without the use of frames.

HOSPITAL UNIT—FIRST PRIZE—A design embodying slanting fixed sash with opening vents between the sash operated by a gear. This window makes for distributed ventilation, easily controlled and with no direct drafts. No provision is made to clean window from the inside. The jury felt that of all those submitted, this seemed to offer possibilities with further study in the ventilating units.

HOSPITAL UNIT—SECOND PRIZE—A more familiar type of window with the hopper vent. The jury did not see added advantage to the slant of vent, either for appearance or practicability. Vertical sections are too small for rigidity

required in the operation of sash, and the mechanical operation of the vertical sash is not clear. The center control mullion should extend down between the hopper sash for stiffness of construction. One of the few schemes submitted where the sash may be cleaned from the inside.

HOSPITAL UNIT—MENTION—A well presented sheet showing a horizontal sliding sash. Various members of the jury were of the opinion that while it made an attractive window and with the details thoroughly studied except the sill section, it had the objectionable feature of direct drafts.

HOSPITAL UNIT—MENTION—This design is based on the center section being fixed and with the horizontal gliding end sash. The metal details have been carefully developed with the possible exception of the double glazing detail which is not airtight. When the window is fully opened, the large center area loses its picture value by the operation of the end sash meeting in the center of the window. Here again the jury felt that no protection against drafts had been provided in the operation of the unit.

HOSPITAL UNIT—MENTION—In the analysis of this window, the jury agreed the details were too complicated for the size of window and expensive to manufacture. If it were four units high and it might have to be for a hospital room, top sash would be inaccessible for hand operation.

HOSPITAL UNIT—MENTION—This design seemed to the jury to be applicable to a special condition rather than a general type of hospital window. The ventilator at the head is impractical to operate through the screen. The louvre feature below the window sill is an attractive one and while the competitor suggests that "the sash manufacturer, using war production tools, makes aluminum ventilation filter heating unit used every second or third opening as needed," it was felt by the jury that this item might better be furnished by other contractors.

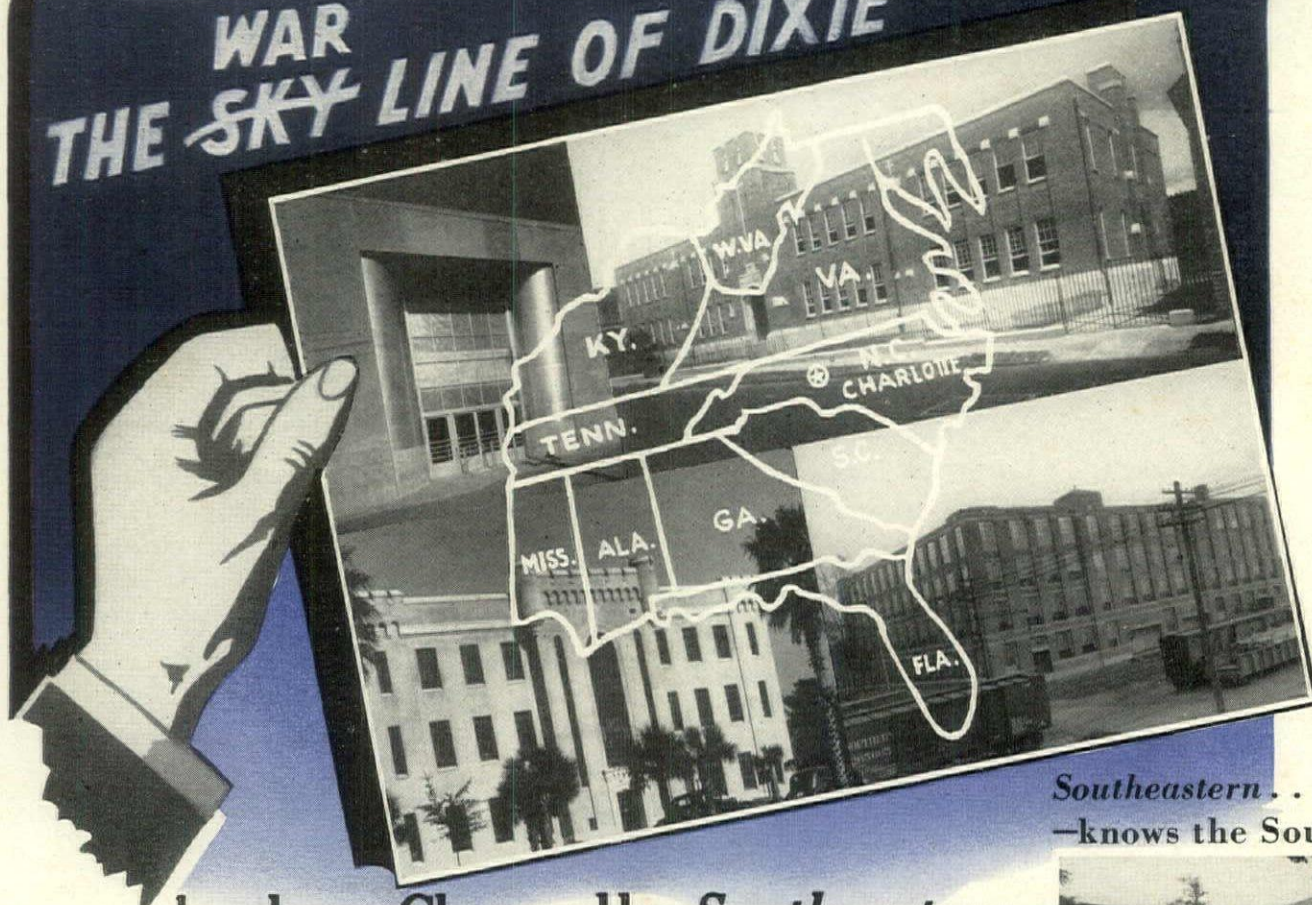
DETROIT STEEL PRODUCTS COMPANY

Now Exclusively Engaged in War Goods Manufacture

Dept. AF-5 • 2252 East Grand Boulevard • Detroit, Michigan

WAR *Windows* ★ ★ ★

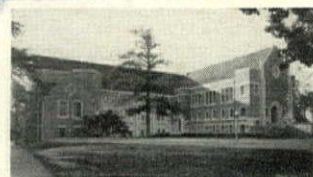
WAR THE ~~SKY~~ LINE OF DIXIE



—has been Changed by *Southeastern*

The superhuman demands of war upon the Construction Industry found SOUTHEASTERN in the vanguard of the industry—ready: with a large and experienced personnel . . . with methods and policies tested through twenty years of building . . . and with an intimate knowledge of materials, supply and Southern labor. Many superintendents and other employees had been with us for more than ten years. Crews of men with special skills had been trained and maintained. The coordinating of material flow into the job at hand had been developed into a science. Our safety and performance records were highly acceptable to bonding companies. Financial aid had often been extended until permanent financing was complete. These and other peculiar SOUTHEASTERN abilities have enabled us to make an important contribution to the amazing story of the Construction Industry at War. You can be sure that when Peace comes again we will be ready to help further in the sensational growth of the South—with a construction service that gets things done, dependably, quickly and “according to plans and specifications.” In the meantime, we invite your inquiry on ways and means and the cost of reconditioning, altering or adding to your clients’ present plant facilities.

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INSTITUTIONS

—has built over 200 Churches, Schools and Hospitals.



INDUSTRIAL PLANTS

—clients read like a bluebook of Southern Industry.



COMMERCIAL PLANTS

—built for almost every conceivable purpose. Hundreds of architects have accepted and approved them “According to Plans and Specifications.”

Southeastern Construction Co.

CHARLOTTE



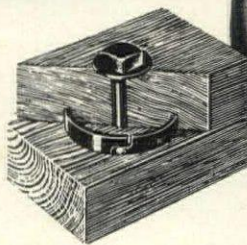
NORTH CAROLINA

FREEDOM IS NOT FREE~IT IS PRICELESS ~ BUY WAR BONDS

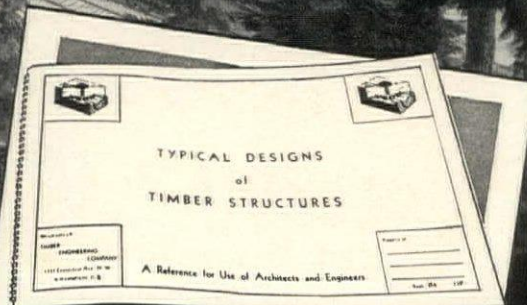
SELECTED FOR SERVICE

Topping the "spar tree" preparatory to forestry operations. Selective harvesting of fully matured trees in the surrounding forest will assure continued forest growth.

The **TECO** Ring Connector spreads the load on a timber joint over practically the entire cross-section of the wood . . . brings the full structural strength of lumber into play.



TIMBER ENGINEERING COMPANY
NATIONAL MANUFACTURERS OF **TECO** TIMBER CONNECTORS AND TOOLS
WASHINGTON, D. C. PORTLAND, OREGON



Lumber, in a thousand different forms, streams to the fighting fronts of the world. At home, wood replaces metal in thousands of heavy duty war structures—made possible by the **TECO** Connector System of Timber Engineering. This **FREE** Reference Book shows details of 45 typical timber designs for roof trusses, bridges, towers, tanks, hangars, and other structures for the war today and the peace tomorrow. Available to practicing engineers and architects. Write for it today—using your firm letterhead.

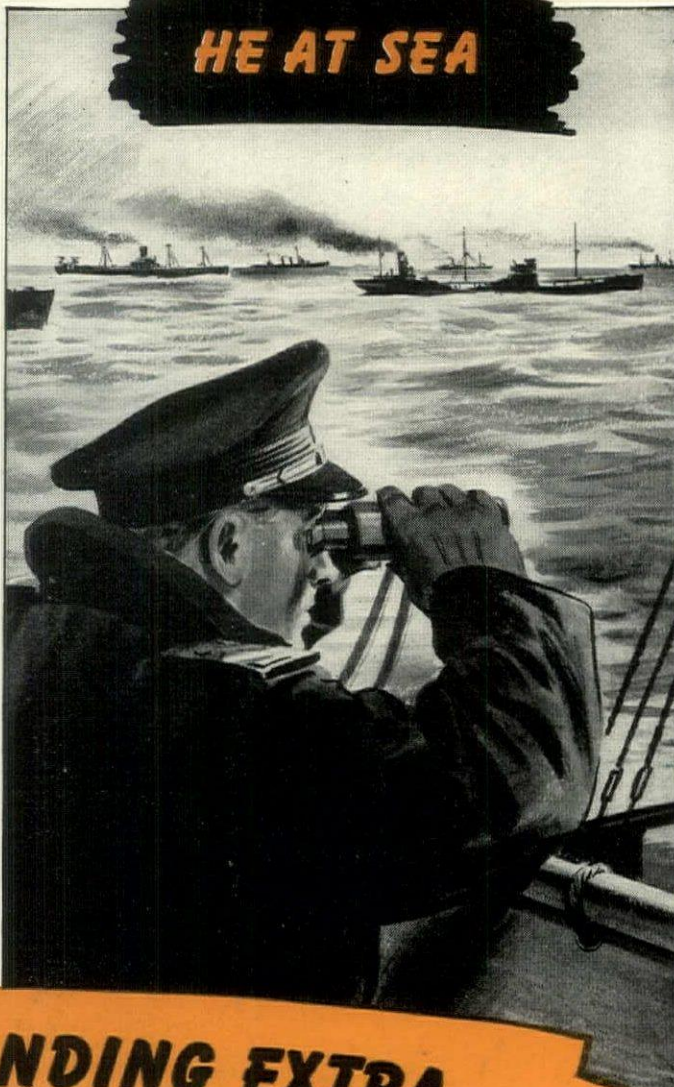
WOOD GOES TO WAR — An MGM Technicolor short by James A. Fitzpatrick. Ask your theater when you can see it.

THESE ARE TIMES THAT PROVE THE WORTH OF GOOD MATERIALS

SHE AT HOME



HE AT SEA



BOTH ARE FINDING EXTRA SECURITY IN COPPER AND BRASS

Because of copper and brass, his ship is safer for him, more deadly for his enemies . . . all the way from its copper-built radio system to the copper-banded shells its big guns fire.

She also enjoys added security at home, thanks to copper and brass . . . brass-pipe plumbing . . . copper sheet-metal work . . . all the many places where durable copper and

brass mean long-lasting, rust-free, trouble-free service.

Every architect can take satisfaction in having written copper and brass into so many pre-war specifications. These basic building metals are saving countless home owners from a good part of today's worry and expense.

Anaconda looks forward with you

to victory, and the tremendous program of peacetime building it will bring. Anaconda Copper and Brass will be ready for your pencil . . . in even wider applications of usefulness.

4321

THE AMERICAN BRASS COMPANY

General Offices: Waterbury, Connecticut
Subsidiary of Anaconda Copper Mining Company

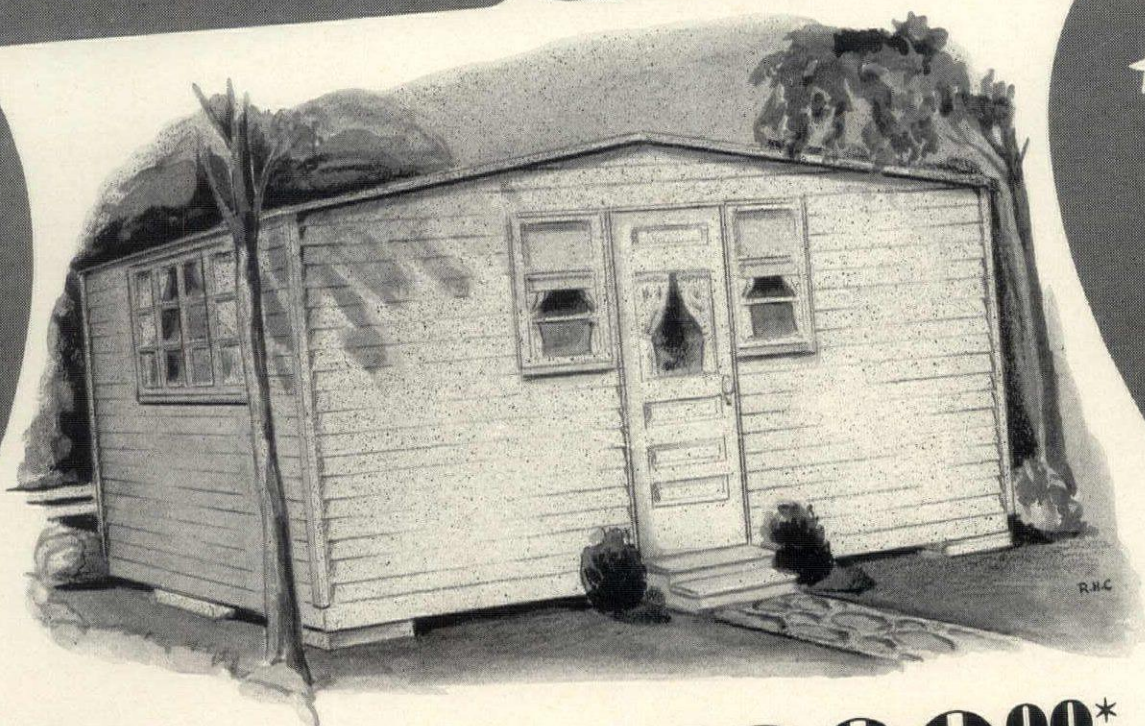
In Canada:

Anaconda American Brass Ltd., New Toronto, Ont.



Anaconda Copper & Brass

Portable WAR HOUSE



**FARM WORKERS
INDUSTRIAL WORKERS
MILITARY PERSONNEL**

**Easy to Erect - Takes Four
Men Three Hours**

\$300.00*

SUBSTANTIAL DISCOUNTS ON
QUANTITY PURCHASES

***PRICE F. O. B. HOUSTON
PLAN 43-1 INQUIRIES INVITED**

BUY A HOME IN THE PEACE TO FOLLOW—WITH THE
BONDS YOU BUY TODAY

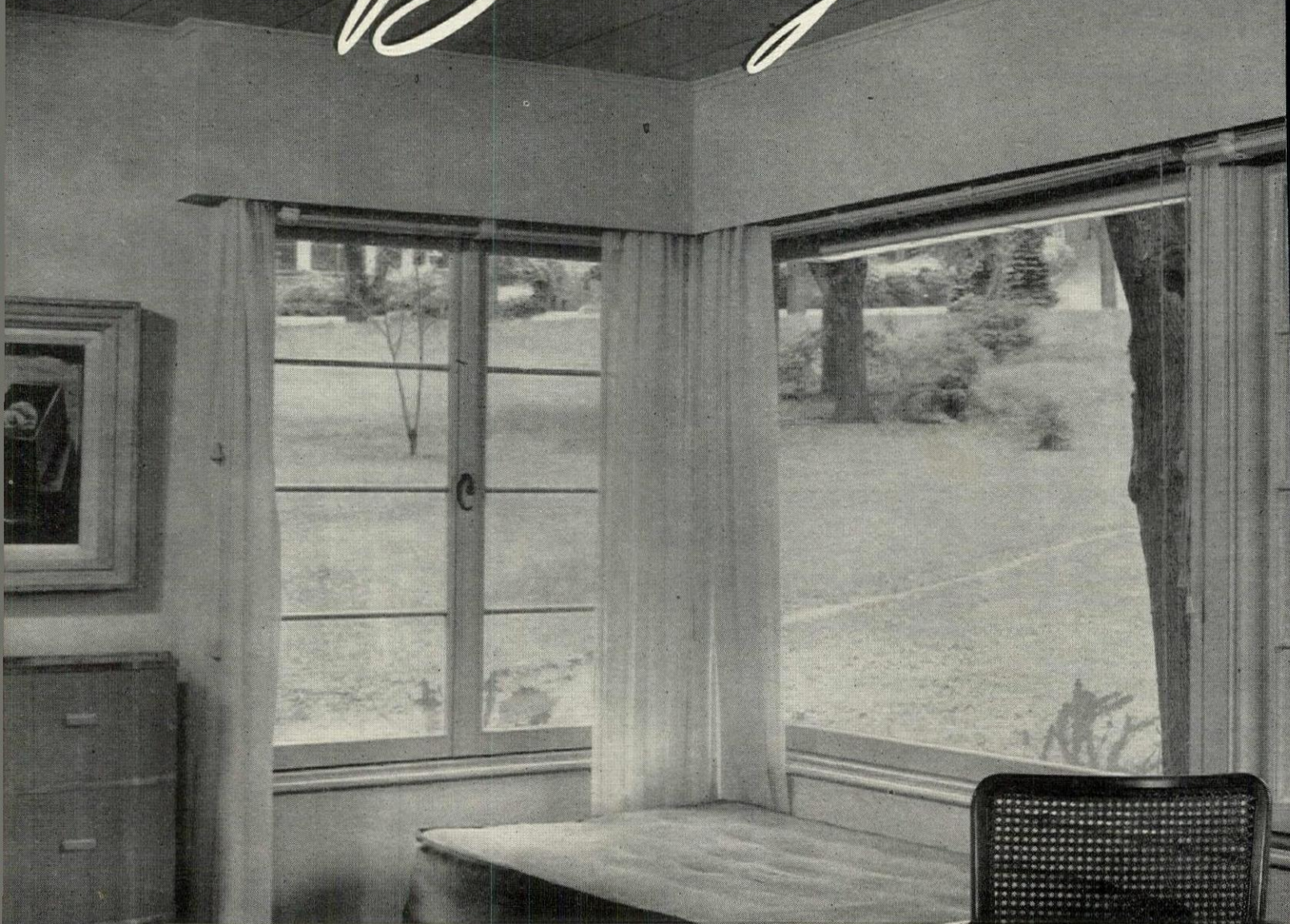
HOUSTON *Ready-Cut* HOUSE CO.

25 years Prefabricating Houses

POLK AVENUE

HOUSTON, TEXAS

THE *Beauty* OF ALL .



... with ANDERSEN **COMPLETE *WOOD* WINDOW UNITS**

The beauty of the changing seasons, the bursting buds on the lilacs, the flick of a squirrel's tail from the top of the garden wall . . . yes the beauty of all outdoors will be part of the 194X home through Andersen Complete Wood Window Units.

Windows will be used generously in the 194X homes. As wall areas devoted to modern fenestration increase, so it will become increasingly important to use Andersen Complete Wood Window Units. For here are units designed as a permanent, functional part of the entire structure,

here are window units of sound design and wide adaptability. To the architect or builder who is today engaged in war work, but who is looking forward to the time when normal practice is resumed, Andersen makes this assurance: though designs may change and innovations develop, Andersen Complete Wood Window Units will, as always, be designed to meet the exacting requirements of the building profession.

Sold through regular millwork channels. See Sweet's Catalog or write to address below.

Andersen Corporation

BAYPORT • MINNESOTA



ONLY THE RICH CAN . .

A black and white photograph of a room. In the foreground, a bed with a light-colored sheet is visible. To the left, a small wooden table holds a potted plant with dark, patterned leaves. Behind the table is a large window with multiple panes, framed by light-colored curtains. The window looks out onto a landscape with a fence and trees. The overall tone is serene and domestic.

Outdoors

For the 194X HOME

AFFORD POOR WINDOWS



Heating and Air Conditioning Contractor:
Asbestos Duct Company

Careyduct THE ALL-ASBESTOS INSULATED DUCT FOR BETTER HEATING AND AIR CONDITIONING IN THE *Nation's Service*

Careyduct is conserving thousands of tons of steel in air conditioning systems . . . saving manpower by eliminating shop fabrication . . . increasing efficiency of air conditioning with great savings of fuel . . . solving difficult installation problems where space is limited.

Careyduct production is now devoted almost exclusively to war needs. But in the vast expansion of air conditioning to come after the war, CAREYDUCT will play an important part . . . building upon its solid foundation of superior performance. Now is the time to become thoroughly familiar with this ultra-modern duct. Write for Careyduct Manual. Address Dept. 20

THE PHILIP CAREY MFG. COMPANY

Lockland, Cincinnati, Ohio

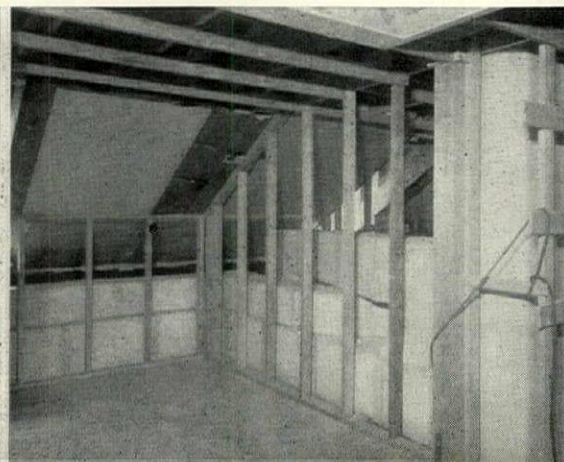
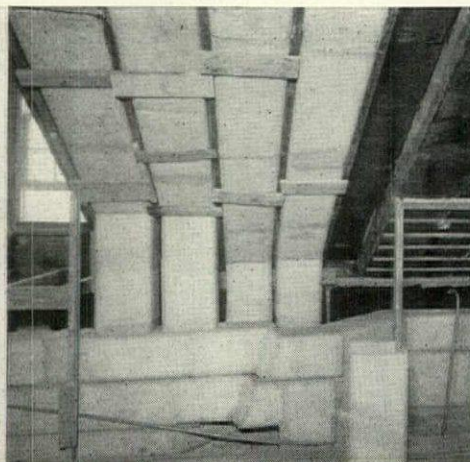
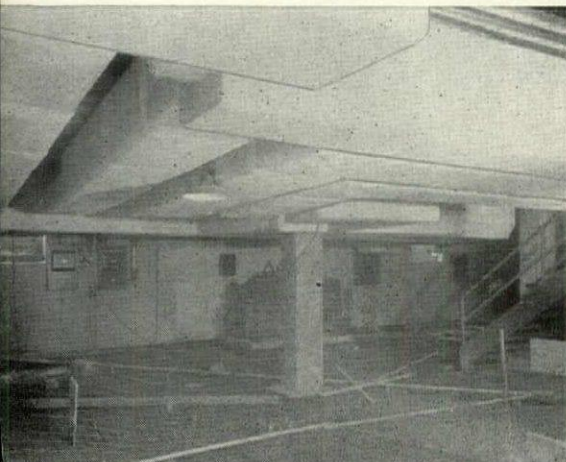
Dependable Products Since 1873

In Canada: The Philip Carey Company, Ltd. Office and Factory: Lennoxville, P.Q.

Careyduct is both duct, and insulation combined in strong, rigid, fireproof units . . .

Careyduct is a natural sound absorber . . . hushes noise . . .

Careyduct permits use of smaller sizes with higher velocities . . .



★ **ADD** *Aluminum in Color* ★
TO YOUR POSTWAR THINKING



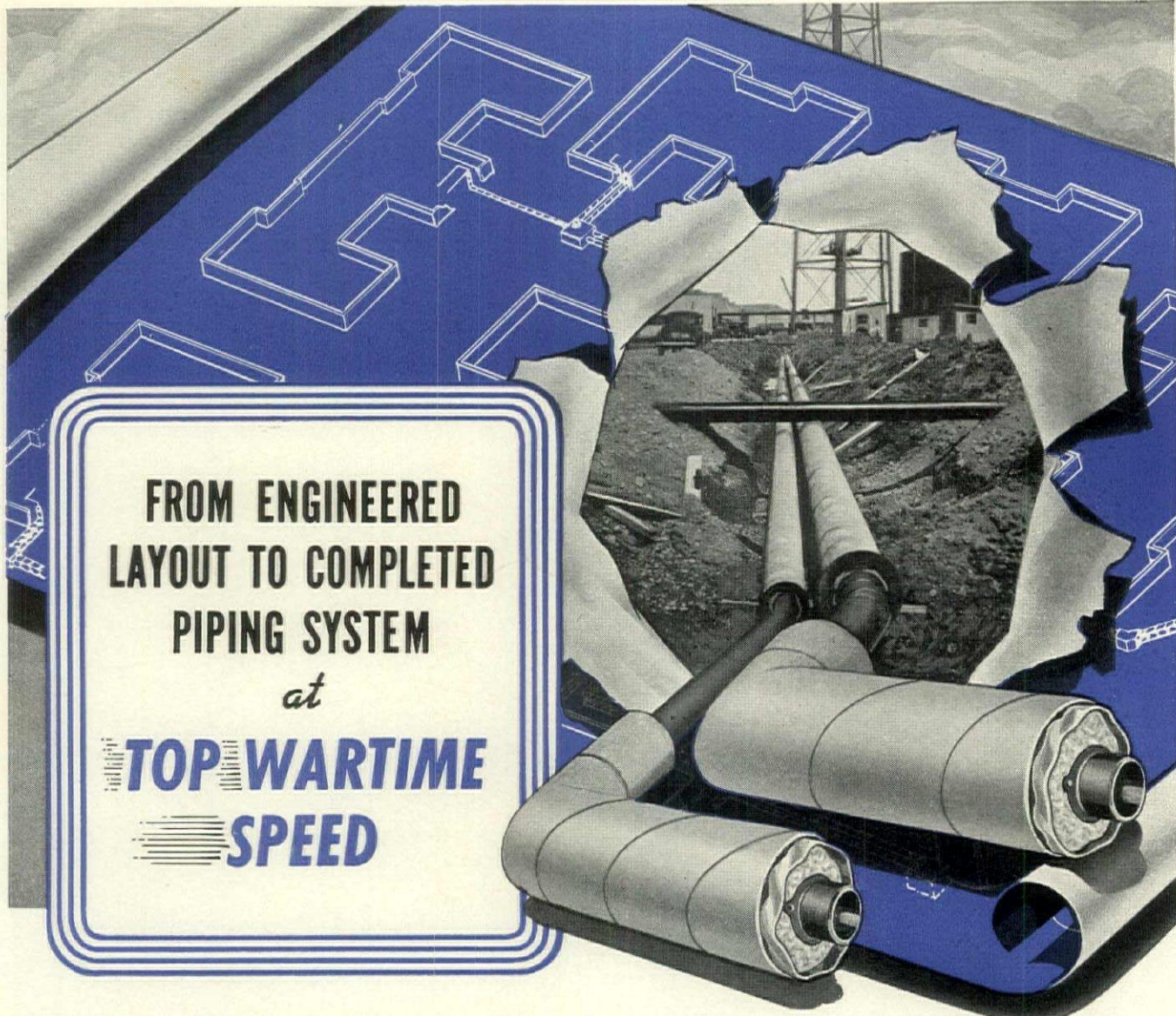
Aluminum finished in bright colors and pastels, in black, silver and gold, with bright and matte surfaces; colors dyed right into the metal. This is no idle dream. It's an actuality, something on which you can safely let your postwar thinking dwell.

Research has been at work constantly, seeking better finishes for the aluminum that is going into airplanes, parts and accessories. They've found finishes that give greater resistance to corrosion, better adhesion for paints, blacks for reduced visibility, colors for identification.

Architects are always seeking new ways of expressing themselves, of achieving unusual and more beautiful effects. These finishes for aluminum offer a means of expression. Of course, you can't start using them now, nor the metal, but it's none too early to be thinking thus —

Aluminum, with its lighter weight, easy and faithful fabrication, ability to resist corrosion, adds color to its surroundings. ALUMINUM COMPANY OF AMERICA, 2166 Gulf Building, Pittsburgh, Pennsylvania.

ALCOA  **ALUMINUM**



FROM ENGINEERED
LAYOUT TO COMPLETED
PIPING SYSTEM

at

**TOP WARTIME
SPEED**

On projects vital to the war effort the urgent need for speed in construction points to Ric-wil Prefabricated Pipe Units for steam, hot water, oil, hot or refrigerated process lines. • Ric-wil Pipe Units are complete when they reach the job—pipe, insulation, protective covering. Field men couple or weld the pipe, insulate the joints and move on to the next joint. Man-hours are saved in the field and the installation is completed at a rate that can give no comfort to the Axis.

In addition, these units produce a permanent, low-maintenance system while using critical materials amounting to only 15% to 20% of their total weight . . . And they require for shipment only 20% to 25% of the space in available gondola cars that would be required for an equal footage of other types of conduit construction. • Speed is the essence of wartime construction—and Ric-wil Prefabricated Pipe Units have proved a definite aid.

*When Makeshifts Won't Do—***Ric-wil**

Architects, Engineers and Contractors on war projects will find much helpful information in the Ric-wil Engineering Data Book. Write . . . on your letterhead . . . for a copy.

RIC-WIL

CONDUIT SYSTEMS FOR UNDERGROUND STEAM
THE RIC-WIL COMPANY • CLEVELAND, OHIO
AGENTS IN PRINCIPAL CITIES

"...I'm not doing much building
but I'm doing a lot of thinking!"

"Before the war I built quite a few houses...nothing spectacular, but generally acceptable...about 50 a year, averaging about \$5,500. And they were all pretty much alike.

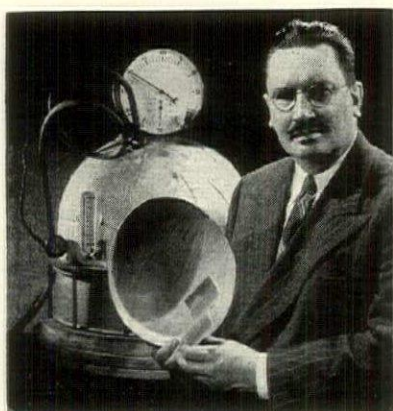
"These last few months, I haven't been doing much building but I have been doing a lot of thinking...about what I'm going to build when the war stops.

"I'll let you in on one of my hunches. Houses have always had floors, walls, roofs, doors and windows, and while all these structural features are vastly better than they used to be, the most important improvement in living is in the operating equipment...the things we use to cook and heat with, and the numerous other devices which have made housekeeping easier.

"I used to figure that I would hold down both the amount and quality of operating equipment because that would make the house cheaper. What I failed to figure was that, by using the most efficient equipment, I would have a better house to sell, and at the same time I would save money for the owner in his monthly operating bills.

"So here's my No. One Memo for post-war building:
Efficient, quality-built electrical equipment usually contributes more in operating economies than any increase it may cause in monthly amortization payments when financed under a long term mortgage.
It can actually cost less to live better."

*We would be glad to receive comments or questions on this memo.
General Electric Home Bureau, Bridgeport, Connecticut.*



Egmont Arens, top-flight New York industrial designer, knows whereof he speaks. An expert on plastics, he has set up a small autoclave (above) in his studio for research on plywoods, laminated fibres, cloth and pulp. He has applied for several patents on these constructions.

FROM THE HULL OF A PT BOAT... "ENGINEERED" LUMBER BY THE MILE?

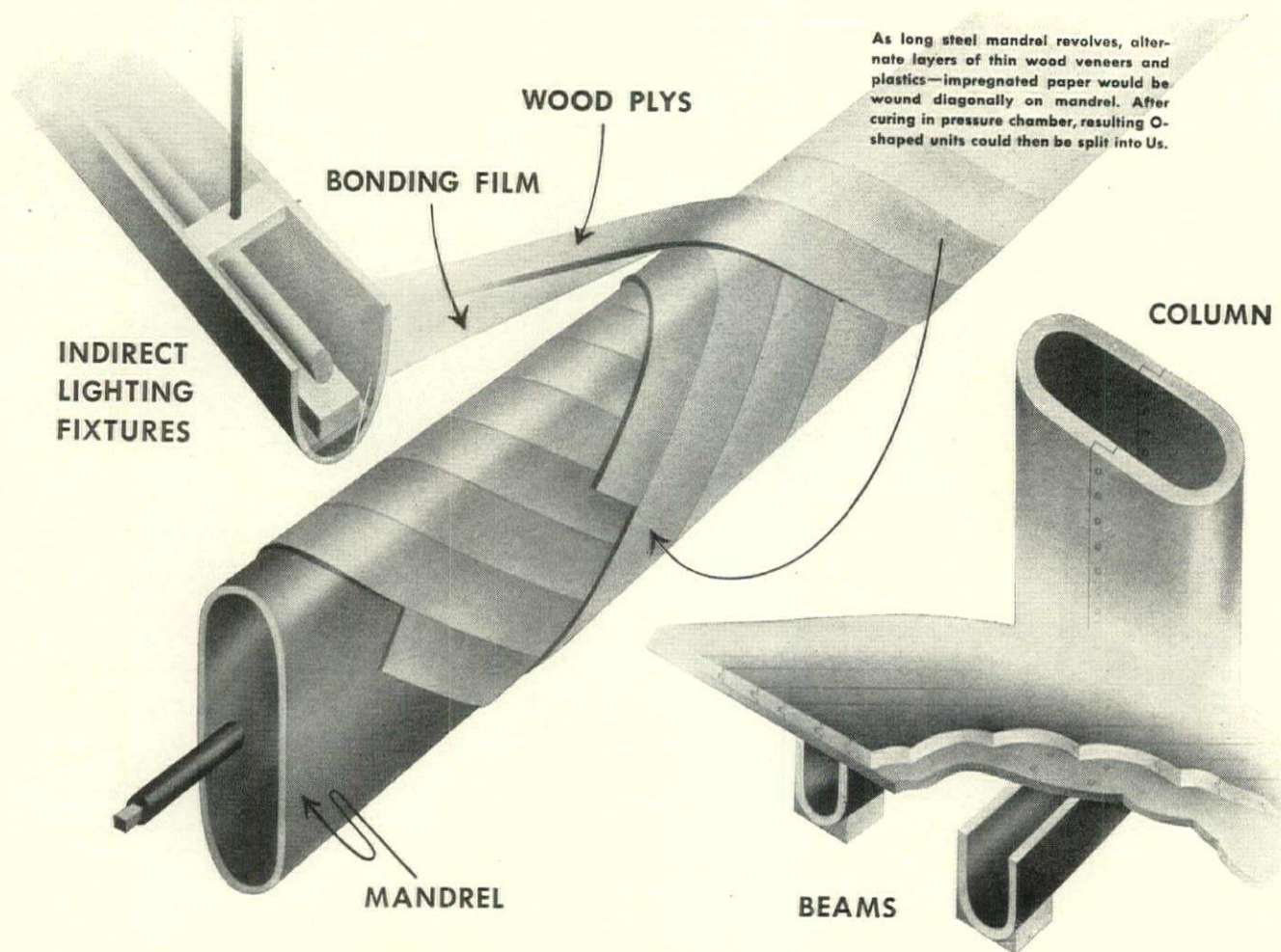
TYPICAL of many wartime advances in plastics materials and techniques are the Navy's deadly PT boats—precisely formed today from large sections of lightweight, plastics-bonded plywoods.

Equally typical of much of today's creative thinking about how plastics can contribute to a better postwar world tomorrow is this suggestion from Industrial Designer Egmont Arens.

The PLYFOLD structural lumber he visualizes would be produced almost literally by the mile...in continuous line production...

from plys of wood veneer and plastics-impregnated bonding film...wound transversely over an oval-shaped mandrel.

"Free from knots and flaws, PLYFOLD lumber could be built to exact engineering specifications with more uniform performance under load than dimension lumber," Mr. Arens points out. "It would have greatly increased strength for its weight, actually approaching steel or aluminum in strength per pound. Being permeated with plastics resins, it would be more permanent and much more resistant to warpage, rot or insect attack than lumber as Nature provides it."



The Broad and Versatile Family of Monsanto Plastics

(Trade names designate Monsanto's exclusive formulations of these basic plastic materials)

LUSTRON (polystyrene) • SAFLEX (vinyl acetal) • NITRON (cellulose nitrate) • FIBESTOS (cellulose acetate) • OPALON (cast phenolic resin) • RESINOX (phenolic compounds)

Sheets • Rods • Tubes • Molding Compounds • Castings • Veeapak Rigid Transparent Packaging Materials



Postwar Plastics and YOUR Future

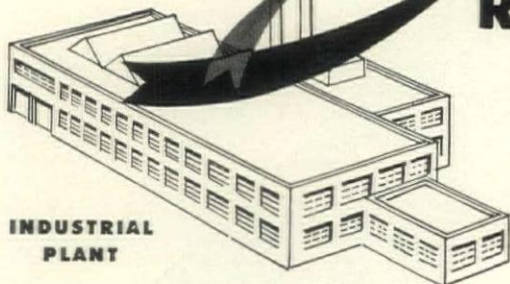
Perhaps you see no immediate tie-up between Mr. Arens' PLYFOLD and the products you hope to offer postwar markets. His suggestion is offered, however, as an indication of the vast new peacetime horizons which wartime advances in plastics materials and techniques will open up for scores of industries. Particularly, it illustrates the stimulating possibilities of new plastics in combination with older, traditional materials.

When the time comes to talk "future" in your shop you will find Monsanto, as one of the nation's largest producers of plastics, an excellent source of reliable information. MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield, Massachusetts.

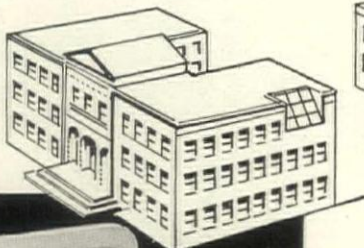
WAR HOME



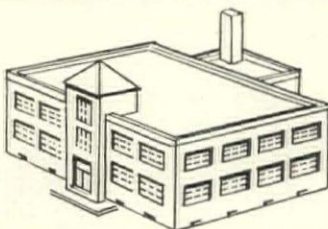
INDUSTRIAL
PLANT



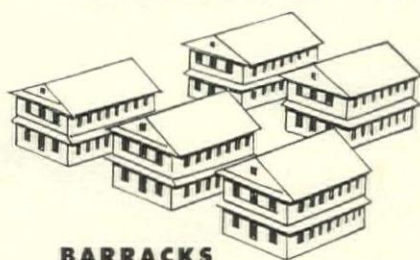
HOSPITAL



SCHOOL



BARRACKS



RUGGED, QUALITY PLUMBING *for* war construction

MANY architects today are busy designing homes for war workers, industrial plants, Army and Navy bases, hospitals and schools. All of these require modern, efficient plumbing equipment.

To meet this need, Crane Co. has designed a line of equipment using a minimum of critical materials. This line has received government approval for all types of war construction jobs.

Your plumbing contractor or Crane Branch will gladly give you further information on plumbing and heating equipment for any plan on which you are working and will assist you in the specifications on such jobs.

ENTERPRISE LINE

The Enterprise line of plumbing equipment is Crane's answer to America's conservation program. This equipment is designed to use the minimum of critical metals. The plumbing fixtures are made of non-priority materials and the trimmings are cast iron heavily galvanized inside and out. The complete line includes equipment for any war construction need.

CRANE

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



VICTORY
CANTONMENT
LAVATORY

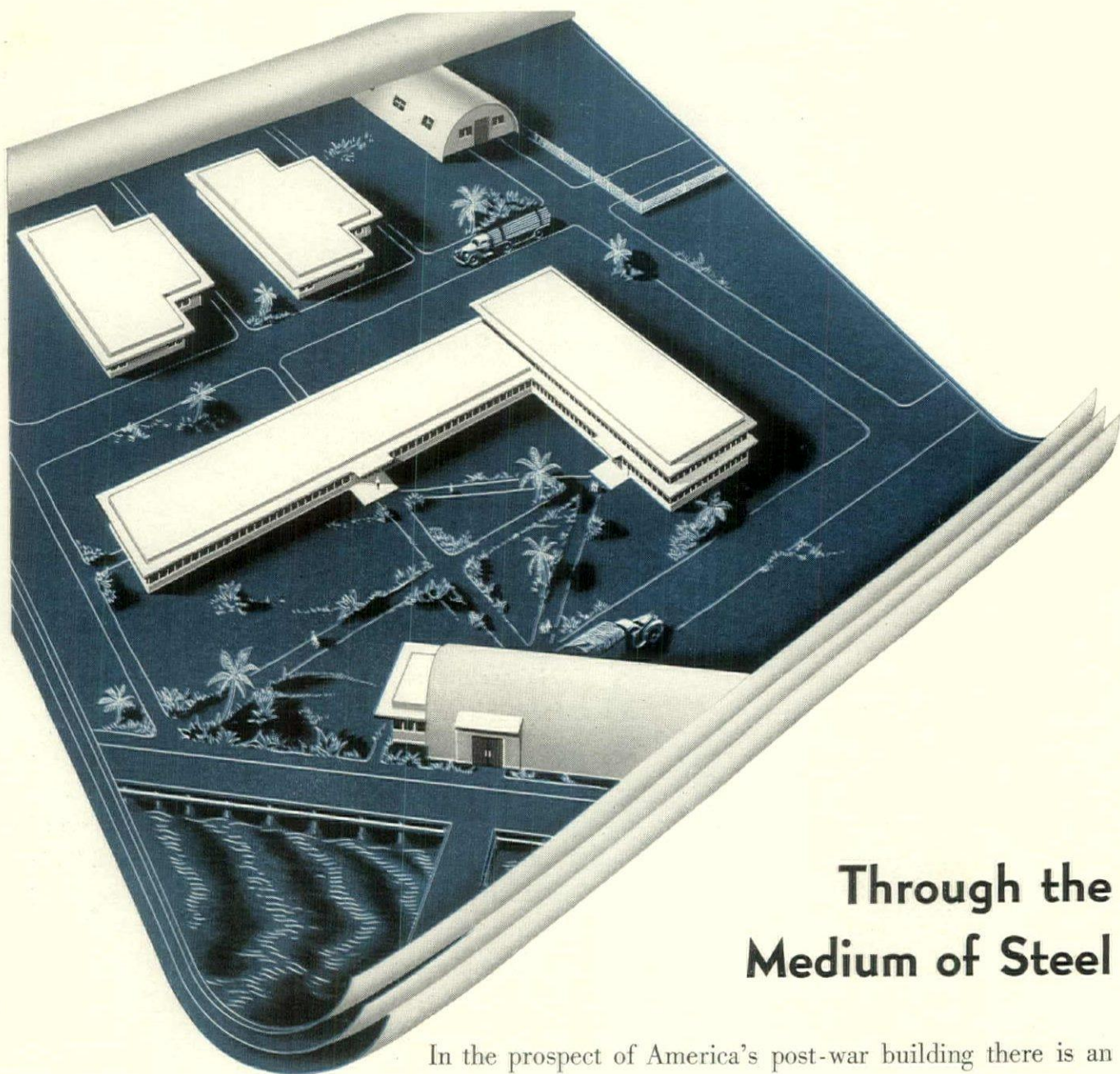
DRINKING
FOUNTAIN

TWO VALVE
SHOWER

SAXONET CLOSET

URINAL

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



Through the Medium of Steel

In the prospect of America's post-war building there is an exciting challenge of new frontiers. Geographical limitations will be erased by the extension of air transportation, while boundaries of architectural thought and execution will be pushed back by new methods and materials.

Stran-Steel's wartime assignment has brought about far-reaching engineering developments in the structural uses of light gauge steel. Today this knowledge is of military value, and is being applied entirely to military uses. When the war is won, it will provide new latitude, new freedom of expression, in varied fields of peacetime construction.

STRAN STEEL

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

U. N I T O F N A T I O N A L S T E E L C O R P O R A T I O N

How the Paintriotic Paint Helps the Patriotic Architect...



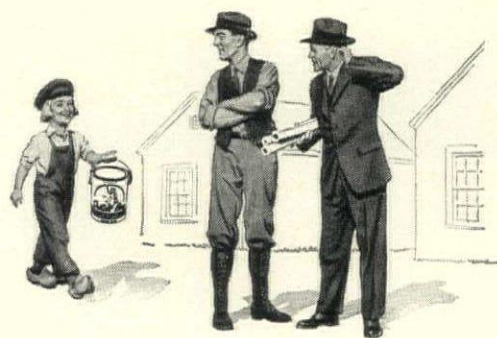
1 "Well, we built 'em the way you designed 'em ... so I'm glad they meet with your approval. Of course, now that they're *up* our next job is to make 'em *last*. A reputation for building well can be made in wartime just as in peace. After all, a building well built is also a building well-painted ..."



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



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



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

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

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



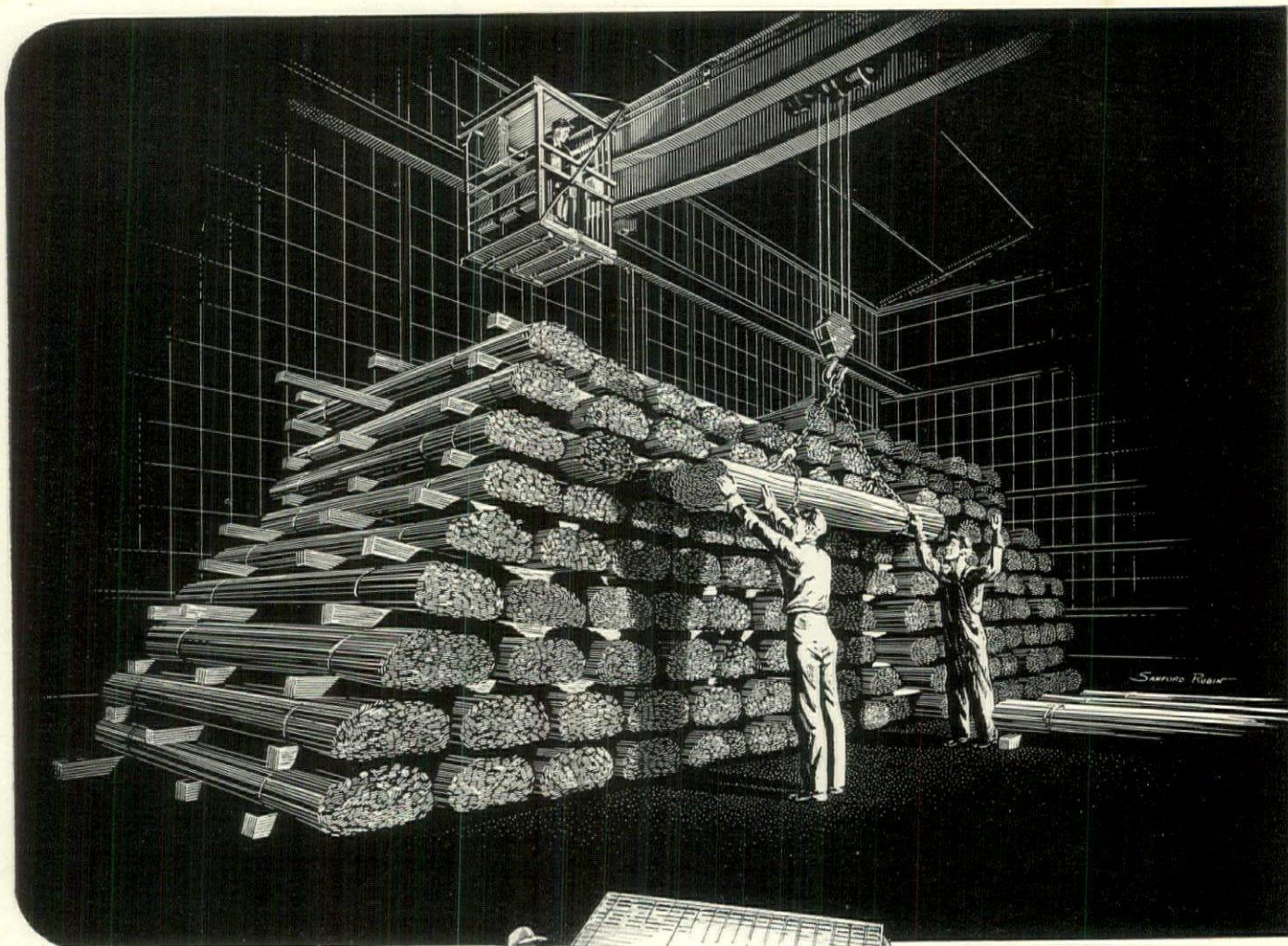
PASTE OR PAINT

Be Paintriotic... make things *last* with

DUTCH BOY PURE WHITE LEAD

NATIONAL LEAD COMPANY New York, Buffalo, Chicago, Cincinnati, Cleveland, St. Louis, San Francisco, Boston (National-Boston Lead Co.), Pittsburgh (National Lead & Oil Co. of Penna.), Philadelphia (John T. Lewis & Bros. Co.).

EVERYTHING WE ARE DOING TODAY...



SAVING RUBIN



**Some Facts We'd Like
You To Know About
Mesker's New Facilities**

"Picking 'em up and putting 'em down" is a task of Americans today, both at home and abroad. Giant Power Cranes, like that shown above, are rumbling through our rapidly-expanding plant, day and night, doing just that; boding evil for the Axis today... good for the users of Windows tomorrow

Mesker Engineers..the country over..

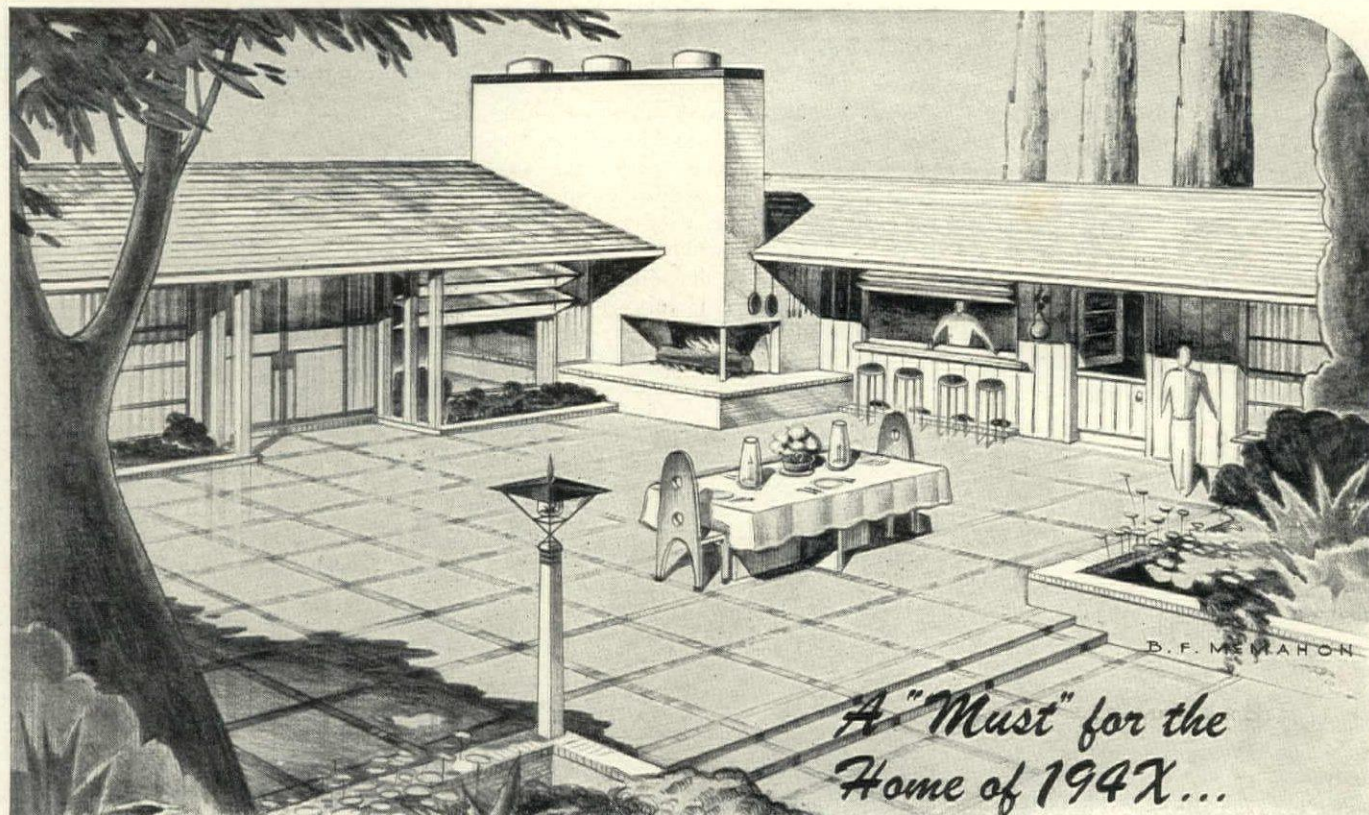
Mesker

424 SOUTH SEVENTH STREET •

YESTERDAY AND TOMORROW

CASEMENT WINDOWS • MONUMENTAL WINDOWS • INDUSTRIAL WINDOWS • SCREENS • INDUSTRIAL DOORS • DETENTION WINDOWS • REINFORCING MESH GRATING...plus
...tomorrow... some other interesting new products!

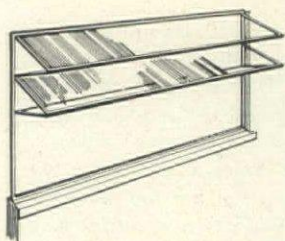
IS DESIGNED TO HELP YOU TOMORROW



*A "Must" for the
Home of 194X...*

MESKER METAL WINDOWS

Weather-Conditioned



Architect McMahon's Home of 194X above is an excellent example of the trend of the times... toward more and larger window openings. This is understandable, since *windows ARE cheaper than walls*. Further, properly Weather-Conditioned, their insulation values are high. For example, in a typical residence today, heat losses from conduction through walls are 27%... *only 28% through glass!* This is based on tests where "ordinary" windows... NOT Mesker Weather-Conditioned Metal Windows... were used. For the truly WEATHER-TIGHT window in the future, keep your weather-eye on The Windows OF The Future... *Mesker Metal Windows!*

Do You Have Your "Red Book of Steel Sash?"

If not, write for this comprehensive volume, personalized with your name. Covers metal windows from A to Z... ideal to have at your elbow when working up specifications, details, etc., on post-war projects. No obligation.

IMPORTANT!
Our warehouse stock of steel windows are now available to anyone without priority, as long as they last. Consult your Mesker Engineer.

In War and Peace... at your service!

Brothers

ST. LOUIS, MISSOURI, U. S. A.

TODAY

STEEL AMMUNITION CASES · PRE-FABRICATED STEEL AIRPLANE RUNWAYS · OIL AND WATER STORAGE TANKS FOR THE NAVY'S FIGHTING SHIPS... other products which necessarily must remain military secrets.

LETTERS

ALLEN RIDES AGAIN

Forum:

The other day a gentleman telephones me to say he is Mr. John R. Stone of Topeka, Kan., and he takes advantage of the opportunity of being in Grand Rapids to call me up and complain because I do not write any more letters for THE FORUM. Naturally, blushing heavily, I ask Mr. Stone who he is and what he does, and he tells me he is the business manager of the Menniger Psychiatric Clinic of Topeka. "We used to pass your letters in THE FORUM all around the staff," he stated, wistfully. "This may sound funny, Mr. Allen, but humor of your type is just what appeals to psychiatrists most."

Things like that make a man think.

Personally I am not versed in psychiatry although I have a friend name of Elwood Slutch who has been treated extensively by psychiatrists and nowadays when he stands up at a bar which is practically always he invariably orders two drinks at a time because the psychiatrist tells him he has a split personality so he orders a drink for each personality. As an extension of the same principle he says he feels morally obligated to commit bigamy.

Thus recalled to my duty to THE FORUM and the profession of psychiatry I lose no time in reporting in. I trust you will pardon me if I state that I am just an old-fashioned boy, and it pleases me to see THE FORUM continuing the quaint old custom of printing photographs of buildings in an architectural magazine as I get slightly tired of picking up some architectural magazines and seeing nothing but strong, significant camera studies of the inside of an egg beater. Furthermore I wish to state defiantly that I am not convinced the future of building lies in the production of prefabricated houses. Those who desire to live in quarters as small as that can have my part of them. It would be just my luck to buy one of those size 16½ houses with 34 in. sleeves and then, after moving in sideways, decide I wanted to raise a beard. Or, if not a beard, a brood.

Well, I wonder what's doing in Topeka?

ROGER ALLEN

Grand Rapids, Mich.

Mr. Allen slyly conceals the true cause of his long absence from these columns. His last letter produced a mass protest from several thousand readers who, in the then Michigan manner, threatened a sit-down strike against THE FORUM. Allen, a teen-age prodigy, refused to sit down with them. His reappearance this month speaks volumes, an accurate measure of Mr. Allen's capacity and torso.—Ed.

PORTUGUESE THE HARD WAY

Forum:

... After two days of continuous flying I arrived here in the middle of the Brazilian sticks and have opened the only architectural office within a thousand miles in any direction. This sounds swell as far as competition is concerned, but an almost total absence of building materials presents a different picture—wood poles and palm thatch—that's my dish now.

The building era here was about 1900 to 1914 and I enclose photos of a local building (*see cut*)—architect unknown. The most imposing building in the city is the Opera House (Teatro Amazonas) which cost \$3,000,000 (\$2,950,000 too



A 1900 Brazilian confectioner's dream

much). It is too well known to send you another picture ... but next week I am sending you a photo of a column base in this theater (if the censor passes it). I have had it photographed by flash light. The column rests on a Daisy Chain of ladies' breasts and gives a delightful feminine touch to that foyer. This is the only thing, to my knowledge, that Dorothy Draper has not used that can be made in plaster. ...

The city here is very gay, clean and colorful, and although practically on the Equator is not as hot as Washington in the summer. The women are good looking here but so far I am learning my Portuguese the hard way. ...

GARDNER A. DAILEY

Manaos, Brazil

WILLOW RUN CONTROVERSY

Reactions to Willow Run are seldom mild or unanimous, as the following letters from Victor M. Villemain, land planner Auger, architect Mayer suggest.—Ed.

Forum:

Why do you describe plans for Willow Run, in the March issue, as a conception of a "model American community" and as a "proving ground for most advanced ideas on housing and city planning?"

Having chosen some of the best archi-

tectural practitioners in the East, FPHA executive direction, it seems, fell down in two fundamentals. First: laxity in adjusting land acquisition boundaries to the physical layout of a tentative site plan. Second: in trying to achieve an orderly, general plan of contemporary character, within the economic limitations of the law, without either accepting this particular responsibility for themselves or entrusting the job to a qualified technician. ...

... Moreover, when a model American community is considered functionally, housing various income groups which utilize various kinds of accommodations, a certain allotment of proposed dwellings (say 25%) would be distributed near the town center and arranged for rental management. Also, an integrated community would have its working places nearby to distinguish it from a dormitory suburb. These are just two qualifications.

Without disputing the town's general location, probably most critics of the overall parti would note these points:

a. Possible shift of the developed area bodily to the NW for economy in extending water lines from storage tank at high point as well as providing necessary sewer gradients toward the SE.

b. Introduction of another access artery leading in the direction of daily working place, in addition to the two provided.

c. Orientation of all dwellings with reference to compass direction would automatically give half of them living rooms on the garden side and the remainder living rooms on the street (service) side.

d. Many of the hairpin blocks are too short, and most of them are too wide for economy in the installation of utilities.

e. Wasteful allotment of land for the town center; insufficient gathering of data leading to aggrandizement of building needs beyond regular or anticipated requirements of the future population.

f. Probable monotony in the uniform rows of dwellings, uniformly spaced, paralleling street frontages.

g. Location of neighborhood stores adjacent to school facilities seems to indicate confusion of purpose.

The writer takes exception to the presentation of attractive architectural designs as a composite product which is labeled "advance ideas" on city planning.

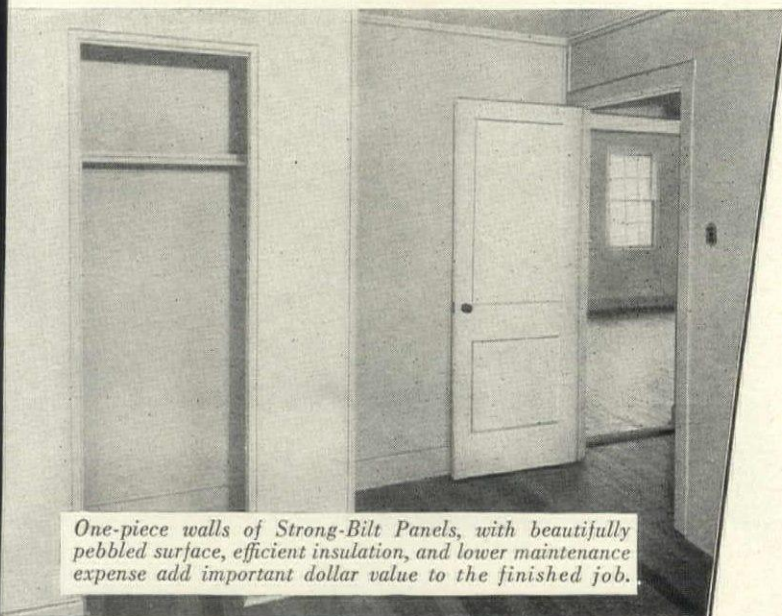
At this time, when people are thinking in terms of temporary war projects, the plans are more acceptable and stimulating than they would be if they were studies as a long-term proposal for after the war.

VICTOR M. VILLEMAIN

Alexandria, Va.

(Continued on page 183)

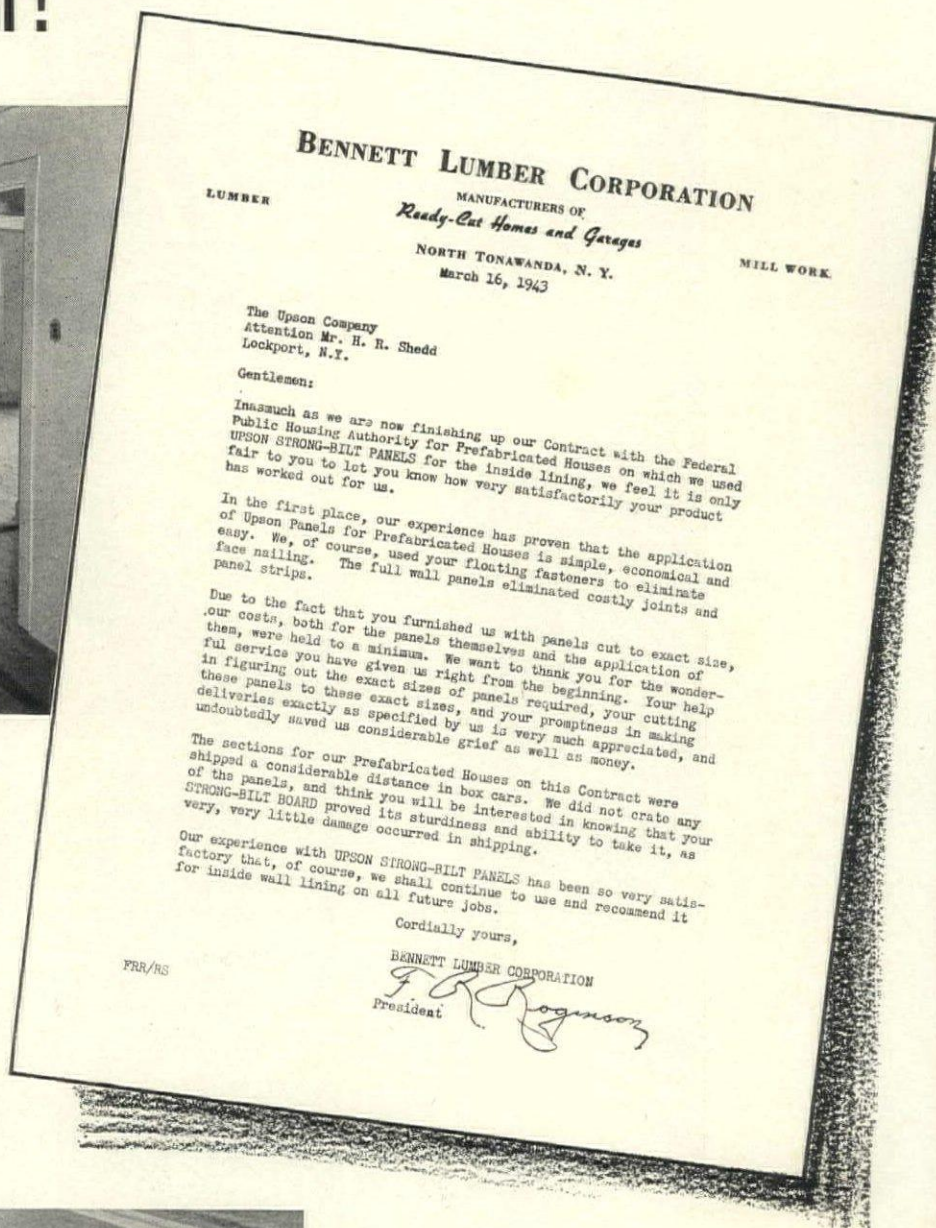
Proof from Leading Project Builders is pouring in!



One-piece walls of Strong-Bilt Panels, with beautifully pebbled surface, efficient insulation, and lower maintenance expense add important dollar value to the finished job.

REPORTS of performance *on-the-job!* The experience of Bennett Lumber Corporation is typical of many. Sections for 250 war housing units built in the company's plant were shipped over 400 miles by rail and assembled at the site near a great war industry center.

Gaining wide popularity before the war, quickly adopted for extensive wartime use, Strong-Bilt Panels already are being figured into plans for eagerly-awaited post-war homes. For informative booklets covering use in both conventional and prefabricated construction, write The Upson Co., Lockport, N. Y.



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LUMBER

MANUFACTURERS OF

Ready-Cut Homes and Garages

NORTH TONAWANDA, N. Y.

March 16, 1943

MILL WORK

The Upson Company
Attention Mr. H. R. Shedd
Lockport, N.Y.

Gentlemen:

Inasmuch as we are now finishing up our Contract with the Federal Public Housing Authority for Prefabricated Houses on which we used UPSON STRONG-BILT PANELS for the inside lining, we feel it is only fair to you to let you know how very satisfactorily your product has worked out for us.

In the first place, our experience has proven that the application of Upson Panels for Prefabricated Houses is simple, economical and easy. We, of course, used your floating fasteners to eliminate face nailing. The full wall panels eliminated costly joints and panel strips.

Due to the fact that you furnished us with panels cut to exact size, our costs, both for the panels themselves and the application of them, were held to a minimum. We want to thank you for the wonderful service you have given us right from the beginning. Your help in figuring out the exact sizes of panels required, your cutting these panels to these exact sizes, and your promptness in making deliveries exactly as specified by us is very much appreciated, and undoubtedly saved us considerable grief as well as money.

The sections for our Prefabricated Houses on this Contract were shipped a considerable distance in box cars. We did not crate any of the panels, and think you will be interested in knowing that your STRONG-BILT BOARD proved its sturdiness and ability to take it, as very, very little damage occurred in shipping.

Our experience with UPSON STRONG-BILT PANELS has been so very satisfactory that, of course, we shall continue to use and recommend it for inside wall lining on all future jobs.

Cordially yours,

BENNETT LUMBER CORPORATION

President

H. R. Shedd

FRR/RS



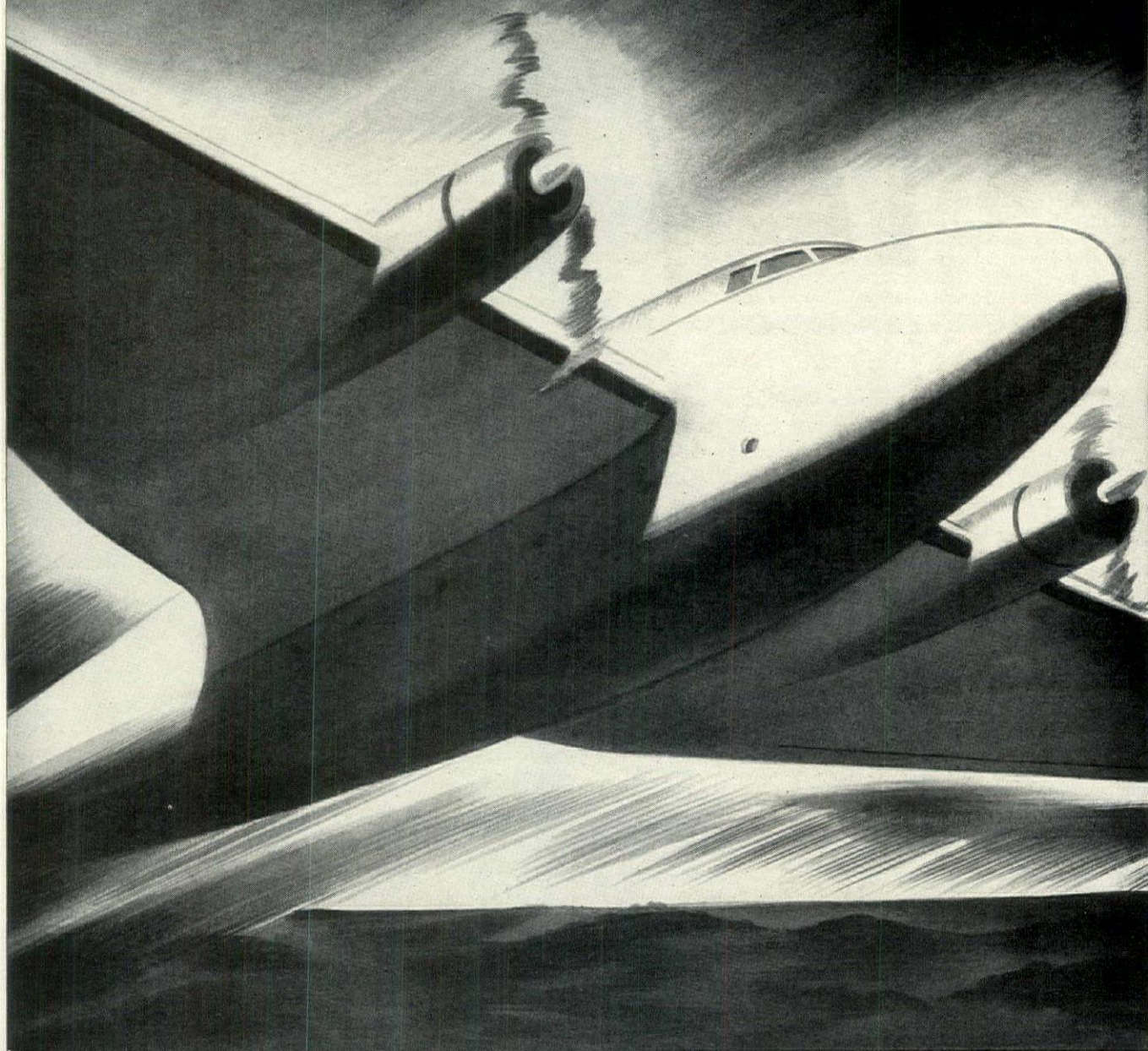
Full wall linings come in one piece and stay in one piece without cracking. No taping or filling of joints. No nail holes to fill. No "drying out" period.

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

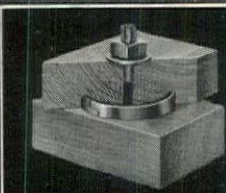


THE CRACKPROOF BEAUTY SURFACE
FOR WALLS AND CEILINGS

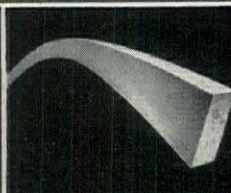
Engineering



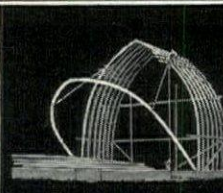
Engineering in Lumber is progressively increasing the efficiency of wood as a structural material... Modern wood products are making important contributions to better, more economical construction.



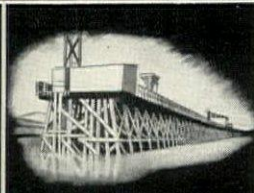
Teco Metal Timber connectors make it possible to join wood members; utilize 80% or more of the working strength of wood.



Modern structural glues make possible Glued Laminated Wood roof trusses, arches, plybeams and other structural members.



Glued wood laminated framing members combine roof and side-wall in a unit, giving stronger, more wind-resistant buildings.



New processes for the treatment of wood extend its service life, broaden its uses, and increase its value in many fields.

in **Lumber**

promises a greater future for wood

FOR THE NATION'S essential construction, the products of the forest were always at hand—and ready for use. Logs built the early cabins and stockades—hewn into timbers, they built bridges and boats—fashioned into dimension and boards, *wood built America*—its homes, churches, schools, factories, stores and farm buildings.

Under the mandate of each new necessity, the quality, the form, and the application of lumber improved. Wood constantly serves new uses, both urban and rural, *because wood is economical and easily workable*.

The rush of war needs for countless materials, made demands on all our nation's resources. High on the list was lumber, available as always, but better prepared to serve a multitude of needs because engineers had increased lumber's usefulness both in form and application.

From timber-line . . . to the laminated arch roof, to the Teco trusses for the building of modern factories and airplane hangars, to plywood shells, for air and water craft, wood enabled men to accomplish in weeks what would otherwise have required months.

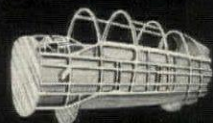
The record of wood in the war marks still further advancement in the development of lumber. Research freed wood from former limitations of the log. New ways of forming and shaping wood, new methods of joining and bonding it have given us such products as laminated wood rafters, various forms of plywood, and many other newer products.

As a result of the marked advances in Lumber Engineering, architects designing the future homes, service, commercial, and farm buildings, will find in wood a new, improved, more economical medium through which to express greater beauty and to assure more practical building functions.

WEYERHAEUSER SALES COMPANY

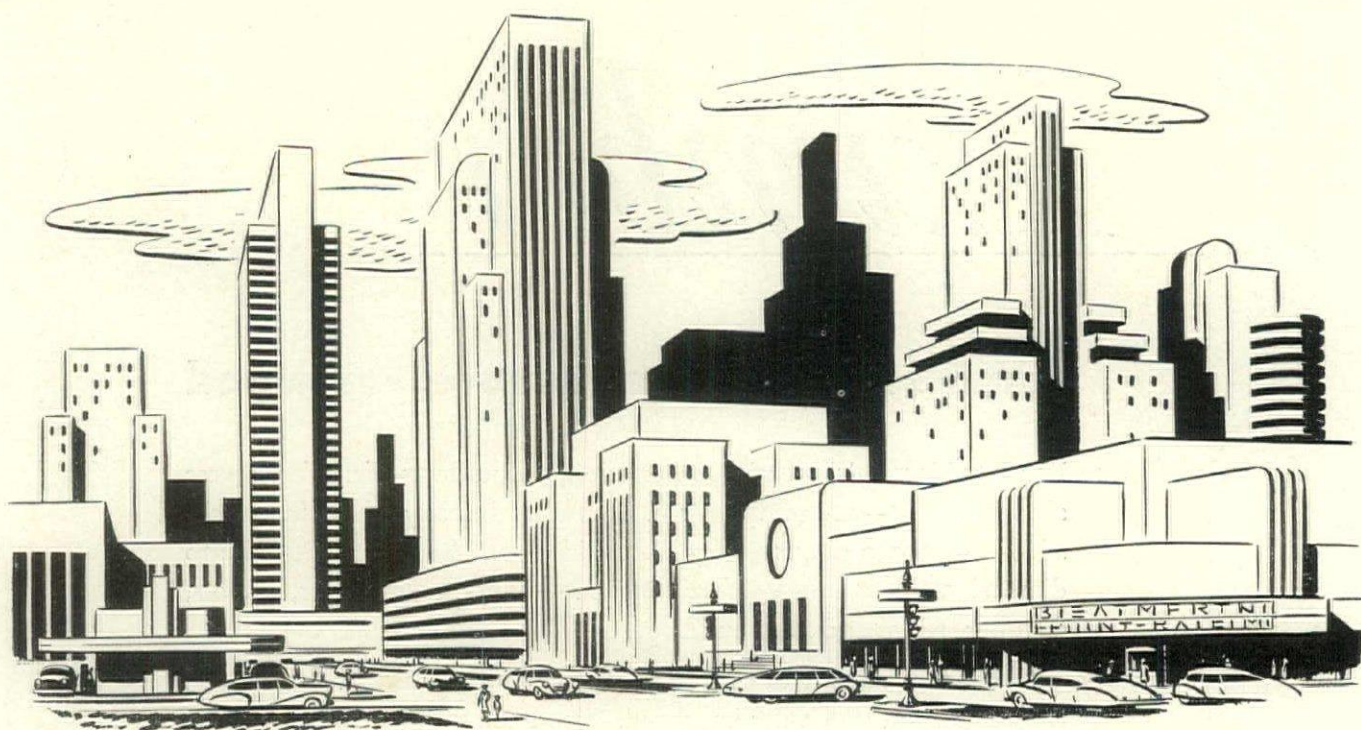
FIRST NATIONAL BANK BUILDING • SAINT PAUL, MINNESOTA

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Plywood is proving its versatility in countless applications. Shapes and strengths can be predetermined for specific uses.

4-SQUARE LUMBER



Sheet metal suggestions for your 194X buildings

Sheet metal is only one of the many materials you will specify for your 194X buildings, but you will want to make sure that you use the right one for the right purpose.

So consider these brief suggestions from ARMCO:


PAINTGRIP: This is the *original* bonderized, galvanized sheet. Use wherever you want the protection of zinc and the beauty and extra protection of paint. No acid-etching or weathering. Paint clings firmly and is preserved much longer than on ordinary galvanized or uncoated sheets—thanks to the neutral surface. PAINTGRIP will be supplied with base of durable ARMCO Ingot Iron, copper-bearing steel or open hearth steel. Use for roof-drainage and exposed air-ducts.

GALVANIZED ARMCO INGOT IRON: The oldest and most widely used of the low-cost, durable ferrous metals. Its high refinement, uniformity, and high-quality zinc coating assure utmost durability and low cost per year of service. Has excellent ductility, which means easier and quicker forming and fidelity to detail.

ARMCO STAINLESS STEELS: There are many grades of these popular alloy steels, the most frequently specified for building purposes being ARMCO 18-8 (18% chromium, 8% nickel) and ARMCO 17 (17% chromium). Rustless, ductile, and readily welded or soldered. The polished grades have been widely used for kitchen and dining-room equipment as well as for decorative work of all kinds. Also

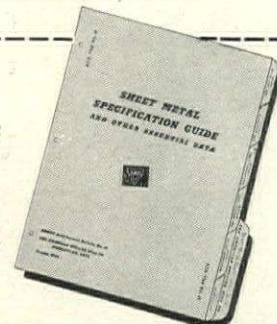
used for roof-drainage systems in better class residences and commercial buildings where long, trouble-free service is desirable.

Like most other manufacturers, ARMCO's entire production is going to the war effort. But we are learning much about improving the older steels, even as we create steels with new properties. All this will benefit you and your clients of 194X. Is there any specific information we can give you? The American Rolling Mill Co., 1211 Curtis Street, Middletown, Ohio.

 **THE AMERICAN
ROLLING MILL COMPANY**



**WRITE
FOR
THIS
GUIDE**



Would you like a copy of ARMCO's Sheet Metal Specification Guide? Just write on your firm letterhead and we'll send one without charge.

The Name

HOPE'S

Guarantees

1818

WINDOWS

1943



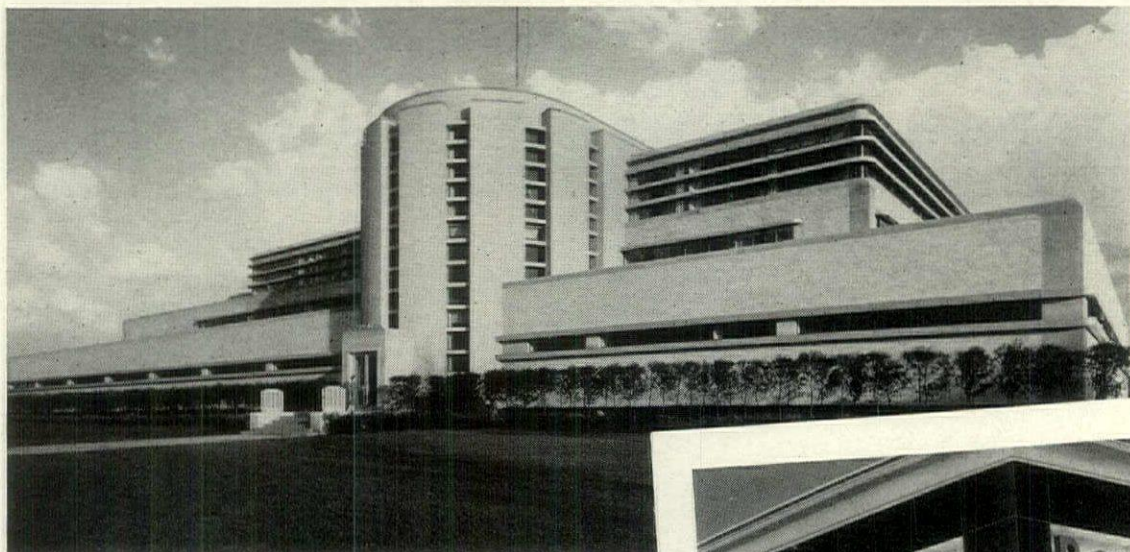
*Equitable Life Assurance Society of the United States—Owners
Starrett Brothers & Eken, Inc.—General Contractors
Harrison, Fouilhoux & Abramovitz—Architects*

HOPE'S WINDOWS MEN AND EQUIPMENT HAVE BEEN 100% OCCUPIED IN WAR PRODUCTION FOR MANY MONTHS NOW, BUT AFTER VICTORY WE WILL OFFER INTERESTING DEVELOPMENTS IN STEEL WINDOWS AND WILL SERVE OUR CUSTOMERS BETTER THAN EVER.

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

BUY U. S. WAR BONDS

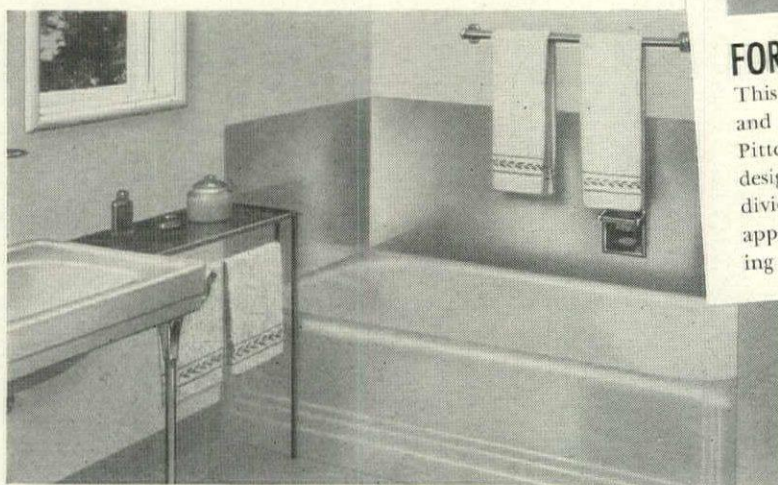
NEWS ABOUT GLASS from "Pittsburgh"



A FAVORITE SPECIFICATION these days is Pennvernon Window Glass. Pennvernon was used in the Research and Manufacturing Laboratories, G. D. Searle & Co., Chicago, Ill., shown above. This quality window glass assures plenty of daylight, good vision and good looks for all types of buildings, from housing project units to war plants. Architect: Herbert Banse.



FOR YOUR STORE FRONT FILE. This Pittco Store Front indicates the versatility and design possibilities inherent in the family of Pittco Store Front Products. These products are designed to be used together to create unified, individualized fronts of unusual attractiveness and appeal. Save this picture for reference when building restrictions are lifted. Architect: L. V. Lacy.



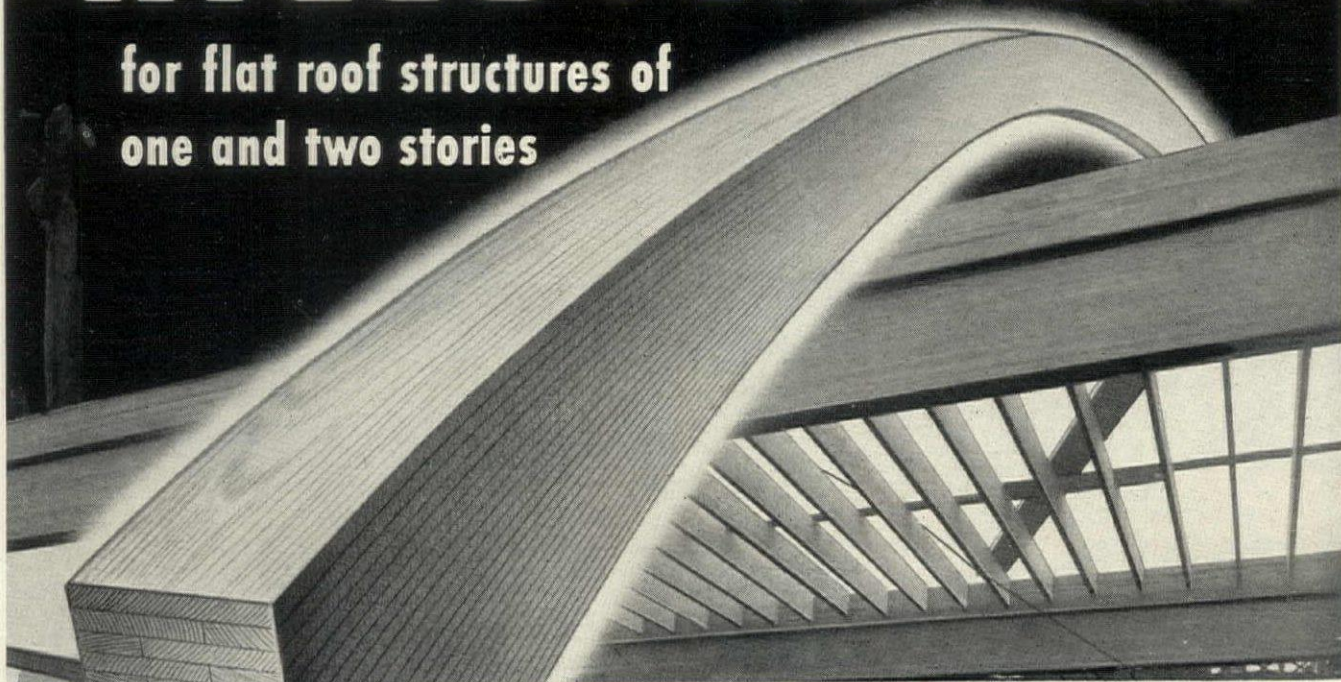
NEW READY-BUILT PANELS make possible bathtub recess wainscoting of Carrara Glass in low-cost homes. Completely prefabricated at the factory, all holes drilled, glass mounted on plasterboard, ready for quick installation on the job. Ready-Built Carrara is easy to install—can be done by any competent mechanic. 24" and 48" wainscoting available for tub recesses. 36" x 48" Ready-Built Carrara Panels also available, for use behind kitchen stoves.

PITTSBURGH PLATE GLASS COMPANY • PITTSBURGH, PA.

"PITTSBURGH" stands for Quality Glass and Paint

RILCO *Laminated Wood* PLYBEAMS

for flat roof structures of
one and two stories



DESIGNED, ENGINEERED AND FACTORY FABRICATED FOR YOUR JOB

● The Rilco Ply-Beam is a glued laminated structural member, straight or only slightly cambered, used principally in one- and two-story flat roof buildings. Rilco Ply-Beams eliminate waste space overhead, reduce the number of columns or other beam supports required. They are finished smooth at the factory ready for final staining, varnishing or other decorative treatment on the job. With conventional roof loads, Ply-Beams are made for clear spans up to about 65 feet. Floor loaded beams are designed for shorter spans according to load.

Rilco ply-beams and ply-columns are engineered for your job, factory fabricated and delivered ready for immediate erection.

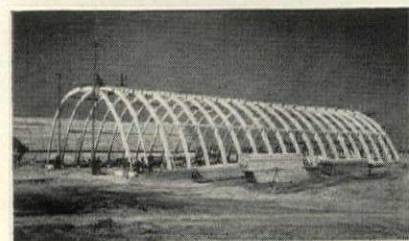
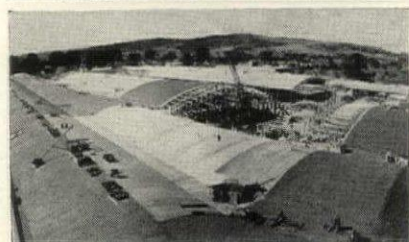
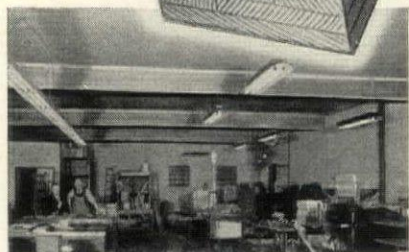
Rilco designs and manufactures many different types and sizes of roof trusses—

great beam arches for the construction of airplane hangars and drill halls with wide, post-free spans up to 200 feet—Rilco glued laminated bowstring trusses and standard timber trusses for factories, warehouses, stores and garages; boomerang arches for chapels, churches and club buildings and other framing members continuous from foundation to roof peak.

You can build it faster and economically with Rilco glued laminated wood products. Whatever the type of building you're planning, wherever its location, *North, South, East or West*, Rilco is ready to serve you with five strategically located plants.

Complete engineering data, design service and consultation available. Write nearest office for information on Rilco Products.

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RILCO

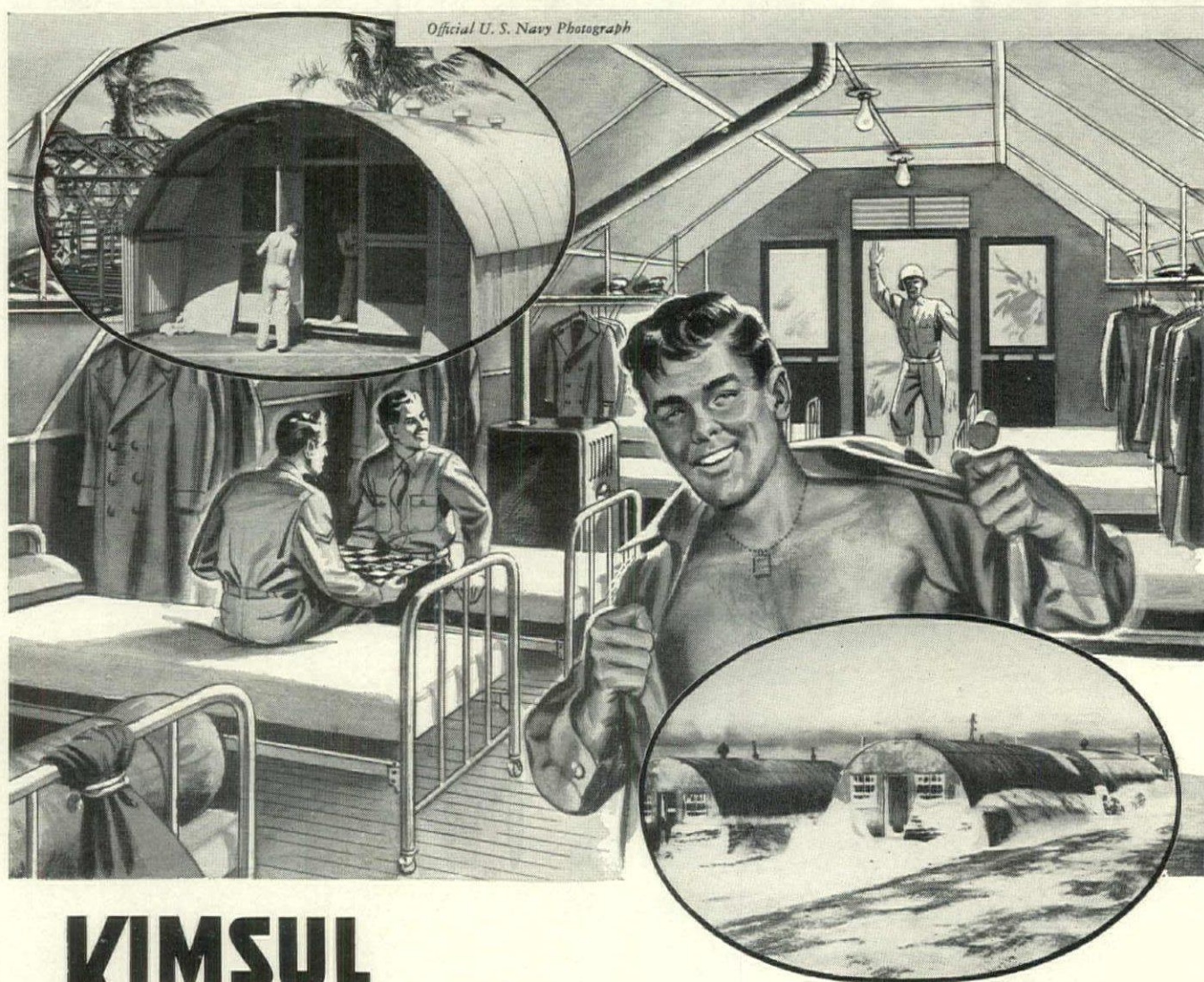
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AND FABRICATORS OF
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PRODUCTS FOR A WIDE
VARIETY OF USES

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keeps prefabricated military huts cooler in Panama—warmer in Iceland

■ America's armed forces pay a real tribute to KIMSUL* Insulation by using it in prefabricated military huts—huts which must keep our fighting men comfortable under tropic sun or in arctic cold.

Providing protection against temperature extremes is no hard job for 1" KIMSUL. With a thermal conductivity of only .27 Btu/hr./sq. ft./deg. F./in., it is one of the most effective insulations known. KIMSUL is shipped compressed to only *one-fifth* its installed bulk—an exclusive KIMSUL feature which *saves four-fifths* the ordinary amount of transportation, storage space and handling. The complete KIMSUL requirement for a 20' x 48' prefabricated hut—1512 sq. ft.—ships in one container measuring only 53" x 31" x 23" and weighing only 275 pounds!



These amazing KIMSUL features can help *every* wartime builder. Find out more about them. And about the new giant-size KIMSUL blanket (4 ft. wide, and wider in some specifications, up to 250 ft. long) which can cover an entire prefabricated wall or floor section in a single operation. Write or mail the coupon for full information today. No obligation.

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



DOOR CLOSERS

PRECISION

PRECISION

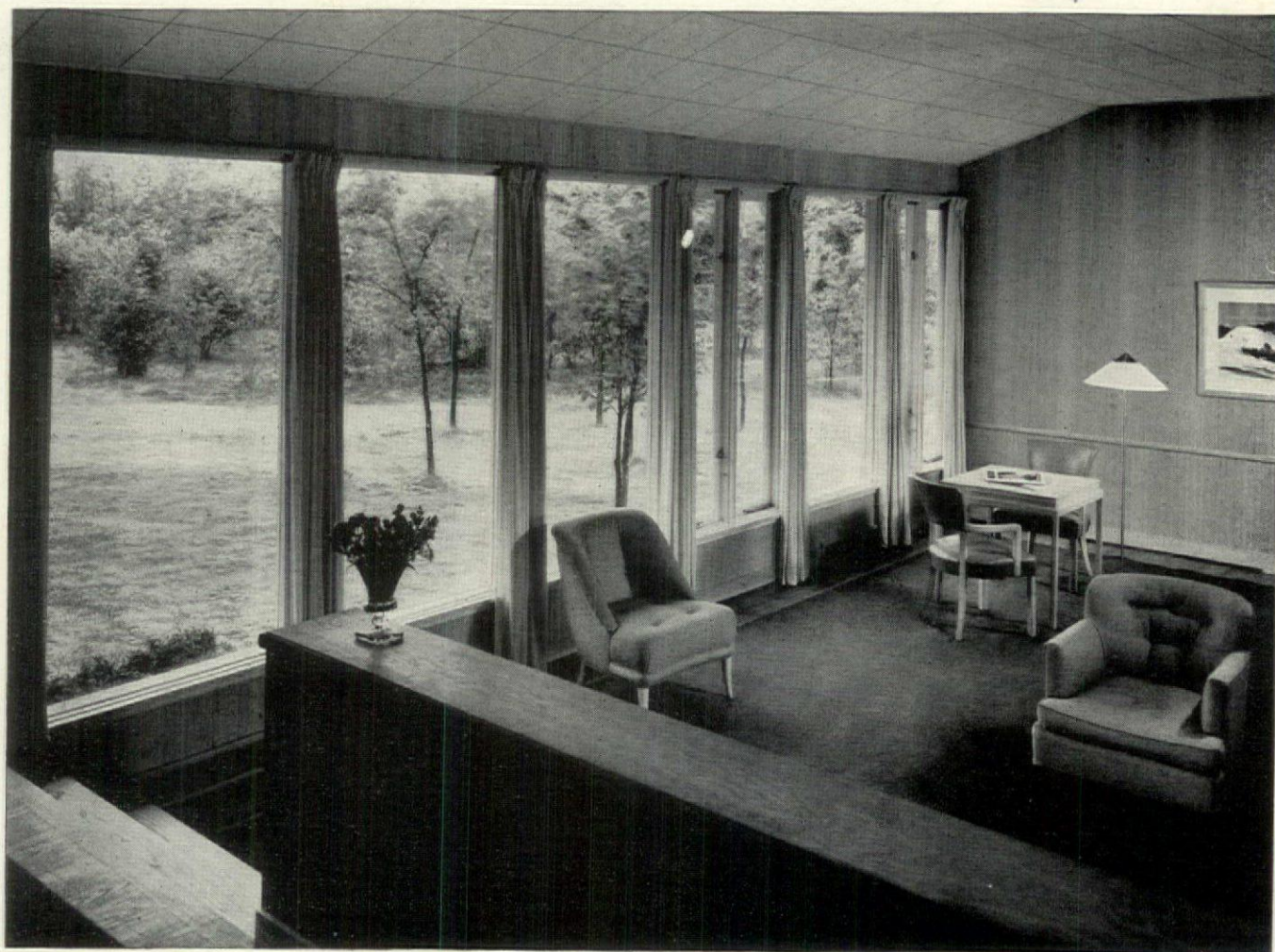
PRECISION



NOW 100% SMALL PARTS PRODUCTION FOR



VICTORY



DAYLIGHT ENGINEERING IN THE *PW* HOME

Daylight engineering is bound to play an important part in the planning of the postwar house. Through the proper use of larger window areas, decorative glass partitions in walls between rooms, and proper location of polished plate glass mirrors, an entirely new and desirable atmosphere can be created within the home. Gone will be the darkened corners, hallways, stairways and closets. Eyestrain conditions will be removed. Even the smallest rooms can be given a feeling of spaciousness never before enjoyed.

In addition to brightening the home, large window areas with southern exposure can be designed in a

way that the radiant heat of the winter sun is utilized to help heat the home. Double and triple glazing of these windows is most desirable. A remarkable new Libbey-Owens-Ford product, Thermopane, will make this type of glazing practical and easy to maintain.

Libbey-Owens-Ford quality glass for windows, partitions, mirrors, wainscoting and work surfaces is available in a wide variety of types, designs and colors. Be sure your records of L·O·F Glass are complete. Libbey-Owens-Ford Glass Company, 2253 Nicholas Building, Toledo, Ohio.



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A GREAT NAME IN *Glass*

How to turn a blueprint into a bridge...QUICKLY



Whether it's to help the war effort...or to get civilian traffic through...
there's one way to help assure a faster construction job

WHEN wartime transportation calls for a bridge...in a hurry...one way to help speed the job is with Atlas High-Early cement.

Atlas High-Early gains strength rapidly. It produces serviceable concrete often in one-fifth the usual time. It saves manpower by releasing men for new jobs more quickly. It saves lumber because forms often can be stripped in 24 hours instead of 3 to 5 days. It shortens the time required for protection and curing by as much as 70%. It reduces overhead by saving time, man-

power, and equipment.

For all types of wartime "Rush" jobs...housing, factories, airports, cantonments, access roads...you can depend on Atlas High-Early cement to give you serviceable, durable concrete...**FAST**. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York City.

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

HOW THE LITTLE PEE DEE RIVER WAS BRIDGED...



...14 DAYS QUICKER

For construction of the Potato Bed Ferry Bridge over the Little Pee Dee River, Atlas High-Early cement was specified for piling. Why? South Carolina Highway Specifications state, "No pile shall be driven until it is at least 24 days old and in cold weather for a longer period as determined by the engineer. This period may be reduced to 10 days if high-early strength is used"—a saving of 14 days!

Atlas High-Early cement provided other advantages, too. Forms were stripped and reused...saving time, materials, and manpower.

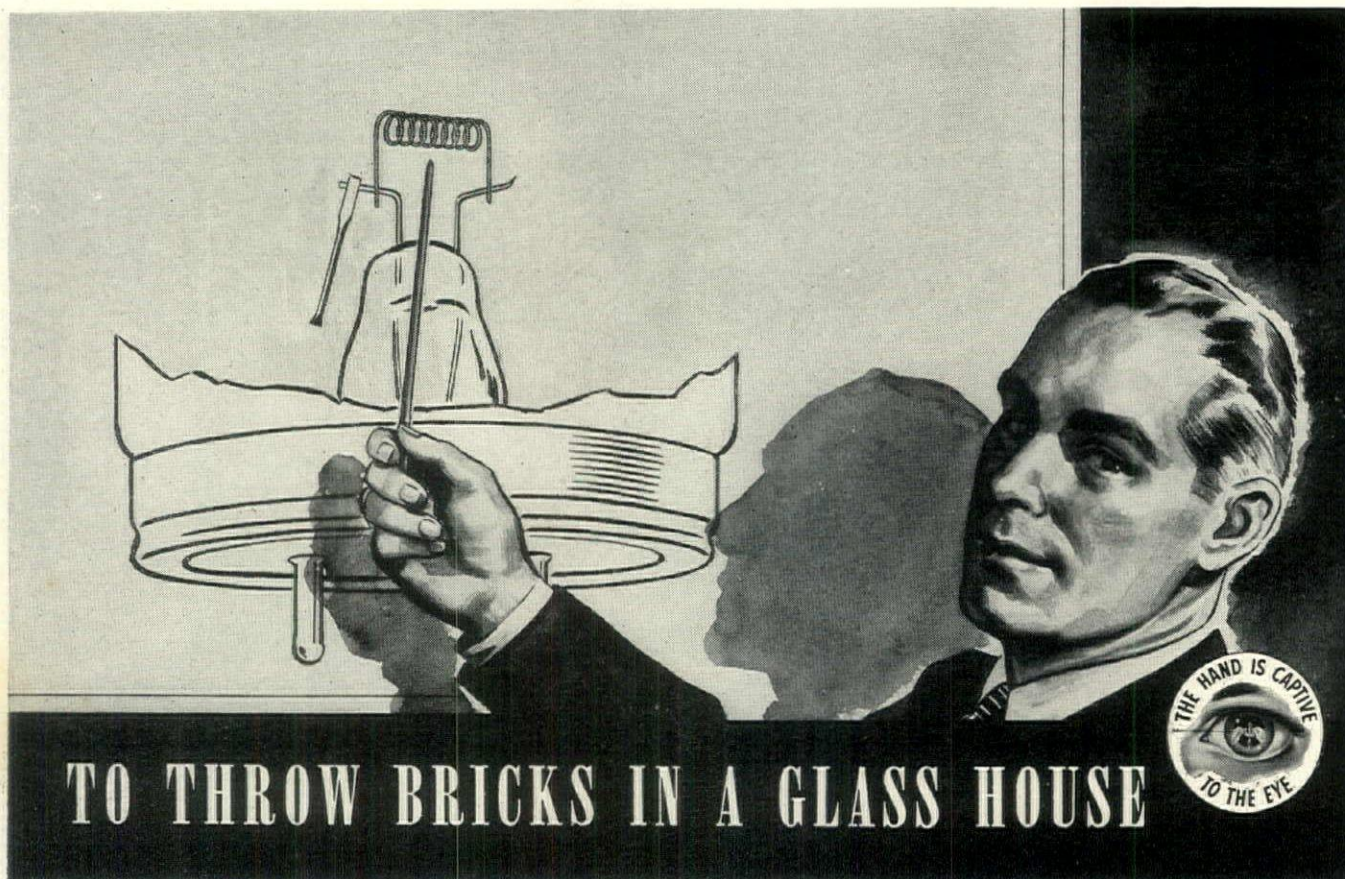
AP-H-53



SAVE TIME IN WARTIME WITH

Atlas High-Early Cement

A UNIVERSAL ATLAS PRODUCT



Hair-fine tungsten, almost invisible to the naked eye until coiled and recoiled, constitutes a cathode. It is coated with a compound which allows it to throw electrons, the bricks of the universe, in the glass house of a fluorescent lamp.

The cathode is a delicate but tough electronic element in the production of fluorescence, which provides the best lighting known for war plants today—and for your home when Victory is won.

At the flick of an electric switch, the cathode throws free electrons—billions of them—into the low-pressure mer-

cury-argon vapor inside the lamp. Free electrons batter mercury atoms, throwing them off balance electrically and into violent motion. In regaining electrical balance, mercury atoms generate ultra-violet rays. This "Black Light" magically makes the "powdered daylight" coating inside the tube fluoresce in a cool, glarefree, shadowless glow more constant than daylight—and just as kind to the human eyes.

During more than ten years of independent research, Sylvania engineers have led in the development of more efficient, more durable cathodes. Electron-emissive material, which is ex-

pected in the process of light-making, largely determines lamp life; therefore its chemical formula and application to tungsten are the subject of tireless study.

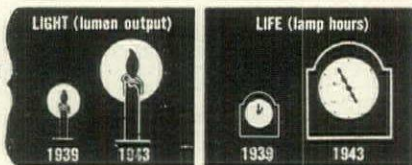
Improvements in material and process specifications are made every week at Sylvania. Many of them, like the "Mercury Bomb" method of precise mercury measurement, conserve strategic materials and labor. But all of them step up fluorescent performance on such counts as lumen output, lamp life, uniform colors, quicker starting—and at progressively lower cost.*

While today's Sylvania Fluorescent Lamps are serving three-shift days in America's war plants, tomorrow's are being made even better. Specify Sylvania replacements for the latest in fluorescent research.

FAR MORE LIGHT AND LIFE FOR YOUR MONEY

*Compared with 1939 a dollar invested today in Sylvania Fluorescent Lamps buys more than four times the lumen output and approximately five times the lamp life.

SYLVANIA
FLUORESCENT
DOLLAR
BUYS:



(Based on decreasing price and increasing efficiency and durability of Sylvania 40-Watt White Fluorescent Lamp)

Even on existing circuits, a change-over to fluorescent—Sylvania Lamps, Fixtures and Accessories—will probably more than double the light you get for the same wattage.



SYLVANIA

ELECTRIC PRODUCTS INC.

formerly Hygrade Sylvania Corporation
Salem, Mass.

*Incandescent Lamps, Fluorescent
Lamps, Fixtures and Accessories,
Radio Tubes, Electronic Devices.*



FIRE TRUCKS

take this trip every 10 minutes*

To Fight ROOF COMMUNICATED FIRE!



Every fire that breaks out endangers nearby buildings as well as the burning structure. Especially vulnerable are buildings with inflammable roofs. Authorities state that more than 60,000 fires* a year originate on the roof—caused by falling sparks and embers.

Prevent such disaster especially where war production is at stake by insisting on Johns-Manville Built-Up Asbestos Roofs. Made of plies of fireproof asbestos roofing felts, they offer lasting protection against fire. Even flaming embers which fall on them burn out harmlessly.

*The National Fire Protection Association has estimated that in 1940 (latest estimate available), 62,000 fires were caused by sparks falling on inflammable roofs.

J-M Asbestos roofs withstand long exposure to sun, rain and inclement weather. They are rot-proof, and require little maintenance. They don't have to be coated periodically to protect them from the drying-out action of the sun.

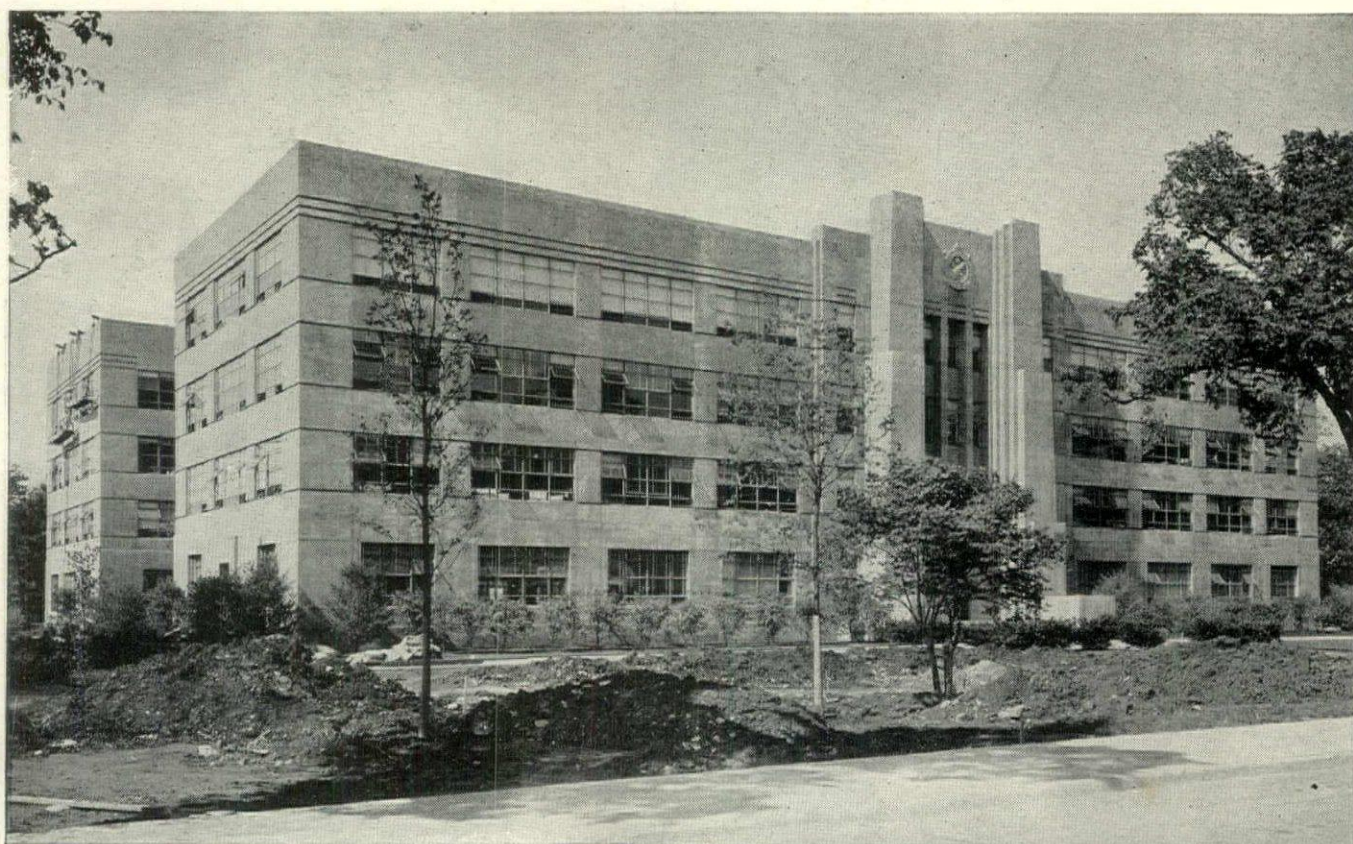
For complete details, send for copy of the 48-page illustrated book, "Things You Should Know About Your Roof." Johns-Manville, 22 E. 40th Street, New York, New York.



Johns-Manville

Asbestos

Built-Up Roofs



CONCRETE

HAS WHAT IT TAKES FOR WAR CONSTRUCTION

FOR EXAMPLE . . .

A Modern Arsenal

Concrete construction in which walls are integral with framing, floors, and roofs has the rugged strength and fire resistance essential to war buildings.

1. Concrete saves steel.
2. Transportation facilities are conserved, since the bulk of concrete materials are usually found locally.
3. Construction is expedited by improved methods, easily accessible materials, local labor.
4. Architectural distinction is easily obtained by interesting textures and simple decorative effects produced economically in the forms.



All-concrete Administration Building of arsenal in middle west. Designed by U. S. Engineer Office. Priester Const. Co., Davenport, Iowa, contractor.

Basement area of heavy ordnance building. T. S. Willis, Janesville, Wis., and Priester Const. Co., contractors.

To help get the maximum service which Architectural Concrete can render, the Portland Cement Association's staff of skilled concrete technicians is available to assist designers and builders of war structures. Ask for this service.

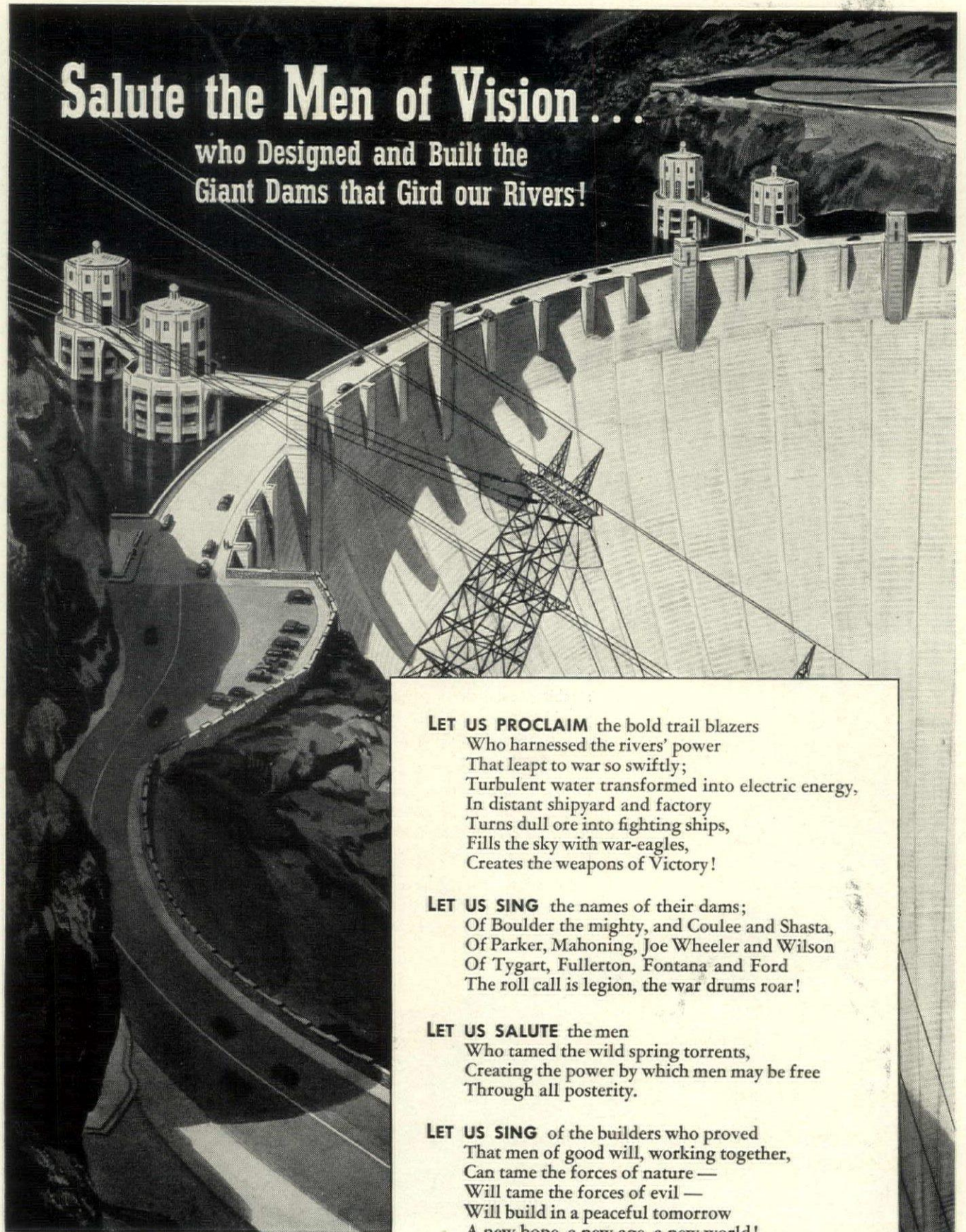
PORTLAND CEMENT ASSOCIATION, Dept. A5-7, 33 W. Grand Ave., Chicago, Ill.

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

BUY MORE WAR BONDS AND SUPPORT THE RED CROSS

Salute the Men of Vision...

who Designed and Built the
Giant Dams that Gird our Rivers!



LET US PROCLAIM the bold trail blazers
Who harnessed the rivers' power
That leapt to war so swiftly;
Turbulent water transformed into electric energy,
In distant shipyard and factory
Turns dull ore into fighting ships,
Fills the sky with war-eagles,
Creates the weapons of Victory!

LET US SING the names of their dams;
Of Boulder the mighty, and Coulee and Shasta,
Of Parker, Mahoning, Joe Wheeler and Wilson
Of Tygart, Fullerton, Fontana and Ford
The roll call is legion, the war drums roar!

LET US SALUTE the men
Who tamed the wild spring torrents,
Creating the power by which men may be free
Through all posterity.

LET US SING of the builders who proved
That men of good will, working together,
Can tame the forces of nature —
Will tame the forces of evil —
Will build in a peaceful tomorrow
A new hope, a new age, a new world!

DREAMS, PLANS, WORK... all were important in the building of our giant dams... as were the materials used in them. High on the list of these vital materials was Monel... used in vital parts of giant valves... as stops for grout that bind the huge concrete sections together... in places where strength, long life and resistance to corrosion are essential.

THE INTERNATIONAL NICKEL COMPANY, INC., 67 Wall Street, New York, N. Y.



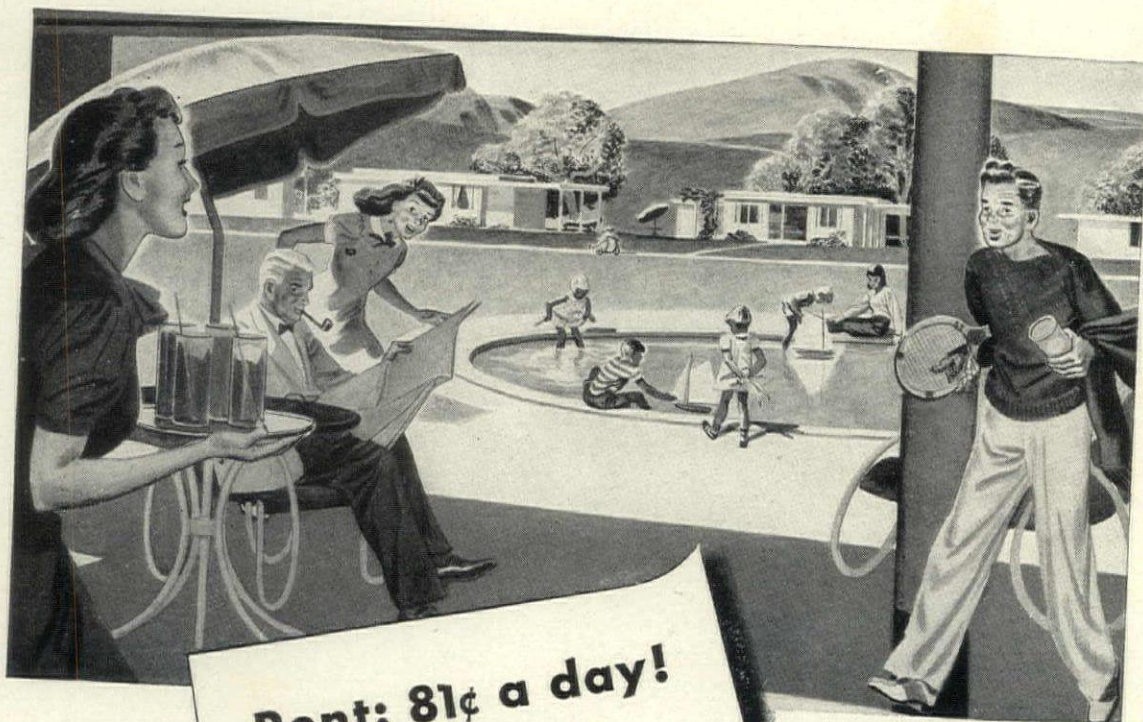
More Impetus for Post-War Plans

TO help materialize the important plans of the building industry, Revere is preparing, after victory, to supply improved roofing, flashing, pipe, tube and architectural shapes in copper and its alloys.

In order to serve you better, Revere has also developed facilities for manufacture of the light metals, and is pioneering with entirely new alloys that can offer far-reaching economies in future building. As in the past, it will be Revere's policy to provide expert technical advisory service, and to help distributors maintain complete stocks in locations convenient to users.

By means of its current national advertising, Revere presents various conceptions of leading architects and designers for better living tomorrow, believing that in this way impetus can be given to public acceptance of the industry's post-war plans. Revere is certain that, through this effort, every factor in the building industry will benefit—the architect, builder, contractor, dealer, realtor, manufacturer and financier.

In such advertising Revere seeks only to stimulate public interest in better planning and building, confident that the greater use of copper and brass makes any building better to live in, better to own, better to rent or sell.



Rent: 81¢ a day!

For games and social activities, the recreation center is like a luxurious club of your own.



A playground where mother can leave the children without worry, for half an hour or half a day.



Each family has a light, airy, attractive home, with every new convenience for happy living.



Families are able to go shopping just by taking a walk through the park.

"As war emphasizes the complexity of life today, we yearn for the simplicity of an Early American village. Yet we are all eager for the wonders of tomorrow's world.

"Through planning we can have both! I have already helped build entire communities where every home is in a spacious park. Quiet lanes bring cars to our very doors without crossing the green acres where our children play. The youngest climb on 'jungle-gyms' in play yards, wade in the spray pool or skate and ride 'bikes' on the tree shaded 'roller-way' within call of home. We stroll along broad paths to the shopping center, and enjoy quiet parties and dances in our own clubhouse. A fifteen minute walk brings us home from work in time to play tennis, badminton, or croquet.

"Our homes are brightened by large glass areas, framing broad vistas of the park. Dining rooms open into secluded gardens fringed with flowers. In pleasant weather we live outdoors, but insulation and automatic equipment keep us comfortable every day. Roasters, toasters, mixers and juicers are built into kitchens. Convenient closets hold everything we want to store.

"It once took great wealth to buy all this. Yet, today's techniques can keep rentals as low as 81¢

a day, or \$24 a month for a family of three!

"You can help plan now to create such a community in your own neighborhood, after the war. Today, copper and other essentials to good construction are reserved for war. But thinking and planning use no critical materials. Now is the time to plan the creation of homes and surroundings with freedom to live, work, and play as we never have before!"



ROBERT E. ALEXANDER

Millions believe that victory can bring, not only peace, but a fuller life. Already architects are planning new homes and communities for better living at a cost within reach of all. New construction techniques and materials will be ready, through which, if you desire it, such plans could be fulfilled in your own neighborhood.

Revere does not produce buildings or expect to in the future, but we know that in tomorrow's communities copper and its alloys will play a newly

important part. In thousands of homes, Revere copper is now giving lasting protection against weather, delivering rust-free water, helping to reduce heating costs. In days ahead it can bring us new comforts and conveniences, can make our homes and buildings better to own, or rent, or sell.

With all of us working for Uncle Sam today, no copper is available except for war. But the research being carried on in Revere's laboratories can help make better living available to all at lower cost after the war is won.

By planning now, you can help to make your home and community the kind you have hoped to live in. Naturally, Mr. Alexander could cover here only a few details. For more information about it, write to Revere for free illustrated booklet.



REVERE

COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801
Executive Offices: 230 Park Avenue, New York

This advertisement appears in Saturday Evening Post, May 1, 1943



Fletcher Pratt, noted military authority, helped us prepare this striking picture showing units of our Air Force attacking a U-boat construction center.

SINKING *U-boats* BEFORE THEY'RE BORN

Modern air power depends on precision instruments—bombsights, machine guns, cannon, navigation instruments, electronic communications devices. These and a vast number of other war essentials benefit from Westinghouse Air Conditioning and Industrial Refrigeration.

Producers who formerly "got along without" have proved that controlled temperature, humidity and air cleanliness mean uniform quality, precision, fewer rejections, faster production.

When peace comes, a thousand new-day benefits will

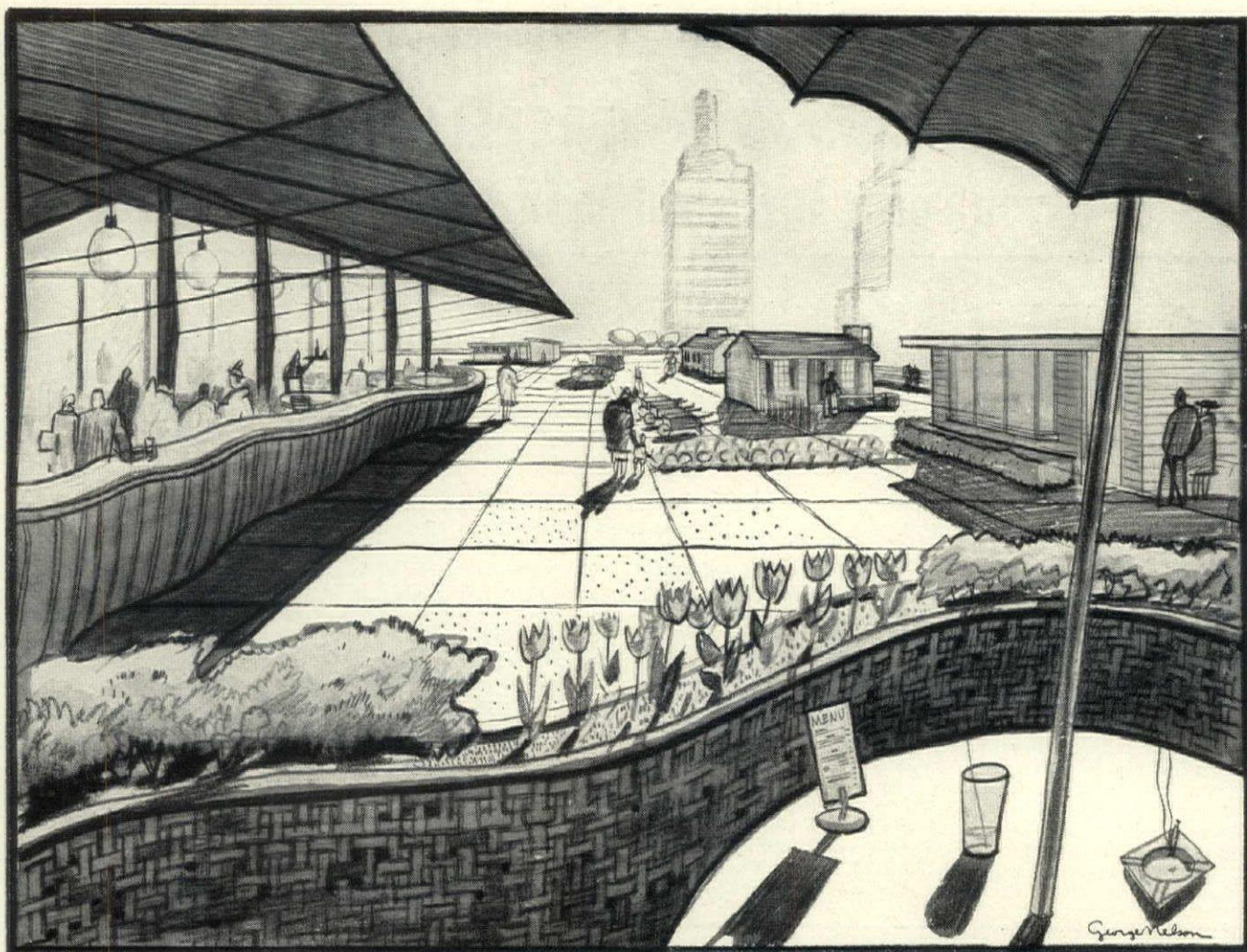
result from Westinghouse Air Conditioning and Industrial Refrigeration. Better products at lower cost, greater year 'round comfort—better living for all.

In helping solve "conditioning" problems, Westinghouse offers years of experience—also, a hermetically-sealed compressor which assures economy, dependability, long life. Inquiries are invited from producers of war materials and postwar planners. Westinghouse Electric & Mfg. Co., 643 Page Blvd., Springfield, Mass.

Westinghouse *Air Conditioning*

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





DEPARTMENT
STORE
IN 194X

AN outdoor selling department that is *actually* out of doors... prefabricated houses for sale on the roof of a department store... This is just one example of the many functional possibilities of roofs in the post-war building era ahead. Designed by architect George Nelson of New York City, this project opens new horizons in department store roof design. Space is provided for assembled prefabricated houses, arrangements of outdoor game equipment, garden furniture and pools, where they may be exhibited in their proper surroundings. Featured also are an attractive soda fountain and

restaurant with tables indoors and out. The roof is appropriately finished to protect the waterproofing membrane and utilize important roof areas which are generally neglected.

* * *

This is the first of a series of architectural designs providing greater utilization of roof areas, a development forecast by the Barrett Roofs which support roof-top gardens in Rockefeller Center, New York, and elsewhere.

In post-war buildings, traditional limitations of design will be put to test, and many new practices and techniques will unquestionably be developed. Just as Barrett Specification Roofs proved their adaptability to new architectural forms in the decades since 1854, so too will these famous coal-tar pitch and felt roofs continue to provide the maximum in dependable, long-lasting waterproofing and weather-proofing protection for the buildings of tomorrow.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York

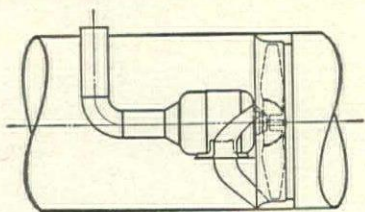
2800 So. Sacramento Ave.
Chicago, Illinois

Birmingham
Alabama

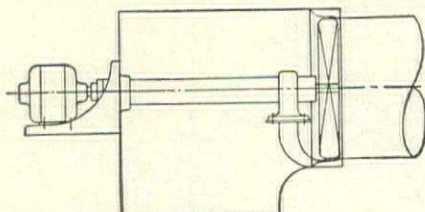
*Trade-mark Reg. U. S. Pat. Off.



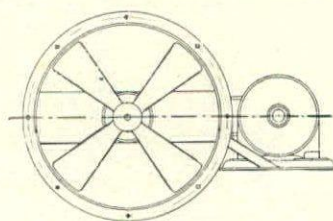
HERE'S WHY PROPELLAIR Fans can help you solve any problem involving heat and fumes!



DIRECT-CONNECTED TYPE
For temperatures up to 120° F.



EXTENDED-SHAFT TYPE
For temperatures up to 450° F.



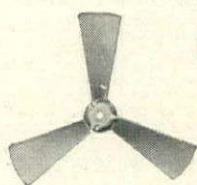
BELT-DRIVE TYPE
For temperatures up to 450° F.

These three illustrations show how fumes or air—at practically any temperatures experienced in industrial plants—are successfully handled by Propellair Fans. Because hundreds of installations of each type are setting performance records for their particular applications, leading architects everywhere are specifying them for war-production ventilating jobs.

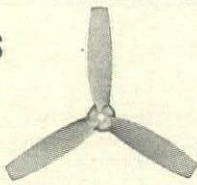
The direct-connected, or "CD," type is most frequently used for handling fumes and air at temperatures up to 120° F. It is shown here installed in a straight pipe. Because the motor is located within the air stream, the totally enclosed ball-bearing type is recommended. If the motor is equipped with a small auxiliary duct, temperatures up to 160° F. may be handled. This small duct should lead to the outside of the main duct so that it can pull cool air over the motor. Where heated *clear* air is involved, the open-type motor may be used, in which case cool air should pass *through* the motor from the auxiliary duct.

The extended-shaft, or "CE," type—shown here installed in an abrupt right-angle turn of a duct system—is recommended for handling fumes and air at temperatures up to 450° F., because under such conditions a motor should not be operated directly within the air stream. The open-type, ventilated motor is usually used, mounted rigidly to a cast steel base. The drive shaft is housed and sealed in steel tubing.

The belt-drive, or "CSV," type is a heavy-duty unit built to operate under temperature conditions up to 450° F. (With a stainless steel fan, not now available, it can handle temperatures considerably higher.) As in the "CE" type, the motor is placed outside the duct. The belt drive is used because it eliminates metal-to-metal transmission of heat to the motor. Fan bearings are of special air-cooled design and are protected, as is the belt, by welded steel tubes in which they operate.



PROPELLAIR FANS OFFER THESE ADVANTAGES

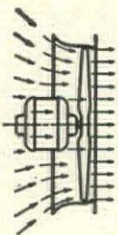


AXIAL-FLOW, AIRFOIL PROPELLERS,

especially designed by Propellair engineers, deliver maximum air with minimum horsepower. Air flow is even over all parts of the blades—the *whole* fan works, not just the tips! These unique propellers are also non-overloading—from free air to complete block-off, horsepower remains virtually constant as long as motor speed is constant. The number of blades, and their angle and shape, depend on the job to be done.

CURVED ENTRANCE RING,

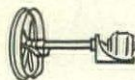
in addition to serving as a sturdy support assembly, reduces tip loss and enables Propellair Fans to deliver *maximum air per horsepower*. Introduced in 1930, as a result of exhaustive experiments and tests by Propellair engineers, this design makes possible the utilization of the "Airfoil" air-movement principle in the *entrance ring* as well as in the *propeller*.



A PROPELLAIR FAN FOR EVERY APPLICATION



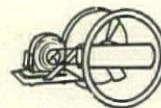
CD—Direct connected to electric motors. For ducts, hoods, roof ventilators or panels.



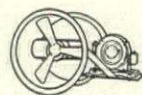
CE—Extended shaft fans for ducts, dryers, etc., where motor must be outside the air stream.



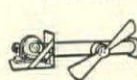
CF—For belt drive from separate motors, engines or line shafts. Also with extended shaft assembly.



CS—Heavy-duty complete belt-driven unit in duct section. For severe dust, corrosive or explosive vapors.



CSV—Heavy-duty complete belt-driven unit for high temperatures in ducts, pipes, and as stack boosters.



CSB—Heavy-duty complete belt-driven unit for ducts or stacks to handle explosive vapors, dust, or high temperatures.



CU—Low-stand, tiltable, portable cradle fan for hardening-room service, product drying or cooling.



CM—Heavy-duty pedestal blast fan for cooling men and products in heavy industries.



C—Industrial circulator fan for general air-circulating service of all types.



CB—Slow-speed, ultra-quiet complete belt-driven fan. For office or room ventilation.

If you have a pressing industrial ventilating problem, write us! We'll either mail you our complete Propellair catalog No. 10-E—or have the nearest Propellair ventilating specialist get in touch with you—whichever you prefer.

On the other hand, if you'd like more information for future reference, and not in connection with a specific war-production job, see our 20-page insert in Sweet's Catalog for 1942.





1941

Calling their floors... comfort and convenience taken for granted. In skyscraper and apartment house elevators, Americans expected and got precision service. Edwards annunciators flashed the floor signal, just one of many communication devices for home and industry.



1943

Calling their shots... Today, Edwards signals step up the striking power of British tank crews, providing the split-second coordination for battering Rommel's Afrika Korps. This is typical of the high speed communications Edwards makes for the United Nations.

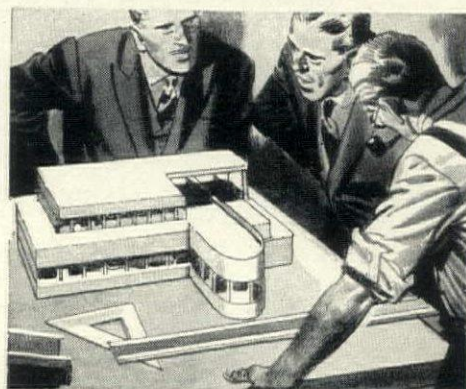
194? Task force for tomorrow's way of living

Allied tanks shatter the desert silence with the clatter of attack... Bombers make their daily deadly sweeps... Destroyers, PT boats churn the seven seas... Each is a complex mechanical masterpiece brought to perfection by the task forces of science. In America, Edwards is part of that task force, developing high-speed communications equipment for land, sea and air forces. But Edwards,



together with you, America's engineers, architects, builders, comprise a task force for tomorrow's way of living... Soon, the myriad advancements of war-science will be applied to peace. The communications equipment of tomorrow will bring undreamed-of progress. Edwards Post-War Research is planning today for that era of rebuilding.

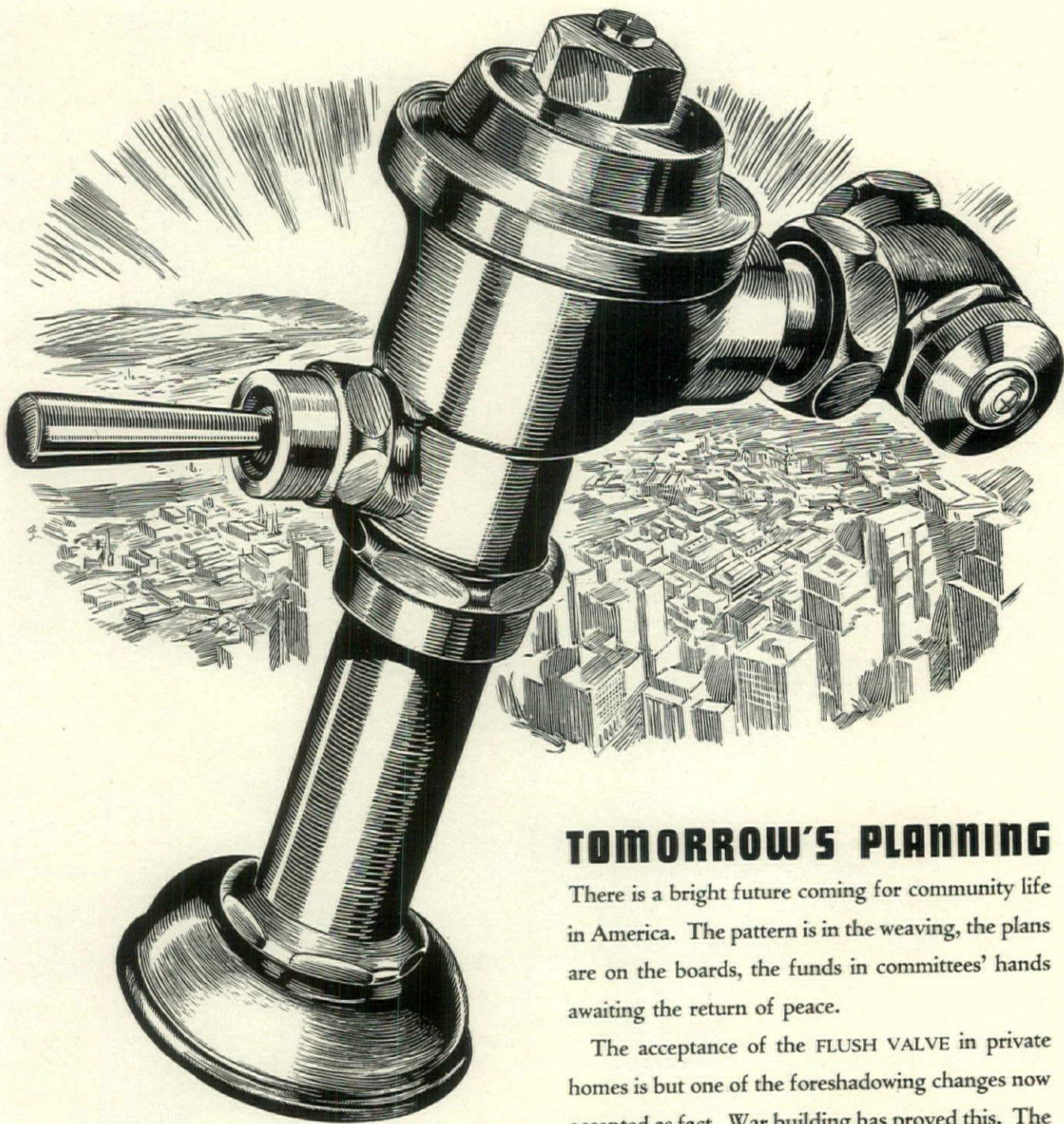
Edwards and Company, Norwalk, Conn.



EDWARDS

SINCE 1872

Communication Equipment for
Homes, Institutions and Industry



DELANY FLUSH VALVE equipped with NO. 50 VACUUM BREAKER, a device that prevents water contamination, tells back syphonage. DELANY VALVES are noted for their simplicity and freedom from breakdown.

TOMORROW'S PLANNING

There is a bright future coming for community life in America. The pattern is in the weaving, the plans are on the boards, the funds in committees' hands awaiting the return of peace.

The acceptance of the FLUSH VALVE in private homes is but one of the foreshadowing changes now accepted as fact. War building has proved this. The water economy, efficiency of purpose, and freedom from fault and common maintenance of the DELANY FLUSH VALVES, over past accepted methods of domestic sanitation, earns them a place in your plans for modern community improvement.

SINCE 1879
Coyne & Delany Co.
 BROOKLYN N.Y.

A BOND WAGON Drive for Builders



BUY WAR BONDS TODAY—and save for home building tomorrow—is the theme which keynotes Hotpoint wartime advertising. It is making millions of Americans want new homes after Victory—truly modern homes with Hotpoint Electric Kitchens.

A Plan to Create "POST WAR" Prospects



- Hotpoint has prepared a promotional plan to help you secure plenty of prospects for post war home building.

The entire activity is outlined in the "Bond Wagon" Plan Book, especially prepared for the building industry. Included as part of the program is the unique Home Planning File, which has proved eminently successful as a prospect getter.

Get all the facts about this forward-looking wartime program now. Send the coupon below for your copy of the "Bond Wagon" Plan Book and free sample of the Home Planning File. Edison General Electric Appliance Company, Inc., 5651 West Taylor Street, Chicago, Illinois.



For outstanding achievement in War Production

☆ MAIL THIS COUPON FOR FREE SAMPLE ☆

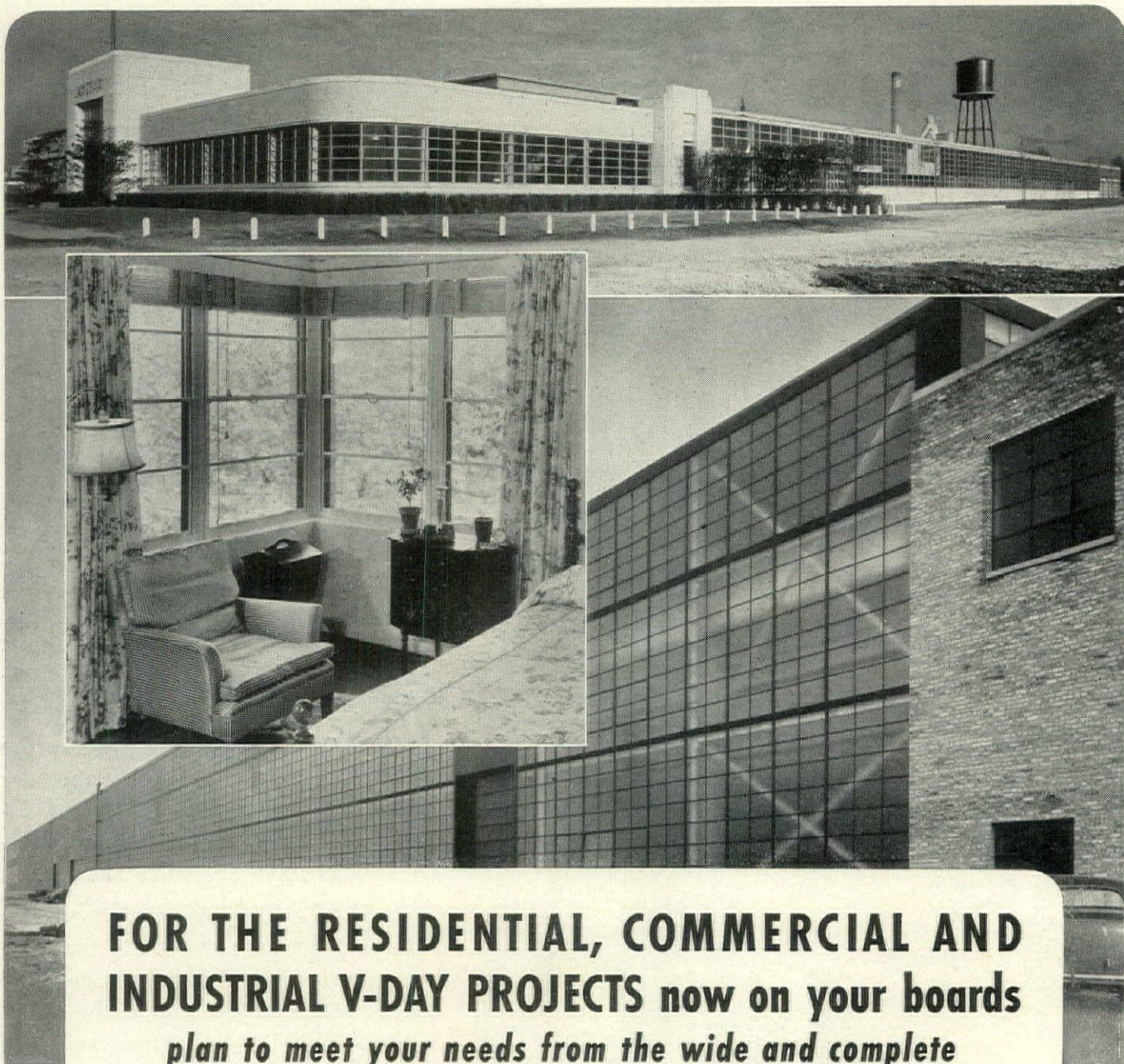
This coupon attached to your business letterhead will bring you a copy of the "Bond Wagon" Plan Book and a Free Sample of the Home Planning File. Mail to: Edison General Electric Appliance Company, Inc., 5651 West Taylor Street, Chicago, Illinois.

NAME _____


TITLE _____

ELECTRIC
Hotpoint
KITCHENS

REFRIGERATORS • RANGES • WATER HEATERS • WASHERS AND IRONERS
CLOTHES DRYERS • AUTOMATIC DISHWASHERS • ELECTRASINK • STEEL CABINETS



FOR THE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL V-DAY PROJECTS now on your boards
plan to meet your needs from the wide and complete range of low-cost, long-lived Truscon Steel Windows

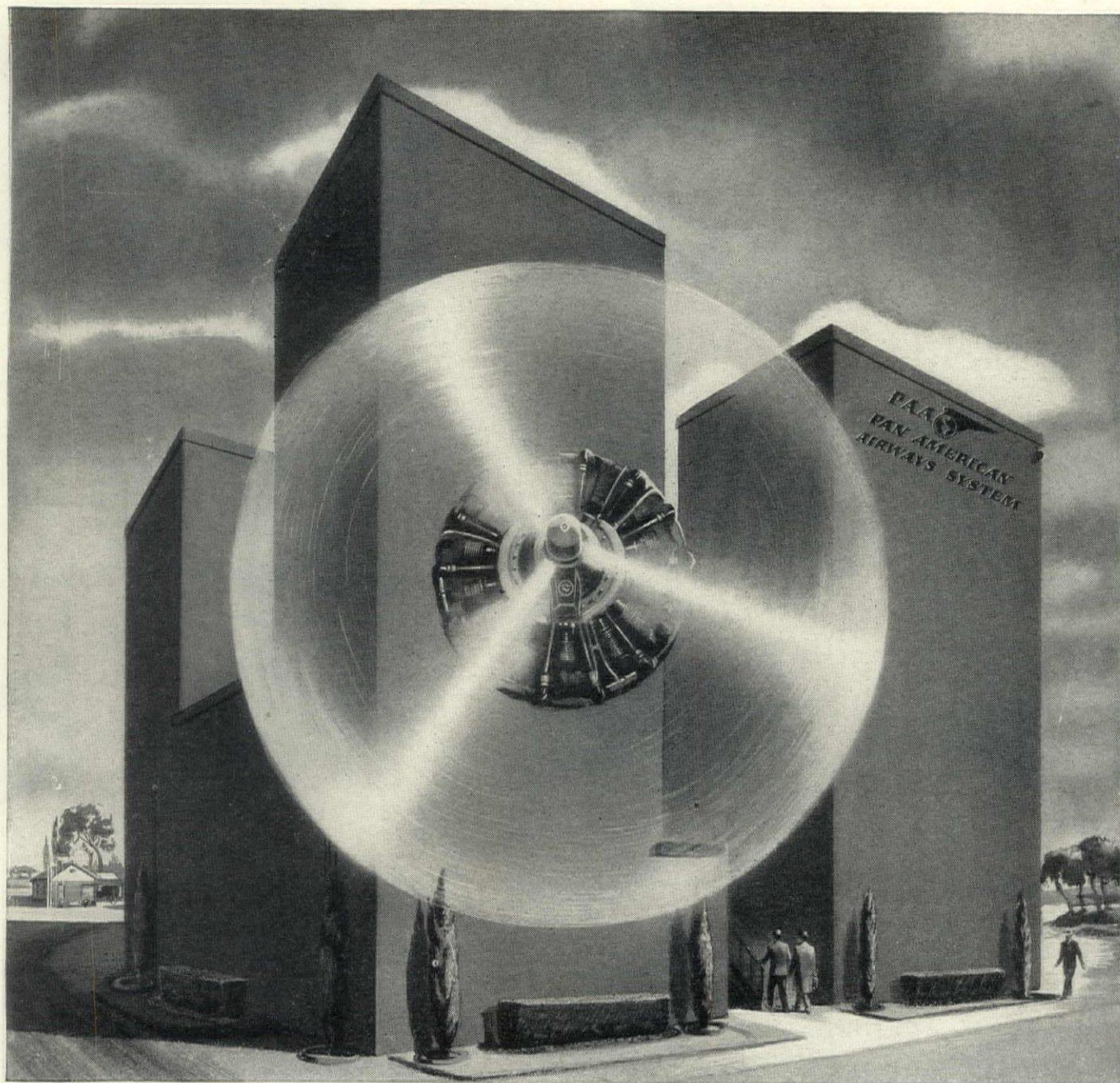
 Right now, there's a wealth of information at your fingertips, to help you design efficient, well-planned steel window installations for every type of "after-the-war" job on your boards. That information can be secured by writing directly to Truscon.

And when your plans are finished, and the war is won, your structures can be built quickly and without delay, because the Truscon Steel Windows you need will be *on the job and ready to install!*

That's because Truscon will be prepared to re-convert to peacetime production when the last shot is fired. The same famous quality which you always have known in Truscon Steel Windows again will be there . . . the same fine standards of manufacture and economy of installation.

Our many sales and engineering offices will be glad to help you on window problems of your V-Day projects. Truscon Steel Co., Youngstown, Ohio. Subsidiary of Republic Steel Corporation.

TRUSCON STEEL WINDOWS



Cave-of-the-Winds in Miami

YOU'LL never see a building more purely functional in design than this four-towered test house, where the engines of Pan American Clippers are put through their paces.

Inside, propellers roar with the thunder of 4000 horsepower—creating super-hurricanes of wind as air is pulled down one set of stacks and pushed out through the other set. Yet outside, there's hardly a sound—for in each stack a honeycombed

unit of cells soaks up the resonance, bit by bit, until it is finally dissipated.

Naturally, this completely windowless structure had to be air conditioned—to remove heat generated by the engines, to provide controlled testing temperatures, to make working conditions bearable for the engineers. As in so many other wartime applications of air conditioning and industrial refrigeration, the equipment selected was G-E.

Today, the talents of G-E Air Conditioning, Heating and Refrigeration engineers—always available to architects and engineers—are helping to win the war. God speed the day when those talents can work *with* and *for* you in the pursuits of peace!

General Electric Company, Air Conditioning and Commercial Refrigeration Department, Division 3135, Bloomfield, New Jersey.

Air Conditioning by **GENERAL**  **ELECTRIC**



Marlite GOES TO TOWN!

Plastic-finished Marlite is seeing plenty of service in Uncle Sam's "Soldier and Sailor Towns" all over the country today. And when postwar building begins, it will see even more extensive service because more and more architects and builders are finding it so practical and productive to work with. ● **PLANNING WITH MARLITE FOR THE "TOWN OF 194X."** Practically "every place in town" will be more attractive with Marlite interior walls. Hotels and hospitals, theaters and restaurants, super markets and dairy stores, smart retail shops and professional offices, factories and homes . . . are only a few of the places in which Marlite flexibility offers full play to your architectural originality. Moreover, the results will satisfy client demands for economy, utility, distinctiveness, durability and beauty. ● Marlite is economical from the installation standpoint, too. It is quickly installed . . . the large wall-size panels are easily cut to fit any wall or ceiling surface. The *easy to clean* and *maintenance* features, which are making it popular with the Service men on "special detail," will bring extra approval from owners and occupants. ● Marlite offers you an opportunity to make the most of designing ingenuity. By planning *now* to use it *later*, you can gain a headstart on tomorrow's business. Turn to Section 11-27 in Sweet's for complete information, or write direct for a full color catalog!

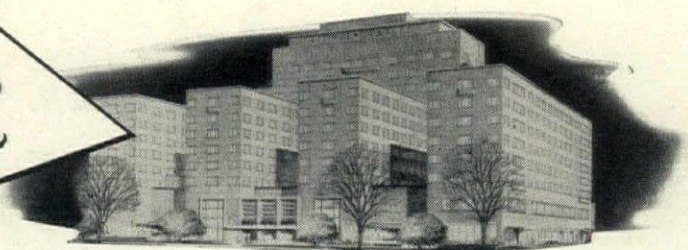


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MARSH WALL PRODUCTS, INC. • 51 MAIN ST., DOVER, OHIO

LOCKWOOD HARDWARE *at Washington's Hotel Statler*



For the hardware at Washington's Hotel Statler, Holabird & Root conceived a basic design of Spartan simplicity with a rich natural bronze surface *unmarred by screw heads*. . . . Guest room plans required that corridor, bath and closet doors *step aside* automatically, in order to avoid unsightly damage. . . . How Lockwood Engineers accomplished each objective is shown below.

ESCUTCHEONS *without Screws*

The need for screws in escutcheon plates has always been taken for granted. How else could a plate be fastened securely? Lockwood Engineers designed a set of hidden attachments, screwed into the door beneath the plate. One of these is shown in Fig. 1: a tapered plate with undercut sides that engage V-shaped grooves in the underside of the escutcheon. This serves to hold the upper end of the escutcheon firmly against the door surface.

Knob spindle and Thumb Turn holes are employed to secure the escutcheon as shown in Fig. 2. Plate (A) is screwed onto the surface of the door, and escutcheon (B) is fastened securely by means of threaded locking thimble (C) which surrounds the knob spindle and acts as a collar for the knob shank.

This method also serves as sole and adequate support of round plates.



Fig. 1

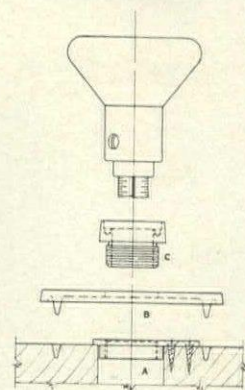
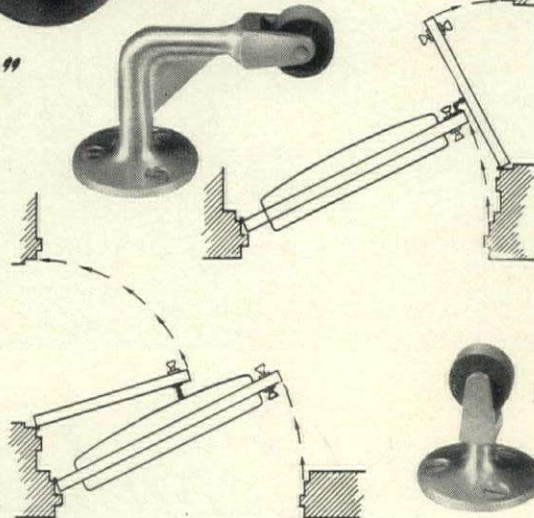
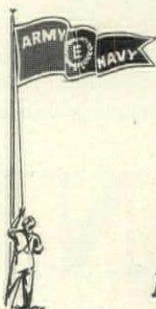


Fig. 2

DOORS *that "Step Aside"*

Structural considerations made it necessary—in certain guest rooms—to place the corridor, bath and closet doors in close proximity. To avoid damage caused by one door striking another, Lockwood Engineers designed a set of roller bumpers which serves to move one door quietly out of the way as another door is opened. This feature removes one of the common causes of expensive maintenance in hotels.

Lockwood is prepared to work with you: for today's war permissible construction; for tomorrow's commitments; and in those plans for that richer, fuller life when peace is assured.



Lockwood Hardware Mfg. Co.

Division of Independent Lock Co.

Fitchburg, Massachusetts

To Men Who Plan *for the Future*

- THESE SIMPLE FACTS ABOUT STEEL :



— *Republic* —
STEELS AND

THOSE post-war structures taking shape in your minds and on your boards. Are you thinking of how they can be transformed from ideas into actualities—and the materials to employ? Are you preparing specifications as you plan?

Many are the materials from which you may choose—some new—some talked of as being revolutionary. But, regardless, each has definite qualities that may make it highly desirable for certain applications, but possibly not for others.

That is why STEEL is outstanding as a basic building material. *It provides a combination of qualities found in no other material.* Even in structures in which other materials may predominate, steel usually is essential to their success.

These features of steel are more than claims. Each has many years of proof behind it.

Steel is strong, tough, stiff, safe.

—is high in strength to weight ratio—permitting reduction in bulk—saving space.

—will not warp or shrink.

—is fireproof, vermin proof, splinter proof.

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—is sanitary and clean.

—provides a stable base for finishes—metallic, vitreous enameled or various colored surface coatings.

—provides, in stainless form, an attractive, lustrous, silvery finish.

—is easy to fabricate both by shop and job methods.

—is inherently long in life with little need for maintenance.

—is low in cost per year of service life.

—is available in a wider range of forms than probably any other material.

Before the war interfered with the progress of the building industry, Republic already was the producer of the most complete line of steels and steel building products made by any single manufacturer. Unusually heavy wartime demand for fighting steels, however, has curtailed the flow of many of these products for the duration.

But even as you are thinking of the structures of the future, so, too, are Republic metallurgists and engineers thinking of better steels to help you build them.

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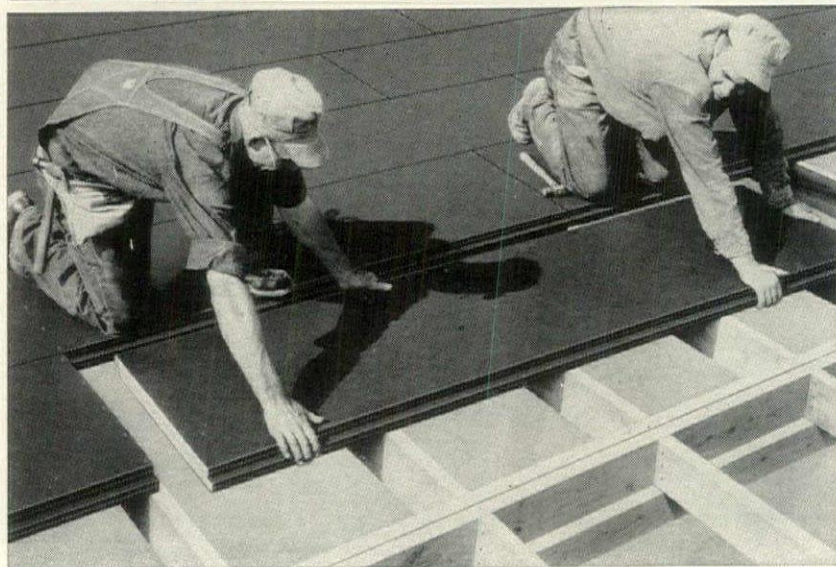
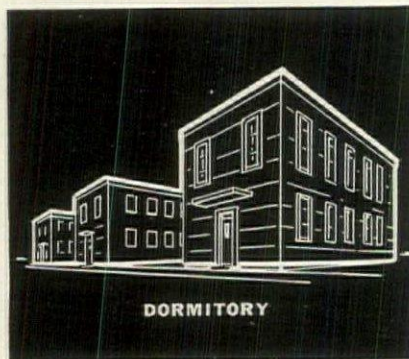
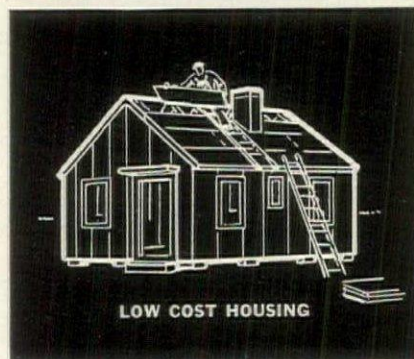
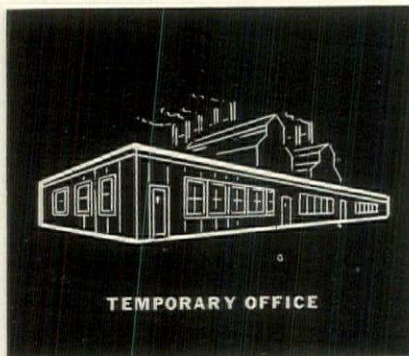
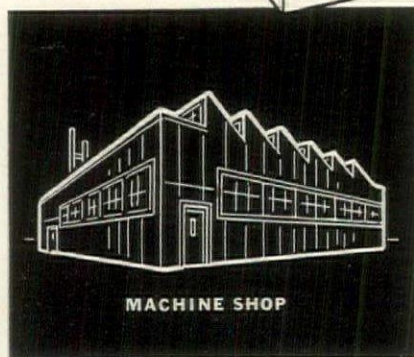
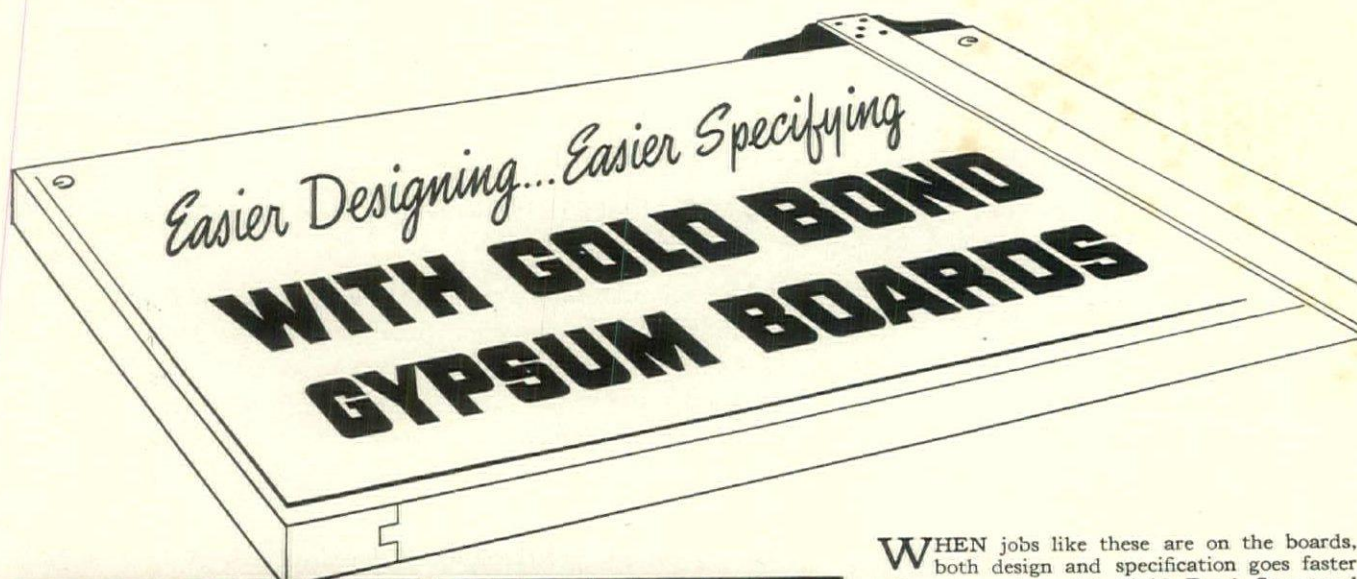
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STEEL PRODUCTS



WHEN jobs like these are on the boards, both design and specification goes faster when you plan with Gold Bond Structural Gypsum Boards in mind. These new products replace scarce lumber for roof decks, outside walls and interior partitions. They come in standard lengths and handle like lumber, require no special fittings.

Millions of feet have already been used in war plants, military buildings and low-cost housing. They are the answer to the Government's request to use gypsum boards wherever possible instead of scarce lumber.

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GOLD BOND EXTERIOR BOARDS! Sheathing and siding in one operation—that's the story about Gold Bond Exterior Boards. The center is fireproof gypsum rock for strength and rigidity. One style with durable overcoat of asphalt roofing. Another comes with tough, weather-sealed facing in dark green color with special watershed edges. Sizes: 2' x 6', 8', 9', 10' . . . ½" and 1" thick.

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Slums today . . . not tomorrow

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fair and equitable system of preventing inflationary rents.

Critics of OPA's stringent rent control program won't, in all probability, be satisfied by the reduction of the down payment to 20%, will continue to propagandize for elimination of it entirely, on the grounds that OPA has never been given the authority to regulate sales.

So strong has NAREB pressure been on this point that the ranking member of the House Banking Committee, Wolcott of Michigan, has introduced a bill prohibiting OPA from regulating sales or controlling occupancy of property.

FSA DEATH SENTENCE

In reporting out the Department of Agriculture supply bill for the new fiscal year, the House Appropriations Committee had a lapse of memory, eliminated the Farm Security Administration, transferred its functions, on a much-reduced scale, to the Farm Credit Administration. This move has created a jurisdictional fight in the House. Its Agricultural Committee sees an intentional slight, is making an exhaustive investigation of FSA.

Feeling in the House on the part of FSA friends is that the Appropriations Committee has exceeded its authority, that it lacks the right to write legislation into a regular appropriations bill. If the charge can be substantiated and sustained, the whole matter will be tossed out, the fight on FSA appropriations would then be transferred to the Senate.

FSA no longer controls "greenbelt projects"—these have been transferred to FPHA in last year's reorganization. Remaining importance to Building of the move is in connection with FSA's plans for housing migrant farm families who follow the crops. No new building in this field is proceeding or planned; the 95 or so existing camps are planning no additions. The Agency's survival, doubtful now, would mean continuation of such programs as farm tenant aid, farm debt adjustment, tenure improvements, water conservation and utilities programs. Indirectly but potently, death of FSA would thus affect branches of the Building industry.

MORE ON MOSES

Contents of Robert Moses' report to Army and Navy officials on housing difficulties in critical areas are as difficult to come by, apparently, as the message to Garcia. It was reported, however, that the principal recommendation—that area directors be appointed with complete authority to coordinate various Federal programs on the spot—was successfully shelved by the Budget Bureau.

After a visit to coastal cities Moses had some rather caustic things to say about the entire lack of coordination among Government bureaus, the overall picture of housing without plumbing facilities.

schools, etc. Red tape and clearance are bugaboos no local official can manage to best Moses' suggestion of area directors who would be directly answerable to the Army and Navy Munitions Board might possibly help to overcome them, bring some order out of the housing-community facilities imbroglio.

The Budget Bureau, having done a neat job of interring the bones, has revived the body of Moses' report and with the aid of skin grafting has managed to restore his basic idea. Just issued as the result of the Bureau's suggestion is a new executive order creating a Committee for Congested Production Areas.

Its composition: War Departments, War Manpower Commission, FWA, NHA, WPB, the Budget Bureau. Its chairman: potent, Republican, Kansas Harold D. Smith, Budget Director. Its job: to designate congested areas, to appoint area di-

rectors whose job it will be to recommend policies to coordinate Federal programs.

Now that the President's main managerial arm (Budget Bureau) is pitching, the game may get under way, with the Federal bureaus more impressed than usual with the need for action. This committee has been given the right to overrule any Government agency, including Army and Navy, on local tangles, may develop into the U.S.'s strongest trouble-shooting group.

NYC TROUBLES

New York City, scene of a million gaieties, home of a thousand good-time-Charlies, had a very troubled month. Governor Thomas E. Dewey's Committee on Employment (John W. Hanes, Elliot V. Bell, Delos Walker, David Dubinsky) reported to him that the city was steadily declining

(Continued on page 68)

175,000 VICTORY HOMES?

YES, 175,000 VICTORY HOMES AVAILABLE FOR AMERICA'S WAR WORKERS!



YES, OVER 500 A DAY OR 175,000 A YEAR of the same type of housing that has gone all over the world to house our armed forces.

LARGEST PRE-FABRICATORS OF M
NOW OFFER THESE VICTORY WOR

THE VICTORY HOME—This is the new type of housing that has gone all over the world to house our armed forces. It is a small, single-story house, built of pre-fabricated sections, and is easy to move and set up. It is built on a concrete foundation and has a steel frame. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped.

THE VICTORY HOME—This is the new type of housing that has gone all over the world to house our armed forces. It is a small, single-story house, built of pre-fabricated sections, and is easy to move and set up. It is built on a concrete foundation and has a steel frame. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped.

SEE your home of the future right now on Macy's Ninth Floor

See the "Victory Home" model at Macy's Ninth Floor. It is a small, single-story house, built of pre-fabricated sections, and is easy to move and set up. It is built on a concrete foundation and has a steel frame. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped. It is built in a factory and is ready to go when it is shipped.

WIRE OR PHONE TODAY—Federal, State and Municipal officials and industrialists concerned with housing problems are invited to wire or phone our Dallas or Washington Offices for further information.

TEXAS PRE-FABRICATED HOUSE AND TENT CO.

Dallas, Texas
1345 Shoreline Building, Washington, D. C.

TODAY AND TOMORROW . . .

On pages where traditionally are advertised the latest fashionable foible and fad, this month in the nation's dailies appeared announcements of houses for sale . . . now and postwar:

New York's R. H. Macy advertised the opening of its "Own Your Own Home Club," exhibited Homasote's model (second-hand from G. Fox where it was shown last month), said it was seriously in the market for postwar home sales.

The Texas Pre-Fabricated House and Tent Company went all out with full-page ads about its one-eighth of a million houses now on tap for war workers. Sold for "considerably under \$1,000" complete with furnishings, the ads brought innumerable inquiries, high volume of sales.

economically, that joint action of city and state (under a proposed Department of Commerce) would be required to save it. The Committee recommended immediate life-saving measures:

►Business should be helped to become more efficient, by the elimination of

ing its efforts with those of the Department of Commerce of New York City.

►The state and city should cooperate to improve highways, dock, terminal and airport facilities.

►The entire legal code pertaining to incorporated business should be stream-

in challenging industry, labor, commerce and the civic authorities to a concerted effort to remove the handicaps which now stifle business and employment opportunities and to develop a program for encouraging the future expansion of the economic life of the city.

Reasons for the decline of the city were outlined:

"The burden of taxation, high assessments on city real estate, and the high level of stock transfer tax; labor differentials; congestion in the city which limits further expansion; density of traffic and inadequacy of terminal and through-traffic facilities; trend toward decentralization of population; decline of Wall Street; Washington hostility."

Mayor La Guardia had little to say about the report when it was first shown to him, but next day his good friend, Commissioner of Investigation William B. Herlands, showed he was ready to hold the scrappy little Mayor's coat. He said the report was "misleading," its statistics "puffed up," what was worse, the Mayor had not been consulted. His major contentions: that the committee failed to consider figures on trade and employment in relation to the rest of the country, and the rest of the state; that New York's record of employment was above most other industrial cities.

Taxation Troubles

This was not the end of civic troubles. Late in March the State Legislature killed the Mayor's proposal to increase the amount of city sales tax, and adjourned, leaving him to face his new city budget difficulties on the basis of present city revenue-collecting methods.

Not knowing precisely which way to turn to meet a terrific budget deficit (\$36 millions) La Guardia chose the most oft travelled road, decided to raise real-estate taxes another 15 points (an additional \$1.50 a thousand of assessed value), declaring "you property owners must piece out the deficit—pass it on to your tenants."

The result was mass meetings in front of City Hall, with property owners bearing posters reading "Keep the Tax Rate Down." The Board of Estimate's chambers were jammed to the doors with citizens wanting (probably for the first time in their lives) to hear proceedings on the proposed budget.

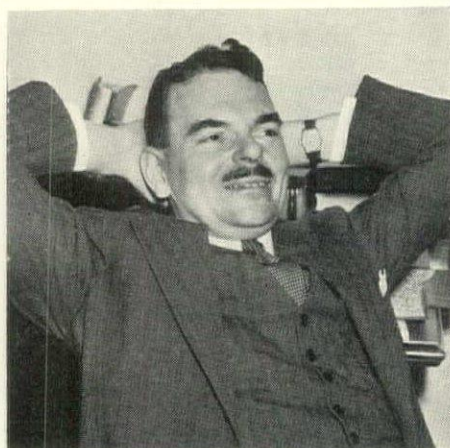
Other result was announcement by Lord & Taylor's president, Walter Hoving, of an offer of a \$50,000 gift to the Mayor for "special research on proposed budget reductions," received sourly by City Council President Morris: the gift, he said, was "gratuitous and uncalled for."

To city officials, the public clamor was also gratuitous and uncalled for. To date no action has been taken by the Board, effect of the demonstration and indignation is still undetermined.

(Month In Building continued on page 160)



The Mayor wasn't very happy . . .



. . . but the Governor had the answers.

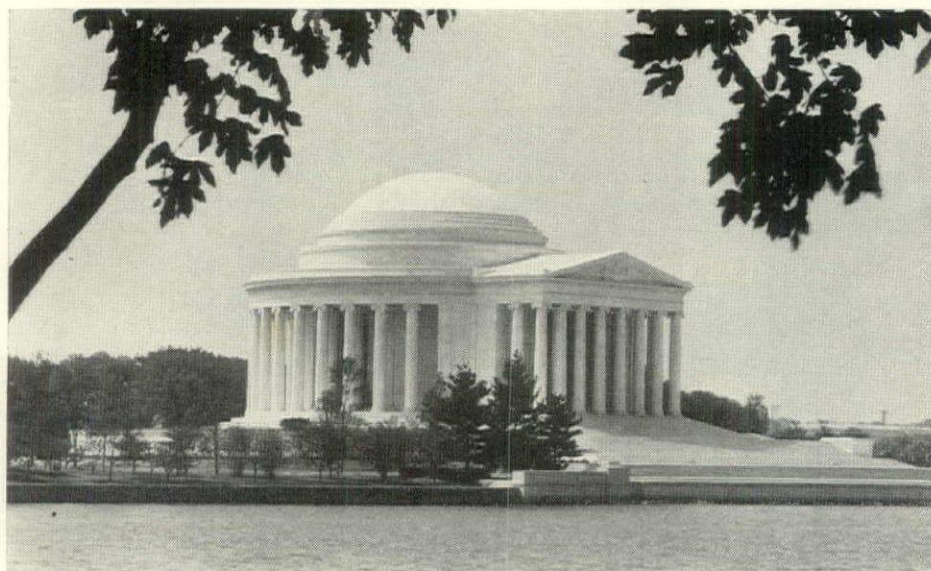
antiquated methods, replacement of obsolete machinery and adoption of a progressive point of view by management. An industrial engineering division under the proposed Department of Commerce was proposed.

►The Department of Commerce should establish a section specializing in the problems of New York City and coordinat-

lined to meet modern conditions, to attract corporations to the state.

►The studies of the problems undertaken at the direction of the Governor should give particular attention to the budget and tax problems of New York City, and the Legislature extend no further authority to the city to levy taxes.

►The Governor is urged to take the lead



THOMAS JEFFERSON MEMORIAL

On a chilly, dullish day last month, official Washington turned out to dedicate the capitol's newest architectural show-piece, the memorial to Thomas Jefferson commemorating the 200th anniversary of his birth. In an impressive war setting, the marble steps patrolled by armed troops, the U. S. Marine Band sounding appropriately patriotic notes, the public was allowed to gaze at the high-domed, multi-columned building. Clutched in

10,000 spectators' hands was the elaborate program of the exercises which contained names of those responsible for its erection—Senate and House Commissioners, Chairmen of the Committee, the Thomas Jefferson Memorial Committee, Presidential Commissioners, the Executive Committee, Executive Agent for Construction.

And over the air waves boomed the names of the architects: the late John Russell Pope, and his associates, Otto R. Eggers and Daniel Paul Higgins.

NEW BUILDINGS FOR 194X

The presentation of projected designs is an integral part of a FORUM policy which goes back to 1935, when an entire issue was devoted to designs for modern schools. The School Reference Number gave rise to a series of disputes, both amiable and acrimonious, for it attacked the approach which considered quasi-Georgian the complete solution to all the problems of housing educational activities. Soon afterwards, schools of a new type began to appear in three dimensions. Ideas can make things happen. And, in this case of schools, they did.

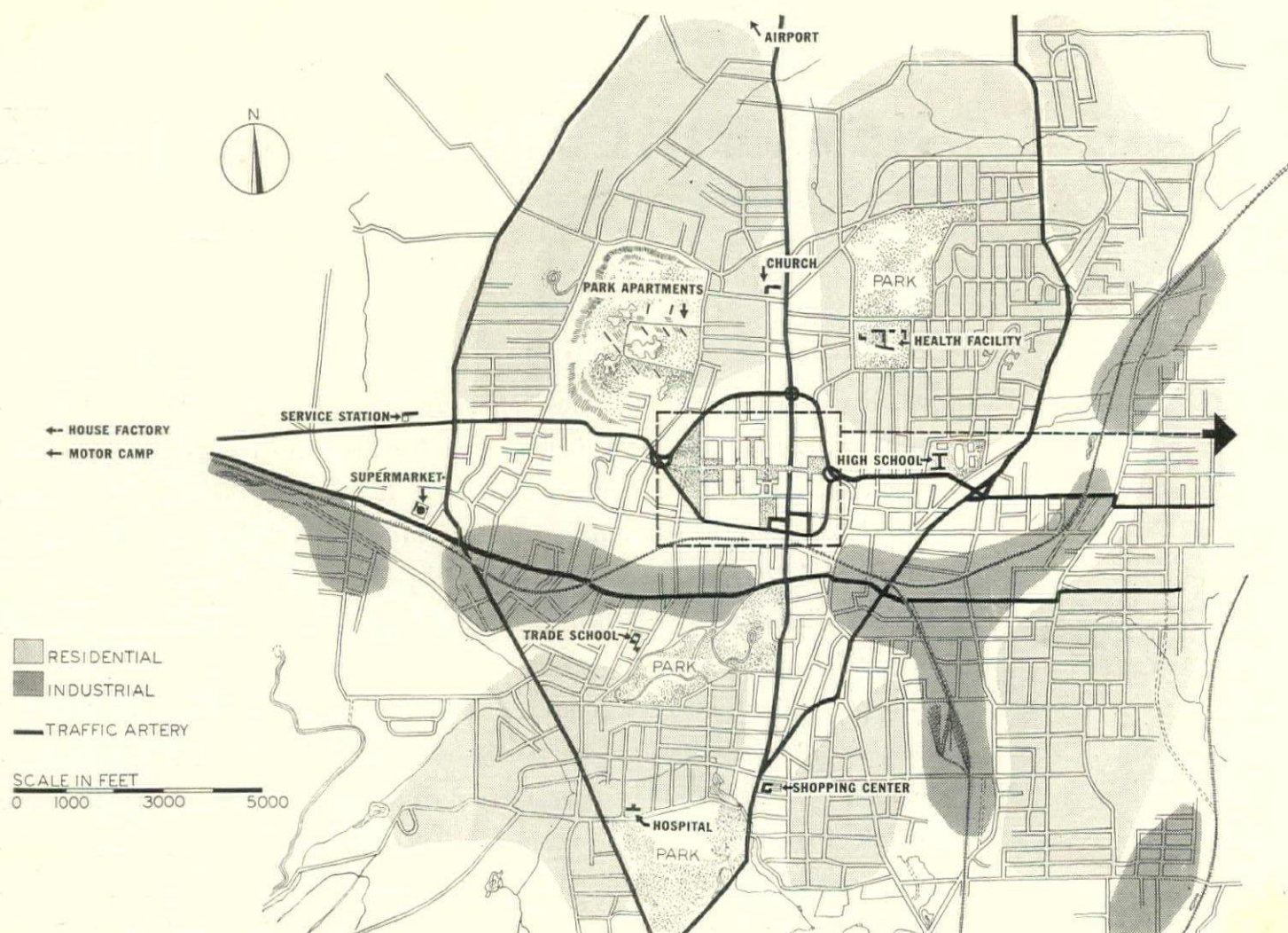
This publishing pattern was further developed with the INTERIORS issue of October, 1937, DESIGN DECADE (October, 1940), NEW HOUSES FOR 194X (September, 1942). In all of these ventures the purpose was the same: to show how buildings might be improved through fuller and more imaginative use of existing resources. In this respect the current issue does not differ from its controversial predecessors.

NEW BUILDINGS FOR 194X contains a variety of building types, all of which might reasonably be erected in any city of moderate size in the course of its normal building activities. They are not "prophecies." Except for an occasional guess as to what industry will produce in new, better or cheaper materials and equipment, they could all be built without waiting for some ever-receding technological millenium.

The architects who produced this impressive body of work did not waste their time dreaming up structural techniques and decorative innovations. We haven't even begun to realize the potentialities of those which already existed before the war, not to mention those newly developed. The importance of these designs stems from the critical examination of the basis on which urban building has been done, and the new assumptions as to financing methods and land use which have been made. These assumptions may also be open to question, but that is as it should be.

For questions provoke answers, and the right answers are needed if Building is to provide better communities for all of us. Particularly, these answers are needed now lest we build the wrong things in the wrong places.

NEW BUILDINGS FOR 194x in relation to the plan of a hypothetical town of 70,000



CITY PLAN AND TRAFFIC DIAGRAM

The twenty-odd projects which were designed for this issue had to meet certain requirements which were of a community rather than individual nature. Most important were those which applied to the buildings to go into the town center. It was stipulated that Main Street, for a distance of several blocks, and some of the streets which intersect it, would be converted into a pedestrian area. This proposal seemed far from Utopian. Downtown merchants are becoming concerned with the loss of trade to new shopping areas where parking is less of a problem. Tax officials and investors are disturbed by the likelihood of further declines in downtown real estate. There is a very real basis, consequently, for effective cooperation to remedy this situation. An examination of the projects designed for the city's business center will reveal many interesting departures produced by this one deviation from the usual program.

Another assumption which seemed realistic was that commercial structures for stable, long-term investment will, in the postwar period, show greater emphasis

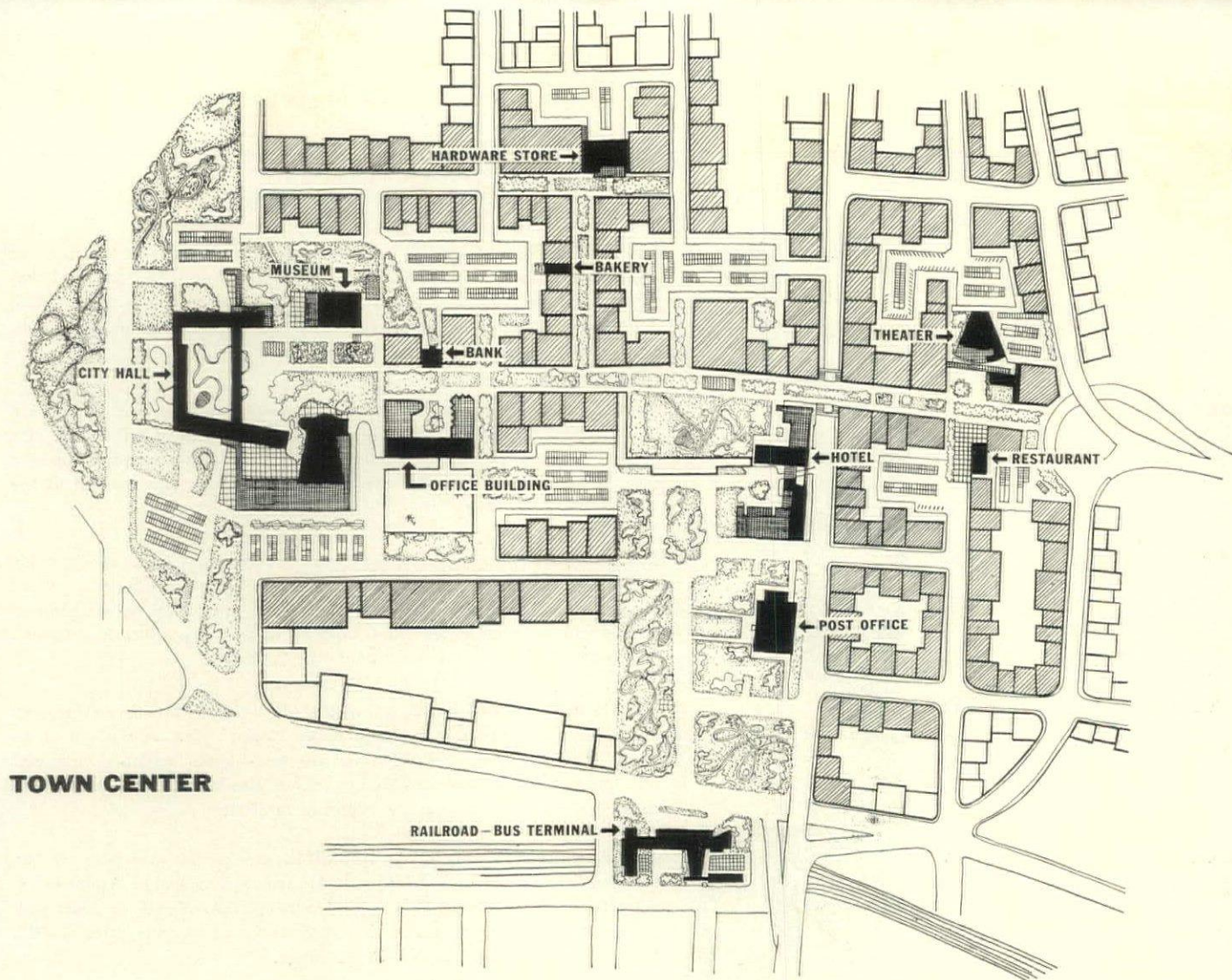
on light, air and similar amenities as factors tending to reduce turnover and retard obsolescence. The requirement that all structures be provided with adequate off-street parking underlines the very real possibility that future building regulations will contain such stipulations.

The introduction of two dozen buildings into a community already equipped with several thousand obviously does not constitute a city planning project. These plans are shown only to stress the very important point that individual buildings must take into account the increasingly important factors of community development. A single building, designed to meet a progressive and farsighted program, can become a potent force towards better over-all planning.

About half of the buildings were designed for the Main Street area. At the west end, where values were lowest, the new city hall has been placed as a dignified terminus to the new Mall, forming a large plaza which might well become the town's social and cultural center. The office building and museum form a logical

part of this group. For the moving picture theater, at the east end of the Mall, a portion of the former street was used as part of the site. The railroad and bus station is located on the site of the old one, but it now has depressed tracks and is connected with the town center by a park plaza which replaces a number of derelict structures and empty lots. One of the narrow streets which formerly helped increase the congestion of the business section has been retained for pedestrian use, and it would be occupied primarily by specialty shops. Some of the larger retail establishments (furniture, hardware, etc.) might be placed at the end of this street. The remaining projects are scattered through the town and outside of it, depending upon the requirements.

As noted above, this issue does not attempt to deal with the larger questions raised by a program of individual buildings. These questions exist, however, and they will be important considerations in the postwar period. In this connection, the announcement of the Syracuse planning project will be of unusual interest.



TOWN CENTER

SYRACUSE, N. Y. At the beginning of this year, the editors of FORTUNE and THE ARCHITECTURAL FORUM discussed a venture of impressive proportions with representatives of the city of Syracuse, New York. It involved the preparation of plans for the complete redevelopment of the city after the war.

Syracuse was chosen for this cooperative effort for a variety of reasons. A busy industrial community of 200,000, it has many of the characteristics and the problems of a thriving city of medium size. It has a highly diversified industry, an excellent university, no real slums. Like other typical communities it is still trying to force motor traffic through horse-and-buggy streets, it has too much noise, too little sun, too few parks and too many commuters who waste years of their lives in a daily escape to the fringes and open country. Most important, it has a citizenry which is progressive and interested in improving the community.

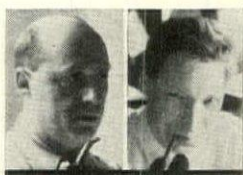
At this writing the planning program is under way. There are a number of groups, working under official sponsorship, which are gathering data on the city's needs and problems, studying ways and means of implementing accepted proposals. Plans are being developed under Sergei Grimm, head of the City Planning Commission, with the active assistance of outside consultants. Russell Van Nest Black is chief city-planning consultant; Hugh Pomeroy, President of the American Institute of Planners, has been retained as special consultant. Chief of the economic advisers is Ernest Fisher of the American Bankers Association. Other specialists will be made available to the city as they are needed.

The importance of a project of this scope needs no emphasis at this time. Progress of the studies will be watched by communities all over the U. S. For the citizens of Syracuse there exists a unique opportunity, not only to give the development of their city direction toward new goals of livability and human efficiency, but to take the leadership in a movement which may well capture the imagination of the entire country.

It will be the joint privilege and responsibility of FORTUNE and THE ARCHITECTURAL FORUM to report the story of the new Syracuse.

HOTEL

page 74



OSCAR STONOROV AND LOUIS I. KAHN have been working together, in association with George Howe of Philadelphia, since 1940. Stonorov was educated at Florence and Zurich, and immigrated to the U. S. in 1929. Kahn got his degree in architecture from the U. of Penn. in 1924. Both have worked extensively in private and public housing.

POST OFFICE

page 80



DOUGLAS ORR received his architectural education at Yale (B.F.A., M.F.A.) and traveled abroad on the William Wirth Winchester Fellowship. He opened his New Haven, Conn. office in 1919, and has since maintained a general practice. His collaborator, Robert McMillan, is a student at the Yale School of Architecture.

CHURCH

page 82



LORIMER RICH is a graduate of Syracuse University who received his early training in the offices of McKim, Mead & White and Charles A. Platt. He has practiced independently in New York since 1929, specializing in public and semipublic buildings such as post offices, court houses, etc. Now engaged in hospital work and city planning.

MUSEUM

page 84



LUDWIG MIES VAN DER ROHE, one of the world-famous founders of modern architecture and foremost exponent of the "open" plan, is the son of an Aix-la-Chappelle stone mason, never received formal technical training. Now professor of architecture at the Armour Institute of Technology, Chicago, he first began to practice in Berlin in 1911.

BANK

page 86



JOHN C. HARKNESS AND SARAH HARKNESS are recent graduates of the Harvard Graduate School of Design and Cambridge School of Architecture, respectively. John Harkness won the Second A.I.A. Medal in 1941, and, together with his wife Sarah, the Boston Society of Architects Prize in 1940. Both are now working in New York offices.

CITY HALL

page 88



CHARLES EAMES was born in St. Louis, Mo. in 1907 and studied architecture there at Washington University. He has worked for Eliel and Eero Saarinen, taught design at Cranbrook Academy of Art. With Eero Saarinen, he won a first prize in the Organic Design Competition of the Museum of Modern Art. Now doing experimental work for the Government.

HIGH SCHOOL

page 91



PERKINS, WHEELER AND WILL of Chicago are perhaps best known for their collaboration with the Saarinens on the Crow Island School. Lawrence Perkins and Philip Will, Jr., were roommates at Cornell, graduating in 1929 and 1928. E. Todd Wheeler is now doing postwar planning for the state of Illinois, has left the firm for the duration, is not pictured here.

TRADE SCHOOL

page 95



RALPH WALKER (Voorhees, Walker, Foley & Smith) was graduated from the Mass. Institute of Technology in 1916, traveled abroad on the Rotch Traveling Fellowship. Designer of many of the country's big telephone and insurance buildings, he was awarded the gold medal of the Architectural League of New York in 1927, is a Fellow of the A.I.A.

SUPERMARKET

page 98



J. GORDON CARR studied engineering and architecture at M.I.T., marketing and industrial production at Harvard. After working for Raymond Hood and for Eric Mendelsohn in Berlin, he opened his own office in New York, designed the Aviation Building (with William Lescaze) and the House of Jewels at the New York World's Fair.

SHOPPING CENTER

page 101



GRUENBAUM AND KRUMMECK, of Hollywood, Calif., have designed retail stores in all parts of the U. S., as well as apartment interiors and industrial products. Before their association in 1939, Elsie Krummeck worked in the exhibit field (auto shows, Chicago and New York fairs), while Victor Gruenbaum practiced architecture in Vienna.

BAKERY & CANDY STORE

page 104



MOORE AND HUTCHINS won first prize in a national competition for Goucher College, Baltimore, Md., and have designed numerous commercial and residential buildings in the New York area. John C. B. Moore studied at Harvard and the Ecole des Beaux Arts (1927), Robert S. Hutchins at the U. of Penn. Both got their early training with Delano & Aldrich.

HARDWARE STORE

page 106

**OFFICE BUILDING**

page 108

**MOVING PICTURE THEATER**

page 113

**RESTAURANT**

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**MOTOR CAMP**

page 120

**AIRPORT**

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**RAILROAD-BUS TERMINAL**

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**SERVICE STATION**

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**HOUSE FACTORY**

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**PARK APARTMENTS**

page 138

**HOSPITAL**

page 146

**HEALTH FACILITY**

page 150



JEDD S. REISNER AND J. STANLEY SHARP are graduates of the Universities of Illinois and New York, respectively. Reisner won the Plym Fellowship (1938), spent 2 years in France and Scandinavia, is now with Harrison, Fouilhoux & Abramovitz. Sharp worked for Edward D. Stone for 3 years, and has spent the last two on defense projects.

PIETRO BELLUSCHI was born in Ancona, Italy, in 1899, and educated at the University of Rome, later at Cornell. He joined the office of A. E. Doyle in 1925, becoming chief designer after two years. Practicing under his own name, Mr. Belluschi has designed many buildings in the Pacific Northwest, is President of the Oregon Chapter, A.I.A.

CARL KOCH AND JOHN JOHANSEN were graduated from the Harvard Graduate School of Design in 1937 and 1941. Koch held the Bacon Traveling Fellowship, 1938-39, had his own practice from 1939 to 1942, and is now Senior Research Technician with the NHA. Johansen has worked on housing and postwar planning, is also with the NHA.

PETER SCHLADERMUNDT was born in Bronxville, N. Y., in 1907. He was graduated from the Yale School of Architecture in 1929, worked with Raymond Hood and Henry Dreyfuss. His independent work has been primarily for Chase Brass & Copper Co., Adolph Zukor and General Cable Corp. Since 1938 he has been with Norman Bel Geddes as head designer.

ERNST PAYER was born in Vienna in 1904, studied sociology, economics, international law, and, later, architecture with Josef Hoffmann. After coming to the U. S. in 1936 he studied at the Harvard Graduate School of Design for two years. He has done cabinet work, worked in a lumber camp and saw mill, and designed a number of excellent houses.

ANTONIN RAYMOND was born in Prague in 1889, where he received his degree as Architect-Engineer. In 1916 he joined Frank Lloyd Wright, with whom he went to Japan four years later. He practiced there until 1938, when he returned to the U. S. to design private residences, housing developments and numerous large projects for the War Dept.

JOHN A. HOLABIRD AND JOHN W. ROOT were graduated together from the Ecole des Beaux Arts in 1913, and joined the firm of Holabird & Roche in 1919. Since that time their office has been one of the most successful in the U. S., designing many large structures, including the Chicago Daily News Building and the new Statler Hotel in Washington.

WILLIAM LESCAZE was born in Geneva in 1896, studied under Karl Moser, and came to the U. S. in 1920. A pioneer of modern architecture in this country, his designs include the Philadelphia Savings Fund Society office building (with George Howe), CBS studios, the Aviation Bldg. and Swiss Pavilion at the N. Y. World's Fair, and the Longfellow Building, Washington.

CALEB HORNPOSTEL was born on Long Island in 1904. Son of the famous Pittsburgh architect, he studied at the Carnegie Institute of Technology and the Ecole des Beaux Arts. In practice for himself since 1933, he has built a number of houses in France and the U. S., won the Wheaton College Art Center competition with Richard M. Bennett in 1938.

SERGE CHERMAYEFF practiced architecture in Great Britain, designed the Bexhill Pavilion with Eric Mendelsohn. In the U. S. since 1940, he is now professor of architecture at Brooklyn College. Collaborator Abel Sorensen worked in Denmark, France and the U. S. for 4 years. Peter Blach was with Chermayeff in London, has worked here since 1940.

HUGH STUBBINS, JR. was born in Birmingham, Ala., in 1912 and studied architecture at Georgia Tech. (B.S., 1933) and Harvard (M.A., 1935). He won third prize in the Smithsonian Competition (1939), and has designed outstanding war housing projects. Now in private practice and an instructor at the Harvard Graduate School of Design.

ISADORE ROSENFELD AND SIMON BREINES collaborated on this project after working together on a postwar hospital for the City of New York. Rosenfeld is Chief Architect of Hospitals in the N. Y. Dept. of Public Works, Breines a member of the firm of Pomerance & Breines, American architects for a number of the foreign pavilions at the N. Y. World's Fair.

HOTEL OSCAR STONOROV AND LOUIS I. KAHN, ARCHITECTS, PHILADELPHIA, PA.

THE ARCHITECTURE:

"The hotel is the number one advertisement of a city. Therefore it should be something of a community enterprise. The visitor gets his first impression of a town from the railroad station and the hotel in which he chooses to stay. While he stays there, it forms an important tie between him and the community. Thus the design of a hotel for a city of 70,000 represents a challenge to the modern architect who has become conscious of his role as a planner and engineer of civic expression. Architecture influences people in the sense that it guides their behavior and gives form to their aspirations.

"The modern architect not only seeks to solve functional problems by more rational use of forms and materials, but also trains himself to sense the psychological implications inherent in the tasks he is called to solve. The new forms he has invented and the conscious informal articulation he is able to give to space—thanks to the freedom new materials and new engineering knowledge give him—are the major tools with which he integrates complex functions.

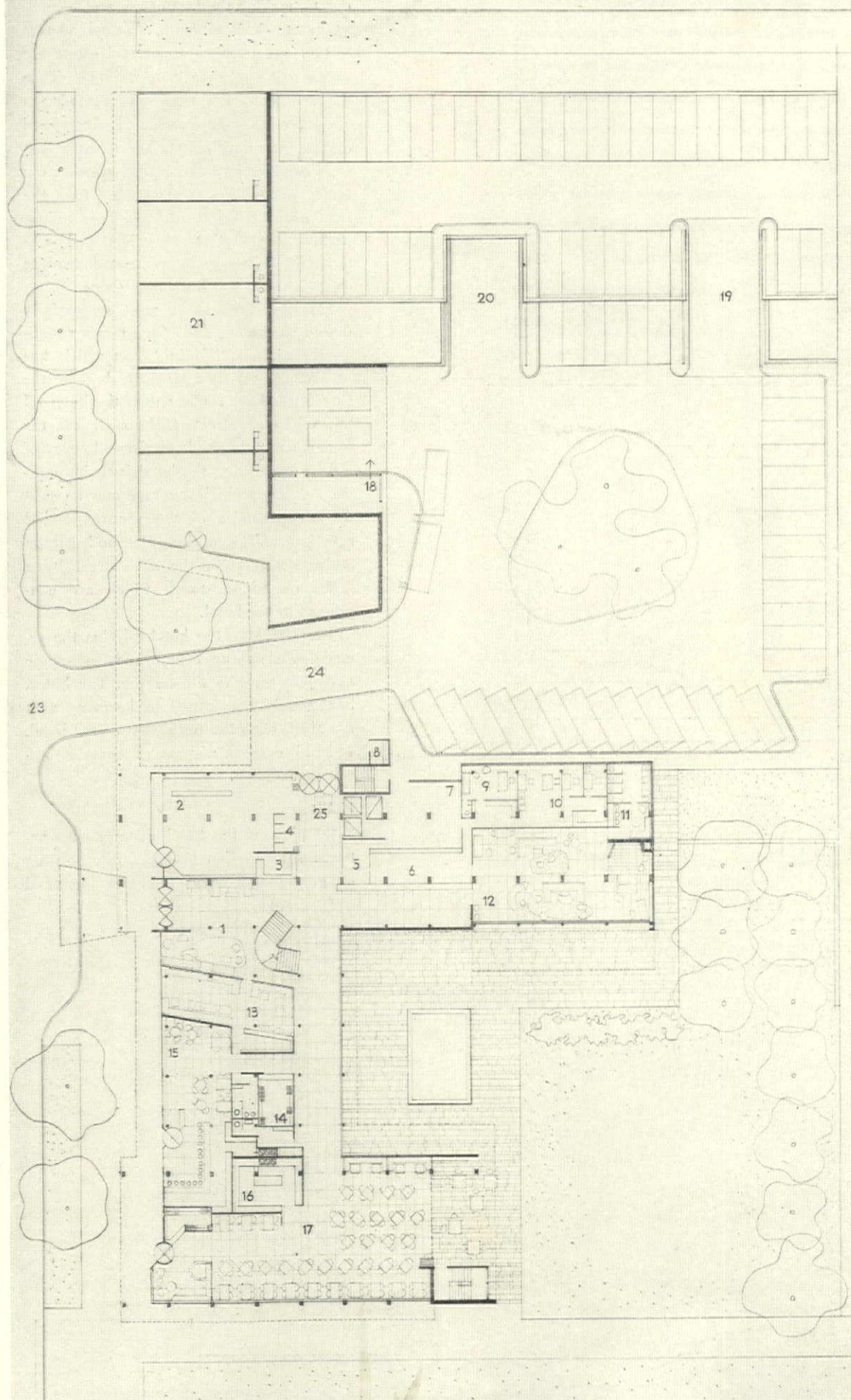
THE PROBLEM:

"The task is: (a) to organize the processes of comfortable sleeping, eating, drinking, meeting people, banqueting, meeting in committees and informing; also, all sorts of special services such as laundering, tailoring, parking and shopping. (b) To give expression to what this type of hotel has become in the last fifteen or twenty years—a center for commerce and industry. The hotel in the medium-sized town fulfills functions already far beyond furnishing overnight up-to-date accommodation. It serves for conventions, the women's clubs make it their rendezvous, Peacock Alley is where everybody waits for everybody else.

"We have studied successful examples of this type of hotel. We believe that we should recognize its community functions, that is, we feel that the hotel must fill the bill for the townspeople as well as for its out-of-town guests.

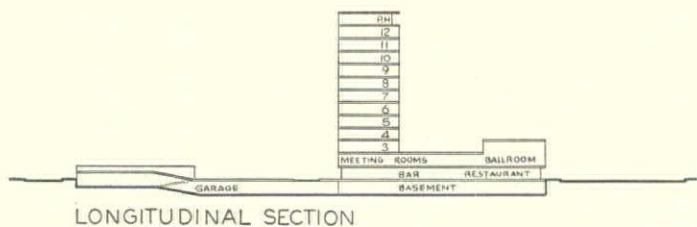
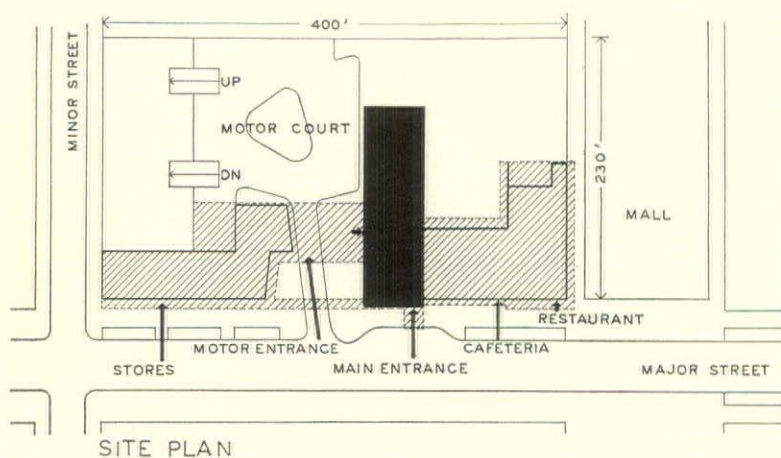
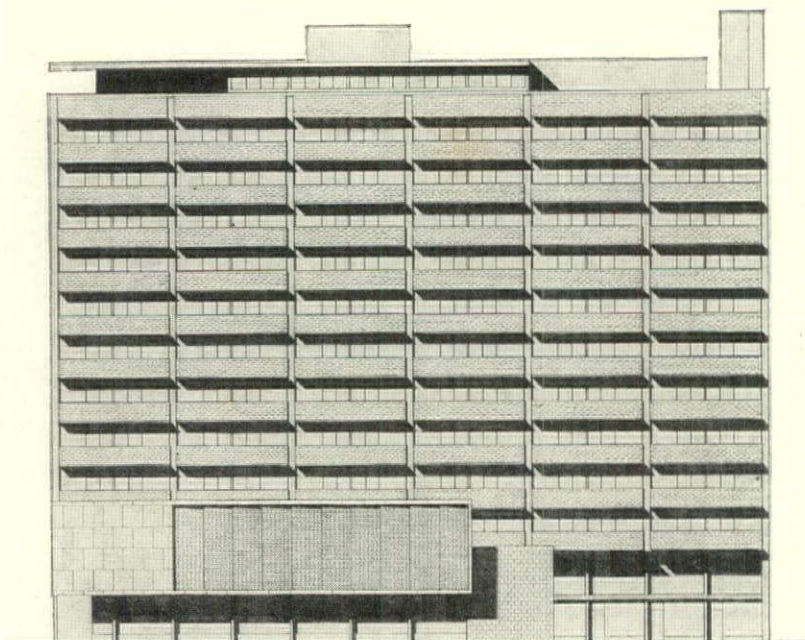
"While developing a slightly more generous horizontal circulation, we have attempted to approach the solution realistically, considering requirements of sound investment."





KEY TO MAIN FLOOR

1. Peacock Alley
2. Drugstore
3. News & Cigars
4. Telephones
5. Porter Stand
6. Registration
7. Service
8. Doorman
9. Manager
10. Offices
11. Ladies' Room
12. Main Lounge
13. Bar
14. Cloak Room
15. Cafeteria
16. Pantry
17. Restaurant
18. Service Station
19. Ramp to Upper Parking
20. Ramp to Lower Parking
21. Stores
22. "Mall"
23. Major Street
24. Service Drive
25. Main Entrance
26. Minor Street

**THE SITE:**

"We have taken a little more ground than one would absolutely need, but we know that obsolescence in hotels is very often due to 'making the best of the area'—more so than the customers like. We believe that certain superstitions about real estate are to stay with us for a little while yet. Thus we have chosen a narrower frontage on Main Street, and taken a little more land on the secondary street. Yet we hold that to convey the impression of permanency a larger plot of ground is needed than the customary 150x150 ft. site (excluding parking). The tall structure is placed so as to overlook its own lot without depending on neighbors for breathing space.

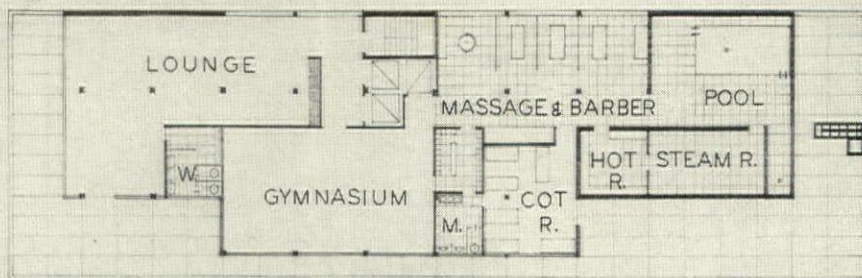
"The hotel would be most successfully placed on the one end of the newly rededicated portion of Main Street which has been closed off from traffic to become the City Mall. Foot traffic enters the hotel off the vehicular street (informally off the Mall), and automobile service is by way of a drive separating the hotel from its parking lot, under which a garage may be built if the economics of the venture should call for it. The parking lot and garage are screened from the side street by a series of minor stores, which are contiguous to the hotel.

"On the Mall the hotel adjoins the remodeled shopping center and an arcade may join them to the terrace. The latter, handsomely landscaped in harmony with the Mall, joins the restaurant of the hotel, which, if desired, may thus become an outside concession.

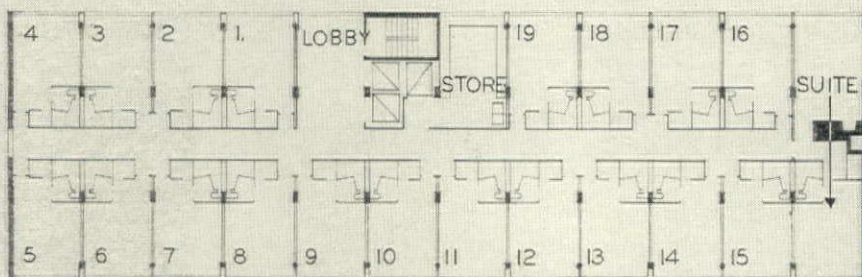
PLAN:

"The plan of the hotel distinguishes between services that belong to the housing of guests and other facilities identified

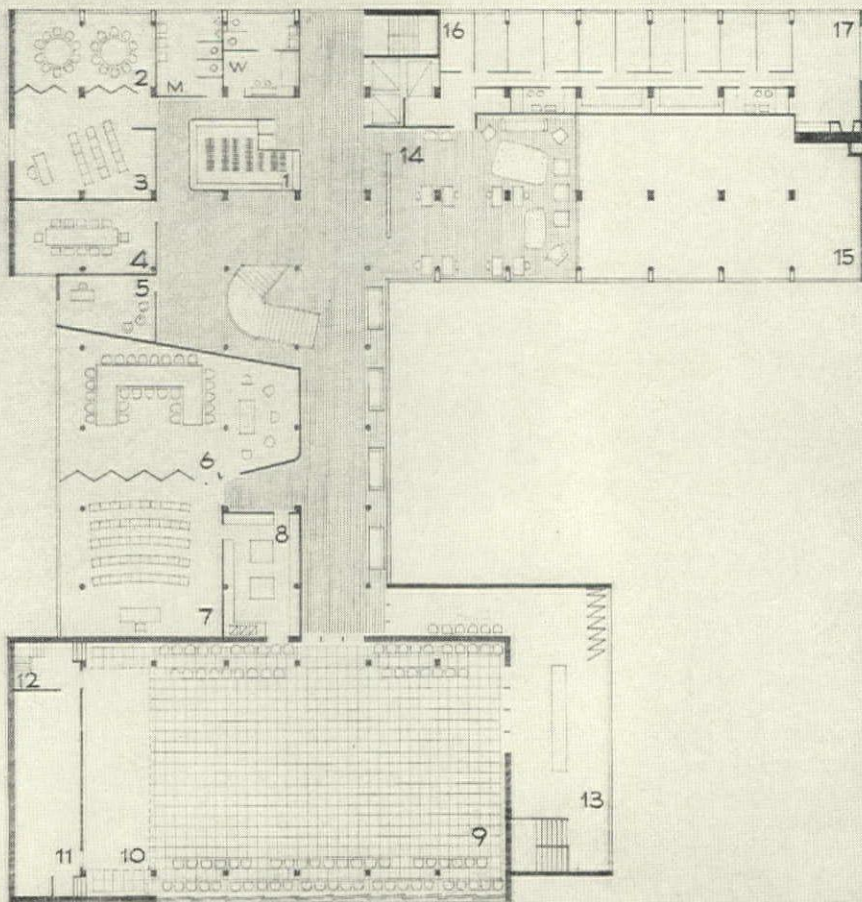




ROOF PLAN



TYPICAL FLOOR 3rd. to 12th.



SECOND FLOOR

SCALE IN FEET 0 5 10 20 30

with hotels that cater to the townspeople as well. Special attention has been paid to the solution of automobile parking. From looking at the plans it is at once apparent that the space needed for comfortable servicing of the hotel and for parking of cars is considerable. We have only indicated what we consider desirable for a standard solution. The size of the garage and open parking depends entirely on local conditions. However, it seems only reasonable that any new hotel after the war must make ample provision for parking and make it easy for the guests to keep their cars close by. It is more or less a problem of space; yet the architectural solution of the hotel will depend largely on the amount and type of parking facilities the management wishes to provide.

FACILITIES

"The hotel comprises:

Basement . . . Garage and deliveries, kitchen, laundry, heating plant, major toilets and barber shop, valet shop.

1st Floor . . . Motor entrance, foot traffic entrance, main desk (registration, information, mail, cashier, porter), main lounge, Peacock Alley, newsstand, drugstore, bar, cafeteria, restaurant.

2nd Floor . . . Reading room, vestibules, meeting and banquet rooms, ball room, employees' rooms.

3rd to 12th floors . . . 10 floors of 19 bedrooms and 1 suite each.

13th floor . . . Turkish bath, roof garden, lounge.

"Use of roof: A Turkish bath and gymnasium are located here. It would seem desirable to provide for these facilities for the traveling public. Modest equipment for exercise, massage and electric treatment should not overtax the financial structure of a 200-room hotel, especially when looked upon from a community point of view."

KEY TO SECOND FLOOR

1. Cloak Room
- 2, 3, 4, 5, 6, 7. Banquet and Meeting Rooms
8. Pantry
9. Ballroom
10. Movable Stage
11. Storage
12. Dressing Rooms above
13. Green Room
14. Writing Room
15. Void over Main Lounge
16. Employees' Rooms
17. Employees' Lounge



CONSTRUCTION

"Structural: The hotel is designed as a fireproof, welded-steel structure in which the lighter exterior columns take dead load only, wind-bracing in addition to dead load being on the center columns.

"Heating and Air-Conditioning: Year around air-conditioning system. Cooling provided by nozzle-type recirculating units below windows. This includes individual room controls for temperature and humidity. Heating provided by convectors in same units.

"Exterior finish: Marble veneer slabs, integrated, extruded aluminum sunshade and insulated spandrels for bays of 26 feet, to which heating and air-conditioning units are applied. Plastic exterior veneer on all surfaces where marble is not used.

"Windows: Aluminum frames, sliding sections; accordion sections in restaurant and green room. Thermopane glass throughout. New type prismatic light-diffusing glass blocks in ballroom.

"Floors: 1st floor marble; 2nd floor parquet flooring. Guestrooms: not decided, since we do not know of any flooring that

would be soft, lasting, resilient, soundproof, inviting and easy to clean. (A new plastic carpet?)

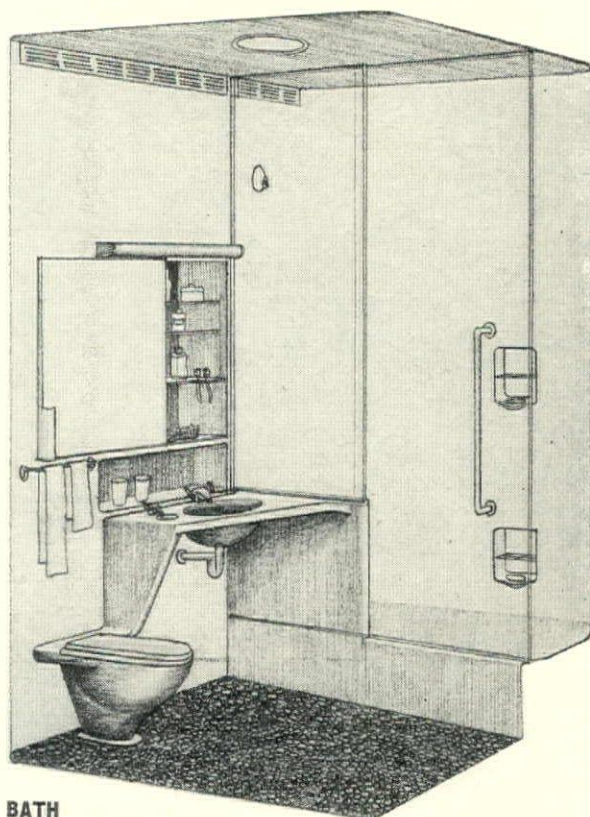
"Bathrooms: Floors: granulated rubber terrazzo. Walls: shower partitions and tub plastics. W. C. and washstand: stainless steel.

"Partitions in bedrooms and otherwise: Plywood finished, insulated, soundproof, of various woods.

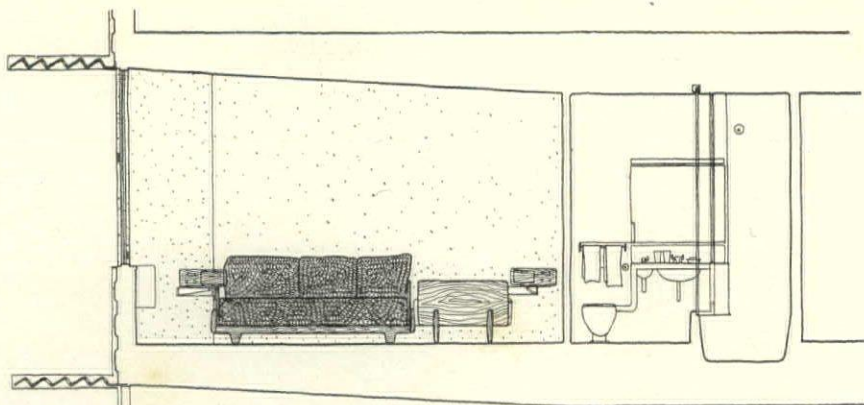
"Lighting in bedrooms: Concealed spots in ceiling over beds, otherwise continuous cold indirect."

GUEST ROOMS

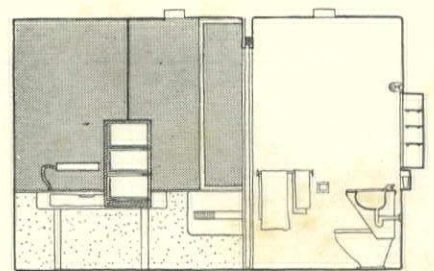
"In analyzing present usage of hotel rooms, we have concluded that, since it is desirable to provide a bath for each room, room sizes should be uniform throughout, at standard rates per bed used. Overall average dimensions do not exceed average size encountered; yet the important flexibility is not impaired, as far as the management is concerned. Furnishings are interchangeable for day and night use. Rooms are thus freed for individual arrangements of furniture to suit the guests. Closet facilities and bathrooms have been designed in standard arrangements. Drawers, with attached bag stand, are built in to provide additional storage space. Clothes closets are standard size, including laundry-bag location and service door. Bathrooms are prefabricated. Integrated, self-supporting W. C. and lavatories, sunken bath tub and shower combinations are freed from sectional walls. All doors in the bathroom are of translucent plastics and of the sliding type."



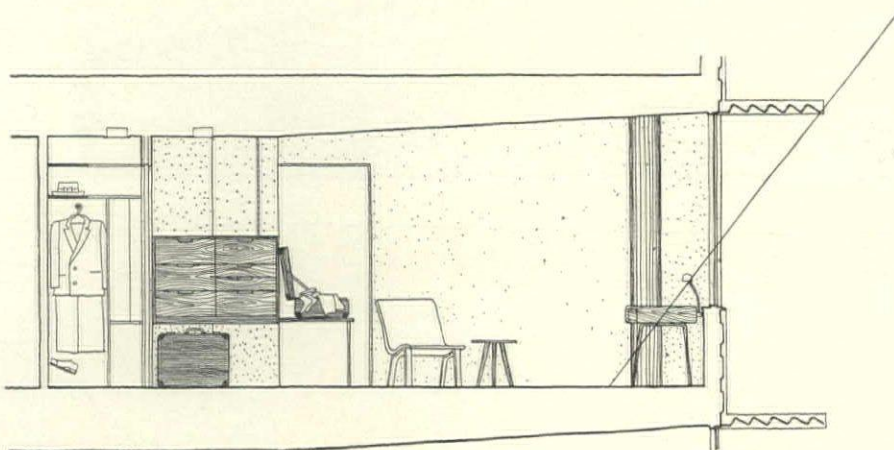
BATH



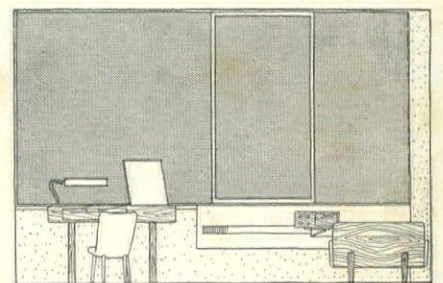
SECTION 1.



SECTION 2.

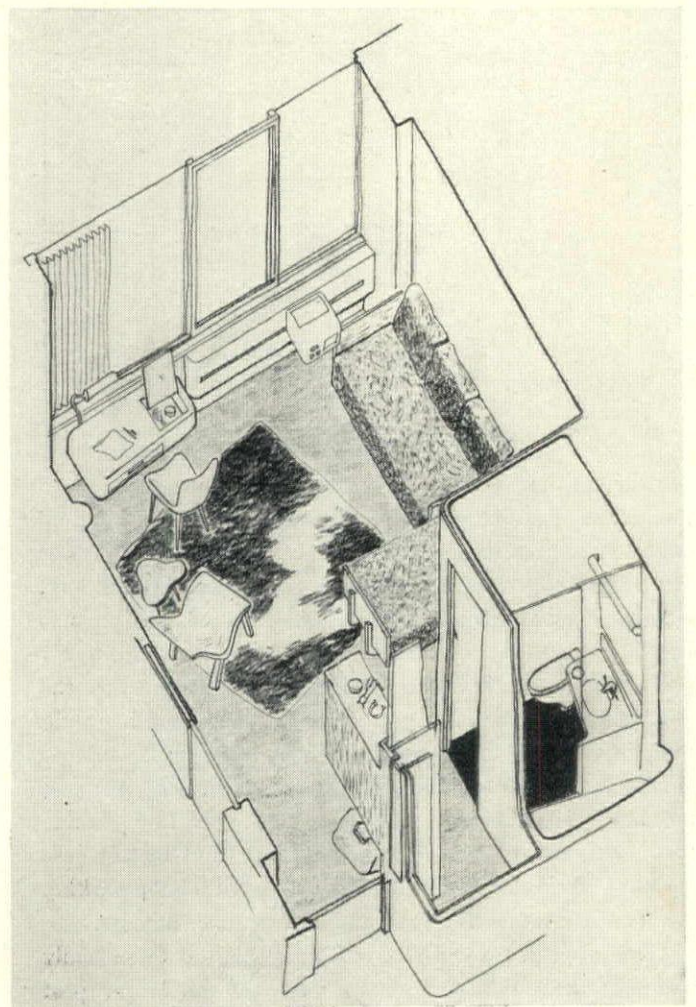
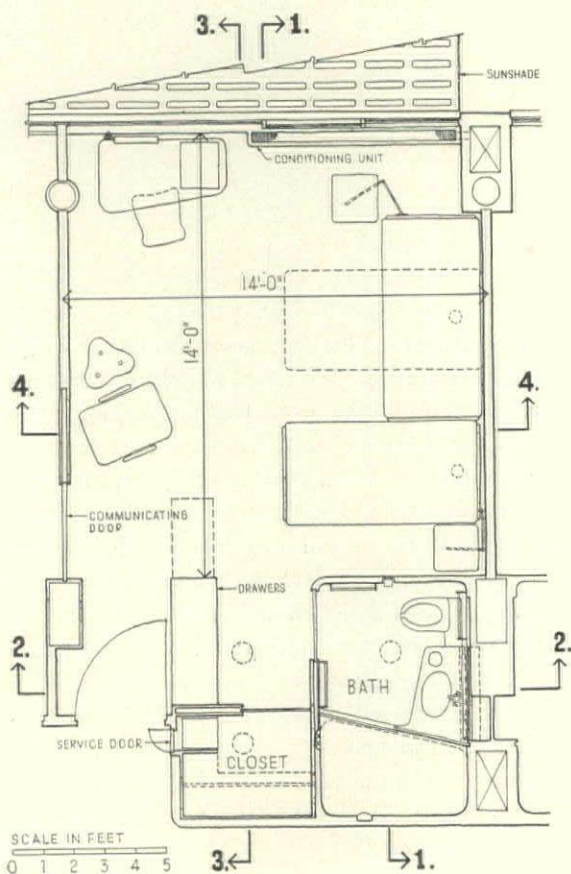


SECTION 3.



SECTION 4.

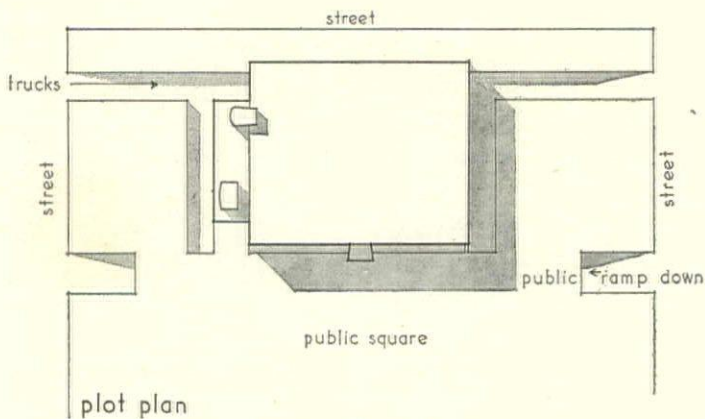
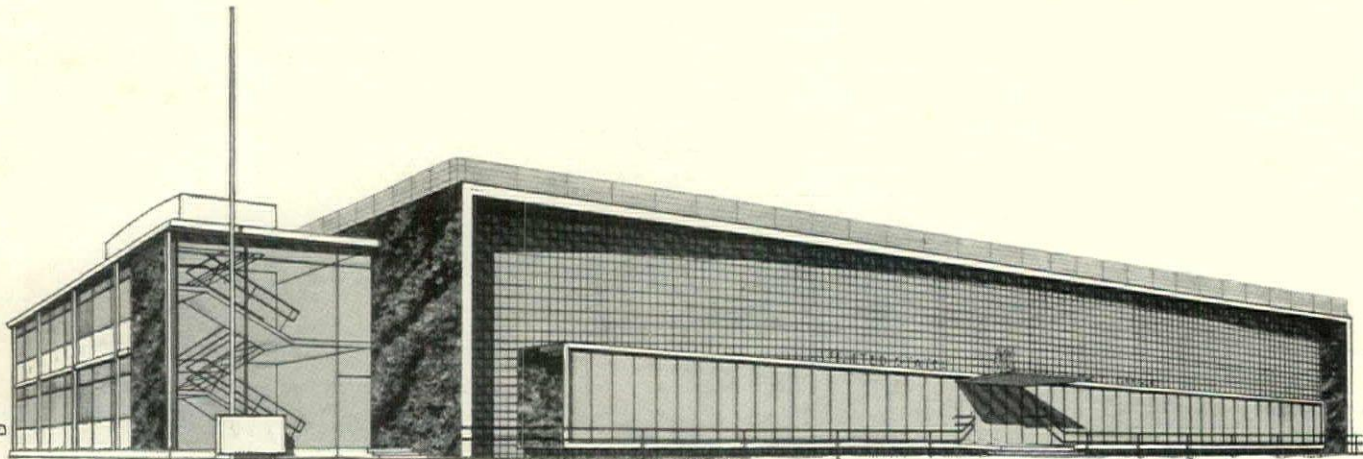
TYPICAL GUEST ROOM



POST OFFICE

DOUGLAS ORR, ARCHITECT, NEW HAVEN, CONN.

ROBERT McMILLAN, COLLABORATOR



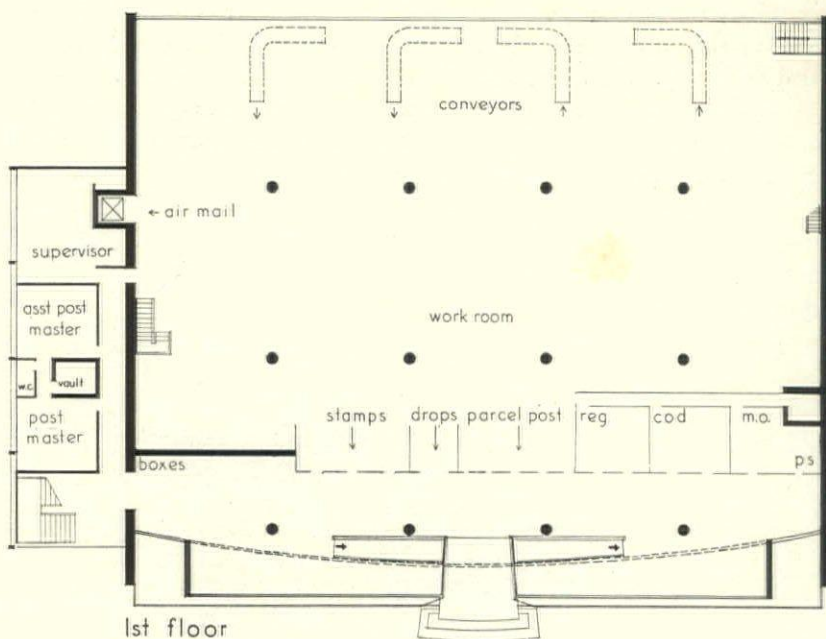
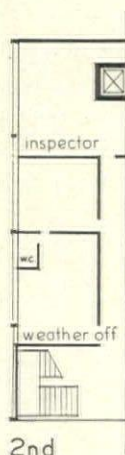
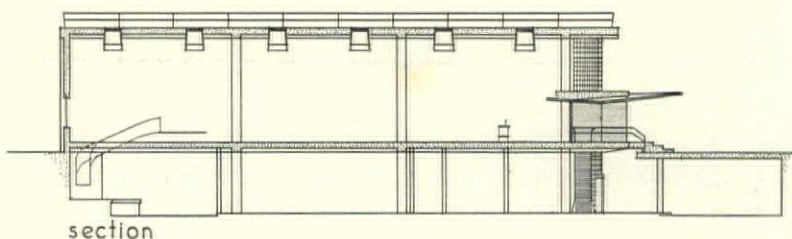
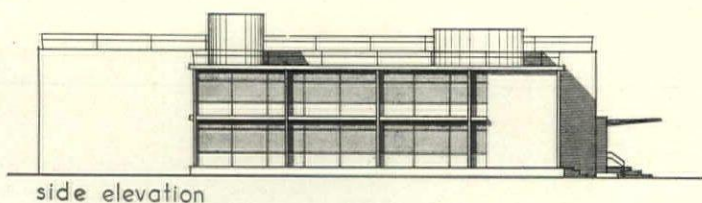
"Present-day post offices give too little consideration to the matter of accommodating customers, which, in the final analysis, is good business even for the Government. The usual site selected for a post office is in the heart of the city, where access is difficult for both motorists and pedestrians. Inasmuch as the future will probably bring an even greater use of the automobile than before, it would seem that the post office authorities should make provision for handling motor traffic for their customers in a way similar to that considered by department stores, i e., directly into the building. With the proper site selection it would be possible to provide motor access to the building, and in this case we have suggested underground access with stop-parking for fifteen minutes for the convenience of customers.

"One area in present-day post offices is too often badly planned: the public lobby. In many of the larger post

offices it is very difficult to find the department with which one wishes to do business. We have, therefore, arranged all functions relating to the public along the lobby so that all these activities can be seen from any part of it.

"A third point that seems important is the simplification of handling parcel post and other matter within the lobby. There appears to be no reason why a post office screen should not be as open as a modern bank screen or counter. Parcel-post counters and scales should be at an easy height for depositing large packages, similar to baggage counters at airports. Everything should be easily accessible, open and designed to carry out the customer's business in a pleasant and efficient manner.

"It is planned to use the roof of the building for helicopter landing, so that air mail transfer in the future will be faster and more direct."

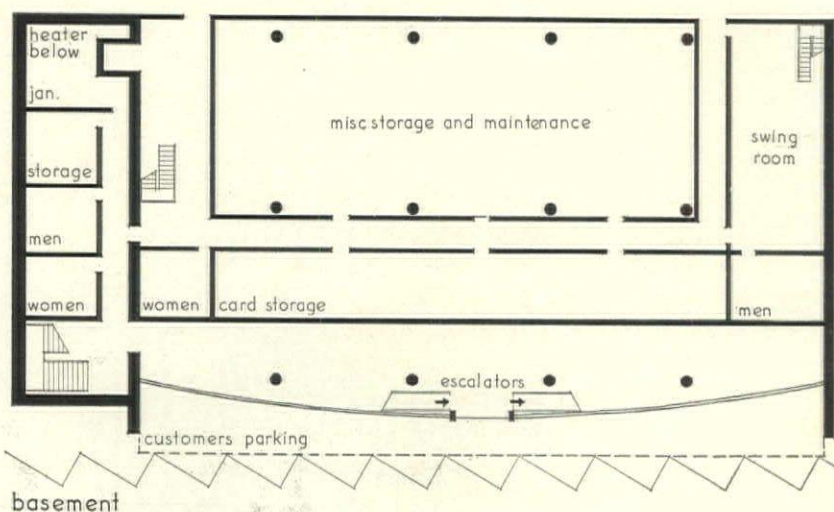
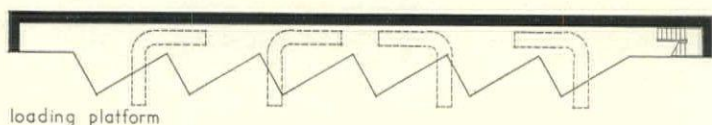


SCALE IN FEET
0 5 10 15 20 25 30

"The principal function of the post office—collecting, classifying and redistributing mail—is housed in a big, light, open work room, rather than behind masonry walls as in monumental buildings of today. The handling of mail has also been planned for movement to the trucks on a lower level, with conveyors for serving hand trucks. This will greatly simplify the movement of mail both incoming and outgoing, and will provide adequate working space under cover without interfering with the general lighting of the main work room above.

"The entire conception is based on an attempt to get a free flow of all functions of the post office. The access from the lower customers' lobby to the main floor would be by escalator.

"As far as design is concerned, we believe that large areas of the exterior would be of glass and plastics, with masonry parts covered with fine stone slabs. The variety of combinations of marble, glass and metal could be almost limitless, and sufficiently monumental for any Government building."



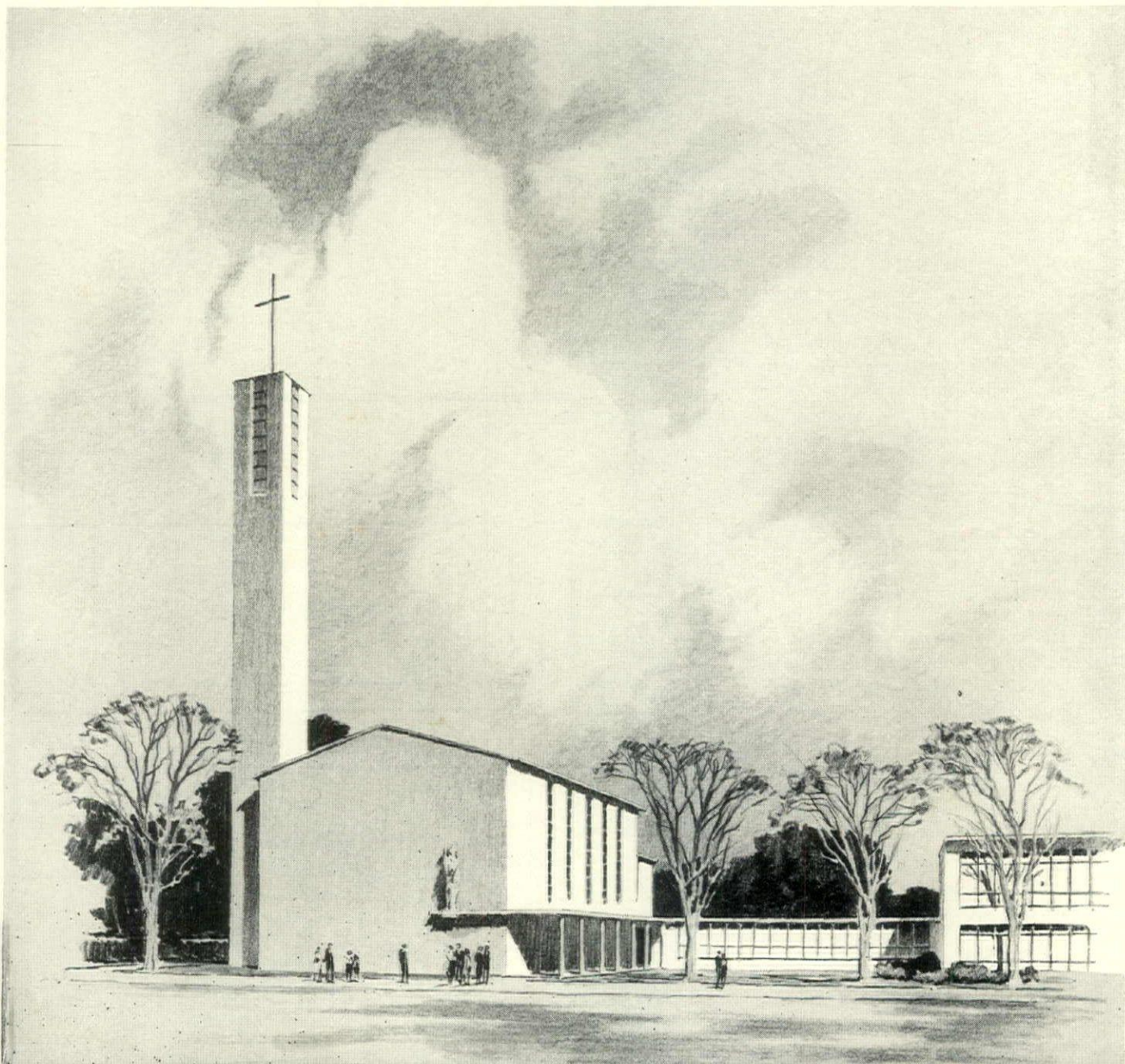
CHURCH

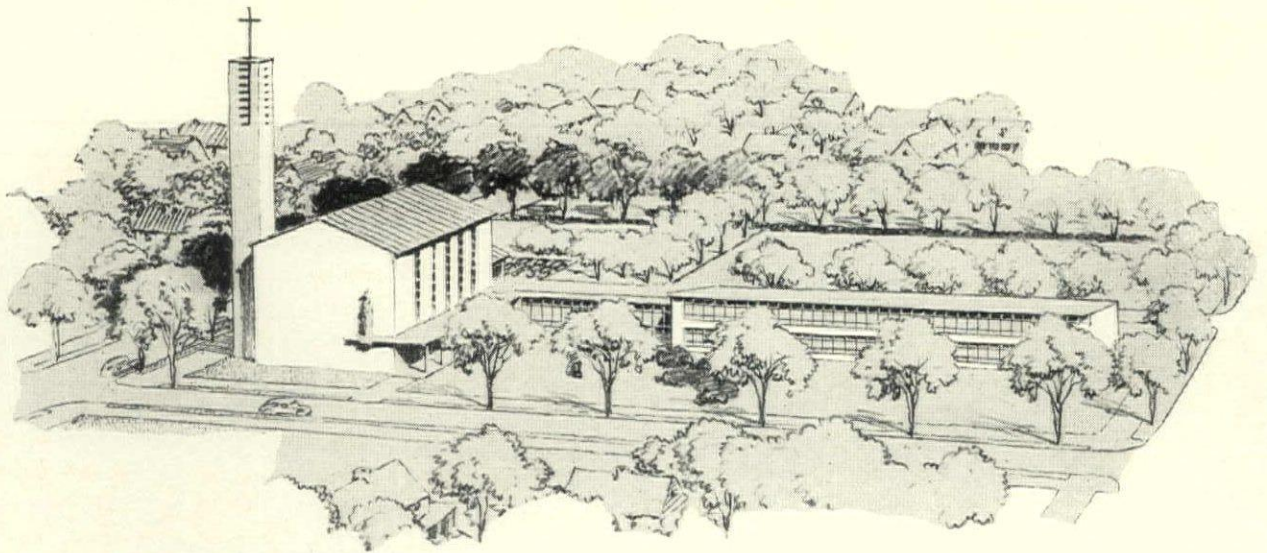
LORIMER RICH, ARCHITECT, NEW YORK

"Forward-looking building committees are asking for churches whose facades suggest Today. If religion is to play an important role in our lives in the postwar world, it must adapt itself to modern thought and philosophy. Similarly, this contemporary attitude must be expressed in its churches. We are not proposing a stylized building, nor are we suggesting that the old churches are out-dated and of no more use to us. They are beautiful and priceless chapters in the history of art as well as of religion. We see religion as a clean, pure, lovely thing, prone to meditation, resentful of falsification. It is this concept we have tried to convey. The church auditorium should be a sanctuary of simplicity and dignity, inspiring the hearts and minds of the parishioners. We have tried to create pleasing and restful proportions. We do not follow the building fashions of the moment, but rather search for a combination of utility and beauty which is not dated. We strive for an enduring architecture to house an enduring institution.

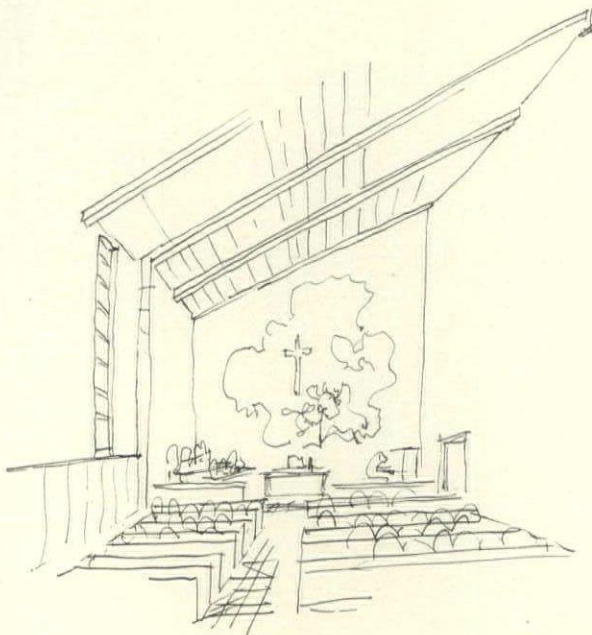
"The main entrance to the church is on the side street,

so that drivers may drop their passengers and drive directly into the parking area without disrupting the regular stream of traffic. An arcaded passage leads into the narthex or into the church offices from the main avenue, which passes the front of the building. The nave seats four hundred with overflow seating provided for one hundred in the small balcony directly above the narthex. The dropped panel in the ceiling allows for soft indirect lighting of the sanctuary. A chapel for fifty persons with an electric organ and choir stall is provided for small services and church school activities. While most of the offices are located on the main floor in a one-story wing connecting the sanctuary and the church school, the pastor's office and study room are on the second floor above the board room. This provides him with the necessary quiet and isolation, without removing him too far from the main office. The board room, or library, may be used as a family room before and after such services as weddings, christenings or funerals. It has a private entrance onto the rear court."

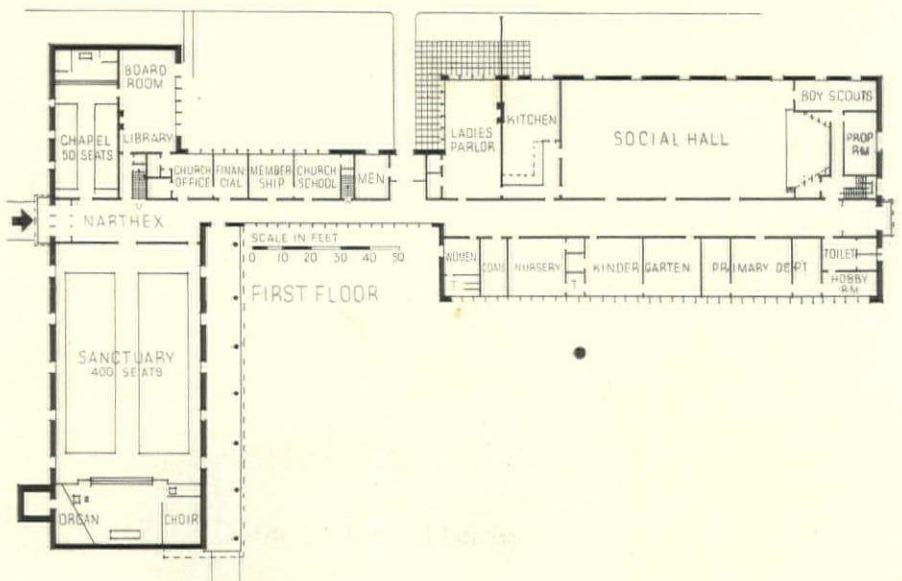
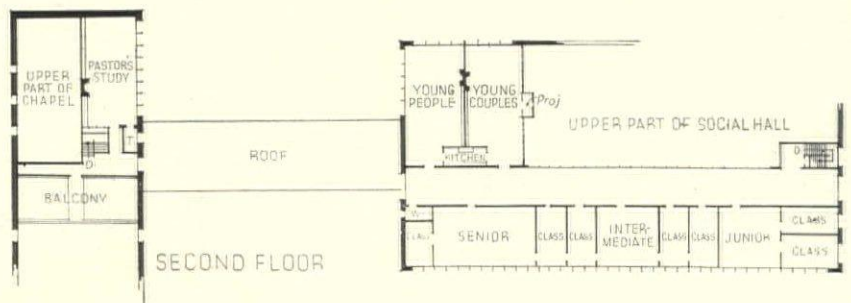


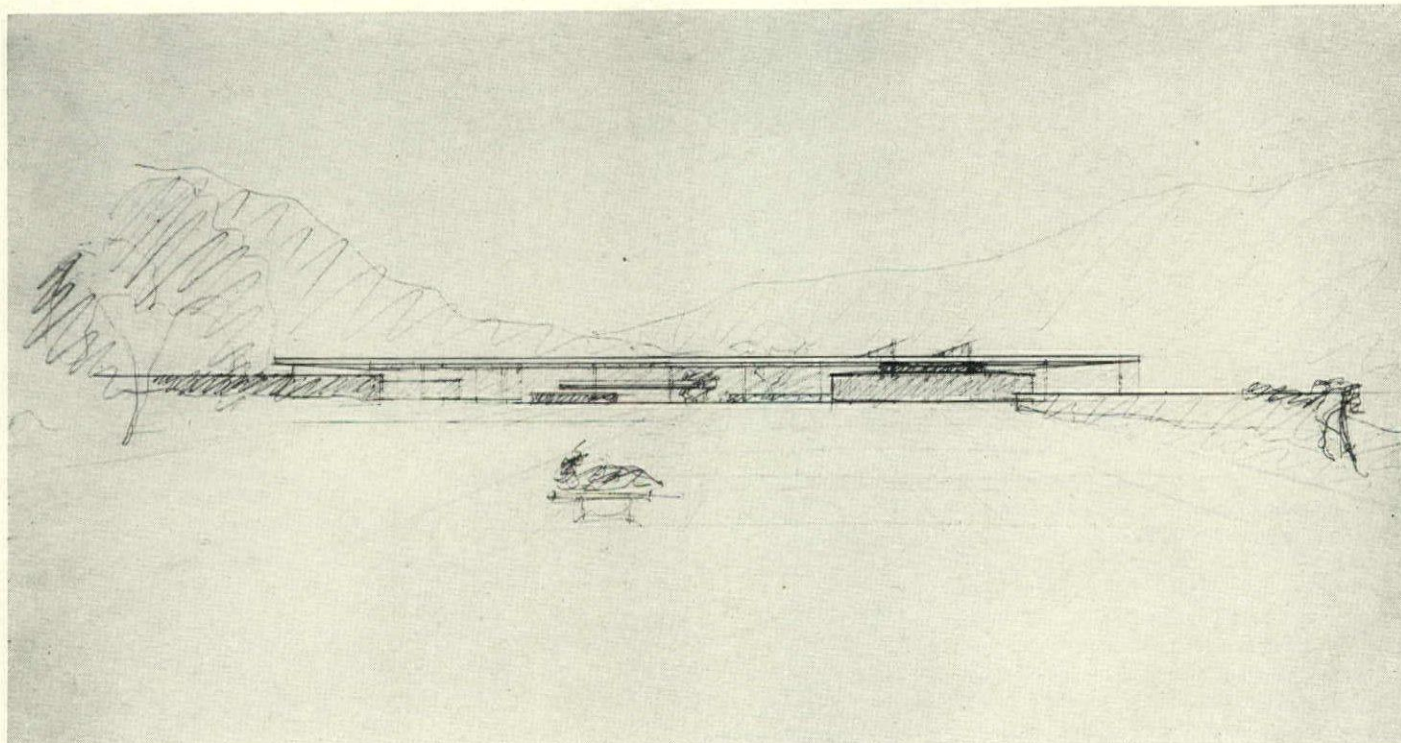


"The church school building has been separated from the others to isolate for heating as well as for noise. Rooms are provided for all classes with emphasis on nursery and primary groups, in the hope that these facilities might be used during the week as a regular neighborhood school. A large social hall, complete with stage, prop rooms, chair and table storage, connects with the kitchen, as does the church parlor. The parlor is surrounded by a terrace for outdoor entertainment."



"In the second floor of the school building the hallway doubles as a glass-enclosed gallery used for overflow audiences. The movie projection booth is an extension of the young couples' parlor, which also has a glass interior wall softened by draw-curtains."





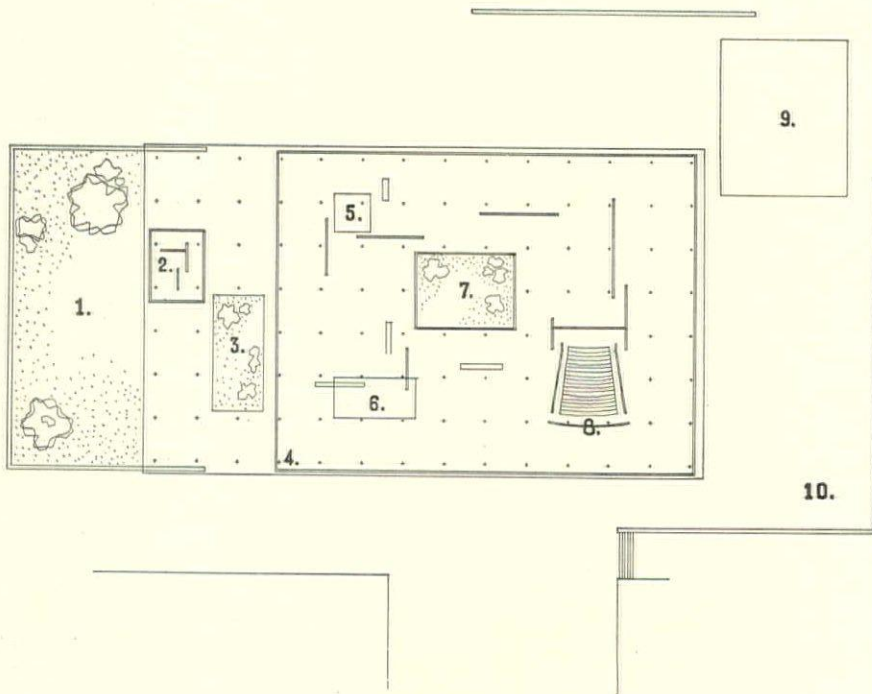
"The museum for the small city should not emulate its metropolitan counterparts. The value of such a museum depends upon the quality of its works of art and the manner in which they are exhibited.

"The first problem is to establish the museum as a center for the enjoyment, not the interment of art. In this project the barrier between the art work and the living community is erased by a garden approach for the display of sculpture. Interior sculptures enjoy an equal spatial freedom, because the open plan permits them to be seen against the surrounding hills. The architectural space, thus achieved, becomes a defining rather than a confining space. A work such as Picasso's *Guernica* (lower picture, facing page) has been difficult to place in the usual museum gallery. Here it can be shown to greatest advantage and become an element in space against a changing background.

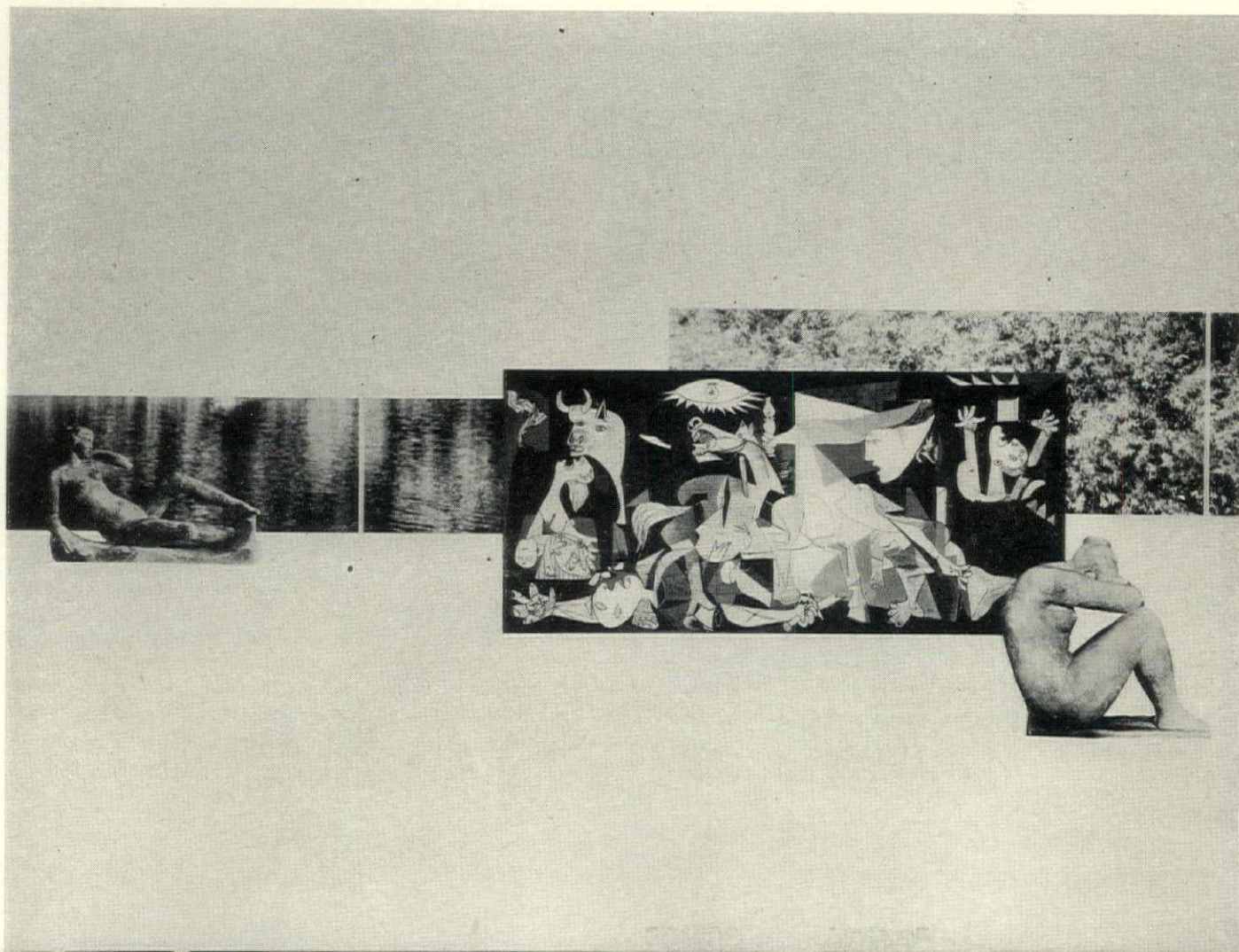
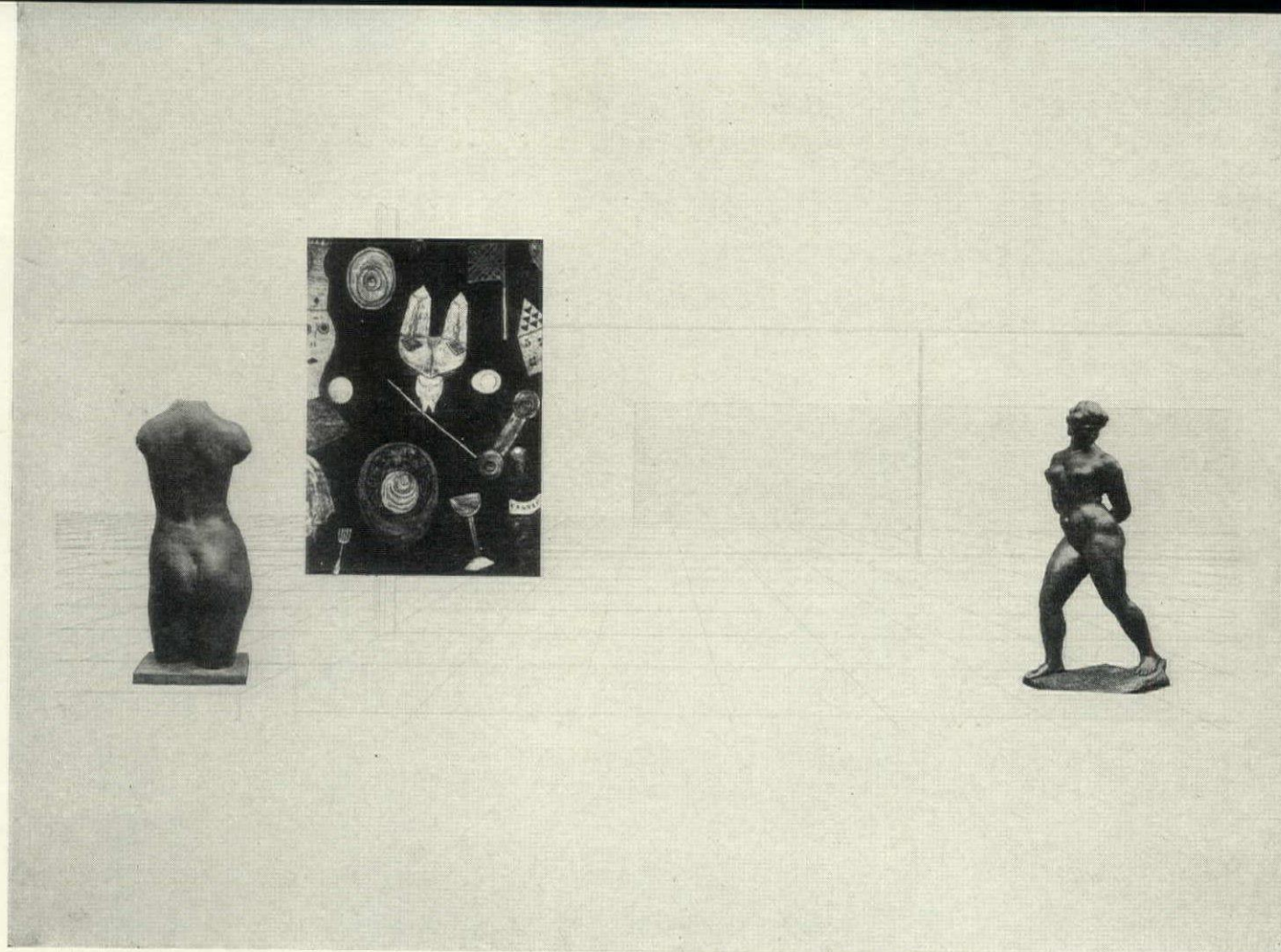
"The building, conceived as one large area, allows every flexibility in use. The structural type permitting this is the steel frame. This construction permits the erection of a building with only three basic elements—a floor slab, columns and a roof plate. The floor and paved terraces would be of stone.

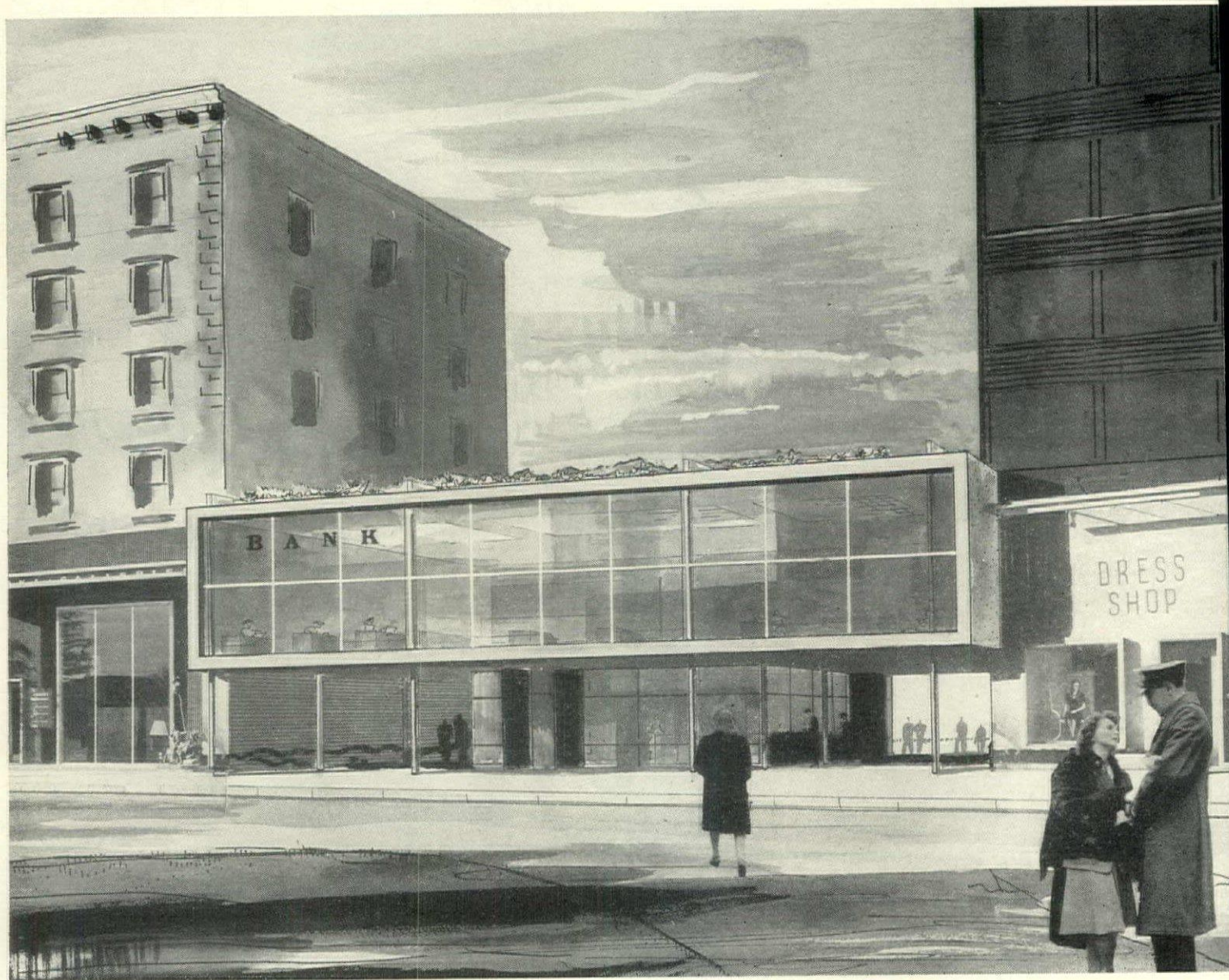
"Under the same roof, but separated from the exhibit space would be the offices of administration. These would have their own toilet and storage facilities in a basement under the office area.

"Small pictures would be exhibited on free-standing walls. The entire building space would be available for larger groups, encouraging a more representative use of the museum than is customary today, and creating a noble background for the civic and cultural life of the whole community."



"Two openings in the roof plate (3 & 7) admit light into an inner court (7) and into an open passage (3) through one end of the building. Outer walls (4) and those of the inner court are of glass. On the exterior, free-standing walls of stone would define outer courts (1) and terraces (10). Offices (2) and wardrobes would be free standing. A shallow recessed area (5) is provided, around the edge of which small groups could sit for informal discussions. The auditorium (8) is defined by free-standing walls providing facilities for lectures, concerts and intimate formal discussions. The form of these walls and the shell hung above the stage would be dictated by the acoustics. The floor of the auditorium is recessed in steps of seat height, using each step as a continuous bench. Number (6) is the print department. Above it is a space for special exhibits. Number (9) is a pool."





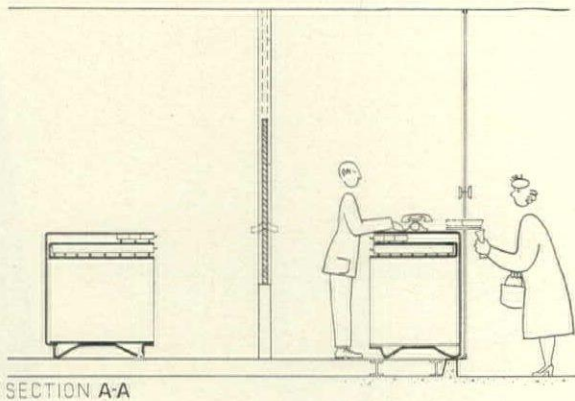
VIEW FROM PARKING AREA

"Banks have changed considerably in the last 20 years. In the first place, there are fewer of them. In 1921 there were 30,000 banks, and there are now 14,500—or, including branch offices, 18,500. Those which went out of business were primarily small country banks, since increasing ease of transportation tended to centralize banking in large trading centers. Another reason for the decrease is that legislation has curtailed the varieties of services rendered, such as the underwriting and sale of securities (except Government securities). Although future bank suspensions are less likely, due to Federal deposit insurance, it would seem undesirable to build a bank which could not gracefully modify its functions. We cannot foretell the nature of the bank of tomorrow, but chances are that its functions will continue to be modified.

"At present two new functions have been imposed on banks: the sale of war bonds and handling ration coupons. This has greatly increased bookkeeping. It has also necessitated temporary rearrangements, sometimes in a makeshift manner. This example makes more obvious the fact that the internal set-up of the bank should not be massive and unchangeable.

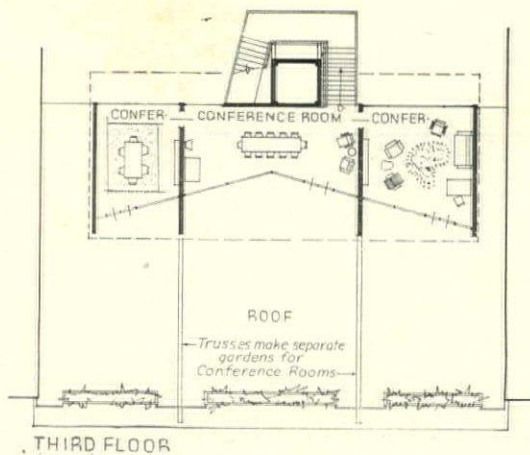
"We have placed our bank at one of the important entrances to the business center, with the main floor raised above the street and spanning an open space. Within the ground-floor space is a special tellers' cage for handling small checking accounts. This is the most-used function of the bank at the present time. It is also becoming the most profitable—since loans, formerly the main source of income, are now largely confined to short-term Government obligations. Larger checks are cashed upstairs on the main floor. This plan does away with the austere, 'temple' quality of the bank of the past, by placing the street floor tellers in about the same relation to the public as the ticket-seller outside a movie theater, but makes a particularly safe bank, since the main part is above the street.

"In recent years, banks have been trying to become more human. Some city banks have elegant conference rooms; country banks sometimes have a rustic back room with a log fire, where farmers may discuss their business. In this bank we have tried to accentuate this trend by the openness of the design and the generally informal treatment."

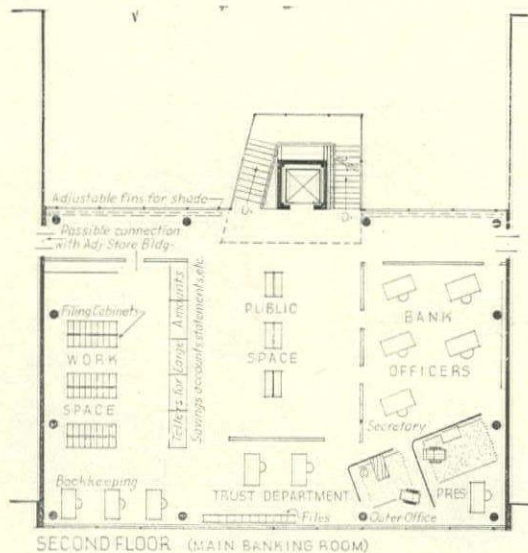


SECTION A-A

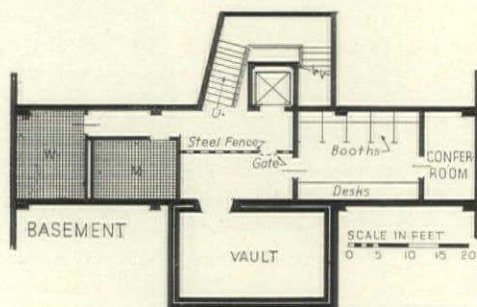
"Three or four tellers are located at street level, in a special enclosure under the main floor, for direct access from the street and to accommodate crowds wishing to cash small checks on pay day. These tellers would not cash large checks. There is communication with the main floor of the bank by a pneumatic tube system, so that they need not keep large amounts of money downstairs. The public is separated from the tellers by bullet-proof glass, with microphones and loud-speakers arranged to catch and transmit voices from one side to the other. Money and checks are passed back and forth in a small tray which snaps in or out when the teller pushes a button, and closes tightly against the glass in either position to keep out drafts."



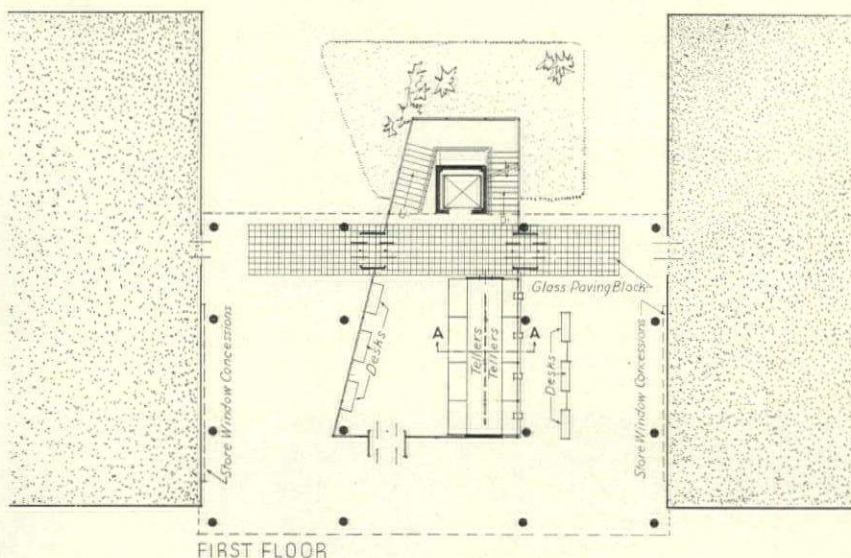
THIRD FLOOR



SECOND FLOOR (MAIN BANKING ROOM)



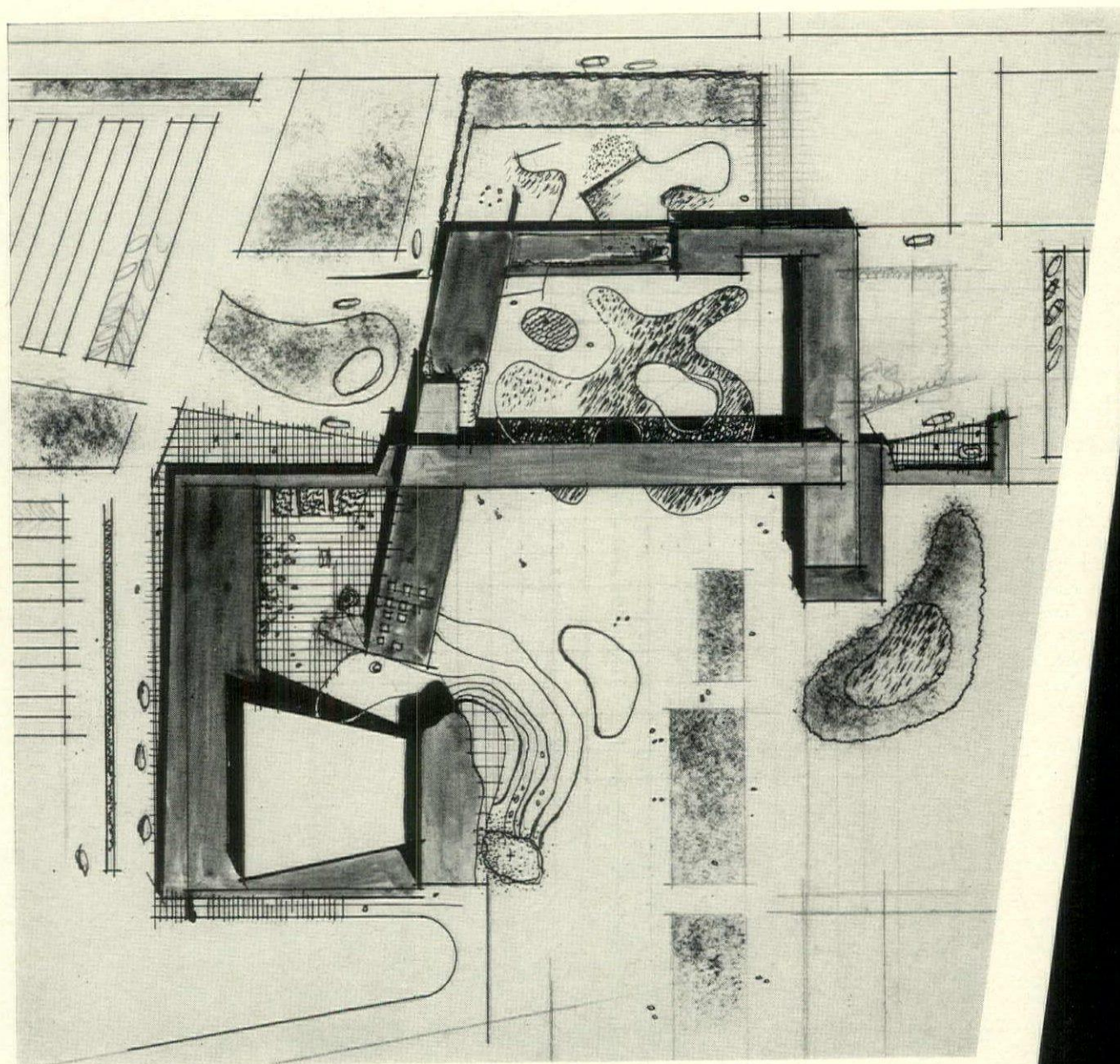
"The vault is in the basement. Access to the vault is primarily by elevator from the main floor, for privacy and safety, and convenience of bank personnel. Except at this level, all partitions throughout the building are movable, with the main floor essentially one large, completely open space."



FIRST FLOOR

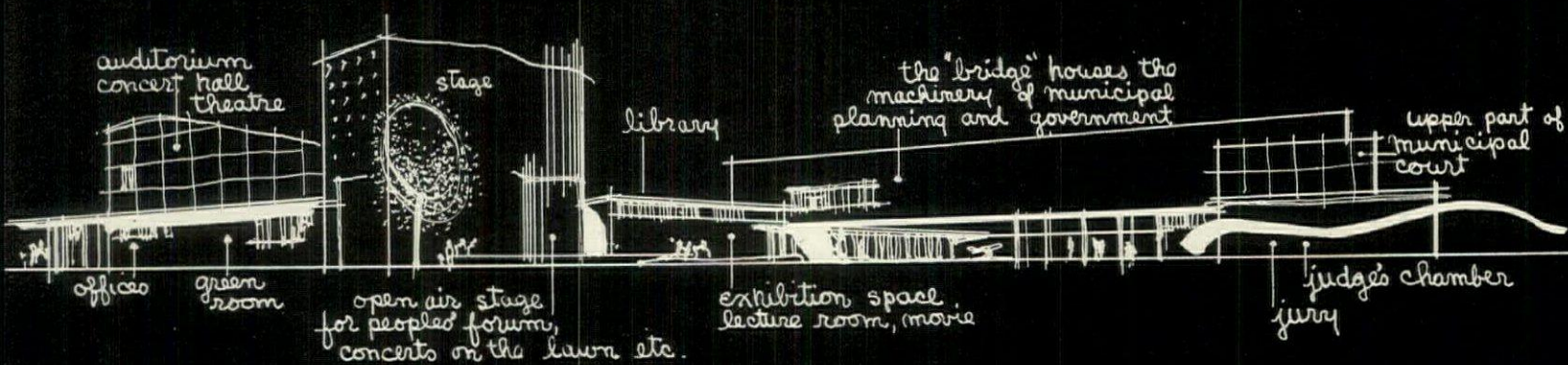
CITY HALL

CHARLES EAMES, LOS ANGELES, CALIF.

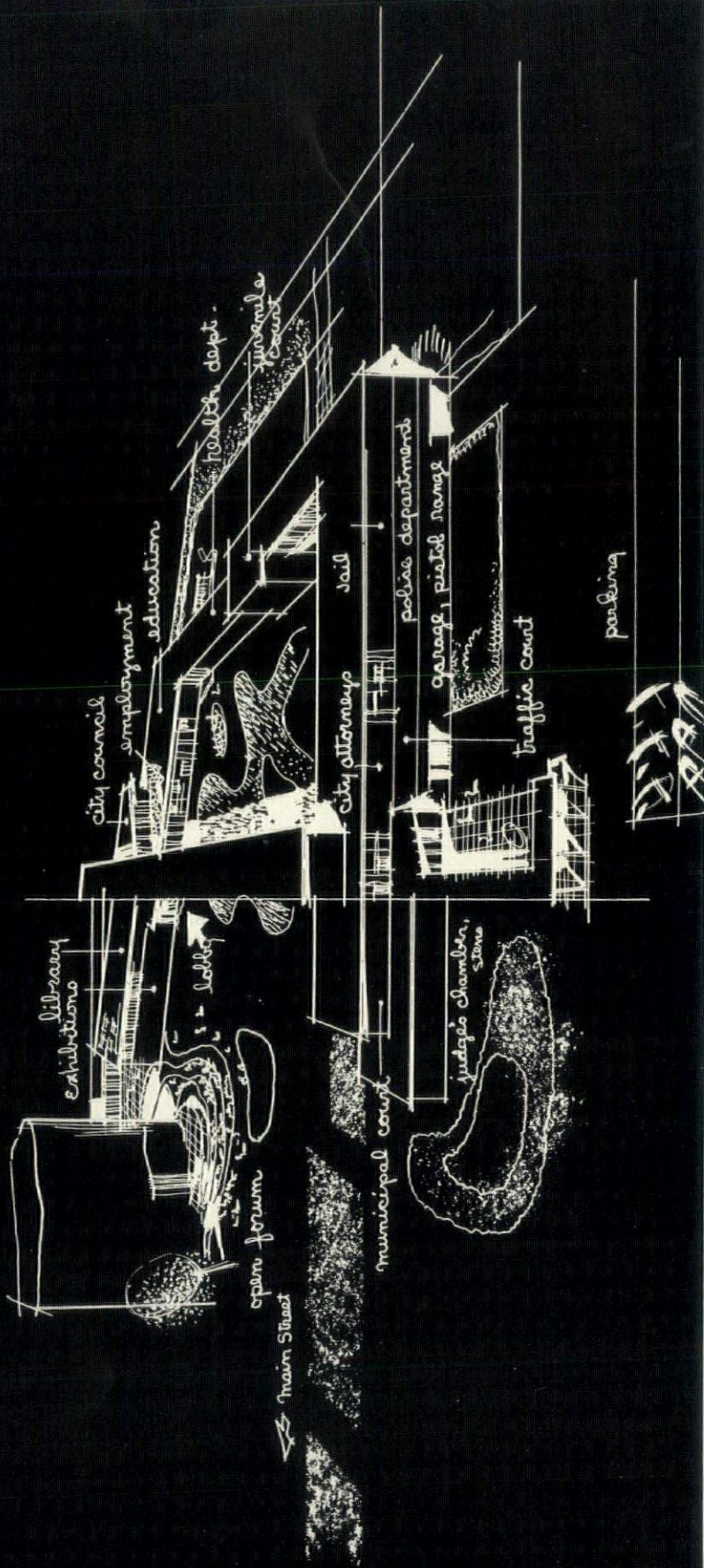


2.

1.



VIEW 1.



VIEW 2.

Probably no other project in this issue was prepared under as adverse circumstances as this city hall by Mr. Eames. As the result of a misunderstanding, Mr. Eames was left blissfully unaware of the program until a few days before closing time, when he finally received an urgent wire from THE FORUM. Despite preoccupation with important Government work, he submitted these brilliant sketches for the design of a city hall, based on the following:

"In a typical American community with 70,000 people, about 27,000 are registered voters. In 1943 only 12,000 voted in a municipal election.

WHY?

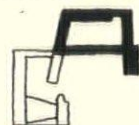
Among the several important reasons:

A lack of the facilities by which the people can educate themselves to understand the techniques of government.

A city government should—must—be housed as the center of a mutually cooperative enterprise in which:

THE GOVERNMENT TALKS TO THE PEOPLE. AND THE PEOPLE TALK TO THE GOVERNMENT.

The administration of government is the business of the people.



The obligations of the people in a democracy consist not only of an exercise of franchise, but participation in, and active direction of the rules or laws by which government exists.

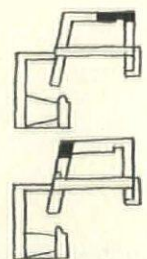
The city hall must properly be considered the heart of any community, the house of government.

A building in which provision is made not only for the administration of rules and regulations, but a building which must contain facilities for the expression of the *idea* of government, which is never static and which can never be complete without the direct participation of the people who create it.

The facts or the functions of administration can not properly be considered as existing independently of one another.

It should be impossible to think in terms of the juvenile court without thinking in terms of the children's clinic, without thinking in terms of a Board of Education. Such a Board of Education can best function through activities within the

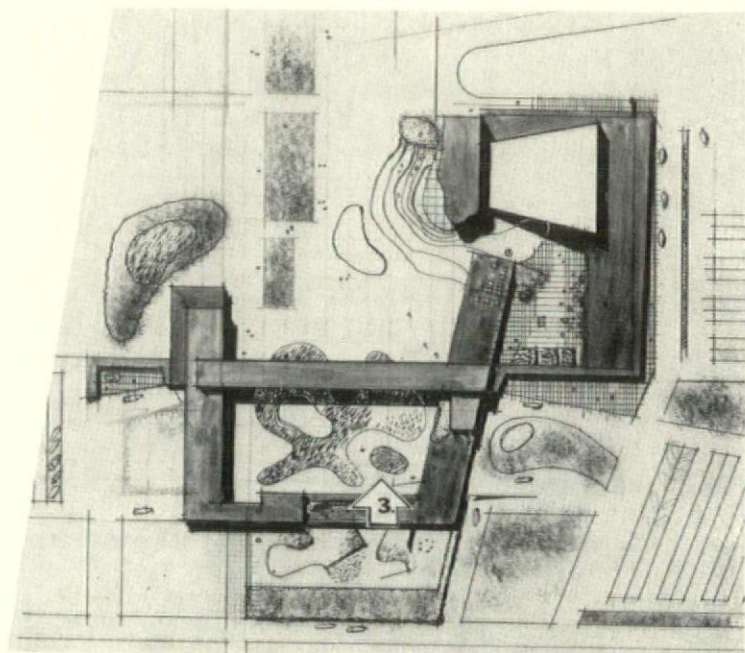
house of government itself by presenting in active cooperation with all departments: exhibitions, motion pictures, study and lecture groups, open forums



house of government itself by presenting in active cooperation with all departments: exhibitions, motion pictures, study and lecture groups, open forums

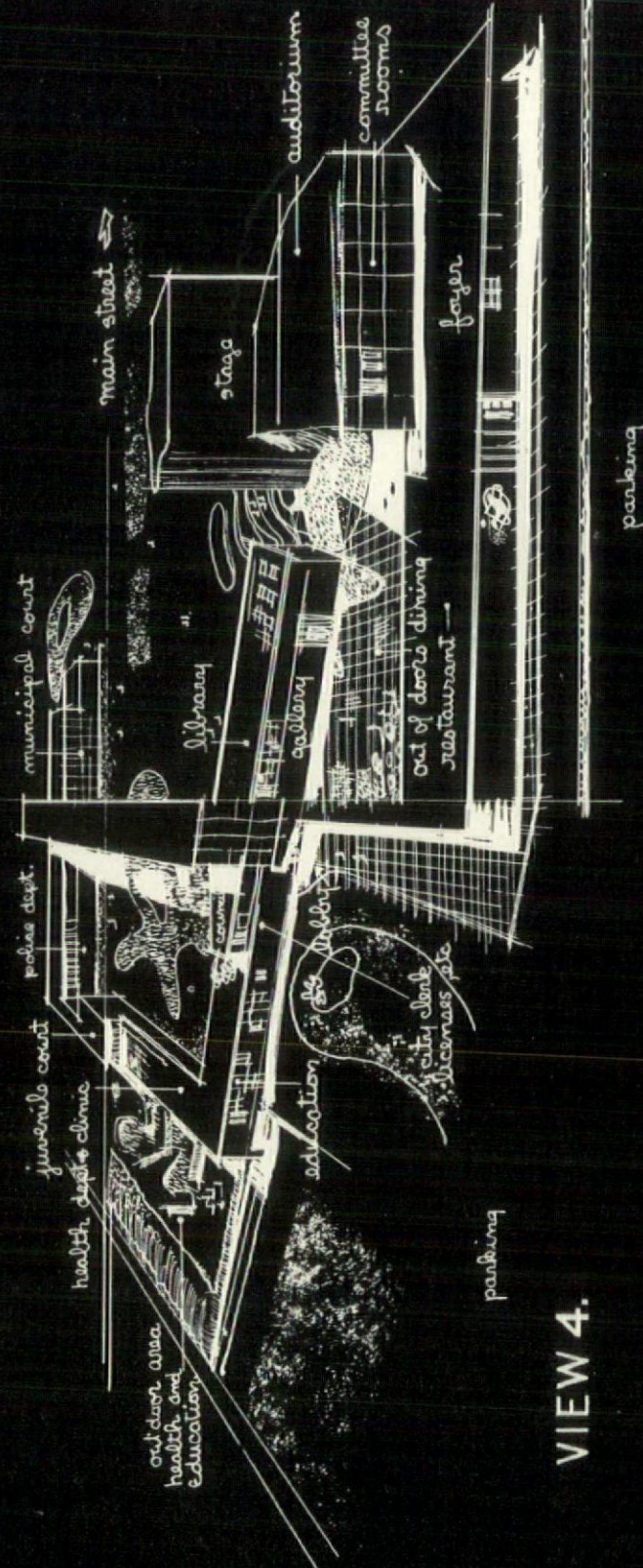
TO THE END THAT
WHEN THE GOVERNMENT TALKS TO
THE PEOPLE AND THE PEOPLE TALK
TO THE GOVERNMENT — IT IS ONE AND
THE SAME VOICE."



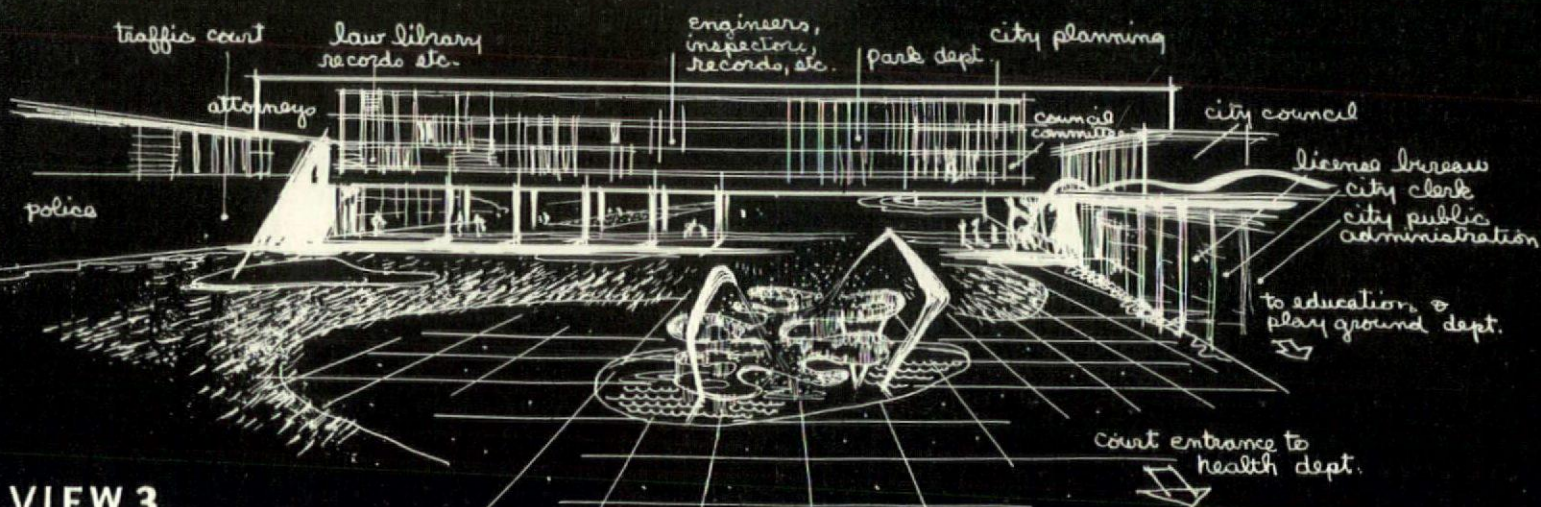


The design of the city hall is conceived as an integral part of the city plan. Located at the end of the new mall, it fits admirably into this natural position. The inter-penetration of public spaces, parks and the purely administrative functions of government symbolizes a truly democratic type of community, of which this group of buildings becomes the center.

4.



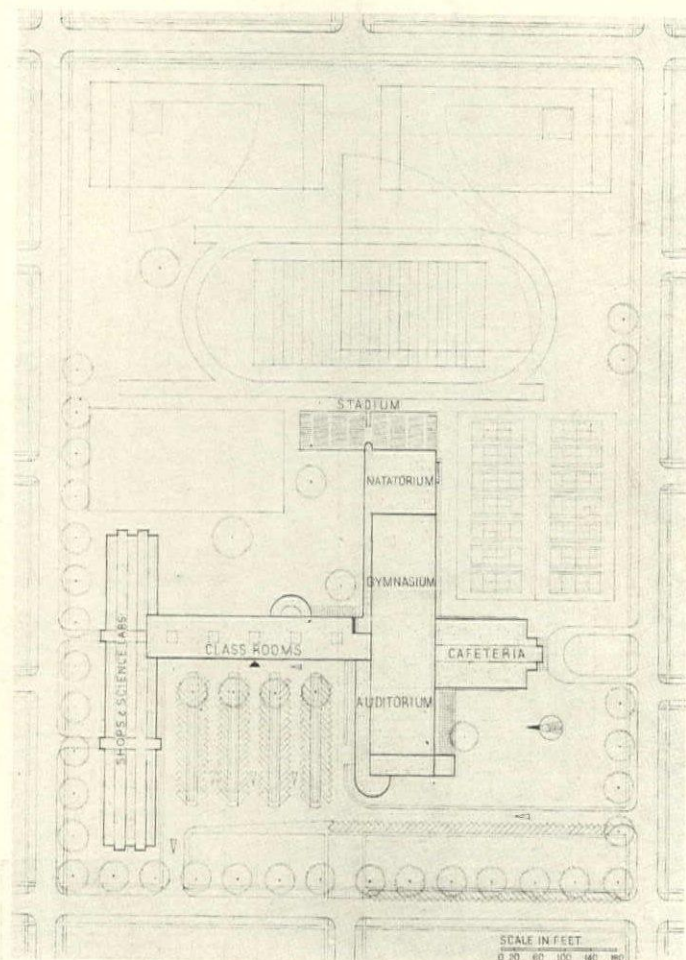
VIEW 4.



VIEW 3.

HIGH SCHOOL

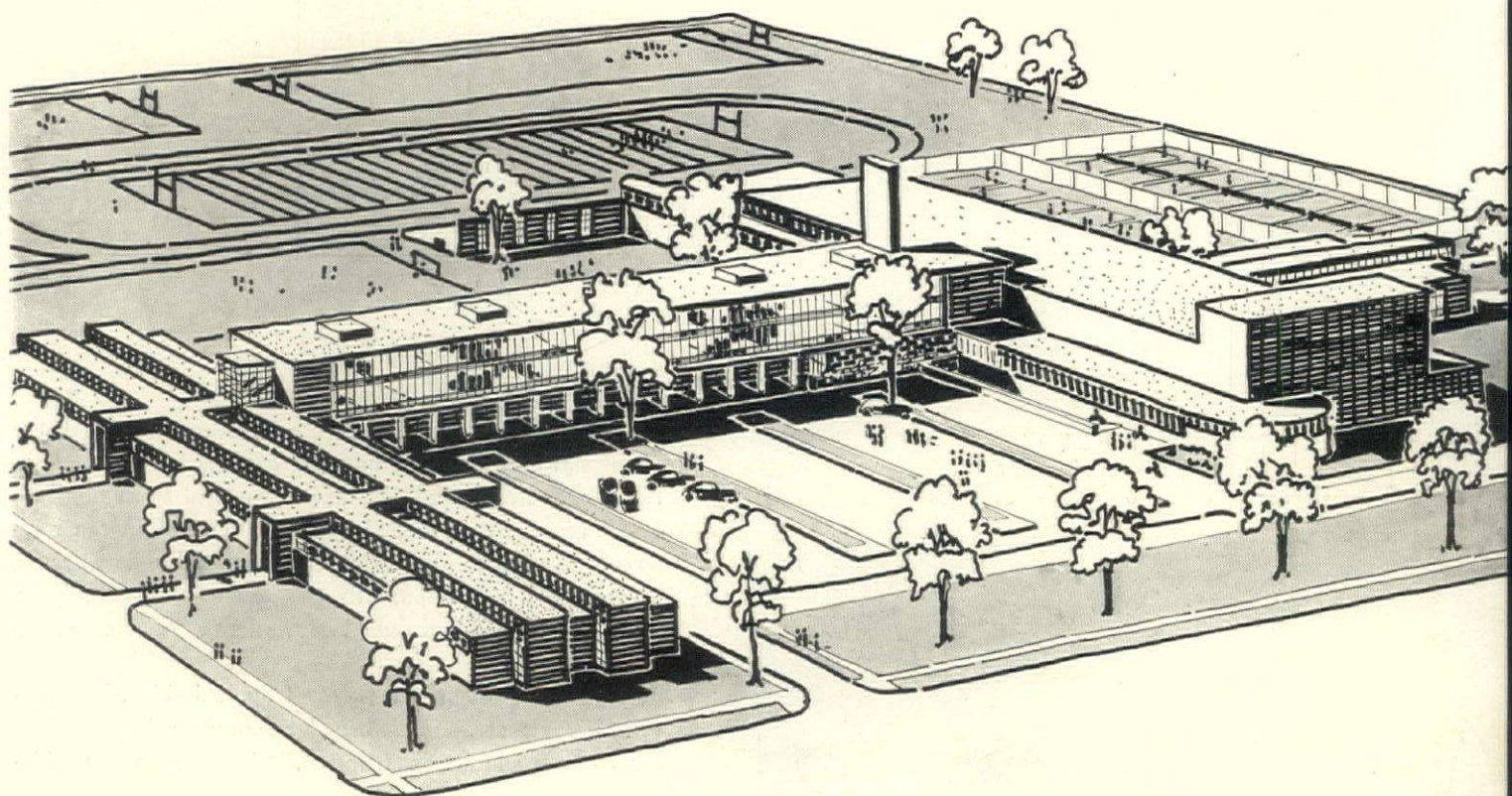
PERKINS, WHEELER & WILL, ARCHITECTS, CHICAGO, ILL.

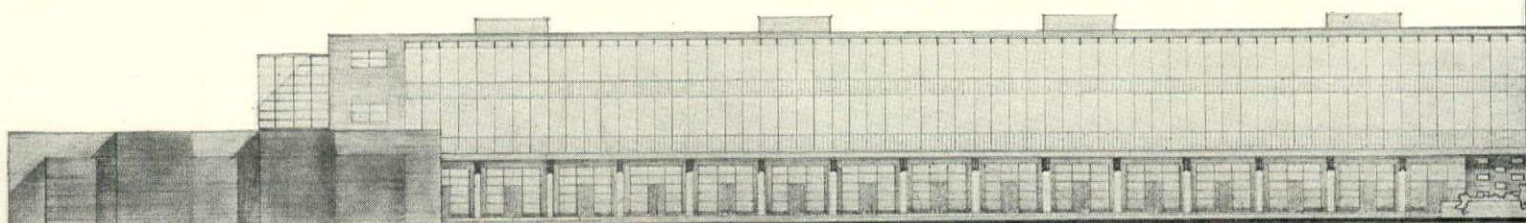


"The town of 70,000 needs more than one High School. This one is the Central High School and Community Center. It is to serve 2,000 students. The site is obtained by taking several blocks near the business district and closing the streets that divide them. This location gives access to the crowds that give life to the commercial area. A building used sixteen hours a day is a definite possibility in such an area.

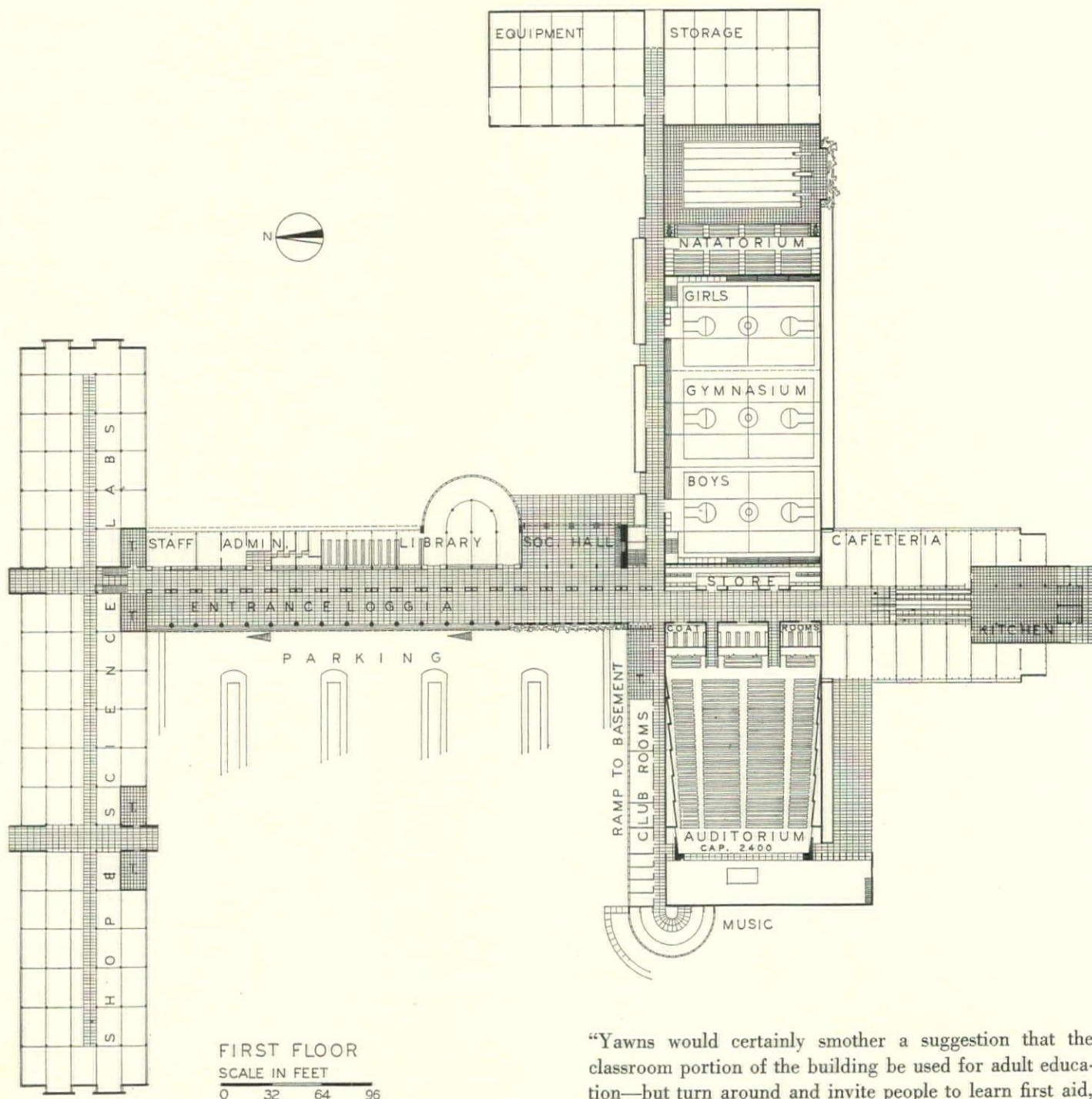
"The objective of a high school is to provide opportunity for students to develop social, cultural and applied skills. A community center has the same three jobs for adults. The effort to get them together has been increasingly successful for thirty years. In this building their identity of purpose is assumed from the outset. The physical plan reflects the living relationships of these three activities.

"Provision for 'cultural skills' goes beyond a collection of various sized classrooms for languages, mathematics, social science, and English literature. Each department has its particular tools. For instance public speaking requires platforms, practice rooms with mirrors, recording devices and provision for an audience. English needs not only room for group study and discussion but a smaller place where student and teacher can hammer out the rough spots in a paper on Eighteenth Century art."



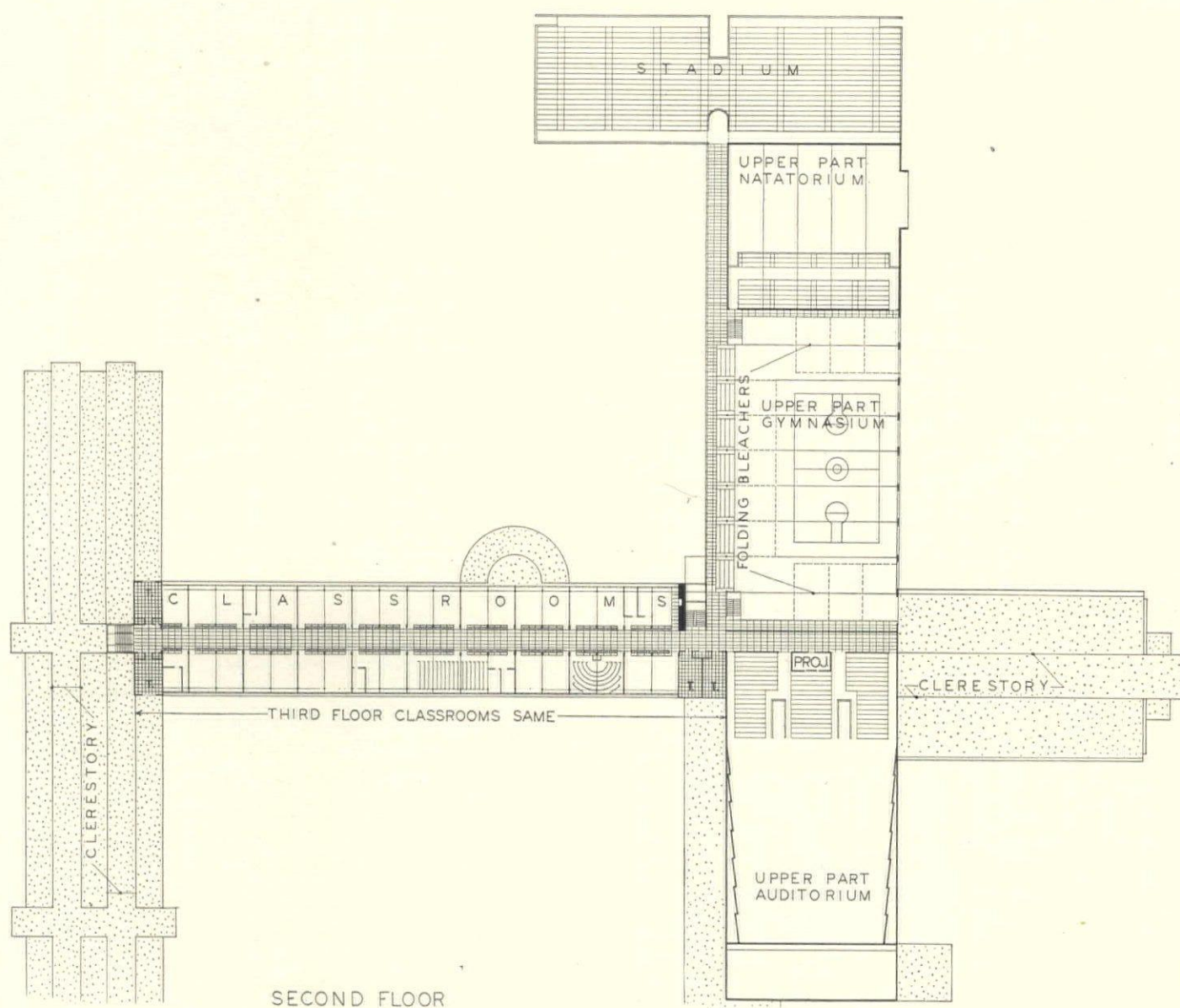
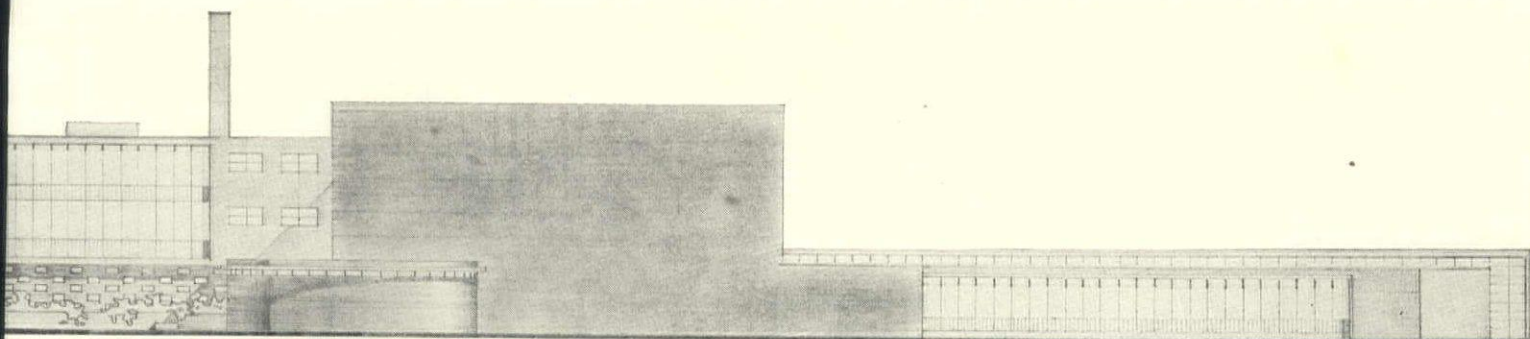


WEST ELEVATION



"Yawns would certainly smother a suggestion that the classroom portion of the building be used for adult education—but turn around and invite people to learn first aid, brush up on Spanish, and you find yourself in the mid-stream of what is already a big business. Public libraries were radical innovations fifty years ago—a fourteen-hour-a-day branch library for this building is conservative enough.

"A boom is on in the fields of applied skills. The provision for such training is broader than were shops, science laboratories and art departments. It isn't even a consolida-

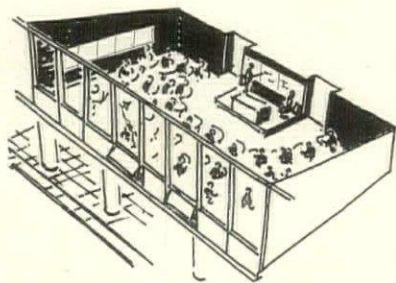


tion of all three. It is a huge place where individuals may work within sight of each other on an experiment in chemistry, an easel painting, the crank shaft of a radial engine, a pair of book ends, or drafting conic sections. In general this area is not for class groups. Faculty members move from student to student giving help and advice. While the facilities for one type of activity would be grouped for convenience, they would be separated as little as possible. Besides adding to the effectiveness of faculty members, this arrangement might drive home the equal dignity of sculpture, heat measurement and airplane repair as long as each

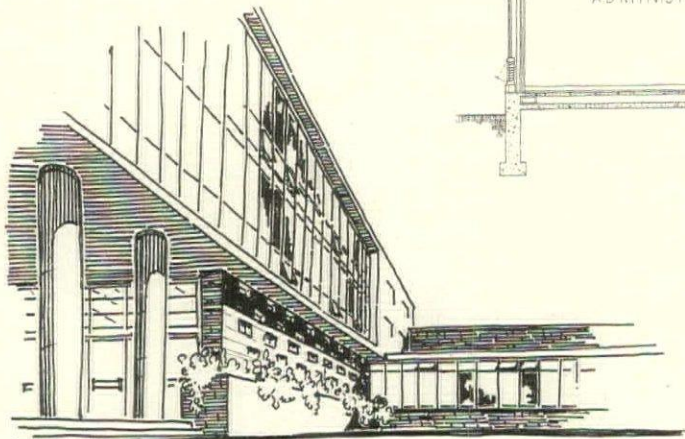
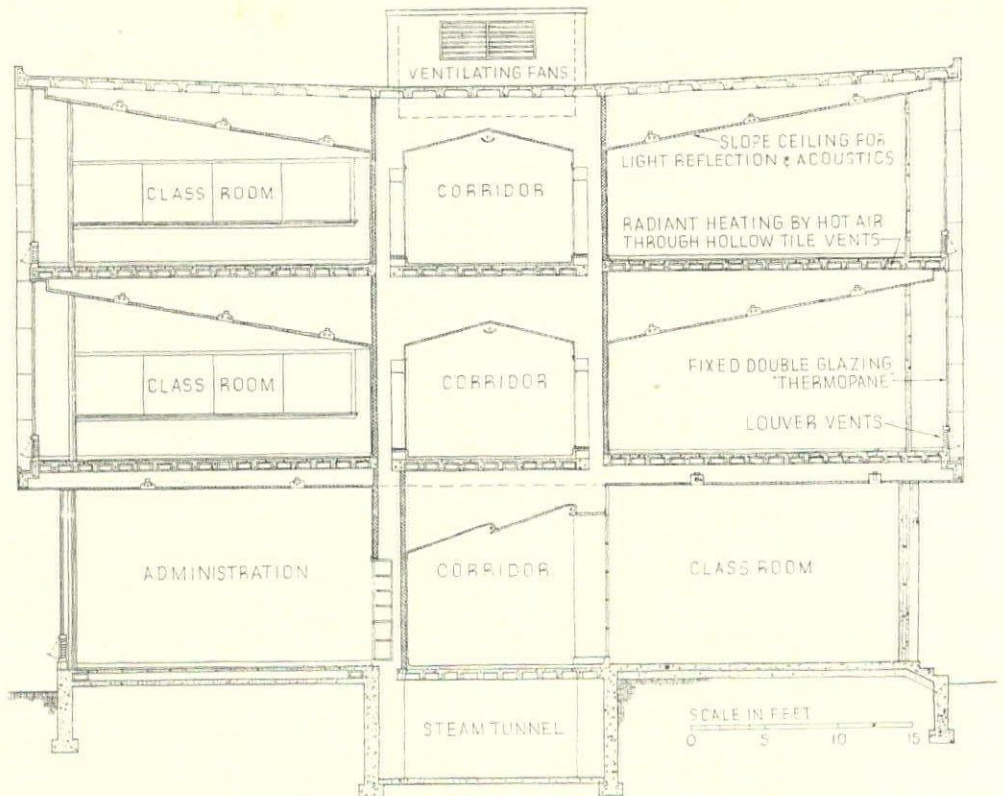
is handled with competent craftsmanship. Little distinction exists between the student and adult use of these facilities.

"Social living consists of talking, eating and playing in groups. For adults, some group activities at home are neither possible nor desirable. For students, the value of team work in sports, dramatics and parties is too thoroughly established to warrant discussion. When adults do the same things for fun, the educational aspects are still there even though they are not admitted objectives.

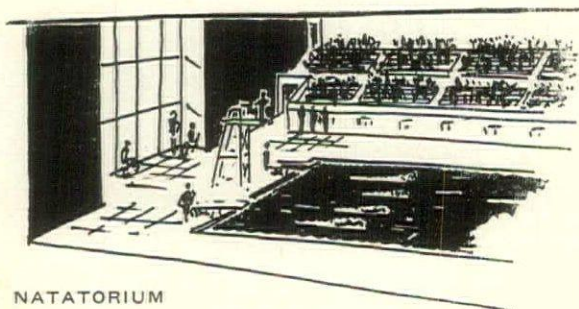
"Perhaps the most valuable by-product is community spirit itself through which democracy gets its life."



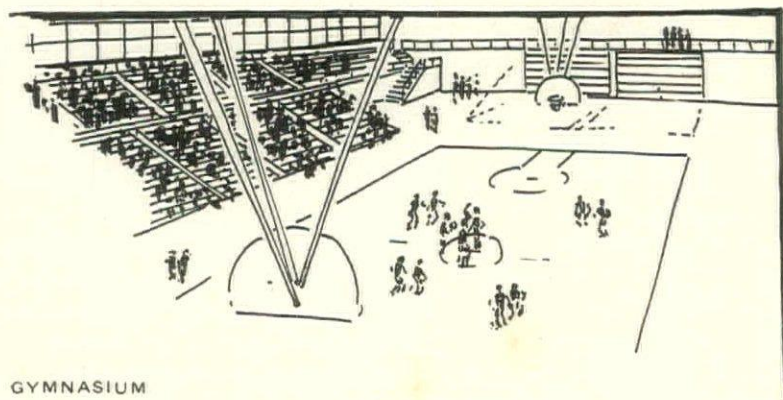
CLASSROOM



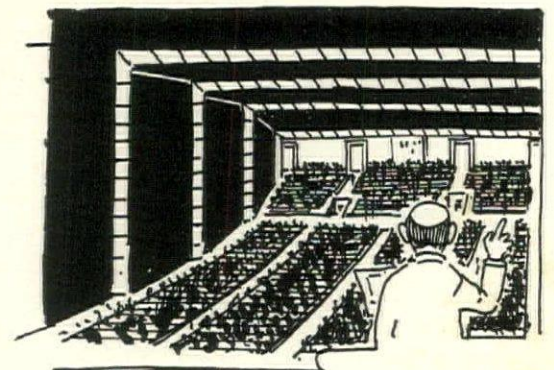
MAIN ENTRANCE



NATATORIUM



GYMNASIUM



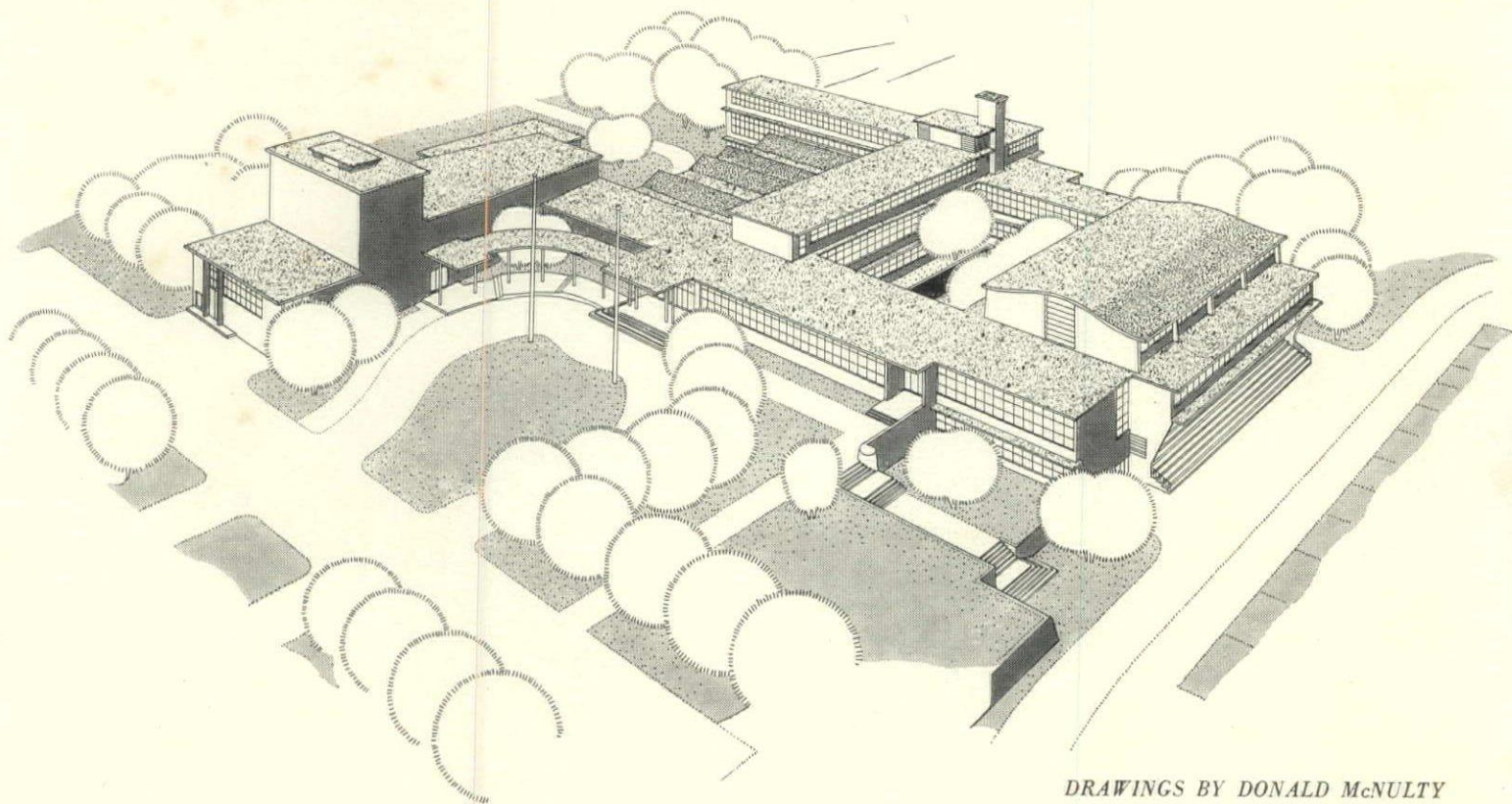
AUDITORIUM

Construction of the main classroom section, which is three stories high, is reinforced concrete. The third floor and roof are cantilevered out from the central corridor, leaving classroom walls entirely free of columns for the most generous possible fenestration. Classroom ceilings are sloped down toward the center of the building to reflect light to inside desks and improve acoustics. Sketches show typical classroom, exterior of classroom section, swimming pool with spectators' gallery, gymnasium and auditorium.

TRADE SCHOOL

RALPH WALKER, ARCHITECT

VOORHEES, WALKER, FOLEY & SMITH, NEW YORK



DRAWINGS BY DONALD McNULTY

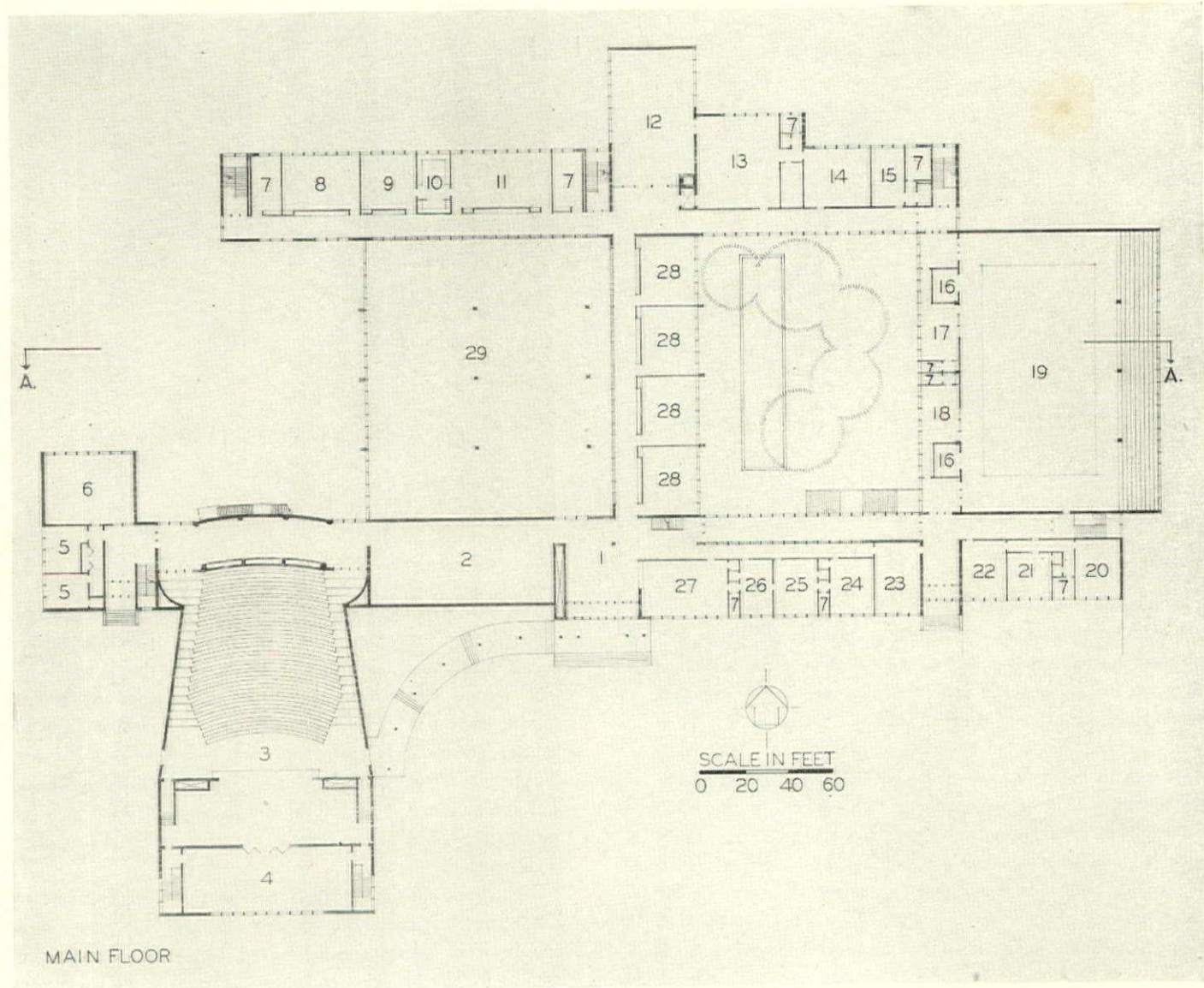
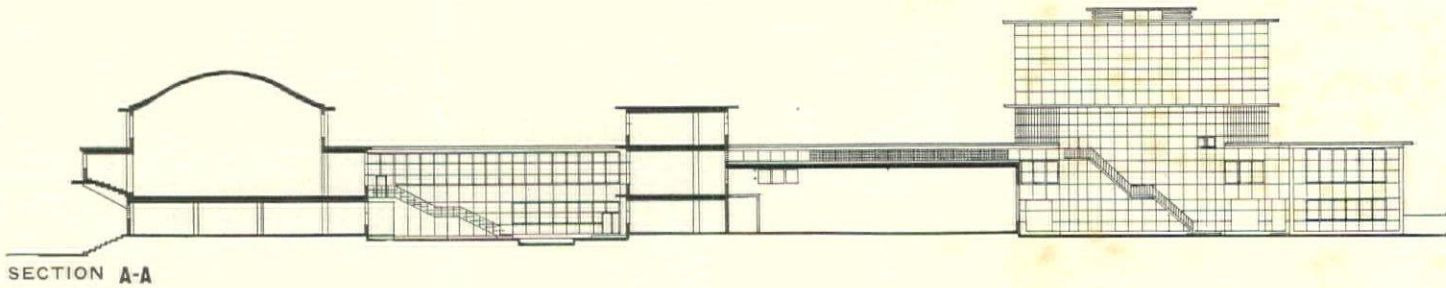
"This design contemplates a balanced education, with the graduates of the school either going into the skilled trades or on to the technical colleges. The center of the school is therefore the normal classroom group devoted to general cultural subjects, i.e. English, history, mathematics, free-hand drawing and sciences, with emphasis also on foreign languages in appreciation of the new world position of the United States. The proposed trades are general in character and might be enlarged or contracted according to the manufacturing interests of the community. The purpose is to give a wide choice in manual skills and an opportunity for the student to observe and practice them—a well rounded technical education rather than a narrowed experience.

"The building is also thought of as being an adult educational center offering the same opportunities for 'skill' observation and practice to older men and women, and in this sense the auditorium with its musical wing is arranged for both the theatrical and musical development of the community as a whole.

"The structure is designed as a dry building on a module

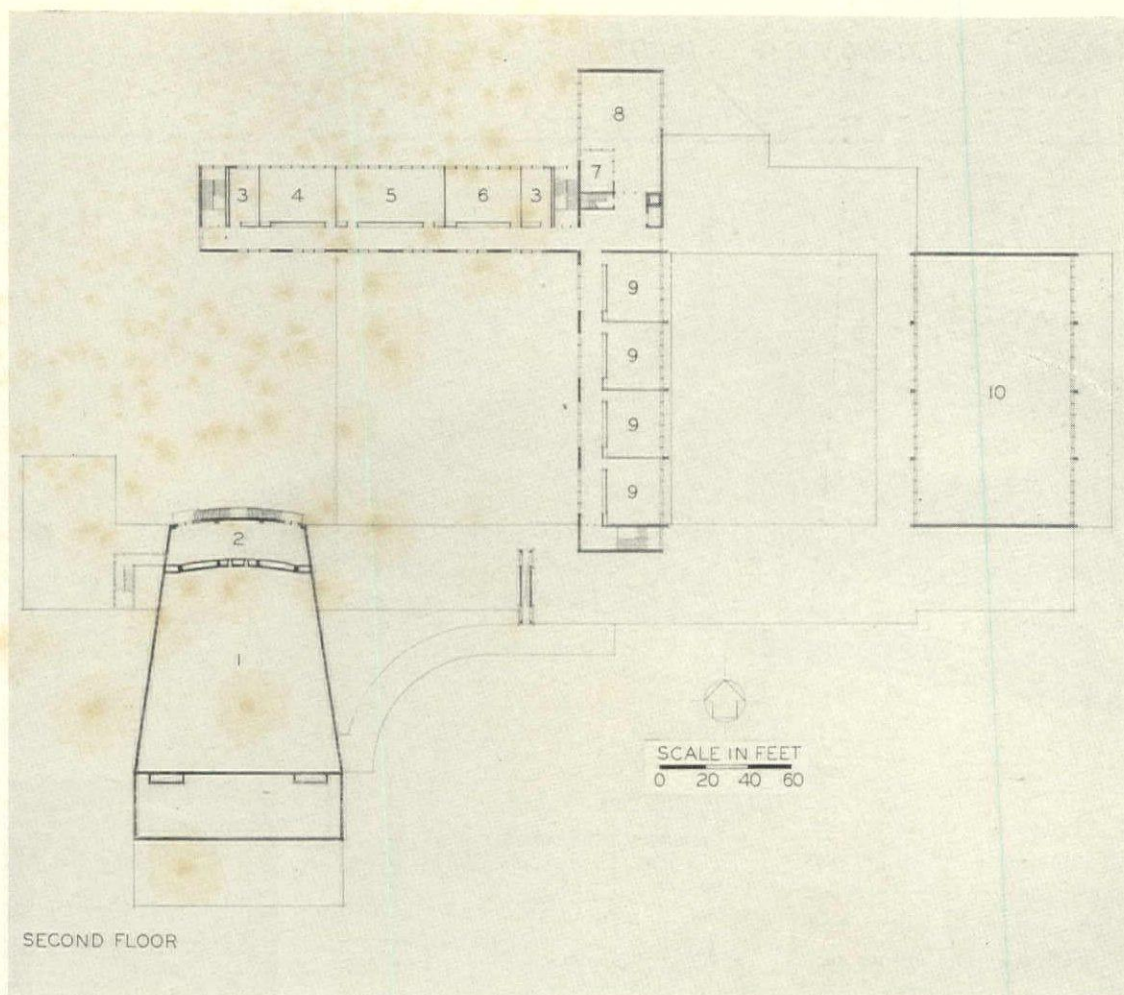
of five feet. The steel skeleton is a bird cage with very few of the familiar columns except where long spans are necessary. On the bird cage will be hung, both inside and out, metal panels containing their own insulation. A similar exterior treatment could be obtained with thin slabs of granite. The floor is of precast slab construction. The use of exterior glass walls is shown for a northern climate where solar glare is largely absent. The geographical position of the school would have a great effect on the amount of glass used.

"The shape of the auditorium was not designed just to be contrary. There is a psychological and physical difference between seeing and hearing. In this design it is possible for the observer to focus out the side walls because the focal interest on the stage is opposite in direction to the auditorium form. The acknowledgment of the focal spread of the two human eyes is here the basis for the form. The shape also avoids the stage-light spill always so visually distracting. The non-parallel walls are as efficient against acoustic flutter as if they went in the usual way."



LEGEND TO PLAN

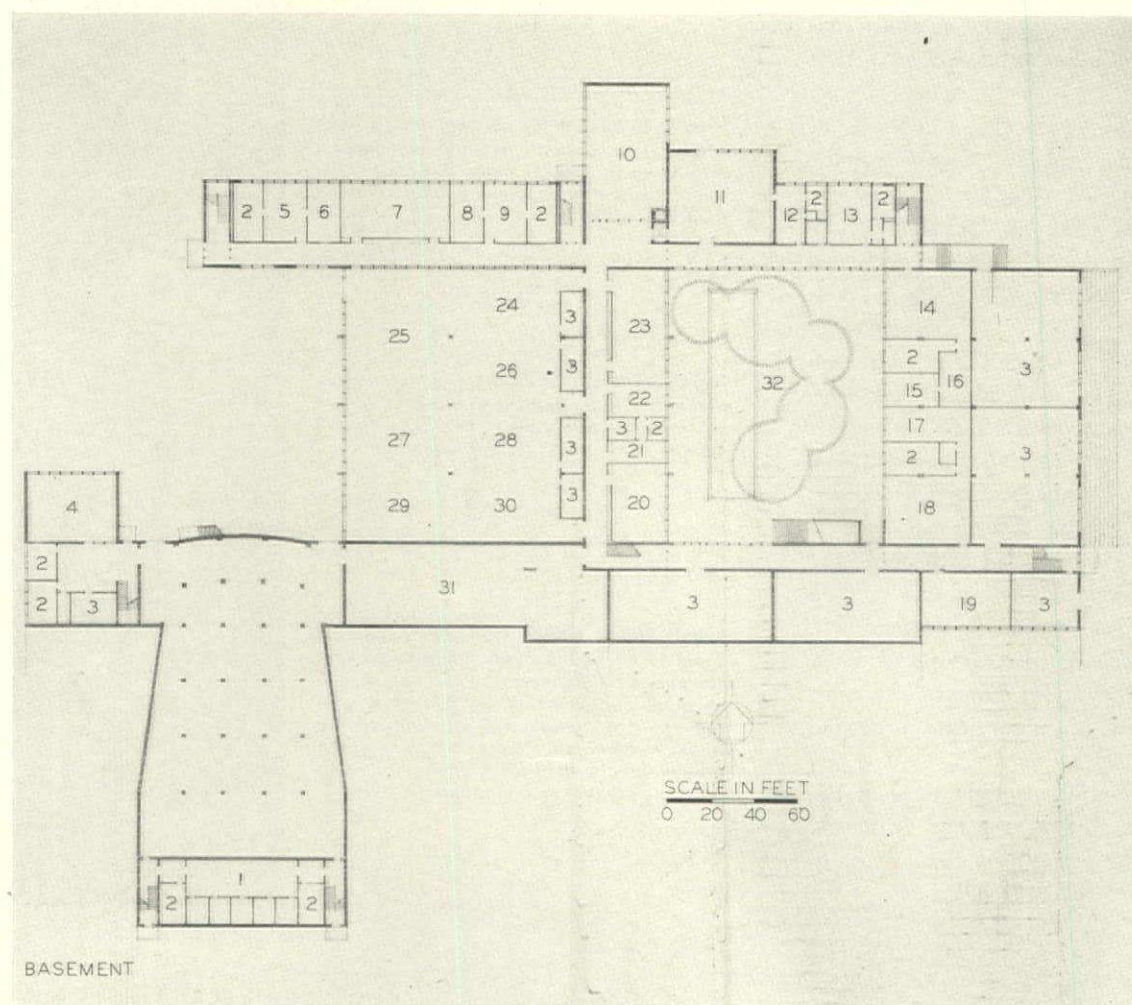
- | | | | |
|-------------------------|-------------------------|------------------------------|-----------------------------|
| 1. Entrance | 7. Toilets | 15. Women Teachers' Lounge | 23. Board Room |
| 2. Museum | 8. Printing Shop | 16. Gym Storage Space | 24. Night School Supervisor |
| 3. Auditorium | 9. Science Lecture Room | 17. Boys' Physical Director | 25. Principal |
| 4. Stagecraft Shop | 10. Preparation Room | 18. Girls' Physical Director | 26. Secretary |
| 5. Music Practice Rooms | 11. Science Laboratory | 19. Gymnasium | 27. Clerical Space |
| 6. Music Room | 12. Cafeteria | 20. Doctor | 28. Classrooms |
| | 13. Kitchen | 21. Nurse | 29. Upper Part of Shops |
| | 14. Faculty Dining Room | 22. Waiting Room | |



SECOND FLOOR

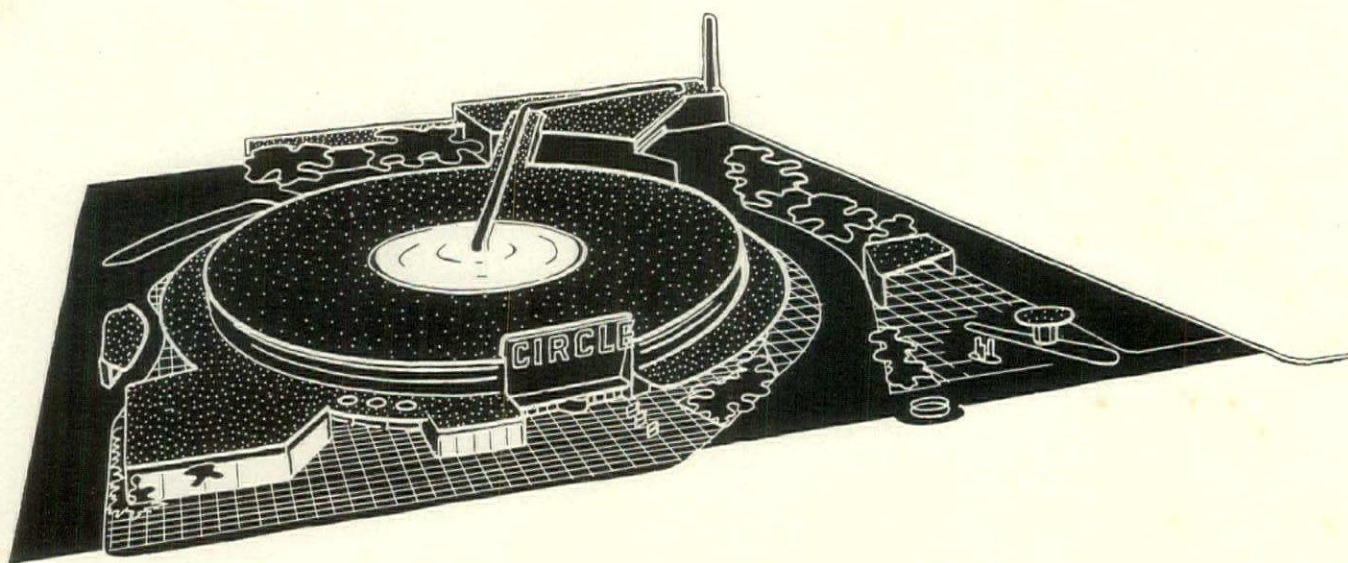
1. Upper Part Auditorium
2. Projection Room
3. Toilets
4. Beauty Culture
5. Dressmaking & Millinery
6. Freehand Drawing
7. Librarian
8. Library
9. Classrooms
10. Upper Part Gymnasium

Second floor plan (above) shows upper portions of the auditorium and gymnasium units and the second floor of the central classroom section, which includes the library. Basement plan (below) includes service units, lockers and toilet rooms and the main shop—a single wide-span which can be divided to take care of a variety of shops.



BASEMENT

1. Dressing Rooms
2. Toilets
3. Storage or Unassigned
4. Group Music Practice
5. Girls Lockers
6. Girls Wash-up
7. Mechanical Drawing
8. Boys Wash-up
9. Boys Lockers
10. Building Trades Shop
11. Boiler Room
12. Engineer's Room
13. Men Teachers' Lounge
14. Boys' Lockers
15. Boys' Showers
16. Drying Room
17. Girls' Showers
18. Girls' Lockers
19. Corrective Exercise
20. Lecture Room
21. Emergency First Aid
22. Office
23. Woodworking
24. Machine Shop I.
25. Auto Repair
26. Machine Shop II.
27. Aircraft Engine Repair
28. Sheet Metal Shop
29. Welding Shop
30. Electric Motor Repair
31. Mechanical Equipment
32. Garden



"Today's supermarket exists because it meets a need. It was made possible by the automobile, which permits large-scale shopping without store delivery service. Tomorrow's shopper will patronize those places that best fit into the tempo of the times. The automobile will carry more people to their work . . . and shopping is part of woman's work. Ease of purchase and ease of handling will result in larger individual purchases than in the past. *Convenience for the customer* is the keynote for success in tomorrow's competitive markets.

"*Convenience in servicing* means faster turnover, lower inventory, greater sales, less spoilage and maximum use of the merchant's investment in construction and equipment.

"Planned around two very prominent features of the average American home, the automobile and the baby, the CIRCLE Supermarket recognizes the importance of both in tomorrow's shopping. Exterior circulation for both pedestrian and car shoppers permits a tour of the day's specials before entering the market. Disposition of the entrances permits the shopper to go directly to those departments in which she is interested.

"Having been designed for a neighborhood area, land is not at a premium; consequently parking is provided within the site for about 100 cars. Additional facilities could be acquired at the left or rear of the site.

"The entire structure functions as a dignified advertisement. The Thermolux glass-paneled area above the main entrance has changeable letters and can be used as a directory of the various departments inside. Brilliantly lighted from behind, the directory panel could be effective by day as well as night. The use of a color key would help to speed up identification of the different sections of the market.

"The building has a continuous light cove at the roof line. Hanging letters, easily reached from the service corridor (see section) could be changed daily or as often as new specials were featured."

CIRCULATION

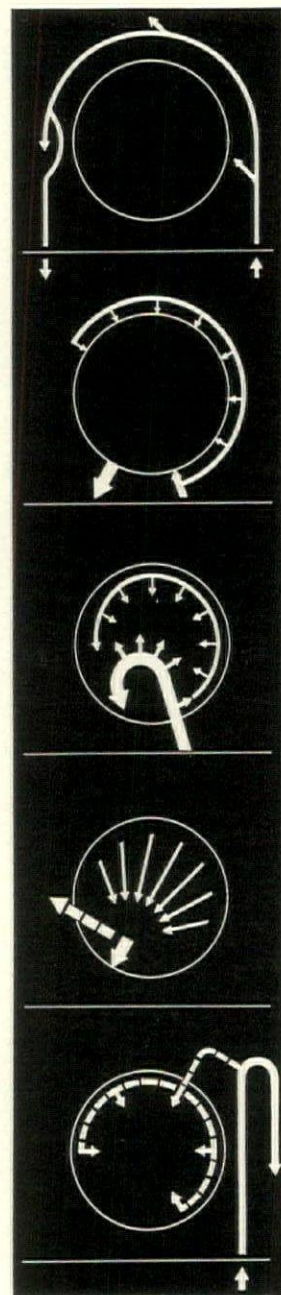
Customers' automobiles. One way only, with a bypass for purchases to be picked up by car.

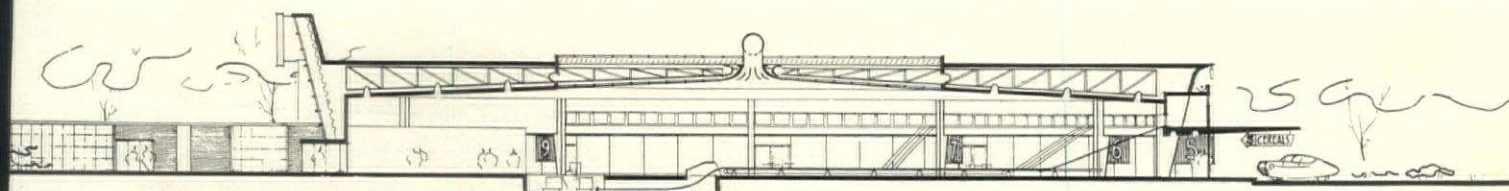
Customers' access and exit. Main and secondary entrances around the circumference of the building, permitting the shopper to go to the desired department the shortest possible way.

Interior circulation for shoppers. Main entrance leads directly to the many departments which radiate from this point. Interior circumferential circulation to avoid through traffic in sales areas.

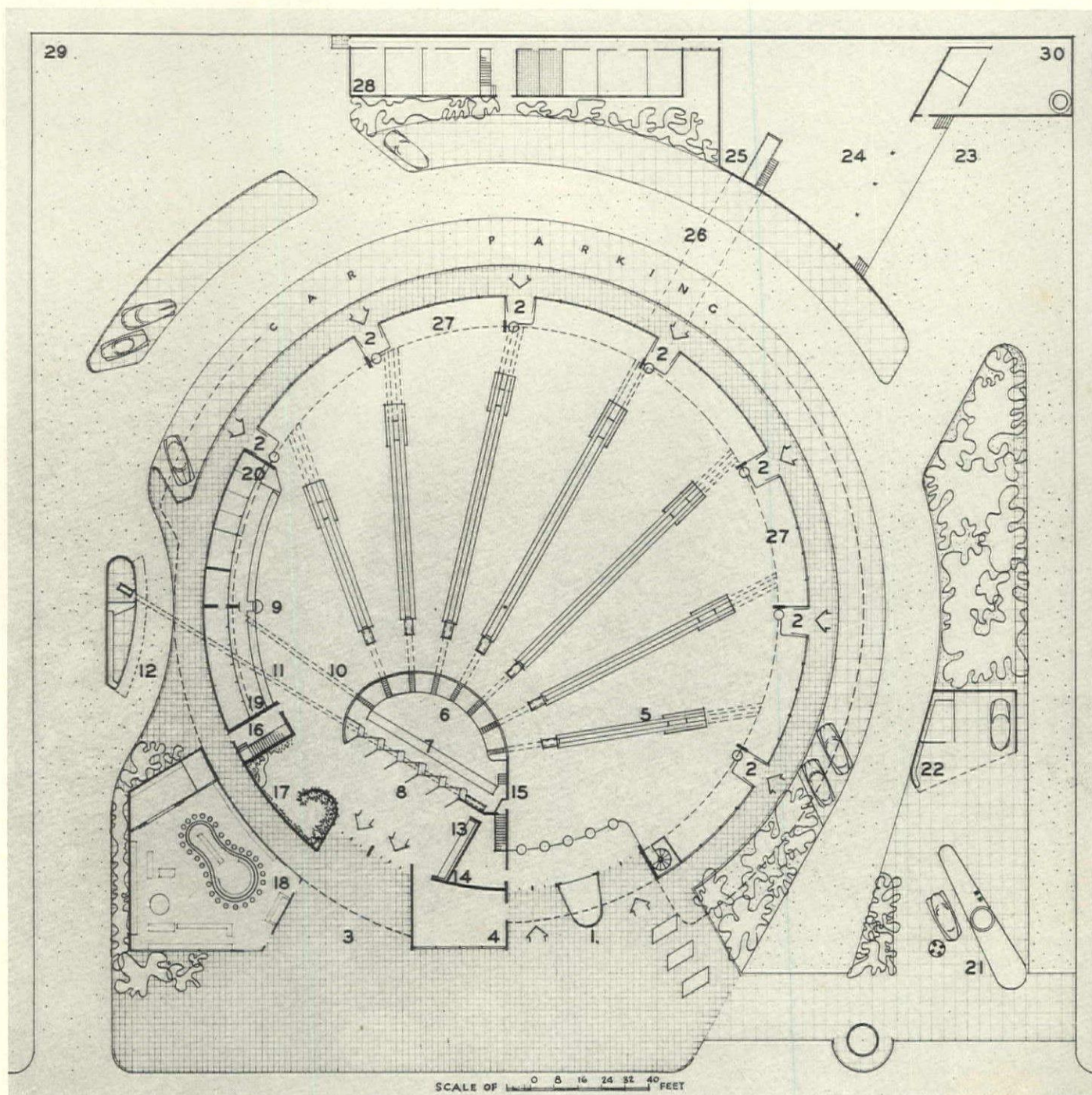
Movement of purchases. All purchases move along the radii toward the center of the system (the collecting area), then to the cashier, and finally to the customer.

Supply and servicing. There is a separate court for incoming goods (23 in plan) with storage unit adjacent. Sales areas are supplied by means of an overhead passage to the mezzanine service corridor which extends all around the sales areas. Interference with the movements of shoppers is reduced to a minimum.





CROSS SECTION

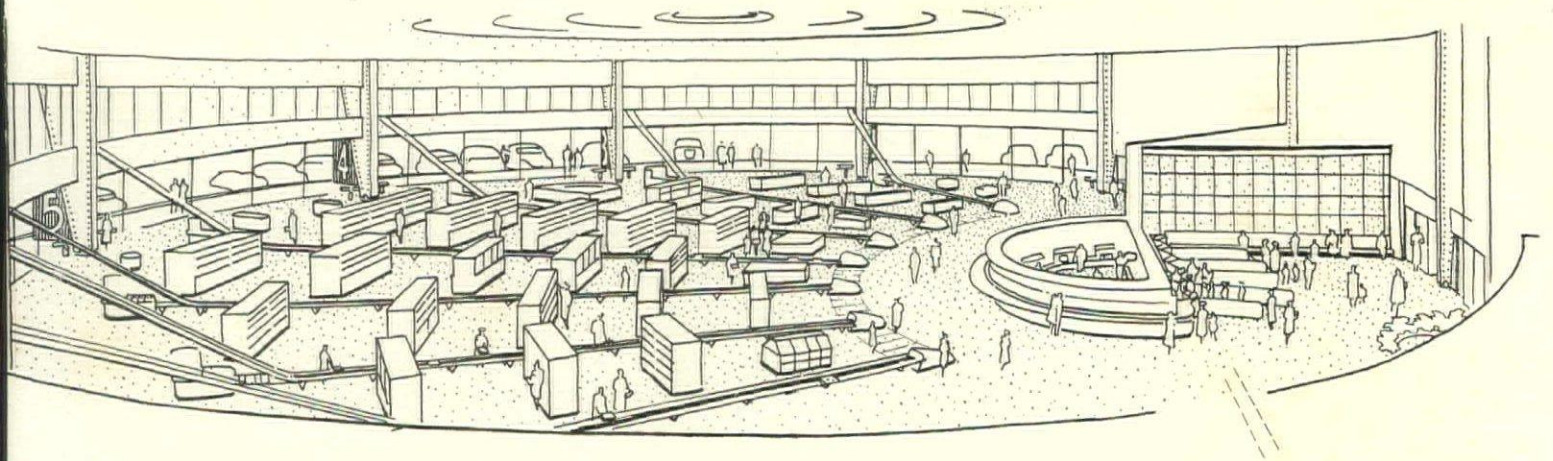


"Basic in the merchandising scheme are the E-Z-Service units. Each customer takes a book of slips bearing a number, which she attaches to merchandise selected. The package is then placed on one of the seven moving belts (5) and carried to the collecting area (6). All packages bearing this number are wrapped together and are picked up by the customer at the cashier's desk. This arrangement leaves the customer unhampered by bulky parcels while shopping.

"The building is of rigid frame construction; there are no columns to obstruct the interior. A large central skylight provides the main illumination."

LEGEND

1. Main pedestrian entrance
2. Secondary entrances
3. Exit
4. Baby station
5. E-Z Service units
6. Collecting area for customer selections
7. Wrapping cubicles
8. Cashiers
9. Cashier: Meats and Dairy
10. Mechanical belt to package assembly
11. Belt to car pickup platform
12. Lane for cars waiting for merchandise purchased
13. Waiting area
14. Manager's office
15. Stair to toilets
16. Employee entrance. Lockers, etc., below
17. Flowers
18. Soda and Drugs
- 19, 20. Meat and Dairy
21. Gas and Oil
22. Lubrication
23. Receiving court
24. Stock storage
25. Moving belt to mezzanine service corridor
26. Overhead bridge to mezzanine
27. Mezzanine service corridor
28. Administration
29. Employee parking
30. Heating, ventilating and cooling equipment



"The entire building is a display case, whether viewed from inside or out. Its characteristic openness is possible because large stocks do not have to be kept in the racks; there is constant replenishment from the mezzanine service corridor above. Individual merchandise stands and the E-Z Service units are easily moved, permitting the rearrangement of sales areas as need arises.

"The various departments of the market are identified by numerals, color, lights and feature displays. Directory signs are thus eliminated in favor of the more important markers calling attention to special items, prices, etc. Ample lighting during the day is provided by the large central skylight and the side windows. At night this same skylight is brightly lighted from above, while other fixtures, such as spots and floodlights, can be grouped and regrouped as desired.

"The shopping procedure is indicated by the drawings. The customer picks up her book with numbered slips at the turnstiles. Each slip carries the same number. A basket is picked up at one end of the nearest E-Z Service unit. The slip is put in the basket, which is placed on the tempered glass slide, while the customer selects merchandise from the nearby racks. When the basket is full, or when the shopper goes to another department, the basket is placed on the moving belt and carried to the collecting center.

"A customer who has come by car can pay the cashier, getting a receipt in return. The merchandise is then sent by conveyor to the pickup platform, where it is held until the customer drives up. The receipt is used to identify the waiting parcels."

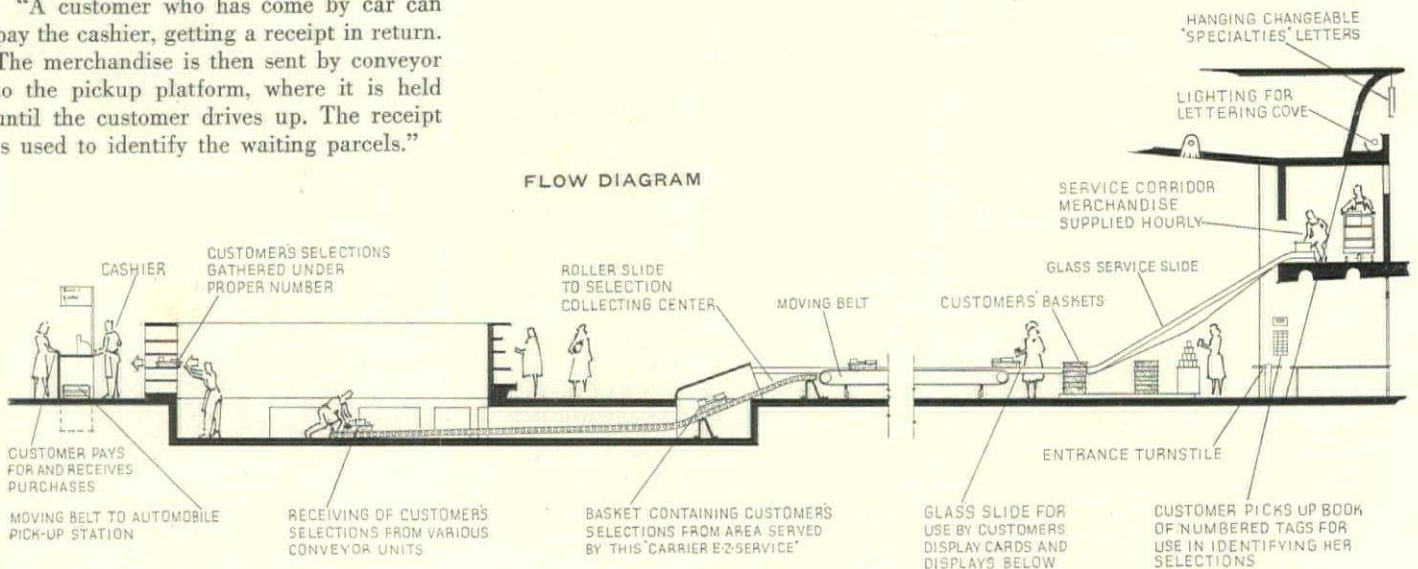
GLASS SLIDE—CUSTOMER GATHERS SELECTIONS IN BASKET ON THIS ILLUMINATED ADVERTISING SPACE BELOW

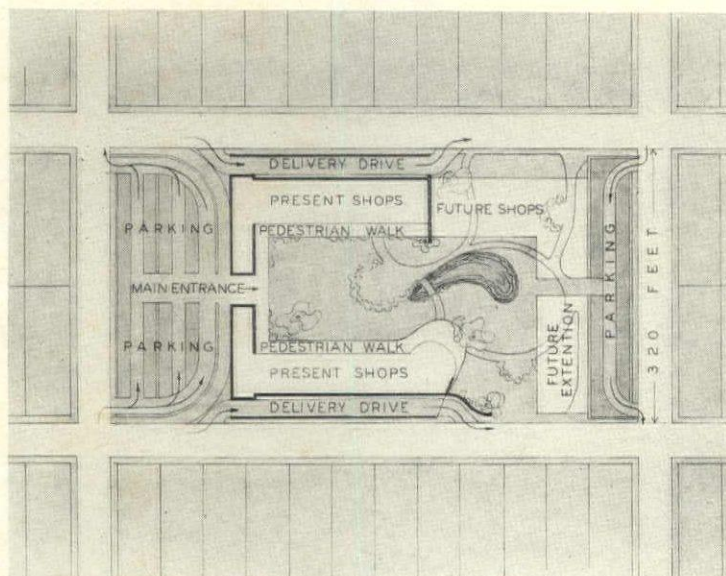
MOVABLE BELT—CONVEYS PURCHASES TO COLLECTING CENTER UPON COMPLETION OF SELECTIONS IN AREA SERVED BY E-Z SERVICE UNIT

WHEELS—TO FACILITATE CHANGE OF POSITION OF CARRIER—THIS FEATURE COMBINED WITH MOVABLE DISPLAY UNITS FOR MAXIMUM FLEXIBILITY

E-Z SERVICE UNIT

FLOW DIAGRAM





"What is wrong with the present neighborhood shopping center?"

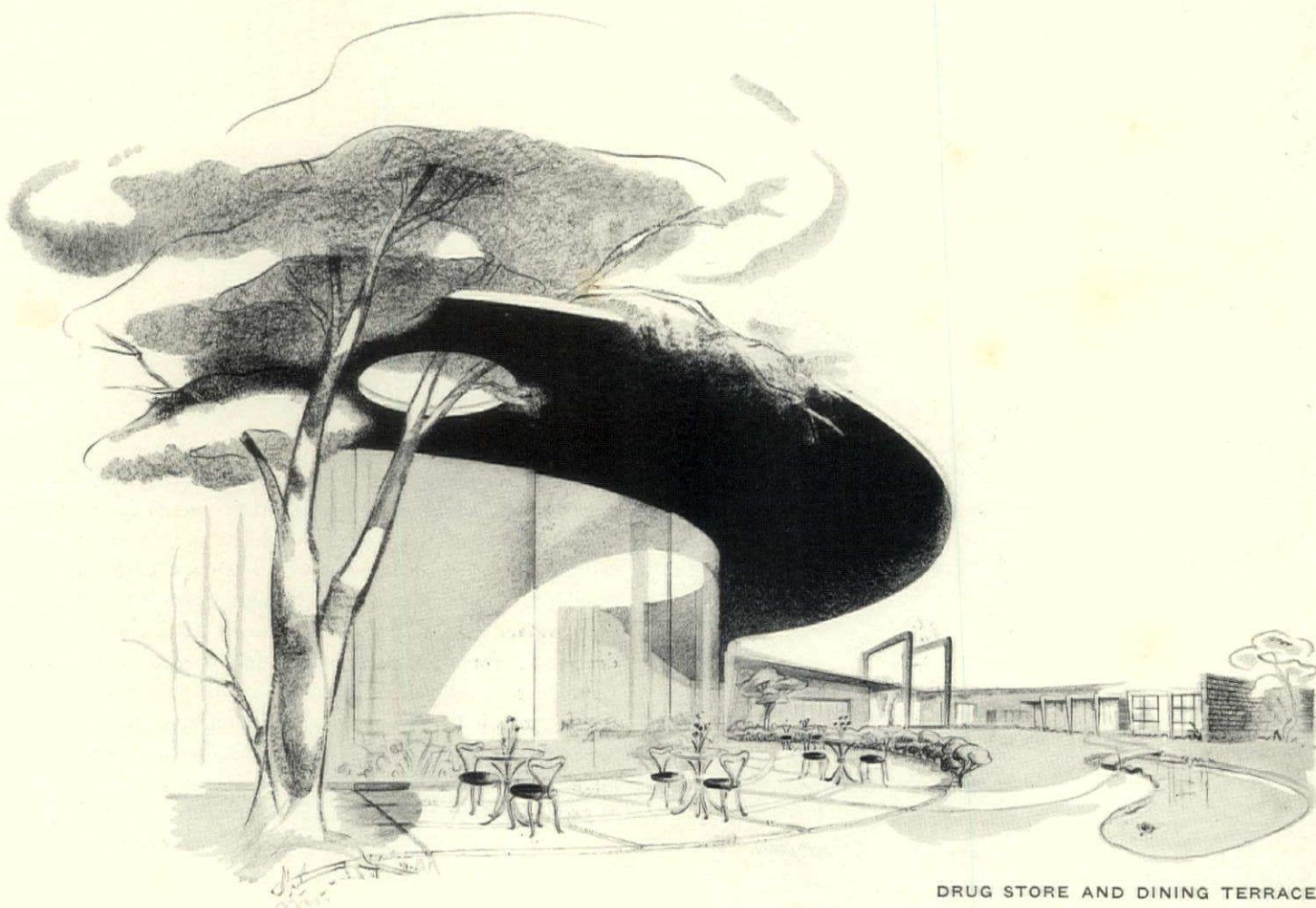
"Stores are lined up on both sides of the street in an otherwise quiet residential section. Shoppers have to cross the street. Parking space is inadequate. There is no protection during rainy weather. Their signs are distracting."

"How can shopping be made more inviting?"

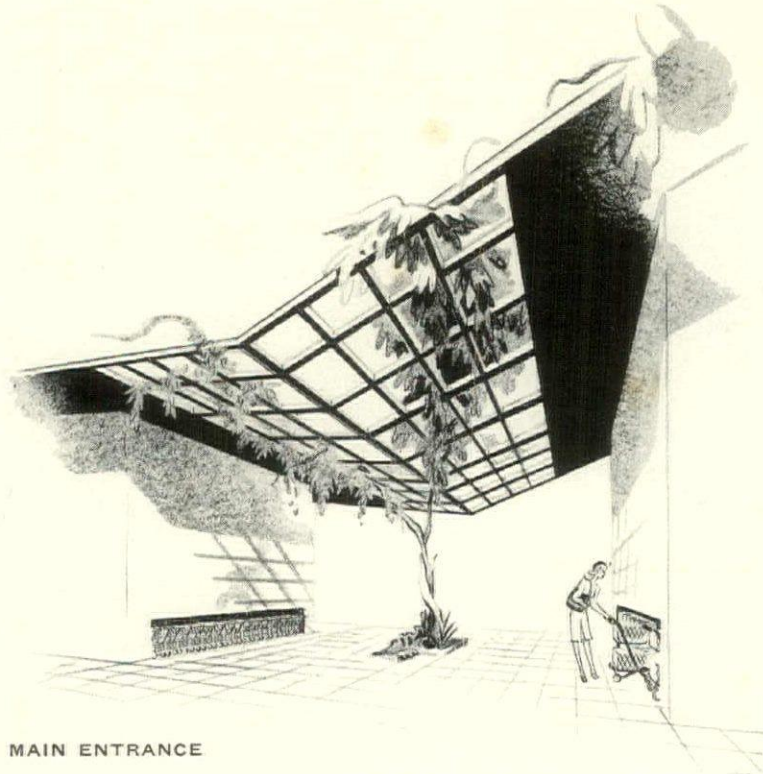
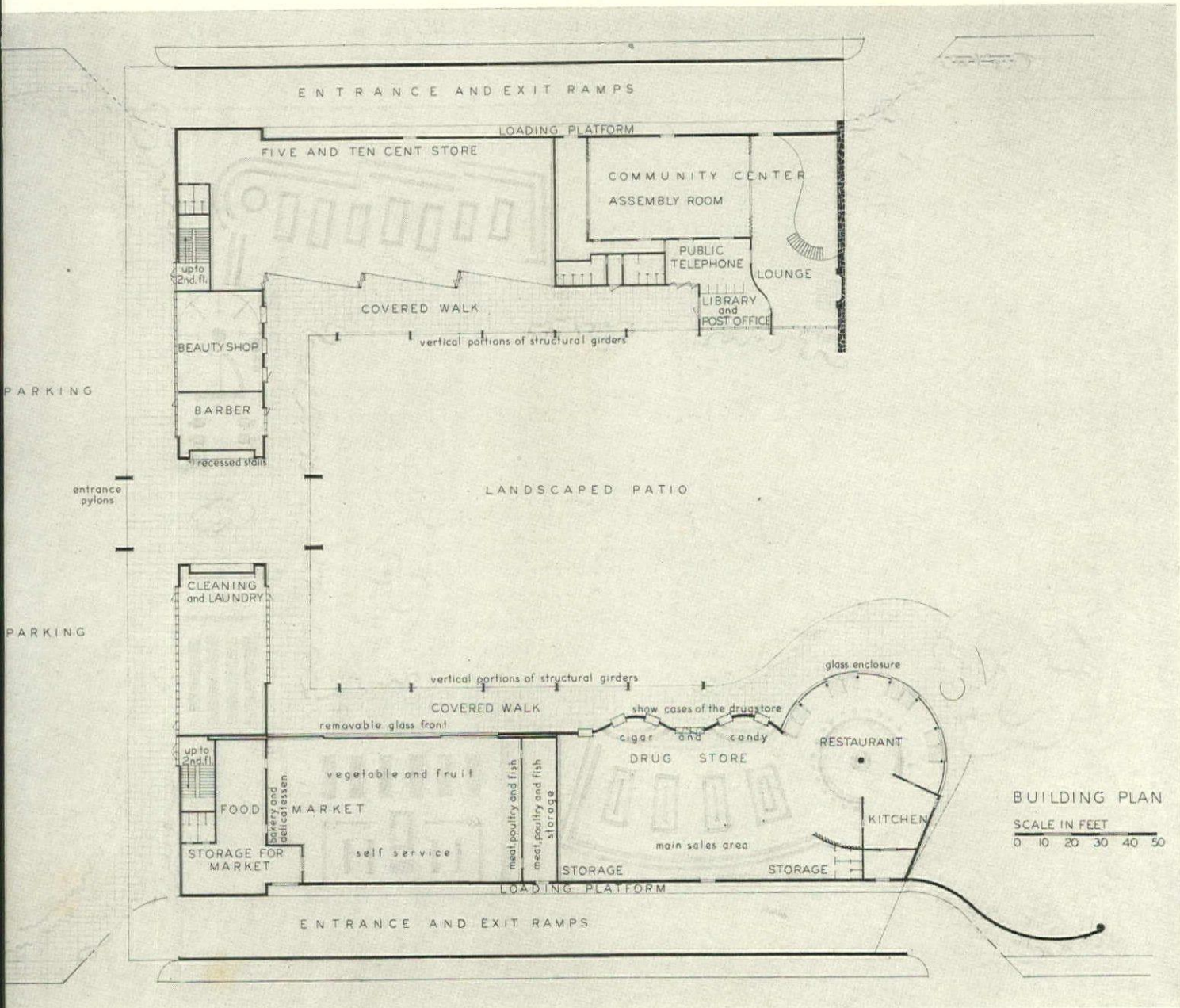
"Shops could be grouped in one building surrounding a landscaped area, as in this scheme. With the exception of the main entrance the outside is modest in character. No advertising disturbs the appearance of the residential streets. Each end of the block has parking space and loading and unloading are carried on behind screen walls. For the shoppers there is a covered walk connecting all the stores, a restful atmosphere and protection from automobile traffic."

"All necessities of day-to-day living can be found in the shopping center: post office, circulating library, doctors' and dentists' offices, and rooms for club activities, in addition to the usual shopping facilities. Shopping thus becomes a pleasure, recreation instead of a chore."

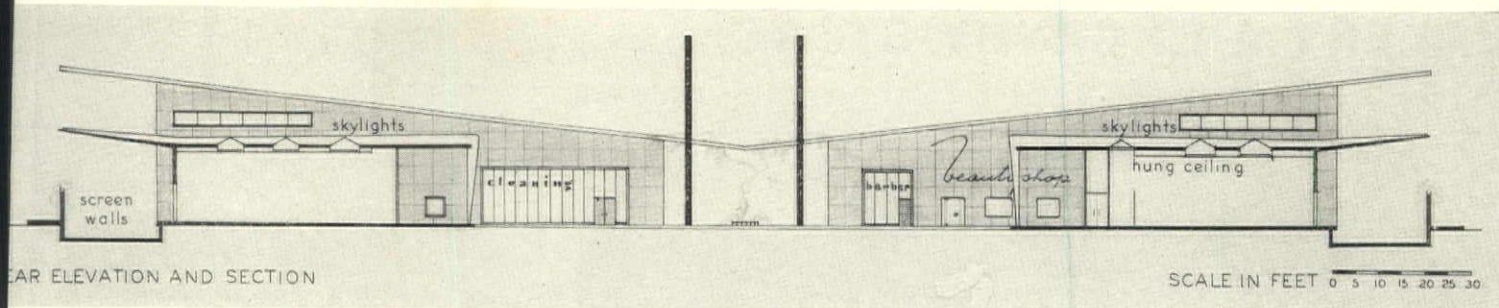
"Larger centers could be built on the same principle, covering several blocks. Automobile traffic could be diverted around such centers or if necessary, under them."



DRUG STORE AND DINING TERRACE



The plan above shows the portion of the shopping center which would be built first. At this stage the group includes most of the facilities required by the average neighborhood, and a number which are not customarily provided. The architects have chosen to show a few large units, rather than the usual collection of small shops; the drugstore, for instance, has been developed to include a sizeable restaurant. Most agreeable of the center's attractive features is the covered walk, a boon to shoppers and merchants alike. The sketch at the left shows a view of the main entrance. It will be noted that recesses are provided at each side of the entrance. These would contain shopping carriages similar to those in supermarkets, available for the convenience of customers.



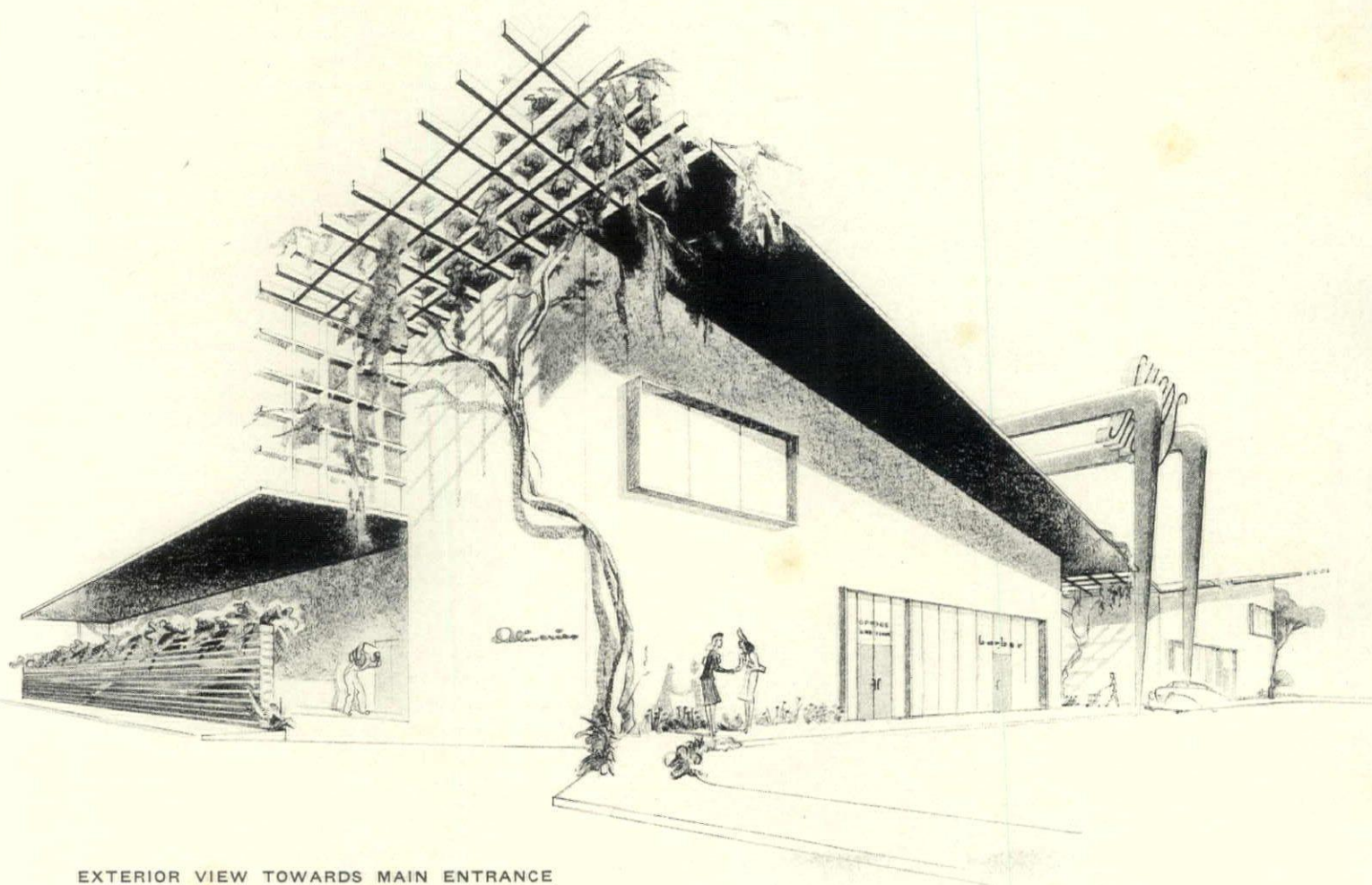
REAR ELEVATION AND SECTION

"There is a danger that a planned arrangement of stores might tend to eliminate the individuality of the shops. This would not only alienate prospective tenants, but would impair the efficiency of store operation, since requirements differ. We have therefore provided a shell whose roof extends from the bearing wall along the rear of the shops to the columns of the covered walk. Thus fronts can be located as desired.

"In the entirely different treatments of the front of the drugstore, of the market and the five-and-ten-cent store there is an indication of the freedom given individual tenants. Despite the difference in design of the separate shops, the appearance of the group will be unified by the

line of columns and the common canopy edge. The ceiling height, set at sixteen feet, can be lowered if desired.

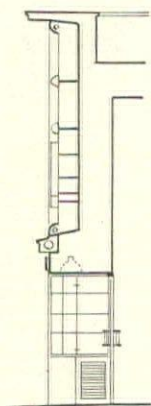
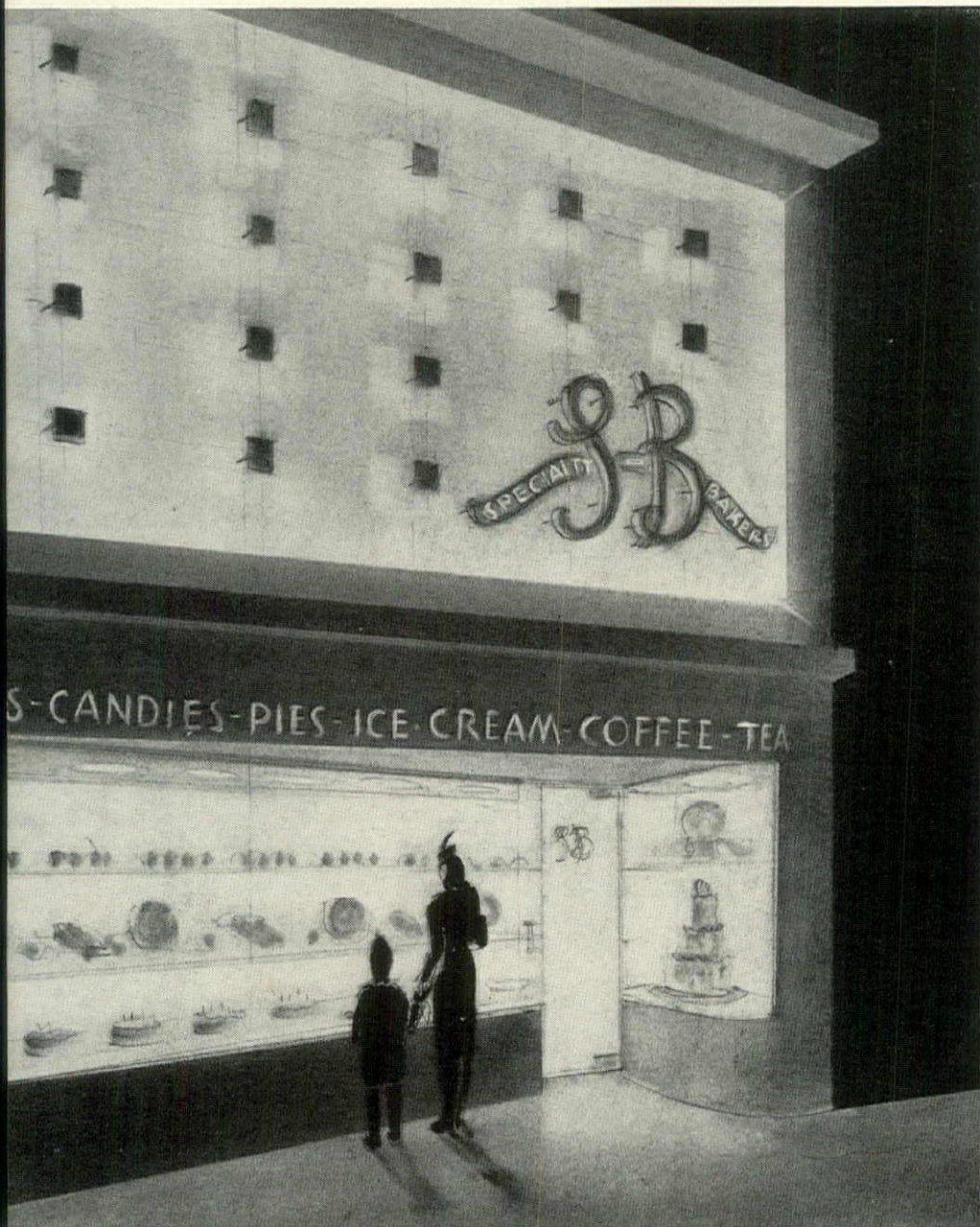
"Tempered plate glass is used in big sheets for the sliding glass panels of the market and the drugstore restaurant. Transparent plastic, as now used in the gun-blisters on bombers, forms the showcases of the drugstore and beauty shop. Weatherproofed hardwood-veneered plywood panels are used to cover the outside walls of the two-story front building. Opaque plastic covers the columns, and is suggested as covering for the wavy front wall of the drugstore. Translucent plastic forms the entrance pylons, giving a glowing effect at night. Luminescent paint is used for the ceiling of the covered walk."



EXTERIOR VIEW TOWARDS MAIN ENTRANCE

BAKERY AND CANDY STORE

MOORE AND HUTCHINS
ARCHITECTS, NEW YORK



"The exterior is of light-green glazed terra cotta in convenient units. Porcelain-enamel sheets might be used as an alternate. Sign recess over the show window is illuminated by projecting lighting units with square metal shields to block direct light."

SITE

"The bakery is located on an interior lot 21 ft. wide and 80 ft. deep. The front of the shop opens on a side street where automobile traffic has been eliminated, the rear faces a parking lot. The gross area is moderate in size, and a single clear span is practicable.

"The bakeshop is complete with all facilities, including space for heating equipment and storage. With appropriate alterations it would be possible to place it in a typical rented store and basement. This consideration determined the width of the shop and the comparatively low ceiling, which is 16½ ft.

FUNCTION

"One principal function is baking on the premises, provided for in the center of the basement. A large view-window into the bakery is provided in the middle of the main floor, making it possible for patrons to watch the baking operations.

"The other principal function is selling the baked goods and candies and filling telephone orders by delivery truck. Display, sales and wrapping counters are provided at the street end of the store.

"As an adjunct to the selling function, space has been provided for a soda and ice-cream counter and tables for coffee and tea-shop business, to promote consumption of bakery products on the premises. There are more tables on a mezzanine.

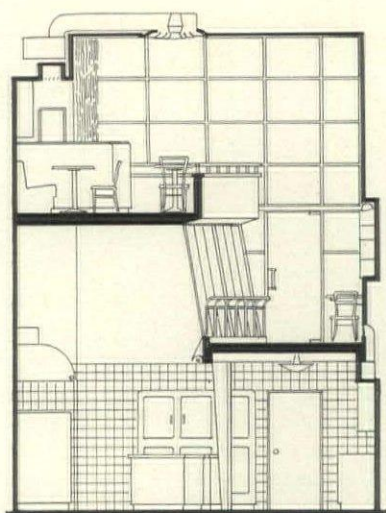
SALES FEATURES

"Consideration has been given to forward-looking sales methods. Bakery products are, however, subject to highly individual selection; they are also extremely fragile. Hence prepacking seems almost impossible, except for candies. Conventional display and sales equipment is therefore indicated, with one exception: vending machines for individual cakes, candies and similar products are provided along the wall opposite the bakery view-window. Tables are placed along this wall so that customers may deposit coins as in the automat and eat at the adjacent tables.

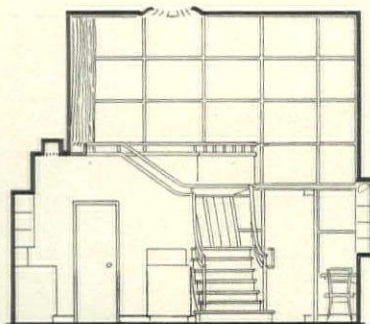
PLAN

"The plan of the shop divides itself into three parts. Display and retail sales are on the street front; the bakery is in the center; local consumption is in the center and at the rear, near the parking lot, where tired shoppers and mothers with children can most easily be attracted. A service entrance has been provided at the rear for use by employees and as a delivery exit for outgoing orders.

"A sidewalk-lift facilitates delivery of goods in bulk. Refrigerators and storage space are located close to the lift in the basement. Near the front of the basement, desk space is provided for the manager."

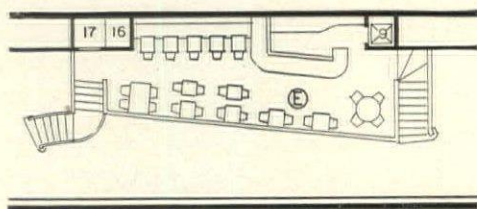
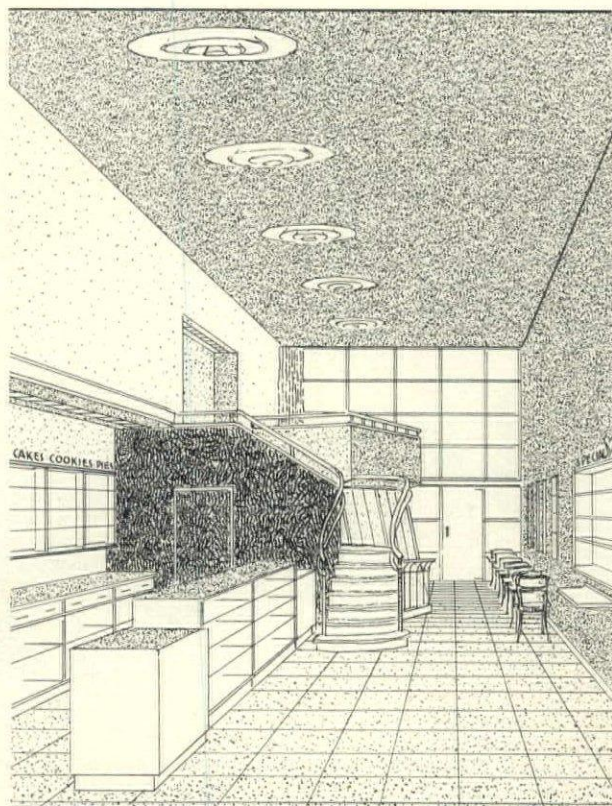


SECTION Y-Y



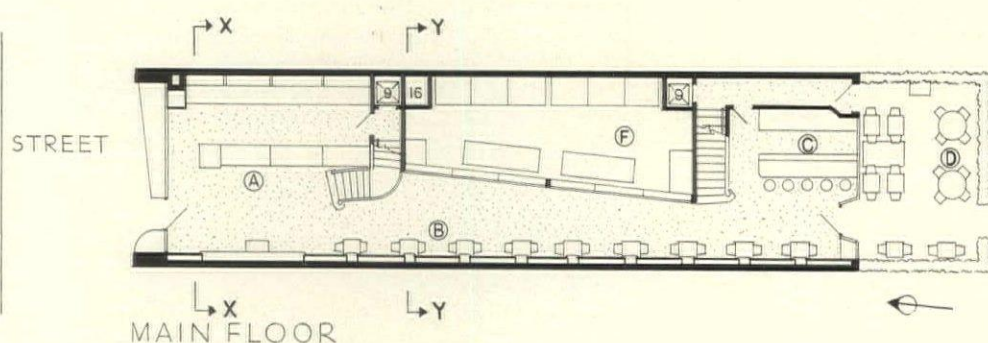
SECTION X-X

"To obtain the desired ceiling heights and provide the view-window opening into the basement bakery, the floor levels have been arranged as shown above. Over the high ceiling of the bakery is a mezzanine for table service. The ceiling and wall opposite the view-window are covered with cork in light tones and illuminated to a low intensity so as not to compete for attention with the merchandise."

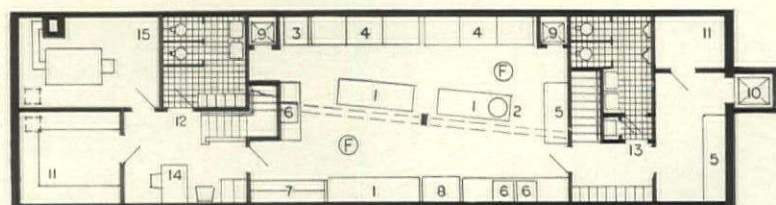


MEZZANINE

- A. SALES COUNTER
- B. SELF-SERVICE MACHINES AND TABLES
- C. COFFEE and SODA COUNTER
- D. SIDEWALK TERRACE
- E. MEZZANINE TABLE SECTION
- F. BAKERY



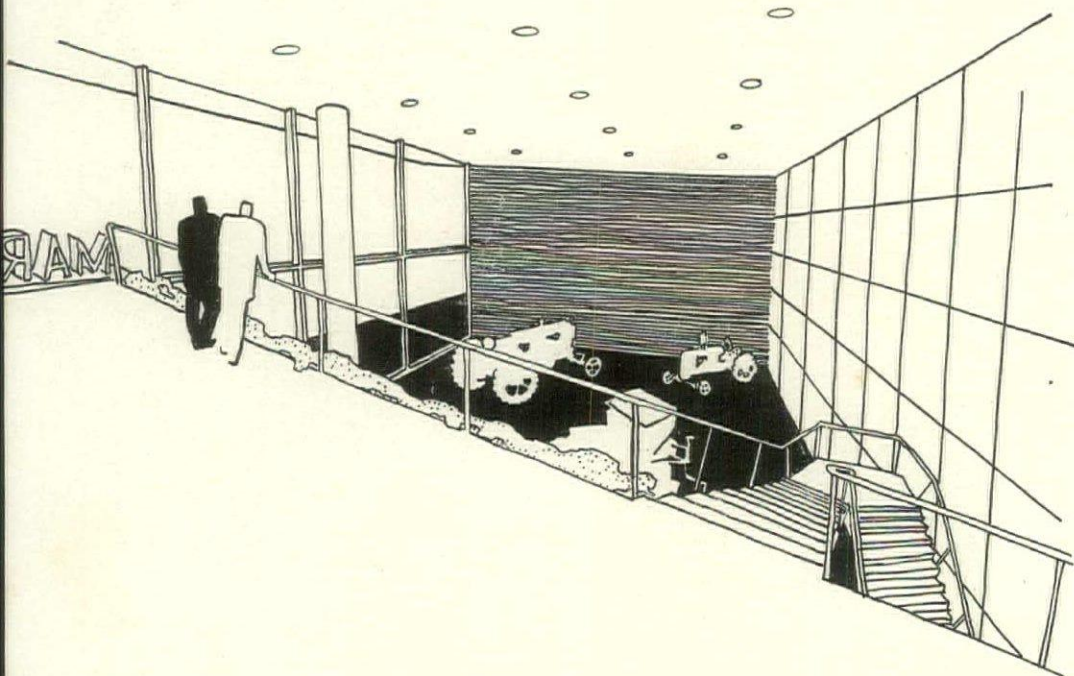
MAIN FLOOR



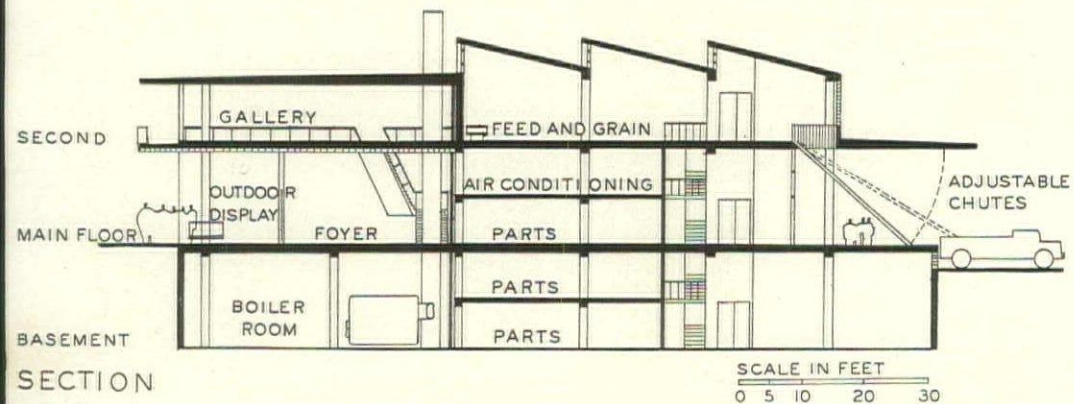
BASEMENT

- 1. Work tables
- 2. Mixer
- 3. Proof box
- 4. Ovens
- 5. Refrigerators
- 6. Sinks
- 7. Utensils
- 8. Cooking range
- 9. Dumbwaiters
- 10. Sidewalk lift
- 11. Storage
- 12, & 13. Employee's lockers and toilets
- 14. Manager
- 15. Heating plant
- 16, & 17. Vents & fans

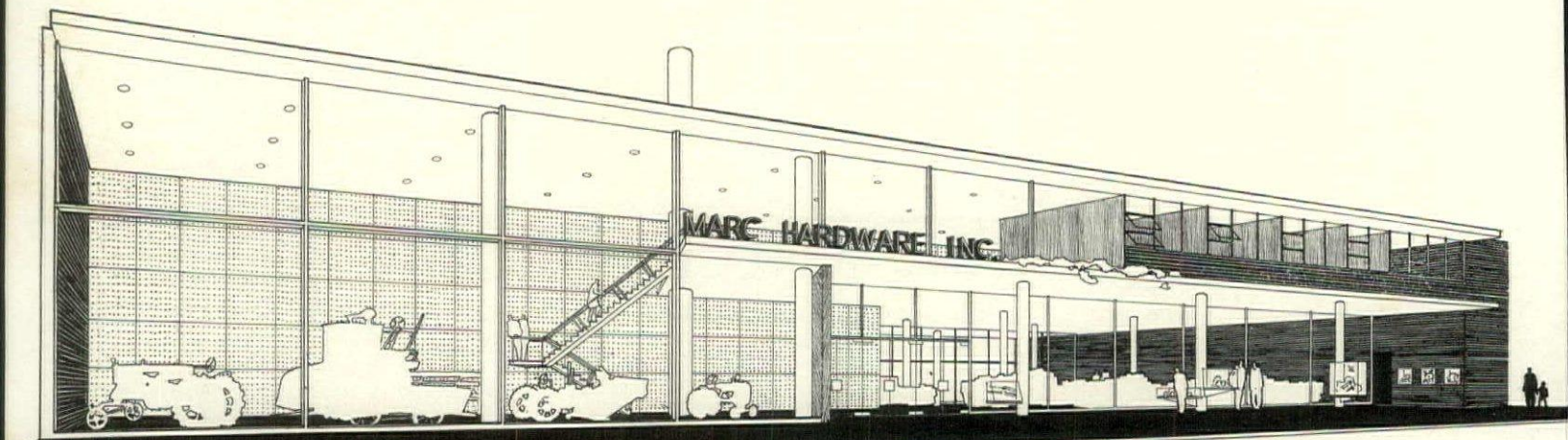
HARDWARE STORE STANLEY SHARP AND JEDD REISNER, ARCHITECTS, NEW YORK



"A high bay room was used to express more clearly the out-of-doors, where the major part of the farm equipment displayed will be used. Such equipment as windmills, haying rig and ensilage cutters can be much more dramatically and realistically displayed in a room of this scale, and the customer can easily see the top of such machines from the gallery."



"The Parts Department is placed for convenient use from both the hardware and repair shop (see plans). Parts are catalogued systematically in storage bins on three levels, with dumbwaiter connection. Orders for feed and grain are taken in the gallery or at a display and sales counter on the first floor. Delivery to storage and removal to customer is by conveyor belt in the former case, and by chute in the latter."



"The 194X hardware store for a town of 60-70 thousand combines the functions of a factory, warehouse, super-market and museum. It will draw not only the farmers and townspeople from the immediate vicinity, but from towns within a 25-40 mile radius. It is a store with a downtown location.

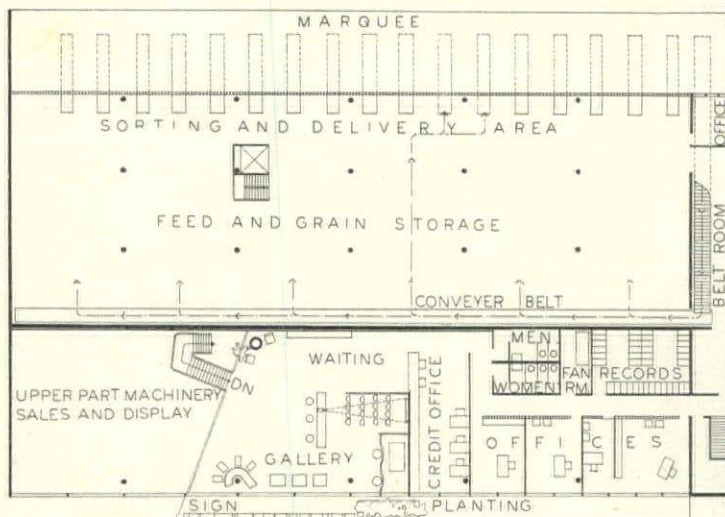
"We have visualized the store as something more than a cut and dried merchandising establishment. As potential customers of this store spend a large portion of their day with machinery, a store of this kind will become a meeting ground for the exchange of new ideas and for the study of new techniques. There is provision for showing films, for instance. Both equipment manufacturers and Government agencies such as the Department of Agriculture could be used as sources for films and other visual education material. Lectures on new developments in farming technique would be equally appropriate. Far from being a distracting influence, such activities would materially reenforce the store's prestige and consequently be reflected in its sales volume.

"This store would not deal in bulk grains and feeds. It could not hope to compete with commercial elevators because of its downtown location and would, therefore, sell "packaged" goods only. Packaged seed, grain, feed and fertilizer take up a good deal of space and a good part of the second floor has therefore been set aside for their storage.

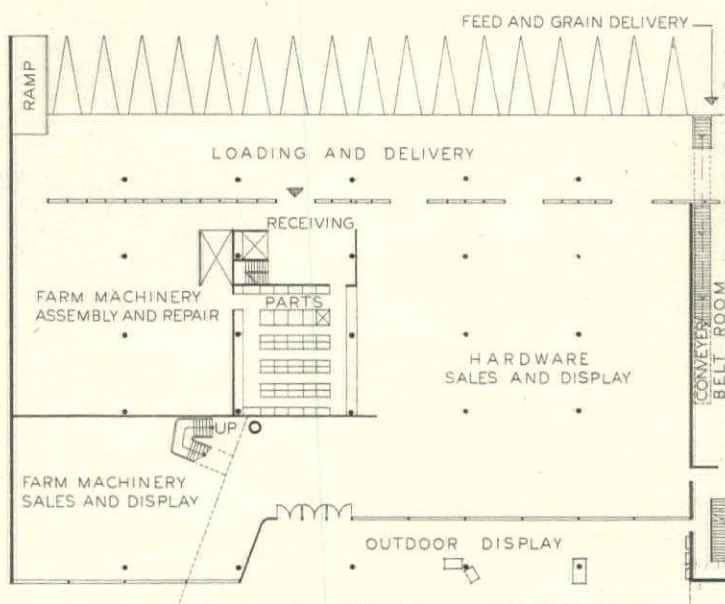
"These factors all influenced the selection of a building site and the general plan. A parking lot should be available to the patrons of a store of this size. It may be placed at any location in the block, and may be used in connection with several other stores in the vicinity. The parking area shown behind the building is located there for the convenience of townspeople and farmers, who can shop in the hardware department while their cars or trucks are being loaded with other merchandise.

"The store is fully air-conditioned, with hot or cold air supplied from the mezzanine fan room through ducts parallel to Main Street. This air drops through 1/4" mesh hardware wire, which forms the finished ceiling. The wire is put up in removable sections for access to lights in relamping. Light is supplied from fluorescent tubes set parallel to Main Street. For greater flexibility auxiliary accent lighting is supplied by spotlight units set in removable mesh sections.

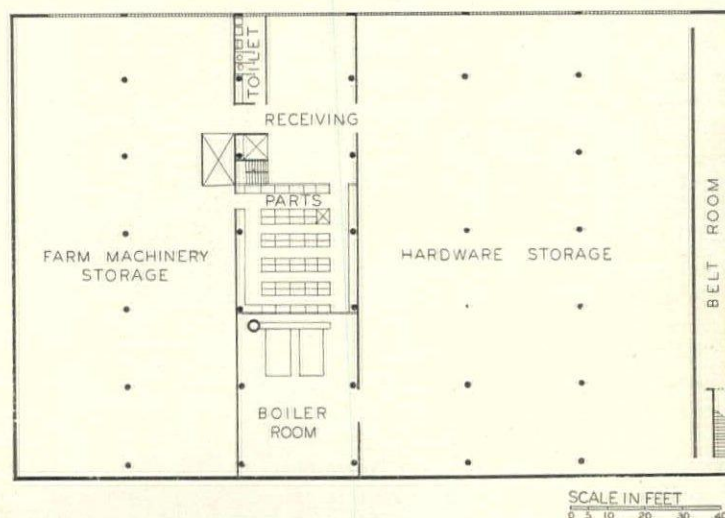
"The second-floor office portion is cooled and heated by cabinet-type units which may be moved about if desired. The feed storage area and the basement are not air-cooled but can be ventilated by the fans in the unit heaters."



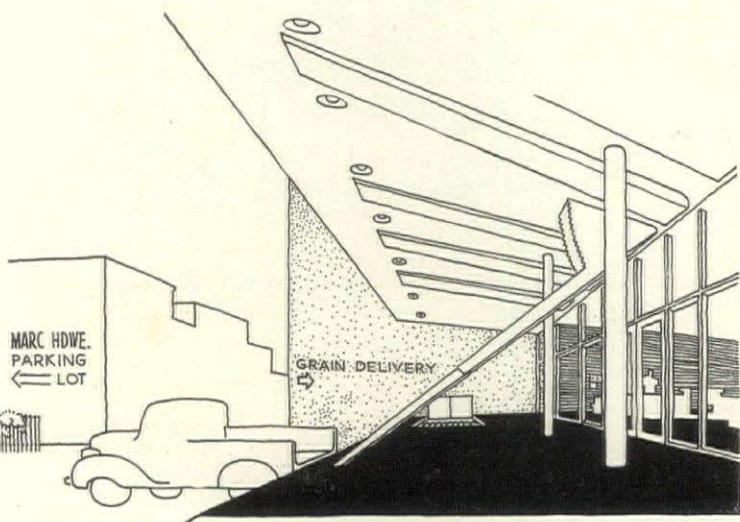
SECOND FLOOR "The purpose of the gallery on the second floor is to house exhibits and displays on technical advancement. Movies will show such things as the operation of new equipment, etc."



MAIN FLOOR "The hardware department, which is accessible from the alley as well, is extremely flexible, as seasonal changes occur rapidly in farming country. There are no show windows in the accepted sense of the word. Small items may be shown in the outdoor display."



BASEMENT "There are two levels of parts storage bins in the basement (see section), connected by dumbwaiter with the third bin on the display & sales floor."

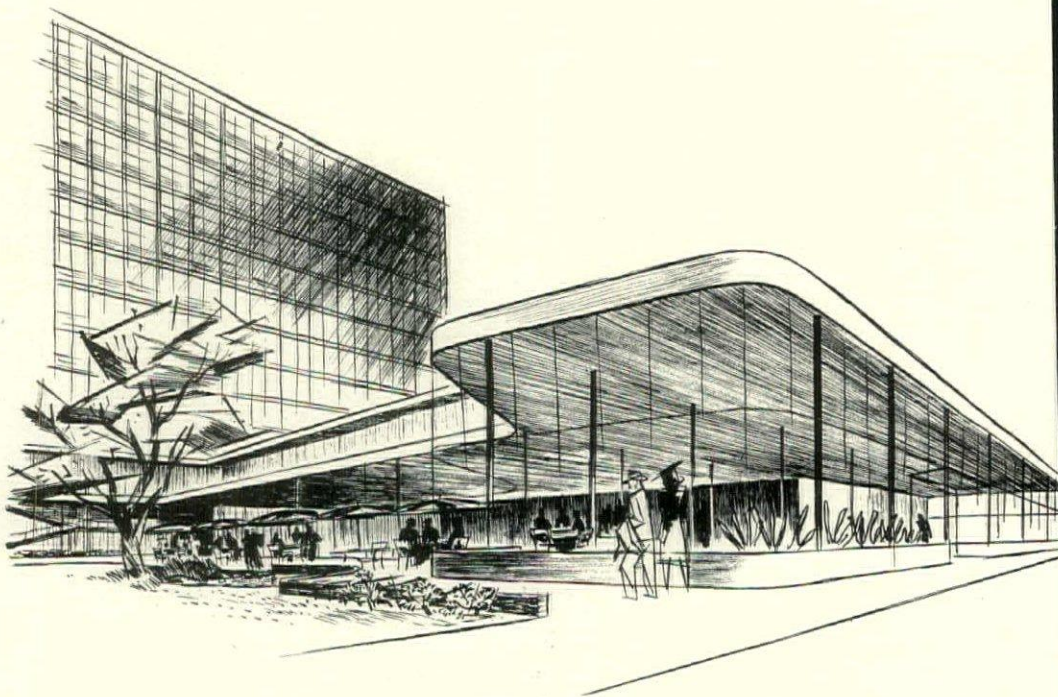


"The important feature of the project, of course, is the one calling for a main street free of automobile traffic. That opens exciting ideas of leisurely promenades, gardens, trees and flowers for a civilized community to enjoy. It is with this in mind that the first floor with its shops, restaurants and cafes was conceived. In the future, an office worker should find that a day spent at his job is a pleasant experience rather than a nerve-wracking one. He should not have to fight a traffic jam or the parking problem to get there; he may lunch in pleasant surroundings, and take an after-lunch siesta in the building club, where he might also take his friends or business prospects. There will be shops for his convenience, a bar if he is thirsty, or he may visit exhibitions, attend meetings or hear concerts if the spirit moves him; he may even take part in rehearsals for his drama club and participate in plays.

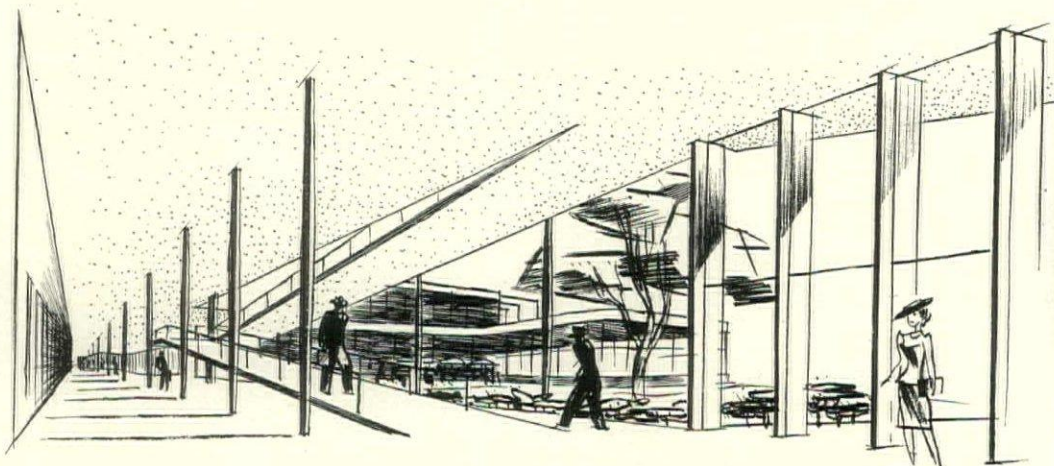
"It is proposed in this design for a medium-sized office building to attempt an architectural expression of this rather different conception of the daily life in an office.

"Our assumptions were affected by the peculiar circumstances found in our northwest region—cheap power and a tremendously expanded production of light metals for war use, which will beg for utilization after the emergency. But we feel that our assumptions need not be exclusive, and that cheap power throughout the nation will be an established Government policy, and light metals will be here for all to use. The prefabricated wall sections for partitions are designed to be fully demountable—sections of light metal frames, covered with colorful plastics. Cumbersome, inflexible materials would be discouraged, and fire-resistant aluminum alloys will do away with concrete fireproofing as now used in steel structures.

"The separation of auto traffic and the provisions for parking are elements, which, however uneconomical in terms of money they may appear today, will have to be faced by the community. The building overlooks a main street in which there will be only pedestrian traffic. The main portion of the building will set back from the property line to preserve air, light and space for all time to come."



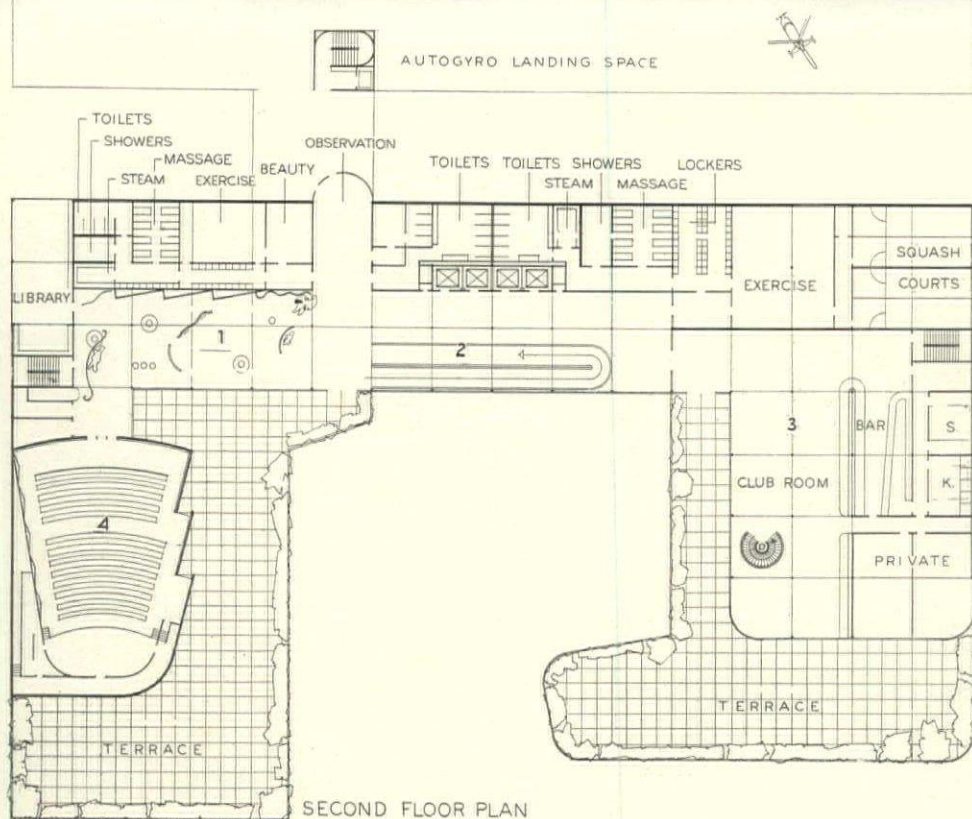
"The office building proper is set back from Main Street, and the community facilities become an integral part of the leisurely and civilized tempo of the 'paseo,' to be enjoyed without the tension caused by the dangers, noises and smells of present-day traffic."



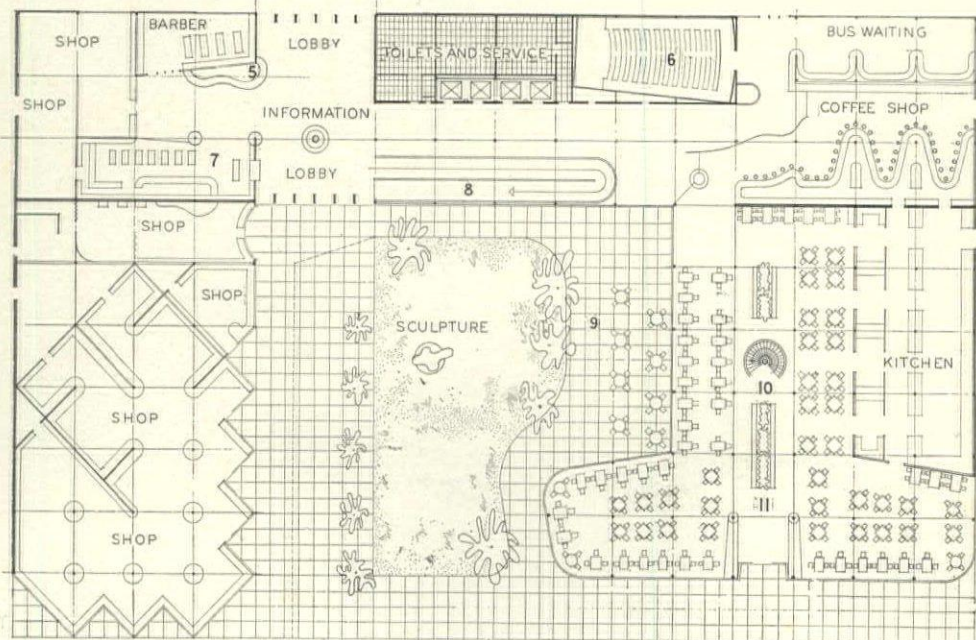
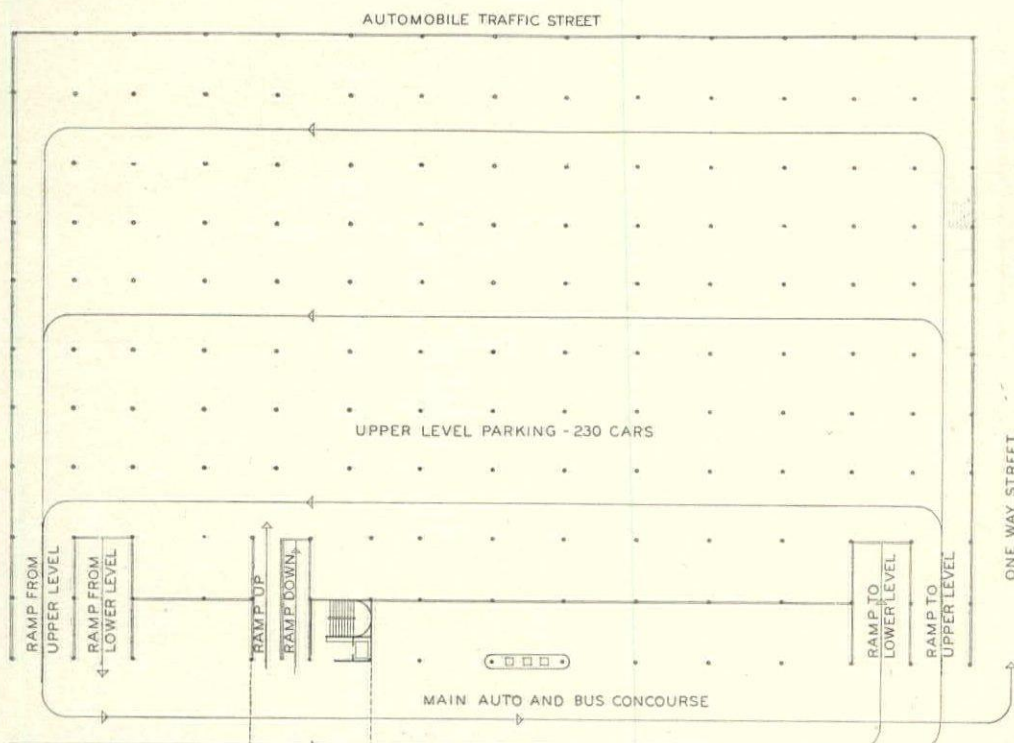
"A long, easy ramp links the community facilities on the first and second floors. This establishes a closer spatial interlocking than could be achieved by the use of stairs or elevators."

KEY TO FLOOR PLANS

1. Space for exhibitions and demonstrations.
2. Ramp down to first floor.
3. Clubroom: upper part of social center of building. Spiral stair links it to restaurant below.
4. Meeting room for lectures, discussions and amateur theatricals.
5. Newsvendor's stand at entrance.
6. Newsreel theater.
7. Drugstore (Soda Fountain).
8. Ramp up to second floor.
9. Outdoor restaurant sheltered from street.
10. Spiral stair up to clubroom.
11. Restaurant accessible both from Main Street and the Office building proper. A more informal coffee shop is located toward the rear.



SECOND FLOOR PLAN

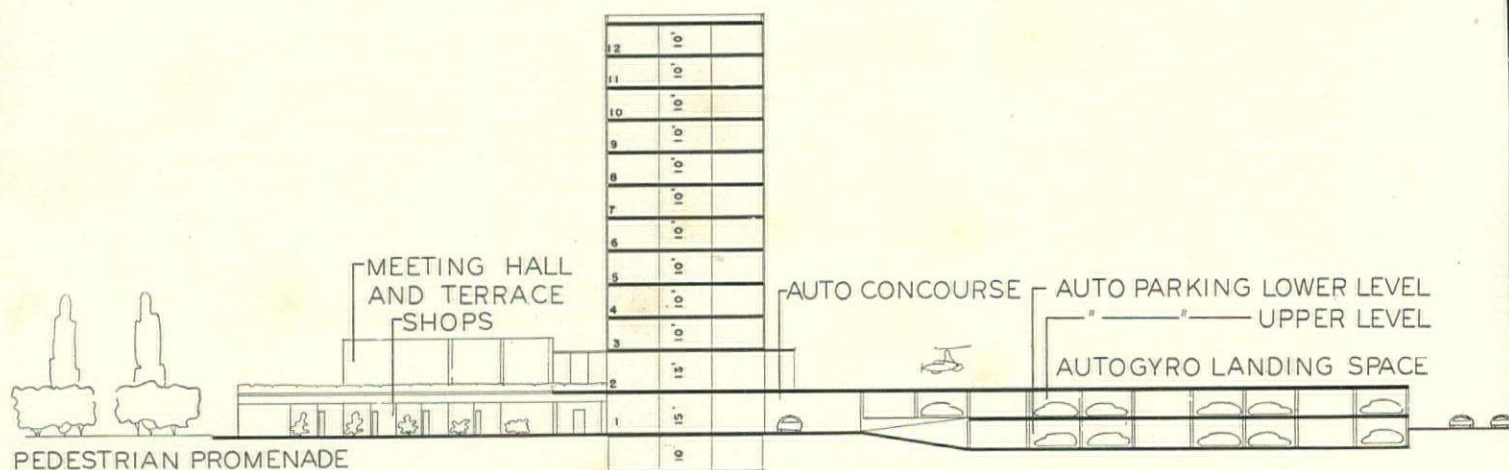


FIRST FLOOR PLAN

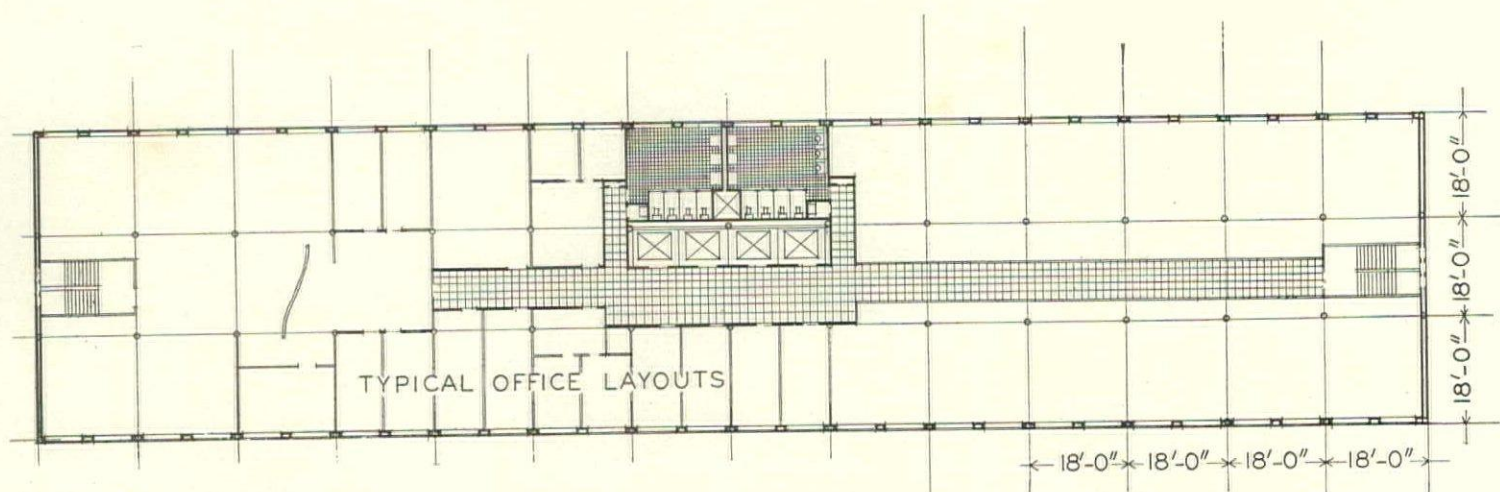
MAIN STREET - PEDESTRIAN PROMENADE

"It should be noted that the problem of transportation has been considered in all its ramifications—including likely trends in future development. If the postwar city is to be a park community on a generous scale, living areas will be relatively far removed from the places of work, such as this office building. In the light of that fact the true entrance to the building may well turn out to be from the rear, i.e., from the parking area, bus concourse and autogyro landing space, thus leaving the Main Street side open and free to develop into an outdoor community space that would reflect accurately the life and spirit of the town."

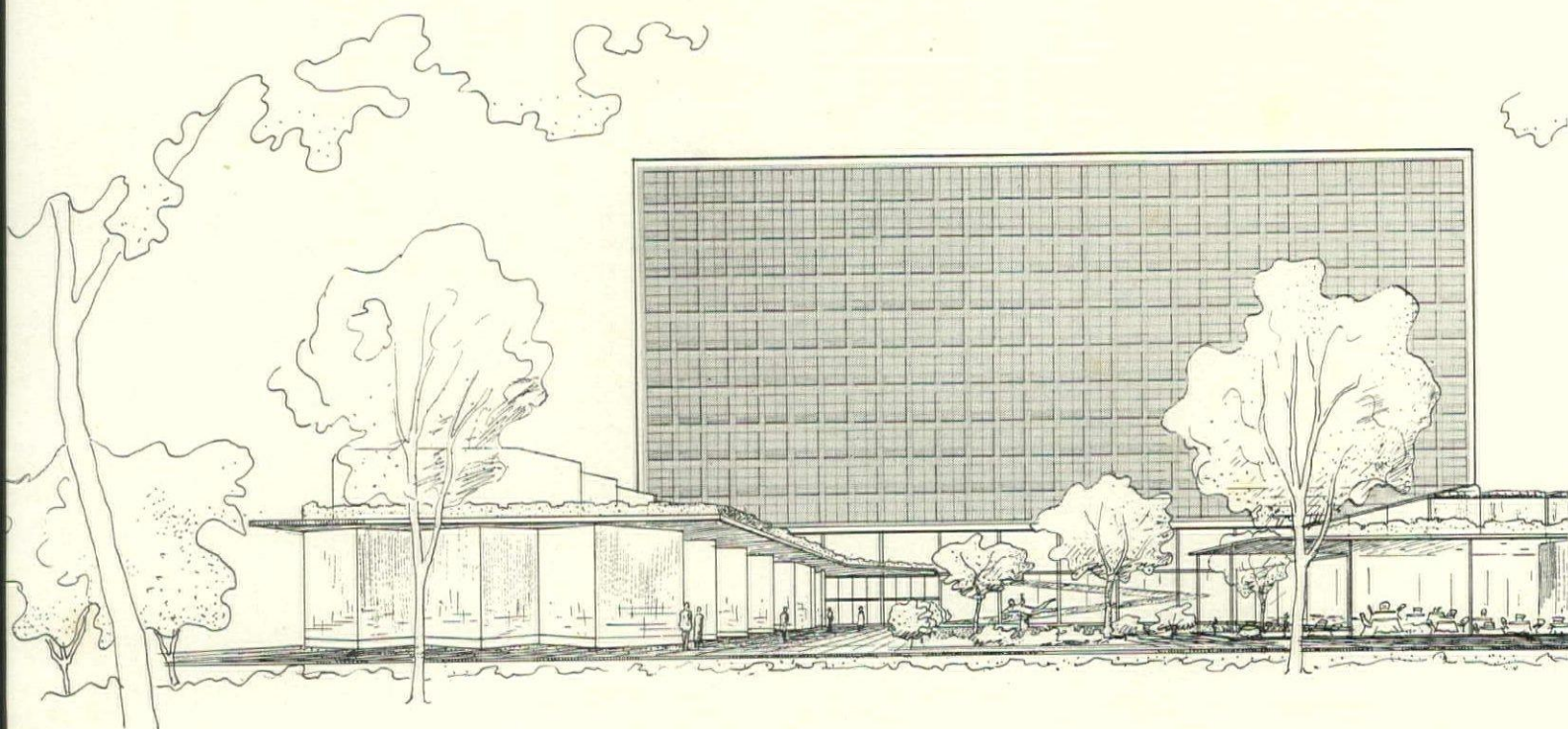
0 5 10 20 30 40
SCALE IN FEET

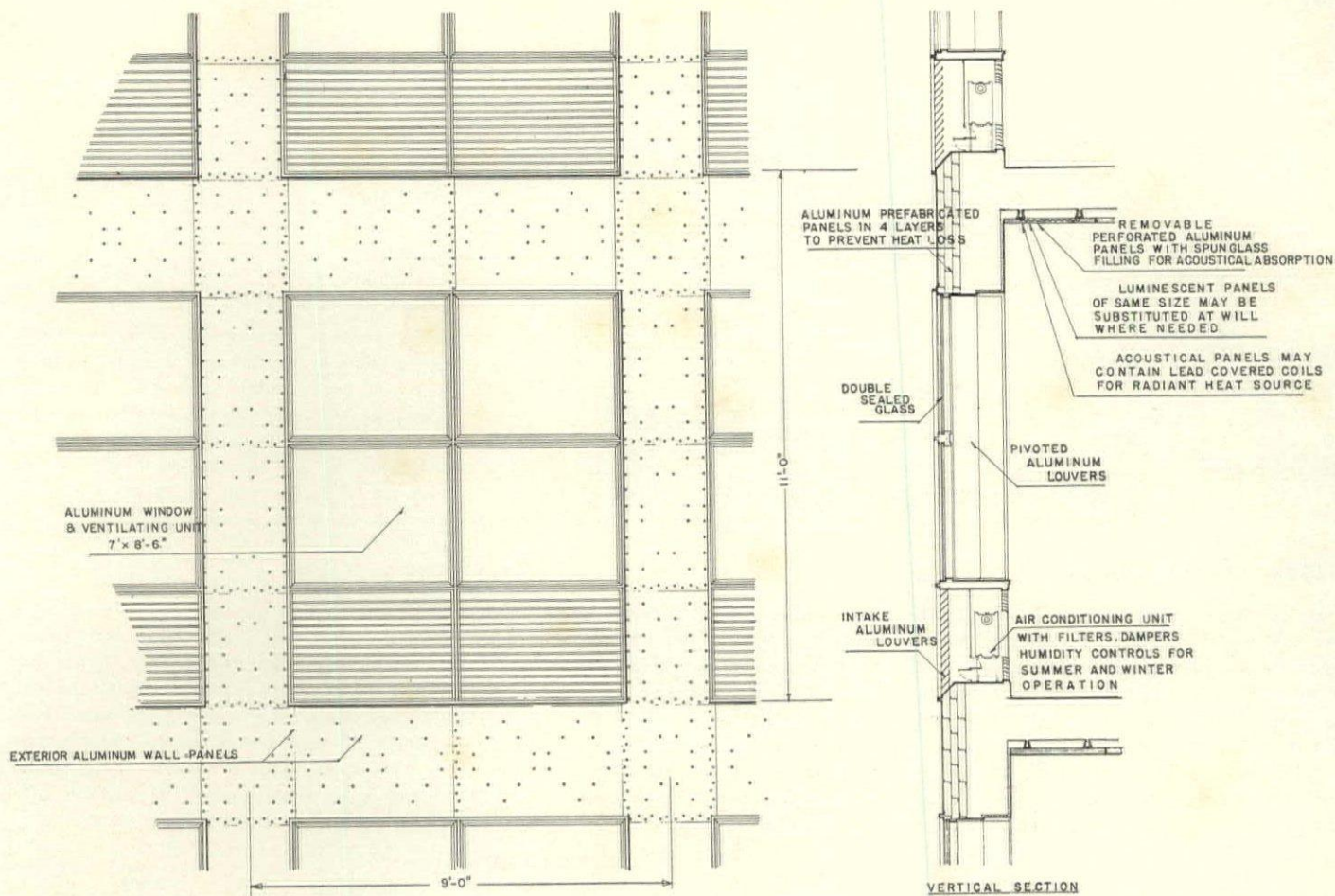


DIAGRAMMATIC CROSS SECTION

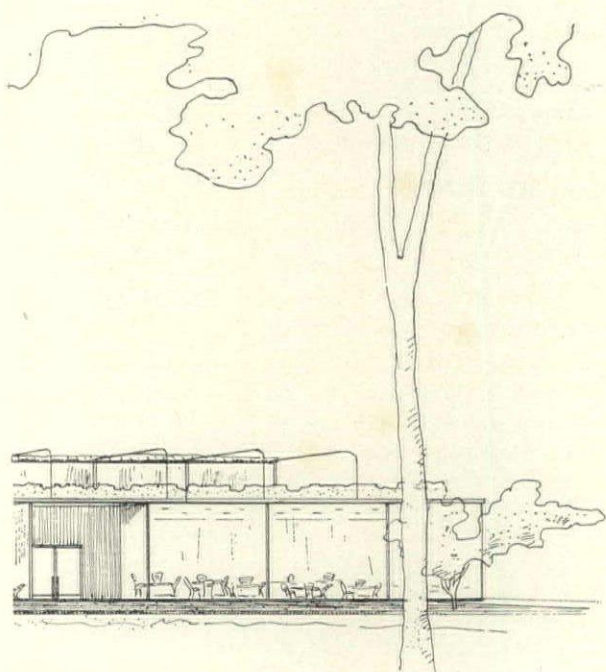


TYPICAL OFFICE FLOOR





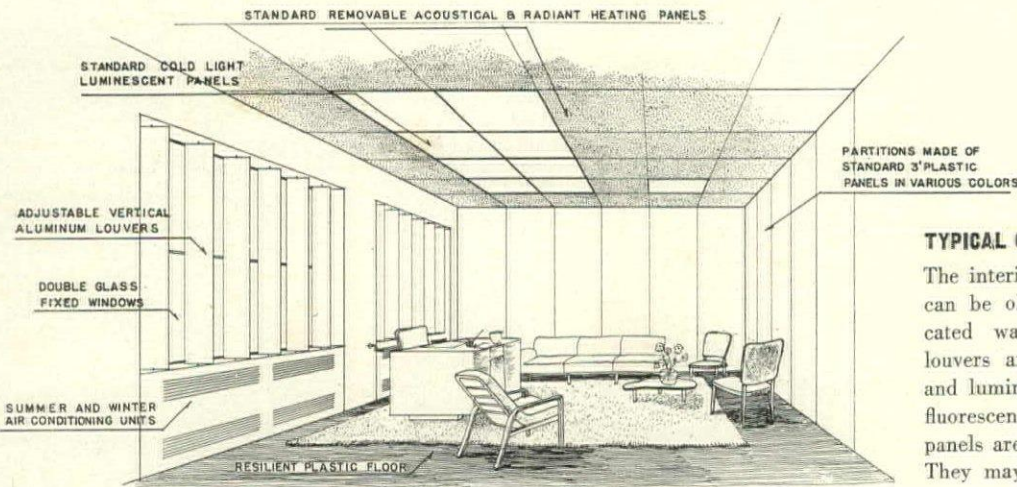
TYPICAL EXTERIOR WINDOW UNIT & PIER DETAIL



"The problem of window cleaning has never been satisfactorily solved. Even outside hooks do not remove the danger to the worker in icy conditions or during the process of placing himself on the exterior ledge. We would, therefore, suggest a permanent rigging on the roof, which would hold scaffolds similar to the travelling type used by painters.

"The vertical aluminum louvers may be omitted on the north side of the building, and can be removed from the south side in the winter as well. The louvers are smooth, easily cleaned and sufficiently separated to allow cleaning of window glass.

"It is possible that the unit heaters shown below the sill of the windows, as well as the ceiling panels, could be controlled by electronics. The word 'luminescent' used for the ceiling light panels indicates a low surface intensity. Fluorescent mercury-vapor tubes would be used."



TYPICAL OFFICE INTERIOR

The interior demonstrates what pleasant patterns can be obtained by the use of stock, prefabricated wall and ceiling sections. Aluminum louvers are used for light control in summer, and luminescent light panels (mercury vapor or fluorescent) as well as acoustical and heating panels are fabricated to fit the structural module. They may be interchanged if necessary.

FINANCIAL BREAKDOWN

"In preparing the financial breakdown, we had to make certain assumptions, which may not be valid for all conditions. In a town of 70,000, rental will be lower than in a larger city; but the cost of land and labor will also decrease.

"The item of loss for the first year is an arbitrary one. It may be assumed that 85% occupancy will be reached sooner

in a building of this nature. It may be that 15% vacancy is too high for a modern building offering unusual facilities, yet these facilities will pay only if the location is right.

"The cost of 60 cents per cubic foot might be considered too low for this type of building, but it is believed that economies resulting from factory-fabricated

units and speed of assembly will make up for the elaborate equipment used.

"The rental rate of \$2.00 per square foot of office space is possibly lower than can be obtained in a building of this class, but it seemed better to be conservative.

"The percentage of return on the equity seems good if the project is built for safe investment rather than speculation."

QUANTITIES

Total cubage of building	2,650,000 cu. ft.
Cubage of Garage	900,000 cu. ft.

AREAS

First floor	37,000 sq. ft.
Second floor	25,000 sq. ft.
Typical floor	14,000 sq. ft.

NET RENTABLE AREAS

First floor including stores and restaurant	30,200 sq. ft.
Second floor facilities: Clubs, theater, gymnasium, etc.	20,000 sq. ft.
Offices—10 stories	106,000 sq. ft.

TOTAL RENTABLE AREA 156,200 sq. ft.

BUILDING COSTS

Cost of land (assumed)	\$ 600,000
Cost of building proper—	
2,650,000 cu. ft. at \$0.60 per cu. ft.	1,590,000
Cost of Garage—	
900,000 cu. ft. at \$0.30 per cu. ft.	270,000
	2,460,000

Interest during construction at 4% on a 60% loan for six months	29,520
Net revenue lost in first year of operation until 85% occupancy is reached.	
One-half of net income	38,000

TOTAL COST \$ 2,527,520

GROSS INCOME

First floor	30,200 sq. ft. at \$2.50	75,500
Second floor	20,000 sq. ft. at 2.20	44,000
The office floors	106,000 sq. ft. at 2.00	212,000
Garage	460 cars and gyro parking	36,000

TOTAL GROSS INCOME \$ 367,500

OPERATING COSTS

Cleaning, electricity, heating, air conditioning, plumbing systems, elevators, general expense, etc. at \$0.55 per sq. ft. of rentable area	\$ 85,910
Maintenance cost—Alterations, decorations, etc. at \$0.10 per sq. ft. of rentable area	15,620
Taxes and Insurance at \$0.30 per sq. ft. of rentable area	46,860
Allowance for 15% vacancy	55,125
1 3/4% depreciation on \$1,860,000 (Cost of building and garage)	32,550
Interest Charges: 4% on \$1,476,000 (60% loan—\$2,460,000)	58,960

TOTAL CHARGES 295,025

NET INCOME \$ 72,475

Invested Capital	\$ 2,527,500
Less Amount of Loan	1,476,000

\$ 1,051,500

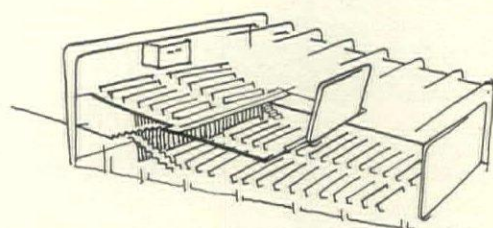
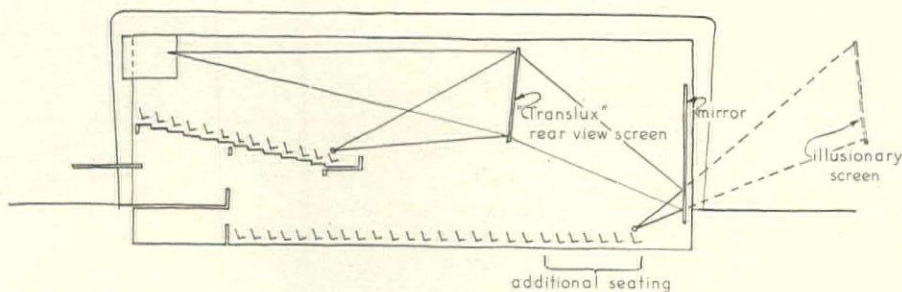
or approximately 7% return on the equity.

In reply to questions by the editors, Mr. Belluschi has provided the following additional information in connection with the breakdown: The estimated cubic foot cost is higher than the actual cost of the five latest office buildings in Portland. Assumptions on operating costs were taken from "Uniform Accounting for Office Buildings", by R. B. Beach of the National Association of Building Owners and Managers. The estimate for the garage is considerably higher than the cost of actual buildings of this type in Portland. Legal fees and brokerage commissions are included in the cost of the land, which is an arbitrary figure anyway. Taxes during the construction period are omitted because in Portland taxes do not begin until the building is occupied.

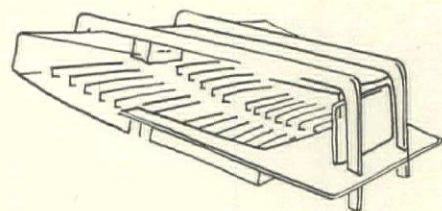
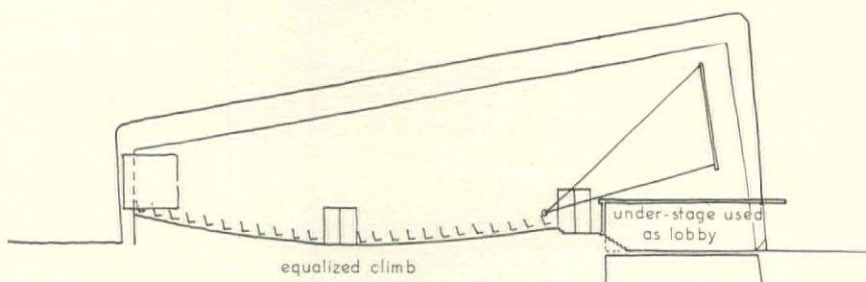
MOVING PICTURE THEATER

CARL KOCH, JOHN JOHANSEN, ARCHITECTS

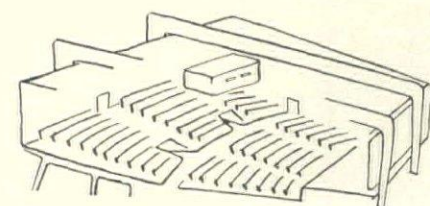
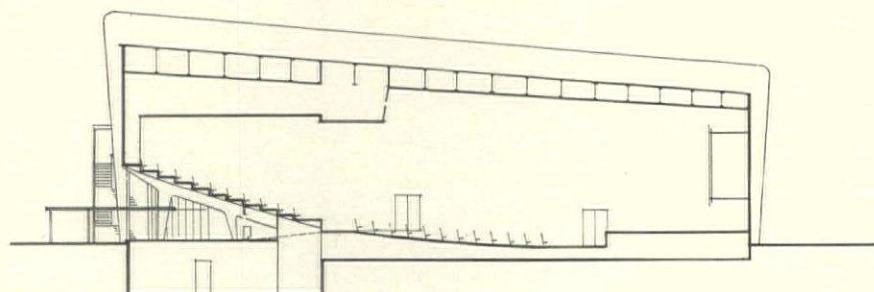
WASHINGTON, D. C.



SCHEME 1.



SCHEME 2.



SCHEME 3.

"The following is no specific plan for a moving picture theater. It is thinking in plan form about what place the moving picture has in the life of a community, and what the ideas behind the mechanics of showing them to people should be.

"Probably more people go to the movies than read newspapers. It is, with the possible exception of the radio, our main source of entertainment and the greatest potential for public education we have.

"If, with the coming of peace, we expand its use to take advantage of its educational possibilities and entertainment functions we can expect changes in the physical facilities for presenting movies. Now, or rather before the war, except in the center of large cities, the theater's main use was restricted to a few hours during the evening. In the future, it will be used as a means for public education, to become an important public service.

"The influence of outworn legitimate theater forms has slowed down the development of design standards for movie theaters. Movies are two-dimensional, and there is no necessity for a deep-level stage. Note how the design of the theater changes through moving the screen around."

In the first scheme an ingenious method of projection and reflection was developed, with the result that a larger seating area was obtained, and the need for a sloped auditorium was eliminated. The scheme was later abandoned—as the architect says: "The mirror scheme used wasn't because we did not know enough about it, and it seemed to have too many drawbacks—loss of light through translux screen and reflection in mirrors being the main one. We included a sketch of it however for what it was worth."

The second scheme represents the next step in the design, later abandoned in favor of the third scheme, whose entrance system seemed superior. "Emphasis in the final scheme is on providing the space in the theater itself, where the time is spent, rather than in lobbies, green rooms, etc., and in the signs of conspicuous waste so evident in the gilded halls of yesterday. There is little intermission during which such fripperies may be admired, and no chance to do the necessary stretching and groaning that theater seating should allow for. Therefore we have kept the rows 4 feet apart. This also permits the number of aisles to be cut down, so as to get back some of the space.

"The projection room is placed forward to shorten the distance to the screen as much as possible to get brighter pictures, and at such a height that the angle of incidence equals the angle of reflection for the majority of the audience."

MOVING PICTURE THEATER

C. KOCH, J. JOHANSEN, ARCHITECTS

"The following factors will be important influences on theater design:

"1. Decentralization:

- Lowering the cost of land in some relation to the use it will be put to.
- Cheaper building cost per cu. ft., as the spreading of buildings lessens fire hazards.

"This will result in opportunities of increasing the space allocated to each individual; which, in turn, will increase convenience, allow for better seating, easier circulation and additional services, such as parking facilities—both to park the car and park the children.

"2. Multiple Use:

- Developments in the field of visual education will demand daytime use of these facilities as well.

"It will be necessary to provide, in the movie theater, comfortable seats with desk-arm for use in daytime. At night these could be used for drinks or snacks. Provide, also, a system of telephones or buzzers to order drinks from the seat directly.

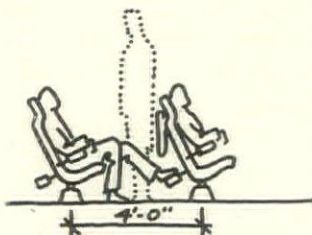
- Developments in television will demand the provision of television equipment. People will want to drop in during the day to hear and see important events and the news. Such daytime use might demand natural light at some times.

"The construction system furnishes the interest, and the glass area was designed to provide more dignified evidence of the whereabouts of the theater than the blinkety blinkers used for this purpose at present. Waiting space is provided off the main circulation and affords some view of the grass-grown street, and outside activities.

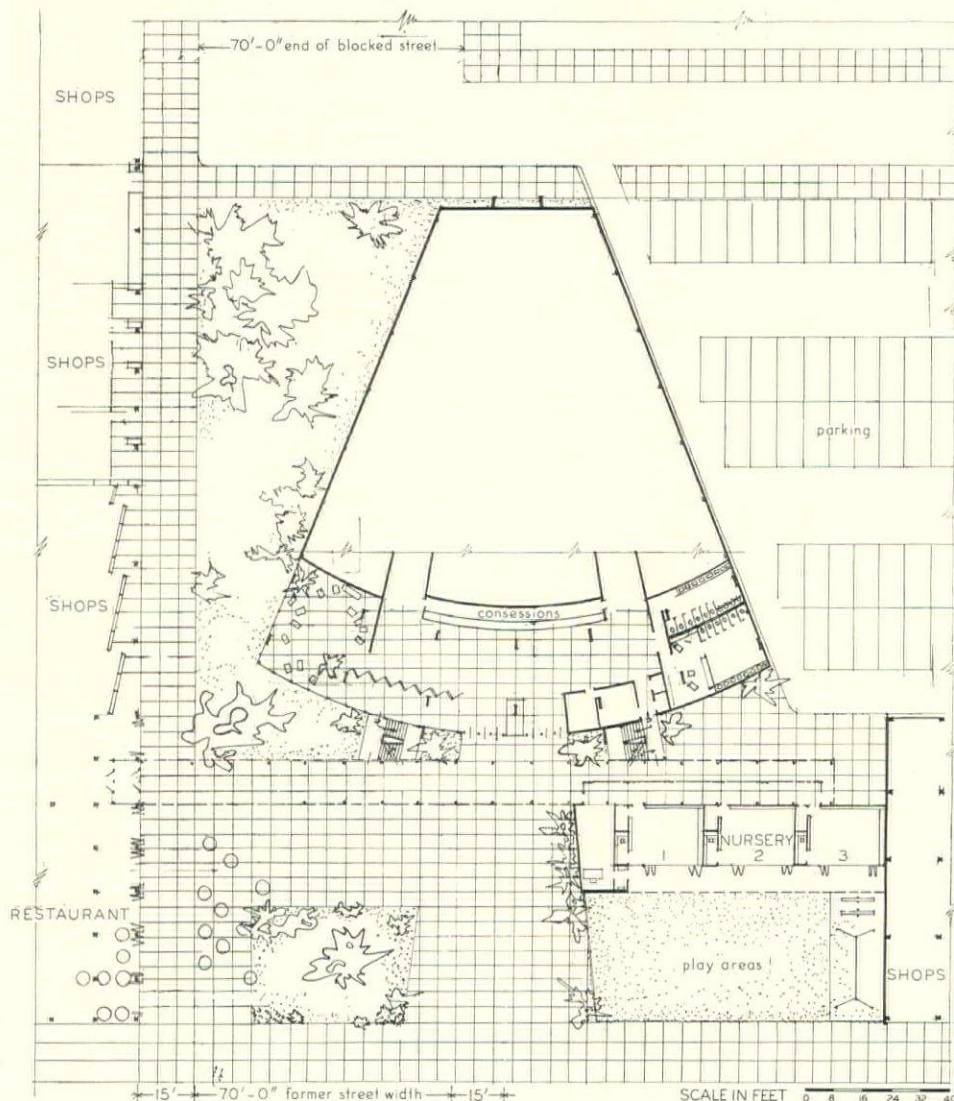
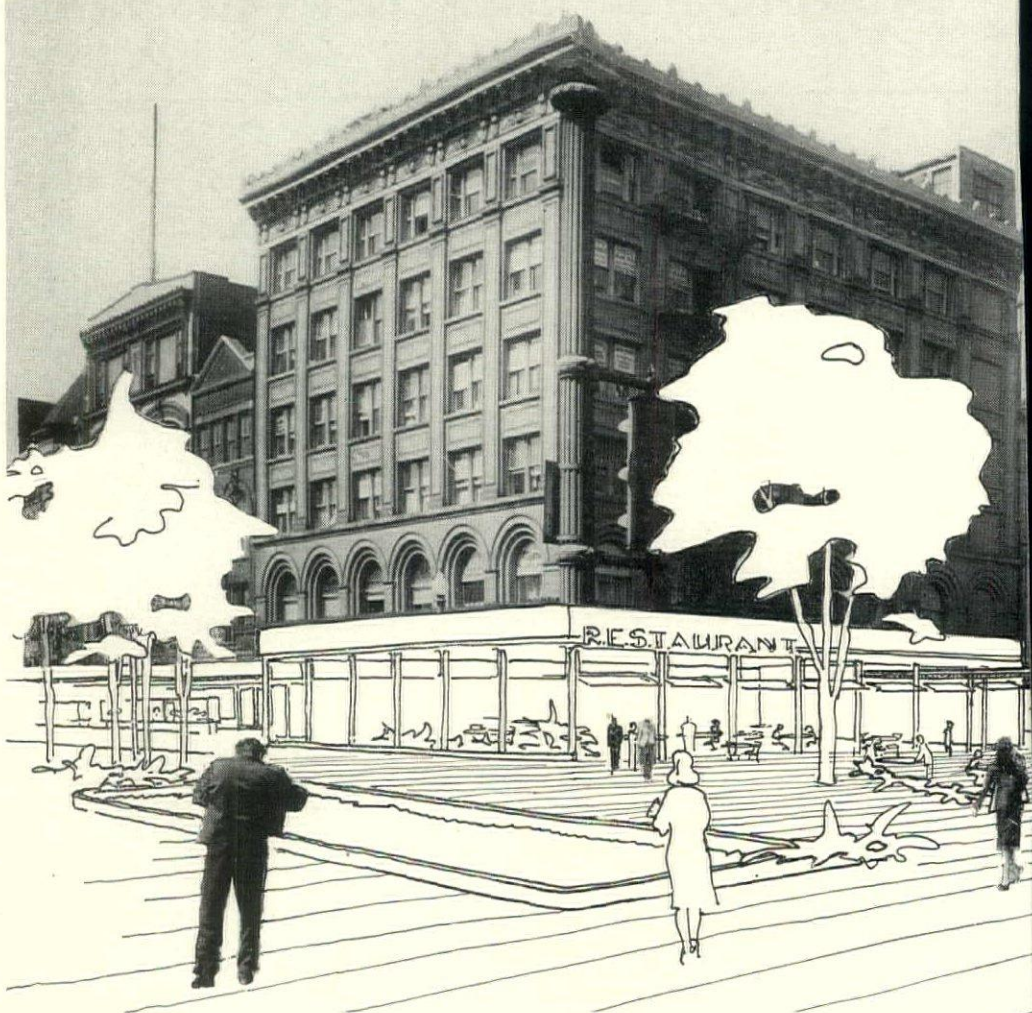
"The vomitory system was used to get the people to their seats in the quickest, easiest fashion, and all the exits are intended to be used."

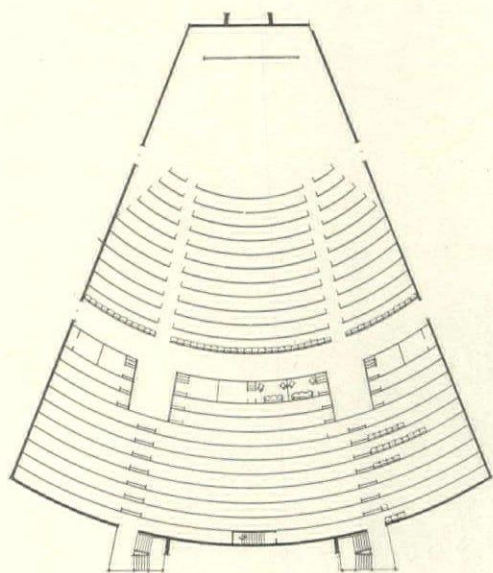
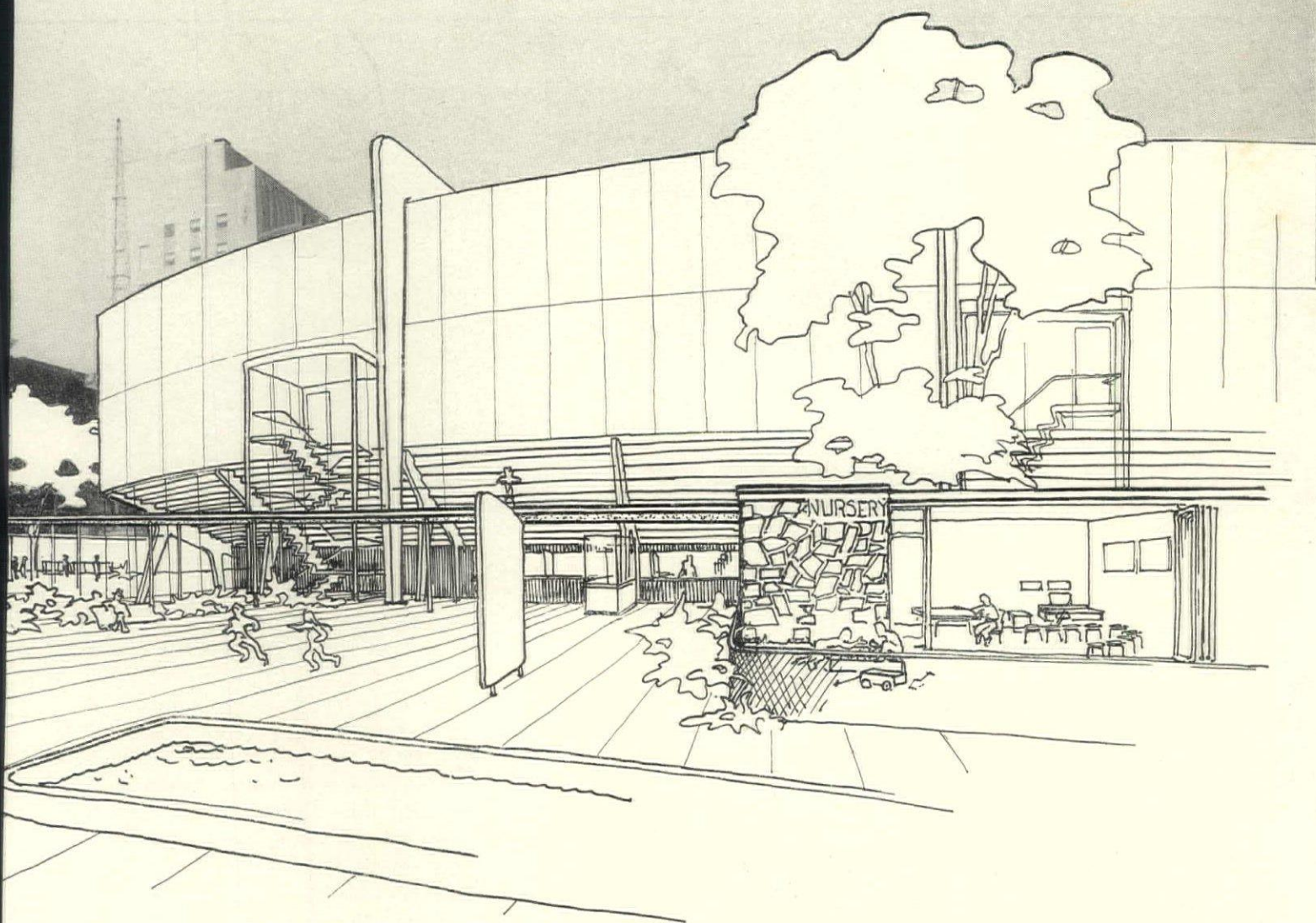


WAITING FOR SEATS

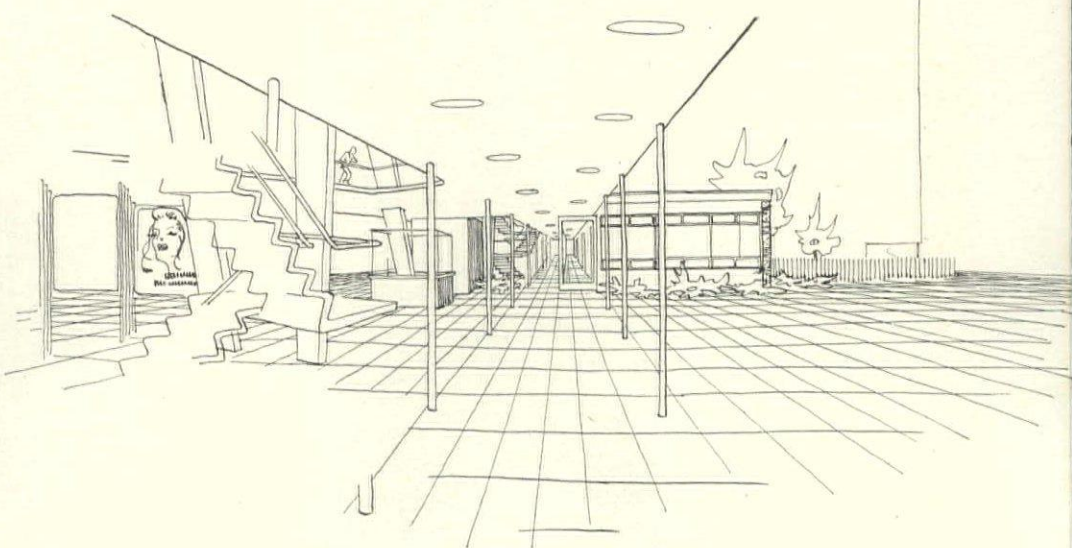


GENEROUS ROW SPACING

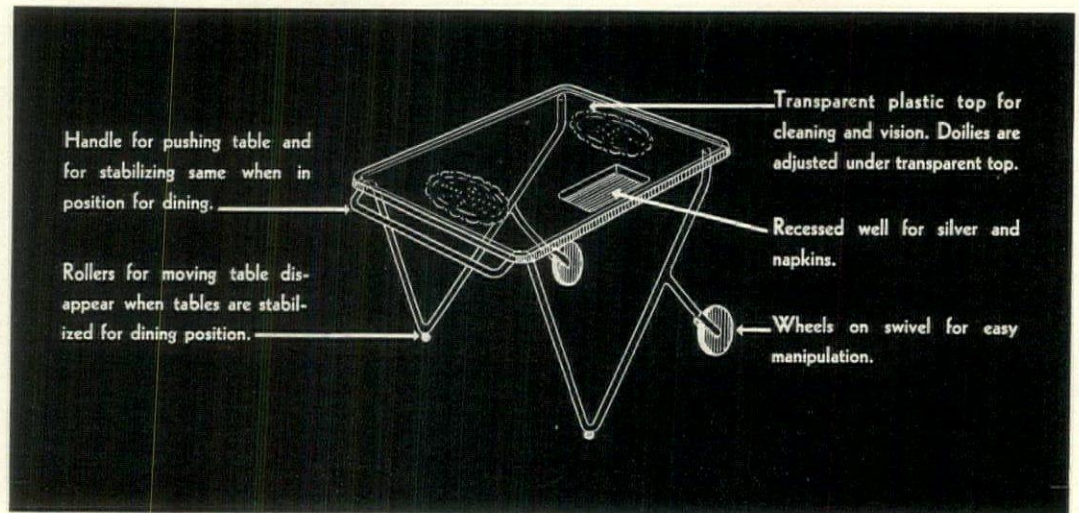




PLAN OF SEATING



LONG COVERED PASSAGEWAY CONNECTS SHOPS, MOVIE THEATER AND NURSERY.



"The restaurant of 194X will be influenced by changes in the nation's living and eating habits induced by the war. For the first time in their lives, many workers are earning enough to permit them to dine out. These new patrons want value for their money. So do the old patrons, who are paying out a large percentage of their incomes in taxes.

"Years of scarcity and rationing will make people intolerant of waste. In their restaurants they will demand good food, well cooked in clean kitchens and efficiently served; the great majority will have no desire to pay for atmosphere or unnecessary trimmings. Thrift, a wartime necessity, will become a national habit.

"Self-service will also become a habit. The prewar trend towards self-service, evidenced by automats, supermarkets and vending machines, will receive great impetus from the war because of the manpower shortage.

"The 194X restaurant attempts to combine the best features of a first-class dining room with those of a cafeteria. Wheeled tables are used for self-service in selecting food and as individual dining tables. Their arrangement, singly or in groups, is capable of many variations. The table has swivel wheels at one end and retractable rollers at the other—retractable for stability when the table is in place for dining. It has a transparent plastic top under which doilies of various patterns and colors can be used. A recessed well is provided for silver and napkins. This flexible table unit forms the basis of the restaurant design shown on the following pages."

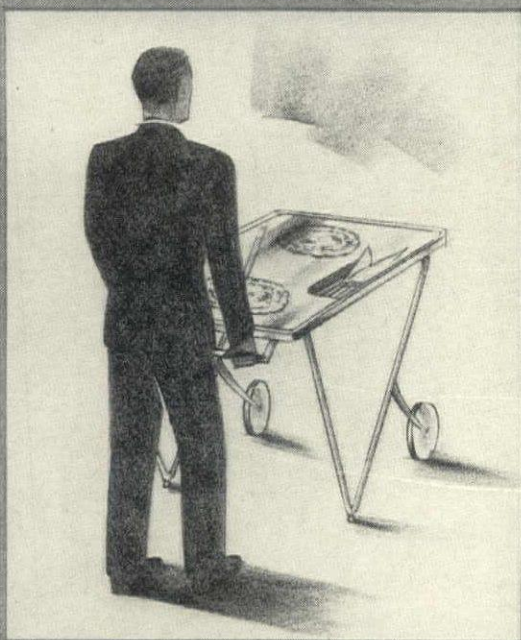
"For the patron, this restaurant offers many advantages:

1. It satisfies his desire for economy by eliminating waiters and the cost of tipping.
2. It increases his confidence in the quality of the food because of the absence of 'front.'
3. It gives him the choice of enjoying a leisurely full-course meal or serving himself a quick lunch with no waste of time or effort.
4. It offers him an interesting new way of eating, dresses-up the method of self-service.

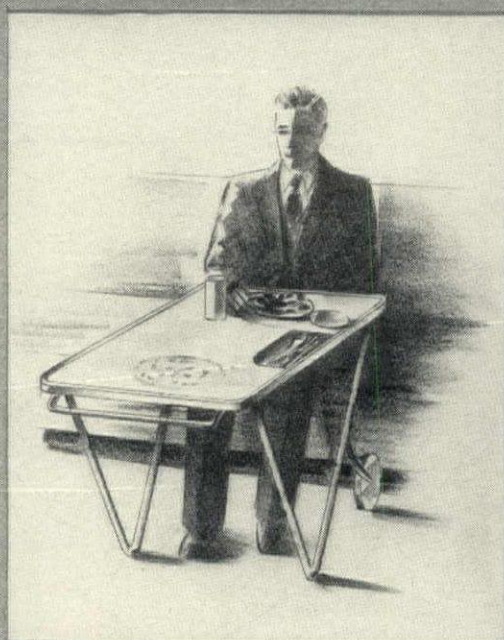
The restaurant benefits by the economies effected in serving the food and by reduction of personnel. This will be of increasing importance in a postwar boom when standards of living will be high and few people will be attracted to the service occupations."



Typical Coat and Chair Rack



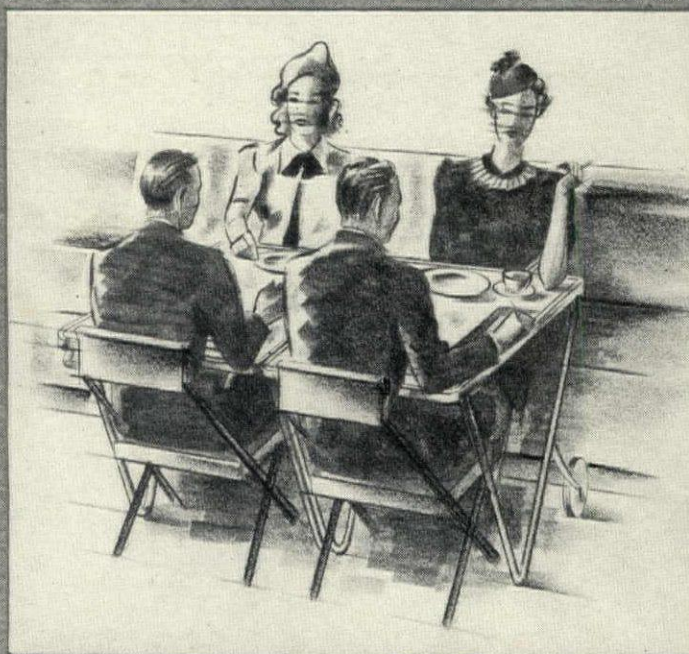
1. Table is taken and wheeled past food-service counter where it is loaded. Silver and napkin fit into a depression in the tray.



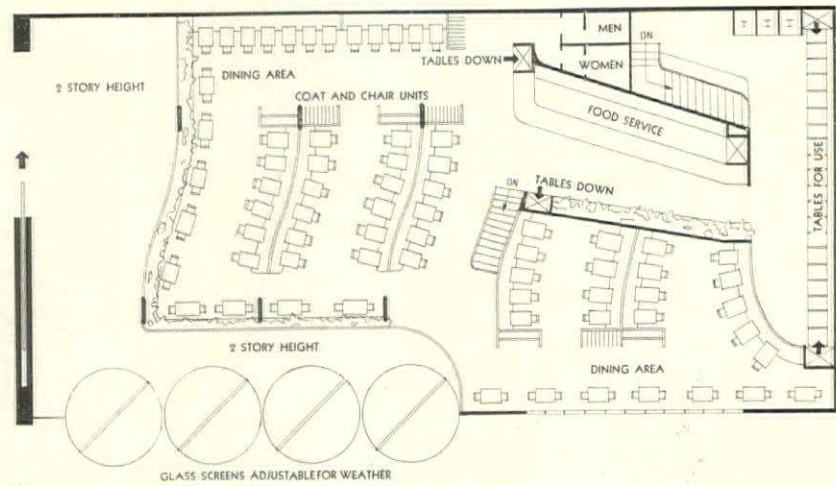
2. The diner selects a space on one of the benches, sits down, and adjusts the table for stability.



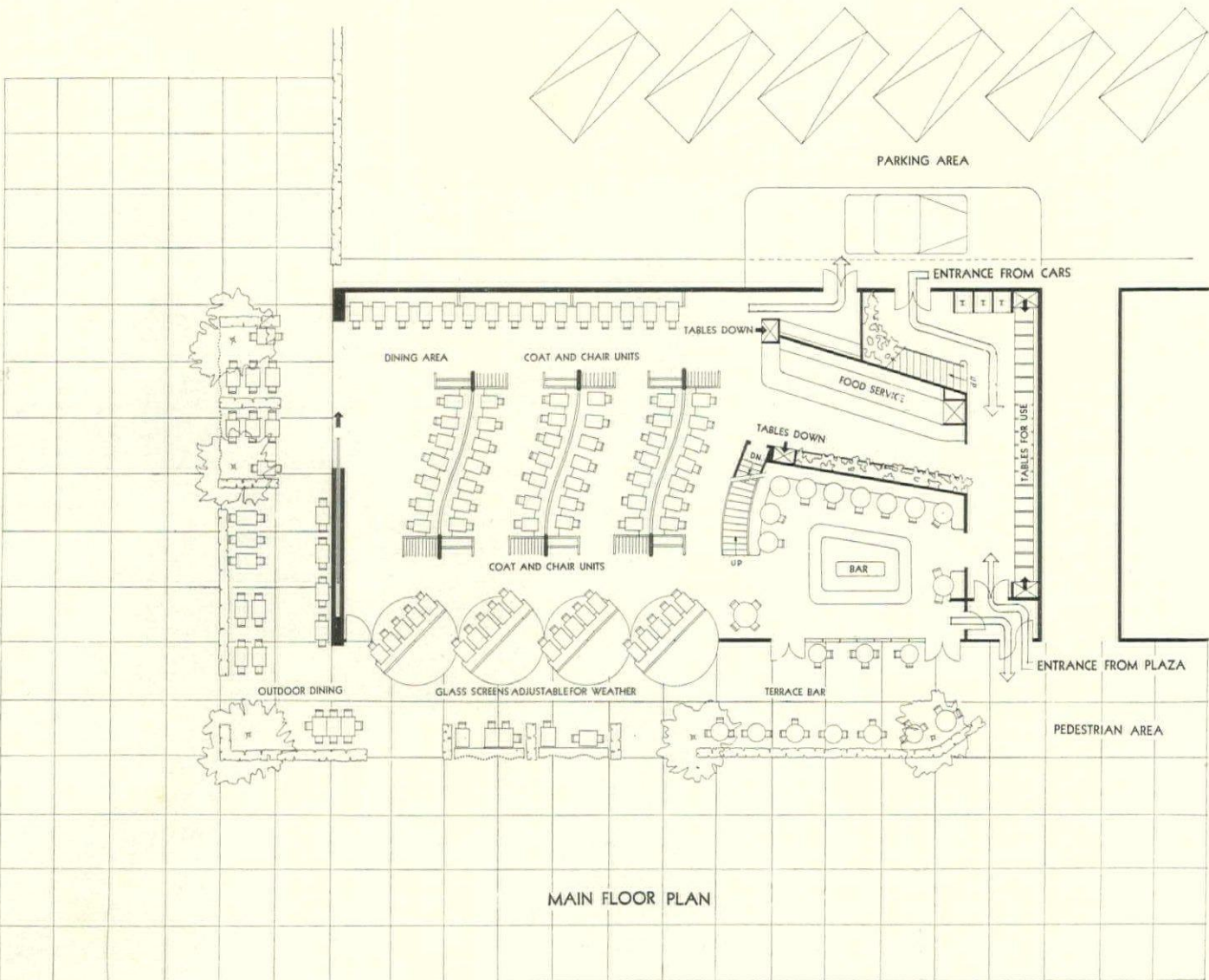
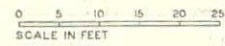
3. If two people are dining, the second person gets a chair at the chair-coat unit, and table is adjusted.



4. Two or more tables can be placed together if a group is dining. Additional chairs can be taken from the chair-coat unit.



BALCONY FLOOR PLAN





PERSPECTIVE FROM PEDESTRIAN AREA

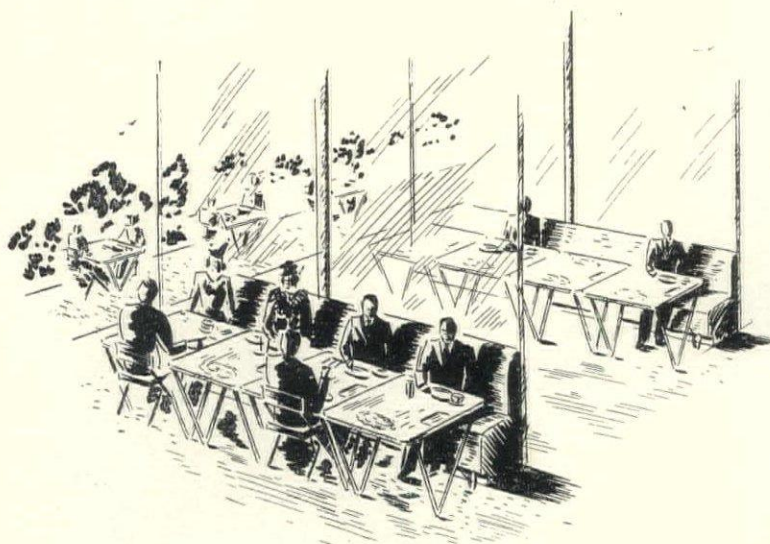
"The restaurant design is one possible solution of the basic arrangement built around the self-service table. No cost figures are shown since costs would be predicated on the economics of the postwar world. Similarly, kitchen and dishwashing arrangements are not analyzed at this time.

►"As the patron enters from the plaza or parking lot, he obtains a table from a group lined up near the door. Tables are fed by automatic lifts from the floor below, where they are taken for clearing after use. If the first-floor dining area is filled, a sign directs people to the balcony level. A bar is accessible from both entrances and is adjacent to the terrace.

►"Orderly placing of the tables is dictated by the use of fixed benches. At the end of each bank of benches is a combination coat rack and storage unit for extra chairs.

►"As the restaurant has a corner location facing on the plaza, ease of access for outdoor dining has been stressed. Large, rotating glass screens, with benches attached to the base, are incorporated in the design. These may be adjusted for use according to the wind or weather.

►"Conveyors for sending used tables to the basement are placed at two points on each floor. After cleaning, tables are returned to the entrance hall on similar conveyors. Patrons follow a traffic route which avoids any confusing cross-currents and brings them back to an exit adjacent to the point of entry."

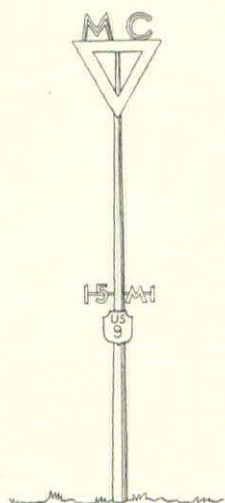


"One of the many by-products of automobile production is the tourist camp, which ranges from the pair of homemade cabins behind a gas station to the de luxe establishment with many of the conveniences of a large hotel. Before the war the better type of motor camp was already a serious competitor to the hotel, and there is no doubt that this trend will continue.

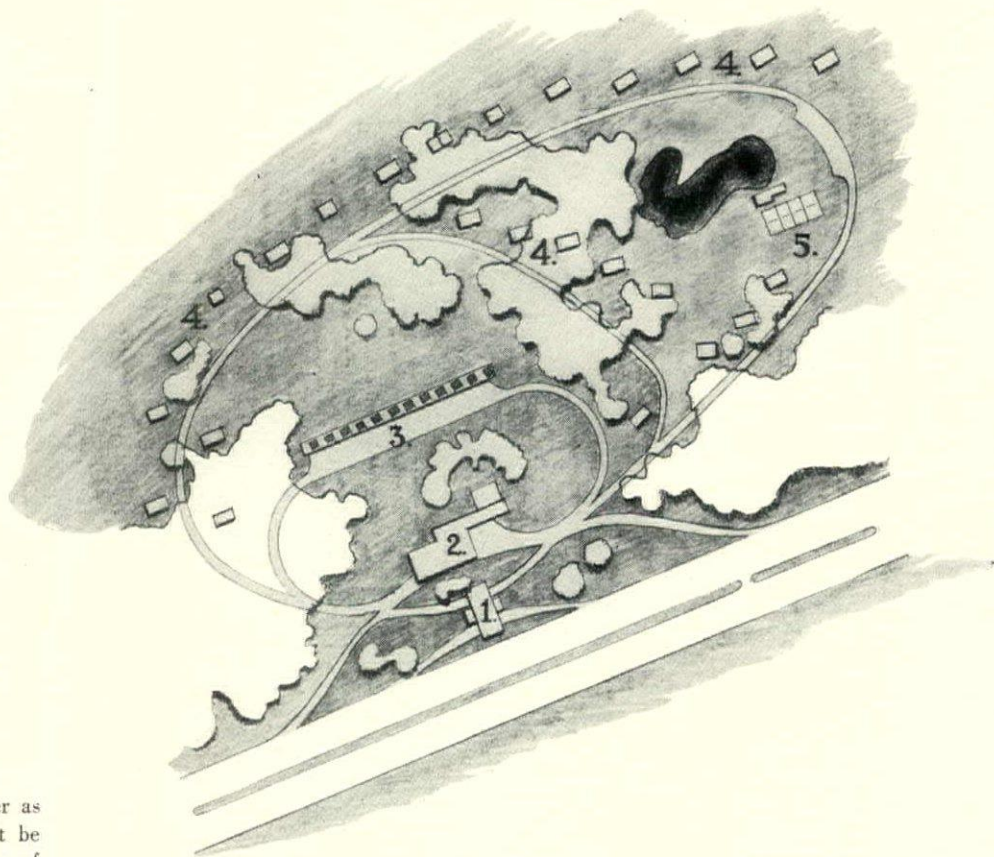
"After spending a good bit of time in tourist cabins in the course of traveling around the country I find that the following amenities are generally lacking: direct, rain-protected connection between car and cabin; a light which will shine into the baggage compartment; a solid rack or shelf for luggage in the smaller cabins, or a closet with shelves in the larger ones; main windows facing away from the drive; adequate cooking facilities; and separation of the toilet from the other bathroom fixtures. This project attempts to remedy these deficiencies, to introduce the element of prefabrication, and to solve the separate problems of overnight accommodation and vacation use.

"Motor camps in favored locations are often used as vacation spots, and proper planning could do a great deal to expand this part of their business. The site plan diagram shows provision for both overnight and vacation cabins. Both types of units lend themselves easily to prefabrication. The local contractor would provide connections for the utilities, and he would install the piers and construct the roofs on posts. This part of the structure would be erected from standard blueprints, and it could be as long as desired. The remainder—that is, the cabins themselves, would arrive as manufactured sections requiring assembly only. The sheets of insulation which form the ceiling would be clipped or snapped to the undersides of the rafters. A certain leeway is given the wall panels (see detail) in case the roof is not at the exact height required.

"Advantages of the scheme are evident. Prefabrication is used only for the standard room units. The locally built roof gives complete plan flexibility, and provides a sheltered area when the manufactured units are assembled."



The sign above is suggested by Mr. Payer as an easily recognized symbol which might be used by a company operating a chain of motor camps. It was designed to replace the billboards which have defaced so much of the countryside. The site plan at the right is merely a diagram to show a possible distribution of the units. The overnight cabins are clustered together under one long roof, using the plan on the facing page. Vacation houses are away from the highway and are more loosely arranged along the curved road.



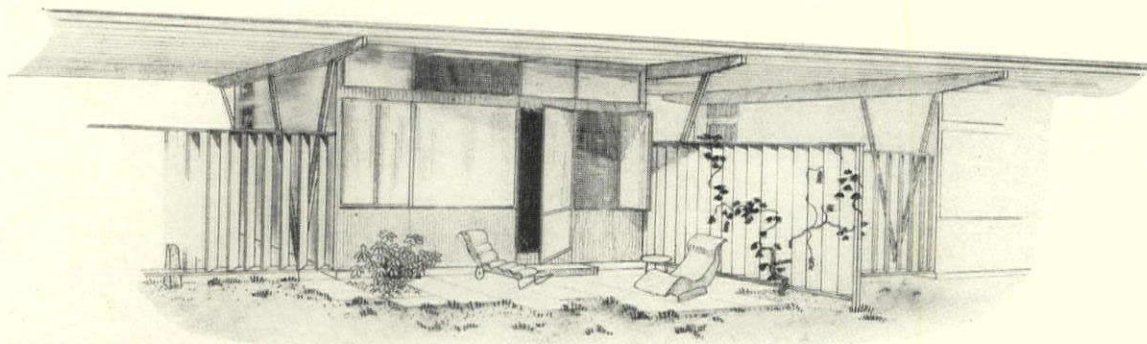
1. FILLING STATION

2. OFFICE, SMALL STORE,
LUNCHROOM AND MAN-
AGER'S QUARTERS

3. OVERNIGHT CABINS

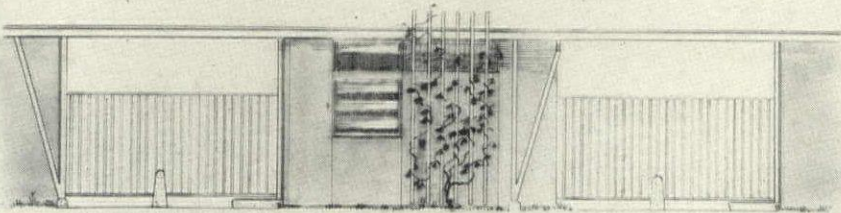
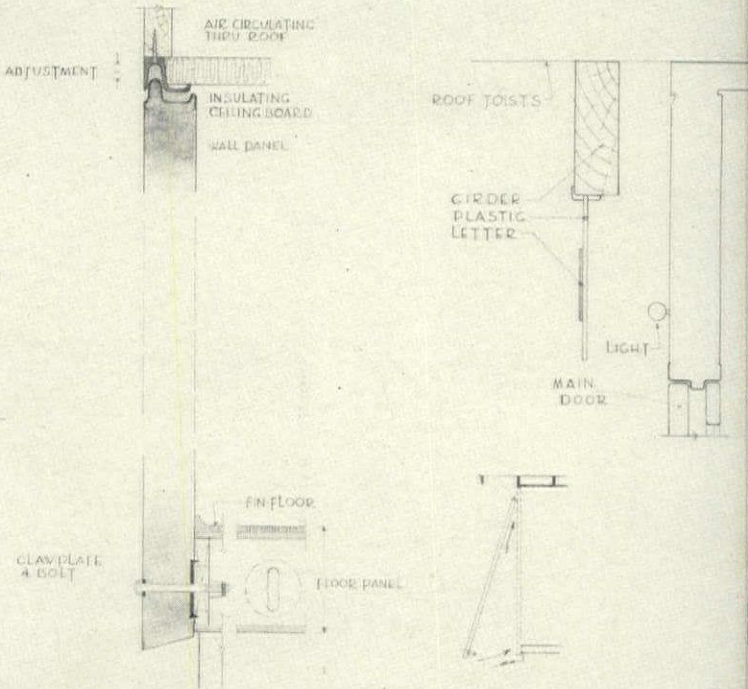
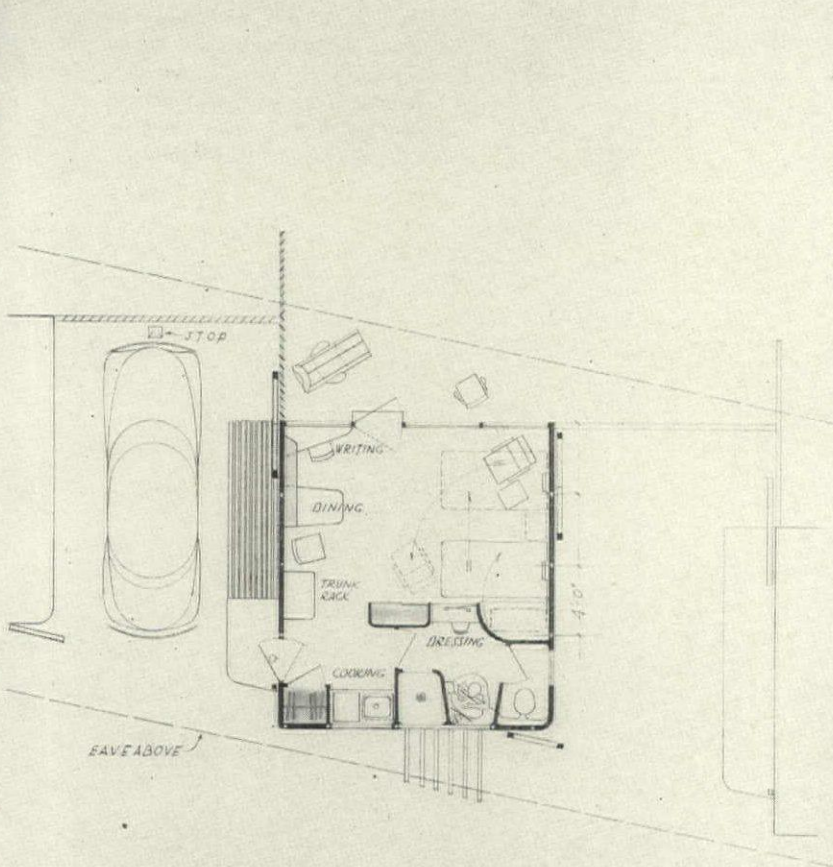
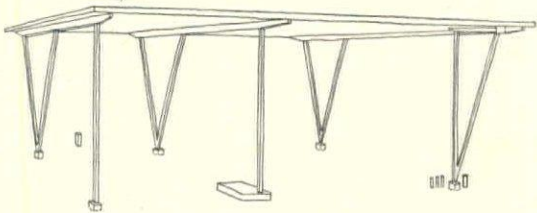
4. VACATION CABINS

5. RECREATION FACILITIES

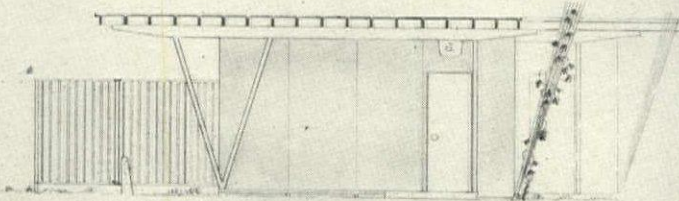


SMALL CABIN

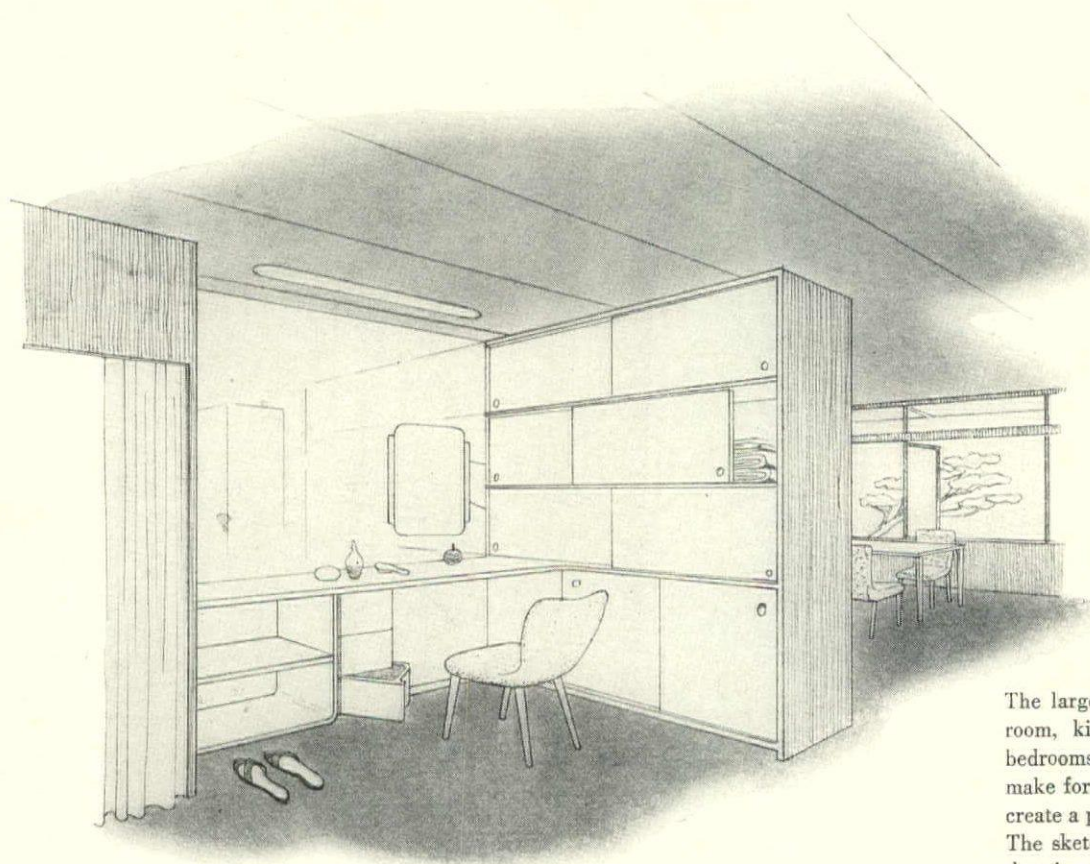
In the drawing below the architect suggests a staggered placing of the units. The arrangement makes possible the unloading of the car under cover and creates a sheltered terrace at the rear of each cabin. One of the beds may be stored in a closet, releasing valuable space for daytime use. Since the roof is independently supported, the walls need only keep out the weather and be sufficiently rigid to withstand impact and wind loads. It would be possible to write an interesting variety of specifications for such panels. Due to ventilation above the ceilings, interiors would be cool in summer.



FRONT

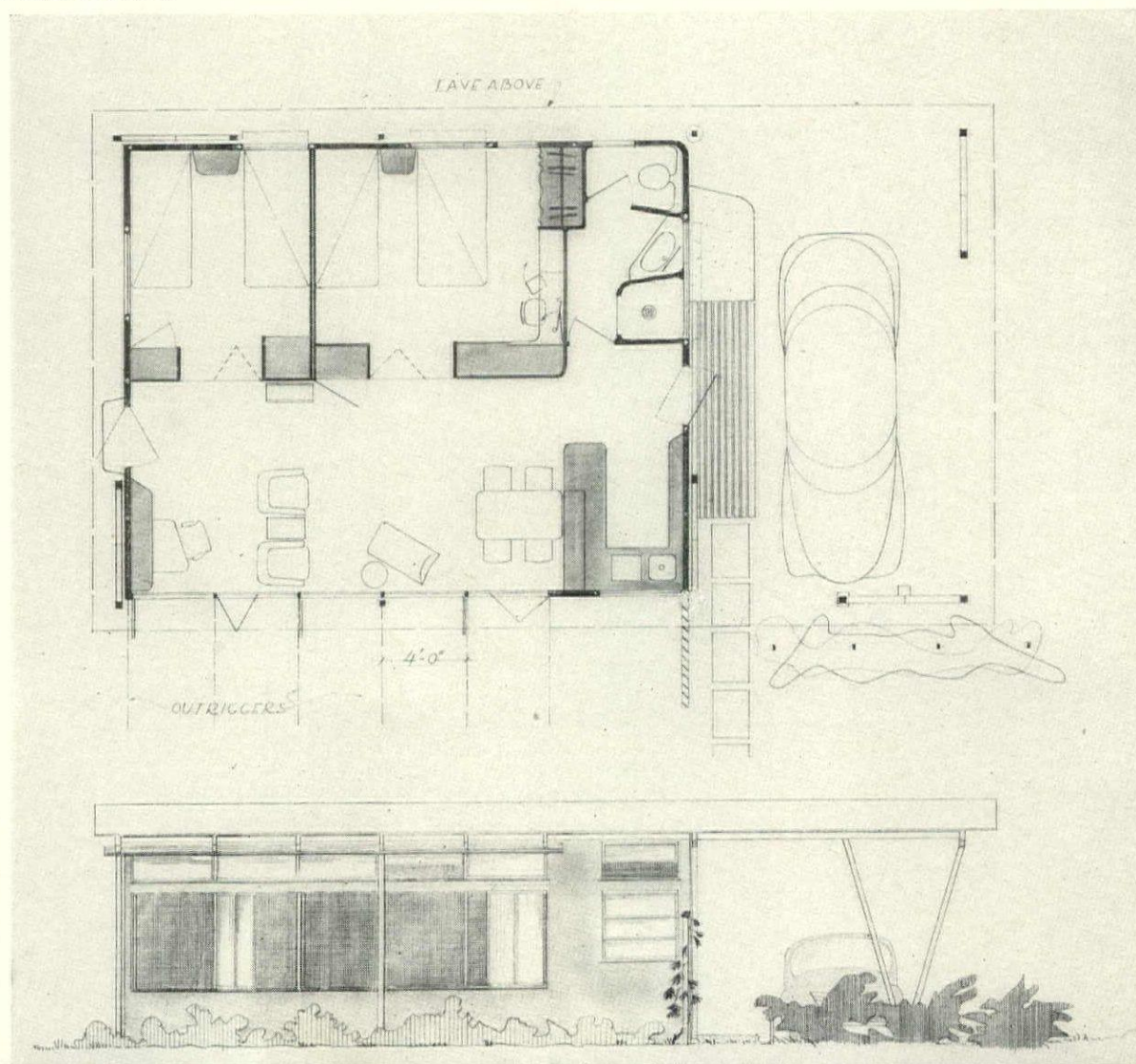


SECTION THRU CAR PORT



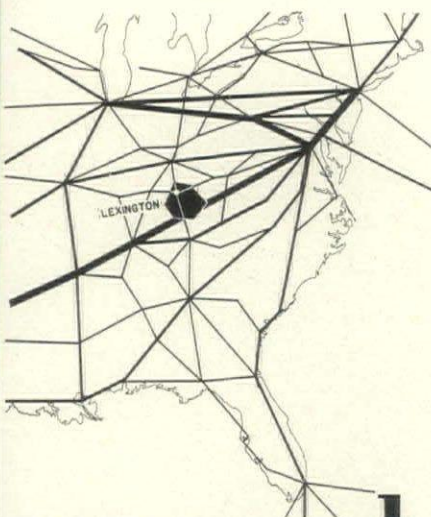
The large cabin has two bedrooms, sitting room, kitchenette and a bathroom. The bedrooms have folding doors which would make for excellent ventilation at night, and create a pleasant air of spaciousness by day. The sketch shows the standard storage and dressing equipment provided for the larger bedroom. It is assumed that kitchen and bath sections would arrive complete and ready for connection to the utilities.

LARGE CABIN



AIRPORT

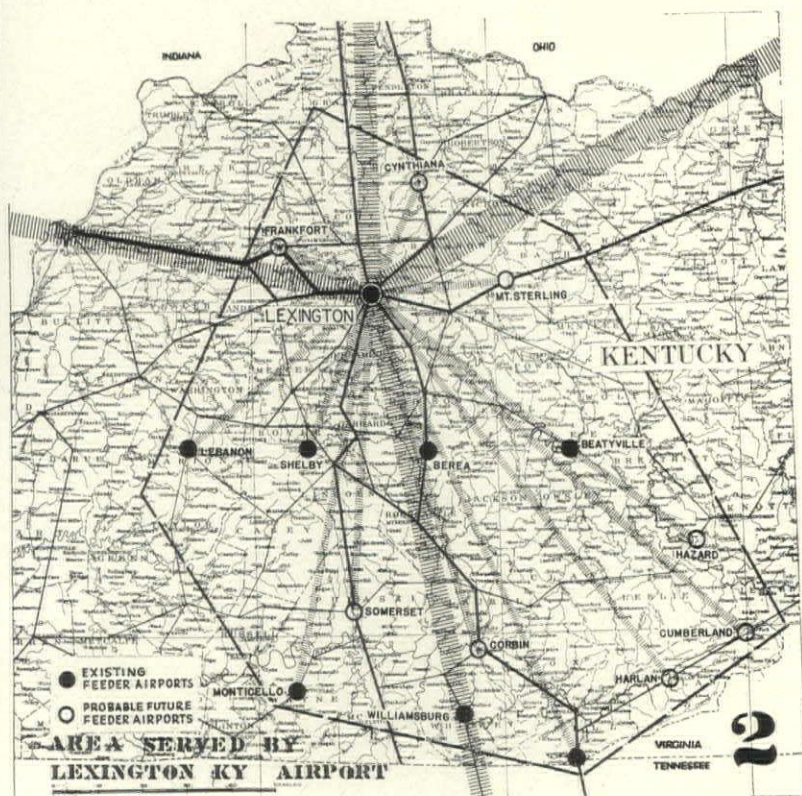
ANTONIN RAYMOND, ARCHITECT; COLLABORATORS: MICHAEL CZAJA;
VINCENT FURNO; SIDNEY KATZ; RICHARD STEIN; EARL STRUNK



AIR ROUTE LOCATION
LEXINGTON KY AIRPORT

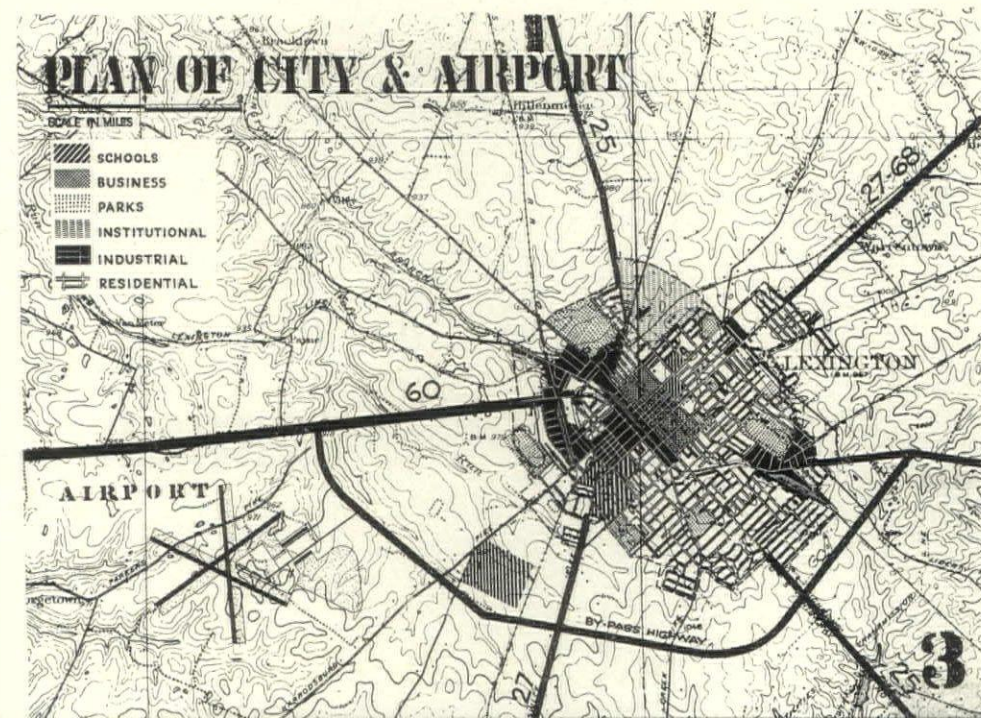
"An airport, or other important community facility must be considered not as a purely local problem, but as a part of a national problem. In the absence of specific postwar planning data, the general picture of where an airport would fit into the national pattern had to be established on the basis of available information, recognized trends and realistic assumptions.

A study of existing airways and their probable development indicates that towns of 50,000, in the eastern part of the U. S., will support completely equipped airports, connecting with through airway lines, and in turn, acting as foci for local air traffic within their particular regions (drawing 1). New types of air traffic can be anticipated, especially the growth of air freight. Wartime aviation advances suggest that this will increase from an incidental by-product of passenger flights to a place of first importance. In volume of tonnage, number of flights and technique of handling it will probably overshadow passenger transportation in the postwar picture.



"As each town presents its own problem, the basis for establishing a program has been to study a particular community. Lexington, Ky. was selected as a representative city of this size. It is the hub of the region and of its principal production, tobacco. The airport must serve not only the 49,304 people in Lexington (1940), but also an additional 780,000 in the region. Eight existing airports in towns of 5,000 in this area will probably be augmented by an additional 7 ports in similar-sized towns (drawing 2.). These are distributed by geography and population to allow easy access to the airfield from the whole area. From these airports there will probably be regular shuttle service to the Lexington port. From Lexington, commercial transport flights will be of two types: scheduled local stops connecting to through terminal points on major lines, and destination-to-destination flights originating in Lexington. On this basis, a possible 70 passenger-flights a day is anticipated. The type of plane fulfilling the commercial transport needs will require about 3,500 ft. for landing and take-off, freight glider trains will need up to 7,000 ft.

"The size, circulation requirements and program indicate that the present airport at Lexington is inadequate and not suited to alteration to full postwar use. In determining a new site (drawing 3), the following requirements were set:



1. Adequate level topography, good drainage.
2. High elevation to eliminate ground-fog and guarantee unobstructed flight zones.
3. Prevailing flight lines not over city, based on windrose study of local winds.
4. Existing highway system, including truck routes from tobacco-growing region.
5. Accessibility to residential area.
6. Commercial transport to business district.
7. Possibility of future airport expansion.
8. Integration into plan of future city growth."

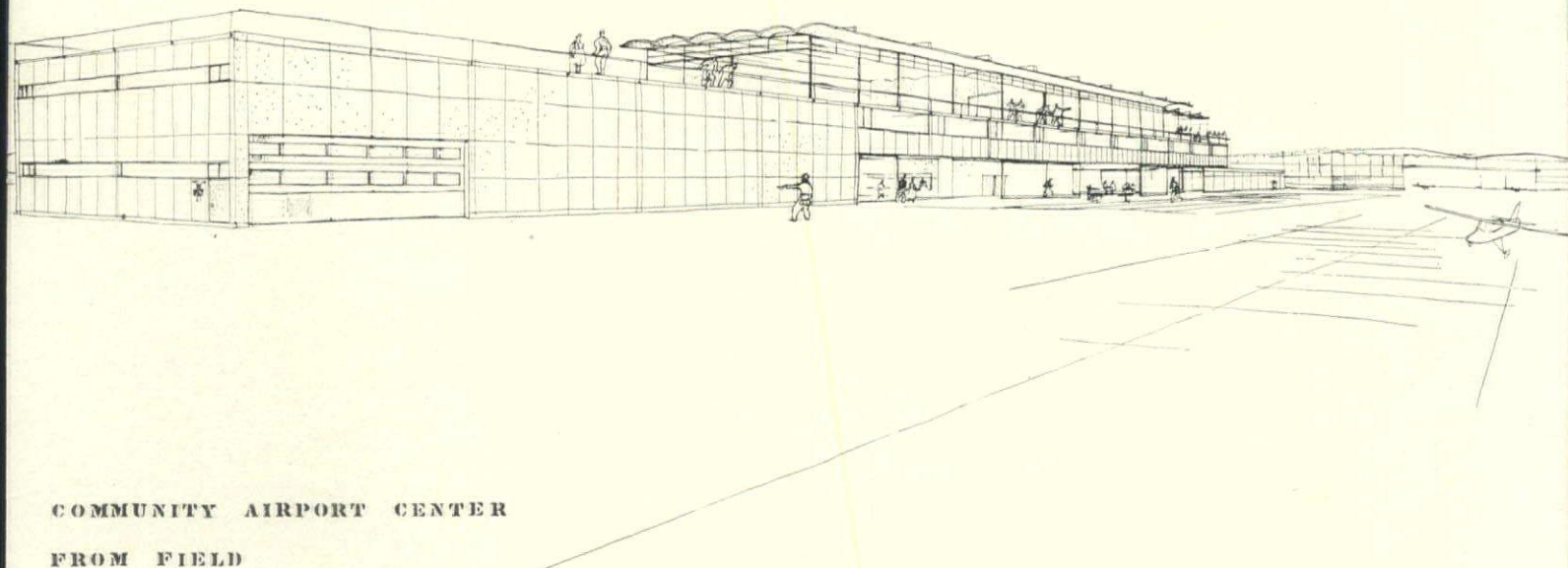
WINDROSE

- A**-AIRPORT STATION
HELICOPTER TAXI FIELD
- B**-COMMUNITY AIRPORT CENTER
SCHOOL, SHOPS AND
HANGAR
- C**-FREIGHT DEPOT
WAREHOUSE SHOPS
AND NOSE HANGAR
- D**-FREIGHT AND PASSENGER
RUNWAYS
- E**-CIVILIAN FLYING FIELD

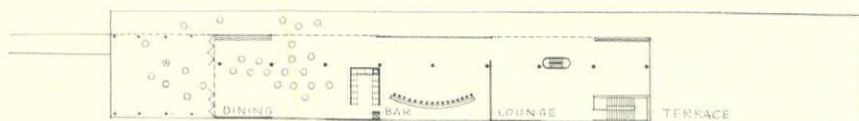
AIRPORT SITE PLAN

0 200 400 600 800 1000 1200 1400 1600 1800 2000

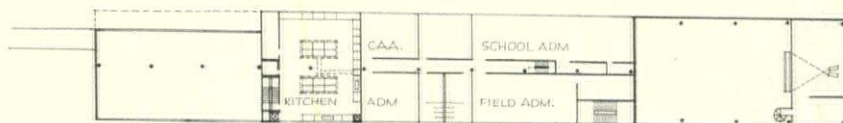
BY AIR PHOTOGRAPHY



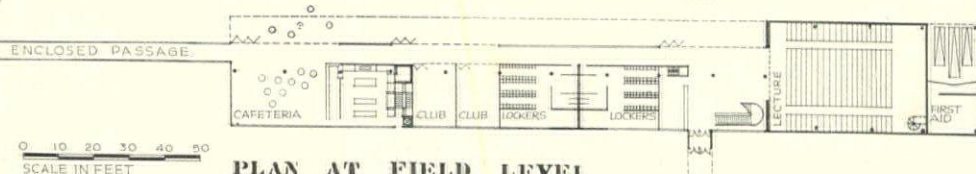
**COMMUNITY AIRPORT CENTER
FROM FIELD**



PLAN AT OBSERVATION LEVEL

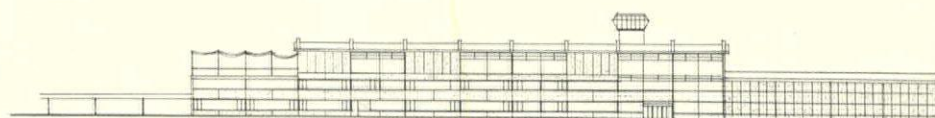


PLAN AT MEZZ

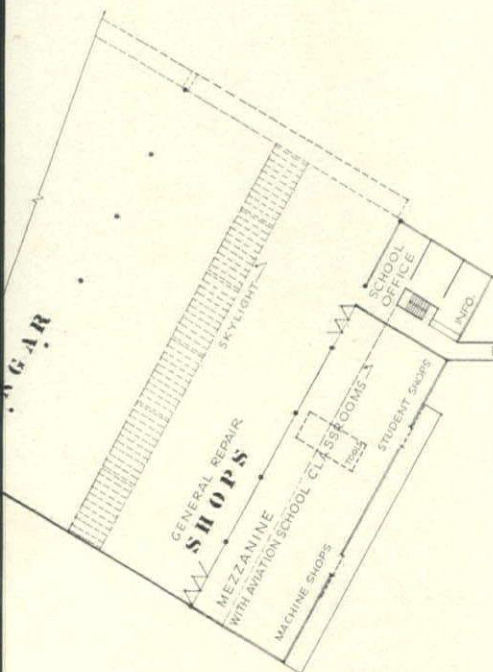


PLAN AT FIELD LEVEL

0 10 20 30 40 50
SCALE IN FEET



ELEVATION FROM ROAD



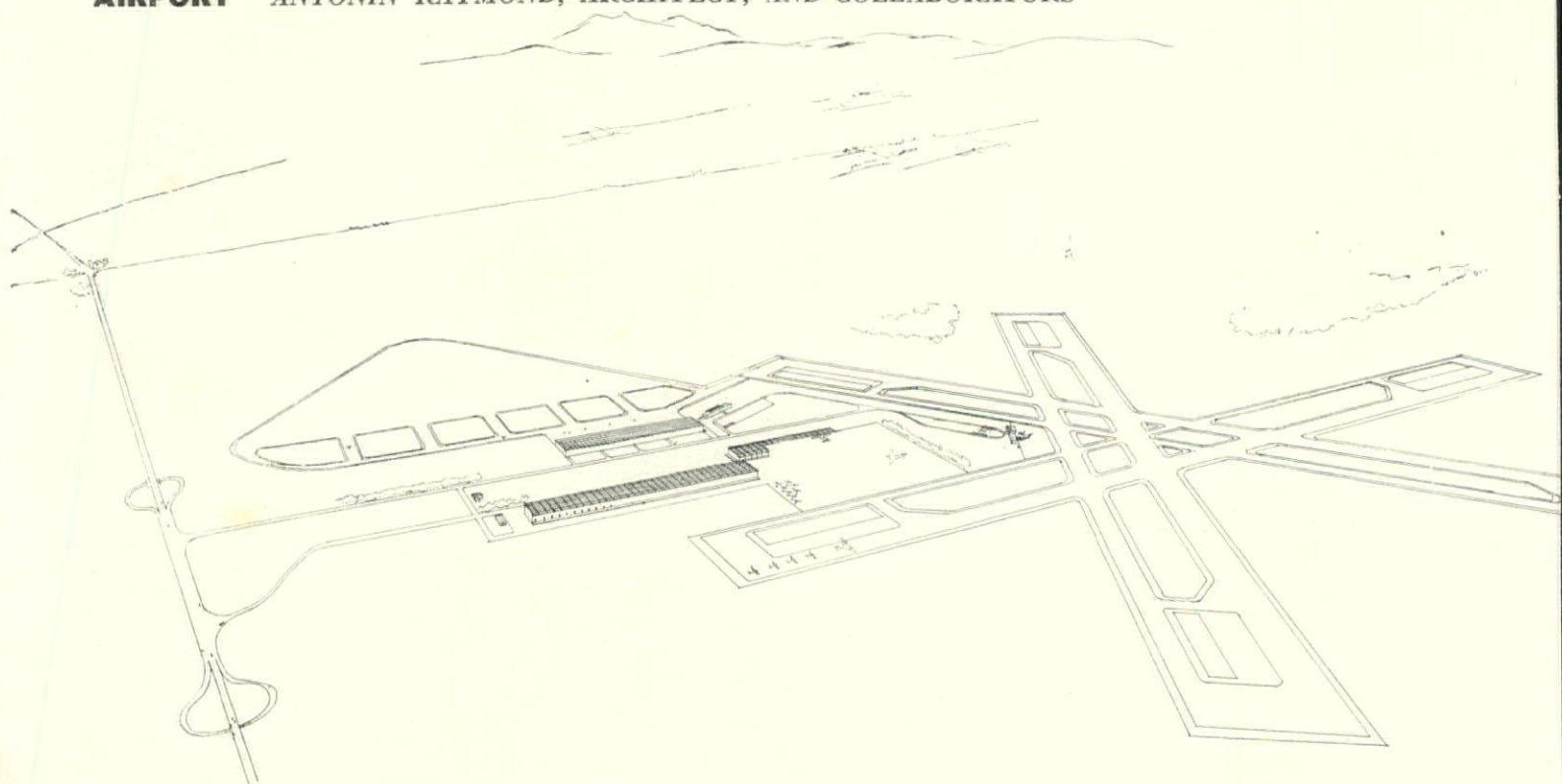
SITE PLAN

"For commercial flights the limiting of taxiing develops the desirability of a field which allows landings from the end of a runway to a station in the center and take-offs from the station in the center to the opposite end. With a windrose showing winds from all points of the compass, three intersecting runways of this sort permit ideal operation for all winds. Economic considerations make it undesirable to provide the same facilities for freight planes with their 7,000 ft. runway requirement for heaviest loads. From a point at the center, taxiways make the distance to the ends of the runways as short as possible where the full runway must be used. The center of the runways is the high point of the field. Planes land uphill and take off downhill. This also permits desirable drainage. The community flying field (E) is planned for greatest flexibility with an all-over field allowing mass flights. Connection to the runways allows use of large trainers for advanced students."

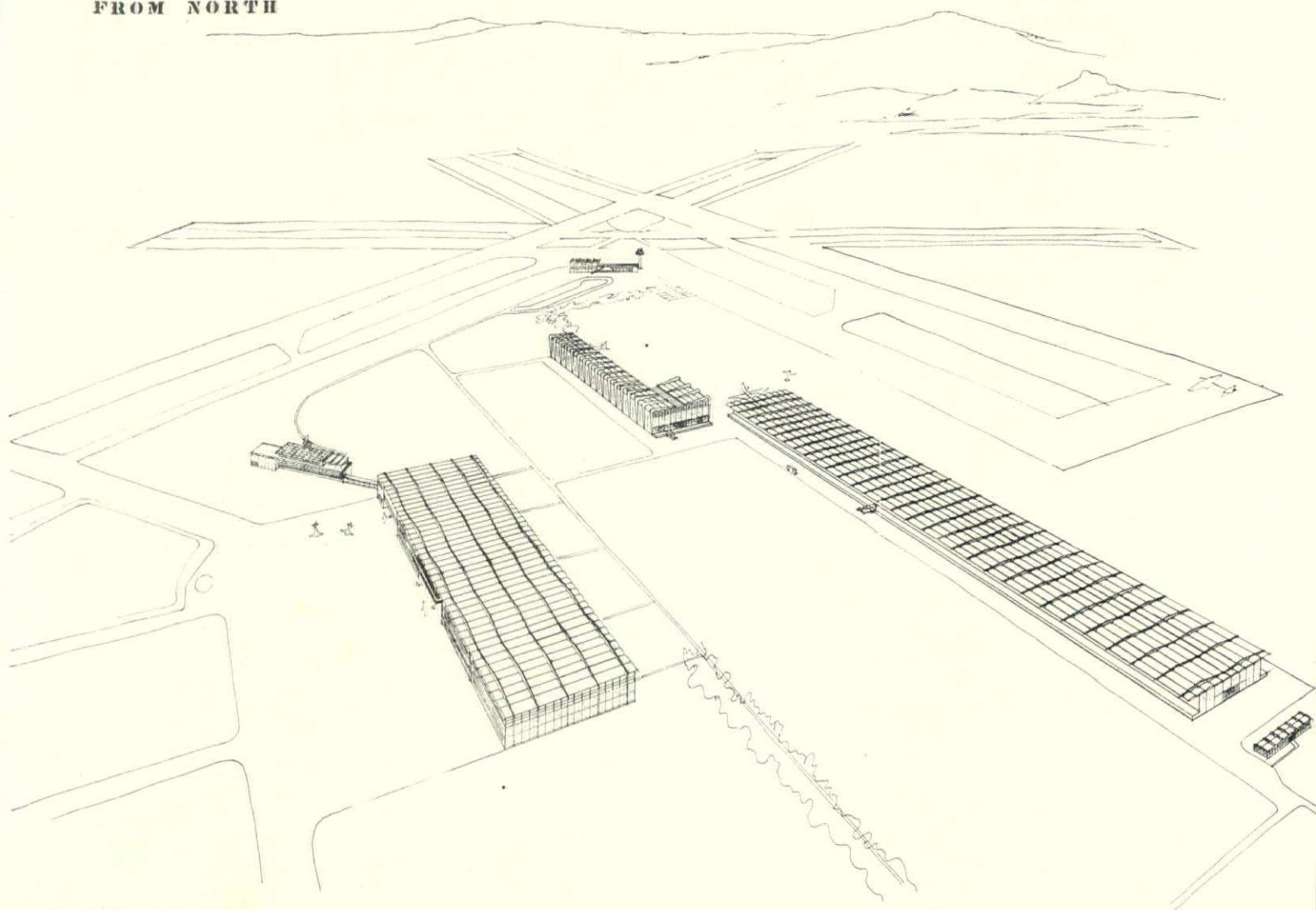


COMMUNITY AIRPORT CENTER

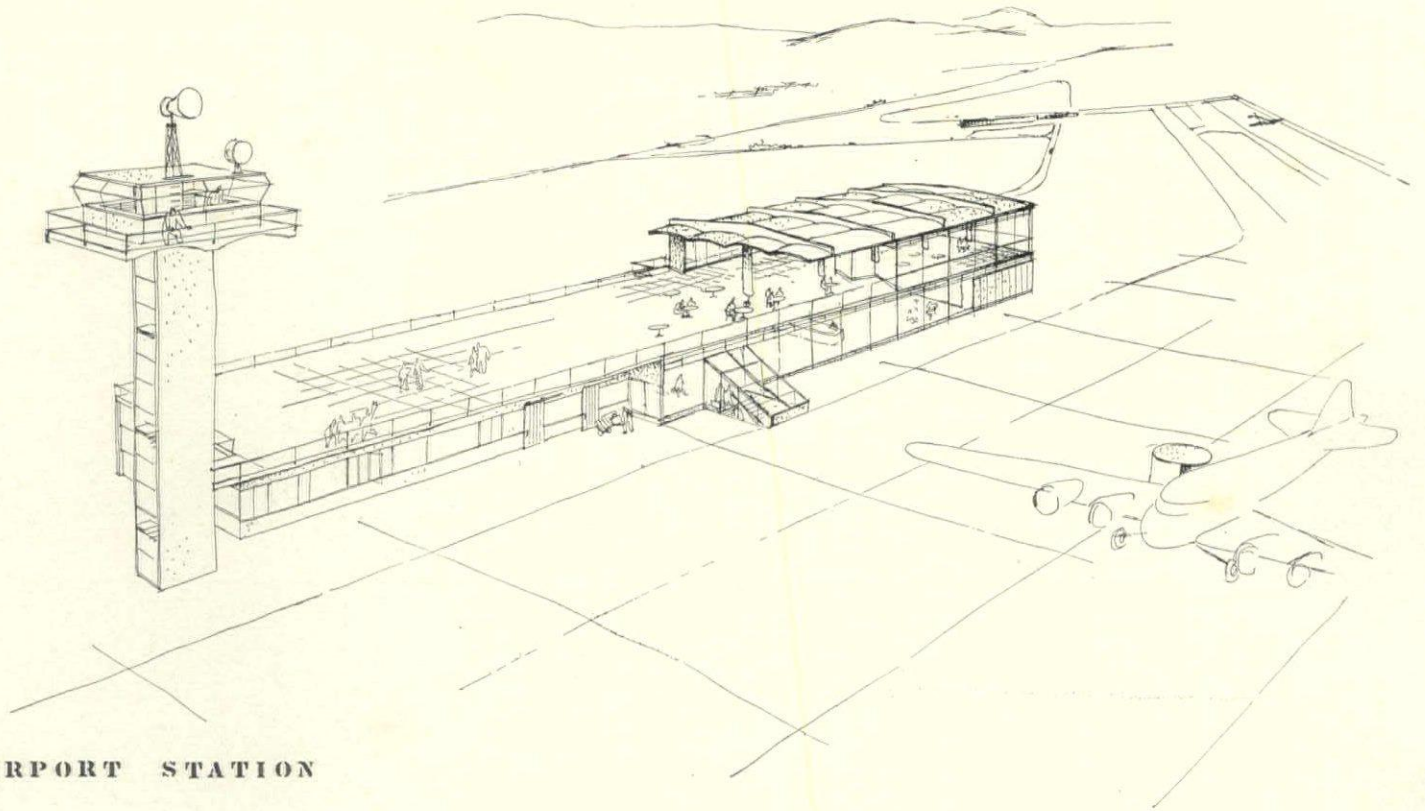
"This building serves as a coordinator of community activities. Clubrooms, lounges, restaurant and schoolrooms, organize a system of activities and provide a stimulant to the improved knowledge and quality of the community's life. It is designed to bridge the gap between the spectator and the participant. The growth of the airplane industry, the technical training of hundreds of thousands of men in the armed services will create a new problem in the relation of the community to the airport. Plans must provide for the continuing education of these people and their integration into a pattern of airport utilization. Shops, hangars for private planes, lecture rooms and lockers will be needed. The existence of two universities at Lexington allows a tie-up of air education with higher technical education. A connection between the community center and airport station provides for flexible inter-use of both."



AIRPORT
FROM NORTH



AIRPORT
FROM WEST



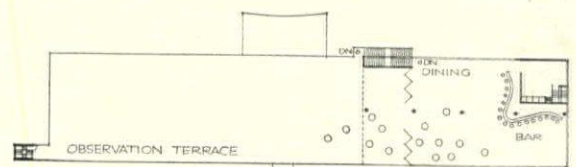
AIRPORT STATION

"The airport station's two principal activities, as a gateway to the planes and as a gallery for spectators, were kept separate. From car to field is a straight line, out of the weather. Underground access to the field is permitted through an elevator in the apron, opening directly to the plane. Baggage and mail have their own through circulations.

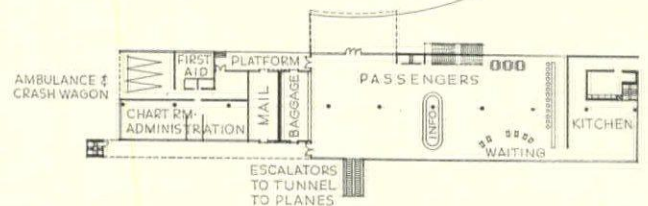
Control. Each field has its separate control tower and operations room.

Construction. For reasons of fire prevention, reenforced concrete construction is used throughout. Thin, precast, long-span vaults are hung from transverse lines of support, for floors and roof. Walls are assembled from prefabricated panels.

Financing will be done by the community with Federal aid. The commercial facilities will be rented, and warehousing, hangar space and commercial lines will help to carry the community facilities. The school will have university and Army subsidies. The financial framework, along with the whole plan, will be designed to make the airport a useful, integrated part of the community's life."



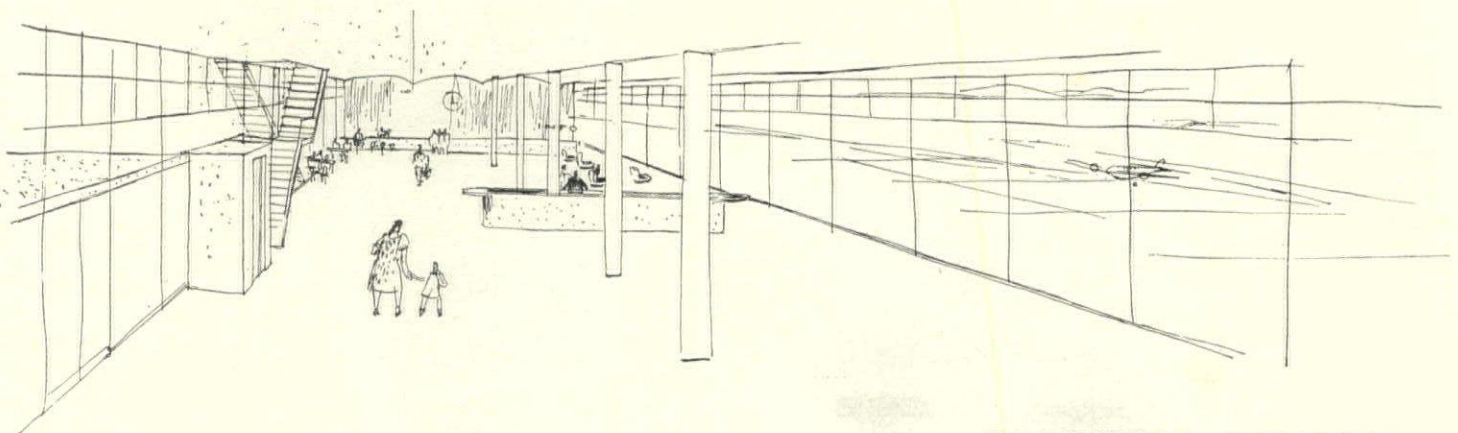
PLAN AT OBSERVATION LEVEL



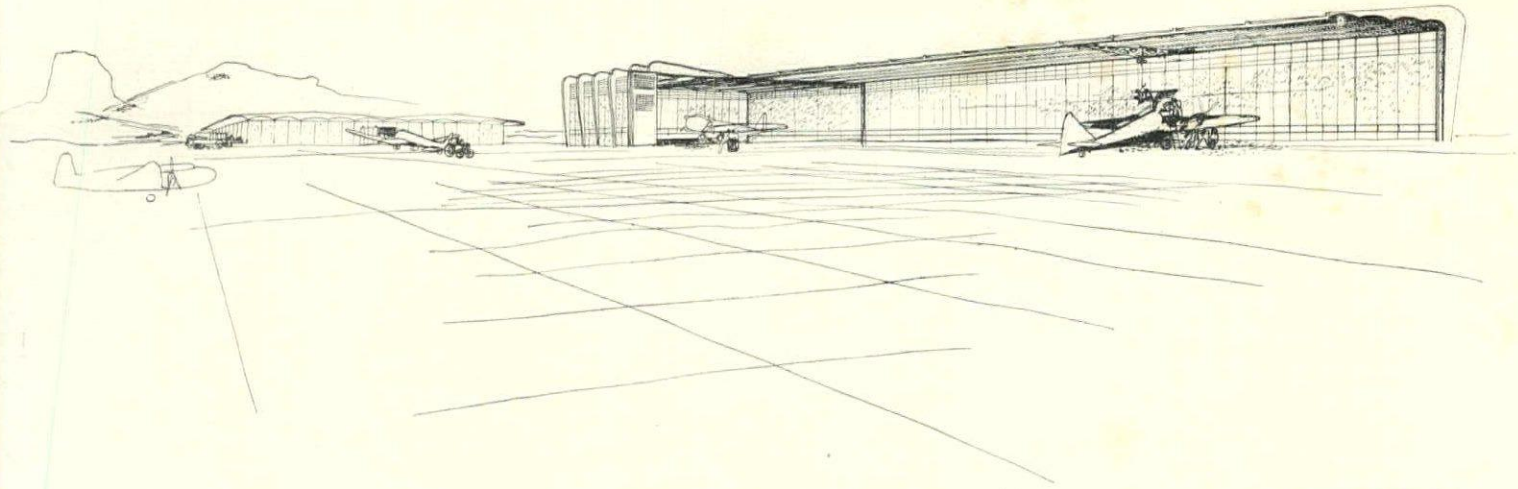
PLAN AT FIELD LEVEL



ELEVATION FROM FIELD

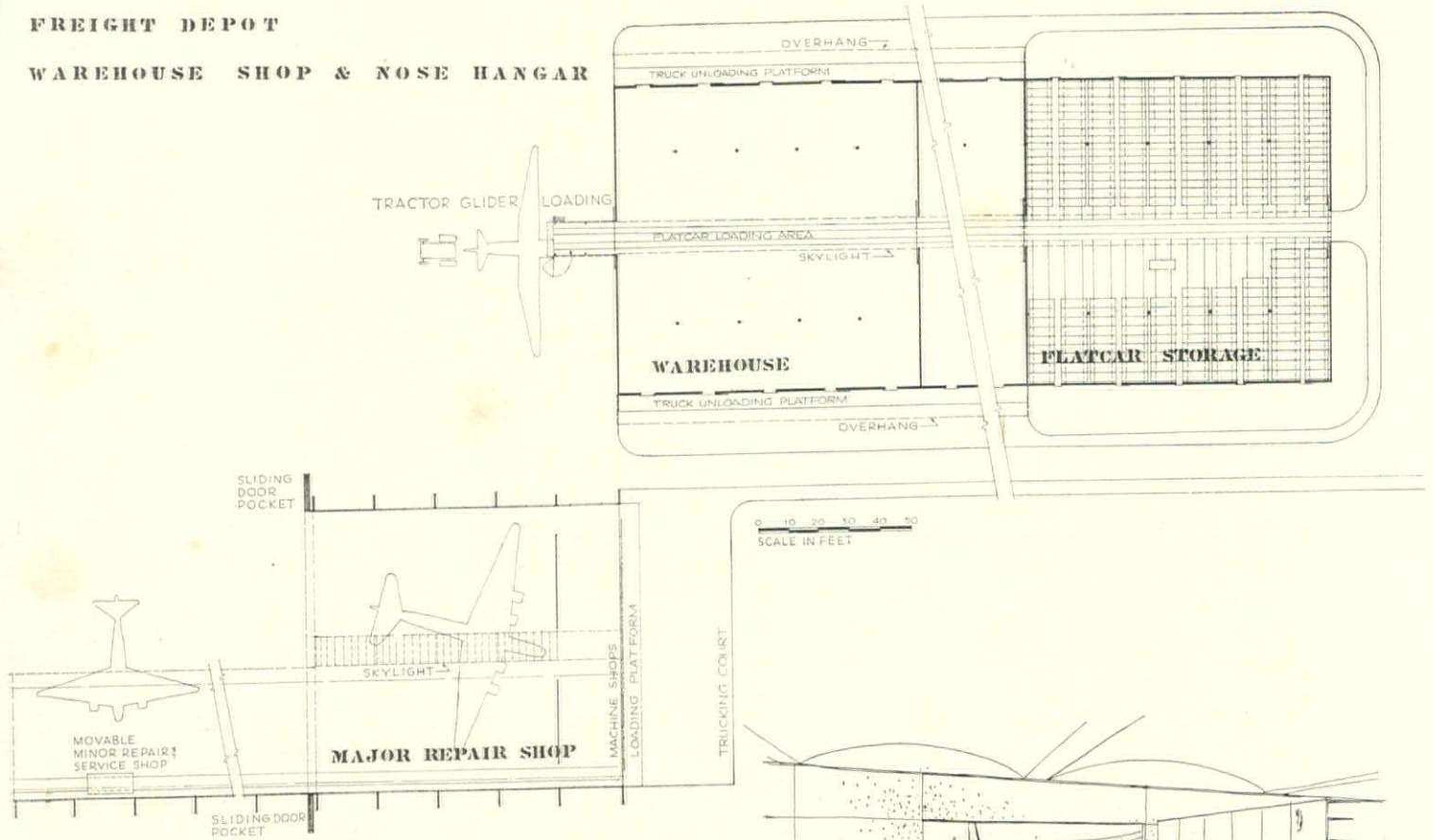


PASSENGER CONCOURSE



FREIGHT DEPOT

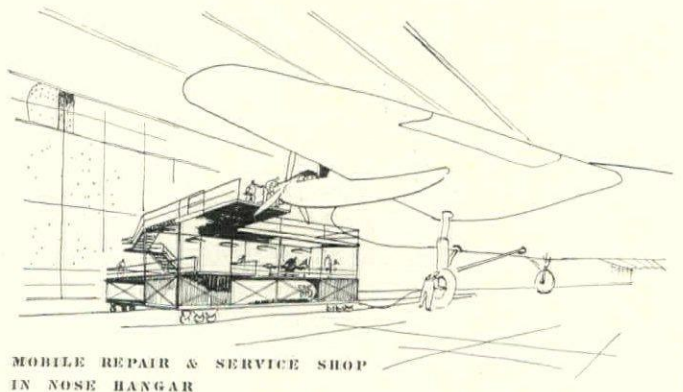
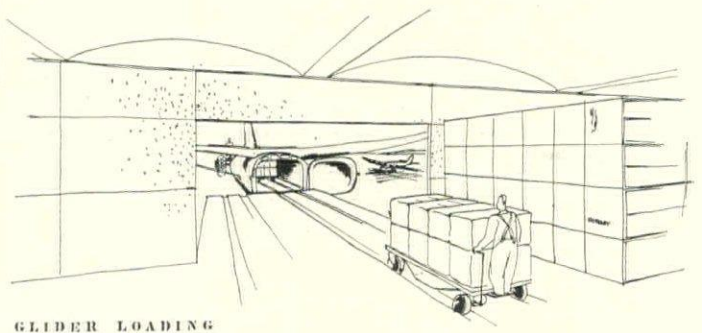
WAREHOUSE SHOP & NOSE HANGAR



FREIGHT DEPOT

"The freight facilities are planned to eliminate unnecessary steps in the handling of goods. Tobacco, the principal commodity, and other products handled are brought directly to the warehouse. As demanded, they are loaded on self-propelled flat cars which go directly into the gliders, which are then formed into glider trains and taken directly to their destination. The redesigning of warehousing for circulation is a necessity for this type of freight handling.

"The necessary concomitant servicing of planes must be considered together with the qualities of the planes themselves. Present and future plane construction eliminates the need for enclosed shelter for anything but the most complete repair jobs. Storage is outdoors. Minor repairing is done under the partial shelter of the nose hangar. Introduction of the mobile minor repair shop eliminates duplication of facilities or complicated circulation to fixed repair points."



RAILROAD - BUS TERMINAL

HOLABIRD & ROOT, ARCHITECTS

CHICAGO, ILL.

"In developing a railroad station and bus terminal for a town of 60,000 people, the following assumptions—based on research—were made:

"An open cut with depressed tracks is the best way of improving a railroad right-of-way through a city. It also seems logical for any railroad to make use of their own air rights.

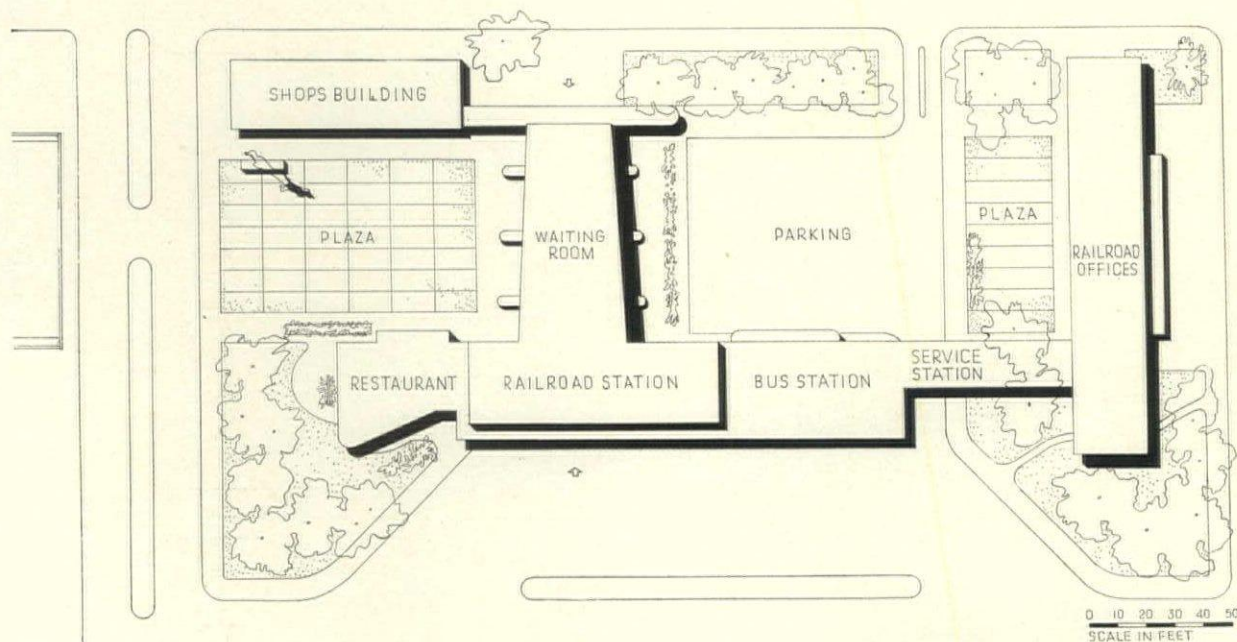
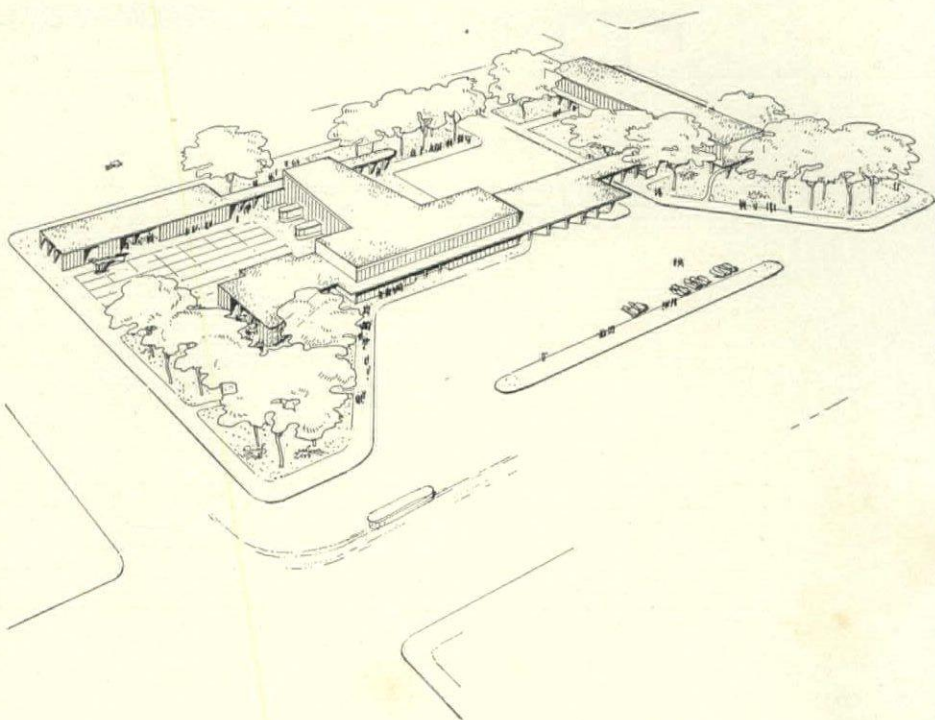
"To accommodate a modern train, platform canopies of 1,000 feet are necessary, and with little added expense, columns and girders can be constructed to cover the open cut for at least the length of a block. The surface space acquired in this manner will solve the traffic and parking problem.

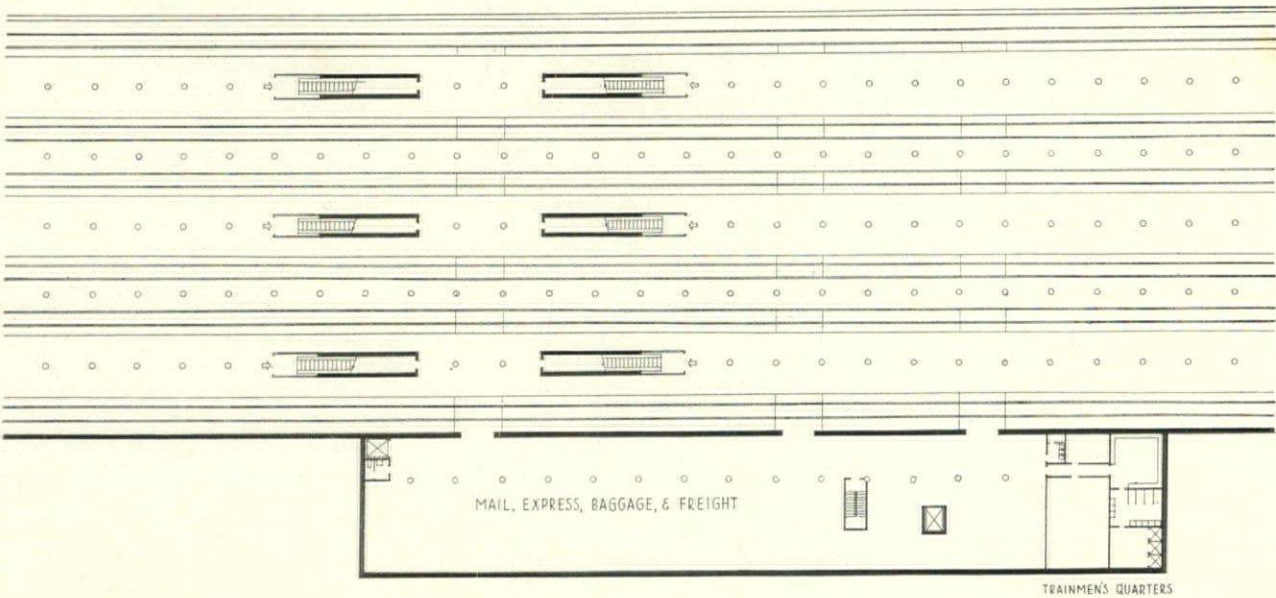
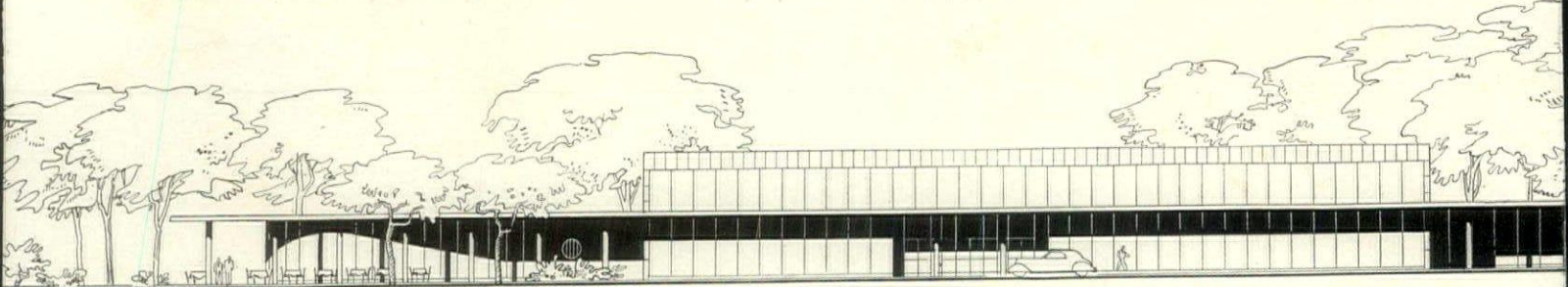
"Taxi, bus, express, mail and freight traffic should be kept separate.

"Offices for a railroad station of this size can be located in a separate building.

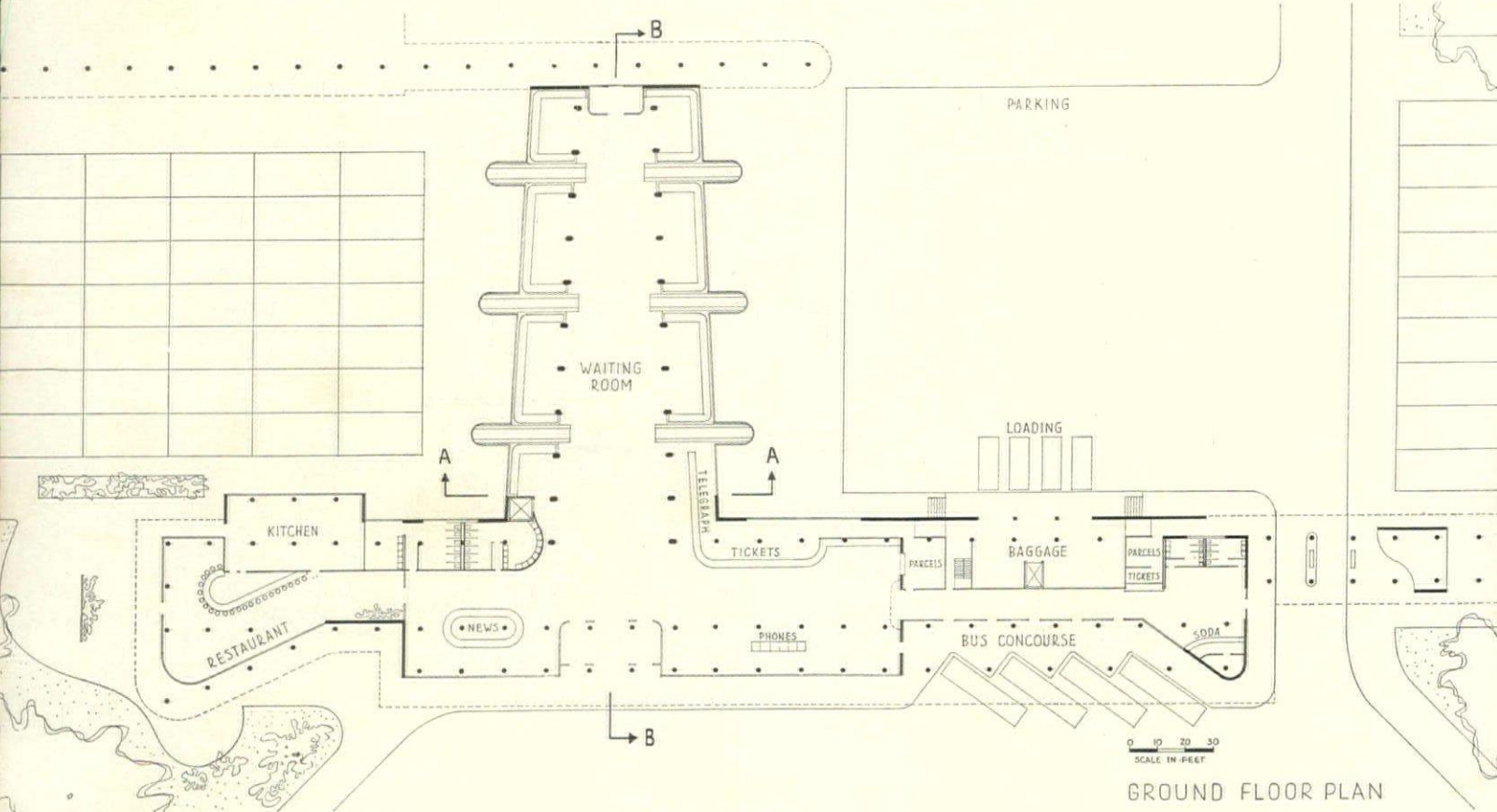
"The necessary six tracks are fed through escalators or stairways in the middle of each platform, which serves both passengers and baggage trucks.

"To bring a railroad station up to the standards of a modern train, utter simplicity and uniformity of rooms seems essential. The same ceiling height throughout the main rooms will give the feeling of a single unit. Electric time-tables on the wall above the ticket counter and similar neon signs and time schedules over each escalator are easily visible to passengers in a clean and simple room."

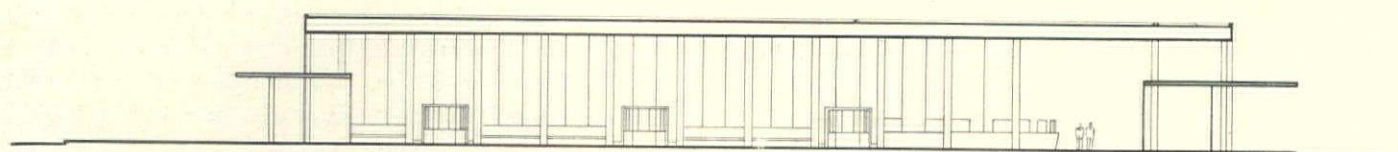
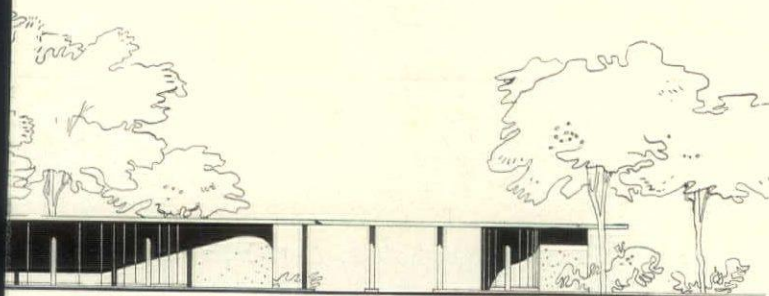




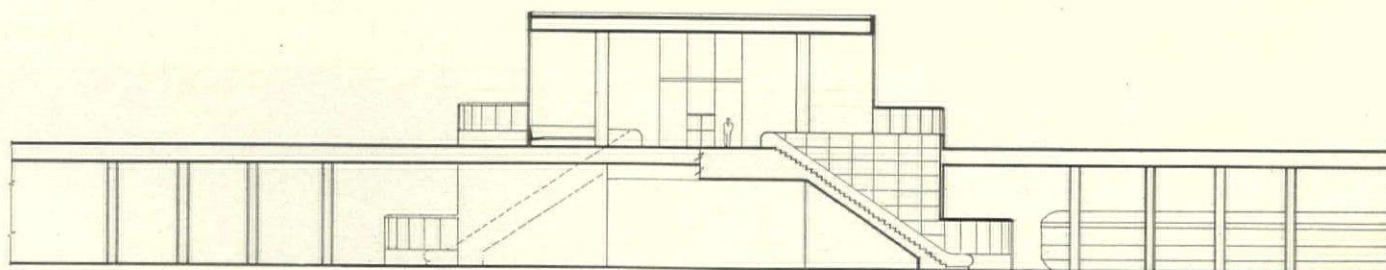
TRACK LEVEL PLAN



GROUND FLOOR PLAN



SECTION B-B



SECTION A-A

"Information, ticket, telegraph, parcel and baggage facilities find their place along an open counter. News, cigars, candies, etc., are located close to the restaurant. The main waiting room has been combined with the passenger feeder which, as a rule, is just a long, unsightly corridor. This combination helps to make people feel at ease and simplifies orientation to the trains. People are not forced to sit locked up in a separate waiting room. Additional waiting space for bus passengers has been provided opposite the ticket counter, from which buses can easily be observed.

"For short-stop bus traffic, a soda bar is located at the far end of the terminal. A bus-ticket counter and baggage room for departing passengers has been placed at that end as well. A transfer baggage room from train to bus and vice versa has been combined with the parcel checkroom and the receiving and loading room for mail, express and baggage. The actual baggage room located at track level serves each track by cross runways and contains rest, locker and toilet facilities for train crews. One elevator is sufficient for freight. A baggage elevator will take care of redcaps at rush hours.

"Lockers, toilet facilities and rest rooms for employees are located in a mezzanine directly under the receiving and loading

room on the first floor. For the convenience of commuters there is a second entrance located at the far end of the waiting room.

"Special attention was given to the restaurant which has an outlook on a small park and plaza. Outdoor dining seemed to be a better solution than a mass eating establishment with a glorious name. Quiet efficiency combined with a friendly, inviting building will attract more business.

"The construction is of reinforced concrete throughout. All ceilings are acoustical plaster with indirect or flush lighting. Concrete interior columns are covered with baked-on enamel sheet steel. Walls are travertine and marble; floors terrazzo. Steel sash and plate glass together with Bedford stone constitute the few simple materials of the exterior.

"As mentioned before, the railroad offices of the district are located in a separate building because there is no necessity for a direct connection with the station. The passenger agent and special agent are the only officers who have desk space behind the counter. The office building also contains shops and different private agencies connected with railroad business. A small-shops building might fulfill many needs in a block unit for a city of this size."

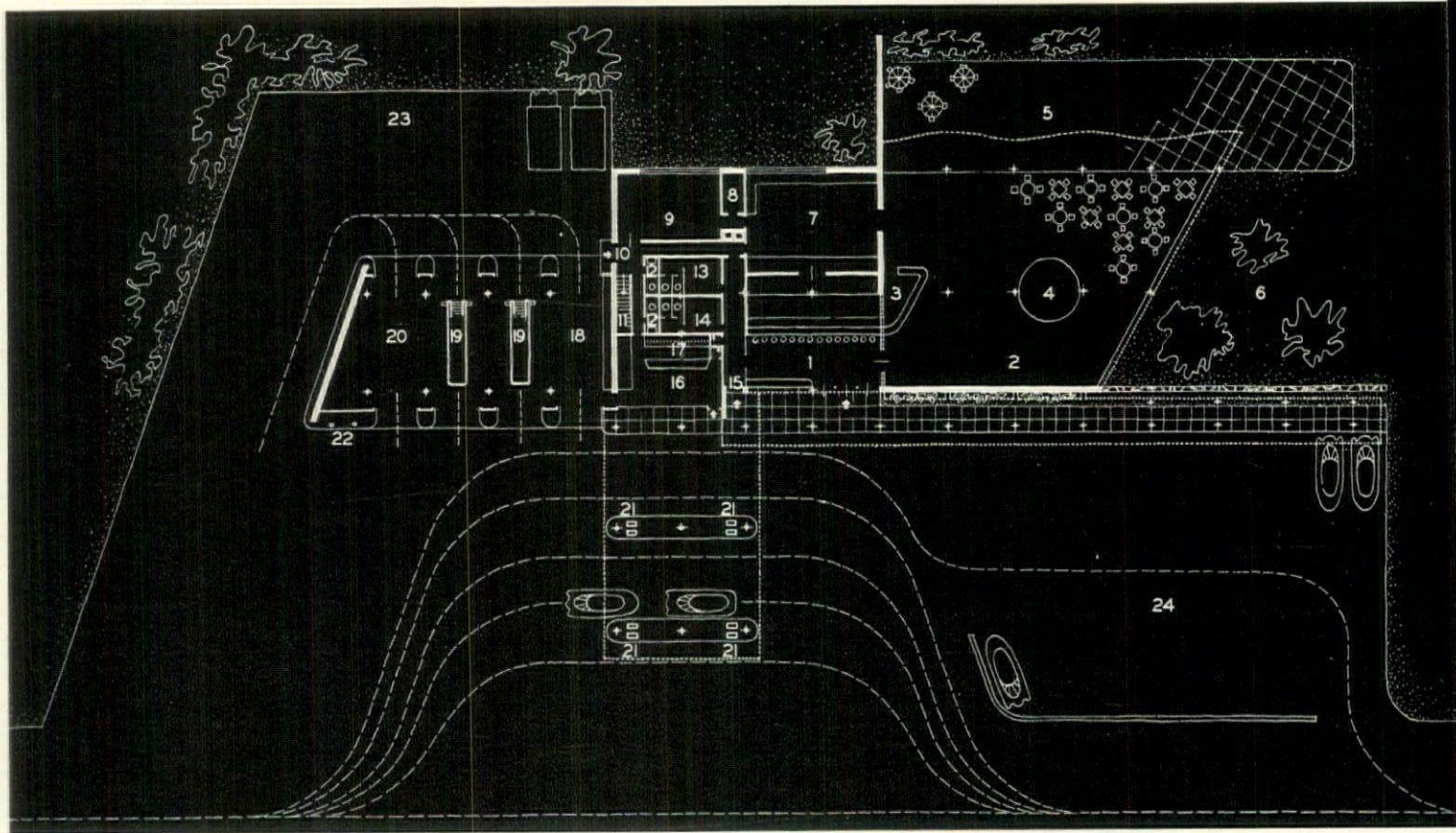
SERVICE STATION

WILLIAM LESCAZE, ARCHITECT, NEW YORK

"The unit would be located on an express highway passing close by a city of 60,000 to 70,000 people. In addition to furnishing gas, oil and the usual services, it contains a roadside stand where motorists can stop for coffee, sandwiches, etc., and also a small restaurant, which both motorists and the inhabitants of the city might patronize for occasional recreation and dancing.

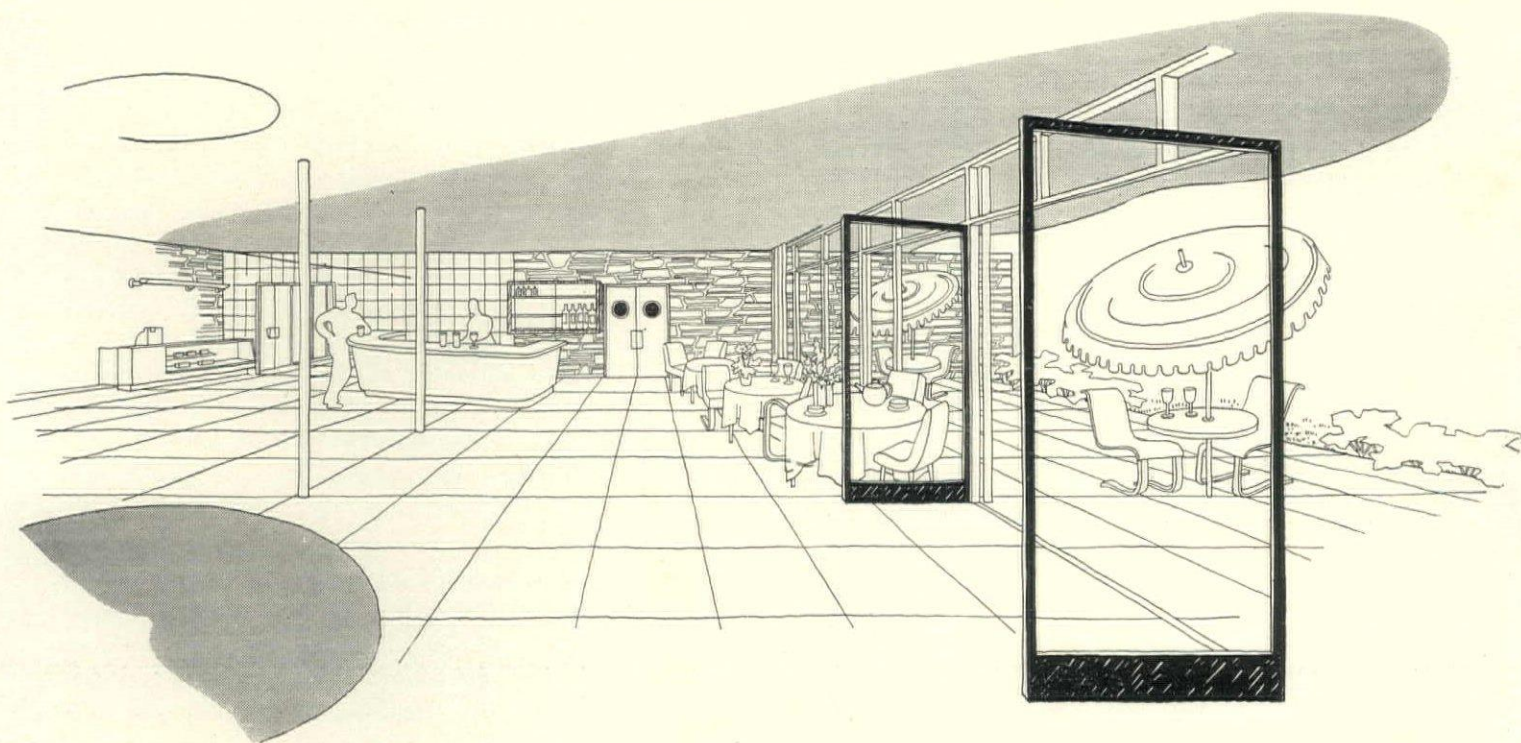
"To quote from *On Being An Architect* (ARCH. FORUM, Sept. '42, p. 16) ; 'Some form of control might conceivably regulate at least five hundred feet on each side of our highways. No one's driving enjoyment is increased by haphazard and planless strings of diners, gasoline stations, fruit stands, miniature golf courses, billboards, which

have been permitted on both sides. At night, their glaring lights obviously decrease rather than increase the driver's safety. But aside from reasons of aesthetics and safety, properly handled control constitutes a wise protection of business which has not been sufficiently stressed. If three Bar & Grilles are built within half a mile, probably none of them can survive. While, if they were separated by three or five miles, each of them might make a living. Then, as an alternative, why not group in one spot the gas station, the fruit and vegetable stand, the diner and, around or between them, the signboards. Wouldn't that make a more effective impression, be more inviting, and benefit the businesses if they were planned as an orderly group?"

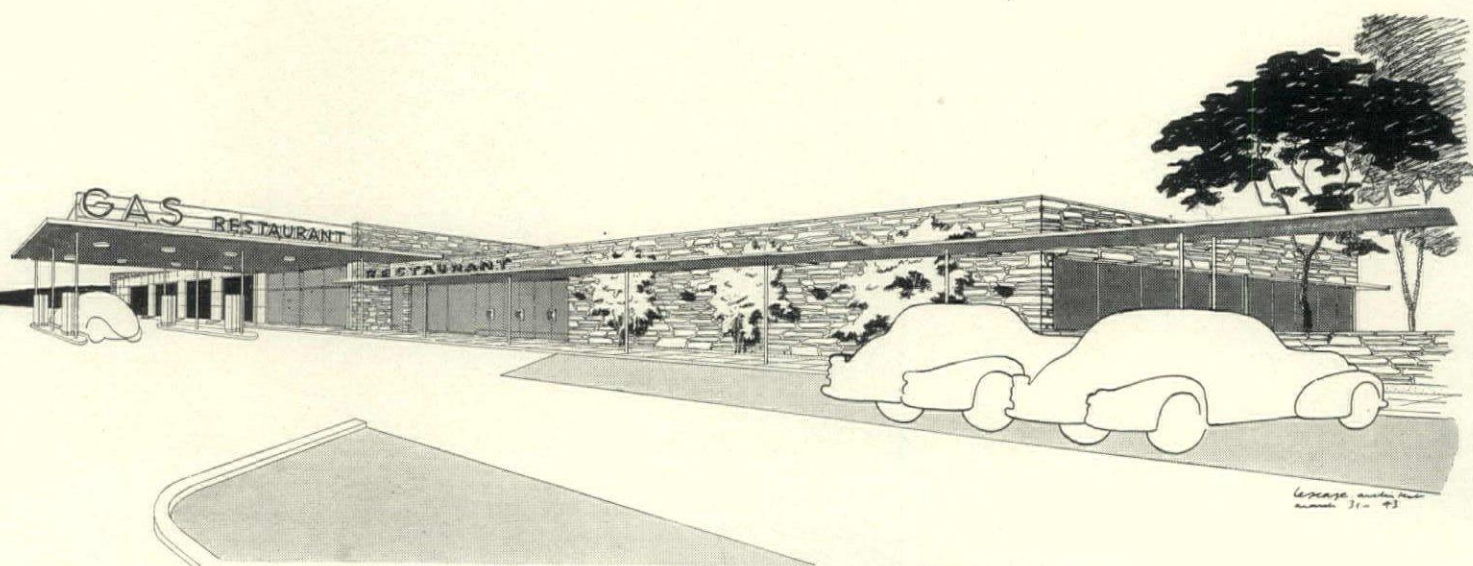


KEY TO PLAN

- | | | | |
|----------------|------------------------|----------------------------|----------------------|
| 1. LUNCH BAR | 7. KITCHEN | 14. MEN'S ROOM | 18. REPAIRS |
| 2. RESTAURANT | 8. REFRIGERATOR | 15. ENTRANCE TO REST ROOMS | 19. LUBRICATING PITS |
| 3. BAR | 9. FOOD STORAGE | 16. OFFICE AND SALES ROOM | 20. CAR WASHING |
| 4. DANCE FLOOR | 10. SERVICE ENTRANCE | 17. COUNTER AND DISPLAY | 21. GAS PUMPS |
| 5. TERRACE | 11. STAIRS TO BASEMENT | | 22. AIR |
| 6. LAWN | 12. EMPLOYEES' TOILETS | | 23. SERVICE PARKING |
| | 13. LADIES' ROOM | | 24. GUEST PARKING |



View across restaurant toward the bar. Circular dance floor is at the left. Doors to the kitchen set into a stone wall, which projects to shelter the outdoor dining space on the far side from the highway.



The filling station would look well on a roadside, has plenty of advertising value despite its unobtrusive appearance. Use of fine-textured materials rather than flashy ones makes this a pleasant place to drive in to.

HOUSE FACTORY

CALEB HORNBOSTEL, ARCHITECT, NEW YORK

PREMISE:

"This project is based on the assumption that a factory for the production of prefabricated houses should be situated in a locality within easy access to lumber supplies and ready-manufactured parts. It should, in addition, be fairly centrally located, so that it can ship houses without much difficulty over a rather large area of the country. It has been further assumed that an extended market will exist for a full utilization of the plant's productivity. Three basic factors have conditioned the design of this plant:

"1. The houses will be produced as a finished assembly of units. These will include living-dining units, kitchen units, bathroom units, bedroom units and other desirable unit types.

"2. All materials for the construction of these houses are to be manufactured elsewhere and delivered for assembly only.

"3. The flow of materials and workmen should be from opposite directions.

PLANT:

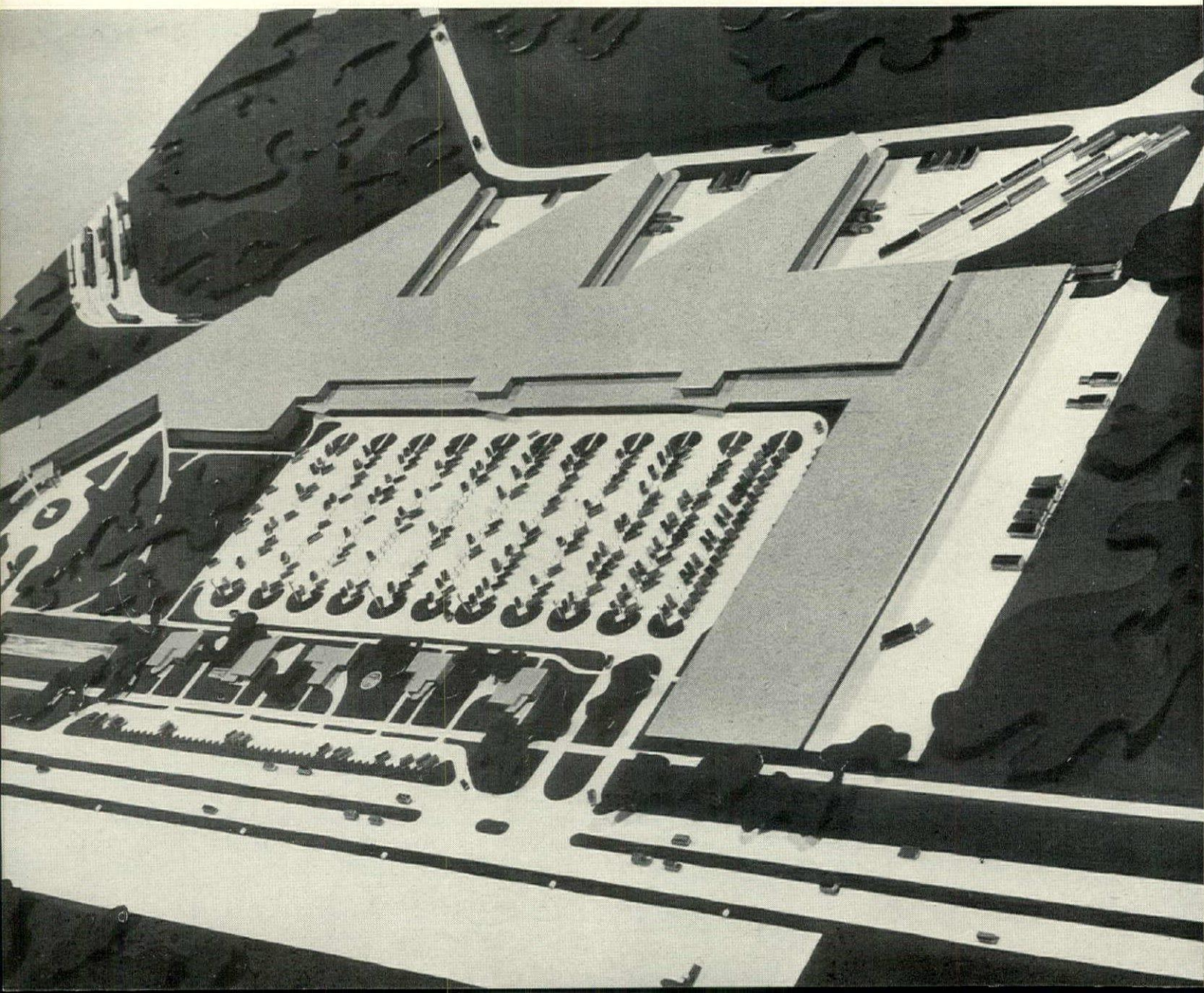
"The factory is set up on straight assembly lines, under a production scheme which stipulates that all materials for floor, walls, roof, utilities and cabinet work are *first*, delivered, catalogued or stored on the first floor; *second*, raised to the second floor, where they are constructed into sectional units; *third*, lowered onto the main assembly line.

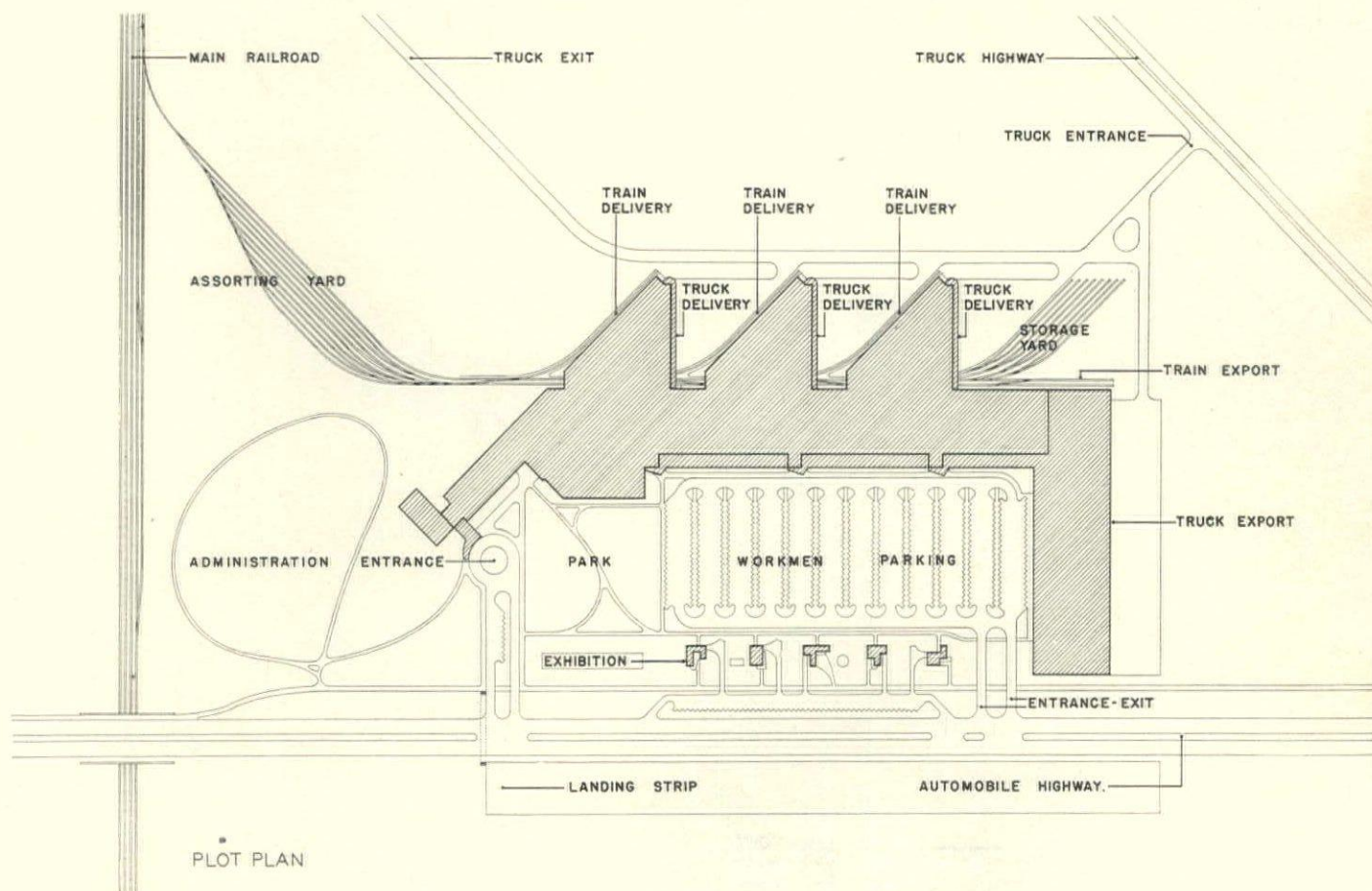
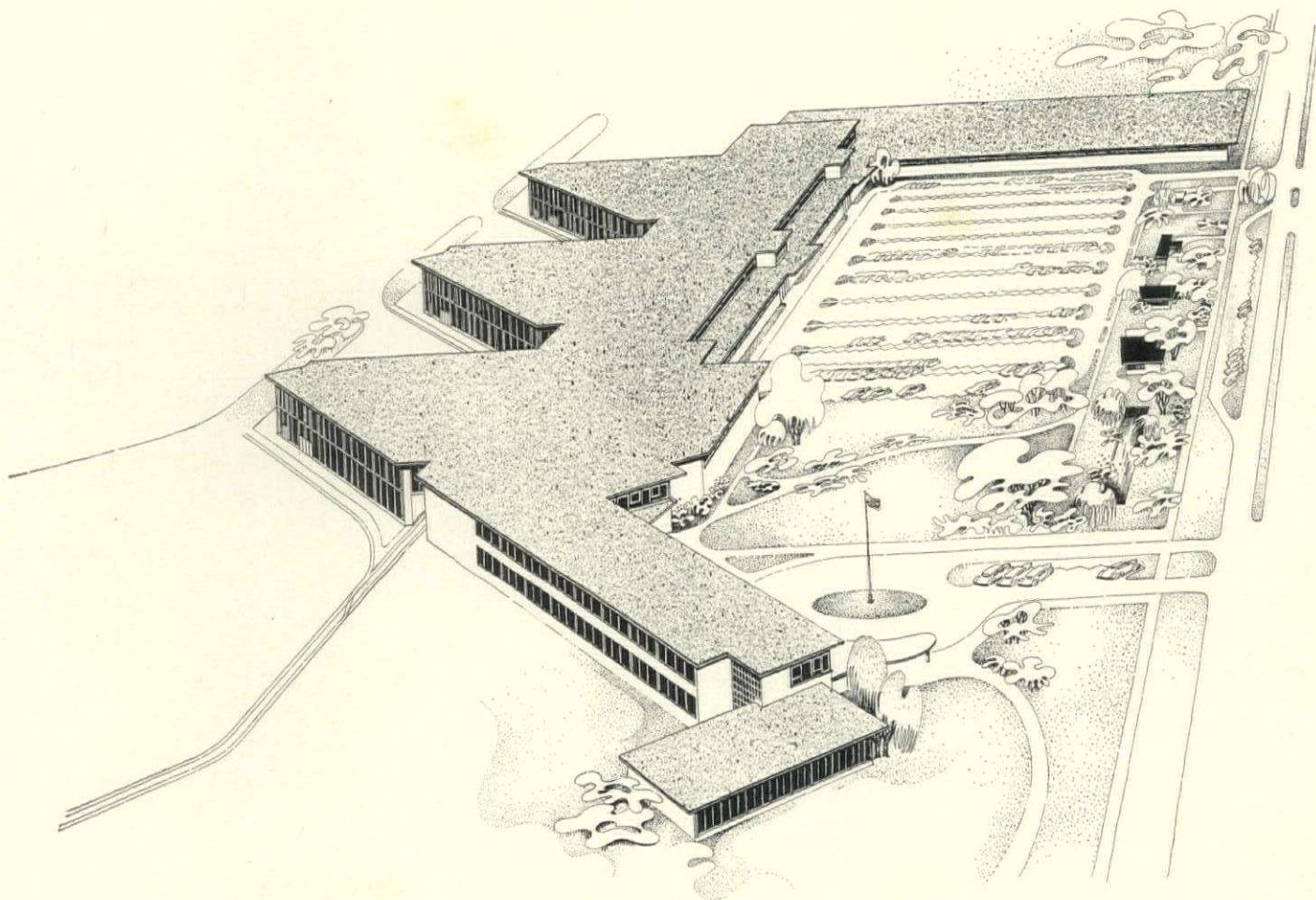
"All small parts necessary to the main assembly lines, such as nuts, bolts, conduit, light fixtures, switches, pipe fittings, etc., are located directly off these lines.

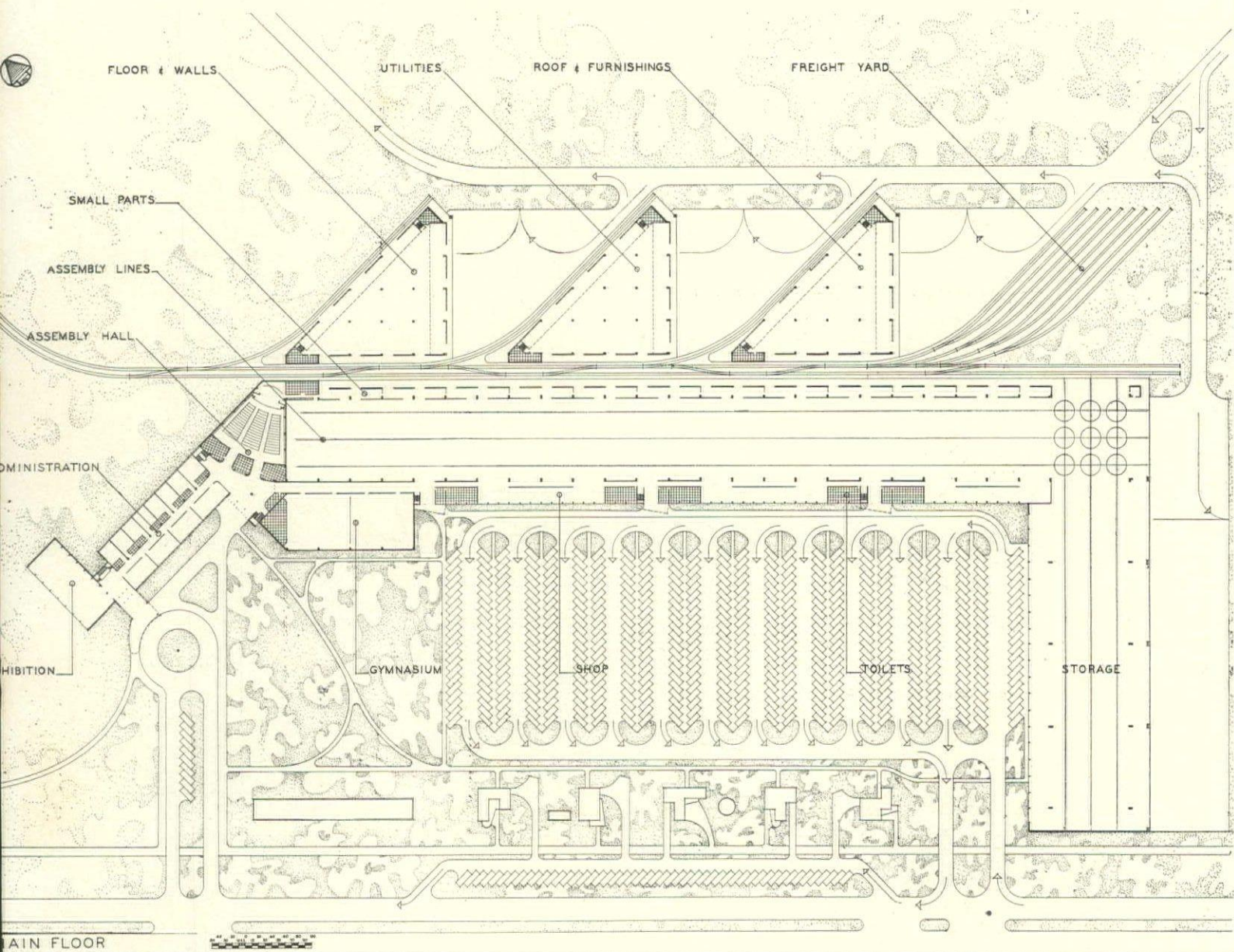
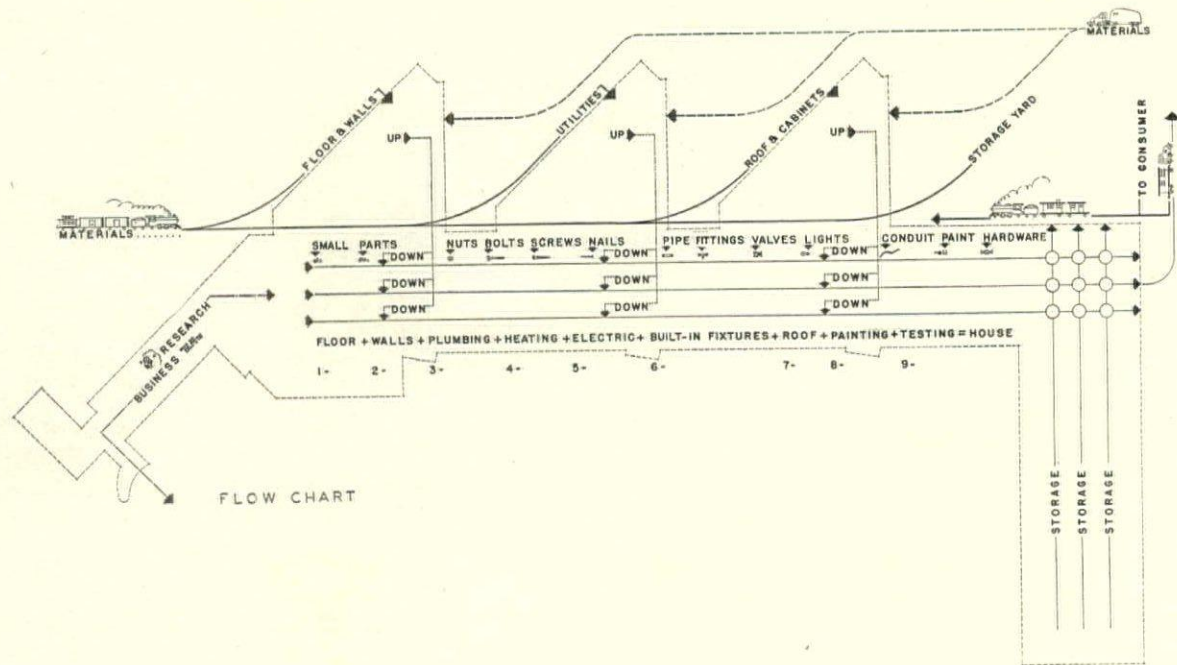
"Shops for touching up, welding, etc., are also located directly off the main assembly line.

PARKING:

"A large parking area for automobiles, screened from the main highway by a row of demonstration houses, is located directly to the southwest of the factory. The workmen enter directly from the automobile parking area to locker rooms, toilets, etc., and from those to the various sections of the factory."







RECREATION:

"For the recreation of the workers, a large assembly hall, two gymnasiums, bowling alleys and pool and billiard tables have been incorporated in the design.

EATING:

"A large dining room (cafeteria type) with its kitchen has been planned for the basement.

ADMINISTRATION:

"On the first floor of the administration wing the following rooms are located: A large showroom for the demonstration of interior color schemes, furnishing and kitchen and bathroom arrangements; offices, conference rooms, publicity, advertising and sales departments. On the second floor are located the accounting and payroll departments, stenographic pool, library, research department, drafting room and laboratory.

TRUCKING:

"The truck system operates as follows: Trucks are used both for the delivery of materials for manufacturing and delivery of houses directly to the consumer. It is almost certain that all trucking will be eliminated from express

highways and that a trucking road system will be evolved. These truck highways will naturally be designed on basic sizes controlled by the products manufactured. Without the height, width and length restrictions existing today, the prefabricated house may easily be delivered to the consumer complete in one piece.

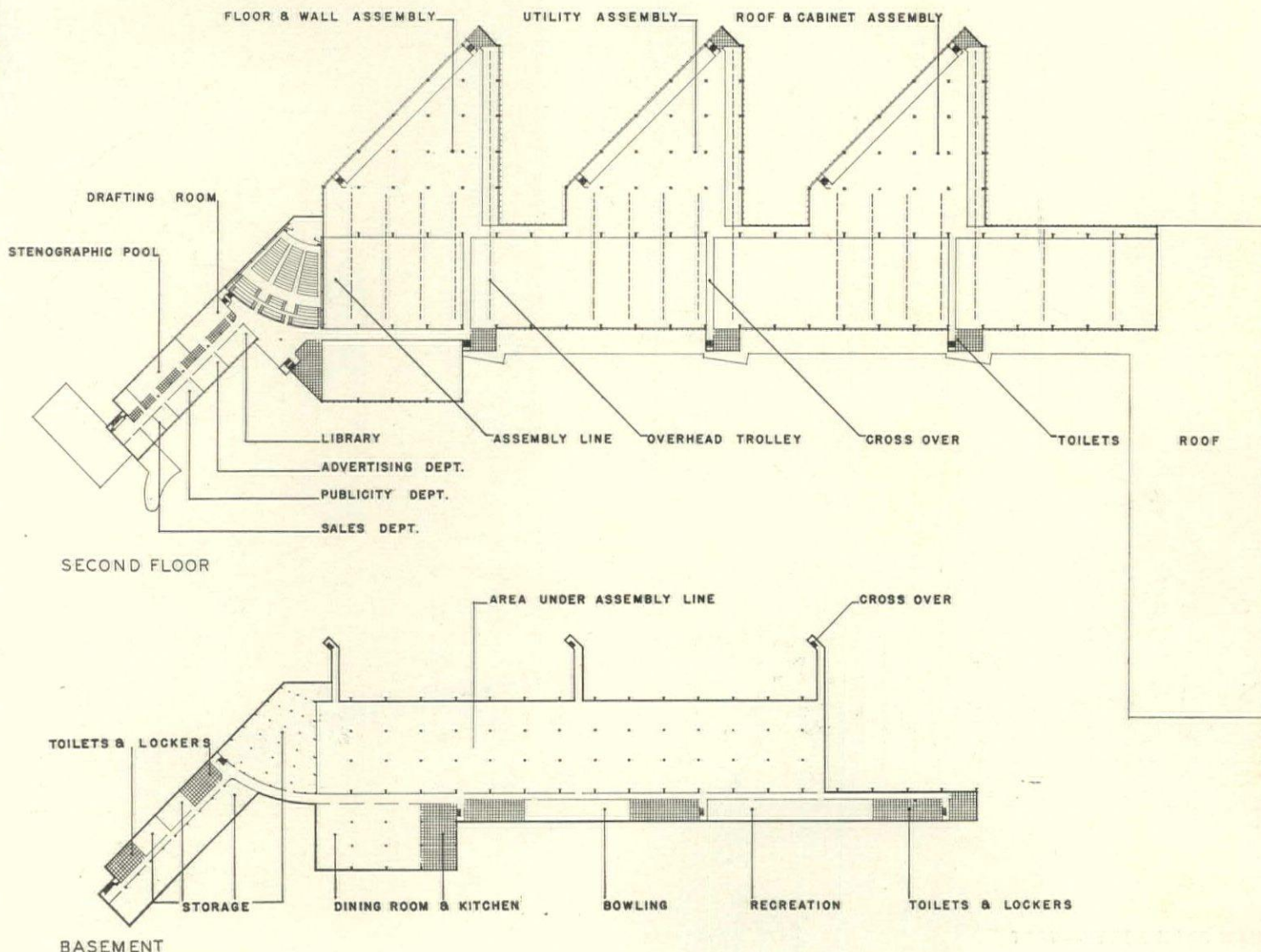
RAILROAD:

"The railroad system operates as follows: The railroad delivers loaded cars once a day to a large assorting yard, takes away all empties and loaded cars. In the assorting yard switch engines assort these cars into groups for the various divisions of the factory.

"After assortment these are switched to their particular unloading siding. When empty they are gathered and made up in the storage yard together with those which have been loaded with house units for delivery to consumer, ready to be taken away when the next shipment of loaded cars arrives.

AUXILIARY TRANSPORTATION:

"A landing strip for airplanes has been provided on the far side of the highway to facilitate transportation of executives and salesmen."



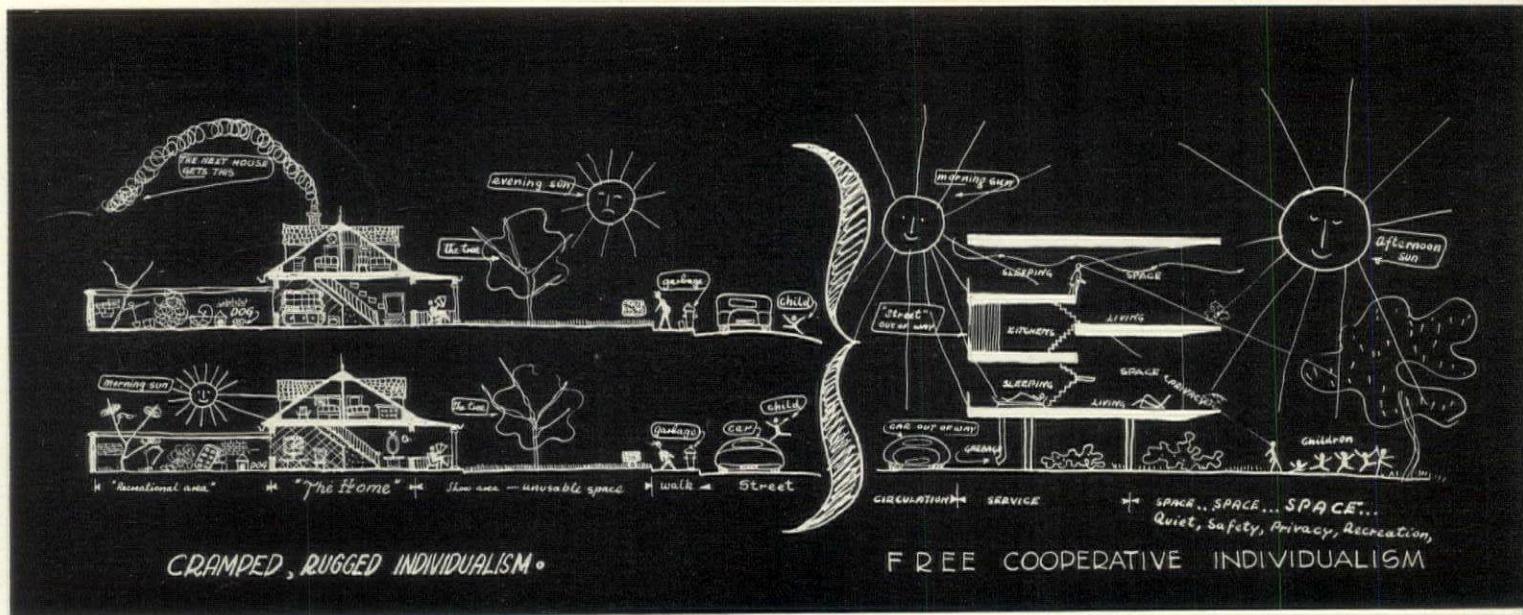
PARK APARTMENTS

SERGE CHERMAYEFF GROUP, NEW YORK

PETER BLACH, SERGE CHERMAYEFF, ABEL SORENSEN
COLLABORATORS: NORMAN FLETCHER, HENRY HEBBELN



VIEW FROM NORTH—WEST



THE ARGUMENT

"Most of the theories upon which this project is based are well known. However, as there are few applications to date, it may be appropriate to restate at least some of the basic ideas:

"The postwar period should mark the final disappearance of obsolete street and block development and its crowding, dangers and noise, with which it has been our habit to surround our dwellings. Whether they be the separate houses of rugged individualism, the row houses with their anomalous recognition of the 'street' of another era, or the massive apartment block, they have produced nothing more than compromised, substandard living conditions.

"Instead we must establish a new organic pattern of urbanism, in which the 'street' is supplanted by **traffic arteries**, which in turn are segregated from **zones of living**—rather than create 'blocks' for 'development.' We must, in fact, establish a **free spatial expression of living** in its fullest contemporary sense. In such zones dwellings can be insulated from traffic noises and danger by humanized space instead of arbitrary property lines.

"It is within such a framework that 'Commodity, Firmness and Delight' can find their appropriate architectural expression, and meet the need for Tranquility, Light and Air—in dwellings where rest and recreation may be found among physically and spiritually stimulating surroundings.

"Instead of individuality finding expression through competition of 'architectural styles,' which finally degenerate

into chaos and blight—architectural and personal bankruptcy—we must create housing that will stimulate a healthy community spirit and mutual enjoyment, to offer, in turn, growing opportunities for individual and communal development on a higher level.

"The familiar arguments for the individual house as against apartments cite the advantages of the relatively freer spaces, with varieties of volume, levels and outdoor living areas denied to the dweller in a typical apartment block. These advantages are very real, but to continue to deny them to apartments is to be unrealistic.

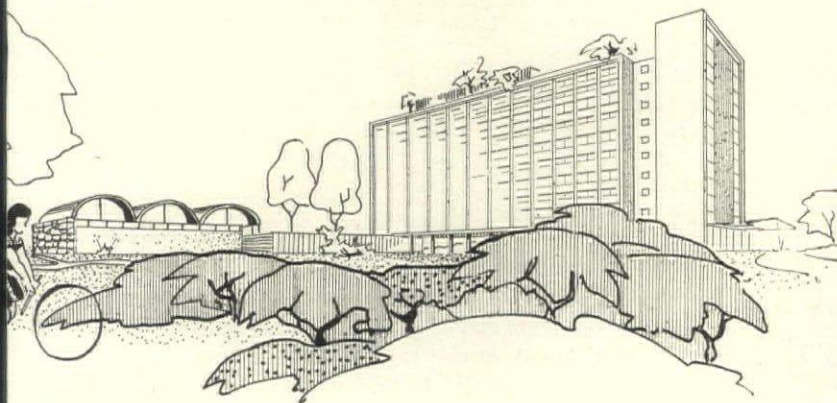
"On the other side of the balance sheet appear many disadvantages rooted in the standard block subdivision: The absence of light and air, the uneven distribution of sunlight, the lack of privacy. As it is, only the relatively well-to-do can afford to insulate themselves from unwelcome noise of neighbors or the street, or enjoy a view of more stimulating surroundings than other people's laundries or the monotony of the same street.

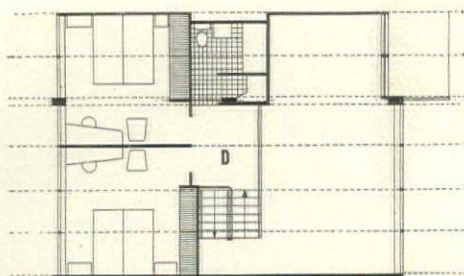
"Most typical developments involve waste of land and effort: The unproductive setback strips between houses; the front yard which becomes a maintenance liability in the struggle to 'keep up with the Joneses' and offers little more than facade value; and the too-close-for-parents'-peace backyard play area, or its dreary and dangerous street-play alternative.

"The provision of play areas in found space is an admirable palliative for the inherited chronic disorders of the past. It is not a prescription for the future.

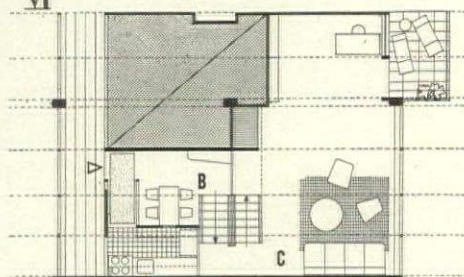
"The project developed here attempts to combine the advantages of house space and the pooled resources of the multi-dwelling apartments—adding to these essential features now absent from either.

"The basis is the formation of **super blocks** defined by **one way** secondary approach roads containing within their boundaries all essential elements of a complete neighborhood unit. Rest and recreation areas are evenly distributed among all tenants, together with maximum amenities consistent with sound economy. Spaces large enough to provide not only for the known needs and zoned to meet these immediately—but also designed to make ample provision for the needs of the future, which we can see emerging with increasing clarity."

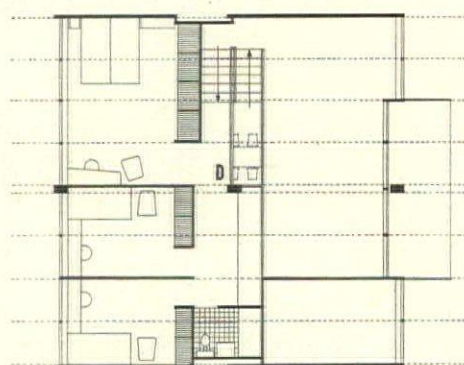




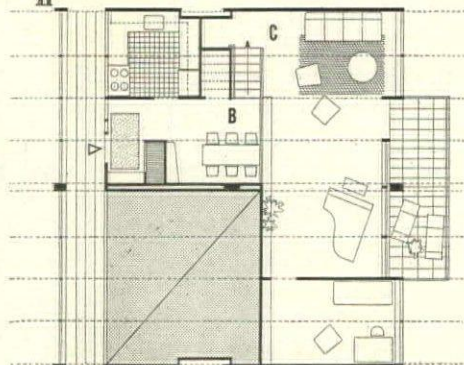
VI



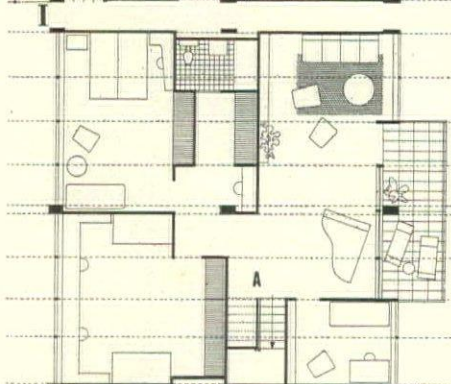
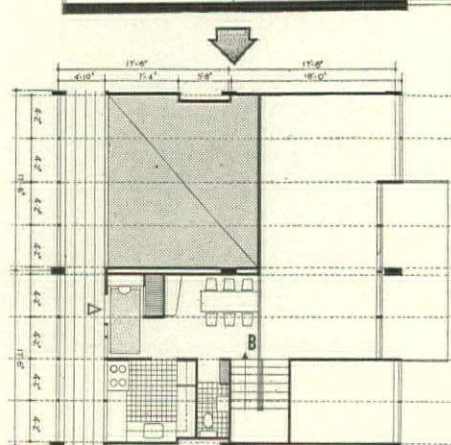
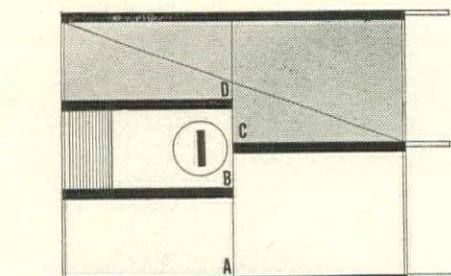
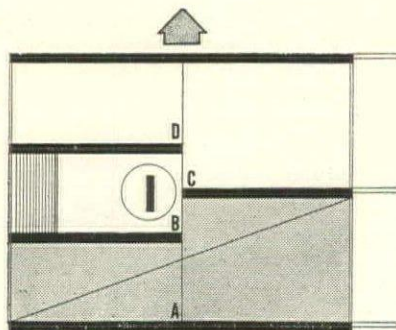
1 1/2 BAYS, ON THREE LEVELS



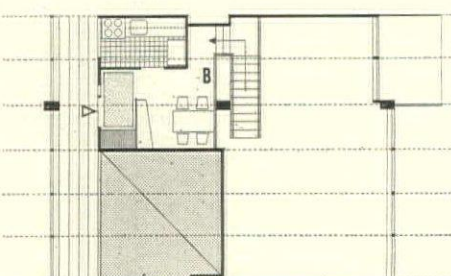
II



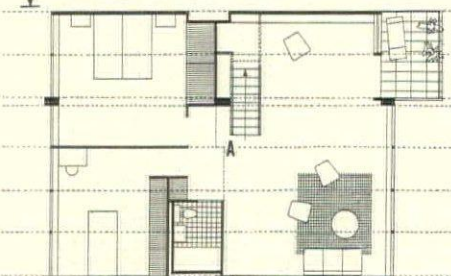
2 BAYS, ON THREE LEVELS



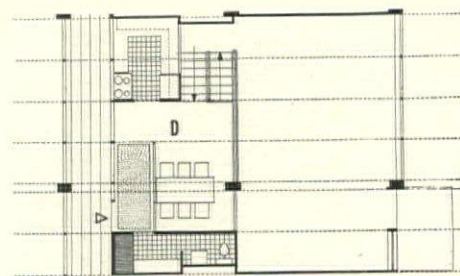
2 BAYS, ON TWO LEVELS



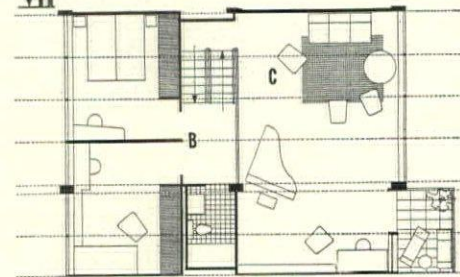
V



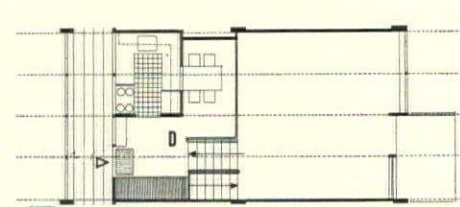
1 1/2 BAYS, ON TWO LEVELS



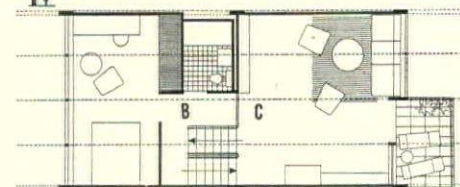
VII



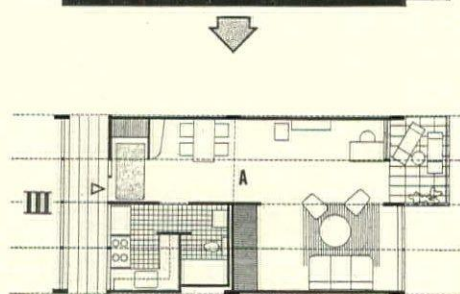
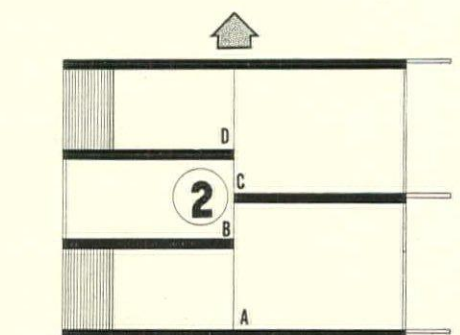
1 1/2 BAYS, ON THREE LEVELS



IV



1 BAY, ON THREE LEVELS

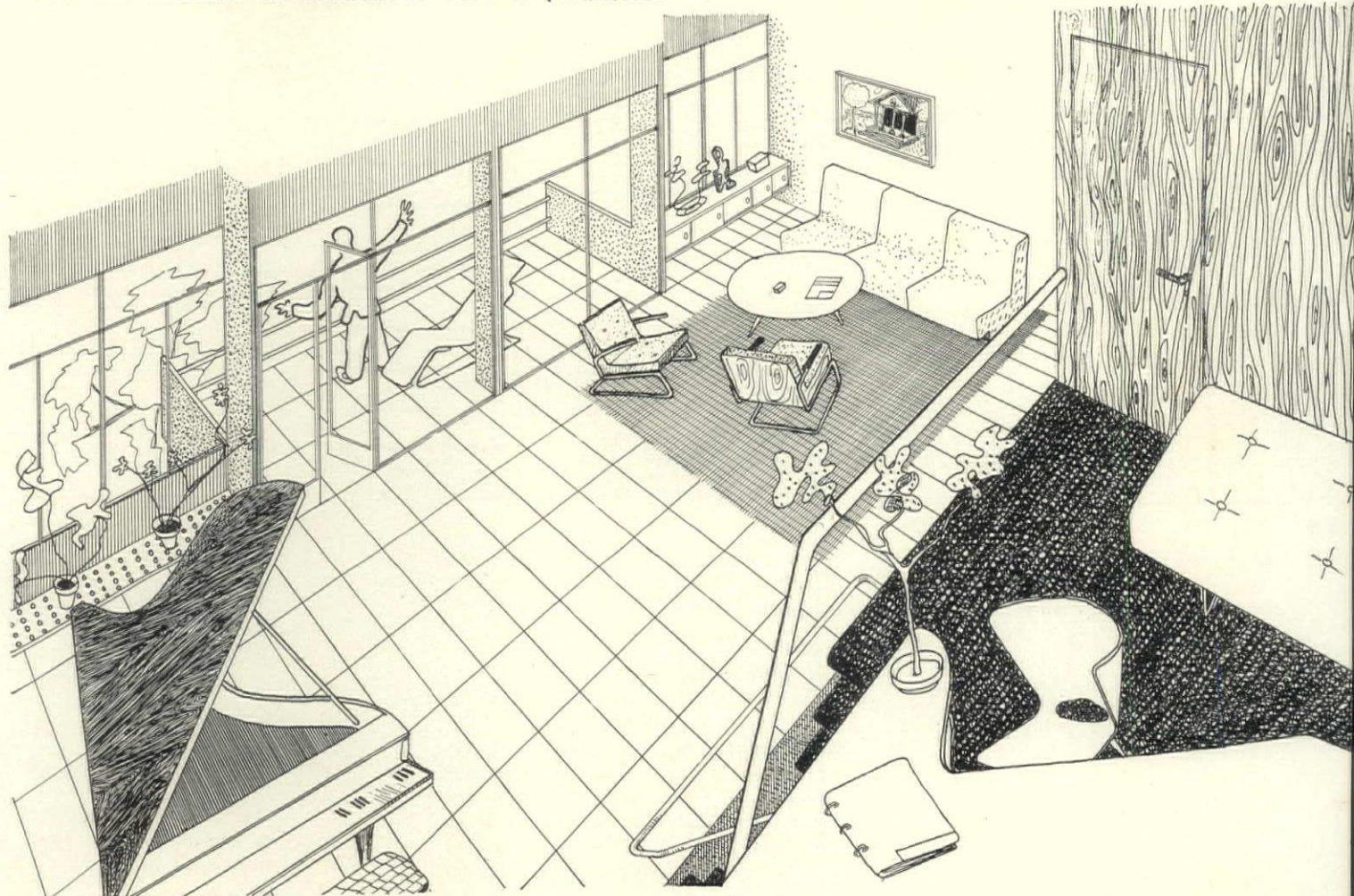


III

1 BAY, ON ONE LEVEL

All apartments shown on this page fit into one or another of two basic sections. The principal difference between these sections is that one has a single corridor while the other has two. Section 1 (single corridor) is used for the larger apartments; section 2, used for small apartments, requires two corridors to serve the increased number of tenants and to get a more even distribution of traffic.

The left-hand column shows the plans of two apartments which fit into the upper half of section 1. Both are arranged on three levels. The center column shows the apartments which fit into the lower half of section 1. The apartments in section 2 (right-hand column) are one- and two-bedroom units on the three upper levels, and an efficiency apartment with a bed-living room on the lowest level.



PLAN AND STRUCTURE

1. BASIC PLAN. "The living space was designed to provide variations in levels and volume implicit in the house, and a generosity in planning usually denied to all but the more costly apartments. The plan has endeavored to present this generosity in terms of the whole space rather than through piecemeal apportioning of size to individual rooms, which often serves no real purpose when in actual use.

"It seemed to the authors that these objectives were best met through a section containing three floors of bedroom and service areas to two floors of living rooms, with resulting plans of living space on two or three levels. The basic plans and sections illustrate this 2-3 principle, which was so successfully applied in the Palace Gate Flats by Wells Coates in London. The sections provide the following advantages:

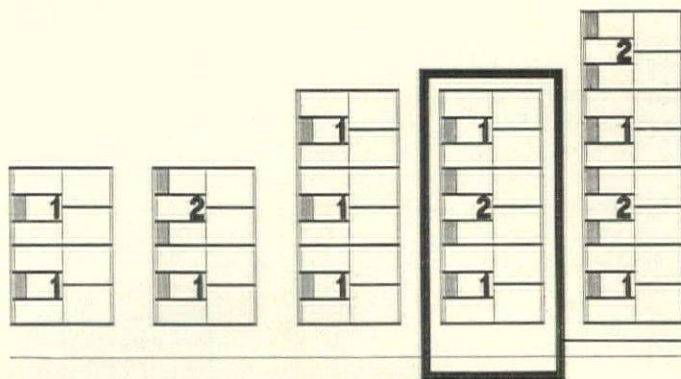
"All living areas are insulated from public spaces by service areas, entrance lobbies and kitchens.

"All living areas open to the park with its pleasant views, and receive their share of sunlight.

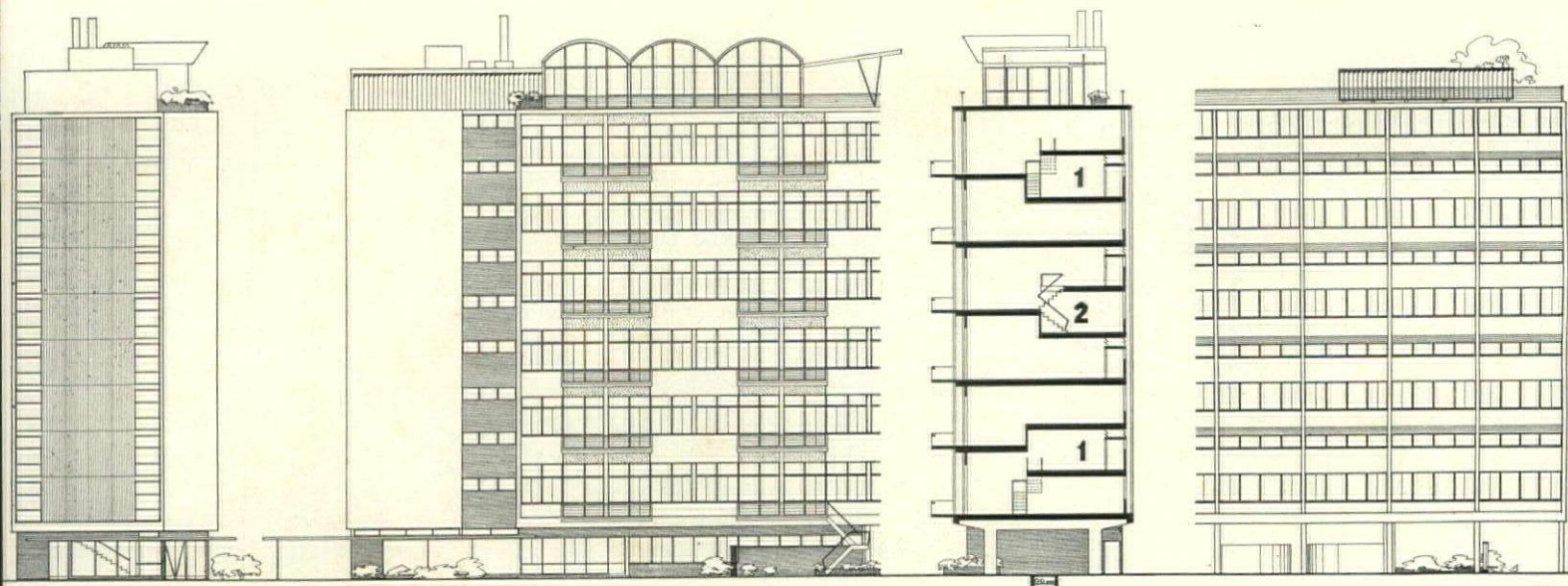
"All living areas have through ventilation. Entrance lobbies, kitchens and eating areas have the same ventilation through ducts over corridors. All bathrooms are ventilated through vertical exhaust ducts.

"All apartments have large balconies for outdoor living.

"The flexible system of plans and sections permits the provision of any combination of apartments within a block to meet local requirements. Each individual apartment, in turn, can be rearranged around the basic service core to meet the needs of individual tenants."



TYPICAL COMBINATIONS OF BASIC SECTIONS into apartment blocks. The section shown in frame is the one selected for development in this project, a block 12 structural bays long, producing 48 apartments for renting.



2. TYPICAL APARTMENT UNIT. "The unit selected for development in greater detail is composed vertically of two basic sections of one corridor sub-divided into the largest apartments (types I & II) of 2 or 3 bedrooms each; and one basic section of two corridors subdivided into an equal number of smaller apartments of 1 bedroom (type IV) and bed-sitting room apartments (type III). All sections are 12 structural 17'-6" bays long. In all cases the corridors give access to 12 apartments each. The apartment block is combined with the basic stair and elevator block, and the basic service link. These basic units are independent of the apartment block, and can therefore be varied to meet site and capacity needs. They can be placed between two blocks of apartments or at the end of any one. The total accommodation provided in the unit selected is as follows:

a. APARTMENTS.

Type	No. of each type	Apartment occupancy	Total max. capacity
I	12	4	48
II	12	4	48
III	12	2	24
IV	12	2	24

Tot. No. of Apts. 48 Tot. capacity 144 people

Manager's apartment: 2 bedrooms, bath, living-dining room, kitchen, office, terrace.

b. SERVICES.

Unloading Dock at entrance level, accessible from management's office, which controls both public and service entrances.

Unloading & Cleaners' Room at all corridor levels.

Refuse Chutes at each end of corridors. **Laundries** at all levels between corridors (5 in all), equipped for simultaneous use by four families, directly accessible through service elevator one floor up or down from every corridor.

2 Passenger Elevators serving all corridors, with one elevator and service elevator serving the roof level.

Centralized Tenant Storage.

Parking for 12 baby carriages.

Bicycle Storage for 24.

All under direct managerial control.

Central Heating & Incinerating Plant in basement. This would apply to a development

of 1 to 2 blocks. In a larger development a central system for the whole is recommended. **Garages** for 45 cars.

c. AMENITIES.

Roof Garden. All typical units are planned for utilization of this space, which is shown zoned for play and sun-bathing.

Roof Restaurant to seat 48 indoors. A self-service type which could be managed with a minimum kitchen staff. The main restaurant area may be used as a whole, or may be subdivided into separate smaller areas for use by individual tenants, as for instance for parties, or by groups for recreational or educational purposes. Film projector and screen are provided.

It is proposed that such a restaurant be provided for every 2 to 4 apartment blocks, so as not to allow them to become disproportionately large, and thereby infringe on other equally important amenity areas.

Gardens at Ground Level. The continuity of the garden space under the main structure is not only esthetically desirable, as it permits the interlocking and interpenetration of landscape and structure—but it serves at the same time the very useful purpose of providing covered and shaded areas for rest and play. The garden is zoned into areas of special use by light screens and planting: small-scale gardens as approaches to the open park spaces.

Manager's Garden.

Sunny and Shaded Terraces.

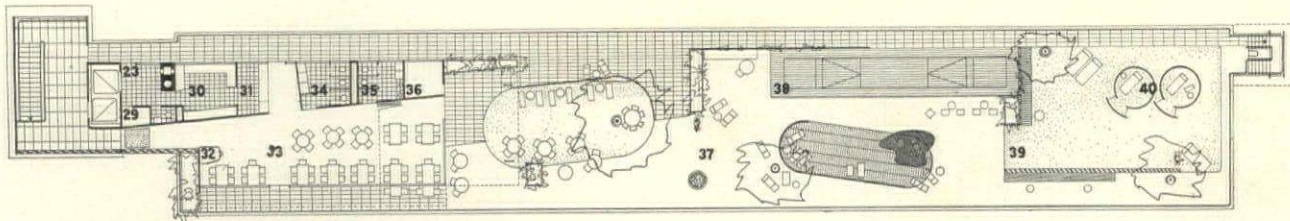
Children's Play Area at the south end of the buildings away from traffic, provides for play both in the sun and under cover.

Nursery School.

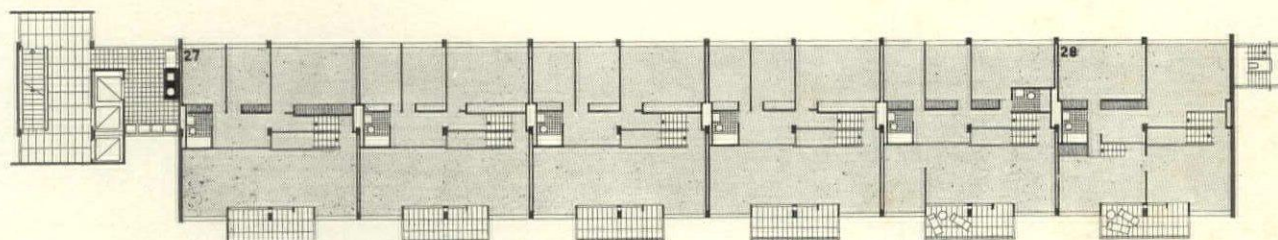
3. STRUCTURE. The frame is of reinforced concrete, with structural bays 17'-6" on centers in width and depth. Prefabricated wall sections are hung from the frame without use of scaffolding. A 4'-2" module between columns contributes greatly to economy in prefabrication, and to a wide choice of materials. Vertical service shafts, containing pipes, ducts and wiring, occur at alternate column lines in all I, II, III and IV apartments, and between column lines in apartments V, VI and VII."

KEY TO PLANS

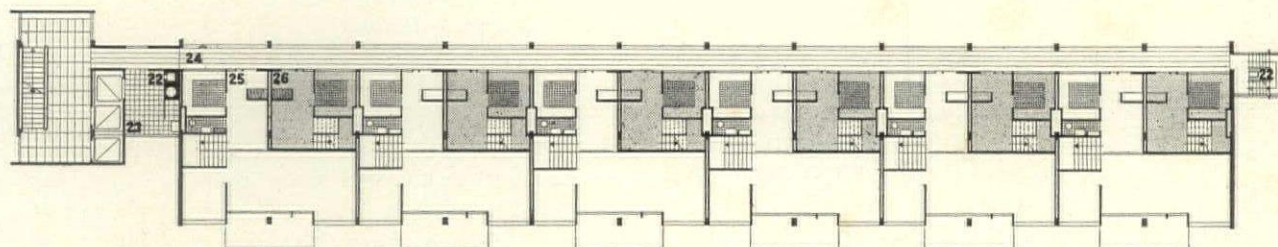
1. Main Entrance
2. Office
3. Service Entrance
4. Manager's Apartment
5. Baby Carriages
6. Bicycles
7. Manager's Garden
8. Tenants' Storage
9. Stairs from 2d floor Apts.
10. Eastern Terrace
11. Covered Terrace
12. Wind Screens
13. Sculpture
14. Children's Play Area
15. Escape Stair
16. Paddling Pool
17. Sand Pit
18. Hall
19. Laundry
20. Lower Level of Apt. I
21. Balcony
22. Refuse Chutes
23. Service
24. Corridor
25. Corridor Level of Apt. I
26. Corridor Level of Apt. II
27. Upper Level of Apt. II
Standard 3 - bedroom plan
28. Upper level of Apt. II
Variations
29. Stores and Staff Toilet
30. Kitchen
31. Serving Counter
32. Film Projection Booth
33. Restaurant
34. Women's Toilet
35. Men's Toilet
36. Chair Storage
37. Roof Garden
38. Shuffle Board
39. Sunbathing Lawn
40. Wind Screens
41. Incinerator
42. Heater & Boiler Room
43. Ducts & Electric Control
44. Trench



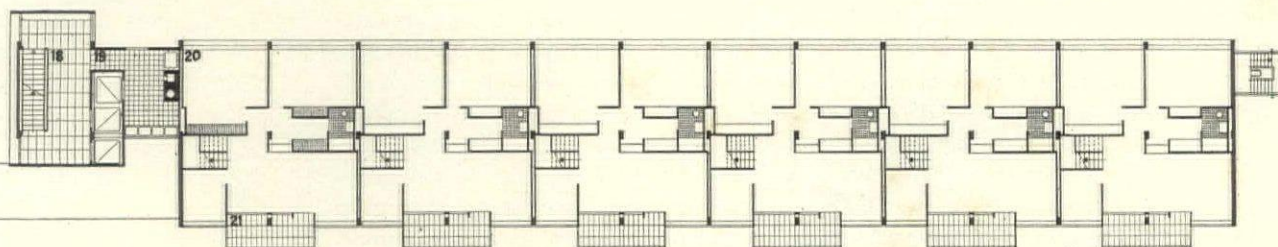
ROOF



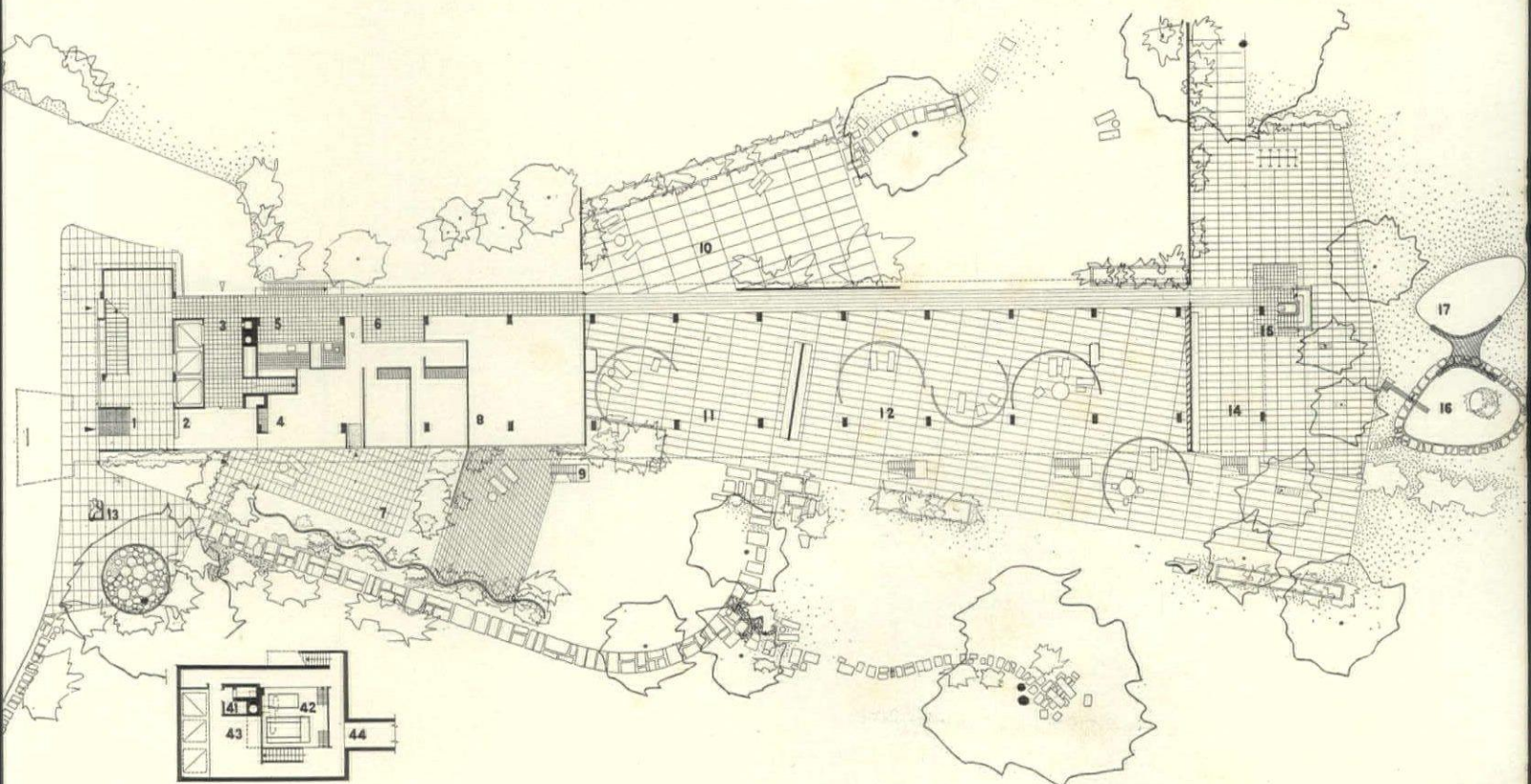
LEVEL D OF BASIC SECTION (1), APARTMENT II.



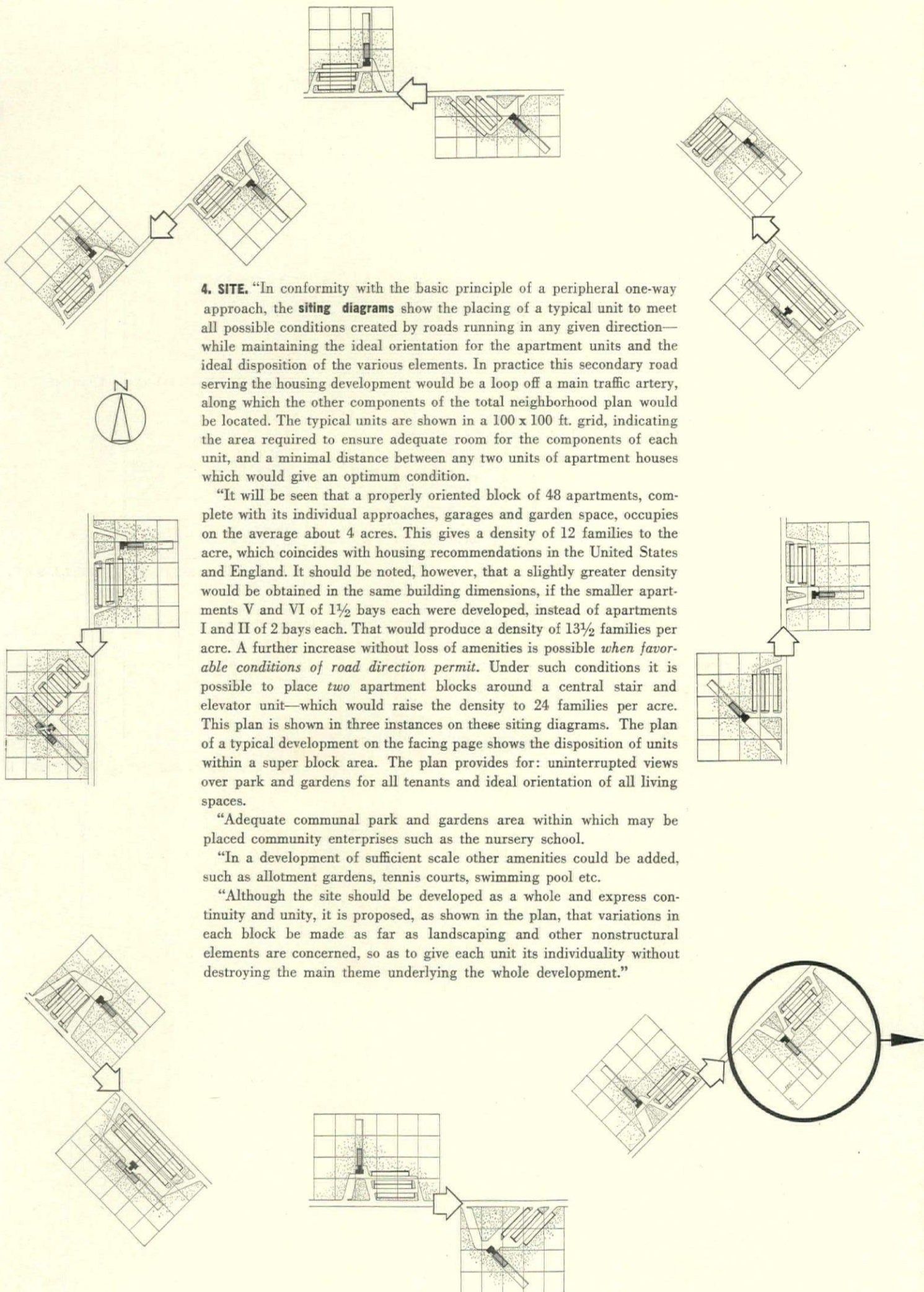
LEVEL B OF BASIC SECTION (1), APARTMENTS I. and II.



LEVEL A OF BASIC SECTION (1), APARTMENT I.



GROUND FLOOR AND BASEMENT



4. SITE. "In conformity with the basic principle of a peripheral one-way approach, the **siting diagrams** show the placing of a typical unit to meet all possible conditions created by roads running in any given direction—while maintaining the ideal orientation for the apartment units and the ideal disposition of the various elements. In practice this secondary road serving the housing development would be a loop off a main traffic artery, along which the other components of the total neighborhood plan would be located. The typical units are shown in a 100 x 100 ft. grid, indicating the area required to ensure adequate room for the components of each unit, and a minimal distance between any two units of apartment houses which would give an optimum condition.

"It will be seen that a properly oriented block of 48 apartments, complete with its individual approaches, garages and garden space, occupies on the average about 4 acres. This gives a density of 12 families to the acre, which coincides with housing recommendations in the United States and England. It should be noted, however, that a slightly greater density would be obtained in the same building dimensions, if the smaller apartments V and VI of 1½ bays each were developed, instead of apartments I and II of 2 bays each. That would produce a density of 13½ families per acre. A further increase without loss of amenities is possible *when favorable conditions of road direction permit*. Under such conditions it is possible to place *two* apartment blocks around a central stair and elevator unit—which would raise the density to 24 families per acre. This plan is shown in three instances on these siting diagrams. The plan of a typical development on the facing page shows the disposition of units within a super block area. The plan provides for: uninterrupted views over park and gardens for all tenants and ideal orientation of all living spaces.

"Adequate communal park and gardens area within which may be placed community enterprises such as the nursery school.

"In a development of sufficient scale other amenities could be added, such as allotment gardens, tennis courts, swimming pool etc.

"Although the site should be developed as a whole and express continuity and unity, it is proposed, as shown in the plan, that variations in each block be made as far as landscaping and other nonstructural elements are concerned, so as to give each unit its individuality without destroying the main theme underlying the whole development."

FINANCE.

"In the past amenities which are an essential part of a housing project have been either sacrificed because of the heavy land cost which such projects had to carry in developed urban areas; or, such developments have been forced to cheaper and not always more desirable land on the peripheries of cities, thus pushing further and further into the countryside, with the consequent spoilation of the latter and the disintegration through blight of the city core.

"This housing development must be considered as an instrument for urban rehabilitation and a means of stopping the creeping of the blight into the countryside. The successful execution of such a project would depend very largely on the means of acquiring suitable land and its equitable evaluation. It appears feasible for a local authority to enact necessary legislation, which would make it possible for it to acquire land with Federal assistance on a large enough scale to permit generous, healthy and farsseeing housing developments. (see Hanson-Greer Plan, Uthwatt Report, et al.) The authority concerned could then create long-term ground leases with the double advantage of attracting private building finance into desirable channels, while retaining a continuous interest and control much more real than the present legislative controls, in projects of the highest standard and value. That is to say, the authority would maintain a creative interest rather than a purely restrictive one. The community would

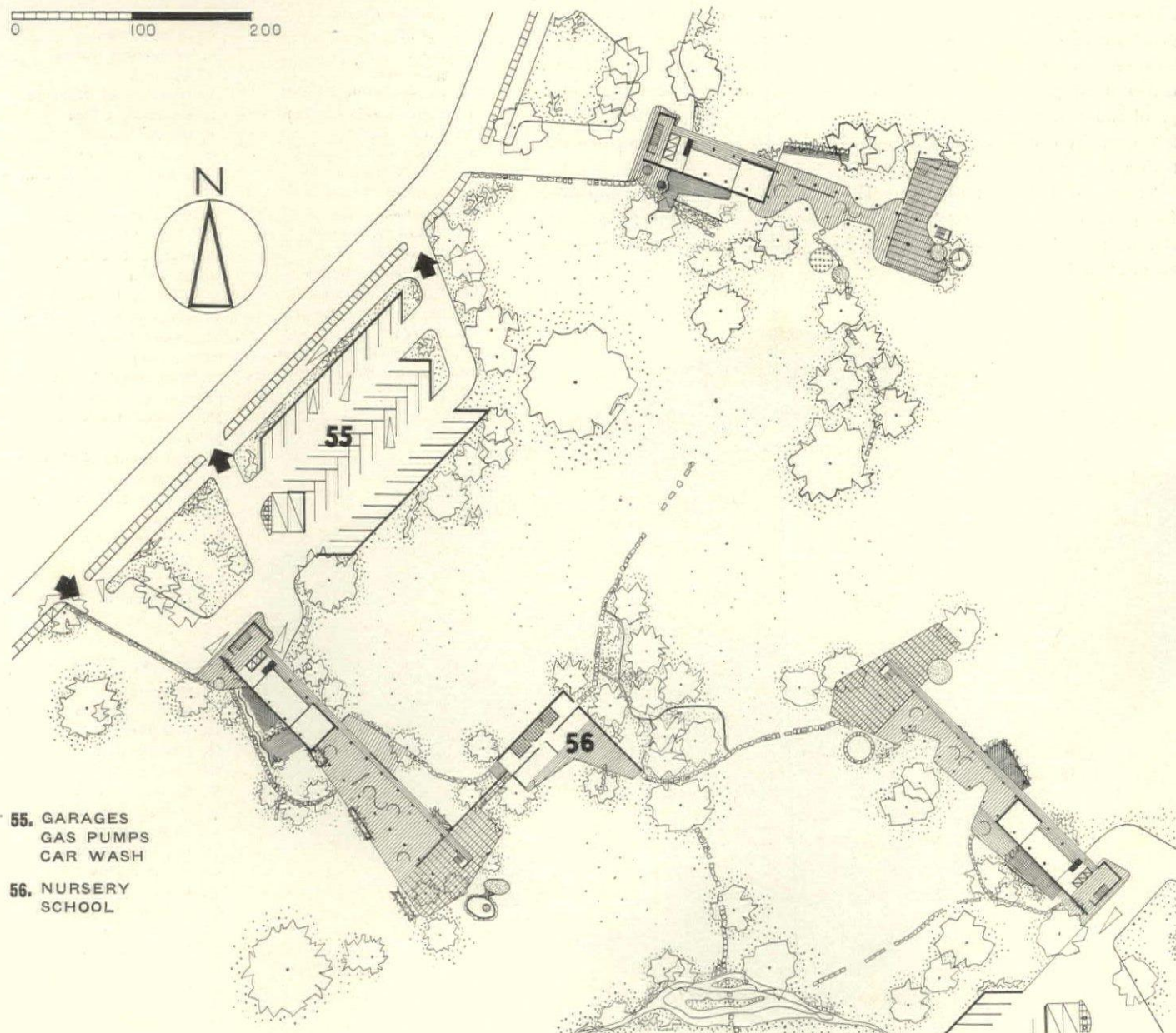
receive direct and indirect benefits through optimum housing development over a long term.

"It has been assumed that a ground rent will be paid as part of its annual expenses by the enterprise carrying out the project. A detailed financial breakdown on the basis of prewar building costs and financing methods demonstrated that the rent scale would be out of reach of the lower middle income groups. However, it seemed to the authors that assumptions based on prewar conditions were not necessarily valid.

"Future building costs may be reduced through mass-production of sectional building units. Building finance may, furthermore, be affected by two major developments: First, a strong Government interest in construction to tide over a possible postwar slump. This might express itself in low-interest loans for this type of medium rental project as well as for low-cost housing. Second, the possibility of guaranteed limited incomes from real estate investments, which would make such investments as liquid as Government bonds.

"Within these fluctuating limits, it may well prove possible to reduce the rentals to come within reach of the white collar and skilled worker groups. And yet, this again depends on the extent of postwar reconstruction programs, and the extent to which the present incomes will be retained in the future.

"Beyond all other matters, however, the authors have attempted here to establish an index of *essential space*, rather than a series of *minimum standards*."



HOSPITAL HUGH STUBBINS, JR., ARCHITECT, BELMONT, MASS.

This hospital was designed for the U. S. Gypsum Company as part of its advertising campaign to establish better standards for postwar buildings. Thanks are due to U. S. Gypsum for their courtesy in permitting the initial publication of these drawings.

PROBLEM:

"The program demanded provision of much-needed and improved hospital accommodations in the postwar era. It required the design of a general hospital and health center based on U. S. Department of Health standards for a community of approximately 30,000 people. The project was to represent a development of scientific methods pertaining to health and the conception that the exclusive aim of medical science should not be the cure of illness alone, but its prevention as well. It should, therefore, be a general hospital where patients may find the elements for cure and be taught to preserve their health. The plan should be designed for expansion, maximum flexibility of interior arrangement and ease of adaptation to new needs and new techniques."

SOLUTION:

"All entrances, services and clinical facilities are at ground level for ease of access and for economical relationship to the other elements of the plan. Heating plant, storage and morgue are in the basement.

"Nursing facilities including maternity section are on the second floor with a central core of service rooms, resulting in an economy of space and equipment, easier supervision and more flexible arrangement. The principle of central services was originated by Charles F. Neergaard, hospital consultant. Each single bedroom is designed on a module that makes it adaptable for a double room. Alternate partitions are sound-proof and demountable to allow for more or less ward space as required. Bed capacity can be expanded from 60 to 85 without crowding or over-taxing of utility space.

"The air-conditioned operating facilities are placed on the top floor for privacy and quiet. Adjunct services, X-ray department, lavatory, etc. are placed in a link with private and public corridors connecting the hospital and the health center."

LEGEND TO PLANS

OPERATING FLOOR:

1. Public Waiting
2. Nurses' Station
3. Consultation Room
4. Surgeons' Locker
5. Nurses' Locker
6. Anesthesia
7. Laboratory
8. Storage
9. Minor Operating Rm.
10. Sub Sterilizing
11. Scrub up
12. Major Operating Rm.
13. Nurses' Work Room
14. & 15. Dr.'s Apartments
16. Terrace

NURSING FLOOR:

1. Public Staircase
2. Waiting Room
3. Information
4. Solarium
5. Nurses' Station
6. Supply Closet
7. Toilet
8. Bath
9. Bedpans
10. Housemaid's Closet
11. Soiled Linen Chute
12. Linen Closet
13. Stretcher Closet
14. Utility Room
15. Nurses' Toilet
16. Kitchen
17. Dumb Waiter
18. Emergency Exit
19. Telephone Booth
20. Private Rooms
21. Semiprivate Rooms
22. Wards
23. Treatment & Exam.
24. Service Staircase
25. Elevator

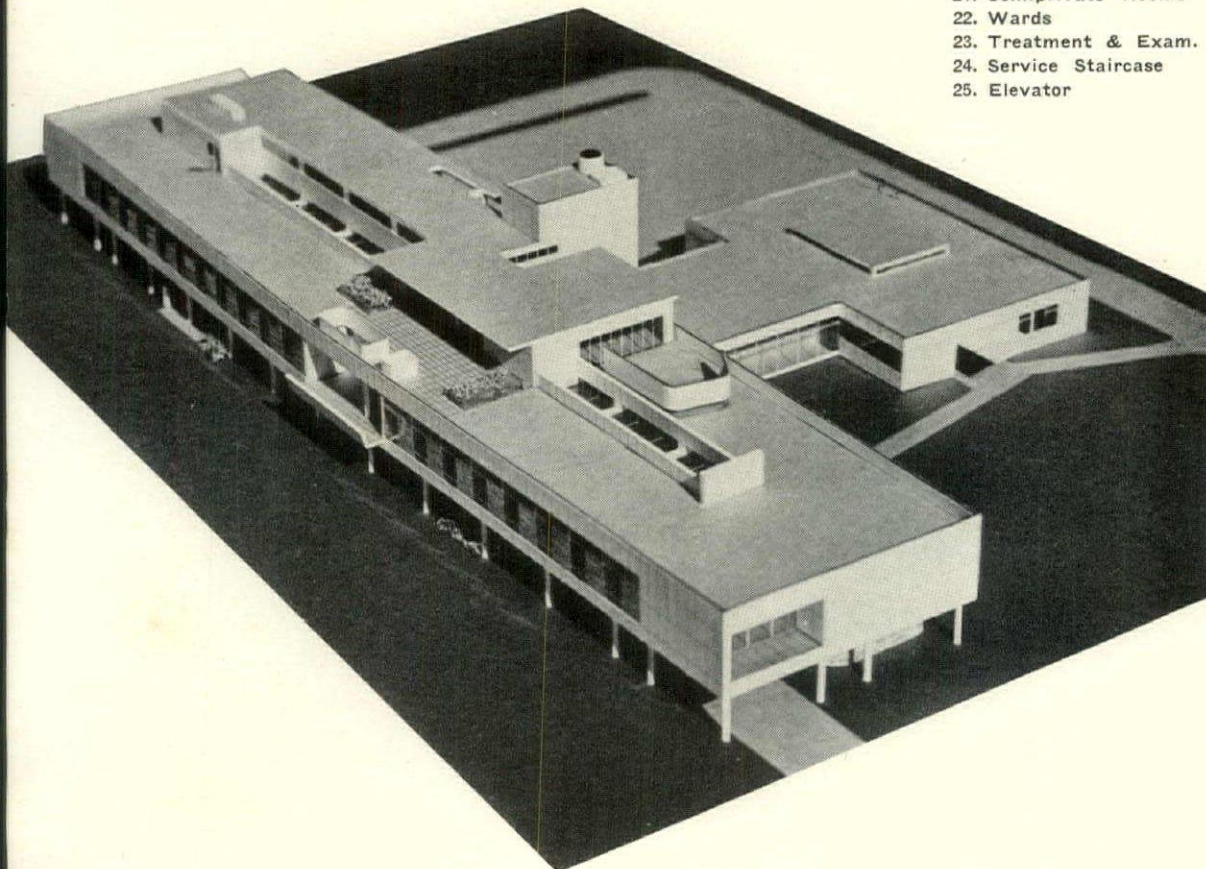
26. Nurses' Station
27. Supply Closet
28. Housemaids' Closet
29. Kitchen
30. Toilets
31. Bath
32. Bedpans
33. Formula Room
34. Utility Room
35. Nurses' Toilet
36. Nursery Isolation
37. Infants' Bath
38. Nursery
39. Lockers and Lounge
40. Supply Closet
41. Labor Room
42. Scrub up
43. Sterilizing
44. Utility Room
45. Delivery Room

GROUND FLOOR:

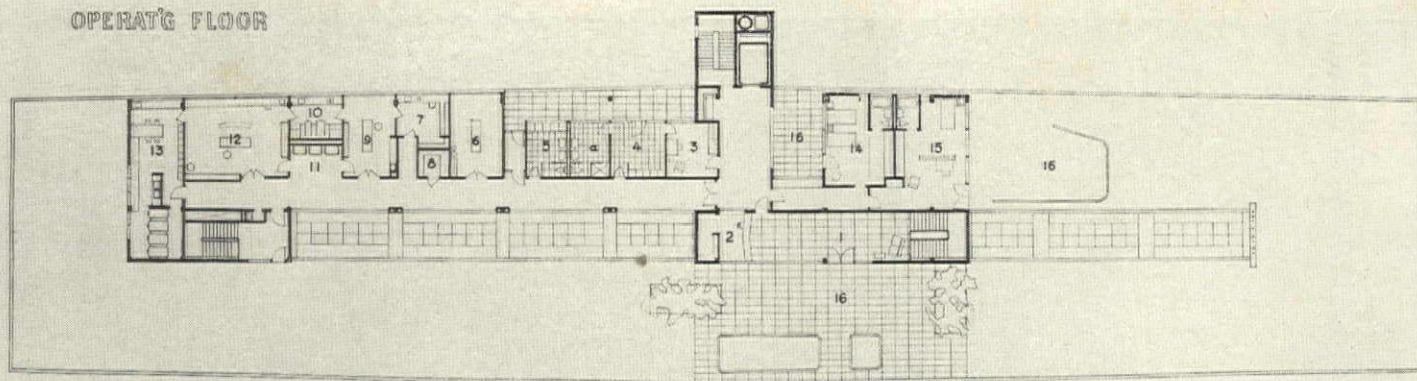
1. Main Lobby & Waiting
2. Public Toilets
3. Lecture Room
4. Information
5. Admitting Office
6. Records
7. Director of Nursing
8. Business Office
9. Board Room
10. Staff Lockers
11. Staff Lounge & Library
12. Staff Dining
13. Nurses' Dining
14. Help's Dining
15. Help's Lockers
16. Kitchen
17. Central Linen Room
18. Housekeeper's Office
19. Soiled Linen Room
20. Laundry
21. Employees' Lockers
22. Nurses' Lockers
23. Nurses' Lockers
24. Elevator
25. Emergency Entrance
26. Emergency Room
27. Utility & Scrub up
28. Bath
29. Supply Room
30. X-ray
31. Pathological Laboratory (Morgue in Basement)

HEALTH CENTER:

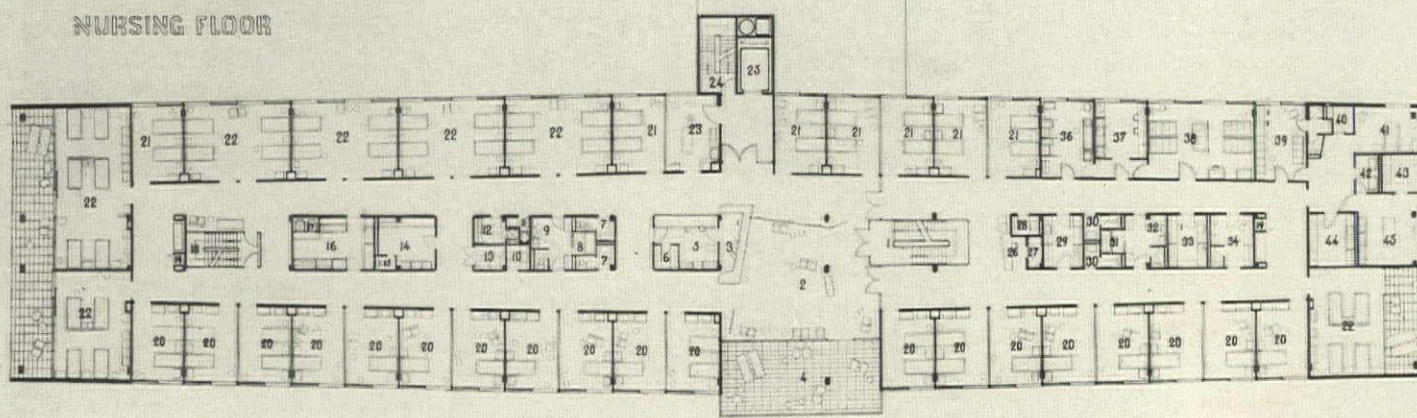
32. Pharmacy
33. Public Toilets
34. Waiting
35. Information
36. Records
37. Social Service
38. Health Officer
39. Sanitarian
40. Nurses' Room
41. Head Nurse
42. Dental Clinic
43. Consultation Room
44. Laboratory
45. Utility Room
46. Consultation Room
47. Supplies
48. Eye Clinic
49. Physical Therapy



OPERAT'G FLOOR



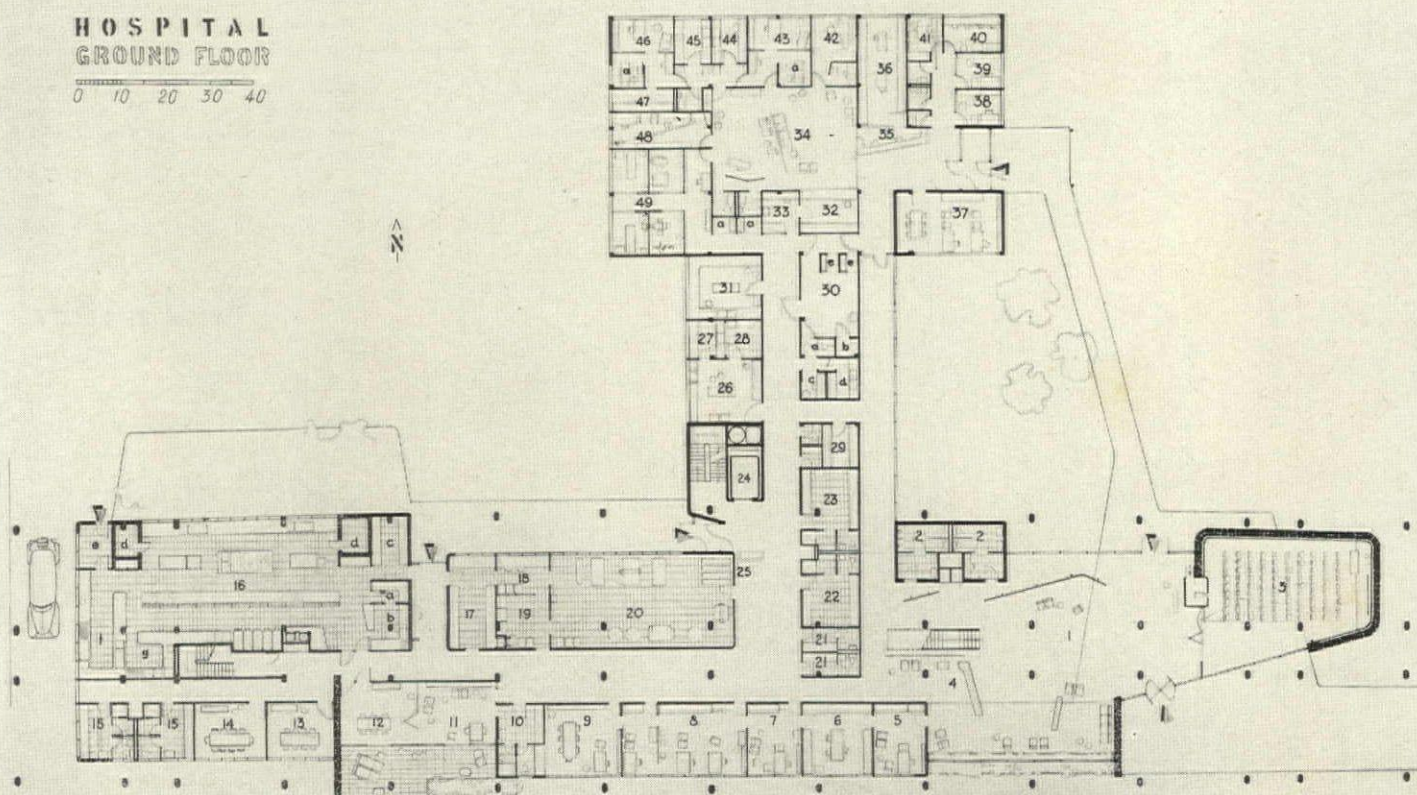
NURSING FLOOR

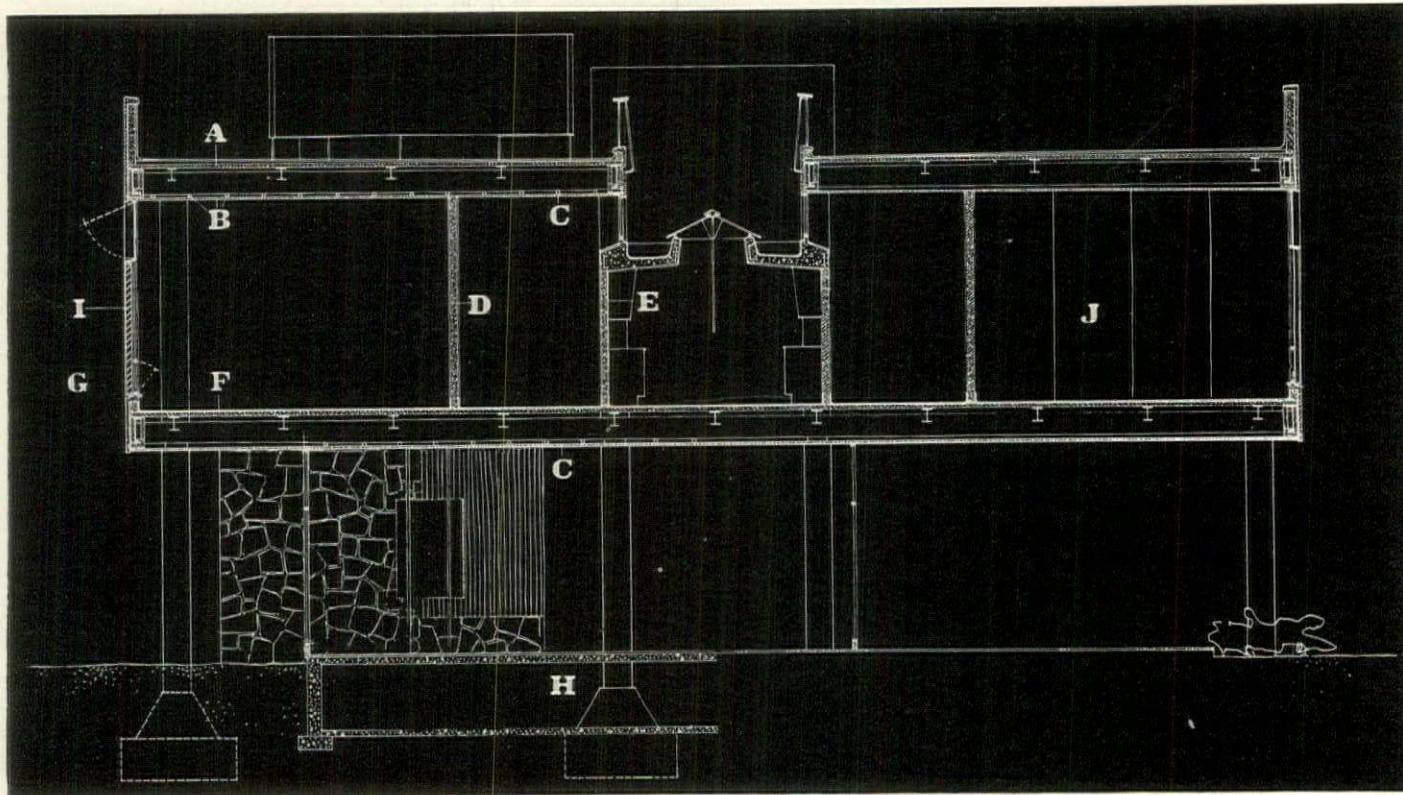


HOW STUBBS, JR.
ARCHITECT

HOSPITAL GROUND FLOOR

0 10 20 30 40





CONSTRUCTION OUTLINE

A. Roof construction: Longspan planks on steel purlins. Hot mop 2 layers of felt. 1" weatherwood mopped for insulation; Pyrofill poured in place to form slope for drainage. Built-up roofing.

B. Ceiling: 1½" furring channels 24" o.c. with insulating rocklath with metal foil down, clipped to channels. Insulation on top of rocklath. Radiant heating coils suspended from channels. Diamond mesh lath tied to coils with 3 coat plaster.

C. Same as B except for acoustic plaster applied to brown coat.

D. Permanent partitions: 4" block with Keene's cement finish coat on corridor side.

E. 3" hollow block with Keene's cement finish coat on both sides.

F. Floor construction: Longspan plank on steel purlins. Battleship linoleum over linoleum floor fill and felt.

G. Precast beam and girder tile used for fireproofing all columns and girders.

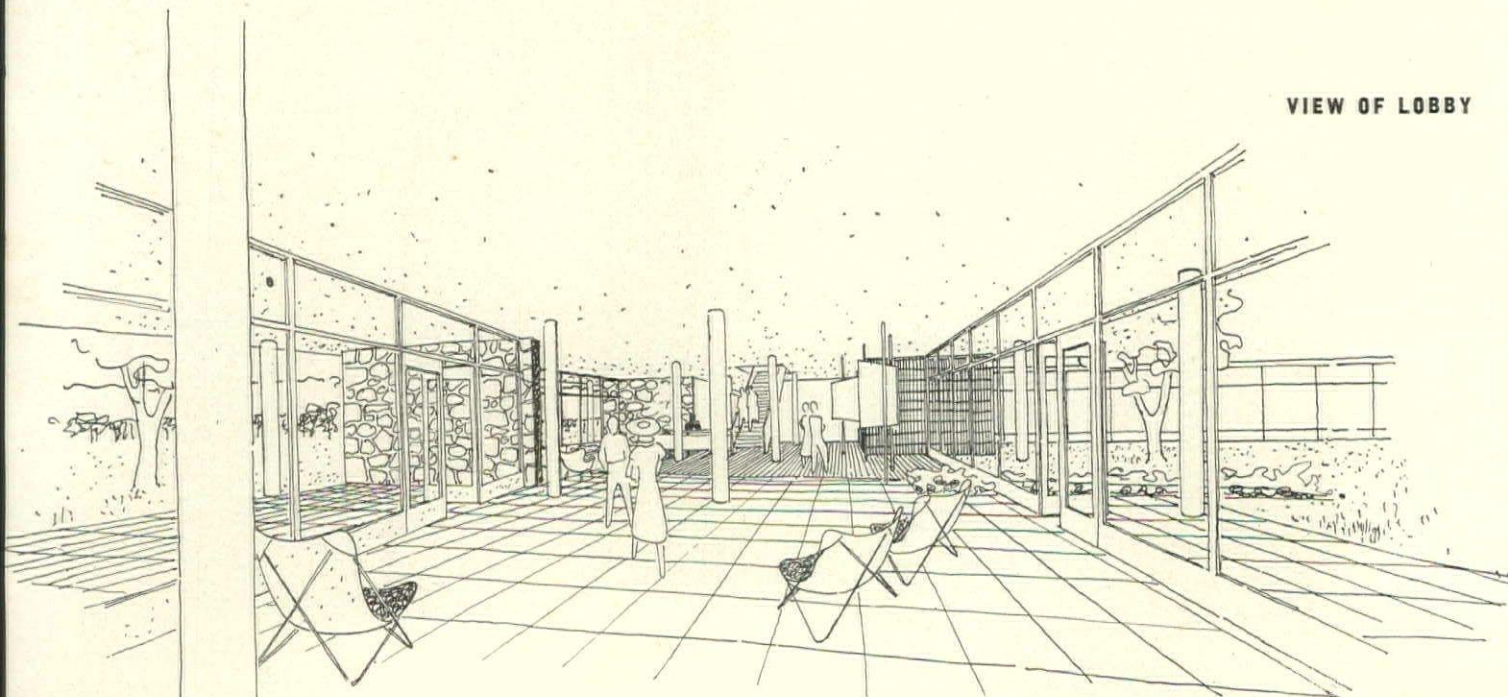
H. Pipe space: (Boiler and General Storage in Basement).

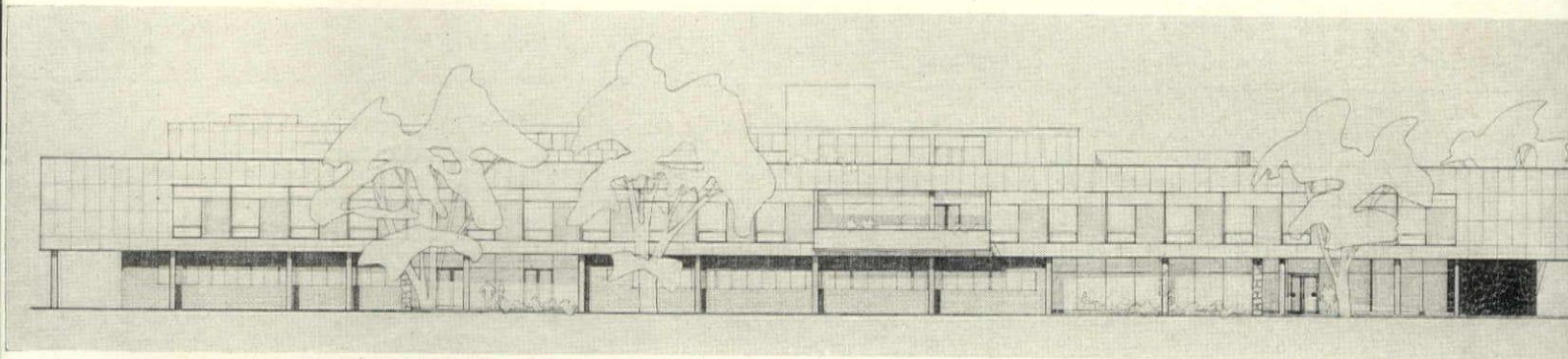
I. Sliding louvered screen to reduce light in rooms when required.

J. Demountable soundproof partition: 4 x 10 ft. panels constructed of 2 x 3 wood studs with ½" weatherwood and ⅜" sheetrock on both faces. Panels are filled with full thickness insulation.

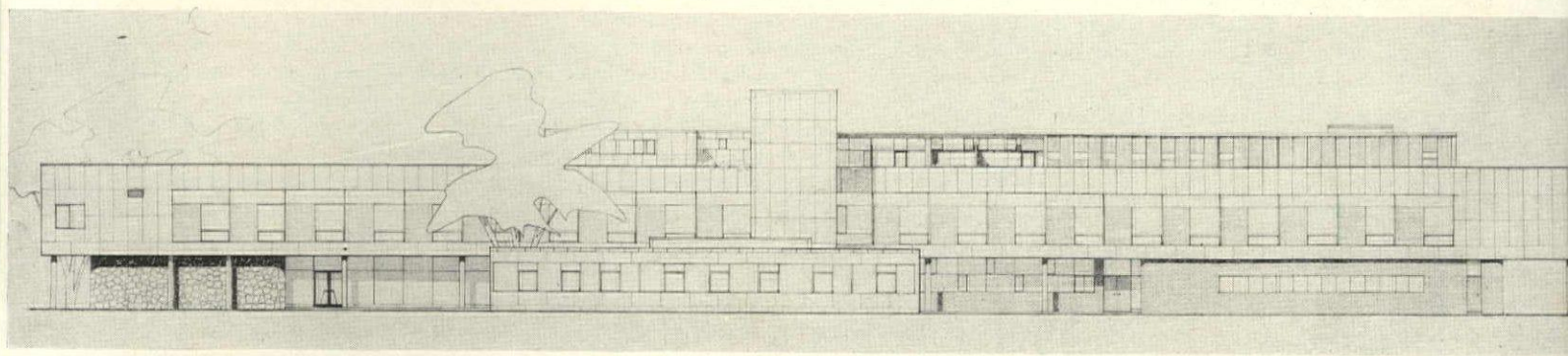
Plaster surfaces in wards and rooms are painted with washable paints. All concrete block on lower story painted with hydraulic cement base paint.

VIEW OF LOBBY



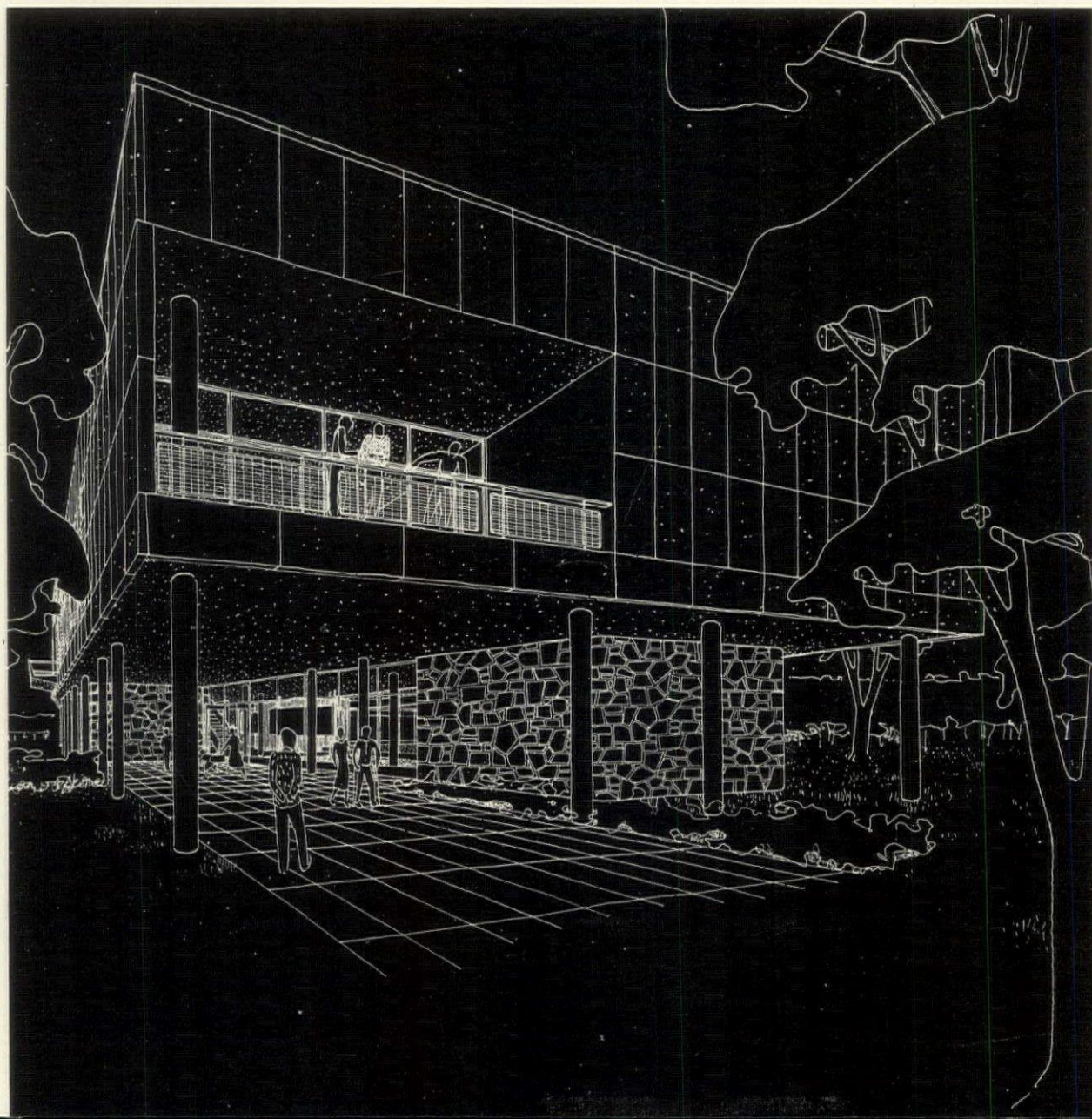


SOUTH



NORTH

VIEW FROM EAST



HEALTH FACILITY

ISADORE ROSENFELD,
SIMON BREINES, ARCHITECTS, NEW YORK

(The opinions expressed in this article are those of the architect and are presented because of their general interest.—Ed.)

THE AIM. "This project is designed to provide facilities for the health protection and care of an American city of 70,000. It is called a HEALTH FACILITY to avoid the current confusion in terminology of structures concerned with health. A 'health clinic' or 'health center' may mean anything from a well-baby station in a corner store to a large hospital or medical center. These terms are also applied indiscriminately to community recreational centers, individual or group medical offices, industrial clinics, etc.

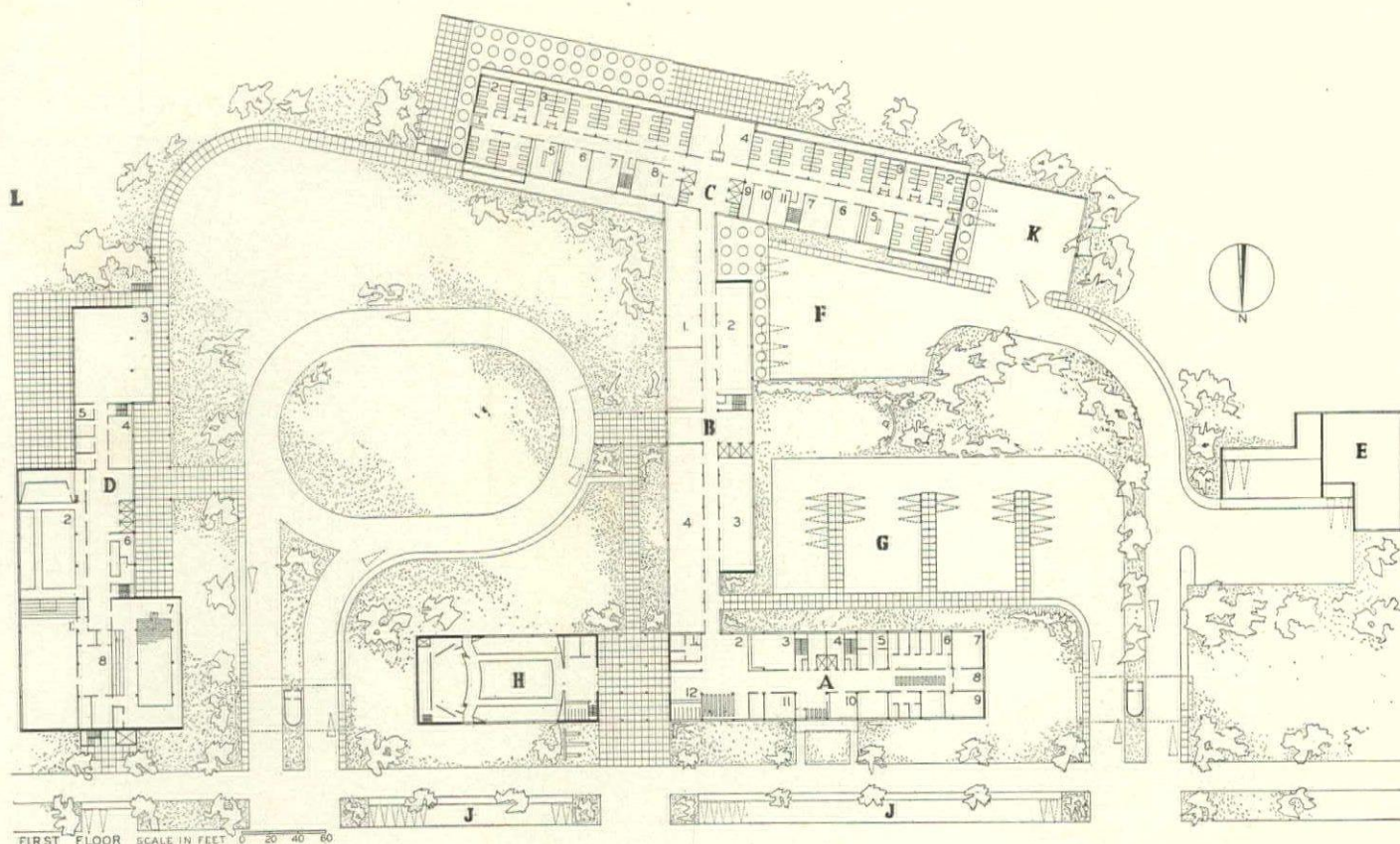
THE PROBLEM. "The average American city of this size has inadequate hospital facilities; it may even lack them altogether. Some 1,338 or over 40 per cent of the counties of the U. S. do not contain a registered general hospital and some authorities estimate that this country has a shortage of 180,000 general hospital beds.

"It is assumed that the city has the usual collection of small and unrelated hospitals—voluntary, denominational, proprietary, municipal, etc. By their very nature these hospitals are often inadequately equipped and uneconomic. Their beds, particularly in the private rooms, are frequently empty a considerable part of the time. Since even the ward beds are relatively expensive they also show an unjustifiable percentage of idleness. As a result, the institutions are always in financial hot water. Hospitals, in the last analysis, are a charge on the whole people who subsidize them directly by contribution and indirectly through tax-exemption, etc. If our city has a municipal hospital, it is probably overcrowded because it is free.

"The inaccessibility and lack of hospital beds for many people is matched by the lack of medical care. In well-to do eastern

industrial communities it is estimated that less than one-half of the population can afford to pay for medical and hospital service. In poorer communities and notably in the South the situation is much worse. In this atmosphere, a large proportion of the population does without care except when serious illness strikes, and then the family goes into debt to pay the cost.

"The hospitals of most cities have few, if any, out-patient facilities because many private practitioners erroneously think that this cuts into their livelihood. But the sad economic state of the hospitals is paralleled by that of the average doctor whose practice is too small and who does not make a decent living. Moreover, many doctors waste a great deal of time in rushing from their offices to hospitals scattered around town and to their patients in town and out.



A. OUT-PATIENT DEPARTMENT

1. Sorting and Isolation
2. Main Waiting Room
3. Records
4. Public Toilets
5. Doctors' Toilets
6. Treatment
7. Baby Weighing, etc.
8. Child Guidance
9. Social Service
10. Pharmacy
11. Director
12. Coats

B. DIAGNOSTIC, TREATMENT

1. General Administration

2. Compensation

3. Records and Information
4. Social Service

C. HOSPITAL

1. Nurses' Station
2. Six-Bed Ward
3. Two-Bed Ward
4. Day Rooms, Dining
5. Utility Room
6. Treatment
7. Patients' Toilets, Bath
8. Serving Kitchen
9. Linen
10. Laboratory
11. Nurses' Toilet

D. NURSES' HOME, SCHOOL

1. Gymnasium
2. Assembly Hall
3. Lounge
4. Administration
5. Visitors' Alcoves
6. Toilets
7. Swimming Pool
8. Lockers, Showers and Toilets

E. GARAGE, LAUNDRY, POWER

F. SERVICE AND SUPPLIES

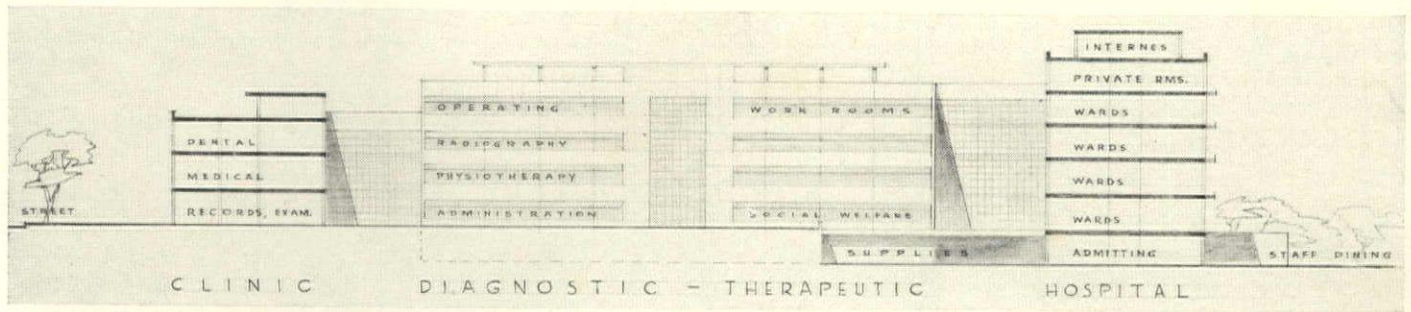
G. STAFF PARKING

H. PUBLIC AUDITORIUM

J. PUBLIC PARKING

K. AMBULANCE COURTYARD

L. STAFF RECREATION



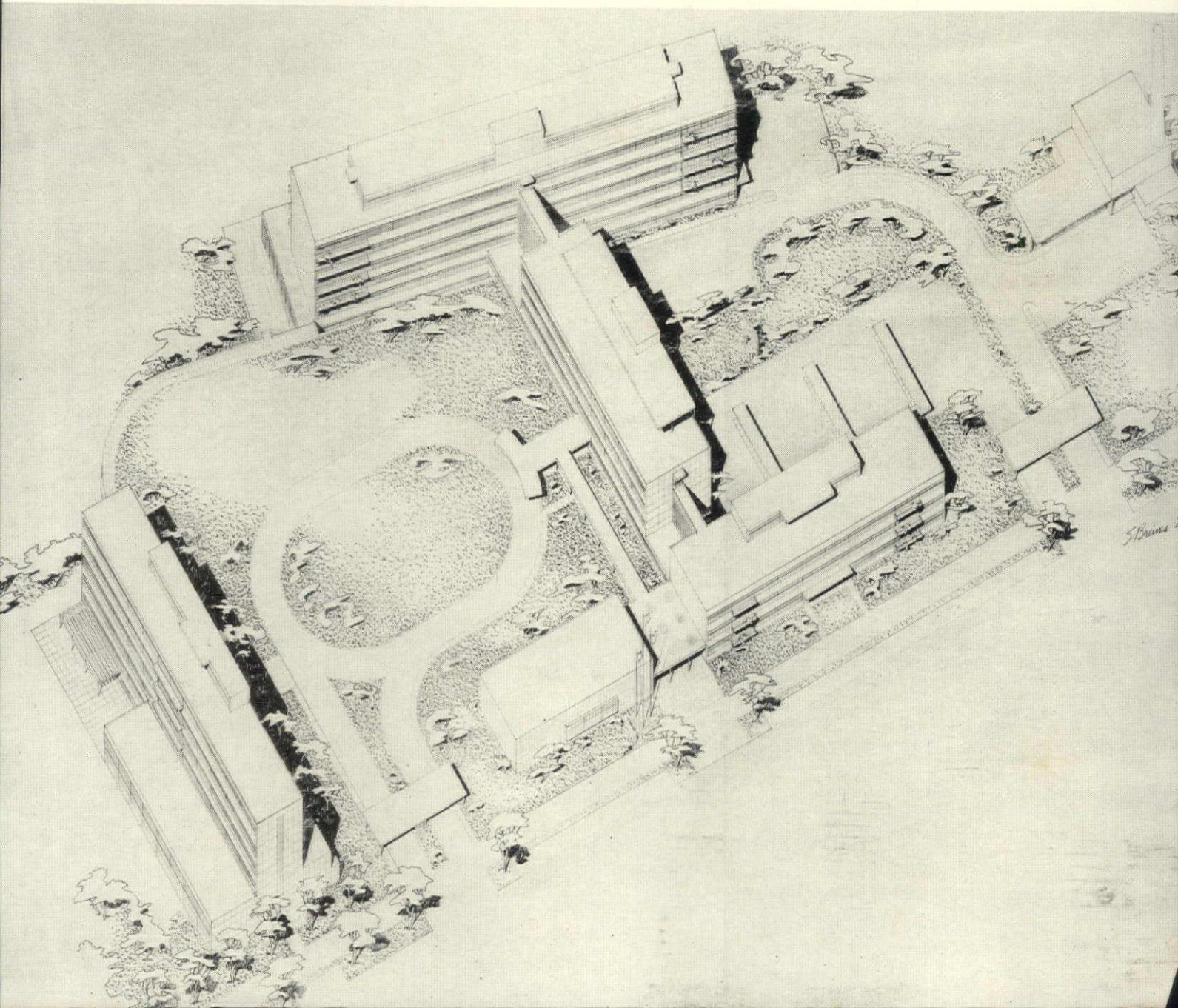
"Our city may also have a number of haphazardly located and unaffiliated clinics and health stations. Some of these are privately built or operated philanthropically. Some are municipal and more or less related to the health department and also to private and public social service agencies. In any case there is little coordination of program or function and practically no continuity of medical care. The health department concerns itself mainly with the inspection of milk, water, meat and enforcement of elementary health regulations. There is probably very little contact between the health department and the hospitals. Vital statistics do not cover many important health

problems. The city, therefore, is ignorant of its own health condition.

"This picture of the health facilities of the assumed city is imaginary but it is not overdrawn. It is also *not* peculiar to the war emergency. It is a continuing problem. Recent years have produced evidence of a popular desire to alleviate this situation. Associated hospital plans (voluntary hospitalization insurance), group medicine and health insurance are on the increase. Legislation providing a larger measure of public health care and treatment is being proposed in the U. S., England, and Canada. Postwar architectural thought is naturally directed to visualizing the kind of plant which may

embody these trends in the field of urban health.

THE PROJECT. "It is assumed that the several hospitals along with the doctors and dentists and the people of our city have decided to get together to make a demonstration of the best organization of their health services. The various organizations and individuals involved in this demonstration need not lose their identity. The hospitals could conceivably get together in the one plant on a cooperative basis. The doctors and dentists would be provided with offices and treatment rooms in the Out Patients Department (O.P.D.) and they would utilize the diagnostic-therapeutic equipment in common



with the hospital. But they need not necessarily give up their outside offices. Indeed some doctors and dentists would probably not be connected with the HEALTH FACILITY at all. The likelihood

is, however, that the extension of the hospitalization insurance plans and group medicine will cause most people in the city and, therefore, also the doctors to associate with the HEALTH FACILITY.

"It is also assumed that the health department has widened its scope of activity to include greater protection of the health of the city through its police power and that it collects statistics on all phases which will keep the public informed as to the state of its health. No provision was made in this project for a health department but it might very well be included in actuality.

"It is obvious that it may not be necessary or practicable for the city to build the HEALTH FACILITY at once. If any of the existing hospitals are in good condition they could be continued until changing conditions indicate the desirability of incorporating them in the HEALTH FACILITY. Both the O.P.D. and the hospital units of the HEALTH FACILITY would lend themselves to being constructed in stages. The connecting building (diagnostic-therapeutic element) would probably have to be built as a whole immediately. The project as designed indicates, in a general way, what the finished HEALTH FACILITY might look like.

Out Patient Department. "The O.P.D. is where the people of the city and suburbs will come to be treated for minor illnesses, to receive health education, and for periodic health examinations. Cases discharged from the hospital will also come here for checking by the doctors. The O.P.D. faces the street because it is the most important element of the HEALTH FACILITY and should be readily accessible. The street entrance is informal and open and leads easily to the O.P.D. and the public entrance of the hospital.

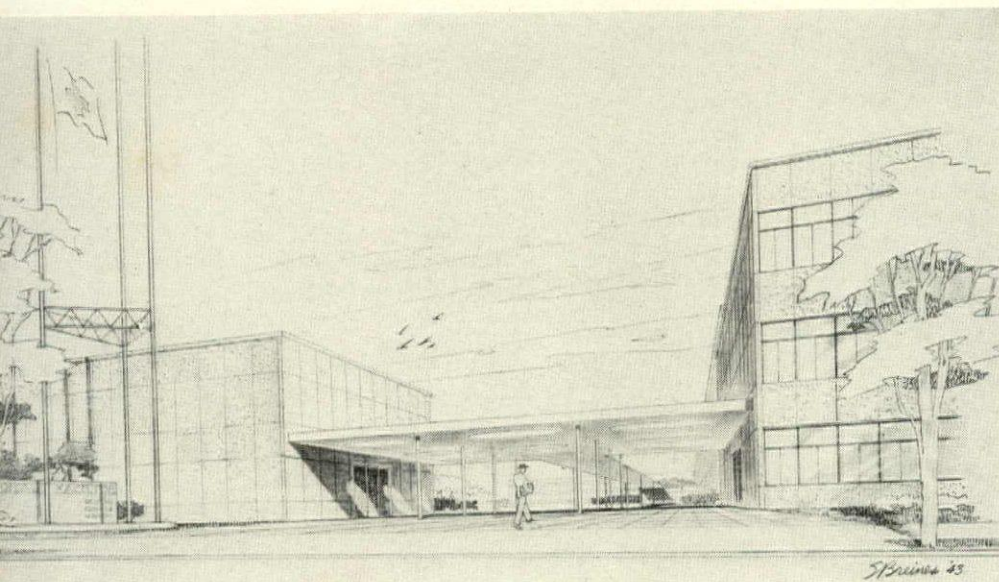
"Where the health department is in a sense the intelligence department in the fight against illness, the O.P.D. is the first line of defense. This is where the doctors and dentists have their offices and meet and treat the people. From here the doctors and nurses also go out into the community to provide home medical and nursing care for those who will not benefit from being institutionalized in a hospital or who are not physically able to come to the O.P.D.

"It should perhaps be stated that the O. P. D. will not limit the individual's free choice of doctor or dentist. He may select from any of the practitioners associated with the HEALTH FACILITY, or if he prefers and can afford it, he may patronize someone outside. The exact development of this phase of the problem is, of course, beyond the scope of our project.

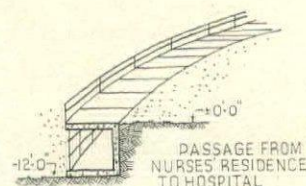
Diagnostic-Therapeutic Element. "The D.T.E. acts as a connecting link between the O.P.D. and the hospital proper. It serves both out-patients and bed patients. Its facilities include X-ray, diagnostic and therapeutic; physio and hydrotherapy; and occupational therapy. It also includes a maternity-delivery section, operating department, laboratories, etc.

"On the first floor, the D.T.E. houses the public or visitors' entrance and contains information and records, administration, workmen's compensation, social

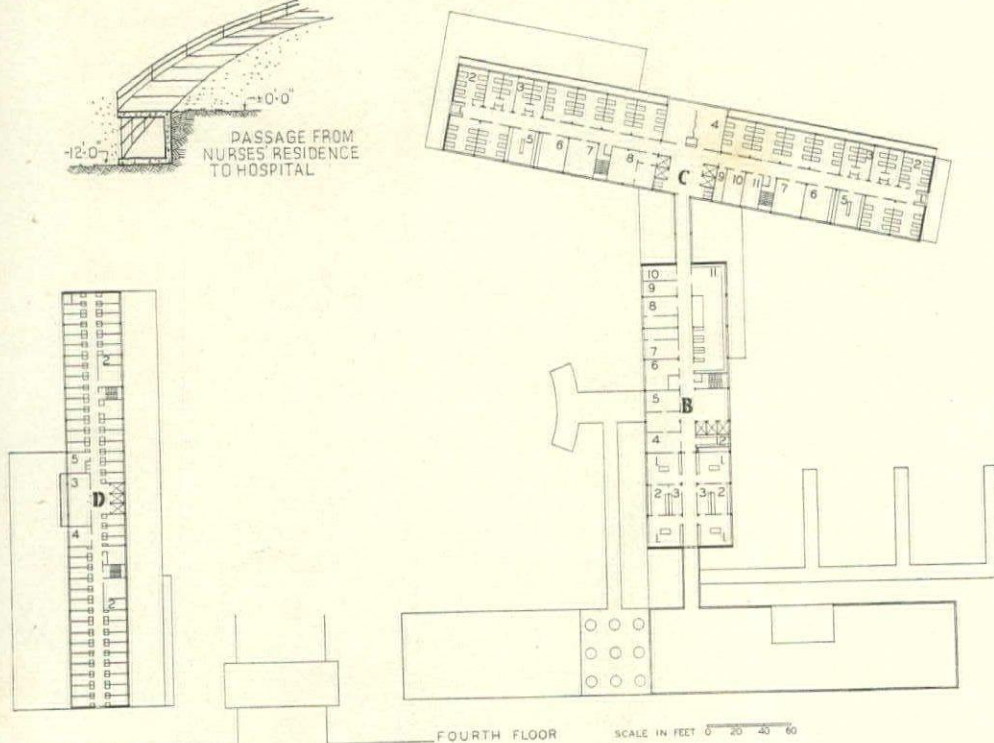
(Continued on page 189)



MAIN ENTRANCE



PASSAGE FROM
NURSES' RESIDENCE
TO HOSPITAL



FOURTH FLOOR

SCALE IN FEET 0 20 40 60

B. OPERATING DEPT.

1. Operating Room
2. Sterilizing Room
3. Scrub-up Room
4. Plaster Room
5. Anesthesia
6. Blood Bank and Frozen Tissue
7. Nurses' Toilets and Lockers
8. Doctors' Toilets and Lockers
9. Supervising Nurse
10. Dictating Room
11. Nurses' Work Room
12. Instrument Room

C. HOSPITAL SURGICAL WARDS

1. Nurses' Station
2. Six-Bed Ward

3. Two-Bed Ward

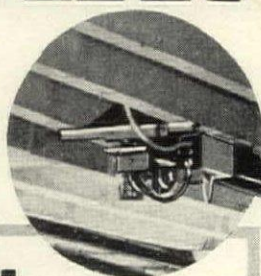
4. Day Rooms and Dining
5. Utility Room
6. Treatment
7. Patients' Toilets and Bath
8. Serving Kitchen
9. Linen
10. Laboratory
11. Nurses' Toilet

D. NURSES' HOME AND SCHOOL

1. Bed Rooms
2. Toilets
3. Living Room
4. Kitchenette
5. Laundry



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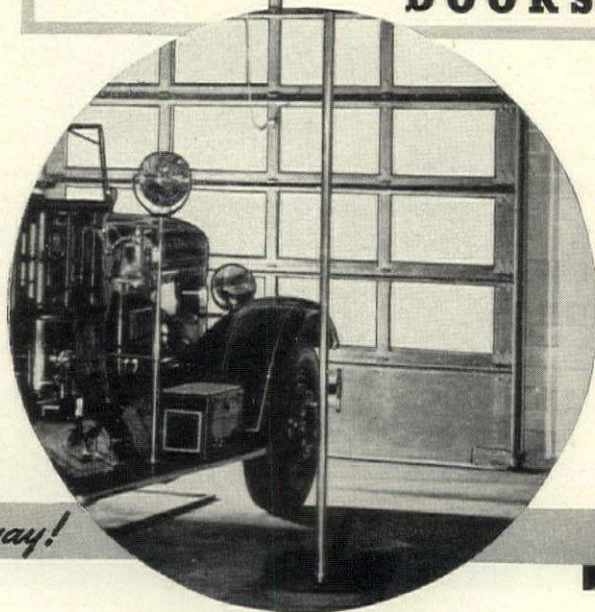
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BOOKS

(Continued from page 12)

human beings. They prove that just as there is a democratic process of rationing to assure that all will have a fair share of certain commodities, there also exists a democratic process of planning to assure that all will have a fair share of the commodity of living. The suggestions gain in prestige by the fact that so many, in isolated localities, have been carried out. They also demonstrate, however, the eventual futility of such haphazard planning. There is a very simple analysis of this to be found in *Rebuilding Britain*: "About a thousand people can support a small nursery school. . . About five thousand people can support a junior and senior school. . . Theatres and cinemas, a hospital, specialized shops, and stores (are) shared by about forty thousand people. . ."

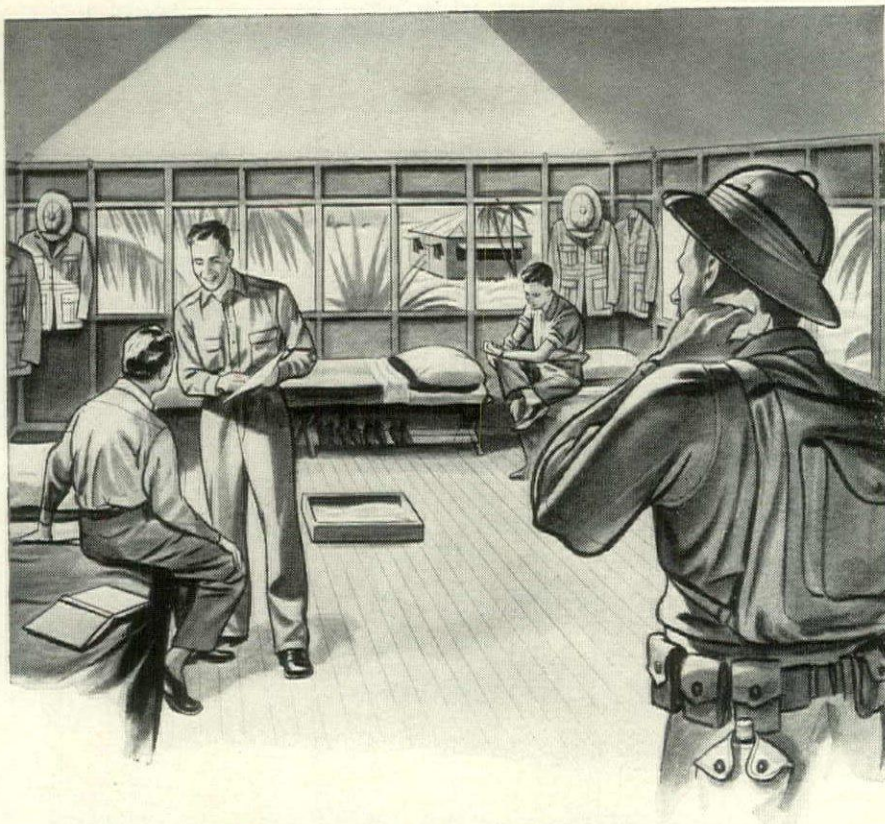
But to assure this kind of even, overall distribution of population alone, agencies with real planning authority must be created. The authors say that a state of planning exists only if every brick laid is an integral part of a large-scale scheme of things—community-wide, nation-wide and perhaps eventually world-wide in character. At this point, therefore, we arrive at the crucial criticism of both booklets.

In *Rebuilding Britain* "They (the R.I.B.A. Reconstruction Committee) found themselves asking all manner of questions, and suggesting answers that affected the social and political structure of society; but after facing these matters, and recording their significance, they did their work as architects, intent on better building, and working out a lucid and satisfying replanning program that must precede the rebuilding of Britain." Mr. Tubbs says "it is not for me here to discuss any details of economic reconstruction. . ." What, then, is their job? Did it not become clear before this war that there could be no planning in a vacuum?

However, they *did* do their work as architects. They took advantage of a relatively static period in city development, during which all activity related to buildings was taken care of by the German air force. It is unfortunate, in a sense, that no such static period was produced in this country by the war—that, in fact, the precise opposite was effected. Nevertheless, this may well be the time for us to undertake similar projects of research, and to propagate the results extensively. The present issue of the *FORUM* is one such attempt, but many more will have to be made and publicized.

Both booklets have a certain amount of material showing that a great deal has

(Continued on page 156)



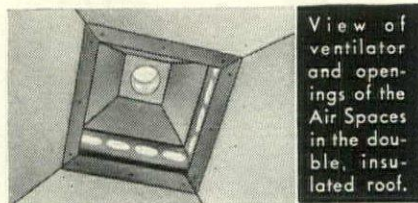
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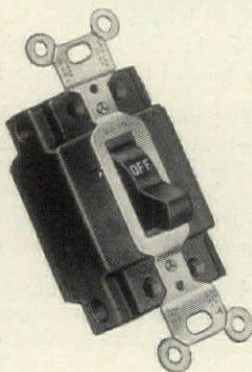
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G-E Wiring Material News

Specify G-E PRESSURE TERMINAL SWITCHES

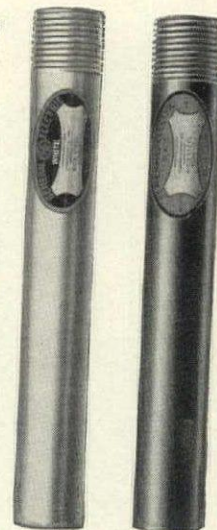


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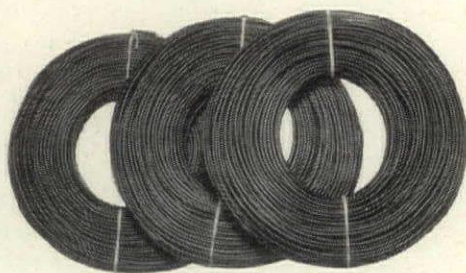
G-E Rigid Conduit is available today for use in wet or hazardous locations on war jobs. Specify G-E White or G-E Black for rewiring or new war wiring. Both are leaders in their classes. G-E White is coated with pure zinc. G-E Black is coated with corrosion-resistant enamel. G-E Electrical Metallic Tubing and G-E Flexible Metal Conduit are also available for use on war jobs.



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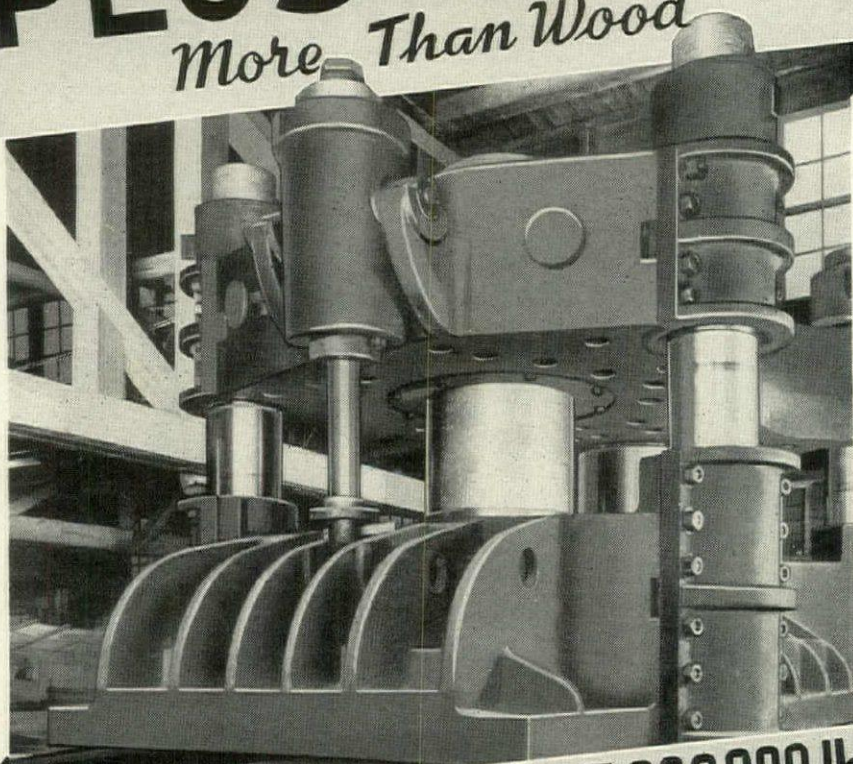
G-E Wiring Materials will meet post-war needs for wiring in all types of buildings. Now, of course, G-E Wiring Materials are being made for the war effort. But, as in the past, General Electric is preparing for future requirements.

For further information on G-E Conduit, Wire and Cable and Wiring Devices see the nearest G-E Merchandise Distributor or write to Section CDW 537-26, Appliance and Merchandise Department, General Electric Co., Bridgeport, Conn.

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BOOKS

(Continued from page 154)

already been achieved in England. 50 Facts about Social Services in Britain documents this in a number of terse statements, many of which are of great interest to planners. Among them:

► Infant Welfare Centers and Pre- and Post-Natal centers are provided by nearly all local authorities.

► The hospitals maintained by public funds in Britain provide nearly three-quarters of the available beds.

► The provision of good houses or apartments at low-income rent level is a responsibility of the Minister of Health.

► Since 1919 over one-third of the population of Britain has been rehoused.

► A large number of subsidized houses are built on garden estates at a density of not more than 12 families to the acre.

► Factory inspection has been a Government responsibility since 1833. Welfare officers under the Ministry of Labor are attached to all large factories and works to advise workers on health, housing and other problems.

Although these steps do not represent anything like the organization that will eventually be needed, they do show, together with the evidence of intensive education supplied by *Rebuilding Britain* and *Living in Cities*, that the era of planning may not be too remote. The moral of these three booklets can be put into the words printed at the end of *Rebuilding Britain*: "It's Up To You!"

TWENTIETH CENTURY PORTRAITS, by Monroe Wheeler. The Museum of Modern Art, New York. 148 pp., illustrated in black and white and color. 7½ x 10. \$2.75.

This is the catalog of a comprehensive exhibition of portraits, recently shown at the Museum of Modern Art. It begins with the fashionable painters of the turn of the century, Sargent, Boldini and Eakins, and goes on to show the techniques developed by the Impressionists, Cubists, Surrealists and other schools of this period. Portraiture being a very special kind of art, with its own peculiar problems, the book has an interest quite apart from that of the usual collection of contemporary paintings. It is particularly instructive, for instance, to see the great differences in the approach to these problems, even within the same school. The cubist portrait of Picasso by Juan Gris, for example, is in sharp contrast to the cubist portrait of Vollard by Picasso. Picasso's portraits of various periods change as much as his

(Continued on page 158)

WHERE A "STRETCH" IN TIME STRETCHES FUEL

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You've got to stretch your fuel these days! To do it, remember that the *quality* of your heating equipment determines to a large degree the *quantity* of fuel burned.

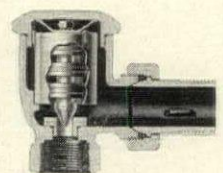
In the matter of steam traps, for example. A Hoffman Trap is operated by a thermostat in which multiple diaphragms expand and contract to open or close the trap port. The thermostat must *instantly* expand, or "stretch," when touched by live steam, or steam is lost and fuel wasted. It should also contract promptly when steam has condensed to permit condensate drainage. The thermostat must be able to perform these operations an infinite number of times without losing flexibility.

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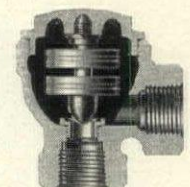
To be sure that *your* heating system is not suffering from lack of "stretch," do this—check your steam traps and replace worn-out units at once. When replacing, make your selection from Hoffman's complete line of steam-saving specialties . . . known and respected everywhere for quality of material, excellence of design and painstaking workmanship. Hoffman Traps are so constructed that parts subject to wear can be easily and inexpensively renewed.

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Can be easily serviced without
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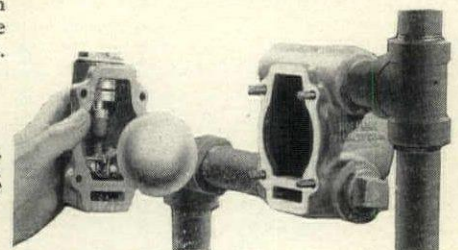
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*A low pressure cast iron trap,
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Controlled Heating

STEAM / HOT WATER

KINNEAR MOTOR OPERATED WOOD ROLLING DOORS

FOR HIGHEST
OPERATING
EFFICIENCY

FOR ECONOMY
OF WAR-VITAL
MATERIALS



THEY FILL THE BILL FOR WARTIME BUILDING

Kinnear Motor Operated Wood Rolling Doors save time and labor; they can be opened or closed quickly at the touch of a button—from any convenient location!

Their coiling, upward action saves valuable floor, wall and ceiling space, and keeps the doors out of the way and safe from wind or traffic damage when open. Strong inter-lapping wood slats form a rugged curtain that blocks out wind and weather, yet presents a neat appearance that harmonizes with any building exterior or interior.

And Kinnear Wood Rolling Doors assure highest economy of war-vital metals!

They are built in any size, for use in old or new buildings, and are available with manual control only, if desired. Write for complete data or specifications.

THE KINNEAR MANUFACTURING COMPANY
1640-60 FIELDS AVE. COLUMBUS, OHIO

The rugged, heavy-duty motor does the work, saves time and labor by opening and closing the doors smoothly and quickly. Pushbutton control may be remotely located. (Manual control only, if desired.)



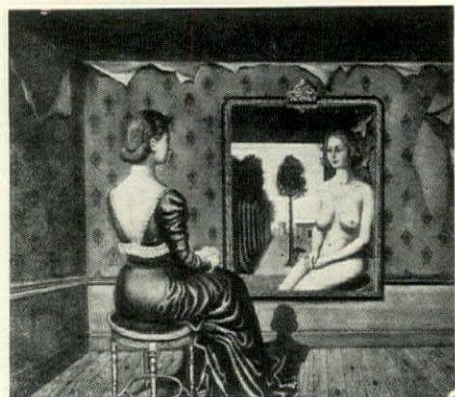
SAVING WAYS
IN DOORWAYS

KINNEAR

ROLLING DOORS

BOOKS

(Continued from page 156)



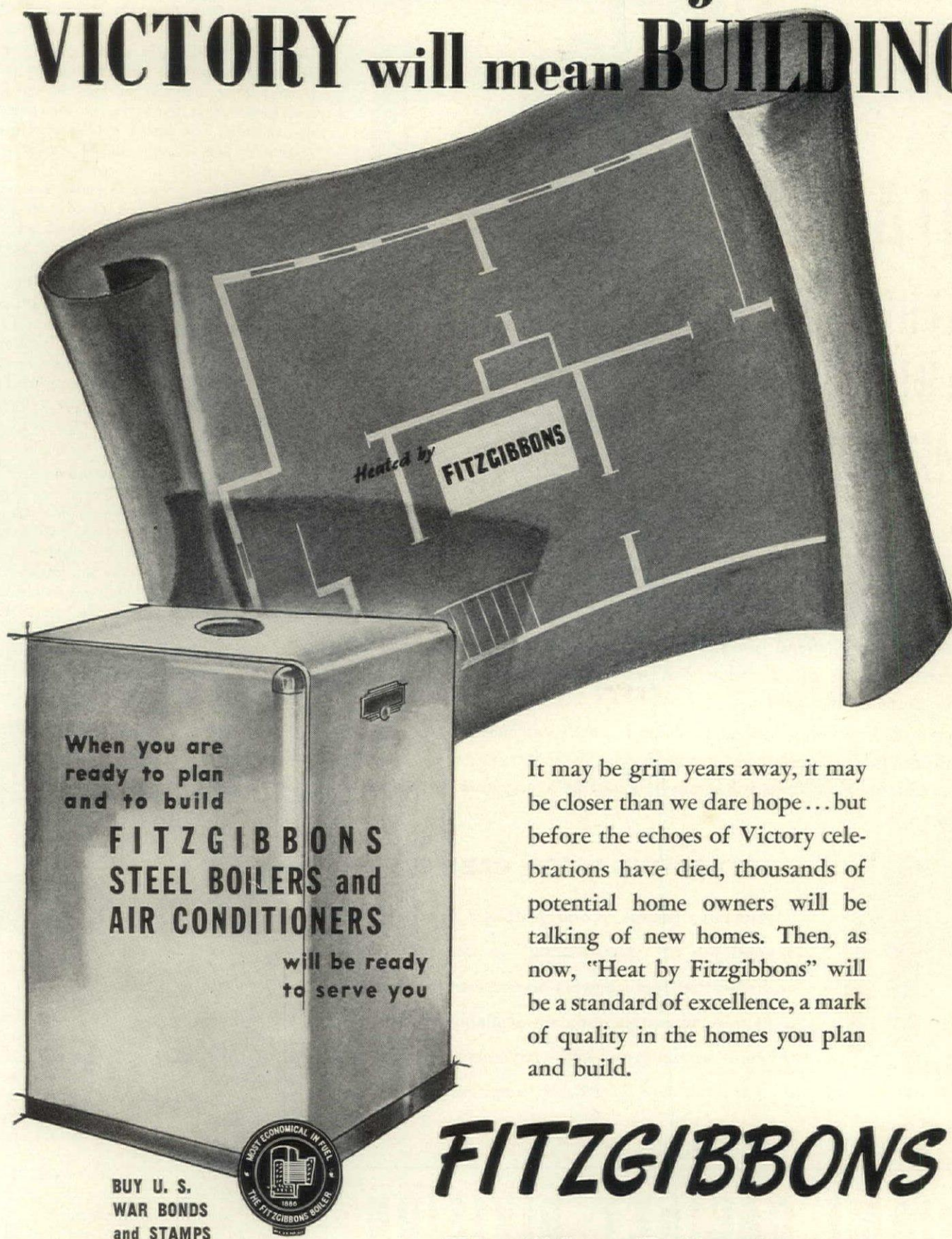
other paintings. Dali, who proved that a painter (with a good program of publicity) could make as much money in the 1930s as a stockbroker before 1929, is also represented. Tchelitchev, another of the super-salesmen of the period, has a number of portraits in various media. At the other extreme one finds primitives by Rousseau and John Kane, and the slick, magazine-cover realism of Grant Wood. Among the more fashionable of the Surrealists is the Belgian, Paul Delvaux, whose "Woman Before A Mirror" is illustrated. There is also a generous sprinkling of the work of both lunatics and charlatans. The book conforms to the customary high standard set by former publications of the Museum of Modern Art in that it is handsome in format and provocative in content. There is a scholarly and interesting introduction by Monroe Wheeler.

THE HANDBOOK OF ARCHITECTURAL PRACTICE, issued by the American Institute of Architects, 204 pp., 8½ x 11, \$5 (students: \$4).

This new edition of the *Handbook of Architectural Practice* was prepared under the direction of William S. Parker, F.A.I.A., of Boston, Past Secretary of the Institute. The Board of Directors of the Institute reviewed and approved the Handbook prior to its publication, and found it to be a comprehensive exposition of the best in modern architectural practice, apart from design. The Handbook is divided into nine parts, covering Registration, Relationship between Architect and Owner, Office practice, Surveys, Preliminary Studies, Estimates, Working Drawings, Contracts, Execution, Law as it affects the architect, Office Records and a survey of the A.I.A. and its documents. Editions of this book have always been invaluable in offices of architects and it is worthwhile to study this 1943 issue, in order to be up to date with new developments affecting the profession.

(Continued on page 192)

No matter how long deferred **VICTORY** will mean **BUILDING**



When you are ready to plan and to build

FITZGIBBONS
STEEL BOILERS and
AIR CONDITIONERS

will be ready to serve you

BUY U. S. WAR BONDS and STAMPS

FITZGIBBONS

Fitzgibbons Boiler Company, Inc.

101 PARK AVENUE, NEW YORK, N. Y. WORKS: OSWEGO, N. Y.

OFFICES IN PRINCIPAL CITIES

It may be grim years away, it may be closer than we dare hope... but before the echoes of Victory celebrations have died, thousands of potential home owners will be talking of new homes. Then, as now, "Heat by Fitzgibbons" will be a standard of excellence, a mark of quality in the homes you plan and build.

Showing Carey Cabinet
No. 640 and Soap
Holder No. 4022

Photo courtesy
Weisway Cabinet Showers

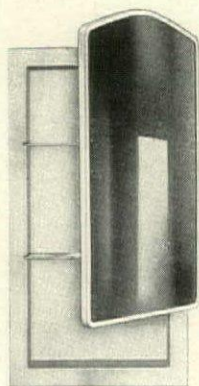
MIAMI BATHROOM CABINETS AND ACCESSORIES



“Reflect Good Taste”

Production of Miami metal cabinets and accessories has been discontinued for the duration, but some models are still available from Distributor's stocks.

Architects have long looked to Miami for the ultimate in modern bathroom cabinet design and conveniences, and after Victory is won, these fine metal cabinets will again be available in the most advanced designs.



No. 103W

Complete details and catalog sent on request. Write Dept. AF.

ATTRACTIVE WOOD CABINETS

Meanwhile, Miami Wood Cabinets are doing a good job of “pinch-hitting” in war housing and wherever replacements are necessary. These units, now in production, are available in quantity, and are equipped with convenience features that are standard in Miami metal cabinets.

MIAMI CABINET DIVISION

The Philip Carey Mfg. Company

Dependable Products Since 1873

MIDDLETOWN, OHIO

MONTH IN BUILDING

(Continued from page 66)

the project, especially in view of the almost goldfish bowl-like position of America's largest life insurance company. Opponents persisted in pointing out that public opinion had not prevented extremely high densities of Parkchester I, and further that there was no guarantee the amended bill would not beckon less reputable sponsors than the Metropolitan once the precedent had been set.

Interest in the project extended beyond the city limits because it could well be the forerunner of similar projects elsewhere (both Chicago and Cleveland have urban redevelopment laws modeled on the New York legislation of 1940). Also, many another large capital pool in the hitherto timid hands of insurance companies may be tempted into similar demonstrations of public service to meet the housing needs of white collar workers in the forgotten one-third of the nation.

CINEMA CHILDREN?

► Agnes E. Meyer, *The Washington Post's* peripatetic investigator of horror war conditions, visited the San Fernando Valley last month, reported that 45 infants were found locked in the cars of a single parking space adjoining several war plants.

► In Vallejo, she found children sitting in movie theatres watching a film over and over until a swing-shift mother called for them. A friend found a little girl in a beer hall waiting until midnight when her bed would be empty.



Curtiss-Wright's new child-care center.

From Mrs. Meyer's articles, from many other sources (the War Manpower Commission reports that in 62 areas surveyed, only one, Milwaukee, had adequate child-care facilities), the complete insufficiency of the Government's efforts to provide nursery schools for the pre-school child was apparent. By year's end, 3,400,000 more women will go to work in war industries—close to 1 million more children will need day care. By year's end, too, FWA's Lanham Act allotment is expected to peter out, no other source of funds for construction of nursery schools (possible exception: WMP's Office of Defense Health and Welfare) seems at hand.

(Continued on page 162)

STORY OF A 9-YEAR BATH

- It started in 1934 — when a ligno-cellulose hardboard was submerged in water. It ended the other day.

- What had happened in that 9-year bath?

- This remarkable material, known as Masonite® Presdwood,* had retained 80% of its original strength.

- The board, when dried, was within 10 one-thousandths of an inch of its former dimensions.

- Its appearance was practically the same as when submerged.

MASONITE PRESDWOODS



THE LIGNO-CELLULOSE HARDBOARDS

THE secret of Presdwood lies in the two basic elements of natural wood: the tiny *cellulose* fibers, of which wood is composed, and the *lignin* which holds the fiber together.

The Masonite process starts with *exploding* wood, neither removing the lignin nor damaging the cellulose fiber. The result is a mass of fiber of varying degrees of plasticity.

The next step is to interlace the fiber so as to provide equal strength in all

directions, and then weld it together under varying heats and pressures, using lignin's own great bonding power.

Masonite Presdwoods—made in this way from ligno-cellulose fiber of varying degrees of plasticity in different weights and densities—are suitable for many special purposes and uses.

Today in America's War Program, Presdwoods have more than 500 uses — saving steel, aluminum, rubber,

and other critical materials, and are not readily available for civilian use. After Victory they will again be ready to provide the homes you design with sturdy exteriors, beautiful walls and ceilings, built-in furniture, kitchen cabinets and counter tops, and many other attractive features. Masonite Corporation, 111 West Washington Street, Chicago, Illinois.



*Trade-mark Reg. U. S. Pat. Off. "Masonite" identifies all products marketed by Masonite Corporation. Copyright 1943, Masonite Corp.

ARMOFLOR

**...a low-cost, traffic-tested floor
for wartime building**

What it is: Armstrong's Mastic Armo floor is made by calendering a highly wear-resistant composition to an asphalt-saturated felt backing. In use since 1936, this durable, low-cost flooring has a remarkable record of service. Armo floor is supplied in roll form, 3' and 6' wide, and in four colors: red, black, green, and brown. Its overall gauge is .080". Immediately available without priority.

Why it is better:

- ✓ Low initial cost
- ✓ Resilient
- ✓ Durable
- ✓ Moisture-resistant
- ✓ Flexible (for use on uneven subfloors)
- ✓ Low-cost maintenance
- ✓ Can be quickly installed on grade-level subfloors (but not below grade)
- ✓ Cements directly to wood or on-grade concrete subfloor
- ✓ Suitable for large areas

Where it is used: Stores, offices, recreation rooms, warehouses, buses, street cars, public buildings, hospitals, schools, Army and Navy construction, mass housing projects, and in any low-cost or semi-permanent structure where an extremely durable flooring is required.

For more information on the many wartime applications of Armstrong's Mastic Armo floor, see the 1943 edition of *Sweet's*, or write directly to us. Address all inquiries in care of the Armstrong Cork Company, Floor Division, 2305 State Street, Lancaster, Pennsylvania.

ARMSTRONG'S ARMOFLOR

MADE BY THE  MAKERS OF

ARMSTRONG'S LINOLEUM



THE ARMY-NAVY "E" flies over our Lancaster factories. It was awarded for excellence in the production of shells, bombs, aircraft parts, and many other vital war materials.

MONTH IN BUILDING

(Continued from page 160)

Industry, faced more directly with the old woes of high turnover and absenteeism, took matters into its own hands. Last month came pictures of Curtiss-Wright's newly expanded Child Care Center at Buffalo, N. Y. (see cut, p. 160), more word that Henry Kaiser was completing a nursery on shipyard grounds at Portland, another report of one under construction at Grumman Aircraft on Long Island.

Staffed by trained workers as well as volunteer assistants, Curtiss-Wright's Center accommodates 50 children in an 8-room, well-designed building, cares for them during the long (8 to 4:30) dayshift, provides medical care, police protection, play facilities. The building was constructed with a minimum of critical materials, a maximum of attention to sunlight, playspace needs.

Critics of Industry's entry into Government's badly managed corral point out that plants are logical places for sabotage and enemy attacks, thus jeopardizing children's safety in schools located on plant grounds. The Army, agreeing, tried to swerve Curtiss-Wright from its chosen location, was borne out to some extent by a recent accident at C-W when a plane crashed into a plant, killed 12 persons.

Despite carping, however, indications are that industry, weary of the Government's apathy, will solve the problem of building nursery schools — whenever, wherever it can.

QUIZ ON POSTWAR PLANNING

Last month keen, youngish economist Leo M. Cherne, executive-secretary of New York's Research Institute* presented to a Washington, D. C. Forum results of the Institute's questionnaire on postwar planning. Sent to more than 30,000 industrial executives, it asked leading questions, got revealing answers:

► Do you think a business firm should start planning its adjustments for postwar operations now?

Yes: 93%. No: 3%. Negative answers were accompanied by "rather violent expressions against the idea," according to Cherne. Reason: fear that even industrial planning might bring Government-inspired or Government-controlled programs into the picture.

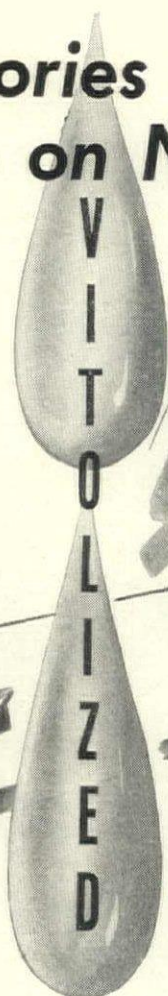
► What postwar possibilities worry you most?

Extension of Government control: 24%. Increased labor union strength; continued tax rate: each 18%. Inflation: 15%. Postwar depression: 13%. Complications from Government ownership of plants during the war: 12%.

(Continued on page 164)

*Organized in 1934, the Institute with more than 30,000 members, is an earnest group of young economists who carefully research problems of Government-Industry relations (Price Control, Wage and Salary Stabilization, CMP among their recent reports), provide expert information.

Pittsburgh Laboratories Improve on Nature's Best!



—develop "Vitolized Oils" which keep paints **LIVE, tough and elastic**

NATURE does a fine job when she manufactures linseed, soy and tung oils—except for one basic defect.

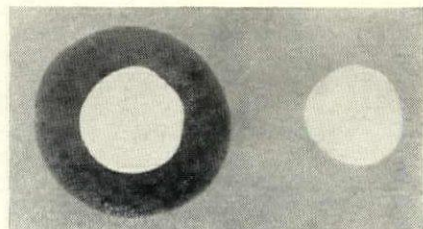
Nature's oils, when used for making paint, have at least one disadvantage—they leave the paint film . . . soak into the surface beneath.

Research work by Pittsburgh chemists has eliminated this defect. Test No. 1, at right, shows how Pittsburgh's exclusive "Vitolized Oils" remain in the paint film to keep it **LIVE, tough and elastic**. When the painted surface expands or contracts, these **live** paints have sufficient "give and take" to resist cracking and peeling. This means longer service from each application of Pittsburgh Paint.

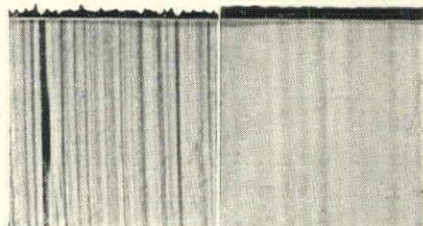
Test No. 2 is a demonstration of the superior leveling qualities of paints made with "Vitolized Oils." In addition, this development promotes proper control of spreading rate.

Free To Architects

Our 148-page "Maintenance and Buying Guide" is a valuable book to have. Contains instructions for the correct maintenance of all types of surfaces and other information useful to architects. Coupon will bring free copy.



Test No. 1—Note how ordinary oil (left) is absorbed into the surface below. "Vitolized Oil" (right) as used in Pittsburgh Wallhide System remains in the paint film keeping it **LIVE, tough and elastic** . . . enabling it to expand and contract with the surface over which it is applied.



Test No. 2—Ordinary linseed oil (left) does not level out well, leaves "hills and valleys" or brush marks. In Pittsburgh "Vitolized Oil" Paint (right), brush marks are rounded—with no sign of deep valleys. This uniform film of protection is better able to withstand weather wear.



PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY
PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

PITTSBURGH PLATE GLASS COMPANY
Dept. AF-5, Pittsburgh, Pa.

Please send me postpaid a free copy of your
"Maintenance and Buying Guide."

Name _____

Address _____

City _____

State _____



*This beauty has
lasted 100 years!*

White carnations are no lovelier than a home painted with Eagle pure White Lead in pure linseed oil.

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

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

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

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

THE EAGLE-PICHER LEAD COMPANY, CINCINNATI, O.

Member of the Lead Industries Association



MONTH IN BUILDING

(Continued from page 162)

►How soon after V-day do you expect to produce your first peacetime product?

At once: 48%. Three months: 17%. One month: 12%. Unknown: 11%.

►Which wartime Government controls do you think should be continued during the postwar transition period?

Price control: 17%. Standardization, simplification: 12%. Wage Stabilization: 11%. Rent Control: 9%.

Other questions revealed Business' opinions on:

Employment: Large firms (over 5,000 workers) anticipate a postwar dismissal of workers in a ratio of seven to one. Medium-sized firms (501-2,000 workers) expect a 50% layoff; small ones (under 500) very little or no layoff.

Most serious Government-imposed impediment to postwar adjustment: The National Labor Relations Act (24%).

Finance: About one-half of the capital requirements for postwar readjustment is expected to be supplied by depreciation reserves, postwar reserves, postwar tax credits and refunds. Bank loans account for about one-third of the funds needed in the smaller-firm brackets.

Foreign Trade: Almost all firms, regardless of size, think postwar foreign trade will exceed prewar levels.

Government Aid: Most desired: lowered tax rates, the right to deduct a limited postwar reserve from taxable income, Government insurance of conversion loans, a Government-promoted program to stimulate savings for postwar purchasing.

To the Forum's 2-day session, attended by 200 deeply concerned Government and Industry representatives, the answers signified that, for a majority of Industry, postwar planning has traveled far from the national-pastime stage to solid work.

SIMON SAYS

To a meeting of the Institute of Civil Engineers, on his return to England last month from a 3-months' sweep of the U. S., Micawber-like Sir Ernest Simon said: "While in America I have taken part in discussions on rebuilding in most of the large towns. Americans are not afraid of big things; their public buildings and express motor highways are impressive. In these matters we (Great Britain) can learn from America, but about housing America can learn from us. We are half a generation ahead of them in this respect."

RIBA-BBI

In an impressive display of their planning-for-rebuilding strength, the Royal Institute of British Architects, together with the British Building Industry (which footed the bill) last month opened a mammoth exhibit entitled "Rebuilding Brit-

(Continued on page 166)

Predestined

FOR A PART IN POST-WAR DAYLIGHTING



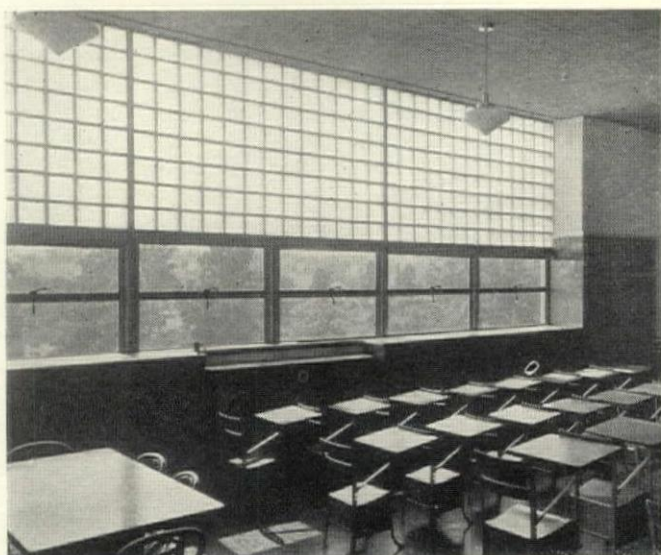
In the four buildings on this page you see the future of *controlled* daylighting in new buildings planned for 194-X.

INSULUX Glass Block diffuse, direct, and distribute daylight where it can be used to best advantage. The value and usefulness of this new *quality* of natural light will find even

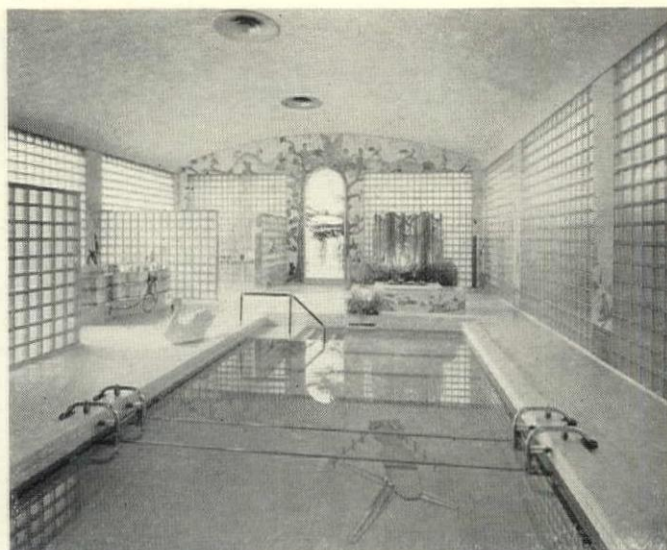
greater expression tomorrow as we continue to work with architects in fitting INSULUX to its foremost job of bringing the miracle of daylight *indoors*.

Owens-Illinois Glass Company, INSULUX Products Division, Toledo.

OWENS-ILLINOIS
INSULUX
GLASS BLOCK



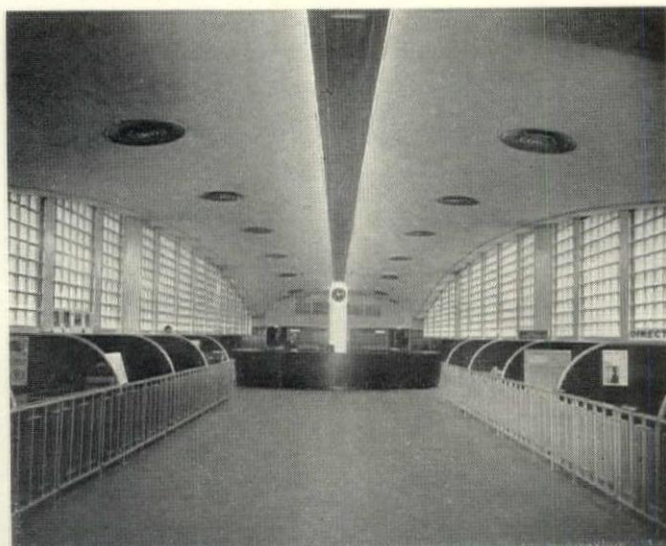
SCHOOL—Light-Directional INSULUX Glass Block project daylight deep into interior of classrooms for the benefit of all students. Sash below glass block panels allow unobstructed vision and provide ventilation.



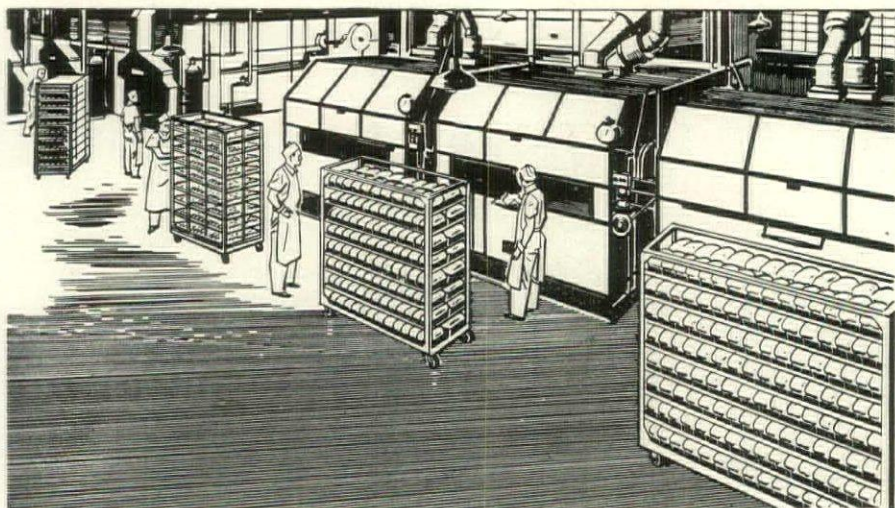
HOSPITAL—Crippled children are bathed in sunlight as they receive treatment in indoor pool. Privacy, sanitary surfaces, and exciting cheerfulness are a few of the advantages here.



SUPER MARKET—Monitor and wall panels of INSULUX insure working daylight throughout store. INSULUX is sturdy, easily cleaned, needs no paint—with lower upkeep than any other type of light-transmitting material.



INFORMATION BOOTH—Under Park Avenue ramp at 42nd Street, New York City. Problem: dust-proof, sound-proof, light-transmitting areas. Answer: INSULUX Glass Block.



WOOD Floors are Warm and Quiet — Easy to Work On

FLOATING FLOORS—used a lot in bakeries—have a hardwood surface over a treated wood subfloor. Sand between this and the concrete serves as a cushion. These floors stand up well under the wear and tear of service. The heavy pan trucks and racks roll more easily on them. The floors are warm and quiet, contributing to happier working conditions.

WOLMANIZED LUMBER* is used for many of these floors, as well as for roof structures, shipping platforms and the like. It provides resistance to decay and termite attack. So, although conditions favor these enemies of wood—high humidities, warmth and frequent wettings for cleaning—this construction has long life.

USE OF THIS long-lived lumber introduces no unusual problems. The speed with which hundreds of Army and Navy projects have been erected is evidence that Wolmanized Lumber goes up easily and fast. All of the advantages of working with wood are retained—low cost, light weight, strength, resilience, good insulating properties. It is clean, odorless and paintable.

ORDINARY WOOD, deeply impregnated with Wolman Salts* preservative by the vacuum-pressure method, becomes Wolmanized Lumber. Service records covering millions of feet, some of it in service over eighteen years, prove its lasting ability. The low upkeep costs that result certainly warrant your considering Wolmanized Lumber for postwar construction. American Lumber & Treating Company, 1647 McCormick Building, Chicago, Ill.

*Registered Trade Mark

"Alloyed" FOR ENDURANCE
WOLMANIZED LUMBER



MONTH IN BUILDING

(Continued from page 164)

ain." (Its catalog is reviewed on page 12.)

Sir William Beveridge, whose monumental *Social Insurance and Allied Services* report contained no specific reference to housing problems, opened the show. Said England's master-planner:



Sir Edward Lutyens: postwar planner for RIBA.

"There are five giant ills on the road to reconstruction—want, disease, ignorance, squalor and idleness . . . it is impossible to destroy squalor unless armed with a sling containing the necessary stones. The first stone is planning for the use of land by national plan, not by bargaining. (FORUM, Uthwatt Report, Nov., '42, p. 49). The second stone is the sane use of transport . . . the third the right use of the right articles: the right architect must be employed . . . On the ingenuity of architects we depend for designing houses so that people shall



Sir William Beveridge: he threw five stones.

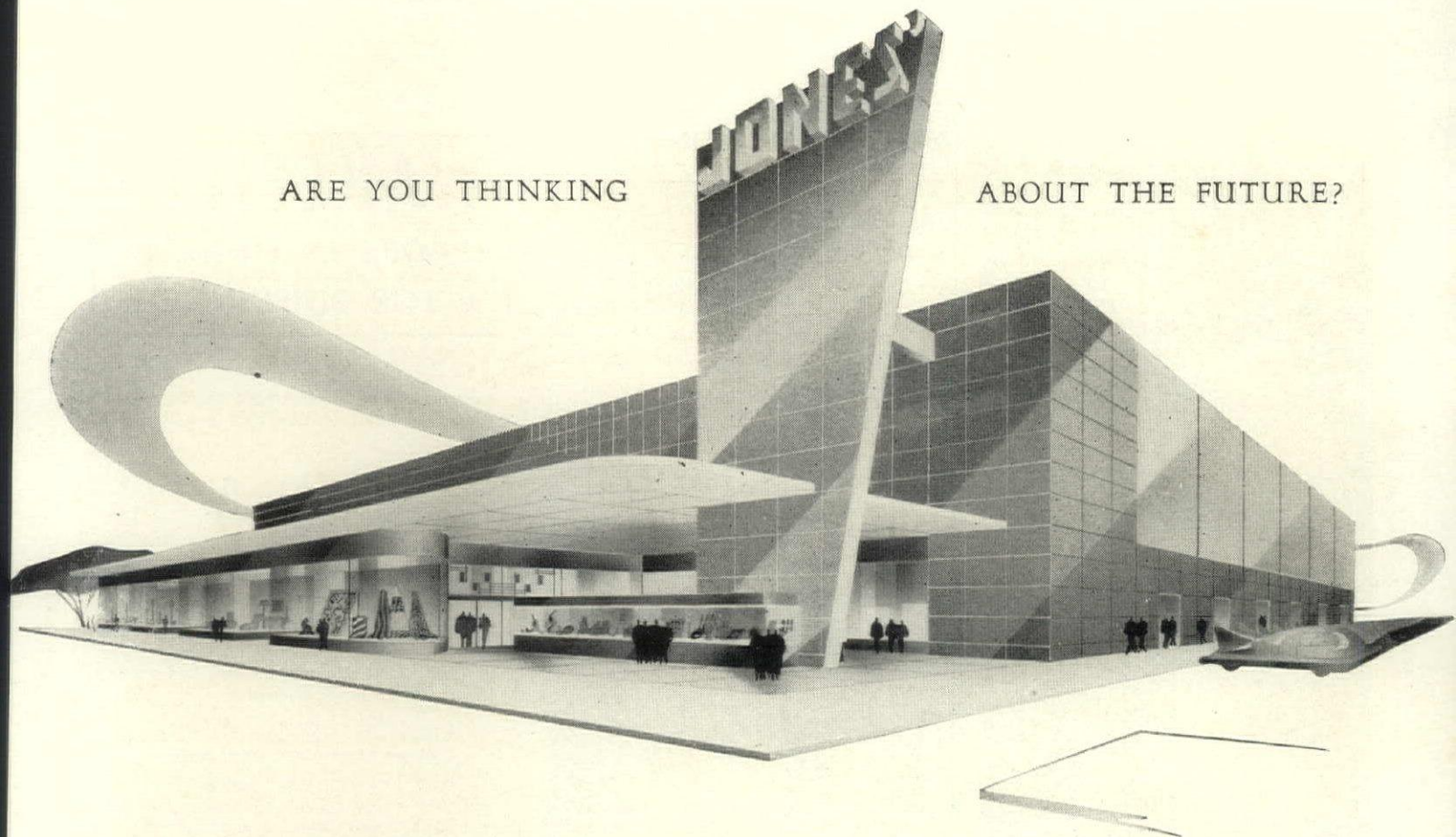
have no needless toil. The fourth stone is the maximum efficiency of the Building Industry which should consider itself about the most important industry in the country, since upon its work depends the happiness and health of the citizens."

The exhibition utilized the example of London to demonstrate the task before the planners. Housing, industry, transport and social services were indicated by diagrams, photographs. Other problems dealt with: relationship of countryside to town, of rebuilding to postwar industrial and labor conditions—all treated from the point of view of long-term planning on a national scale.

(Continued on page 168)

ARE YOU THINKING

ABOUT THE FUTURE?



What Steel has to offer for the buildings of 194X



THE qualities that have made steel the A-1 material for thousands of war uses will again

make it a prime material for construction after the war. No other material can do so many jobs so well.

Here are a few things that you can obtain with steel that will improve post-war buildings of all kinds:

GREATER STRENGTH. Steel-framed buildings have shown their greater strength again and again during severe bombings of London and other European cities. Future construction should take this into consideration for all types of buildings. Steel frames for homes offer greater resistance to damage from tornadoes, high winds or earth movement.

MORE LIGHT AND AIR. Steel windows and large glass areas made possible with steel framing bring the outdoors into the house. Living is more healthful and enjoyable.

IMPROVED AIR CONDITIONING. Great advancements in heating and air-conditioning are now being perfected and will be ready right after the war. Warm air systems using steel furnaces and steel

ducts will clean the air to a degree never obtained before. Temperature and humidity controls are being improved which will assure freedom from drafts, cold areas, and incorrect humidity.

BEAUTY. U·S·S Stainless Steel and Porcelain enamel on U·S·S VITRENAMEL Sheets are finding new uses for kitchens, bathrooms and outdoor trim. Store fronts of porcelain enamel are highly decorative—never need painting.

DURABILITY. U·S·S Steels will be obtainable with corrosion resistance ranging from that of ordinary steel to the permanence of stainless steel. Greatly increased capacities for making electric furnace steels will help to reduce their cost. Surface finishing, such as Bond-erizing, will help to make painted surfaces more durable.

PREFABRICATED UNITS. Mass production of prefabricated units, such as windows, cabinets, closets, stairways, bathtubs, sinks and lavatories, will help to reduce costs on these items. Prefabricated homes and farm buildings with steel wall sections have already found wide use in some districts. Look for increasing developments along this line with more attention to exterior and interior beauty.

BETTER PROTECTION. Danger from fire, lightning, rain, snow, wind, sun and termites can be reduced with proper use of steel. Roofing of U·S·S Copper Steel for modern and colonial style buildings will last indefinitely if properly maintained. Porcelain enamel corrugated roofing and siding never needs painting.

MORE EFFICIENT INSULATION. Steel insulation reflects 95% of radiant heat. Winter heat trying to escape is directed back into the house. Summer heat from the sun is kept out. Steel insulation sheets retard fire, form dead air space between walls, are water-proof, vermin-proof and do not pack down.

Write for information

Late information is available which gives complete details on these and many more items made of U·S·S Steels. Address U. S. Steel Corporation Subsidiaries, 621 Carnegie Building, Pittsburgh, Pa.

**U·S·S
BUILDING SHEETS**



CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago

COLUMBIA STEEL COMPANY, San Francisco

TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham

United States Steel Supply Company, Chicago, Warehouse Distributors

United States Steel Export Company, New York

UNITED STATES STEEL

The Battle House has A 30-YEAR-OLD RAINCOAT



IN 1912, the Battle House at Mobile first donned a unique weather-proof coating that still defies the driving fury of tropical rains. That was DUM DUM MASONOC, a protective, decorative coating for concrete, stucco and masonry, which is today giving hundreds of other structures the same kind of tough, lasting weatherproofing the Battle House has enjoyed for 30 years.

DUM DUM MASONOC is one of Arco's long list of maintenance specialties which also includes mill whites, floor treatments, metal protectives, wall paints—products that have played an important conservation role in three generations of American industry. Write for full details.

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

ARCO



Paints for Industry

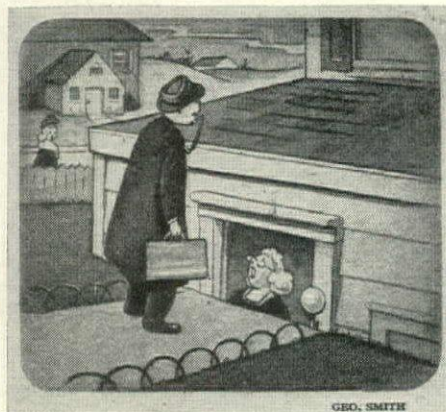
MONTH IN BUILDING

(Continued from page 166)

TRIALS FOR ERRORS

1) Indicted last month for conspiracy to defraud the United States Government were three companies, five officials connected with the nation's No. 1 housing scandal, \$3,400,000 Winfield Park, N. J. Defendants on the first housing case to reach the courts are officers of the Clifford F. MacEvoy Company, the Park Avenue Storage Company and Rockledge, Inc.—all highly interchangeable directorates, the courts discovered.

The indictments grew out of an acid investigation by Harry Truman's ubiquitous Senatorial committee, which serves as



"The man from Washington says it's only the foundation settling!"

magic eye to the Government's war program. Truman and his boys found that the project was an object lesson in improper filling, grading and landscaping, poor foundations (*see cut*), waterlogged cellars and roofs, dangerous electrical connections, warped and buckling floors, peeling exterior paint, a shining example of sharp dealings and vicious-circle practices. Their findings were sent to the courts, the indictments followed fast and febrily:

► Purchasing building materials through Rockledge and Park Avenue Companies, reselling them to the MacEvoy Company, thereby obtaining profits not authorized under the contract.

► Manipulating the rental of equipment to make it appear that Rockledge and Park Avenue had supplied it "as bona fide third parties."

► Misrepresenting the size and capacity and quantity of items of equipment used so as to obtain higher rentals.

► Obtaining approval and payment of claims for rental of equipment amounting to \$40,000 of which 85% was false and fraudulent (\$35,000).

Conviction on all counts in the three indictments will mean maximum penalties of 200 years for Clifford MacEvoy, main offender and \$200,000 fine. To the successful prosecution of the U. S. housing

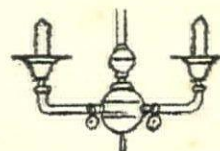
(Continued on page 170)

WAKEFIELD

LEADER IN LIGHTING

★ FOR BUILDINGS ★

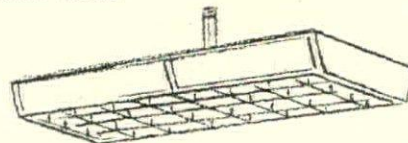
40 years ago architects might have specified Wakefield fixtures like this gas lighting unit.



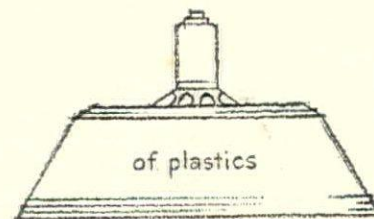
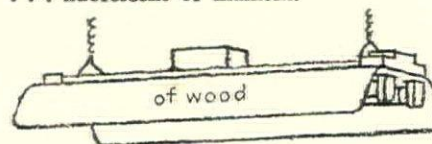
In 1936 many an architect specified a new plastic fixture by Wakefield.



In 1940 architects were specifying Fluorescent by Wakefield . . . planned for office needs.



Today architects lighting war plants specify efficient, new steel-saving units by Wakefield . . . fluorescent or filament.

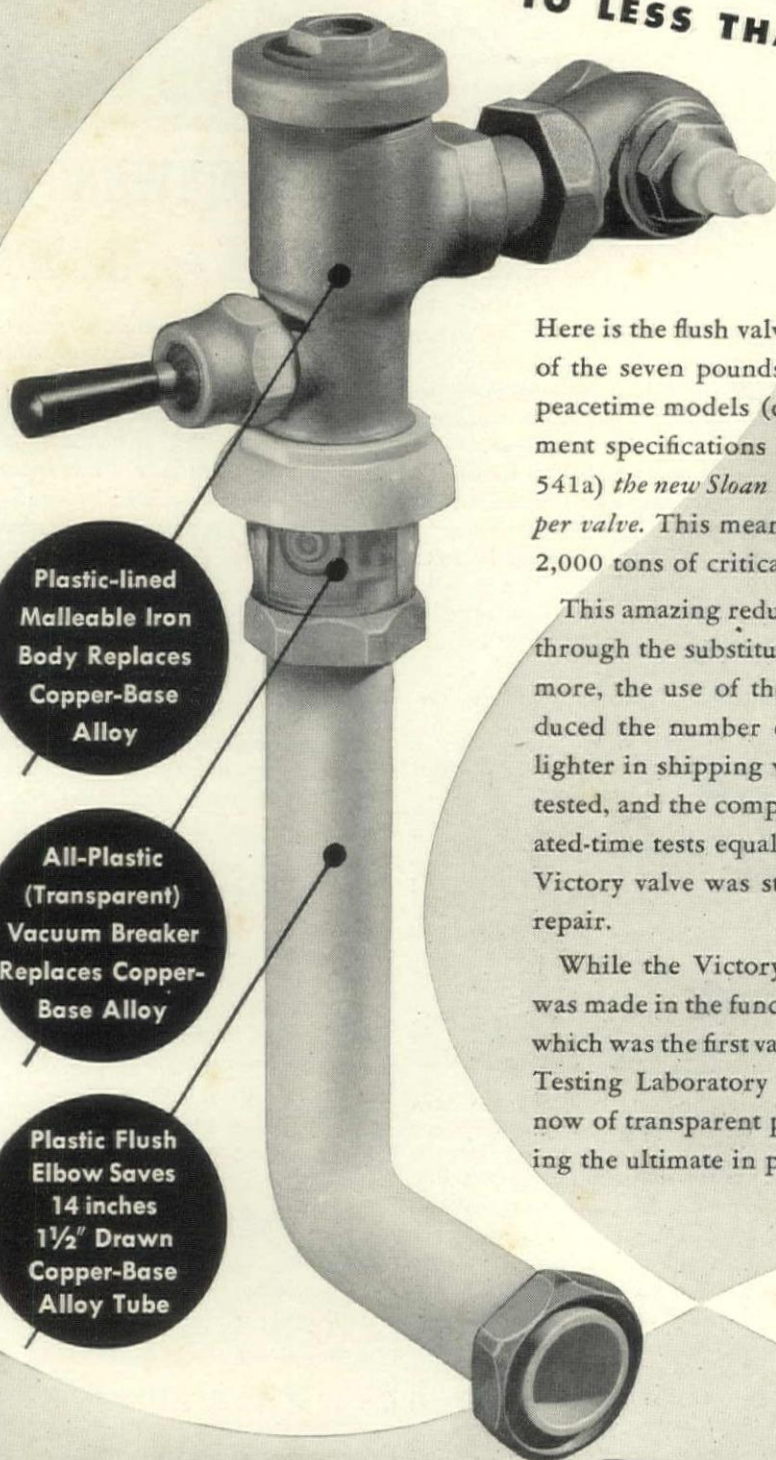


In 194X architects can continue to specify lighting fixtures by Wakefield . . . confident that they will incorporate all the latest developments of lighting research and engineering.

THE WAKEFIELD BRASS CO.
F.W. WAKEFIELD
53 Forum Park • Vermilion, Ohio

THE SLOAN *VICTORY* VALVE

REDUCES COPPER CONTENT FROM SIX POUNDS
TO LESS THAN FOUR OUNCES—



Plastic-lined
Malleable Iron
Body Replaces
Copper-Base
Alloy

All-Plastic
(Transparent)
Vacuum Breaker
Replaces Copper-
Base Alloy

Plastic Flush
Elbow Saves
14 inches
1½" Drawn
Copper-Base
Alloy Tube

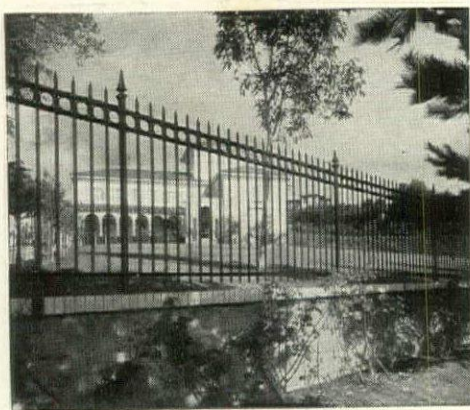
Here is the flush valve that *really* saves critical materials. Instead of the seven pounds of copper-base alloy formerly used in the peacetime models (or the 2¼ pounds permitted by War Department specifications PE-623 and Federal Specification E-WW-P-541a) the new Sloan Victory valve uses less than four ounces of copper per valve. This means that Sloan alone is saving the nation over 2,000 tons of critical copper per year.

This amazing reduction in critical materials was brought about through the substitution of plastics and malleable iron. Furthermore, the use of these substitute materials has appreciably reduced the number of parts, and the new valve is 2½ pounds lighter in shipping weight. All parts have been thoroughly field tested, and the complete valve has undergone laboratory accelerated-time tests equal to 10 years normal service, after which the Victory valve was still working perfectly and without need for repair.

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

SLOAN VALVE COMPANY
4300 West Lake Street
CHICAGO

SLOAN *VICTORY TYPE* FLUSH VALVES



3 reasons why

ANCHOR FENCE BELONGS IN YOUR POST-WAR PLANS

- 1. For Beauty.** Anchor-Weld Iron Fence harmonizes with the building it surrounds—completes your architectural picture. The unusual strength of Anchor-Weld Iron Fence makes center-supports and cross-bracing unnecessary. Each panel will support one ton of distributed load. Made in a wide selection of standard designs or to your own individual needs.
- 2. For Strength.** Anchor-Weld Iron Fence is electrically welded under high pressure to insure permanent, inseparable joints. Pickets and rails cannot loosen or sag!
- 3. For Permanence.** Welded construction plus rails which are as heavy as the pickets assure permanent alignment. Anchor Copper-Bearing Steel assures maximum resistance to weather and moisture.

FREE BOOK

Plan now to make Anchor-Weld Iron Fence add "the final touch" to your post-war projects. Get the facts about Anchor Fences . . . see how they give extra protection, long life, low maintenance costs. Mail the Coupon below for free Anchor-Weld Iron Fence Catalog and a Sample Weld (makes an attractive paper weight). No obligation, of course.

Anchor Post Fence Co., Baltimore, Maryland

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SALES AND
ERECTING SERVICE

MAIL THIS
COUPON
TODAY!



ANCHOR POST FENCE CO.
6635 Eastern Ave., Baltimore, Md.

Send me () Anchor-Weld Iron Fence Catalog () Anchor-Weld Sample () Name of nearest Anchor Fence Engineer.

Name.....

Firm.....

Address.....

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

MONTH IN BUILDING

(Continued from page 168)

program it will mean stern warnings to others.

2) Convicted after one month of bitter debate and recrimination, Barnett Welansky, owner of Boston's Cocoanut Grove nightclub, will serve a 12-year sentence. The crime: manslaughter.

Boston's most tragic fire (FORUM, Jan. '43, p. 35) in which 491 lives were lost, was caused by dual neglect: managerial failure to provide sufficient safety equipment, disregard of fire hazards. Unnamed, major causes, which do not appear in the Suffolk County conviction: laxness of Boston's fire code, panic.

DETROIT STEEL COMPETITION

Open to architects, engineers, designers, draftsmen and students, the Detroit Steel Products Company's contest "to stimulate the kind of postwar planning that will help ease the transition from war to peace," last month announced its panel of winners.

The competition was divided into two sections: designs for small-house windows, and designs for hospital windows. The jury (see cut), consisting of Edward G. Conrad of Cleveland; Robert B. Frantz of Frantz and Spence, Saginaw; Branson V. Gamber of Derrick and Gamber, Detroit; John N. Richards of Mills, Rhines, Bellman & Nordhoff, Toledo; Amedeo Leone of Smith Hinchman & Grylls, Detroit, chairman; and Alfred Shaw of Shaw, Naess & Murphy, Chicago, found the hos-



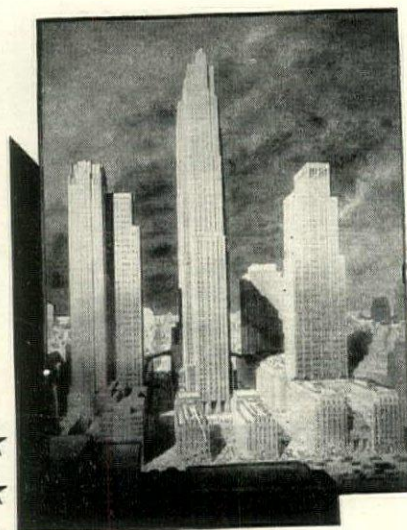
Judges Conrad, Weed, Shaw, Palmer (AIA adviser), Leone, Frantz, Richards.

pital entries on the whole disappointing, the house-window designs more varied and original, ranging from "well-known types to far-reaching ideas."

Winners in the small-house window section: 1) Frank F. Polito and Evald A. Young, Oscoda, Mich., \$500. 2) T. Y. Hewlett, Toledo, Ohio, \$300. Mention: Karl Kamrath, Houston, Texas, Royal Barry Wills, Boston, Mass., Robert A. Jones, St. Simons Island, Ga., and Walter Jon Shelly, Lawrence, Kan., each \$50.

Winners in the hospital-window section: 1) Percy Cashmore, White Plains, N. Y., 2) William G. Moeckel, Wilmington,

(Continued on page 172)



★★ REDRAWING THE SKYLINE of AMERICA

Already on the boards of forward-looking architects are preliminary drawings of post-war America. Pre-eminently functional, the buildings of the future will be more completely self-contained than those of the past. Provision will be made for increased efficiency, convenience and comfort. Beauty will assume new forms.

Facilities for the preparation and serving of food will no longer be confined to hospitals, schools and other public buildings. They will also be included in apartment houses, department stores, bus terminals, airports, manufacturing plants and neighborhood drug stores.

As in the past, the architects responsible for these projects are invited to avail themselves of the assistance of John Van Range Kitchen Engineering Service in laying out these departments and for designing, manufacturing and installing the equipment.

In anticipation of the return to normalcy we are planning new designs of kitchen equipment, using more enduring materials and incorporating advanced engineering principles that have demonstrated their value to the armed forces of the Nation. Some of these are already available to architects now engaged in priority projects.

We invite your inquiries

The John Van Range Co.

EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD

Branches in Principal Cities
328 EGGLESTON AVE. CINCINNATI, O.

Save up to **50%** OF LUMBER

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Specifying

TIMBEAM

The New
System of

WOOD STRUCTURAL FRAMING

Made of **STANDARD PLYWOOD** and
STANDARD DIMENSION LUMBER

WOOD PLATE
GIRDERS

BEAMS

PURLINS

JOISTS

AND COLUMNS

Does not
require
Stress Grade
Lumber
in its
Fabrication



TIMBEAM fits squarely into today's picture where scarcity demands alternates for critical materials. Because of their design, TIMBEAMS often save more than one-half of the lumber required for solid sections of equivalent strength.

TIMBEAMS are being widely specified for buildings and other structures for the U. S. Engineers, Navy and

Defense Plant Corporation. They are WPB approved.

Since TIMBEAMS are made of standard dimension lumber and standard plywood, adequate stocks of which are carried to assure prompt delivery . . . and because they are completely pre-fabricated, TIMBEAM jobs afford adherence to the shortest completion schedule.

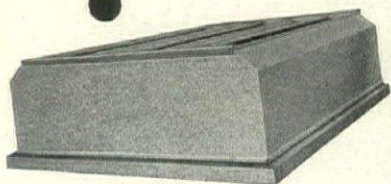
Write for catalog.

TIMBEAM, Inc.

4086 Michigan Ave.

Detroit, Michigan

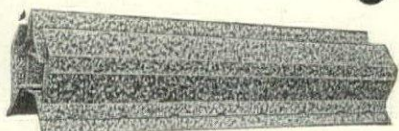
**You can solve
vitally necessary
roof ventilating
problems with
Swartwout's
Two highly efficient
HEAT VALVE
designs**



Swartwout Multiple

*... The new low height
roof coverage ventilator*

USE this improved gravity type ventilator where enormous air movement capacity is needed. Regardless of volume of exhaust provided, Swartwout Multiple is only 32" high. Short air travel means *extremely low air friction*. Used in continuous runs or single units. Made in steel or non-critical materials.



Swartwout-Dexter

*... The original
continuous ventilator*

THE first continuous ventilator made, Swartwout-Dexter is foremost in ridge type installations all over the country. Skillfully designed for greatest suction effect from outside air currents. Any size opening from 4" upwards. Made in steel or non-critical materials.

*Write for complete catalog data
and free engineering help.*

**The
Swartwout
Company
VENTILATION SPECIALISTS**
18617 Euclid Ave. Cleveland, Ohio

MONTH IN BUILDING

(Continued from page 170)

Del., Mention: A. Ralph Curry, Kansas City, Mo. G. Edwin Shofer, Memphis, Tenn. Lee Charles Mielke, Chicago, Ill., and Wendell Clough, Perrysburgh, Ohio.

Detroit Steel Products Company, manufacturers in peacetime of Fenestra Steel Windows and other building products, intended to create widespread "window-consciousness" among contestants.

OFFICIAL REPORT

►FWAdministrator Maj. Gen. Philip B. Fleming to a gathering of labor, business and Government in St. Louis:

"Postwar public construction is being projected here and there but, taking the country as a whole, very little has been done to translate paper proposals into steel, stone, concrete—and jobs.

"This is the next step that must be taken. Whether it is to be directed by the

Federal Government or by the States and municipalities, is less important than that it should be done, and done now.

"There are some, of course, who tell us that this is not the time to bother about the future; that the only thing we should think about now is the winning of the war, after which the future will take care of itself. That was the mistake we made the last time.

"I am informed on competent authority that before the middle of the coming summer some 18,000 civil engineers and architects will be displaced from construction activities.

"A few of these may go into the armed services but probably most of them are too old for military service, or could not meet the physical requirements. Some may be able to find jobs in war plants. A great many of them probably could be put to work at once preparing for postwar construction, to the benefit of the entire nation."



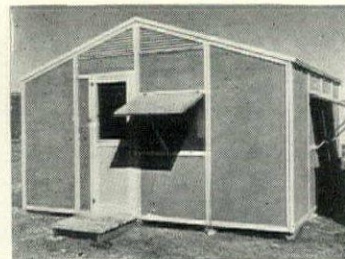
Assembly line at the Michigan plant uses conveyer belt.

JEEP HOUSING

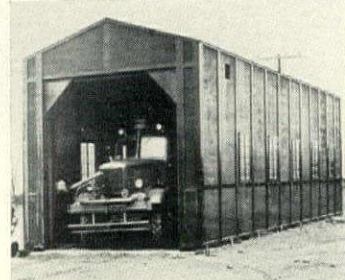
Having filled current demands of the armed forces, enterprising William Bushnell Stout, Detroit engineer-inventor of the Thermal House, is now ready to enter his prefabricated demountable unit into the war housing field on the home front.

Two years ago Stout Houses Inc. (FORUM, Sept., 41, page 209) was organized to produce a little (15x15 ft.) demountable house for about \$1,500. Today six factories in Michigan and Minnesota are pouring out—on an assembly-line basis—the panels and posts (*see cut*) of 125 Thermal houses a day. More than 7,500 units have been shipped to the armed services in the Arctic, the tropics; 1,200 units were erected at San Diego, Calif., and Little Rock, Ark., for military housing units.

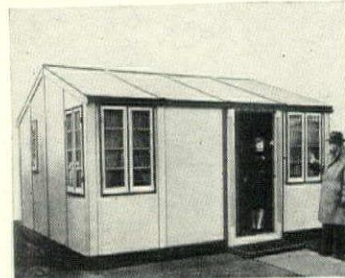
Essentially like the original Stout House, the new unit has eliminated all critical materials (by substituting interlocking wood strips for original steel joints), retained its thermal qualities (by sandwiching a dead-air space between sheets of Homasote and Insulite), expanded the house size to 16x20 ft. Rooms



Basic unit for the African troops.



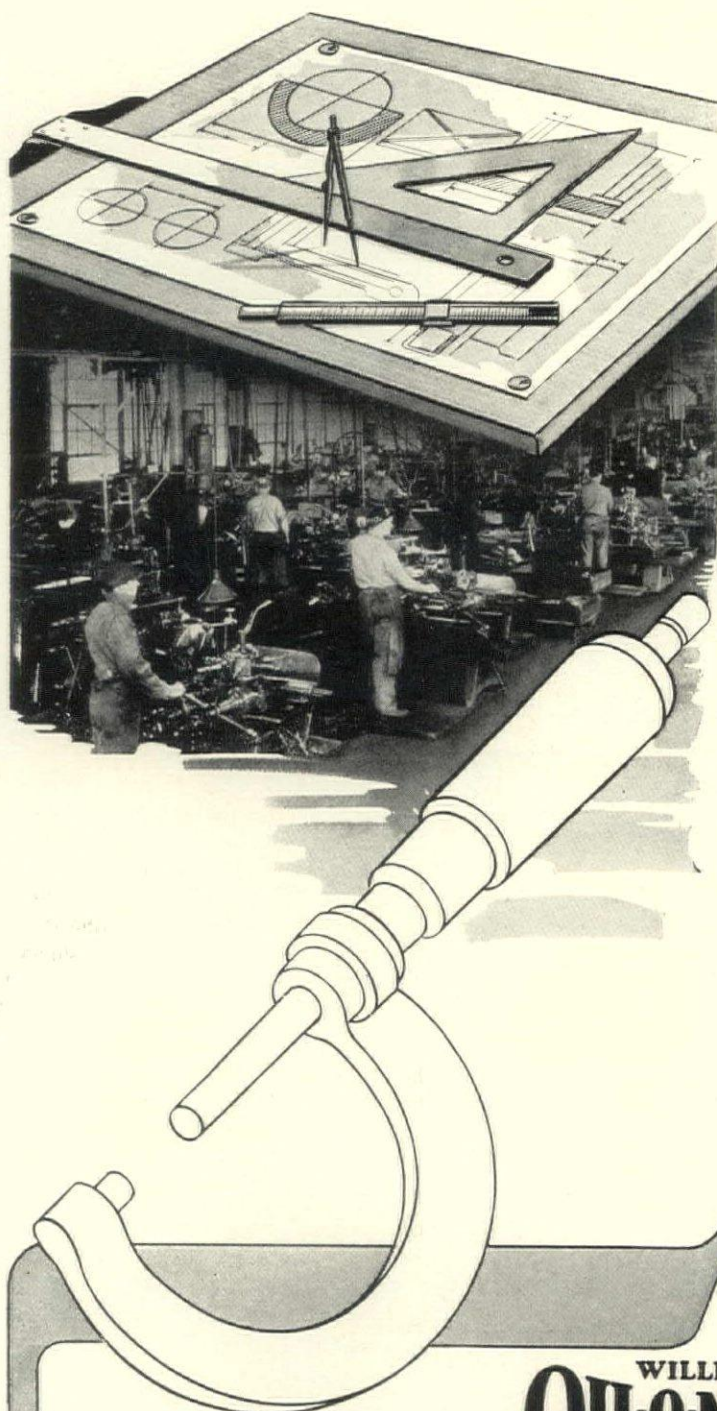
Giraffe-version for a fire station.



Package civilian unit—for \$1,500.

are formed by panels, the unit is expandable into an any-number-of-bedrooms house, into lengthy barracks, into houses for fire equipment at airfields.

Inventor Stout, responsible in earlier days for the first all-metal airplane, the first rear-engine automobile, may well be on to an important postwar housing "jeep"—a packaged house which could be taken anywhere, then sold to dealers in the "used-housing market" when the owner wishes to move on.



SKILL TO *Design* FACILITIES TO *Produce*

For its more than twenty pre-war years, Williams Oil-O-Matic design, construction and performance won undisputed world leadership of the oil heating industry. No other oil burner even approached Oil-O-Matic in number of exclusive, patented features or number of installations.

Today, this skill to Design and Facilities to Produce are working for Victory! Oil-O-Matic's past experience, coupled with War's know-how are going to mean even finer Williams Oil-O-Matic products tomorrow.

★ ★ ★

Today, the money that would ordinarily be spent for home appliances is going into billions of dollars worth of War Bonds. Today, the materials and precision building that would ordinarily go into Williams Oil-O-Matic products are going into battle-winning war equipment! Tomorrow, however, war-time experience and War Bond dollars will be converted into the world's finest, most modern automatic heating in tens of thousands of American homes.

WILLIAMS
OIL-O-MATIC
HEATING



Precision-production "know-how" and experience. Proved in Peace — Proved in War! Oil-O-Matic's Skill to Design and Facilities to Produce have won the coveted Army-Navy "E".

★ ★ ★ ★ ★ ★ ★ ★

BUY WAR SAVINGS STAMPS & BONDS

**THE BONDS YOU BUY TODAY
ARE YOUR GUARANTEE OF A
*Better Tomorrow!***

WILLIAMS OIL-O-MATIC HEATING CORPORATION
BLOOMINGTON, ILLINOIS

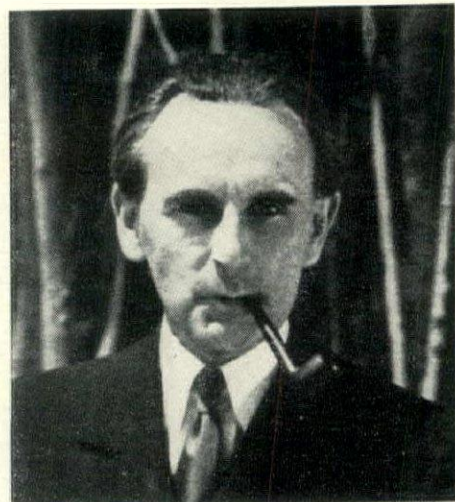
FORUM OF EVENTS

(Continued from page 4)

APPOINTMENTS

Richard J. Neutra, one of the foremost modern architects in the U. S., has been elected chairman of the California State Planning Board. California is the first state to charge an architect with such a responsibility. Mr. Neutra studied at the Universities of Vienna and Zurich, and began practicing architecture in this country in 1923. A strong advocate of prefabrication and contemporary methods of plan-

ning, he has produced an important series of house designs notable for their engineering and aesthetic qualities. But, as Henry-Russell Hitchcock has said: "His technical organizing ability in relation to new possibilities and opportunities in community planning are even more significant than his work as an architect." In 1929 Mr. Neutra was elected the first American delegate to the International Congress of Modern Architecture, after having written a book on American Planning and Traffic Problems, which was considered a textbook in Europe on these subjects. His work, apart from numerous excellent houses, includes the Ring Plan School, "Rush City Reformed"—a project



Richard J. Neutra: Planner

for an ideal city, undertaken in 1924—and, quite recently, a defense housing project at Avion Village, Texas, which demonstrates better than most the advantages of a peripheral road plan. California is fortunate to obtain such excellent assistance for its postwar plans.

The New York City Housing Authority has announced the reappointment by Mayor La Guardia of Mary K. Simkhovitch as a member of the Authority for a third term of five years. Mrs. Simkhovitch, who is Vice-Chairman of the Authority, has been a member since its establishment in February 1934. Long active in the field of public housing, she was one of the founders of the National Public Housing Conference, and instrumental in securing the passage in 1934 of the first housing authorities law in N. Y. State. While Mrs. Simkhovitch was a member of the Authority, 14 public housing projects were built costing approximately \$90,000,000, housing over 17,000 families.

One of the outstanding figures in the country in the field of welfare and settlement work, Mrs. Simkhovitch's activities have included directing Greenwich House, working with the N. Y. State Board of Welfare, and teaching at Barnard, Teachers' College and the New York School of Social Work.

The election of Keith Powlison to the position of Vice-President and Controller has been announced by the Armstrong Cork Company. Mr. Powlison joined the sales organization of the company in 1922, but left later to take a degree of Doctor of Philosophy in Economics at Johns Hopkins in 1928. After a period of association with the Security-First National Bank of Los Angeles, he returned to the Armstrong Cork Co. as Assistant Treasurer in 1932, and was elected Treasurer in 1938. The election of M. J. Warnock to succeed Mr. Powlison, and the appointment of Cameron Hawley as Director of Advertising and Promotion to succeed Mr. Warnock were also announced.

(Continued on page 176)



MUELLER
Supplies Thousands of
Furnaces in War Housing
Projects from Coast to
Coast

59 Single Houses —
Gauer Circle, Milwaukee,
Wis. Builder: Fred A. Mikkelsen.

Designed for the job, Mueller all-cast-iron defense housing furnaces are continuing the Mueller tradition of quality and dependability — maintained through 85 years of war and peace. They are complete standard furnaces in every respect (following the proved principles of return-flue radiator design)—compact, good-looking, a credit to those who select and install them . . . While Mueller helps hasten the day of Victory through specialized war-production work, you have the assurance that the Mueller name will be a greater asset than ever in your post-war construction. Research and development continues apace. B-12



152 Single Houses — "Bridgeton Terrace,"
Bridgeton, Mo. Builder: Ball Lumber &
Supply Co.

★
150 Single Houses — "York Gardens," Hat-
boro, Pa. Builder: York Garden Homes, Inc.



74 Single Houses — "Edmund-
son Terrace," St. Louis County,
Mo. Builder: Harvey Vatterott.
Architect: Winkler & Gruen-
inger.

WG-42 (GRAVITY)
defense housing furnace. All
cast iron. Also available with
blower for forced air.



MUELLER Milwaukee
HEATING AND AIR CONDITIONING

More Comfort per Dollar...

IN POST-WAR HOMES



When Johnny comes marching home he'll marry Mary and they'll start house-hunting. The home they'll be able to afford will be very little but very well built, compact and convenient. Not a middle-sized house squeezed together. More like a modern apartment expanded.

No space wasted on a separate kitchen! Instead, a beautiful complete, all-steel Pureaire set into the big living room wall. Ready to cook the finest meal you ever ate. And whisking every whiff of cooking odor, heat and vapor away into the outer air.

Thousands of housewives already O.K. Pureaire. Investigate! But remember—none for sale till Victory.

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K I T C H E N S

**OHIO
WHITE
FINISH**

**HAWK SPREAD
WHITE
FINISH**

**Two Finishing Limes
you can depend upon**

**Always packed in
Red Zig Zag Bags**

THE OHIO HYDRATE & SUPPLY CO., Woodville, Ohio



Write for free booklet telling about our 99 1/2% pure dolomite deposit and how it is converted into the two famous finishing limes—"Ohio" and "Hawk Spread."

FORUM OF EVENTS

(Continued from page 174)

ANNOUNCEMENTS

The Museum of Modern Art announces plans for an exhibition and book devoted to the best American buildings of 1932 to 1942, the decade that has elapsed since the Museum's first show of modern architecture.

The selected buildings will probably number less than fifty, including industrial structures and housing projects. Only buildings in the United States and

its possessions are eligible. The architectural magazines will be thoroughly combed for material, but architects are invited to send information, photographs and plans of unpublished work to Elizabeth Mock, The Museum of Modern Art, 11 West 53rd St., New York City.

The Army's Corps of Engineers has recently shown an unusually progressive and farsighted spirit. The Engineer School at Fort Belvoir, Va. has turned to soldiers and civilians alike in a request for new ideas, which might be useful in combat. Eleven per cent of the ideas submitted have been put to use. More suggestions are wanted. Engineer-soldiers are author-

ized to send them direct without going through military channels. Civilians, too, are asked to contribute, and the subject matter ranges from camouflage to specifications, and includes suggestions on construction, design, drafting, maintenance, materials and surveying. Army officers feel that this suggestion system will have a useful morale value. Each engineer-soldier and civilian will realize that his ideas can help win the war—if they reach the right people in time.

Major-General Eugene Reybold has made a further request. He is asking for 9,000 specialists a month to enlist prior to induction. The nearest U. S. Engineer Office, passing on their qualifications, is empowered to provide such volunteers with a letter to their induction station. This letter will earmark them for assignment to the Engineer Corps. Says Major-General Reybold: "We'll give these volunteer specialists as much training as a good man can take. We've got a date with a certain paperhanger; and an Engineer keeps his appointments."

AWARDS

Hugh Ferriss, consulting architect and well-known delineator, was among the ten outstanding artists in America to whom the American Academy and the National Institute of Arts and Letters awarded \$1,000 grants each for the year 1943, to help them in continuing their creative work. The other artists include Isobel Bishop, painter and etcher, Bruce Moore and Gertrude Lathrop, sculptors.

At a dinner given by the American Designers' Institute at the Architectural League in New York City, a silver medal was presented to Bigelow-Sanford Carpet Co. in recognition of its contribution to American design. The designs for which the award was given were created by Alfons Bach, who also received a silver medal. Bigelow has for some years commissioned both established and unknown artists to design their rugs. This policy has resulted in original and refreshing patterns, and the establishment of many new trends in carpet design.

The Cranbrook Academy of Arts announces that its 1943 summer session will be held from June 28 to August 6. There will be weekly seminars by Messrs. Eliel Saarinen, Carl Milles and Zoltan Sepeshy. Tuition with board and room amount to \$170, tuition only to \$70. Students are accepted for the full 6-week term only. For further information write to the Executive Secretary, Cranbrook Academy of Arts, Lone Pine Road, Bloomfield Hills, Michigan.

Syracuse University announces that one \$400 and four \$200 scholarships will be awarded to students wishing to enter the

(Continued on page 178)

Veteran of Every War Since 1816.

LAWSON

Serves Again.

For the fifth time in the 127 years of our existence, we, of The F. H. Lawson Company, are serving to help America defeat its enemies. And today, over seven acres of floor space in our plant are devoted to the production of the tools of war

Tomorrow we will again turn to the manufacturing of a complete line of bathroom cabinets—cabinets designed for the house of the future from the materials best suited to their design. Perhaps they will be made of steel, perhaps of plastics or of aluminum or even of plywood. In any case, the finest cabinets will bear the name of Lawson.

Lawson
**BATHROOM
CABINETS**

127 YEARS
OF QUALITY
Lawson

THE F. H. LAWSON CO.

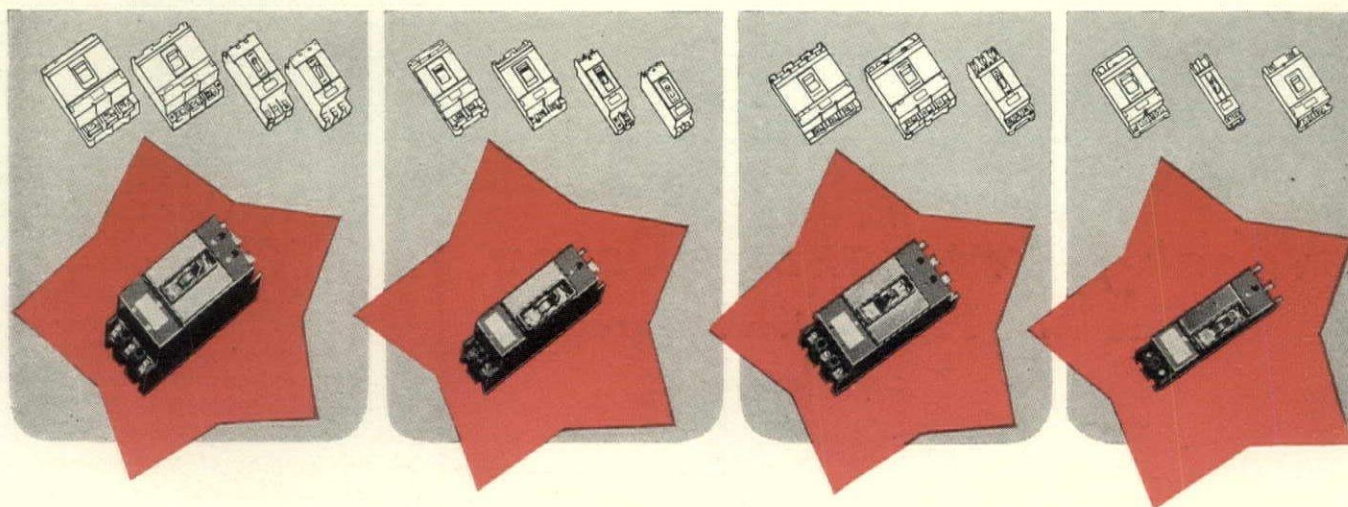
Bathroom Cabinet Division
Cincinnati, Ohio

INVEST IN AMERICA—BUY WAR BONDS

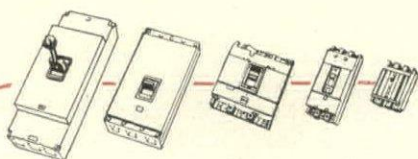


4 breakers

TAKE THE PLACE OF 14



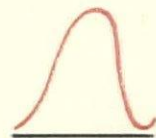
- — TO SAVE 18% COPPER
- — TO SAVE 38% STEEL
- — TO CONSERVE SPACE
- — TO IMPROVE CIRCUIT PROTECTION



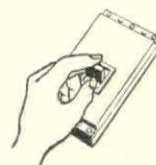
Nofuze "De-ion" Breakers



—prevent *harmless* overloads from interrupting war production.



—protect circuits from *dangerous* overloads and "shorts."



—restore service *instantly* with just a flip of the switch.

As a voluntary war measure, Westinghouse has "mobilized" the Nofuze line of "De-ion" Breakers. For example, all ratings from 15 to 100 amperes have been made available in one compact frame size. Instead of 14 models, 4 now serve the same purpose. Pole spacing and terminal arrangements have been made standard for interchangeability. Space is saved—vital materials are conserved.

Today, the production of Nofuze Breakers is concentrated on war requirements. Our engineering facilities are serving all branches of the war effort on a broad consulting basis.

Result: many far-reaching developments are being made ... overload protection of low-voltage circuits has been greatly improved. If you have a war circuit problem, ask your Westinghouse representative for engineering help. Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa., Dept. 7-N. J-60523



Westinghouse

PLANTS IN 25 CITIES... OFFICES EVERYWHERE

NOFUZE CIRCUIT PROTECTION

FORUM OF EVENTS

(Continued from page 176)

Department of Architecture. The scholarships will be awarded on a competitive basis between June 25, 1943 and July 10, 1943. On or before the first date a portfolio containing not more than 20 drawings and 3 letters of recommendation should be sent to Dean H. L. Butler, College of Fine Arts, together with high school records. On the second date the awards will be announced. All scholarships may be held for four years. Information can be obtained

from Professor L. C. Dillenback, Director of the Department of Architecture.

DIED

ROBERT E. DOWLING, 76, president of the City Investing Company, an important real estate operator in New York City for many years, in New York. Mr. Dowling was responsible for the erection of the thirty-two story City Investment Building, which, though later surpassed in height and office space by other skyscrapers, remains one of the landmarks of the lower section of Manhattan. The building covers the greater part of a Broadway block, and though it was sold in 1919, the City Investing Company had bought it back some years prior

to Mr. Dowling's death. Born in California, he was educated in New York. After starting out to become a lawyer, he soon changed his mind and opened a real estate office in New York at the age of 19.

Mr. Dowling was a director of the New York Life Insurance Company, and of the City Bank Farmers Trust Co., East River Savings Bank, National City Realty Corp., and the 270 Broadway Corporation.

ALAN CORSON, 66, in Bryn Mawr, Pennsylvania. Mr. Corson formerly was the chief engineer of the Fairmount Park Commission, and was largely responsible for the development of several city parks, the construction of the Philadelphia Museum of Art and the Benjamin Franklin Memorial Parkway. He resigned as chief engineer in 1941 because of failing health, after serving as a park official for forty-three years. In the previous year he had received a medal for "distinguished and meritorious service" from the Philadelphia Chapter of the American Public Works Association. Mr. Corson, who transformed Philadelphia into "a city of beautiful parks," developed, more recently, the Cobbs Creek and Pennypack park areas. He was also responsible for the building of the municipal golf courses maintained by the city. He was graduated from the University of Pennsylvania in 1898, and was appointed assistant engineer of the Fairmount Park Commission in the same year.

ARTHUR WHEELER FRANCIS, 74, in New York City. Mr. Francis, a retired real estate broker, was formerly a vice-president of Brown, Wheelock & Co. While associated with this firm, he was instrumental in purchasing the right of way for the New York Central Railroad. Born at Castleton, Va., he was graduated from Williams College in 1890, and entered the real estate business in New York City.

JAMES E. TODD, 85, in New Haven, Conn. Mr. Todd was the builder of some of the largest structures on Yale University campus. During his association with the Sperry and Treat Construction Co., from which he retired in 1938, he was responsible for the Sterling Law Quadrangle, Yale Divinity School, Lapham Field House, Peabody Museum, William L. Harkness Hall and Bingham Hall.

FREDERICK H. PEARCE, 59, in Garden City, L. I. Mr. Pearce was a partner in the New York real estate firm of William Cruikshank's Sons, and had been connected with that firm for more than thirty-eight years.

JOHN D. GALLOWAY, 73, in Berkeley, Calif. Mr. Galloway was the West's representative on the engineering board which submitted sites for the San Francisco Bay Bridge.

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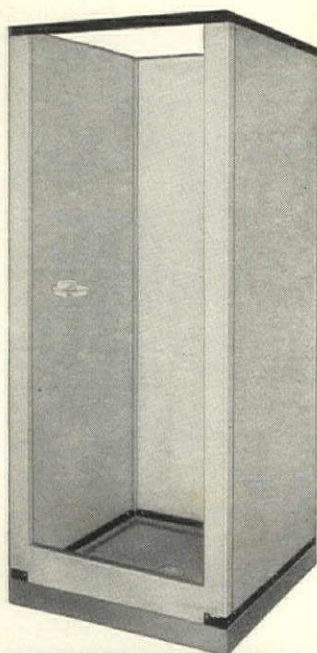
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LETTERS

(Continued from page 34)

Forum:

... Since the Town of Willow Run died in controversy it is meet that its soul should live in controversy. I am not sure that I know at what all of the comments are aimed, but I will try to reply with equal abandon and hope to hit the mark occasionally.

THE FORUM article states that the Willow Run town plan "establishes the level on which planners, builders, realtors and

investors will have to compete in the post-war period." I find no inference that the editors consider the plan letter perfect in detail, or "model" in the sense that copies could be struck off to supply each and every town-planning need. Certainly none of the distinguished company of architects, engineers or planners who collaborated in its making would hold that view. But as to establishing the level for future operations, I think all would agree with THE FORUM. The time is past when new housing developments can be sold the public on the strength of pink bathtubs or built-in kitchen radios. People have learned that a house is no better than the neighborhood in which it stands, and that investments in residential property are

dubious ventures unless that property is part of a carefully planned and protected community.

As a "proving ground for the most advanced ideas on housing and city planning," the plans for the Willow Run community were instructive to their makers and should be to thoughtful students, though it would take a year's supply of ARCHITECTURAL FORUMS to explain their many features and cover the debate that preceded their adoption. The proving ground would have been of far greater value if the plans could have been subjected to the test of actual use. The country badly needs such proving grounds if it is to avoid ghastly mistakes in postwar development. I have no doubt that mistakes were made in the Willow Run plans, some consciously because of unavoidable war limitations, some unconsciously because of America's inexperience in planning complete communities for human use. We could have learned from the mistakes as well as from the successful features of the plan, if the town had been allowed to become the positive force in war production for which it was designed. It was not allowed to become such a force, and war production has suffered. Perhaps the big mistake of not building the town at all will teach us more than the little mistakes that the plans might have contained.

Specifics

Turning to the specifics of Mr. Villemain's letter, I presume that in referring to the "best architectural practitioners in the East" he means east of the Rockies, for the groups that gathered in the Detroit offices of FPHA included distinguished collaborators from points well west of the Hudson. The charge of laxity in adjusting site boundaries to plan leaves me a little puzzled. All of the land which the preliminary plans indicated to be necessary for town development was in fact acquired. As for the second "laxity," I would have to know what the writer means by an "orderly, general plan of contemporary character" before I could comment intelligently.

In his third paragraph Mr. Villemain appears disturbed by the failure of the Willow Run plan to conform to accepted realty and building practices. Frankly, I should be disturbed if it did. The country is full of conforming developments, and the realtors and builders are busy all over the place introducing legislation to permit their redevelopment into less accepted forms. People are no longer willing to live in the kind of urban environment that traditional realty economics has produced. A generation ago people began showing unwillingness to use the type of travel that the horse and buggy furnished. I don't know whether the Federal Horsebreeders Administration of that day was

(Continued on page 182)

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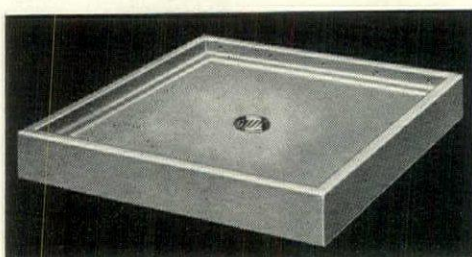


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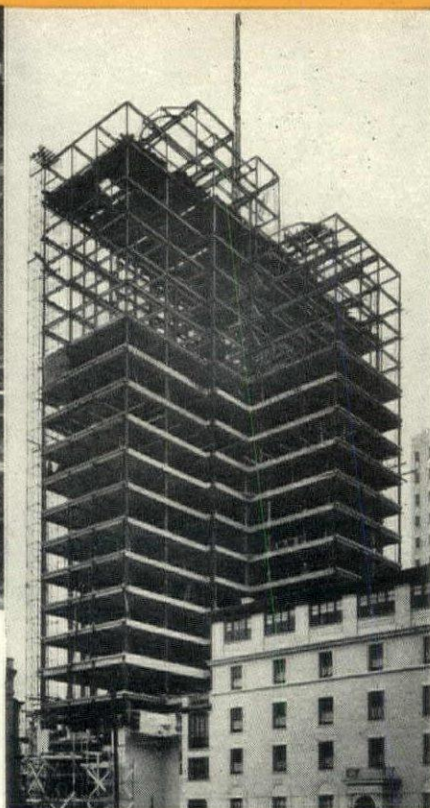
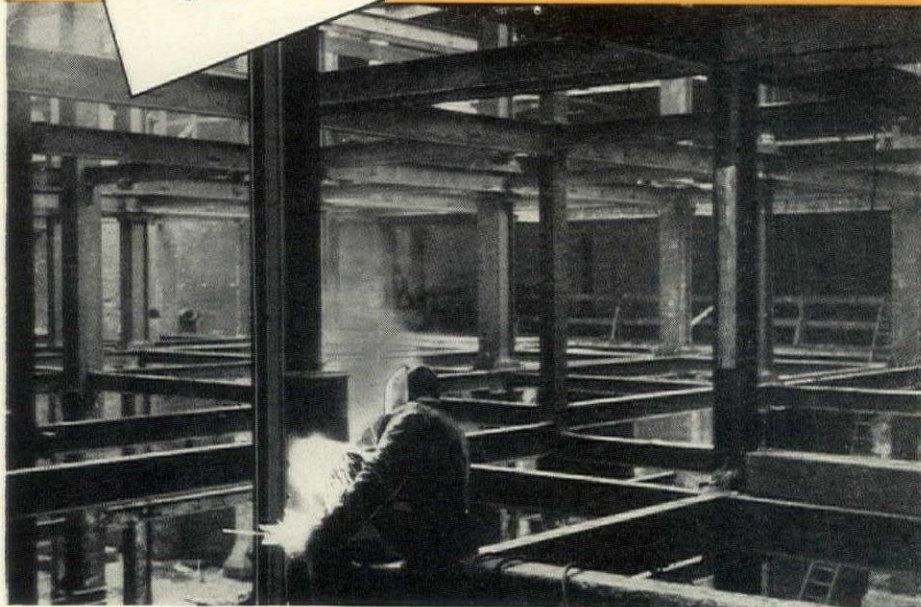


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IDLE CYLINDERS ARE PRODUCTION SLACKERS: Keep 'em rolling for victory!

LETTERS

(Continued from page 180)

willing to underwrite the auto, but history shows that it would have been a good idea.

As a matter of fact, there is nothing uneconomic in low-density developments, provided one starts with low-priced land and does not expect to make a speculative profit on it. The Willow Run townsite was far enough from Detroit to have escaped the speculative fever that wracked that city. Land was relatively cheap.

There was no economic compulsion to use every acre of it for building. The woods and fields that were left undisturbed were well worth their price to the new town as open space for recreation and gardening.

Developmental costs are only encountered in the areas where development occurs, in the narrow bands that contain roads and utilities and flanking buildings. It costs no more to develop a mile-long band of housing in the form of a hollow ring than it does when the same band is tied up in a tight little knot, but the investment is apt to be safer in the first case. At Willow Run the bands themselves were designed compactly to save money and

critical materials, but they were not mashed together on the site at the expense of open play lawns and woods. It takes no critical materials to leave trees uncut or to leave open fields in grass.

The comment regarding dwellings arranged for rental management seems to be based on inadequate information. All of the dwellings at Willow Run were to be under rental management for the duration and any percentage of them could be so retained after the war. Why renters should be segregated in a special mid-town district, I don't know. I have been both home owner and home renter in my day and have felt equally respectable in each capacity.

The necessity of having "working places nearby" in an integrated community is a debatable subject. The principal working place for the town of Willow Run was the Willow Run plant, and it was nearby. Good sites for other working places were also nearby. Whether they were integral parts of the community depends on where you draw the community boundaries, how the regional tax structure is set up and a lot of other things. There is nothing socially, economically or politically wrong with a dormitory suburb. The troubles come when social, economic and political burdens are inequitably distributed among the units of a metropolitan region. These matters were all given careful consideration in the planning of Willow Run. Perhaps the published plans did not adequately display the symbolism of social significance.

Answers A-G

As to points (a) to (g), the following brief comments are offered:

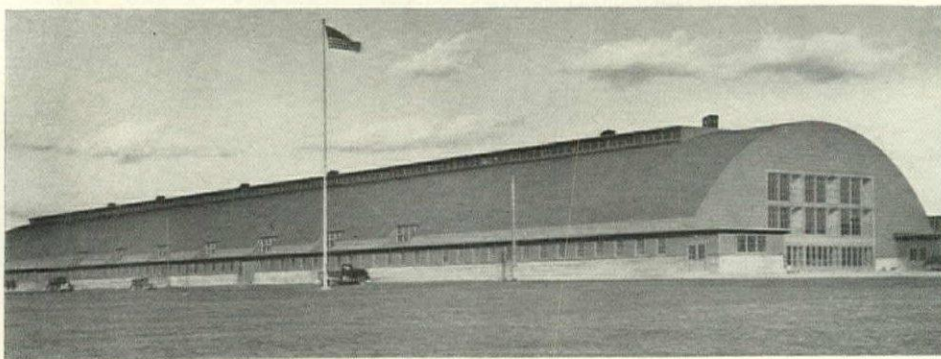
a. Nothing would be gained by shifting the developed area to the northwest. Location of water supply and sewage disposal plant were dictated by topographic conditions. Development anywhere on the line between the two was equally economical. Actually, development was concentrated toward the southeast to bring as much as possible of it within walking distance of the plant, primarily a war requirement but not illogical at any time. It helped to bring the working place nearby.

b. Access provisions were wholly adequate. The main access road was designed to tie into the express highway system serving the plant, with uninterrupted "steady flow" traffic. One point of access was more efficient than several for this purpose, but there were alternative routes for emergency use.

c. Similar orientation of all dwellings with reference to compass direction is, to my humble mind, pure hokum. It may be important to cliff dwellers, but Willow Run was designed for folks living in one- and two-story cottages. In my experience such folks live in all rooms of the home, and spend as much time in the garden or

(Continued on page 186)

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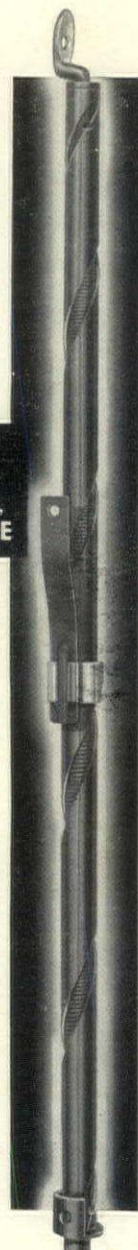
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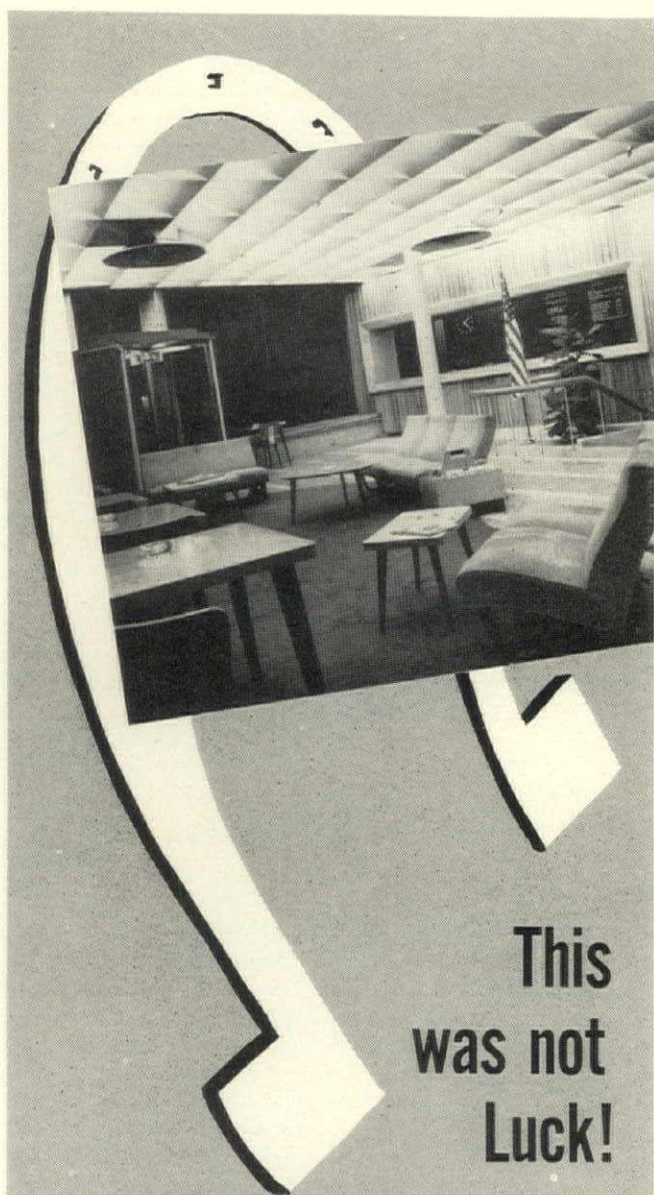
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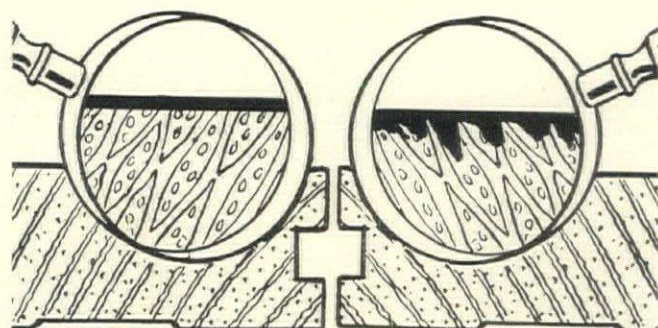


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LETTERS

(Continued from page 182)

elsewhere in the community as they do inside.

d. Some of the loop drives may have been too short and too fat for the ultimate economy in utility construction. What of it? Economy in utilities was an important consideration, but it was not the reason for building the town. It was far more important that the town afford rest and relaxation to workers in an important war industry. Would they find greater con-

tentment in the contemplation of a perfect sewerage system than in a pleasant neighborhood?

e. I think Mr. Villemain is out on a limb in discussing the town center. Data on the town's civic and commercial requirements was very carefully and competently gathered by the firm of Saarinen and Swanson. The layouts pictured in THE FORUM were not intended for full immediate construction, but they were not excessive for the future. Land in the town center was not valued on the basis of speculative front foot prices but on the basis of convenience and attractiveness to the townspeople. Spaciousness was a desideratum to be sought, not avoided.

f. From looking at the plans portrayed

in THE FORUM, where could anyone get the idea of uniform rows of dwellings, uniformly spaced, paralleling street frontages? Five separate firms of architects were employed for the specific purpose of getting variety in the treatment of dwelling and site plans. There was uniformity in meeting limitations of cost and critical materials, but certainly not in the appearance of the dwellings or the layout of the sites.

g. The neighborhood centers were designed as centers of social activity. Anyone who has discussed politics around the cracker barrel or point rationing around the cash register knows that neighborhood stores are social institutions. What kind of a family routine would dictate that the school child should not pick up some of the groceries on his way home, or that Mother should not stop and shop when she takes the youngsters to kindergarten? And what school could operate without a nearby emporium to dispense pencils, notebooks, chewing gum, baseballs and other educational necessities? What's all this nonsense about "separate functions?"

"Crippled housing, crippled plant . . ."

Whatever degree of perfection or imperfection the Willow Run plans may have had, no one would say that they could not have been better. They would have been far better if housing for workers in war production had been accorded the same consideration that was given to the housing of the machines and materials they use. The housing of the production line was designed and built with all the favors that could be given it in wartime, but housing for the producers was harassed with every conceivable limitation and obstruction. The town plan had a stormy birth and shows the marks of it, but it was never so badly battered that its final demise could properly be termed a mercy death.

If built as planned, the town would have been a very useful member of society, as subsequent events have shown. Because of its loss the great plant of the same name is crippled. The very things that the town would have supplied are the things which the plant now lacks for full operation. The experience of the last war should have taught us to foresee and avoid that situation, but it didn't. The question now is whether we shall profit from this war's experience in the postwar years. Will we go on expecting the machine age to operate itself without the aid of human hands and human minds refreshed by daily relaxation amidst pleasant home surroundings? If we do we are in for bigger and more disastrous disappointments than the one for which the name Willow Run is now famous.

TRACY B. AUGUR

Norris, Tenn.

(Continued on page 188)

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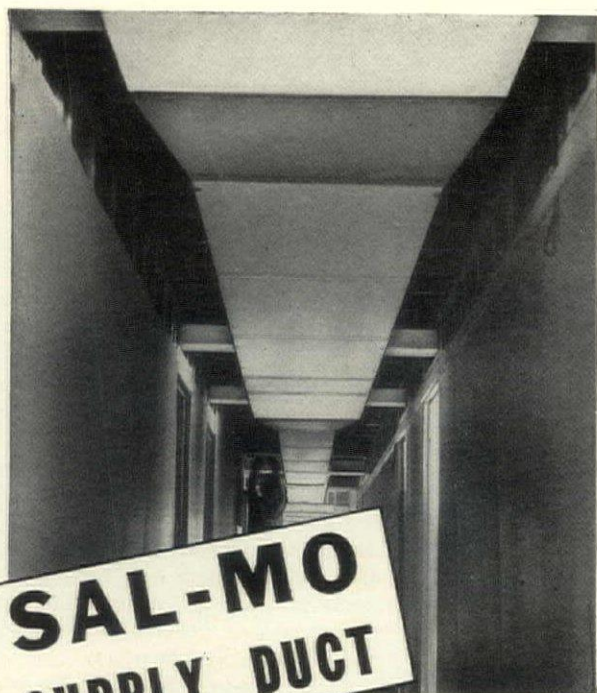
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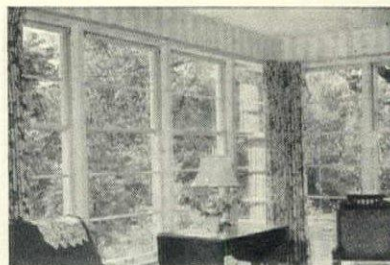
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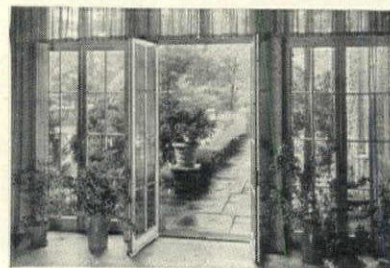
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LETTERS

(Continued from page 186)

WILLOW RUN (cont'd.)

Forum:

... I think the feebleness of the piece as a whole is mainly attributable to two reasons, both habitual and time-honored vices of architectural publications:

1. The space approach rather than the content approach. The regular approach is: let's give it X pages, hell it's got to go into that—in this case 18. Of course

the sane approach, if this Willow Run is really so important as the blurb says, is to tell the full rounded story, and give it the necessary space. . . .

2. The hand-out approach. Architectural magazines are so used to having most of the job done free by architects that they don't put a good man on this with time to think it through and whip it into shape.

... I think the worst offender was Saarinen. I never did agree with his town center, the excessive circulation and parking . . . I tried to reconsider it again in my mind—but there was not even any limit of scale, so I couldn't figure out how far we had to walk from parking, whether there was or wasn't too much vehicular

circulation in the town centers.

I'm right sad at the opportunity missed in the whole thing.

ALBERT MAYER, Capt., U.S.A.

LONDON LETTER

Forum:

Private building has almost ceased in Britain. If a roof springs a leak it must of course be repaired, but anyone who wants a new house in place of his old one will have to wait until the end of the war. The builders have a more urgent job to do. They are busy housing great armies.

Faster than human hands can build encampments, thousands of new recruits in Britain and whole divisions from the U.S.A. clamor for accommodation. Yet British builders are performing miracles of speed. They are constructing big solid towns in a matter of a few weeks, with the enthusiasm and ingenuity of pioneers opening up a new territory.

A typical soldiers' town is now in course of building in the heart of the agricultural region of the British Midlands. A little while ago it was farm land. Cows grazed in the fields, and there were a few scattered cottages. That spot had been earmarked by the War Office, however, as a suitable site for a military camp, and the camp was needed urgently. Forty-eight hours after the War Office had invited tenders for the contract men were working on the job. The site was three and one-half times the area of the City of London. From the builder's point of view it was practically virgin territory. It had to be drained, and supplied with roads and railways.

At first the site looked like the result of systematic bombing, but soon a town began to take shape. Whole streets of huts sprang up. Each hut will have to be comfortably furnished and fitted with light and heat. Warehouses have been built and a hospital to accommodate 750 beds has been added. All the amenities of town life will be there.

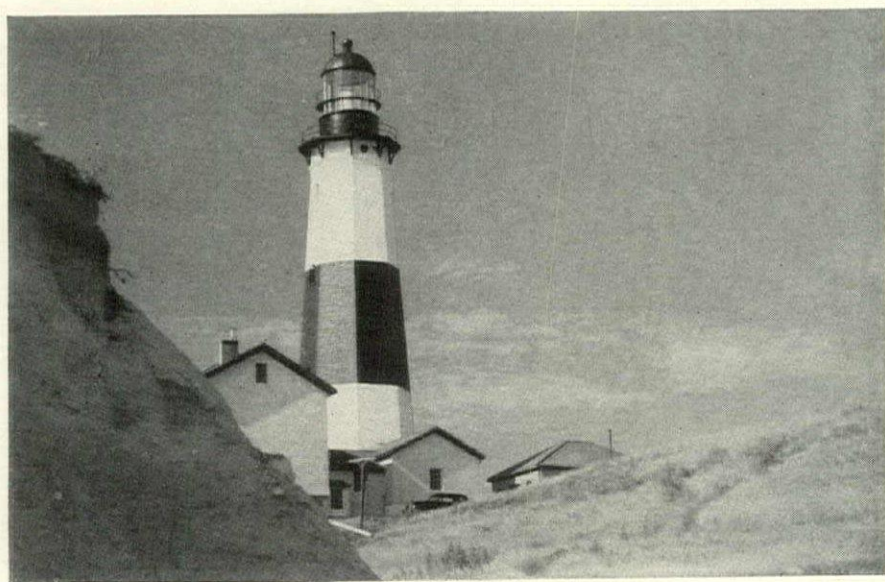
The job falls into two parts. The smaller of the two scheduled for completion in sixteen weeks will be finished in twelve. The larger half promises to be complete three months ahead of schedule.

That camp will house 8,000 troops, a minute fraction of the British Army. It is being duplicated all over the country.

Already Britain has sent out more than a million trained troops to garrison her bases in various parts of the world, and to fight the Germans and the Japanese on many battlefields. In addition, a large proportion of the U. S. A.'s projected Army of seven or more million men, will for a time be trained and housed on British soil. More than 100,000 British builders have been detailed to construct camps for the American Army and Air Force alone. . . .

GEORGE O'BRIEN

London, England



Symbol of Safety

In exit devices, the symbol of safety is the name Von Duprin.

Just as Von Duprin was the original self-releasing fire and panic exit device—just as it was the first (and only) device to use drop-forgings—so today it is the outstanding advocate of completely safe devices, in war as in peace.

Victory Model Von Duprins are made only of tough, resilient malleable iron. They can be trusted implicitly. They are sure in operation; they are, beyond any doubt, SAFE!



HEALTH FACILITY

(Continued from page 152)

service and other offices. The diagnostic and therapeutic facilities are on the 2nd and 3rd floors. The 4th floor houses the operating department, a part of the hospital to which it is directly connected as a cul-de-sac.

Hospital. "The hospital building faces away from the street to the south-south-east. The wards are mainly on this exposure with the utilities on the northerly side. It would, of course, be desirable to have this building look out on a park or open space.

"The hospital has five ward or bed floors. The final disposition of this space into rooms of one or several beds would depend on a study of the economic status of the population. The structure should be capable of accommodating changing demands, which can be easily accomplished as the design is based on a modular system of multiples of one bed plus the space required to service it.

"It is assumed that the site slopes away from the street and permits the hospital an additional story below the 1st floor. The ground floor contains the main kitchen which supplies the serving kitchens on the ward floors and also the staff, nurses and employees' dining rooms.

"Ambulance patients are admitted to the hospital at the lower level, via a separate courtyard, into an admitting emergency treatment unit.

Nurses and Interns. "The HEALTH FACILITY is not only a place for dealing with health problems. It is also a center for the education of doctors and nurses. Since the former have already received their basic education in a medical college, they need only be provided with housing, which, in this project, is on the pent-house floor of the hospital building. The nurses on the other hand must not only be housed but educated. Hence the proposed nurses' home and training school. This structure contains living quarters, classrooms and recreational facilities.

Size and Quantity Factors. "The city is an American city of 70,000. On the basis of a one-hour peripheral population there would probably be about 100,000 persons to be provided with medical services.

"Authorities agree that two per cent of the population are sufficiently ill at any one time to be unable to pursue their daily work. This would amount to 2,000 persons. One quarter of those ill, or 500, will need to be hospitalized—hence a hospital of 500 beds. This does not include patients suffering from mental diseases, chronic illnesses or tuberculosis. This community is not big enough to sustain separate institutions for these categories. They must therefore be lumped on a county or statewide basis.

"A typical hospital floor as planned in

this project, provides for approximately 100 beds. As has been already stated, the entire hospital need not be built at once, but at least 200 beds should be included in the first stage. A smaller building would not justify the facilities considered necessary for a modern hospital.

"Of the 1,500 sick who will not be in the hospital, some will go to the Out-Patient Department; others will be treated at home. The proportion between the two is unknown, as this country has not yet had experience with home medical and nursing care on a large enough scale.

"At one doctor per thousand of population, there will be about 100 doctors in

the city and approximately as many dentists. It is assumed that most of the doctors and dentists will be affiliated with the HEALTH FACILITY.

"At one intern per ten patients, there will be 50 interns connected with and living at the hospital.

"The student nurses, of whom there will be about 175, will be domiciled with the supervisory nursing staff at the Nurses' Home and Training School. An additional 124 graduate nurses who will work at the hospital will live outside. Other nurses will be needed for the O.P.D., home nursing etc., but these too will live outside the hospital."

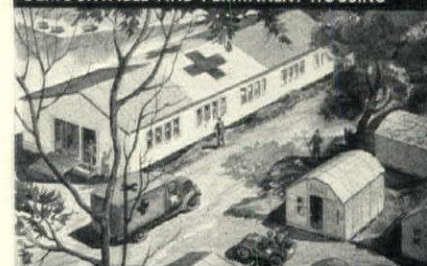
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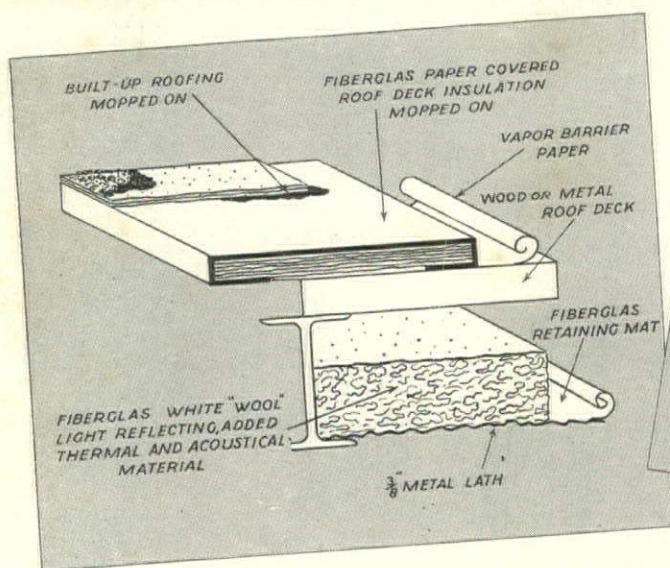
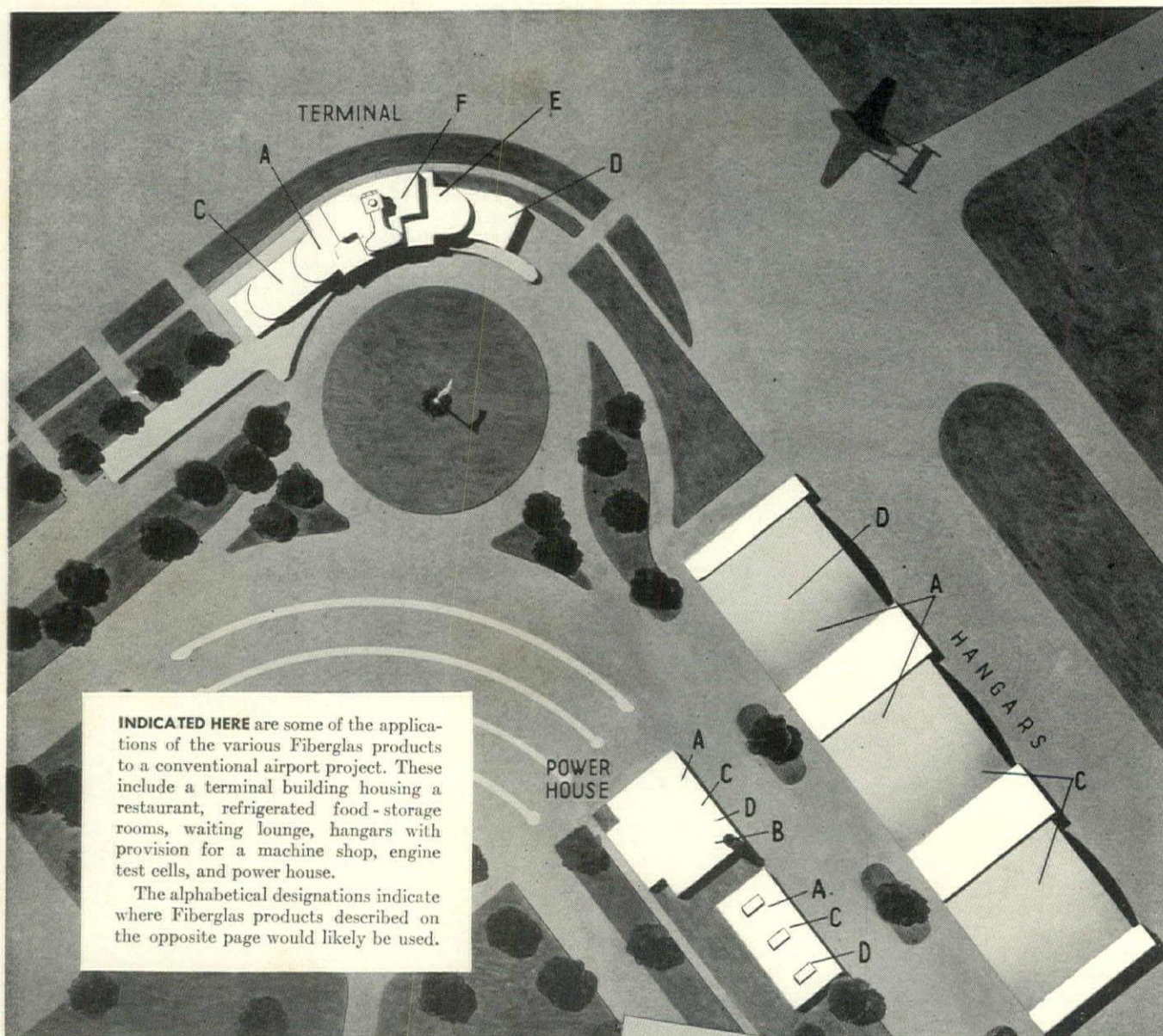
MILITARY BUILDING OF MANY TYPES



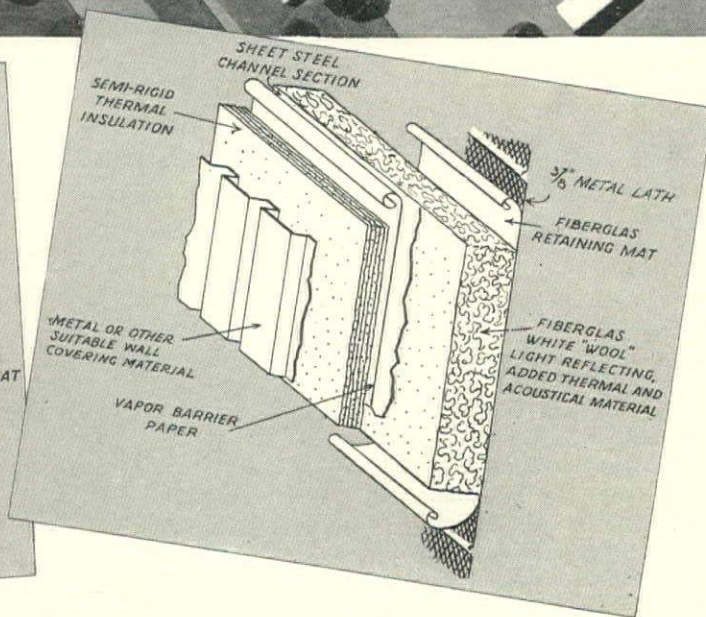
FARM UTILITY BUILDINGS

*Grain bin from Iowa State College
design; hog pen and pantry house
from Purdue University designs.*

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DETAIL OF ROOF CONSTRUCTION. This diagram shows the simplicity of Fibreglas roof construction. When steel is used, structural form work is erected first, then entire ceiling and roof is applied from the outside. This eliminates the need for scaffolding inside the structure.



DETAIL OF WALL CONSTRUCTION. Diagram shows the elements which make up a light-weight, insulated, fire-resistant, and sound absorbing wall. This is the type of wall construction used in some of our largest war plants which also require light-reflective surfaces.

Why architects will look to FIBERGLAS* in building the airports of the future

This economical, fire-resistant material provides ideal thermal and acoustical insulation . . . easily adapted to new industrial construction and for modernization of existing structures.

FIBERGLAS makes possible a new type of construction which combines noise reduction, light reflection, and thermal insulation in one single unit. In addition, this new construction provides side walls, ceilings and roofs that are light-weight, noncombustible, and enduring. (See diagrams at the bottom of page at left.)

This is merely one of the types of construction possible with Fiberglas insulation. Indeed, the versatility of this product, for future building and con-

version, challenges the imagination of architects and engineers.

Below are illustrations of only a few of the uses of Fiberglas, *in its present forms*. The application of these products to a modern air terminal merely suggests their practicability and wide use in modern hospitals, office buildings, industrial plants, schools, and of most importance in

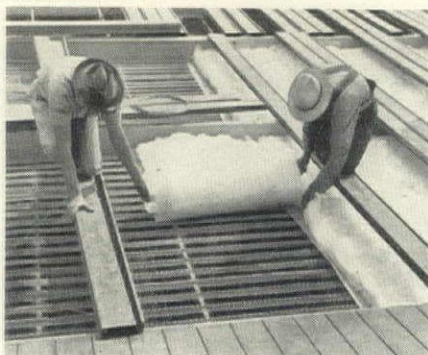
the homes of tomorrow. Fiberglas is modern. This material is destined to play a significant part in every post-war building project.

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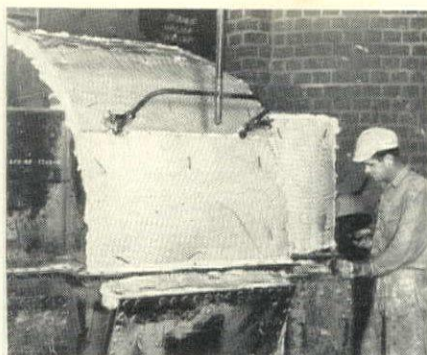
FIBERGLAS*

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

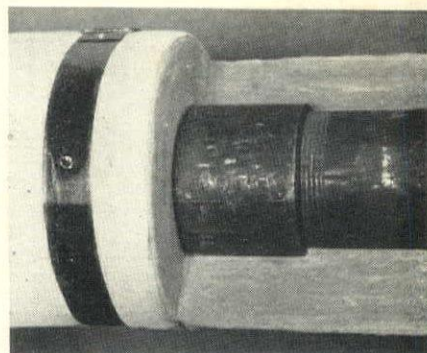
For further details write to *Owens-Corning Fiberglas Corporation, Toledo, Ohio. In Canada, Fiberglas Canada, Ltd., Oshawa, Ontario.*



A. Fiberglas Insulating Wool. (1) This white fleecy Fiberglas comes in bats or long rolls. It is usually installed at a density of 3 lbs. or 4 lbs. per cu. ft. When used as a combination thermal insulating and sound absorbing product, it may be applied with a Fiberglas Retainer Mat and metal lath or perforated metal to secure excellent light reflective qualities.



B. Fiberglas Metal Mesh Blankets. These flexible blankets are for use on hot surfaces and pipes up to 1,000 degrees F. They combine high insulating value with light weight, durability, and extremely low moisture absorption. Metal facings can also serve as a base for plaster finishes.



C. Fiberglas Pipe Insulation has proved an economical and efficient material for insulating both hot and cold pipes. Made in all standard sizes up to 30 in. it provides extremely high resistance to heat transmission for temperatures as high as 600 degrees F. It will withstand plenty of handling without chipping or breaking.



D. Fiberglas PF Insulation. This versatile insulation can be faced with many different materials and cut to any shape or size. It comes in 4 weights or densities and may be used on flat or curved surfaces. It is the base for Fiberglas roof-deck insulation and is a general-purpose thermal insulation and sound-absorbing material.



E. Fiberglas AE Board. This product consists of Fiberglas insulation compressed to a density of 6 or 9 lbs. per cu. ft. and heavily coated with high-temperature asphalt on all sides and edges. This product has low thermal conductivity plus great durability. It is widely used for the insulation of cold-storage rooms and refrigerated spaces.



F. Fiberglas Replaceable-Type Dust-Stop Air Filters. These filters eliminate virtually all dust and dirt, and even pollen from the air. They are ideally suited for use in modern commercial and industrial air conditioning systems either in L or V frame banks. Dust-Stop filters cost only 1¢ per CFM to install—only 1/10th of 1¢ per CFM to replace.

(1) A similar product, paper covered is distributed exclusively as "Red Top" insulating wool by U. S. Gypsum Company and their dealers.

BOOKS

(Continued from page 158)

DECORATING THE HOME, by Ethel Lewis. The Macmillan Co., New York City, 574 pp., illustrated with drawings and photographs, 6½ x 9½. \$4.

Decorating the Home is clearly the result of painstaking effort and research. It is about as complete and detailed a book on Interior Decoration as can be found, and the chapters dealing with period furniture are handled with good taste. Although

the photographs have suffered somewhat in reproduction, the selection of illustrations for this part of the book is excellent. For these reasons the book can be recommended to students and amateurs alike. Unfortunately this can not be said of its contemporary approach. Here the author shows little discrimination. The rooms which she proposes for contemporary living are either of the dull department store variety, or gaudy allusions to past styles mingled with references to present day "modernistic." There are a few exceptions, such as the illustrations showing the Saarinen and Mathsson chairs. There is no reference to Aalto's revolutionary furniture designs, and little to steel furni-

ture as originally designed. There are photographs of the latter after it had been maltreated by the manufacturers of transparent plastic—a material not too suitable so far for the seats and backs of chairs.

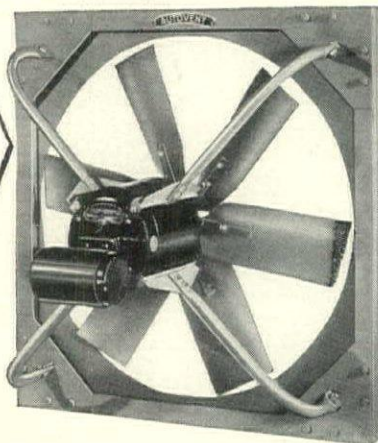
It might be thought that the criticism of this section of the book alone should not be allowed to obscure its general competence in traditional decoration. However, the contemporary period must always be considered the more important, for in it we are formulating the style that will express our civilization. Had the author used the good sense of design and materials which she showed in her survey of past styles, the book might be a complete success.

LEE MANSION, by Randle B. Truett. Hastings House, New York City, illustrated, 5½ x 8¼, \$1.25.

This booklet contains a collection of excellent photographs of Lee Mansion, Arlington, Va., together with the story of its construction, occupancy and passing into the hands of the National Park Service. The architecture of the entire

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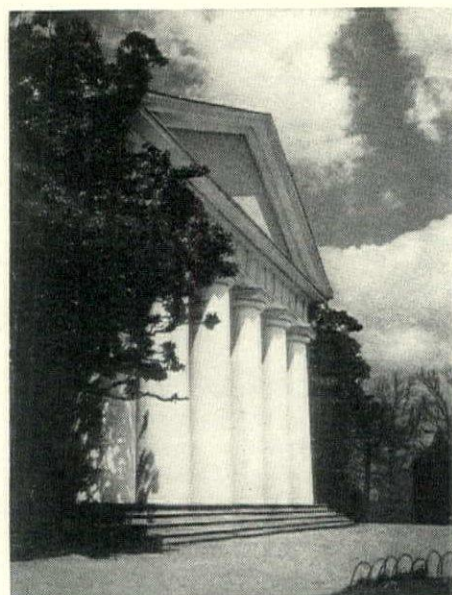
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structure was contemplated at the beginning, but only a small section was constructed at first, and the Mansion was not completed until shortly before 1860. Apart from its value as a record of a national architectural treasure, the booklet will be of great interest to architects because of the exceptionally fine colonial details shown in the photographs.

HISTORIC CAMBRIDGE, In Four Seasons, by Samuel Chamberlain. Hastings House, New York. 73 pp., chiefly photographs, 6 x 7½. \$1.25.

A collection of excellent photographs of Cambridge, including many views of Harvard University, the M.I.T. buildings and old houses and churches in the town. There is a very brief introduction, outlining the community's history; additional historical data are given in the captions accompanying the pictures.

"How we hope to fix up our home after the war"



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Building Reporter

(Continued from page 6)

for interior and exterior sheathing, inside and outside walls and ceilings, for prefabricated houses and all types of farm buildings. It is fire-, weather-, rot- and termite-proof. Comes in standard-size sheets measuring 4x8 ft. and in three thicknesses— $\frac{3}{16}$, $\frac{1}{4}$ and $\frac{3}{8}$ in. Flexible and easy to work, it can be sawed, scored, drilled and nailed.

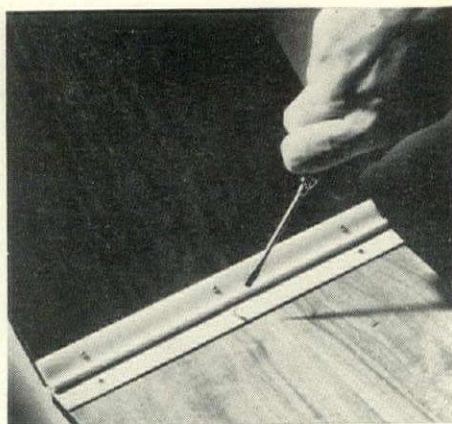
Manufacturer: The Ruberoid Co., 500 Fifth Ave., New York, N. Y.

PLASTIC HINGES for lightweight applications.

Name: Tenite Piano-type Hinges.

Features: Offering new design possibilities to makers of lightweight portable equipment, these Tenite hinges are now available in various colors. They are lighter in weight than metal hinges and will withstand hard wear without denting, chipping or cracking. Extruded in continuous lengths, they can be cut to any desired size and easily assembled to other materials with adhesives, rivets or screws. Now being used on airplane tool boxes, oil immersion boxes, radio, map and chart cases.

Manufacturer: Plastic Process Co., 828 North Highland Ave., Hollywood, Calif.



EMERGENCY LIGHT automatically turns on when a power-line failure occurs.

Name: Exide Lightguard Emergency Unit.

Features: This self-contained battery and charging unit, weighing only 47 lbs., needs only to be plugged in to the AC supply for automatic operation when current failures occur. Designed to meet the need for a source of emergency light in war plants, arsenals and shipyards, it will help reduce the accident hazard, especially in crowded spaces where machinery continues to run on momentum after power is cut off. It throws a beam 50 ft. wide a distance of 150 to 200 ft., covering an area of 7,500 sq. ft. May be moved from its customary position and used for additional or emergency lighting at control equipment, entrance and exit locations, and plant dispensaries. Only maintenance required is the occasional adding of water. Recharging is done automatically. Uses a prefocused auxiliary driving lamp and long-lived three-cell Exide battery.

Manufacturer: The Electric Storage Battery Co., Philadelphia, Pa.

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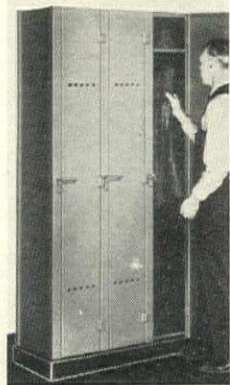
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FIBERBOARD lockers replace steel ones.

Name: All-Wood Wartime Locker Compartments.

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Manufacturer: The Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland, Ohio.



(Continued on page 194)

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Building Reporter

(Continued from opposite page 193)

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Manufacturer: De Walt Products Corp., Lancaster, Pa.

PORTABLE PRINTER duplicates small-size blueprints or black and white prints.



Name: Spee-Dee Printer.

Features: A fast low-cost method of reproducing drawings, letters and other written or printed matter has been recently developed. Sheets are laid on curved glass surface of printer, which gives perfect contact without the inconvenience of wrapping around a cylinder. Spee-Dee Printer comes in two sizes—12x18 and 18x24. (Actual printing surface is oversize to prevent crowding and overlapping of prints, or blurring of edges.) Small size is listed at \$35, with automatic timer \$45; larger size, \$55, with timer \$65.

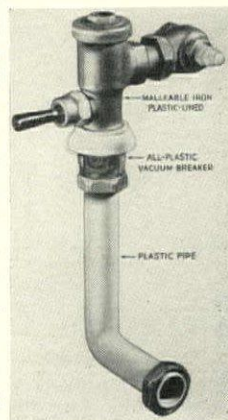
Manufacturer: Peck and Harvey, 4327 Addison St., Chicago, Ill.

FLUSH VALVE uses less than 4 oz. of copper.

Name: Victory Flush Valve.

Features: Substituting plastics and malleable iron, this flush valve reduced its net copper content from approximately 6 lbs. It has been thoroughly tested under all simulated conditions and already has given satisfactory service in many installations.

Manufacturer: Sloan Valve Co., Chicago.



(Continued on page 196)

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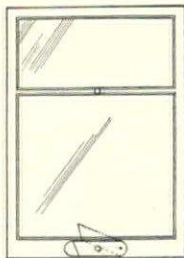
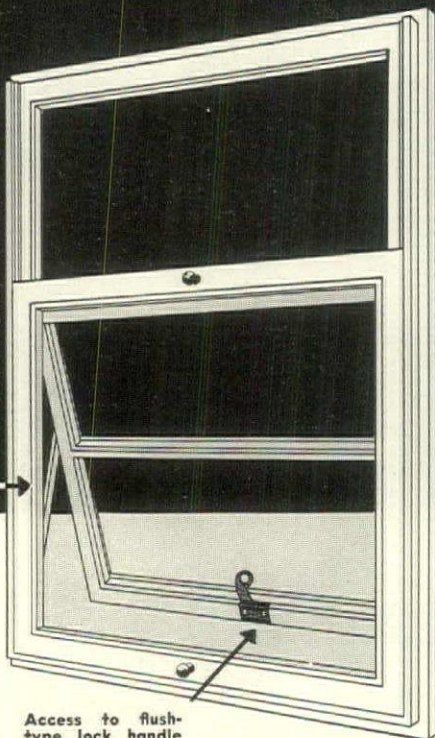
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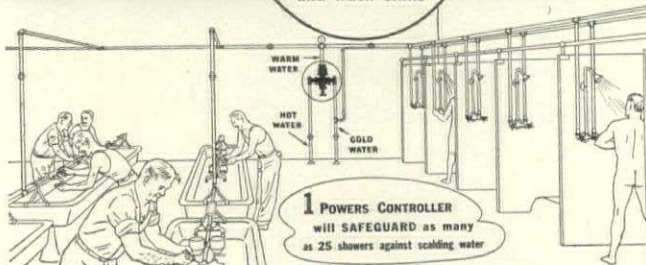


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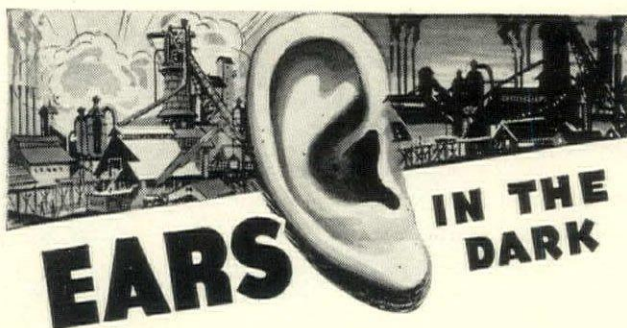


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Cabot's patented "Collopping Process" breaks down the pigments to sub-microscopic fineness (100 to 1,000 times finer than ordinary paint pigments) and dissolves them colloiddally in the oil. Because oil and pigment are thus inseparably united Cabot's paints have greater adhesion, greater hiding power, longer life and fresher, livelier, non-fading colors. At no time, in over 50 years has the quality of ingredients or workmanship ever been lowered—nor has the effort to make them even better paints ever been relaxed.

FREE BOOKLET. Contains full information on Colloppakes. Illustrated. Write for your copy and color card today. Samuel Cabot, Inc., 1269 Oliver Bldg., Boston, Mass.

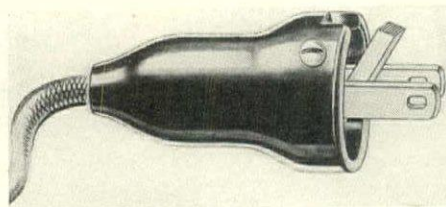
**Cabot's
DOUBLE WHITE
and Gloss Colloppakes**

Building Reporter

(Continued from page 194)

CIRCUIT BREAKER PLUG provides protection against dangerous overload.

Features: Replacing the conventional receptacle plug, Hopax plug gives individual protection to each piece of electrical equipment. Especially useful as an individual plug for motors, power tools and fluorescent lighting units, since it disconnects only the faulty piece of electrical equipment without affecting other units on the same circuit. Unit can then

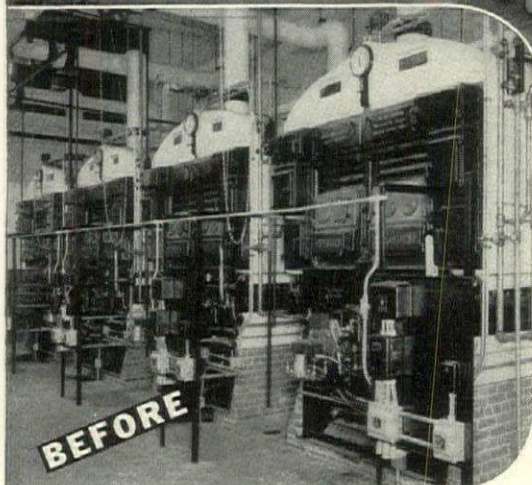
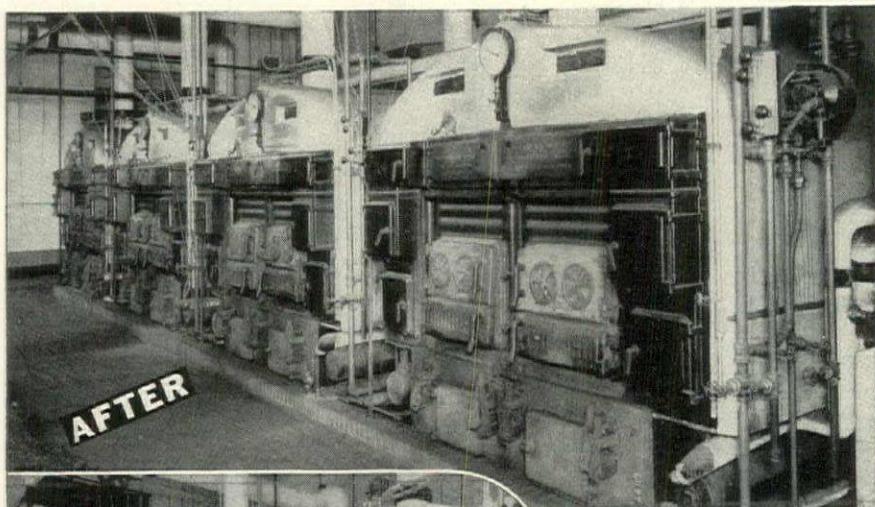


be removed, repaired and replaced without hampering production. Small lever, actuated by heat, has a time-delay feature so that current will be stopped only when conditions become dangerous. Plug does not have to be renewed after circuit has been broken; is reset by simply raising and lowering lever.

Manufacturer: Hopax Industries, Inc., 1 North La Salle St., Chicago, Ill.

WHAT 1942 PROVED FOR 194X

194X . . . V day for building . . . the subject is rife with speculation about new and better design, construction methods and equipment. Since that long cold fuel-conscious winter of 1942, however, one standard for postwar heating equipment has become certainty. **THE BOILER MUST BE CONVERTIBLE.**



H.B. *Smith*

BOILERS

in the Heath St. Housing project . . . oil-fired in 1941 — converted in 1942 . . . easily, quickly and without loss of efficiency!

IN 1942, every Architect and Engineer who had specified H. B. SMITH boilers for public and commercial buildings could tell his clients that their boilers were easily convertible to hand or stoker firing.

In 194X . . . whatever may be their design, you can be sure of this . . . H. B. SMITH boilers will continue to be built as truly all-purpose boilers suited for use with any fuel.

THE H. B. SMITH COMPANY, INC., WESTFIELD, MASS.
BOSTON NEW YORK PHILADELPHIA

ALUMINUM-COATED STEEL combines surface advantages of aluminum with the strength of steel.

Name: Aluminized Steel.

Features: This new specialty sheet metal is designed for use in products requiring exceptional resistance to heat and corrosion. Having all the surface qualities of aluminum, 16-gage sheet uses only 5 per cent as much aluminum as a solid sheet of the same thickness. Aluminum coating will not peel or flake in moderate forming or drawing operations. Holds paint better than galvanized sheets, although for most uses unpainted surface is satisfactory. Present uses include aircraft fire walls and air intake filters.

Manufacturer: American Rolling Mill Co., Middletown, Ohio.

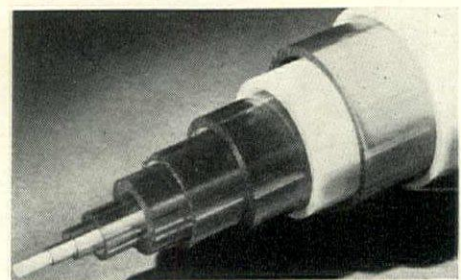
RUST-PREVENTIVE PAINTS make satisfactory alternates for aluminum.

Name: Silver Gray Aluminum Alternate, No. 18328; Fume-proof Silver Gray Aluminum Alternate, No. 906.

Features: These paints are recommended for use on metals, concrete, brick and wood, where it is desirable to simulate the appearance of aluminum-painted surfaces. No. 18328 may be used for maintenance and new construction work in light industrial, residential and farm areas on sash, buildings, fences, bridges and structural steel. Not recommended for use under heavy fume conditions. Withstands temperatures up to 212° F., rigorous weather conditions and mild fumes. No. 906 may be used where aluminum paint was formerly employed under fume conditions in heavy industrial districts, for production work in heavy industries and on railroad structures, etc.

Manufacturer: Rust-Oleum Paint Corp., P.O. Box 110, Evanston, Ill.

SEAMLESS TUBING of extruded plastic available in all diameters up to 2 inches.



Name: Tulox.

Features: This seamless plastic tubing has been introduced to meet increasing demands of war industries. Extruded from Tennessee Eastman cellulose acetate butyrate, it will probably find greatest application where its toughness, dimensional stability and weather resistance make it an excellent metal substitute.

Manufacturer: Extruded Plastics, Inc., Norwalk, Conn.

(Continued on page 198)

When did you first specify Kentile—about 20 years ago? Do you know that many of those floors, even after 20 years of heavy traffic, are still perfect today? Since then Kennedy has continually improved this remarkable material—and today millions and millions of feet are being laid—highly decorative, multi-colored floors that permit an unlimited number of patterns and achieve an amazing technical excellence. They never crack, curl or craze; the pre-waxed tiles are cleaned by simple mopping, are slip-proof even

when wet, are resilient, comfortable and noise deadening, and are impervious to moisture even on concrete in direct contact with earth. Furthermore, Kentile is now extra important—the best floor in most locations yet made of *non critical materials* and lowest in cost. Finally, as you plan for Victory Day, you should remember that this splendid flooring—proved by the years, then proved under war conditions, yet always improving—will play a vital part in building the better world of Tomorrow.



KENTILE
Asphalt Tile
REG. U.S. PAT. OFF.



DAVID E. KENNEDY, Inc. • 58 SECOND AVE. • BROOKLYN, N. Y.

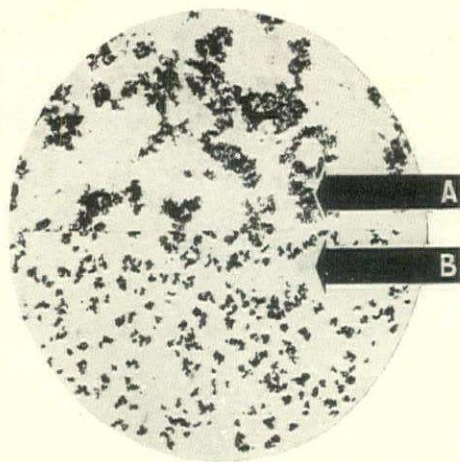
Building Reporter

(Continued from page 196)

LIQUID added to bag of cement increases dispersion of cement particles.

Name: Santorized Trimix Liquid.

Features: Trimix, by improving dispersion of cement particles, automatically permits reduction of water ratio and improves compression strength characteristics of concrete. This is achieved through application of principle of greater wet-



ting by means of additives having greater surface activity. How this works may be noted in the photomicrographs. A shows Portland cement gauged with plain water; B shows the result when one quart of Trimix is added to bag of cement.

Manufacturer: L. Sonneborn Sons, Inc., 88 Lexington Ave., New York, N. Y.

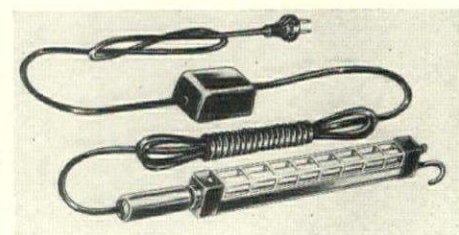
PRESERVERS for interior and exterior application to concrete.

Name: In-Mix; Colorthru.

Features: In-Mix is an integral transparent liquid, containing no calcium chloride, which claims to prevent efflorescence and scumming in concrete mixtures. One-half gallon of In-Mix added to each bag of cement will cure faster, preserve, harden and waterproof concrete. Colorthru is a finish color coat for masonry which requires no priming or undercoat, thus reducing cost of paint job.

Manufacturer: Evercrete Corp., 19 West 44th St., New York, N. Y.

PORTABLE FLUORESCENT units for production, inspection and servicing operations.



Name: Midget.

Features: This hand-type unit, designed for one 6-watt lamp, is furnished with a hook so that it will hang vertically. Square shape prevents rolling. Has a manual starting switch. Ballast is in separate box with wired-in cord and plug. Larger hang-up and floor units can be rotated for adjustment, and 40-watt lamp units have either a wire safety screen or vapor-tight plastic cover.

Manufacturer: Day-Brite Lighting Inc., 5411 Bulwer Ave., St. Louis, Mo.

CLAY SEPTIC TANK for sanitary disposal of sewage and household wastes.

Name: Vitrified Clay Septic Tank.

Features: New septic tank system provides for a flexible capacity, since it consists of two or more tanks to which more can be added after initial installation. Operates as one unit without connecting pipes, due to unique location of openings between each tank. This feature, plus the length of flow possible within tank, assures complete disintegration of solids and, therefore, a purer effluent. System is suitable for country and suburban buildings, automatically disposes of all household wastes from bathroom and kitchen.

Manufacturer: The Robinson Clay Product Co., Akron, Ohio.

(Continued on page 200)



Helping to Pass the Ammunition

Now in its 50th year, Sedgwick is devoting its full resources to the production of ammunition hoists and special lifts for all types of naval vessels and cargo ships, airplane elevators for aircraft carriers, and dumb waiters and elevators for military shore installations. But Sedgwick will be ready to meet the demands of post-war days with an experienced organization for full peace-time service — and a complete line of elevators, hoists and dumb waiters for industrial, commercial and private use.

When it's a lifting problem — think of Sedgwick

SEDGWICK MACHINE WORKS

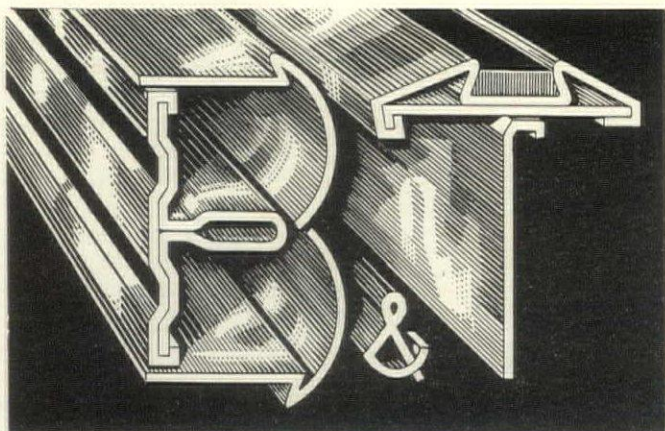
ESTABLISHED 1893

140 West 15th Street

New York, N. Y.

MEMBER OF PRODUCERS' COUNCIL, INC.

ELEVATORS ★ HOISTS ★ DUMB WAITERS



METAL TRIMS *Trademarked* CHROME DGE

In the "Chromedge" line you'll find the right metal trim for every floor and wall covering job. It includes a wide variety of types, sizes, and designs, from distinctive, plain-metal edgings to beautiful curved-face panel trims and color-insert nosings.

Chromedge trims are designed and manufactured by people with years of special-

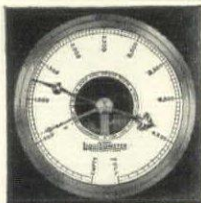
ized, first-hand experience in the floor covering business. Many ROLLED METAL sections in the famous line trademarked Chromedge are still available, from immediate delivery, from large stocks existing before the war curtailed production. Write for bulletin! "Chromedge."

The **B & T METALS COMPANY**
Columbus, Ohio

*My Business Maintains
High Accuracy Standards,
That's Why In Measuring
Valuable Stored Liquids,
We Rely On ...*

LIQUIDOMETER Tank Gauges

"THEY'RE ALWAYS DEPENDABLE"



from or directly at the tank. Remote reading types utilize balanced hydraulic transmission system which completely compensates for temperature variations on communicating tubing. Accuracy unaffected by specific gravity of tank liquid.

Approved for gauging hazardous liquids by Underwriters' Laboratories and other similar groups. Models available to automatically control pumps, motors, signals or other devices for maintaining minimum or maximum liquid levels.

Write for complete details.

-protection in the public interest



to give even greater
life to
**wood
doors**

—to assure purchasers that they will have a lasting usefulness, research scientists have developed minimum standards of toxic preservation—a treatment to enhance and improve the lasting qualities of wood products to keep pace with modern service requirements.

NATIONAL DOOR MANUFACTURERS' ASSOCIATION
McCORMICK BUILDING • CHICAGO ILLINOIS

Seal of Approval—The Identification of a Product Meeting N. D. M. A.
Preservative Minimum Standards



From Start to Finish!

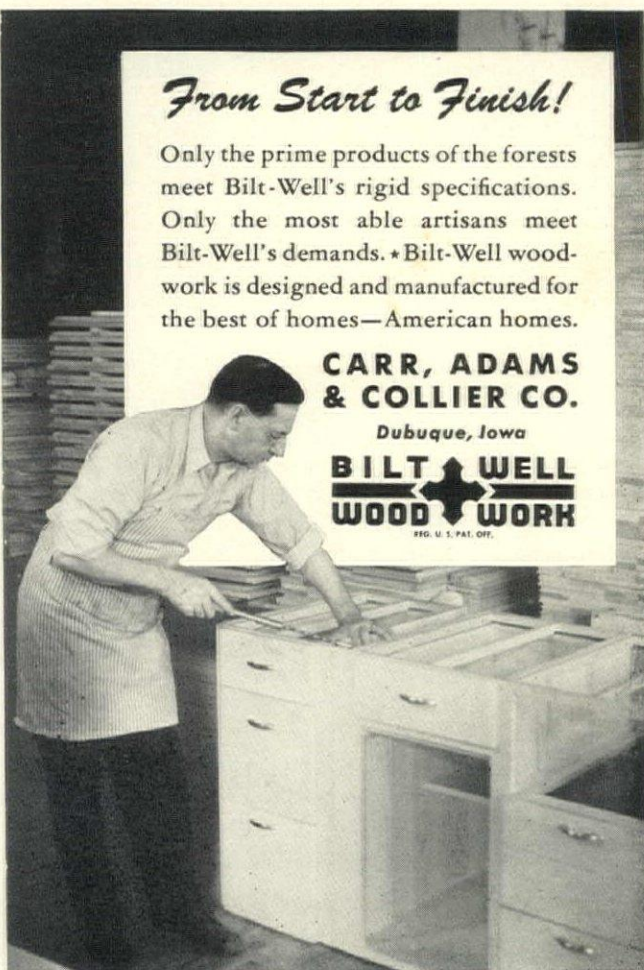
Only the prime products of the forests meet Bilt-Well's rigid specifications. Only the most able artisans meet Bilt-Well's demands. * Bilt-Well woodwork is designed and manufactured for the best of homes—American homes.

**CARR, ADAMS
& COLLIER CO.**

Dubuque, Iowa

**BILT-WELL
WOODWORK**

REG. U. S. PAT. OFF.



Building Reporter

(Continued from page 198)

INTERCOMMUNICATION system incorporates conference traffic control.

Name: All-Master Communication System—Super Chief Model KS-60.

Features: Conference traffic control enables any number of these master stations to hold a private conference without interruption or eavesdropping from other stations outside the conference group. When one of group is being called, he is

signaled by a light so that he knows a call is waiting. Working in conjunction with traffic control is the busy signal light which goes on when the line on another station you are trying to reach is



busy and which remains lighted until that station is ready for a new conversation. Also a number of two-way conversations may be held simultaneously without cross-talk. Other new features include one-way automatic transmission for dictation of letters and recording of conferences; latest type pushbutton control utilizing Hold-O-Matic switch; and optional privacy earphone. Units may be as far as 3,000 ft. from one another without diminished power or lowered efficiency. Each station has individual volume control, and systems may comprise from 2 to 10 or even 80 and more master stations. **Manufacturer:** Dept. H, Talk-A-Phone Mfg. Co., 1219 West Van Buren St., Chicago, Ill.



Atlas WHITE News



Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Bldg., N. Y.

PORTLAND-CEMENT PAINT SEALS MASONRY SURFACES AGAINST WEATHER AND MOISTURE

Durable Finish

Beautifies Buildings, Lowers Maintenance Cost

By actually penetrating the pores of masonry surfaces, portland-cement paint made with Atlas White portland cement seals them against the dangers of excessive moisture and climate extremes. It bonds permanently to masonry—to stone, brick, hollow tile, concrete, architectural concrete, or concrete block.

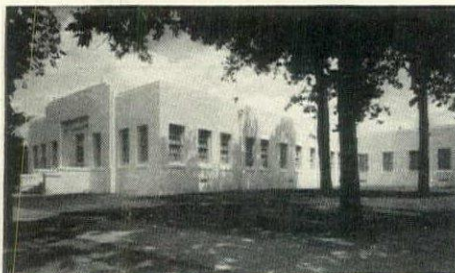
Portland-cement paint is available for exterior and interior surfaces in a variety of colors, ranging from pure white and delicate pastel tints to rich, full colors. Its durability, and the ease with which it can be cleaned, make frequent repainting unnecessary.

Portland-cement paint made with Atlas White cement is made by a number of manufacturers. It is scientifically mixed, uniform in color, and comes in handy containers, ready for application. It should be mixed and applied in accordance with the manufacturer's directions.

For assurance of beauty and protection for your masonry surfaces, use portland-cement paint made with Atlas White cement.

* * *

Factory prepared paint is preferable



Educational Building, First Baptist Church, Cameron, Texas, finished with portland-cement paint made with Atlas White cement. The painted surface resists dirt and dust and is easy to clean.

DURABLE, NONSTAINING FACE-BRICK MORTAR

Atlas White portland cement (plain or waterproofed) is particularly suitable for face-brick mortar. With it as a base, you get the color, strength, durability, and beauty so desirable in face-brick mortar.

* * *

Send for more helpful information about these and other uses of Atlas White cement: Stucco, Fine Terrazzo Floors, thin precast Architectural Concrete Slabs, Light-Reflecting Floors. Write to Atlas White Bureau, Universal Atlas Cement Company, (United States Steel Corporation Subsidiary), Chrysler Building, New York City.

AF-C-4

PLASTIC FITTINGS for gas, oil, water and air lines.

Name: Imperial Plastic (Saran) Fittings.

Features: Fittings may be used with copper, brass, aluminum, steel and plastic tubing, so that tubing itself need not be replaced when fitting replacements are needed. Practical as a substitute for brass fittings except where extreme temperatures are involved. Fittings may be tool-flared or bent by hand and come in a range of sizes from 1/8 to 3/4 in. Freely available without priorities.

Manufacturer: The Imperial Brass Mfg. Co., 1200 West Harrison St., Chicago, Ill.

PENETRATING FINISH for wood, linoleum or concrete floors.

Name: McQuade Wood Seal.

Features: Quick-drying seal composed of resins, oils and thinners forms a transparent, lustrous finish that is waterproof and wear-resistant. Because of its penetrating quality, finish has a soft wax appearance that may also be cleaned with water, soap or cleaning compound. For finishing linoleum floors, seal should be applied after original glaze has worn off. **Manufacturer:** John McQuade & Co., Inc., 132 Classon Ave., Brooklyn, N. Y.

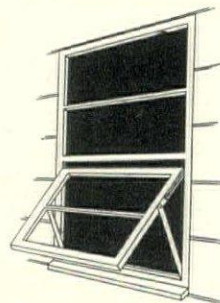
LOW COST WINDOW for speedy construction of war housing.

Name: Pella Awning Type Window.

Features: Completely assembled window may be set in standard 2x4 frame or thin wall construction. Set directly into studing, it requires no frame, weights or balances. Sash units are of white pine, toxic treated with Woodlife. Standard sizes include 14 ventilating and fixed units.

Manufacturer: Rolscreen Co., Pella, Iowa.

(New Product Literature, page 204)



WILL that building balloon go UP?

"SOMEDAY I'm going to be a millionaire!"...
"Boy, wait till I get going!"... Sounds like a small
boy boasting to his best girl—doesn't it?

Well, that's what a lot of today's post-war talk-
ing sounds like. Realistic adults smile, mutter,
"Maybe..."

Fact is, when the war ends, there *may* be a great
rise in the demand for new buildings—or there may
not be. Certainly there will be a *need* for new hous-
ing. But you know from experience that need and
demand are not always the same thing.

To help you turn the need into demand as soon
as possible after Hitler is washed up, we offer this

PLAN FOR BUILDING POST-WAR BUILDING MARKETS

1. Get ready to make sales the minute peace comes.
2. Stimulate confidence in and acceptance of your
new methods, materials, designs.
3. Interest both men and women, because they jointly
decide when and how to build a house.
4. Stir up prospects for non-residential building.
5. Get the middlemen on your side.

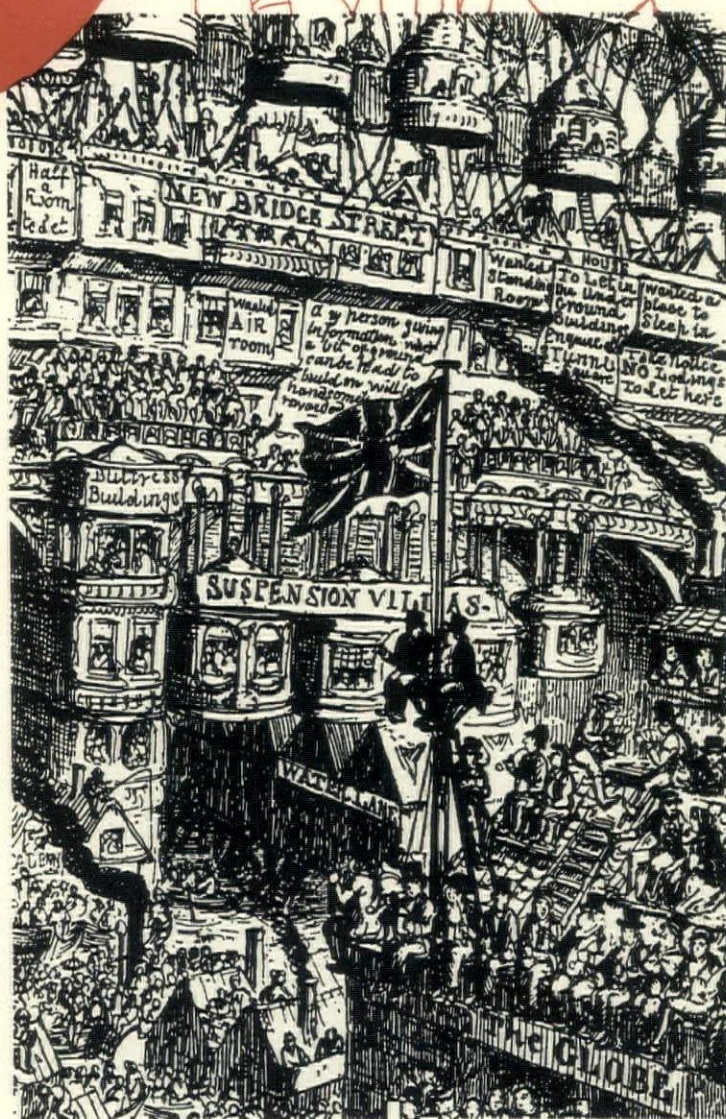
**You can do all five of these jobs
in one magazine, TIME**

FOR in TIME you can tap the dammed-up buying
power of over a million families with 2½ times the
income of the average U.S. family...in TIME you can
tell your story to America's most important people*—
people who set the pace of living for millions of others.

TIME is one magazine both men and women take
seriously—they add up to more than a million men
and more than a million women, who prefer TIME 7
to 1 over all other magazines in which you can adver-
tise. What's more, TIME's prestige gives your story
added weight with the bankers and executives who
have the say on non-residential building.

And in TIME you back up your trade-paper ad-
vertising with extra impressions on thousands of top
men in construction and finance.

VILLAS SUSPENDED FROM BALLOONS. To solve
the housing problem of London in the 1870s,
Dickens-illustrator George Cruikshank did this
tongue-in-the-cheek sketch to spur the hopeful
do-nothings of his day into action.



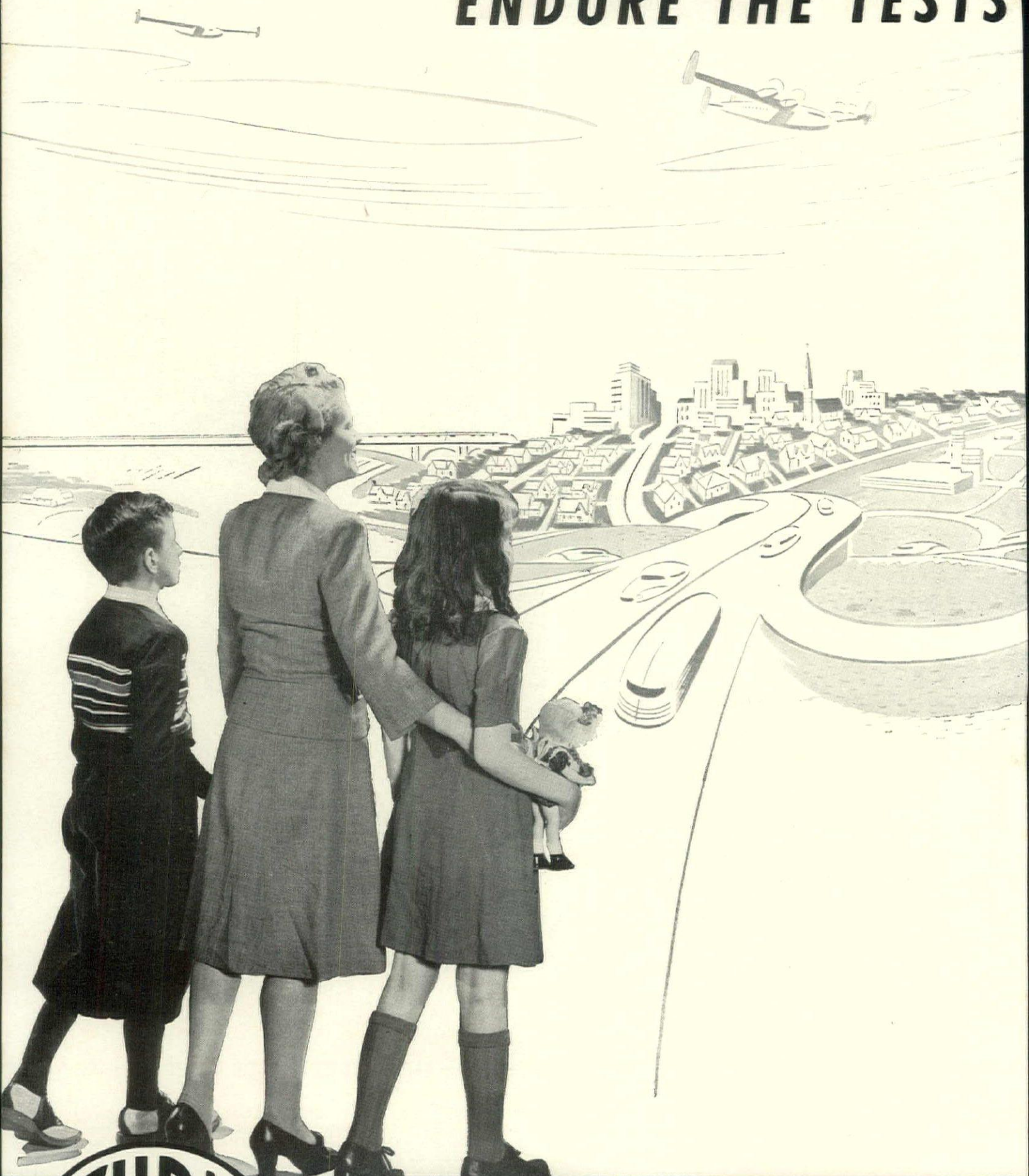
BETTMANN ARCHIVE



GATEWAY TO THE BUILDING MARKET

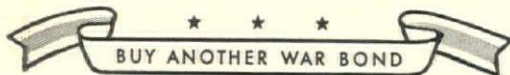
*These people include executives and editors, congressmen and college presi-
dents, government officials, mayors, radio commentators and 21 other groups
of leaders—all of whom have recently voted "TIME is America's most im-
portant magazine."

Will the structures you conceive today
ENDURE THE TESTS



BUILDING • PLUMBING DRAINAGE PRODUCTS

ROOF TO BASEMENT



that will begin with the hour of victory ?

Tremendous changes are being wrought in the crucible of war. At the instant of "unconditional surrender," a new era will begin—an era that is even now visioned, in many of its aspects, by men who think in terms of tomorrow. Neglect no plans today that will strengthen and inspire those who fight on to victory, and the right to live exuberantly. Neither allow any circumstance or condition to retard the planning of structures for tomorrow that will provide environments in which people may live and work and shop and play more exuberantly.

The mere redesigning and rebuilding of physical structures for tomorrow will not be enough. The importance of a suitable environment surrounding a structure needs no emphasizing. But, the task of meeting the basic human needs of people requires the conception of environments within physical structures which will inspire them and relieve whatever retards the unfoldment and growth of character. Perhaps, it is a function of you men, who plan for tomorrow, to exercise the faith and courage, to plan and present structures which will provide suitable environments for every kind of human activity.

The custom has been to ask what the people wanted and then to supply it. But, has not the time arrived for you men to firmly insist upon the erection of structures in which environments for exuberant living may be realized? Are you not confident that a people striving to live more exuberantly may accept what you conceive to be a suitable environment?

A bold break with the present would seem to be the surest way of providing those environments in which men and women and children may always be mentally alert and physically fit for work and play. An essential characteristic of these environments must be an absence of things that normally cause resentment and irritation and the utilization of every convenience and facility that protects health and nurtures strength. First, the structure itself must be protected from the elements without, and deterioration from within must be retarded. Over a period of 40 years, it has been the privilege of the Zurn Organization to provide devices for such protection. To meet the urgent requirements of the structures you conceive today, and which will be built tomorrow, Zurn Engineers are developing and perfecting devices which will offer the utmost of "engineered protection for human health and modern structures." In this field of highly specialized engineering and product development there can be no compromise with the established principles and practices. In a brochure entitled, "A New Era For Building Is Only Marking Time," it is a privilege to present the results of research and study along these lines. You are invited to register for a copy of it.

J. A. ZURN MFG. CO.

Sales Office and Factory: ERIE, PA., U. S. A.



NOT FOR ONE MOMENT are Zurn Engineers in any way neglecting the performance of vital service to the winning of the war. They are making and testing one device after another in a continuous effort to equip the ships that are so vital to victory. Their contribution to the housing of war workers is known wherever war housing has been, or is being, built. Although giving their utmost to the war effort, they have their vision fixed upon the requirements of the structures of tomorrow. While at war, it should be a *duty* to prepare for peace.



- A—Zurn Engineered Carriers afford 4-Point Protection for wall fixture installations.
- B—Zurn Roof Drains are available for every type of roof construction.
- C—Zurn Floor Drains and Accessories meet every floor drainage requirement.
- D—Zurn Plumbing Drainage Fittings include every item required for the installation of plumbing drainage systems.



J. A. ZURN MFG. CO., ERIE, PA., U. S. A.

Please register my name and the names of individuals and organizations attached, to receive a copy of the portfolio entitled, "A New Era For Building is Only Marking Time," of which I understand a limited number will be available when printed.

Name Position

Company

Address

City and State

Form No. 48-29

P. S. Please attach to your business letterhead

J. A. ZURN MFG. CO.

SALES OFFICE AND FACTORY

ERIE, PA.

U. S. A.

NEW PRODUCT LITERATURE

HEATING AND VENTILATING. *Heating Ventilating Air Conditioning Guide 1943*, 21st ed., 1268 pp., 6½x9¼. Book contains new and revised technical data and information on heating, cooling, ventilating and air conditioning, and related phases of refrigeration. Also new chapters entitled Abbreviations, Symbols and Standards, Emergency War Practices, and a Catalog Data Section and Index to Modern Equipment. Published by American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York, N. Y. \$5.

WOOD. *Utility Wood Products*, 8 pp., 8½x11. Several new wood items in the Morgan line are illustrated, with specifications and sizes given. Includes lockers, shelving, cabinets, work benches and tool boxes. Morgan Co., Oshkosh, Wis.

WIRING. *Q-Floor Wiring Data Manual*, 48 pp., 9¾x11½. Catalog listing, detailed layout and installation data on under-floor electrical distribution in H. H. Robertson cellular steel Q-Floors. Hollow cells of Q-Floors may be used as raceways, and electric power outlets may be provided wherever needed. Manual illustrated with diagrams and photographs. Appliance and Merchandise Dept., General Electric Co., 1285 Boston Ave., Bridgeport, Conn.

WORK LIGHTS. *Swivelier Work-Lite Units, Catalog No. 102*, 4 pp., 8½x11. Specifications and pictures of new directive lighting units, adjustable 90° vertically and 350° horizontally. Even though attached to machines, units are unaffected by vibration and stay put at any angle. Reliance Devices Co., Inc., 510 Sixth Ave., New York, N. Y.



BRUSHES. *Care and Conservation of Brushes*, 7 pp., 8½x11. Pamphlet gives detailed information on care of wartime brushes made of 55 per cent bristle and 45 per cent horsehair or other adulterants. Also tells how to recondition old hardened brushes. Above illustrations show a few don'ts for handling brushes. The Osborn Mfg. Co., 5401 Hamilton Ave., Cleveland, Ohio.

PAINT. *Johnson's War-Formula Paints*, 12 pp., 8½x11. Catalog lists and specifies paints specially developed to replace Johnson's Wax-Fortified Paints, which are no longer available for the duration. Industrial Maintenance Div., S. C. Johnson & Son, Inc., Racine, Wis.

WOOD. *An Introduction to Pluswood*, 6 pp., 9x12. Folder describes initial large-scale commercial production of Pluswood, or compregnated wood. Test data on this high-density wood demonstrates its high mechanical strength and excellent electrical properties. Pluswood, Inc., Oshkosh, Wis.

WOOD CHARTS. *Where We Grow Our Trees*, 28x34; *Products of American Forests*, 25x30. Two pictorial charts on forests and forest products. First maps out forest resources of United States. Second shows some well-known product derivatives from sawlogs, wood chemistry, veneer processes and miscellaneous. American Forest Products Industries, Inc., 1319 Eighteenth St., N.W., Washington, D. C.

Ostlund Slope of Grain Chart, 3¾x6¼. Pocket-size plastic card aids inspection of woods, and especially aircraft woods. Quickly determines approximate strength of wood through a visual correlation of spiral and diagonal grain slopes. California Panel & Veneer Co., 955 South Alameda St., Los Angeles, Calif.

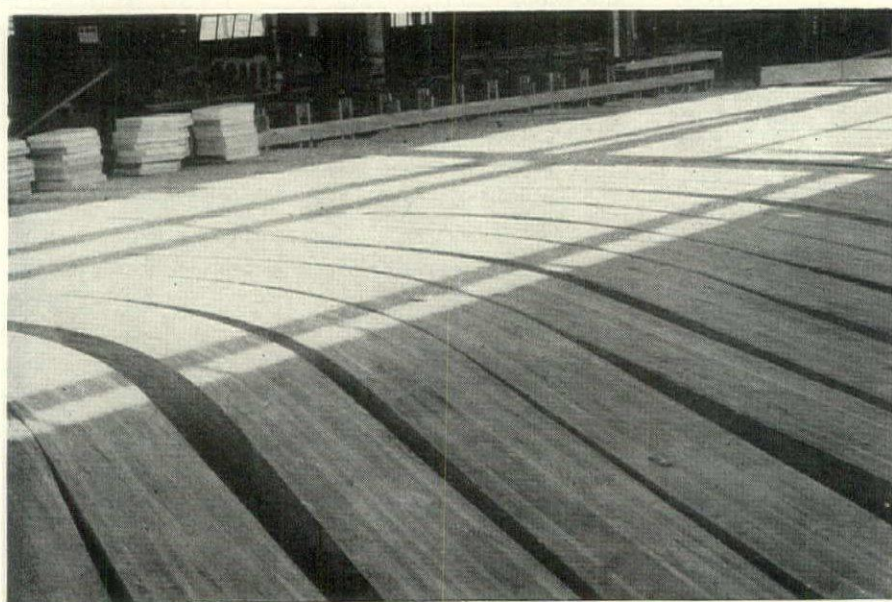
WELDING. *Manual of Recommended Practice for Saxe Welded Erection System*, 42 pp., 8½x11. Instructions and drawings for using Erection Seat and Clip which hold steel members firmly in place for welding. Hook and eye self-aligning system saves critical materials, labor and time. Prepared by Van Rensselaer P. Saxe, and published by Drop-Forgings Div., J. H. Williams & Co., 400 Vulcan St., Buffalo, N. Y.

REQUESTS FOR LITERATURE

Feemster & Striger, 109 South Spring St., Tupelo, Miss., would like to be placed on manufacturers' mailing lists for 1943 catalogs and design data on construction materials, plumbing, heating and electrical specialties, which do not duplicate Sweet's Catalog File.

H. W. Hargiss, 1656 Indiana St., Lawrence, Kans., would like to receive information on concrete, laminated glued arch and masonry construction, with particular reference to the construction of an athletic field house.

Edward L. House, 403 South Clinton St., Baltimore, Md., would like to receive literature on new building materials, supplies and methods.



"Photo courtesy Timber Structures, Inc."

ACRES OF ARCHES!

Laminated with Laucks Glues

VAULTING into national prominence through speedy, large scale production of vitally needed arches, beams, columns, is Timber Structures, Inc., Portland, Ore.

Included in the impressive list of Timber Structures laminated products are giant arches spanning 200 feet, wood beams 2' x 3' x 120' and larger, glued-up ships knees, built-up keelsons, monolithic gunwales, wide deck planking, etc.

Here—as in hundreds of other new-day uses—Laucks Glues serve with distinction in America's engineering battle to house, transport and supply our troops efficiently.

Why? Twenty years of leadership

in the glue field finds Laucks prepared with products, personnel and procedure to give patrons a "head start" in applying glues to new or unusual uses.

If wood and glue is a problem with you—won't you write or wire now? No obligation, of course.

I. F. LAUCKS, Inc.

Lauxite Resins—Lauxein Glues

In U. S. Address Inquiries to—
SEATTLE—911 Western Avenue
LOS ANGELES—859 E. 60th Street
CHICAGO—6 North Michigan Avenue

Factories:
Seattle, Los Angeles, Portsmouth, Va., Lockport, N. Y.
In Canada Address Inquiries to—
I. F. LAUCKS, Ltd., Granville Island, Vancouver, B. C.
HERCULES-LAUX-MERRITT, Ltd., Stanbridge, Quebec

• Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.



LAUCKS CONSTRUCTION GLUES

Consult LAUCKS—America's Glue Headquarters

MAKE THIS TEST -
Prove **BRIXMENT** *is* **BEST!**



1

Slap a small amount of Brixment mortar, and an equal amount of 50-50 lime and cement mortar, on a brick. Wait a minute, then feel each mortar.



2

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.

SPECIFICATION AND BUYING INDEX

The advertising pages of THE ARCHITECTURAL FORUM are the recognized market place for architects and all others engaged in building. A house or any other building could be built completely of products advertised in THE FORUM. While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This THE FORUM does.

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READILY AVAILABLE!

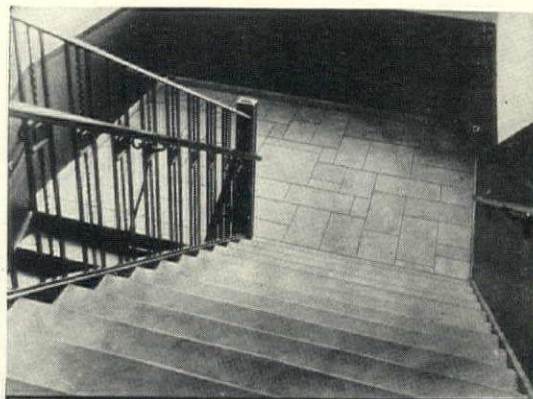
Alberene * **TREAD STOCK**

**a safe footing
for hurrying feet!**

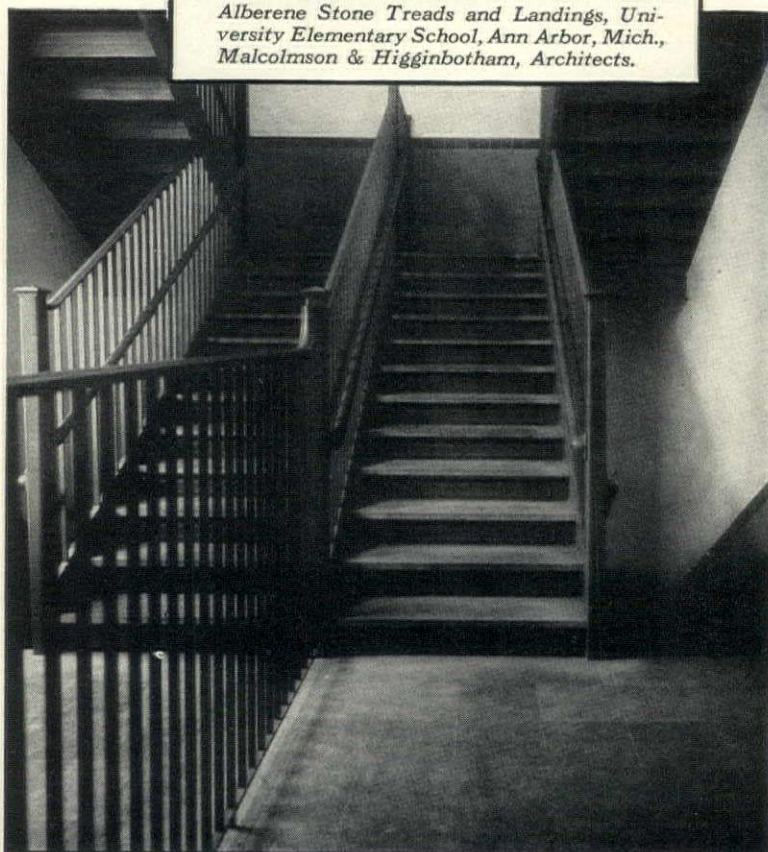
Ample stocks of this selected, extremely hard stone are available. Shipments can be made with reasonable promptness.

For more than 30 years Alberene Tread Stock has been the choice for treads, platforms and floors subject to severe daily use in schools, hospitals and public buildings. Its natural highly-toothed surface is safe, wet or dry, and this light blue-grey stone meets every requirement of durability, economy and upkeep and appearance. Tread Stock is non-staining and easy to clean, and neither chips nor scales.

A request on your business letterhead will bring a set of samples, conveniently boxed, showing the wide range of our stones, including black and mottled dark blues and greens. Please address Alberene Stone Corporation of Virginia, 419 Fourth Avenue, New York. Sales Offices in principal cities. Quarries and Mills at Schuyler, Virginia.



Alberene Stone Treads and Landings, University Elementary School, Ann Arbor, Mich., Malcolmson & Higginbotham, Architects.



Alberene Stone Treads and Landings, Woodrow Wilson High School, Washington, D. C., Nathan Wyeth, Architect.

*Abrasive hardness factor averages 30 to 35; far higher than that of any other stone commercially used for stair treads.

ALBERENE STONE

THE NATURAL STONE OF DIVERSIFIED UTILITY

Koppers "C & C"* Projects

*Current and Contemplated

Better roofs may be born in an igloo



Current

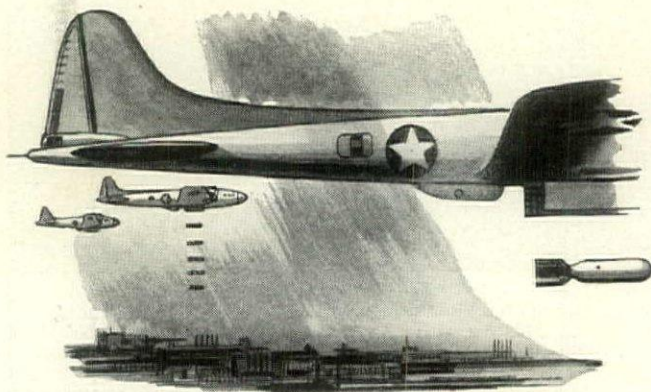
Koppers Coal Tar Products "keep your powder dry"—In concrete "igloos" covered with ground, the Army keeps its powder dry and safe from enemy eyes. This is fine for the powder but hard on concrete. To protect the concrete and exclude water, many of these igloos are sealed in watertight "blankets" of Koppers coal tar pitch and tar-saturated fabric and felt.



Contemplated

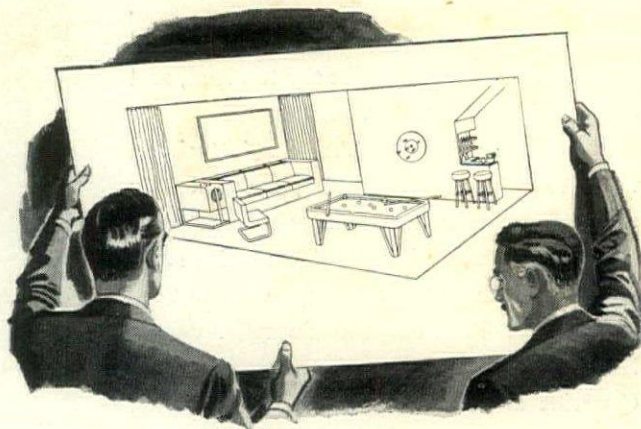
More roofing products may soon be available for non-war use—Many of the biggest wartime building projects are well along toward completion. More coal tar pitch roofing may soon be available. This will be good news for anyone who has roofing work to be done, because coal tar pitch and tar-saturated felt are such long-lasting materials.

Better heat may be born on a drawing board



Current

The Flying Fortresses that rain death on the Axis could not be produced so fast nor so well without America's rich reserves of bituminous coal. Millions of tons are delivered to the war industries, yet ample coal has been supplied for residential heating, and to the coke plants.



Contemplated

For dependability of supply, as well as for all around fuel economy, design your homes and buildings for solid fuel. Modern coal and coke stokers make this fuel almost completely automatic and permit wide utilization of basement for playrooms and other purposes.

Koppers Company and Affiliates, Pittsburgh, Pa.

KOPPERS

THE INDUSTRY THAT SERVES ALL INDUSTRY



Arctic Swing Shift

When the months-long arctic night comes to an end, the plastic windows of the snowbound troop shelters let in the full spectrum of vitalizing sunshine. At the same time, they insulate against sub-zero temperatures outside.

Lumarith, Lumapane, and Vimlite, Celanese Celluloid Corporation's war-developed plastic glazing materials, are serving on all fronts of wartime activity. They eliminate the hazard of flying splinters . . . are super-tough and practically unbreakable.

This ability to "take it" has increased the demand on

both war and production fronts. Shell-loading and other war plants specify "Plastic Glazing." Military housements, portable buildings and pre-fabricated troop structures can be shipped worldwide without loss from breakage when window openings are glazed with Lumarith, Lumapane or Vimlite.

The growing list of uses for plastic glazing presages wide peacetime application. Write for specification booklet describing all three types.

Celanese Celluloid Corporation, 180 Madison Ave., New York City. Representatives: Dayton, Cleveland, Chicago, St. Louis, Detroit, Los Angeles, Washington, D. C., Leominster, Montreal, Toronto, Ottawa.

LUMARITH^{*} is a clear-transparent and super-tough. Its aviation use in cockpit enclosures is conclusive evidence of its impact strength. It is easily installed in both wood and steel sash.

LUMAPANE^{*} (wire base) meets severest conditions where resistance to internal or external explosion is a requisite. Non-shattering, it is a war industry essential.

VIMLITE^{*} (wire base) provides diffused light transmission. It is economical and labor-saving in application . . . ideal for portable buildings.

The First Name in Plastics

*Reg. U. S. Pat. Off.

A DIVISION OF CELANESE CORPORATION OF AMERICA

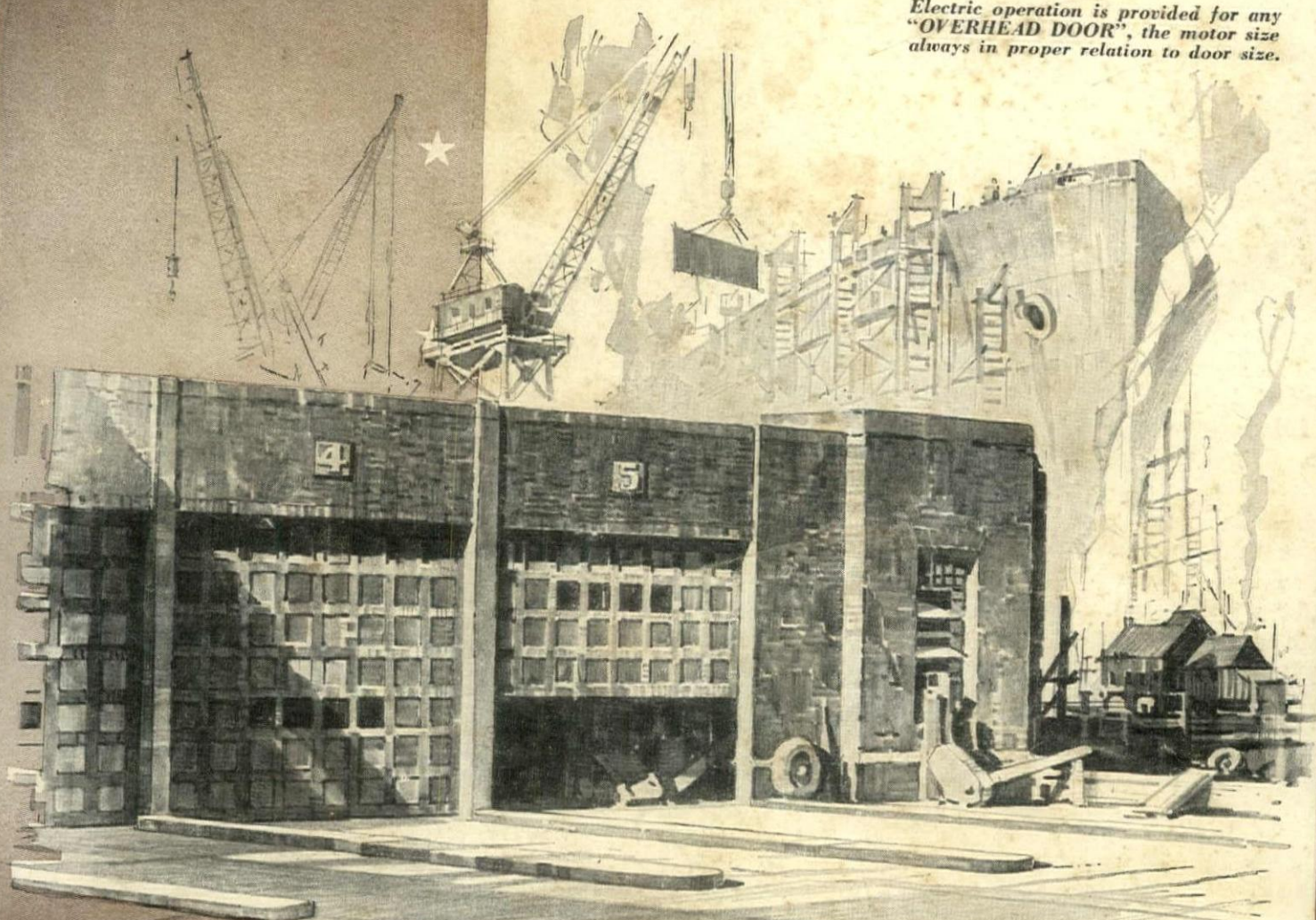
**CELANESE
CELLULOID
CORPORATION**

FEB 5 1951

DOORS for **LASTING SERVICE!**

Quality materials and expert construction are responsible for the unvarying performance of The "OVERHEAD DOOR". Each door is built as a complete unit in any size to fit any opening. With its fast, easy operation, The "OVERHEAD DOOR" provides a weathertight, tamperproof closure, and saves space and valuable man-hours in army, navy or marine structures and war production plants. Nation-Wide Sales-Installation-Service.

Electric operation is provided for any "OVERHEAD DOOR", the motor size always in proper relation to door size.



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TRADE MARK
WITH THE

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Hartford City, Indiana • U.S.A.