

A *Progressive Architecture*

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JOBS AND MEN: 113 P.S.: 140

1/48

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January, 1948

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Mr. David S. Miller, President
The Producers' Council, Inc.
Washington, D. C.

Dear Mr. Miller:

This is a special issue of PROGRESSIVE ARCHITECTURE -- our Annual Products Progress Issue. We thought you would be particularly interested in it, because its theme is the influence of available building products on architectural design.

I wonder how many producers and manufacturers of building materials and equipment realize the part they play in finished architectural design. It should be exciting to a guy who makes concrete blocks to know that his product helped produce Tony Raymond's church design on page 45. That's the point of this issue -- that architectural design is not something theoretical, but results largely from the right use of the right materials. Sometimes (not always, these days) this fusion of technology and esthetics is still as clear as it was in the case of the Greek temple, or the Gothic cathedral.

The producers in America, Mr. Miller, are in a unique position to influence contemporary architecture. The lists of new and newly available products that appear in this issue are going to be good news to the architects. They will design with these materials and design because of these materials. We believe that the manufacturers need the advice of the architects in development of their materials, and we know the architects need the help of the manufacturers in development of their designs. We hope that this issue helps to bring the two groups closer together.

Sincerely,

The Editors
The Editors

P/A:czm

Practical, attractive glass

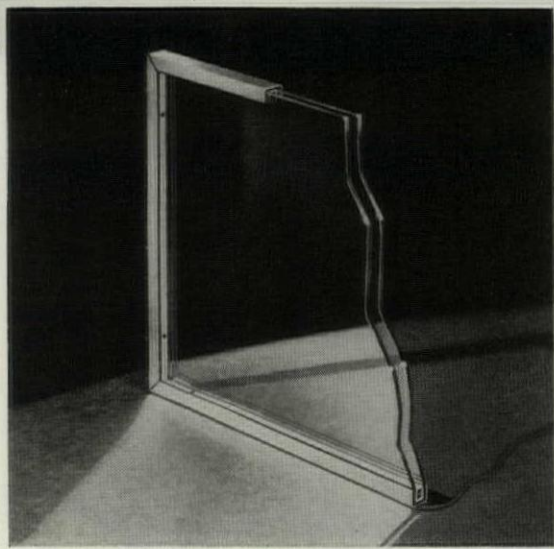


"PITTSBURGH'S" LINE of store front products—Carrara Structural Glass, Polished Plate Glass, Pittco Metal, Herculite Doors, and Twindow, the window with built-in insulation—are being used with outstanding success in many "open vision" type store fronts. These materials can be depended upon to meet the most exacting demands made upon them by the new trend in store front designs. Architects: Forsblom & Parks.

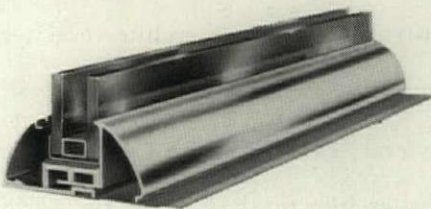
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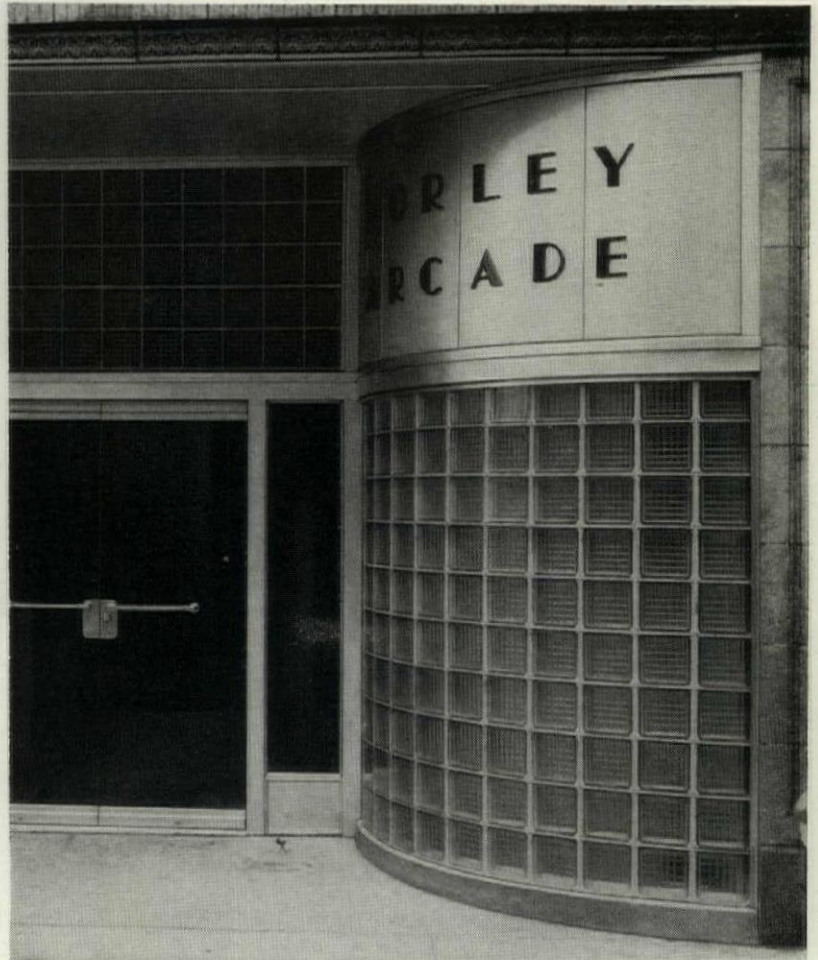
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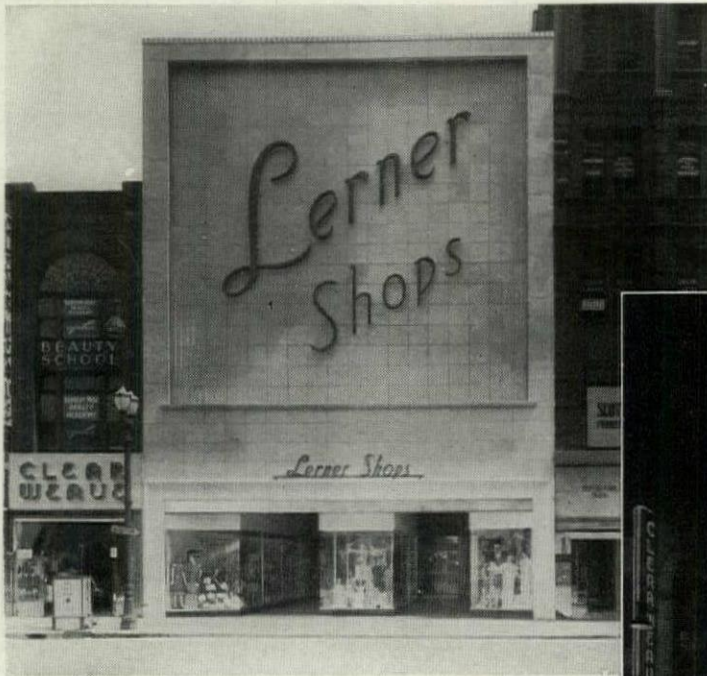
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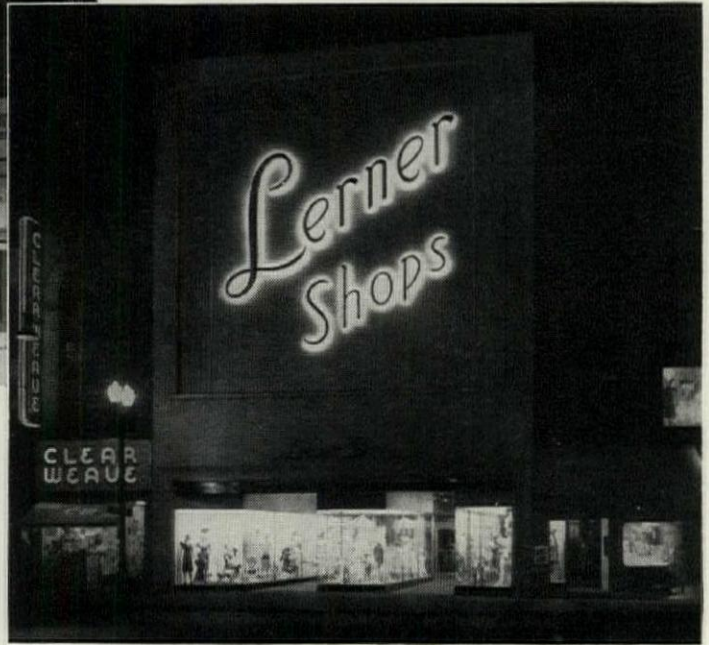


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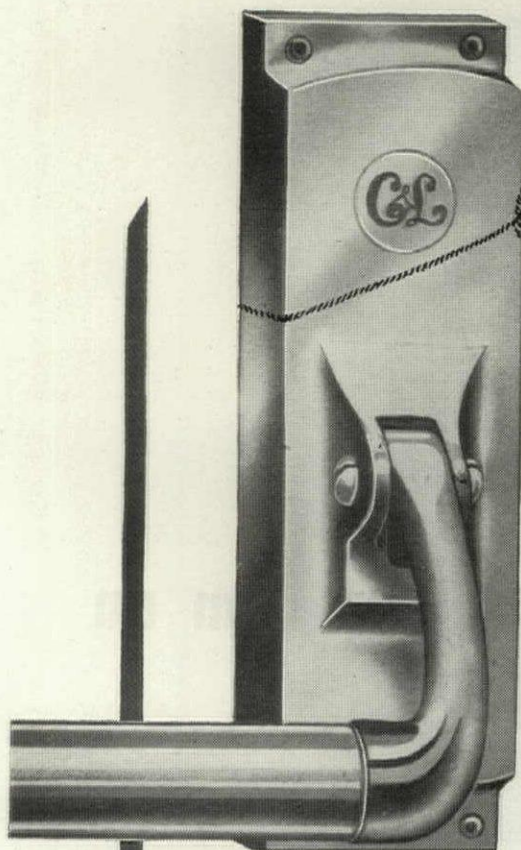
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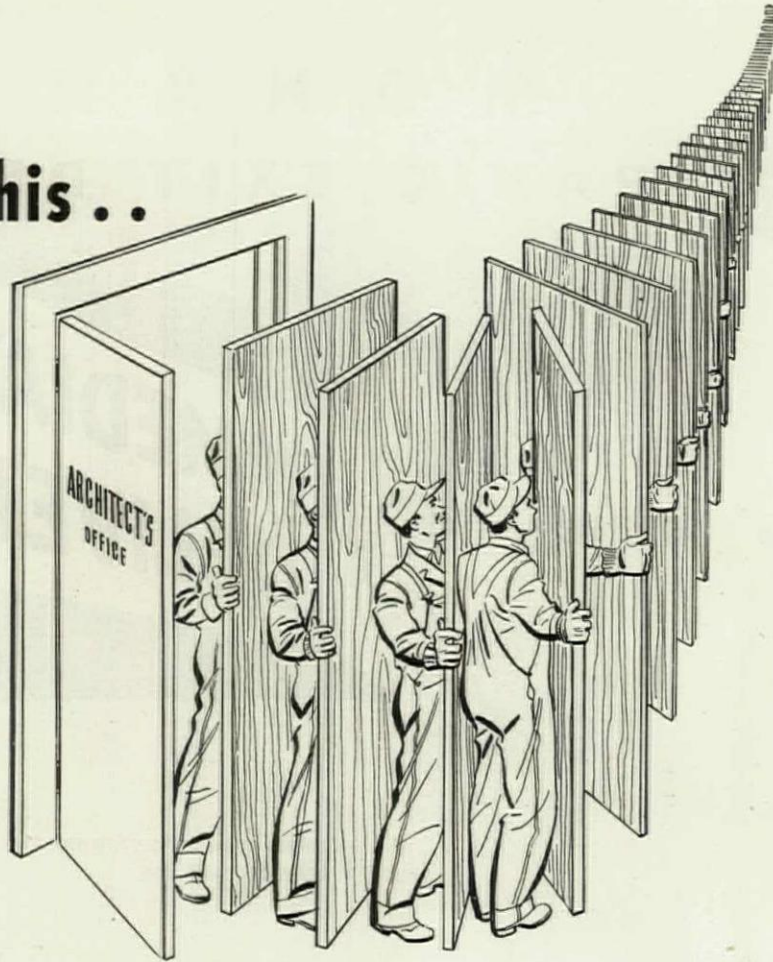
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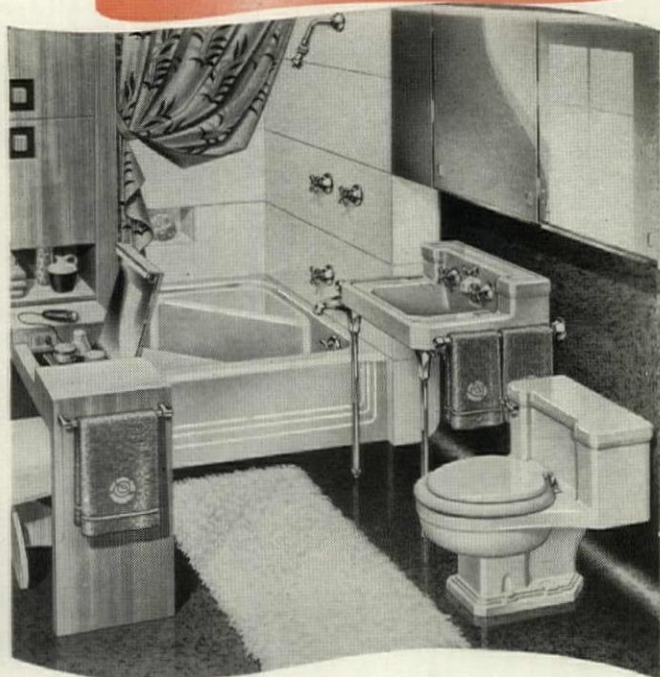
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THE ARCHITECTS "SERVICE"

Dear Editor: I was interested in Sheldon Brumbaugh's philosophy as set forth in "The Architect and His Community" in your October issue and in your accompanying editorial, "Architecture and Politics."

To me Mr. Brumbaugh's key words were two: "genuine service." In the minds of American architects what constitutes such service? I suspect that to many it means little more than the satisfactory completion of a business transaction, the "substantial completion" of a building that meets health and safety requirements and the client's program. But doesn't it mean much more than this? True architecture has always been the expression of the social, economic, political, and religious ideas of the times. Its main problem has been to find a proper relationship between the human being and the material world. In solving that problem architects of the past had not only to understand the building and business methods of their day; they also had to understand the physical and spiritual aspirations of their fellow men. I think it safe to say that few architects today think in such abstract terms, and that their main considerations are technical and economic rather than psychological. That seems to be the big trouble with architecture today; like most everything else it has overemphasized the technical and economic requirements at the expense of those which are infinitely more important, the human ones. Often they are completely overlooked.

For instance, it is obvious that the psychological needs of a New York suburbanite, who five times weekly literally claws his way on and off Manhattan Island, are vastly different from those of a Vermonter who leisurely walks from his home to his place of work in 10 minutes, and that these varying needs should exert a marked influence on the type of living and working spaces required by each and their respective families. In other words, the provision of adequate light, heat, ventilation, and plumbing is only part of the problem. Again I say, how many architects go to the end of the problem?

How much longer can architects afford being considered the least essential of all the professions? Of them all, that of architecture is, from the long-range point of view, possibly the most important to society, in that it is the architect, who must also be a planner in the broad sense, who has the prime responsibility to direct the growth and development of the neighborhoods and cities in which coming generations will live. It is his job to evolve the type of community that will best promote healthy, constructive living. This all may sound too idealistic and theoretical to the more practical-minded, but I feel this attitude must be adopted by the profession if it hopes to regain its lost prestige and proper place in society.

I want to point to one example of the type of activity which I feel helps discredit the profession. A year ago last spring Congress was debating the Patman Housing Bill, one section of which

proposed subsidy payments as a means of encouraging greater production of building materials. While the bill was under discussion in Washington, the Michigan Society of Architects permitted its *Weekly Bulletin* of April 16 to be used almost in its entirety by the Producers' Council, Inc., for a debatable attack on the subsidy provisions of the Patman Bill. I doubt if such use of the *Bulletin* by a self-interested, outside organization falls within the limits of "genuine service" as defined by Mr. Brumbaugh.

What the profession badly needs, as you stated in your editorial, is a lot more objective thinking about all issues affecting architecture, planning, and society, and discussions that go to the bottom of these issues. Most of all it needs a deeper understanding of what is best for society as a whole, and the realization that what is best for the latter is also best for itself.

WILLIAM W. LYMAN, JR.
Cambridge, Mass.

PROGRESSIVE CITIZENS

Dear Editor: It is indeed unfortunate that more of the men who have been trained in the large metropolitan architectural offices do not leave these offices when they have become matured in the very valuable experience which one obtains in such offices and settle themselves in the various small communities throughout the country. There

(Continued on page 10)



Proposed New York University Law Center—Eggers & Higgins, New York, Architects.

CONFUSING AND APPALLING

Dear Editor: Can't something be done about the proposed N.Y.U. Law Center?

Perhaps you already are doing something about it. Such as providing a delayed-action atomic bomb for the cornerstone. Or perhaps by pointing your own fine program of enlightenment at lawyers instead of architects for a while.

Seriously, as one of those who was educated at New York University's now defunct School of Architecture, a thing such as this is confusing and appalling, being so contrary to what we were taught in that school.

The most disturbing possibility is summed up in a reported quotation of Al Smith's while passing darkened Protestant homes on his way to 6 a.m. Sunday Mass. "Wouldn't it be a — of a joke on us if they were right."

HARVEY P. CLARKSON
Petroff & Clarkson
New York, N. Y.

(Continued from page 8)

they could take root and be not only invaluable architectural advisers, but outstanding and progressive citizens in these communities.

One of the crying needs of this country today is some movement which would give the general public, the "layman," as it were, a better understanding of architecture. Better service amongst architects to said public, in order that the average man and woman will feel that an architect can really help

them to solve their building plans and problems would erase their general conception that he is a glorified professional specialist beyond their reach and more particularly their pocket-books.

L. WOODFORD ANDREWS
Arcadia, Calif.

LIGHT ALL AROUND

Dear Editor: In your October issue of PROGRESSIVE ARCHITECTURE you pub-

lished a very interesting article on Sheldon Brumbaugh and his practice. I believe there ought to be more men like him.

The floor to ceiling windows in the drafting room have made me quite curious, however. How do the draftsmen like this arrangement of light coming from both above and below the working level?

GORDON DIRKES
Pullman, Wash.

With regard to the light in the drafting room coming from the floor to ceiling windows, the best description of it would be that "it is like working outside under the trees." Fortunately, we never have any direct sunlight through these windows as they face directly north. We could very easily do without the fluorescent lights as the only time they are used is in the late winter evenings.

SHELDON BRUMBAUGH

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PRAISE FOR ARCHITECTS

Dear Editor: It was indeed gratifying to see the article and the work of Mr. Paul R. Williams and his associate published in the November issue of PROGRESSIVE ARCHITECTURE.

Mr. Williams' work has been published numerous times in California magazines and his books on modern homes have been circulated in volumn throughout the country. Thanks to PROGRESSIVE ARCHITECTURE that it recognizes his unusual talent. It is hoped that PROGRESSIVE ARCHITECTURE will continue to publish his work and that other nationally circulated architectural magazines will follow the example.

K. RODERICK O'NEAL
Chicago, Ill.

HELP THE DRAFTSMAN

Dear Editor: As you perhaps observed from your contacts with the practicing profession, architectural publications find their way into the drafting room within a day or so after delivery and the principal value of it is there determined. Therefore, may I suggest that you direct more of your articles or attention to the instruction of the drafting force.

My experience indicates, at least in recent years, that the average draftsman lacks the fundamental knowledge of the history of architecture, and what is more important, they lack detailed knowledge of the construction of a building. A series of articles in relation to this item is necessary for a draftsman to show on working drawings and details in order to enable them to convey exactly what results they wish to obtain through these drawings. For instance, the average draftsman may turn

(Continued on page 12)

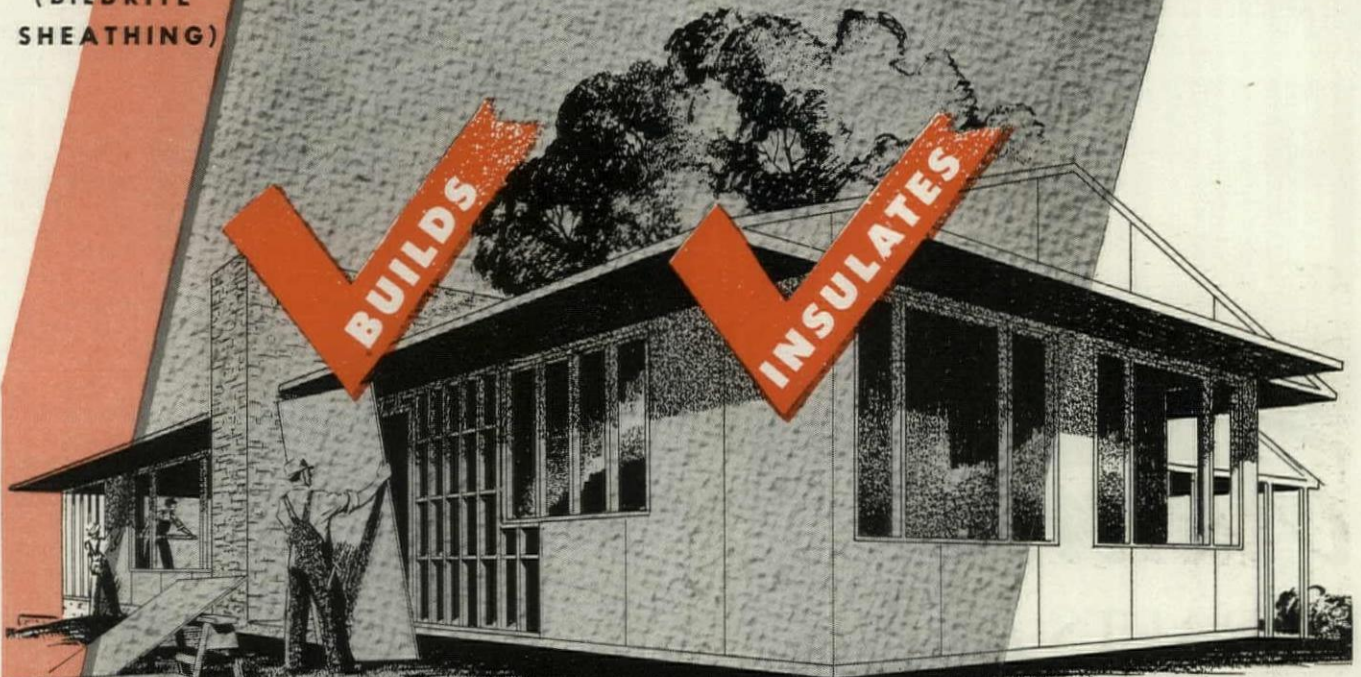
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(Continued from page 10)

out a beautiful detailed drawing but upon examination it is usually found that he has neglected to check the dimension of the space within which the work is to be constructed, such as the distance between columns; allowance for fireproofing, and space for finishing materials; the location of ducts, pipes, radiators; the position of electrical outlets; placement of furnishings and equipment; and similar information that is vital for completion of the work without confusion at the job.

In other words, they are unable to think through to the end and completion of a problem. Also that in detailing, the specification should be constantly referred to and that materials or work not shown on the working drawings and/or specified should be incorporated in a detail merely because they consider it to look "pretty" and involve extras. Also because of the lack of construction knowledge the average draftsman is hopelessly confused when he is given a shop drawing to check. An article, or

better still, a number of these, in relation to the checking of shop drawings would be of great value. Finally, a series of small drawings showing the preparation of the several classic orders, in outline without ornamentation, would be of great assistance to draftsmen that are designing or working on modern monumental work.

PAUL C. REILLY
New York, N. Y.

TRICKY CRITICISM

Dear Editor: I'd like to underline some of friend Isadore Rosenfield's views which you printed in the November issue: The schools *do* pay lip service to "function" while underhandedly (no doubt unaware) working to "make a wow of an impression." I.R.'s last sentence, "The trick is to satisfy emotion while in full consonance with the other functions a building must satisfy," points to the "nut" of the critique question—what function? I think most misunderstandings among progressive architects arise from not "taking in enough territory" in the frame of reference each assumes.

The fact that I consider the San Francisco Bay house "easel-painterish" while I.R. considers it almost above criticism just shows how tricky criticism is. Keep it up!

I especially liked Sanderson's review, "Portraits of Western America" (I'm from Idaho via Oregon myself).

JOHN RANNELLS
New York, N. Y.

CHEER FROM ABROAD

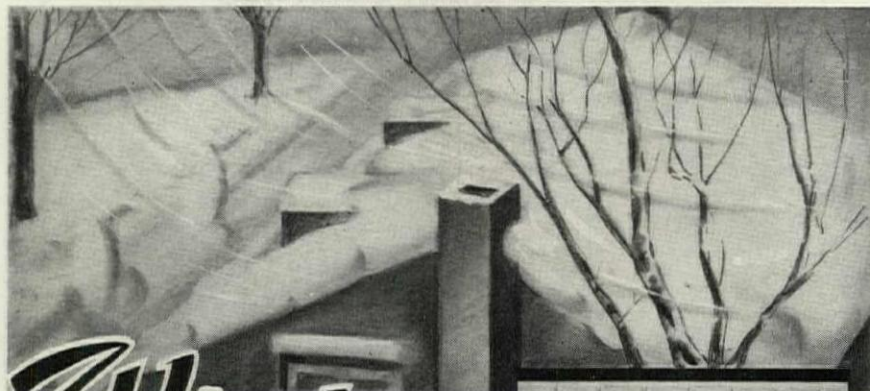
Dear Editor: Your magazine with its interesting and helpful subjects, written in architectural language pleases me very much. Friends of mine will soon join and subscribe. Bravo for P/A!

L. THEO VAN LOOIJ
Antwerp, Belgium

SIMPLY CURRENT GUIDES

Dear Editor: Re your editorial in November issue, our comment is that "standards" can change, do change, and should change as living standards change. Such standards control or direct standards of design, construction, and cost. What do not change are principles. They are fundamental and everlasting. We spend our lives trying to discover them and in the light of our discoveries accept, revise, or discard our standards. The latter simply represent current guides and controls of details and policies, all of which are constantly susceptible to change.

R. B. PARSONS
Seattle 2, Wash.



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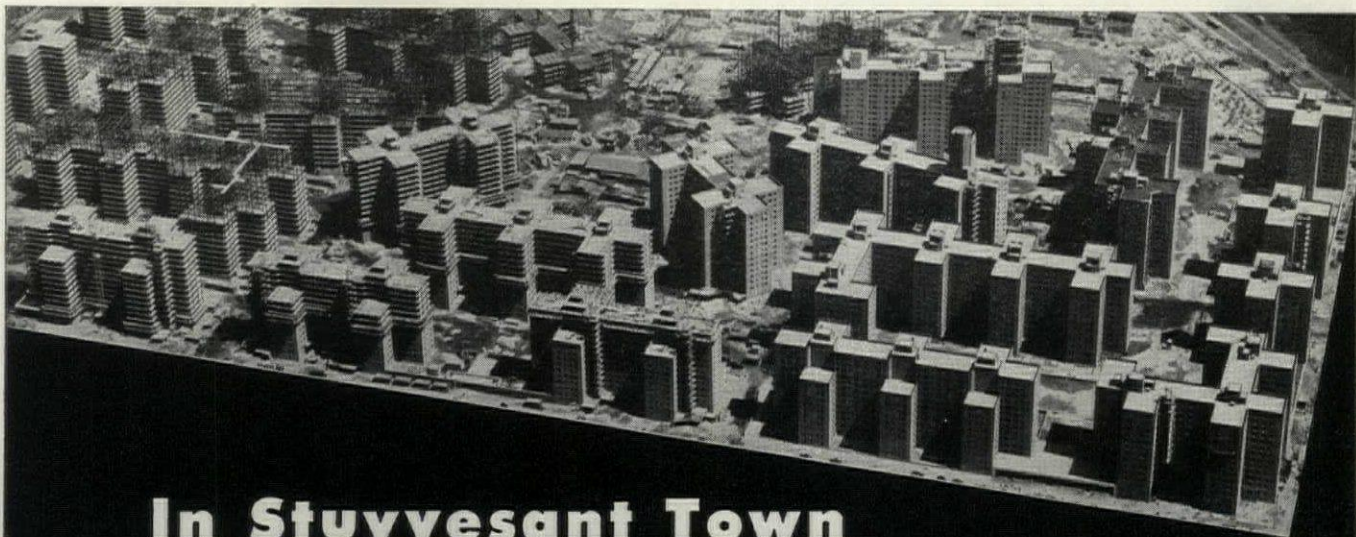
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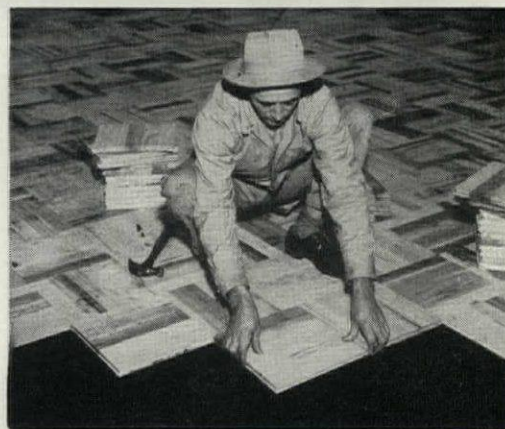
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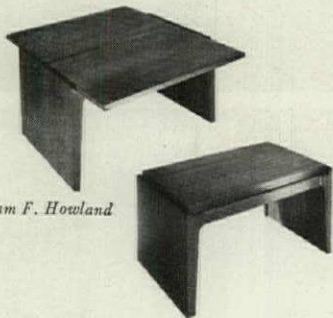


BRUCE BLOCK

Hardwood Floors

Most encouraging progress in the contemporary furniture field is in growing consumer demand and in willingness of more manufacturers to devote their skills to whole collections worthy of the best designed new homes. Good furniture by some clear-visioned designers has been familiar for years to the design professions. Professional shows, the daring of a few manufacturers, and the persistence of the Museum of Modern Art in high-lighting each new furniture development have lessened timid or biased resistance to the new designs. This year will bring many more department store displays—less self-conscious than in the past—and the Museum is sponsoring a direct effort to bring out more low-cost contemporary furniture through its current Museum Design Project, Inc.

With a sensational advertising display, Drexel Furniture Company recently announced a new collection designed by Edward J. Wormley. The handsome pieces, all offered in silver elm or lacquer finishes, include this stool with folding



William F. Howland

top, which can be a coffee table or, set on a twin piece, a serving or lamp table. Also from the Drexel collection is this chair with loose cushions of foam rubber, which can be used singly or as a



sectional unit of a sofa. This furniture, as well as Wormley's collection for Dunbar, also shown here, will be sold by the large stores throughout the country.

Architect George Nelson has added new pieces to his collection, distinguished for its clean lines and special thought for ample storage spaces. This and furniture designed by Architect Charles Eames, Sculptor Isamu Noguchi, and Designer Paul Laszlo, are marketed

(Continued on page 16)



New York Times Studio

ALVAR AALTO used natural birch for this bent wood table, top choice piece of his collection.



JENS RISOM recently designed this sturdy natural birch chair for office, shop, or home use.



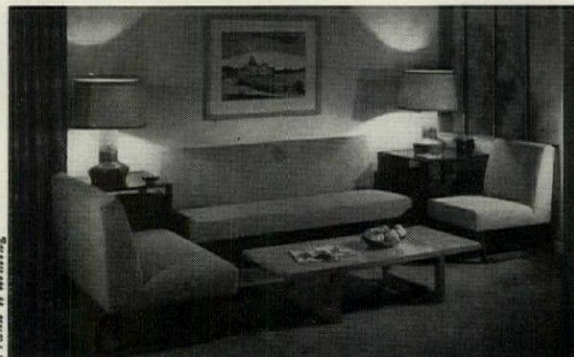
Laskey

T. H. ROBSJOHN-GIBBINGS chose white oak for this chair, with Koylon loose cushions, for Widdicomb Co.



Betty Lundquist

KNOLL ASSOCIATES offer this new storage cabinet with sturdy hinged door-shelves to be hung on a wall or set on a walnut base.

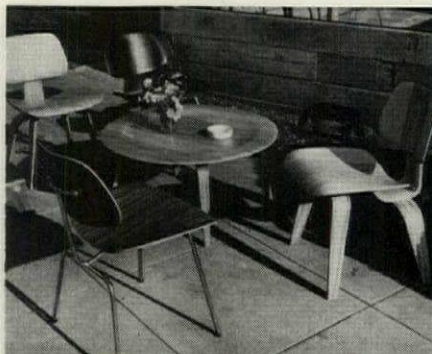


Frank Williams

EDWARD J. WORMLEY grouped these pieces from his collection for Dunbar Furniture Manufacturing Co. Chair and sofa runners are made of 21 laminations of mahogany; cushions are of Koylon rubber over springs.



GEORGE NELSON designed a complete collection, more than 80 pieces, for Herman Miller Furniture Co.

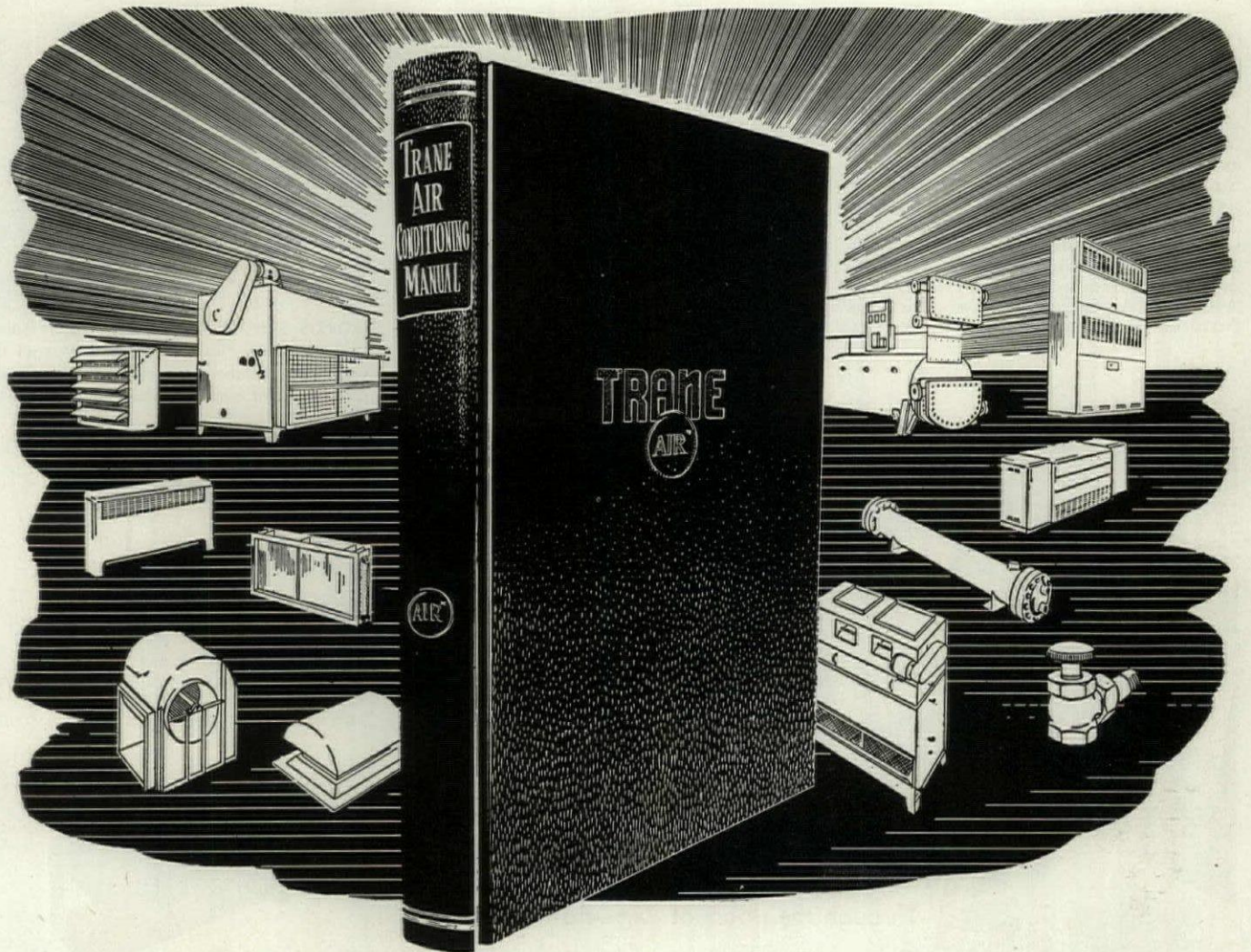


CHARLES EAMES commanded wide attention for his adroitly functional molded plywood chairs, offered in various woods and stains by the Herman Miller Co.



Barkerville

DAN COOPER creates fabrics and wallpapers, as well as furniture, readily adapted to sitting, eating, or sleeping areas. The free-form coffee table is a playful accent.



ENGINEERED AIR CONDITIONING

by the Men Who Wrote the Book

The "bible" of the air conditioning industry is a 376-page book, entirely devoid of commercialism. In it are clearly explained the terms, workings, and applications of all phases of air conditioning. So helpful and complete is this book—written by Trane Engineers at Trane expense—that it has worldwide use as a standard reference by architects, engineers, and contractors, and also as a text by students of air conditioning.

The same men whose experience made the Trane Air Conditioning Manual possible produce *Engineered Air Conditioning*. It is these men who engineer and build the most complete line of products for air conditioning and heating in the industry—products that are designed and built

together for use together, and that reflect the high standards of Trane product engineering.

Because Trane manufactures a *complete* line, architects, engineers and contractors can plan entire Trane systems, obtaining all the necessary elements from one source, with one responsibility. Trane Field Offices in 85 principal cities offer these men their entire cooperation.

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Progress Report

(Continued from page 14)

throughout the country by Herman Miller Furniture Company. Also increasing is the collection by Architect Morris Sanders for The Mengel Company (see September 1946 PROGRESSIVE ARCHITECTURE) which also will soon seek to popularize the modular units as an interior building product. The furniture is already placed in 84 stores. Architect Alvar Aalto now offers his furniture through Finsven, Inc., in New

York, and through Thomas Church in San Francisco.

T. H. Robsjohn-Gibbings has recently shown pieces upholstered in exotic fabrics, to supplement his collection for Widdicombe Furniture Company (see February 1947 PROGRESSIVE ARCHITECTURE), which are due to appear on the market early this year. Preferring to deal directly with architects are Jens Risom, whose chairs, tables, and storage pieces are shown in his own New York showroom, and William Armbruster, designer for Edgewood Furniture Company, whose slogan is "Designed by Architects for Architects." A popular



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designed for straight line, efficient production

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JAMESTOWN METAL CORPORATION

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MORRIS SANDERS gave architectural thought to his modular furniture for The Mengel Co., producing a coherent system of interchangeable pieces of matching sizes.



William Leftwich

welded-steel and glass coffee table by Armbruster is shown here. The company specializes in tables and seating for public areas. The accompanying coffee



table, part of a coordinated group designed by Norman Fox MacGregor, Jr., for Valley Upholstery Corporation, also has a plate glass top. The ends are solid mahogany and the table base is veneered.



Roy Stevens



A determined effort by L. Anton Maix to market low-cost furniture of good design has been initiated with this laminated maple (or mahogany) chair and stool, to retail for \$12.50 and \$7.50 respectively. And more to come, from the design board of Ewald Holtcamp! Others are tackling the price enigma with energy and frankness, so consumer acceptance may be steadily increased rather than nipped at the outset by dollar barriers.

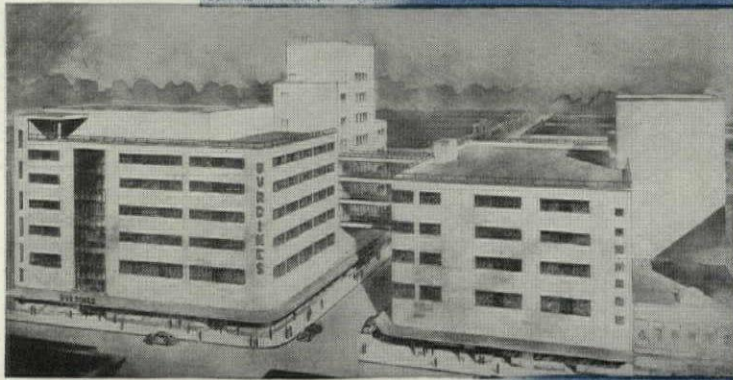
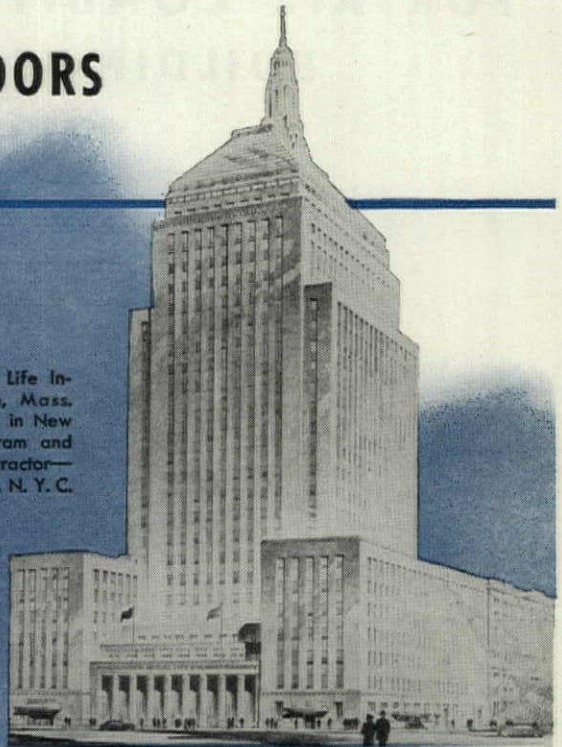
THE FINEST BUILDINGS OF THE POSTWAR

HAVE Q-FLOORS

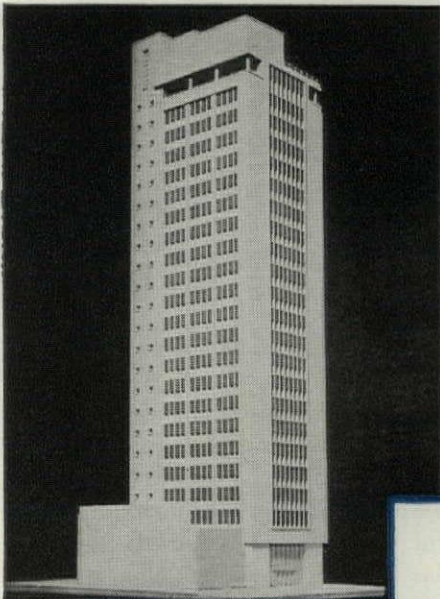


Mercantile National Bank, Dallas, Texas. Tallest office building in the South. Architect—Walter Ahlschlager, Dallas. Contractor—Henger Construction, Dallas.

John Hancock Mutual Life Insurance Co., Boston, Mass. Largest office building in New England. Architect—Cram and Ferguson, Boston. Contractor—Turner Construction Co., N. Y. C.



Burdine's Store, Miami, Florida. Largest department store in Dixie. Architects—E. L. Robertson, Miami; J. R. Weber, N. Y. C. Contractor—Rodney Miller, Miami.



Waterman Steamship Building, Mobile, Ala. Most striking office building of the postwar. Architect—J. Platt Roberts, Mobile. Contractor—J. P. Ewin and Co., Mobile, Ala.

Federal Telecommunications Laboratories, Nutley, N. J. Largest all-metal commercial group in the world. Architects—Louis S. Weeks, N. Y. C. (groups 1 & 2); Giffels & Vallet, L. Rossetti, Detroit (groups 3 & 4).



If you want to know why these architects specified Robertson Q-Floors, please write for literature.

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World-Wide Building Service

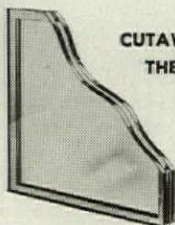


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FOR AIR CONDITIONED BUILDINGS



420 *Thermopane* units of Aklo heat absorbing glass were used in glazing this plant. The manager reports: "These units were installed in our steel sash wherever it was necessary to maintain a uniform year-round temperature to permit satisfactory baking conditions and processing. It has resulted in a saving in reduced operation cost of our air conditioning system and elimination of condensation on the room side." Architects: M. C. Haley and C. W. Watkins.



CUTAWAY VIEW OF THE THERMOPANE UNIT

● When manufacturing processes or employee operating efficiency depend on air conditioning, there's no need to restrict the use of larger window areas.

Thermopane, consisting of two panes of one-eighth inch glass separated by one-half inch air space, has a coefficient of heat transfer of .58 as compared with 1.16 for a single one-eighth inch pane. Thus, you can double glass area without increasing heat loss... without throwing excessive load on air conditioning equipment. Likewise, *Thermopane* permits greater use

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*®

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MAKES *Thermopane*

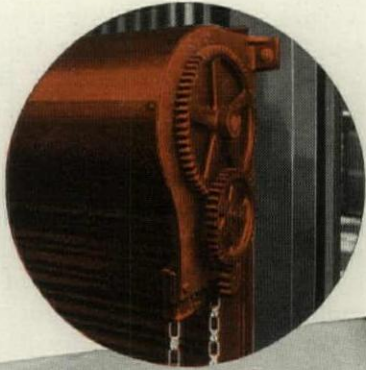


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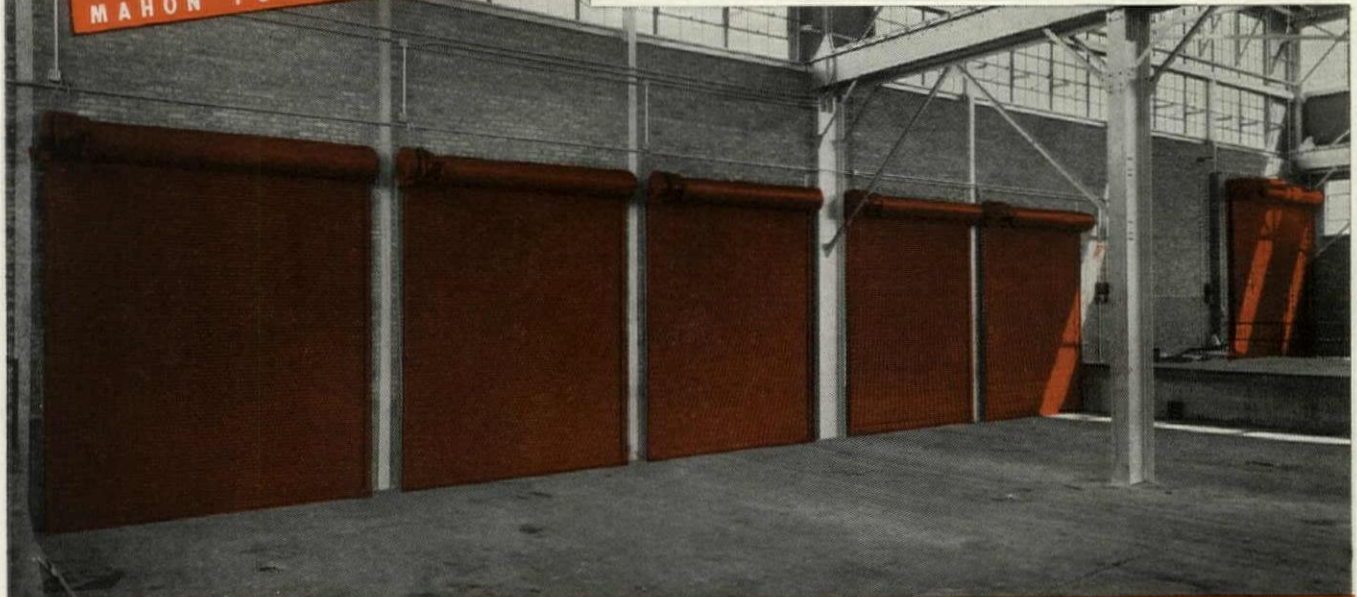
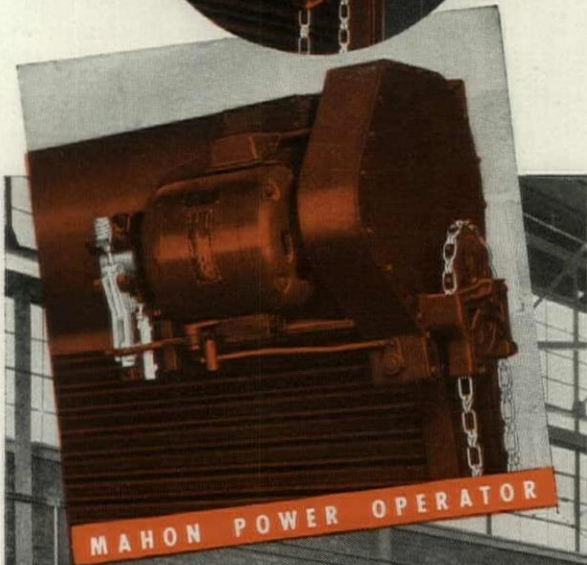
Vertically operating Rolling Steel Doors are by far the most practical doors for large openings in industrial or commercial buildings . . . they conserve space, require less maintenance, and provide more positive protection throughout a lifetime of trouble-free service. A study of Mahon Rolling Steel Doors will reveal many exclusive developments which are very desirable from a standpoint of daily operation. See Mahon's Insert in Sweet's File for complete information and specifications, or call in a Mahon representative.

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MAHON

Insulux makes daylight go to work for you!



Ground to roof facade of Allen B. Wrisley Company, Chicago, has continuous panels of Insulux Prismatic Glass Block. Three face patterns and approximately 4500 glass blocks provide the ultimate in daylighting this modern and progressive plant. Architects: Fugard, Burt and Wilkinson, Chicago Ill.



Insulux Prismatic Glass Block turns light to ceiling for re-direction into this second-floor display room. Drapes over windows can be entirely drawn without loss of daylight in room. Same type panels give fine working light in factory areas.

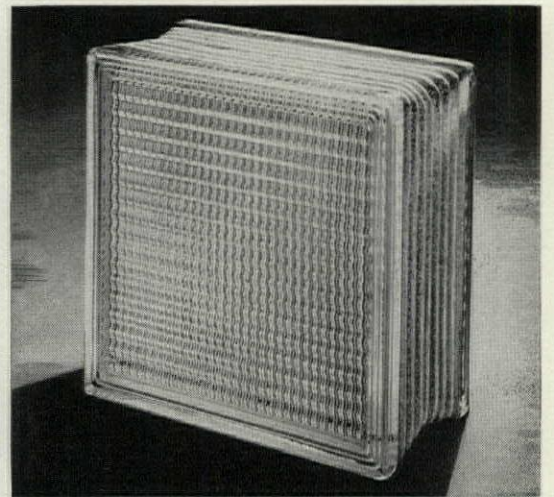
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For complete technical data, specifications and installation details, see the "Glass" section of Sweet's Architectural Catalog, or write Dept. E-20, Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.



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GLASS BLOCK

Insulux is made in three sizes—many attractive and functional patterns. Investigate this modern material that has solved many complex daylighting problems.



Advanced "garden-type" design is an exterior feature of the new Hancock village apartments. Buildings are basementless, with heating boilers located in attic spaces. Owner: John Hancock Mutual Life Insurance Co., Boston Designer, Engineer and Contractor: Ring Engineering Co., Washington, D. C. Heating Engineer: W. K. Korsunki & Co., Washington, D. C.

789 RADIANT HEATED APARTMENTS..

in the New **Hancock Village** will have

HONEYWELL *Personalized* HEATING CONTROL

DESIGNERS of Hancock Village—being built in Brookline, West Roxbury, Massachusetts—have provided the newest conveniences for future tenants of the mammoth 789-unit project. One of the most modern comfort features is Honeywell Personalized Heating Control.

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And you can offer this same efficient heating control to owners and managers of existing rental properties. Explain to them how buildings already P.H.C.-equipped have reduced fuel consumption at an average rate of 20%. Meanwhile, just mail the coupon for complete information about Personalized Heating Control—the improvement that is fast becoming a "must" for every modern apartment building.

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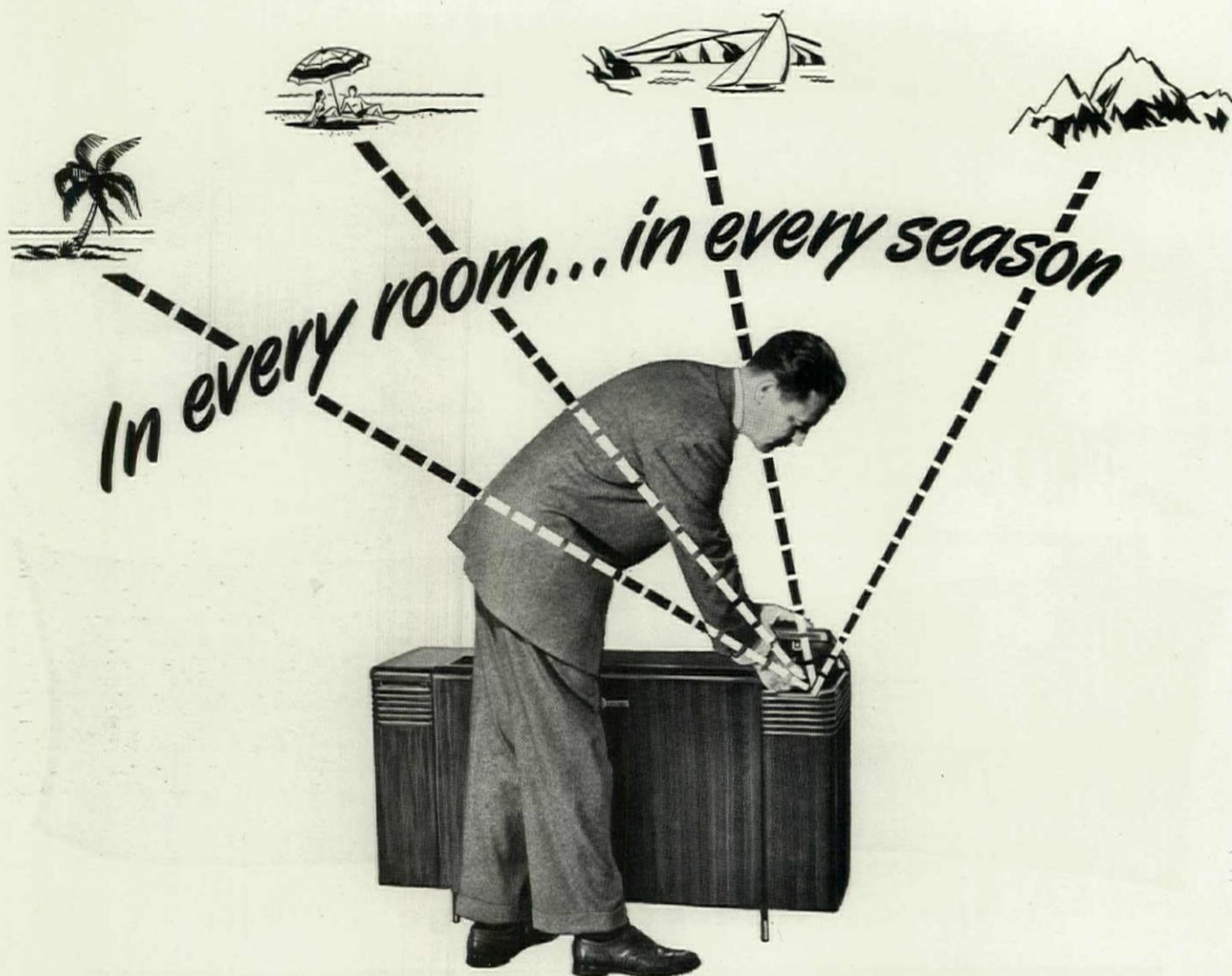
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THERE'S NO DISPUTING about comfort...when you put G-E Personal Weather Control in every room. A flick of a switch or thermostat gives the desired temperature.

This versatile equipment is designed—not for one arbitrary system—but for *many* systems, to meet the wide variety of conditions encountered in the air conditioning of multi-room buildings.

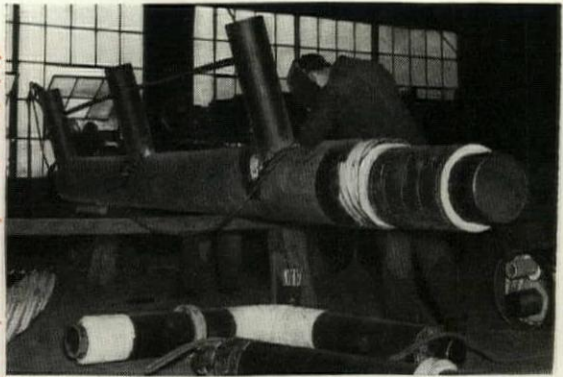
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There's a General Electric system for *every* type of multi-room or single space installation. Your local G-E air conditioning specialist will be glad to work with you in planning the proper system for any job. *General Electric Company, Air Conditioning Department, Section 85001, Bloomfield, New Jersey.*

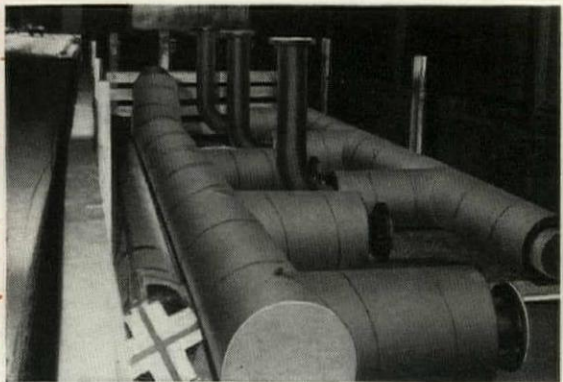
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Units are completely fabricated and insulated at the Ric-wil plant . . .

and are shipped ready to install with single-handling upon arrival.



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FOR OUTDOOR USE
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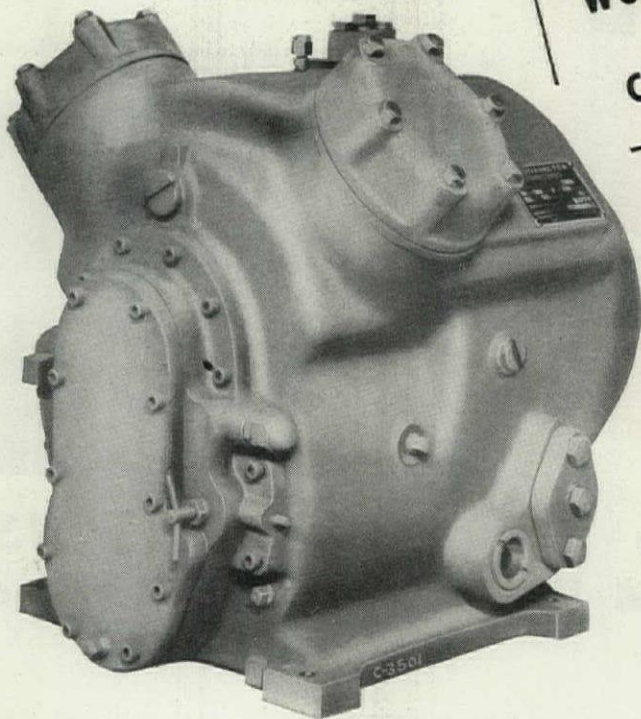
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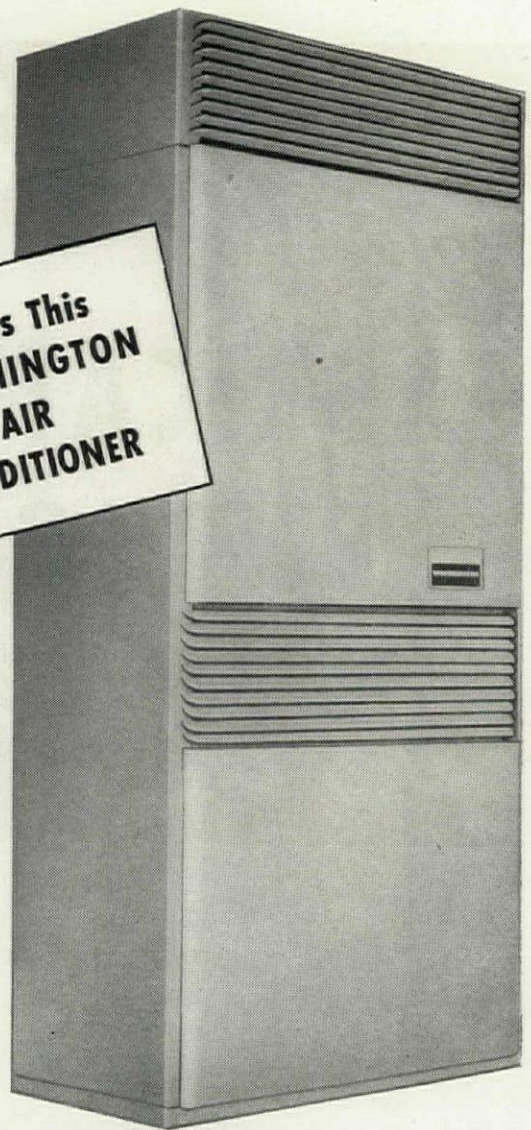
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PHOTO BY FAIRCHILD AERIAL SURVEYS



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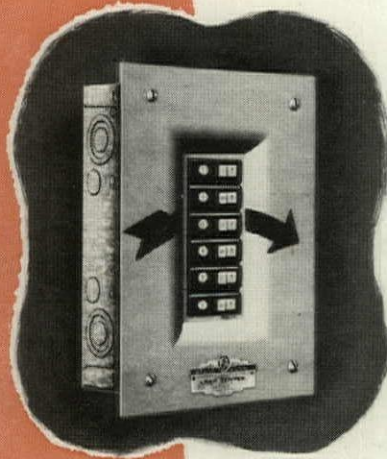
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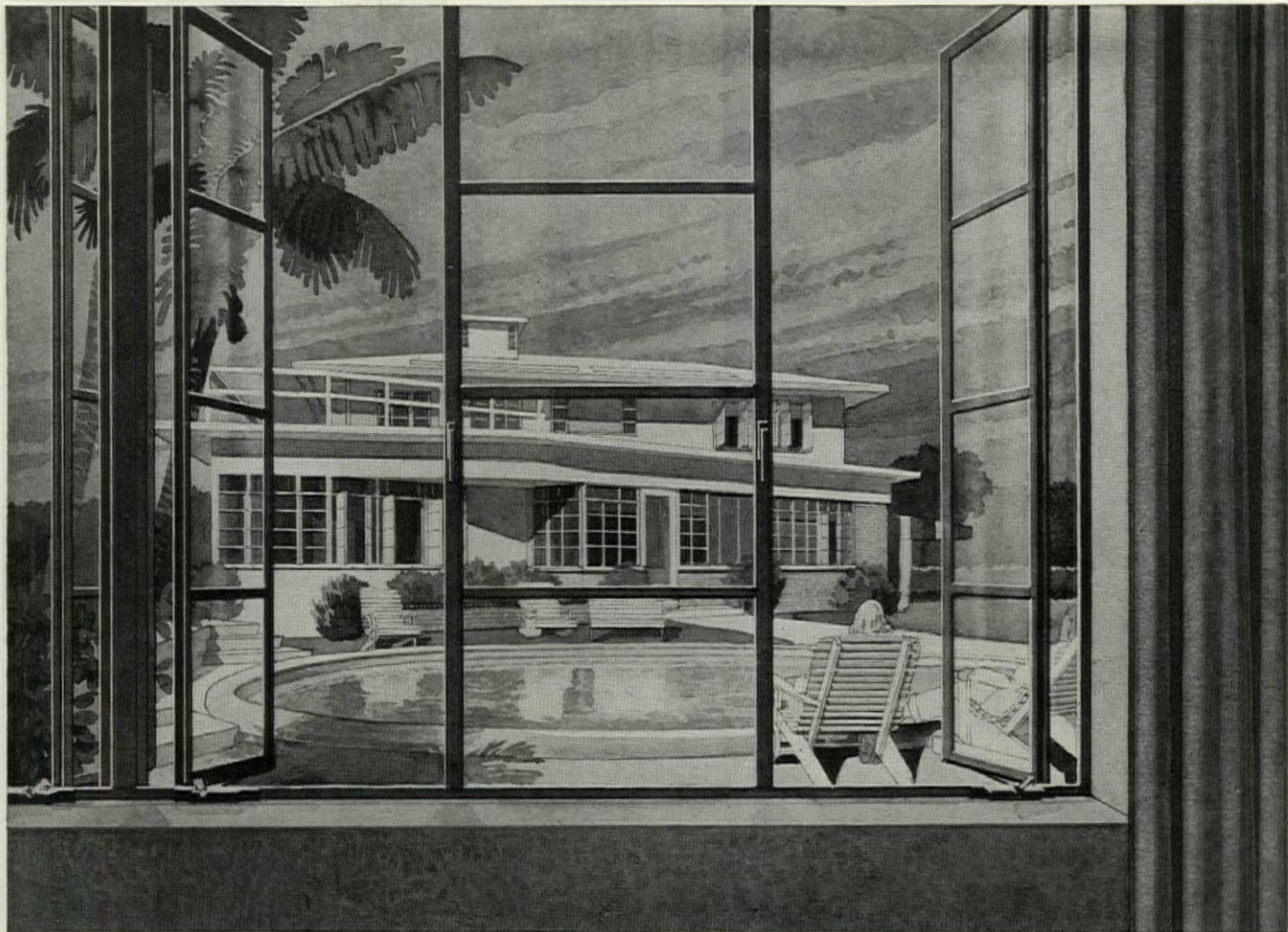
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FOR SKILLED HANDS

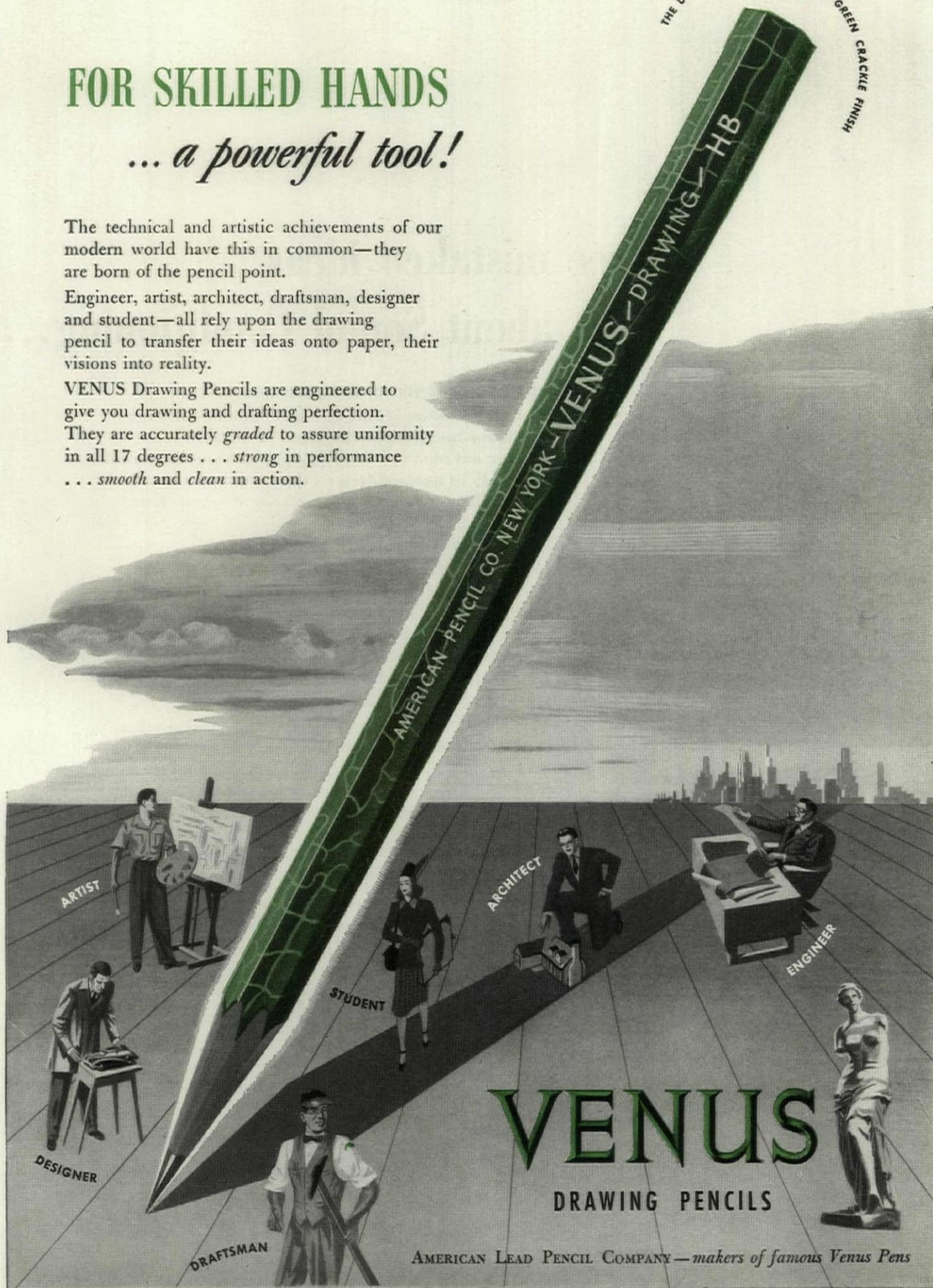
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three mistaken ideas about Sound Conditioning...

mistake #1 THAT SOUND CONDITIONING IS EXPENSIVE...

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mistake #2 THAT SOUND CONDITIONING IS A LUXURY...

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mistake #3 THAT THE USE OF SOUND CONDITIONING IS LIMITED TO SPECIFIC AREAS...

The fact is: More and more architects are specifying overall use of Acousti-Celotex sound conditioning for truly modern buildings offices, hospitals, schools, banks, and other structures. Incidentally, more sound conditioning has been done with Acousti-Celotex products than with any other material.

YOU ARE INVITED to submit your acoustical problems to a trained sound technician—your nearest distributor of Acousti-Celotex products. He brings you a judgment enriched by the accumulated experience of a quarter century in sound conditioning... and the proved performance of Acousti-Celotex in more than 200,000 installations. Look for him in your classified phone directory, or drop us a line saying when you would like to see him. In the meantime, you'll find Acousti-Celotex products listed in Sweet's File, Section 11-A3.

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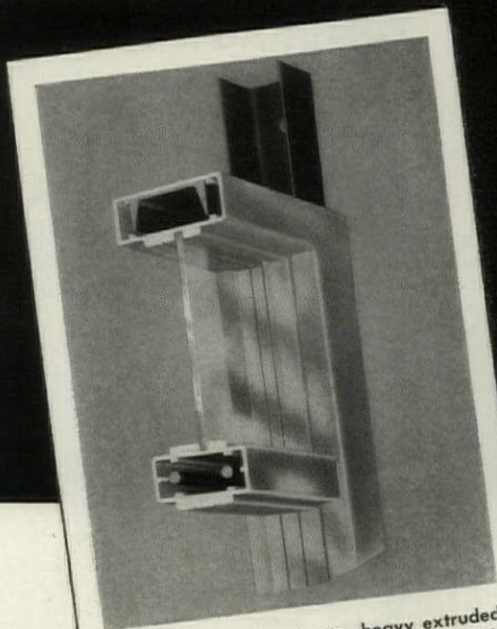
Sound Conditioning

PRODUCTS FOR EVERY SOUND CONDITIONING PROBLEM

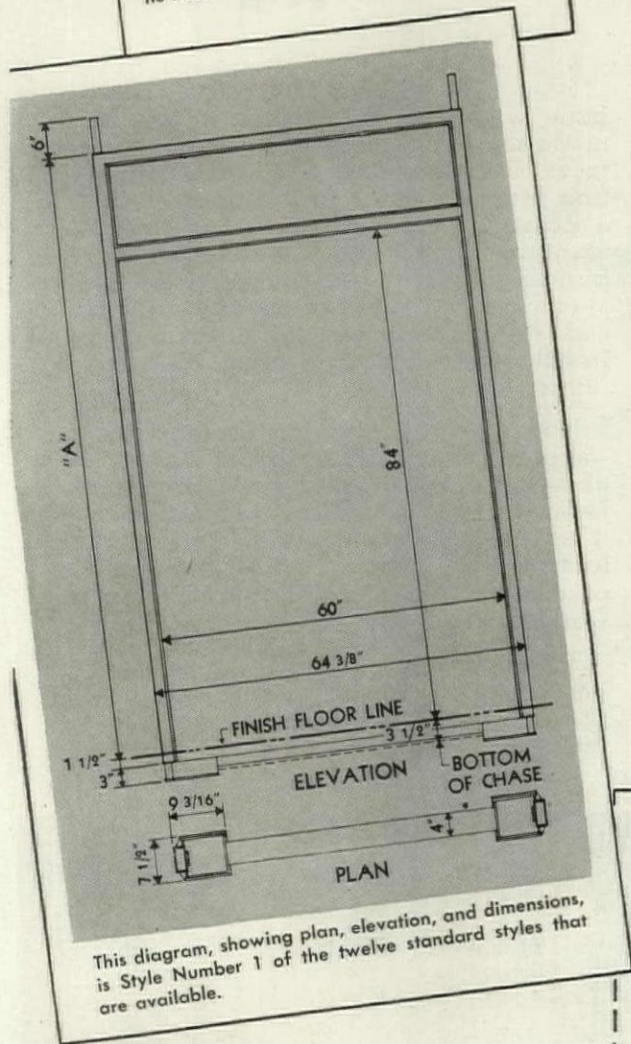
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AVAILABLE IN 12 STANDARD STYLES
TO FILL ALMOST ANY REQUIREMENT



The frame is made of extra-heavy extruded aluminum, highly polished and anodized. It is heavily reinforced with steel channels and tie rods, as partially shown here.



CONSTRUCTED to accommodate standard Herculite Tempered Plate Glass doors, "Pittsburgh's" new Herculite Door-Frame Assembly is supplied complete with checking floor hinges and top pivots, ready to bolt into the rough building opening. All clearances on the frame and doors are controlled by accurate factory gauges. These features combine to make possible the greatest simplicity of installation. When the building is ready to receive the doors, they are simply set on the hinge pivot, the top pivot is dropped into the top channel, and the entire structure is complete.

This new and unique Door-Frame Assembly is a handsome, rugged and easily installed unit — in a "packaged" construction. It eliminates all problems of setting and fitting; does away with time- and labor-consuming details about clearances and other bothersome matters usually encountered in such installation. It replaces the complicated custom-made frames which required scores of different materials and the services of many trades to install. And there are twelve standard styles available to meet almost any need.

To obtain further information about this revolutionary, prefabricated Herculite Door-Frame Assembly, fill in and return the coupon below. Do it now.

Pittsburgh Plate Glass Company
2033-8 Grant Building, Pittsburgh 19, Pa.

Without obligation on my part, please send me your descriptive literature on "Pittsburgh's" new Herculite Door-Frame Assembly.

Name.....

Address.....

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



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PITTSBURGH PLATE GLASS COMPANY

INSTALL STEEL PIPING ADEQUATE FOR TOMORROW'S NEEDS

It took a bond issue
to replace piping.....

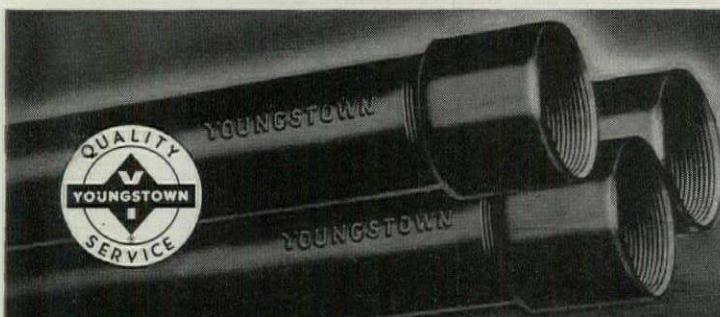
so school children
could drink



IN a certain Ohio city, a bond issue was submitted to the voters for modernizing a school building. The most publicized item of the modernization program was a provision to install a complete new system of drinking fountains. In planning and erecting the building several years ago, those responsible had failed to specify and install steel pipe large enough to insure a free flow of water to the fountains on all floors.

How much cheaper for the taxpayers --and how much healthier for the children--if adequately sized pipe had been installed in the first place! Then, it would have cost only a few cents a foot more; now, it's costing thousands of dollars more to get fountains that work satisfactorily.

Youngstown pipe distributors are prepared to recommend and furnish steel pipe of proper sizes for any job, adequate for tomorrow's needs.



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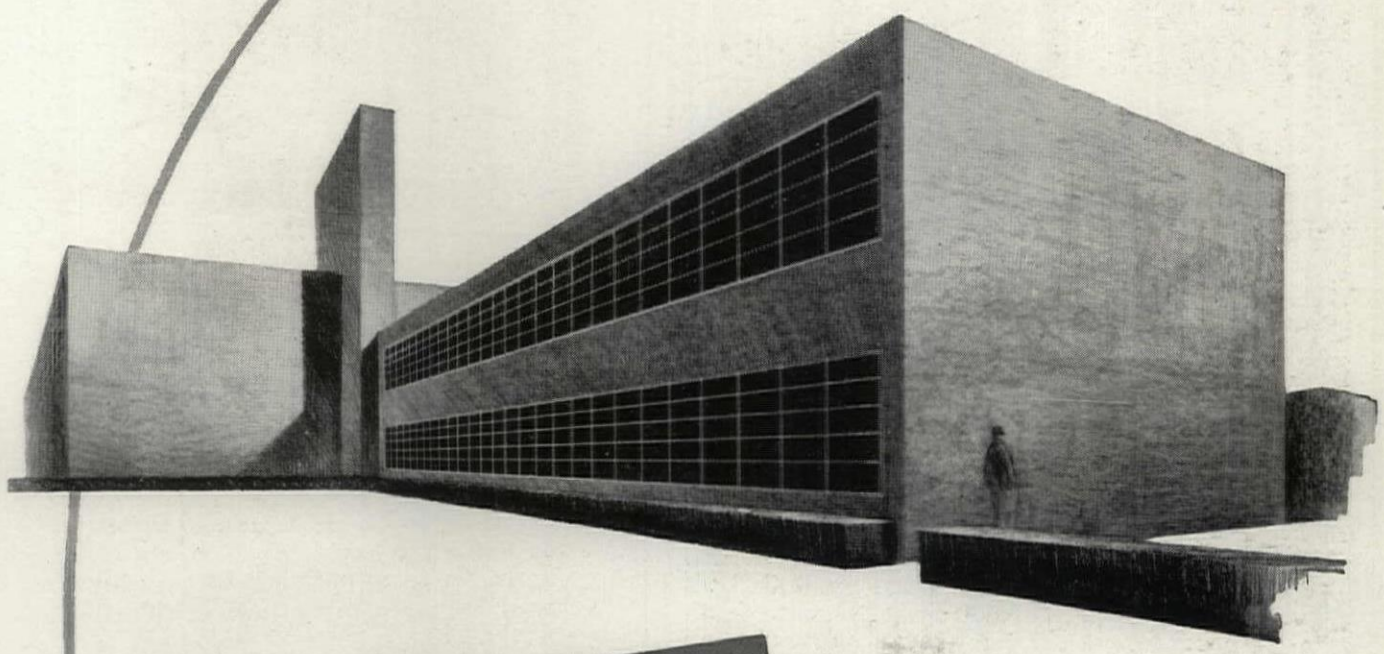
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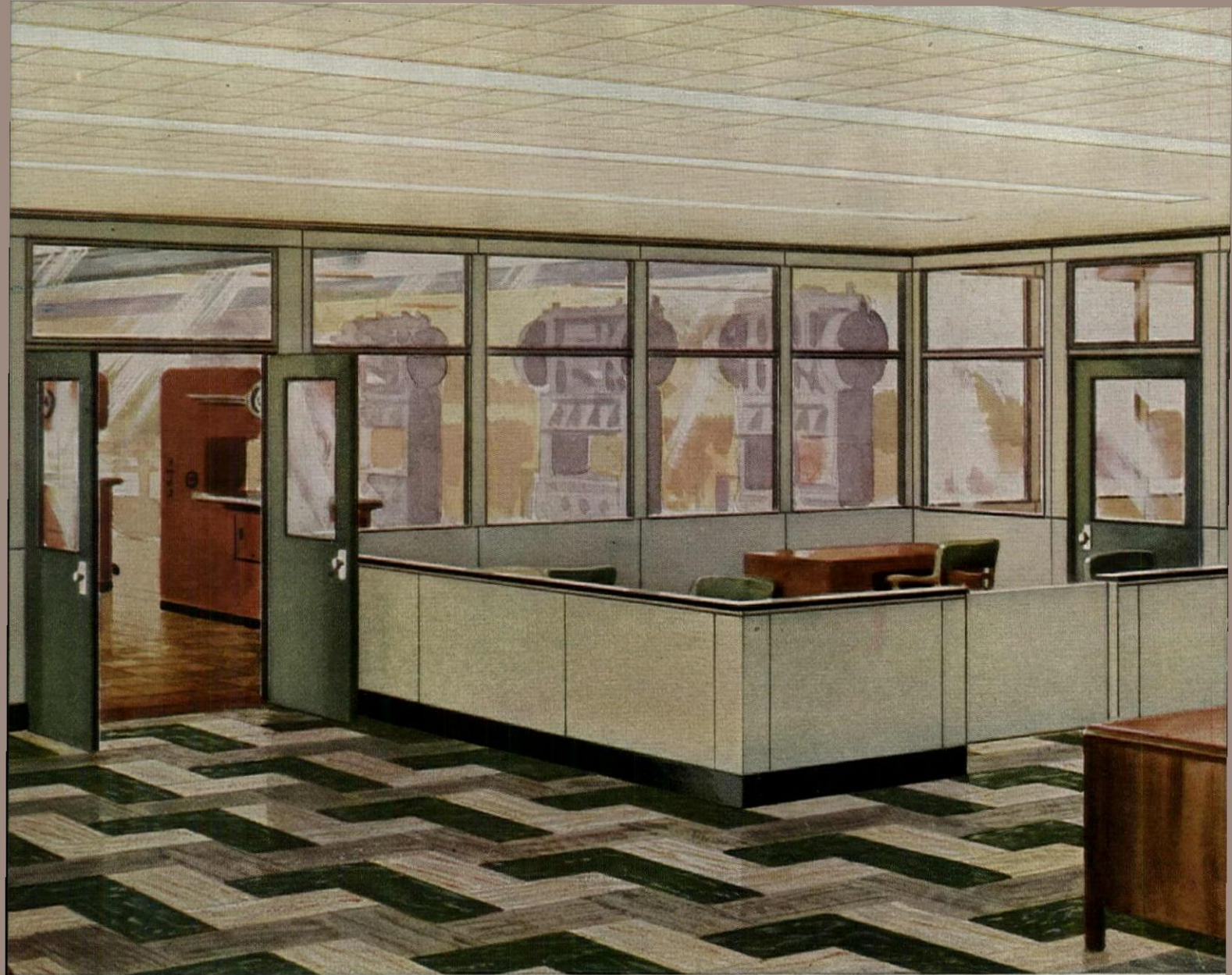
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“Fulfilling all demands for adequate daylighting and ventilation, steel windows additionally offer a satisfyingly simple decorative treatment for modern industrial plants.”

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**Use all 3 products—Walls, Ceilings, Floors—
for Johns-Manville Unit Construction . . .**

With this new method of interior construction, you can meet the problem of ever-changing space needs.

You can provide for endless revisions of space-use—at low cost. You can keep expanding, converting, or subdividing rooms as often as conditions require . . . with little or no interruption to routine activities!

Moreover, the J-M Unit Construction system now makes

the *complete interior* available under *one* specification, *one* manufacturer's responsibility.

Three Johns-Manville materials, described at right, are the basis of this revolutionary development. The asbestos Transite Walls are *movable*, 100% salvageable. The Acoustical Ceiling Units are *demountable* . . . can readily be taken down and re-located as desired. And the Asphalt Tile Floors consist of small units which permit easy extension of the floor to meet changing conditions.

Write for colorful brochure, giving full details on the remarkable *flexibility* of J-M Unit Construction.

Production of Johns-Manville Building Materials has now been greatly increased to meet unprecedented demands. So the chances are better than ever that you can get the materials you want when you want them. Write Johns-Manville, Box 290, New York 16, N. Y.



Johns-Manville
Walls - Ceilings - Floors

... for Reception Lobbies and Stores





... for Institutions and Hospitals



... for Schools



... for Factory Areas

Flexible Interiors that look to the future!

1. TRANSITE WALLS—*Movable!*

Rooms when and where you want them . . . that's the magic of Johns-Manville Transite Walls—the attractive and sturdy asbestos walls that are *movable*. Now you'll never again need to send partition walls to the dump every time space changes are required!

With the least inconvenience—almost *overnight*—you can enlarge, decrease, or rearrange areas as often

as your needs require. Transite movable panels are easy to handle, readily assembled, interchangeable, and can be used over and over again. Made of asbestos and cement, Transite Walls have all the qualities of solid and permanent construction. They provide rigid, double-faced partitions, and can also be used as the interior finish of outside walls.

To make sure your interiors will provide for *change*, write for booklet, "J-M Transite Movable Walls."

2. ACOUSTICAL CEILINGS—*Quieter!*

There's a Johns-Manville acoustical material to give you the best in sound control, no matter what the type of interior.

To assure you the maximum in noise-quieting, Johns-Manville not only provides the correct acoustical materials for each specific condition, but follows through by *installing* the materials *properly* with its own con-

struction crews. In other words, you get "J-M materials installed by Johns-Manville" for best results.

That's the all-inclusive service . . . the *undivided responsibility* Johns-Manville gives your projects.

For further details, send for brochure, "J-M Sound Control." Describes such J-M acoustical products as demountable Sanacoustic, Fibracoustic and Fibre-tone, Transite Acoustical Panels, and special materials for Broadcasting Studios.

3. ASPHALT TILE FLOORS—*Colorful!*

You spend no more to have *quality* floors like these—attractive and resilient . . . extra-long wearing . . . reinforced with indestructible asbestos!

That's the kind of flooring you get with Johns-Manville Asphalt Tile. It's easy on the eyes, easy on the feet, and easy on the budget, too.

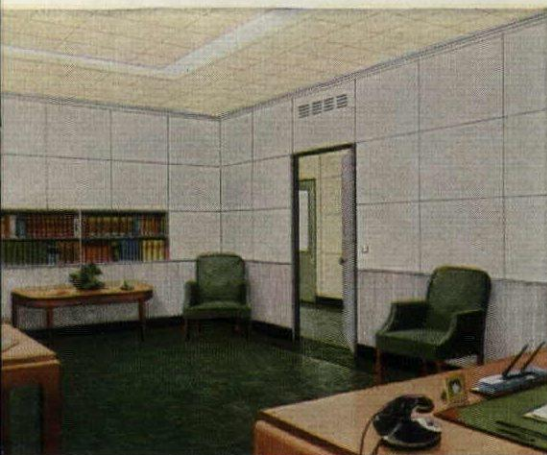
Yes, you'll like *everything* about this modern floor-

ing, including the unlimited range of color combinations—from striking patterns with strong contrasts to solid fields of marbled colors.

J-M Asphalt Tile does not originate dust . . . stays fresh and unmarred with practically no maintenance. Individual units permit easy repairs.

For areas exposed to oil or grease, use J-M *Grease-proof* Asphalt Tile. Send for full-color brochure, "Ideas for Decorative Floors."

... for Offices



... for University Lecture Rooms



... for Laboratories



A Great New Escalator

AT A NEW LOW PRICE!

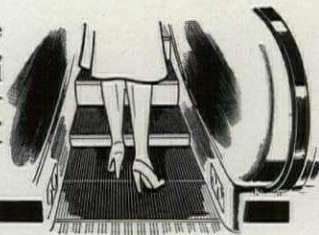


WIDE ENOUGH for adult and child—or traveler and luggage. The new Otis “32” carries 5000 people an hour comfortably. It is designed for any vertical rise up to 23 feet.

It's big in capacity
It's Otis throughout

HERE NOW — the new Otis “32”, designed especially for the medium-sized and smaller building. The result of many years' research, this modern Escalator has all the time-tested features of earlier models, plus a wealth of post-war design features . . . it is truly the last word in Escalator design.

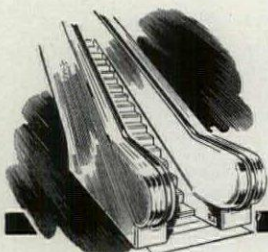
SAFETY FEATURES include narrow-gage metal treads, semi-circular extended newels, continuous pinch-proof rubber hand rails . . . the world's safest transportation.



Capable of carrying 5000 people an hour, the Otis “32” handles more persons per dollar investment than any other moving stairway. Wide enough to comfortably carry an adult and child on one step, it is the ideal size for most stores, stations, plants, banks and other public buildings. Yet for all its spaciousness, the “32” requires less space and structural work than narrower moving stairways.

Best of all there has been no compromise with quality. In eye-appeal, in safety, in the inherent ruggedness that makes for long life and low upkeep, the new “32” is the equal of any Escalator we ever built. And remember, only Otis makes Escalators.

A LIFETIME OF BEAUTY. The modern Escalator's graceful lines and gleaming aluminum balustrade combine to give buildings the New Look in level-to-level travel.



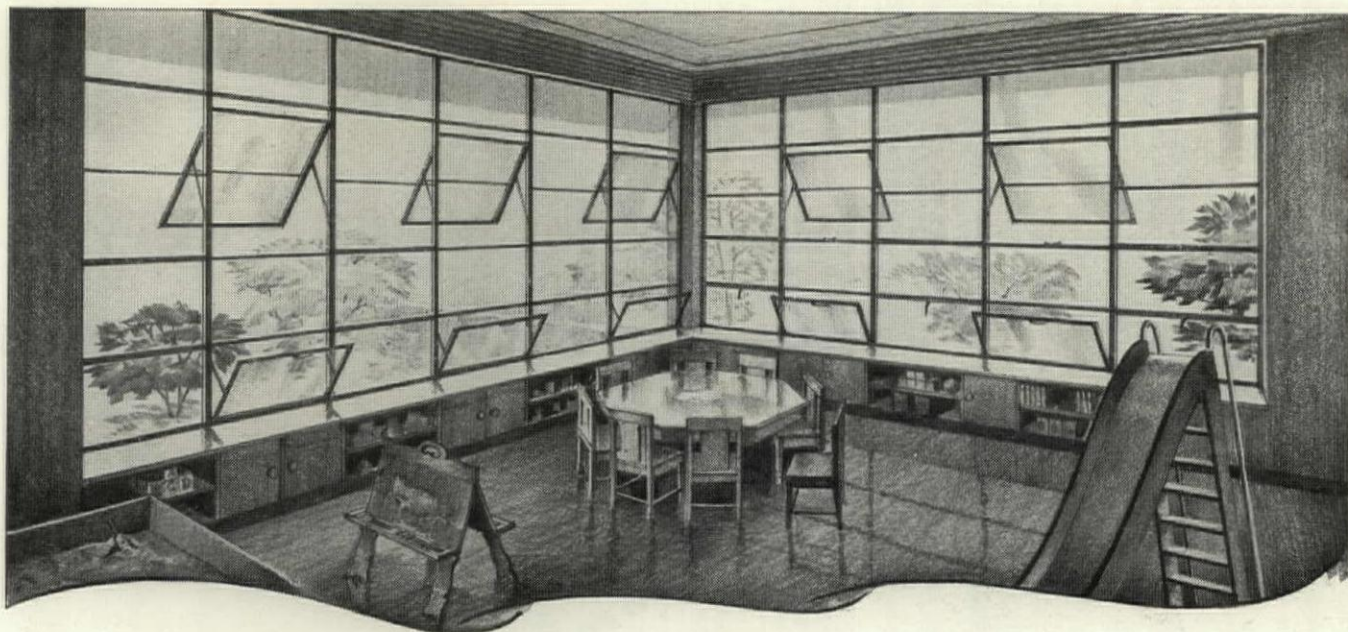
NEW FREE BULLETIN B-700P tells the whole story. Write for your copy to Otis Elevator Company, 260 Eleventh Avenue, New York 1, N. Y.

“Escalator” is a U. S. Patent Office registered trademark of the Otis Elevator Company. Only Otis makes Escalators.



ELEVATOR COMPANY

Offices in All Principal Cities

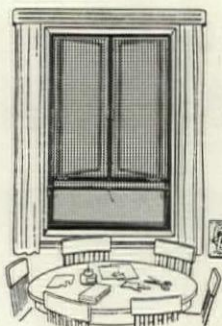


More Daylight— WITH BETTER VENTILATION AS A BONUS!

When you plan larger daylighting areas, why not take advantage of the opportunity the larger wall opening affords for better ventilation?

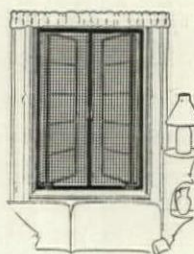
With Fenecraft Projected Windows, large steel-strengthened areas of glass flood the room with daylight. All-weather ventilation is provided by two vents in each window unit. One opens out to form a canopy over the opening—to shed rain and snow. A sill vent opens in—deflecting incoming air upwards to prevent direct drafts. This vent likewise sheds rain and snow to the outside.

They're economical windows, too. Lower cost—in both manufacturing and installation—has been accomplished by standardization. Fenecraft Window units conform with modular dimensions of modern construction practice. Yet the variety that is achieved in making these windows of standard sections enables you to have all the design flexibility you wish, without the cost of "specials". There's a great range of types and sizes—in Projected, Combination and Casement Windows. That means a *right* window for every use—designed right... made right. See your Sweet's Architectural File for full information. Or mail the coupon.



FENCRAFT COMBINATION WINDOW

Generous fresh-air ventilation. Swing leaves deflect breezes into the room. In-tilting sill vent protects against drafts. Both sides easily and safely washed from inside.



FENCRAFT CASEMENT WINDOW

Safe washing on outside, from inside. Easy to operate. Interchangeable inside screens, protected from outside dirt.

Fenestra

CASEMENT PROJECTED COMBINATION

FENCRAFT INTERMEDIATE STEEL WINDOWS

Detroit Steel Products Company,
Dept. PA-1,
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Detroit 11, Michigan

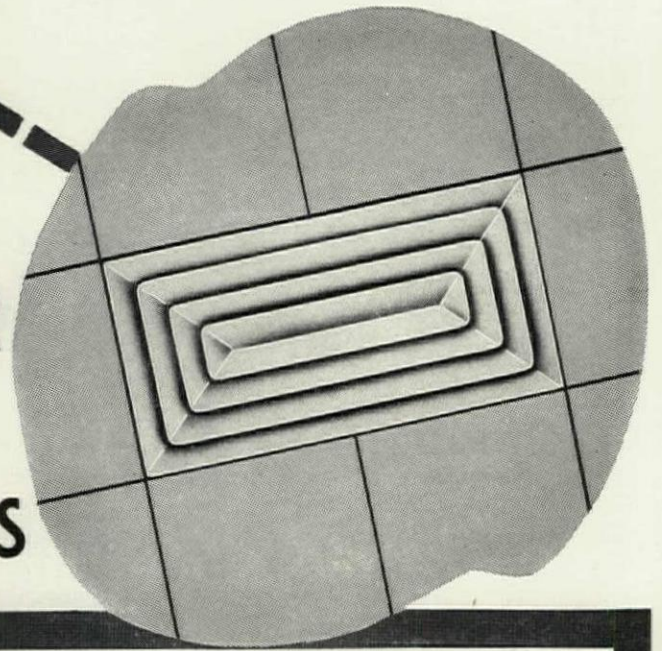
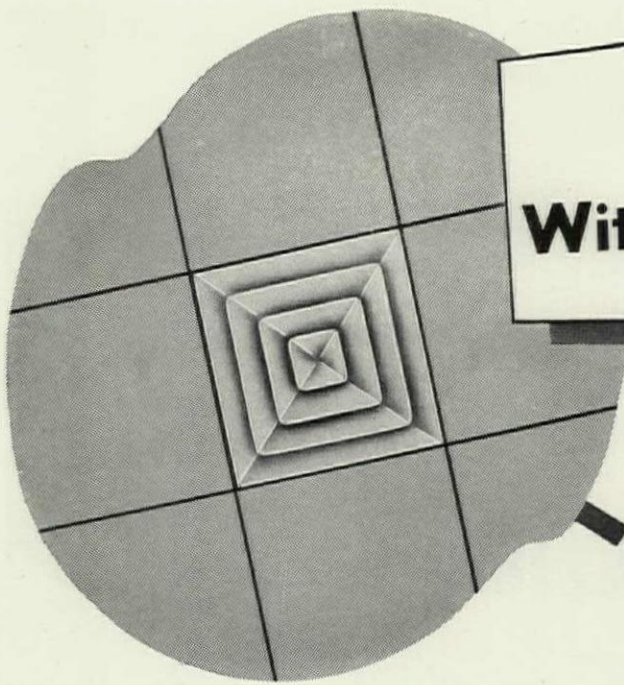
Please send me data on types and sizes of the new Fenecraft family of Fenestra Windows:

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Company _____

Address _____

How To Cut Costs Without Cutting Corners



AGITAIR TYPE R

*The Only Air Diffuser
Especially Designed for*

ACOUSTICAL CEILINGS

Acoustical Tile, Perforated Steel, or Glass Brick ceilings? Then specify the logical air diffuser—Agitair Type R. It's the only diffuser made in standard sizes to fit acoustical ceilings. Think of the all-around savings with this standardized unit that fits every acoustical ceiling.

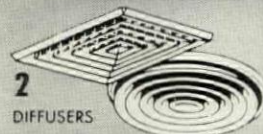
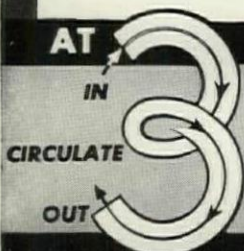
And Agitair Type R gives you 100% control of air distribution — with no drafts, no blank corners, no hot spots, no cold spots. Patented

construction permits Agitair Type R to be assembled into numerous patterns which divide the air and discharge it noiselessly in one, two, three or four directions in proportion to the area served.

On that next air diffuser specification — can you afford to overlook the beauty, efficiency, and all-around savings of Agitair Type R?

Write for Complete Data

AT KEY POINTS IN AIR CONDITIONING—AGITAIR SERVES BEST



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HOT GAS
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FURNACES



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See Our Display at Booth 412-414, International Heating & Ventilating Exposition, New York, Feb. 2 to 6

Solution to an Elevator Problem!

THE PROBLEM
To provide economical elevator service for a three-story manufacturing plant of functional design. All movement of raw and finished materials in plant to be handled by fork lift trucks which are to be carried on elevator in process of loading and unloading. Architect's visualization calls for building without elevator penthouse to break streamlined contour.

THE SOLUTION

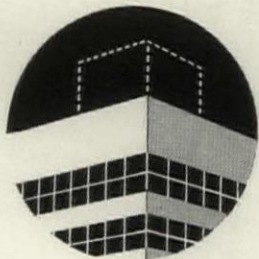
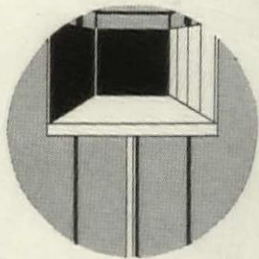
The architect analyzed his problem as follows: (1) Since no elevator penthouse was desired, a push-up type elevator should be used. (2) Loading by power vehicles called for unusually accurate landing stops and for an elevator of very strong construction. (3) Initial cost of elevator, including construction provisions, must be held to a minimum . . . elevator operation and maintenance expense must be low. **Result: A Rotary Oilraulic Elevator was selected because it met all these requirements.**

Elimination of Penthouse Streamlines Building Design

The Oilraulic Elevator requires no costly, unsightly penthouse because it's **pushed up** from below by a powerful hydraulic jack . . . not pulled from above. This also makes possible a lighter shaftway structure . . . no need for heavy load-bearing supporting columns to carry the elevator and its load. No special machine room necessary either . . . the compact power unit can be located in any convenient space on any floor.

Oilraulic Controller Insures Accurate Landing Stops

Where loading and unloading is done by power vehicles, the Rotary Oilraulic Elevator is first choice. Guided by a highly efficient mechanism called the Oilraulic Controller, it operates smoothly and rapidly, stops at floor landings with accuracy, and holds the landings. Also important for this type of service is the rugged construction of the elevator car, with its heavily reinforced sling and platform.



Streamline your building designs and make sizeable savings in construction costs by specifying Rotary Oilraulic Elevators for 2, 3 or 4-story structures. Coupon at the right will bring you complete information and Architect's Preliminary Layout Data.

For data to help solve
your elevator problems

ROTARY LIFT CO.
1109 Kentucky
Memphis 2, Tenn.

Send data on Rotary Oilraulic
Elevators to:

Name.....

Address.....

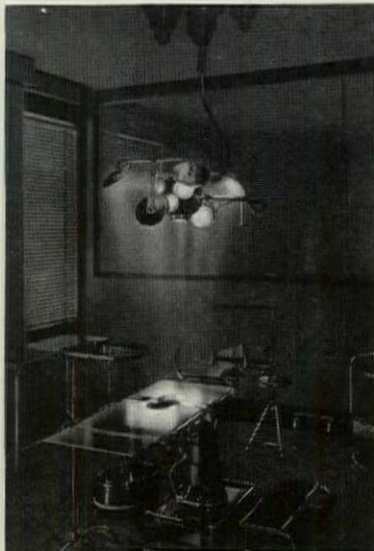
City and State.....

Rotary
OILDRAULIC
ELEVATORS

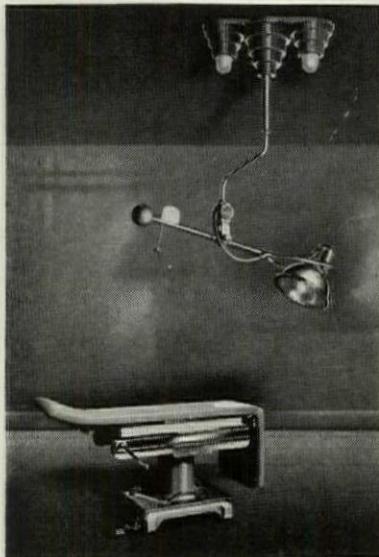
The Elevator that's PUSHED up

MEMO

Write "Ohio Chemical"
for info Explosion-
Proof Scanlan-Morris
surgical lights

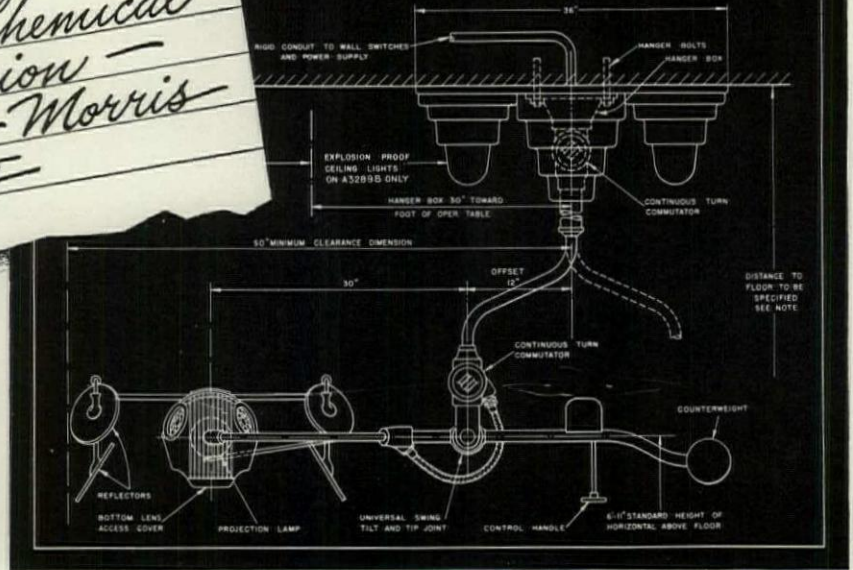


Explosion-Proof Operay Multibeam Light



Explosion-Proof Operay Surg-O-Ray Light

EXPLOSION-PROOF OPERAY MULTIBEAM
WITH TWO EXPLOSION-PROOF CEILING LIGHTS
A3289A WITHOUT CEILING LIGHTS



Ceiling
HOSPITAL FLOOR PLANS
should include provision for
Explosion-Proof Surgical Lights

• For more than 40 years architects and hospitals have received valuable assistance and authentic guidance in planning for many major items of hospital equipment manufactured by Scanlan-Morris. They have found this service especially helpful in planning for surgical lighting.

Efficient surgical lighting plus adequate protection against fire and explosion hazards in the anesthetic area is the dual accomplishment of Scanlan-Morris Operay explosion-proof surgical lights. These fixtures are approved by Underwriters' Laboratories for use in Class 1 Group C Hazardous Locations—a classification that includes operating and delivery rooms employing explosive anesthetic gases.

Scanlan-Morris Operay lights are

widely used in prominent hospitals. The lights are made in two general types, as illustrated: Operay Multibeams and Operay Surg-O-Ray. The ceiling fixtures are furnished either with or without auxiliary ceiling lights for general illumination.

The Scanlan-Morris Technical Sales Service Department will be glad to supply complete information, including installation drawings, and will also welcome opportunities to cooperate with architects in correct planning for surgical lighting based on building plans. Such service is freely offered, without obligation, not only on surgical lighting but also on sterilizing equipment, recessed cabinets and other major items of hospital equipment manufactured by Ohio Chemical. Mail the coupon for detailed information.

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THE OHIO CHEMICAL & MFG. CO.,
1400 E. Washington Ave., Madison 3, Wis.

Send information on Scanlan-Morris Explosion-Proof Surgical Lights. (Please attach professional card or letterhead)

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Address

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THE INDUSTRIAL BOOK treats comprehensively of the use of PC Glass Blocks in a wide variety of industrial plants to distribute light, to insulate, to exclude harmful dust and grit, to reduce maintenance and fuel costs.

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In each informative book you will find complete engineering data, charts, specifications and complete information on the application of modular coordination to the basic principles of Glass Block installations. Each book contains many photographs of actual PC Glass Block jobs. And there are also photographs of the various patterns of PC Glass Blocks and descriptions of their various functions.

Whether you are planning modernizing or new construction projects, you need this latest information on PC Glass Blocks. Why not send the coupon today and get these helpful books? Remember, they're free. Pittsburgh Corning Corporation also makes PC Foamglas Insulation.

PC GLASS BLOCKS

... the mark of a modern building

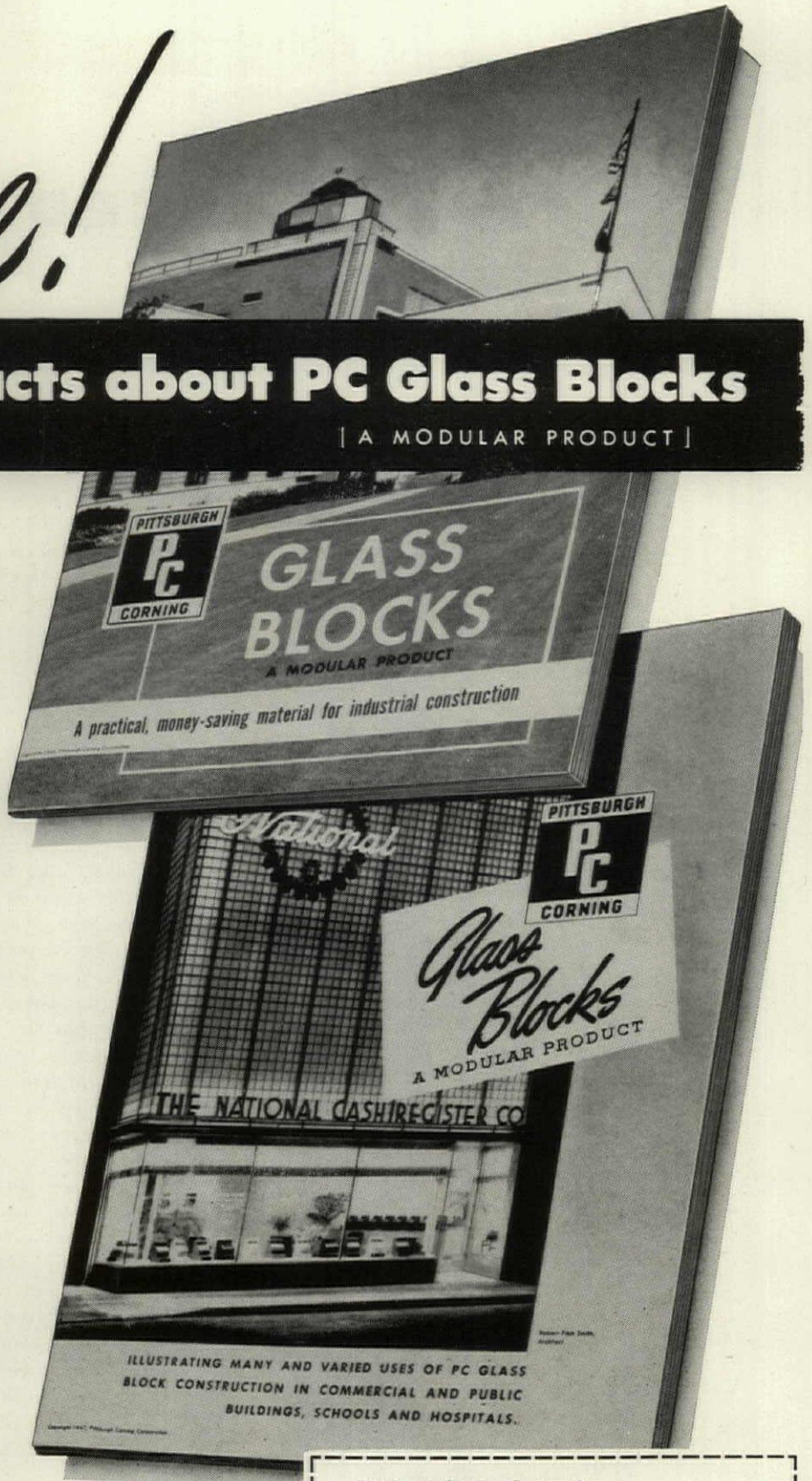


GLASS BLOCKS

Distributed by PITTSBURGH PLATE GLASS COMPANY

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FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS



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Room 611-8, 632 Duquesne Way
Pittsburgh 22, Pa.

Please send along my free copies of your books on the use of PC Glass Blocks for industrial and commercial buildings. It is understood that I incur no obligation.

Name.....

Address.....

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

101 DISPLACED PERSONS

IN A STRANGE NEW LAND they stood—these displaced persons. Silent men with grim tasks ahead worked purposefully and with little thought of the fatigue that racked their weary bodies. They were building a new community—their community.

Women, hollow-eyed, their white drawn faces mirroring pain, went about setting their humble homes in order. On every side was hunger, privation—the plight of desperate people—"A picture of Europe, 1948?" . . . you ask.

No—a picture of America, 1620.

For here, 101 displaced Pilgrims—men, women and children of the new America—freedom-loving people all, were beginning a new way of life. They were meeting critical shortages, and overcoming them—shortages of all the things that make for decent living—food, clothing, shelter . . . shortages that relatively were the greatest our nation has *ever known*.

There was a 100% shortage of almost everything on that day, 328 years ago, when their storm-battered ship nosed into the quieter waters of rock-studded coastal bays. Yes, a shortage of everything except COURAGE—a belief in the dignity of man—a passionate desire on the part of each to live as he liked.

Perhaps it was the strong driving force of the urge to be free men that enabled them to solve the critical shortages of their day. For you see, no one could pass a law providing new homes or schools . . . nor were there any homes here ready for them to occupy.

So, with bare hands and primitive tools, they individually dug from the earth and cut from the forests their own homes and schools. Ceaselessly and endlessly they worked at their simple tasks, struggling for necessities . . . looking ahead, not behind . . . building a heritage for millions of Americans to come.

Are we less courageous than they?

Is war-scarred Europe more
destitute than they were?

Is there less hope in our time than theirs?

Are our shortages more acute than 100%?

There is a simple answer to those questions and to the problem they pose. It is a WORD. A short word, without glamour, but a virile word of dynamic force . . . a word, that in its simplicity, might be overlooked, but a word so powerful as to be virtually magic.

It isn't a new word to Ceco thinking, for in January 1947 we said this word was the key to better times—to security for all.

May we say it again?

It is W-O-R-K—a four-letter word for continuing prosperity, for preserving freedom in America and for providing hope throughout the world. As we said before, *everyone* must work more . . . produce more—*management and labor*.

Suppose we look at the simple mathematics of the problem. There just aren't enough homes, schools, hospitals, roads, to satisfy the needs of all—not enough steel, automobiles, freight cars, food . . . for America and the rest of the world. How can more of these scarce things be made available sooner, and at LOWER PRICES?

We, like you, have heard many so-called cure-alls. Some say too many have too much money . . . they bid against each other for scarce things and thus keep prices ever moving upward, so taxes must be raised, not lowered—must be kept high to draw off excess money. Credit must be curtailed so buying will be slowed down. Or prices must be regulated and goods rationed.

Others say don't buy unless your needs are desperate, quit eating certain foods certain days, don't build now . . . don't . . . don't . . . don't . . . verboten. It all has a familiar ring somehow. It's a creed of hopelessness—of negation.

Let's hear a new voice in America, raised high in a mighty crescendo, drowning out those voices of fear. Yes, a new voice of hope, which will say in clear unmistakable tones of triumph . . .

"Let's DO something . . . yes, let's
trade DO for DON'T."

We of Ceco believe the American way to solve the problem of shortages and high prices is one of action . . . one of *doing* . . . of *making more things*, not buying less of what we have, of increasing prosperity . . . not dividing misery. And prosperity comes from *making a lot* for all . . . not *dividing a little* with all.

vs. 60,000,000 EMPLOYED..

Look at it this way. There are some 60,000,000 adults—men and women—employed in the nation today, making things for the more than 140,000,000 Americans and the many, many millions in all the other countries of the world. Now we can't increase our 60,000,000 employed to any great degree very fast. They just about represent today's manpower capacity—but, if everyone of those 60,000,000 . . . executives . . . managers . . . labor . . . white collar people, *ALL* of America's working force, produced more *individually*, things would become more plentiful and prices would be reduced.

It's basically that simple.

Yes . . . we 60,000,000 Americans must work more, produce more, instead of less, and that goes for EUROPE and EVERY OTHER PART of the world. Everywhere we must increase man-hour output . . . bricklayers must lay *more* bricks, architects create *more* buildings, miners dig *more* coal, farmers raise *more* produce, stenographers write *more* letters, managers do *more* managing . . . and this must go clear back through the entire economy from raw materials to manufactured products.

Then, and only then, will scarce things be plentiful . . . will money stop bidding up prices . . . will inflation be halted and a sound basis be established for the security of all, both *labor* and *capital*.

Given a freer rein this past year, the building industry made real progress in cutting down building shortages. For example, twice as many homes were completed in 1947, as compared to 1946 . . . plant expansion is getting closer to demand. Ceco salutes construction men for the job they are doing.

We like to feel that in some measure we have been helpful in this progress. Here are some of the things we have done to help the building industry in 1947.

Our production in 1947 nearly absorbed manufacturing capacity, which was doubled in 1946 • New fabricating plants were erected in Hillside, New Jersey and Houston, Texas • Personnel in plants, offices and sales force increased more than 50% • More than 100 improvements were effected in our products • More than one-third of our new products developed since the war were put in production.

But what about the future?

Today, as was true a year ago, the building industry faces an imposing demand for all types of construction. People want more homes, schools, roads, and will get them if an *unhampered* building industry is permitted to provide them . . . could get them at lower prices, too, if ALL would WORK to produce MORE, not less.

We of Ceco believe in America's future, in its ability to meet the challenge of world leadership—for after all, a way of life that has given Americans more of the good things of earth than any other people anywhere doesn't have to be *proven* . . . it is proven . . . *it is working*.

As for the building industry, Ceco has confidence *we can* count on our architects, engineers, contractors, builders and industry labor, to provide the structural needs of our nation. To this end the industry—America—can count on Ceco.

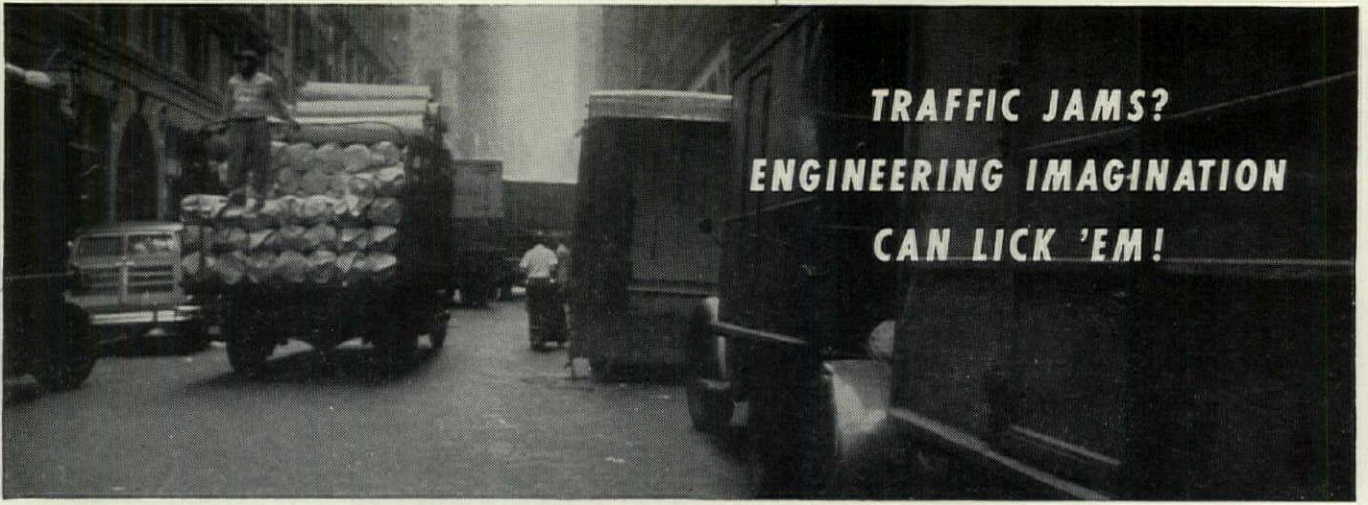
**CECO
STEEL**

PARTIAL LIST OF CECO PRODUCTS • METAL WINDOWS AND DOORS • METAL FRAME SCREENS • STEEL JOISTS AND ROOF DECK • METAL LATH AND ACCESSORIES • MEYER STEELFORMS • CONCRETE REINFORCING BARS • WELDED STEEL FABRIC • HIGHWAY PRODUCTS • CORRUGATED ROOFING • LOUVRE VENTILATORS

CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5701 West 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities



**TRAFFIC JAMS?
ENGINEERING IMAGINATION
CAN LICK 'EM!**

Driveway Punched Through City Block

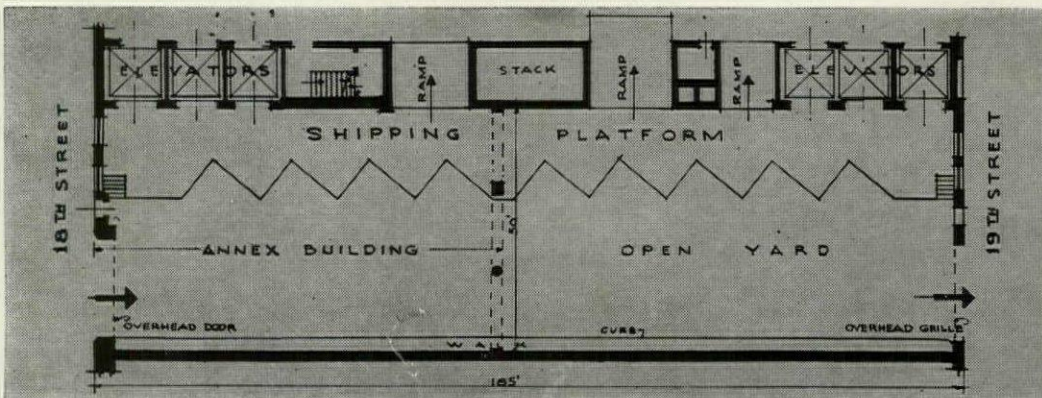
SPEEDS LOADING, REDUCES TRAFFIC JAM



BIG CITY traffic congestion is increasingly critical. J. C. Penney & Co., Inc., leading department-store chain, decided to do something about it. They tore out part of the ground-floor of their huge New York City warehouse, reinforced the entire structure to carry 350 to 400-lb. loads per sq. ft., built a modern concrete loading dock adjacent to main-building elevators, and concreted a 40-ft. transverse driveway from street to street. Now trucks enter from one street, back into the platform with a quarter turn, unload from both center and rear doors, drive out the other street.

Same kind of planning went into concrete work. The Bell Company, of New York, designed the job with 'INCOR' 24-Hour Cement . . . saved time, overhead and cold-weather costs . . . only one-day curing under hay and tarps. Safe, speedy, sub-freezing concrete work assured by faster thorough 'Incor'* curing. It pays to keep economies like these in mind on cold-weather work.

* Reg. U.S. Pat. Off.



J. C. PENNEY & CO., Inc.,
Warehouse Loading
Dock and Driveway,
New York City. Industrial
Engineers: **THE
BELL COMPANY.** Construction Engineer:
MATTHEW HILLER. General Contractor:
**BUDD CONTRACTING
CORP.;** all of New York
City.

LONE STAR CEMENT CORPORATION

Offices: ALBANY • BETHLEHEM PA. • BIRMINGHAM • BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS • JACKSON, MISS. • KANSAS CITY, MO. • NEW ORLEANS • NEW YORK • NORFOLK • PHILADELPHIA • ST. LOUIS • WASHINGTON, D. C.

LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS: 15 MODERN MILLS, 27,000,000 BARRELS ANNUAL CAPACITY



ACCEPTED DESIGN: concrete block, reinforced. Subtle differences between the schemes enlarge when studied.



EFFECT OF BUILDING *Materials* ON DESIGN

Feature

ALTERNATE DESIGNS FOR A **CHURCH**

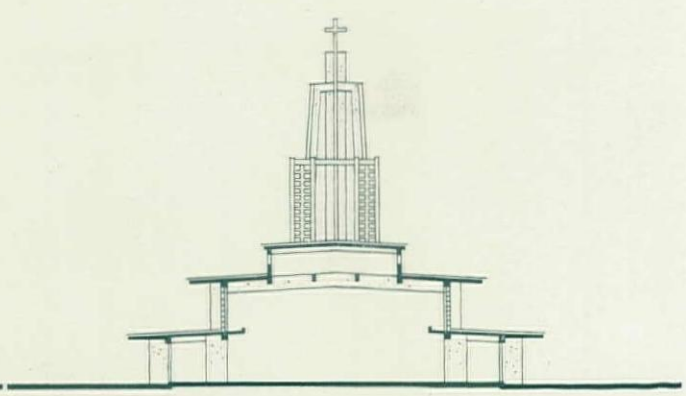
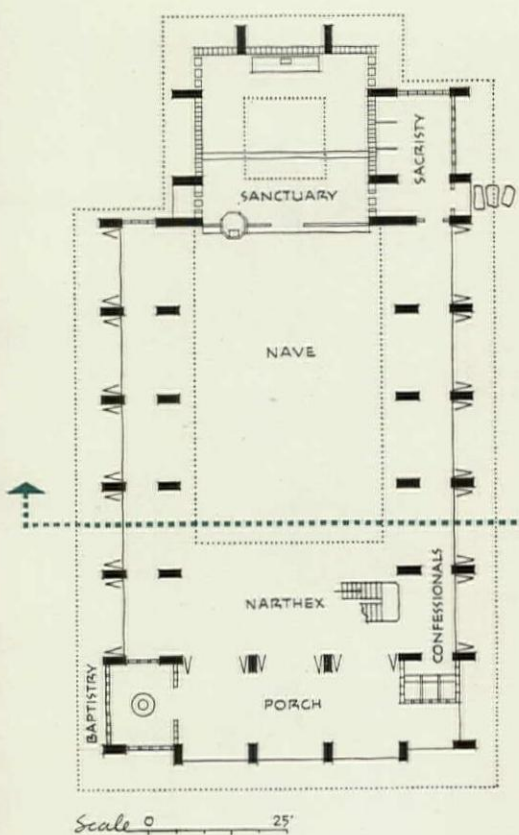
NEGROS, PHILIPPINE ISLANDS

ANTONIN RAYMOND & L. L. RADO, Architects
 PAUL WEIDLINGER, Structural Engineer



REJECTED SCHEME: reinforced concrete monolithic frame.

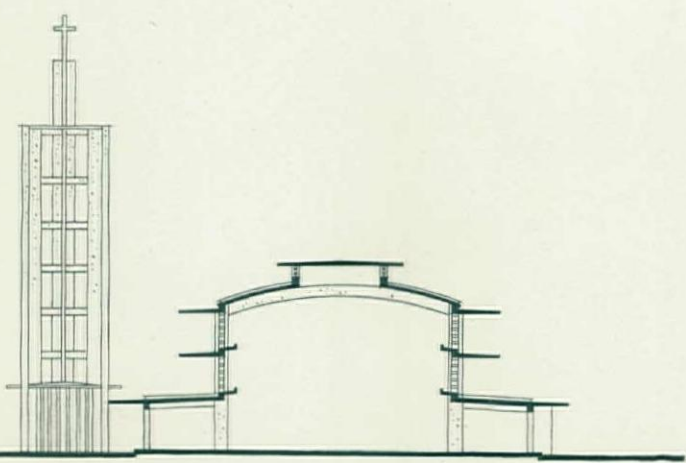
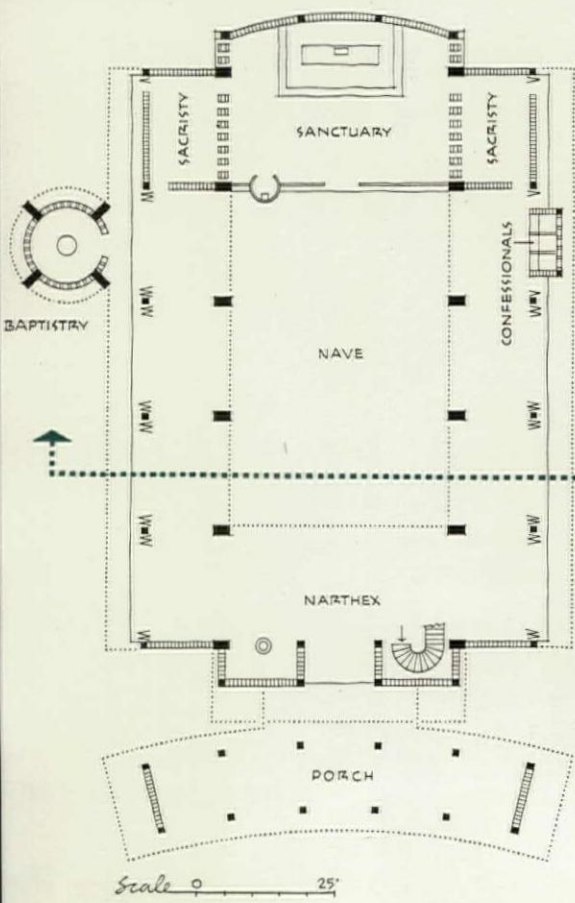
Esra Staller Photos



PROBLEM: A Catholic church (to seat 500, plus open porches) for the Island of Negros. Site: on a sugar plantation. Climate: hot, very high humidity, torrential rains. Structure: materials limited to reinforced concrete and concrete block masonry; the building must withstand hurricanes and earthquakes.

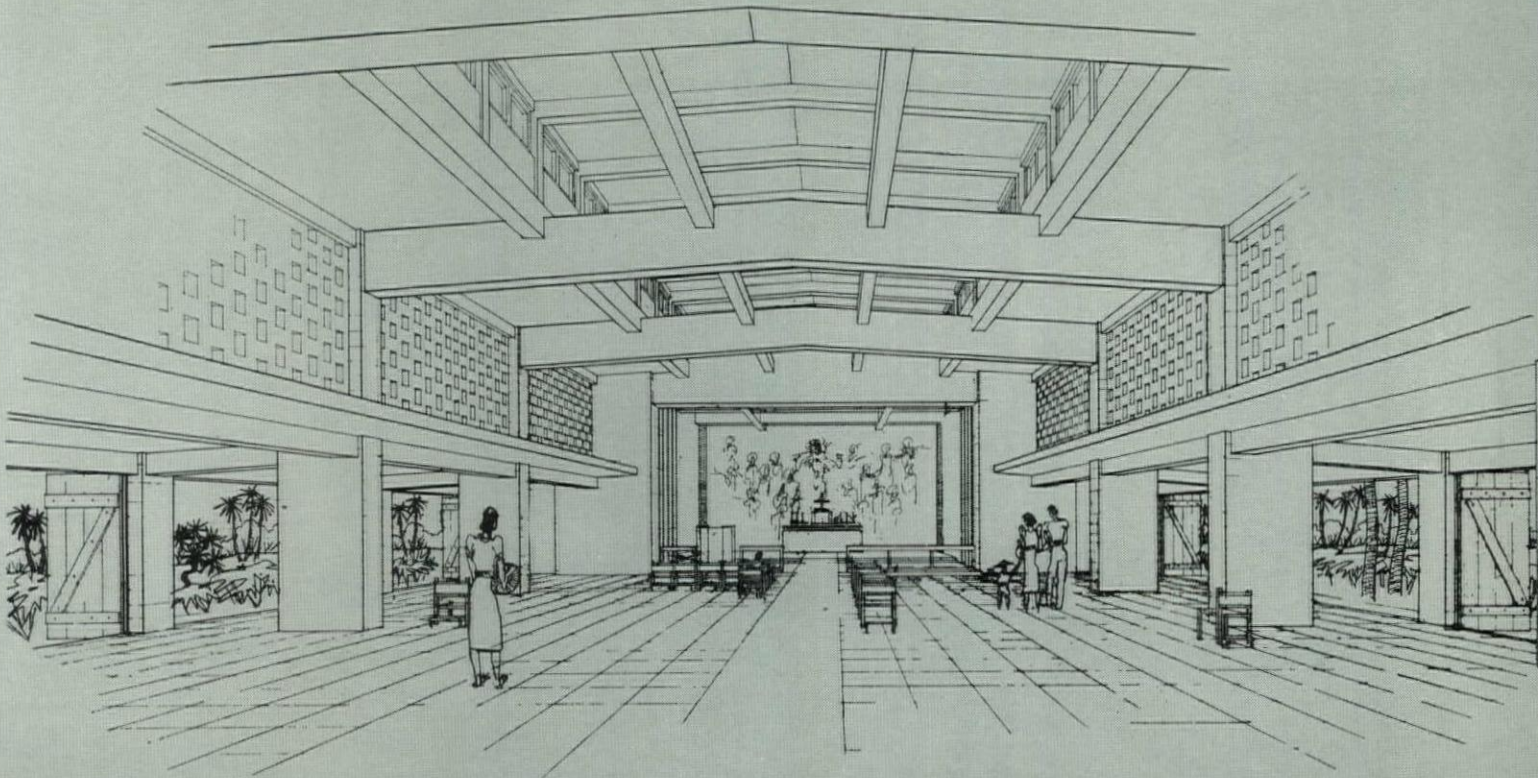
ACCEPTED SOLUTION: Concrete block, reinforced, for verticals; reinforced concrete beams and slabs.

ALTERNATE CHURCH DESIGNS, NEGROS, PHILIPPINE ISLANDS



REJECTED SOLUTION: Reinforced concrete monolithic framing, which leads to lofty proportions, thin verticals, a detached tower and baptistry.

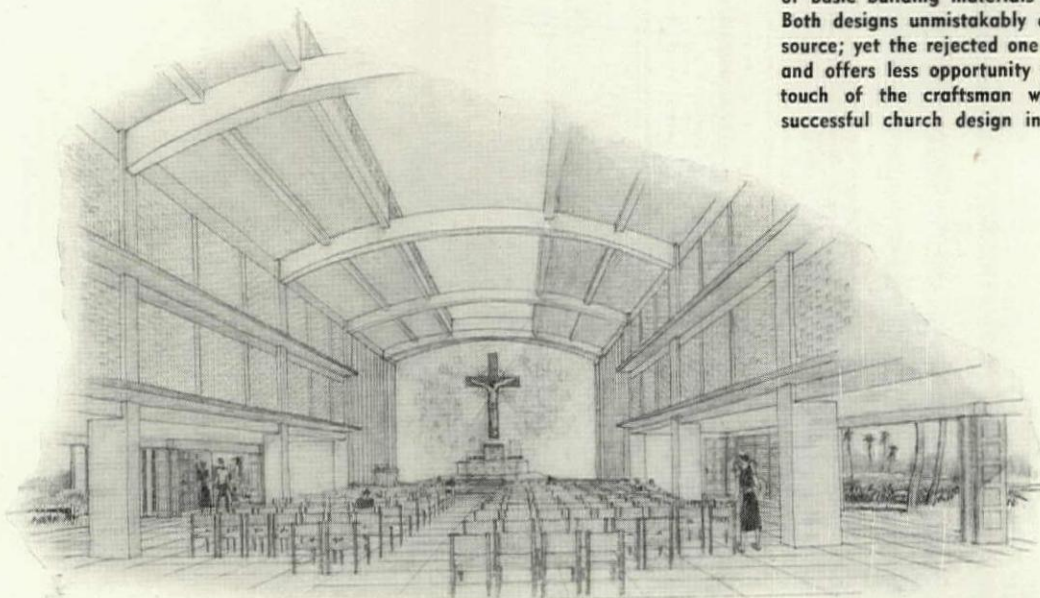
COMMON TO BOTH SOLUTIONS: Church entirely open at sides on ground level, with walls of folding doors; pierced concrete block clerestories for ventilation, with wide roof slab overhangs and interior "shelves" to catch rainspray which penetrates.



INTERIOR, ACCEPTED SOLUTION; renderings by Leavitt.

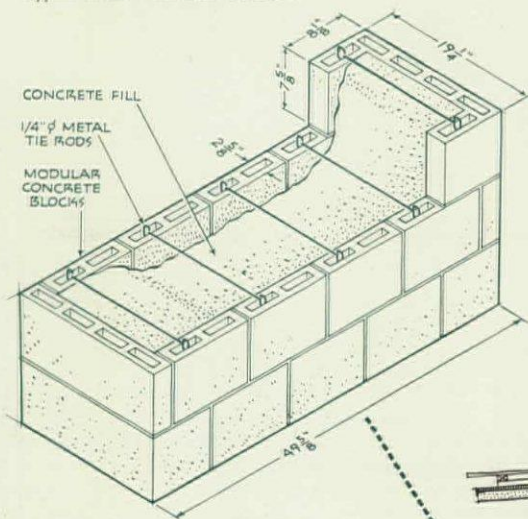
ANTONIN RAYMOND & L. L. RADO, Architects

IN THE INTERIOR, REJECTED SCHEME (at left), the design differences imposed by the two kinds of basic building materials become most apparent. Both designs unmistakably emanate from the same source; yet the rejected one is relatively mechanical and offers less opportunity for the personal, loving touch of the craftsman which has characterized successful church design in the past.

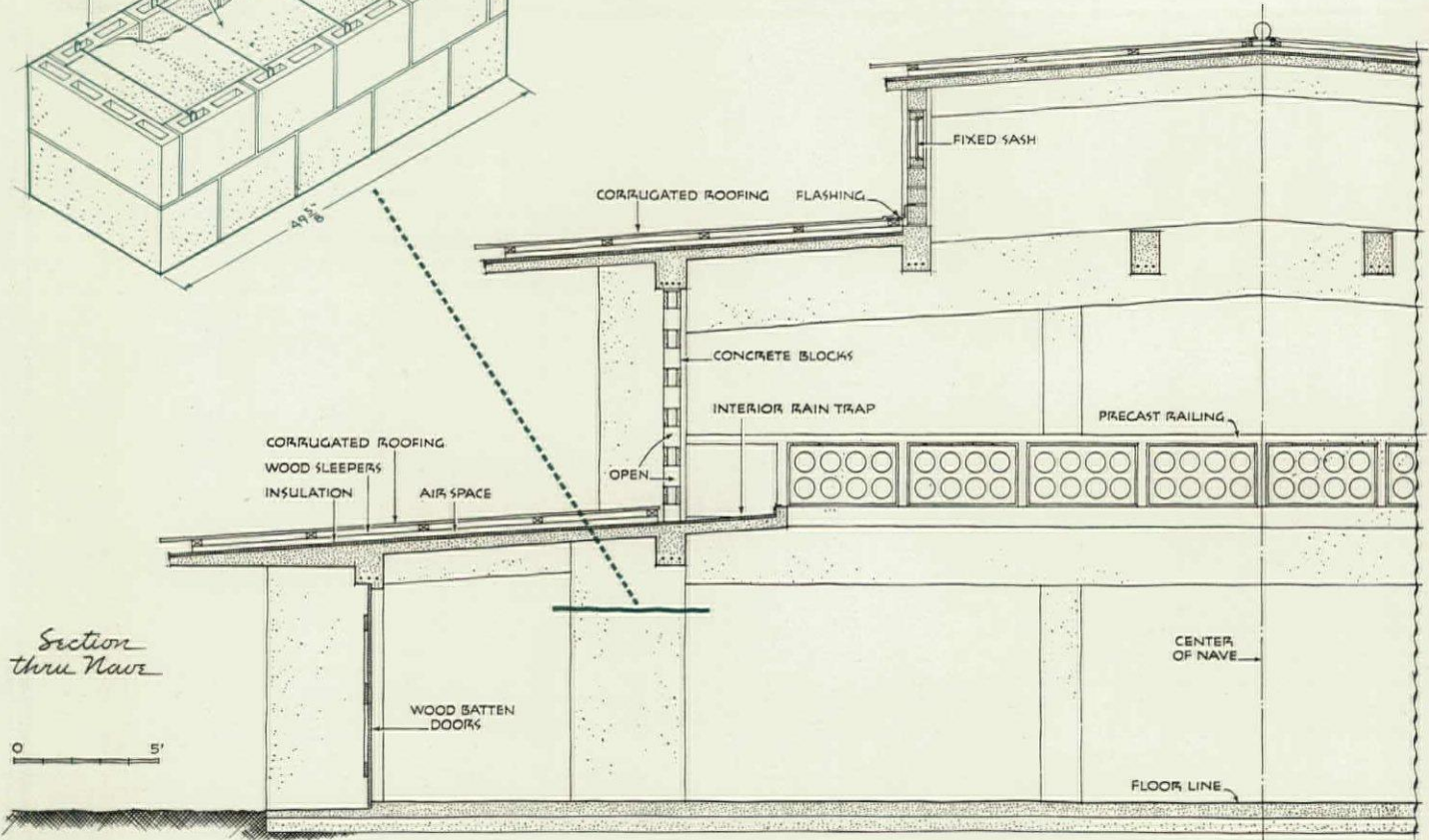




Typical Pier Detail



CONCRETE BLOCK CONSTRUCTION, detailed below, entails heavy supporting piers whose buttress-like masses are designed to resist hurricane and earthquake stresses. The concrete masonry is to be erected first and filled with mass concrete as work progresses, a procedure, well adapted to local labor capabilities, which eliminates some formwork. Note, in section, projection of aisle roof into interior to act as a gutter to catch the rain that is expected to penetrate the clerestory, which is a simple grille constructed of concrete blocks; the block will have slightly colored aggregate. Detail at left is being restudied; vertical reinforcing rods will be introduced in the central concrete core.



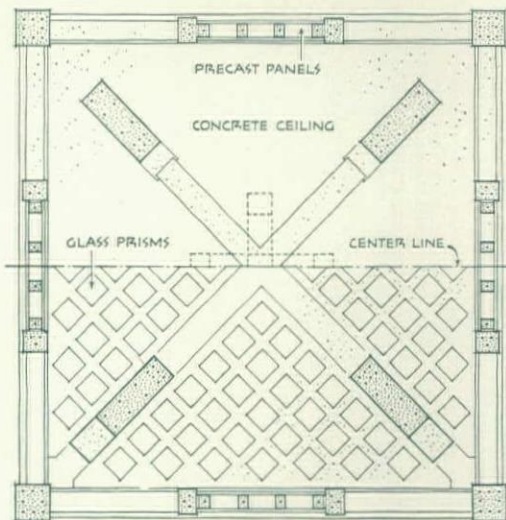
Section thru Nave

ACCEPTED CHURCH DESIGN, NEGROS, PHILIPPINE ISLANDS

ANTONIN RAYMOND & L. L. RADO, Architects

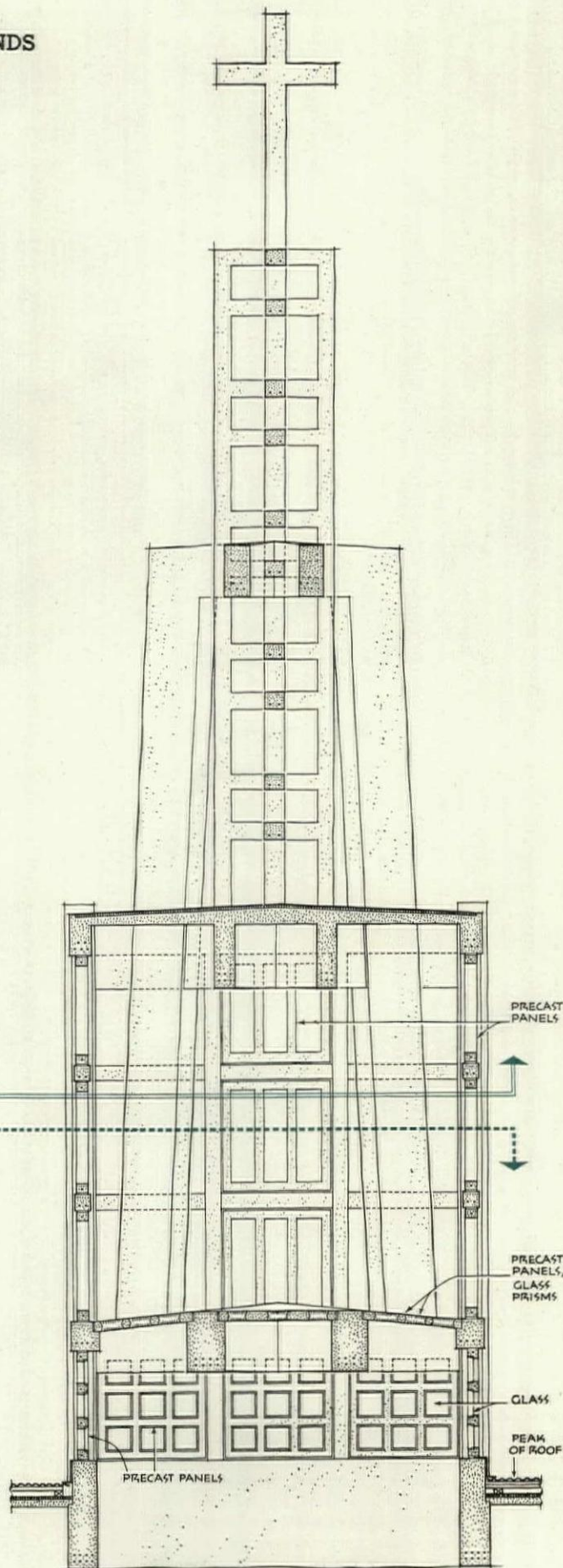


ANTONIN RAYMOND (right) is well known; LADISLAV L. RADO, born in Czechoslovakia in 1909, studied in Prague and at Harvard and practiced in Czechoslovakia as well as Boston and New York before joining Raymond. Of the accepted design they say: "(we) felt that the resulting more humble character is more fitting in this particular case."



Plans thru Tower

TOWER. The sanctuary is given a necessary dramatic quality by opening the space upward into the tower, which adds to the belfry's significance. Sanctuary and tower (resting on concrete beams supported by buttresses) are structurally detached from the main body of the church to avoid an eccentric center of gravity which is undesirable in earthquake-resisting design. The whole structural system, dictated by materials, results in a down-to-earth character and lower proportions. Into this technically conceived composition the contrast between deep, thin overhangs, massive piers, and pierced clerestories, as well as the overall fresco of the sanctuary wall, introduce essential emotional elements.

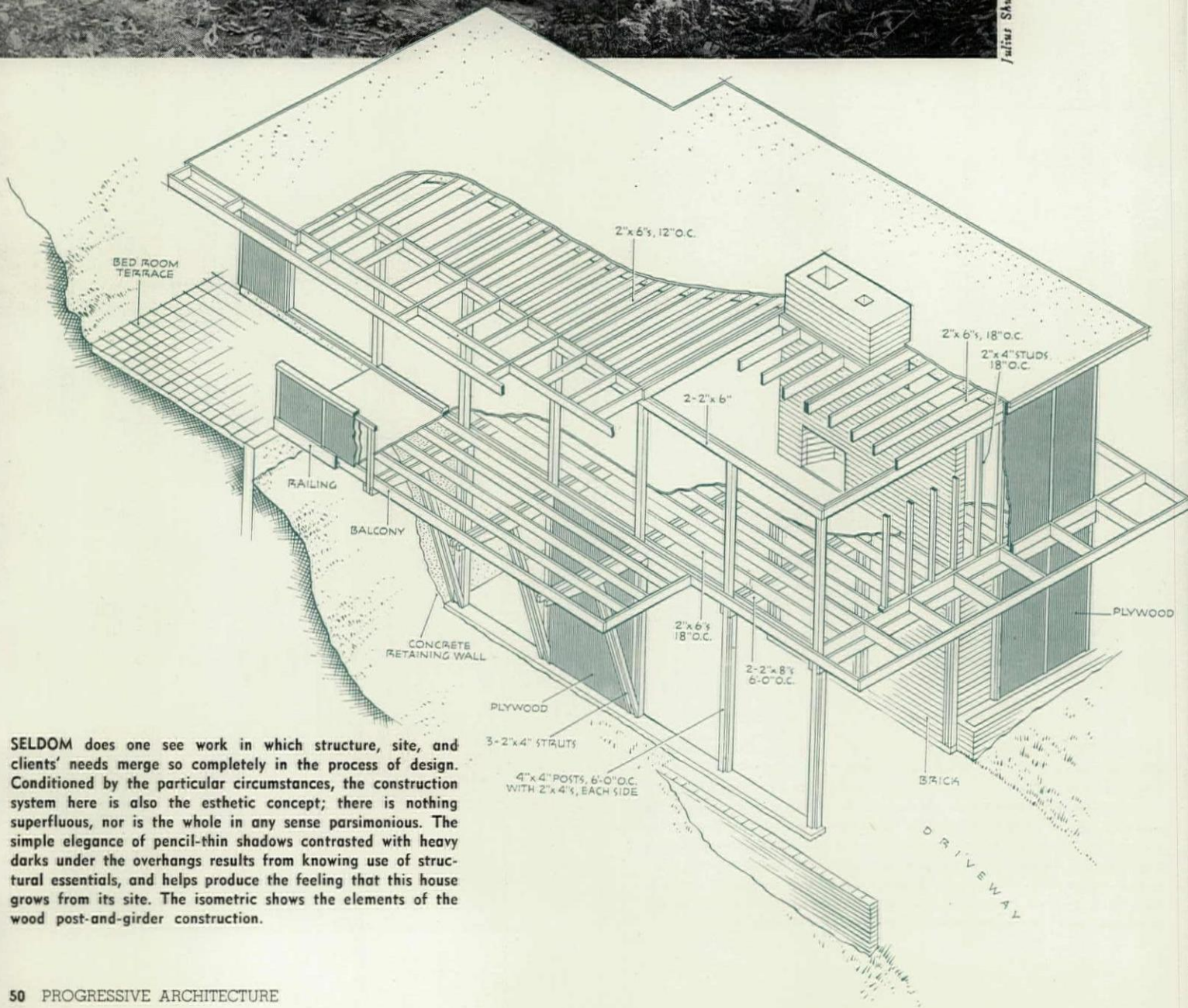


Section thru Tower

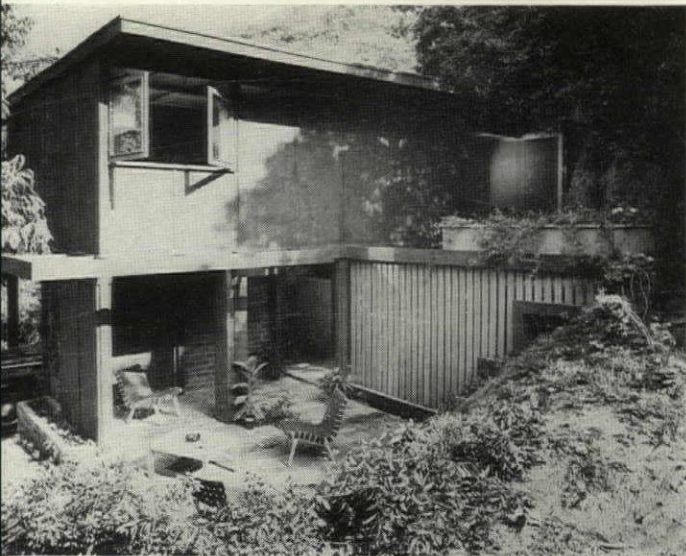
0 5'



Julius Skurman Photos



SELDOM does one see work in which structure, site, and clients' needs merge so completely in the process of design. Conditioned by the particular circumstances, the construction system here is also the esthetic concept; there is nothing superfluous, nor is the whole in any sense parsimonious. The simple elegance of pencil-thin shadows contrasted with heavy darks under the overhangs results from knowing use of structural essentials, and helps produce the feeling that this house grows from its site. The isometric shows the elements of the wood post-and-girder construction.



ON THIS SIDE the ground continues to rise. Hence, for privacy on the upper floor, the only openings in this wall are kitchen window, clerestory under the eaves, and entrance door (right). The small paved sitting space is the single important change in the natural site.

Materials for '48

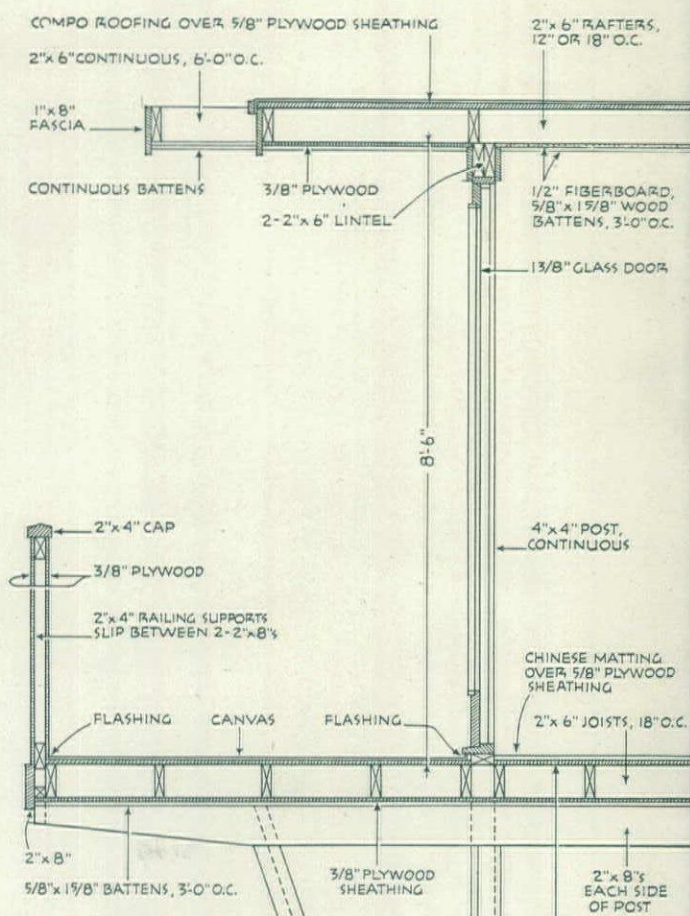
HOUSE LOS ANGELES, CALIFORNIA

GORDON DRAKE, Designer

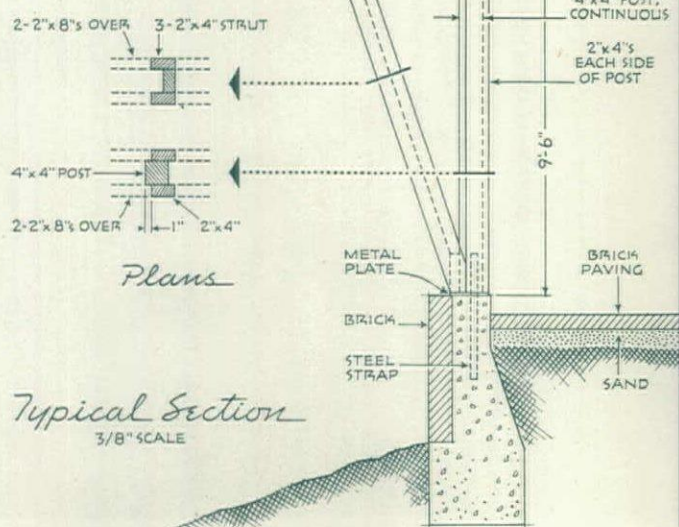
SITE: North slope of a small, wooded canyon west of Los Angeles; lot only 35 ft wide and fronting on a steep, unpaved access road; buildable area a mere 30 ft deep, ending abruptly in a cliff-like hill. The buildable area was shut in by trees, so the designer decided to raise the principal floor to give the occupants a vista and more winter sunlight. This also made it possible to disturb the site very little, and to retain all the principal natural growth.

CLIENTS: Designed for one couple, built by a second, and lived in by a third—all three professional people, childless, and wishing to live informally.

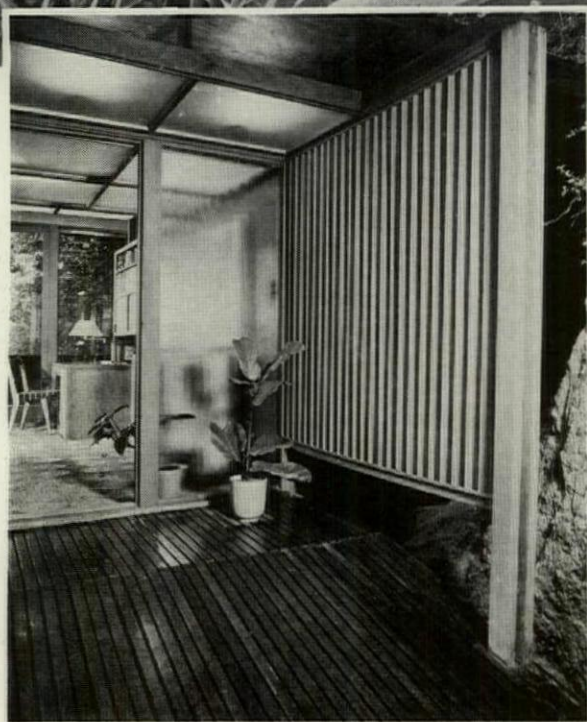
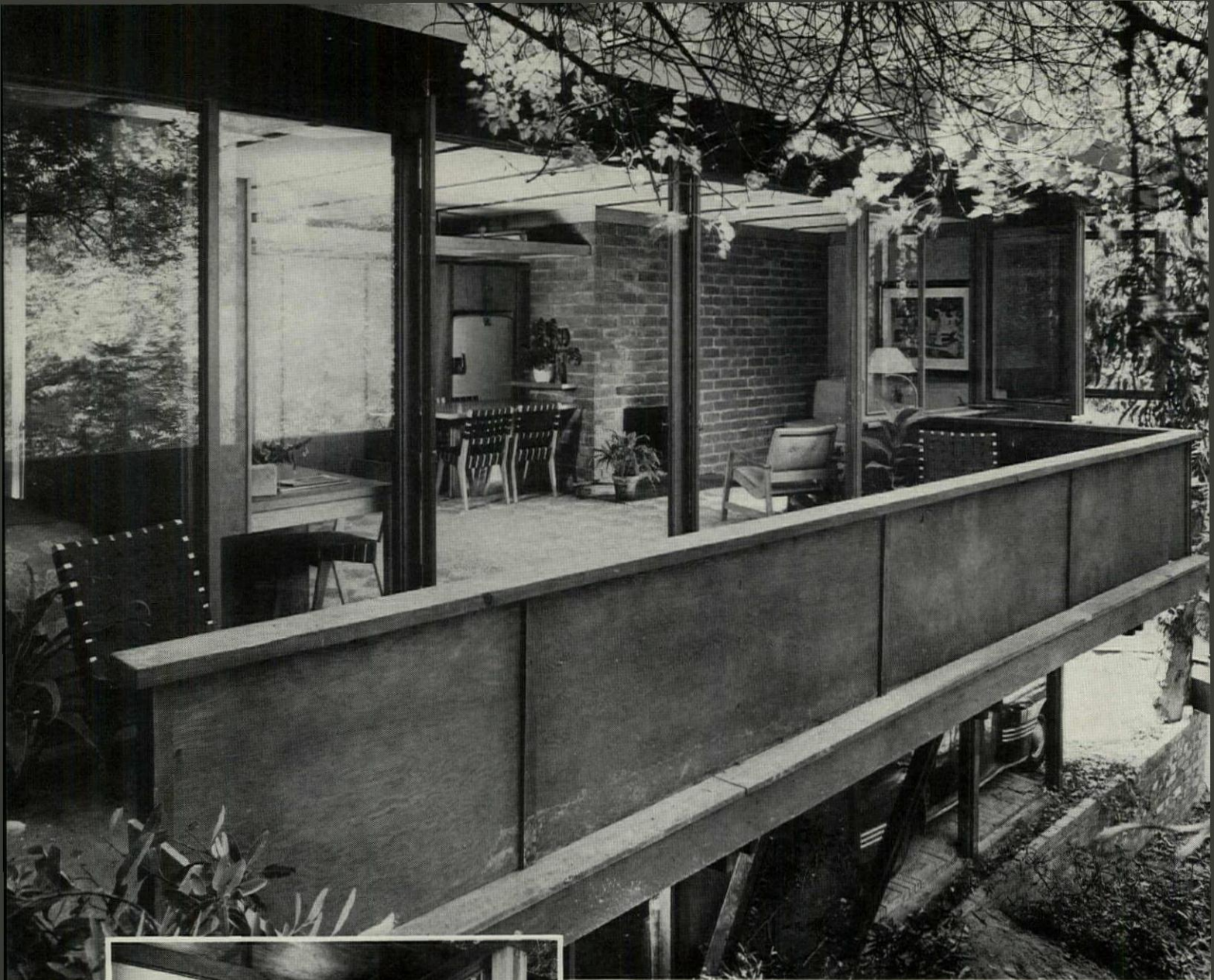
DESIGN: Site restrictions led to the concept of an upper living plane anchored to the hill at one end and apparently supported at the other by the mass of the chimney, with all services on the lower floor. Wood framing had to be independent of the chimney to comply with earthquake design requirements.



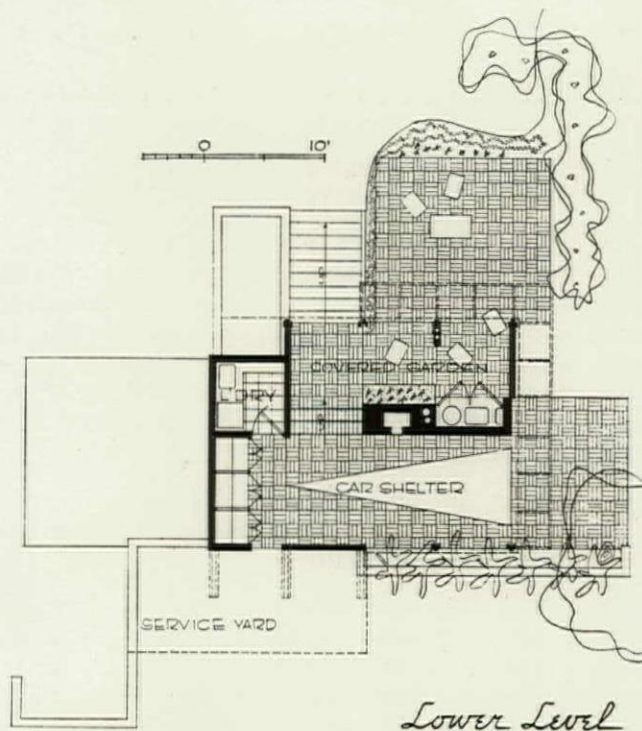
STRUCTURAL



BETWEEN THE 4" x 4" WOOD POSTS, 6 ft on centers, exterior grade Douglas fir plywood sheathing is employed as a structural skin. Posts not so braced have 2" x 4" stiffeners. Interiors are surfaced with white pine plywood, also used as a structural skin.



UPPER LEVEL is entered across a wood ramp, bridging from hillside to house. Interior trellis, projecting over the entry, dropped to door-head height, connects plan elements on this side as the first in a series of vertical space progressions.



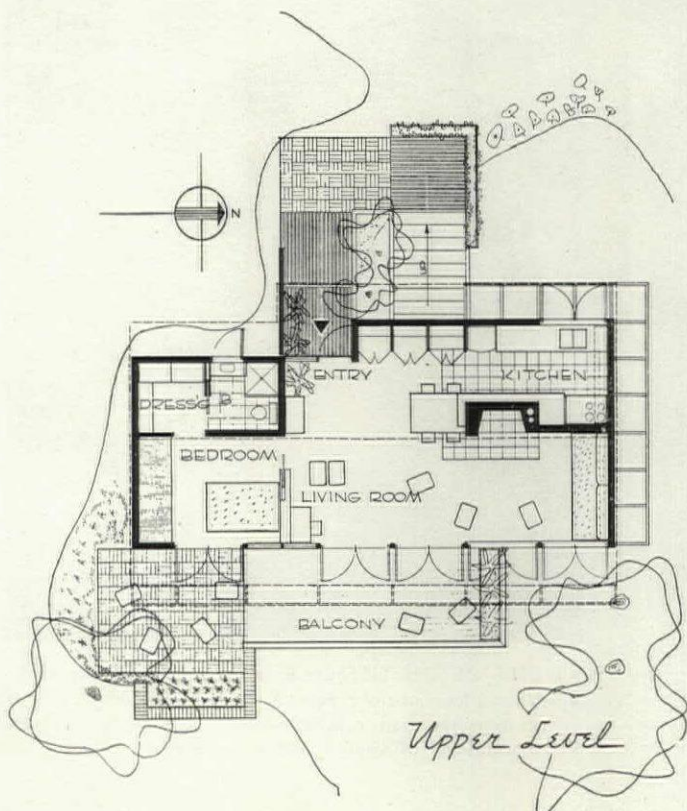
LEFT: Most of the east wall is a series of all-glazed doors opening to a balcony that leads to a secluded garden terraced to the hillside. Clerestory (see preceding page) in opposite wall over the row of doors is hidden above the interior trellis. provides cross ventilation.

RIGHT: Interior looking toward balcony shows some interior trellis sections open to relate tangibly to the ceiling above; others are lighting soffits of diffused glass. Beyond the trellis the living area opens up to full story height in preparation for the balcony, where the sky is literally the ceiling. Floor is Chinese matting, over $\frac{5}{8}$ " plywood used as a structural membrane, as in the walls.



HOUSE, LOS ANGELES, CALIFORNIA

GORDON DRAKE, Designer



ENTRY from the car shelter is directly up a flight of wooden steps shielded by a vertical trellis. Between laundry room and chimney one can see completely through the lower floor to the paved terrace and natural growth beyond.



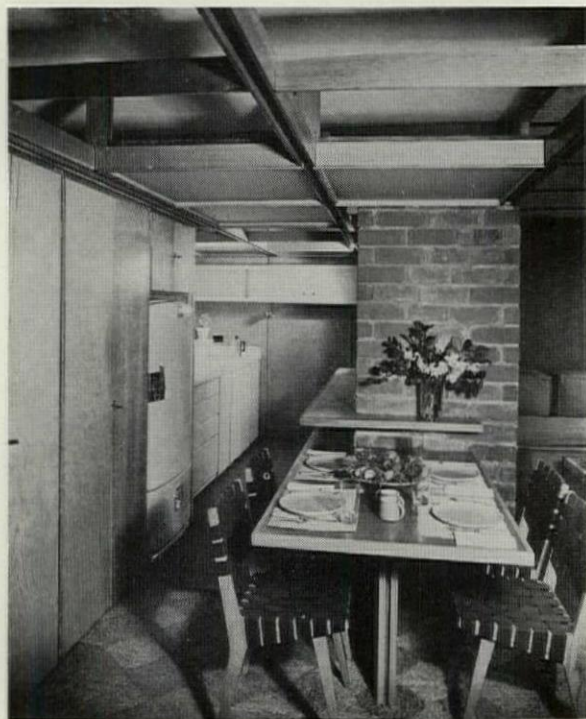
THE DESIGNER says: "I used the original isometric drawing to convince the local building inspector that the building actually would stand up. . . . Perhaps this house (satisfactory to three potential owners) points up the dominance of site rather than individual family in design, once typical needs of a group are met."

HOUSE, LOS ANGELES, CALIFORNIA

GORDON DRAKE, Designer



RIBBED OBSCURE GLASS gives privacy to the entrance corner yet admits outdoor light. The same glass is used in portions of the ceiling trellis to form lighting soffits.



KITCHEN, glimpsed in rear above, is separated physically from living room only by the chimney, yet the process of food preparation is not visible from the rest of the living area.



AT LEFT OF THE FIREPLACE is the built-in dining table, which seats four; at right, against the blank wall which affords privacy from the road, a built-in couch. Such devices increase the spaciousness of what is almost a "minimum" house.

WOOD

American Roof Trusses: custom-built with parabolic top chord, ensuring great strength. Spans 25 to 150 ft. For remodeling, interior walls can be removed without destroying roof support. Eliminates interior columns. American Roof Truss Co., 6850 Stony Island Ave., Chicago 49, Ill.

California Redwood Assn.: adopted new grading rules for redwood, effective 1946, actually getting into use during the current year. California Redwood Assn., 405 Montgomery St., San Francisco 4, Calif.

Glued laminated beams and arches: for churches, schools, commercial, industrial buildings. Improved products introduced this year. Available on short notice. Timber Structures, Inc., P.O. Box 3782, Portland, Ore.

Lank Teco Truss: new, redesigned, timber construction, with 3 features—use of Teco connectors; chord members lapped at splices in place of usual butt splices; steel tension rods used where timber joints would be unwieldy. Timber Engineering Co., 1319 18th St., N. W., Washington 6, D. C.

Long Span Arches: new type, for auditoriums, gymnasiums, hangars, etc. Also, new type doors for hangars. Simple, economical. Additional new types of arches, hangar doors will be introduced shortly. Arch Roof Construction Co., Inc., 113 W. 42nd St., New York 18, N. Y.

Plywood: higher performance standards for Douglas Fir plywood established by the industry through U. S. Bureau of Standards. Effective Sept. 15, 1947, fir plywood now in accordance with new U. S. Commercial Standard CS45-47. Douglas Fir Plywood Assn., Tacoma Bldg., Tacoma, Wash.

Timberib: laminated, glued arched rafter; selected, kiln-dried lumber. U. S. Dept. Agriculture tests indicate this type of arch is 4 times stronger than nailed arches of same size. For industrial, commercial, farm buildings. New product. Timber Structures, Inc., Box 3782, Portland 8, Ore.

METAL

Clip-Grip steel studs, clips, and runners: fireproof, clip-grip system of partition construction. Clip-grip studs are notched at ceilings and floor lines to accommodate facing material from 1/4" to 1/2" thick. Steel floor and ceiling runners, when bolted to floors and ceilings, serve as track for partitions. Neslo Mfg. Corp., 516 5th Ave., New York 18, N. Y.

LaCled steel joist: redesigned in 1947 to a straight chord type, provided with 3 types of standard ends to permit underslung application, bolted strut application, full depth buried ends. LaCled Steel Co., Arcade Bldg., St. Louis 1, Mo.

Lamella steel roof trusses: for wide-span construction, hangar, gymnasium, armory, warehouse roofs. **Steel joist "A" frame** for small residential work; provides pitched roof without intermediate supports, tension member extending across lower part of frame, serving as ceiling support. LaCled Steel Co., Arcade Bldg., St. Louis 1, Mo.

Lightweight Roof Trusses: (single, multiple residences) gable design, fabricated of Macomber V-sections with rod bracing. Roofing nailed to top chord; ceiling materials to bottom chord; siding, insulation to end trusses; sheathing nailed to top chords, roofing applied. Macomber, Inc., Canton 1, Ohio.

Load-Bearing Partition Panels: (multi-story apts., commercial bldgs.) fabricated from cold-formed, nailable steel sections with spacer for conduit installation. Panels finished top, bottom with heavy steel channel sections, trussed with rod bracing; anchored to steel structure by welding to steel floor joists. All openings framed, ready for sash bucks. Macomber, Inc., Canton 1, Ohio.

Metrodeck: primarily for roof construction, applicable for siding, floors, etc. Attached to steel purlins by clips or welding, desired amount of rigid insulation then bonded to metal deck with mopped asphalt. Provides light, economical, fireproof, insulated roof, with considerable saving in size and cost of structural members. Goldsmith Metal Lath Co., 4501 Chickering Ave., Cincinnati 32, Ohio.

Nailock: redesigned channel for partitions. Nailock Div., Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio.

Rigidized Metals: patented method of processing

sheet metals to increase strength and rigidity. Attractive patterns are obtained. Process may be applied to stainless steel, aluminum, copper, brass, plated metals, etc. Material used for many products: machinery, appliances, hotel and restaurant fixtures, other equipment. Rigid-Tex Corp., 658 Ohio St., Buffalo 3, N. Y.

V-Type Steel Joists & Roof Purlins: (nailable steel), improved product; ceiling extensions to wall line; furring strips attached to bottom chords with double eyelet wire clips. Adaptable to such buildings as multiple plane hangars as well as 2-car garages. Macomber, Inc., Canton 1, Ohio.

Wall Panels: (for steel framed dwellings) jigsawed, nailable, steel-stud sections sawed to required length for site fabrication or shop-fabricated into 8' x 8' wall panels; finished top, bottom with channels and trussed with rod bracing; thickness designed to accommodate vertical pipe runs in both house and commercial steel framing. Macomber, Inc., Canton 1, Ohio.

MASONRY (brick, stone, concrete, aggregates, construction systems)

Atlas Speed Forms: lightweight forms for casting concrete houses. When used in large-scale production (100 houses or more) reduce cost per use per house to \$140 for 1-story house, \$180 for 2-story. Available in standard units, but flexibility of forms lends to variety of treatment. Irvington Form & Tank Corp., Irvington, N. Y.

Concrete Thermos Wall Forms: portable form of aluminum alloy, consists of two 5' forms, a corner form, and other accessories for making cavity concrete walls. Forms can be adjusted to various thicknesses. Concrete Thermos Wall Co. of America, George Washington Bridge Plaza, Fort Lee, N. J.

Cooling Tower Tile: new product to replace wood and metal towers. Elgin-Butler Brick Co., Austin, Tex.

Fire Brick and other refractory products that were off the market are again available. Elgin-Butler Brick Co., Austin, Tex.

Hi-Production Concrete Block Machine: automatic concrete block machine that produces over 20,000 concrete 8x16x8" blocks in 3 shifts. Blocks of varying densities can be produced. Constructed of welded steel. Henry & Hutchinson, Inc., Blair Bldg., Decatur, Ga.

Joistile: new product, clay tile floor and roof beams. Elgin-Butler Brick Co., Austin, Tex.

Modular clay units: additional new products to be introduced early in 1948. Elgin-Butler Brick Co., Austin, Tex.

Mul-Kra "Wonder Block": patented formula containing fiber and special mastics, is identical in appearance with concrete block. Many working properties same as wood: may be sawed, sanded, drilled, screwed. Laboratory tests confirm high compressive strength, thermal conductivity. Now available locally in several states. Marketing Associates, 904 Lapeer St., Saginaw, Mich.

New brick: made from heretofore waste products—fly ash collected from industrial smoke stacks, and slag from soft-coal burning furnaces. Both are ground, mixed with plasticizer and water, forced through a brick die, then dried and fired. Considerably stronger than usual clay brick. Will soon go into mass production. New process announced by Dr. John H. Koenig, Dir. of N. J. Ceramics Research Station, New Brunswick, N. J.

Porrete: new lightweight fill block for reinforcing concrete floors; extremely low cost. Porrete Mfg. Co., North Arlington, N. J.

Porotherm 32: lightweight concrete fill to insulate roofs, ceilings, floors; fireproofing for steel columns, girders, trusses; odorless, vermin-, fungi-proof, does not deteriorate when continuously exposed to moisture. Permanent heat and sound insulating values even under extreme conditions. Porrete Mfg. Co., North Arlington, N. J.

Porox Plank: recent development in precast roof, floor construction. Weight (101 lb/sq ft) much less than gypsum or lightweight concrete used in other precast slab construction. Lab tests proved incombustibility of Porox: strength and durability unaffected by exposure to water or weather conditions. Porrete Mfg. Co., North Arlington, N. J.

Portite: stable, neutral, organic compound in liquid form for mixing with concrete, plaster, or mortar to reduce shrinkage, cracks; less need



Alumi-Drome, aluminum prefabricated building. Reynolds Metals Co.

for expansion joints. Unusual adhesion to brick and concrete. Increases waterproofness. Hopper Products, Inc., 12 E. 41st St., New York 17, N. Y.

Shurebond Unit System: for concrete floors and roofs, structural steel frames, bearing walls. Incorporates metal tile serving as mold for forming concrete joists and top slabs, and metal lath for ceilings under slabs. Flat, level ceiling obtained without wiring, hangers, or furring. Reduces amount of plastering materials and labor required. Goldsmith Metal Lath Co., 4501 Chickering Ave., Cincinnati 32, Ohio.

Waylitter lightweight aggregate consisting of silicates and aluminosilicates of lime, for lightweight structural concrete, fireproofing structural steel, lightweight floor and insulating roof fill, lightweight concrete masonry units, precast acoustical wainscoting, etc. Flexural and bond strength, high fire resistance, increased thermal insulation, and good sound absorption. Waylitter Co., 105 W. Madison St., Chicago 2, Ill.

STRUCTURAL BOARD

Durisol: building material made of wood chips and refuse of planing machines, plus stabilizers and Portland cement binder. Perfected in Switzerland, will soon be available here. Used in semi-structural panels, slabs, blocks; lightweight; excellent insulation qualities; non-inflammable. Many more uses of Durisol now in development; among others, vertical bearing panels for small house construction. Durisol, Inc., 420 Lexington Ave., New York 17, N. Y.

BUILDING PAPER

Economy Brownskin, which was off the market, and improved **Ansulate**: both immediately available. A new type of vaporsealing material as well as a new sheathing paper will be introduced shortly after Jan. 15, 1948. Angier Corp., Framingham, Mass.

Richkraft sheathing 60 paper: meets all requirements for Federal Specification U.U.P. 536-Class D. Can be used for many of same applications as 15# felt. Immediately available in unlimited quantities. **Richkraft Skulpruf** again available in limited quantities. Richkraft Co., Builders Bldg., Chicago 1, Ill.

PLASTER, GYPSUM, LATH, ACCESSORIES

Bostwick Electro-Gal Truss-Wing Corner Bead: bonderized, electro-zinc galvanized coating. New finish offers good base for paint. Will not flake, chip, peel; finish spangle-free, with smooth steel-gray finish. Bends easily, uniformly. Bostwick Steel Lath Co., Niles, Ohio.

Dantore: new aggregate formed of globules "popped" by intense heat from raw perlite ore; replaces sand in plaster. Weighs only 12 lb/cu ft compared with sand's weight of 85 lb/cu ft. Material is more flexible in adjustment to stresses of settling. High degree of insulation against cold, heat, noise. Also available: lightweight plaster aggregate, acoustical plaster, ready-to-use hardwall plaster. Dant & Russell, 1112 Porter Bldg., Portland, Ore.

Gold Bond Gypsum Sheathing: improved asphalt treated, gypsum center. Also **2" Solid Partition System**, with simplified metal base, adjustable clips; installed 10% to 25% faster. **Hollow Wall Partition System**, same advantages as the 2" Solid Partition System; cuts room-to-room transmission of noise. Simplifies wiring, piping installation. Both fireproof. All 3 products improved in 1947. National Gypsum Co., Buffalo 2, N. Y.

Goldsmith Solid Plaster Partition & Metal Base System: for housing projects, hospitals, office buildings, schools, etc. Comprises 4 coordinating products: ceiling runner, metal base integral with floor runner, cold formed channel studs, flat diamond-mesh metal lath. Provides rigidity,

fire protection, sound insulation. Goldsmith Metal Lath Co., 4501 Chickering Ave., Cincinnati 32, Ohio.

Metal Lath and Lathing Accessories: were off the market but are now available. Goldsmith Metal Lath Co., 4501 Chickering Ave., Cincinnati 32, Ohio.

Milcor Solid Partition System: steel-reinforced vertical plaster slab, 2" thick. Hot or cold steel channels, running from floor to ceiling, reinforce partition vertically and hold metal lath to which plaster is applied. Metal lath reinforces partition horizontally and diagonally; also functions as plaster base. Unit resists physical impact, fire, wind, water, vibration. Limited quantities. Inland Steel Products Co., P.O. Box 393, Milwaukee 1, Wis.

Olsen Type "A" Gypsum Lath Clips: eliminate nails in applying gypsum or rock lath to wood studs. Available in unlimited quantities. Neslo Mfg. Corp., 516 5th Ave., New York 18, N. Y.

FOUNDATION CONSTRUCTION EQUIPMENT

Battered Drilled-In Caissons: for horizontal foundations; new product. Also new, **Diamond Drill and Core Boring** with sampling devices for soil mechanic determinations. Drilled-In Caisson Corp., 2 Park Ave., New York, N. Y.

Sand Drains and Electro-osmosis: improved equipment for subgrade drainage. Drilled-In Caisson Corp., 2 Park Ave., New York, N. Y.

PROTECTORS (waterproofing, decay-resistance; expansion joints)

Cabot's Foundation Coating: black bituminous coating for protecting and waterproofing all types masonry below grade; fills and seals pores and keeps water out. Immediately available. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Decaznot: odorless wood preservative; new ingredient prevents sediment formation, eliminating necessity of stirring or shaking. Coopers Creek Chemical Corp., W. Conshohocken, Pa.

Dilato: new, expanding mortar used for weatherproofing brick and stone buildings. Western Waterproofing Co., 1223 Syndicate Trust Bldg., St. Louis 1, Mo.

Hill Termite Control Systems: patented pipe sprinkler system for permanent, positive termite control. In new construction only. In addition to pipe system, there is thorough poisoning of soil at all entry points, also removal of debris, tree roots, etc. System will be distributed nationally through large building supply companies with exclusive agency arrangement. Products now available. Hill Termite Control Systems, Memphis, Tenn.

Hillyard's Caulking Compound: was off the market but is now available again. Hillyard Sales Co., St. Joseph, Mo.

Para-Plastic Joint Sealing Compound: "Hot Poured Rubber Seal" used to seal expansion joints in all types of concrete construction; available in green, red, gray, cream, and yellow. Serviced Products Corp., 6051 W. 65th St., Chicago 38, Ill.

"Pinta" Preservative: wood preservative for protection against beetles and termites. Renders wood practically odorless. Insoluble properties prevent leaching. Chapman Chemical Co., 333 N. Michigan Ave., Chicago, Ill.

Prufite: transparent waterproofing penetrates all pores, capillaries, hairline cracks in masonry walls; material is permanently bonded to surface. Prufcoat Laboratories, Inc., 63 Main St., Cambridge, Mass.

Pyresote: combination fire-, decay-, insect-resistant treatment. Increased permanence, especially



Teco Lank Truss (E. S. Lank, structural engineer). Timber Engineering Co.

in locations exposed to weather. Protexol Corp., Kenilworth, N. J.

Ranetite VVW Cement Waterproofing: improved; for weather protection and more serious waterproofing work; resists water pressure through walls and floors; requires no protecting wall or double floor construction. Ranetite Mfg. Co., 1917 S. Broadway, St. Louis, Mo.

Servicised Waterstops for joints in concrete construction. Serviced Products Corp., 6055 W. 65th St., Chicago 38, Ill.

Sika-Kote: new cementitious coating for concrete or masonry. Contains plasticizing, water-repellent, self-curing, cementitious compounds producing hard, dense, coating, uniform and durable. Preserves and decorates exterior and interior surfaces of masonry units. Effective against dampness. Available immediately. Sika Chemical Corp., 35 Gregory Ave., Passaic, N. J.

Woodtox: combination toxic and water repellent for wood, carried in petroleum solvent. Treatment does not affect dimension. Product is clean and, after 3 days, may be painted. Insoluble in water; greatly increases dimensional stability. Suitable for millwork, structural lumber, board-walk decking. Protexol Corp., Kenilworth, N. J.

METHODS OF AFFIXING, ASSEMBLY (nails, clips, studs, glue, etc.)

Clip-Grip metal furring. Neslo Mfg. Co., 516 5th Ave., New York, N. Y.

Fairprene (No. 5118) Adhesive Cement: thermoplastic elastic waterproof composition for bonding Buna-N rubber and vinyl film or sheet to rigid surfaces—steel, aluminum, wood, concrete, glass. Affected by high temperature (160F), regains strength when cooled; resists oxidation. Dries completely in 2 hours. Du Pont Fabrics Div., Fairfield, Conn.

Kork-Pak: expansion joint filler; nonextruding composition of bitumen and cork; resilient, tough-handling without breakage; recovers to minimum of 70% following compression to 50%. Shipment usually immediate. Serviced Products Corp., 6055 W. 65th St., Chicago 38, Ill.

LaClede steel center joint: for contraction joint construction in concrete slabs, also dowel assemblies for expansion joint load transfer units. Were off the market but now available. LaClede Steel Co., Arcade Bldg., St. Louis 1, Mo.

Nailock: new spring lock clip to be used for installing the redesigned Nailock Channel. Nailock Div., Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio.

Nelson Electric Arc Stud Welding Gun & Studs: new method installing conduit boxes, canopy plates, ceiling header ducts, etc., to underside of cellular steel floors that serve as ceiling. Instantaneously welds threaded stud at desired fastening location, eliminating necessity of expensive grommets. Immediately available. Nelson Stud Welding Corp., Lorain, Ohio.

Nelson Electric Welding Stud: 1/4" diameter, used with Nelson Electric Arc Stud Welding Gun, providing method of installing fibrous insulated building panels surfaced with asbestos sheets; welded through sheet to steel framing member and a Nelson flat head zinc die-cast noncorrosive nut and flat lead washer applied, securing sheet in place. Eliminates clip bolts and nuts. Nelson Stud Welding Corp., Lorain, Ohio.

Nelson Flux Filled threaded stud: improved method of installing automatic sprinkler systems in exposed steel frame structures; stud, 3/8" or 1/2" diameter, instantly welded at desired location in lengths up to 16"; serves as hanger rod, eliminates beam clamps. Immediately available. Nelson Stud Welding Corp., Lorain, Ohio.

Perkins Corox: new type of liquid, ready-to-use glue requiring no mixing, heating, or other preparation. Unaffected by heat or freezing; catalysts, solvents, etc., are unnecessary; all ingredients for strong bond already in product. Perkins Glue Co., Lansdale, Pa.

Perkins RP-18: new resin glue especially adaptable to high-frequency gluing for waterproof bonds; maximum resistance to arcing at very high voltages; boilproof, weatherproof, non-crazing. Cures at room temperature, permanent bond in any climate. Perkins Glue Co., Lansdale, Pa.

Portable Welder: self-powered arc welder available as a stationary or trailer unit; has a welding service range from 30 to 260 amp; a heavy-duty, 4-cylinder air-cooled engine of 265 hp, rear mounted; 10 gal. capacity gas tank. Harnisheger Corp., 4400 W. National Ave., Milwaukee 14, Wis.

Servicised gray sponge rubber expansion joint: improved product. Serviced Products Corp., 6055 W. 65th St., Chicago 38, Ill.

Teco Segmental Washers: of malleable iron

made in 2 different pieces to be slid onto a bolt and fastened permanently without removing nut from bolt. Held together by friction, will not separate under shock or vibration. Time-wasting removal of nuts over threadbare or rusted bolts eliminated. Timber Engineering Co., 1319 18th St., N. W., Washington 6, D. C.

Teco Trip-L-Grip Framing Anchors: secondary timber connectors made of 18 ga zinc-coated, corrosion-resistant sheet steel that is joined to wood with nonsplitting, full bodied nails. Timber Engineering Co., Washington 6, D. C.

Veriply Plastic Resin Glue: waterproof glue for bonding lumber and plywood. Wood-Ply Research Foundation, Inc., 111 W. Monroe St., Chicago 3, Ill.

PREFABRICATED STRUCTURES AND SUB-ASSEMBLIES

Alumi-Drome: new, standardized, unit type, arch-roof, all-aluminum prefab building. Withstands tough weather conditions. No posts or other obstructions: entire floor area available for use. Can last year after year without maintenance; will not rust, rot, or deteriorate. Fire-, termite-, and rat-proof. Standard size 36' x 60'. 6' sections allow length to vary as desired. Reynolds Metals Co., 2500 S. 3rd St., Louisville, Ky.

Aluminum Prefabricated House: basementless, 1-story, prefab aluminum house erected on a concrete slab foundation. Stucco-like appearance due to asbestos-impregnated plastic-paint finish. Not available at present but may be after further experimentation. Goodyear Aircraft Corp., Akron, Ohio.

Cabinet-Wall: plywood, prefabricated closet for storage of clothing, linens, or household equipment. Provides floor-to-ceiling, flexible, usable closet space. Units may abut interior or exterior bearing walls, or may be used to form non-bearing partitions. 3 types available. All **Cabinet-Wall** units are for use in buildings with ceiling heights of 8 ft or more. Milo Products Co., 1507 M St., N. W., Washington 5, D. C.

Fabricon: precast concrete wall panel, 8' x 4', 4" thick. Made of 2 lightweight concrete surfaces separated by light steel frame. Panels are joined with metal fasteners; joints sealed with mastic. American Type Founders, Inc., Elizabeth, N. J.

Lockstep: permanent, fireproof, sectional steel stair unit of 14 treads. Can be erected in about 90 minutes. The HomeOla Corp., 9 S. Clinton St., Chicago 6, Ill.

Modular wall, floor, partition, ceiling, and roof panels: for custom-designed residential construction, introduced in 1947. **Lightweight modular steel trusses** for residential construction, redesigned products. Also in process of retooling for production revised version of Homes in Series Twenty, commencing Dec. 1, 1947. HomeOla Corp., 9 S. Clinton St., Chicago 6, Ill.

Multi-Weaving: process for weaving metal, plastic, fabric, or wood in which a wide range of grades, gages, and meshes can be produced. Can be used in ventilating grills, prefab housing, flooring, partitions, etc. General Electric Co., Electronics Dept., Bridgeport, Conn.

Packaged Chimney: lightweight, easy to install; low cost. In 2 sections, each lined with acid-proof, high-temperature tile inside 3" thick insulating wall of lightweight masonry, steel reinforced. Complete with steel roof housing and all materials required for erection. Van-Packer Corp., 135 S. LaSalle St., Chicago 3, Ill.

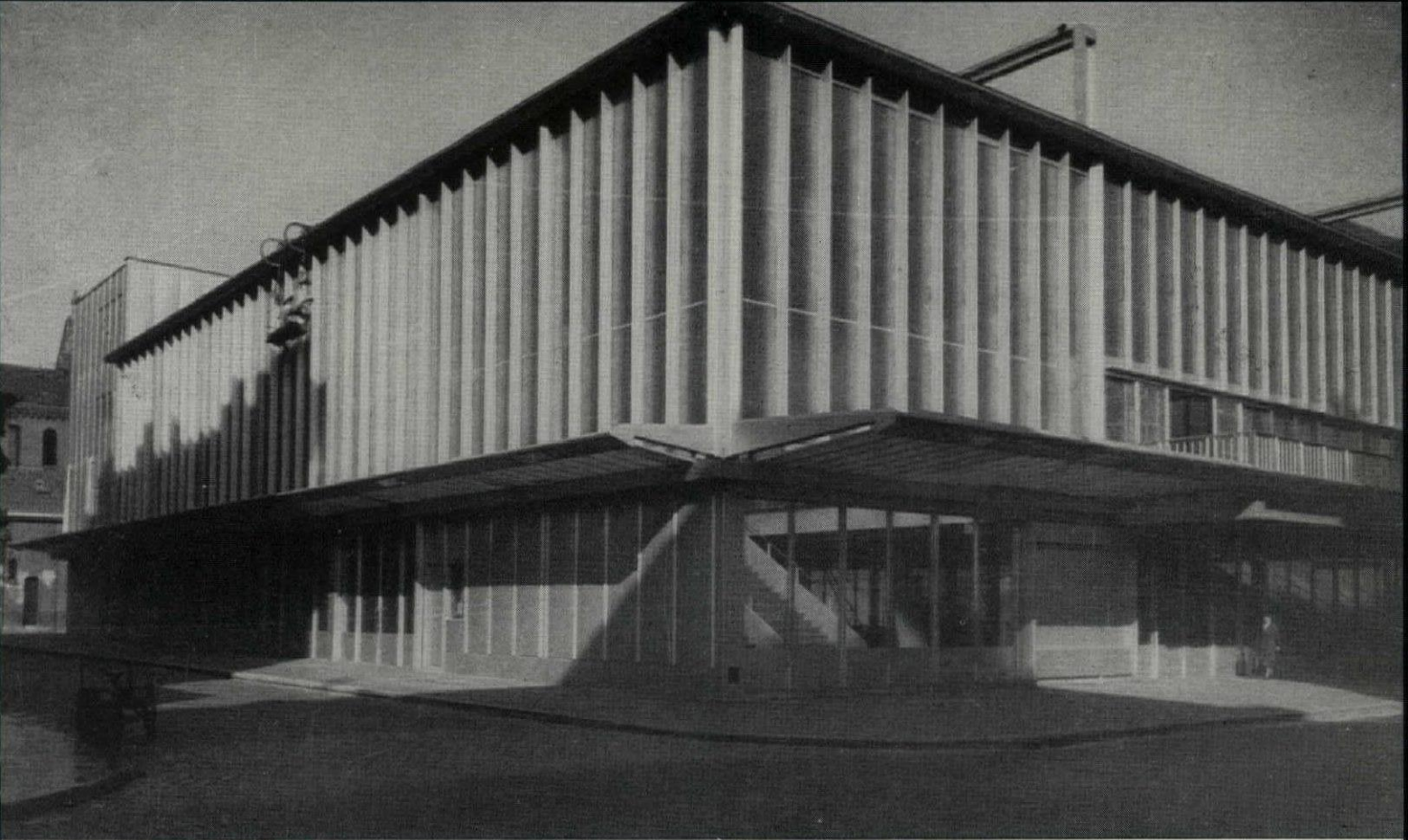
Portable Bleachers: new product. Timber Structures, Inc., P.O. Box 3782, Portland 8, Ore.

Rigidsteel Construction: prefabricated rigid-framed, welded all-steel buildings; welded frames eliminate many members ordinarily required in roof trusses, etc.; standard bays 14' to 24' in 2' multiples. Suitable for agricultural, warehousing, single-story manufacturing purposes, etc. Field erection and alteration much simplified. McCloskey Co., Pittsburgh, Pa.

Stanfab Unit Bathroom: 3-fixture bathroom and accessories, including bathtub, lavatory, water closet, medicine and linen closets, combination toilet paper holder-bookshelf with cigarette compartment and tray, towel and grab bar, and water-tight wall protectors. All pipes are built in. Standard Fabrication, Inc., 1400 W. Armistage, Chicago, Ill.

Timberib: economy building, 40 ft span; windows and doors optional. New product. Timber Structures, Inc., P.O. Box 3782, Portland 8, Ore.

Timtruss: economy buildings, shop fabricated, low cost, multi-purpose, ready for delivery. Can take on any architectural treatment for warehouses, stores, showrooms, hangars, etc. Optional widths 40' or 50' in varying lengths of 16' multiples. Timber Structures, Inc., P.O. Box 3782, Portland 8, Ore.



Materials for '48

SURFACING

PUBLIC HALL CLICHY, FRANCE

BEAUDOIN & LODS, Architects

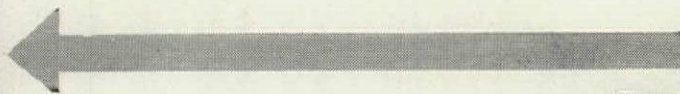
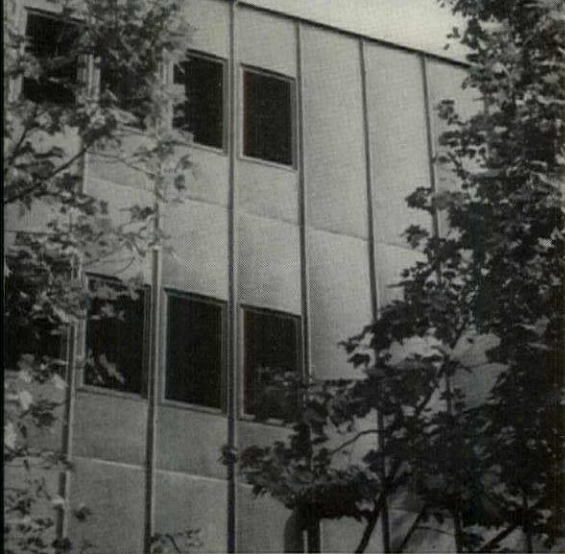
M. W. BODIANSKY, Consulting Engineer

PROBLEM: To provide in one block-square building a two-floor public market, a social hall and public meeting room for 1,500 to 2,000 people, a 500-seat moving picture theater, and a block of offices. The market had to have, on both floors, traditional openness to outdoors; the theater of course had to be designed to exclude natural light; but market, theater, or hall would never be in use at the same time.

SOLUTION: Movable interior walls, floor, and roof, motor-operated, make it possible to change the upper floor from market space to social hall or theater in less than an hour. Lower floor is devoted entirely to the market, except for a lobby which can be partitioned off to serve the upper floor. Walls of the lower floor are glass doors; of the upper, translucent plastic and glass. The office block, taller, is at the rear. The entire structure was prefabricated.



GROUND FLOOR, showing corner of market and stairs to upper floor.

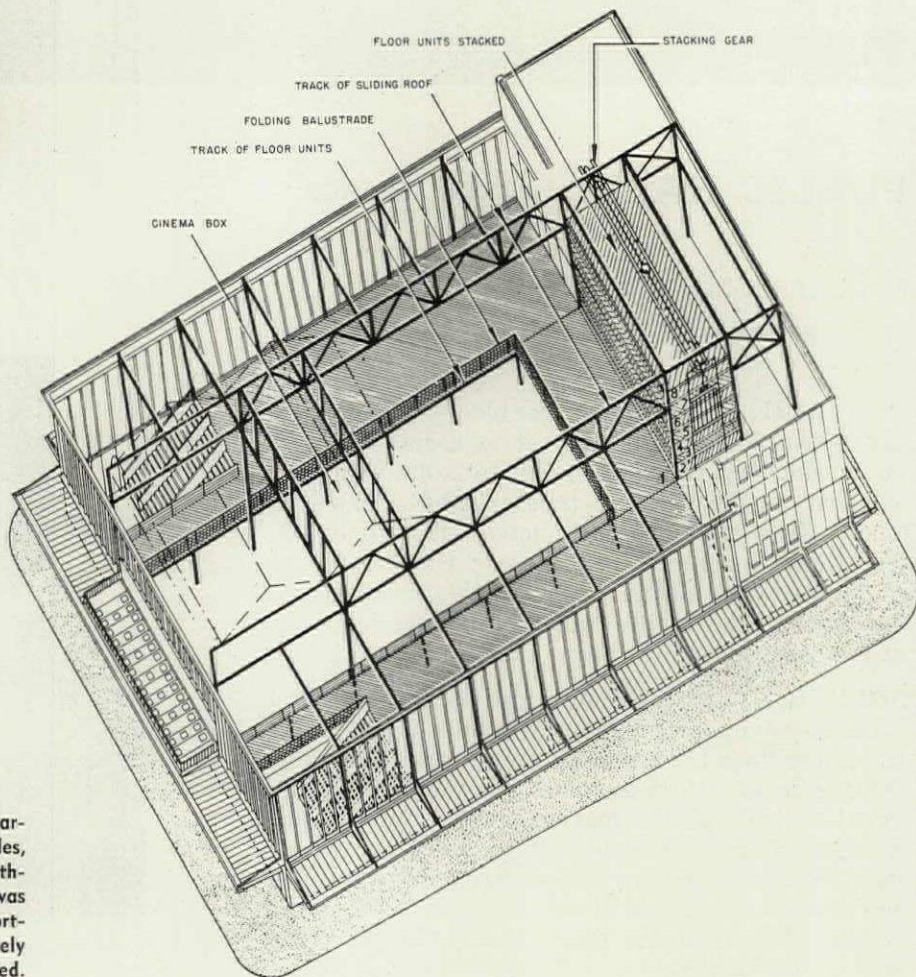
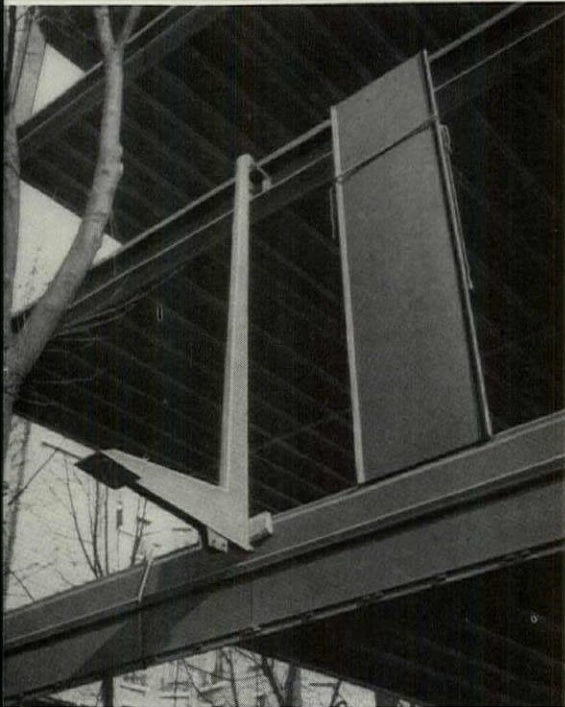


Franziska Porges

METAL WALLS

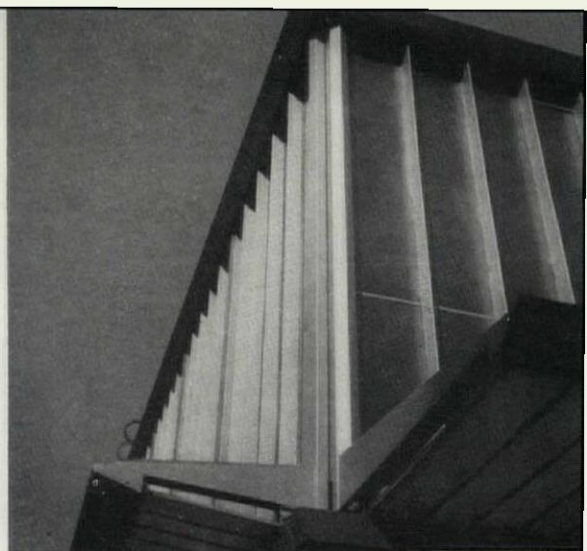
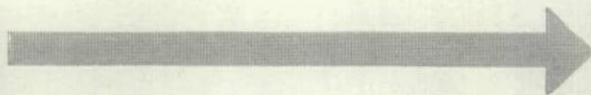
Walls of the office portion of the building, along one entire street frontage of the full-block site, consist of completely prefabricated metal panels which are held in place by spring cover strips. These are easily removable, allowing any panel to be taken out for examination and repair. Individual panels are composed of an inner and an outer sheet of steel, spot-welded together. Inner face of each sheet has an asbestos fabric lining; panels are filled with glass wool held in position by upholstery-type springs. Though built in 1939 and poorly maintained during the war, none of these panels shows signs of damage or rust today.

Materials



MARKET

Building arranged as a public market; lower floor for meat, vegetables, perishables; upper for textiles, clothing, etc. Entire construction was prefabricated in units of transportable size and assembled completely dry on the job. Steel frame is welded.



TRANSLUCENT WALLS

To increase the apparent openness of the second floor when used as a market, thus furthering the French tradition of open-air retailing, it was decided to enclose the area with translucent walls. Glazed panels set between the vertical framing members have outer surfaces of glass, inner faces of translucent ribbed plastic, which admit a soft, diffused natural light. The air space between serves as thermal insulation.

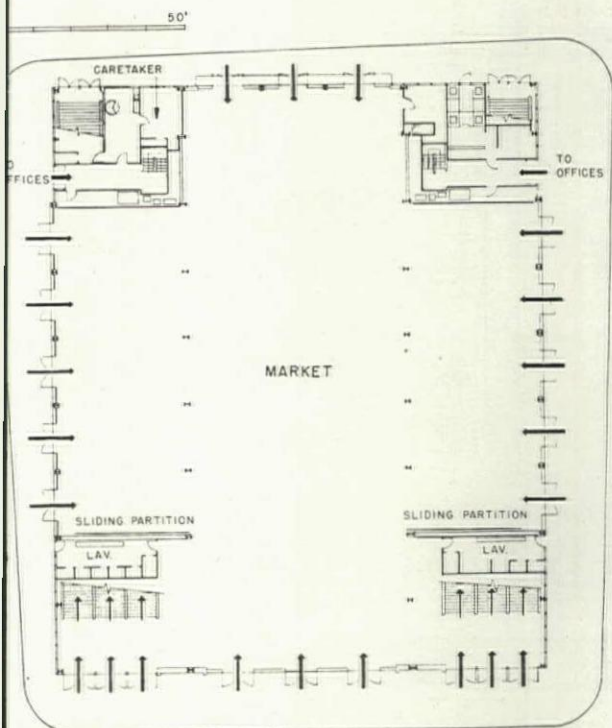
In both metal and translucent walls, the vertical framing is covered with enameled sheet steel sections in standardized unit sizes.



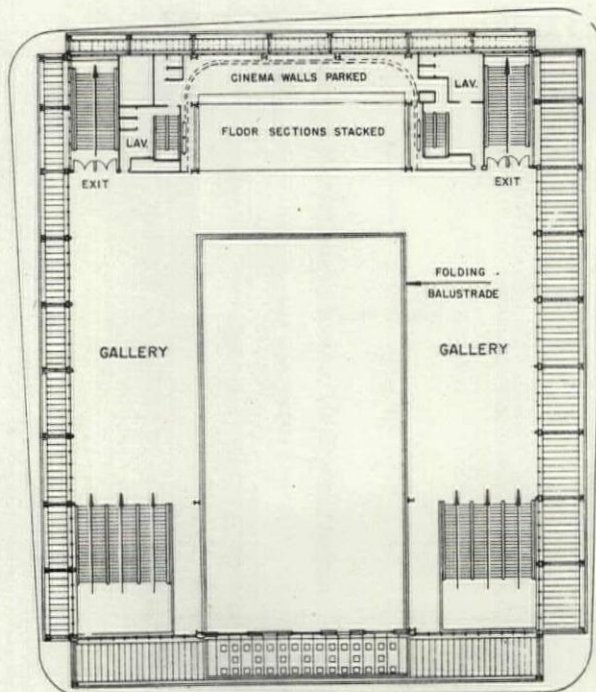
SURFACING

PUBLIC HALL, CLICHY, FRANCE

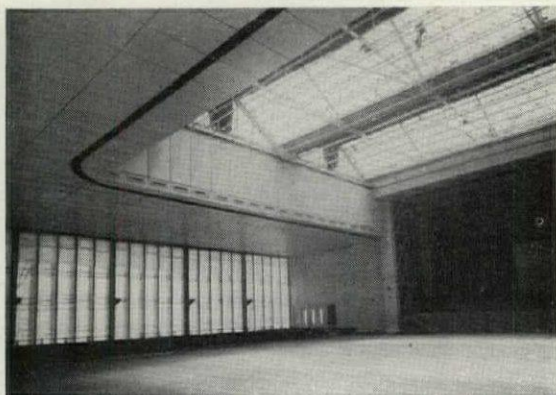
LEAUDOIN & LODS, Architects



GROUND FLOOR; note sliding wall which shuts off foyer.



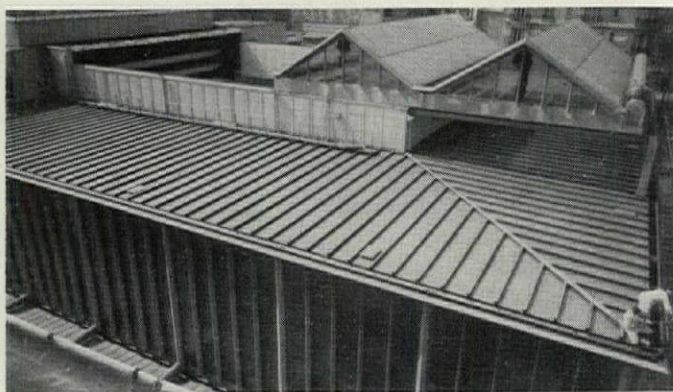
UPPER FLOOR (as a market); center well is open to sky.



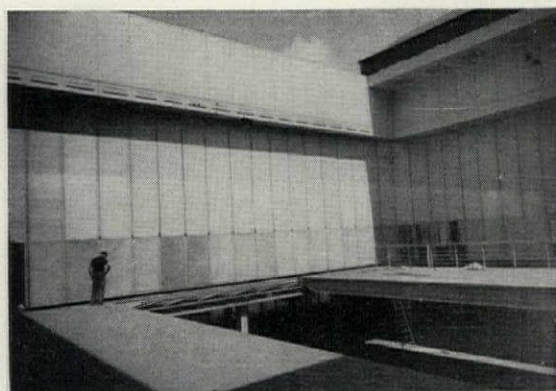
INTERIOR, upper floor, skylight and floor panels in position, making the hall suitable for social or public meetings.

MOVABLE FLOOR AND ROOF

When the upper floor center well is open, floor panels are stacked in the stage area. When the floor is to be filled in, the whole stack, powered by a 4 hp motor, moves out and deposits the panels in place one by one. For restacking, an 18½ hp motor is required. The balcony balustrade folds down before the floor panels are placed. Changing the floor takes about 45 minutes. Floor panels consist of steel girders and joists decked with sheet steel; over this are a cushion of asbestos secured with asphalt, and top surfacing of linoleum. The same finish is used over balcony floors. Ceilings are of enameled steel sheets. The sliding roof (5 hp motor) can be removed in about one minute. The projection room is housed in the fixed roof framing. The roof is also insulated with glass wool.

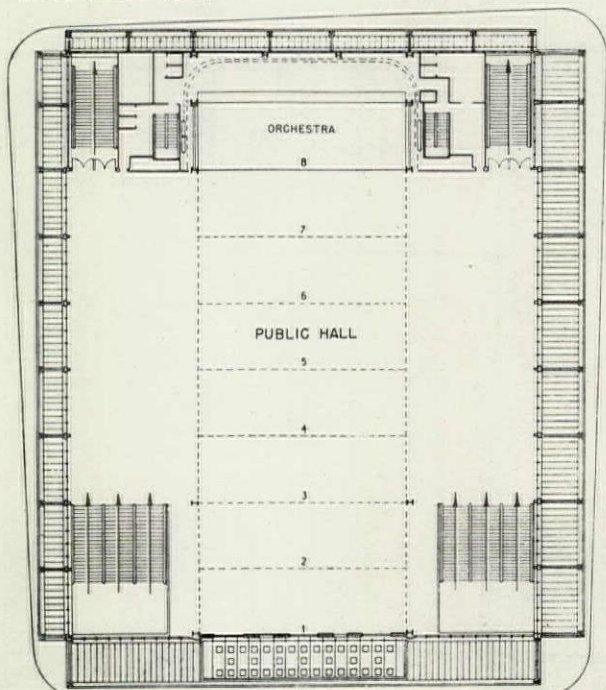


SKYLIGHTS moved away to open the center well to the sky when entire building is being used as a market.

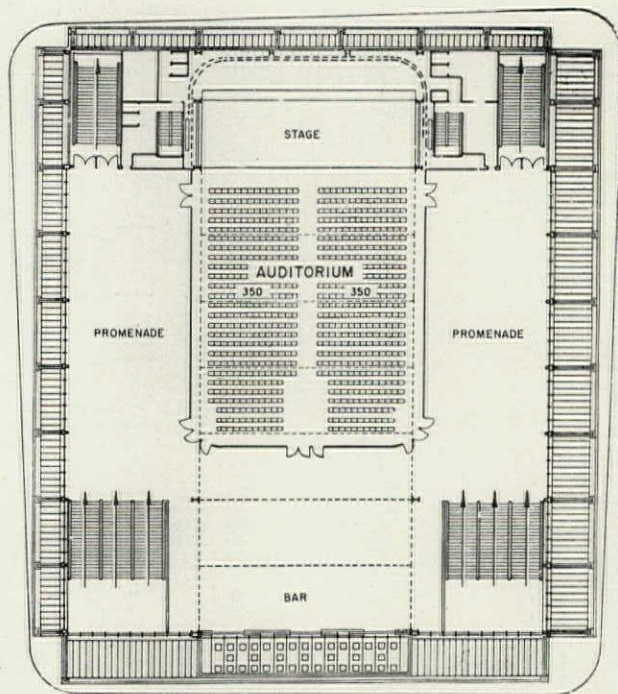


INTERIOR, upper floor, showing both floor panels and skylight opened on market day.

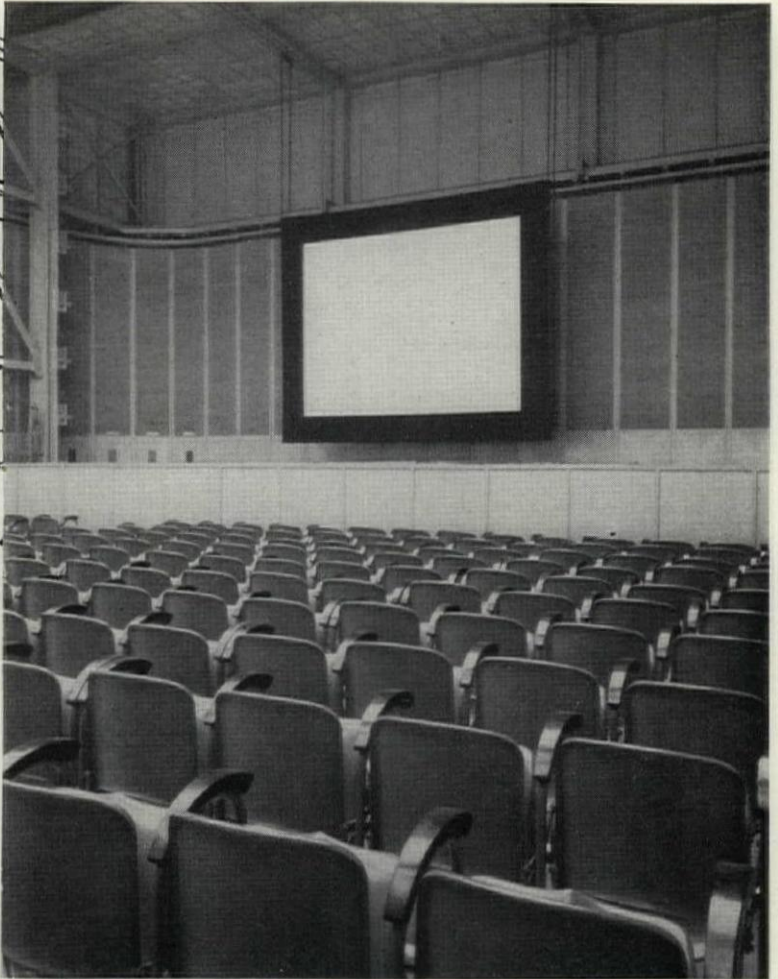
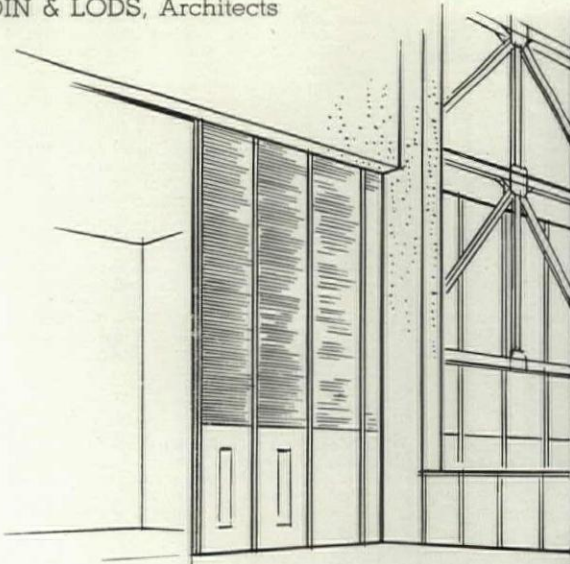
0 50'



UPPER FLOOR, as a social or public hall, center well floor panels in position.



SAME FLOOR, as a moving picture theater; sliding walls drawn around theater area.

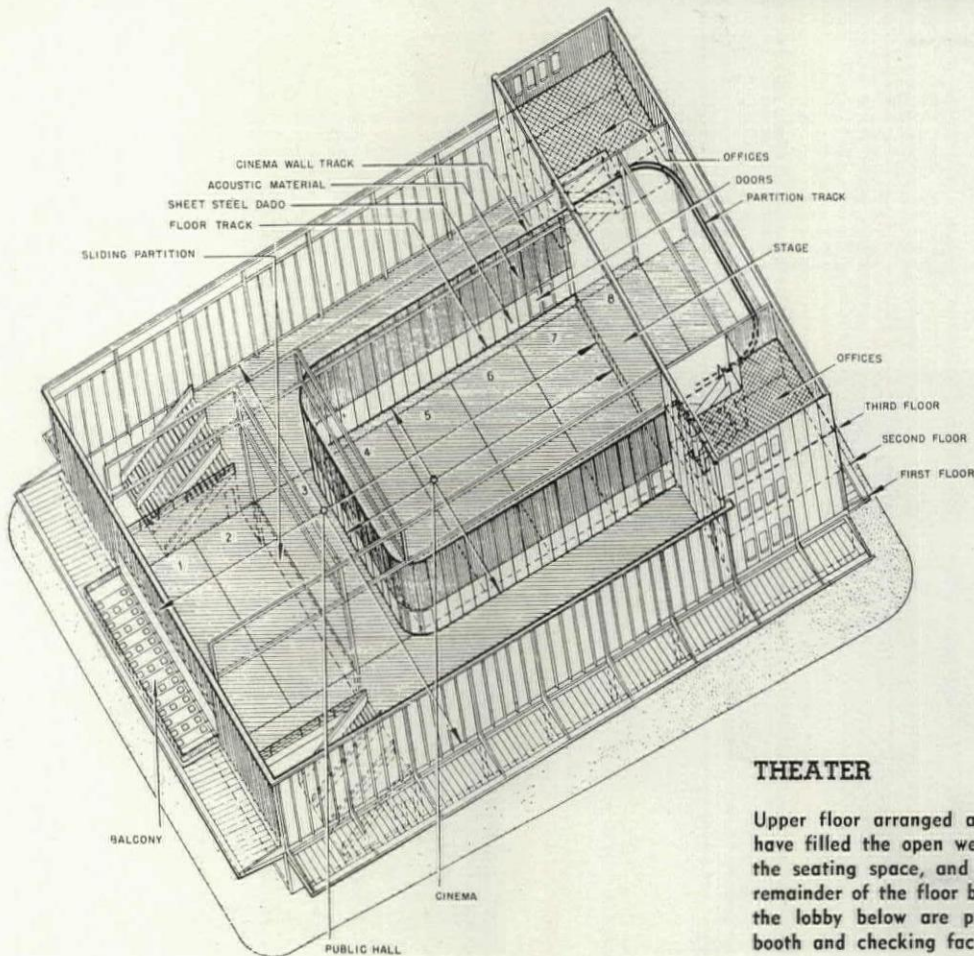


MOVABLE WALLS

When a theater is wanted, a button is pressed and two sets of movable walls emerge from slots at either side of the stage, encircle the theater area, and meet at the opposite side. The walls, suspended from a track concealed in the ceiling, consist of metal frames surfaced with sheet steel dados, above which they are filled with mineral wool slabs faced both sides with fabric to act as an acoustic absorbent. When not wanted, walls are stored behind the movie screen.

It takes as long for the walls to move into position as it does the roof (about one minute), and requires a 5 hp motor.

INTERIOR of the 700-seat movie theater



THEATER

Upper floor arranged as a theater; floor units have filled the open well, interior walls enclose the seating space, and the roof is closed. The remainder of the floor becomes a promenade. In the lobby below are placed a portable ticket booth and checking facilities.

SURFACING

FLOORING, FLOOR COVERINGS

Armstrong's Acolon: transportation flooring, new product introduced in 1947. Armstrong Cork Co., Lancaster, Pa.

Congoflor: new, heavy-duty mastic composition on asphalt-saturated felt backing, for industrial and commercial areas; inexpensive, resilient, easily maintained. May be laid loose or permanently applied with **Nairn Linoleum Paste**. Suitable for above, on, or below grade installations. Congoleum-Nairn, Inc., Kearny, N. J.

Flo-Ever Plastic Floor Covering: plastic floor covering which eliminates need of waxing and polishing. Felt-backed Vinylite flooring, applied exactly like linoleum. Does not chip or crack; unaffected by alkali; does not support combustion; resists staining by water and grease. Available in wide range of excellent colors and patterns. Delaware Floor Products, Wilmington, Del.

Hardwood Flooring: 3-ply, cross-laminated hardwood flooring available 12" wide and in any length. Made in a continuous glue press from small-size, cull-type hardwood logs. Best part is used as top layer, remainder as other 2 layers. Laminated Wood Products Co., Knoxville, Tenn.

Latex Underlayment: new leveling fill for use under resilient floorings; stabilized rubber latex emulsion and mineral filler. Requires no primer, easily applied. Provides sound deadening cushion withstanding slight structural movements without loosening or cracking. Johns-Manville, 22 E. 40th St., New York 16, N. Y.

Leatherfloor: natural cowhide capable of taking highly waxed finish. Applied in individual tiles by means of a mastic directly to smooth sub-floor such as plywood, cement, etc. Produced in 4", 6", 8" squares or triangles. Promptly available. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Maple Flooring: new grading rules. Combination grades of wood. Second and better grade, combination of first, second grades developing in a strip without crosscutting for each grade. Lowest grade not less than second. Third and better grade, combining first, second, third grades developing in strip without crosscutting; lowest grade no less than standard third grade. Maple Flooring Mfrs. Assn., 46 Washington Blvd., Oshkosh, Wis.

Nairn Marine Deck Covering: resilient flooring combining good appearance, easy maintenance, resistance to severe wear. Research facilities produced only material which met critical Navy requirements for war vessels. Scorch-, alkali-, water-resistant; unaffected by heat and humidity; good nonslipping qualities when surface is wet. New product. Congoleum-Nairn, Inc., Kearny, N. J.

Nairn Veltone: 1/8", burlap-back commercial linoleum is again available. Congoleum-Nairn, Inc., Kearny, N. J.

Parkay wall and floor covering: 2 styles (both in solid American oak) —Parkay tile in 9" x 9" beveled sections to lay with alternating grain directions, revealing qualities of the wood; Parkay 9" wide **Broadboard** with chamfered edges, for floor covering and wall paneling. Quickly installed, 1 room floored or paneled ready for use in 1 day. Promptly available. Wood-Mosaic Co., Louisville 9, Ky.

Servicised Safety Flooring: rubber composition into which is anchored **Alundum** abrasive aggregate providing nonslip, durable walking surface. No grooves to catch dirt, resistant to chemicals. For installations where grease, gasoline are anticipated, different rubber base required. Consult Engineering Dept. for **Servicised Greaseproof Flooring**. Servicised Products Corp., 6055 W. 65th St., Chicago 38, Ill.

Servicised Safety Floor Tile: available in various colors matched to **Servicised Safety Treads** for landings and vestibules, in 36" x 84" sheets or 9" x 9" or 12" x 12" tile forms. Servicised Products Corp., 6055 W. 65th St., Chicago 38, Ill.

ROOFING, SIDING (exterior)

Alcoa Industrial Roofing and Siding: aluminum, newly designed for long-term service with minimum maintenance. Aluminum Co. of America, 801 Gulf Bldg., Pittsburgh, Pa.

Aluminum Alloy Roof Decking & Siding: improved product. Macomber, Inc., Canton 1, Ohio.

Creo-Dipt Double Wall Zephyrs: deep, textured **Certigrade Red Cedar** stained shingles, backed by **Creo-Dipt Moisture-Resistant Insulation Board**. Shipment includes proper quantity of shingles, insulation backing board, rustproof nails to cover 100 sq ft of surface. Immediately available. Creo-Dipt Co., Inc., North Tonawanda, N. Y.

Dubl-Coverage Tite-On Shingles: asphalt; provide 2 layers, interlocked into virtually 1-piece roof of double strength. Triple coverage over 1/3 roof area. Will remain intact in winds and gales. Basket-weave pattern, woodgrain texture. Available for prompt shipment. Ruberoid Co., 500 5th Ave., New York, N. Y.

Fiberglas Roofing Material: glass fiber bonded into a uniform felted mat used as a carrying and reinforcing agent for bitumen in roofing. Unaffected by high temperature applications of bitumen. Owens-Corning Fiberglas Corp., Toledo, Ohio.

Fitrite products: snow guards, roof strainers, leader bands and straps, skylight gearing. These new items are for steep-sloping roofs of all kinds of materials. David Lewow, 308 W. 20th St., New York 11, N. Y.

Ford-V-Neer: new siding material using Fiberglas as the base material. Weather-, fire-, and vermin-resistant. Available in either brick or stone pattern, wide variety of colors, large sheets. Ford Roofing Products Co., Chicago 2, Ill.

Giant Strip asphalt shingles: extra thickness, twice coated with refined asphalt and mineral granules. Double protection uniform over entire area. Size 12" x 36", have 3 square-cut tabs, come in variety of colors. Available in limited quantities. Improved product. Johns-Manville, 22 E. 40th St., New York 16, N. Y.

Glasfab: waterproofing membrane made from Fiberglas yarn for roofing and other use in construction. Rotproof; not affected by hot coal tar or asphalt bitumens. Lexington Supply Co., Cleveland, Ohio.

Leadtex "15": reintroduced in 1947, a lead-coated copper; neutral gray, noncorrosive, non-staining; for roofing, flashing, gutters, leaders, etc. Copper is coated both sides with 7 1/2 lb lead per 100 sq ft. Available in standard sizes of sheet, strip, parallel edge strip, and roll copper. Revere Copper & Brass, Inc., 230 Park Ave., New York 17, N. Y.

STAIRS

Feralun Cast Iron Anchors On Feralun Abrasive Treads: improved product. Anchors shipped with treads; heretofore anchors were shipped separately from treads and assembled on the job. Available in 6 months. American Abrasive Metals Co., 460 Coit St., Irvington, N. J.

Servicised Safety Treads: with non-slip nosing; applied to concrete, stone or metal construction with equal ease. Laid in adhesive cement, yet can be repaired or replaced at will. 2-tone color effects obtainable by use of narrower treads and standard **Servicised Safety Tile** as back-up. Servicised Products Corp., 6055 W. 65th St., Chicago 38, Ill.

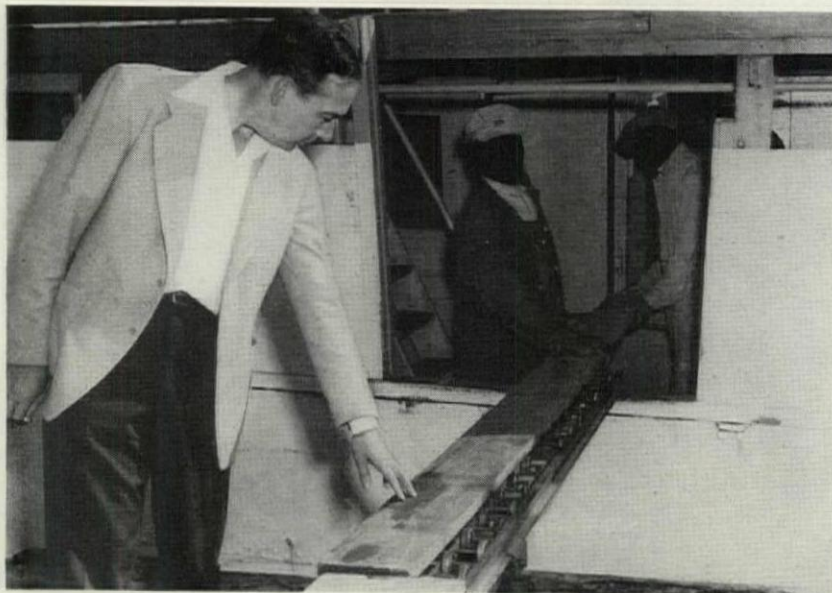
BUILDING BOARDS, PLYWOOD

Durisol: building material made of wood chips and refuse of planing machines, plus stabilizers and Portland Cement binder. Perfected in Switzerland; will soon be available here. Used in semi-structural panels, slabs, blocks; lightweight; excellent insulation qualities; non-inflammable. Many more uses now in development; among others, vertical bearing panels for small house construction. Durisol, Inc., 420 Lexington Ave., New York 17, N. Y.

Glazecoat Finish for insulating board products: improved surfacing, harder, more durable, easier to clean; smudges quickly removed with ordinary art gum eraser. **Glazecoat** ceiling panels 12" x 12", 16" x 16", 16" x 32", ivory color; **Glazecoat** wall plank 10", 12", 16" wide by 8', 10', 12' long in ivory, graytone, rose tan. **Glazecoat** finished building board 4' wide by 6', 7', 8', 9', 10', 12' long in ivory. Improved products. Johns-Manville, 22 E. 40th St., New York 16, N. Y.

Welchboard: new, waterproof, exterior-grade plywood, surfaced with a layer of ground wood waste and resin binder to make it suitable for the finest of finishes. West Coast Plywood Co., Aberdeen, Wash.

Woodwelder: portable, high-frequency handgun; secures wood with resin glue, electrothermally, without nails or screws. Used like an electric iron; operates on 1-kw generator. Woodwelding, Inc., 3000 W. Olive St., Burbank, Calif.



Sickles Photo-Reporting Service

TILE (ceramic, linoleum, etc.)

Armstrong's Acolon: transportation flooring, new product introduced in 1947. Armstrong Cork Co., Lancaster, Pa.

Amcolun: non-slip safety tile, new 1947 product; available in 4 weeks. American Abrasive Metals Co., 460 Coit St., Irvington, N. J.

Ceramic Tiles: this manufacturer has endeavored to meet demands for a few essential products, which has limited production of items normally fabricated. New items must wait until production equipment has been freed from the regular items so badly needed. American-Franklin-Olean Tile Co., Lansdale, Pa.

Faiencettes: small units of mounted glazed faience mosaic tile. Improved product introduced in 1947. Sparta Ceramics Co., East Sparta, Ohio.

Hyatt Streamliner: portable diamond saw for tile cutting. Can be operated at 1/5 hp; has self-contained flushing system. Accurate liners to 1/8" may be cut. Hyatt Lapidary Equipment Co., East San Diego, Calif.

Kencork: cork tile for floors and walls, reintroduced in mid-1946 after 6 years' absence from architectural field. David E. Kennedy, Inc., 58 2nd Ave., Brooklyn 15, N. Y.

Modular face brick and facing tile: improved design in 1947. Elgin-Butler Brick Co., Austin, Tex.

Plastic wall tile: new, with self-aligning lap joint to eliminate possibility of setting askew. Forms a complete plastic wall surface; no need for grouting joints, resulting in considerable saving. Available in choice of colors, plain or marbled. Pittsburgh Tile Co., Pittsburgh 19, Pa.

Styron Tile: thin, lightweight plastic wall tile in variety of colors. Said to be nonwarping, non-checking; color is all the way through. Can be installed on new or old walls. Dow Chemical Co., Midland, Mich.

Suntile Trim: clay; can be used as door trim, sink trim, window trim, wainscot cap. Available in 16 glazed colors. Cambridge Tile Mfg. Co., P.O. Box 71, Cincinnati 15, Ohio.

ThemeTile: 9" x 9" composition tile, die-cut, wide range of "themes"—dots, petals, stars, musical notes, silhouettes; can be assembled into borders, special floor arrangement, aisles, focal areas. Available at once. David E. Kennedy, Inc., 58 2nd Ave., Brooklyn 15, N. Y.

Vari-Tile: fluted surface, glazed tile for wall use; had been off the market but is now available. U. S. Quarry Tile Co., Canton, Ohio.

METAL SHEETS, ASSEMBLIES

New, low-priced aluminum sheet: said to be 15% lower in price than any other aluminum offered by sheet metal industry. Easily bent, welded, fabricated. Especially alloyed to increase strength; excellent resistance to chemical attack. For use in wide range of products such as air ducts for heating, ventilating systems, building products of all types. Reynolds Metals Co., 2500 S. 3rd St., Louisville, Ky.

Aluminized Steel: formed by application of molten aluminum to both sides of sheet steel. Resists corrosion, also high temperatures (900F to 1600F) without scaling or discoloration. Can be welded, bent without peeling or flaking. Not recommended for direct paint application, but does hold paint better than galvanized steel. The American Rolling Mill Co., Middletown, Ohio.

Milcor Applied Casings and Trim: for residential construction. Fabricated from 22-ga rolled steel. Painted both sides with rust-inhibitive, light gray primer coat. Units cannot warp, split, crack, or rot. Cannot be damaged by rats or vermin. 3 styles of casing trim, 2 styles of base trim. Immediately available. Inland Steel Products Co., P.O. Box 393, Milwaukee 1, Wis.

Prolyt: aluminum solder used to solder aluminum to aluminum without a flux or flux substitute. Resisted shearing after 250-hr salt spray corrosion test. Also showed excellent fusing and electrical properties. Aluminum Solder Corp., 10 E. 52nd St., New York, N. Y.

Rigidized Metals: patented method of processing metals to increase strength and rigidity. Attractive patterns obtained, utility values improved. Process may be applied to stainless steel, aluminum, copper, brass, plated metals, etc. Material used for many products: machinery, appliances, hotel and restaurant fixtures, other equipment. Rigid-Tex Corp., 658 Ohio St., Buffalo 3, N. Y.

GLASS, MIRRORS

Flexglass: small pieces of glass on flexible backing, with color fired on underside. New product introduced in 1947. Designed by Muller-Barringer. Promptly available. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

One-Way Mirrors: for use where it is desirable to see without being seen. Produced by evaporating chromium in a vacuum, causing vaporized metal to condense on glass surface. Furnished in polished plate glass 13/64" thick, in 3 sizes: 12" x 40", 20" x 40", and 30" x 40". Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh, Pa.

Glass: see "Openings"

PLASTICS

Blanchardized Vinylite: new vinyl plastic sheeting impervious to spotting, staining, or abrasion. Available 48" wide in standard grade and in special grade treated on back for installing on hard, smooth surfaces with special adhesive. 22 standard colors; may be furnished to match any color swatch. Promptly available. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Corrugated Plexiglas: new form of acrylic plastic, combines structural advantages of corrugation with light weight, safety, and decoration. Also **Patterned Plexiglas** in wide range of decorative designs. Both suitable for building, decoration, display, furniture. Highly shatter-resistant, easy to clean. Rohm & Haas Co., W. Washington Sq., Philadelphia 5, Pa.

Decorative Micarta: was off the market, now

available. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Formica Realwood: complete line of colors and patterns now being produced. **Formica** laminated plastic sheets are immediately available to fabricators of sink tops, table and counter tops, etc., in all sections of the country. Formica Insulation Co., 4614 Spring Grove Ave., Cincinnati 32, Ohio.

Neotron: resin-impregnated, pigmented pulp made into a reinforced panel which can be laminated to any backing. Excellent chemical and heat resistance; easy to trim, fit, apply. Amply available. Macrolyn, Inc., Houston, Tex.

Plastiglaze: new plastic coating which hardens, toughens, and preserves paper, plywood, lumber, and plaster against water, salt air, and most mild acid solution. Also affords high surface glaze. Calresin Corp., Culver City, Calif.

Vimlite: new material of reinforced plastic used to enclose sides of buildings while under construction. Also used for tarpaulins which can be rolled away for storage and used indefinitely. Translucent, gives privacy without blocking light. 2 types: plastic mesh, wire mesh. Celanese Corp. of America, 180 Madison Ave., New York 16, N. Y.

Vinylite plastics: in various forms—draperies, upholstery, resin-fortified lacquers, flooring. Also paneling, cabinet-work, resin-bonded plywood, counter and desk tops. Bakelite Corp., 300 Madison Ave., New York, N. Y.

FABRICS, WALL COVERINGS

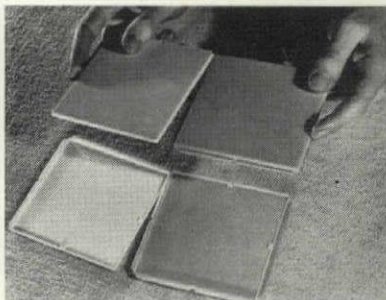
Checkwood: wall covering of 1" jewel-cut squares of plywood bonded to fabric backing. Suitable for moldings, trim, furniture facing, wall treatment; may be stained, painted, or finished with shellacs, waxes. Sheets 24" square. New product designed by Muller-Barringer. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Congowall (Upper Wall Patterns): thick baked-enamel surface and the exclusive **Duplex Felt Back** provide a wall covering never needing re-finishing or repairs. New product; does not blister, bulge, or crack; raised tile effect gives "ceramic" look to tile patterns; seams practically invisible. Easy to install, care for. Guaranteed fully. Congoleum-Nairn, Inc., Kearny, N. J.

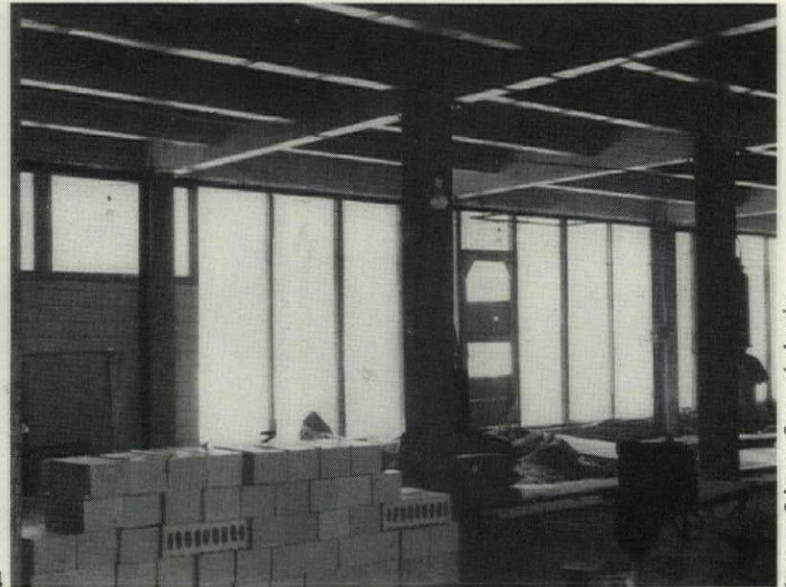
DDT Wallpaper: DDT-treated, ready-pasted, children's room wallpaper, available in two patterns, "Jack and Jill" and "Disney Favorites." Carries 1-year guarantee. Trimz Co., Div. of United Wallpaper, Inc., 222 W. North Bank St., Chicago, Ill.

Detron: metallic-plastic-lacquer wall covering on canvas backing, available in 13 new textural color effects. Washable with soap and water. Installed like ordinary wall paper, comes in double roll units. Frederick Blank & Co., Inc., New York, N. Y.

Leatherwall: for wall application, covering certain types of furniture, etc. Offered in 36" or 50" widths in continuous lengths; standard colors or to match any swatch. Promptly available.



Neuman-Schmidt



Courtesy Celanese Corp. of America

1. Inspecting a shipment of Cedro Macho, imported wood similar to mahogany. Don B. Wallace & Co.
2. Testing shock-resistant Amcolun safety floor tile. American Abrasive Metals Co.
3. Self-aligning Pittsburgh Plastic Tile, for walls. Pittsburgh Tile Co.
4. Job protected with Vimlite translucent plastic tarpaulins. Celanese Corp. of America.

U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Nairn wall linoleum: surfaced with genuine linoleum composition on backing of light canvas. Overall thickness .050". Stain-resistant; attractive colors permanent, cannot fade or wash off; practically invisible seams make cleaning easy. Congoleum-Nairn, Inc., Kearny, N. J.

"Plastic wallpaper" and matching fabrics: also improved plastic wallpaper and fabrics in matching patterns. All immediately available. Laverne Originals, 225 5th Ave., New York 10, N. Y.

Plymouth Fire-Guard Fabrics: noncombustible Fiberglas yarns and flameproofed cotton combined to provide fire-resistant fabrics. Available in variety of colors, designs; can be cut, sewed, and ironed; will not stretch; can be dry-cleaned without losing their fire-resistant qualities. Plymouth Fabrics, Fall River, Mass.

Sana-Wall: new wall covering of plastic-treated sheets bonded to a cellulose fiber back. Dirt-proof, greaseproof; does not discolor or dull with cleaning. Available in tile design or plain. Guaranteed for as long as it remains on wall. Sandura Co., Inc., Architects Bldg., Philadelphia 3, Pa.

TRIM, ADHESIVES

Chromedge Trims: metal trims of channel strip; also threshold weather strips. Channel strips available in 3 sizes for all standard gages of plate glass. Weather strips designed to fit door bottoms of any size or thickness. Are drilled and counter-sunk assuring flush installations. Available in 32, 36, 42, and 48" lengths. B & T Metals Co., 425 W. Town St., Columbus 6, Ohio.

Fairprene (No. 5118) Adhesive Cement: thermoplastic elastic waterproof composition for bonding Buna-N rubber and vinyl film or sheet to rigid surfaces—steel, aluminum, wood, concrete, glass. Affected by high temperature (160F), regains strength when cooled; resists oxidation. Dries completely in 2 hours. Du Pont Fabrics Div., Fairfield, Conn.

Lopo-Trim: hollow steel quarter round with projecting prongs, can be used as baseboard trim, wiring raceway, etc. Prongs pushed behind baseboard hold trim without nailing. Elbows for corners are available. Neutral gray finish, paintable. National Electric Products Corp., Pittsburgh, Pa.

Nu-Wall: bonded plaster, a new method of restoring old walls, bonds permanently to cracked surfaces, glazed tile, concrete, fiber board, etc. Takes all regular plaster finishes. Available in general unlimited quantity. Manufacturer may introduce a new patching plaster, also other improvements in bonding plaster. Nu-Wall Mfg. Co., 923 N. 19th St., Milwaukee 3, Wis.

Pecora adhesives and mastics, acoustical tile mastic and tile mastic for decorative tile: new products. Also improved tile mastic and acoustical tile mastic. All available. Pecora Paint Co., Sedgley Ave. & Venango St., Philadelphia 40, Pa.

Veriply Plastic Resin Glue: waterproof glue for bonding lumber and plywood. Wood-Ply Research Foundation, Inc., 111 W. Monroe St., Chicago 3, Ill.

FINISHERS, PROTECTORS (paints, etc., waterproofing)

Agraseal: "one-coat" protective and sealing coating for cinder blocks, lightweight aggregate or concrete blocks. Applied with scrub brush; available in white, ivory cream, light buff, stone gray, yellow, and light green. Tamms Silica Co., Chicago 1, Ill.

Aluma Seal: aluminum fibrated roof coating; **Copperite Rot Proofing,** preserves all types of cellular matter. 2% metal base penetrating solution of copper and cobalt naphthenates carried in linseed oil and petroleum naphtha; embodies all fundamental requirements of all-purpose anti-fungus agent. Steelcote Mfg. Co., 3418 Gratiot St., St. Louis, Mo.

Cabot's Cinder Block Primer: new product to be introduced early in 1948. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Cabot's Gloss Collopakes: compounded by patented process, gives product tremendous hiding power and lasting, bright gloss. Contains no fillers or adulterants, therefore colors retain permanence. Used on all interior and exterior surfaces, and such materials as stucco, stone, brick, cement, and metal. Immediately available. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Cabot's Heavy-Bodied Shingle Stains: new finish for shingles, also exterior woodwork. Hiding power valuable for use on old, porous, weather-beaten shingles. Colors go flat after drying, eliminating shiny or "painty" effect. Immediately available. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

California Redwood Stain: new protector which maintains color of redwood clapboards and sidings; also restores color to faded redwoods. Gives redwood appearance to any wood. Immediately available. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Clear Coat: odorless, non-slip linoleum finish having a synthetic resin base. May be walked on two hours after application. Said not to turn yellow or curl linoleum. Comes in pint and quart glass containers. O'Brien Corp., 101 N. Johnson St., South Bend 21, Ind.

Dutch Boy: completely new line of house paints and trim colors, blended for maximum life and beauty. Blended paints available in white and colors, the result of 30 years' outdoor weather-testing. Exterior paints available in 3 types: whites, tints, gloss trim colors. New blended primer also available. National Lead Co., 111 Broadway, New York 6, N. Y.

Fire Stop: new patented fire-resistant paint originally developed for the Navy. In laboratory tests, wall covered with Fire Stop merely formed brown blisters when exposed to Bunsen burner flame at 3000F. Flames extinguished themselves within 8 to 15 seconds after burner

was removed. Washable; comes in 5 pastel tones, white. Plicote, Inc., Pittsburgh, Pa.

Firizer: to prepare surfaces of fir plywood for painting, finishing. Manufactured in clear and pigmented grades, used to minimize "wild" grains showing through surfaces and face checking under painted work. Provides beautiful finish effects in plywood-paneled rooms with minimum of labor and material costs. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Flintkote new aluminum roof coating: weather-resistant paint to protect asphalt roofs and other asphalt-coated surfaces. Consists of selected aluminum flake in a vehicle of long-life, liquid asphalt. Tight surface, heat reflector. Flintkote Co., 30 Rockefeller Plaza, New York 20, N. Y.

Fume Resistant Outside White Paint: sunproof. New product. Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

Gillespie Colors In Oil: triple-ground colors for tinting oil, synthetic, and varnish type paints and enamels; or for graining and glazing. Available in 31 standard basic shades. Gillespie Varnish Co., 182 Dey St., Jersey City 6, N. J.

Gilsalume: aluminum roof paint that provides year-round weatherproofing and summer cooling. Deflects 85% of sun's heat rays, can be applied to asphalt shingles, smooth or slate roll roofing, built-up slag or metal roofs, non-porous masonry, and outside metal work. United Gilsonite Laboratories, Scranton, Pa.

Glazecoat Finish: for insulating board products, improved surfacing, durable, easy to clean; smudges quickly removed with ordinary art gum eraser. Johns-Manville, 22 E. 40th St., New York 16, N. Y.

Hillyard's new products: **Star Gym Finish, All-Strike Bowling Alley Finish, All-Strike Bowling Alley Seal.** Available again are Hillyard's **Diamond Floor Finish, Diamond Floor Seal, Super Hil-Brite Liquid Wax, Hil-Glo Finish, Colortone Colored Finish, Quick-drying Wood Seal.** new product to be introduced before Jan. 15, 1948. Hillyard Sales Co., St. Joseph, Mo.

Horn-O-Kote: new coating for cement asbestos shingles and siding. Beautifies shingle; increases waterproof and durable qualities. Ready-mixed, no thinner required. 1 gallon covers approximately 300 sq ft. A. C. Horn Co., Inc., 43-36 10th St., Long Island City 1, N. Y.

Johnson's Wax-Fortified Interior Finishes: for commercial establishments and industry. These are 1941-1942 products; however, patents were obtained on Wax-Fortified Gloss, Semi-Gloss, Eggshell Flat in 1944. New colors selected for strength and balance. All available for immediate shipment. S. C. Johnson & Son, Inc., Racine, Wis.

Kemox: fine granules, metallic compound for hard-wearing floors and expanding, grouting, and water-resisting mortar. Was off the market, now available. Sika Chemical Corp., 35 Gregory Ave., Passaic, N. J.

Phenoplast: 100% phenolic resin coating cured without heat or pressure. Can be brushed or sprayed on practically any surface, giving a ceramic-like finish that never needs waxing or cleaning. Hard, glossy. Lockrey Plastic Products Co., 40-16 150th St., Flushing, N. Y.

Prufcoat Aluminum: aluminum paint made with corrosion-proof, synthetic resin vehicle and a special aluminum powder that lasts well. Keeps all moisture and corrosive agents from reaching the surface of the painted article. Prufcoat Laboratories, Inc., 63 Main St., Cambridge, Mass.

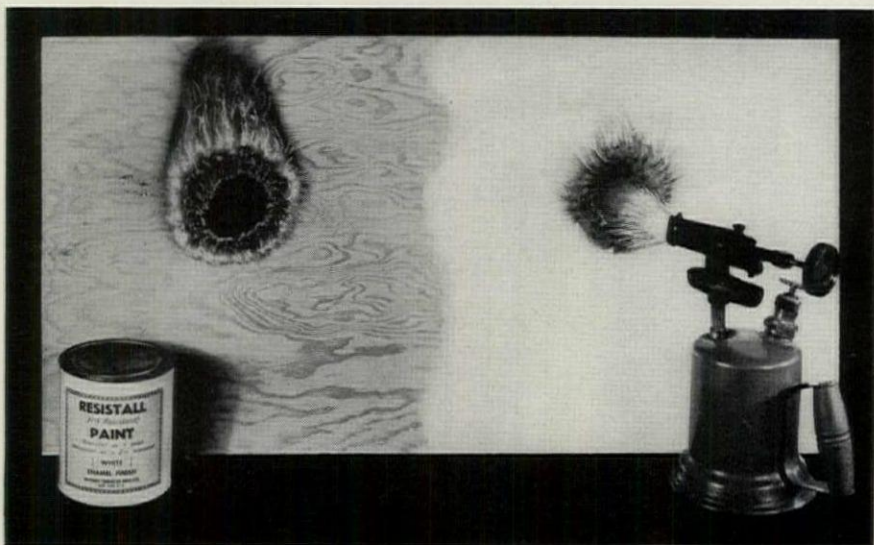
Ramuc utility enamel: improved product for concrete, steel, or wood, indoors or outdoors. Waterproof, sunproof, withstands interior and exterior exposures; color retention. Reasonable quantities immediately available. Inertol Co., Inc., 470 Frelinghuysen Ave., Newark 5, N. J.

Reducite: all-purpose paint thinner for reducing almost any type of paint product except shellac and lacquer. Substitute for turpentine. Cleans brushes; no disagreeable odor. O'Brien Varnish Co., South Bend 21, Ind.

Rigortex: new lipstick-proof enamel. Inertol Co., 470 Frelinghuysen Ave., Newark 5, N. J.

Sika Seal: new protective paint for concrete, masonry, or steel, to be applied on dry or wet surfaces. Forms black, tough, flexible film, adheres firmly, prevents penetration of water or dampness. Not affected by solutions of almost all salts, acids, alkalis, or by changes in temperature. Sika Chemical Corp., 35 Gregory Ave., Passaic, N. J.

Tuf-Seal: varnish-type sealer penetrates sub-surfaces of wood floors and prevents drying and splintering. For gymnasiums, dance floors, and floors with unusual traffic. Gillespie Varnish Co., Dey St., Jersey City 6, N. J.



Resistall high-gloss fire-retardant paint. Brytenu Chemical Mfg. Co.



Hedrich-Blessing Photos

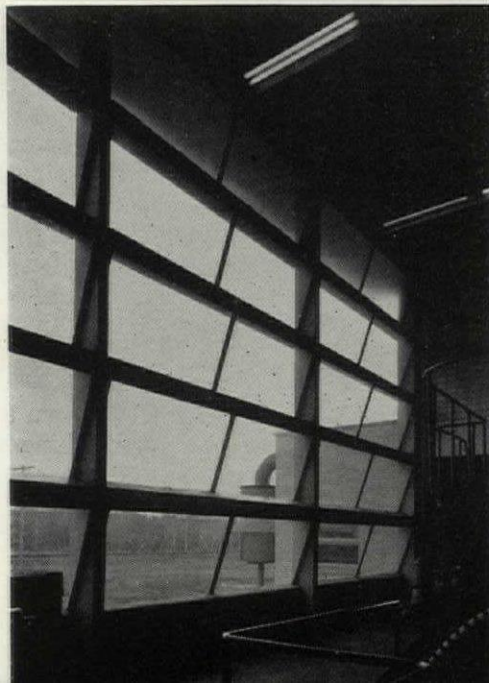
Materials for '48

OPENINGS

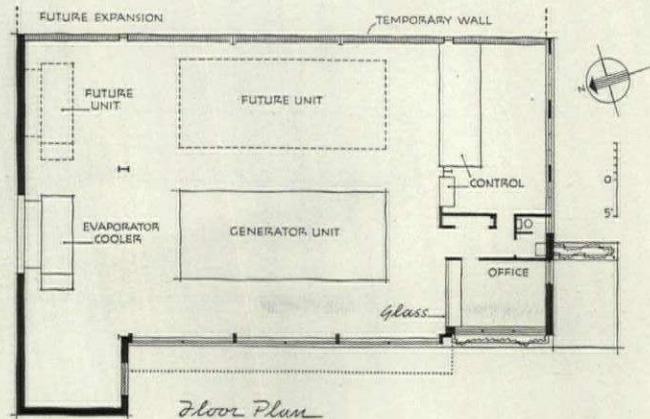
GENERATOR BUILDING CAMBRIDGE, MINNESOTA

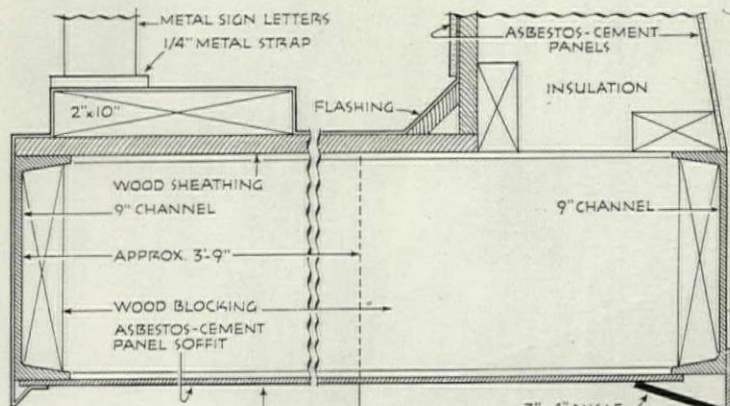
LONG & THORSHOV, INC., Architects; ROBERT G. CERNY, Consultant

RALPH D. THOMAS & ASSOCIATES, Engineers

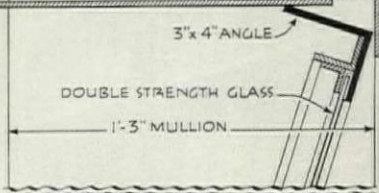


AS IN MANY recent rural electric generating plants, the exciting process of manufacturing power is here displayed to the passing public through an entire wall of windows. The Diesel plant employed in this instance generates considerable heat, which necessitated ample ventilation.

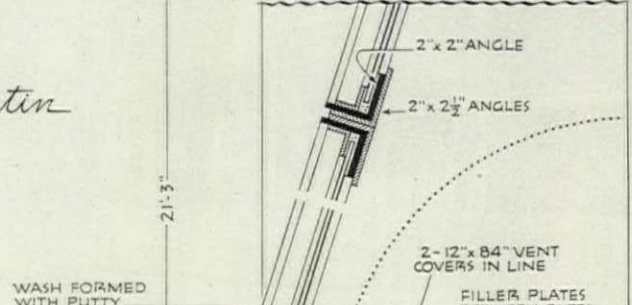




Head Section

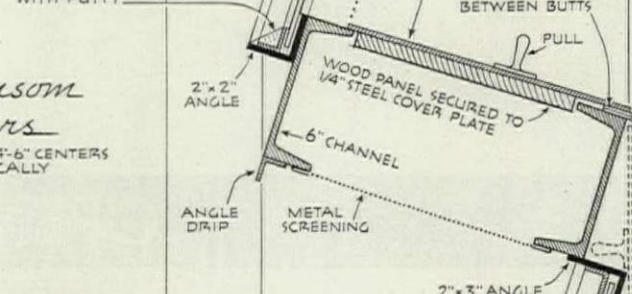


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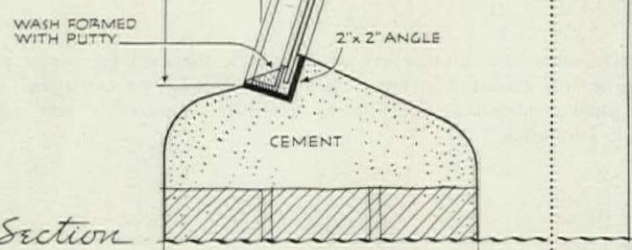


Transom Bars

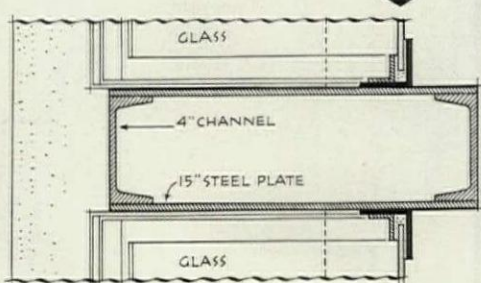
APPROX. 4'-6" CENTERS VERTICALLY



SPECIAL SASH



Sill Section



Plan thru Mullion

MULLIONS ON 14'-9" CENTERS



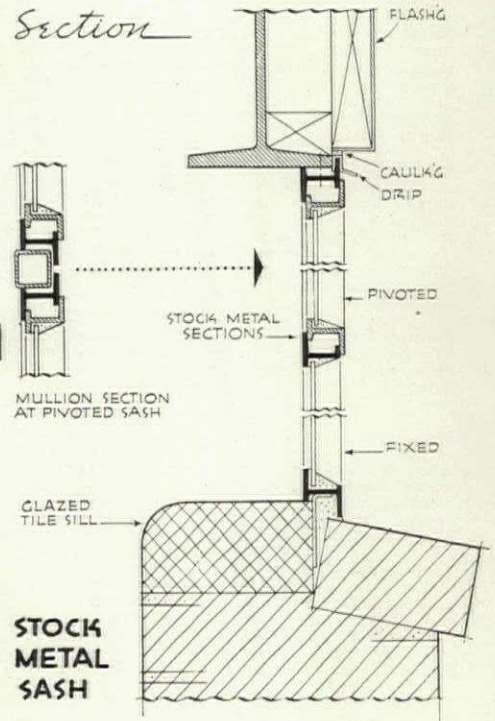
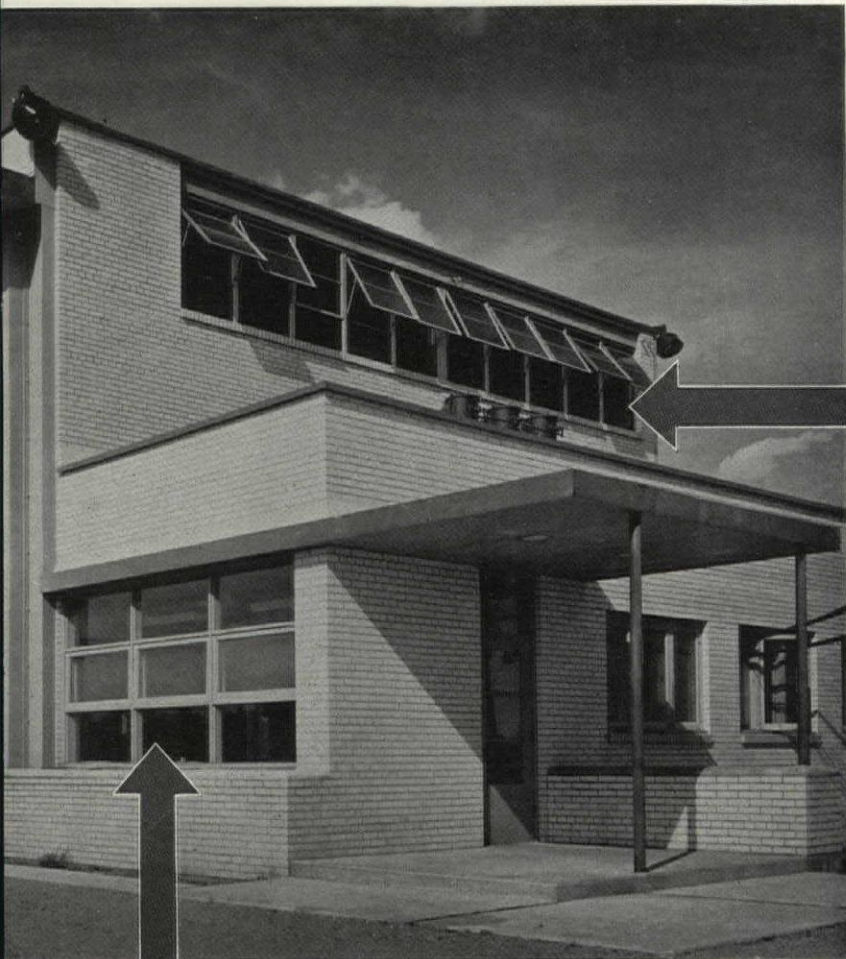
GENERATOR BUILDING, CAMBRIDGE, MINN

LONG & THORSHOV, INC., Architects

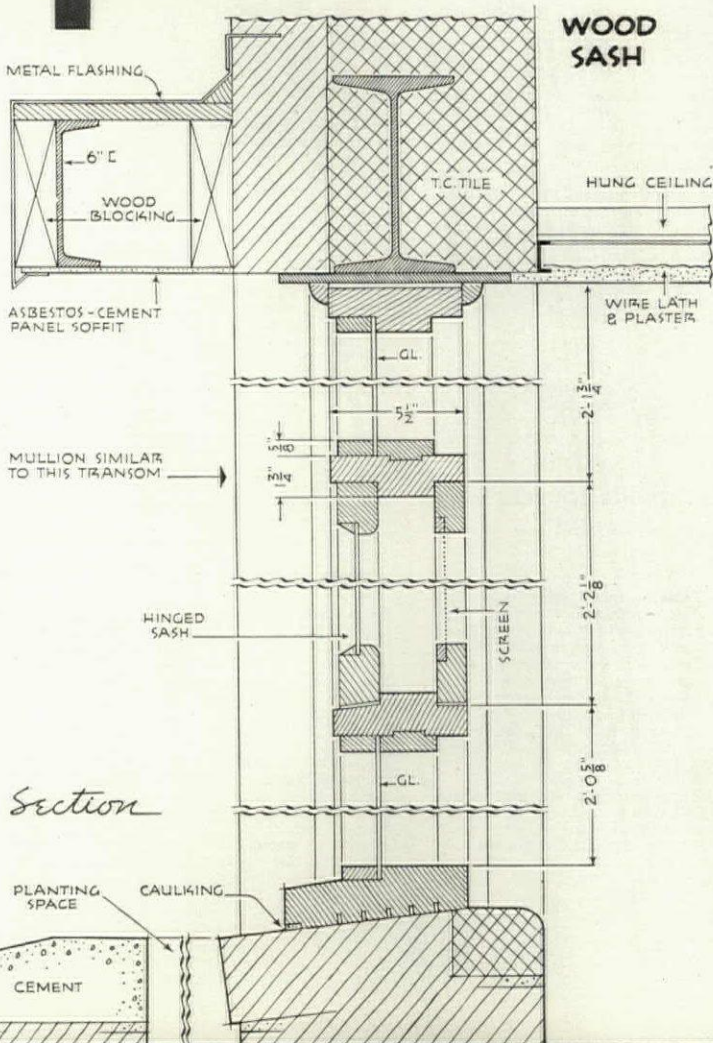
SITE: Facing a major highway and the main line of the Northern Pacific.

PROBLEM: To display the Diesel generators to the passing public, and dissipate heat developed by the Diesel process. Problem was complicated because the building was constructed toward the end of the recent war; sufficient steel sash could be found only for the clerestory shown at right top.

SOLUTION: Special steel sash (shown at left) for the window-wall, with hinged vents rather than openable sash to save money.



NOTE! All details are at 1/8" scale



THORSHOV



SHOTWELL



CERNY

MR. CERNY, consulting architect, says: "We felt the interior of a power plant is (a) most exciting place . . . (Interior) walls are golden tile and the network of pipes, valves, etc., is painted a variety of contrasting colors . . . (The) continuous horizontal vents . . . draw air through the entire building uniformly . . . (even) when it is raining . . . One or two louvers are left open even on the coldest winter day."

GLASS, GLAZING

Mona-Lite: dense opal glass in rolled sheet form. Low transmission, high reflection. Diffusion secured through composition of glass rather than surface treatment. Will not discolor. Very low surface brightness. This new glass is supplied flat to specifications. Corning Glass Works, Corning, N. Y.

PC LX-75 Glass Block: for use where desirable to take advantage of insulation of light-transmitting areas with glass blocks and also obtain maximum diffusion and reduction of brightness. Not for structural building purposes except under special conditions. **PC Solid Glass Blocks,** 5" x 5" x 2 3/8". Immediately available. Pittsburgh Corning Corp., 632 Duquesne Way, Pittsburgh 22, Pa.

Pecora sash putties and glazing compounds: new products. Also improved glazing compound. **code #181.** Available in quantities required. Pecora Paint Co., Sedgley & Venango, Philadelphia 40, Pa.

Richglaze: plastic glazing material admits 60% of the sun's ultraviolet rays. Waterproof, flexible, shatterproof. Can be used in poultry houses, barns, cold frames, safety glazing under glass skylights, heat and dust barriers in greenhouses, warehouses, etc. The Richkraft Co., Builders Bldg., Chicago 1, Ill.

Thermopane Glazing Clip: metal clip for glazing Thermopane units in standard steel sash when double Thermopane units of slight thickness are used. Also applicable with Thermopane units of increased thickness, with specially punched sash. Libbey-Owens-Ford Glass Co., Nicholas Bldg., Toledo 3, Ohio.

Thermopane: insulating windows introduced late in 1946. Available in 62 standard modular sizes; transparent windows, and front surface mirrors (as contrasted to old method where coating was applied on back). Libbey-Owens-Ford Glass Co., Nicholas Bldg., Toledo 3, Ohio.

Twindow: standard sizes for picture windows. To insure maximal thermal insulation a 1/2" air space is recommended for all large Twindow units. 26 standard sizes; units incorporating Solex or 1/4" air space are available but not standard. Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

DOORS

Aluminum and stainless steel rolling grilles, also rolling doors with bronze or stainless steel bottom sections: were off the market, now available. Cornell Iron Works, Inc., 36th Ave. & 13th St., Long Island City 1, N. Y.

Bilco IR all aluminum (Custom) and part aluminum (Deluxe): new models of **Bilco Home Cellardoor.** Patented safety catch holds doors securely open. Also improved Custom and Deluxe **Celladoors** introduced in 1947. Style **IR Celladoors** immediately available. Bilco Co., 164 Hallock Ave., New Haven 6, Conn.

Glidaway: sliding door unit without rollers, designed for standard 4" walls, available for both single and double pocket openings. Frames also available in stock sizes to fit various door widths and heights; door of any design may be adapted to a frame if not more than 1 3/8" thick. U. S. Plywood Corp., 55 W. 44th St., New York, N. Y.

Hangar doors: new type; another new type will be introduced by Jan. 15, 1948. Arch Roof Construction Co., Inc., 113 W. 42nd St., New York 18, N. Y.

Herculite Metal Door Frame: for use with all-glass doors. Made of heavy, anodized, and extruded aluminum reinforced with steel channels and tie-rods. Available in 12 standard patterns and sizes. Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

Mengel Flush Door: had been off the market, now available promptly in unlimited quantities. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Modernfold: 2 new special accordion-fold doors for residential use. Also new accordion-folding doors and partitions for use in shallow closets, kitchen cabinets. 2 standard sizes, also custom-built line. New Castle Products, Inc., New Castle, Ind.

New Fireproof Door: will be introduced by Jan. 15, 1948. U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

Orange Metal Doors and Frames: interior steel doors, for either right- or left-hand use. Rubber cushioned to deaden sound, fire-retarding. Shipped with baked prime coat of paint. Available for immediate delivery. Virginia Metal Products Corp., Orange, Va.

WINDOWS

Basement windows: redesigned steel, introduced in 1947. Immediately available in unlimited quantities. Crittal-Federal, Inc., Waukesha, Wis.

Bayley Aluminum Projected Windows, with double glazing Thermopane: built with specially extruded extra-strength sections; equally suited for commercial or private living units. Other new products: **Steel Commercial Projected Windows, Steel Pivoted Windows, Steel Projected Housing Windows, and Aluminum Housing Windows.** Increasingly available with growing supply of materials. William Bayley Co., Springfield, Ohio.

Bayley Detention Windows: for prisons, institutions, etc., including **Guard Windows, Aluminum Pivoted Windows** for commercial buildings. Above products had been off the market but are again available. Improved and redesigned products are in process of development for housing units, institutional buildings requiring detention. William Bayley Co., Springfield, Ohio.

Horizontal Gliding Window Unit: improved, sizes changed to conform to modular requirements. Horizontal sliding action permits larger sizes than are practical in other types of ventilating window that operate vertically or swing on hinges. Stock sizes amplified. Available only in limited quantities. Andersen Corp., Bayport, Minn.

Intermediate Casement Window: improved product, was off the market during the war, returned in 1946. Shipping schedules vary from 4 to 10 weeks. Ceco Steel Products Corp., 5701 W. 26th St., Chicago, Ill.

"Orange" All Weather Aluminum Window: redesigned, with improved storage and ventilation features. Made of extruded aluminum, combines storm sash and screen in 1 unit. Orange Screen Co., Dover, N. J.

Super-Vent Window: patented mechanism lowers upper vent to facilitate exterior cleaning of glass. Available in sizes to include 1 to 5 vents, depending on window height. Super-Vent Co., 303 W. Monroe St., Chicago, Ill.

STORE FRONTS

Brasco Safety Set Store Front Construction: with patented fingertip setting which eliminates glass-setting screws or springs. Full-visibility glass areas incorporating Brasco's deeper grip. Rolled members in stainless steel or aluminum, for every structural requirement. Heavy-duty, reinforced bars for heightened glass areas. Immediately available. Brasco Mfg. Co., Harvey, Del.

Natcor Store Fronts: with fully extruded Aluminized aluminum sections, with 24 new additions. Noncorrosive, weather-resistant, anodized finish; no polish required, easy to install. Natcor Store Fronts, Providence 9, R. I.

Pittco Store Front Metal: installation said to be easier, quicker, and safer than that of any other store front metal. Finished in Aluminite; sash is self-adjusting to various glass thicknesses, yet maintains strong grip on the glass at all times. Can be provided with drainage facilities when desired. Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

ESCALATOR COVERS

Escalator covers: double width covers for electric moving stairways, Escalators. Improved product introduced in 1947. Cornell Iron Works, Inc., 36th Ave. & 13th St., Long Island City 1, N. Y.

STORM SASH, SCREENING, LOUVERS

Aluminum roof vents and louvers: new. Available. Standard Steel Cabinet Co., 3701 Milwaukee Ave., Chicago, Ill.

Aluminum Storm Panels: new, for residential metal casements. Also combination screen and storm panel unit for basement windows; permanently installed auxiliary window frame affords quick transformation from summer screens to winter storm windows inside the house. New aluminum insect screens. New **Ceconomy** basement window will be released about Feb. 15, 1948. Shipping varies from 4 to 10 weeks, depending on products. Ceco Steel Products Corp., 5701 W. 26th St., Chicago, Ill.

Detjen electric fly screens and electric insect screens: for doors, windows, transoms, porches. Grids of strong bars in sturdy frame; energized by specially constructed adjustable transformer electrifying killing grid with low amperage current. Available during spring, 1948, 1 size

only. Detjen Corp., 303 W. 42nd St., New York 18, N. Y.

Detjen standard fly screen doors: were off the market but now available. Detjen Corp., 303 W. 42nd St., New York 18, N. Y.

HARDWARE

Barber-Colman Residential Garage Door Operator "Model K": new product has simplified construction especially adapted to use with the manufacturer's **Model C Radio Control.** Barber-Colman Co., Rockford, Ill.

Casement Fasteners (Nos. 230 & 231) for use with **Donovan-Universal Awning Type Window:** fasteners are special drop forgings, superior in appearance and utility. Available for prompt delivery as is the operating window hardware with which the fasteners are used. Universal Window Co., 950 Parker St., Berkeley 2, Calif.

Freehand Night Latch: new product made of aluminum die casting. 5-pin tumbler security. 1/4 turn of key, and latch stays back. P. & F. Corbin Div., American Hardware Corp., New Britain, Conn.

Getty No. 4700 Horizontal Drive Worm-and-Gear Casement Operator: for wood casement windows. Newly redesigned model, **No. 4703,** employs exclusive internal gearing, simplified installation details. **No. 4715** has angle-drive external worm-and-gear. H. S. Getty & Co., Inc., 3348 N. 10th St., Philadelphia 40, Pa.

Grand Rapids Improved "Invisible" Sash Balance: completely invisible; electrogalvanized finish resists corrosion. Especially important in coastal regions. Easy to install. Immediately available. Grand Rapids Hardware Co., Grand Rapids, Mich.

#350, #400 Kennatracks: made from aluminum extrusion. Both feature neoprene tired wheels to assure quieter operation. Complimentary sliding door hardware, **Kennalock** and **Kennalatch,** which latch automatically as door closes; positive safety latch feature to insure privacy. **Kennapull** is used with **Kennalock** on doors which slide into a well. Hardware is finished in brass and chrome. Jay G. McKenna, Inc., P.O. Box 677, E. Jackson Blvd., Elkhart, Ind.

Norwalk door closers: new; general cast bronze locksets, letter drop plates, push and pull plates are again available. Redesignated residence front door locksets, rim night latch with die-cast brass cylinder, introduced in 1947. Limited quantities on all products immediately available. Norwalk Lock Co., 395 Broadway, New York, N. Y.

Pittco checking floor hinge: new, of small design (6 1/4" x 6 1/4" x 6 1/2") designed for heavy doors. Mechanism is permanently sealed in oil. **Tullex** (tempered glass) door and hinge may be bought as an integrated unit. Hinge, which can be adjusted, leveled, etc., on the job, can also be ordered separately. Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh 22, Pa.

Rochester Spiral Sash Balance: of heavy rust-resisting steel. Power created by tightening of patented pretensioned spring. Exclusive feature: no winding or adjustment of spring tension by installing carpenter. Eliminates weights, pulleys, cords, chains. Accelerated spiral gives perfect, quiet action. Milwaukee Stamping Co., Milwaukee 14, Wis.

Yale "Hipless" compact door closer: powerful flat ribbon clock-type spring, aided by arm leverage, automatically closes door. Unit has 180° range, keeping door always under control by means of rotary piston; contains only 1 moving part. Closing speed regulated by flow of oil through ports of dual valve. Noiseless, leakproof; price same as old style door closer. Yale & Towne Mfg. Co., Stamford, Conn.

Yale Screen Door Catch: new, heavy-duty, non-mortise catch for screen and combination doors. Complete handle assembly 1 casting, rustless metal, brass finish. New **Featherlight** keys of aluminum alloy; 1/2 weight of ordinary keys, but stronger and more durable. Yale & Towne Mfg. Co., Stamford, Conn.

AWNINGS, BLINDS

Perma-Steel Awnings: all-year-round stainless steel awnings permanently spot-welded. Construction is of tubular strut type, with sturdy wall anchors. Impervious to salt spray, acid fumes, most severe climatic conditions. Available in size increments of 6", length and width; assembled to measure. Perma-Steel Corp., 2025 Fennell Ave., Detroit, Mich.

Trussbilt Decorative Aluminum Blinds: precision-stamped from heavy sheet aluminum to form a rigid 1-piece panel that will not warp, rust, or rattle. Choice of 6 baked-on enamel colors. Primed finish available if special color is desired. 5 standard sizes; special lengths on special order. Trussbilt Div., Siems Bros., Inc., 3303 Como Ave., S.E., Minneapolis 14, Minn.

INSULATION, THERMAL AND ACOUSTICAL

THEATER LONG BEACH, CALIFORNIA

HUGH GIBBS
Architect

PROBLEM: Movie theater, 1300 seats, for Cabart Theaters, Inc. (a chain). In addition to the theater itself and the usual appendages, the building was to contain an ice cream bar and several stores. Most important, it was desired to provide the best possible conditions within the auditorium for hearing and seeing movies; goofy ornament for ornament's sake was to be eliminated.

SOURCE OF TECHNICAL DATA: Acoustic design is based on findings and recommendations of the Research Council, Academy of Motion Picture Arts and Sciences, and of the Theater Sound Standardization Committee.

SITE: Typical urban location requiring maximum profitable use of the land.

Floyd Ray



THEATER, LONG BEACH, CALIFORNIA

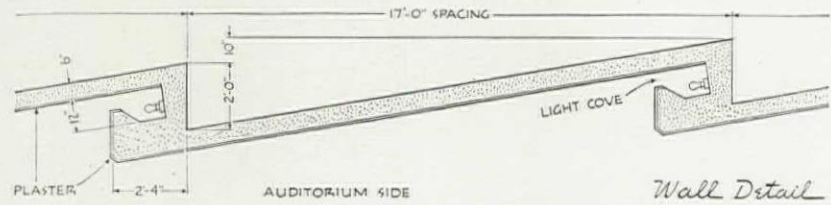
HUGH GIBBS, Architect

CONSTRUCTION

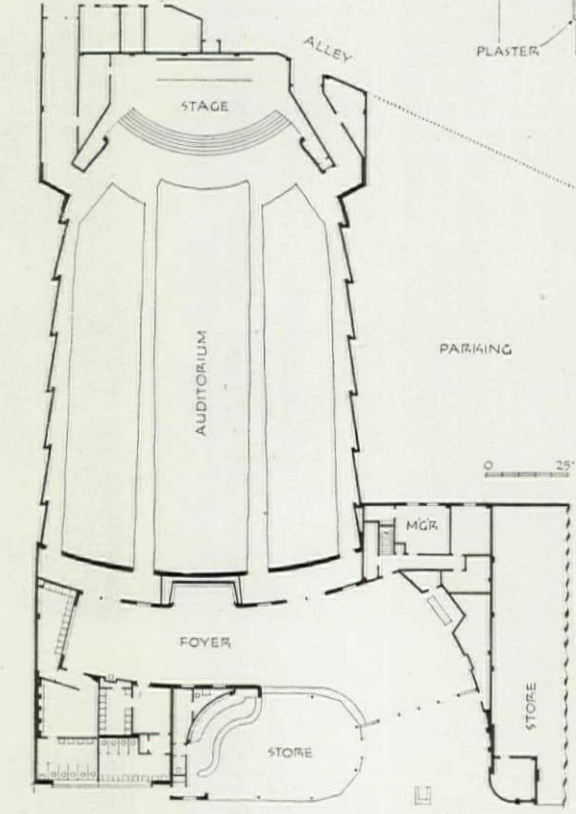
The structural system springs directly from acoustic considerations. Zigzag side walls (see plan), desirable in this scheme for proper hearing, were economically constructed of Gunitite. Forms were erected on the exterior only; from these the reinforcing was suspended. Gunitite was applied in two layers to the thickness detailed below, and screeded off against guide wires stretched to indicate finish wall thickness. Not only did this eliminate half the formwork; it also made possible the use of lighter form construction since there was no hydrostatic pressure. Note (below) development of wall angles into structural columns. Roof is supported by wood bow-string trusses.



Floyd Rey

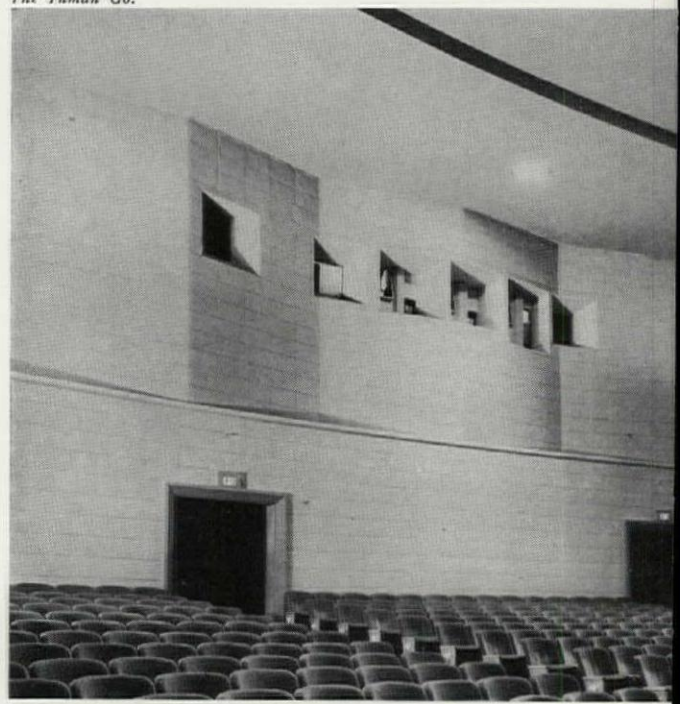


Wall Detail



PLAN. Auditorium is convex in general scheme to diffuse and control sound properly; staggered walls reflect sound into side seating areas. Extra wall at rear of stage is covered with 4" exposed rock wool to minimize reradiation of sound from back of loud-speaker or of reflections from rear auditorium wall. Auxiliary rooms form sound barriers or baffles to protect auditorium from exterior noises.

The Inman Co.





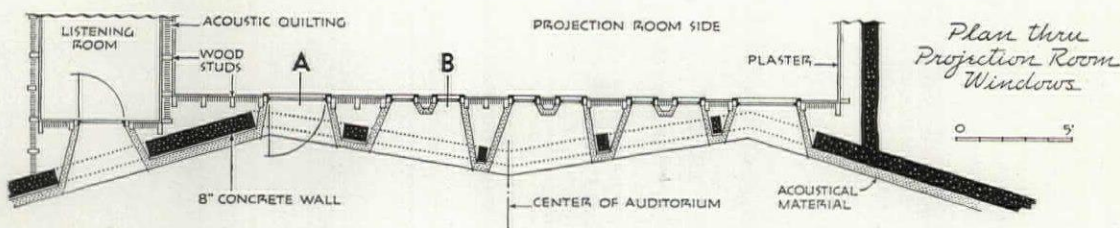
Western Photographic Service

THE ARCHITECT, educated at U. of Southern California and in practice in Long Beach since 1932, is a member of the Architect's Advisory Board, *Showman's Trade Review* magazine. He says: "An effort was made to obtain a good view for all seats, to subordinate all architectural details that (might) detract from the picture itself."



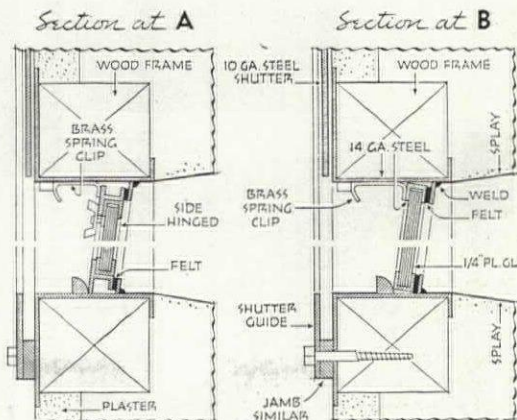
The Inman Co.

AUDITORIUM. Parallel flat surfaces avoided to prevent undue reverberation; seats upholstered, aisles carpeted to reduce audience noise and approach constant sound absorption whether seats are filled or not; ceiling broken up, hard, reflective, for better sound distribution. Lighting fixtures recessed to prevent rattling or resonance; decoration obtained by use of various colors of lighting in vertical, concealed side wall sources, by dark blue-green ceiling and mulberry walls. Sound-absorptive materials, selected for smooth absorption characteristics particularly at low frequencies, were carefully used to maintain brilliance of sound: side walls of auditorium are faced with vermiculite plaster. For rear wall, see below.

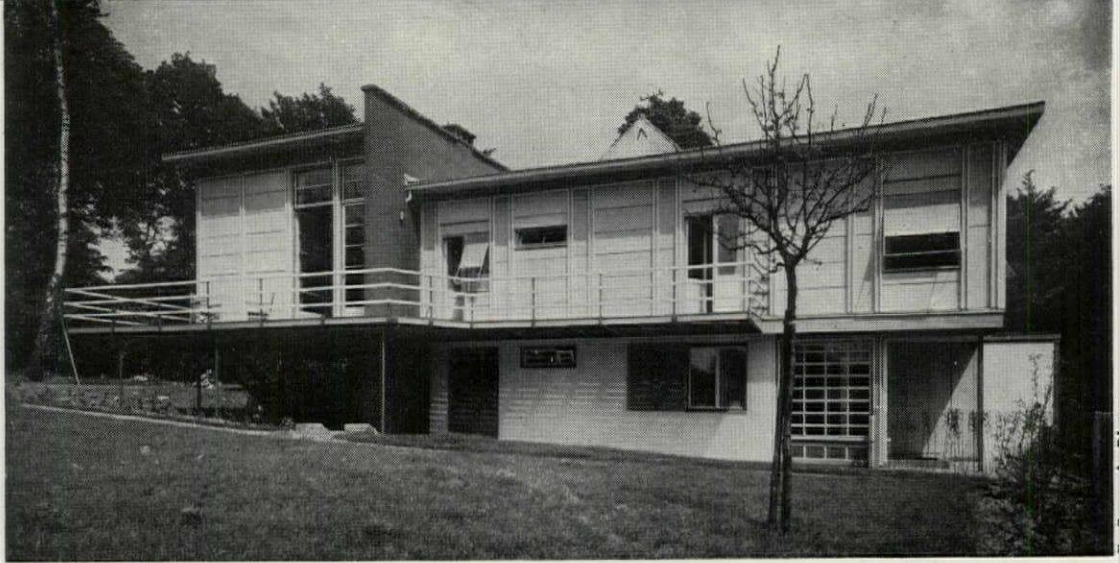


PROJECTION ROOM, EQUIPMENT

Rear wall, convex, is partly broken up to prevent focusing sound reflections, surfaced with perforated metal sound-absorptive tile, and constructed of concrete plus 4" mineral wool to sound-isolate projection room. Projection room ports are sealed with optical glass; room itself has acoustic plaster walls and ceiling. Mechanical equipment: generators, light control equipment, etc., acoustically isolated; air conditioned by a large-volume, low-velocity system to reduce noise; fan and heater rooms have concrete walls, floors, ceilings for sound isolation.



HOUSE IN BRUSSELS, Belgium; upper floor of Durisol slabs, horizontal and vertical, forming a curtain wall between wood posts and girders. Claude Laurens, architect.



E. Serrysels Photo

STRUCTURAL INSULATING MATERIAL

DURISOL, INC., NEW YORK, N. Y.

First manufactured in Belgium, shifted to Switzerland at the outbreak of the recent war, now manufactured in Czechoslovakia and with an American pilot plant now operating, Durisol is expected to get into quantity production during 1948. Construction of the first American buildings employing the material started in July, 1947.

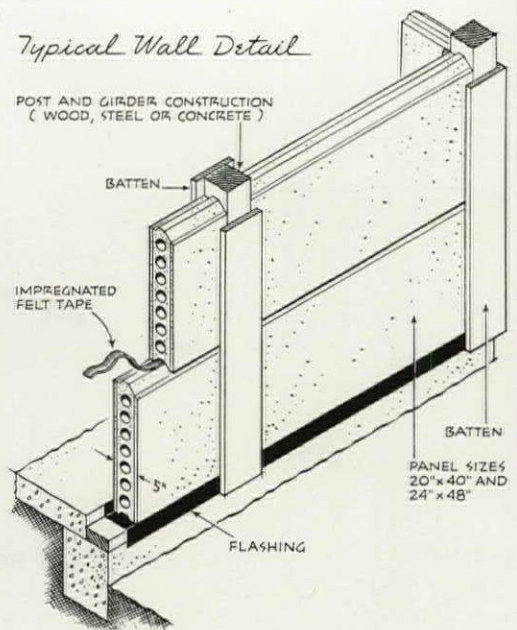
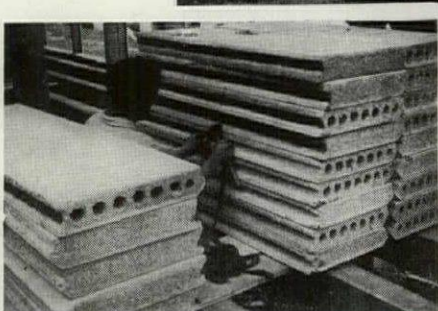
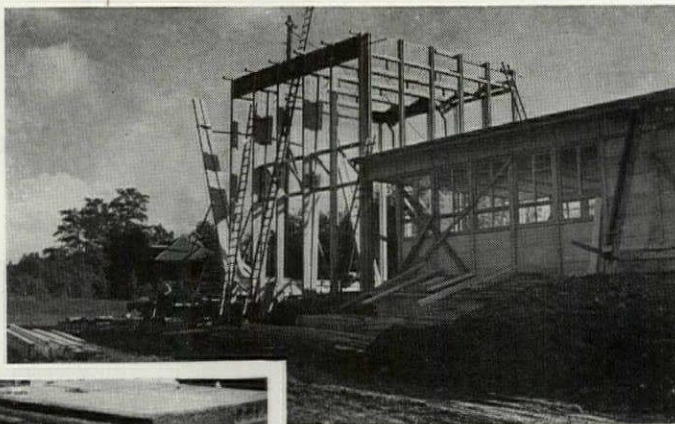
Durisol consists of wood chips, chemically treated and impregnated to mineralize the fibers, which after mixing with Portland cement are shaped under pressure and dried into panels, slabs, and blocks. Used as a semistructural curtain wall, or as floor or roof insulation, this material has proved itself thermally and acoustically, is fire-resistant, termiteproof, and will take many different types of surface finish.



HOUSE designed for construction of Durisol in Connecticut. Wendell R. Holt, architect.

W. R. Holt Rendering

Photos courtesy Durisol, Inc.



LEFT, workman inserting in bottoms of cored 5" Durisol slabs impregnated felt to weatherproof the joint. ABOVE, post-girder-Durisol slab construction, details of one type of Durisol. Another is 2' x 4' x 2"; and coated slabs for exterior facing (laid up with mortar) are being developed in modular dimensions. The 2" slab weighs approximately 7 psi; the 5", 15 psi. Ultimate compressive strength is 145 psi; ultimate load-bearing capacity of 5" Durisol wall 8 ft high, approximately 130 psi (gross area); thermal conductivity, 0.75; sound absorption from 0.12 at 128 cycles to 0.77 at 4,096; noise coefficient, 0.65.

INSULATION, THERMAL AND ACOUSTICAL

STRUCTURAL BOARDS

Armstrong's Insulated Siding: new repair material; eliminates painting, further repairs, insulates effectively at low cost. Can be installed on any exterior building wall suitable for nailing. Worked easily with simple tools. Armstrong Cork Co., Lancaster, Pa.

Cemex: structural, fireproof insulating slab made of treated long wood fibers coated and bonded with Portland cement and compressed to desired thickness, then air dried and cured. Can be sawed like wood. For insulating walls, floors, roofs; also as plaster base, etc. Structural Insulation Corp., Chicago 1, Ill.

Durisol: building and insulating material processed from wood chips and refuse of planing machines, plus stabilizers and Portland cement; perfected in Switzerland; will soon be available here. Used for semi-structural panels, slabs, blocks; excellent insulation qualities; non-flammable. Many more uses of Durisol now in development, including vertical bearing panels for small house construction. Durisol, Inc., 420 Lexington Ave., New York 17, N. Y.

Temlock sheathing: redesigned product introduced in 1947. Armstrong Cork Co., Lancaster, Pa.

Weatherite sheathing: improved insulating board product. Clean pine fibers impregnated with weather-resistant pitch saturants. Comes in three types: 25/32" for horizontal application, 25/32", 1/2" for vertical applications. Johns-Manville, 22 E. 40th St., New York 16, N. Y.

INSULATING CONCRETE

Poretherm 32: lightweight concrete fill to insulate roofs, ceilings, floors; fireproofing for steel columns, girders, trusses; odorless, vermin- and fungi-proof; does not deteriorate when continuously exposed to moisture. Permanent heat and sound insulating values even under extreme conditions. Porete Mfg. Co., North Arlington, N. J.

Porex Plank: recent development in precast roof, floor construction. Weight (10 lbs sq ft) much less than gypsum or lightweight concrete used in other precast slab construction. Lab tests proved incombustibility of Porex; strength and durability not affected by exposure to water or weather conditions. Porete Mfg. Co., North Arlington, N. J.

Lightweight Concrete: see "Structural Materials: masonry"

GLASS

Fiberglas Roof Insulation: highly efficient, inorganic insulation for use under built-up roofs. Redesigned product. Owens Corning Fiberglas Corp., Toledo 1, Ohio.

Tiger insulation: new patented product made of Fiberglas. Kelley Island Lime & Transport Co., 1122 Leader Bldg., Cleveland 14, Ohio.

Glazing: see "Openings"

CORK

Corkoustic: acoustical material to be reintroduced by Jan. 1948. Armstrong Cork Co., Lancaster, Pa.

Kork-Pak: fiber insulation board effective against cold and heat, as well as being waterproof and resistant to condensation; light in handling, conveniently installed. Available in 1/2", 3/4", 1" boards. Shipment usually immediate. Serviced Products Corp., 6055 W. 65th St., Chicago 38, Ill.

REFLECTIVE INSULATION

Allol asbestos: new product; 1/2" Aircell asbestos with one surface of Allol. Metallic reflecting surface, pure aluminum foil, withstands higher temperature than ordinary asbestos surface; reflection of heat keeps surface temperature lower. For all high temperature insulation purposes. Reflectal Corp., 155 E. 44th St., New York 17, N. Y.

Allol building blankets: reduce heat transmission by providing high resistance to heat transfer; reflects 95% of all radiant heat, resulting in very rapid preheating, or precooling of insulated structures. Moistureproof, durable, insulating value constant. Reflectal Corp., 155 E. 44th St., New York 17, N. Y.

Ferro-Therm Steel Insulation: now available to the public is Ferro-Therm Steel insulation for

use in cold storage and all-weather rooms. Ferro-Therm reflects 90 to 95% of radiant heat, and, being metal, is verminproof, gives fire protection, and is odorless. Standard-sized sheets of 24" x 32", in 38 ga. For refrigeration heavier gage is obtainable. American Flange Mfg. Co., Inc., New York, N. Y.

Gilsalume: aluminum roof paint that provides year-round weatherproofing and summer cooling. Deflects 85% of sun's heat rays, can be applied to asphalt shingles, smooth or slate roll roofing, built-up slag or metal roofs, non-porous masonry, and outside metal work. United Gilsonite Laboratories, Scranton, Pa.

Infra-Insulation: reflective insulation of triangular, non-conductive air cells enclosed in double layer of thin aluminum foil. Applied between studs. Accordion construction and aluminum surfaces admit only 1/20 of heat rays. Effective vapor barrier; extremely lightweight. 3 cu ft carton, 3 1/2' x 1 1/2' x 1/2' contains 1,000 sq ft of insulation. Available for 16" or 24" spacing. Infra Insulation, Inc., 10 Murray St., New York, N. Y.

COTTON

Cellulite-Type E: completely enclosed blanket insulation, "flameproofed" cotton. Vapor seal on 1 side, tough paper covering on other, to provide greater convenience in handling. Made in same standard widths as regular Type II Cellulite. Improved product. Gilman Bros. Co., Gilman, Conn.

New type of building and industrial insulation to be introduced shortly. Gilman Bros. Co., Gilman, Conn.

VAPOR BARRIERS

Presstite Barrier Paper: moisture- and vapor-resisting kraft paper saturated and coated with Gilsonite, asphalt, and wax compound for protecting insulation. For frame and masonry construction, cold storage areas, and locker plants. Presstite Engineering Co., St. Louis, Mo.

PLASTER

Spraykote: new patented process eliminating 90% of dust problem in sprayed insulation. Monolithic 1-piece application without crevices. Fire-, vermin-, moisture-proof. Redesigned equipment and application method gives finer texture than heretofore possible. Sprayed Insulation, Inc., 78 Hawthorne Pl., Montclair, N. J.

PIPE INSULATION

Ric-wil Foilclad Insulated Pipe Units: for outside overhead distribution of steam, hot water, oil, brine, etc. These new products are immediately available, as are the Ric-wil prefabricated insulated pipe units that were off the market. Ric-wil Co., Union Commerce Bldg., Cleveland, Ohio.

ACOUSTICAL MATERIALS

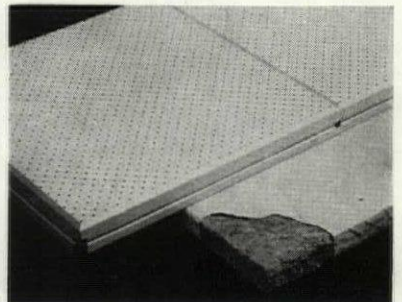
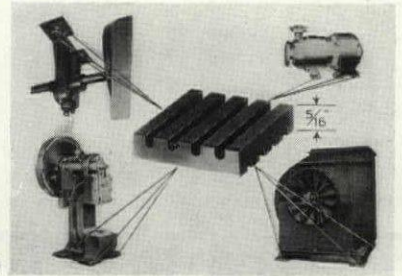
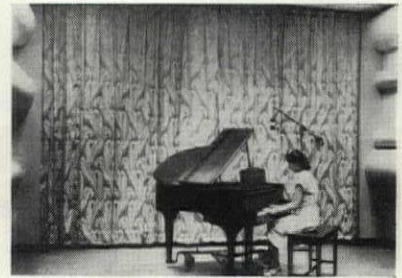
Arrestone: new acoustical material introduced in 1947. Perforated metal unit; mineral wool sound-absorbing pad wrapped in flameproof paper. Very high sound absorption; can be washed and repainted repeatedly without efficiency loss. Unperforated pan units also available. Armstrong Cork Co., Lancaster, Pa.

Fiberglas Acoustical Tile: incombustible, efficient for use on ceilings. **Fiberglas Acoustical Board,** same material in board form for use with fluorescent lighting troffers. Both are new products. Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

Gold Bond Acoustimetal: durable, enameled metal sound-control tiles. Removable for access to wiring and pipes. **Gold Bond Acoustifibre,** lightweight wood fibre tile combining highest noise reduction per unit thickness with the high light reflection. Repaintable. **Gold Bond Macoustic,** acoustical plaster providing fine-grained monolithic finish with high sound absorption; fireproof, permanent. All improved products introduced in 1947. National Gypsum Co., Buffalo 2, N. Y.

Kilnoise: improved acoustical plaster. Kelley Island Lime & Transport Co., 1122 Leader Bldg., Cleveland 14, Ohio.

Travertone acoustical material: redesigned product to be introduced by Jan. 15, 1948. Armstrong Cork Co., Lancaster, Pa.



1. Adjustable curtain of Fiberglas, used for acoustic correction in radio studio. Owens-Corning Fiberglas Corp.
2. Isomode pads, of Neoprene, for sound-isolating mechanical equipment. MB Mfg. Co., Inc.
3. Arrestone, perforated metal acoustic tile with sound-absorbent mineral wool pad; tile mounted on suspended metal T-bars. Johns-Manville.
4. Durisol structural insulating slabs, also used as curtain walls. Durisol, Inc.





EFFECT OF BUILDING *Equipment* ON DESIGN



Photos courtesy General Motors Corporation

ENTRANCE TO THE OFFICE AREA of the plant: doors, trim, glazing members, etc., are stainless steel; walls are surfaced with green marble.

FACTORY GRAND RAPIDS, MICHIGAN

ALLEN & KELLEY, Architects

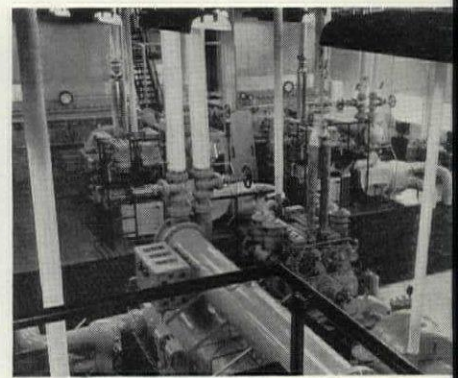
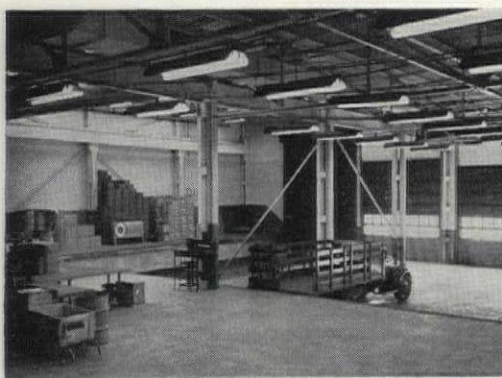
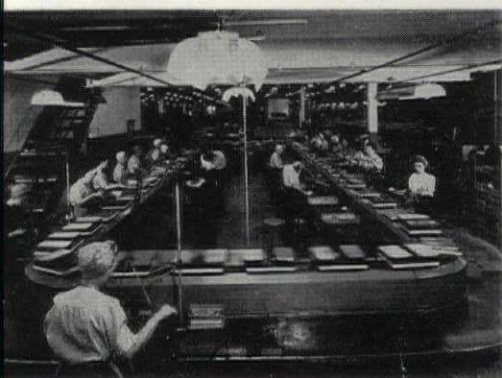
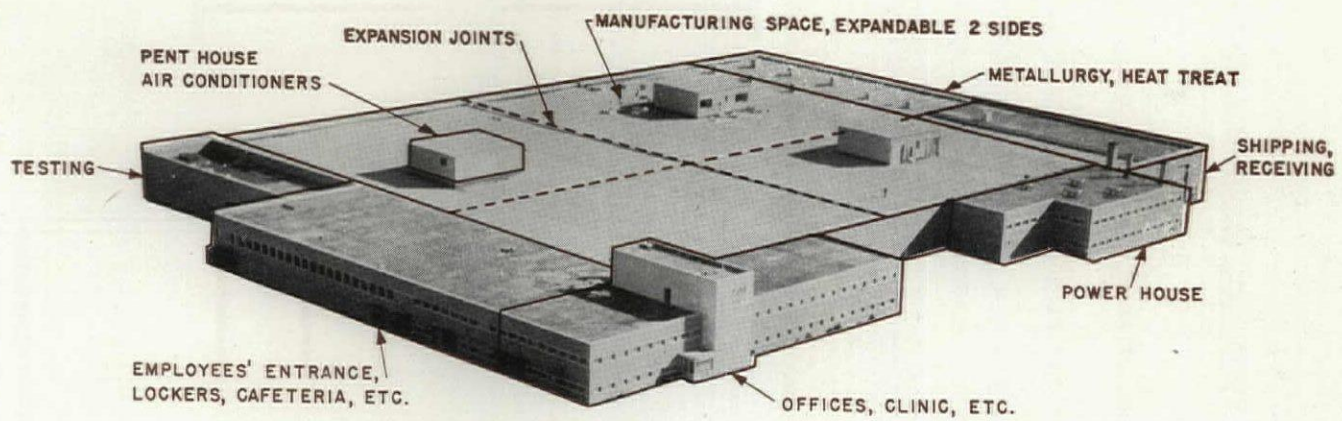
CLIENT: Diesel Equipment Division, General Motors Corporation.

SITE: 76 acres, located just outside the city of Grand Rapids. Approximately half the acreage was to be utilized for building, parking, and recreational areas, leaving the remainder for future expansion.

OPERATIONS TO BE HOUSED: Manufacture of small precision products (highly sensitive fuel injectors for all types of Diesel engines, other Diesel equipment, parts for jet propulsion engines) which require extremely close tolerances. Every phase of production was to be carried on here. Space requirements were grouped as follows: *manufacturing area*, with *powerhouse*, *testing* and *heat treat* departments, and *receiving* and *shipping* space; *office area*; and *employee facilities*—*locker rooms*, *cafeteria*, *toilets*, *showers*, *emergency clinic*.



Feature

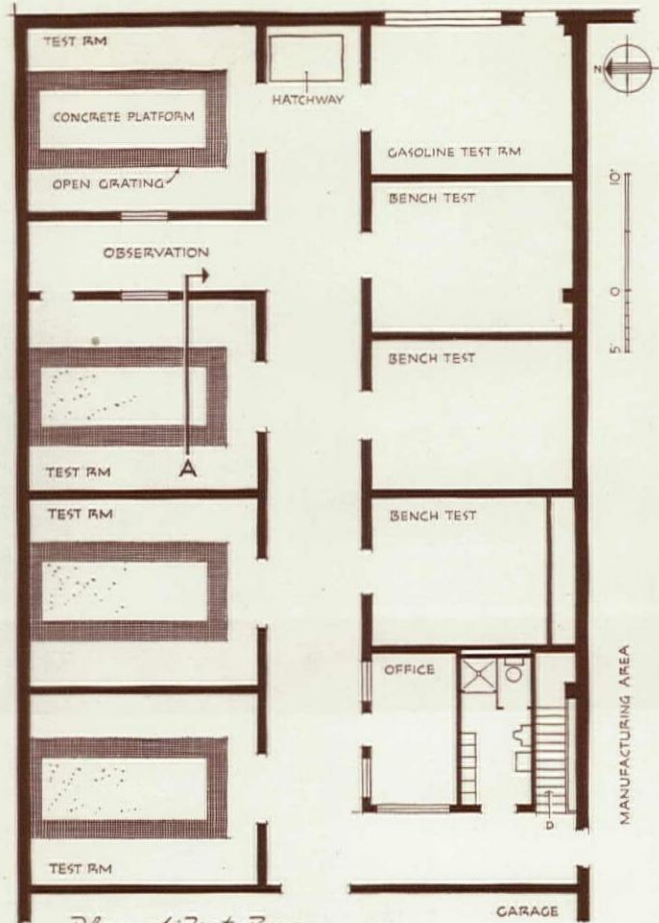


AT LEFT, one of the manufacturing processes: all fuel injector parts, after being machined, lapped, and thoroughly tested, are assembled. They are then sent to the calibration room for testing. Other processes range from metallurgical research, product design, production planning, etc., to machining, heat treatment, inspections. CENTER PHOTO shows truck portion of shipping and receiving area which was located to include an existing railroad siding right-of-way. AT RIGHT, powerhouse, which has two 500 hp oil-fired boilers and Diesel-driven Freon and air compressors.

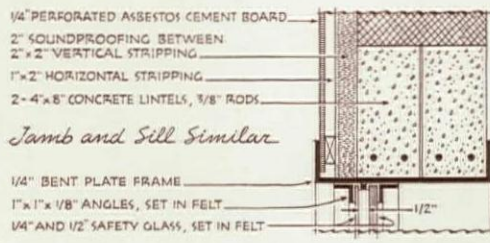
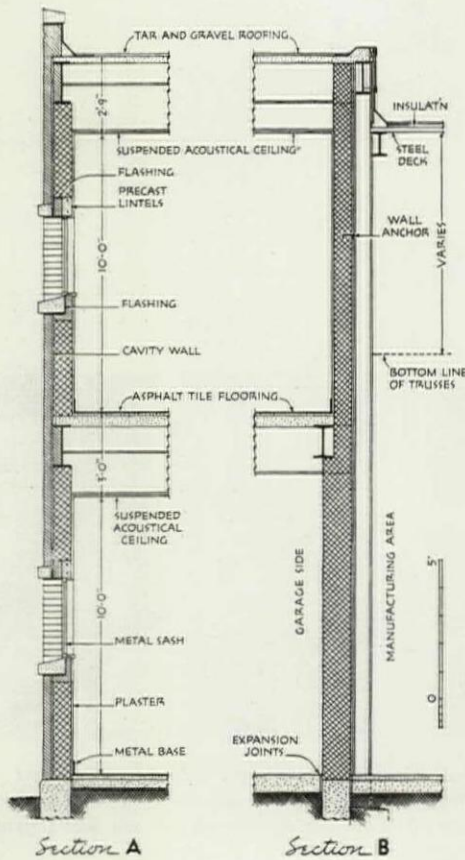


FACTORY, GRAND RAPIDS, MICHIGAN

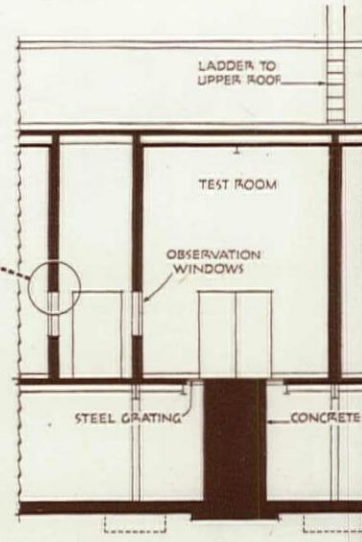
ALLEN & KELLEY, Architects



Plan of Test Rms



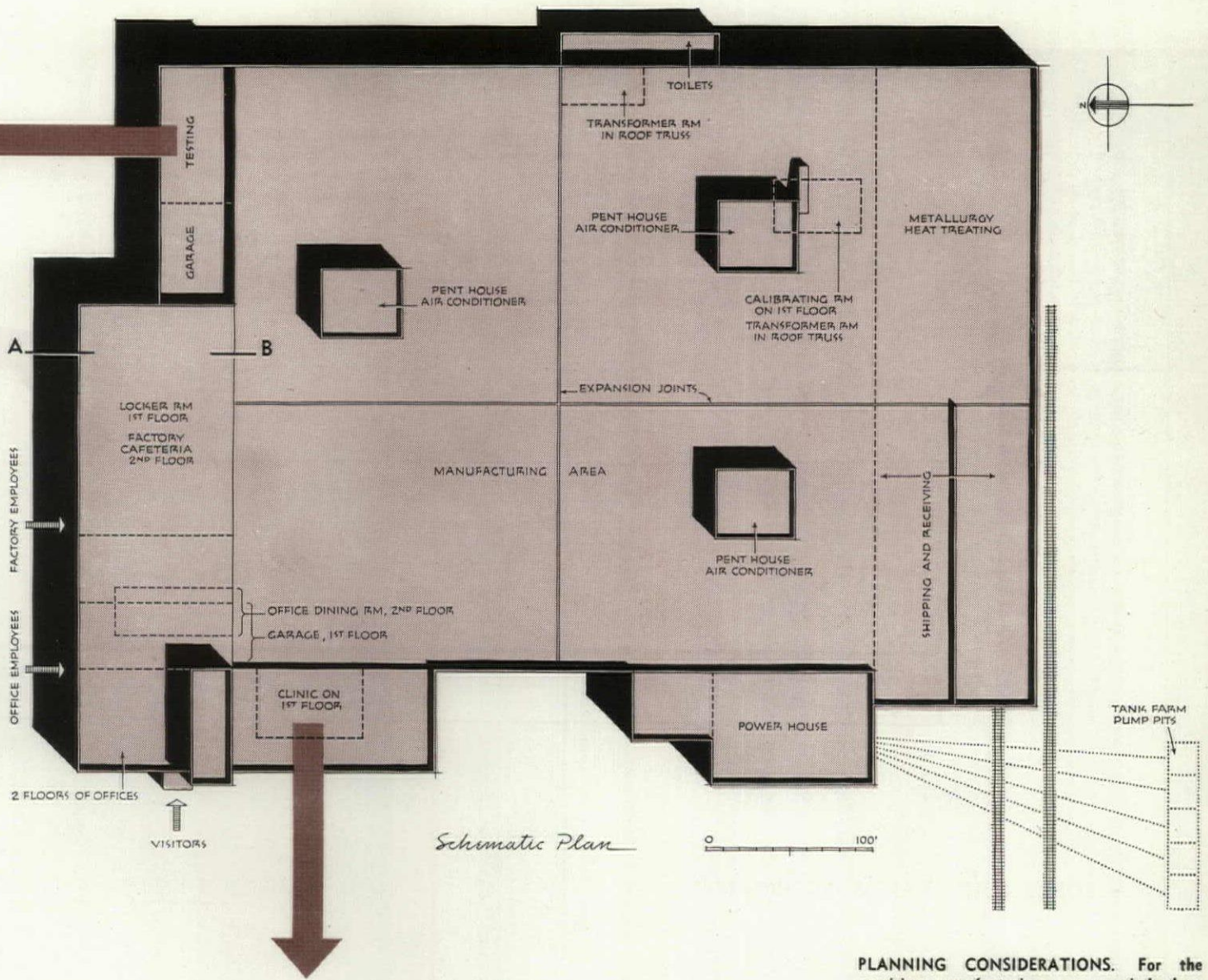
Jamb and Sill Similar



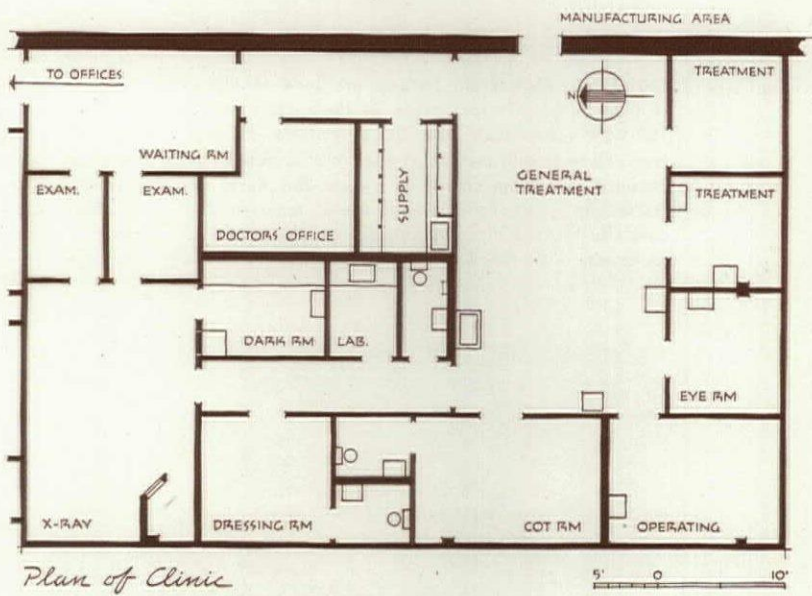
Section at A

TESTING DEPARTMENT. This includes four dynamometer test rooms and one production test room; the latter requires separate air conditioning equipment. A similar condition obtains in the *Heat Treat Department*, where heat from furnace operations led to provision of a basement into which a separate ventilating system pulls air that is forced up through the floor around the furnaces and out through mechanical roof ventilators.

CONSTRUCTION: brick with stone trim, backed up with concrete block, over steel frame. In manufacturing area, roof is supported by light steel angle trusses and steel purlins, which carry steel roof decking insulated with two layers of 1" insulation board surfaced with 20-year built-up roofing (minimum insulation for economical operation of air conditioning). Columns are spaced 48 x 40 ft, determined by production requirements. Bottom chords of trusses are uniformly 15 ft above the concrete floor; manufacturing area is one huge room. The two-story office and cafeteria have conventional steel framing, acoustical metal pan ceilings, asphalt tile floors, and are laid out on a 4-ft modular basis so future alterations may be made by moving the flush-panel steel partitions without upsetting the recessed fluorescent lighting, fenestration, or air conditioning outlets.



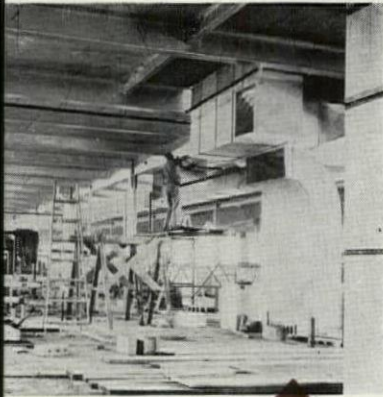
Schematic Plan



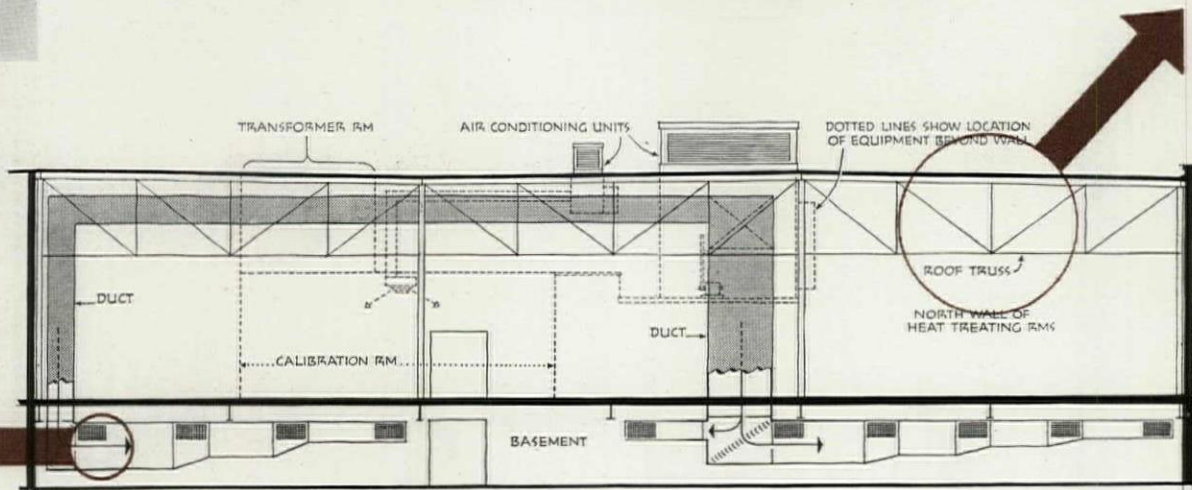
Plan of Clinic

PLANNING CONSIDERATIONS. For the precision manufacturing area a windowless, air conditioned building was decided upon. Shape was chosen because a square encloses the maximum floor area per lineal foot of wall. Existing railroad siding determined location of shipping and receiving. Manufacturing area was placed on north side. With the two main components (production, and facilities for receiving and shipping raw materials and products) determined, office and employee requirements were "wrapped around" one corner; a symmetrical facade was abandoned because space requirements for these areas were not equal. Powerhouse was located at the front to provide for future expansion of the production area on two sides without seriously interrupting plant operation.

MEDICAL FACILITIES. Excellent medical facilities, their worth proved on both humanitarian and dollars-and-cents bases, are staffed by a physician, three graduate nurses, and an X-ray technician. The clinic handles emergencies, but its principal functions comprise medical examination and careful check on health and medical problems of employees. Equipment includes emergency operating, X-ray, physiotherapy, diathermy, and laboratory installations.



AIR CONDITIONING. A prime requisite for the plant's precision processes is precise control not only of humidity but also of air cleanliness. Improper humidity may cause even a fingerprint to result in damaging corrosion of the accurately manufactured products; airborne dust does comparable damage. In this plant the air conditioning equipment, with humidity control apparatus and electronic precipitators for air cleaning, is located in penthouses on the roof. Air ducts are carried in the roof trusses and down to sub-floor areas. Constant temperature, also vital to the manufacturing process, is maintained the year around; this results also in comfortable, healthful working conditions in both offices and factory area. In offices, steam radiators are also installed for use when needed, and window sash are fixed in view of the air conditioning.



Typical Section

FACTORY, GRAND RAPIDS, MICHIGAN

ALLEN & KELLEY, Architects

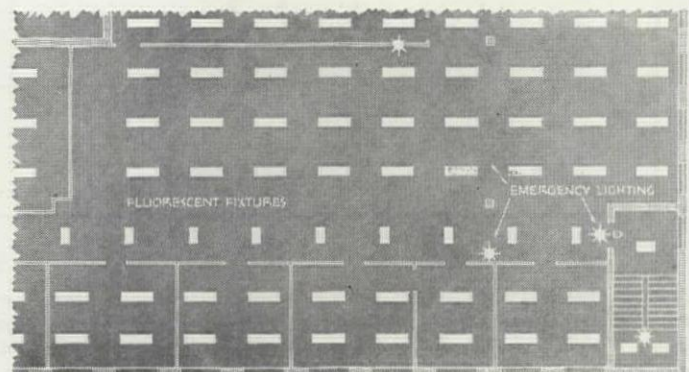


KELLEY

ALLEN

THE ARCHITECTS state: "This is what an architect calls 'a nice, clean job,' one in which he is given a set of requirements and enough ground to place it on."

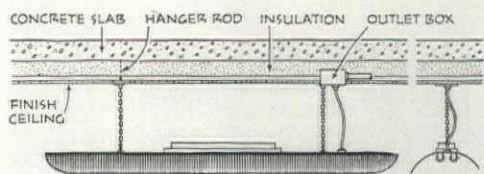
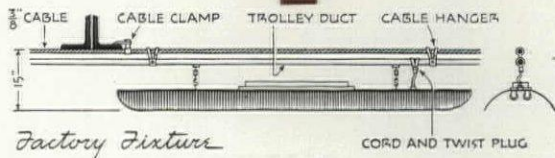
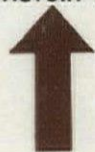
LIGHTING. Fluorescent fixtures are used throughout the plant, varying in type in the different areas. In the factory portion 2,550 fixtures (two 100-watt tubes each) provide a uniform 35 foot-candles at working level. Fixtures and electric conduit are suspended from messenger cables clamped to bottom chords of trusses. Bus ducts are also carried in the trusses. In offices and similar areas, recessed fluorescent fixtures are carefully located in coordination with the acoustical metal tile ceilings to comply with the 4-ft modular scheme.



Portion of Lighting Plan (OFFICE AREA)



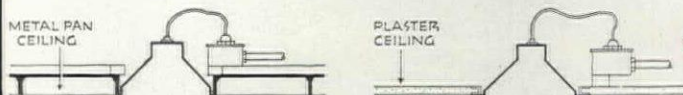
THROUGH FACTORY ROOF TRUSSES are distributed electric power, compressed air, high-pressure steam, other services.



Calibrating Rm. Fixture



SUPER-GLASS-LIKE, precision-dimensioned finish applied in this department requires excellent lighting.



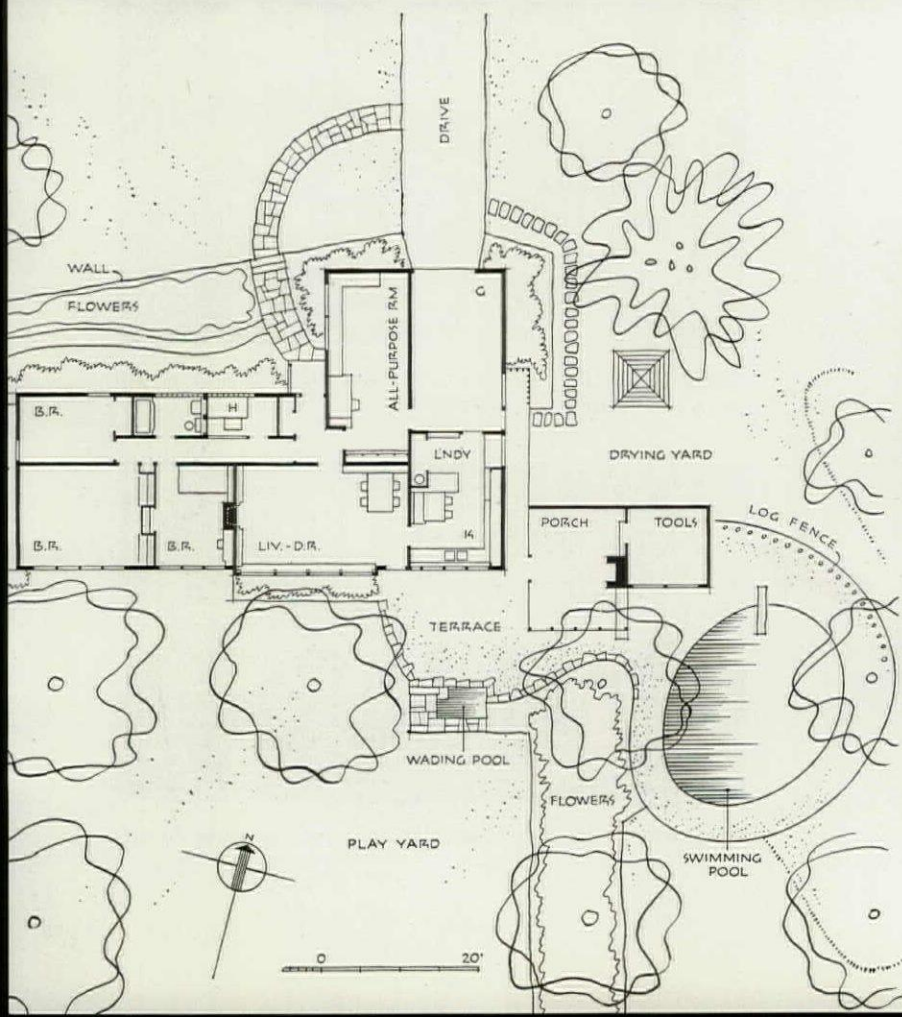
Office and Cafeteria Fixtures



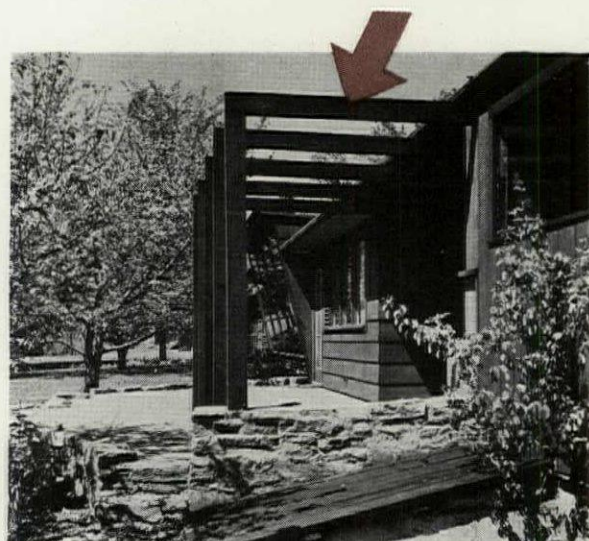
CAFETERIA (also office space) has recessed fluorescent fixtures.



Gilbert Ask Photos

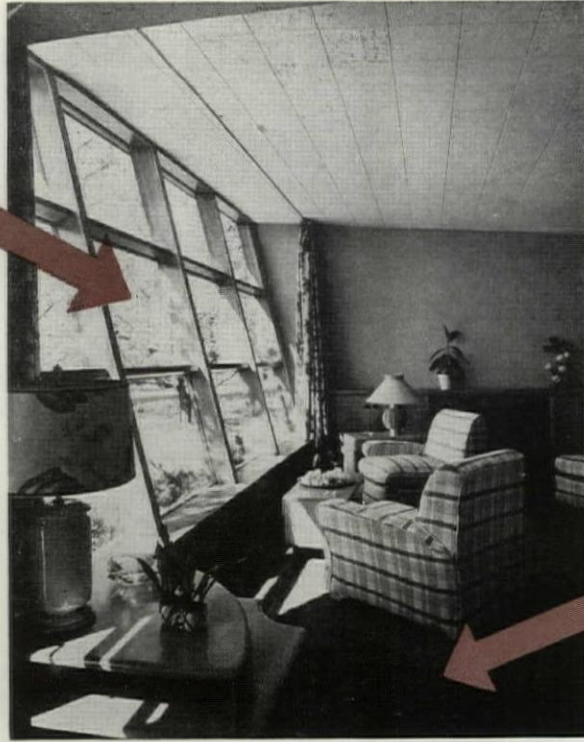


SCREENED PORCH



SCREENED PORCH with roof half solid, half screened, provides outdoor sitting sheltered from afternoon sun. Bulkhead in foreground leads to fruit and vegetable cellar under toolshed greenhouse.

SOLAR HEATING



RADIANT HEATING

ONE OF THE FIRST solar-radiant heated houses in central New York, this job taught the architects much that has been invaluable in more recent work.

Equipment for '48

AIR AND TEMPERATURE CONTROL

HOUSE

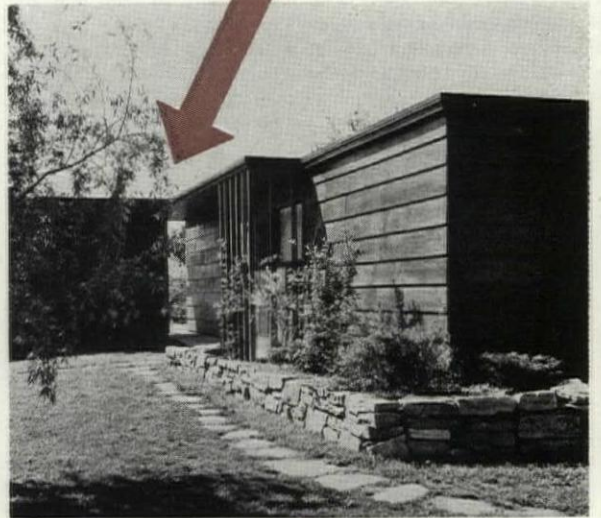
LIVERPOOL, NEW YORK

SARGENT-WEBSTER-CRENSHAW & FOLLEY, Architects

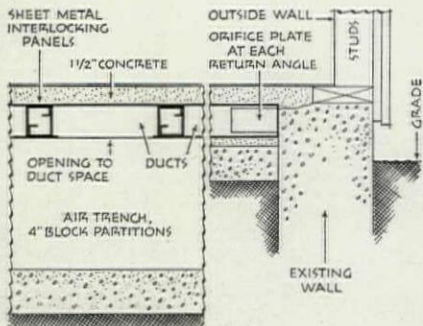
PROBLEM: This house is not only for architect Milo D. Folley and his family (wife, two sons aged 1½ and 4½ years, and dog) but is also a practical example to show the people of near-by Syracuse what contemporary architecture is all about, and what features the average client can expect in a medium-priced house. In central New York the late summer is quite hot, winter often severely cold; hence heating, ventilation, and thermal insulation required special attention. War-induced shortages of materials caused adoption of several abnormal expedients.

SITE: Liverpool, a semi-rural setting convenient to the owner's business in Syracuse, yet affording relief from the city. The site had been an orchard, through which there was a view to the south and east.

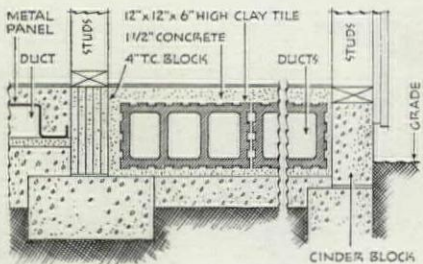
BREEZEWAY



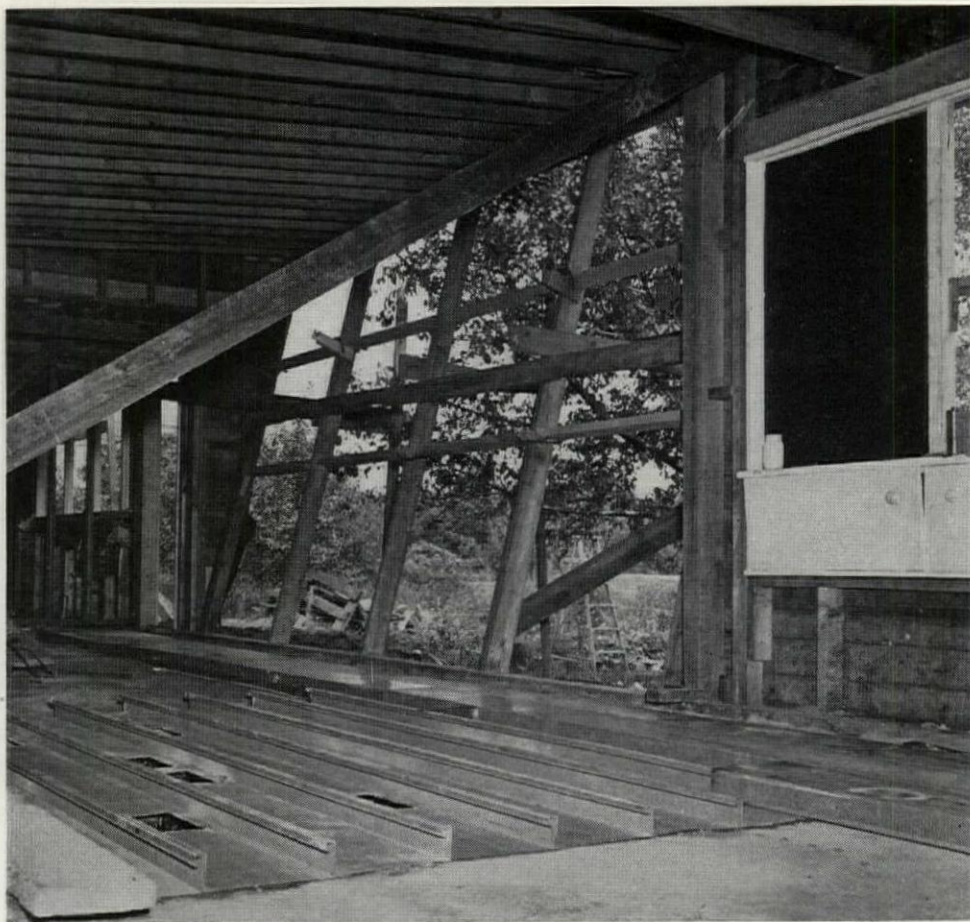
ROOFED WALK from service entry to screened porch serves not only as a breezeway, but also facilitates serving outdoor meals.



Section at A



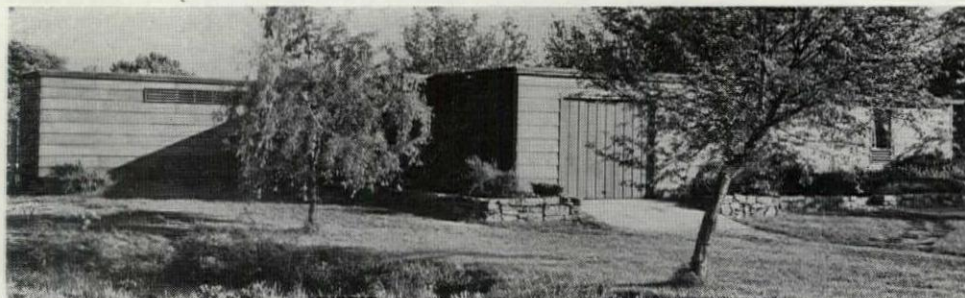
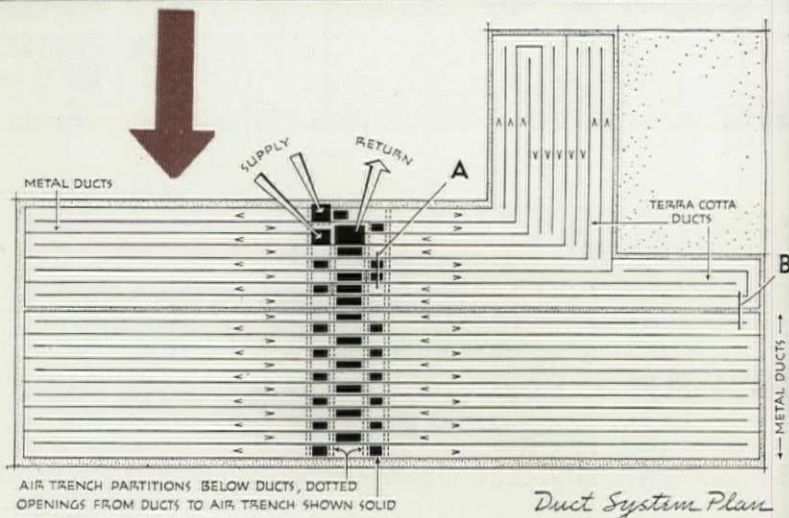
Section at B



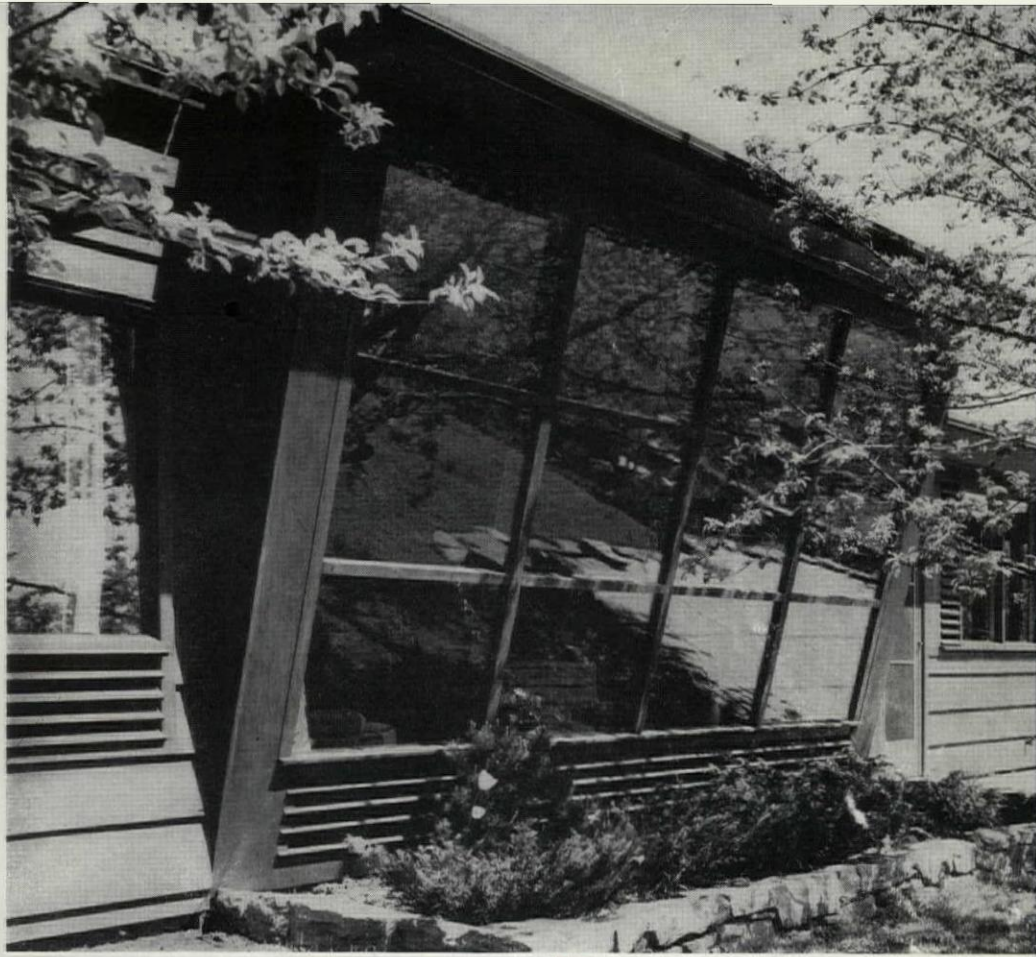
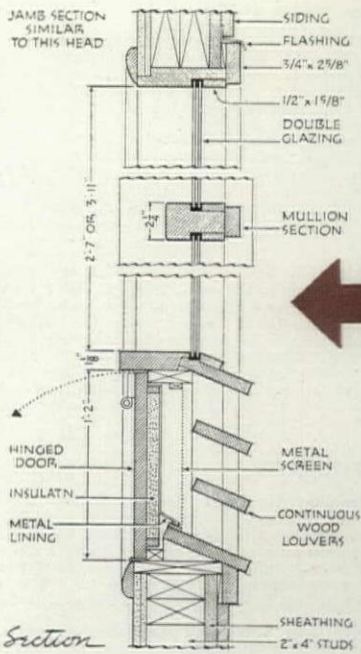
RADIANT HEATING

Subfloor plenum chambers convey forced warm air from the central heater room to floor ducts. There is a vermiculite under-slab for insulation from the ground. In the living room, which has the southeast solar wall, ducts are formed of interlocked steel roof decking, a material chosen because its relatively small mass and ability to heat and cool rapidly were expected to reduce heating lag and overrun often experienced in solar-radiant installations. In other areas glazed structural tile forms the ducts. The top 1 1/2" layer of concrete is surfaced with rubber tile, selected as the finish least likely to soften when heated.

The architects state that this system is too costly; in fact, that any radiant installations they have made have cost too much. In addition, there are condensation difficulties (see solar wall details); all this may be due to the experimental nature of the job, or perhaps radiant heating is not economical for a house of this size and price range; their answer will come with more experience.



NORTH AND WEST sides of house are protected from both winter exposure and late afternoon summer sun. Note louvered ventilator high in wall at left, to aid ventilation of the porch behind. House is insulated with 2" of mineral wool.



VENTILATION

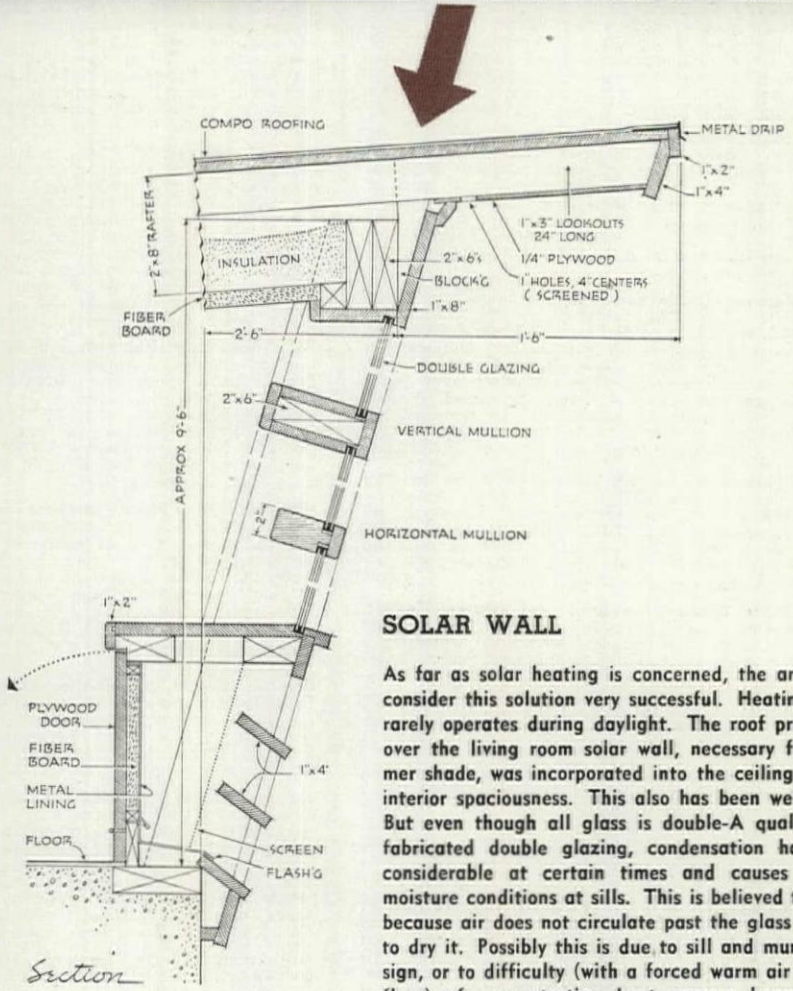
Functions of ventilation and vision are divorced; all sash are fixed and ventilation is obtained through permanently screened louvers with interior doors. Burglar-proof, virtually weather-, insect-, and rodent-proof, these make it possible for the occupants to leave the house without shutting out all air circulation; in addition, the bottom-hinged vent doors discourage drafts.

HOUSE, LIVERPOOL, NEW YORK

SARGENT-WEBSTER-CRENSHAW
& FOLLEY, Architects



32-year-old MILO FOLLEY graduated from Syracuse in '38, won a fellowship, got his Master's at Pennsylvania in '41, was licensed and joined the present partnership in '45. Of his house he says: "design is not as radical as I wished . . . but we have a sort of 'lead-em-along' program to educate the Syracuse public along the modern path. It's working."



SOLAR WALL

As far as solar heating is concerned, the architects consider this solution very successful. Heating plant rarely operates during daylight. The roof projection over the living room solar wall, necessary for summer shade, was incorporated into the ceiling to add interior spaciousness. This also has been well liked. But even though all glass is double-A quality pre-fabricated double glazing, condensation has been considerable at certain times and causes serious moisture conditions at sills. This is believed to occur because air does not circulate past the glass surface to dry it. Possibly this is due to sill and muntin design, or to difficulty (with a forced warm air radiant floor) of concentrating heat sources beneath the solar wall, or to the wall's outward slope.

BOILERS, FURNACES

BCR Smokeless Furnace: for residential heating. Completely new. Coking and free-burning coal can be used, best results with nut or stove coal. Furnace is magazine type with fuel capacity for 12 hours' operation at full output. Self-feeding, requires little or no manual attention. Removal of fine ash accomplished with specially designed grates. Natural draft from average chimney sufficient to operate furnace. Ready for commercial development. Bituminous Coal Research Institute.

Coleman: automatic oil-fired warm air furnaces in gravity and forced air models. Filtrated air; complete automatic operation. Also oil and gas floor furnaces, oil space heaters, with improvements on all these items. LP-gas automatic water heater has been just introduced. Coleman Co., Inc., Wichita 1, Kans.

Dravo Counterflo Heater: oil- or gas-burning direct-fired heater with stainless steel combustion chamber. Need for a refractory lining within combustion chamber is eliminated because of high temperature capacity of stainless steel. This improved product is suitable for commercial and industrial buildings. Dravo Corp., 300 Penn Ave., Pittsburgh 22, Pa.

Free-Aire Coal and Oil Heaters: new products, used as furnaces for both conventional duct systems and with **Free-Aire** minimum duct systems for low cost houses. Also for pipeless furnace arrangements and for stove heating. Coal unit has Btu 85,000 output. Oil unit Btu 70,000 output. Immediate delivery on both products. Kehm Corp., 135 S. LaSalle St., Chicago, Ill.

Gravity Furnace: (2 sizes—75,000 Btu; 100,000 Btu/hr) new hot water system with triple service, supplying water at modulated temperature for automatic appliances, comfort heating, and for personal use. A complete package system. Gas-, oil-, or LP gas-fired. Surface Combustion Corp., Toledo 1, Ohio.

Iron Fireman: new line of gas conversion burners, gravity gas furnaces, and forced circulation gas furnaces. Heating element becomes highly radiant in absorbing intense heat of transparent gas flame. Horizontal gas ports in stainless steel burner head will not become oxidized. Preheats air; flash-back impossible. Iron Fireman Mfg. Co., 3170 W. 106th St., Cleveland, Ohio.

Hammel Comfortaire: new, winter "air conditioning" unit. Automatic gas heating. Individual burners designed for proper flame distribution, providing correct air mixture for complete gas fuel combustion. New **Karol-Air** vent cap; eliminates necessity for installing vent pipes above roof line. A new, advanced design, single-vented wall heater will be released before Jan. 15, 1948. Hammel Radiator Engineering Co., 3348 Motor Ave., Los Angeles 34, Calif.

Hydrotherm gas-fired boilers: 600 ft net standing radiation and 1000 ft net standing radiation. Available for prompt delivery. Miniature hot water boiler of 25,000 Btu input for small apartments, stores, cottages, etc., will be released before Jan. 15, 1948. Hook & Ackerman, Inc., 18 E. 41st St., New York 17, N. Y.

Kehm Master Gas-fired Hot Water Heating Boiler: new packaged unit. All accessories necessary to a complete forced hot water heating system, including circulating pump, relief valve, limit control, relay, gauge, pilot, draft diverter. All wired and ready to operate. 2 sizes: 80,000 and 120,000 Btu output. Available for immediate delivery. Kehm Corp., 135 S. LaSalle St., Chicago, Ill.

Mor-Sun pressed steel forced warm air furnaces: for gas and oil. May be installed in basement or utility room. Only 5 3/4" high, requires 22" x 25" floor space. All parts die-stamped. Available on immediate to prompt shipment. New product. Morrison Steel Products, Inc., 601 Anherst St., Buffalo, N. Y.

Models 2750 and 2770 Vikimatic Console Heater: plain and deluxe models, each size having capacity of 50,000 and 70,000 Btu's per hour respectively. Dirt-free automatic heat with air-conditioned features. Features heat-flow exchanger contoured to fit flame travel so that it is more completely wiped by circulation air. Viking Mfg. Corp., 1747 Chester Ave., Cleveland, Ohio.

Saf-Aire: new device for zone heating. Automatic; burns natural, manufactured or liquefied petroleum gas. Fully vented, exclusive **Lundstrom Safe-Flue** disposes of all combustion

products without use of flues. All aluminum construction. Sealed combustion chamber renders it safe from all standpoints. Heating Research Corp., 516 N. Jefferson, Muncie, Ind.

#1500 Smith-Mills Boiler: contains tankless hot water heater, eliminating necessity for independent hot water supply. Does away with hot water tank or any connections outside boiler, excepting supply piping and piping to fixtures. Available in limited quantities at present time. H. B. Smith Co., Inc., Westfield, Mass.

Springfield Type M Boilers: water tube boilers ranging from 6,000 to 17,000 lbs of steam per hr. Standardized dimensions for various size units. Springfield Boiler Co., Springfield, Ill.

Synchromatic: new gravity warm air oil burning vaporizing unit, for low cost housing. Forced warm air units for butane, propane gas. A gun type oil burner, Model S-1 (1-3 gal per hour) had been off the market, but is now available. New highboy utility room model for vaporizing, and gun type oil burner to be introduced before Jan. 15, 1948. Counter-flow design in all products; heavy steel construction in all heat exchangers. Synchromatic Corp., 1141 10th St., Watertown, Wis.

Type "C" Hi-Firebox: modified steel boiler for heating big buildings. Corrugated crown sheet adds strength, provides additional heating surface. **Square-Heat 3R**, improved, high-efficiency boiler for medium-sized buildings. **Round "R"** steel boiler, with square jacket only, sized and priced for any home or small building. A new jacket will be released before Jan. 15, 1948. Products available as steel plate comes in. Kewanee Boiler Corp., Kewanee, Ill.

Types R and RI Ram-Feed Stokers: capacities with single retorts—150 to 560 boiler hp. Twin retorts available for larger requirements. May be equipped with automatic air volume, coal feed controls. When operating intermittently, ram stays at innermost point of feed stroke to seal coal tube against blowback. Rugged construction, mechanically precise. Brownell Co., Dayton 1, Ohio.

Vikimatic Model 1813: new warm air furnace using combustion chamber similar to Model 891 floor furnace introduced in 1946, with constant operating forced draft fan and shrouded burner. Entire line of gas-burning equipment altered and approved by A.G.A. for use with L.P.G. Series 800 utility room oil-fired winter air conditioning unit now equipped with new style burner, new front panel. Improved appearance and operational efficiency. Viking Mfg. Corp., 1747 Chester Ave., Cleveland, Ohio.

"V" Series Comfortmaster: new, oil-fired, winter "air conditioner." Capacity: 90,000 and 140,000 Btu. Available in quantity. **A-204 Comfortmaster**, oil-fired, winter "air conditioner," with vaporizing oil burner, capacity: 60,000 Btu, and **103 Series** oil-fired, winter "air conditioner" with gun-type burner, capacity: 75,000 Btu, will both be released before Jan. 15, 1948. Thatcher Furnace Co., Garwood, N. J.

Williams Oil-O-Matic Division: no new 1947 models. They have resumed manufacture of all prewar models with exception of the oil-fired water heater prior to 1947. In 1948 they will have information on new oil heating equipment. Williams Oil-O-Matic Div., Eureka Williams Corp., Bloomington, Ill.

SPACE HEATERS

Emerson-Electric Combination Radiant and Fan-Type Heater: quiet rubber-mounted fan forces 150 cu ft air per minute over new chromium reflectors to give rapid, penetrating heat distribution. Cool to touch, compact, easy to move. Emerson-Electric Mfg. Co., St. Louis 21, Mo.

Hammel Vented Wall Heaters: improved design, for in-the-wall installation to fit 4", 8", 16" wall thicknesses. Sizes, types available to suit most requirements. Redesigned **Hammel Consoleaire**, vented gas circulator, with constant burning pilot for ease of operation. Redesigned; fully welded; vented element eliminates sweating walls, windows. Hammel Radiator Engineering Co., 3348 Motor Ave., Los Angeles 34, Calif.

Oil-burning House Heaters: has horizontal burner which allows low heat chamber for heat at ankle height; 45,000, 55,000, 75,000 Btu. Evans Products Co., Detroit 27, Mich.

Quikheater: built-in electric heater for bathroom or bedroom. Radiant and convection heat. **Nichrome** element; embossed chrome steel cover. 2 sizes; 4 capacities. Individual thermostatic control if desired. Available for immediate delivery. Frank Adam Electric Co., St. Louis, Mo.

Rheem Series 1600: new floor furnaces using any type of gas. Down draft diverter prevents sudden flue drafts from extinguishing burner. 3 models are available to fill different heating requirements. Easy operation manual controls or automatic controls are available. Rheem Mfg. Co., 570 Lexington Ave., New York 22, N. Y.

Thermador Bathroom Electric Heater: improved models, LR and RB, with new grille and switch at top. A wall fan type electric heater with new grille design and new thermostat. Immediate delivery on these products. Thermador Electric Mfg. Co., 5119 S. Riverside Dr., Los Angeles 22, Calif.

Winkler Oil Space Heater, Winkler Low and High Pressure Burners, Winkler Attic Fans: 3 new oil-burning products, and new fans for attic and general ventilating purposes. A suspended hearth is one of several improvements made in **Winkler stokers** ranging in capacity from 20 to 1,000 lbs coal per hr. Stokers, oil heaters, oil burners immediately available. Fans available in spring of 1948. U. S. Machine Corp., Lebanon, Ind.

UNIT HEATERS

Chromalox Air Duct Heater, Type TDH: for high-temperature recirculating air systems, air temperatures up to 1050F maximum. An assembly of Chromalox electrical tubular heaters mounted in a steel frame. Thermostat provides protection against overheating. Rated at 230 v, 6 to 30 kw. Edwin L. Wiegand Co., Pittsburgh 8, Pa.

Model CS-95 Gas-Fired Unit Heater: cast iron ribbon type burners that offer quiet operation, no flashbacks; easily removed for cleaning. Completely automatic controls; easy accessibility to every part of heater. Tested and approved by American Gas Assn. Great National Air Conditioning Corp., Dallas, Tex.

Modine Unit Heaters: new line of heaters in wide range of types, models, sizes. Finished in beige-gray with chrome trim, deep-drawn, slightly convex casings, they are designed to meet practically every space heating requirement of industrial and commercial buildings. Modine, Racine, Wis.

Palmaire: 80,000 Btu input, suspended type gas-fired unit heater. Designed to permit low ceiling installation; corrugated steel heating elements increase heating efficiency. No central heating plant, boiler, or ductwork required. Hangs from ceiling, permits full use of store or factory space. AGA approved for natural, LPG, or manufactured gas. Palmer Mfg. Corp., Phoenix, Ariz.

Thermolier unit heaters: back on the market, and immediately available. Grinnell Co., Inc., 260 W. Exchange St., Providence 1, R. I.

Shafco Suspended Unit Heaters: compact suspended oil-fired unit heaters, single or multiple, for commercial and industrial buildings. Units are automatic and can be operated separately or in multiple installations. Shafco Distributing Corp., 1354 Book Bldg., Detroit 26, Mich.

Vertiflow: new vertical discharge unit heater. Delivers low final air temperatures; increased delivery capacity; heavy gauge sheet metal casing finished in neutral color. 7 models; may be had with adjustable vane diffusers, high velocity nozzles, or anemostats. Young Radiator Co., 709 S. Marquette St., Racine, Wis.

Wing Turbine Unit Heater: has fan driven by all-steel steam turbine. No electric motor or power needed. Fan stops when steam pressure stops. L. J. Wing Mfg. Co., New York, N. Y.

AIR CONDITIONERS

Amcoil Comfortaire Conditioner: lowers room temperature and removes moisture from the air without overcooling. Available in 2 models for houses, shops, laboratories, etc. American Coils Co., 25-27 Lexington St., Newark 5, N. J.

Duct-Type Weathermaster System: year-round air conditioner for hotels, apartments, offices, hospitals. Available in cabinet-type or furred-in units to harmonize with interiors. Carrier Corp., Syracuse, N. Y.

Frigidaire: improved Central System Air Conditioners. Sectional cabinets allow flexible installation. Optional equipment includes heating coils and humidifiers, providing year-round air conditioning. 4 horizontal suspended models, 4 vertical floor type models. Also improved "package" and room conditioners. Limited production on all. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

Gemco Air Conditioner: packaged unit with hermetically sealed 2-stage compressor and refrigerant-cooled motor. Cabinet is insulated with Fiberglas; efficient fireproof, sound, and heat insulation. Uses little water, a big economy if water costs are a factor. Heating coil and

humidifier may be installed for winter use, if desired. General Engineering & Mfg. Co., 4417 Cleatha Ave., St. Louis, Mo.

Patterson Freon Condensers (fin tube) and **Freon Condensers, Coolers** (bare tube): new 1947 products. Patterson-Kelley Co., Inc., East Stroudsburg, Pa.

DUCTS

Single Wall Type Careyduct: introduced in 1945, not offered in quantity until 1947 because of asbestos shortage. This addition to present types of Careyduct has following advantages: firm, strong, relatively lightweight; less expensive than insulated acoustical Careyduct; suitable for cold air returns where insulation not needed. Same anti-noise qualities as 1 A type of Careyduct—immediate delivery. Philip Carey Mfg. Co., Lockland, Cincinnati 15, Ohio.

AIR FILTERS, CLEANERS

Precipitron: new, electrostatic air cleaner. Removes 85 to 90% of all dust in circulating air streams in homes as large as 8 rooms. May be had in compact cabinet model, or built into furnace unit. **Unitaire,** new self-contained air conditioning units for retail stores, restaurants, other commercial establishments; made in 2, 3, 5 hp sizes. Westinghouse Electric Corp., 306 4th Ave., Pittsburgh 30, Pa.

Trion Electric Air Filter: electrostatic precipitation, attached to warm air furnace or air conditioning system, cleanses air in homes. 2 sizes available, Model 100 for houses up to 7 rooms, Model 200 up to 11 rooms. Operating cost equals 40 watt. Trion, Inc., 1000 Island Ave., McKees Rocks, Pa.

HEAT EXCHANGER

Hevigage steel heat exchanger: new, designed to eliminate extra baffles that cause hot spots, and cold spots that trap condensation. Machine-welded sections; 12 ga steel walls, 3 times thicker than minimum A.G.A. requirements. Controlled travel of hot gases through vertical passages extracts full heating value. Bryant Heater Co., 17825 St. Clair Ave., Cleveland 10, Ohio.

RADIATORS, CONVECTORS, ETC.

Baseboard Radiant Panel: cast iron, replaces regular baseboard; forms a continuous length of heating surface, occupying little more than an inch of floor space when recessed. Available in 2 types: **R** provides radiant heat alone; **RC** combines radiant and convected heat for use where heating requirements are above average. Both panels are 3" high, 2" thick. American Radiator & Standard Sanitary Corp., P. O. Box 1226, Pittsburgh 30, Pa.

Nesbit Model U Universal Convectector: improved unit for residential and commercial buildings. 1 heating element for steam, forced or gravity hot water. Identical headers tapped for all practical connections. Immediately available. Redesignated **Webster-Nesbitt Cabinet-Type Unit Heater** will be available shortly. John J. Nesbitt, Inc., State Rd. & Rhawn St., Philadelphia 36, Pa.

Webster Baseboard Heating: new 1948 model, incorporates improvements with resultant better heating effect. Also makes heating element invisible, prevents articles dropping into space behind enclosure. New **WW-1 Wood Moulding** for enclosure support; made in 1st grade poplar or spruce, treated with "Woodlife" preservative. Warren Webster & Co., 17th & Federal Sts., Camden, N. J.

Webster Type W1 Extended Surface Radiation: copper tubing and aluminum fins combined to provide nonerroneous heating surface with maximum efficiency. Also improved models of **Webster System Radiation, Series 5 Siphon Thermostatic Traps and Siphon Bellows Packless Valves,** discontinued during the war, are again available. The valve is an improved design. Warren Webster & Co., 17th & Federal Sts., Camden, N. J.

GRILLES, REGISTERS, DIFFUSERS

Agitair Type A: new circular air diffuser, made of aluminum. Fabrication method assures perfect concentricity of spun aluminum rings. New **Agitair Stripline** air diffuser provides continuous strip line outlet to fit into interior designs; insures engineers of draftless air distribution and rapid temperature equalization. Made of steel or aluminum. Prompt delivery on both types. Air Devices, Inc., 17 E. 42nd St., New York 17, N. Y.

Agitair Type R Air Diffusers: air distributor with a diffusion pattern control for almost any type or shape of ceiling. This unit agitates the supply air stream by forcing it to be deflected

from various vanes at different angles; air is discharged at a uniform velocity. Air Devices, Inc., 17 E. 42nd St., New York 17, N. Y.

D500 Series Register: for forced air systems, designed to provide uniform, wide-angle air diffusion. New product incorporates fixed angle turning vanes and opposed blade volume dampers to permit balancing at each register. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

Kno-Draft adjustable air diffuser: improved; air direction and volume easily and simply controlled. By means of adjustment features air distribution system may be altered after installation to meet unforeseen requirements. Wider cones for better concealment of damper within neck of unit. W. B. Connor Engineering Corp., 114 E. 32nd St., New York 16, N. Y.

Multi-Louver Damper No. 4: circular multi-shutter damper for use with Aero diffuser. Balanced system assured by minute adjustment of air volume; convenient to regulate. Quiet operation. Tamperproof; louvers can be positively locked in any position. Immediately available. Tuttle & Bailey, Inc., New Britain, Conn.

Tri-Flex Grilles and Registers: for control of air distribution on commercial, institutional, industrial air conditioning systems. Available in 26 standard sizes, with grille and deflector blades, dampers. Tuttle & Bailey, Inc., New Britain, Conn.

Type "W" Wall Anemostat: was off the market. Now completely redesigned, and available. **New Type C1 adjustable Anemostat,** universal unit for heating, ventilating, cooling of any types of applications. Available. Anemostat Corp. of America, 10 E. 39th St., New York 16, N. Y.

VENTILATORS, FANS

Air Changer: air-cooling fan of aluminum for installation in basements, attics, and kitchen floors. Noiselessly draws cool, fresh night air from outdoors when windows are open. Powered by a ball-bearing 1/2 hp motor, is 36" in size, operates at about 1 1/2 an hour. Unwanted air filtration is eliminated by an automatic lowered aluminum grill. Eagle-Picher Sales Co., American Bldg., Cincinnati 1, Ohio.

Hunter vertical discharge "package" fan: with ceiling shutter. Streamlined unit offering new idea in attic ventilation. Built-in fuse link and motor switch will close shutter and stop fan when temperatures rise above dangerous points. Automatic protection against fire hazard. Ventilates in winter, creates cooling breeze in summer. Immediately available. Hunter Fan & Ventilating Co., 400 S. Front St., Memphis, Tenn.

Ilgvent 8-In. Packaged Fan: electric vent fan with 3/8" sleeve for mounting in thin walls, steel sash, other small-panel sash. 350 cfm; 2-min. air change in kitchens up to 700 cu ft in area. Ilg Electric Ventilating Co., Chicago 41, Ill.

Ject-O-Valve: "straight-through" powered roof ventilator with a propeller fan to exhaust heat, fumes, smoke, etc., through a divided top that opens and closes automatically. Made in 5 sizes. The Swartwout Co., Cleveland, Ohio.

Kitchen-Aire Ventilator Fan: electrically operated; the only unit where operating mechanism is placed outside, making it noiseless. Removes cooking odors, smoke, stale air. Easily installed, requiring only an 8" diameter opening through the wall and simple electrical connections to wall switch. Stewart Mfg. Co., 3205-11 E. Washington St., Indianapolis, Ind.

No. 135 Atlantic Breeze: side-wall exhaust ventilator, incorporating new "axial flow" blade developed during the war; greatly improved efficiency, increased air delivery. New product brought out in 1947. Pryne & Co., Inc., 140 N. Towne Ave., Pomona, Calif.

Trane Unit Ventilator: new, with 4 developments—3 easily removed panels for accessibility to interior; removable panels on fan scrolls which makes cleaning out of dust, debris, a simple job; removable louver assembly to simplify installation; higher placed fresh air dampers so that snow or sleet cannot interfere with operation. 6 models, each available in 4 sizes. Trane Co., La Crosse, Wis.

Victron Ventilating Fan, Model V1106: improved, with removable grille for easy cleaning. Quiet, dependable motor; positive weather sealing. New **Victron Window Model Ventilating Fans—Models V186S, V186W** for existing buildings. Low installation cost. Will be introduced before Jan. 15, 1948. Victor Electric Products, Inc., 2950 Robertson Ave., Cincinnati, Ohio.

Wilstraire: room cooling unit; aluminum casting. Dimensions 9 1/2" high by 9" deep. Metal extensions to cover windows from 20" to 30"

wide. Outstanding feature is circulation without direct draft. **Strato-Liminator,** automatic air circulator. In winter, keeps room warm by diffusing warm ceiling air to living level. Both new products, immediately available. Wilster, Inc., 5700 Detroit Ave., Cleveland 2, Ohio.

CONTROL DEVICES

Alnor Dewpointer: humidity control instrument, eliminates need for external coolants. Built to instrument standards, available in 2 ranges—dew point minus 20F and room temperature, and minus 100F to 0F. Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill.

Heat Timer Valve: first device to provide flexibility of zone heating at low cost. Automatic temperature control for radiators, permitting room-by-room variation in heat, adjusted to preference of occupant. Etched on valve is a scale of temperatures, ranging from 55 to 80°. Movable indicator is rotated to point to desired temperature. Heat Timer Corp., 160 5th Ave., New York, N. Y.

Indoor-Outdoor Control: for radiant panel and radiator-convecter heating systems. Operated by hydraulic action; 2 bulbs to measure outdoor temperature and water temperature. Control prevents wasteful heating. 2 types available, 1 for radiant panels, other for radiator-convecter heating units. Available. White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo.

R177A Electronic Relay: for oil burners. **R180A Electronic Relay** for gas burners using manual lighted pilot. **R180B Electronic Relay** for gas burners using electrical ignition. All are new automatic controls, with split-second flame detection. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

T147A, T247A, T847A Chronotherm: electric clock type thermostat, for series 10, 20, and 80 wiring, are all redesigned products introduced in 1947. Give fully automatic control of day and night temperature settings. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

T220A Greenhouse Thermostat: entirely corrosion-resistant, with mercury switching, heat leveling for accurate control. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

T418 Compensating Outdoor Temperature Control: new device for domestic applications of warm air and hot water heating. Automatically controls temperature of the heating medium of heating plant in relation to outside temperature. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

Weather-Man: new, completely automatic thermostatic control, actuated by outside temperatures, for controlling building heat. May be used to operate gas or oil burners, stokers, circulating pumps, fans, motor valves, or zone valves. For all types of heating systems. Weather Controls Div., Automatic Devices Co., 53 W. Jackson Blvd., Chicago 4, Ill.

W127 Aquatrol Panel: modulating reset control with compensating outdoor controller. Automatically varies boiler water temperature in accordance to outdoor temperatures. New product especially designed for radiant panel heating. Minneapolis-Honeywell Regulator Co., 2753 4th Ave., Minneapolis 8, Minn.

FIREPLACE, CHIMNEY EQUIPMENT

Bennett Cast-Iron Damper: gives minimum resistance to heat flow and gases up through the throat with 50° front slope. Interchangeable rotary controls for valve. **Screw-tite Cleanout Door,** solid aluminum, rust-resistant; thumb-screw insures tight closure. **Bennett Ash Dump,** designed to avoid cutting of bricks as it is "brick-size." All new products. Bennett-Ireland, Inc., Norwich, N. Y.

Fresh-Aire Fireplace Unit: was off the market, but is now available. An improved **Fresh-Aire Fireplace Unit** and **Warm-Aire Fireplace Unit** were introduced in 1947. Bennett-Ireland, Inc., Norwich, N. Y.

Heatilator fireplace equipment: new line of cleanout doors, ash dumps, electric fan grilles, cranes, grates. Ash dumps of heavy steel and warpproof. Overall size 7" x 10". Grilles especially designed for use where maximum heat desired from Heatilator-equipped fireplace; furnished with motor, fan, electrical connection. Cranes designed for Colonial hearths, also open fire cooking. Heatilator, Inc., Syracuse 5, N. Y.

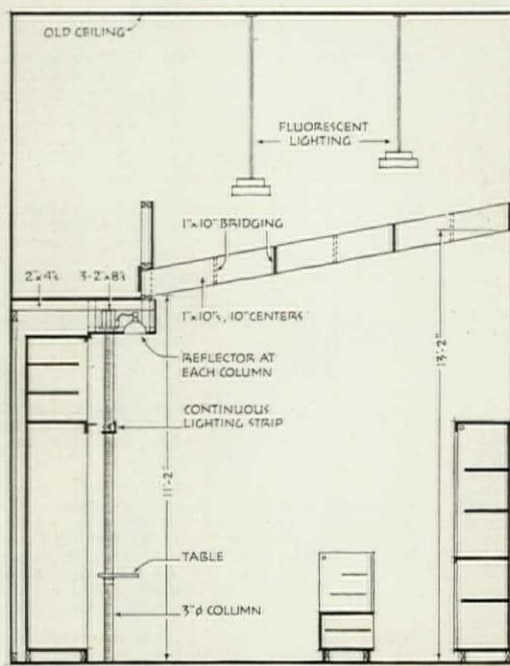
Packaged Chimney: lightweight, easy to install; low cost. Comes in 2 sections, each lined with acidproof, high temperature tile inside 3" thick insulating wall of lightweight masonry, steel reinforced. Complete with steel roof housing and all materials required for erection. Vam-Packer Corp., 135 S. LaSalle St., Chicago 3, Ill.



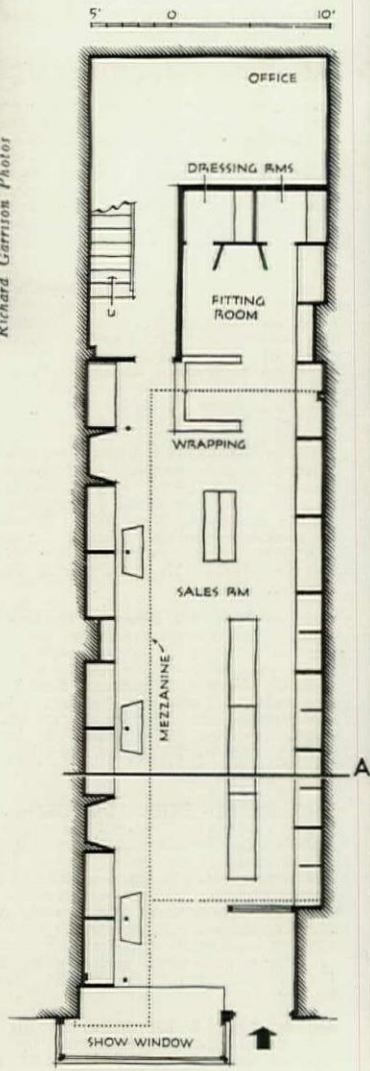
Richard Garrison Photos

JOSEPH ABEL, well known with JULIAN BERLA for their apartment houses, is author of major portions of the newest volume of the *Progressive Architecture Library*, "Apartment Houses." Of this store the architects say: "Space above the showcases is extremely useful . . . (there was) no other storage space . . . crate was used to bring down room height."

EXCESSIVE HEIGHT was turned to advantage in lighting design: it permitted very deep members in the crate ceiling, which increases its value in shielding light sources; and rows of continuous fluorescent reflectors were mounted sufficiently high above the crate to afford an even intensity of light distribution. Over showcases at left is haberdashery storage up to the ceiling; at that point a ceiling walkway provides access to more storage cases above. At rear is an alcove fitting room with two dressing rooms, behind that an office. Workroom occupies the mezzanine.



Section at A



Floor Plan

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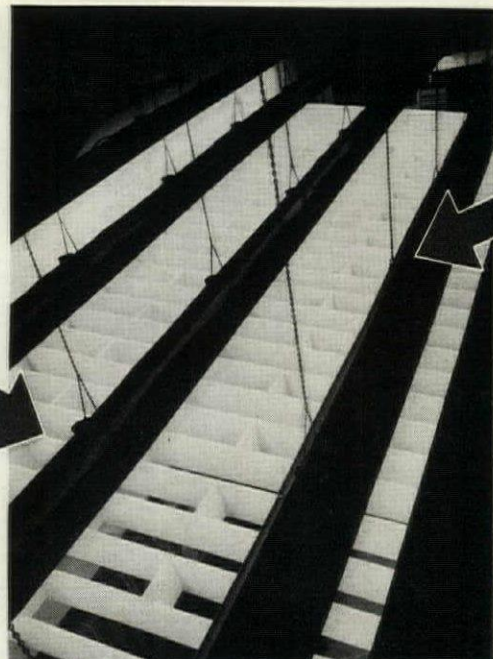
BERLA

ABEL

Let Brothers

LIGHT
BAFFLES

FLUORESCENT
LIGHTING



Equipment for '48

LIGHTING, ELECTRICAL

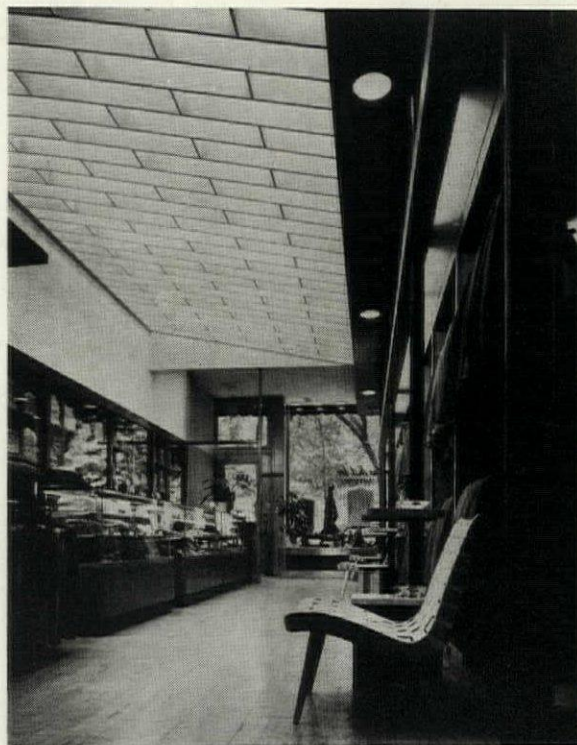
STORE WASHINGTON, D. C.

BERLA & ABEL, Architects

PROBLEM: To remodel the interior of a store to provide a good, contemporary setting, not extreme, for a men's clothing shop. Considerable storage space had to be provided.

EXISTING CONDITIONS: A deep, narrow store, much too high in proportion. At the rear a mezzanine extended forward over one-third of the floor area; this is the maximum allowed by District of Columbia regulations. No other storage space existed for the client in the building.

SOLUTION: A "luminous ceiling" composed of a wood crate or light baffle, with continuous fluorescent fixtures above, was used to reduce apparent height. To provide storage, wall cases were extended up above the luminous ceiling—permitted because the construction is part of the showcase installation, not permanently secured to building structure.



FINISH WOOD in store fixtures is straight-grained American walnut. Crate ceiling is painted light blue-gray. Some maroon and burnt orange are used for accent. Floor is neutral, light gray-tan asphalt tile.

LIGHTING FIXTURES AND LAMPS

Alzak Aluminum Luminaires: all are again available after 7 years of absence, including the No. 1548 Wall Urn. Redesigned for use are the Incandescent Recessed Lighting Units for general lighting, or for spot and accent lighting. Curtis Lighting, Inc., 6135 W. 65th St., Chicago 38, Ill.

Bacteria-Lite: cold cathode gaseous discharge lamp combining visible fluorescent and invisible ultraviolet radiation from single source. For hospitals, dental offices, restaurants, dairies, etc. Also improved Bacteria-Lite pin-up model. Libbey Engineering Co., Elgin, Ill.

Alzak SkyLux: for two 40-watt fluorescent lamps per section. Made of aluminum and steel with Alzak aluminum reflecting surfaces. Has a soft, silvery appearance when lighted; recommended particularly for office lighting. Dimensions: overall height, 6 7/8"; width, 11 1/4"; length, 48 11/16". Extra sections add 48 3/16". Newly brought out. Curtis Lighting, Inc., 6135 W. 65th St., Chicago 38, Ill.

Circular: new, semicircular fluorescent lamp for portable lamps, merchandising displays, decorative lighting, etc. Rated 18 watts; operates directly on 110-125 v AC lighting circuit. Manufactured by Westinghouse, General Electric, Sylvania.

Circline, 32-watt fluorescent fixture: for use in houses and some commercial establishments. May be had with a round glass in white or pink, in sand-blasted design, providing soft effect. New types fluorescent kitchen units and bathroom fixtures, also showroom fixtures (and for offices) utilizing louvers and glass. Recessed fluorescent fixtures are again available. Lightmore Appliance Corp., 738 Broadway, New York 3, N. Y.

Colonial residential fixtures: have been made available again. Lightolier, Inc., 11 E. 36th St., New York, N. Y.

Day-Brite recessed troffers: snap-in type with Boxco louvers or hinged frames and glass panels, for use with tee-bar ceiling construction. Also flange type with Boxco louvers or hinged frames and glass panels; for acoustical and plaster ceilings. Incandescent boxes, recommended for color blending with fluorescent; **Holophane controlens:** 2 types, for use with snap-in and flange troffers. Day-Brite Lighting, Inc., 5411 Bulwer Ave., St. Louis 7, Mo.

Decoralite: new; carved glass or plastic panel set in shadow-box frame, to hang on bedroom wall. Frame conceals lumiline tubes at top and bottom that cast glareless downlight. Variety of decorative designs to go with every kind of bedroom decoration, period or modern. Available. Lightolier, Inc., 11 E. 36th St., New York, N. Y.

Electric Fixture Stud, Type FS-3 No-Bolt: die-cast aluminum alloy with 3/8" pipe thread. Tested to breaking point of 600 lbs vertically; now furnished less locknut. Cannon Electrical Development Co., 3209 Humboldt St., Los Angeles 31, Calif.

Flex Conduit Fittings: 1/2" and 3/4"; also reversible metallic and nonmetallic conduit fittings. Cannon Electrical Development Co., 3209 Humboldt St., Los Angeles 31, Calif.

Generaliner strip lighting unit: colored lamps, new products, available. Redesigned lamp holders and simplicity lighting unit, introduced in 1947. Further lamp colors will be available. General Luminescent Corp., 732 S. Federal St., Chicago 5, Ill.

Hinged-Glass Aristolite: luminaire with hinged-glass diffusers that swing open, for ease of cleaning and relamping. Available in 2-, 3-, or 4-40 watt sizes, can be mounted individually or in continuous rows. Edwin F. Guth Co., 2615 Washington Ave., St. Louis, Mo.

Horizon Commercial Fixtures: new, with Slimline tubes; lightweight louver construction, with patented coupler for continuous row mounting and versatility of stem suspension. Unit finished in baked white enamel with molded plastic, translucent, or solid steel side panels. Leader Electric Co., 3500 N. Kedzie, Chicago 18, Ill.

L-I-N-O-L-I-T-E Series 21, 22, 17, 31, 32: new fluorescent fixtures, including incandescent downlights designed for use in combination for each series. Other products were refined and improved to meet new industry demands and to take full advantage of new tools and techniques. All fluorescent fixtures of standard design available immediately, or within 3 to 4 weeks of order receipt. Delivery of custom work depends upon type required. Frink Corp.,

27-01 Bridge Plaza N., Long Island City 1, N. Y.

New recessed troffers: will be released before Jan. 15, 1948. Leader Electric Co., 3500 N. Kedzie, Chicago 18, Ill.

New Style #60 Light Fixture: with frosted tubular shade held in chromium plated bracket. Shades are threaded for easy insertion or removal. 1 bracket contains switch for both lights. F. H. Lawson Co., Cincinnati 4, Ohio.

New troffer luminaire: wide choice of decorative lighting effects. Available for 40-watt, 100-watt, two 40-watt fluorescent lamps. Can be shielded by egg-crate louvers, cross baffles, or left open without additional shielding. Westinghouse Electric Corp., 306 4th Ave., Pittsburgh, Pa.

Officer Series of fluorescent luminaires: redesigned, for stores, offices, and institutions. Shielding of lamp brightness accomplished by white, high gloss, steel louver having minimum of interference with light output. Molded plastic translucent or solid steel side panels. Units furnished for continuous runs connected end-to-end have connecting band between units fastened with 2 thumbscrews; no bushings or locknuts needed. Leader Electric Co., 3500 N. Kedzie, Chicago 18, Ill.

Pathfinder: new lighting for driveways, paths, steps, and gardens. Cannon Electrical Development Co., 3209 Humboldt St., Los Angeles 31, Calif.

Pry-lite: redesigned recessed lighting fixtures with special reflectors for maximum light. Many models have pull boxes for economical wiring. New Pry-lite fixtures to be released before Jan. 15, 1948, are automatic closet light, step or baseboard light, adjustable overhead spot light, combination mazda, fluorescent multi-colored recessed dining room light. Pryne & Co., Inc., Pomona, Calif.

Schoolmaster: fluorescent lamp for schoolroom use with 60% downward and 40% upward light diffusion. Constructed of 20-ga steel, finished in high gloss white baked enamel. Dimensions: 48-3/32" long, 12 3/4" wide, 8-3/16" deep. Optional feature: built-in germicidal lamp, source of radiant ultraviolet energy that destroys airborne bacteria. New product. Leader Electric Co., 3500 N. Kedzie, Chicago 18, Ill.

Sky-Glo: new fluorescent luminous ceiling system which converts entire ceiling into a lighting unit. Consists of standardized stock sections of channels, fittings, and Vinylite louvers. Light transmission factor approximately 60%, providing uniform, comfortable lighting. Benjamin Electric Mfg. Co., Des Plaines, Ill.

4060 Luminaire: new, for 100-watt fluorescent lamps. New Anniversary Luminaire, four 40-watt lamps per section, is recommended for office and store lighting. Also new are Curtis 2- and 3-lamp fluorescent recessed troffers; easy to install in any type ceiling. Curtis Lighting, Inc., 6135 W. 65th St., Chicago 38, Ill.

REFLECTORS, DIFFUSERS

Alzak reflectors and louvers: new in this line. Reflectors afford better light distribution and lower surface brightness. Alzak louvers available for this manufacturer's lighting fixtures: **Faturliters** and **Trucolites.** Alzak is a permanent surface, tough and durable, will not crack, peel, or break. Edwin F. Guth Co., 2615 Washington Ave., St. Louis 3, Mo.

Permalectors: entire line of silvered-glass, also incandescent accessories, such as roundels, louvers, plaster rings, which were not available since before the war are once again in production. Pittsburgh Reflector Co., Oliver Bldg., Pittsburgh 22, Pa.

Tulox Fluorescent Diffusers: Tulox tubing of Tenite extruded in transparent colors for diffusing fluorescent lighting. Installed by slipping tubes over standard fluorescent lamps. Extruded Plastics, Inc., Norwalk, Conn.

SWITCHES, CIRCUIT-BREAKERS

Cutler-Hammer Multi-Breaker: small, 4 pole multi-breaker for use in smaller houses as fuseless circuit-breaker protection, and for larger installations as a branch circuit load center. Incorporates both thermal over-load and magnetic protection. Carries a 50-amp maximum solid main rating, individual single poles at 15, 20, or 30 amp. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis.

Double Throw Safety Switches: new line. Other new products are the Type MO2 and Type MB4 Multi-Breakers. Redesigned line of Service Con-

trol Switches, and Industrial Multi-Breakers equipped with conventional type enclosure in addition to special industrial enclosure. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis.

Electric Wall Switch: electric light switch equipped with a neon light in the handle that lights up when overhead lights are out. Available in many colors. Light will last for 2 years; electric current for the light costs less than 2¢ a year. Roberts-Glo, Switch Div., 700 Jamaica Ave., Brooklyn 8, N. Y.

Electronic Timer: newly designed for use on timing applications requiring dependable operation. Simple knob adjustment provided for desired time setting. New Pneumatic Timer handles a wide range of industrial timing application. Extremely small size, flexibility of timing arrangements, suited for many applications on machine tools, conveyors, and automatic processing equipment. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis.

Improved Raintight construction: on safety switches, service control switches, and multi-breakers, brought out in 1947. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis.

MO-4 Multi-Breaker: newly designed to offer fuseless, low cost protection as a service entrance switch, also as a branch circuit load center. Combines 4 breaker poles, available in ratings of 15, 20, or 30 amp. Flip of the lever restores service after overload or short circuit; no live parts exposed, nothing to replace. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee, Wis.

Quicklag: new circuit breaker with thermal magnetic trip; new tripping action combines inverse time limit of bimetal thermal action on overloads with operating speed of magnetic trip action on short circuits. Available in single or double poles, 10 to 50 amp, 125 to 125/250 volts AC. Westinghouse Electric Corp., 306 4th Ave., Pittsburgh, Pa.

Unitrol: patented sectionalized control center; all controllers for operation of a number of motors and machines in a compact unit. Patented construction provides for adding sections at any time for expansion and, when desired, sections can be easily removed or changed. Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis.

61 and 63 "T": bakelite cup single-pole and 3-way switches designed for high grade residential work. Also 2 duplex convenience outlets, 6122 for residential work, 9260, more suitable for industrial installation. All new products. Westinghouse Electric Corp., 306 4th Ave., Pittsburgh 30, Pa.

ELECTRICAL CONDUCTORS

Federal Bus Duct: simplified, enclosed, bus bar electrical distribution system, housed in rigid sheet steel. Standardized lengths and fittings. Both feeder and plug-in types. Federal Electric Products Co., 50 Paris St., Newark 5, N. J.

Main and Range Units: new service equipment, designed for modern electrical requirements. Capacities, 60, 100 amp. Flush or surface mounting; easily removable 1-piece molded base. **Circuit Breaker Type,** for mass housing projects, small commercial buildings. Capacity, 100 amp. Available with 4-, 6-, 8-, 10-plug fuse branches. Frank Adam Electric Co., St. Louis, Mo.

Plug-In Busduct: power distribution system; standard 10-ft sections. Capacities—225, 400, 600, 800, 1,000 amp; 60 v and less. **Plug-in outlets, 12" centers.** Improved design with simplified construction. **Plug-in devices available:** 30-200 amp, 250-600 v **Klamswitchuz; Shutbrak Circuit-Breaker Types.** Frank Adam Electric Co., St. Louis, Mo.

Prewired Plugmold: new product to meet requirements of multiple convenience outlet installations in homes, stores, schools, etc. Small dimensions: 3/8" deep by 1 1/8" wide; convenience outlets may be added or relocated, as needed. Ready to install, in 3' and 6' lengths, with outlets wired in position on either 6" or 18" centers. Wiremold Co., Hartford, Conn.

Surfaceduct: surface raceway for easy accessibility of wiring; **Plug-In Strip,** steel molding with electrical convenience outlets every 18"; **Lopo-Trim,** hollow steel quarter round; **A.B.C. Cable,** armored cable, bonded and bushed; **Lo-Loss Feeder Bus,** for conducting long runs of large AC's; **2163 EZ Armored Cable Connector,** connects armored cable to outlet box; **Two Service Fittings,** for high, low potential wiring. All new products. National Electric Products Corp., Chamber of Commerce Bldg., Pittsburgh 30, Pa.

ELECTRIC RANGES

Electric Ranges: see "Sanitation"; "Specialized Equipment"



Equipment for '48

SANITATION, WATER SUPPLY, DISPOSAL

LAVATORY FAIRBANKS-MORSE BUILDING, CHICAGO, ILLINOIS

GEORGE T. SENSENEY

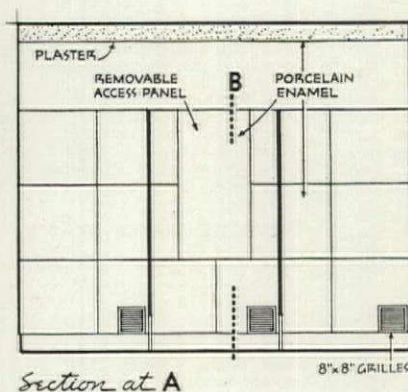
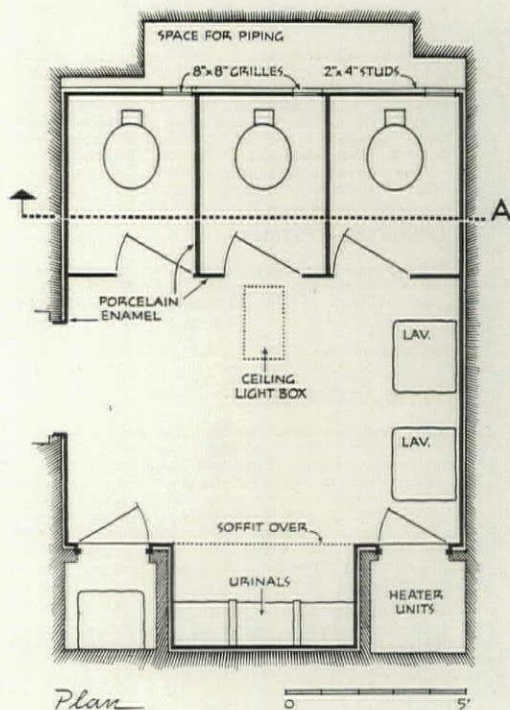
Architect

PROBLEM: To design a men's lavatory and toilet in a modern office building. Room, partitions, and fixtures to be clean, easy to maintain, and attractive without use of extravagant materials.

J. STEWART STEIN

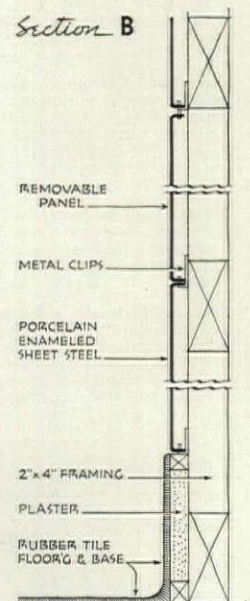
Associate

DESIGN: Simple, good-looking fixtures set off by wainscoting and stall partitions of porcelain-enameled steel sheets, formed into panels. Suspended plaster ceiling. Floor and flush cove base of rubber tile.



Section at A

REMOVABLE PANEL behind water closets gives access to pipe space. Porcelain enamel panels are veneered under pressure to insulation board core (plywood core for stiles and stall doors) and flanged for a neat butt joint.



SANITATION, WATER SUPPLY, DISPOSAL

PLUMBING FIXTURES (bath, kitchen, laundry)

Bendix Automatic Home Laundry: washing machine with minor production improvements, is fundamentally same machine as the 1945 product. Available. Bendix Home Appliances, Inc., South Bend 24, Ind.

Blackstone Combination Laundry: consisting of automatic washer, automatic dryer, automatic ironer in matching units. Prewar type wringer washers and automatic washers again available. Improved washers introduced in 1947. Models available in limited quantities. Blackstone Corp., Jamestown, N. Y.

Crane China Closets: 2 new models; saddle-type seat, quiet whirlpool siphon action bowl. Large trapway reduces stoppage possibility. Compact units, of vitreous china. Also new: **Criterion** porcelain enameled cast iron baths with **Dial** controls; vitreous china lavatories with same controls; **Laundrette** tubs made of **Dura-clay**, in 1 or 2 compartment styles, with **Dial** controls. Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

Elkay Stainless Steel "Lustertone" Sink: newly designed, extra heavy stainless steel. Drain-board, sink bowl, rims, splashers welded integral into 1 metal sheet. Resiliency in drain-board and sink reduces dish breakage. Immediately available in 5 standard sizes. Custom-built units require about 60-day delivery. Elkay Mfg. Co., 1874 S. 54th Ave., Chicago 50, Ill.

Formica sink tops: made with **Formica** laminated plastic sheets which have been used for restaurant table tops and counter tops for many years. New product. Formica Insulation Co., 4614 Spring Grove Ave., Cincinnati 32, Ohio.

Four Kitchen sink models: Camberley, Cymbria, Wellwin, Sea Cliff, made of non-flexing cast iron base with white, easy-to-clean, acid-resisting enamel. All have the **Duostrainer**, a removable cuplike strainer in which waste collects for easy disposal. Were off the market, now available in limited supplies. Redesigned **Edge-water** sink fitting of durable brass, finger-tip action, also available. Kohler Co., Kohler, Wis.

Frigidaire: new line of home laundry equipment includes an automatic electric clothes washer. Employs new "live-water" principle with use of a pulsator that creates up-and-down motion. Mechanism housed in 1-piece welded steel cabinet, porcelain finish inside and out. Sealed, self-oiling motor and pulsator. Limited production. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

Frigidaire: kitchen cabinets and cabinet sinks which have been off the market are available again. Production is limited. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

General Electric automatic washers: free-standing, portable, need not be bolted to floor. Also improved electric dishwashers; drop-in, free-standing, electric sink models. Improved line of electric water heaters, heated by Calrod ribbons that wrap around tank, making tank itself the heating element. All available, not for immediate delivery at this time. General Electric Co., 1285 Boston Ave., Bridgeport, Conn.

Hamilton Automatic Clothes Dryer: with thermostat which maintains uniform temperature of 190F. Steel construction, porcelain-enameled cabinet. In both gas and electric models. Height 39", width 31", depth 27½". Available in limited quantities. Hamilton Mfg. Co., Two Rivers, Wis.

Kaiser Dishwasher: powered by water; no motor. Connects to hot water line and drain. Siphon-breakers built-in. All-aluminum construction. Cabinet or installation models. Kaiser Fleetwings, Inc., Kaiser Bldg., Oakland, Calif.

Murphy Cabranette Kitchens: shipped after Jan. 1, 1948, will be completely redesigned. Improved ranges, 1-piece sink and range top porcelain on steel; new type stainless steel evaporator in refrigerator, giving frozen food space. More storage space; deck type faucets will be used. Dwyer Products Corp., Michigan City, Ind.

Remote Type Wall Fountains: Models C-250-N and V-255 are designed for maximum drinking convenience and sanitation. Chrome-plated fittings; equipped with No. 12000 **Ebco Angle-Stream Bubbler**, providing leather-touch operation. Also 3 **Glass Filler** models: 500, 525, 550. All with self-closing valves. Made of brass with chrome-plated finish. All these products are again available for immediate delivery. Ebco

Mfg. Co., 401 W. Town St., Columbus 8, Ohio.

The Speakman Co.: production of plumbing fixtures has been somewhat limited since the war. They are adding to their list from time to time, whenever materials are available. By middle of 1948 expect to be in production on practically all items illustrated in their current catalog. Speakman Co., Riverview Works, Wilmington 99, Del.

Stanfab Unit Bathroom: 3-fixture bathroom and accessories, including bathtub, lavatory, water closet, medicine and linen closets, combination toilet paper holder-bookshelf with cigarette compartment and tray, towel and grab bar, and water-tight wall protectors. All pipes are built in. Standard Fabrication, Inc., 1400 W. Armistage, Chicago, Ill.

Tracy stainless steel kitchen sink and cabinet combinations: new, 3 sizes—54", 60", 72". Again available are stainless steel kitchen sinks and cabinet tops, custom-built to measure for every type installation. New **Tracy Dura-Double** unit, with steel cabinet, featuring extra deep bowl. All available; prices average 20% lower than 1941. Tracy Mfg. Co., 3125 Preble Ave., Pittsburgh 12, Pa.

PLUMBING FIXTURES, FITTINGS

Aquatemp: new automatic pressure balance valve for mixed hot and cold water fixture. Prevents scalding or chilling due to sudden water pressure changes. For any type of shower fitting. Immediately available. Milton-Griffith Co., 7617 Mack Ave., Detroit 14, Mich.

Closet bends, stack base fittings: were off the market, now available. Blake Mfg. Co., Rock Island, Ill.

Imperial soap dispensers: were off the market but now immediately available. Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago 7, Ill.

Imperial flush valve: new, with drip receptor. Also an improved series "400" flush valves. Both immediately available. Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago 7, Ill.

Roof Drain: with adjustable water level rings, newly designed for use where water head is desired on roof for cooling or air conditioning. Integral brass sleeve easily raised or lowered by releasing tension held on it by asbestos gaskets. Optional: screw pipe or for inside calking. Blake Mfg. Co., Rock Island, Ill.

Sani-Flor Stainless Steel Closet Base, Minute Man Test Plug, Nu-Rail Railing Fitting: all new products introduced in 1947. Ready for shipment by return mail excepting **Nu-Rail, Hol-Anchor** adjustable bathtub hanger was off the market, now available for shipment return mail. Hol-laender Mfg. Co., 3841 Spring Grove Ave., Cincinnati 23, Ohio.

Watrous Flush Valve with Bedpan Drip Receptor: flush valve with drip receptor for use with bedpan fittings in hospitals. Adjustable for any height above bowl. Protected against back siphonage and spilling while valve is being flushed. Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago, Ill.

Zurn Engineered Carriers: for wall type fixtures; complete line to support every type and make of wall fixtures. These are again available. **Zurn Discharge Drain,** improved product. High velocity, with extra-large, removable mushroom-type dome. Open area ratio of dome orifices to outlet from 3½:1 to 32:1, depending on outlet size. Immediately available. J. A. Zurn Mfg. Co., Erie, Pa.

DOMESTIC WATER HEATERS

Automatic oil-fired water heaters: can be used anywhere; fully automatic; heat water fast; low cost operation; 12 features to give automatic hot water convenience. Coleman Co., Inc., Wichita 1, Kan.

Heat Wrap Calrod: heating unit for electric water heating tanks, consists of 1, 2, or 3 ribbons of Calrod held tight against surface of tank by stainless steel channels; conducts heat to water and provides maximum delivery of hot water. Galvanized or monel tanks from 15- to 82-gal. size. General Electric Co., 1285 Boston Ave., Bridgeport, Conn.

Instantaneous hot water heaters: improved product brought out in 1947. Patterson-Kelley Co., Inc., East Stroudsburg, Pa.

Norge Electric Water Heater: round upright type of electric water heater will be available

in 5 sizes with capacities of 80, 66, 52, 40, and 30 gal. Completely insulated with 5" of glass wool. Borg-Warner Corp., Norge Div., 574 E. Woodbridge St., Detroit 26, Mich.

Presteline electric and gas water heaters: new models will be introduced by Jan. 15, 1948. Pressed Steel Car Co., Inc., 666 Lake Shore Drive, Chicago, Ill.

Ruud NC-5: new automatic water heater comes in 2 models—continuous flow type, parallel floor type. **Ruud-Monel** automatic water heaters were off the market, now available again. All models available in limited quantities. Ruud Mfg. Co., 2934 Smallman St., Pittsburgh 1, Pa.

Table-Top Water Heater: electric water heating unit resembles a 24-in. base cabinet in kitchen, has a 4-sq ft work top. Immersion type heating element; Fiberglass insulation. Westinghouse Electric Corp., Appliance Div., Mansfield, Ohio.

WATER COOLING, SOFTENING

Oasis Electric Water Coolers: 5 new models—OP-10W, OB-4, OP-5, OP-20B, OP-20G. Also Kelvinator-refrigerated **Electric Water Coolers**, 4 models—K-4-B, K-5, K-20B, K-20G. To be released before Jan. 15, 1948, are the **Oasis Electric Water Coolers** OB-4-V, OP-10-V, and Kelvinator refrigerated **Electric Water Coolers** K-4-BV, K-10-V. Immediately available. Ebco Mfg. Co., 401 W. Town St., Columbus 8, Ohio.

SHOWER CABINETS

Adapto: receptor for built-in shower stalls. Features a non-slip safety floor design. 1-piece construction, made of porcelain enamel on heavy steel. Comes in 2 sizes, 32" x 32" and 34" x 34". Milwaukee Stamping Co., Bathe-Rite Div., 824 S. 72nd St., Milwaukee 14, Wis.

Aluminum Shower Cabinet: made of heavy gage lightweight aluminum; composed of 5 form sections which slide into interlocking flanges providing a watertight fit. Standard glass door can be added. W. R. Ames Co., 150 Hooper St., San Francisco 7, Calif.

Econo Shower: new shower bath cabinet, with drain, self-cleaning shower head and arm, 2-way valve, soap dish, curtain. Panels finished in gloss white enamel, black top frame. Portable; easy to assemble. Also new bathroom medicine cabinets, finished in gloss white enamel; with A-glass Venetian mirror, for use in low cost houses. New aluminum shower door will be released before Jan. 15, 1948. Others available. Standard Steel Cabinet Co., 3701 Milwaukee Ave., Chicago, Ill.

Weisway Standard Corner Entrance Model: with Armo iron receptor, 1-piece vitreous porcelain enameled with no-slip floor surface. 14 B&S ga aluminum alloy walls with high-temperature baked enamel finish inside and out. **Budgeteer Model** with porcelain enameled receptor, foot-grip, no-slip floor surface; aluminum walls, high temperature baked-enamel finish inside and out. Both products were off the market, but now available. Henry Weis Mfg. Co., Elkhart, Ind.

Weisway Vitreceptor: 1-piece porcelain enameled receptor with foot-grip non-slip floor pattern in grey; furnished with various wall materials such as glass, marble, tile, linoleum. This product and the **In-A-Wall Entrance Adapter** were off the market but are now available. Also the **Weisway** toilet, shower, dressing room enclosures with aluminum alloys. Henry Weis Mfg. Co., Elkhart, Ind.

SPRINKLER SYSTEMS

Ceiling-type sprinkler head: new, for use with concealed piping. Immediately available. Grinnell Co., Inc., 260 W. Exchange St., Providence 1, R. I.

Sprinklers: see "Specialized Equipment"

GERMICIDAL LIGHTS

Duro Test Germicidal Lamp: new unit produced in 2 types; 1 kills airborne bacteria, for use in home, barns, hospitals, public gathering places; other destroys molds, fungi, bacteria virus, to be used wherever food is handled, i.e., meat packing plants, bakeries, bottling operations, etc. Produced in two lengths—15 watts in 18" and 30 watts in 36". Available for immediate delivery. Duro Test Corp., North Bergen, N. J.

Germ Killing Light: germicidal unit used as protector against bacterial and mold contamination; applies ultraviolet rays. Lustrax Corp. of America, 40 W. 25th St., New York 10, N. Y.

Germicidal Lamps: see "Lighting and Electrical"



Julius Shulman Photos

Equipment for '48

SPECIALIZED EQUIPMENT

SERVICE STATION

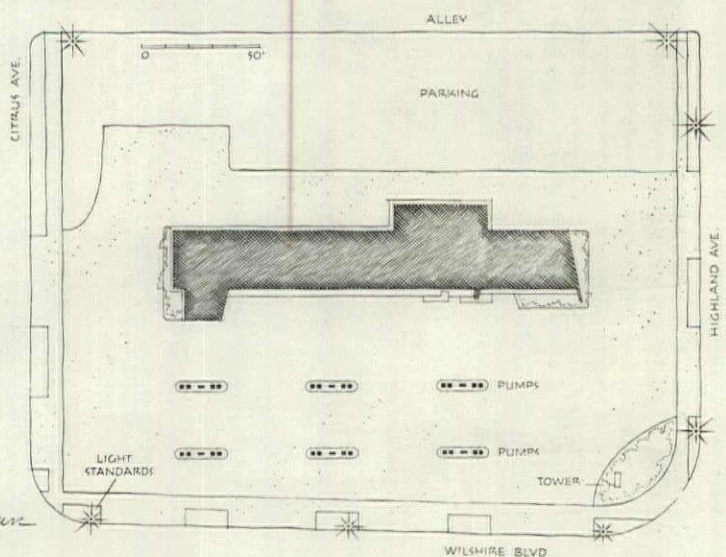
LOS ANGELES, CALIFORNIA

WILLIAM F. HEMPEL, Architect

PROBLEM: To provide, for the Craig Oil Co., the world's largest service station, with more gasoline pumps and lubricating racks than any other, plus usual facilities, salesroom for accessories, lounges for waiting patrons, and offices.

SITE: A full block on traffic-laden Wilshire Boulevard.

FIRST SCHEME: Pump islands in two rows curving from the normal entrance on Highland Avenue to permit cars to ease back into traffic on Wilshire; canopy over the foremost row; entrance and exit ramps directly at the two Wilshire corners; lubrication rooms glazed along Wilshire frontage with car entrance from rear; slim sign obelisk or light shaft 90 ft high; otherwise similar to final scheme shown.



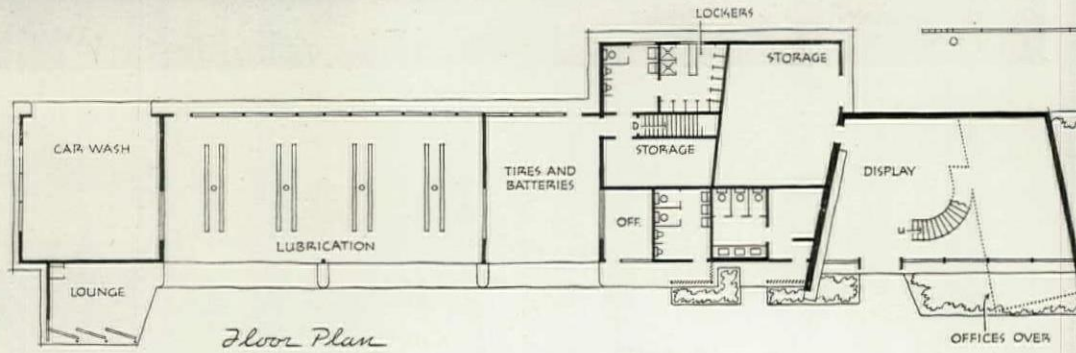
FINAL SCHEME: Pump islands in straight rows to permit another bank of pumps; canopy omitted to save money; corner ramps forbidden by city regulations; rear

lubrication approach abandoned on advice of other service station operators; sign tower height limited by regulations and design dictated by owner.



SERVICE STATION
LOS ANGELES, CALIFORNIA
 WILLIAM F. HEMPEL, Architect

PLAN shows fire walls and doors separating hazardous areas, private office space on second floor above showroom in the cantilevered portion. Roof overhang reduces glare through the glass showroom wall, which is tilted out to increase interior spaciousness and improve visibility. Building is equipped with sprinklers.

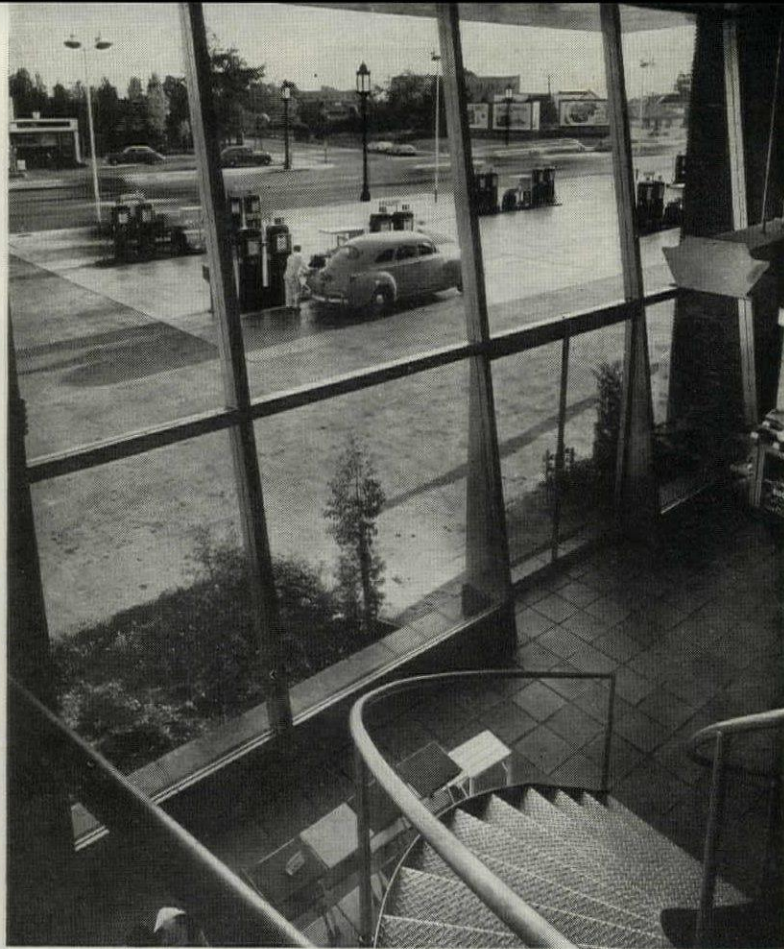


VIEW FROM ROOFED TERRACE LOUNGE for patrons, showing lubrication racks, fire wall, and at right in distance, sign pylon. Roof is suspended from exposed light steel trusses to obtain a clean, flat ceiling, and has mineral wool insulation. Construction is steel, surfaced with porcelain enameled steel sheets, red and white in color. Roofing is perforated asbestos.



Henry Roth

BILL HEMPEL studied at University of California ('35), worked in San Francisco and Palo Alto, was licensed in '40, and reopened his own office after the war. Of this job he says: "I've forgotten many of the headaches, fortunately, but the Los Angeles Street Department gave us a bad time. . ."



VIEW FROM OFFICE BALCONY down through showroom. Flooring is terra cotta tile in showroom, concrete in work areas. The fluorescent lights are controlled by circuit breakers, and heat is provided by electric space heaters.

New Equipment for '48

SPECIALIZED EQUIPMENT

BATHROOM CABINETS

Lawson Bathroom Cabinets: new 1-piece drawn steel body finished in baked enamel, with first quality plate glass mirror, shelf supports, and removable razor blade box made of stainless steel. Tubular, glareless side lights held in chromium plated brackets. Cabinets wired. Also improved hotel-type bathroom cabinet with or without side lights. F. H. Lawson Co., Cincinnati 4, Ohio.

Park Lane, Parkway, Park View DeLuxe Bathroom Cabinets: 3 new models, with and without fluorescent lights and reflector shades. Complete new line of forged brass, stamped brass, die-cast chrome bathroom accessories—towel bars, soap dishes, tumbler holders, toothbrush holders, shelves, robe hooks. Will be released very soon with advanced designs. Cabinets available for immediate delivery. Faries Mfg. Co., Decatur, Ill.

COMMERCIAL REFRIGERATORS

Frigidaire: complete new line of dry storage beverage coolers with extra work surface (4½ sq ft). 7 large-capacity models, 3 large-capacity portable models. Also redesigned milk coolers for farm use. Limited production on beverage coolers. Frigidaire Div., General Motors, 300 Taylor St., Dayton 1, Ohio.

Frigidaire: new commercial products include sealed rotary **Meter-Miser**, simple refrigerating mechanism with only 2 movable parts, eliminating seals, belts, pulleys. Small powerful compressor. Well suited for cooling meat and vegetable display cases, reach-in refrigerators, milk, beverage, and water coolers. Frigidaire Div., General Motors, 300 Taylor St., Dayton 1, Ohio.

Frigidaire: new line of commercial refrigeration includes 8' double-duty self-service display case, fully equipped with slide-away night covers which conserve refrigeration, save current. Also

8', 10' forced-air models, designed for clerk service. Production limited on all. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

DOMESTIC KITCHEN AND LAUNDRY EQUIPMENT

American Kitchen Units: completely redesigned ensembles of sink and storage cabinets. Made in sizes to fit any kitchen, regardless of shape or size. American Central Div., Avco Mfg. Corp., Connersville, Ind.

Automatic Washing Machine: soaks, washes, rinses, damp-dries, at 1 setting of dial. May be some time before it is generally available. Hotpoint, Inc., Chicago 24, Ill.

Bendix gas and electric driers: both fully automatic; thermostatic control varies temperature necessary for synthetic and delicate fabrics. Standard and DeLuxe automatic ironers. These products are new and available. Bendix Home Appliances, Inc., South Bend 24, Ind.

Bilt-In Electric Range: compact, stainless steel, 1-piece cooking unit with a separate standardized oven that can be built into existing cabinets at any height. Cooking top has 3 heating units, a 5-qt-deep well cooker. Oven has an automatic temperature control, Telechron Automatic Timer, and Minute Minder. 1 conduit with 3 wires provides connection for the cooking unit, the same for the oven. A built-in griddle, extra ovens, and heating units will be available. Thermador Electrical Mfg. Co., S. Riverside Dr., Los Angeles, Calif.

Bilt-Well products: wide variety of new wood-work designs for large and small buildings—windows with patented weatherstrip, overhead spring balance; Nu-Style kitchen cabinet units, for modern kitchens, made in graduated stock sizes to fit any size kitchen; adjustable entrance frames, each with several head designs to fit a

standardized base. Carr, Adams & Collier Co., Dubuque, Iowa.

Blackstone Combination Laundry: automatic washer, automatic dryer, automatic ironer in matching units. Prewar type wringer washers and automatic washers again available. Improved automatic washers and dryers introduced in 1947. A portable ironer and automatic ironer will be released before Jan. 15, 1948. Other models available in limited quantities. Blackstone Corp., Jamestown, N. Y.

Built-In Home Dishwasher: new, semiconcealed unit to fit into kitchen cabinet with machine cover flush with drain-board. Has own motor-operated centrifugal pump; not dependent on pressure levels at city's pumping stations. Optional equipment includes electric immersion heater, thermostat control. Jackson Dishwasher Co., 3703 E. 93rd St., Cleveland, Ohio.

Defrost-All: electric ranges incorporating a defrost-all which thaws quick-frozen food in a fraction of the usual time, retaining flavor and food values. Estate-Heatrola Div., Noma Elec. Corp., New York, N. Y.

Fain Foldinette: built-in cabinet which opens into complete dining set. Plastic topped, chrome edged 32" x 48" table, and 2 backed-benches to seat 4 people. Cabinet can be recessed into 4" standard wall in new construction. Sierra Wood Products, 404 S. Arroyo Parkway, Pasadena, Calif.

Freez-All: refrigerator-type home freezer with 3 large food storage drawers; food can be segregated for easy selection. Storage space: 8 cu ft, 400 lbs frozen food. White cabinet. Portable Elevator Mfg. Co., Bloomington, Ill.

Frigidaire: new line of home laundry equipment, including automatic clothes dryer, electric ironer. Dryer, thickly insulated, has electric heating units, fan and revolving drum to "tumble" clothes. Ironer has new foot control and open-end roll 30" long. Special sag-resisting construction. Limited production. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

General Electric: new 8 cu ft chest-type freezer. Redesigned standard refrigerators (one 6, three

8, one 10 cu ft models); electric ranges (apt. house size: two 36", one deluxe 39"); 2 cabinet rotary irons. New 8 cu ft combination (2-temperature) refrigerator, and a low priced wringer washer will be introduced before Jan. 15, 1948. Other appliances available but not for immediate delivery at this time. General Electric Co., Bridgeport, Conn.

Kaiser Dishwasher: powered by water; no motor. Connects to hot water line and to drain. Siphon-breakers built-in. All-aluminum construction. Cabinet or installation models. Kaiser Fleetwings, Inc., Kaiser Bldg., Oakland, Calif.

Murphy Cabranette Kitchens: shipped after Jan. 1, 1948, will be completely redesigned. Improved ranges, 1-piece sink and range top porcelain on steel; new type stainless steel evaporator in refrigerator, giving frozen food space. More storage space; deck type faucets will be used. Dwyer Products Corp., Michigan City, Ind.

NA-8 Home Freezer: 8 cu ft chest-type freezer holding 280 lbs of frozen food. Measures 39 1/2" long, 17 1/2" wide, 20" deep. Equipped with 4 removable wire baskets, 1 with thermometer attached; 2 shelves for fast-freezing up to 35 lbs of food; a warning light for temperature increase. Interior of chest lights up automatically when lid is opened. General Electric Co., Appliance Div., 1385 Boston Ave., Bridgeport 2, Conn.

Norge Refrigerator: 9 cu ft with "across-the-top" frozen food storage compartment which holds 35 lbs. Removable, adjustable glass shelves, sliding tray for ice cubes or meat, vegetable storage drawer. Norge Div., Borg-Warner Corp., Detroit, Mich.

Power-Leg Washing Machine: wringer mounting prevents tipping when wringer is swung out; also has anti-air-lock pump and new transmission. Norge Div., Borg-Warner Corp., Detroit, Mich.

Presteline electric ranges: 3 new models. Custom "B" has choice of 3 top arrangements, 2 ovens; Deluxe "6" and "4", with the largest ovens (17" x 17" x 20") in the electric range field; Budget, with same size oven, an economical range of high quality, available with cluster top only. Pressed Steel Car Co., Inc., 666 Lake Shore Dr., Chicago, Ill.

Pry-an-co: adjustable, swivel, steel, recessed ironing board. Adjusts for 16" from sitting to standing position and swivels with positive lock. A redesigned product released in 1947. Pryne & Co., Inc., 140 N. Towne Ave., Pomona, Calif.

RJ Series Electric Ranges: 5 new streamlined models, including 2 deluxe models, 1 with 2 ovens. All constructed with 1-piece rolling tops; porcelain finished, inside and out; full width utensil drawer on all except lowest priced models. Many other Frigidaire features incorporated in this new line. Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio.

St. Charles: 7 redesigned products brought out in 1947—mixer storage unit, towel drier, retuse receptacle, sliding vegetable tray, sliding towel rack, dish drainer, stainless steel protector. Many minor improvements added to standard St. Charles designs. St. Charles Mfg. Co., St. Charles, Ill.

Space-Saver Refrigerator: storage capacity 6 cu ft; uses no more floor space than previously required for 4 cu ft models. In combination with Kelvinator's newly designed 21" electric range, both give builder and apartment operator the utmost in effective space conservation. Kelvinator Div., Nash-Kelvinator Corp., Detroit 32, Mich.

Tappan Gas Range: new, automatic. 8 completely new models, including de luxe CPV-667, with automatic oven control, concealed oven venting, 2 electrical outlets, concealed dial con-

trols, drip trays, top burner valve indicator lights, and Pyroglas plates. Due to tremendous demand, ranges still allocated to Tappan franchised dealers. Tappan Stove Co., 250 Wayne St., Mansfield, Ohio.

Tip Toe Iron: lightweight electric automatic iron with a hinged sole plate at tip for ironing gathers, ruffles, pleats, etc., has its own cast-in tubular heating element. For regular ironing tip connects with rest of iron making a total of 29 sq in. sole plate. Has a ten thousand cycle reversible cord. Yale & Towne Mfg. Co., Empire State Bldg., New York 1, N. Y.

DRAFTING ROOM EQUIPMENT

Blueprint files: improved, heavily built, spot-welded construction; drawers operate smoothly and easily. Redesigning drafting tables introduced in 1947. Hamilton Mfg. Co., Two Rivers, Wis.

Bruning Industrial Drawing Set: includes beam compass with 8" and 13" beams and patented adjustment of needle and pencil blocks on beam; 6" giant bow compass; ruling pen with patented calibrated adjusting collet to regulate opening of nibs, also record desired setting for future use; refillable pencil that can be converted into double point pencil. Redesigning Bruning Electric machine, was off the market, now available immediately. Charles Bruning Co., Inc., 4700 Montrose Ave., Chicago 41, Ill.

Bruning BW Volumatic Printing and Developing Machine: (direct line printing process) new product; delivery depends on BW model desired and source of inquiry. Charles Bruning Co., Inc., 4700 Montrose Ave., Chicago 41, Ill.

Bruning Hollow Shaft Electric Erasing Machine: new, especially designed, induction type motor, plus nose bearing mounted in rubber, assures smooth quiet running. Erases on tracings, drawings, etc. Immediate delivery. Charles Bruning Co., Inc., 4700 Montrose Ave., Chicago 41, Ill.

Drafting template and modular layout guide: new, made of transparent plastic; contains 40 symbol cutouts, scaled to 1/8" to the foot. Ser-rated edges; calibrated to multiples of 4" in 8 standard scales—1/8" to 3" = 1'-0". Immediate delivery. Timely Products Co., Box 206, Columbus 9, Ohio.

Draftsman's Tool Tray: combination rack and tray designed to keep drafting instruments in orderly arrangement. Metal tray weighs 8 oz, measures 3 5/8" wide x 8" long. Immediately available in any quantity. Winslow Product Engineering Corp., 614 S. Maple Ave., Los Angeles 14, Calif.

Dry Process Reproduction Unit: new, with new Harvey Ammo-Fume Dry Developer. Makes dry prints, positives, negatives, etc., by exposure and dry development. Operates on 110 v 60 cycle AC. Baked olive-green wrinkle finish. Peck & Harvey, 5736 N. Western Ave., Chicago 45, Ill.

Elasticheck Pencil: new aluminum drafting pencil; has rubber collet in neck of the chuck to grip lead and cushion it against undue pressure. Single or double end. Elasticheck Sales Co., Inglewood, Calif.

Multichrome: new, thick lead colored crayon pencils in 50 colors. Also Kimberly drawing pencils in 22 degrees of lead, 6B to 9H. Tracing 1-2-3-4 and extra B (soft) for layout work. General Pencil Co., 67 Fleet St., Jersey City 6, N. J.

No. 50 Pocket Pal Drafting Template: incorporating most commonly used symbols—circle, hex, delta, square, etc. Pocket-sized for convenience; 3 3/8" by 5" with rounded corners. Scaled from 1/8" up to 1". Printing on negative side to prevent wearing off. Made from .030 mathe-

matical-quality plastic. Rapidesign, Inc., P.O. Box 592, Glendale, Calif.

Perspectigraph: kit of 5 components ("perspecti-scale," 2 "vanishing arcs," "perspective-edge," "basegrid") for quick, accurate portrayal in perspective of architectural and other objects. Said to enable anyone to draw perspectives. Letterite Co., Fort Washington, Pa.

Vant Rule: transparent drafting scale with 8 different scales on 1 side. Calibrations and numerals in red. \$2.00 with case. Stewart-Jackson Instrument Co., Los Angeles 14, Calif.

ELEVATORS, DUMBWAITERS, ETC.

Car Position Indicator: lantern-indicator with amber floor numerals which light individually to indicate position of elevator in hoistway; illuminated arrows tell direction car is traveling. A chime sounds whenever either strip lights. Otis Elevator Co., 260 11th Ave., New York 1, N. Y.

Dumbwater doors: new, steel; underwriters-labelled construction. New electric Roto-Waiter freight type, heavy duty dumbwater. Steel shaft enclosures and steel self-supporting towers for dumbwaiters were off the market, but are now available. Redesigning electric stair-travelers and dumbwaiters with steel cars introduced in 1947. Interlocks for dumbwater doors will be brought out before Jan. 15, 1948. Others immediately available by prompt shipping schedules (2 to 6 weeks). Sedgwick Machine Works, 142 W. 15th St., New York 11, N. Y.

Electravator: electric dumbwaiter for hotels, restaurants, homes, hospitals, factories, etc. Gentle starting and stopping adapt it for carrying fragile objects. 1-hp model lifts up to 350 lbs. Shipped ready to install. Electravator Corp., 705 Albany St., Dayton 8, Ohio.

Hydraulic Elevators: standard-sized hydraulic elevators; plunger construction; freight or passenger service; travel limited to 36 ft. Corrosion protected; friction reduced; pit stays dry without a drip pan. Montgomery Elevator Co., Hydraulic Div., Moline, Ill.

Motorstair: new moving stairs. Multiscope, Inc., Coffeyville, Kans.

Multiple Stroke Hydraulic Pallet Truck: equipped with plastic wheels and "Spring-Lift" booster rollers mounted in back of rear wheels. Truck is built in capacities from 1000 to 6000 lbs and is adaptable to either single or double, 2- or 4-way pallets. Lewis-Sheppard Products, Inc., Watertown 72, Mass.

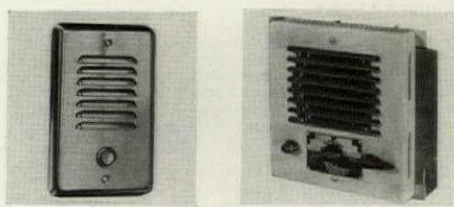
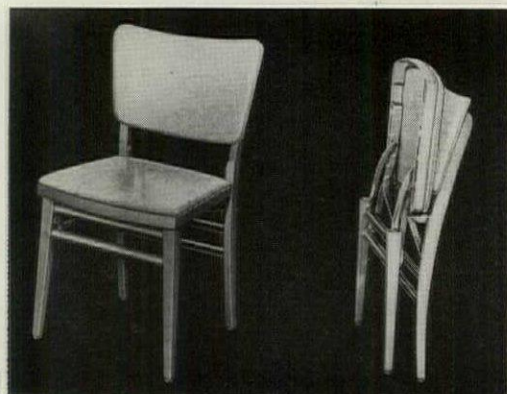
Otis Pow-R-Truck Elevator: new freight elevator designed for use with industrial materials handling trucks. Immediately available. Otis Elevator Co., 260 11th Ave., New York 1, N. Y.

Lockstep: permanent, fireproof, sectional steel stair unit of 14 treads. Can be erected in about 90 minutes. The HomeOla Corp., 9 S. Clinton St., Chicago 6, Ill.

Shepard HomeLIFT: elevator for residences. Operates from lighting circuit; requires only the pressing of a button. Car is equipped with complete safety devices. This and 2 other models, Senior and Master HomeLIFTS have been off the market; about ready to resume production for prompt delivery after Jan. 1, 1948. An improved HomeLIFT model was brought out in 1947. Shepard Elevator Co., 2425 Colerain Ave., Cincinnati, Ohio.

Type "R" Escalator: redesigned, medium-priced, for use in medium-sized stores. Otis Elevator Co., 260 11th Ave., New York 1, N. Y.

Electrically operated rolling steel shutters: for sealing an Otis Escalator at top of each run; operates either automatically in case of fire, by push button, or by manual cranking. J. G.



1. Magnesium folding chairs. Louis Rastetter & Sons Co.
2. Telehome two-way intercommunicating system. Webster Electric Co.
3. Space-Saver refrigerator and electric range, for kitchenettes. Kelvinator Div., Nash-Kelvinator, Inc.

Wilson Corp., 370 Lexington Ave., New York, N. Y.

Warsaw Fluid-Drive Elevator: first application of fluid-drive principle (borrowed from automobile field) to elevator machines. Warsaw Elevator Co., Warsaw, N. Y.

FIRE PROTECTION

Albi-R: fire-retardant paint, forming bubble-mass when exposed to flame which prevents penetration of heat. Said to exceed 20-minute burning test (Fed. Spec. SS-A-118). Applied by brush or spray. Albi Chemical Corp., 9 Park Place, New York, N. Y.

Cardox: general line same as last year. Improvements constantly made but largely in components, design, etc. Cardox Corp., 307 N. Michigan Ave., Chicago, Ill.

System for fire protection of Escalators: prevents building up of explosive pressures in area where fire starts; draws heat and gases away; shuts down air conditioning, preventing recirculation of fire gases and smoke; isolates the fire; provides ventilation for firemen. System may be operated by thermostat, photoelectric smoke detector, or heat-sensitive devices. Process developed jointly by Grinnell Co., R. I., Otis Elevator Co., N. Y., and Westinghouse Electric Corp., N. Y.

Foamite Firefoam Extinguisher: a splashproof, foam-type fire extinguisher for tank trucks and other large vehicles. Foam range from 35 to 40 ft. American LaFrance-Foamite Corp., Elmira, N. Y.

Plymouth Fire-Guard Fabrics: noncombustible Fiberglas yarns and flame-proofed cotton combined to provide fire-resistant fabrics. Available in variety of colors, designs; can be cut, sewed, and ironed, will not stretch, can be dry-cleaned without losing their fire-resistant qualities. Plymouth Fabrics, Fall River, Mass.

Pyrogard: fire-resistant cover for Kimsul blanket insulation. New wrappers and end labels, to be brought out before Jan. 15, 1948, will assist in identifying the 3 thicknesses of the Kimsul blanket insulation: double thick, standard thick, commercial thick. Kimberly-Clark Corp., Neenah, Wis.

Sprinkler systems: see "Sanitation"

FURNISHINGS, FURNITURE, UPHOLSTERY

Fabron: not a new product in 1947, was tested and approved that year by Underwriters' Laboratories, Inc., as a fire-spread preventive. **Detron,** similar to **Fabron** but with metallic finish, is now available again. Both products have new colors, patterns, with more to come before Jan. 15, 1948. Immediately available. Frederick Blank & Co., Inc., 230 Park Ave., New York 17, N. Y.

Fireproof fabrics: new patterns in decorative materials with fiberglas yarns. Other redesigned patterns; all are noncombustible drapery materials, for use in places of public assembly. Thortel Fireproof Fabrics, 101 Park Avenue, New York, N. Y.

FURNISHINGS, FURNITURE

Gulistan Carpets: new, brighter colors in Renaissance and Symphony Wiltons. Featured are Maraschino Red, Willow Green, Cloud Gray. Axminster lines trend toward florals in larger patterns. Friezette, top quality hard twist carpet, will be reintroduced in January. Carpets available in limited quantities. A. & M. Karagheusian, Inc., 295 5th Ave., New York 16, N. Y.

Mengel: 2 new functional furniture ensembles

made in mahogany veneers and solid oak; for bedrooms, living rooms, dining rooms, and halls. Available in limited quantities. Mengel Co., 4th & Colorado, Louisville 1, Ky.

Multipurpose Furniture: new designs by Eames, Nelson, Laszlo, Noguchi; 80 pieces in walnut and prima vera, for living, dining, bedrooms. Herman Miller Furniture Co., Zeeland, Mich.

Pantasote: plastic upholstery material similar to leather; said not to crack, easy to tailor. Available in variety of colors, grainings, and 2-tone finishes. The Pantasote Corp. of N. J., 444 Madison Ave., New York 22, N. Y.

Rastetter Magnesium Chair: new, folding, upholstered, with magnesium frame; patented hinge and brace to enable folding in 1 simple motion. Louis Rastetter & Sons Co., 1300 Wall St., Fort Wayne 1, Ind.

INSTITUTIONAL EQUIPMENT

Auditorium Seating: both new and improved seat construction on theater and auditorium chairs. Deliveries somewhat handicapped by steel shortages. American Seating Co., 9th & Broadway, Grand Rapids 2, Mich.

Bar-Ray products: special X-ray protective equipment for all persons coming within proximity to any apparatus emitting X-rays. Lead-insulated doors, partition blocks, panels, nails, etc.; lead-lined tanks, pipes, control booths, boxes for equipment or experimental work, etc. Bar-Ray Products, Inc., 209 25th St., Brooklyn 32, N. Y.

Blodgett's De Luxe No. 900 Series: new line of institutional ovens in #35 Monel, including all exterior and interior surfaces subjected to corrosion (except shelves). Redesignated No. 900 series of Blodgett ovens, in #35 Monel, have new burner design and new type trim. G. S. Blodgett Co., Inc., Burlington, Vt.

Capital Cubicles: for hospital wards, to enclose any size compartment required, for complete privacy to a patient. Cubicle parts made of brass, chromium plated finish, each connected with a patented device which makes for a smooth, even track. Curtains made of closely-woven, nontransparent, sanitized-shrunk jean cloth. Rustproof eyelets will not pull out; hooks are concealed, cannot jump or catch. Capital Cubicle Co., 213 25th St., Brooklyn 32, N. Y.

Hyoplate Lite Site Chalkboard: new, light, bright chalkboard which aids materially in proper distribution of classroom light, making classroom more pleasant place in which to work. Manufactured in 3 colors, including jet-black. Weber Costello Co., 1210 McKinley, Chicago Heights, Ill.

Lawson: improved hotel-type bathroom cabinet with or without side lights. F. H. Lawson, Cincinnati 4, Ohio.

Prison Equipment: new combination bunk, seats, and table for use in jails. Includes magazine, book rack. Bunk is hung to wall, table and seats secured to bottom side of bunk, requiring no anchorage. Table, seats used only when bunk is folded up. When bunk is let down, other equipment swings beneath bunk, completely out of way. Rugged construction, cannot be torn to pieces or used as weapons. Unit not adapted for use as upper bunks. Southern Prison Co., P.O. Box 2021, San Antonio, Tex.

Prison Equipment: line of flame-resistant mattresses, pillows, blankets for prison use. New products introduced in 1947. Southern Prison Co., P.O. Box 2021, San Antonio, Tex.

Seco-Ware: die-stamped stainless steel hot and cold food storage pans, now available with new Nestrol nesting feature. Entire line of **Custom-Bilt** stainless steel food serving equipment for hotels, restaurants, hospitals, again available. New, improved design and construction of food serving equipment **Custom-Bilt** in accord with plans and specifications. **Seco-Ware** by Seco Co., Inc., 5206 S. 38th St., St. Louis 16, Mo. **Custom-Bilt** by Southern Equipment Co., 5017 S. 38th St., St. Louis 16, Mo.

INTERCOMMUNICATION, MOVIE MACHINES, ETC.

Amplical: electronic intercommunication system in a walnut plastic case. Up to 24 Master Stations, permitting 12 conversations simultaneously. Has "on-off" volume control, plug-in cable connections, balanced line wiring system preventing cross-talk, and push buttons for station selection. Rauland Corp., Chicago, Ill.

A-323B Amplifier: for high quality music reproducing systems in home. Exclusive features-built-in equalization to operate direct from new high quality General Electric Variable Reluctance; treble tone control cutting off noise frequencies, allowing full reproduction of phonograph records; hum-balancing potentiometer for noiseless operation. Can be concealed in fur-

niture or interior structure of room. Altex Service Corp., 250 W. 57th St., New York 19, N. Y.

Locking Push Button Type Nurses' Calling System: newly designed for hospitals. Also improved silent flashing illuminated number paging system for hospitals, banks, department stores, etc. School fire alarm relays and boxes are available again. Cannon Electrical Development Co., 3209 Humboldt St., Los Angeles 31, Calif.

Symphonette Model 300, Lyric Model 318: 2 new low priced door chimes; special resonance chambers give high volume and tone clarity. Models 410, 620, 420 were off the market, re-introduced in 1947. All models immediately available. Rittenhouse Co., Honeoye Falls, N. Y.

Telehome: home intercommunication equipment. New **Master Station Models** 604M (table model) and W606M (wall-recessed model). **Speaker Station Models** 5D45 (room speaker) and 3D45 (outside door speaker). System capacities: 2 to 6 stations. Speaker stations reply to calls without manual control operation. Master station can "monitor" nursery, still hear incoming calls. Webster Electric Co., Racine, Wis.

Triumph model 60: 16mm sound motion picture projector, for auditorium use in schools, churches, etc. **Lite-Weight model 55** 16mm motion picture projector, only 33 lbs in weight with attached speaker, complete in case. Both are new products; available immediately. Model EE Arc Animatophone, redesigned, improved product is again available. Victor Animatograph Corp. Div., Curtiss-Wright Corp., Kahl Bldg., Davenport, Iowa.

MISCELLANEOUS

Detjen: portable electric insect lanterns for porches and gardens, new products to be introduced between now and Jan. 15, 1948. Detjen Corp., 303 W. 42nd St., New York 18, N. Y.

Detjen: portable electric insect traps, commercial and standard sizes. Improved, produced, introduced in 1947. Detjen Corp., 303 W. 42nd St., New York 18, N. Y.

Erco wood and metal letters and signs: new 1947 products. Also hand-hammered builders' hardware in brass, bronze, aluminum, nickel silver. Bronze tablets, name plates, special bronze work to architect's drawings. Erco Mfg. Co., 4010 W. Montrose Ave., Chicago 41, Ill.

MP Wall Units: for visible stock storage in stores, made of Plexiglas or Lucite in drawer form. Drawers lock in place automatically. Units can be arranged in full wall displays. Merchandise Presentation, Inc., New York 22, N. Y.

Tymandater: new time recorder with time and date stamp for arrival and departure; job timer and attendance recorder. **Lectro-count,** new, electronic, for accurate counting and recording of operations on machines using AC motors. Available for immediate delivery. Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati, Ohio.

Time recorder: practically eliminating human error from payroll time recording. Now being perfected. Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio.

Wallmaster: wall-washing machine of large lightweight trowels covered with terrycloth pads for washing, rinsing, drying interior wall surfaces. Maintenance Co., Inc., New York, N. Y.

REFUSE DISPOSAL

Fuelless Incinerator Majestic No. 30: to be connected to furnace flue. Quickly reduces garbage, refuse to ashes, eliminating breeding spots for germs, flies, rats. Downdraft circulation through refuse dries it and prevents odor or smoke inside house. Costs nothing to operate. Neatly designed, finished in 2-tone blue enamel. Immediately available. Majestic Co., Huntington, Ind.

National Garbage Disposal Unit: newly introduced, immediately available. National Rubber Machinery Co., 47 W. Exchange Bldg., Akron 8, Ohio.

SAFES

Mosler Insulated Chest: new patented item; the only money chest bearing Underwriters' Laboratories, Inc., labels for both fire and burglary protection. For business, home, wherever valuables are kept. Patented Mosler Insulated Record Container and Mosler X-60 chests are again available. Vault doors and ledger desk safes are redesigned products introduced in 1947. All immediately available. Mosler Safe Co., 320 5th Ave., New York 1, N. Y.

Wall Safe: 3-tumbler combination lock, insulated walls, electrically welded heavy steel plates for fire and theft protection. Can be installed flush with wall. Meilink Steel Safe Co., Toledo, Ohio.





Manufacturers' Literature

★ *Editors' Note: Items starred are particularly noteworthy, due to immediate and widespread interest in their contents, to the conciseness and clarity with which information is presented, to announcement of a new, important product, or to some other factor which makes them especially valuable.*

Air and Temperature Control

1-153. *The New Viking Series V Blower Assembly (Form M-304)*, 10-p. illus. booklet on a factory-built complete blower assembly for air conditioning systems. Advantages over "home-built" units. Construction and operation of blower bearing, wheel, and scroll housing. Data on equipment employed in construction. Applications, dimension tables, and drawings. Performance data and air selector charts; features; details. Other Viking products. Viking Air Conditioning Corp.

Doors and Windows

4-110. *Model C Radio Control, AIA 27-C 3 (F 1445-4 500 9-47)*, Barber-Colman Co. Reviewed December.

4-111. *Kinnear Motor Operated Doors, AIA 16-D-13 (Bul. S-17-4-47)*, Kinnear Mfg. Co. Reviewed December.

4-117. *Builders' Cabinet and Sliding Door Hardware*, 4-p. brochure on drawer slides, closet fixtures, shelf standards and supports, sliding door tracks, etc. Illustrations and descriptions. Dimensions; operation details. Knappe and Vogt Mfg. Co.

4-113. *Safe Builders' Hardware (Cat. 19)*, Safe Padlock & Hardware Co. Reviewed December.

4-114. *Truscon Steel Doors (1947 Edition)*, Truscon Steel Co. Reviewed December.

Electrical Equipment and Lighting

5-102. *Display Window Lighting, AIA 31F*, Claude Banks Co. Reviewed December.

5-103. *Mercury Lamps in Industry (Y-729)*, Lamp Dept., General Electric Co. Reviewed December.

5-109. *National Electric Plug-In Strip, AIA 31 C 71 (Cat. CF-2, Form 554)*, 6-p. illus. booklet on a strip wiring protector, installed on top of baseboard to provide outlets every 18 in. Typical layout. Illustrations of various types and sections. Installation details; also Lopo-Trim. National Electric Products Corp.

5-104. *Electric Plants (Form A-138-20M-447)*, D. W. Onan & Sons, Inc. Reviewed December.

5-105. *Powerstat Theatre Dimmers (Bul. 347)*, Superior Electric Co. Reviewed December.

5-106. *The Grenadier (Cat. Section 9-47)*, F. W. Wakefield Brass Co. Reviewed December.

Finishers and Protectors

6-107. *Plastic Pene-Treat*, McKeown Bros. Co. Reviewed December.

Insulation (Thermal, Acoustic)

9-86. *Acousti-Booths (170)*, 4-p. (9" x 4") brochure on acoustical telephone booths for factories, stores, offices, hotels, etc. Illustration of various models. Prices. Burgess-Manning Co.

9-82. *Infra Insulation*, Infra Insulation, Inc. Reviewed December.

9-83. *Balsam-Wood Sealed Insulation*, Wood Conversion Co. Reviewed December.

Load-Bearing Structural Materials

12-138. *The ABC's of Wrought Iron*, A. M. Byers Co. Reviewed December.

12-139. *Calcium Chloride in Concreting (Bul. 28, 1947 Edition)* Calcium Chloride Assn. Reviewed December.

12-141. *Waylite Aggregate For Lightweight Concrete*, Waylite Co. Reviewed December.

Non-Load Bearing Structural Materials

14-51. *Decorative Glass*, a reprint on decorative glass panels: colored, translucent, intaglio motifs, appliqued design, etc., for hotels, stores, showrooms, residences, etc. Illustrations of works. Description; details. Harriton Carved Glass.

Sanitary Equipment, Water Supply, and Drainage

19-192. *Central Fire Protection Equipment (Bul. S-2-12644-BC)*, 22-p. loose-leaf booklet on fire protection equipment for dry and wet pipe sprinkler systems. Illustrates various types of automatic and open sprinklers, accessories; alarm systems and devices for wet pipe systems; dry pipe valve; air exhauster; "electro-speed" sprinkler system. Operation and construction details; application. Purpose and installation

data. Sectional drawings; descriptions; inspections. Specifications. Central Automatic Sprinkler Co.

19-177. *Raduluxe, Sinks, Cabinet Tops and Other Sanitary Equipment*, Just Mfg. Co. Reviewed December.

19-178. *Bathrooms and Kitchens by Kohler (Form P127-200-7-47)*, Kohler Co. Reviewed December.

19-179. *Youngstown Kitchens (9225-500 M 6-47)*, Mullins Mfg. Corp. Reviewed December.

19-180. *Speakman Showers and Fixtures (Cat. S 46)*, Speakman Co. Reviewed December.

19-181. *Carriers For All Makes of Wall Hung Fixtures, AIA 29C (Cat. 39)*, J. A. Zurn Mfg. Co. Reviewed December.

Specialized Equipment

19-198. *Executone (Form 250)*, 6-p. booklet on a "paging by voice" sound system. Advantages. Operation details. Uses. Executone, Inc.

19-183. *Apeco Photocopy*, Photocopy Equipment Co. Reviewed December.

Traffic Equipment

★ 20-46. *Murphy Elevators (Cat. 46)*, 108-p. loose-leaf reference book on passenger and freight elevator equipment. Illustrates traction engines, full floating type of alternating current brakes, controllers, governors, motors, penthouse installation, passenger and freight cars, accessories. Descriptions; capacities; ropings; speeds. Dimensions; details of construction; operation. Electroil elevators; advantages; features; applications. (Price \$4.00 per copy; make check or money order payable to Murphy Elevator Co. Free to members of architectural profession). Murphy Elevator Co.

PROGRESSIVE ARCHITECTURE, 330 West 42nd Street, New York 18, N. Y.

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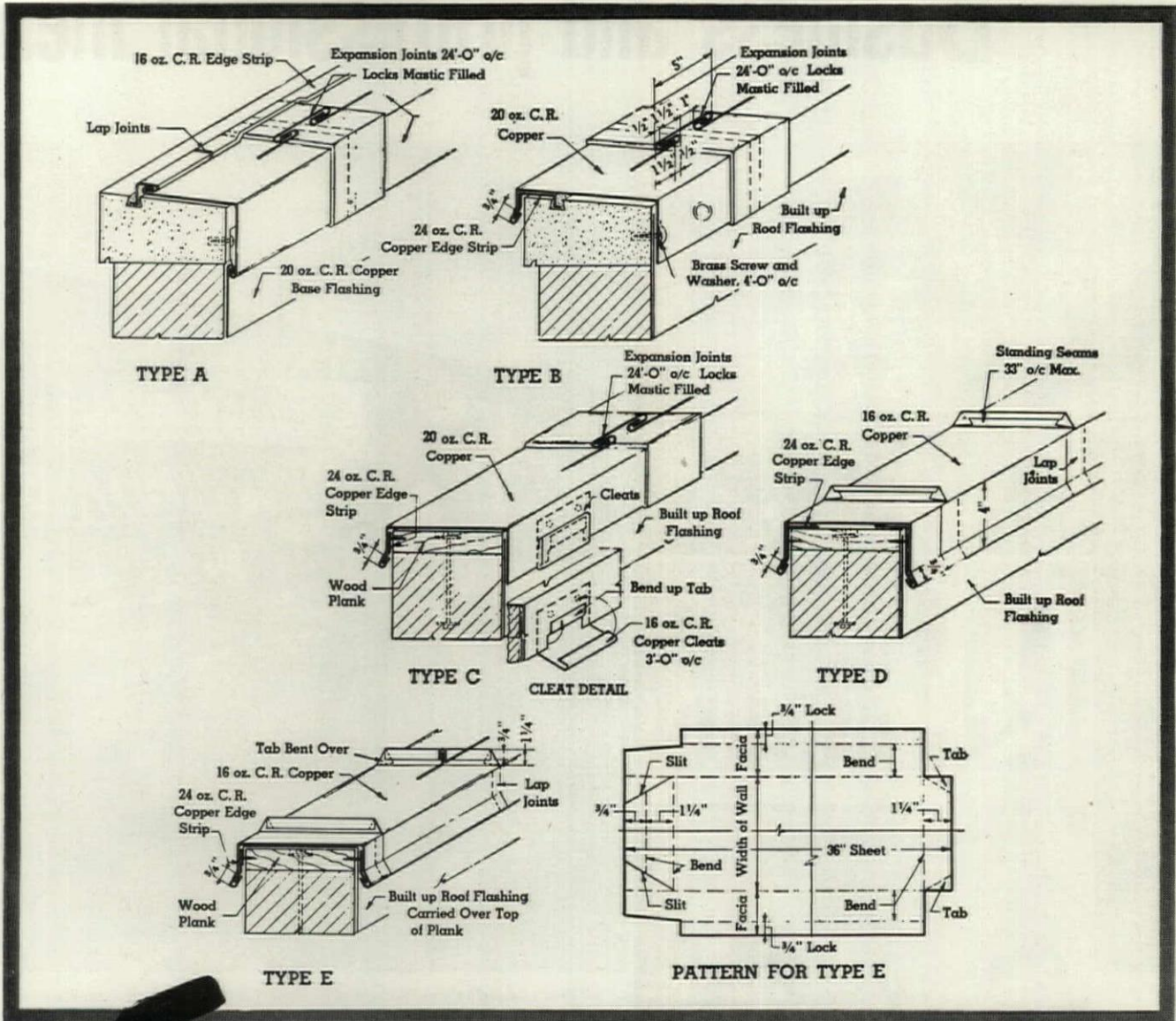
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1/48

COPPER AND COMMON SENSE



5

METHODS OF COVERING THE TOP OF PARAPET WALLS WITH REVERE COPPER

These five detail drawings were prepared by the Revere Research Laboratories to illustrate some of the approved methods of covering the top of parapet walls with copper coping covers. They are typical examples of the work Revere is doing to help you provide the finest sheet copper construction.

Revere's continuous research program, covering every phase of sheet copper construction, has developed important new facts that enable you to design or install copper flashing, roofs and gutter linings that give extra years of service. Much of these data have been compiled into a 96-page booklet* that has been widely distributed to architects and sheet metal contractors. In all probability, there is a copy in your office files.

Look first to this Revere manual whenever you are faced with a problem concerning the design or instal-

lation of copper. If you do not find the answer there, the Revere Technical Advisory Service will be glad to help you. The chances are that they have already had experience in solving a similar problem. In any case, they'll do their best to help solve yours.

Revere materials are available from leading distributors in all parts of the country.

*"Research Solves Problems of Stress Failures in Sheet Copper Construction."

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Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y.—Sales Offices in Principal Cities. Distributors Everywhere.

Business and professional men



"We consider the Servel All-Year Gas Air Conditioner to be a worth-while investment, and do not hesitate to recommend it," says Sam Rubin, jeweler, of 323 De Siard St., Monroe, La. "Customers have been attracted to the conditioned space, and we have been able to keep our merchandise in better condition."



"Ideal for efficient work in medical offices," says Dr. Fred. L. Scott, of Huntington Park, Calif., about the temperature and humidity conditions maintained the year round in his offices by Servel.



"Very satisfactory in all respects," agrees W. D. Owen, Vice President and Cashier of the Bank of Beaumont, California, which is kept cool in summer, comfortably warm when needed, by the Servel unit.

praise all-year gas air conditioner

THEY SAY SERVEL *All-Year* GAS AIR CONDITIONER
PROMOTES HEALTH, EFFICIENCY, BUILDS PROFITS

TYPICAL of hundreds of letters in our files from business and professional men all over the country are the testimonials on these two pages. Practically everyone who has a Servel *All-Year* Gas Air Conditioner is more than pleased with the results. In fact, as you'll see on the right, one enthusiastic user has installed *three* units—one in his home, one in his automobile agency, and one in a store he owns!

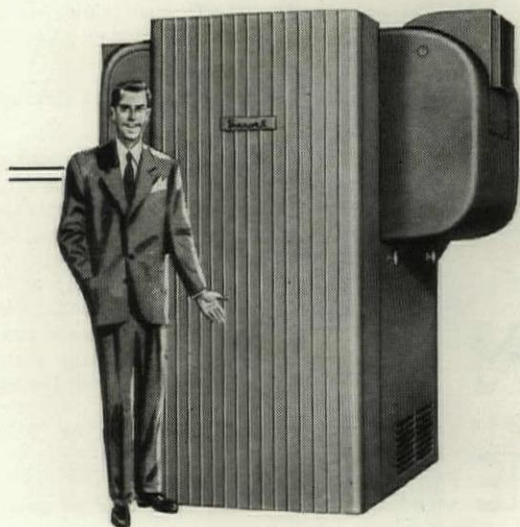
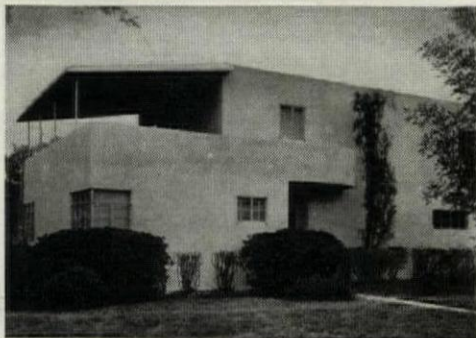
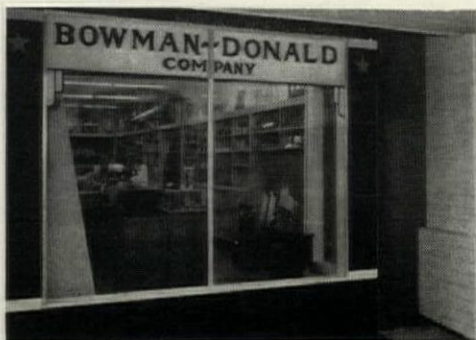
Everywhere, users agree that this wonderfully efficient year-round conditioner is worth every penny it costs. Some go so far as to declare it will actually pay for itself in a very few years! So you can recommend Servel *All-Year* Gas Air Conditioning to your clients with every assurance that it will perform up to expectations. And that your clients will be glad you brought Servel's advantages to their attention.

Complete in one unit, the Servel conditioner refrigerates and dehumidifies the air in summer. In winter, the same unit heats and humidifies the air. In between seasons, it offers independent air circulation at prevailing temperatures. Year-round, it filters dust, dirt, and irritating pollen from the air. A "flick of the finger" controls all operation.

Check your list of clients today. Determine which are logical prospects for Servel *All-Year* Gas Air Conditioning. Then ask your local gas company for more detailed information about these types of application. Or, write direct to Servel, Inc., for application data and names and addresses of satisfied users with comparable installations. Address Servel, Inc., 4801 Morton Ave., Evansville 20, Indiana.



"If I could find another place to install Servel *All-Year* Gas Air Conditioning, I would do it," says Frank M. Bowman, Alice, Texas, businessman. He already has three Servel units, one in his automobile agency (above), and one each in his store and home (below).



Servel
All-Year GAS AIR CONDITIONER

FROM THE TECHNICAL PRESS

By JOHN RANNELLS

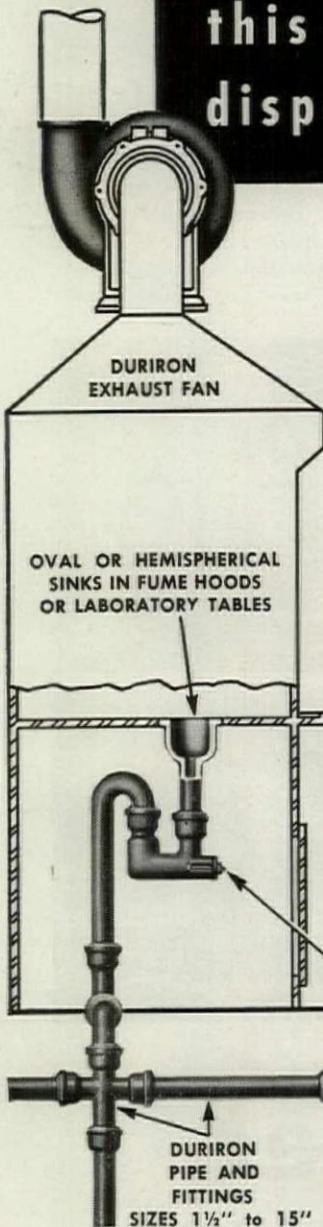
The Architecture of Broadcast Transmitter Buildings. Western Electric Oscillator, 195 Broadway, New York, N. Y. September 1947.

The bulk of this issue (about 60 pages)

is devoted to planning, design, construction, and technical requirements of broadcast transmitter buildings of all sizes. It comprises an excellent guide to planning (including, of course, the choice of the site). Architects Deigert

and Yerkes of Washington, D. C., have designed six very attractive buildings from 250 w to 50 kw, and six outstanding existing buildings of similar sizes are also presented in detail with outline plans, photographs, and data. A survey of 600 American buildings, photos of a variety of buildings all over the country, and catalog cuts of Western Electric transmitters and auxiliary equipment complete the picture.

WHY CORROSION CAN'T DESTROY this laboratory waste disposal system



The sinks, strainers, traps, pipe, fittings and fume exhaust fan in this chemical laboratory corrosive-waste disposal system are made of Duriron. The high silicon iron composition of Duriron gives it a wider range of corrosion-resistance than any other commercially available alloy. Duriron can be expected to outlast the building.

Some other cost-reducing advantages of this high silicon iron are: Uniform corrosion-resistance through entire wall thickness; no lining to chip, spall or crack . . . abrasion resistance . . . will not warp or sag from heat.

For complete details of Durco products for the chemical laboratory, write for new bulletins 703 and 1102.

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DURIRON ACID PROOF DRAIN PIPE

Air Temperature Gradients in a Panel Heated Room. S. M. Ayres and B. W. Levy. Heating, Piping & Air Conditioning, 6 N. Michigan Ave., Chicago 2, Ill. October 1947.

Part of the research work being carried on in a test house at Purdue University. Under stabilized conditions (1.4 air changes per hr, 67F at 5 ft above floor, readings taken at night to eliminate solar radiation, etc.) the room air temperatures at all levels are given for heating by floor, ceiling, interior wall, and exterior wall panels. The room is nearly 8 ft high.

Floor panel heating gives uniform air temperature throughout except for a couple of degrees warmer near the ceiling and several degrees warmer at the floor.

Ceiling panel heating is only a couple of degrees cooler toward the floor and four to six degrees warmer at 7½ ft above the floor, increasing rapidly the last few inches toward the ceiling. About two degrees cooler near the floor. Floor temperature 67 to 69 degrees. The warmer temperatures at floor and near the ceiling occur at the lower outside temperatures.

Exterior and interior panels give nearly identical curves—two to four degrees cooler near the floor, two or three degrees warmer near the ceiling.

ARTICLES FROM THE SEPT. 1947 ISSUE of Illuminating Engineering, published by the Illuminating Engineering Society, 51 Madison Ave., New York 10, N. Y.

Brightness Engineering Calculations. Willard Allphin.

Comparative analysis, before and after remodeling, of lighting in a small executive office and in a model schoolroom. Three techniques were used: the Logan method of flux distribution analysis, the Noon-Spencer rating system, and the Harrison glare rating method. Results with these techniques are presented and discussed. All are important steps in the direction of improved lighting quality. Their very diversity indicates that continued work in the field of

(Continued on page 102)

(Continued from page 100)

brightness engineering will soon result in a synthesis of techniques for realizing the rather simple objectives of good visual environment.

Conditioning Schoolrooms for Visual Comfort and Efficiency. Charles D. Gibson.

The author is Field Representative, Division of Schoolhouse Planning, California State Department of Education.

The material in this paper is taken from his work on seeing for *Guide for Planning School Plants*, published by the National Council on Schoolhouse Construction. The article brings the reader up to date on "quality" lighting as compared with the old recommendations of quantity of foot-candles on the working level. The basic elements are clearly explained and recommendations given for reconditioning or new construction.

Having this up-to-date approach presented by the National Council on Schoolhouse Construction in its *Guide* should help greatly in improving the visual environment in American schools.

School Lighting Appraisal and Recommendation Procedure Developed from Survey.

Summary of results of survey of fourth-class schools (serving 5,000 or less population) in Bradford County, Pennsylvania. An excellent outline of procedure which might well be followed by public spirited citizens everywhere.

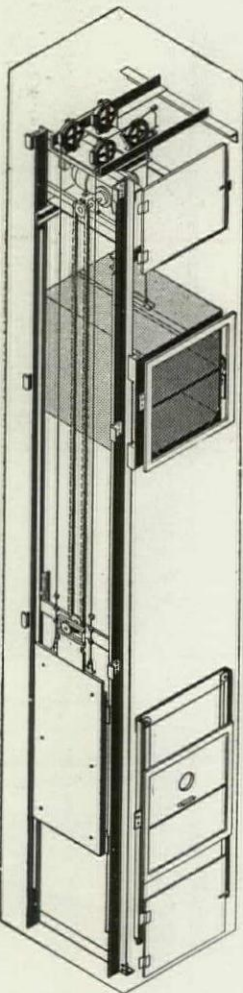
This work resulted from efforts of the Bradford County Federation of Women's Clubs and was shared in by the State Department of Welfare, the local Lion's Club, and the Northern Pennsylvania Power Company in cooperation with the County Superintendent of Schools.

Current Articles on Lighting.

List of titles and source of publication of nearly 100 recent articles on lighting and allied subjects appearing in nationally known magazines, technical and trade.

ROTO-WAITER by Sedgwick

A new kind of fully automatic electric dumb waiter that never overtravels



The endless chain drive of the new Sedgwick Roto-Waiter makes it the perfect dumb waiter for stores, hospitals, hotels, restaurants, libraries, clubs, schools, banks, factories, residences, etc.—especially for two-stop installations.

The single direction motor helps cut costs by eliminating the need for special control equipment normally required when reversing motors are used—and, by reducing starting torque, it cuts current consumption.

And Sedgwick Roto-Waiters. . . .

1. Never overtravel
2. Are completely factory-assembled-and-tested
3. Require only minimum clearances
4. Have an overload safety device for safe operation
5. Require no heavy load-bearing supports except at the bottom
6. Are easy to install

The table of dimensions shown below lists three standard counterweighted Roto-Waiters. In addition, Sedgwick makes an uncounterweighted Roto-Waiter—capacity 150 lbs., car size 24" x 24" x 36"—which is ideal when a dumb waiter is to be installed in limited space as for undercounter use.

STANDARD ROTO-WAITER DIMENSIONS

Size No.	2C	3C	5C
Capacity, lbs.	200	300	500
Car width, in.	24"	30"	36"
Car depth, in.	24"	30"	36"
Hoistway width, in.	33"	39"	45"
Hoistway depth, clear in.	27"	33"	39"
Hoistway depth, including doors, in.	29"	35"	41"

So if you are stymied by perplexing lifting and lowering problems involving the vertical movement of material and merchandise—tell us about them. And write for complete details and specifications of the new electric dumb waiter that *cannot* overtravel—the Sedgwick Roto-Waiter.

SEDGWICK MACHINE WORKS, 142 W. 15th St., New York 11, N. Y.
ELECTRIC AND HAND POWER ELEVATORS AND DUMB WAITERS

BOOKS


YOU WANT TO BUILD A SCHOOL?

Charles W. Bursch and John L. Reid. Reinhold Publishing Corp., 330 W. 42nd St., New York 18, N. Y., 1947. 128 pp., illus. \$3.50

The procedures to be followed in developing a long-range master plan for school-housing and in initiating and carrying through an actual building project are often but vaguely understood by lay members of boards of education and building committees. The architect who designs a school building, who prepares contracts and supervises construction, is on familiar professional ground. He has in his files, or there is readily available to him, a wealth of material to aid him with special problems that may arise. The board or committee member, on the other hand, who is charged with responsibility for the administration of a building program, is more often than not undertaking the task for the first and only time in his life. His lot has been further complicated by a scarcity of informative material, in convenient form, to guide him through the maze of detail with which he must wrestle.

It is this void that the authors, Mr. Bursch and Mr. Reid, have set about to fill. That through their training and wide experience they are well qualified to do it is amply borne out by the success they have achieved. Although they cover their subject thoroughly and clearly, they manage to do it with a

(Continued on page 104)



refrigeration
is no experiment
in research laboratories

Control of temperature and humidity is paying its way for modern industrial laboratories in more and better research. Such exacting work demands precise control the year round. That is why so many industrial laboratories choose Carrier centrifugal refrigerating machines for their refrigerating and air conditioning requirements.

Recently Carrier centrifugals have been installed by such companies as Louisiana Division of Standard Oil Company of New Jersey, Sinclair Re-

fining Company, and the B. F. Goodrich Company. Like other corporations operating extensive research laboratories, they find precisely controlled air conditioning and refrigeration permit more exact measurements, promote cleanliness, and help control chemical and biological reactions. And comfort of the research personnel encourages better work.

Compact, dependable Carrier centrifugal refrigerating machines are used all over the world in laboratories, in-

dustrial plants, hotels, office buildings. Their efficient operation, ease of maintenance and lack of vibration make them the choice for refrigeration and air conditioning applications.

Whatever the kind of laboratory or type of construction Carrier engineers will be glad to help you. They're the most experienced in the industrial field. And they've worked for years with architects and consulting engineers to unravel knotty problems. Carrier Corporation, Syracuse, N. Y.

Carrier

AIR CONDITIONING • REFRIGERATION • INDUSTRIAL HEATING

(Continued from page 102)

succinctness and singleness of purpose that is gratifying. Their scrupulous avoidance of such extraneous matters as philosophies of education and standards of design and construction adds to the effectiveness of the job they set out to do.

Following an orderly arrangement of material, the book opens with a section on the people, groups, officials, and agencies that enter into the planning

and construction of a school building—their functions and their contributions. There follows then a description of the things that influence or affect building and planning procedure—regulatory laws, codes, bonds, and such instruments as plans, specifications, and contracts. Next in logical sequence is shown, step by step, how those people and agencies that have already been introduced, working with one another

and with the instruments, laws, and codes that have been described, initiate and carry through the planning and construction of a school plant from the essential development of an over-all plan for future school plant growth to the completion of the building. Since, however, a completed building can be effective only through intelligent use, the authors follow through with a discussion of some of the problems and opportunities to be met in connection with the utilization of that new building.

Although the agencies, laws, and procedures described are specifically those of the State of California, the counterparts of those agencies and laws are to be found in many other states, while the principles behind the procedures are applicable anywhere. As a consequence, the book will be a valuable asset to all boards of education and building committees, regardless of where they may be, as a reliable guide to a better understanding of the duties that are common to them all.

To the architect who undertakes the design and construction of school facilities—and especially to the one who does not possess a backlog of wide experience in this field—there is offered an understanding of the work and the problems of those boards and committees with which he must work in close and productive harmony.

JOHN E. NICHOLS

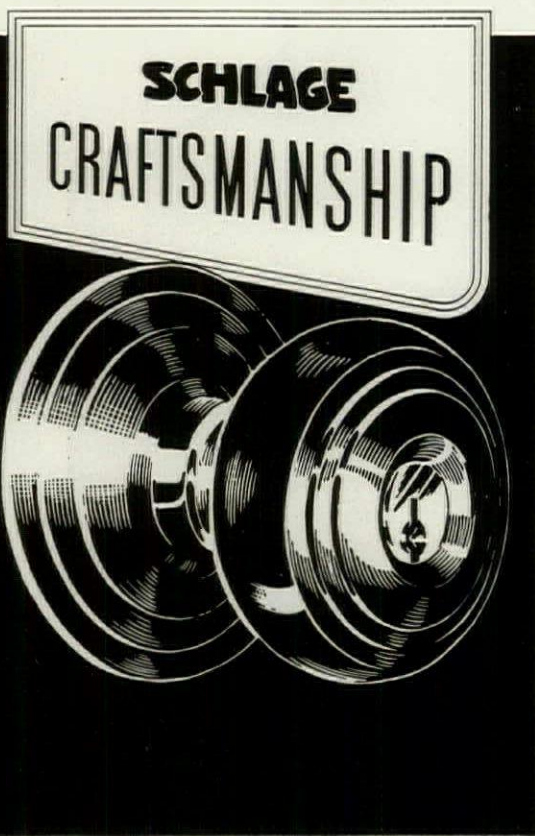
YOUR SOLAR HOUSE

Compiled under the editorial supervision of Maron J. Simon, Architectural Consultant Talbot Hamlin, prepared with the technical assistance and cooperation of Libbey-Owens-Ford Glass Co. Simon & Schuster, 1230 Sixth Ave., New York, N. Y., 1947. 128 pp., illus. Cloth-bound edition, \$3.00; paper-bound, \$1.00

Libbey-Owens-Ford commissioned 49 representative architects (in all states and District of Columbia) each to design a house inspired by his own locality. No limitations were set except that they be medium-priced (\$15,000 maximum, prewar) and that they should have extensive windows or even walls of glass “to unite interiors with out-of-doors in a spacious cheerful atmosphere.” The 49 sketches, each with a statement by the architect, present an interesting composite view of our profession in the house field. No “regional” architecture is in evidence. Flat or sloped roofs and open or tight plans are scattered indiscriminately. There is a fair variety of plan types, also considerable repetition of the plan that spreads rooms out in a ribbon facing south. Certainly there is no “tremendous variety” as promised by the introductory chapter. The format is attractive, with overlays in color, but there is evidence of “chopping up” some drawings, greatly to their detriment. And plans reproduced at such various scales impair ready comprehension.

(Continued on page 106)

IMPLEMENT OF ARCHITECTURE



The skill of Schlage craftsmen is evident in every Schlage lock. Their experienced hands expertly guide precision machinery through exacting Schlage manufacturing processes. This ideal combination of modern machines and skilled craftsmen provides locks that give a long life of dependable operation.

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ORIGINATORS OF THE CYLINDRICAL LOCK



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PRACTICAL, SOUND CONSTRUCTION
for DRAMATIC OPEN DISPLAY



CREATED BY BRASCO to enlarge the possibilities of full-visibility design, Safety-Set Construction permits new freedom of personal expression in store fronts of character and distinction. It provides improved structural and safety features for special architectural requirements such as height-ened areas and larger glass loads.

In addition to an unusually wide variety of attractive sash and sill combinations, Safety-Set's lowered sash height insures greatest visibility. For sound structural strength, heavier gauges in all sections plus stronger steel reinforcements. For improved safety, FINGERTIP SETTING, exclusive with Brasco, which entirely eliminates screws and other pressure devices and provides maximum glass protection.

Safety-Set installations require stock millwork only, effecting substantial savings in time and material. As with all Brasco Construction, it is available in both stainless steel and anodized aluminum. Our new illustrated catalog includes descriptive material and quarter-size details. Clip and mail the attached coupon for your copy.

★ A COMPLETE LINE FOR EVERY DESIGN ★

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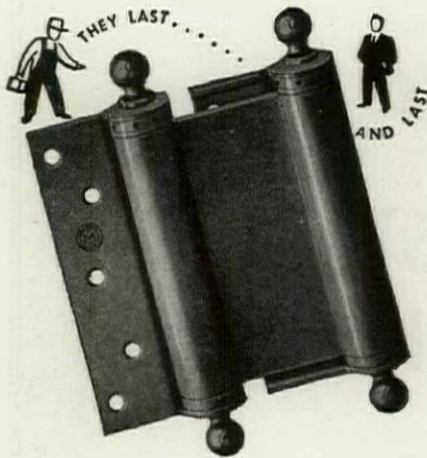
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Milwaukee JAMB HINGES

● You've made a good choice when you recommend modern MILWAUKEE and NU JAMB Spring Hinges on your finest projects. They're engineered for long life—with "frictionless" bearings, tough tempered steel springs, reinforced web and other quality features. Twenty years hence they will be swinging as easily, smoothly as ever—building owners can prove this today.

NU JAMB Spring Hinges require *no hanging strip*. MILWAUKEE Giant Jamb Hinges are standard type for use where hanging strips are desired. Both types are attractively modern in design, available in Button Tips or regular Ball Tips. Single and double-acting types are both adjustable after installation.

The Milwaukee Line of Quality Builder's Hardware is stocked by leading Jobbers. Write for catalog information.



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850-B S. 72nd STREET
MILWAUKEE 14, WIS.

OUR 54th YEAR OF QUALITY PRODUCTION

Reviews

(Continued from page 104)

The architect will find much of interest in these drawings and statements by his 49 colleagues. In general their aim is to give the client a better house to live in without deferring to traditional styles. The collection has much the same reference value as a very good competition, but with more variety and higher average quality. However, this is decidedly a "consumer" book for the prospective house owner, not written for architects. Without a sound critical background a layman can be quite confused by contradictions and half-truths that are presented as explanation of solar houses in the chapters preceding the 49 designs.

Libbey-Owens-Ford is well aware of this, as is evident in the text, but it was decided that this "popular" book should not burden the reader with "deep stuff" (who decided is not apparent, for no author is listed). Instead, one is left with the impression of pseudoscientific hocus-pocus, the implication that any one of these designs will solve the house problem in a new and different "solar" fashion. (Some of the designs are quite definitely "old" fashioned.) Three pages of more-or-less foolish answers to more-or-less foolish questions don't improve the I.Q. of the book, either.

J. R.

KINDERGARTEN CHATS AND OTHER WRITINGS

Louis H. Sullivan. Wittenborn, Schultz, Inc., 38 E. 57th St., New York 22, N. Y., 1947. 252 pp., illus. \$4.50

This is Sullivan's own 1918 revision of the "chats," previously unpublished, together with seven essays and papers written between 1885 and 1906. It is a scholarly work, of which the present editor, Isabella Athey, may feel proud. If any architects have not read this witty, wise, and tremendously influential work, the present opportunity should not be missed. Everyone who carelessly misuses the "form follows function" cliché should be forced to read the two essays on Function and Form. Illustrations are carefully chosen, and index, bibliography, and appendices are complete.

T. H. C.

TWO TALES OF ONE CITY

Invitation to Boston. A. C. Lyons. Photographs by Samuel Chamberlain. M. Barrows & Co., Inc., 114 E. 32nd St., New York, N. Y., 1947. 258 pp., illus., index. \$3.50

A genial account of what makes Boston tick, this "merry guide to her past, present and future" organizes the landmarks of the old city around a series of sightseeing junkets, including suggestions for places to stop for lunch or a

cocktail in-between pilgrimages to shrines. For those who look to architecture as the clearest indicator of the culture of a time or place, it is regrettable that the important contemporary work within "the home of the bean and the cod" is not emphasized along with the familiar, proud buildings of the past. To this reviewer, at least, this aspect of present-day Boston is perhaps the clearest evidence that there's plenty of life in the old girl yet.

G.A.S.

The Boston Book. Esther Forbes. Photographs by Arthur Griffin. Houghton, Mifflin Co., 2 Park St., Boston, Mass., 1947. 122 pp., illus., index. \$5.00

While this attractive volume is chiefly a picture book, informative text woven in among the plates gives meaning to many of the pictures and tells some of the history and lore connected with the things illustrated. Imaginative camera angles provide welcome fresh views (in color, as well as black and white) of the time-honored place-scenes that distinguish Boston. For the photography-minded, there is an index to the pictures explaining how each shot was made. Architecture and architects are mentioned several times. Even quite recent buildings are shown; though no qualitative distinction is drawn. The newer blots on the landscape take bows along with the few admirable contemporary things shown.

G.A.S.

BUILDING WITH EARTH

Building in Cob, Pise, and Stabilized Earth. Clough Williams-Ellis & John and Elizabeth Eastwick-Field. 164 pp., illus., index. Country Life Ltd., London, England, 1947. 15 shillings

Rammed-earth construction is a "modern" technique applied to the most ancient of construction materials—"mud wall." More generally called *Pisé* in Europe, its use goes back to Roman times, but except in a few localities it has been forgotten until recently and "rediscovered" under press of material and transportation shortages. The more ancient techniques of building with clay lumps or a mud and straw mix (cob) or clay bricks (adobe) have continued in active use since prehistoric times in many parts of the world.

Rammed earth is much like mass concrete. For good results the mix should be proportioned in much the same way, with enough sand and clay to fill the voids between pebbles, and placed dry. Stones larger than about one inch should be removed, and organic matter should be avoided. "Stabilized" earth is a low-grade concrete.

(Continued on page 108)

There's insulation and there's INSULATION!

Many new homeowners boast that their places are insulated ... then get a terrific let-down when they learn that the insulation has been installed so thin that they will get only a fraction of the benefits that home insulation can provide.

That's why we have emphasized two important features about insulation in the ad shown below. In the name of good construction we believe that you will subscribe to these recommended specifications.

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

(Appearing in full color in the February 21st issue of The Saturday Evening Post.)



For the newest in building and remodeling products, see your local Gold Bond dealer first.

Puzzle: which house costs less to heat?

The house on the left costs a lot less to heat—the one with the snow on the roof. The snow is still there because this house is insulated with Fireproof Gold Bond Rock Wool. Furnace heat is kept inside instead of leaking through the roof to melt the snow. Heating costs are cut as much as 40%.

Naturally you'll want your new home insulated. But don't make the mistake of just saying you want "insulation". That's like going to the butcher and asking for a pound of meat—any meat. It will pay you to remember two points about insulation:

1. Specify Fireproof Gold Bond Rock Wool. This National Gypsum product is not just "fire-resistant", not just "fire-retarding" but as fire-proof as the rock from which it is made.

2. Specify that you want full thick insulation—not 1 inch or 2 inches thick but full thick. With full thick insulation you get the full benefit that home insulation can and should provide. And because it completely fills the wall, only full thick insulation provides an effective fire stop.

Insulation is the one modern home improvement that pays for itself by reducing heating costs as much as 40% every year. Then during the summer it keeps rooms 8° to 15° cooler. The resale value of the house is automatically increased.

Old homes, too, can be insulated the Gold Bond way. Call your local Gold Bond applicator for a free estimate. He is listed in the phone directory under "Insulation". The easy payments will be

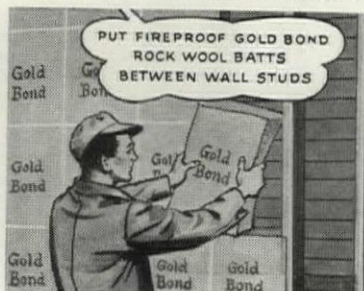
amazingly small because your fuel bills go down immediately.

Gold Bond Rock Wool insulation is only one of over 150 Gold Bond Products—engineered to help you build or remodel better at no extra cost. Included are Gypsum Lath, Plaster, Lime, Sheathing, Metal Lath, Insulation, Wallboard, Acoustical Products and Sunflex, the one-hour wall paint.

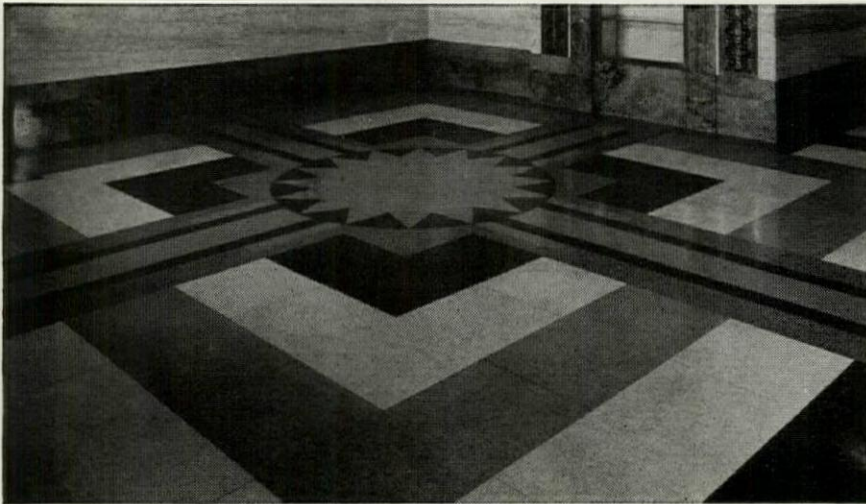
Your local Gold Bond lumber and building material dealer is headquarters for all that's new in building products. See him first!

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Just as
fine chinaware patterns
are set against **WHITE...**



Terrazzo Floor: Samuel Gompers Industrial High School for Boys, Bronx, New York.

Concrete craftsmen choose Atlas White Cement

Delicate colors and intricate patterns of fine chinaware stand out most strikingly against a white background. So, too, a matrix of Atlas White Cement sets off better the color values of pigments and aggregates in Terrazzo, Stucco, Cement Paint and Architectural Concrete Slabs. Such a background has the uniform clarity to complement the desired color overtones, whether in contrast or blend.

Atlas White complies with Federal and ASTM specifications for portland cement. It has the same advantages for concrete and is used in the same way. Atlas White concrete gives a clean, fresh appearance. Cleaning is easy. Maintenance costs stay low.

For further information on the uses of Atlas White Cement, see SWEET'S Catalog, Sections 12B/7 and 13B/7, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, New York.

FOR BEAUTY AND UTILITY
ATLAS WHITE CEMENT
FOR TERRAZZO, PAINT, SLABS, STUCCO

PA-C-21



"THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries
Sunday Evenings—ABC Network

(Continued from page 106)

Suitable material can generally be found on the site—otherwise, there's no advantage in this technique.

Where only clay or fine loam are available, *adobe*, as in our Southwest, or *clay-lump*, as in the Ukraine, are the suitable methods using "no-cost" material. There is of course a great deal of heavy labor involved in all of these methods of building, and with rammed earth the cost of forms would be a considerable item unless the same forms could be used for several structures.

In the old days the necessity for good foundations was not appreciated nor was dampproofing against ground moisture a general practice. With these improvements (and, of course, a good roof overhang) a rammed-earth wall can last forever. A great limitation (and the most interesting challenge to a clever planner) is the need for using very simple forms. Only one set of knockdown forms about 3 ft high and 10 ft long is necessary, with means of blocking off for openings and for rounded external corners. This gives a very big but fairly adjustable "building block" to work with. Adobe gives a modular unit on the old cubit measure (18 or 20 inches) while the other earth-walling techniques have no inherent requirements as to size except that they be massive.

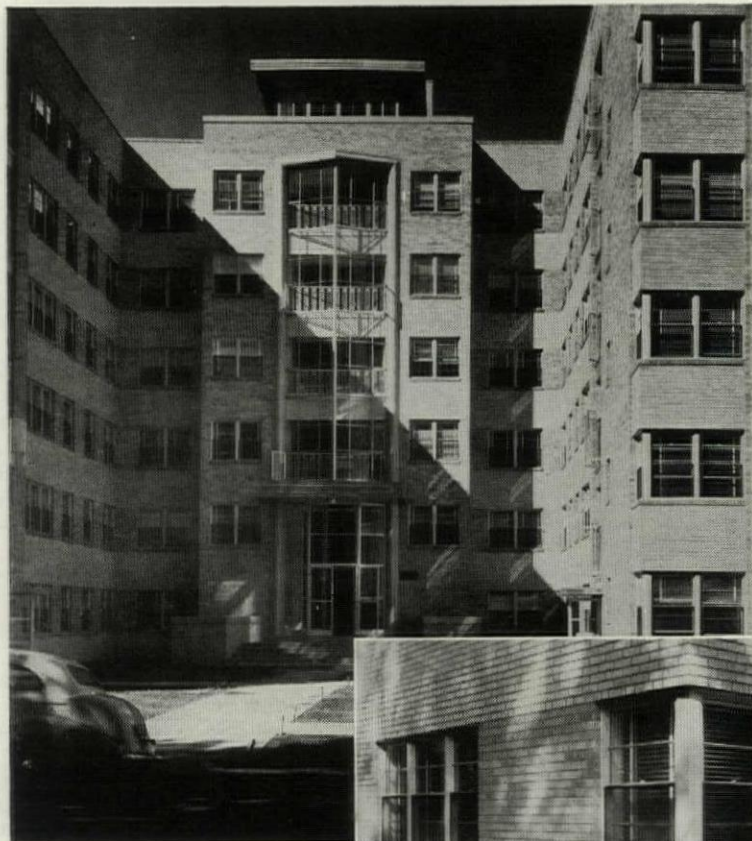
Data available in this country (cited in the book) are: *Terracrete—Building with Rammed Earth Cement*, published by Francis Macdonald, Chestertown, Maryland; U. S. Department of Commerce National Bureau of Standards Report, BMS 78; and *University of Illinois Bulletin No. 17*.

The book was first published in 1919 with a lively introduction by J. St. Lee Strachey, then editor of the *Spectator*, who had been largely responsible for a revival of building with "pisé de terre" during the war. This introduction is so pat to the present building situation that it makes one wonder almost whether the year is now 1919 or whether this was written in 1947. A re-evaluation of the old earth-building methods is given in the body of the book and in this edition the added experience of the last 30 years or so is covered in detail. There are plenty of clear drawings of typical sections, forms, etc., and many excellent photographs. At first glance the book seems completely "old hat," for the buildings illustrated all have a traditional English Cottage look about them. The book gets off to a rambling start and it takes a bit of digging to get it all straight and to find out just what technical problems might be encountered. But the information is there and a good contemporary architect could use earth walls as readily as any masonry to give this work the "new look."

J. R.

(Continued on page 110)

TRUSCON PLANNING BOARD



Camellia House Apartments, Denver, Colorado. Walter H. Simon, Architect; A. Perlmutter Construction Co., Contractors; Manhattan Builders, Inc., Owners.



CAMELLIA HOUSE BEAUTY AND SECURITY BUILT WITH TRUSCON STEEL BUILDING PRODUCTS

Handsome New Denver Apartment House Adds Bright Note of Modernism to Mile-High City

The generous use of Truscon Series 138 Double-Hung Steel Windows in Camellia House offers its residents an opportunity to enjoy Colorado's brisk air and bright sunshine as desired. Smart and sparkling, too, is the pleasing window pattern achieved by the ample number of the windows across each facade and around outside corners.

This outstanding window was an original development by Truscon as an answer to the insistent demand for an economically priced steel window in the popular double-hung design. To attain a production volume permitting sale and installation at a price level comparable to that of the conventional type residential window, it was necessary to design and construct special manufacturing equipment capable of high quality fabrication in mass output, with a resulting minimum of manufacturing cost.

Of major importance in the Series 138 Truscon Double-Hung Steel Windows is the fact that the sash members are of welded tubular construction. This adds greatly to the strength, durability and finished appearance. Weights and cords are not used. Operation is controlled by motor type spring balances equipped with tapes of Enduro stainless steel. Quiet, positive action and long trouble-free life are assured.

Each window is completely factory weather-stripped in stainless steel. Screening is easily and attractively accomplished.

The low cost is reflected not only in the window price, but in all accessories. Frames are prepared to receive screens and storm sash of the simplest and most economical type. Shade, drapery, curtain or venetian blind fixtures, of standard types are easily attached to the interior side, in holes provided in all units.

Write for complete information.

New Literature

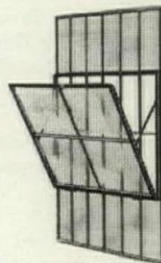
A 36 page catalog complete with installation details and specifications on Truscon Double-Hung Windows and Casements. Write for your free copy.



TRUSCON STEEL COMPANY
YOUNGSTOWN 1, OHIO
Subsidiary of Republic Steel Corporation

Truscon Security Windows, Reinforcing Bars and Metal Lath Also Serve This Handsome Structure

Camellia House also utilizes the protective features of Truscon Security Steel Windows, at those points where ventilation is desired with extra protection against unauthorized entry. This is a highly desirable safety feature, especially where the property of a large number of people is concentrated in one structure.



Truscon Security Windows are standardized denton windows, built of heavy industrial window sections. Their weight and strength are adequate to effectively resist forced or illegal entry to apartments, commercial and industrial buildings, stores and warehouses. Glazing is from the interior, with wire clips and putty as standard. Screens may be conveniently installed.

Write for full information on Truscon Security Type Steel Windows.

Adequate Reinforcement

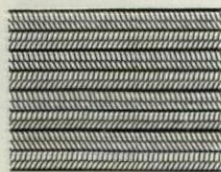
Rigidity of structure in Camellia House is

assured by the use of Truscon Steel Reinforcing Bars.

Truscon Steel Bars for reinforcing are applicable to a wide range of concrete work, such as concrete slabs, beams and girders, columns, walls and footings; in the construction of buildings, bridges, tanks, and all other concrete structures subject to tension and compression stresses. Write for details.



Truscon Metal Lath a Beauty Aid



Truscon Doublemesh
*Herringbone Metal Lath
Reg. U. S. Pat. Off.

Smooth, straight walls and ceilings, without unsightly cracks, are assured for Camellia House rooms through the use of Truscon Metal Lath. Truscon has a wide range of types of metal lath, corner beads, stucco mesh, corner reinforcements, hollow partition studs, base screeds, cold rolled channels and other products related to the plastering trades. All Truscon Metal Lath products are manufactured in accordance with U. S. Department of Commerce Simplified Practice Recommendation R-344. Write for free catalog showing the complete line, or refer to SWEET'S.

CUSTOM INSTALLATIONS at No Extra Cost WITH **WILEY** NIAGARA STOCK MODELS

(Continued from page 108)

RESIDENTIAL LIGHTING

Myrtle Fahsbender. D. Van Nostrand Co., Inc., 250 4th Ave., New York, N. Y., 1947. 269 pp., 8½" x 11", illus., index. \$10.00

Here's a great big book for the lighting fixture dealer to have on his showroom table to help spend his customers' money. There's a lot of good material in it, useful to architects too, overlaid by such a raft of much-retouched photographs of period interiors, arty table lamps, cute garden lighting, and such that the subject of the book is quite snowed under. The jacket blurb proudly cites "five hundred and sixty-nine vivid illustrations." Yeah! 31 big cuts of floor and table lamps in one chapter, all china vase-silk shade style or the equivalent. Another chapter, "The Influence of Period Styles on Lighting Fixture Design," has 57 cuts about equally divided between half-page photos of huge high-ceilinged period rooms (museum pieces, every one of 'em) and line drawings of "period" light fixtures and chairs.

Of course this is a "consumer" book, not written for professionals, and it does give the layman lots of information and suggestions on equipment, wiring, light sources, etc. The chapter, "Lighting the Rooms of the House," is entirely helpful. If the author had concentrated on "arrangement and design of home lighting" as the cover states and left the fancy fixtures to the dealers in such merchandise, the book would be half the size and have at least twice the value.

J. R.

NOTICES

NEW PRACTICES, PARTNERSHIPS

FRANK GRAD & SONS of Newark, N. J., and Washington, D. C., have announced a new member of the firm, JOHN HANS GRAHAM.

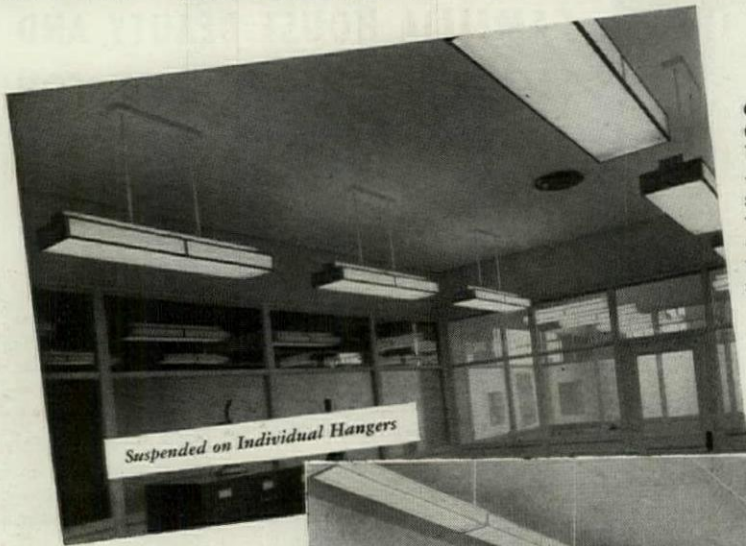
GEORGE G. GARTHORNE, A. L. BUONACORSI, and JOS. E. MURRAY have formed an association with offices in the Grant Bldg., 1095 Market St., San Francisco 3, Calif.

JOSEPH M. BARROW has opened a general architectural practice with offices at 713 W. Illinois St., Urbana, Ill.

LLOYD B. KNUTSEN has resumed his architectural practice with offices at 527 Hoeschler Bldg., La Crosse, Wis.

J. GILBERT BUVENS, architect, has opened offices at 310 East Blvd., Baton Rouge 10, La.

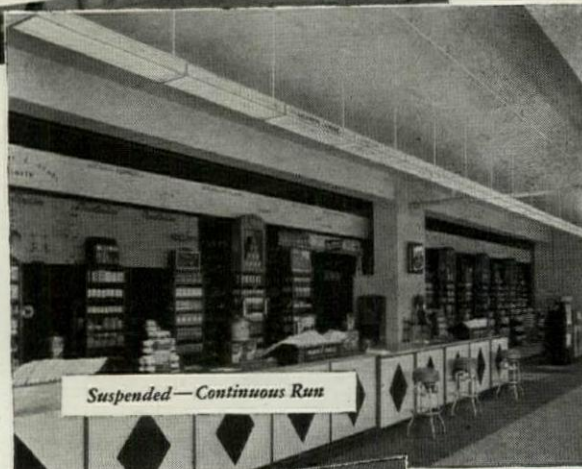
ARTHUR F. DEAM, professor of design, has been appointed chairman of the Department of Architecture of the University of Pennsylvania. Professor Deam has taught design at University of Illinois and at Pennsylvania.



Suspended on Individual Hangers

Suspended or flush with ceiling... individual or continuous runs.

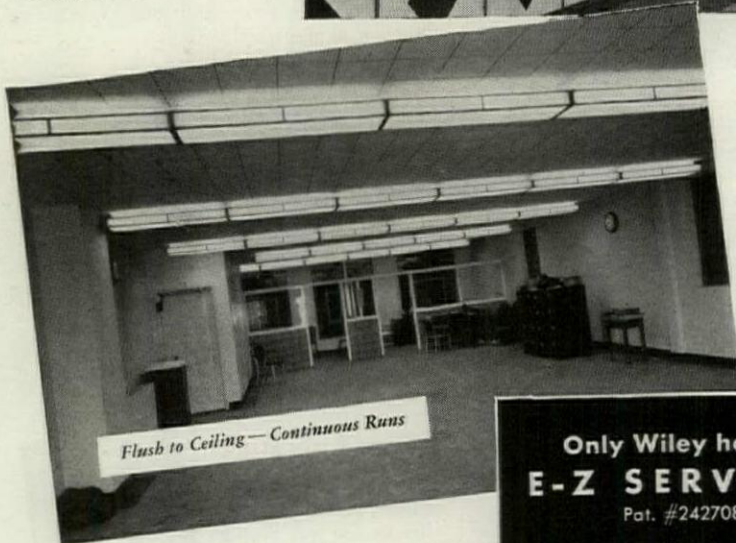
Universal Troffer in 2, 3 and 4-lamp sizes, completely assembled, may be used individually or in rows with open, louvered or glass base panels. Completely interchangeable.



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Starter or Instant Start... certified HPF Ballasts.

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Spot Lites... adjustable or fixed lens types... may be used individually or combined with Wiley Commercial and Troffer Models.

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Write for Complete Catalog

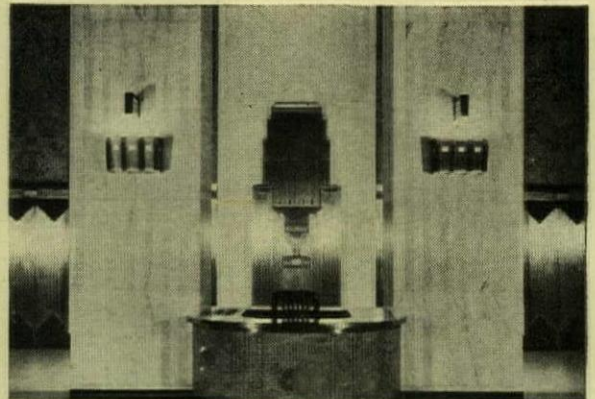
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**Chicago's Field Building
keeps its youth
with the help of
ANACONDA NICKEL SILVER**



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Graham, Anderson, Probst and White, Architects; George A. Fuller Company, General Contractor. Architectural metal work by General Bronze Corporation and Flour City Ornamental Works.

CHICAGO'S monumental Field Building, a gleaming incisor in Chicago's serrated skyline, provides an impressive example of the lasting beauty of Anaconda Nickel Silver.


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In combining lasting beauty with ease of main-

tenance, Anaconda Nickel Silver plays its part in helping the management keep the building looking as though it had just opened its doors.

Anaconda Architectural Bronze and Nickel Silver in all wrought forms have been the choice of architects through the years for ornamental work of every description. These Anaconda Metals have likewise been the choice of leading fabricators for their easy workability and uniformity in dimension and composition.

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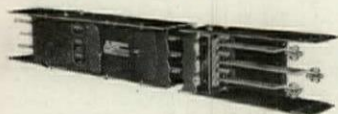
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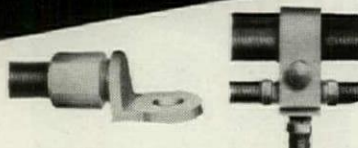
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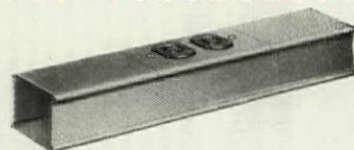
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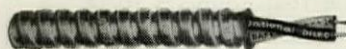
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2 1/8" x 1 5/8" raceway for loads to 60 amp. Lay-in the wires.
Snap on the capping.



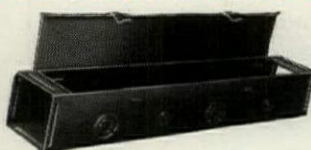
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NOTICE: Insertions for this section will be accepted *not later than the 1st of the month preceding publication*. Legible copy, accompanied by check or money order for \$3.00, must be addressed to Jobs and Men, c/o PROGRESSIVE ARCHITECTURE, 330 W. 42nd St., New York 18, N. Y. Insertions may not exceed 50 words.

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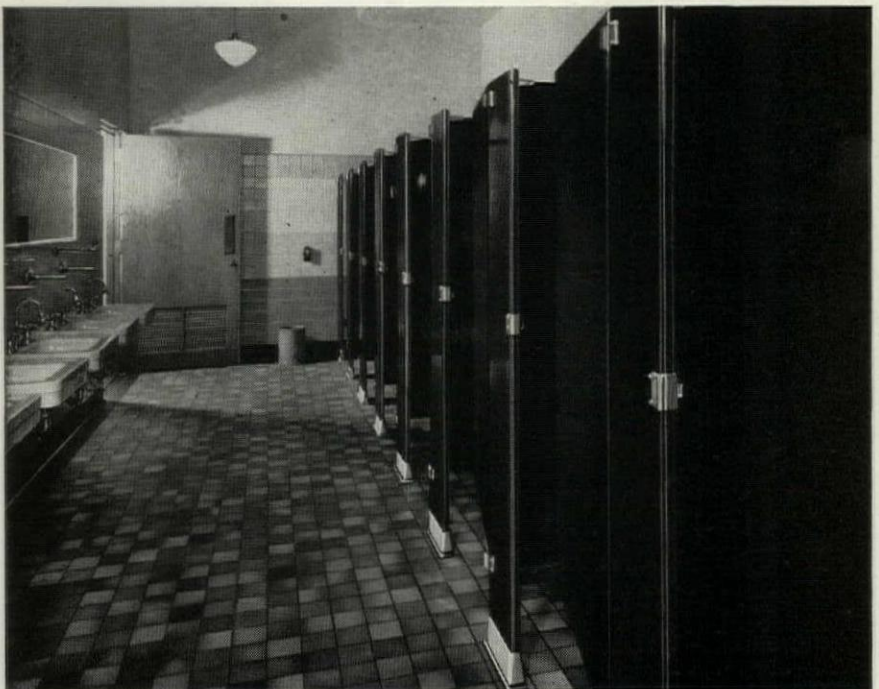
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and of directing such effort. Permanent connection can be offered to qualified applicant in large architectural-engineering organization. Send record of experience and samples of work. Marr and Holman, 701-703 Stahlman Bldg., Nashville, Tenn.

(Continued on page 114)

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(Continued from page 113)

STRUCTURAL ENGINEER—with good experience who can design and make drawings for structural and reinforced concrete. Permanent position can be offered to properly qualified applicant in large architectural-engineering organization. Send record of experience and samples of work. Marr and Holman, 701-703 Stahlman Bldg., Nashville, Tenn.

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(Continued on page 116)

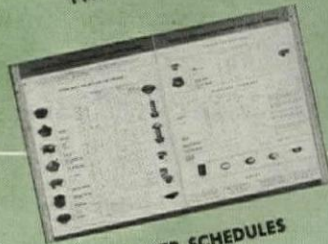
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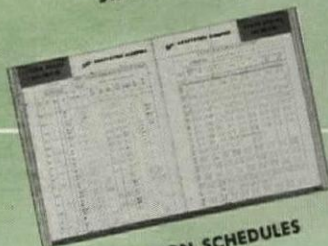
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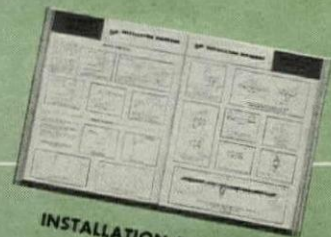
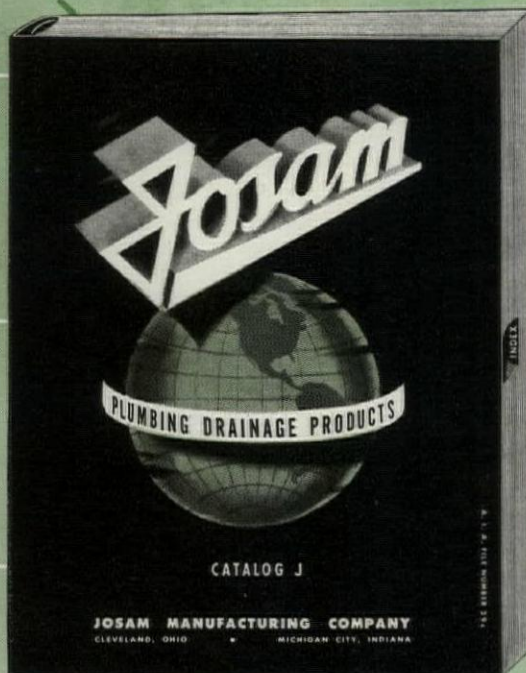
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STRAINER SCHEDULES



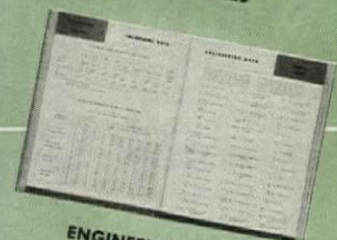
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CITY AND STATE

(Continued from page 114)

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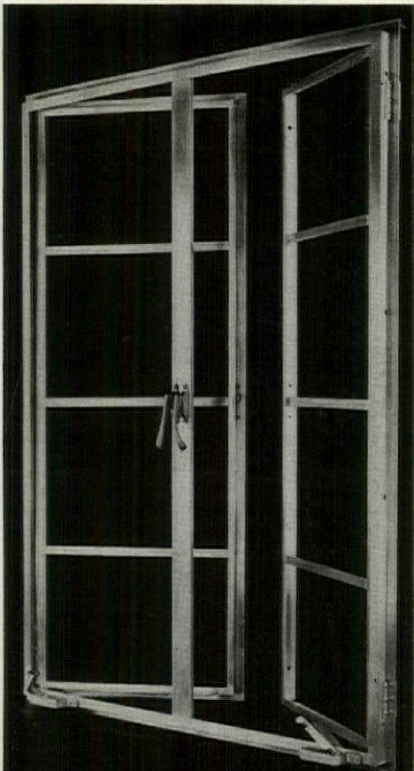
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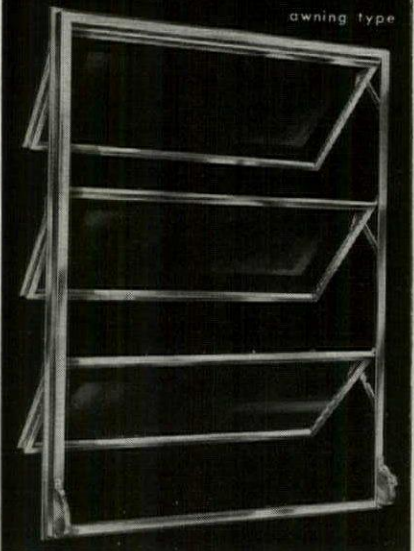


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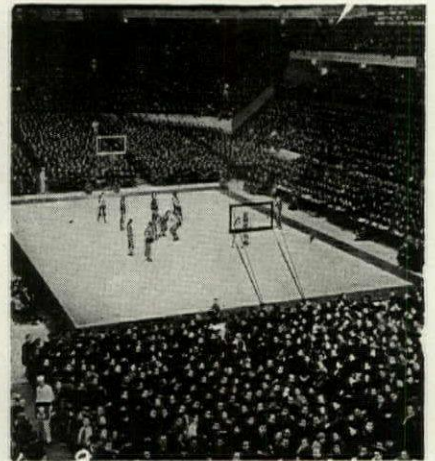
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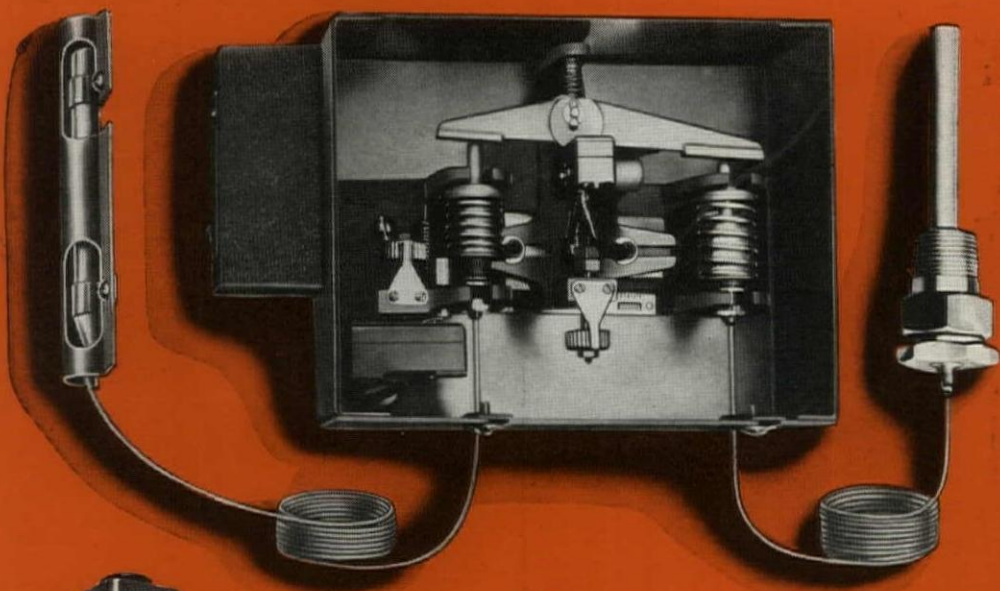
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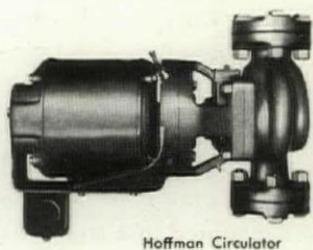
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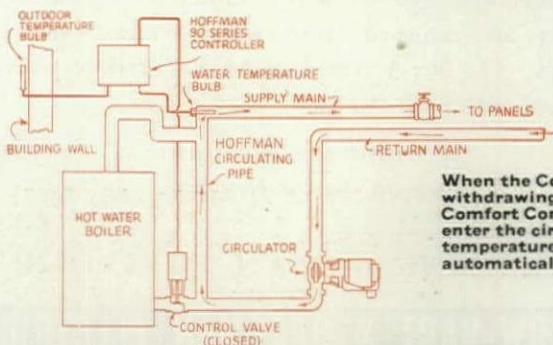
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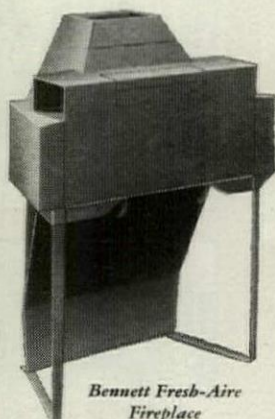
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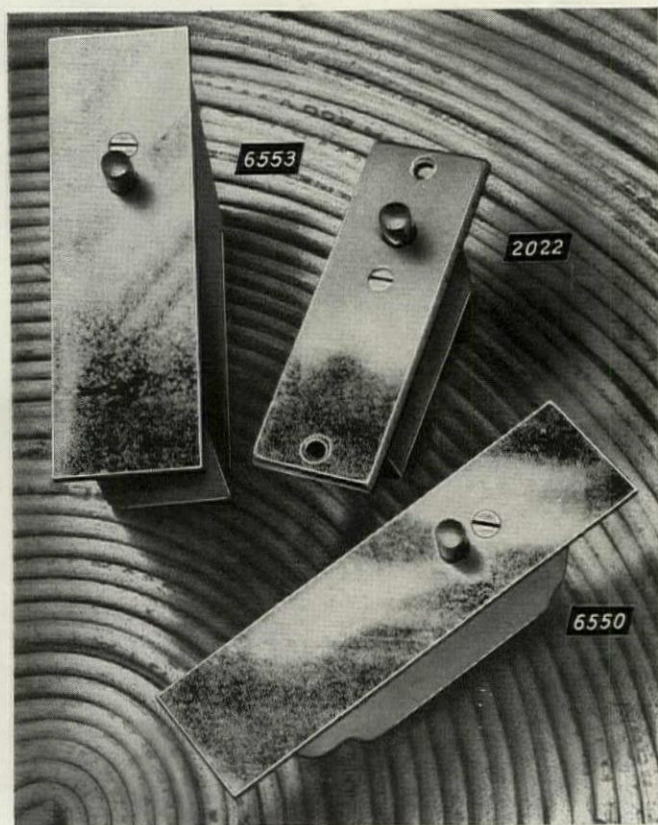
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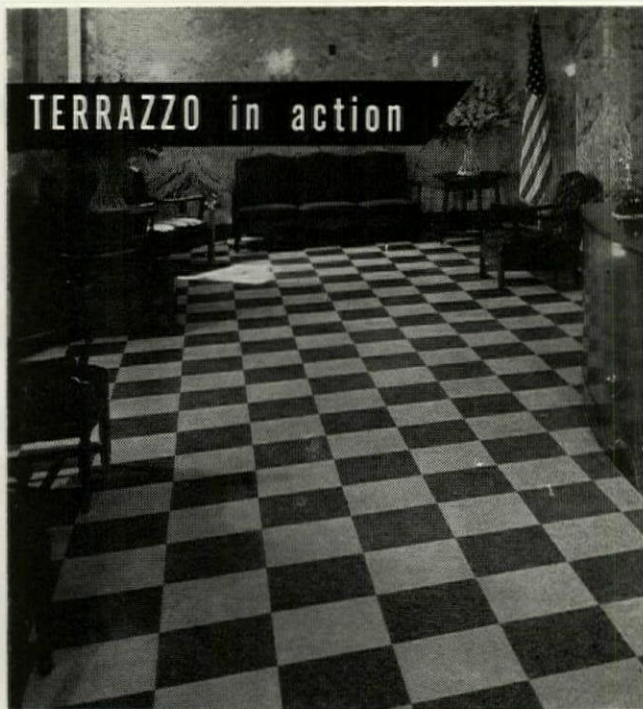
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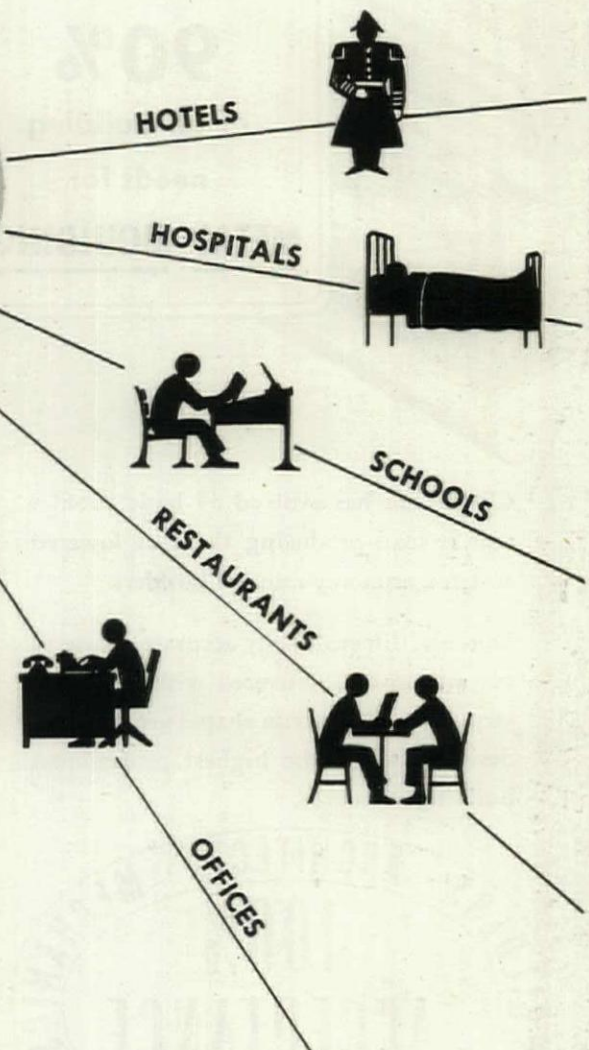
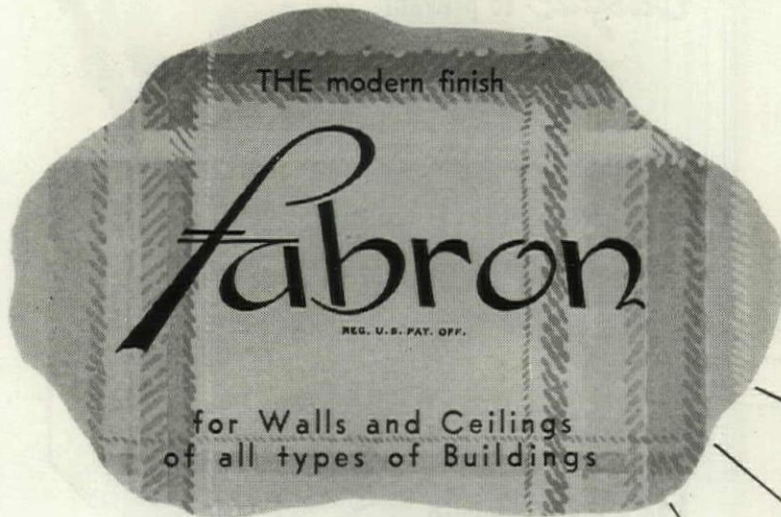


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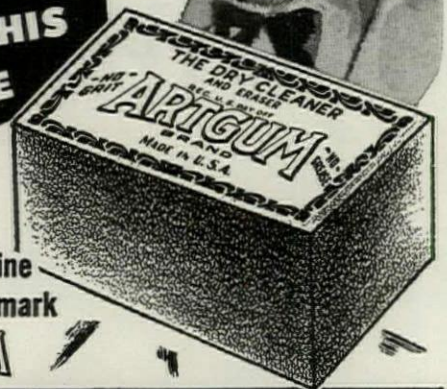
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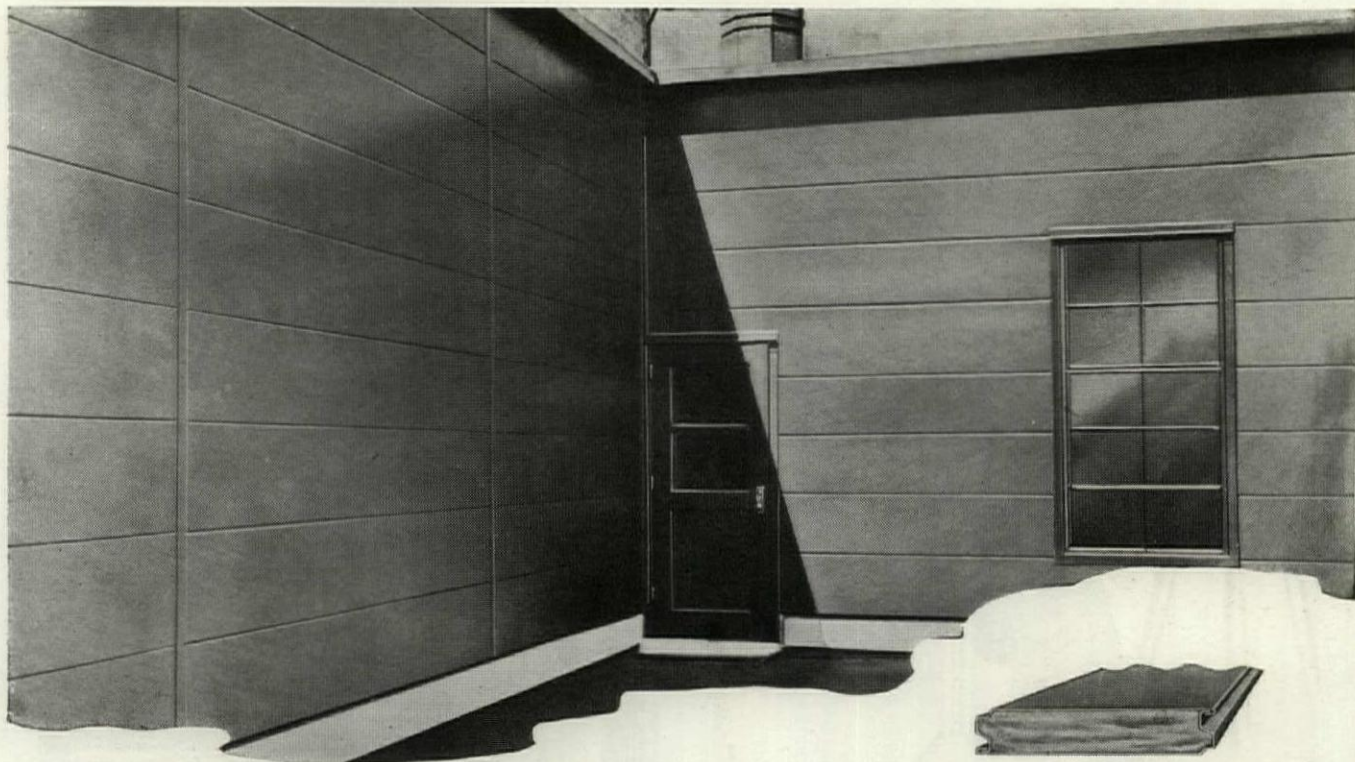
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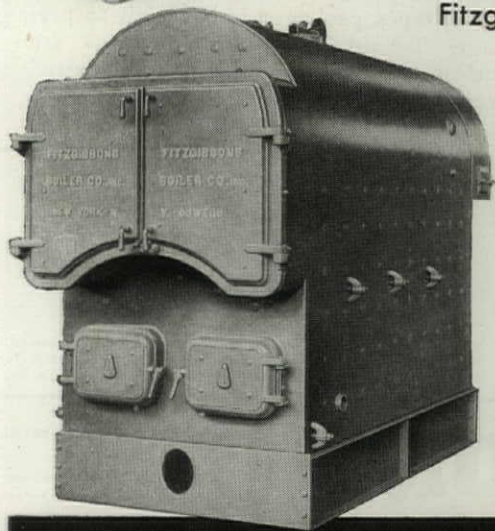
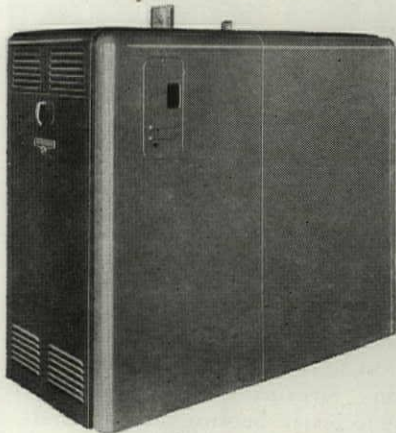
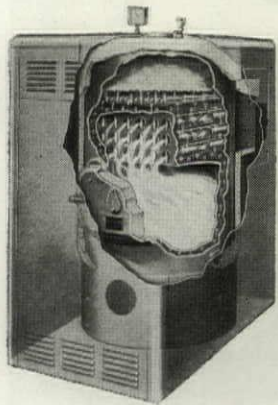
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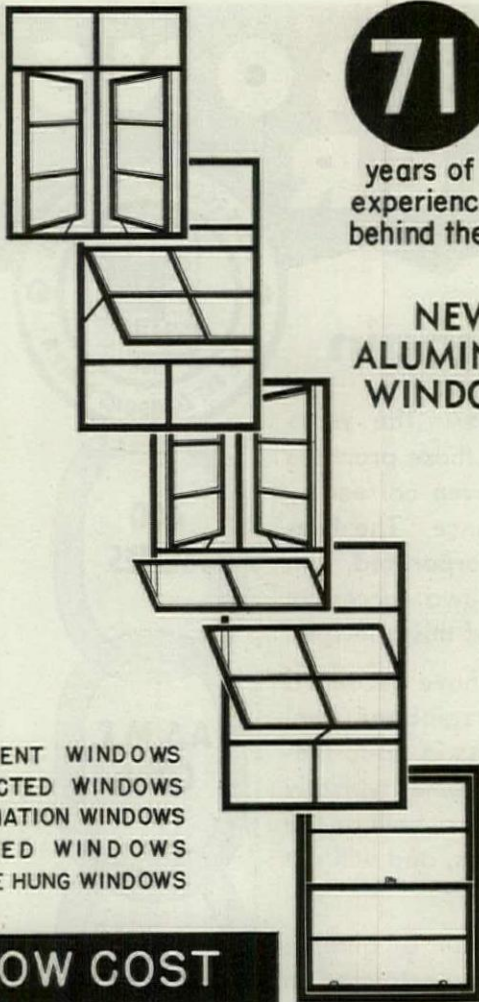
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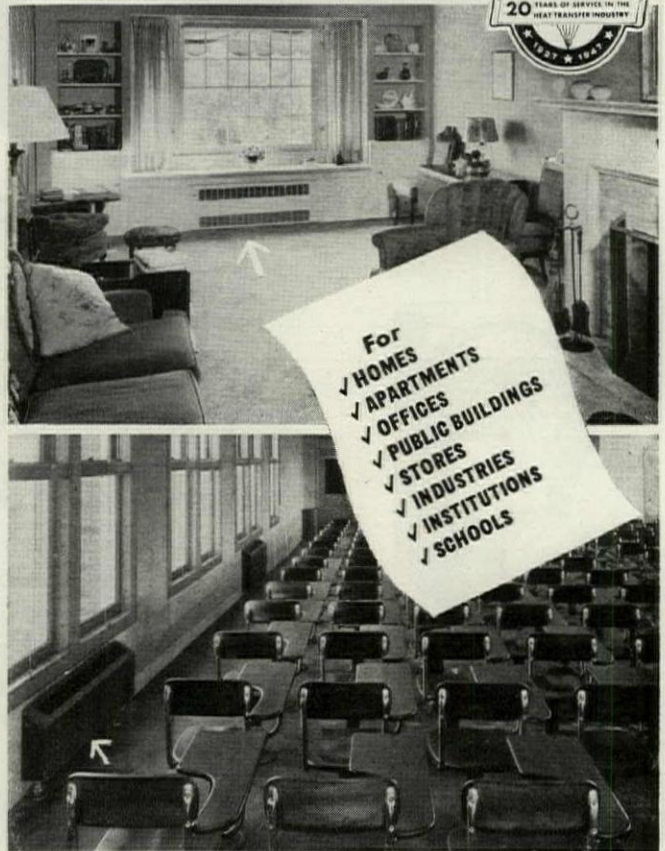
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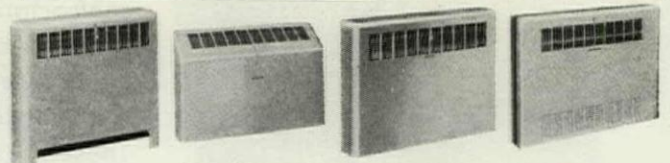
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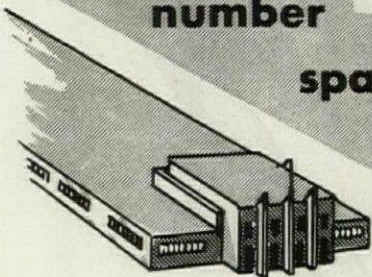
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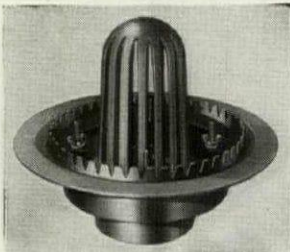


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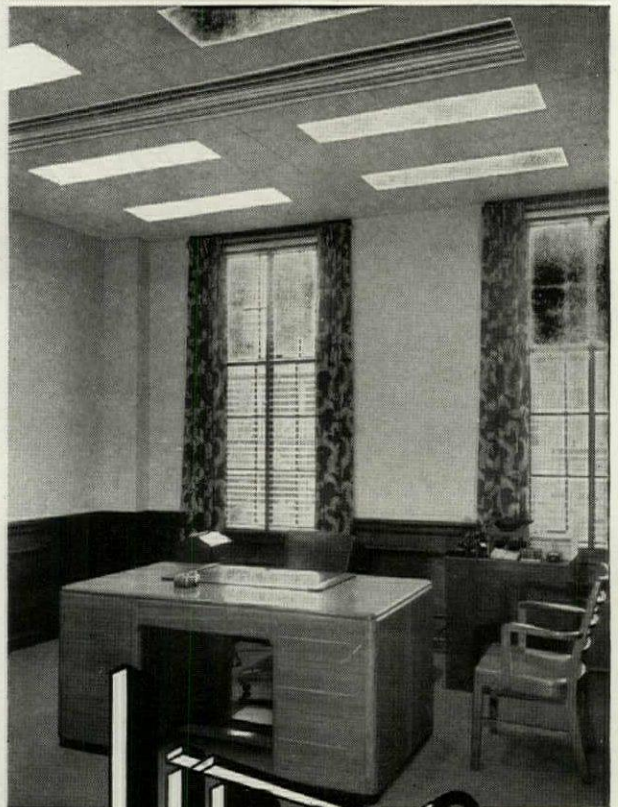
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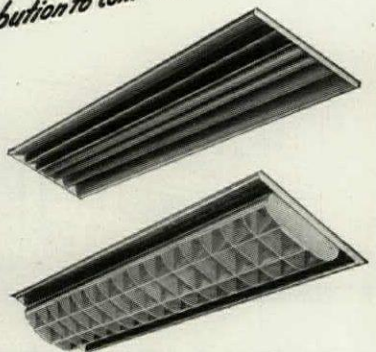
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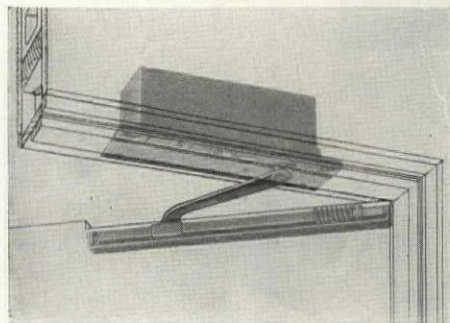
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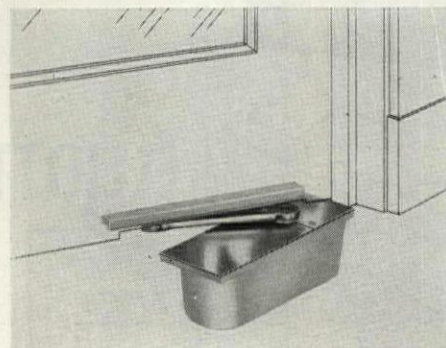
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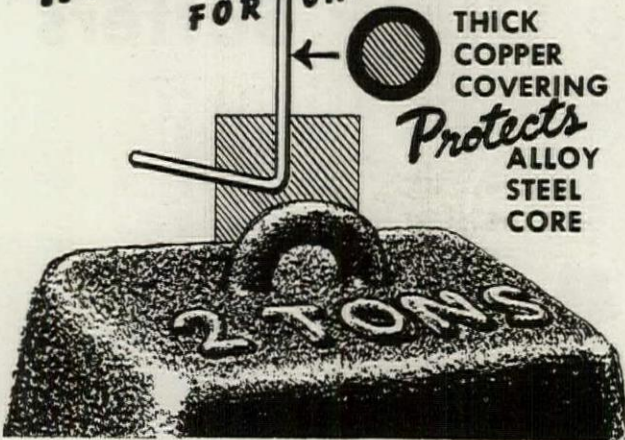
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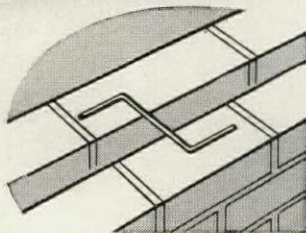
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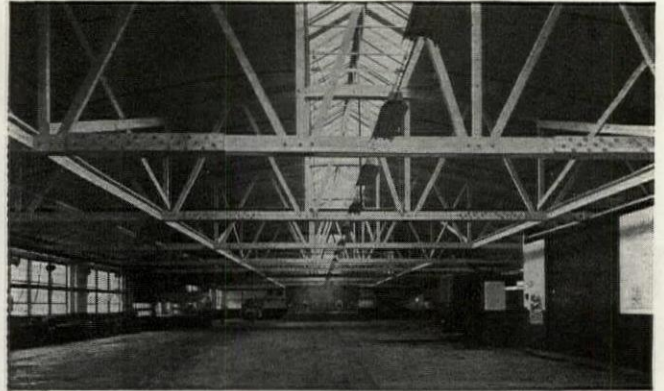


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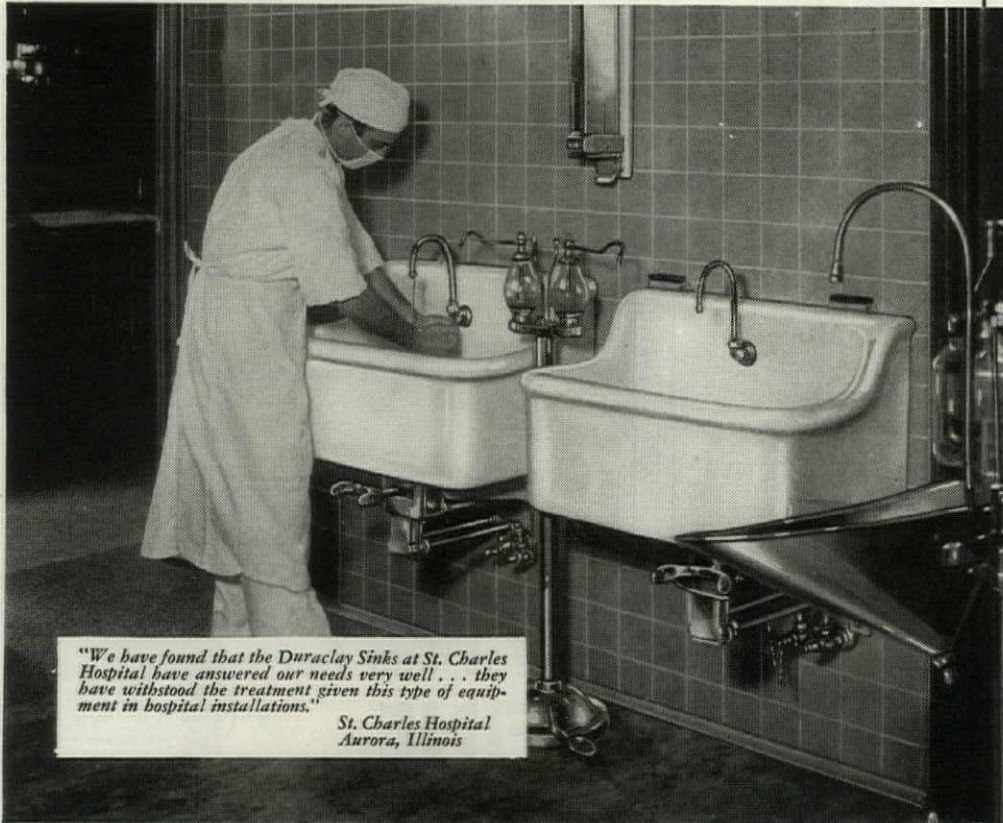
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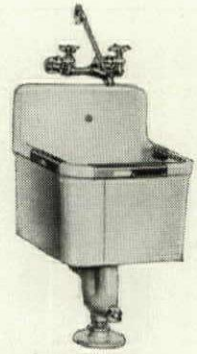
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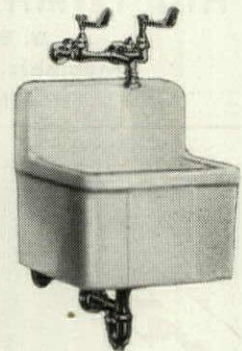
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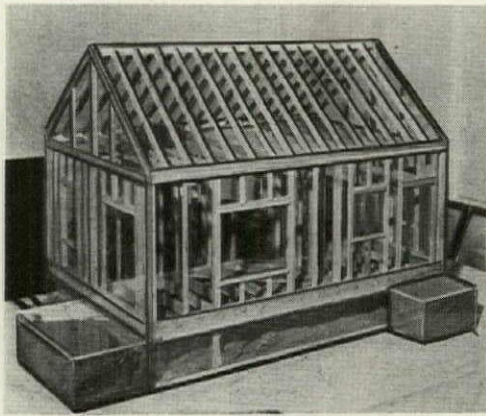
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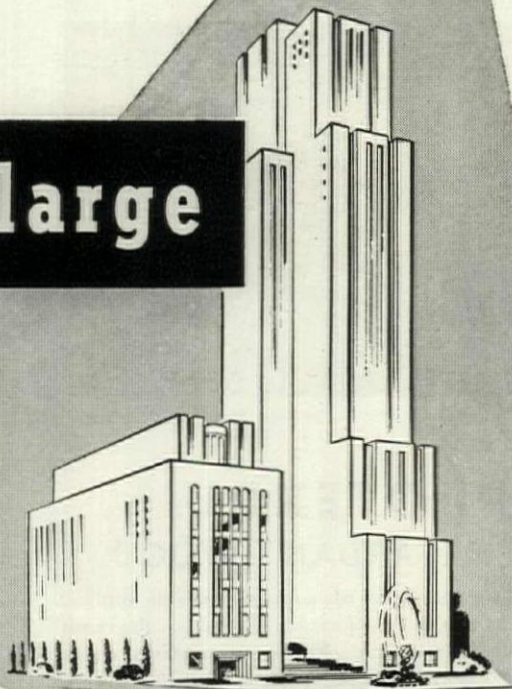
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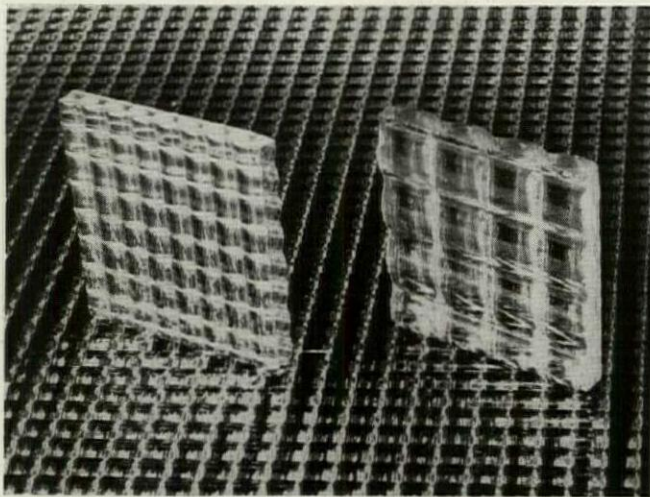


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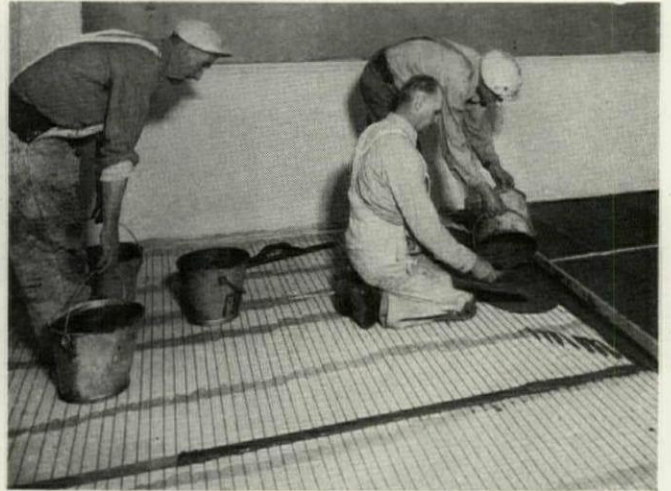
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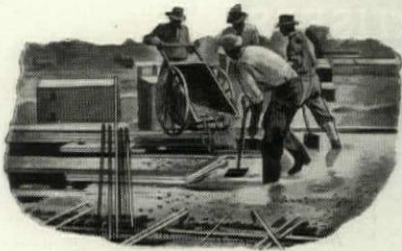
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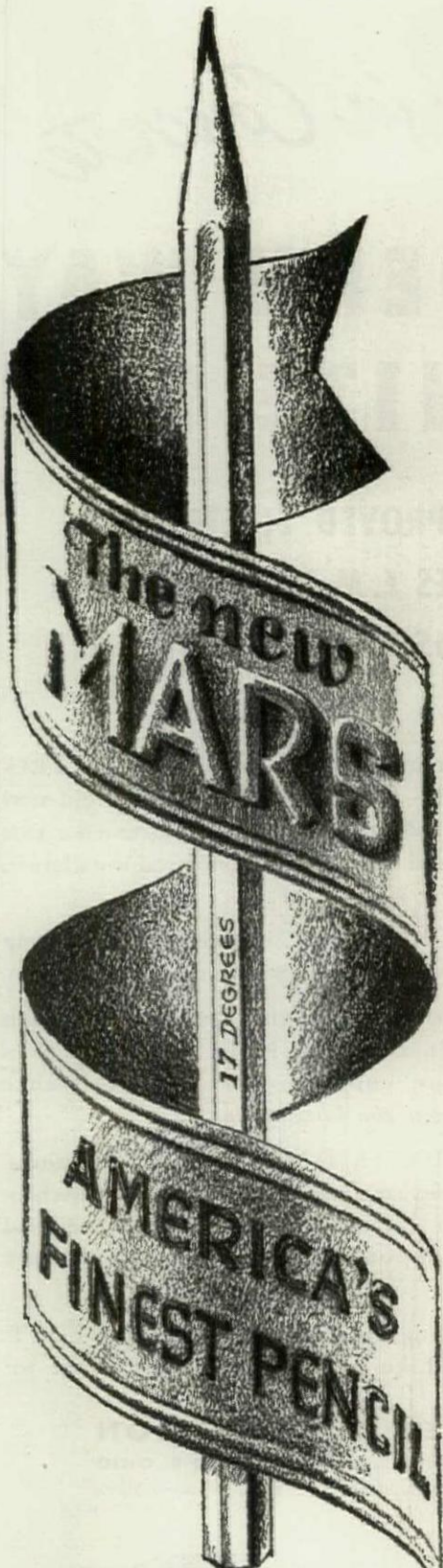
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P.S.

CLEVELAND, OHIO. A local firm of architects—Conrad, Hays, Simpson & Ruth—have been working for several years on a project for the Cleveland Zoo. Have you ever designed a solar home for a beaver? Byers Hays assures me that more research has gone into the living habits of animals than any architect ever spent on studying human requirements. This, I conclude editorially, is good for snakes, bad for slum dwellers.

COLORADO SPRINGS, COLORADO. A local architect points to another impact of behavior problems on design. No one has yet translated the increasing divorce rate (one divorce to four marriages) into architectural terms. This man, divorced and remarried, is finding it difficult to design his own home. "I have so many requirements," he complains: "I have to satisfy myself, my wife, her children, my children, and our children."

MILWAUKEE, WISCONSIN. A group of students from the Layton Art School, studying architectural design à la Beaux Arts, exhibited their work at an A.I.A. Chapter meeting. It's interesting to see (as I have in several places) conservative-minded practicing architects pleased as punch at the work of local students who know only the modern approach. One thing that does seem to alarm the older generation is a fear that history is not being taught in the schools. A small atelier, of course, cannot teach history, or structure, or the other things that are a part of design education; that's the drawback in that system. In the accredited schools it's my impression that history is being taught more acutely than it was when I was in school. Which brings us to the next item.

NEW YORK, NEW YORK. Tony Raymond, receiving the November A.I.A. *Journal*, boiled over at editor Henry Saylor's comments about Yale's lecture series on 18th century arts. Saylor remarked, "Perhaps the student is going to be allowed to look into the past occasionally in spite of its general disrepute." Raymond snapped back, "What utter nonsense and misrepresentation. . . . Modern architecture and its proponents lay

more stress on study of the past and study of the principles underlying all great periods of arts and architecture than the teachings of Beaux Arts and its narrow eclecticism. Don't you ever read anything?"

For reading we recommend the current catalogs of the architectural schools. Plenty of history courses listed, Henry.

DENVER, COLORADO. Perhaps it's because Denver lies at that turbulent point where the Midwest plains begin to swell up into the Rockies; perhaps it's the exhilarating air; maybe it's just the talented people in town; whatever the reason, this city is moving very fast architecturally. There's a great deal of excellent work on the boards and under construction. There is, of course, the gracious master, Burnham Hoyt. There is new blood in the older firms (nephew Alan with uncle Arthur in the firm of Fisher & Fisher, for instance), and there are new men establishing themselves rapidly.

I like the atmosphere of friendly rivalry among the architects; I admire the way the architects boost the new school at Denver University, where Carl Feiss and his staff are off to a great start; I'm impressed at the way architects, sculptors, writers associate naturally, rather than theoretically or artificially as in so many places. In fact, as you may have guessed by now, I like Denver.

PITTSBURGH, PENNSYLVANIA. A local enterprise promises to be of great service to the architects in that town. Last year the Joseph Horne Co., local department store, sponsored a competition with full cooperation from the Pittsburgh A.I.A. Chapter. Ken Johnstone, director of the School of Fine Arts at Carnegie Tech, was professional adviser. Four plots characteristic of Pittsburgh's peculiar topography were described, and a house meeting the needs of a family with two children was the problem. Twenty designs were chosen as winners, and now the store is displaying ½-inch scale models of these houses, for promotion purposes. The architects will benefit from the publicity campaign, the store will tie in the house plans with its home furnishing merchandise, and the Pittsburghers will presumably get better houses. Everyone wins.

LINCOLN, NEBRASKA. Kenneth Clark, designing a builder's group of houses for sale, produced a well planned, pleasant looking series of contemporary houses which are selling for comparatively low prices—and are selling well. He ran

into builder trouble, though, in a minor way. A series of vertical wood slats shielding the entrance were "improved" by the addition of caps and bases. A brick wall running from outside to inside (into which a glass living room wall butts) was fixed up beautifully by the builder—he varnished it on the inside of the house, and again added base and cap molds. No interpenetration of space for him!

Reexamining the Nebraska State Capitol, one is struck anew by its pleasing mass and by the reasonable verticality produced by corner piers blossoming into sculpture. It remains, however, a rather shockingly tall building set in a rundown residential neighborhood; a swell example of the fact that one building does not make architecture if it is not related to a larger plan. I tried to get an impression of the interiors, but I got lost in the gloom of the main lobby, and after bumping into several state office workers scurrying through the dark passages I sneaked out a side door and went back to the Cornhusker Hotel.

FONTANA, NORTH CAROLINA. Groups are forming all over the state in angry protest at PROGRESSIVE ARCHITECTURE'S December issue, which placed Fontana Dam in Tennessee, instead of North Carolina, where it really is. P/A editors intend to leave town quickly as soon as the February issue has been put to bed, and take refuge in some safe, obscure, out-of-the-way place—perhaps Tennessee.

NEW YORK, NEW YORK. PROGRESSIVE ARCHITECTURE announced its jury for the 1947 P/A Awards. The members are: Henry Churchill, architect and city planner; Joseph Hudnut, dean of Harvard's Graduate School of Design; Douglas Orr, architect, president of the A.I.A.; Antonin Raymond, architect known for his work here and abroad; Paul Weidlinger, engineer. As last year, it is a distinguished group, ranging from men interested in the larger community to those concerned primarily with technical advance.

Don't forget the deadline for submission of entries—March 1st. Details are on page 20 of the November 1947 issue of P/A. Entry blanks are available now. Begun last year, these Awards are already something for all progressive designers to aim for. Conditions, as you know, are simple: the buildings entered must have been constructed in the United States and completed during the calendar year 1947. Criteria of judgment are also simple: sound progress in all aspects of design—fitness, strength, beauty, purpose. Maybe you'll be this year's Gordon Drake.

Thomas H. Craig