

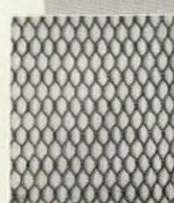
# **P**rogressive **A**rchitecture

LIBRARY OF THE MINNEAPOLIS  
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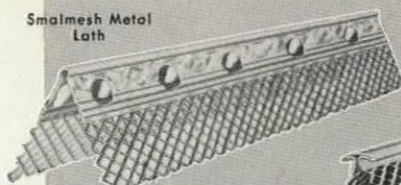
Smallmesh Metal Lath



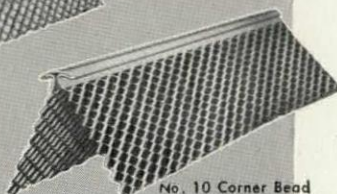
Specialmesh Metal Lath



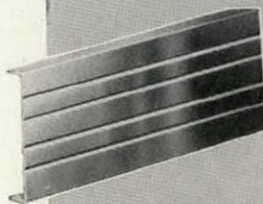
Corner Lath



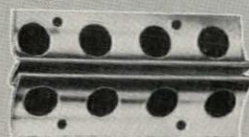
Super-Ex Corner Bead



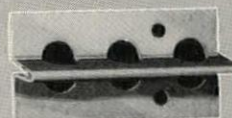
No. 10 Corner Bead



Applied Casings



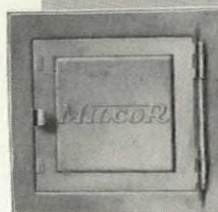
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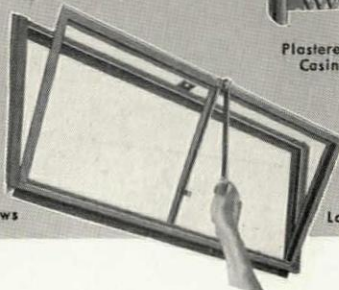
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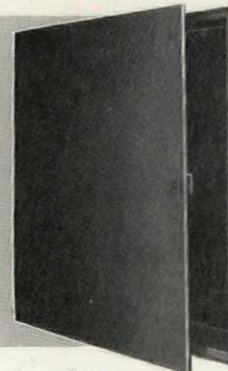
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# Progressive Architecture

(PENCIL POINTS)

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July, 1948

Mr. Edward D. Pierre  
925 Architects' Building  
Indianapolis, Indiana

Dear Mr. Pierre:

When we were in Indiana recently you asked us, "Why doesn't P/A do something about 'organizing' the building industry?" We replied that that was a pretty big task, and seemed beyond the scope of an architectural magazine. As this goes to press a resolution is being offered to the National Convention of the A.I.A. in Salt Lake City, and presumably will have been passed by now. The resolution calls on the Institute to set up a committee and arm it with the necessary funds to conduct, during the coming year, an inquiry into the constitution and functioning of that sprawling giant, the "building industry" in the United States.

The reason for the inquiry would be the realization that architects are in a unique position to determine objectively the factors, technological and social and economic, which cause buildings to cost as much as they do and which keep the building of necessary structures from being accomplished at the rate society seems to require. It would be spurred by the realization that the profession we are a part of has a duty because of its central, coordinating position, to search out the answers—a duty to each individual client, and in the larger sense a duty to society as a whole.

After a competent study has been made of the difficulties and the ways they might be resolved, then the resolution envisages the calling of a meeting by some over-all agency—perhaps the Board of Economic Advisors to the President. The meeting would bring together all elements of the building industry, but would differ from other "investigations" that have been held recently because it would start with information in hand, the findings of the architectural committee.

We like this resolution and all that it implies, and we hope the profession as a whole, in and out of the Institute, will give the committee which must be set up all the support possible. We certainly intend to.

Very truly yours,

*The Editors*

The Editors

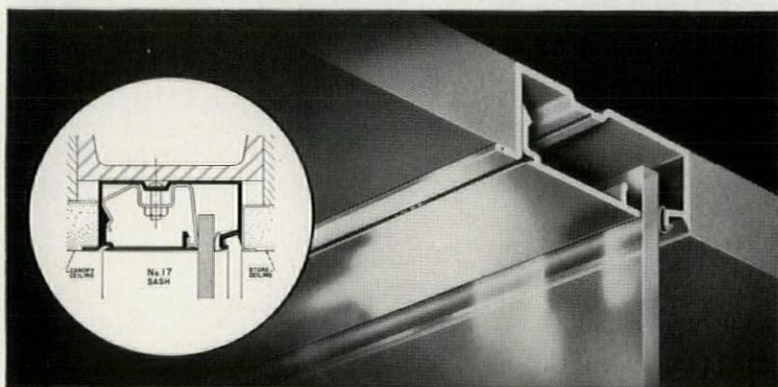
P/A:kos

# Interesting uses of *Glass*

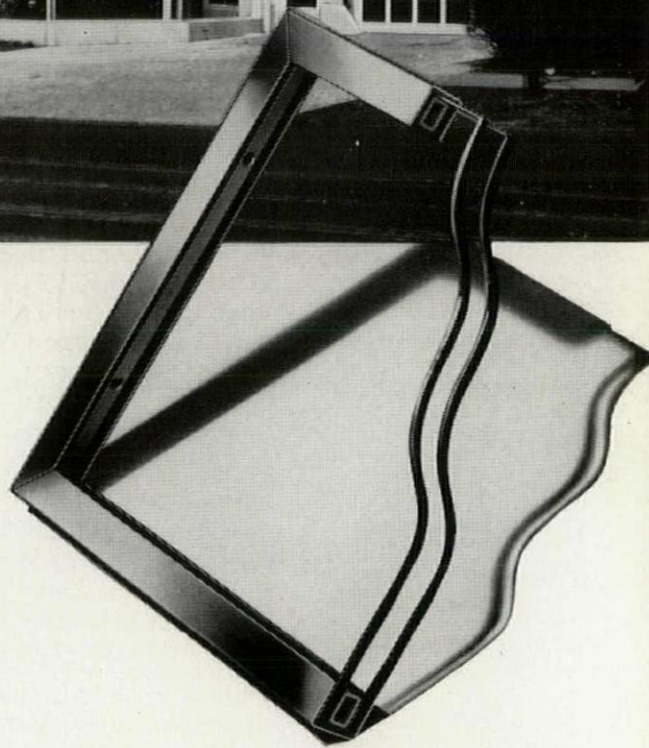


IT'S HARD TO PASS BY one of the new, "Open Vision" store fronts without looking to see what is inside. That's why so many clients are requesting "open vision" store front designs. "Pittsburgh" has a complete line of quality products to help you meet the exacting demands of this new trend.

(Architect: Harrison E. Baldwin, New Haven, Conn.)



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(Architect: William York Cocken, Pittsburgh)

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(Architect: Edward F. Sinnott, Richmond, Virginia)

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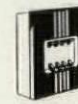
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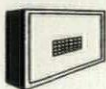
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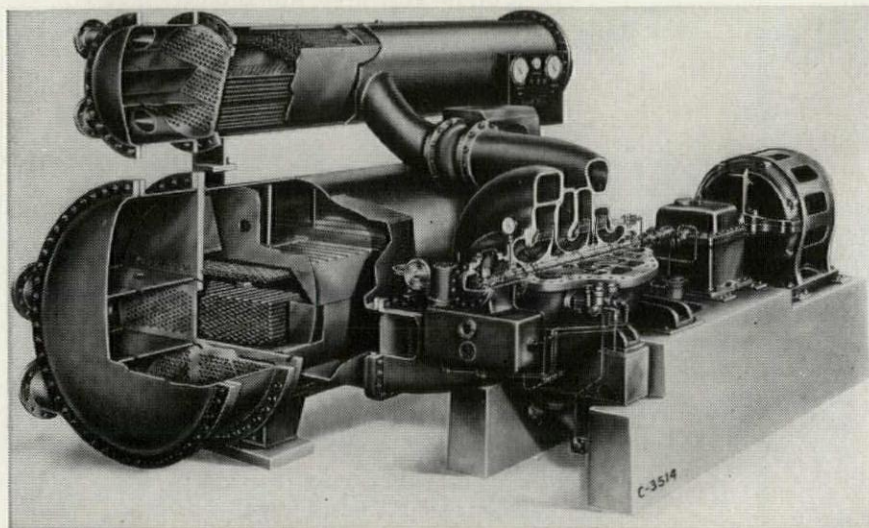


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Worthington Pump & Machinery Corporation, Harrison, New Jersey

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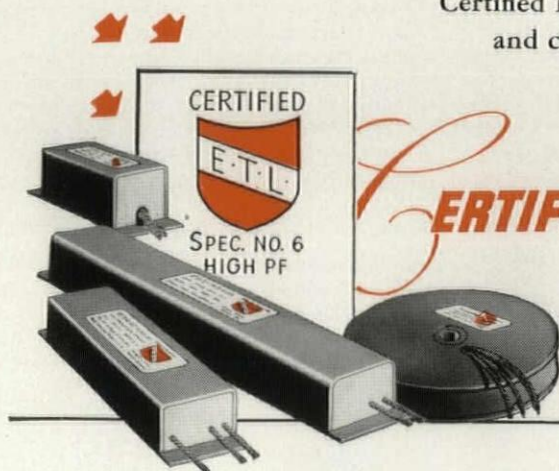
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## STREAMLINED SPECIFICATIONS

*Dear Editor:* I have had some very nice acknowledgements referring to the several exemplars published in *P/A*. The last one seems to have been helpful as an extended illustration of method in writing according to the "streamlined" system, about which numerous architects (including some of the best-known offices) have inquired of me.

A project under discussion by some of the members in our chapter contemplates the issuance of a quarterly bulletin the material for which will be largely supplied by the membership. Such material will include informal statements setting forth the thinking and/or experience of members on subjects of state-wide professional interest; exchange of cost data experienced by architects in various parts of the state (which should help to promote accuracy in preliminary estimates); experiences of architect-client relationship where disagreements or other unusual circumstances have arisen; etc. I expect to contribute my recommendations on methods for writing specifications.

JAMES D. BEACHAM  
Greenville, S. C.

## INTEREST AND VALUE

*Dear Editor:* In reviewing a few of my past editions of *PROGRESSIVE ARCHITECTURE* and *Pencil Points* magazines, I have run across several articles in your Materials and Methods sections which pertain to the streamlining of specifications and specification surgery by Horace W. Peaslee and James D. Beacham, architects.

These articles on the logical and sensible approach to the writing of specifications are of extreme interest and value to me in the work I perform in my profession.

ROBERT E. MURRAY  
New York, N. Y.

## TO EXCHANGE IDEAS

*Dear Editor:* It occurs to me that you may be interested in knowing of the work of the International Federation for Housing and Town Planning, of which I am honorary treasurer. Possibly, indeed, membership in or contact with the Federation may be useful to you personally or to the organization with which you are connected. The

Federation now has members in 34 countries and can be extremely useful in the exchange of ideas and information.

The Federation also sponsors a biennial International Congress, attendance at which is always stimulating and enjoyable. I hope there will be a large delegation from both the U.S.A. and Canada at the meetings to be held in Zurich in June this year. As soon as conditions permit, it is intended to schedule a Congress in the American Continent.

F. J. OSBORN  
London, England

## P/A AWARD DINNER

*Dear Editor:* May we add our congratulations to those you must be receiving for the splendid Award Dinner held on June 1st at the Commercial Club of San Francisco.

We thoroughly enjoyed the program and feel you and your organization are to be highly commended for the architectural award program and its valuable contribution towards the advancement of the architectural profession.

EDWIN H. WILDER, Editor  
The Architect and Engineer  
San Francisco, Calif.

## OPEN HOUSE EXHIBIT

*Dear Editor:* One house I am now building is on a very prominent street and has caused a lot of curiosity. And from all I can gather is being very favorably received. As a matter of fact, I have an idea which I am going to try to carry through. My theory is that people need to be shown. How can we expect them to know when the only good example of organic architecture I know of in St. Clair County is well hidden in the woods and wasn't even discovered by me until last winter? And at the most the public's contact with architecture is the real estate section of the paper and perhaps popular house magazines. So upon completion of the house, before the folks move in, I propose to have an open house—an exhibit of contemporary architecture. Probably the folks will invite a good many friends and prominent people, and I am planning an exhibit of examples of modern architecture with some explanations, some models, maybe

a little furniture which one of my talented young friends is designing and building. No highballs or cocktails—just a chance for the people to get acquainted with the better way of living!

Incidentally the house should be a good example for anyone, being built for my parents who have lived all their lives in (and are breaking away from the nostalgia of) a house which was built for them by my grandfather for them to start housekeeping. They have given me free reign for design, the only restrictions being reuse of present furniture—and, of course, cost. The house is designed for solar heating and around their favorite hobby, gardening. The only change made was elimination of the radiant heating system (for which I am not sorry now) to get the price down to \$14,000 complete.

This item of meeting a cost budget, incidentally, is an important criterion of a good contemporary architect which is usually overlooked. I am doing another house for a fellow who wouldn't even allow himself the luxury of flush doors, figuring he could get one-panel stock doors cheaper. I omitted doors wherever possible and sliding doors in the closets which would have worked swell—nothing added that wasn't absolutely necessary—and still we have a good piece of contemporary architecture. It won't get the publicity that a lot of these lush houses get—but certainly it is a better piece of architecture than a lot of them, and I feel that I have done the profession as well as the public a service.

CHARLES F. JOST  
Webster Groves, Mo.

## BETTER UNDISGUISED

*Dear Editor:* Can anything be done about our manufacturers destroying the character and value of the materials they manufacture? Can they be convinced that architects prefer to use materials with their natural and intrinsic surfaces and colors for an honest architecture? Can they be convinced that they should stop making their materials ape every other material conceivable?

A stainless steel salesman introduced to our office a new technical advancement (?) in which the surface of *stainless steel* is rolled so that it will have the texture of *leather* or *linen*.

How much sham can our buildings stand?

HENRY P. FETZER  
Salt Lake City, Utah

# ANEMOSTAT

## DRAFTLESS AIR DIFFUSERS

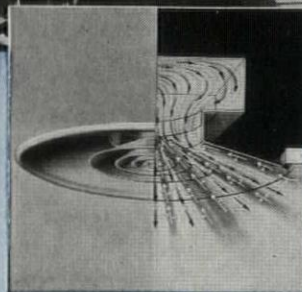
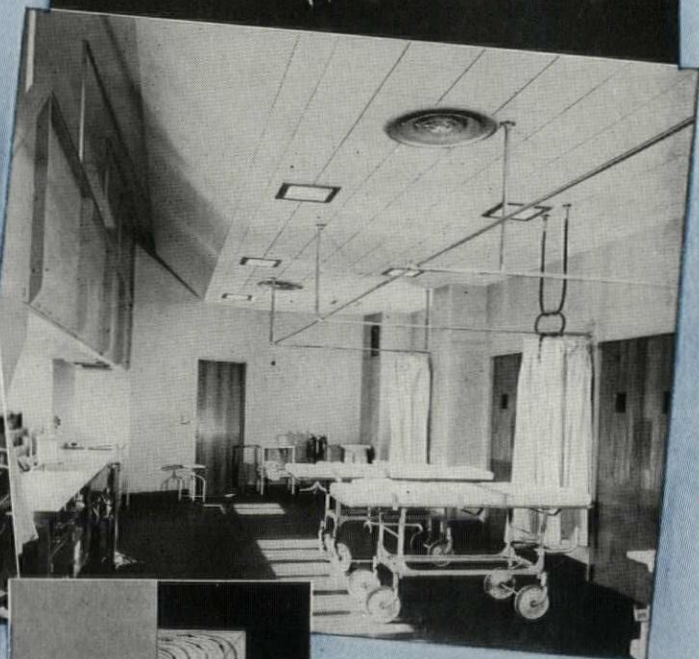
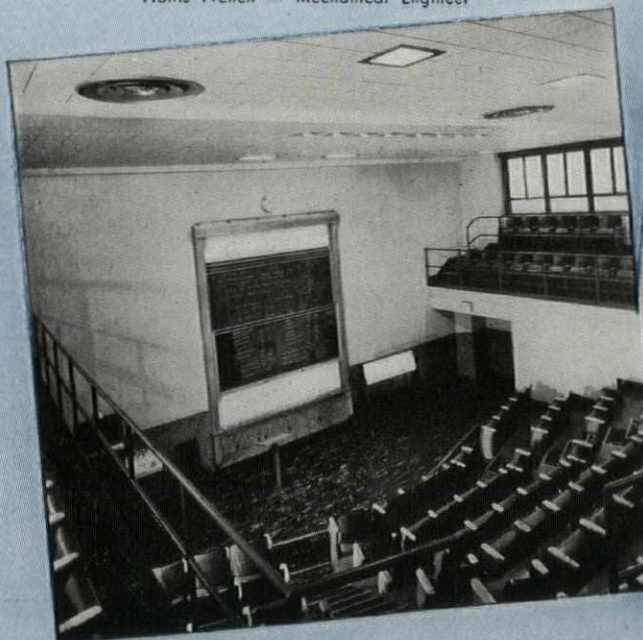
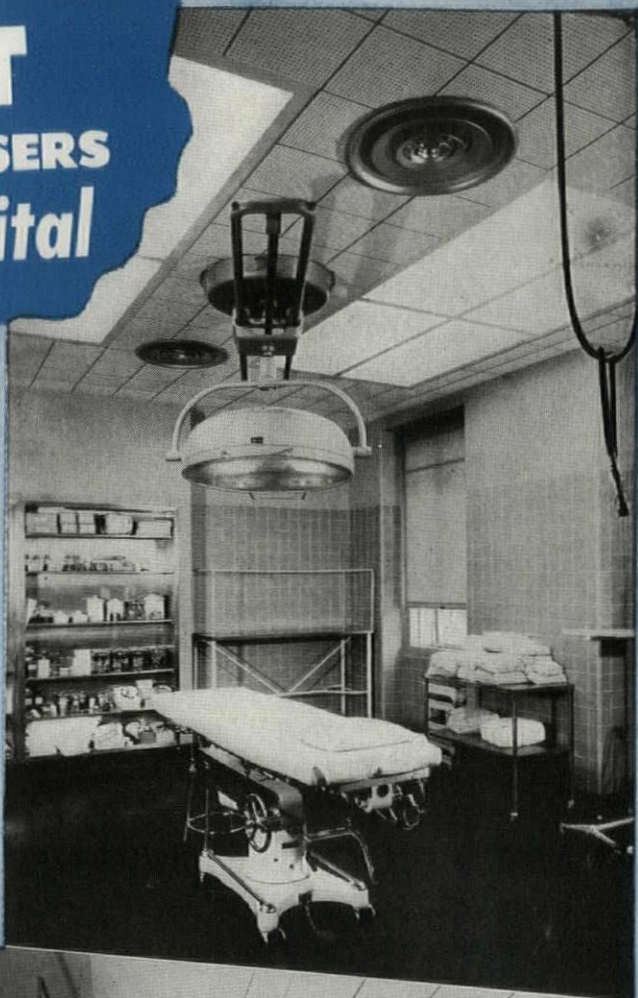
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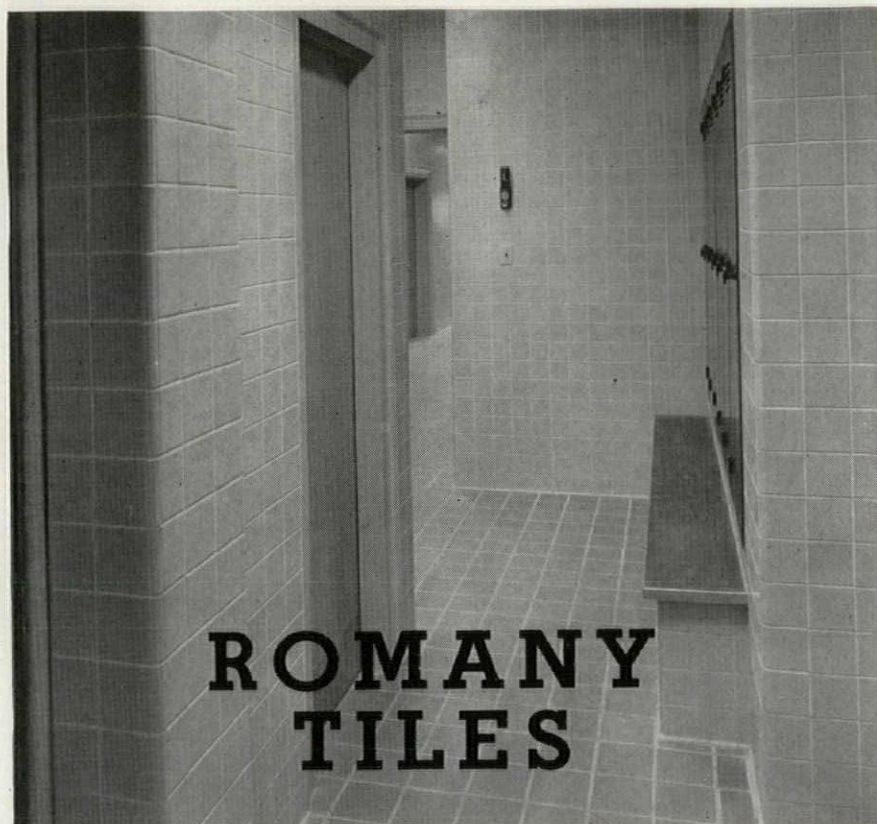
**FELLOWSHIPS**

ERIC QUELL, Forest Hills, N. Y.; VINCENT MOSCARELLA, Brooklyn, N. Y.; and JOHN J. WALLACE, Middletown, N. Y., have been awarded Robert James Eidlitz fellowships of \$1000 each for study and travel abroad in 1948-1949. The

fellowships are awarded annually to graduates of Cornell University College of Architecture, in memory of Robert James Eidlitz, a Cornell graduate of 1885. Mr. Quell will study at the Eidgenoessische Technische Hochschule, Zurich, Switzerland. Mr. Moscarella will register as a student in the Faculty of Architecture, University of Rome, Italy.

Mr. Wallace will enroll at the Royal Academy of Art, Stockholm, Sweden.

RONALD A. DICK, Beckenham, Kent, England, has been awarded a \$1500 special fellowship offered to a foreign student by the College of Architecture, Cornell University, for the year 1948-1949. Mr. Dick, a graduate of the Ecole Speciale d'Architecture, Paris, is now completing his studies at the Bartlett School of Architecture, London. Alternates for the fellowship are FLORIAN VISCHER, Basle, Switzerland; MARCELO URRETS ZAVALIA, Cordoba, Argentina; and LLOYD E. A. ORTON, Melbourne, Australia.



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**SCHOLARSHIPS**

The first postwar LE BRUN TRAVELING SCHOLARSHIP of \$2800 of the New York Chapter of the A.I.A. has been awarded to Jouko Hakola, of New York, N. Y. The award was based on the best entry of drawings of a health center building for an industrial city of 100,000 population. The purpose was to house essential health services presently located in public buildings and rented quarters. Mr. Hakola, who studied architecture and design at Pratt Institute, New York University, and the Art Students League, will undertake a study of health centers in this country and abroad.

VICTOR A. LUNDY has been awarded the ROTCH TRAVELING SCHOLARSHIP IN ARCHITECTURE for 1948, sponsored by the Boston Society of Architects. Mr. Lundy plans to travel and study abroad for one year, visiting Scandinavian and eastern European countries.

**EXHIBITION**

Outstanding architects, designers, retailers, and manufacturers, all specialists in their fields, will speak at the conference of 10 clinics to be held in conjunction with the SECOND ANNUAL INTERNATIONAL STORE MODERNIZATION SHOW, Grand Central Palace, New York, N. Y., July 6th through July 10th. There will be five subjects discussed at the clinics, each clinic to be repeated during the week so that those attending either the first or the last two and one-half days may be present at all five clinics. Clinics are scheduled as follows: Store Layout and Traffic, July 6th and July 8th; Store Lighting and Color, July 6th and July 9th; Displays and Fixtures, July 7th and July 9th; Store Fronts, July 7th and July 10th; Planning and Budgeting for Modernization, July 8th and July 10th. Invitations to the Show and registration cards for the

(Continued on page 12)



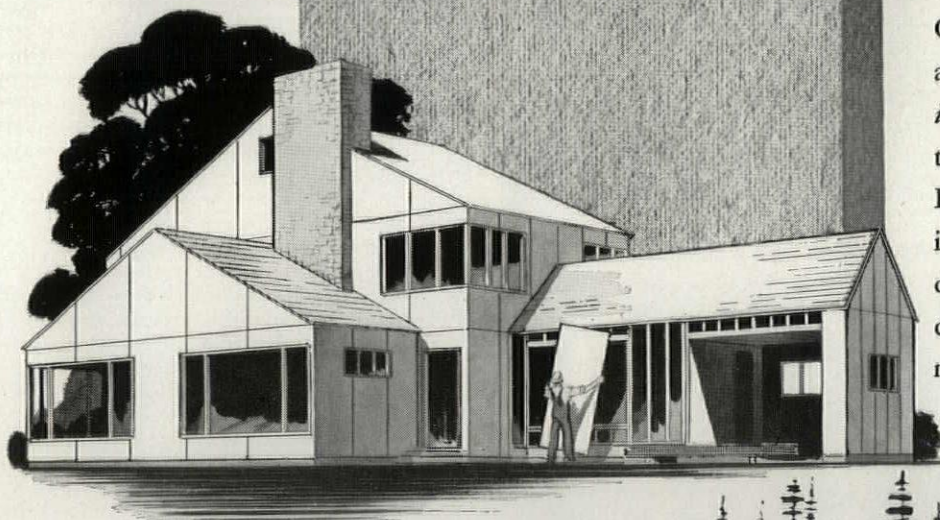
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Architectural Section 10a/9

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## Notices

(Continued from page 10)

clinics can be obtained from the Store Modernization Show, 40 E. 49th St., New York 17, N. Y.

### COMPETITIONS

Three sculptors from the New York area have won the top prizes for medal designs in a nation-wide COMPETITION CONDUCTED BY THE MAYOR'S COMMITTEE

FOR THE COMMEMORATION OF THE GOLDEN ANNIVERSARY OF THE CITY OF NEW YORK. Each will receive \$1500. Winners are John Amore, New York, designer of the Medal of Honor to be awarded to a New Yorker who has done the most for his city during the past 50 years; Michael Lantz, New Rochelle, N. Y., designer of the Medal of the Golden Anniversary to be awarded to the professional, commercial, or finan-

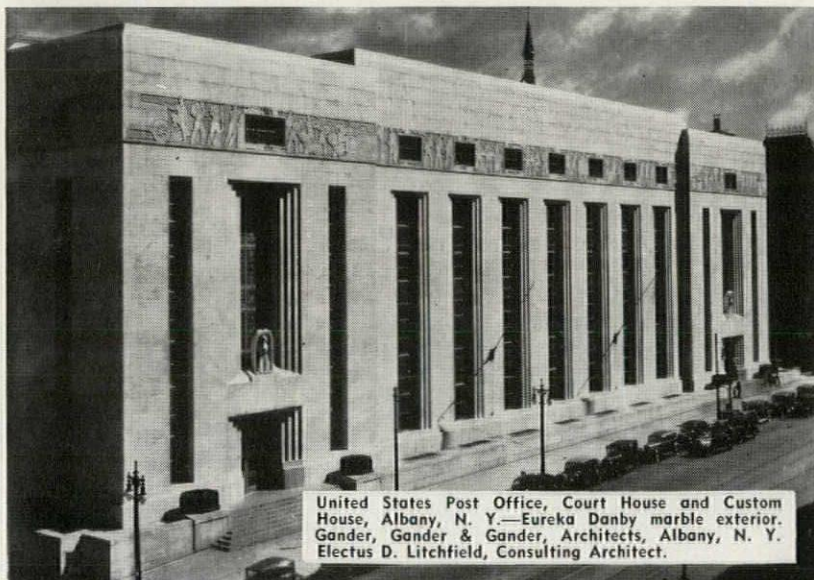
cial institution which has done the most for the city during the past 50 years; and Theodore C. Barbarossa, New Canaan, Conn., designer of the Departmental Medal of the Golden Anniversary to be awarded to the city department which makes the best showing at the Golden Anniversary Exposition, Grand Central Palace.

The National Association of Home Builders is sponsoring a COMPETITION FOR THE BEST RESIDENTIAL COMMUNITIES. Six classifications have been set up as follows: Class 1, best small group of single family homes under 50 units, with emphasis on the "economy" house; Class 2, best group of single family homes over 50 units; Class 3, best residential community; Class 4, best garden apartment or multiple group; Class 5, best suburban shopping center, where construction is 25 percent complete. The competition is open to members of the National Association of Home Builders, and prizes will be awarded and winners' plans displayed at the annual Home Builders Exposition in February 1949. Complete information may be obtained from the Urban Land Institute, 1737 K St., N. W., Washington 6, D. C., which is acting as consultant for the competition.

Patricia Casey and J. G. Replinger, both of the University of Illinois, have been awarded first and second prizes respectively in the recent competition sponsored by PROGRESSIVE ARCHITECTURE in conjunction with the Beaux-Art Institute of Design for the best solutions to the problem of the DESIGN OF A REHABILITATION CENTER FOR UNDERPRIVILEGED CHILDREN. Winners received prizes of \$50, first place, and \$25, second place, and first medals. One hundred and forty-six entries, representing eight schools, were considered in the competition, program for which was written by Lawrence B. Perkins, of Perkins & Will, Architects-Engineers, Chicago, Ill. In addition to the two prizes, the University of Illinois also won two first medals and three second medals. Oklahoma Agricultural and Mechanical College entries received two second medals. Other schools participating were Catholic University of America, Pennsylvania State College, Princeton University, Rice Institute, the University of Pennsylvania, and the University of Virginia. Chairman of the competition jury was Robert Allan Jacobs, of New York.

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United States Post Office, Court House and Custom House, Albany, N. Y.—Eureka Danby marble exterior. Gander, Gander & Gander, Architects, Albany, N. Y. Electus D. Litchfield, Consulting Architect.



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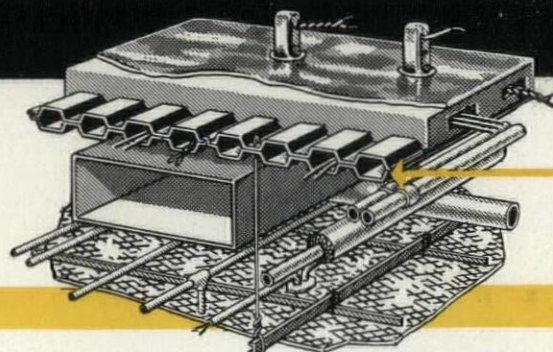
SAMUEL ZOURI MOSKOWITZ, Deposit and Savings Bank Bldg., Wilkes-Barre, Pa.

OSWALD FISCHER, 35-10 Broadway, Long Island City 3, N. Y.

ROBERT I. GOLDBERG, 22 E. 17th St., New York 3, N. Y.



## A building is known for FACILITIES, NOT FACADE



Q-Floors offer the architect a means of meeting increased, and still increasing, mechanical demands within a building.

A facade can be soon outmoded. But if every electrical demand can be satisfied promptly, the years can not obsolete the building as a working mechanism. Q-Floors are steel. The cells are crossed over with headers which carry the wires of every kind of electrical service.

An electrical outlet can be established on any six-inch area of Q-Floor. No need to locate outlets, or even partitions, until tenants are in. For an outlet, an electrician drills a small hole, pulls the wires and installs the fitting . . . all done in a matter of minutes without fuss, muss, or trenches.

Note the composite drawing. Steel Q-Floor is shown with suspended ceiling and a condensed visualization of mechanical equipment (no preset inserts) needed in a modern building. For such a job, a solid, monolithic floor is as active as a tombstone.

Aside from the electrical availability, Q-Floor has the value of reducing construction time 20 to 30%. It comes pre-cut and eliminates much of the

unpredictable factors of field construction. This time-saving is money-saving for your client. Also, you can estimate an earlier finish date—which is to say, an earlier revenue date for your client.

As for delivery of steel—remember, you must allow time for demolition and excavation. By then the steel will be ready.

The price of Q-Floors is right in line—less than the carpet that covers them. Think of a floor as the source of flexibility for the whole building. It has been specified for the largest postwar buildings in this country and the British Empire, because it keeps a building modern—regardless of the passing years. See Q-Floor fittings at any General Electric construction materials distributor's.

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## NEW STRUCTURE: NEW DESIGN

More general appreciation of the work of Louis Sullivan, an acceptance that informs the earnest contemporary designer rather than adding to the professional stature of the great Chicago pioneer, is evidence of sound progress. Seven oversized photographs of selected "Architectural Masterpieces of Louis Sullivan" are spotlighted dramatically in a room set aside for their exhibition by the Department of Architecture of the Museum of Modern Art, New York. Together they attest the skill of the leader of the Chicago School, at the beginning of this century, in his efforts to define the new multistory architecture that structural advances had just made possible; as well as his disgust with the then-fashionable revivalism, expressed through invention of new ornament.

Intended to emphasize the importance of Sullivan as the man most directly responsible for the development of the American skyscraper in its formative years, in the nineties, this show follows a display last season of "Masterpieces of Henry Hobson Richardson" also presented by the Museum of Modern Art. Philip Johnson, consultant to the Department of Architecture, announced the exhibition with the note:

"The three great names in the history of American architecture are Henry Hobson Richardson, Louis Sullivan, and Frank Lloyd Wright. In today's concern with contemporary building the important work of Richardson and Sullivan is too often dismissed as old-fashioned, or is completely forgotten. These men are the pioneers of the modern movement and their contribu-

tions should be understood as an exciting and necessary part of the development of the architecture that we know and admire today.

"The name of Louis Sullivan has become synonymous with the American skyscraper. Throughout his entire life Sullivan . . . attempted to define the new architecture that industrial growth and structural advances had made possible. His battle was won by the men who came after him, who recognized his genius and built upon his achievement."

Sullivan was seeking to create a new architecture—giving character to the new multistoried building without resorting to the formulas of past styles. He raised the architectural level of the commercial building, but at the time lost favor in the Midwest by his refusal to join or applaud those who were happy in reviving, with modern improvements, the glories of Rome and Greece. Despite his able writings, the influence of his thoughtful design, even his exuberant ornament that has been discarded as later designers adopted other means of expressing structural lightness, he has been little understood or acknowledged. Henry-Russell Hitchcock, of M.I.T., and Vincent J. Scully, Jr., of Yale, who acted as special consultants for the exhibition, have paid tribute to the lasting importance of Sullivan. Captions for the pictures shown in the Museum of Modern Art's exhibition are as follows:

**Tower, Auditorium Building, Chicago (1887-89)** When the Auditorium Building was completed, its tower was the

highest point in Chicago. Its unified, vertical design was the first step toward the skyscraper as we know it today. For the simplicity and power of the building's unadorned mass Sullivan owed much to Henry Hobson Richardson (1838-1886), the first of America's architectural pioneers. Abandoning, in the tower, the heaviness of Richardson, Sullivan rises to a new and more original range of expression. The smooth surfaced stone, the open arcade, and the tall, vertical arches enclosing gridded panels of windows suggest a thin sheathing of the interior rather than a solid masonry block. This new weightless monumentality was to become an important characteristic of twentieth century architecture.

**Wainwright Building, St. Louis (1890-91)** Here, for the first time, a skyscraper achieves unity and monumentality. The new skeleton construction needed only a thin sheathing to protect the metal frame against fire. Sullivan's soaring lines emphasize lightness and height. Broad corner piers frame the grid of tall brick verticals and short terra-cotta horizontals. The feeling of monumentality is increased by the contrast between the plain stonework of the ground stories and the rich luxuriance of the terra-cotta frieze. This frieze and the slab cornice above it decisively terminate the verticality of the intervening stories. Offices are arranged around a partially enclosed court along which the elevators are banked. The plan shows

(Continued on page 16)



VALUED ANEW for their significance as early expressions of twentieth century design in this country are the three buildings shown here—Carson Pirie Scott store (left), Gage Building (right, above), and Guaranty Building (right)—from the current Exhibition of Architectural Masterpieces of Louis Sullivan continuing until July 25 at Museum of Modern Art, New York.



Photos by Chicago Architectural Photographing Company

# Modern... **YET** Traditional

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DOUBLE-COURSED CEDAR SHINGLES OR CEDAR SHAKES PLEASINGLY ACCENTUATE THE TRADITIONAL IN SIDEWALL CONSTRUCTION

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*( Send for free "double-coursing" folder which explains how to estimate quantities and compute costs—a real time saver. )*

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5510 White Building, Seattle 1, Washington  
or Metropolitan Building, Vancouver, B. C., Canada

\*Sixteen-inch shingles are exposed up to 12"  
Eighteen-inch shingles are exposed up to 14"

## Progress Report

(Continued from page 14)

that alternate piers on the exterior sheathe major structural supports. To the intervening piers Sullivan gave equal visual importance in order to emphasize height through the repetition of verticals.

**Guaranty Building, Buffalo (1894-95)**  
Though taller and larger than the

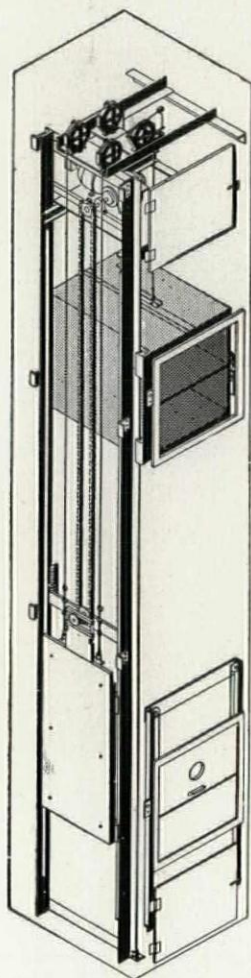
Wainwright, the Guaranty Building looks lighter and less massive to the eye. The broadly spaced round piers of the ground story express the structure with clarity. Above the horizontal line of the mezzanine double verticals rise like slender stalks. The entire structure is sheathed in modeled terra-cotta in lacy patterns that give no feeling of weight. Even the cornice, a heavy, flat

slab on the Wainwright Building, is here hardly more than an outward curvature where the lines of the piers interlace at the top.

**Gage Building, Chicago (1898-99)** These facades of the nineties illustrate clearly the difference between competent building and distinguished architectural design. All three buildings were structurally the work of Holabird and Roche, but the facade of that on the right is by Sullivan. All three have the wide glass bays made possible by skyscraper construction. Yet the Holabird and Roche facades appear heavy and clumsy, without visual expression of the lightness implicit in their metal frames and thin sheathing. It is the clearer articulation and the carefully studied proportions of the Gage Building which makes it seem lighter and more integrated than its neighbors. Sullivan divided the windows horizontally so that the entire front became an organized pattern of regular casement sash under panels of prism glass, between horizontal bands of decorated terra-cotta. He also thinned his molded vertical piers like plant stems, topping them with bursts of delicate organic tracery which relieve the heaviness of the broad band of terra-cotta at the top.

## ROTO-WAITER by Sedgwick

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that never overtravels**



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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
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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.

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**ELECTRIC AND HAND POWER ELEVATORS AND DUMB WAITERS**

**Carson Pirie Scott Department Store, Chicago (1899-1904)** This department store made architectural history. It was the first distinguished example of the great skyscraper stores we know so well today. Its clean lines, large windows, and horizontal bands of masonry and glass, so radical when Sullivan introduced them, have become a twentieth century formula. The upper part of the building is strikingly simple. Huge rectangular windows fill the entire space between terra-cotta sheathed structural beams and stanchions. The naturally horizontal pattern of the metal cage construction is consciously and deliberately stressed by delicate continuous lines of decoration above and below the windows. The top story, set back to reveal the columns, emphasizes the structural lightness. A later addition at the right, by other architects, lacks this refinement, and seems, by comparison, solid and dull.

**Martin Ryerson Tomb, Graceland Cemetery, Chicago (1889)** The massive blocks of polished blue-black granite of which this tomb is built are treated plastically, like the forms of abstract sculpture. For its scale, its materials, and its organic simplicity, nothing could contrast more with Sullivan's characteristic works. No surface decoration diminishes the force of its compact mass and plain geometric shapes. In an age of correct stylistic revivals Sullivan designed a tomb so completely original that it can be traced to no specific his-

(Continued on page 18)

**For schools that are modern  
in a most practical way...**

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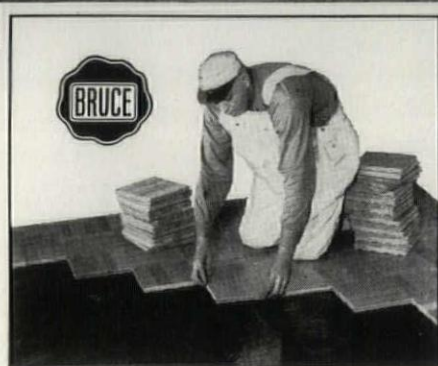
Leading school architects prefer this type of floor over all others. They find Bruce Blocks particularly adapted to modern functional design and concrete slab construction.

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## Progress Report

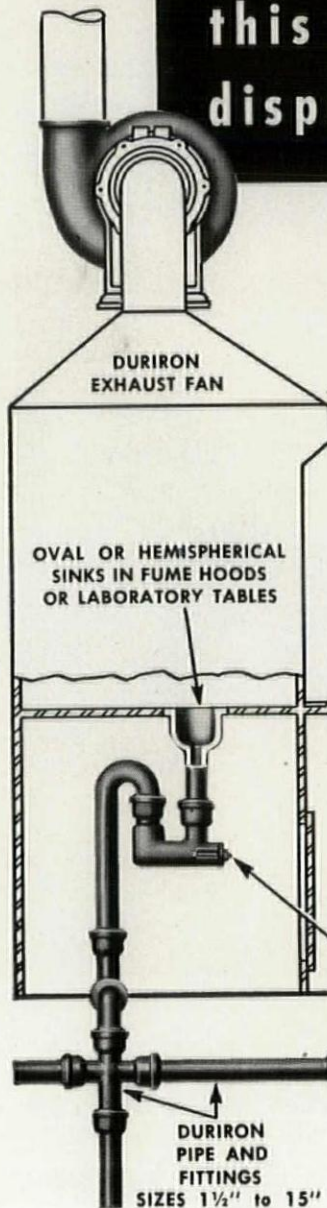
(Continued from page 16)

toric source. Such a vigorous design expresses more of life than death.

**McVicker's Theatre, Interior, Chicago (1890-91)** In this theatre interior Sullivan's ornament, which he considered essential to architecture, is at its most luxuriant. The intricacy of the gilded and molded plaster is the antithesis of

today's plain surfaces. Yet here are none of the hack, machine-made clichés of the nineteenth century against which modern taste has reacted so strongly. These plantlike forms and fantastic geometries are original, imaginative and vigorous, carefully confined within rectangular structural panels. They form an important contemporary contribution to the history of ornament.

## WHY CORROSION CAN'T DESTROY this laboratory waste disposal system



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## NOTICES

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**EDWARD L. BARNES**, 33 E. 75th St., New York, N. Y.

**WALLACE FRANKLIN YERKES**, association with **NAESS & MURPHY**, 80 E. Jackson, Chicago, Ill.

**ALLAN McNAB & ASSOCIATES, INC.**, designers for industry, 485 Madison Ave., New York, N. Y. Affiliated with international design firm. Directors include **CLARK MINOR**, **SHERMAN FAIRCHILD**, **H. W. DODGE**, **ALEXANDER C. BARKER**, **RALPH MACBANE**, **ROBERT L. GRAHAM**.

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**RICHARD L. MEAGHER**, new partner of **ROBERT L. BROWN**, **WILLIAM G. WELLS** (**BROWN, WELLS & MEAGHER**, architects), 118½ W. Campbell Ave., Roanoke, Va.

**GEORGE H. DAVIS, JR.**, architect, association with **JOHN B. FERGUSON**, engineer, 14423 Sylvan St., Van Nuys, Calif.

**I. WILLIAM RICCIUTI**, **M. WAYNE STOFFLE** (**RICCIUTI, STOFFLE & ASSOCIATES, ARCHITECTS**), Queen & Crescent Bldg., New Orleans, La.

**ROBERT B. MYERS**, 200 Gregory Pl., West Orange, N. J.

**FLEMING R. HURT**, **CHARLIE D. HURT, JR.** (**FLEMING R. HURT & CHARLIE D. HURT, JR., ARCHITECTS**), offices in Waynesboro and Lexington, Va.

**JAMES J. SOUDER**, association with **YORK & SAWYER, ARCHITECTS**, 101 Park Ave., New York, N. Y. Mr. Souder continues practice of the late Jarrett C. White in Washington office, 1308 18th St., N. W., Washington, D. C.

**ALEXANDER KNOWLTON** (formerly associate of **Edward D. Stone**), 139 E. 53rd St., New York 22, N. Y., and 14 Steamboat Rd., Great Neck, N. Y.

**JOHNSON, WALLWORK & DUKEHART**, partnership dissolved. Practice to be continued by **JOHN K. DUKEHART**, 802 Dekum Bldg., Portland 4, Ore.

**WALTER L. MOODY**, association with **RALPH C. FLEWELLING** (**RALPH C. FLEWELLING & WALTER L. MOODY**), 3112 Los Feliz Blvd., Los Angeles 26, Calif.

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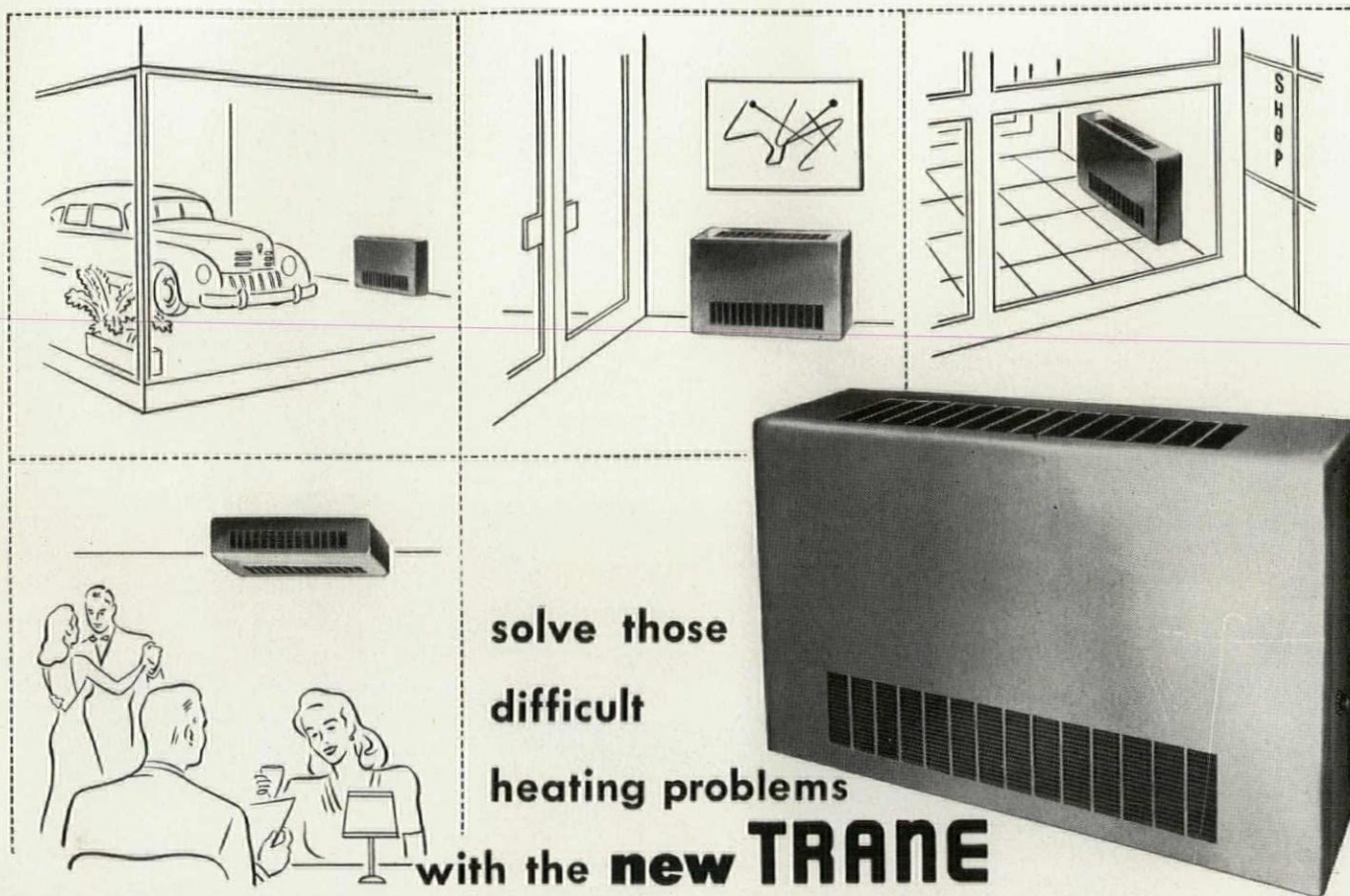
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**GENERAL G-E ELECTRIC**



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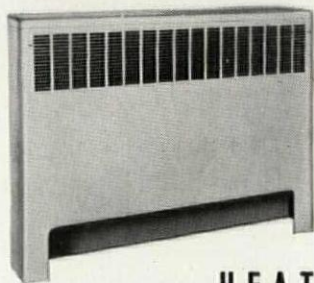
Here is the perfect unit for those hard-to-handle spots. Ideal where large volumes of heat are needed but where beauty is a must and space is at a premium. The new Trane Force-Flo Heater has the Btu output of a unit heater with an exterior that matches the sleek lines of Trane Convactor-radiators.

The sleek, compact cabinet of the Trane Force-Flo Heater occupies little floor space. It can easily be recessed for a still greater saving in space. Efficient centrifugal fans inside the cabinet are Trane-designed to be whisper quiet. The famed Trane Coil is furnished in types for either hot water or steam.

Styled and engineered to blend perfectly when used in systems with Trane Unit Ventilators and Trane Convactor-radiators.

Use the new Trane Force-Flo Heater to counteract heat loss from extremely large window areas, to supply heated air in volume for entrances, to heat larger areas where ordinary radiation might not be practical. You'll find this trim new unit useful in offices, stores, hotels, theaters, public buildings, and any place where both beauty and high heating capacity in a limited space are called for. Ask any of the 200 Trane Sales Engineers for further information.

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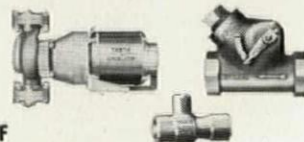
Nationally advertised Trane Convactor-radiators provide ideal heating. One universal model fits every requirement. Available from local jobbers' stocks.

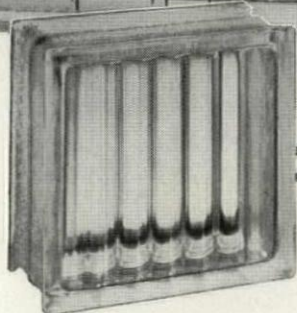
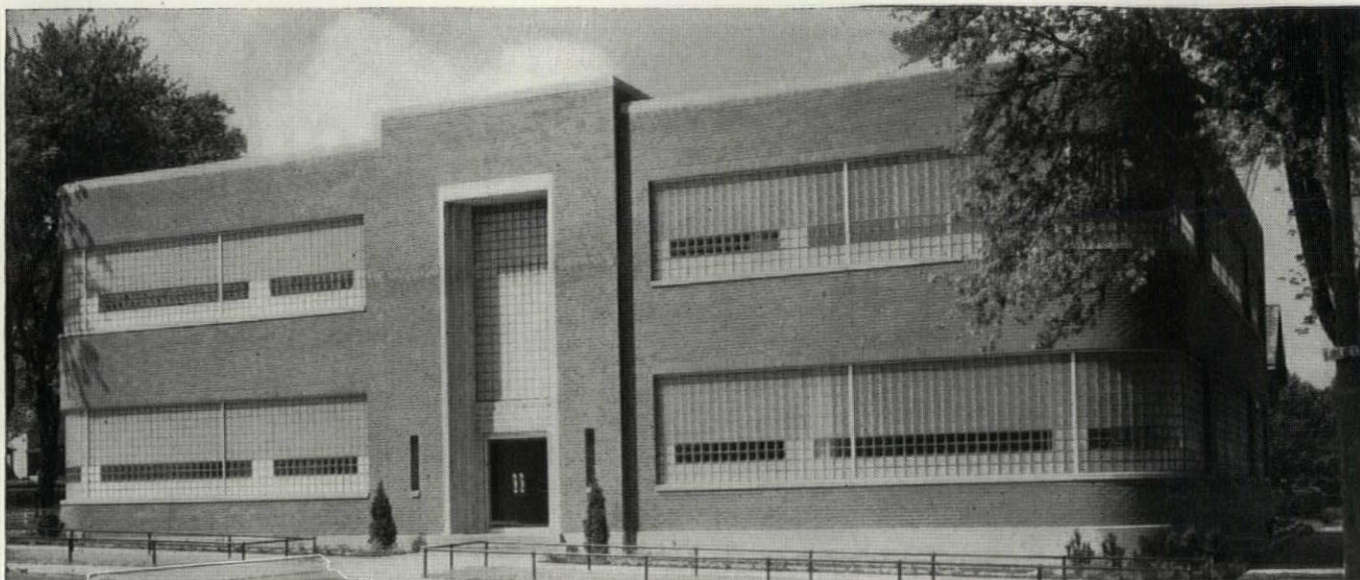
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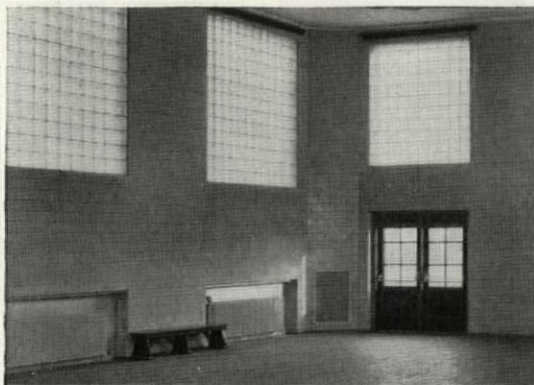




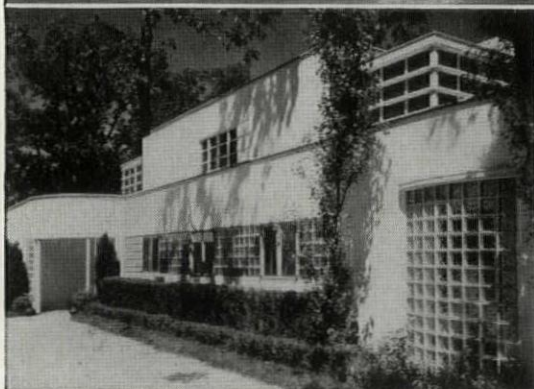
In this trim, modern building, the combination of patterns illustrates the functional versatility of PC Glass Blocks. Essex blocks provide ample light, without glare. Vue blocks provide vision panels. Prism Light-Directing blocks transmit daylight to areas remote from light openings. Easy cleaning, minimum repairs and replacements keep maintenance costs at low levels. Architect, Hugh M. Nelson, Erie, Pa. Photo, courtesy of Continental Rubber Works.

## Why PC Glass Blocks are the mark of a modern building

In this school gymnasium, PC Glass Blocks provide plenty of daylight for games of speed and skill. The insulation value of PC Glass Blocks prevents excessive heat loss through large lighting panels, with a consequent saving in fuel costs. PC Glass Blocks are also used in school stairwells, entrances and lunchrooms. Architect, Arthur F. Baer, City of Cleveland, Board of Education.



In this distinctive residence PC Glass Blocks admit plenty of bright cheerful daylight. Their insulating properties make homes cooler in summer, warmer in winter. Privacy and noise dampening add to the comfort of the home with PC Glass Blocks in light openings. Architect, Philip B. Maher, Bluff, Ill.



• PC Glass Blocks are not only smart and modern in *appearance*—they are also extremely modern in their *functional versatility*, in the many ways in which they help to improve operating conditions in your clients' buildings.

Panels of PC Glass Blocks admit plenty of clear daylight without color change. The line includes patterns that serve all lighting functions, including directing daylight to areas where it is needed.

The insulating value of PC Glass Blocks eases the load on air-conditioning equipment in summer, saves fuel costs in winter. Easily cleaned and rarely needing repairs or maintenance, PC Glass Blocks also effect a sharp drop in maintenance costs. All of which adds up to important savings.

Whether your clients are considering new construction or remodeling projects, be sure you have the latest information on PC Glass Blocks. Why not send in the convenient coupon for our new booklets today? Pittsburgh Corning Corporation also makes PC Foamglas insulation.

### PC GLASS BLOCKS

...the mark of a modern building



FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS

# GLASS BLOCKS

Distributed by PITTSBURGH PLATE GLASS COMPANY

by W. P. Fuller & Co. on the Pacific Coast and by Hobbs Glass Ltd. in Canada

Pittsburgh Corning Corporation  
Room 637-8, 632 Duquesne Way  
Pittsburgh 22, Pa.

Please send along my free copies of your booklets on the use of PC Glass Blocks in Commercial, Public and Industrial Buildings and in residences of all sizes and prices. It is understood that I incur no obligation.

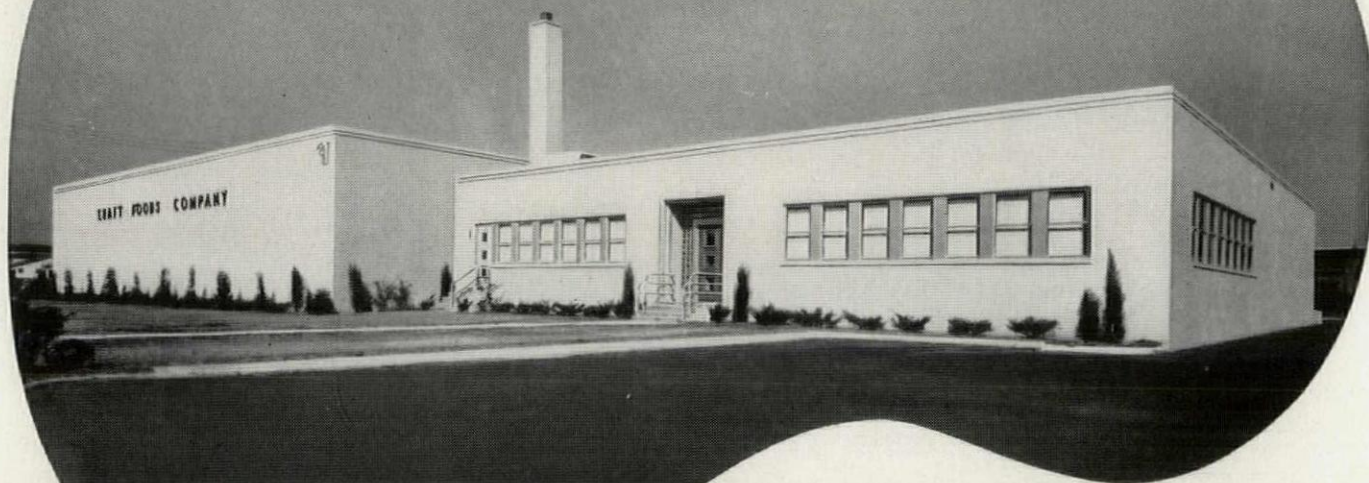
Name.....

Address.....

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

# It's surface smooth

—thanks to Kimpreg\* + Plywood concrete forms



The new Kraft distributing branch — at Louisville, Kentucky. Note the exceptional smoothness of the architectural concrete. Credit goes to Del E. Webb Construction Co. and Kimpreg-surfaced plywood panels.

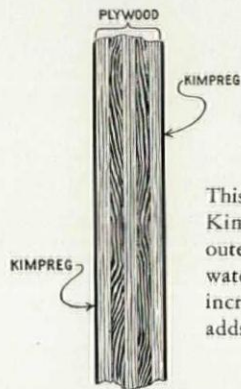
**Surfaces are smooth, attractive.** Kimpreg\* plastic surfacing is a hard, flint-like material that is bonded to plywood in manufacture. Its phenolic resin facing produces a remarkably even, long lasting concrete finish. Lessens rubbing down labor.

**Maintenance expense cut.** Plywood forms protected with Kimpreg resist the abrasion of sand, gravel and cement. On the Kraft project, these panels used a minimum of oil. They stripped fast — cleaned quickly. Light in weight and durable, they were easily moved, safely shipped to another job.

**Ultimate cost of the forms reduced.** Handled with reasonable care, Kimpreg-surfaced plywood panels can be re-used many, many times. They're unaffected by rain, or snow, or temperature extremes.

**Panels are easily constructed.** These versatile panels can be sawed, drilled or nailed to erect any size form desired. They're available through your local plywood jobber; are also sold by individual plywood manufacturers under the trade name Laminex, Inderon and Westboard Industrial Plastic. For full information, write us on your business letterhead.

**KIMBERLY-CLARK CORPORATION**  
Plastics Division      Neenah, Wisconsin



This sectional view shows how Kimpreg surfaces are fused to the outer layers of plywood. A tough, water-resistant sheathing, Kimpreg increases the abrasion resistance — adds to the life of plywood.

**Kimpreg**  
REG. U.S. PAT. OFF.  
PLASTIC SURFACING



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

# BETTER BRICKWORK

## is EASIER with **BRIXMENT!**

Full mortar joints are one of the best possible precautions against leaky brick walls. When cross joints and head joints are not *completely* filled with mortar, in both face brick and back-up work, water may penetrate to the inside of the wall, through openings in the joints.

### HEAD JOINTS



Slushing does not properly fill the voids in the head joints.



When mortar is spotted on only one corner of the brick, slushing seldom fills the voids.



Even when mortar is spotted on both corners of the brick, slushing will not always fill the voids.

### CROSS JOINTS



When mortar is spotted on both corners of the header brick,



there is nowhere near enough mortar in the joint.




Slushing will not fill the voids.

Poor workmanship like that shown above is the result of (1) excessive speed in laying the brick or (2) the fact that the mortar is so poor and lean as to make better workmanship too difficult.

Brixment makes this kind of workmanship unnecessary. It is rich, plastic, and has

high water-retaining capacity. It works almost as easy as straight lime putty. In addition, it has better bonding quality and greater resistance to freezing and thawing. It is this *combination* of advantages that makes Brixment the leading masonry cement on the market.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY



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



## Able Helmsmen Needed-

WITH our way of life threatened and even our motives for helping others discredited, we drift toward destruction of the very thing that makes America the envy of the world -- individual liberty. Who can steer our course, to save our craft from wreck?

It is *your* job. You, as a leader in your community, must help arouse public opinion to a full appreciation of America's sacred heritage of free-

dom for the individual. You owe it to yourself, your family, your neighbor and your nation, to give of your experience and knowledge to pilot us safe through the storm.

These tempestuous times demand the intelligent work of leaders in every community to preserve America as the impregnable vessel of liberty and freedom. Here then, is important work for able helmsmen.

### The Youngstown Sheet and Tube Company

General Offices--Youngstown 1, Ohio

Export Offices--500 Fifth Avenue, New York

MANUFACTURERS OF CARBON, ALLOY AND VOLOY STEELS

COLD FINISHED CARBON AND ALLOY BARS - SHEETS - PLATES - WIRE - TIE PLATES AND SPIKES -  
ELECTROLYTIC TIN PLATE - COKE TIN PLATE - PIPE AND TUBULAR PRODUCTS - CONDUIT - BARS - RODS.

# GOOD-LOOKING METAL DOORS

## *Immediately Available at Low Cost!*

Fenestra Fireshield Swing Doors combine attractiveness with durability. Here are quality metal doors that you can recommend with confidence for many uses—for entrances, exits, stairwells, communicating doors, etc.—for apartments, stores and other commercial buildings, and factories, to mention a few.

**IMMEDIATE SHIPMENT**—standardization of types and sizes enables your building supply dealer to carry ample stocks to meet your needs for many door uses.

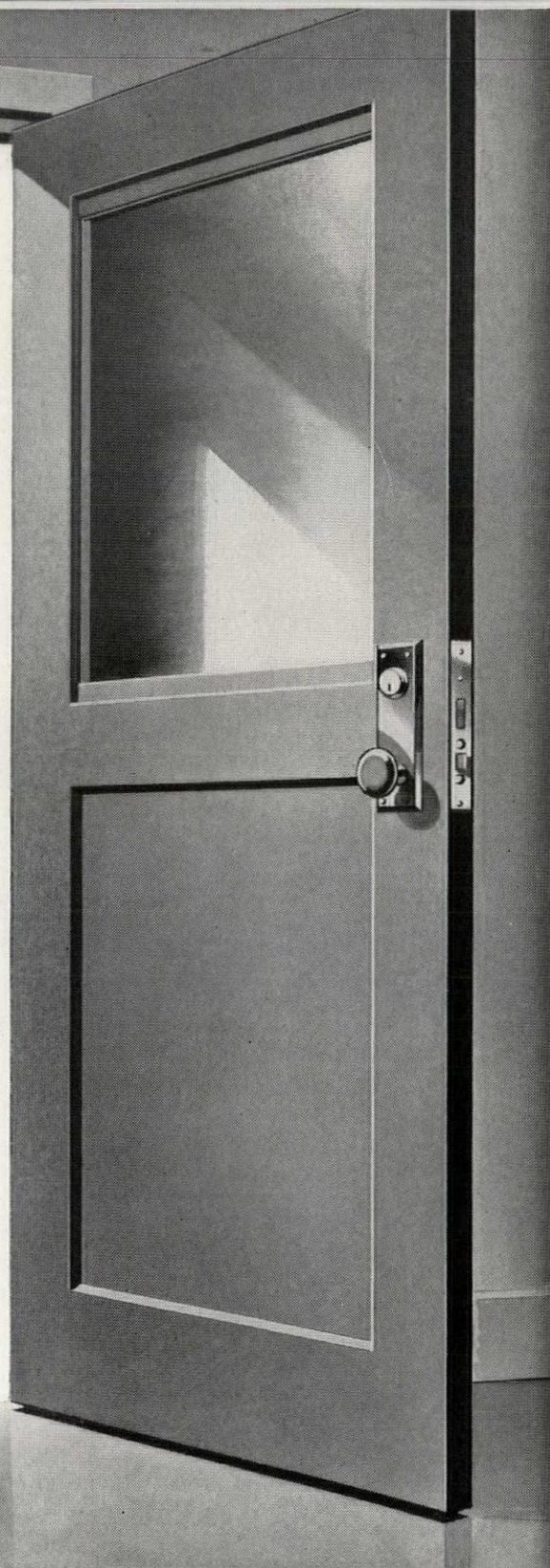
**WHY LOW-PRICED**—these doors are standardized in six sizes most commonly used for single swing doors. That streamlines production, means lower cost. You get a sturdy metal door for far less than many doors now on the market. Installation costs are reduced, too—swing doors come to the job complete with frames and hardware machined, fitted, ready to assemble.

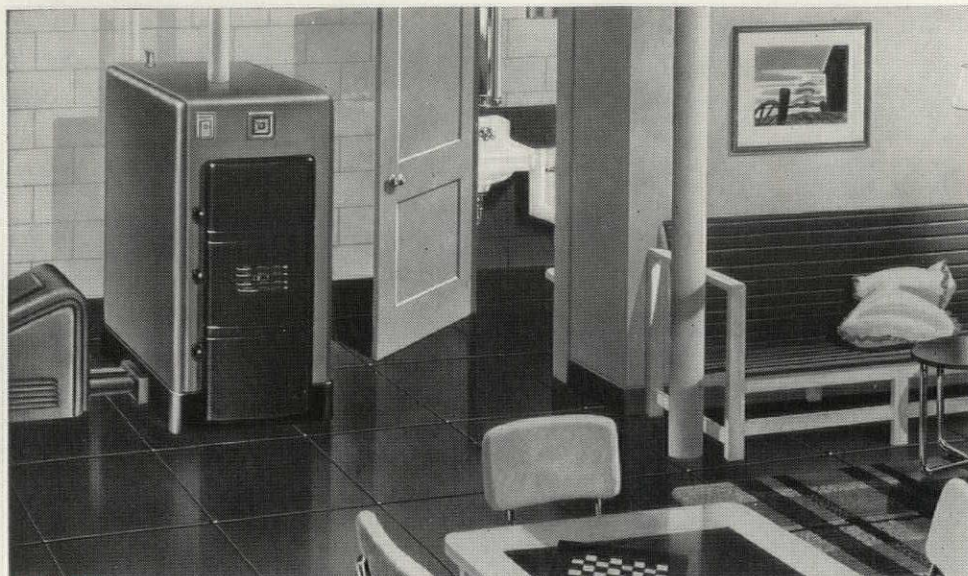
**UNDERWRITERS' LABEL**—doors of same design are available with Underwriters' B Label.

For full information on these doors, as well as counterweighted doors, call the nearest Fenestra office. Or write to Detroit Steel Products Company, PA-7, 2253 East Grand Blvd., Detroit 11, Mich.

# *Fenestra*

**FIRESHIELD SWING AND SLIDE  
METAL DOORS**





Thanks to the attractive jacket and tight construction of the stoker-fired **SEVERN** Boiler, a clean, modern downstairs recreation room can be created in this basement. Designed especially for small and medium-size homes, the **Severn** is also available in models for hand-fired coal, or for use with the **Arcoflame** or any other good oil burner.

The sink in this compact kitchen is designed for convenience and lasting beauty. It is the popular **ROYAL HOSTESS** by American-Standard — a luxurious 6-foot model made in one piece of rigid cast iron, finished with a heavy coating of acid-resisting enamel. Comes in sizes and models to fit virtually any kitchen arrangement . . . in white and many attractive colors to harmonize with any decorative scheme.



**FIRST**

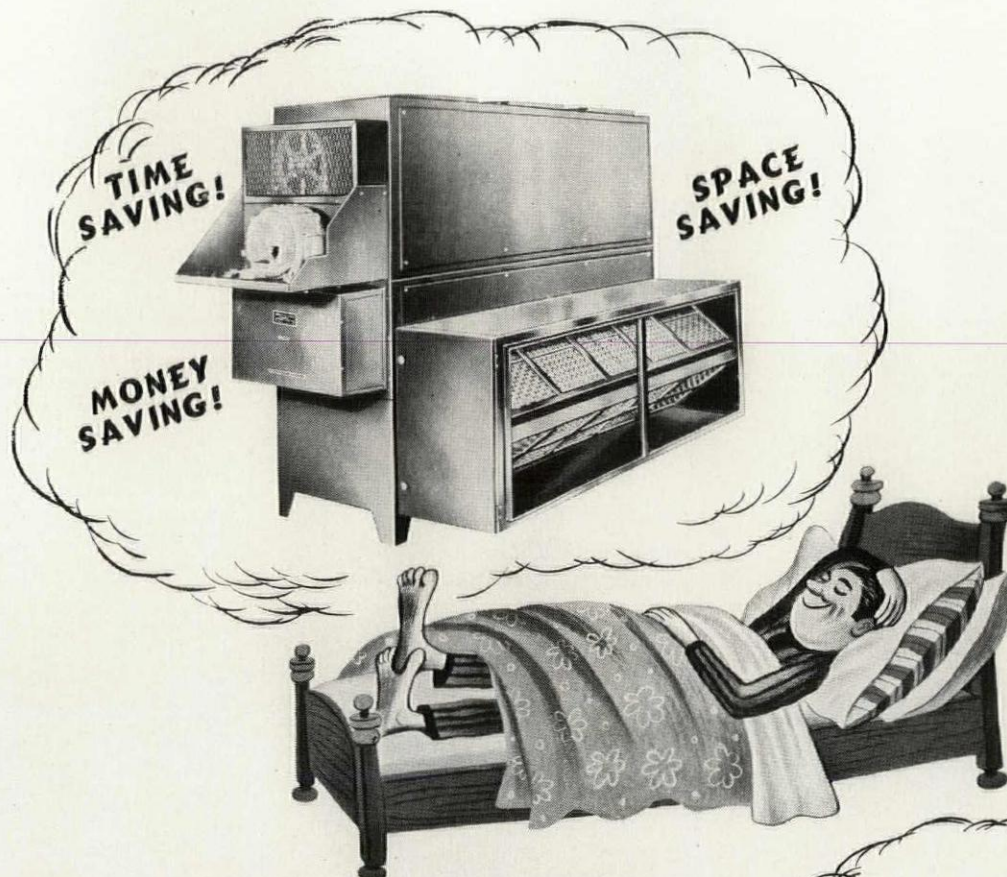
**in heating and plumbing  
for every size and type of home!**

**W**HETHER you're planning a large home . . . or a small one; an elaborate home . . . or a simple one, you will find the right heating equipment and plumbing fixtures for the job in the complete American-Standard line. Not only does American-Standard offer you the widest choice of styles, types, models and sizes, but it also assures you of the finest quality. And when you select these good-looking, efficiently designed, long-lasting products, you're sure they'll please. No line is better known . . . for more American homes have heating and plumbing by American-Standard than by any other single company. For details of the complete range of products, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.



**AMERICAN-Standard**  
*First in Heating and Plumbing*

**LOOK FOR THE MARK OF MERIT**—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, for all fuels—Water Heaters—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships and Railroads.



## **CENTRAL PLANT AIR CONDITIONING** with the features you dream about

**T**O eliminate costly application problems and installation bugs in central plant air conditioning, G-E engineers arranged countless discussions with architects and contractors in the air conditioning field. The results of this intensive field work went into the construction of the new G-E Central Plant Air Conditioners.

### **Time Saving . . . Space Saving**

Compact and light in weight, these units are pre-engineered, pre-fabricated and parts pre-matched for speedy installation. Expensive building alterations—cutting and patching—are avoided because each sub-assembly has ample clearance to pass easily through a standard 30" door. You'll find 12 assembly arrangements available for vertical or horizontal installations—virtually eliminating the bugaboo of space problems.

The new vertical or horizontal combinations both share equally the built-in G-E qualities which give quiet, smooth operation . . . dependable, consistent performance. Why not discuss them with your local G-E air conditioning representative today? *General Electric Company, Air Conditioning Department, A8507, Bloomfield, New Jersey.*

### **Look at these Dream Points!**

- Pre-matched components
- Pre-engineered
- Quick, easy selection
- Accurate, reliable G-E ratings
- No expensive rigging
- No wall knockdowns—(Every part will go through standard 30" doorway)
- Attractive appearance (No shielding or furring)
- No field fabrication of parts

# **GENERAL ELECTRIC**

*Better Air Conditioning*

"Tell me **MORE** about this  
New Blonde **KORINA**"



One eyeful of Korina tells you why architects and their clients demand "more."

If *you* haven't feasted your eyes on this honey blonde newcomer to the line of Weldwood Hardwood Plywoods, hang on to your hat:

Here's coloring and a figure that rival *Prima Vera*; a figure that shows stripe and more than a hint of cross fire. Only Korina is cleaner, sounder, with flitches that run wider.

And, speaking of *figures*, Korina more than rivals *Prima Vera* in price — it's *about one third less*. Yet, remember, Korina offers all the popular Weldwood Plywood advantages that alert, style-conscious clients know about and appreciate.

Korina's natural color is a lovely, light shade similar to *Prima Vera*. Finish it with White Firzite and you have the highly popular "bleached" effect. Add stain and you have a panel that closely resembles hard-to-get comb-

grain Oak or Walnut. Korina is a versatile wood that takes a variety of finishes — and takes them all beautifully.

Ample stocks of Korina Weldwood are on hand in lumber yards everywhere. With *your* approval Korina will soon be going into modern interiors, the finest homes, the smartest shops.

#### BRING YOURSELF UP TO DATE ON KORINA

Fill, clip and mail this coupon:



#### UNITED STATES PLYWOOD CORPORATION

55 West 44th St., New York 18, N. Y.

Gentlemen: I want to know *more* about your interesting new Weldwood Hardwood . . . KORINA.

Name

Address

City  State

## WELDWOOD Plywood

*Weldwood Plywood and Mengel Flush Doors are products of*

UNITED STATES PLYWOOD CORPORATION  
New York 18, N. Y.

THE MENGEL COMPANY  
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*Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U. S.-Mengel Plywoods, Inc. distributing units in Atlanta, Dallas, Jacksonville, Louisville, New Orleans, Houston, St. Louis, Tampa. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.*

Weldwood\* Hardwood Plywood  
Weldwood Moldings  
Douglas Fir Weldwood  
Mengel Flush Doors  
Douglas Fir Doors  
Overhead Garage Doors  
Molded Plywood  
Armorpoly\* (metal-faced plywood)

Tekwood\* (paper-faced plywood)  
Flexmet  
Weldwood Glue\* and other adhesives  
Weldtex\* (striated plywood)  
Decorative Micarta\*  
Flexwood\*  
Flexglass\*  
Firzite\* \*Reg. U. S. Pat. Off.

  
Plastics and Wood  
Welded for Good

*Weldwood Plywood is made in both Interior and Exterior types, the former bonded with extended urea resins and other approved bonding agents; the latter with phenol formaldehyde synthetic resin.*

## A Specific Cure for Hardening of the Electrical Arteries

ARCHITECT'S PRESCRIPTION  
*Rexall Drug*  
Rx *Walkerduct*  
*use as needed*



Home Office and Warehouse, United Rexall Drug Co., Los Angeles, Cal.



Two miles of Walkerduct—hidden in the floors of the modern Rexall Building—provide ample raceways for a vast network of telephone, power and lighting circuits. Over 1800 service outlet fittings are now in use and there's room for hundreds more.

A Walker Underfloor System is the modern answer to present and future electrical needs. *Flexible*—to meet changing requirements during the life of a building. *Adaptable*—to any type of floor construction. *Economical*—to supply electrical outlets quickly and eliminate costly changes.

**WALKER BROTHERS**  
Conshohocken 43, Pa.

Albert F. Roller, Architect, San Francisco; Lyle E. Patton, Consulting Electrical Engineer, San Francisco; Fishbach & Moore, Inc., Electrical Contractor, Los Angeles; Gough Industries, Inc., Electrical Distributor, Los Angeles.

For further details, write for our Catalog #146 or consult Sweet's Architectural Files.

**walker**  
of Conshohocken

**UNDERFLOOR SYSTEMS**

# *New Amazingly Low Cost* **REVOLVING DOOR**

Large glass area for beauty, clear vision and adaptability to modern design.

Perfected folding mechanism . . . manufactured to highest custom-built standards for safe, efficient handling of traffic at all times.

Made of bonderized, rust-resisting, heavy-gauge, cold-finished steel sheets. Three sizes: 6' 10" in height by 6' 0", 6' 6" or 7' 0" in diameter.

Finish colors and hardware to match or harmonize with your present entrance are usually available.

Easily erected with local labor where desired. Complete, illustrated installation instructions furnished.

Produced in quantity from a basic design, to provide "custom" features at a new low price.



Here at last is a revolving door with "custom-built" features . . . costing no more than swing doors of comparable capacity. Here is exactly the door you've been waiting for . . . and at the lowest price imaginable! Everything you have to have! Nothing that you don't need! Can be purchased any way you wish: with or without accessories; with or without connecting or adjacent work; finished at the factory or primed for finishing at job site; with or without glass; completely installed or f.o.b. factory. Each door as carefully engineered and as individually tailored as any custom job.

Write for details today!

REVOLVING  
DOORS  
INTERNATIONAL VAN KANDEL

EVANSVILLE 7, INDIANA •

1604 EDGAR STREET

# ELECTRUNITE E.M.T.

provides **UNBROKEN** corrosion resistance



*Cutaway view of compression coupling. Due to design of this coupling, there are no corrosion-inviting threads necessary on ELECTRUNITE E.M.T.—yet strong, water-tight joints are made quickly and easily with only a wrench or pliers.*

● Here's another important advantage of Republic ELECTRUNITE E.M.T.—the original lightweight rigid steel wiring raceway. It results *from* the fact that ELECTRUNITE E.M.T. is threadless. It results *in* finished raceways that can't be beat for corrosion-resistance ... raceways that provide long years of dependable wiring protection in exposed, concealed and concrete installations.

Unlike other types of conduit, modern ELECTRUNITE E.M.T. never requires thread-cutting or turning into the fitting. Hence its tightly-adherent protective zinc coating remains unbroken and unmarred *throughout the entire finished raceway installation.*

This is but one of many reasons why ELECTRUNITE E.M.T. merits the Underwriters' Laboratories seal of inspection, and approval by the National Electrical Code. Other advantages afforded *exclusively* by ELECTRUNITE E.M.T. include Inch-Marking and Knurled Inside Surface on several of the popular sizes.

For complete information about these and still more job-proved advantages of much-in-demand ELECTRUNITE E.M.T., see your nearest ELECTRUNITE Distributor, or write direct to:

**REPUBLIC STEEL CORPORATION**  
STEEL AND TUBES DIVISION • CLEVELAND 8, OHIO  
Export Department: Chrysler Building, New York, 17, New York

#### SEE SWEET'S FILE

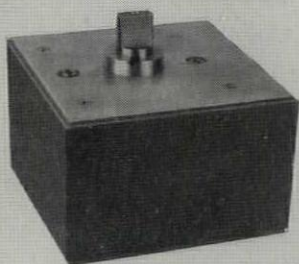
or write us for detailed information on these Republic Steel Building Products:

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Enduro Stainless Steel  
Toncan Enameling Iron  
Electrunite E. M. T.  
Fretz-Moon Rigid Steel Conduit  
Taylor Roofing Terns  
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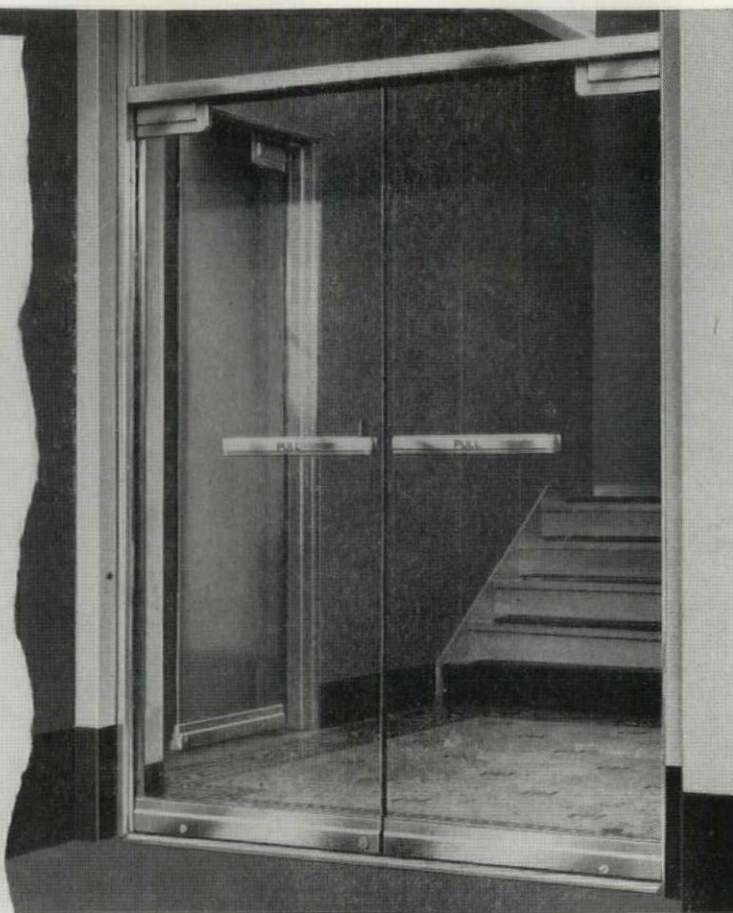
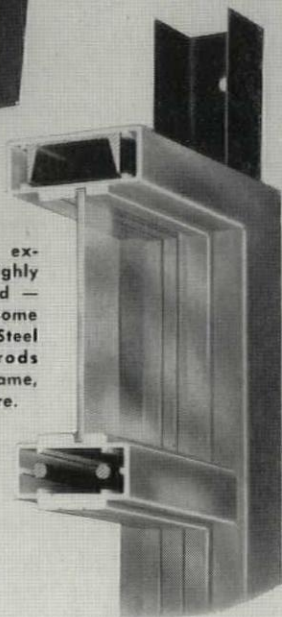


L I G H T W E I G H T   T H R E A D L E S S   R I G I D   S T E E L   R A C E W A Y

The Pittco Checking Floor Hinge is small in size ( $6\frac{1}{4}"$  x  $6\frac{1}{4}"$ ); provides positive door speed control, a separate checking control, and a built-in hold-open feature. It is sealed in oil for life. Case and cover are drop-forged. The main working parts are hardened and ground tool steel. Bearings are anti-friction, precision-ground.



Made of extra-heavy extruded aluminum — highly polished and anodized — the frame is a handsome and rugged structure. Steel channels and tie rods heavily reinforce the frame, as partially shown here.



"Pittsburgh's" new factory-built

# HERCULITE

## DOOR-FRAME ASSEMBLY

is easy to specify... easy to install

WHEN you order the new Pittsburgh Herculite Door-Frame Assembly, you are not involved in any complicated or long-drawn-out specifications. All you do is specify "Herculite Door-Frame Assembly" and provide the style number and size—of which there are twelve standard designs from which to choose. And it is easy to install, too. A completely factory-built frame — in one unit — no assembly is necessary on the job.

This Herculite Door-Frame Assembly is supplied complete with Pittco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts, and thresholds when specified.

In this frame, architectural styling

has been combined with structural and mechanical engineering to produce a unit that is both good looking and well-constructed. It is factory-built of special shapes and of heavy extruded aluminum, reinforced with structural steel. Metal craftsmen fabricate the frames to high quality standards, using special checking gauges to assure accuracy of all dimensions. Thus, when the building is ready for the doors, they are simply set on the hinge pivot, the top pivot is dropped into the top channel and the structure is complete.

The coupon below will bring you complete information on this new and revolutionary door-frame assembly. Fill it in and return it now.

Pittsburgh Plate Glass Company  
2238-8 Grant Building, Pittsburgh 19, Pa.  
Please send me your literature on "Pittsburgh's" new Herculite Door-Frame Assembly. There is no obligation on my part, of course.

Name.....

Address.....

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



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY



## In a Floor of Distinction Safety plus Wear-resistance

The slipping hazard has not been accepted—it has been banished here in this distinctive floor in the lobby of the civic auditorium at Grand Rapids, Michigan. Not a minimum of attractiveness has been subtracted from the precast art marble treads in this floor by adding the measure of safety with the inclusion of ALUNDUM® Terrazzo Aggregate. For this is the measure which adds permanent non-slip protection—unimpaired by water or other liquids and extreme resistance to wear even under heavy traffic.

Norton non-slip floors are made of hard, tough ALUNDUM® (aluminum oxide) abrasive and they are available in four distinct forms:

- ALUNDUM Terrazzo Aggregate
- ALUNDUM Cement Floor Aggregate
- ALUNDUM Stair and Floor Tile
- ALUNDUM Ceramic Mosaic Tile

See our Catalog in Sweet's (SA and SE)

**NORTON COMPANY**  
Worcester 6, Massachusetts

\*Reg. Trade-mark

**Norton Non-slip Floors**  
**NORTON COMPANY • WORCESTER 6, MASS.**



World News  
City News Editorial

# DAILY CHRONICLE

The Weather  
Monthly, fair and warmer  
through tomorrow with low  
humidity

## SPACE SAVING PARTITIONS IN 1084 NEW APARTMENTS

Gold Bond Solid Partition System provides more  
living space in Amsterdam Houses in N.Y.

New York City  
Housing Authority O.K.'s.

SHOT IN HIS OFFICE  
IN HEADQUARTERS  
AT NEW YORK

Get Latest Type, Says Inventor

OPERATORS CLAIM  
PEACE LIKELY AS

All 6 Bodies Removed  
In Parking-Lot Fire

'UNITY' AGITATION  
ACTIONS INDICATE  
REFUSE TO



**H**ERE'S another big job where Gold Bond Solid Partitions, of fireproof gypsum plaster and metal lath, will save about 4 inches per wall over old style walls. This system, employed throughout the Amsterdam Housing project in New York, will actually provide far more living space. Why not look into the Gold Bond Solid Partition system

for your next job? You'll find it fully described in Sweet's. Or, for a 15 minute demonstration by your local Gold Bond representative, just drop us a card. No obligation, of course!

**NATIONAL GYPSUM COMPANY**  
BUFFALO 2, N. Y.

**You'll build or  
remodel better with**

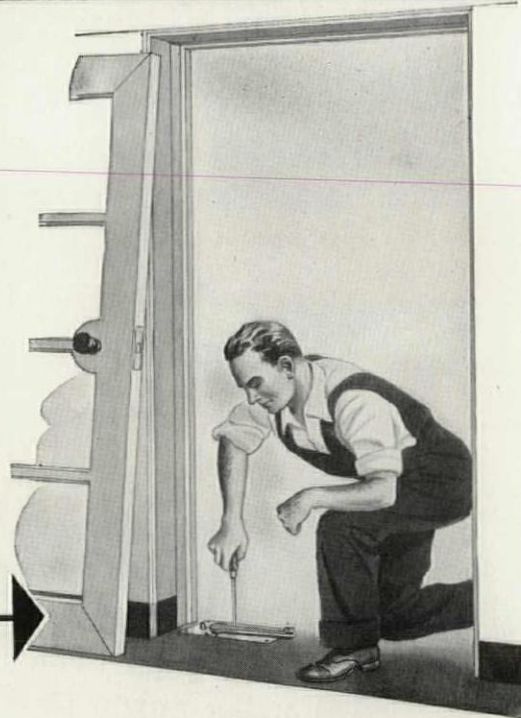
**Gold Bond**



← **OVERHEAD...**

**IS WHERE  
THE  
DOOR  
CLOSERS  
BELONG...**

**NOT UNDERFOOT** →



Alert designers today call for concealed control on all prominent doors. Some do not realize, however, the advantages of concealing the closers **OVER** the doors rather than in the floor. For three reasons overhead closers should be specified:

#### **FIRST COST . . .**

With list prices about equal, the *installed cost* of the overhead closer is usually much less than that of a floor closer. Why? No cutting of floors; no costly moves; no extra door holders or shock absorbers to buy; no expensive boxed or cut thresholds needed. The overhead closer is easily secured in a metal door and frame "blanked out" for it at the factory, or in a wood door and frame quickly prepared on the job. These savings run into real money.

#### **PERFORMANCE . . .**

An overhead door closer is basically more efficient because its power is applied farther out from the hinge than that of a floor closer. This gives greater leverage, a

smoother performance, less strain on closer, door and frame. All adjustments are easy to reach without removing anything.

#### **LONG-RUN COST...**

The real cost of any equipment is the *total cost*, including maintenance, over the years. Here the overhead closer is far more economical than the floor type. (We know this, after twenty years of making both types and observing the experience of users.)

The overhead closer needs less servicing and lasts longer. In its protected location above the door it avoids the abuses of floor dirt, scrub water, etc., which always foul floor closer and shorten its life. This is doubly true where closers are exposed to the weather.

LCN Catalog 11-b contains 33 pages of information on good door control; how to select the right closer; full data on each. Would you like a copy? Address LCN Closers, Inc., 466 W. Superior St., Chicago 10, Ill.



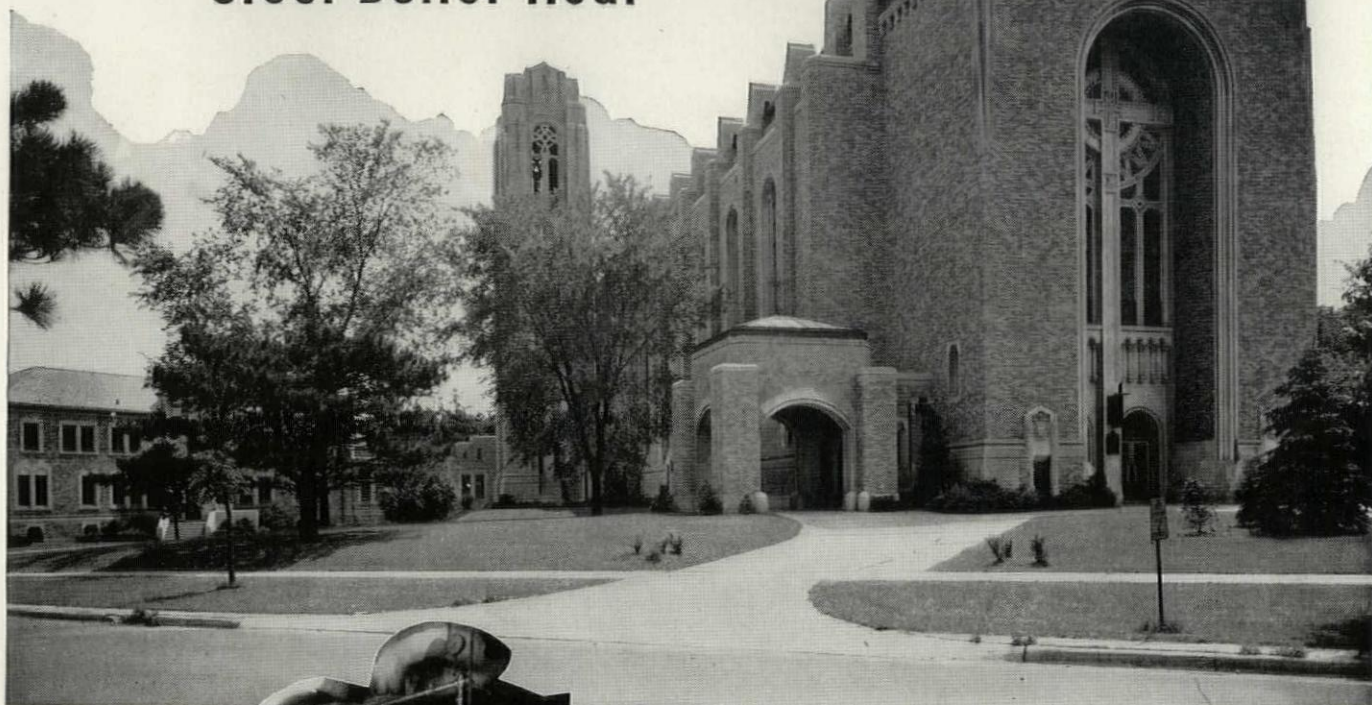
**LCN**

**Overhead and Floor Type  
Concealed and Surface Type Door Closers**

# KEWANEE

*the Word to the Wise*

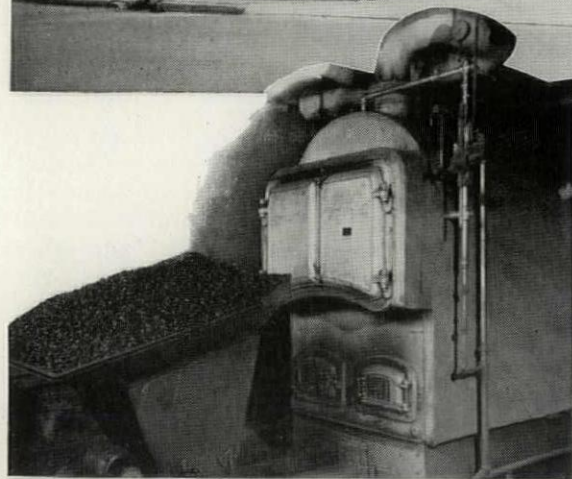
**KEWANEE signifies dependable  
Steel Boiler Heat**



**St. JOSEPH CHURCH and RECTORY**

Wilmette, Illinois

McCarthy, Smith and Eppig, Architects



Heating Contractor Geo. A. Henrich installed the ten thousand foot Type "C" Stoker Fired, Kewanee Welded Steel Boiler

Outstanding group... Church, Rectory and School... typical of the thousands of religious edifices in which Kewanee Steel Boilers insure dependable heat at low cost.



Reg. U.S. Pat. Off.  
MEMBER

**KEWANEE BOILER CORPORATION**  
KEWANEE, ILLINOIS

Branches in 60 Cities—Eastern District Office: 40 West 40th Street, New York City 18

Division of **AMERICAN RADIATOR & Standard Sanitary CORPORATION**

**OVER  
75 YEARS  
BOILERMAKERS**

The new Chicago office and plant building of "Power House" Candy Bars (Walter H. Johnson Candy Co.) features Insulux Glass Block to direct daylight deep into interior. Note clear windows for vision and ventilation. Bruce A. Gordon Co., Engineers; S. N. Nielsen, General Contractor; Frank Millers Sons Fireproofing Co., glass block installation.



## Notes on bending light

A NEW approach to daylight control in offices, laboratories, precision manufacturing plants and classrooms lies open.

Insulux Glass Block No. 351 actually bends light rays. Light is thus directed to ceiling for even distribution deep into the room.

Combined with Insulux Block No. 350 (pattern spreads light evenly through horizontal plane) brightness

contrasts are sharply reduced, and light is more evenly distributed throughout the room.

American Structural Products Company is a wholly owned subsidiary of the Owens-Illinois Glass Company. It has taken over the manufacture and sale of Insulux Glass Block and other Owens-Illinois structural products. For data on Insulux write Dept. E-26, American Structural Products Company, P. O. Box 1035, Toledo 1, Ohio.



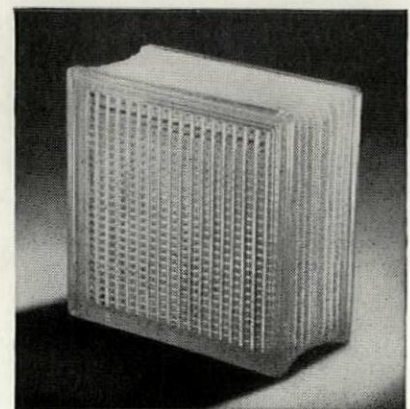
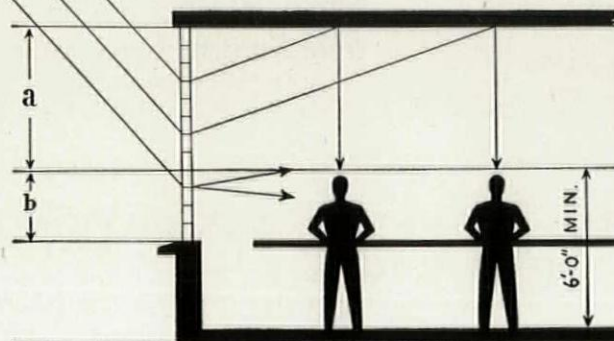
See how a combination panel of Insulux Glass Blocks No. 351 (a) and 350 (b) directs light into a room. No. 351 turns major part of light transmitted upwards, has a greatly reduced brightness when viewed from below. No. 350, used below eye-level, diffuses light evenly over horizontal plane; has low surface brightness at all angles.

**INSULUX**

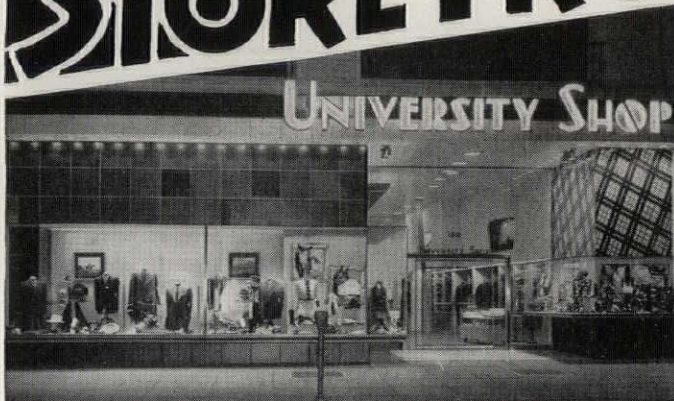
GLASS BLOCK

AMERICAN STRUCTURAL  
PRODUCTS COMPANY

Subsidiary of  
OWENS-ILLINOIS GLASS COMPANY



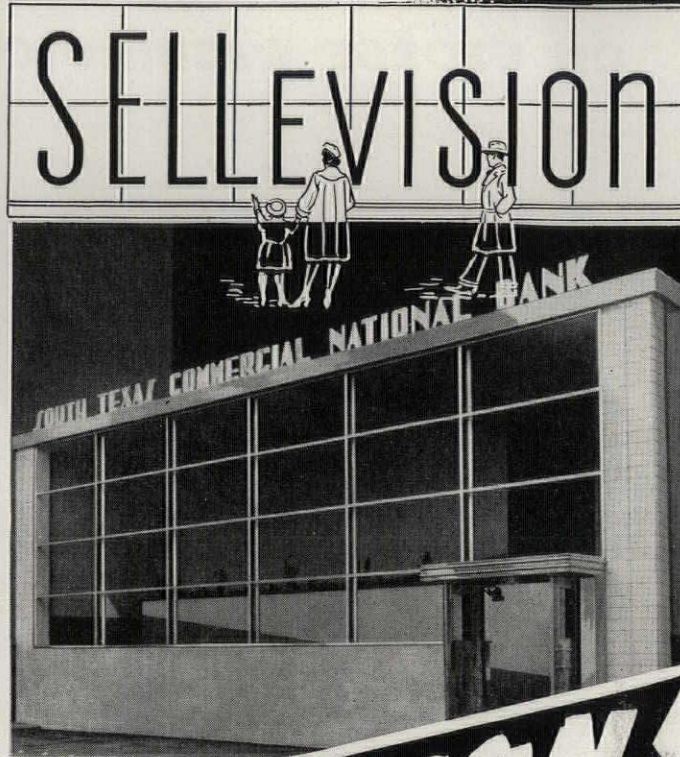
# STORE FRONTS with SELLEVISION



Archt., Adolph Novak, New York



Van Os & Flaxman,  
Archts.,  
Shreveport

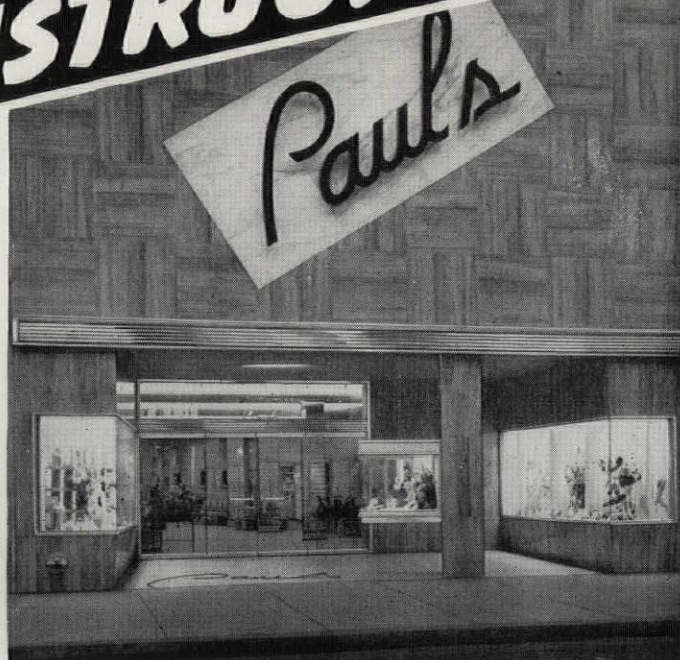


Nunn & McGinty,  
Archts.,  
Houston

## BRASCO CONSTRUCTION



Archts., Sidney H. Morris & Associates, Chicago



Archts., Harker & Heyer, Memphis

★ A COMPLETE LINE FOR EVERY DESIGN ★

**Brasco**  
SAFETY-SET  
STORE FRONTS

**BRASCO MANUFACTURING CO.**  
HARVEY • (Chicago Suburb) • ILLINOIS

Specialists in Metal Store Front Construction for more than 35 Years

Copr. 1948 by Brasco Manufacturing Co.

# 'Incor' Cuts Form Costs \$8,000.

**ON GEORGE WASHINGTON UNIVERSITY HOSPITAL**



**C**OMPLETION of George Washington University Hospital, in the heart of the Nation's Capital, marks another big forward step in applied medical science. Built by the Federal Government, and equipped through the practical generosity of public-spirited citizens, the Hospital is staffed by George Washington University, whose School of Medicine, one of the oldest in the country, has earned nationwide recognition for its professional standards. The new Hospital is the first unit in the projected George Washington University Medical Center.

Six stories in height, it is 400 x 185 ft. at wing projections, with 240,000 sq. ft. of floor space. The building frame is reinforced concrete, with wall construction of Indiana Limestone backed up with brick. In concreting

frame and floor slabs, Chas. H. Tompkins Co., General Contractor, used 'INCOR' 24-HOUR CEMENT throughout. Dependable 'Incor' high early strength resulted in economical job speed with only one set of forms — saving an extra form-set worth \$8000. At today's form material and labor costs, 'Incor' savings are greater than ever. Figure your next job with 'Incor'\* — save time AND money!

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



**GEORGE WASHINGTON UNIVERSITY HOSPITAL**  
**CHAS. H. TOMPKINS CO.,** General Contractor  
**FAULKNER, KINGSBURY & STENHOUSE,** Architects  
 Ready-Mixed 'Incor' Concrete from  
**MALONEY CONCRETE COMPANY**  
 — all of Washington, D. C.

## LONE STAR CEMENT CORPORATION

Offices: ALBANY • DETHLEHEM, 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



## FACTORY OFFICES, BERKELEY, CALIFORNIA

KETCHUM, GINA & SHARP, Architects



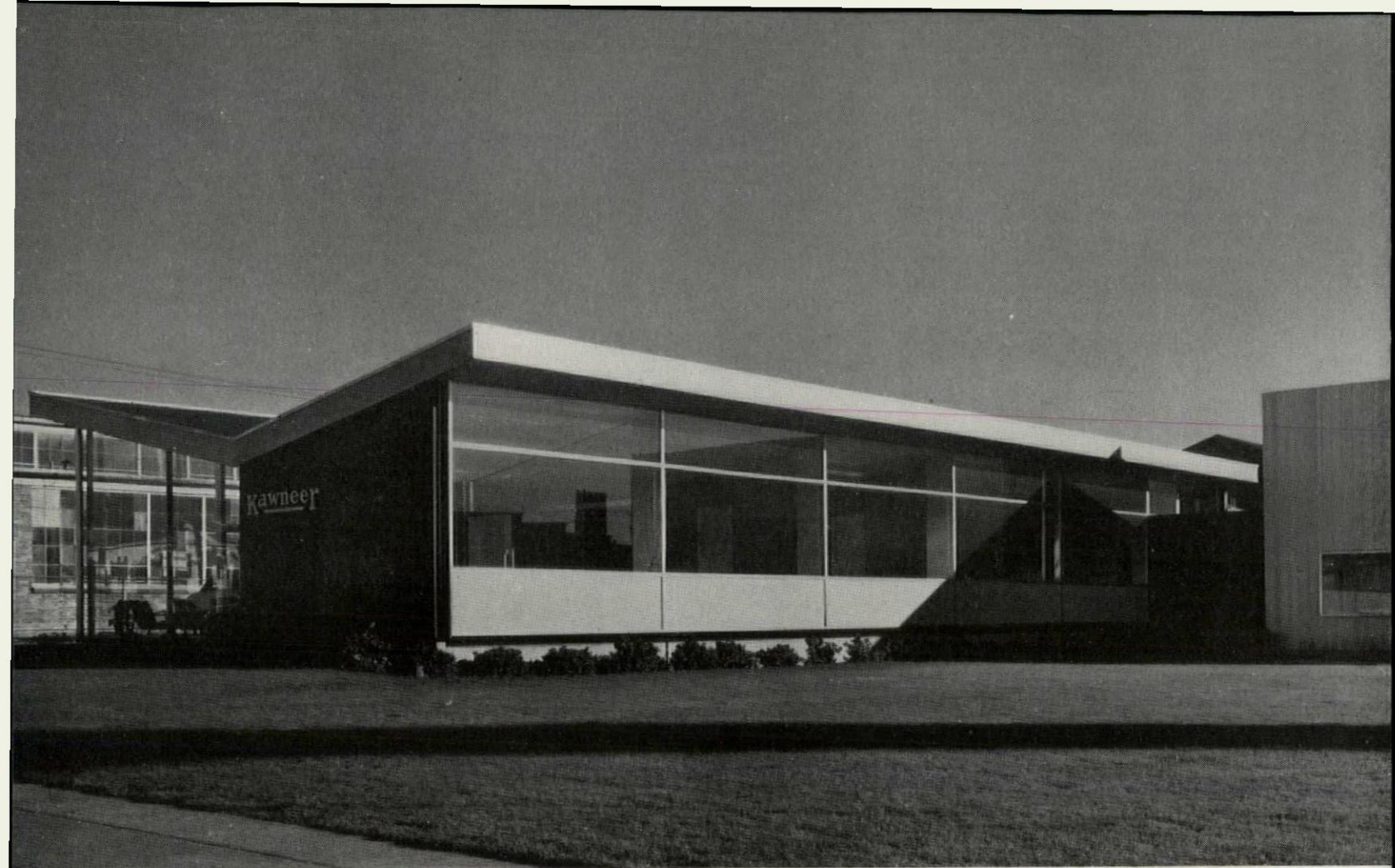
### Feature

### *Ingenious Design Dramatizes Kawneer's Own Products*

**PROGRAM:** A new administration building, joined to an existing factory structure, thus gaining efficient new offices, at the same time releasing much-needed space within the factory where the offices were formerly located.

**SITE:** A prominent corner in Berkeley's industrial area.

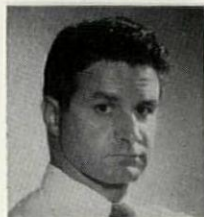
**SOLUTION:** Excellent advantage taken of the open-corner site to provide maximum light and air conditions; extensive use of the client's own building products on both exterior and interior, making the building a "silent salesman" as well as a business headquarters. The new building contains a reception room, employees' entrance, staff offices and conference room, a drafting room for the chief draftsman and his associates, and general office space. In the factory proper, only the near end was remodeled and resurfaced to tie in with the new unit.



ADMINISTRATION BUILDING



KETCHUM



GINA



SHARP

## FACTORY OFFICES, BERKELEY, CALIFORNIA

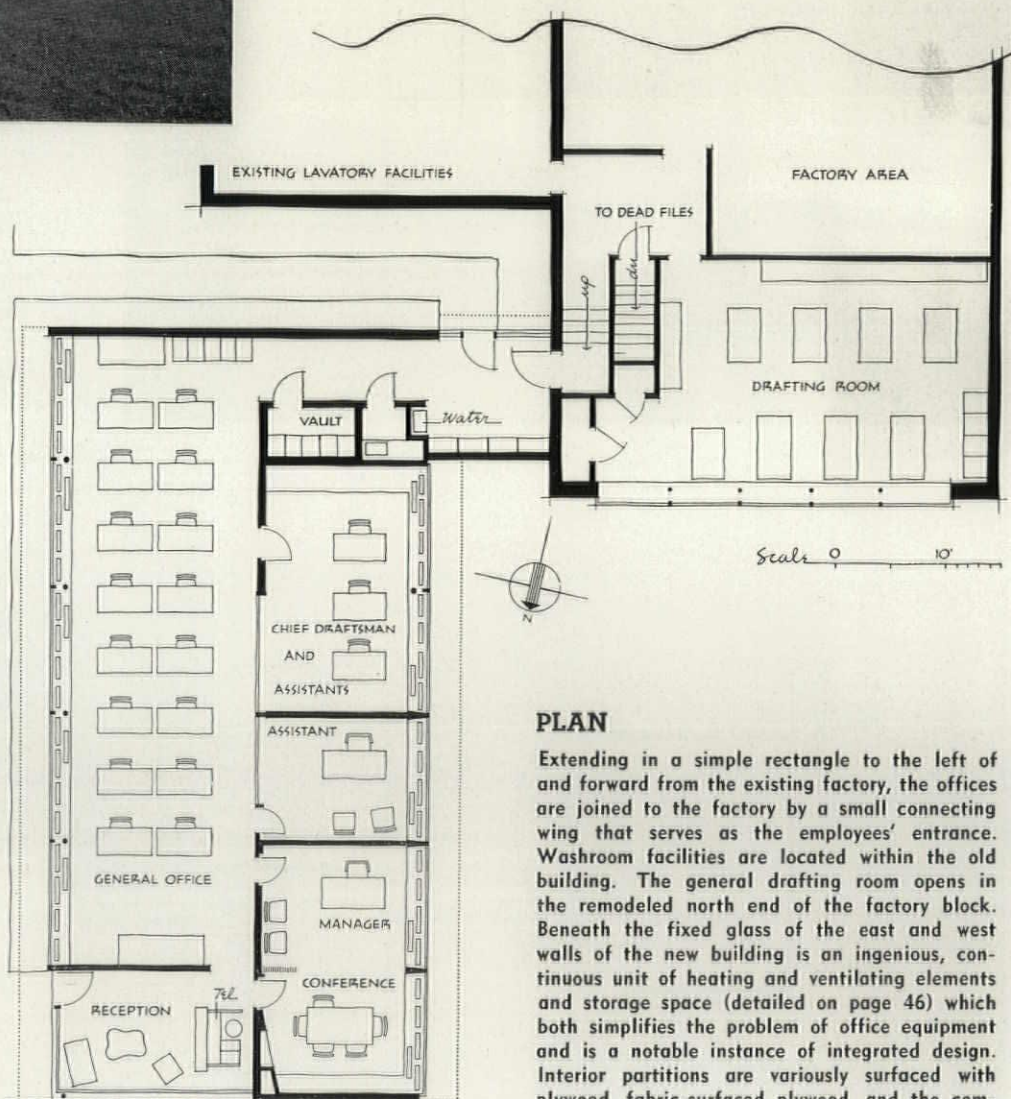
KETCHUM, GINA & SHARP, Architects

### STRUCTURE

The new building and the remodeled end of the existing factory are schemed as a visual unit, the simple billboard-like, corrugated aluminum surfacing of the latter acting as a foil to the sprightly upsweep of the much-windowed, V-roofed new building. The new structure is surfaced with the company's porcelain-enameled, corrugated aluminum sheets in tones of brown and celadon. The structural scheme consists of the up-sloping roof framed in wood and steel, supported on cement-filled pipe columns; there are no bearing walls. The floor is a concrete slab set on grade with a finish surface of linoleum tile. The roof framing gives lateral support to the steel frame. Ceiling joists are oversized in order to provide a flush interior ceiling surface; the roof deck encloses a continuous plenum chamber, used for mechanical exhaust of air from the interior. The  $\frac{1}{4}$ -in. plate glass enclosing walls have fixed aluminum store-front sash; spandrel sections beneath the glass areas are faced on the exterior with flat asbestos panels.

# Kawneer

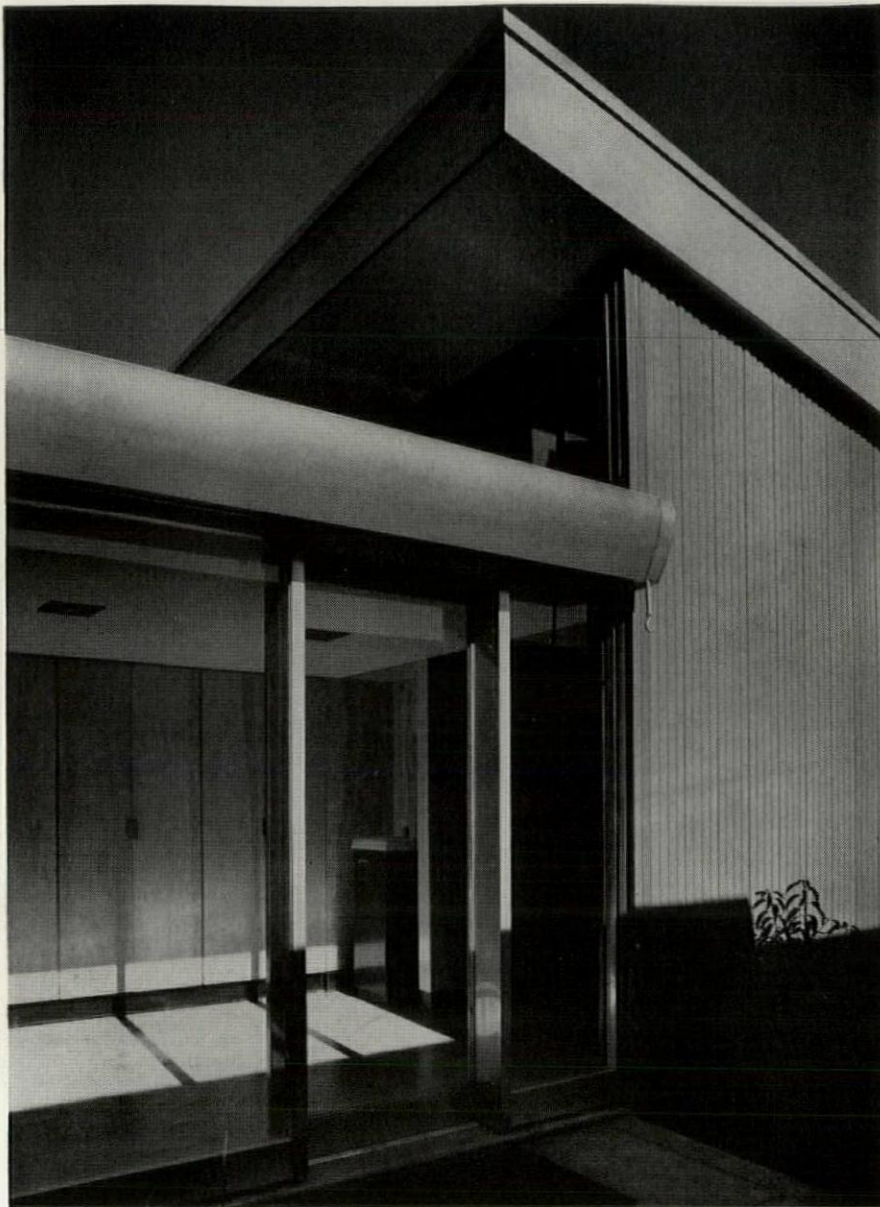
REMODELED END OF EXISTING FACTORY



Plan

## PLAN

Extending in a simple rectangle to the left of and forward from the existing factory, the offices are joined to the factory by a small connecting wing that serves as the employees' entrance. Washroom facilities are located within the old building. The general drafting room opens in the remodeled north end of the factory block. Beneath the fixed glass of the east and west walls of the new building is an ingenious, continuous unit of heating and ventilating elements and storage space (detailed on page 46) which both simplifies the problem of office equipment and is a notable instance of integrated design. Interior partitions are variously surfaced with plywood, fabric-surfaced plywood, and the company's corrugated, porcelain-enameled, aluminum sheets.

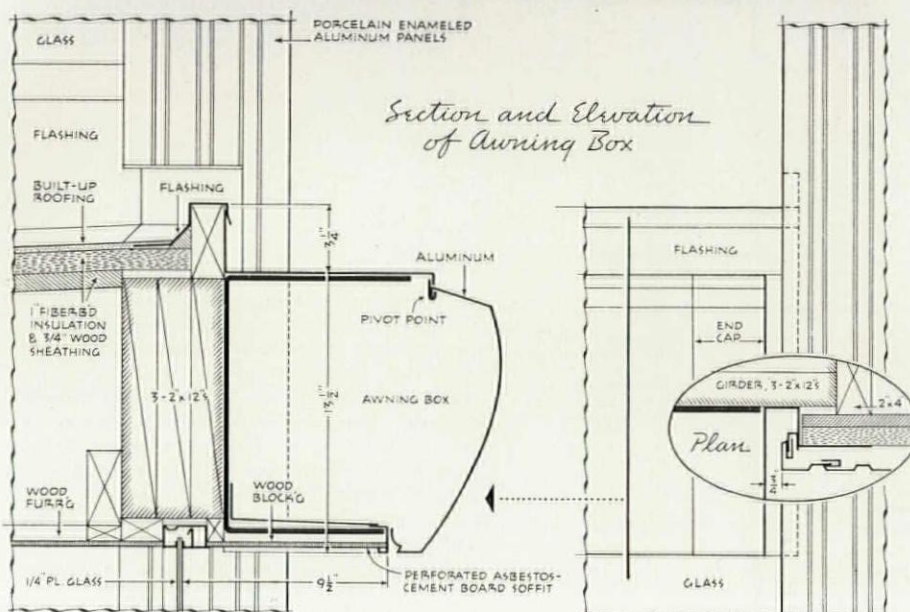


**FACTORY OFFICES,  
BERKELEY, CALIFORNIA**

KETCHUM, GINA & SHARP,  
Architects

**MATERIALS, EQUIPMENT, ETC.**

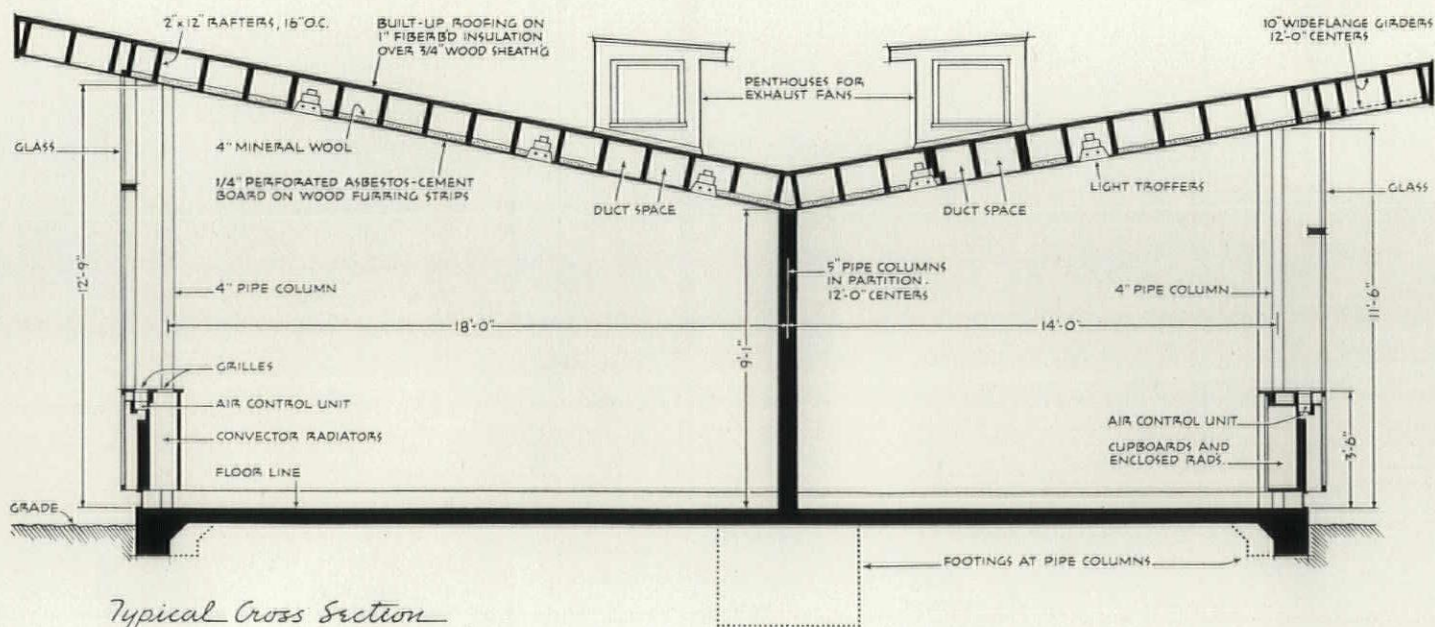
Throughout the building, the architects have incorporated their clients' products—glazing moldings, awnings, hardware, wall finishes, and other equipment. This not only reflects an obvious wish on the client's part but demonstrates that these products, at present chiefly marketed for storefront use, are equally applicable to other architectural problems. If more architects were thus to explore the versatility of established, though "typed," materials, there is little question but that it would similarly turn up fresh and salutary design potentials. Artificial lighting of the building in general comes from fluorescent lamps mounted in louvered troffers and installed flush with the perforated asbestos ceiling panels. Heating is from convectors in the front portion of the enclosed space beneath the window ledge; fresh air from the outside (see detail, page 46) is circulated to interior rooms through window-ledge registers and so up through special sections of the perforated ceiling to a plenum chamber (one in each roof slope) within the joist space and thus out through a roof exhaust.

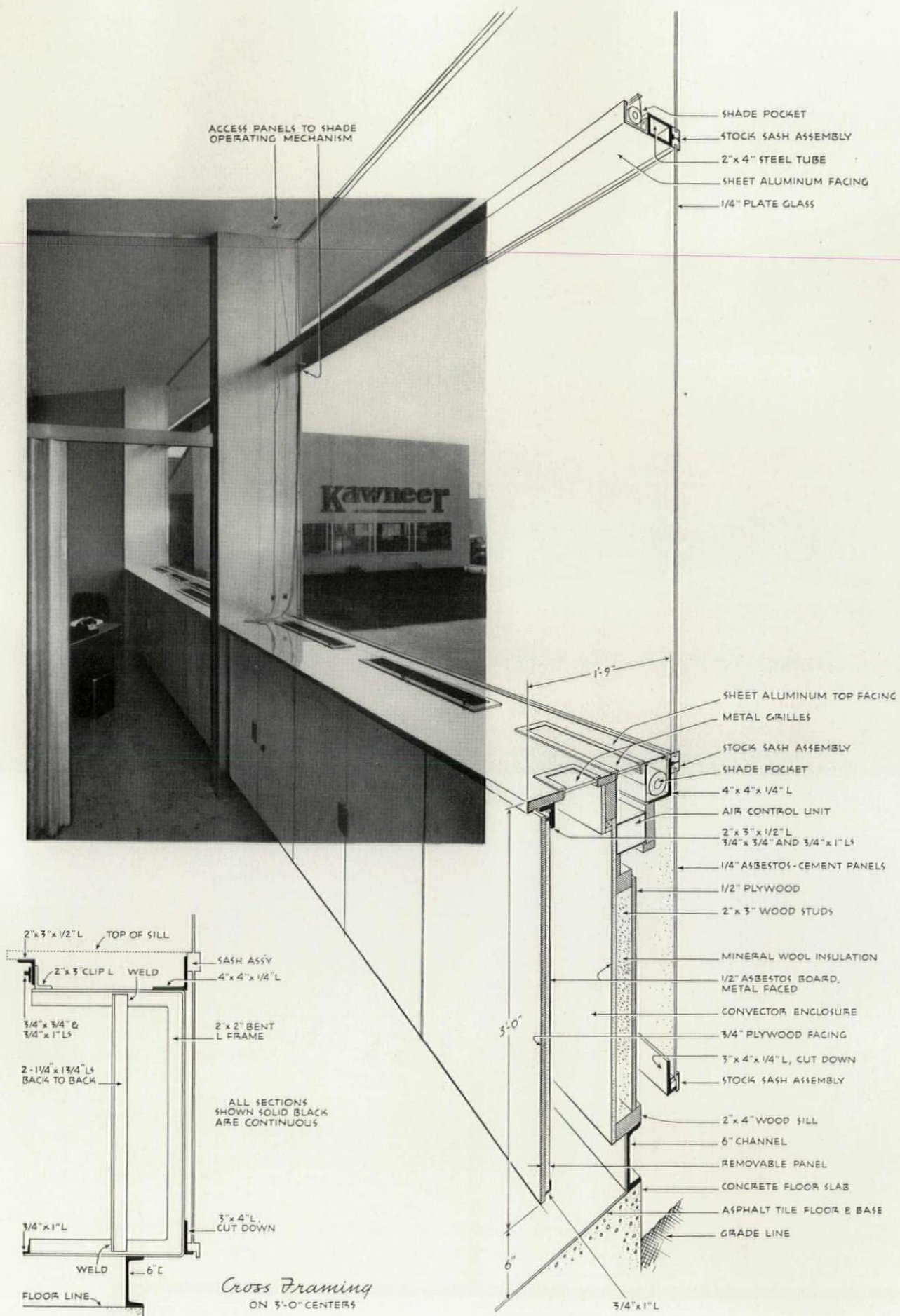


EMPLOYEES' ENTRANCE



GENERAL OFFICE

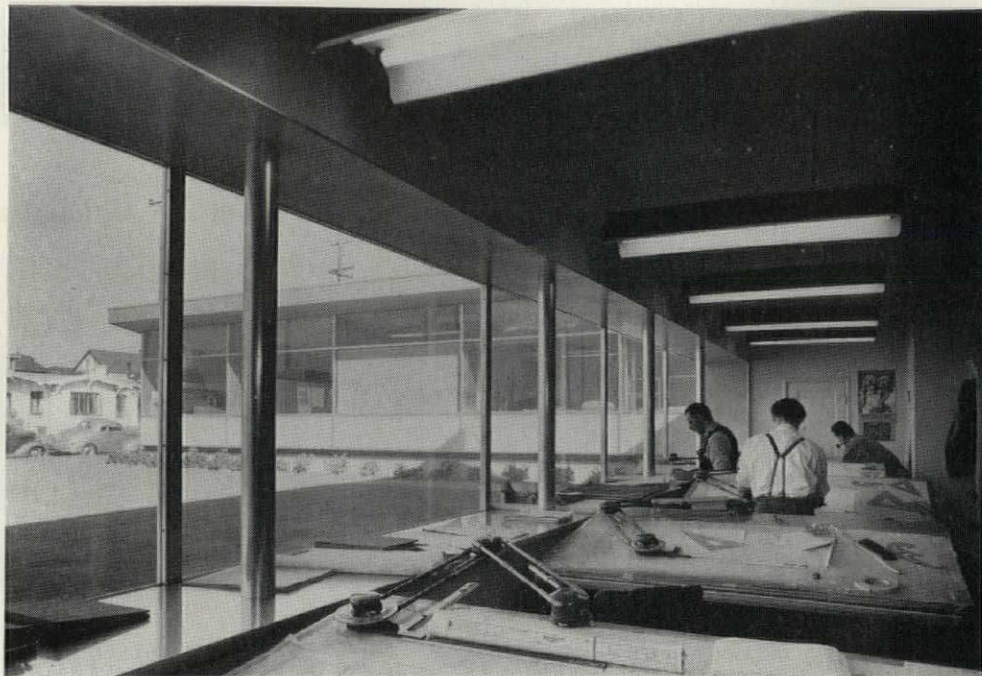




BELOW SPANDREL SECTIONS is a continuous vent to admit a controlled, dust-filtered current of air through registers in the window ledge.

**DRAFTING ROOM**—in north end of the factory structure. This wall is frankly a resurfacing job, with a continuous, projecting window band introduced. The much-used deep window sill and soffit are plywood surfaced; the 3½-in. pipe columns are embedded in the masonry of the existing wall.

Natural north light is supplemented by fluorescent troffers above drafting tables.

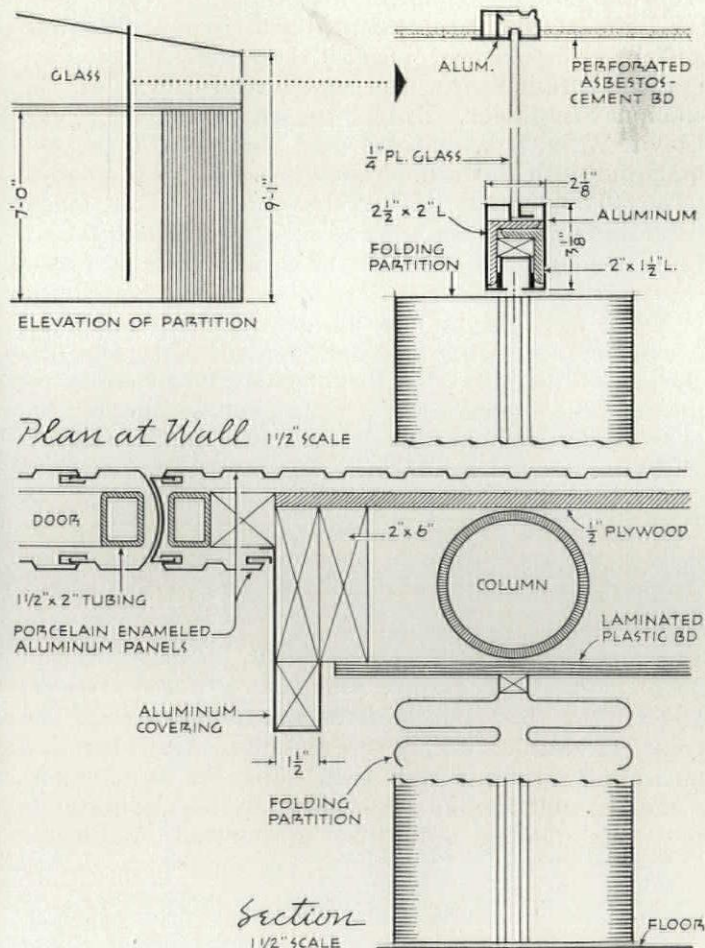


## FACTORY OFFICES, BERKELEY, CALIFORNIA

KETCHUM, GINA & SHARP, Architects



FLEXIBLE PARTITION between manager's office and conference room



# MAN TAKES COMMAND

Notes on Siegfried Giedion's Comprehensive Study of Mechanization\*

By LEWIS MUMFORD

Almost a generation separates Le Corbusier's *Vers une Architecture* and Siegfried Giedion's latest book, *Mechanization Takes Command*. But whereas Le Corbusier's early works were hymns to the machine and its products, and took for granted that man himself was the gainer by every effort at mechanization, Mr. Giedion's book reflects a more mature attitude of discrimination and appraisal. At the origin of his inquiry, Mr. Giedion explains, he sought "to understand the effects of mechanization upon the human being; to discern how far mechanization corresponds with and to what extent it contradicts, the unalterable laws of human nature . . . The coming period has to reinstate basic human values."

Le Corbusier's attitude toward the machine was at the time a salutary one. We had taken our mechanical inventions for granted and had detached our feelings from the new forms our civilization had created. The lyricism of the great engineers, Brunel, Paxton, Eiffel, the Roeblings, with all their imaginative daring, had faded into the pedestrian prose of the efficiency engineer. Except for an occasional Frank Lloyd Wright, architects had come to treat the machine with disdain. Following Marcel Duchamp, who had demonstrated that cheap, ready-made, mass-produced articles might be works of esthetic interest, Le Corbusier showed that the machine itself was a source of form. But in the course of acclimatizing modern man to his mechanical environment, Le Corbusier somewhat innocently overlooked the machine's limitations. He forgot that the machine, by nature, represents only a fragment of the human personality; and he falsely identified mechanization with human development. (Reacting against such essentially nineteenth century views, Mr. A. J. Toynbee, in *A Study of History*, has gone so far as to indicate that there is an inverse relationship between mechanization and culture: an equally erroneous description.)

The great merit of Siegfried Giedion's study is that he has set out to explain the split between thought and feeling that still persists in our generation. He treats mechanization, not as an end in itself, but as a means of releasing and developing the human personality; and, unlike Le Corbusier, he understands that this end has sometimes miscarried. While his

work proceeds on the basis Le Corbusier laid down for his generation in the most general terms, Giedion's last two books—for the new work is in effect a companion volume to *Space, Time, and Architecture*—both correct and complete it.

The rich veins that Giedion has opened up in *Mechanization Takes Command*, have, strange to say, hardly even been prospected. Even in the realm of technics itself, far more attention has been paid to machines, particularly to those that converted energy into motion, than to the utensils, the apparatus, and the utilities that have modified the character of building. There are many exhaustive histories of the steam engine and the loom; but not a single book, so far as I am aware, that covers the whole story of plumbing. When was prefabrication first introduced into building, and in what historic order were windows, doors, stoves, mantels, mouldings, ice chests, kitchen cabinets prefabricated?

Up to now, apparently, no one has bothered to ask those questions, much less tried to find the answers. The result is that we often attribute to our own age many advances that began generations ago. Who would guess from current references to wallboard that plasterboard was advertised in American architectural magazines in the Nineties? Sometimes our ignorance works the other way 'round, too: a very recent innovation like the domestic electric refrigerator (1916) seems to have been with us almost as long as the electric light (circa 1895).

There are, of course, reasons for this ironic silence about the things that have most occupied our minds and hands for the last century and a half. One of the reasons Giedion himself has pointed out: the fact that the development of the machine belongs to the realm of what he calls "anonymous history," history without names, dates, collected records. In their concern for profits and practical success, our manufacturers forgot that the machine was a formative element in our culture: one of the masters of mass production even said that "history is bunk." This contempt for the *meaning* of industry's achievements has led to the wholesale destruction of archives and records. Most of the exceptions to this rule occur in Europe: the Caldburys have kept a fascinating record of the development of their cocoa business, from the foundation of the firm onwards; and in Germany, F. E. Krauss, the head of a small family

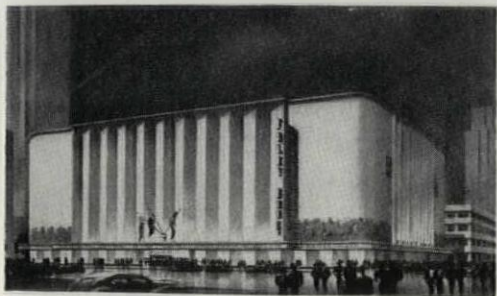
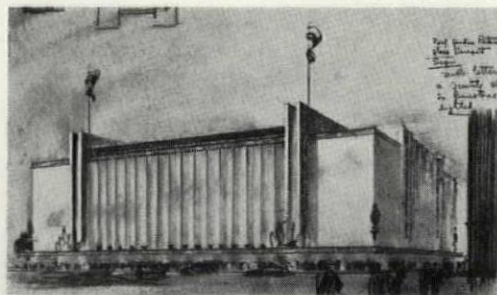
\**Mechanization Takes Command: A Contribution to Anonymous History*. By Siegfried Giedion. Oxford University Press, 114 Fifth Ave., New York, N. Y. 743 pages. Illus. \$12.50

(Continued on page 108)



Elwood M. Payne

## DEPARTMENT STORE, HOUSTON, TEXAS



SCORES OF SKETCH STUDIES were made in working out the windowless facade treatment.

KENNETH FRANZHEIM, Architect

RAYMOND LOEWY ASSOCIATES, Retail Planners and Designers

EDWARD E. ASHLEY, Consulting Engineer

***A new downtown department store in which thoroughgoing restudy of the problem of handling goods and customers has resulted in a new high in mechanized efficiency.***

**PROGRAM:** The store proper; an adjoining parking garage; a warehouse on the perimeter of the city—all to be interrelated in such a way as to assist the customer's arrival, shopping, and departure; delivery of merchandise to the store, and shipment of sales therefrom.

**SITE:** A full downtown block for the store; the better part of an adjoining block for the garage.

**SOLUTION:** A six-story store building (provision for addition of six more floors at a later date); a five-level parking garage, on the neighboring site.



A SIDEWALK CANOPY surrounds the entire building.



Elwood M. Payne Photos

THIS MAIN ENTRANCE unit is 105 feet in width.

## DEPARTMENT STORE, HOUSTON, TEXAS

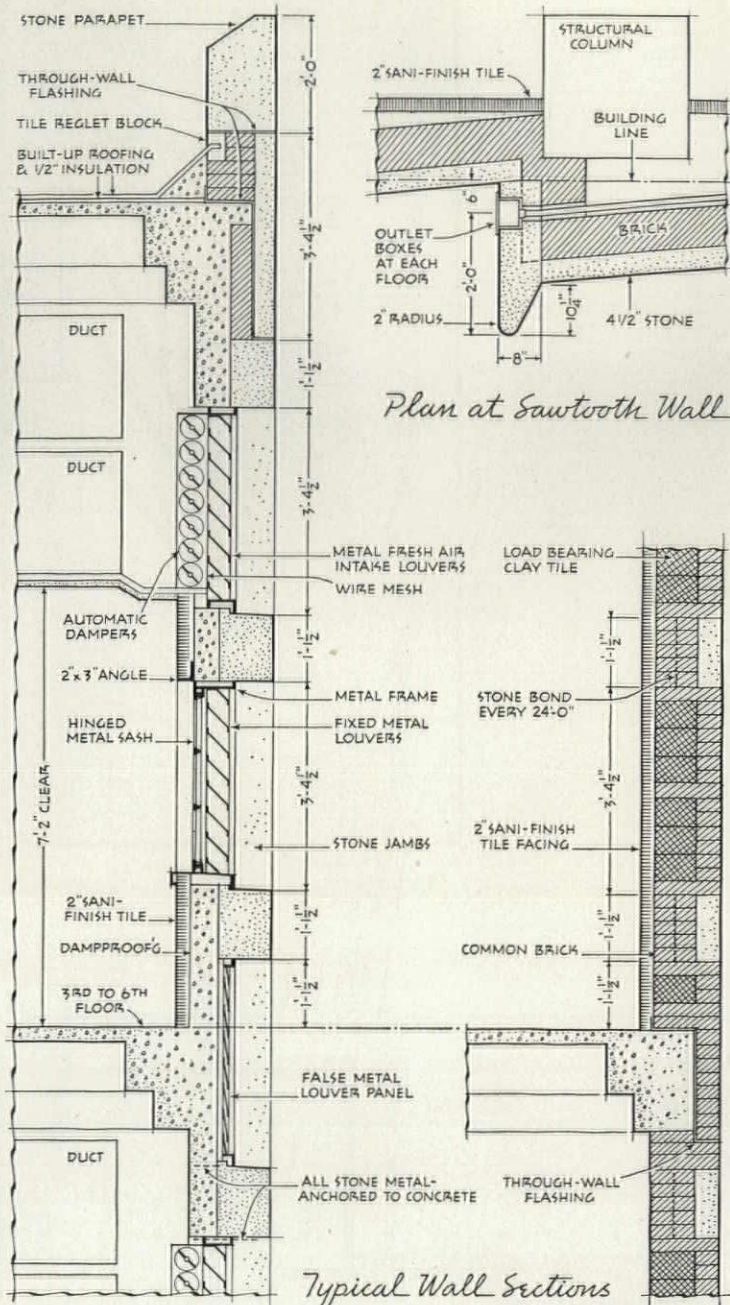
KENNETH FRANZHEIM, Architect

RAYMOND LOEWY ASSOCIATES, Retail Planners  
and Designers

EDWARD E. ASHLEY, Consulting Engineer

### GENERAL

The store, at present a six-story and basement block, is of reinforced concrete frame construction; foundations and columns and placement of mechanical services are so arranged that six more floors may be added at a later date without upsetting present installations. A windowless scheme above the ground floor (which has show windows on all four sides), the exterior walls are of buff stone and matching brick. The sawtooth front facade is equipped with numerous conduit outlets (see detail across page), so that the entire wall may be used for "hanging" dramatic, seasonal displays.



FRANZHEIM



SNAITH

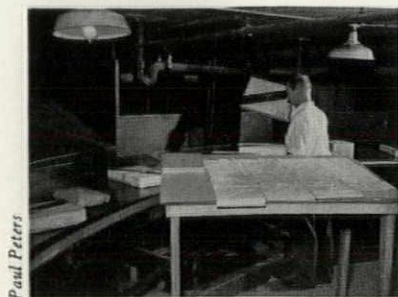
Kenneth Franzheim, architect, is a graduate of M.I.T. and practices in Houston and Mexico City. Vice-president of the Houston A.I.A. Chapter, Mr. Franzheim is in charge of the Institute's 1949 convention, to be held in Houston and Mexico City.

William T. Snaith, architect head of the Retail Development and Planning Division of Raymond Loewy Associates, was in charge of over-all design, including interior planning of the store. A partner in the design firm, Snaith directs all building and architectural programs in the five Loewy offices—New York, Chicago, Los Angeles, Sao Paulo, and London.

Edward E. Ashley of New York, N. Y., was consulting engineer for the project.

THE GARAGE BUILDING is on the adjoining block (note corner of store at left of photo). As plans on the next pages show, the basement of this building is an integral part of the mechanized merchandising service. Tunnels under the intervening street connect the two structures. Reinforced concrete construction.





Paul Peters

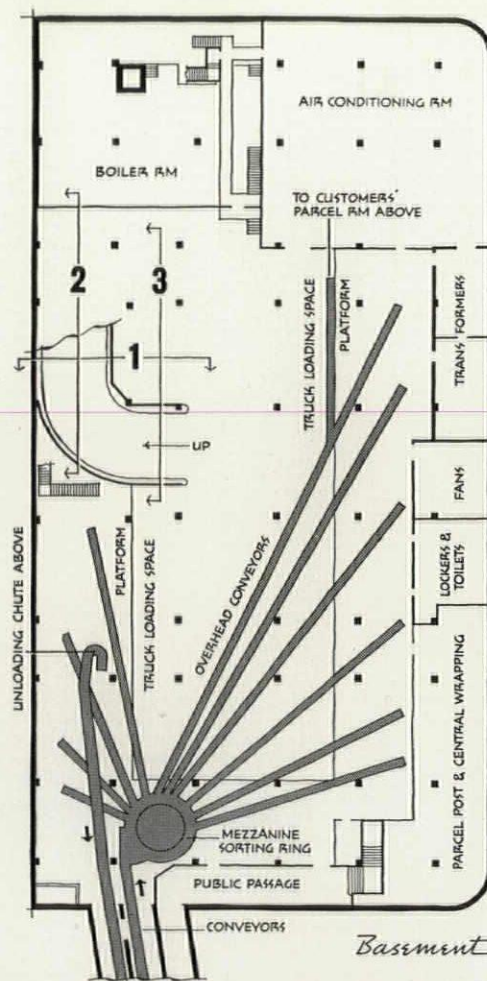
The "sorting ring"

## DEPARTMENT STORE, HOUSTON, TEXAS

KENNETH FRANZHEIM, Architect

RAYMOND LOEWY ASSOCIATES, Retail Planners and Designers

EDWARD E. ASHLEY, Consulting Engineer

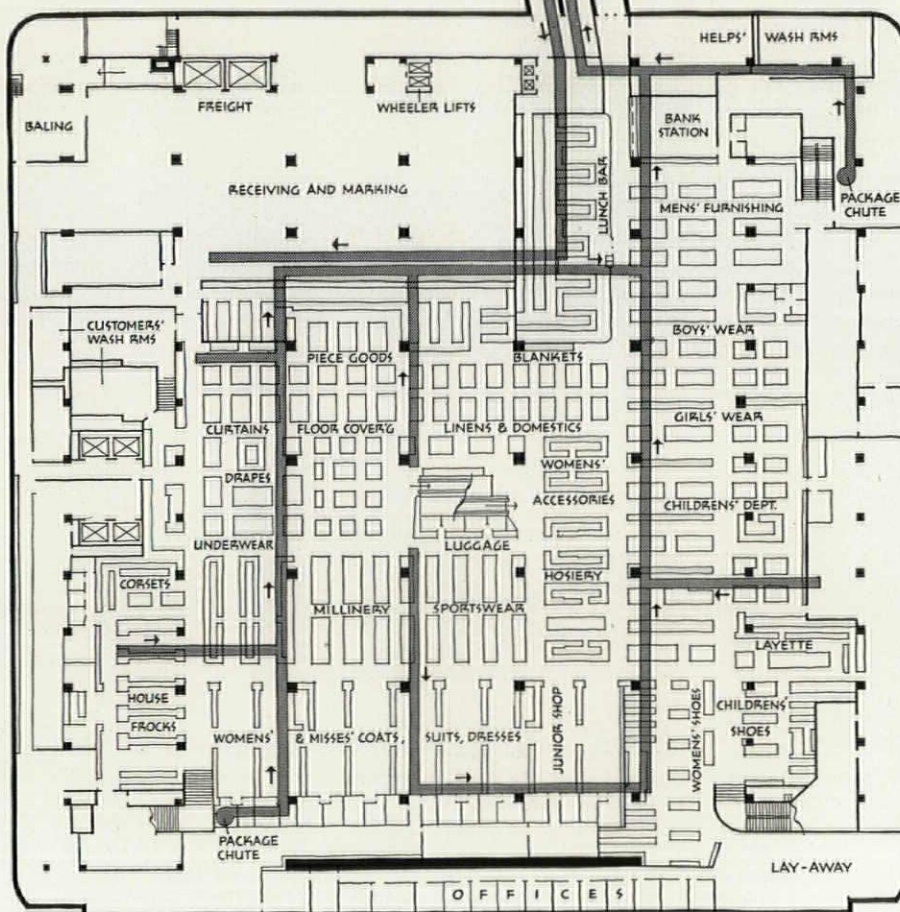


## HANDLING OF MERCHANDISE

The three units of Foley's—the store, the garage, and the warehouse (on edge of city)—all play their part in the mechanized system for expediting merchandise. Heavy goods such as furniture and appliances are stocked in the warehouse; only floor samples are at the store. The customer makes purchases from the samples; merchandise is shipped from the warehouse.

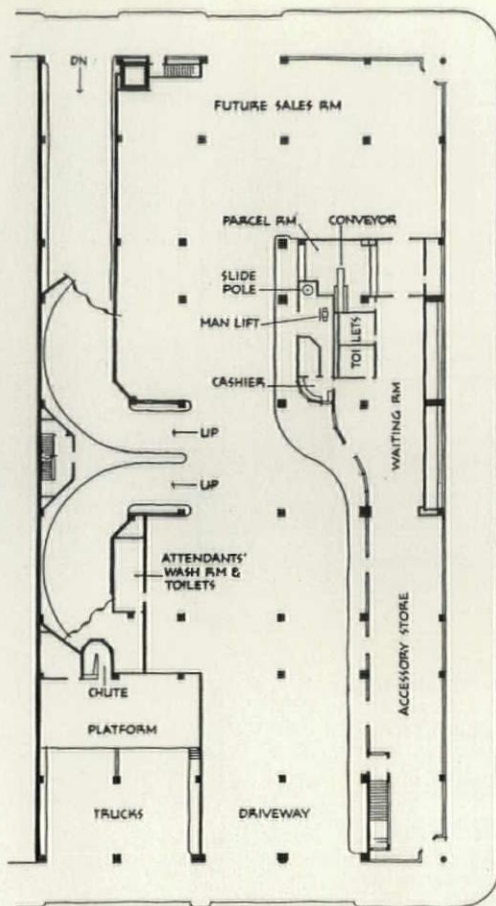
## INCOMING MERCHANDISE

Goods stocked at the store arrive at an unloading dock at one side of the garage building, travel via a chute to a basement-conveyor and so under the street to the store receiving and marking room. When ready for delivery to sales floors, the goods travel up on wheeler lifts to stock-receiving rooms on each floor. To reach a particular department, the merchandise is then wheeled around the perimeter corridor (see typical floor plan, page 56) to a point immediately adjacent to the destination department.

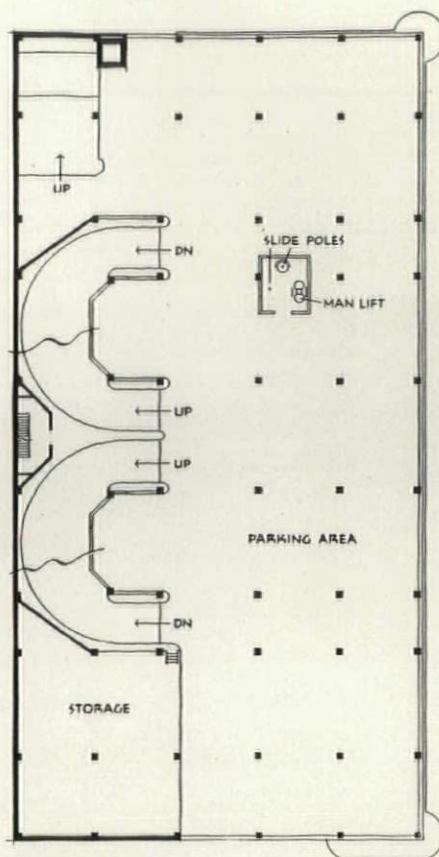


Basement

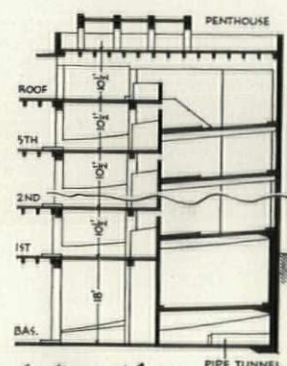
Scale 0 50



*First Floor*



*Second Floor*

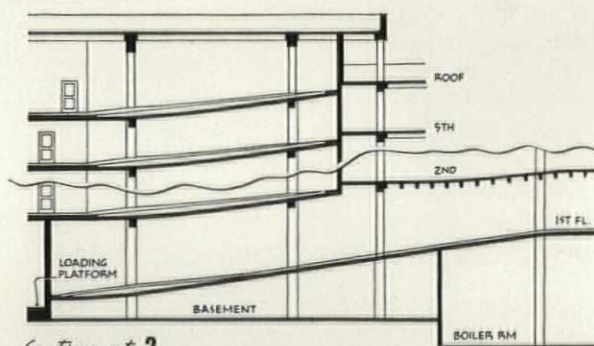


*Section at 1*

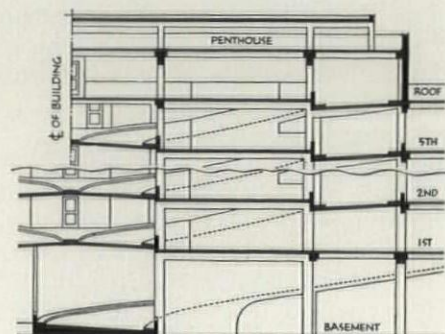
## OUTGOING MERCHANDISE

Purchases (on all floors above the main floor) that are to be mailed out, delivered by truck, or taken by a customer whose car is parked in the parking garage follow this route: the merchandise is wrapped and placed on one of two spiral chutes (located in opposite corners of each sales floor). These take it down to just below the ground floor where it is automatically deposited on a ceiling-mounted conveyor which trundles it through the under-street tunnel and delivers it onto a "sorting ring" (see photo at top of facing page). At this point, sorters channel the packages onto one of three types of outgoing conveyors—(1) to the mailing department; (2) to the delivery-truck platform; or (3) in the case of the customer whose car is parked upstairs, to a branch conveyor that feeds up to a parcel-checking room on the street level of the garage. Main-floor purchases follow this same general route; only on this floor, all of the central sales islands have parcel drops that feed directly down to the sub-floor conveyor system.

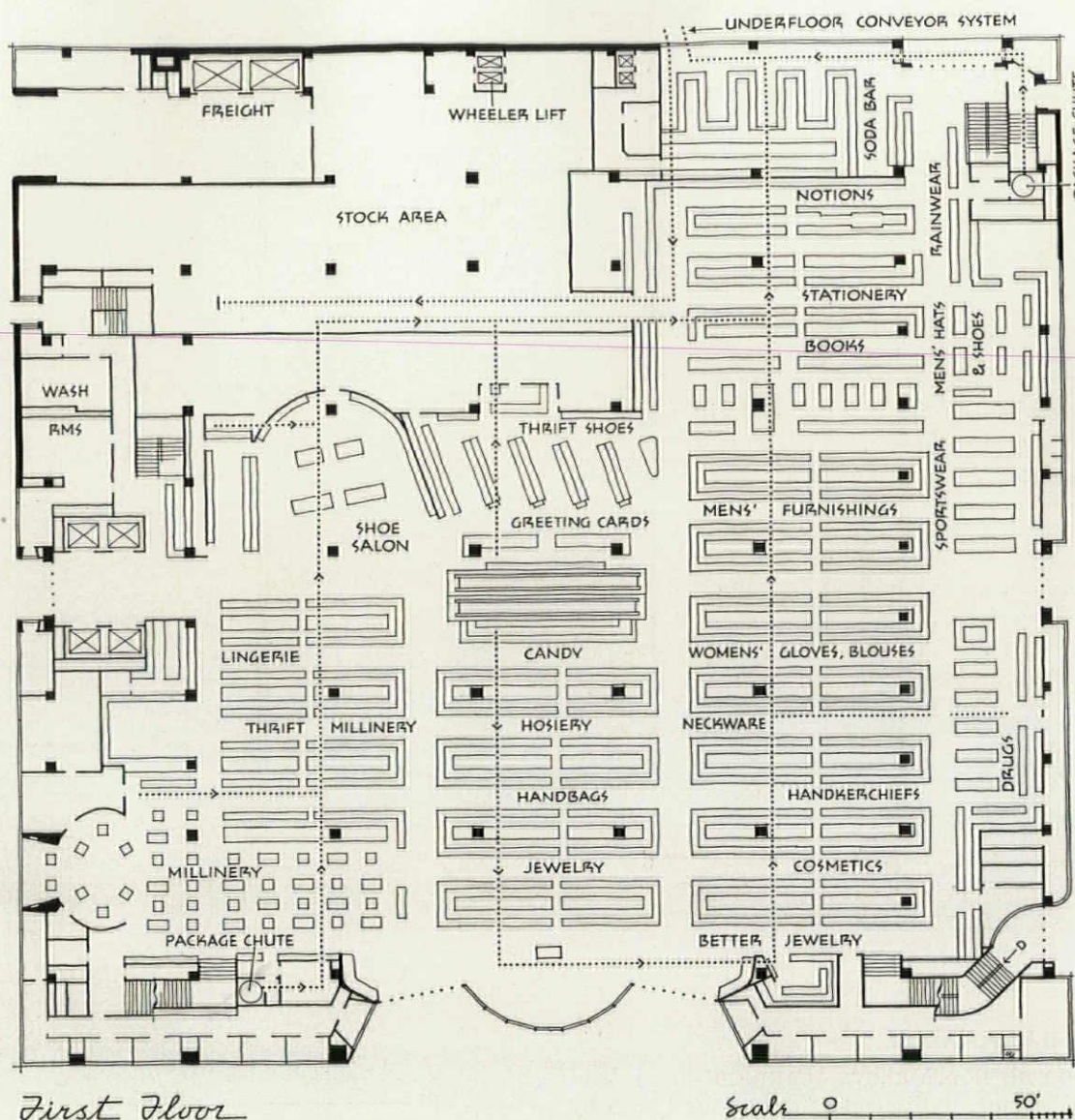
At time of purchase, the car-parking customer is given a claim check for each purchase and finds all his packages waiting for him at the checking room. For either incoming or outgoing merchandise that is too bulky to travel via the conveyor system, a receiving and shipping dock occurs in one corner of the main sales floor of the store, adjacent to freight elevators.



*Section at 2*



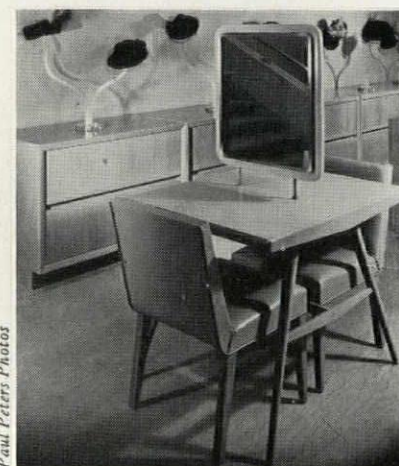
*Section at 3*



## DEPARTMENT STORE, HOUSTON, TEXAS

### MAIN FLOOR

The plan shows the basic organization—electric stairways on center, reached by straight aisles (the school of thought that opposes the “baffle” technique of store layout that confronts customers with a miscellany of merchandise, willy-nilly). A side entrance for the carriage trade adjoins passenger elevators. Notable departmental organization is the grouping of all fashion-accessory goods for women on one floor—shoes, millinery, lingerie, hosiery, gloves, handbags, jewelry, and cosmetics. The entire store is year-round air conditioned by means of electronic precipitators to remove dust and smoke and air-conditioning cabinets to control cool air that may be increased or lessened in any zone as required. The heating system is a combination of numerous types—steam, hot water, radiant panel.

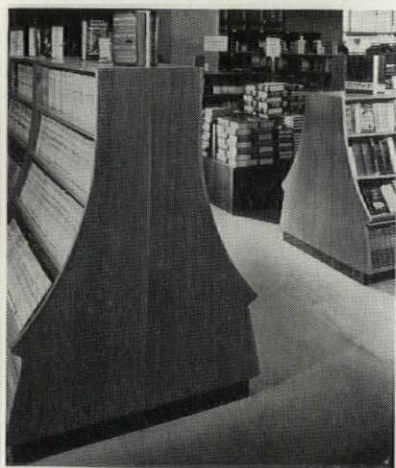


Paul Peters Photos

MILLINERY



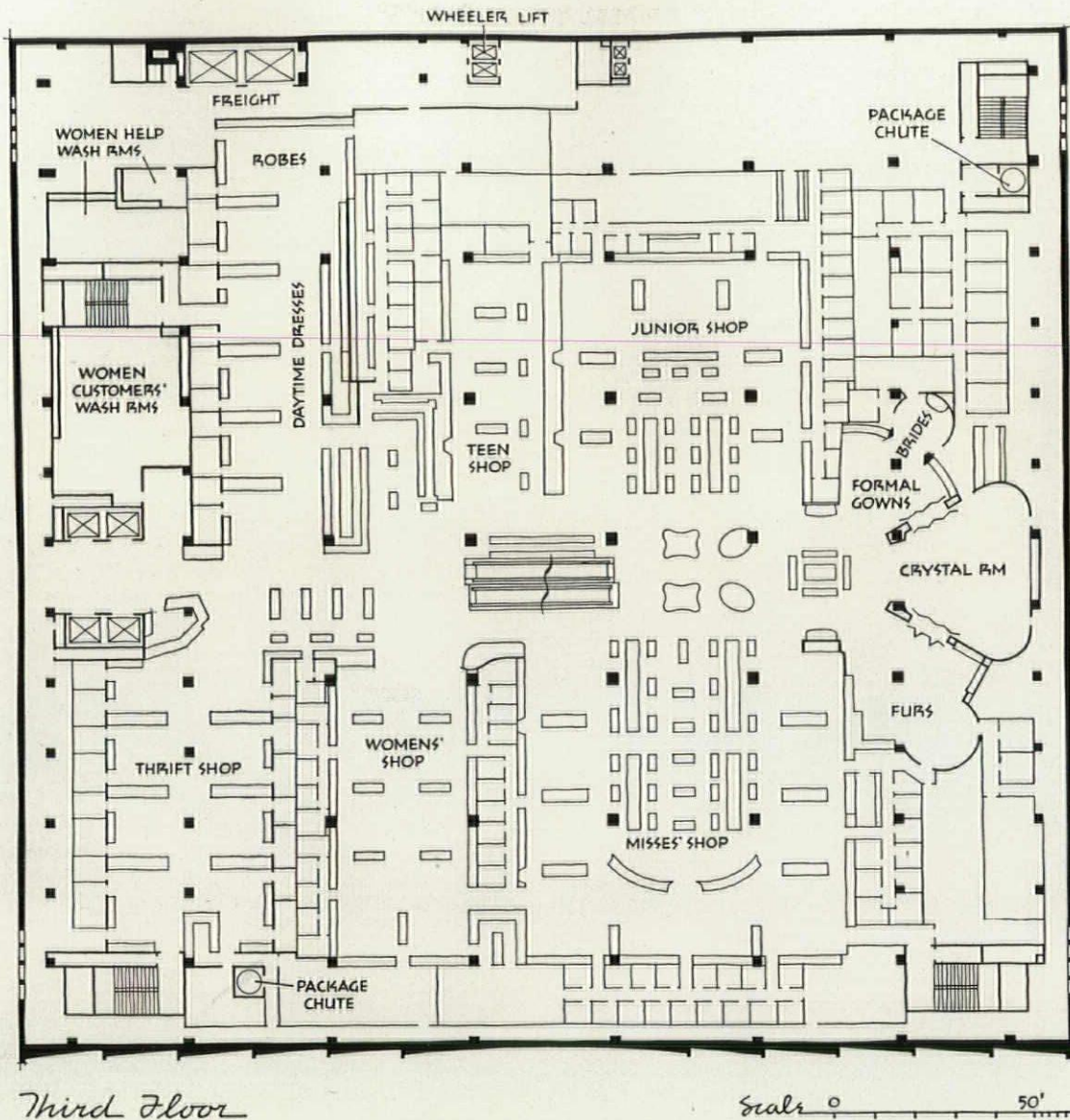
GENERAL VIEW. Pink marble floor; lighting is combination fluorescent and incandescent, furnishing 32 foot-candles at display-case level.



BOOKS



BETTER SHOES



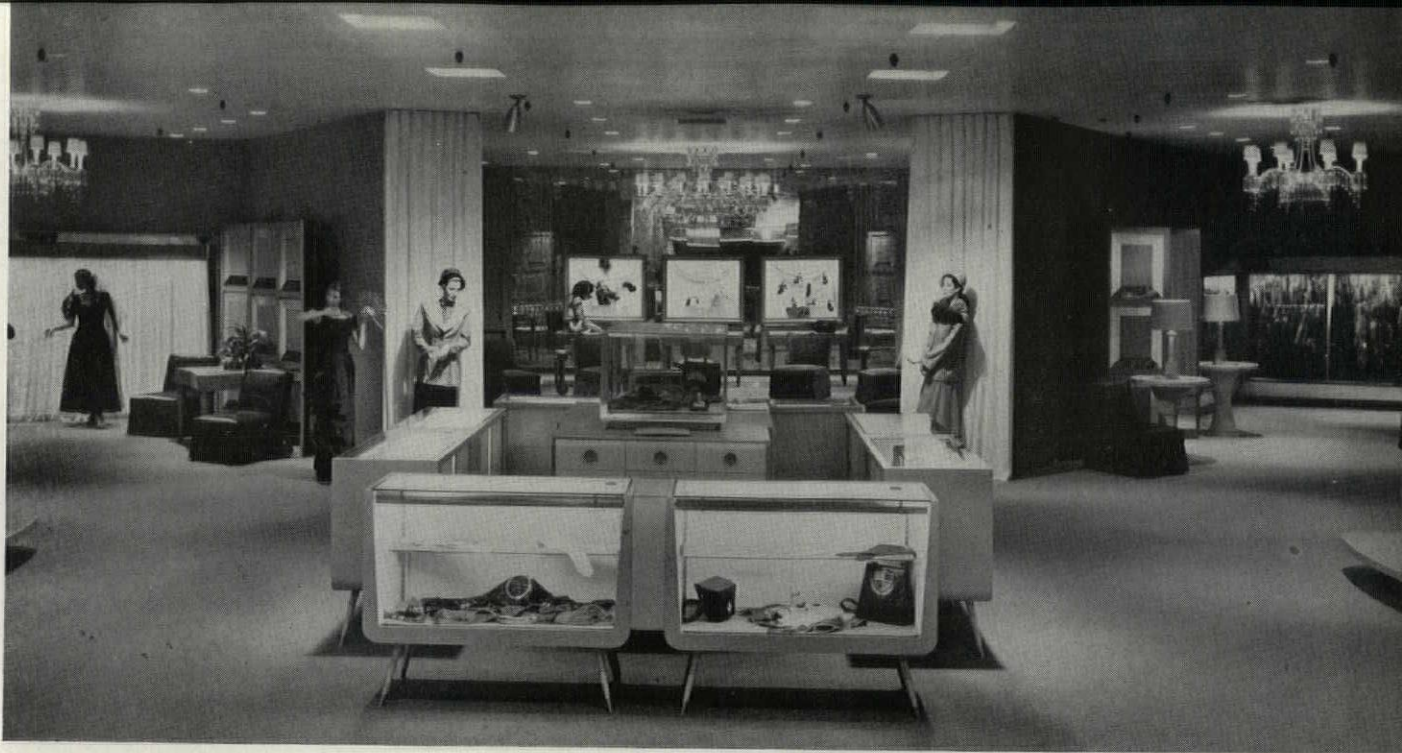
## DEPARTMENT STORE, HOUSTON, TEXAS

### THIRD FLOOR

Women's specialty shops make up the third-floor plan. All merchandise is organized according to sizes; 135 fitting rooms are located in close relation to each department. Note the perimeter corridor which allows off-floor handling of all new merchandise coming from the corner receiving area. Throughout the store, safety has been built in to the design. A complete sprinkler system, each outlet acting as a fire alarm, is supplemented by stand-by fire pressure pumps in the basement. The sprinkler system is backed by pressure storage tanks of water on the roof. Enclosed stair wells are separated from the store by steel doors. All stock shelving is of steel. In addition, of course, the building itself is of fireproof construction.



WOMEN'S SHOP



"THE CRYSTAL ROOM"



CORSETS



MISSES' SHOPS



BLANKETS (Second Floor)



FLOOR COVERINGS (Fourth Floor)



MEN'S CLOTHING (Second Floor)

## DEPARTMENT STORE, HOUSTON, TEXAS

### OTHER FLOORS

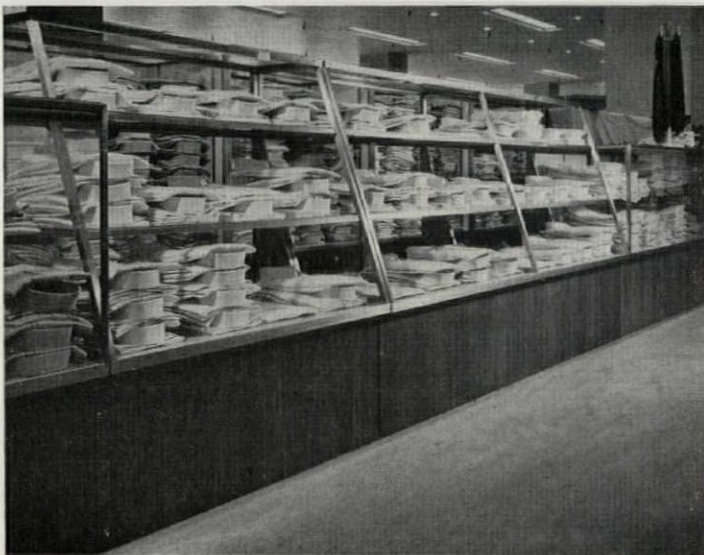
*Basement:* men's and boys' furnishings, clothes for infants and young children, women's ready-to-wear, luncheonette.

*Second floor:* boys' and men's wear, grill, children's furnishings, bedding, dress goods, etc.

*Fourth floor:* furniture, draperies, rugs, lamps, etc.

*Fifth floor:* housewares, china, glass, silver, gifts, appliances, radios, paints, luggage, toys, auditorium.

*Sixth floor:* business offices, beauty salon, main public lounge, etc.



SHIRTS (Second Floor)



NEEDLEWORK (Second Floor)



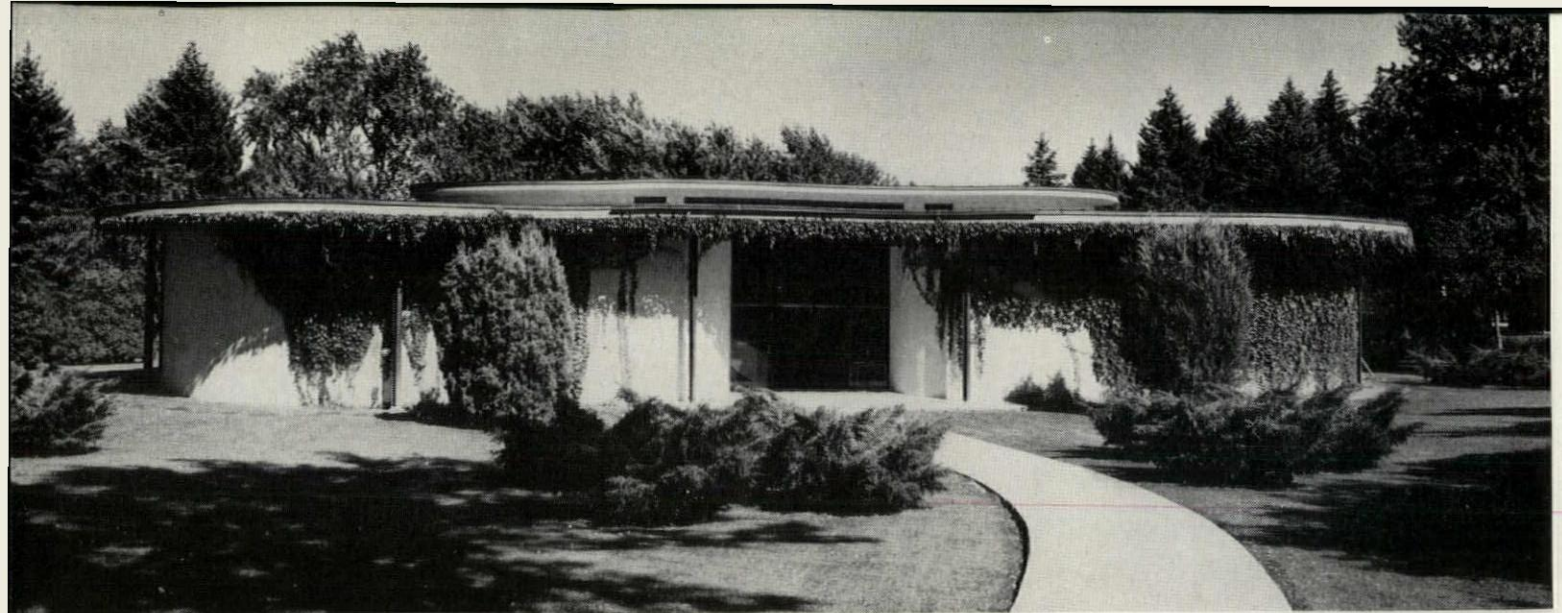
BEAUTY SALON (Sixth Floor)



CHINA (Fifth Floor)



PAINT, ETC. (Fifth Floor)



TO HARMONIZE with neighboring buildings, both the roof and the exposed structural columns are surfaced with copper.

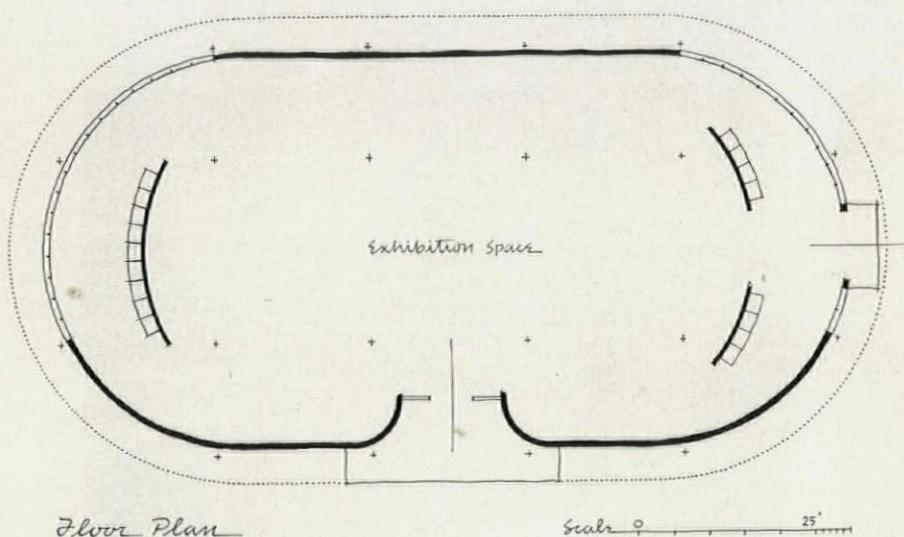
## DISPLAY PAVILION, BROADMOOR, COLORADO

JAN RUHTENBERG, Designer

**PROGRAM:** A display shelter for a collection of carriages used in the early days of the West; supplementary display space for a collection of Indian artifacts.

**SITE:** A parklike flat piece of land facing the fashionable Broadmoor Hotel.

**SOLUTION:** An oval plan, literally developed around an



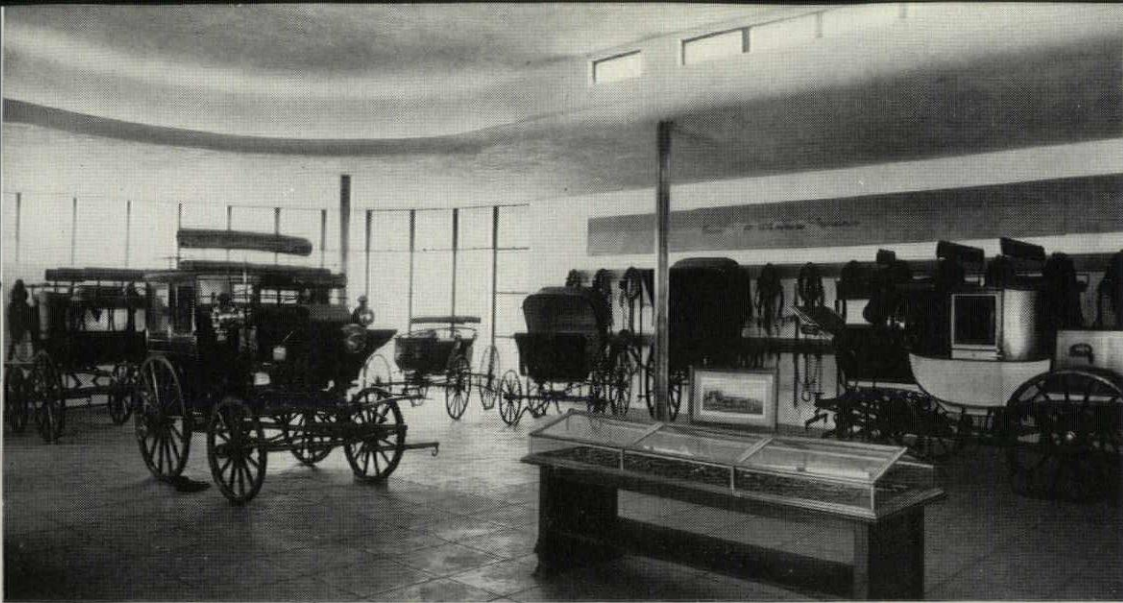
*Floor Plan*

*Scale 0 25'*



*Fred Gaud Photos*

PORTIONS OF THE CURVED ENDS of the building . . . . .



NIGHT LIGHTING comes from a ceiling cove and reflectors in case tops. The floor is surfaced with red cement.

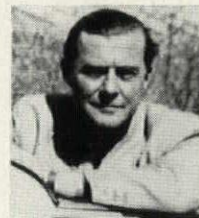


### ***Independent steel frame allows a free pattern of curtain walls.***

ideal arrangement of the old carriages previously worked out in model form. Curved concrete-block wall sections within the space act as backgrounds for carriage displays and (on the reverse sides) as screens against which the cases for the Indian collection are arranged. Structurally, the building is of free-standing steel frame, with curtain walls of cinder block and glass.

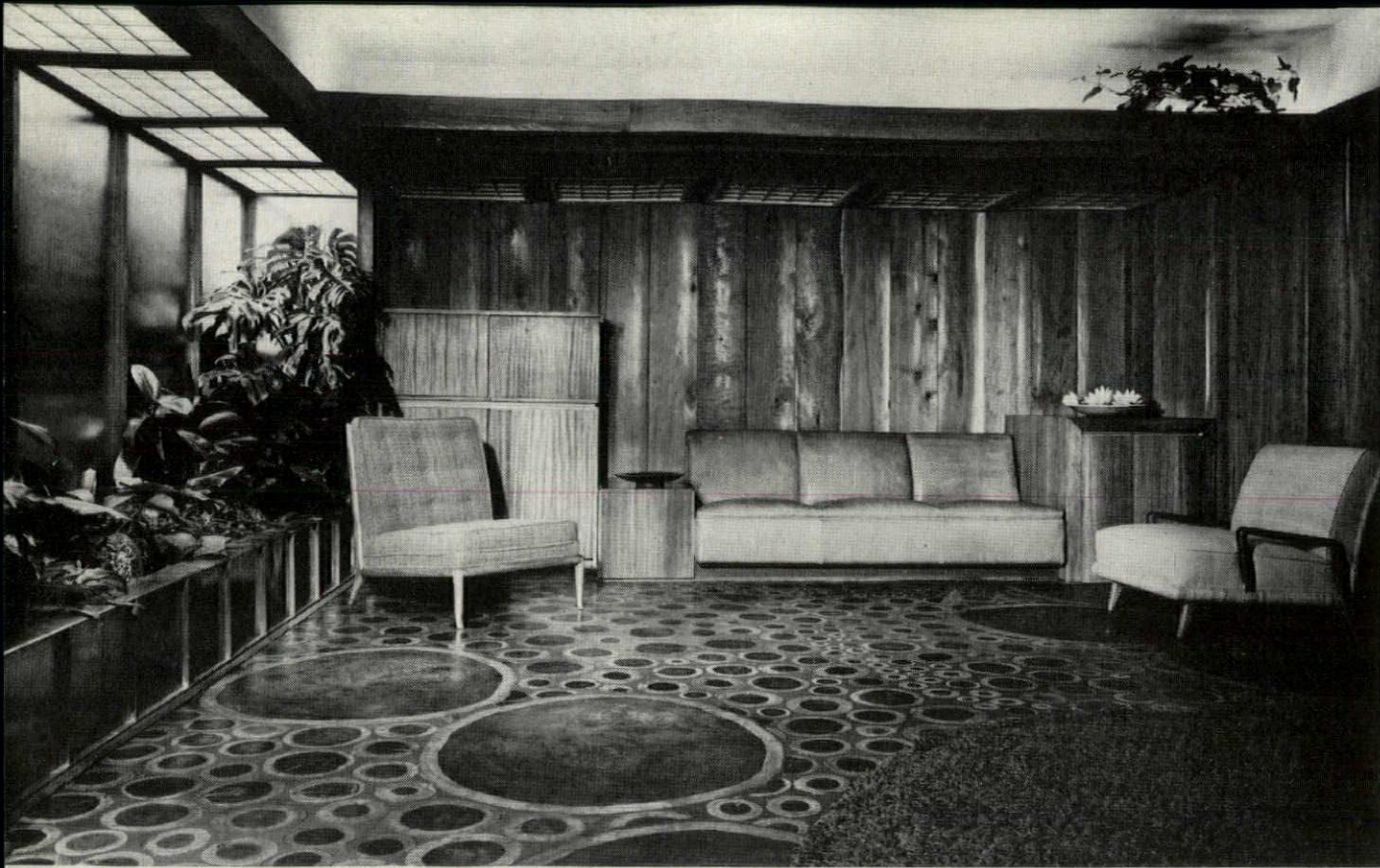


..... are made up of screen walls of structural glass.



RUHTENBERG

After receiving his training at the University of Leipzig and under Mies van der Rohe in Berlin, **Jan Ruhtenberg** entered professional practice in Stockholm. Coming to America in 1933, he has subsequently taught at Columbia University, lectured at the New School for Social Research, and (during the summer of 1947) taught at the University of Denver. Recently he was appointed a member of the Advisory Committee of Denver U.'s School of Architecture and Planning.

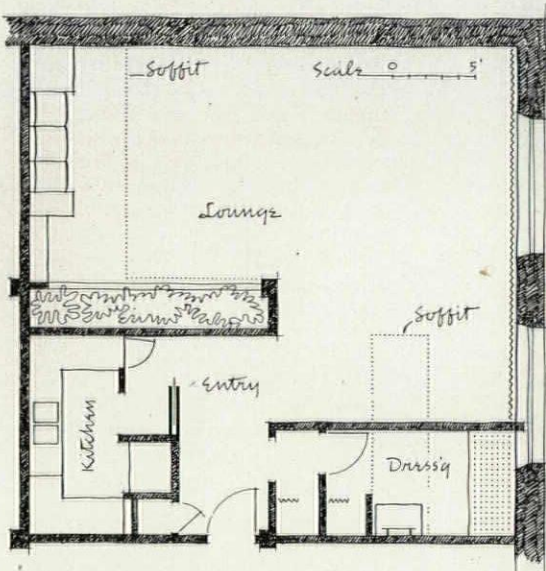


Maynard L. Parker Photos

Frosted mirror-backed plant bay at left; ceiling portion is a light source, amplified by the mirror surround.

## SALES SUITE, LOS ANGELES, CALIFORNIA

HARWELL HAMILTON HARRIS, Designer



The suite of rooms is ventilated by a blower which also delivers heat in winter. An air purifier removes odors of tobacco, food, etc. The dressing-room sofa accommodates an occasional overnight guest.

**Manufacturer's display rooms designed to approximate normal background for products.**

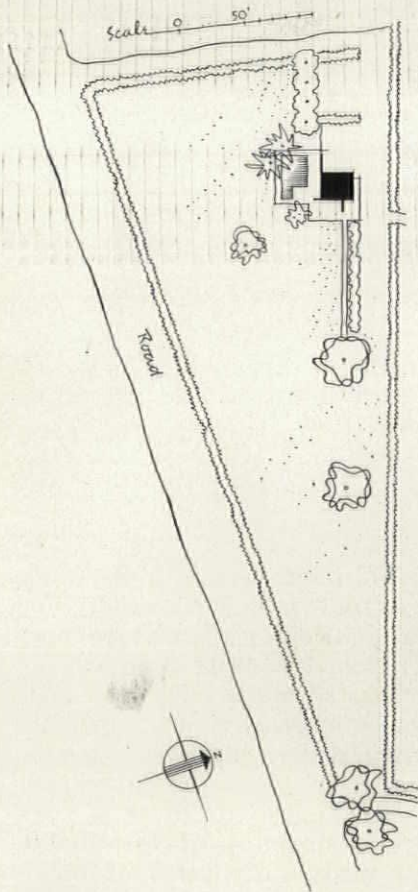
**PROGRAM:** A suite of "casually elegant" rooms for display of women's clothing and for business entertainment.

**SITE:** A 30-foot square space within an existing building.

**SOLUTION:** Almost residential atmosphere worked out in natural materials: redwood walls; flooring of end-grain sections of redwood trunks; planting; leather and webbing upholstery; copper, rich fabrics.



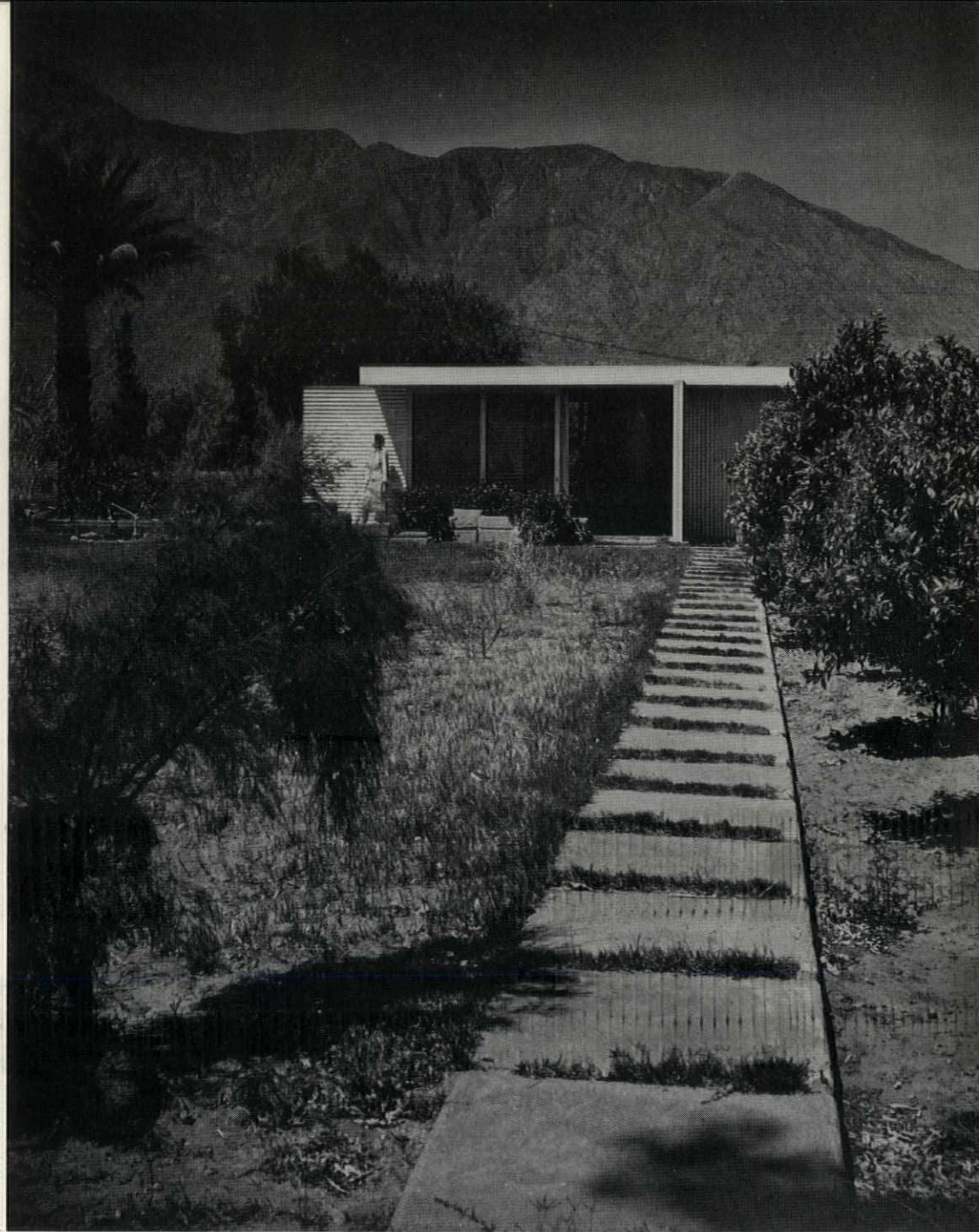
Looking toward dining "L" of lounge.



#### SITE

This minimum house for a bachelor (Albert Frey, one of the architects) is placed well back in the widest portion of a deep, triangular plot. Pool, main windows, etc., face slightly west of south to gain most favorable view of 10,000-foot-high Mount San Jacinto.

Julius Schulman Photos



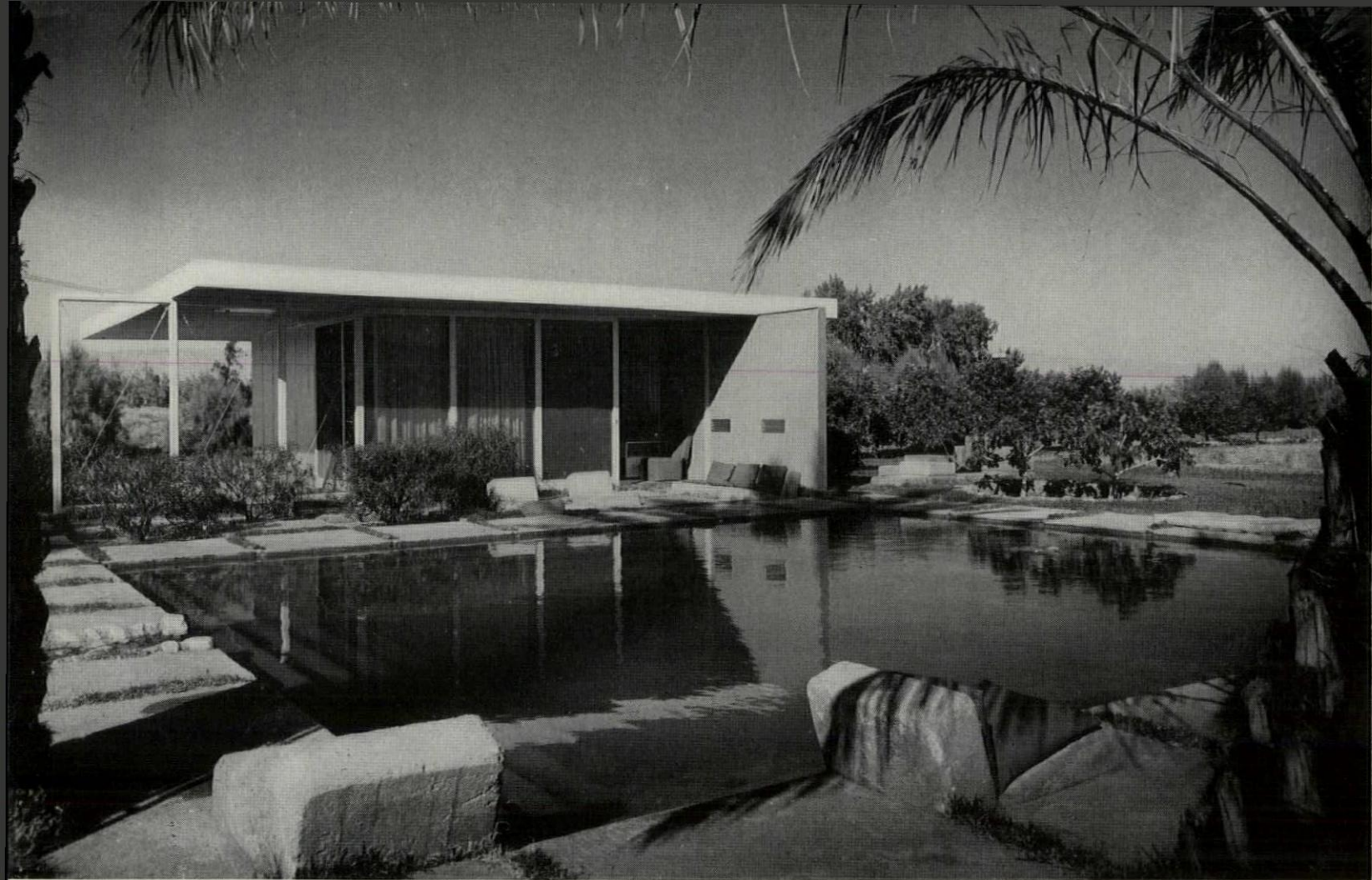
VIEW FROM SOUTHEAST

## HOUSE, PALM SPRINGS, CALIFORNIA

CLARK & FREY, Architects

***Integrated design in which space takes on new dimensions. The home an architect planned for himself.***

*Mr. Frey comments:* "I am thrilled every day by the varying spectacle of the natural views that are part of it, changing with light and color, wind, rain, stillness, and sunshine . . . I believe, however, that a full understanding of this type of house will come only gradually because most people's reflexes are conditioned by the conventional, closed-in houses in which they have grown up."



1 SOUTHWEST FRONT. Wing walls (direct continuations of interior walls) define separate areas and provide wind protection.

HOUSE, PALM SPRINGS, CALIFORNIA

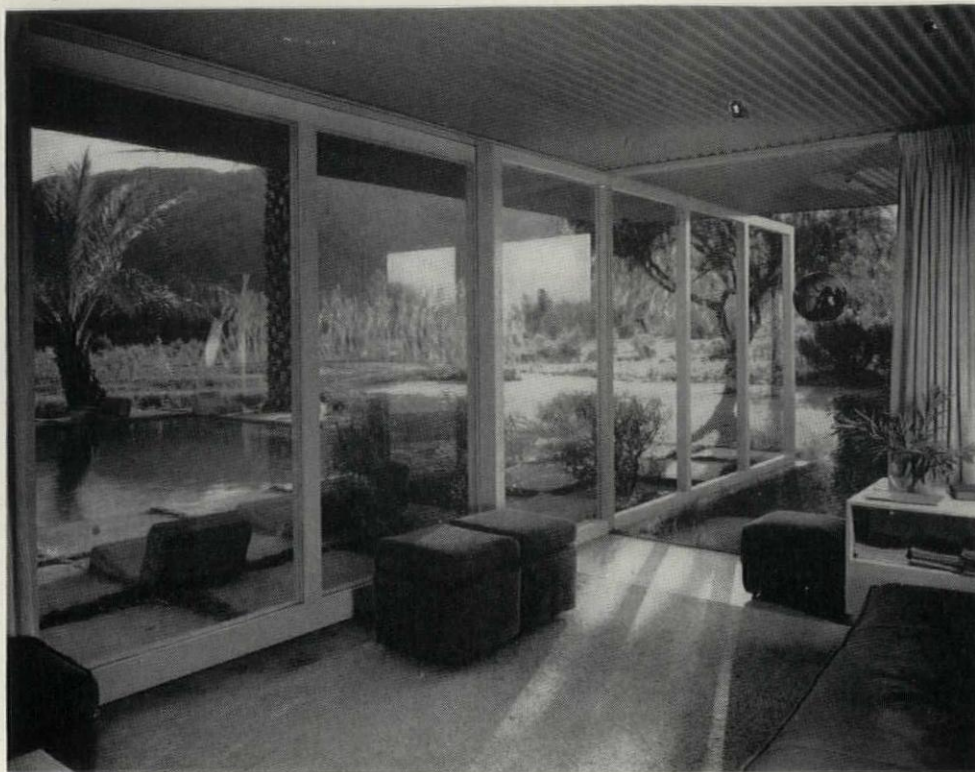
CLARK & FREY, Architects



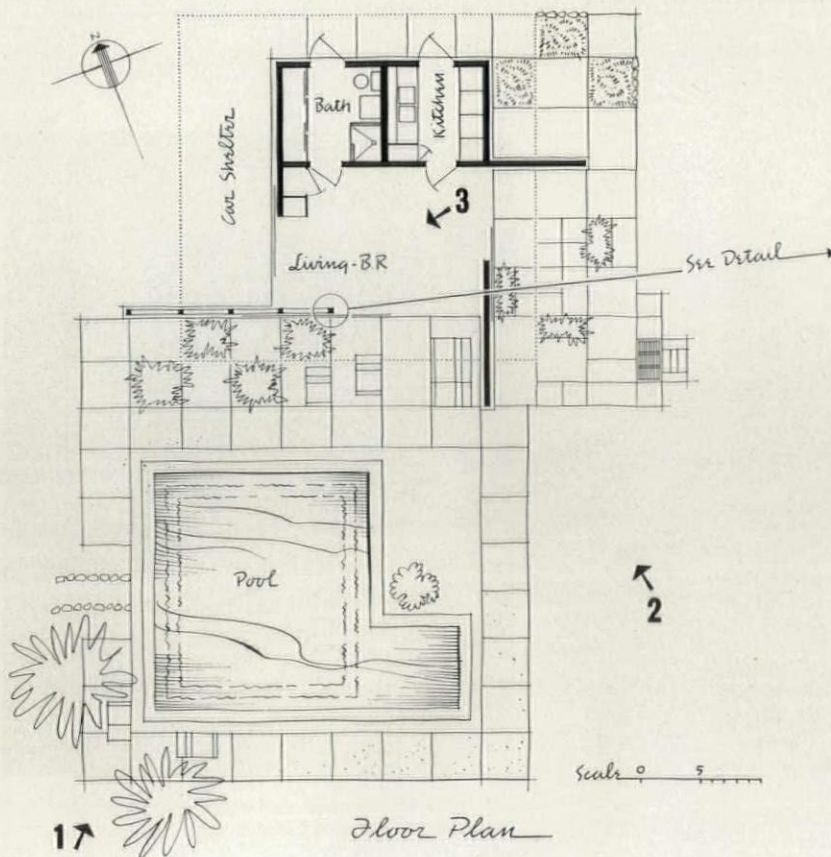
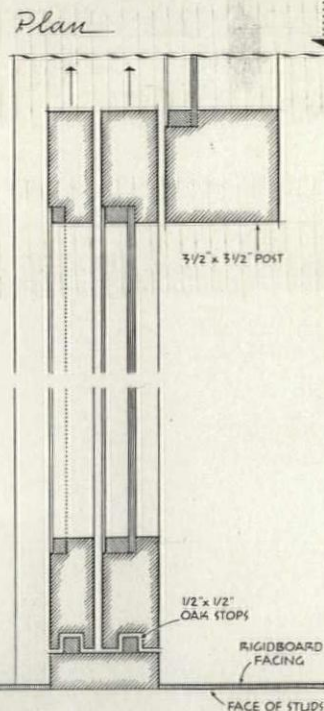
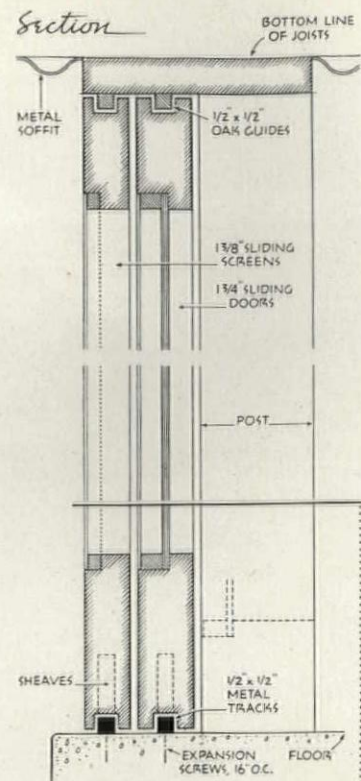
2 BARBECUE TERRACE, right; pool pavilion, left. Corrugated metal wall is surfaced with asbestos board on the reverse.

## SOLUTION

Mr. Frey arranged his home within a rectangle only 16' x 20' in area; but both horizontally and vertically, wall, floor, and ceiling planes have been variously extended; floor-to-ceiling and wall-to-wall windowed portions of walls slide; the pool, the view, and the closed-in terraces are important factors in the design, and the end result is a compact, efficient little plan with exceptional indoor-outdoor relationships that provide literally horizon-wide dimensions. Depending on the adjustment of the sliding walls, circulation of air is controlled over a wide range; on hot days, the house can be wholly shut up, and a cooler-humidifier-fan-air-washer unit takes over; in cool weather, electric space heaters keep things warm, assisted by the solar benefits inherent in the glass walls on south, east, and west. Curtaining, on the other hand, can cut direct sun out entirely.

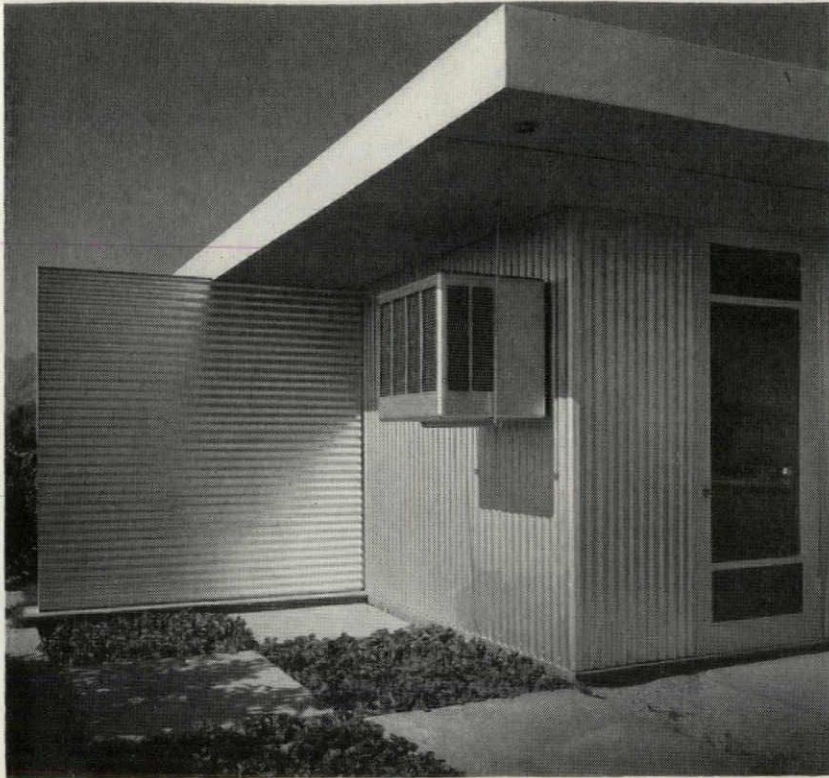


**3** THREE-QUARTERS of the pool-front wall is a sliding, glass partition (sliding screen panel outside); both panels slide wholly out of the way along frame at right.

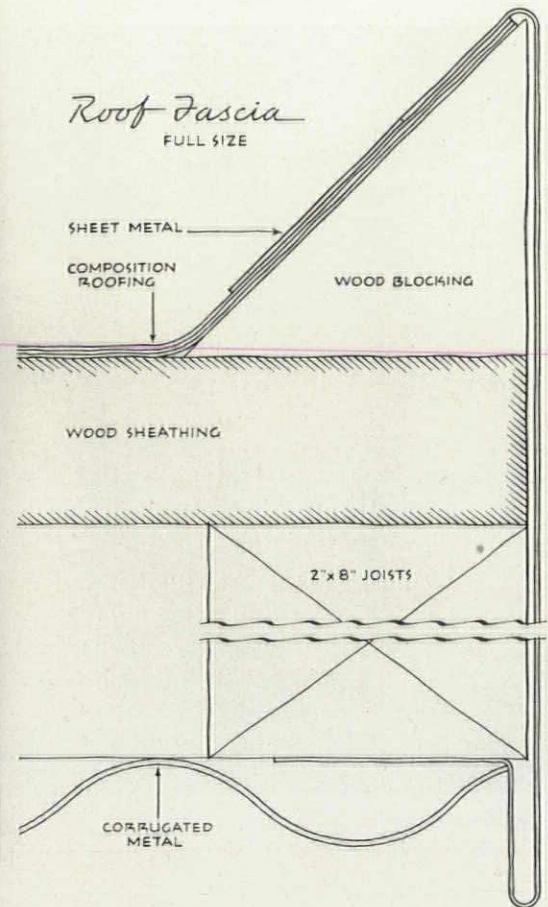


#### STRUCTURE

Laid out both in plan and section on a modular basis, using multiples of 4 feet as the dimensional control, the house is of wood-frame construction; exterior and interior surfaces are simply panels of either rigid asbestos cement board or corrugated metal, screwed to the frame. Mr. Frey actually applied these panels himself—a cost-saving system which some mass producer might study—a pre-made frame, with prefinished but unattached surfaces which the owner can install himself.



THE COOLER UNIT that washes, dehumidifies, and fans the air as well, is suspended from the roof, just outside the corrugated metal kitchen wall.



## HOUSE, PALM SPRINGS, CALIFORNIA

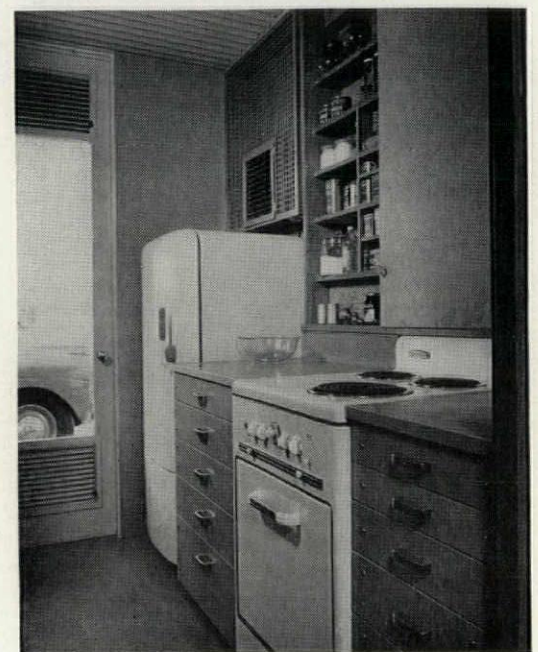
CLARK & FREY, Architects



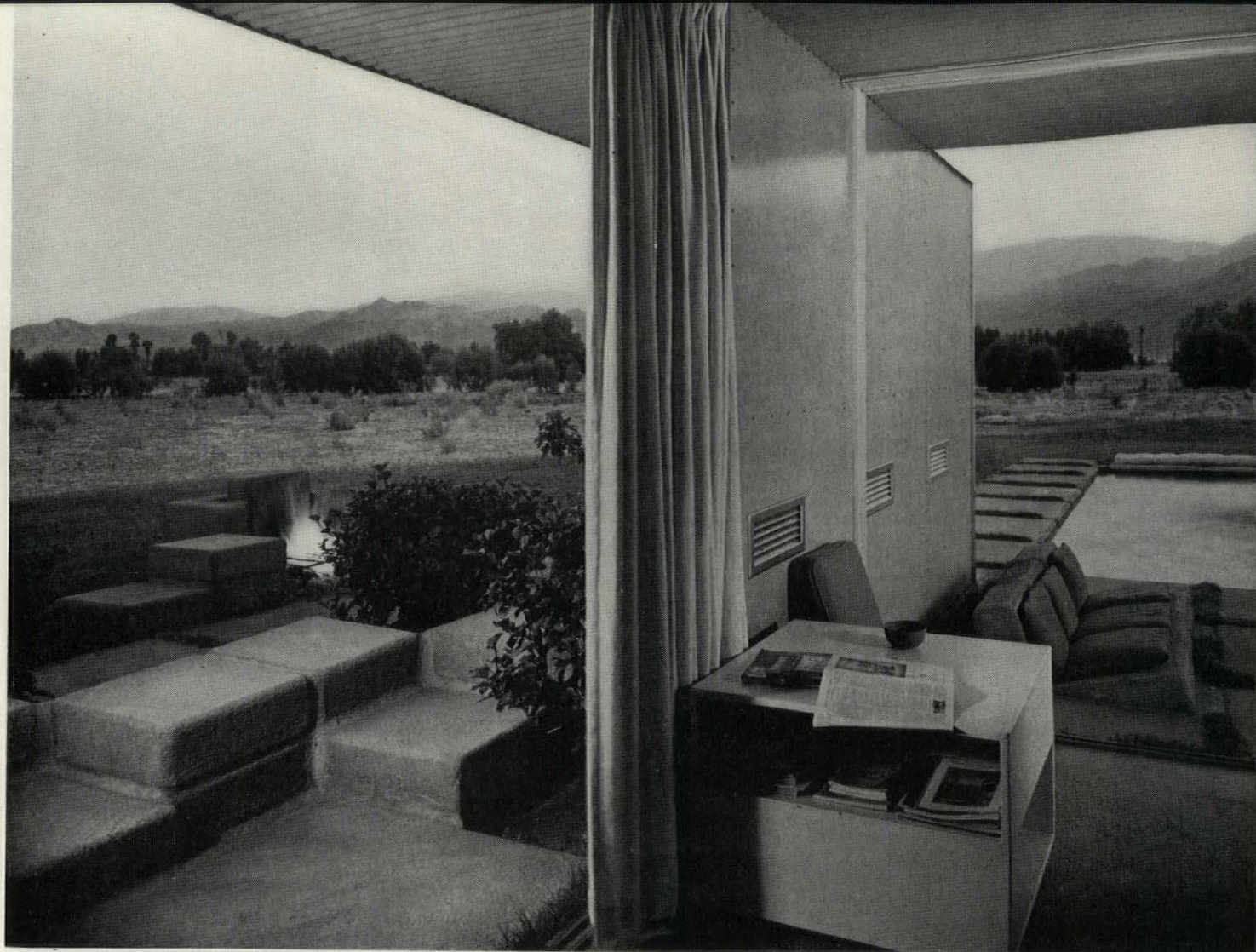
FREY

Albert Frey received his training in Zurich, Brussels, and Paris (with Le Corbusier). Following prefabrication experiments with A. Lawrence Kocher and the U. S. Dept. of Agriculture, he worked with Howe & Lescaze and with Philip Goodwin. He is the author of "In Search of A Living Architecture."

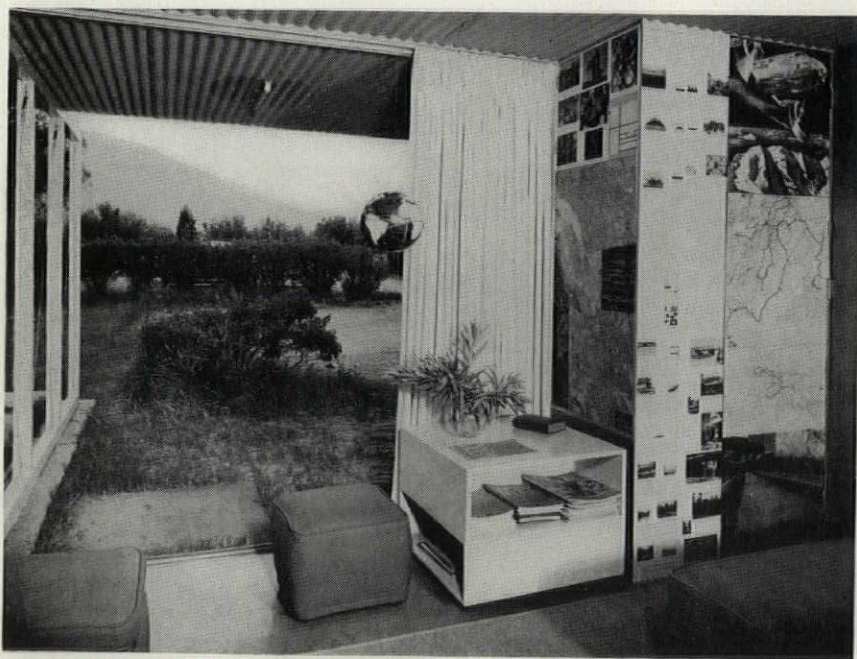
John Porter Clark had his formal training at Cornell, subsequently worked in Southern California offices, entered private practice, and joined Mr. Frey in partnership in 1939. For four years he was Captain with the Corps of Engineers and has served as chairman of the Palm Springs Planning Commission.



KITCHEN drawers and shelves are dimensioned to hold the things to be stored therein.

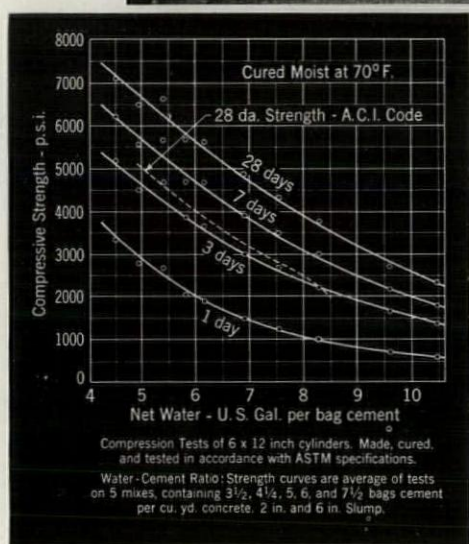
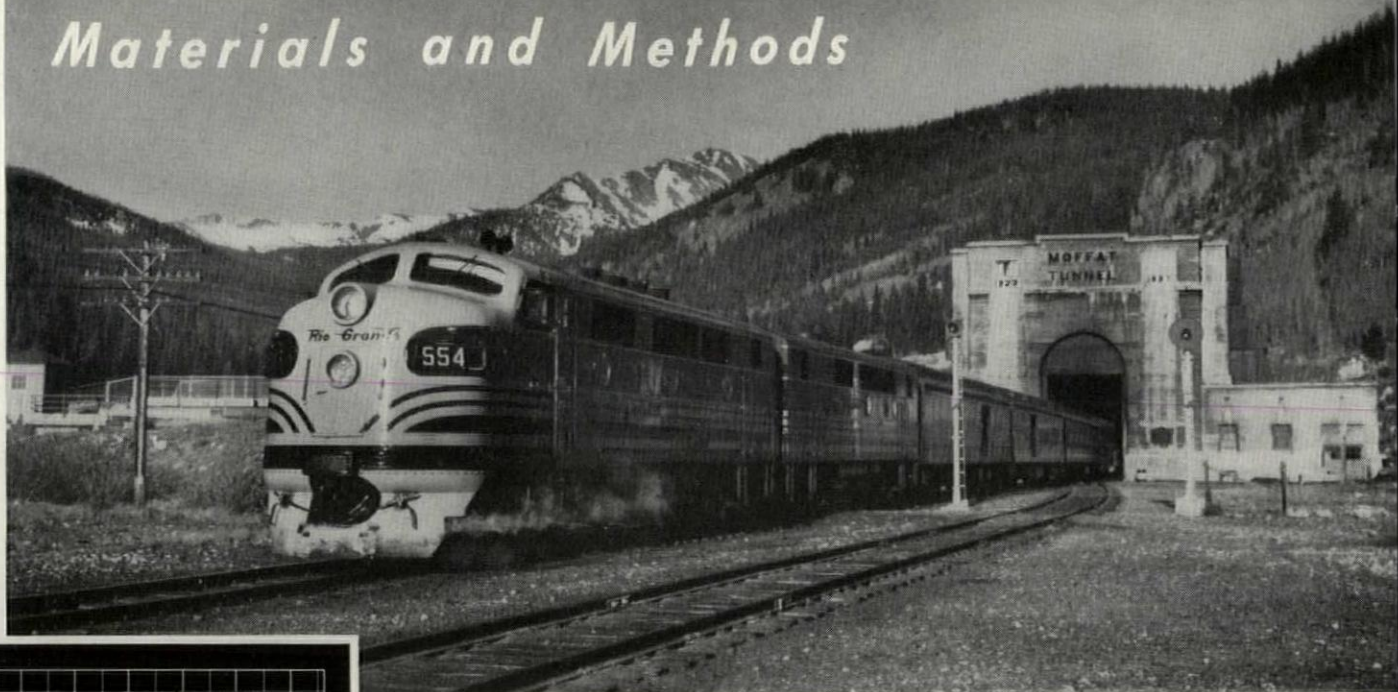


LIVING-ROOM CORNER. Note continuous planes of both asbestos-cement-surfaced walls and corrugated metal (painted blue) ceiling.



THE ROOF OVERHANG at the southwest is extra deep, forming a car shelter. A hinged bookcase panel lets down to form a desk.

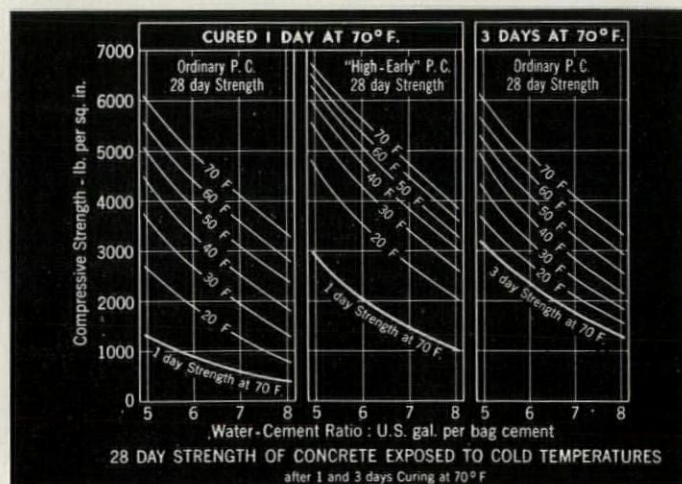




Top photo shows first job in which high-early strength Portland cement, then barely out of several years of laboratory research, was employed: the Denver and Rio Grande's Moffat Tunnel. Chart shows strength attained in three days with high-early cement almost equals 28-day strength of ordinary Portland.

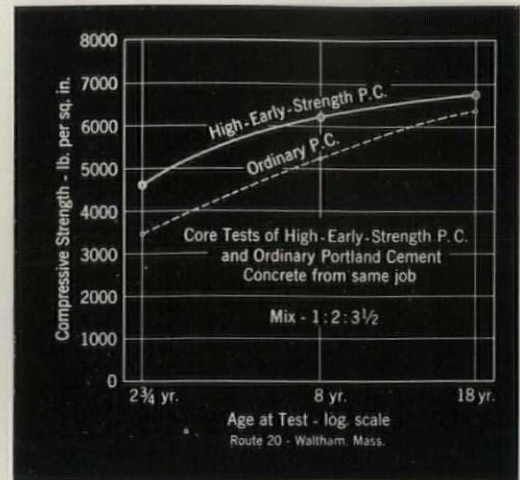
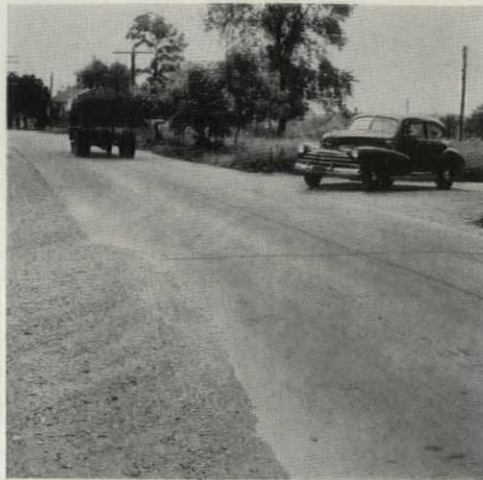
## "HIGH-EARLY" PORTLAND Changes Concrete Construction

HIGH-EARLY STRENGTH PORTLAND CEMENT has shared in popularizing reinforced concrete for buildings; occasionally it has even helped concrete displace other structural materials. Yet only 20 years ago was it first used in construction, and then only for heavy engineering work. In this article PROGRESSIVE ARCHITECTURE analyzes the characteristics which have made it an accepted building material.

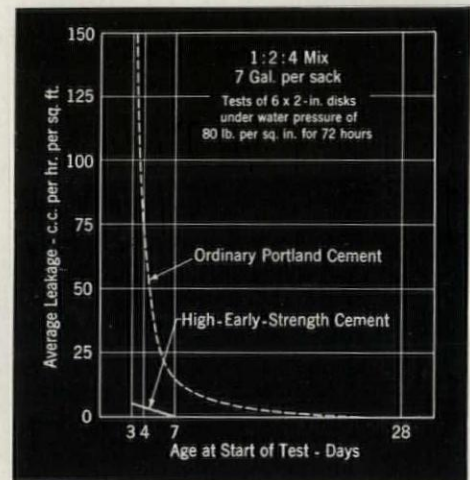
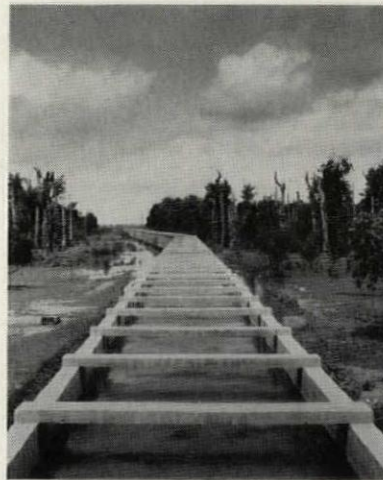


Early attainment of high strength results in shorter curing time; and this in turn makes possible the placing of concrete even in subfreezing weather—an important factor during the recent war and even now, when high costs and great need make construction at all seasons essential.

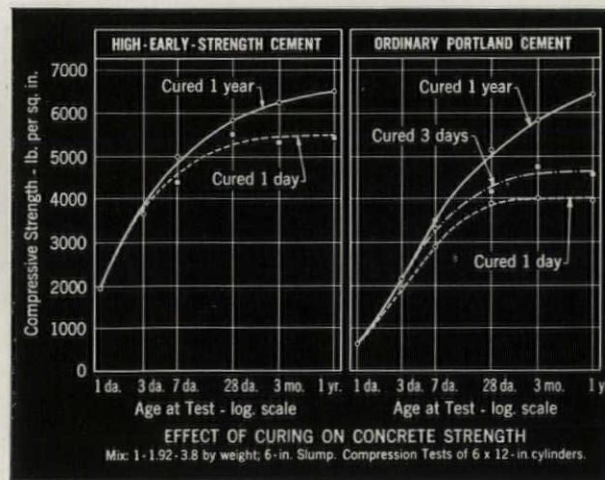
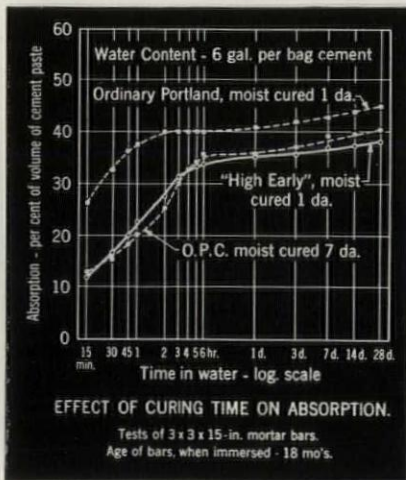
# CEMENT



Another early use of the material is highway paving, where quick hardening reduces traffic interruption. Parallel uses have come up in the building field; for instance, industrial floors, loading docks and ramps. Chart compares strength of samples, both high-early and ordinary, taken from highway (photo) after 18 years in use. Curves indicate strength would probably increase with more age.



Watertight concrete can be more quickly attained with high-early strength than with ordinary Portland, which has caused it to be specified for such uses as the irrigation flume illustrated. Extremely low permeability is needed in concrete used in buildings to house wet industrial or food manufacturing processes, in roofs, etc.



Charts show effect of curing on strength of ordinary and "high-early" cements. Another great advantage in using the latter is the fact that forms can be removed quickly and reused, which substantially reduces an inevitable cost item in concreting and increases speed of work. In general, the larger the job, the larger the saving on forms.



Thin-shell concrete hangars for American Airlines, Chicago, have the tremendous clear span of 257 ft between vertical walls. In construction . . . . .

## "HIGH-EARLY" PORTLAND CEMENT Changes Concrete Construction

In 1927 a new kind of Portland cement, which had the property of attaining almost as great a strength in one day as ordinary Portland had in seven, had just about proved itself in the laboratory. Engineers for the Moffat Tunnel, the Denver and Rio Grande's cutoff through the Rocky Mountains, were searching for a cement that would rapidly become strong enough to carry the tunnel's tremendous loads. Learning that there was enough of the new cement available for their purposes, the railroad people prevailed upon the cement manufacturers, who were somewhat reluctant to release their new product for such a use because it had not been quite as thoroughly tested in actual practice as they would have liked, to make it available. When examined in 1947 the tunnel's concrete, made with what has since become widely known as *high-early strength Portland cement*, showed no evidence of structural failure or disintegration, and in the intervening time there had been practically no necessity for maintenance.

At first the new material's uses were limited to heavy engineering construction: tunnels, dams, highways; and by 1929 and '30 it had been employed in several bridges. At about the same time it began to appear in buildings, in freight loading docks, railroad terminals, and the like. In all of these installations the principal factor leading to selection of "high-early," as the product is familiarly called, was the possibility of putting the structure into use, often under heavy traffic, one day after pouring. Since then, other secondary characteristics, most of them rooted in this "quick-use," have been recognized and have had a share in widening the material's utilization to include many types of building construction. At the same time, there are now many manufacturers; and the price differential, not very great at any period, has consistently lowered.

### CHARACTERISTICS; THEIR EFFECT ON CONSTRUCTION

Primarily, high-early gains strength and durability sufficient to withstand quite severe usage in a fifth the time required by ordinary Portland. The tests cited on the preceding page indicate that well proportioned, expertly placed high-early concrete continues to maintain this advantage over 20 years; it continues to increase in strength as time passes, just as ordinary Portland cement concrete does. Perhaps ordinary cement concrete will catch up to it eventually; we cannot tell about this because the product hasn't been in use long enough.

Assuming you have good concrete, early attainment of high strength means that formwork can be removed quickly, that relatively little curing time is required, and that the concrete achieves minimum water absorption (and maximum density) in about the same time it takes to reach usable strength.

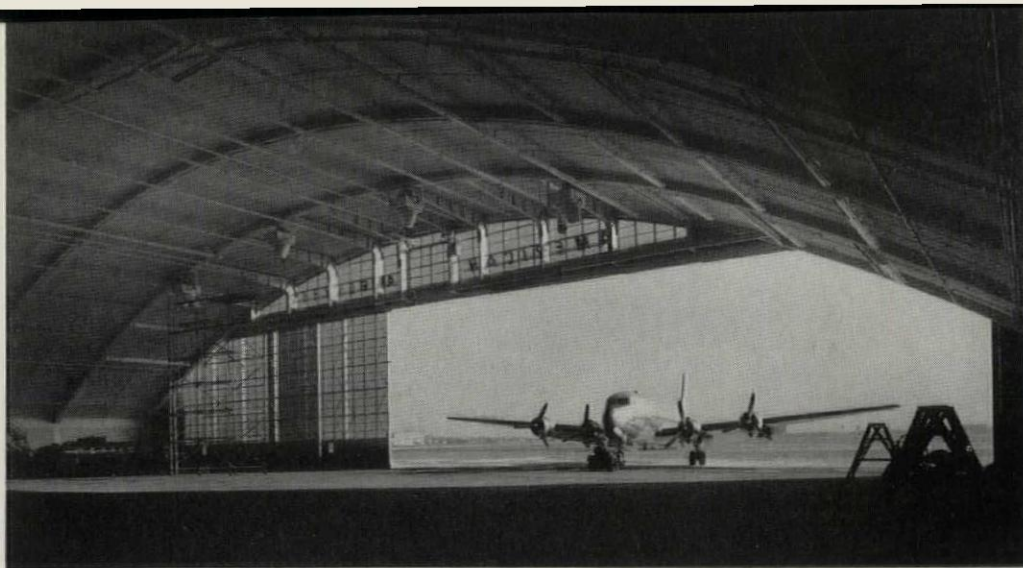
The net result of these characteristics is to speed up construction, of whatever kind; which makes possible quick occupancy or use of the structure. Since time is very patently money in American building construction, this speed-up has been found to save appreciably in building cost. Nor has the saving been noted only in terms of time; we must also consider the material's effect on curing, on formwork, and on the possibility of concreting in subfreezing weather.

**Curing** can contribute almost as much to good concrete as proper proportioning, mixing, and placement. It requires nothing like the engineering attention of these three processes, and it's not as impressive—there's nothing exciting about watching a piece of green concrete grow old. To speak plainly, the curing process is apt to be slighted. Therefore, concrete which can be cured satisfactorily in one day (see charts, "Effect of Curing on Concrete Strength") not only saves time in labor, supervision, and inspection, but also is that much more likely to be good concrete.

**Formwork** is admittedly an expensive part of concrete construction. The principal means of reducing form costs, even on relatively small jobs, is to reuse forms as often as possible. Use of high-early strength Portland cement makes it possible to shift forms quickly, and thus on even a large job one comparatively modest set of forms may suffice for the entire project. In some wartime plants, barrel-roof forms were mounted on tracks and hauled forward daily.

**Cold-weather construction**, once so costly as to be almost prohibitive with concrete, has become entirely feasible when high-early is employed. Concrete must be protected against freezing while it is hardening. High-early concrete requires stoves, fuel, and tarpaulins for one day only, however low the temperature.

Savings in terms of dollars due to use of high-early cement have been tabulated for many types of buildings, in localities from Texas to Massachusetts. On a small Texas hotel, for instance, with concrete frame and brick curtain walls, the saving (in today's dollars) on form costs was just under a thousand dollars; in addition, brickwork started 10 days earlier than it could have with ordinary Portland cement.



forms were moved rapidly forward and reused; high-early strength Portland was used.

On a New York factory, savings were over \$14,000 and four weeks. In 1947 the New York Housing Authority went to the length of having prepared two full sets of working drawings for at least two different housing projects, one set in steel framing, the other in reinforced concrete. Figuring on use of high-early, bids on the concrete designs came in substantially lower, and both projects went ahead in concrete.

#### EFFECTS ON DESIGN

Use of high-early strength Portland cement has widened until now we build institutions, multifamily housing, industrial buildings, hangars, etc., with this material; in fact, it has proved its worth for any concrete structure in which speed of erection, complex or extensive formwork (which can only be employed economically if quick re-use is possible), early attainment of strength and water-resistance, and reduction of cost for labor, curing, and overhead, are important. In addition, high-early is advantageously used in producing concrete masonry, precast units (slabs, beams, etc.), and cast specialties ranging from ornamental lighting standards to concrete pile points.

In all these manifestations there are design opportunities. When concrete as a material is to be exploited to the greatest possible degree, as in some of the thin-shell constructions, architect and engineer combine talents to produce one of the most breathtaking of contemporary esthetic results. If, by reducing form costs, high-early aids this design—and it does—it has earned its place. Perhaps the design must be “streamlined” (although we hesitate to use the word) to permit forms to be shifted economically; that is a technical consideration to be taken as a matter of course.

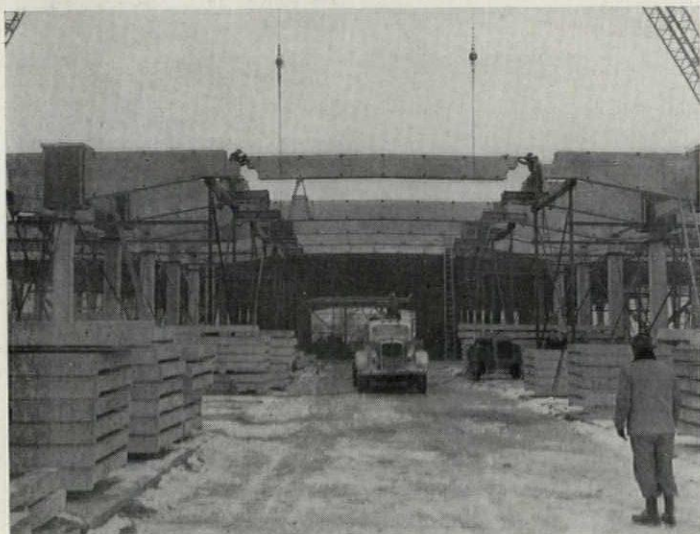
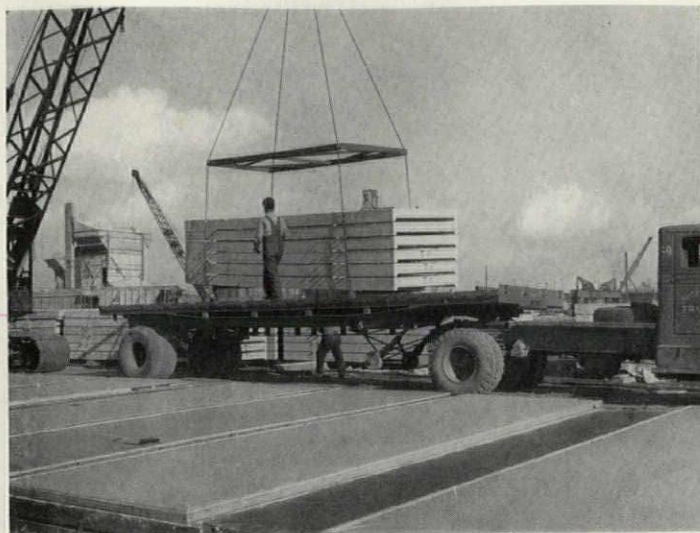
In laying out a structure for use of precast units, the designer is merely employing a building block larger than is customary. Often he also has the opportunity to design the units themselves—slabs, columns, beams, purlins, etc. And in such expanding developments as use of high-early in “shot-crete,” or concrete applied forcibly through a hose nozzle, there are chances to form walls and columns integrally, to build in lighting recesses, ductwork—to make the structural frame, the enclosing “curtain,” and at least part of the equipment, an integral whole (see the Long Beach, Calif., theater, Hugh Gibbs, Architect; January, 1948 P/A.) The laboratory product of 20 years ago has effectively changed construction practice and broadened the designer's horizon.



Types of buildings in which high-early cement has been used are almost infinite. Above, recently completed George Washington University Hospital, Washington, D. C., where high-early contributed substantially to save construction costs.



Popham Hall, Scarsdale, N. Y., apartment building, had to be rushed for early occupancy. Use of “high-early” permitted construction scheduling which saved both time and money—\$1.45 per cu yd of concrete.



Prefabrication in concrete has also benefited from use of high-early strength Portland cement. Photos show (upper left) foreground, roof panels poured in forms on the ground at the site, and, background, being loaded on a truck. Upper right, placing prefabricated framing; forms were clamped around joints and joints poured. Lower left, frame nearly assembled, roof panels stacked ready for installation. Note that the season is winter. Lower right, placing roof slabs. (Naval Supply Depot, Mechanicsburg, Pa.)



Hayden Planetarium, New York, has a spherical dome of gun-applied concrete over wood frame; construction occurred in early winter season.

# STREAMLINED SPECIFICATIONS

## MISC. and ORNAMENTAL STEEL and IRON

## STRUCTURAL STEELWORK

**HENRY L. BLATNER**  
Architect

Continuing the series of sample streamlined specifications in which subscribers have expressed so much interest, PROGRESSIVE ARCHITECTURE presents two important sections of the specifications for Mr. Blatner's new elementary school at Clarksville, N. Y. The brevity of these examples should not lead to any idea that they are incomplete; study will reveal that, short as they are, they cover the subject thoroughly. The job for which they were written, though it is modest in size, was handled with extreme care in the architect's office. Blank spaces below are for notes, addenda, etc., to aid in adapting these specifications as needed.

### MISCELLANEOUS AND ORNAMENTAL STEEL AND IRON

*Space for notes, addenda, changes*

#### 1. GENERAL CONDITIONS.

##### A. Hereby made a part of this specification.

- Contractor cautioned to read same carefully.
- particular attention called to Article 48.

#### 2. SCOPE.

- ##### A. Any or all miscellaneous and ornamental steel, iron, aluminum or other metal work required by or inferred from drawings and/or specifications.
- flashings specified under roofing work.

#### 3. SHOP DRAWINGS.

##### A. Prepare detailed shop drawings of all items except stock items.

- include size, weight, shape, location and all pertinent information for all members and items.
- submit in triplicate to Architect for approval.
- correct and return if required.
- check measurements and elevations at building site wherever possible.

#### 4. CUTTING, PATCHING, DRILLING, etc.

- ##### A. Of all work supplied by miscellaneous iron and steel contractor.
- for any or all trades whether or not part of this contract.

#### 5. STEEL LINTELS, FRAMES, etc.

##### A. Generally indicated and specified under structural steelwork.

- supply lintels, frames, etc., required by special job conditions only.

#### 6. ANCHORS, BOLTS, RODS, CLIPS, etc.

##### A. As indicated, detailed and/or as necessary for a complete and workmanlike job.

- necessary nuts, washers, straps or other devices.
- furnish to mason for building-in where necessary.

#### 7. LADDER RUNGS.

##### A. Bent pieces of $\frac{3}{4}$ " diameter wrought iron or steel with 18" wide face.

- 6" projection into wall with hooked ends.
- 6" projection from wall.
- spaced vertically 16" o.c.
- furnish to mason for setting.

#### 8. GUARD RAIL ASSEMBLY.

##### A. 1½" diameter standard steel pipe rail assembly.

- neat, welded joints less fittings.
- extra length for anchorage into concrete with pin or bent plate anchor at each vertical support.
- wall flanges as required.
- shop coat of approved metal protection.

##### B. Installation.

- securely install guard rail assembly to insure rigid job.
- vertical members true and firm.
- horizontal members level.

##### C. Schedule.

- Storage Area #3 as shown.

**MISCELLANEOUS AND ORNAMENTAL STEEL AND IRON (Continued)**

*Space for notes, addenda, changes*

**9. ACCESS PLATES.**

**A. 1/4" thick, checkered steel plate.**  
—drop lifts.

**B. Schedule.**

- two 16" x 24" access plates to Kitchen trench at points directed.
- four 12" x 16" access plates at points noted on drawings.

**10. MANHOLE COVER AND FRAME.**

**A. Flockhart Foundry Co. #33650 or approved equal.**

- 24" x 24" watertight frame and 5/16" thick, hinged steel plate doors.
- complete with hardware including cast bronze hinges, handles and padlock eye.
- complete waterproof assembly.
- shop coat of paint.

**11. ALUMINUM WORK.**

**A. Ornamental Metal Letters.**

- 1 set of exterior alumillited aluminum letters made from 1/4" x 3" bars fabricated to simple ribbon style letters per full size details later submitted by Architect.
- anchor exterior letters to masonry by concealed aluminum rod anchors.

**B. Aluminum angles.**

- 4" x 1/4" x 3" continuous extruded alumillited aluminum angle base completely around Assembly-Cafeteria area and anchored to masonry only.
- angles as noted at sliding door recess adjacent to All-Purpose Room Entrance door.

**C. Guard Rails.**

- 3/4" diameter, round extruded tubing or solid rod.
- rails, vertical supports, flanges, etc.
- neat, brazed joints without fittings.
- solid, secure anchorage to masonry or other construction.

**D. Aluminum Floor Strip.**

- stock tee strip 3/4" wide at intersection of wood and concrete finished flooring.

**ALTERNATE WORK**

See Alternate Specification Sheet for addition of Metal Wire Door and Frame in Pantry.

**STRUCTURAL STEELWORK**

*Space for notes, addenda, changes*

**1. GENERAL CONDITIONS.**

**A. Hereby made a part of this specification.**

- Contractor cautioned to read same carefully.
- particular attention called to Article 48.

**2. SCOPE.**

**A. All Class "A" structural steelwork** as required by or inferred from drawings and/or specifications per latest AISC Code of Standard Practice.

- complete material, fabrication, transportation and erection.
- as shown on structural layout Drawing S-1, and as detailed and explained on other general drawings.

**3. CODES AND REGULATIONS.**

**A. In strict accordance with latest edition of:**

- AISC Specifications** for The Design, Fabrication and Erection Of Structural Steel For Buildings (Riveted, Bolted and Arc-Welded Construction).
- Standard Specifications ASTM.**
- Pertinent Specifications of American Welding Society.**
- any pertinent **federal, state, or local codes.**

**4. SHOP DRAWINGS.**

**A. Prepare detailed shop drawings** in triplicate for Architect's approval.

- Include framing plans indicating size, weight, and location of all members and detailed drawings of all members and connections.

## STRUCTURAL STEELWORK (Continued)

Space for notes, addenda, changes

- Correct and return if required by Architect.
- Await Architect's approval before fabricating.
- Make provision for any work abutting steel as noted on drawings or as directed by Architect.

### 5. MATERIALS.

#### A. Structural Steel.

- Standard stock sections conforming to requirements of AISC and ASTM for steel for buildings.
- Free from injurious seams, flaws or cracks.
- Minimum sections and weights noted. Substitution must possess equal or greater section moduli and not otherwise violate AISC specifications.

#### B. Rivet Steel.

- Conforming to standard specifications ASTM for structural rivet steel.

### 6. FABRICATION.

#### A. Conforming to best practice in modern structural shops.

- Beams.
  - cut, fit and cope as necessary.
  - project no closer than 4" to the outside face of exterior walls except where detailed otherwise.
  - bearing plates as shown.
- Columns.
  - mill bearing ends.
  - splice only where necessary due to change in size of section.
  - base and billet plates complete with anchor bolts.
- Rigid Bents.
  - completely fabricated as shop units and delivered to job ready for erection.
  - all connections shop welded except loose connecting members which will be field bolted.
  - complete with connections, etc., to receive other members as shown.
- Connections.
  - AISC Standard Series throughout except where absolutely necessary to deviate or otherwise shown.
  - Designed to withstand stresses due to wind and eccentric loading both during and after erection.
- Shop Connections.
  - riveted or welded.
- Field Connections.
  - to columns or within 3'-0" of the face of any column—Dardalet Rivet Bolts.
  - other field connections—machine bolts, washers and nuts.
- All necessary rivets, bolts, rivet bolts, nuts, washers, etc., for complete fabrication and erection of all structural steelwork.

### 7. SHOP PAINTING.

#### A. Complete in every respect and conforming to best practice in modern structural shops.

- clean all scale, rust and foreign matter.
- one coat of approved metal protection to all surfaces except contact surfaces.
  - well and evenly applied.
  - to dry surfaces only.
- one additional coat of different color to surfaces inaccessible after assembly.
- identify all sections or pieces by suitable mark to conform with erection drawings.

### 8. ERECTION.

#### A. Erect complete steel frame.

- plumb and true in all particulars.
- bolt up during erection to provide for dead load, wind and erection stresses.
- temporary bracing and shoring as required.

#### B. Field corrections.

- as necessary to correct shop or detailing errors.
- cut, burn or drill members only with Architect's approval.

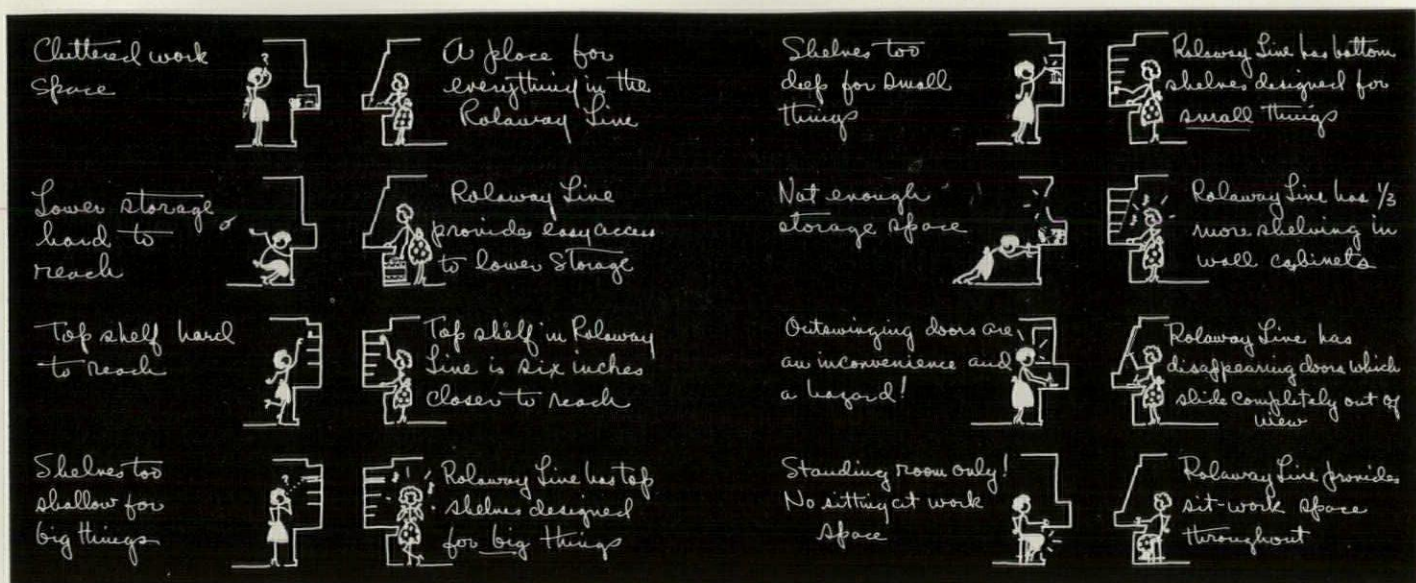
### 9. FIELD PAINTING.

#### A. All unpainted field bolts, etc., and any serious abrasions to shop coat.

- touch up with same material used for shop coat.

#### B. General Field Painting.

- included in Painting Specifications.

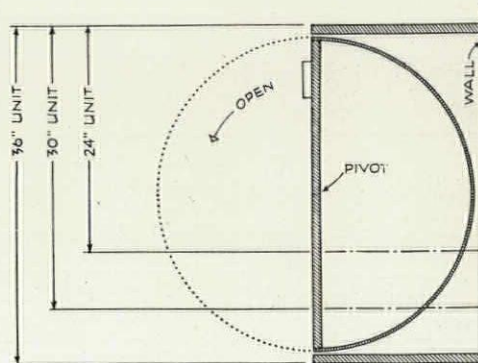


## KITCHEN CABINETS REDESIGNED

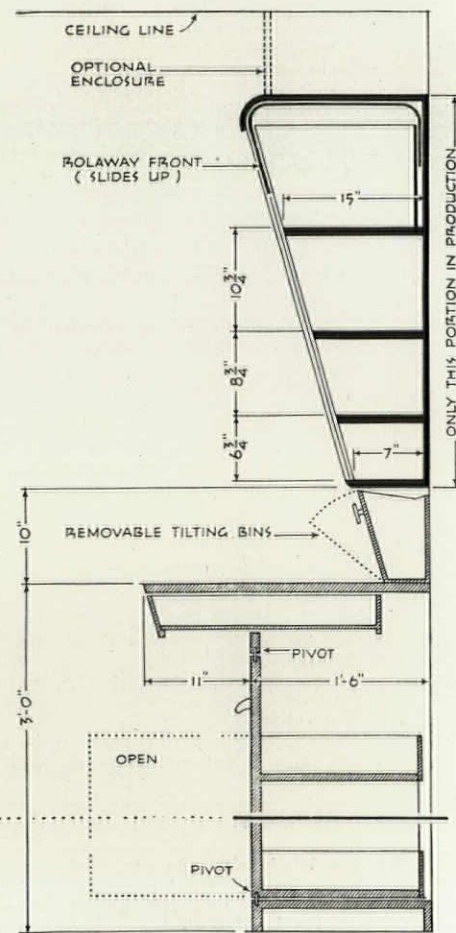
Designed by Sherwood, Mills & Smith, Connecticut architects, and being readied for production by a New England mill is a new line of kitchen cabinets which incorporates some unique features as well as some which are similar to other new lines. While the base unit as designed is not yet in production, it is an important component of the complete line and ought to be produced.

Wall cabinets have sloping fronts, which not only provides shelves sized to take the variety of items usually stored in kitchens, but also increases available storage space by  $\frac{1}{3}$ . The roll-up doors eliminate the possibility of bumping one's head on an open side-hinged door. The suggested bins beneath the wall cabinets, while not yet in production either, are to provide storage space, convenient to the point of use, for staples such as flour and coffee. Base cabinet counter width has been increased from the normal 25" to 29". The projecting drawer space will afford knee-room for the housewife who would like to sit at her kitchen work—an advantage obtainable in no other cabinets to our knowledge. Below this are to be storage cabinets with pivoted (rather than hinged) fronts on the back of which the shelves are mounted. Thus, instead of having to bend over and peer into the cabinet to find something stacked at the rear, a touch on the pivoted door brings the cabinet's entire contents into view; the desired object can be lifted out easily. This same "lazy Susan" principle is adapted to corner units for both base and wall cabinets. The architects have recommended that the finish be natural to show the grain of the wood.

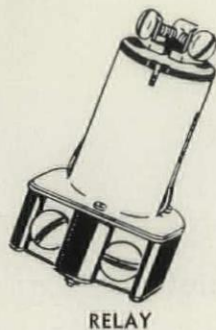
Of the complete assembly, only the upper wall cabinets of the Rolaway line are now getting into production. These are to be distributed eventually through normal retail outlets. Pivot-front base cabinets are available in other lines, but this is the only current proposal to combine design for comfortable sitting, drawer space, and the pivot front. Note that counter top is brought out into the open, for easy lighting and accessibility, by the sloping-front wall cabinet.



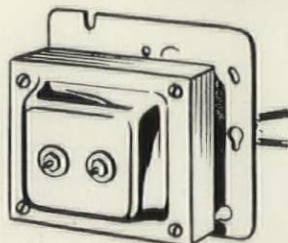
Plan



Section



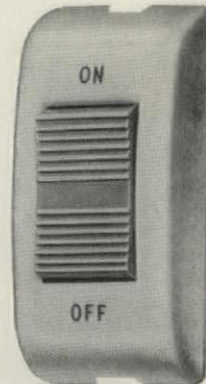
RELAY



TRANSFORMER



WIRE two types



SWITCH  
actual size

## REMOTE CONTROL ELECTRIC WIRING

We can't resist telling you that the General Electric Co. has as much trouble with housebuilding as Mr. Blandings. G-E wanted to show us the new *Remote Control Wiring System* being installed in a house in Bridgeport, Conn., so we'd see how simple it is (and it has excellent points). However, frantic phone calls just before train time informed us that the showing was transferred to New York, so we had a hotel lunch and saw the system in G-E's basement auditorium. Supposedly the transfer was due to an imminent railroad strike; but a G-E fellow let slip the fact that the electricians just didn't get things ready on time.

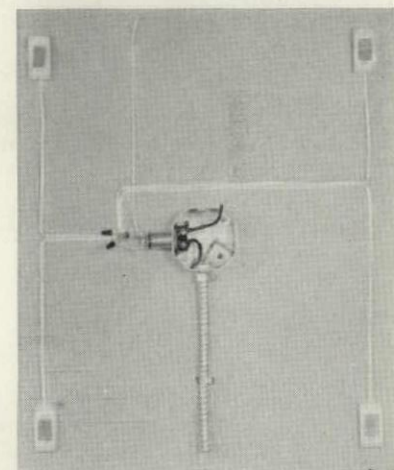
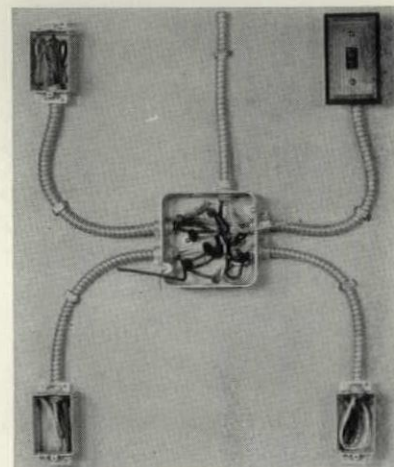
In spite of the basement showing we came away enthusiastic. The system is almost foolproof, and of established electrical practices it upsets only one, and that not everywhere: a few local codes insist on conduit for low-voltage wiring, which makes no sense. In principle, the Remote Control switch operates a low-voltage relay which turns off (or on) the 115v current at a light or convenience outlet. Several switches can be hooked up to a single outlet without complex interconnections, and with each switch turning current on or off regardless of other switches; or one switch (or a number of them) can control a group of outlets. The permutations and combinations of the four items shown at the top of the page are almost endless. There are limits, of course; too long a run of wire causes excessive voltage drop which impairs operation, and more than three relays per switch overloads the transformer.

When installation is made during construction, all that shows is the switch (actual size above); no switchplates are used. For rewiring, the low-voltage wire may be fished through walls, channeled into plaster, or tacked to the surface. The system substantially reduces hazards of fire and electric shock (most people can't feel 25 volts) and makes it possible to install multi-switching in even low-cost houses (which seldom have it) as well as in expensive houses, on the farm, for outbuildings, in office buildings, factories, hospitals, tourist cabins, etc. With it, the farmer (or watchman or foreman or floor nurse) can control distant lights from a central point; Mr. Householder, reading himself to sleep, can put out the downstairs light without getting out of bed. Yes, we were fascinated with G-E's newest development; we examined it, poked it, asked questions, and fiddled with the beautifully designed switches for nearly two hours.

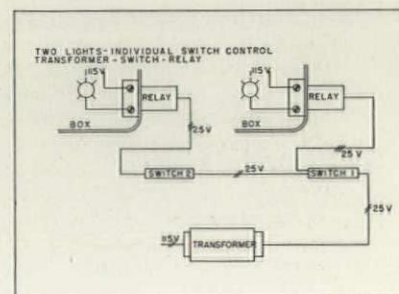
**COMPONENTS:** switch, operated by feather touch; relay with two coils, one for closing, one for opening circuit, relay mounted on standard outlet box in knockout; 25v transformer, only one required for average house; wire, no. 22 Flamenol-covered, two- or three-conductor, solid, with ribbed covering for identifying conductors. **INSTALLATION:** wire may be stapled to studding, is easily concealed; components and recommended installation conform to National Electrical code and union practices. **SAFETY:** the low voltage cannot cause fire, is imperceptible to touch. **COST:** in general, Remote Control system is cheaper than conventional wiring when 2 or more lights are to be controlled from 3 or more points. Costs of the two systems are roughly equal for 1 light controlled from 3 points, or for 1 or 2 sets of 2 or more lights controlled from 2 points; conventional wiring is at present cheaper for 1-point switching. **AVAILABILITY:** ample stocks should be in dealers' hands by the time this is published.



Installing: left, mounting 25v transformer; center, installing switchplate in lightweight wall box; right, installing low-voltage wiring. Note: no armor or conduit.



Top, BX runs (expensive 3- or 4-wire cable), large box for 16 wires, 9 connections, required for customary 4-way switch wiring; lower, simple low-voltage runs, one high-voltage supply, small outlet box, for Remote Control system.



Variation: one transformer, two Remote Control switches for two lights.

## CORROSITE — Applied Like Paint

CORROSITE is composed of plastics and solvents, the result of extensive research, for use on all types of building materials wherever there has to be a very high degree of protection against severely corrosive conditions.

Riding home on a bus the other day, we overheard an emphatic exposition of the value of a new protective coating. "Yes, it's pretty wonderful stuff. No, it is *not* a paint; it's a plastic, and don't get it mixed up with 'plastic paints.' The Federal Trade Commission won't let 'em call it paint, because it isn't made of the things paint is." Over our newspaper we identified the lecturer as a member of an important New York firm of architects. The young chap he was talking to had a flat 6" architect's scale in his vest pocket.

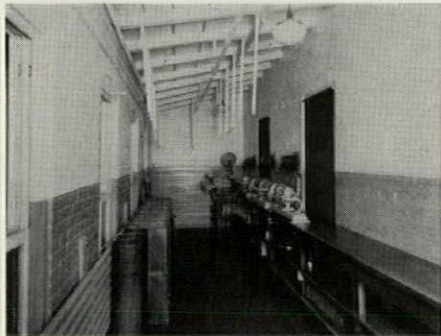
"This stuff is put on just like paint—brush, spray, or dip—and it works on wood, masonry, or metal. When you put it on aluminum you have to degrease the metal—you have to do that anyway for paint—but it will stick to any other metal or wood or brick and so on without a prime coat. But the biggest thing about it is that it won't wear out; I don't care how corrosive an industrial atmosphere you use it in. And you can apply it right over old paint, though I'd want to make darn sure any loose paint, or scale and so on, was taken off. . . . Oh, you've got a small house. Well, use this on doors and trim; then you can wash off dirty fingermarks—they're acid too—with any household cleaner, and your coating will still be good. Same goes for the kitchen. Know how brown kitchen walls get? Ceilings, too. And over radiators. Yes, it's wonderful stuff. Resists all alkalis and nearly every acid.

"They call it Corrosite," he concluded, satisfying our curiosity as well as his young companion's. "Made by the Corrosite Company in the Chrysler Building in New York. You get in touch with them."

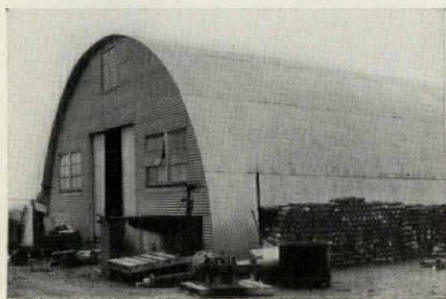
A few days later some Corrosite people were in and gave us additional data. Corrosite, available clear and in colors, is a combination of thermosetting and thermoplastic resins in a solvent which evaporates quickly. It dries tack-free in 15 to 30 min. (first coat) or up to an hour (third coat) when brushed on, faster when sprayed; and ages to its permanent form in a period of days, beyond which it does not weather or chalk. The film bonds to porous materials by penetrating, just as paint does; it is quite flexible and expansible, so that neither reasonable bending nor temperature changes affect it. Corrosite stands up well under both salt air and industrial fumes; but it will not withstand constant immersion in acetic acid, or mixed nitric-hydrochloric, stronger than 10%. It is not recommended for air temperatures over 265F or immersion temperatures over 140F; and it is attacked by hydrocarbons, ketones, esters, or by constant immersion in gasoline or kerosene.



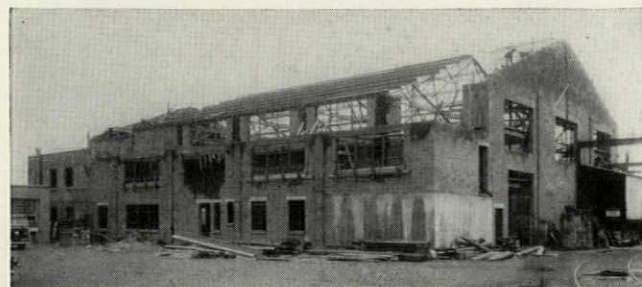
Building in New York City has facade of left wing coated with Corrosite; right wing is not. Prior to Corrositing, say owners, moisture penetrated wall and damaged interior plaster. Since Corrositing (two coats, June 1947) there has been no moisture penetration, no discoloration of brickwork.



M. N. Schaeffer Co. building, Reading, Pa., has Corrosite, white and gray, on walls and ceilings to withstand steam and alkali cleaning, high humidity.



One coat of Corrosite (June 1946) has protected this Quonset's galvanized iron surface from chlorine fumes as well as weather.



In this new building for F. W. Berk & Co. in Wood Ridge, N. J., manufacturers of chemicals, the owners expect a more accelerated corrosion problem than is normally encountered. Corrosite is being applied to all structural steel and window sash in two coats. All machinery, piping, etc., will also be Corrosited.



## THIS MONTH'S PRODUCTS

### AIR AND TEMPERATURE CONTROL

**Industrial Humidifier:** requires no steam, pumps, or compressors; connects directly with any water line. Entire unit of heavy-gauge copper or other non-ferrous material. Abbeon Supply Co., 58-10 41st Dr., Woodside, N. Y.

**Twin-Ring Chimney Crown:** utilizes force of air currents from every angle to improve chimney draft and increase efficiency of heating systems. All parts (tube, two outer bands, chimney proper, top disk) continuously extruded, quickly assembled by cementing. Coleman Co., Inc., 2nd & St. Francis Sts., Wichita 1, Kansas.

**Thermo-Matic Register:** individual room temperature control device for forced warm air heated residences. Warm air input from register is regulated automatically in relationship to heat loss from room. Dole Valve Co., 1933 Carroll Ave., Chicago 12, Ill.

### CONSTRUCTION

**Aluminum Sheet:** new form with raised patterns eliminates need for finishing operations, hides surface wear. Increased rigidity allows material to replace steel. Available in flat or coiled sheet. Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky.

### DOORS AND WINDOWS

**Rite-Lock Series 500:** new unit-type lock for sliding door, adjustable to various thicknesses and installed without mortising. Exposed parts of solid brass, four standard finishes. Adams-Rite Mfg. Co., 540 W. Chevy Chase Dr., Los Angeles, Calif.

**Metal Window Well:** made of heavy galvanized copper steel with flanges for attachment to masonry walls. Conserves yard space, silvery surface brightens up basement rooms. Types, sizes for every window. United Steel Fabricators, Inc. Wooster, Ohio.

### ELECTRICAL EQUIPMENT AND LIGHTING

**Timer:** small, compact, for battery chargers, ovens, laundry equipment. Transparent polystyrene housing permits inspection of elec-

trical contacts. Eagle Signal Corp., Moline 3, Ill.

**Minuteman:** portable self-contained emergency lighting system. Two adjustable lamp heads supply light, instantly and automatically, for approximate area of 10,000 sq ft for about five hours. When normal current is resumed, lights go out; battery restores itself for next emergency. No special wiring required—only convenient plug. Electric Cord Co., 30 Church St., New York 7, N. Y.

**Reflector Flood and Spot Lamps:** two new 75w flood and spot lamps with internal reflectors, to supplement standard 150 and 300w. R-30 bulb lamp claimed to be smallest ever offered in standard voltage ratings of 115, 120, and 125. Westinghouse Electric Corp., Box 1017, 306 4th Ave., Pittsburgh 30, Pa.

### FINISHERS AND PROTECTORS

**Corrosite:** new coating, combining thermo-setting and thermoplastic resins, blended with plasticizers, stabilizers, and solvents. Protects almost any surface—wood, metal, concrete, old paint. Will not oxidize, resists acids, alkalis, alcohol; no prime coat needed. Applied like paint. Seven colors, also ready-mixed aluminum. Corrosite Corp., Chrysler Bldg., New York 17, N. Y.

**Home Flashing System:** packaged weatherproofing unit consists of 10 flexible, non-rusting copper sheets, 200 bronze nails, instruction book. Two packages will flash average five- or six-room house. Revere Copper & Brass, Inc., 230 Park Ave., New York 17, N. Y.

**Perma-Dri:** a compound finish formed of heat-processed aluminum silicate and an adhesive binder. Blocks heat and sound transmission, retards moisture condensation. Applied to walls, ceilings, or wherever heat conductivity takes place. Stephenson Air Brush Paint Co., 190 MacArthur Blvd., Oakland 10, Calif.

### INSULATION (THERMAL, ACOUSTIC)

**Corkoustic:** resilient acoustical material, entirely composed of cork particles, again

available. Glareless white paint finish reflects 80% of all light that strikes it. Thermal conductivity is 0.18 Btu per sq ft per hour, per degree of temperature difference. Building Materials Div., Armstrong Cork Co., Lancaster, Pa.

### SANITARY EQUIPMENT, WATER SUPPLY, DRAINAGE

**Donnal Nevr-Leak Faucet:** guaranteed not to leak for ten years. Hexagonal brass bar body with basin cocks and swing spout. Rubber washer eliminated, works on patented watertight closure. "O" rings at all packing points; anti-splash nozzle. Donnal Co., P.O. Box 513, Pasadena 14, Calif.

**Magnesium Anode Rod:** said to prevent or greatly lessen corrosion of hot water tanks. May be used in any type of water heater. Dow Chemical Co., Midland, Mich.

### SPECIALIZED EQUIPMENT

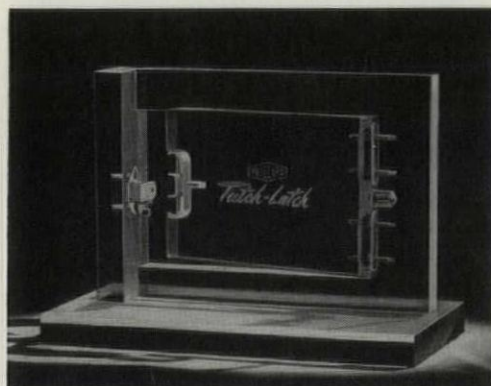
**Launderall:** coin-operated automatic washing machine, with tamperproof meter. Machine can be stopped during washing cycle to add extra articles of clothing. F. L. Jacobs Co., 1043 Spruce St., Detroit 1, Mich.

**Vemco Drafting Machine:** with articulated arms which raise drafting head yet keep the scales always flat. Simple tightening device produces proper band tension. Machine has thumb-action indexing for each 15° in entire circle. V. & E. Mfg. Co., 758 S Fair Oaks, Pasadena, Calif.

**"Duoflex" X-Ray Table:** improved procedure, sharp fluoroscopic image, less floor space required, new, simplified controls. Two-tube X-ray unit features 18" increase of target-to-patient distance. Westinghouse Electric Corp., Box 1017, 306 4th Ave., Pittsburgh 30, Pa.

### SURFACING MATERIALS

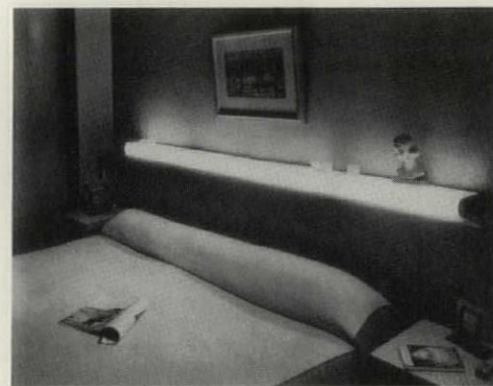
**Lockback:** new plastic wall tile molded with patented ribs across tile back; provides automatic lock—and permanent installation—between mastic and tile. Available in 20 colors, marbleizations, and trims. Wilson Plastics, Inc., 131 Arthur St., Sandusky, Ohio.



Plastic model shows new Phillips "Tutch-Latch," easily installed, positive latching and unlatching at a finger's touch, for cabinet work, drawers as well as doors.



Quiet Automatic Burner Corp.'s winter air conditioner: furnace (oil or gas), blower, humidifier, controls, in sealed casing.



Plexiglas used in a bed lighting fixture manufactured by Sylvania (one 40w, two 20w, fluorescents in line); refraction of plastic shield directs light down at 55°.



# 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

1-183. Capture the Sun with B & G Hydro-Flo Heating (AX-1247), 17-p. illus. catalog on the application of forced hot water to all forms of radiant heating. Advantages, typical installations. Bell & Gossett Co.

1-184. Overfire Jets in Action, 16-p. bulletin on automatic steam-air jets that abate smoke from furnaces by burning volatile matter from coal before smoke is formed. Diagrams, typical installations. Bituminous Coal Research, Inc.

1-185. Airjet, 4-p. illus. folder, including 15 loose sheets, on roof ventilators and vent flue caps for commercial and industrial buildings. Modern design with low silhouette (cannot be seen from street). Advantages, selection data. C. R. Gelert Co.

★ 1-186. The New International Warm Air Oil Furnace (Form 121-8-47J-25M), 6-p. folder on two types of automatic oil furnaces for basementless houses. Specifications, installation data. International Oil Burner Co.

## CONSTRUCTION

3-4 Fabricated Structural Steel, 8-p. booklet containing advantages of steel

construction, a brief description of the A.I.S.C. and its aims, research findings, and services. List of publications on steel construction. American Institute of Steel Construction.

3-5 Daylight in Industrial Buildings (1B-73), 36-p. illus. catalog on structural glass block used to bring daylight into building interiors. Made in a variety of face designs, each with its own light-transmitting characteristics. Advantages, typical installations, tables and charts, details, dimensions, specifications. American Structural Products Co.

3-6 Aluminum Sheet and Plate, 48-p. illus. booklet containing data on various sheet and plate alloys, gauges and sizes. Analysis of cost comparisons with other metals, tolerances, specifications, mechanical properties, tables of weight, ordering data. Reynolds Metals Co.

★ 3-7 Manual of Recommended Practice, 58-p. handbook on a system of erection for welded structures. Diagrams, tables and charts, typical applications, detail drawings. J. H. Williams & Co.

## DOORS AND WINDOWS

4-134. Tinted Screening, folder on weatherproof tinted plastic screening; is worked like cloth, can be cut with scissors. Advantages. Firestone Industrial Products Co.

4-135. The Window of the Future—Today! 4-p. folder on awning windows,

made up of separate panes, each of which operates independently, controlled by worm and gear shift. Specifications, price lists, general data. Gate City Sash and Door Co.

★ 4-136. Entrances, 8-p. booklet on metal-and-glass constructed doors, frames, and trim. Typical details, sections. The Kawneer Co.

4-137. Apartment Casements (A-623), 4-p. illus. pamphlet on casements with tilt-in sill ventilators, steel screens, and casings. Types and sizes, installation details, specifications, general information. Truscon Steel Co.

## ELECTRICAL EQUIPMENT AND LIGHTING

Two booklets dealing with causes of trouble in electrical equipment, and their remedies. Tables. Frank Adam Electric Co.:

5-124. Excessive Heating of Fuses in Enclosed Switches, Panelboards, and Cabinets.

5-125. Why Circuit Breakers Trip Out and Fuse Links Melt Out.

★ 5-126. Surgical Lighting Technique (7L-949-1), 32-p. illus. catalog on direct Luminaire lighting for all surgical postures. 350w lamp features dual control and head end. Fixture combines track and offset mounting to provide for height adjustment over the operative site. Contents table, general data, photographs. American Sterilizer Co.

★ 5-127. Prescolite, 4-p. illus. folder on recessed lighting fixtures for residential and commercial purposes; manufactured in 42 styles and finishes. Light distribution charts, specifications for standard package quantities, features. Pressteel Co.

★ 5-128. Central Spang Conduit (351-1-48), 63-p. illus. catalog on rigid steel conduit. Weights, dimensions, manufacturing standards, specifications, general and detailed requirements, typical installations, symbols charts for architectural plans, ampere tables. Spang-Chalfont, Div. of National Supply Co.

## FINISHERS AND PROTECTORS

★ 6-126. Corrosite, 4-p. pamphlet on a new coating combining thermosetting and thermoplastic resins blended with plasticizers, stabilizers, and high-boiling point solvents. Protects almost any surface: wood, metal, concrete, old paint. Not subject to oxidation, requires no prime coat. Technical data, laboratory and field tests, application. Corrosite Corp.

(To obtain literature coupon must be used by 9/1/48)

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7/48

# Old St. Louis Courthouse Dome

## GETS NEW ROOF OF REVERE COPPER ANOTHER EXAMPLE OF COPPER AND COMMON SENSE

A NEW ROOF of Revere Copper was recently installed on the Italianate dome atop the old St. Louis Courthouse, now the museum of the Jefferson National Expansion Memorial. The new roof is part of a large restoration program that will preserve this handsome, historically-rich building for future generations.

Sheet copper for roofs, flashings and gutter linings is the common sense choice whenever you want *extra* years of service. Not only is copper the most enduring of all the commonly used sheet metals when exposed to the elements, but the Revere Research Laboratories have developed design and installation data that help you provide the very finest sheet copper construction.

Whenever you are faced with a problem concerning the design or installation of copper, look first to the Revere manual\*; and if you do not find the complete answer there, the Revere Technical Advisory Service, Architectural, will be glad to help you. The chances are that they have already had experience with a similar problem. In any case, they'll do their best to help solve yours.

There is no charge or other obligation for this service. Simply call your Revere Distributor or the Revere Office nearest to you.

☆ ☆ ☆

Sheet Metal Contractor: Mound Rose Cornice & Sheet Metal Works.  
Distributor: Brass & Copper Sales Co. Both of St. Louis, Mo.

\*"Research Solves Problems of Stress Failures in Sheet Copper Construction"

# REVERE

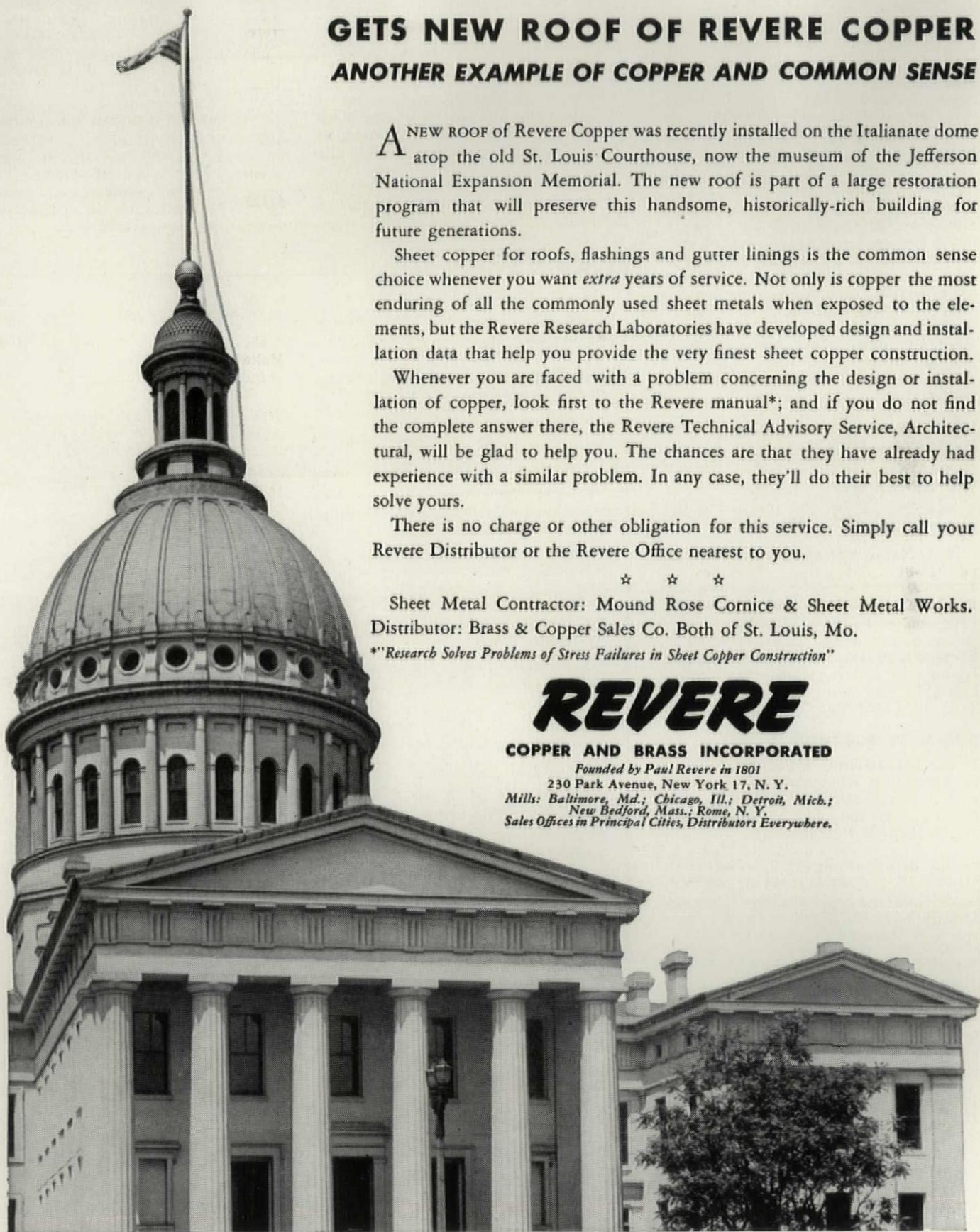
COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, N. Y.

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.;  
New Bedford, Mass.; Rome, N. Y.

Sales Offices in Principal Cities, Distributors Everywhere.





# Manufacturers' Literature

## MATERIALS OF INSTALLATION

**13-71. The Right Roof for any Job from One Source!**, 32-p. illus. catalog on built-up roofings and flashings, and correct specifications for particular roofing needs. Tabular index to specifications, construction details, cross section diagrams. Ruberoid Co.

## SANITARY EQUIPMENT, WATER SUPPLY, DRAINAGE

**19-229. A Positive Low Cost Answer to Corrosion** (844112-2-100M-2-48), 6-p. illus. folder on a chemical to control corrosion, lime scale, and "red water" discoloration in water systems by means of a feeder. Advantages, installation directions. Calgon, Inc.

Four 4-p. illus. folders on three new clothes washers. Features, capacities, dimensions. Norge Div., Borg-Warner Corp.:

**19-230. Norge "Triple-Action" Model W-818-P Washer** (W-448-8A).

**19-231. Norge "Triple-Action" Model W-814-P Washer** (W-448-8C).

**19-232. Norge "Triple-Action" Model W-817-P Washer** (W-448-8B).

**19-233. Norge "Triple-Action" Washer** (W-248-8).

**19-234. Wall Closet Fittings, AIA 29C** (Supplement No. 46-3), 12-p. illus. catalog on plumbing fittings constructed to fit any wall type closet bowl. Index, layout instructions, typical installations, assembly list, specifications and details. J. A. Zurn Mfg. Co.

## SPECIALIZED EQUIPMENT

**19-235. Ornamental Metalwork** (Booklet 148), 16-p. of illustrations on decorative metalwork such as balconies, treillage, window grilles, fences, etc. Julius Blum & Co., Inc.

**19-236. Hospital Signal Systems** (Bul. HP-1), 12-p. illus. bulletin on replacement parts for hospital signal systems. Drawings, descriptions. Cannon Electric Development Co.

**19-237. Hammond Organs, AIA 35-G-1** (Cat. HO-10), 16-p. illus. catalog on compactly designed electric organs requiring no structural installation. Also tone amplifying cabinets. Specifications, advantages, typical installations. Hammond Instrument Co.

**19-238. Hydroplex Pump** (Bul. 47-8020), 8-p. illus. bulletin on a split case multi-stage centrifugal pump for low capacity and high pressure pumping. Cross-section, sub-assembly, parts and dimensional drawings; installation photographs. Pump Div., Byron Jackson Co.

## SURFACING MATERIALS

**19-239. Matico Asphalt Tile Flooring**, folder containing three pieces of literature on asphalt tile: manual for guidance in installation and maintenance; descriptive information on greaseproof tile, with color and pattern charts; leaflet recommending methods of cleaning and waxing tile flooring. Mastic Tile Corp. of America.

**19-240. Castle Square**, 4-p. pamphlet on hardwood squares composed of wood

strips insulated on all edges with latex filled, fibrous material. Installed without nails; mastic glue secures each square to sub-floor, cement slab, or old flooring. Advantages, laboratory test. Newcastle Industries, Inc.

**19-241. Norton Abrasive Floors** (Form 1935-6P-10-47), 12-p. illus. booklet on Alundum and other nonslip aggregates used in four types of flooring (concrete, terrazzo, ceramic tile, semi-vitreous tile). Advantages, specifications, typical details. Norton Co.

## REVIEWED JUNE '48

### AIR AND TEMPERATURE CONTROL

**1-176. Air Recovery** (Bul. 105-A Form S-24), W. B. Connor Engineering Corp.

**1-177. Cyclotherm to Meet Every Steam Need**, Cyclotherm Corp.

**1-178. Heat**, Cyclotherm Corp.

**1-179. Glomaster**, The Firan Co.

**1-180. Thatcher Oil Master**, Thatcher Furnace Co.

**1-181. Thatcher Thermaster Gravity Furnace**, Thatcher Furnace Co.

**1-182. The V & E Water Tube**, V & E Products Co.

### CONSTRUCTION

**3-1. Temprex Duo-Pane**, Appleman Art Glass Works.

**3-2. Fenestra Panels for Up-to-Date Houses** (BP-2), Detroit Steel Products Co.

**3-3. Laminated Arches and Beams**, Unit Structures, Inc.

### DOORS AND WINDOWS

**4-130. Hope's Lok'd Bar Steel Sash** (Pub. No. 76B), Hope's Windows, Inc.

**4-131. Store Fronts**, The Kawneer Co.

**4-132. Durall Aluminum Tension Screen**, New York Wire Cloth Co.

**4-133. Modern Ways for Modern Days** (G71179), Pittsburgh Plate Glass Co.

### ELECTRICAL EQUIPMENT AND LIGHTING

**5-121. The Executive Luminaires**, All-Bright Electric Products Co.

**5-122. General Lighting Company**, AIA 30a-10, General Lighting Co.

**5-123. Port-O-Reel**, Industrial Electrical Works.

### FINISHERS AND PROTECTORS

**6-123. Smooth-On No. 7 Iron Cement**, Smooth-on Mfg. Co.

**6-124. Speco Woodtrem** (P & P-1006), Speco, Inc.

**6-125. Speco Rustrem Paint** (P & P-1002-A) Speco, Inc.

### INSULATION

**9-95. Mineral Wool Insulation for Apple and Potato Storages**, Specifications Committee, Industrial Mineral Wool Institute. (15 cents per copy. Make check or money order payable to Industrial Mineral Wool Institute.)

**9-96. Sound Control** (AC 35A), Johns-Manville.

### MATERIALS OF INSTALLATION

**13-68. Loxit Mouldings** (Cat. 3-48), Loxit Moulding Co.

**13-69. Here's a Better Way to Build!** Timber Engineering Co.

### SANITARY EQUIPMENT, WATER SUPPLY, DRAINAGE

**19-221. Crestlyn Stainless Steel Sink Tops**, Douglas Distributing Corp.

**19-222. Are You the Victim of Water-Stealing?** AIA 29-H-3, Speakman Co.

### SPECIALIZED EQUIPMENT

**19-223. Claywood Design Products**, Claywood Design Products.

**19-224. The Big New Plus** (F3-7), Eastman Kodak Co.

### SURFACING MATERIALS

**19-225. Nairn Linoleum**, AIA 23j, Congoleum-Nairn, Inc.

**19-226. Granite**, AIA 8-B-3 (Jan. 1948), H. E. Fletcher.

**19-227. Tile**, Tile Council of America.

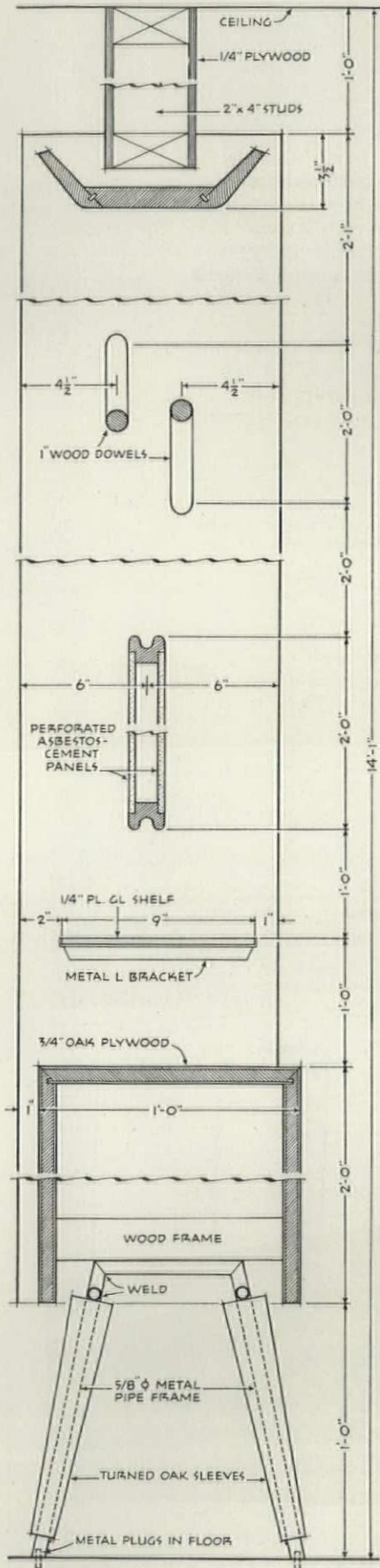
**19-228. Flexwood**, U. S. Plywood Corp.

### TRAFFIC EQUIPMENT

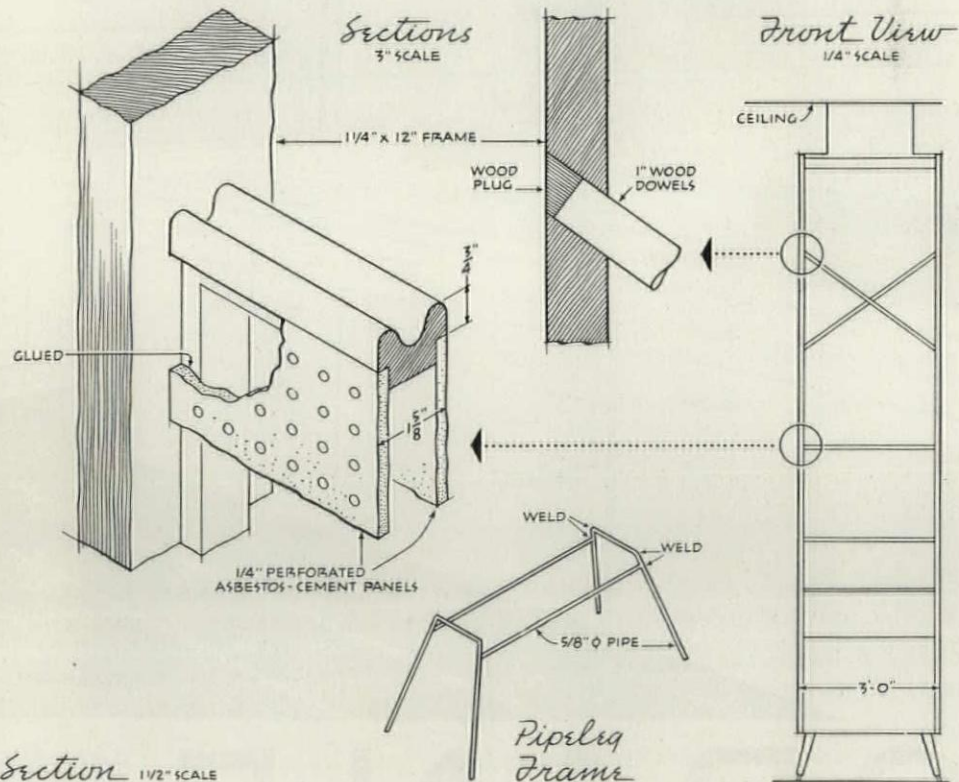
**20-234. Pow-R-Truck Elevators**, AIA 33E-1, (B-705) (8410), Otis Elevator Co.



Paul Peters



Section 1/2\" scale



**FOLEY'S DEPARTMENT STORE**  
Houston, Texas

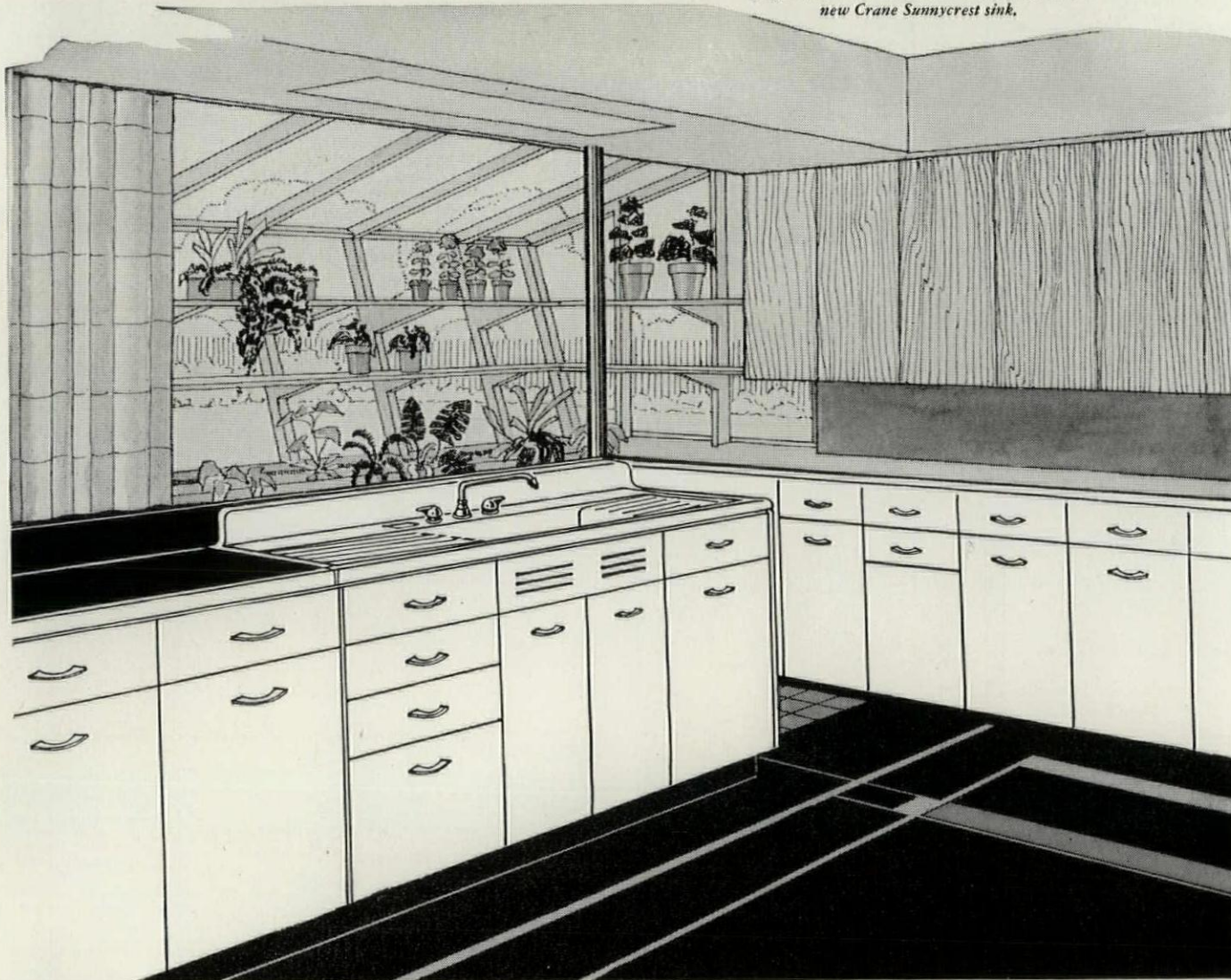
**RAYMOND LOEWY ASSOCIATES**  
Retail Planners and Designers

# *say* CRANE

**and  
your  
client  
asks  
no  
more**

He himself has chosen Crane time after time in nationwide surveys. He knows Crane for fine quality . . . for modern styling . . . for beauty that endures. And *you* know the broad Crane line will suit his needs exactly—with a style for every taste, and a price for every budget. These things are true of Crane kitchen sinks, bathroom and laundry fixtures alike—and all feature the new finger-tip *Dial-ese* faucets. Again in heating, Crane offers a full choice of equipment . . . for any system, any fuel. When making selections, refer to your copy of "Crane Service for Architects," or ask your Crane branch for one. Of course, not all fixtures are immediately available everywhere . . . check your requirements with your Crane branch or wholesaler.

*The outdoors comes in . . . to this conservatory kitchen. A gay blend of efficiency and charm, the room focuses on the new Crane Sunnycrest sink.*



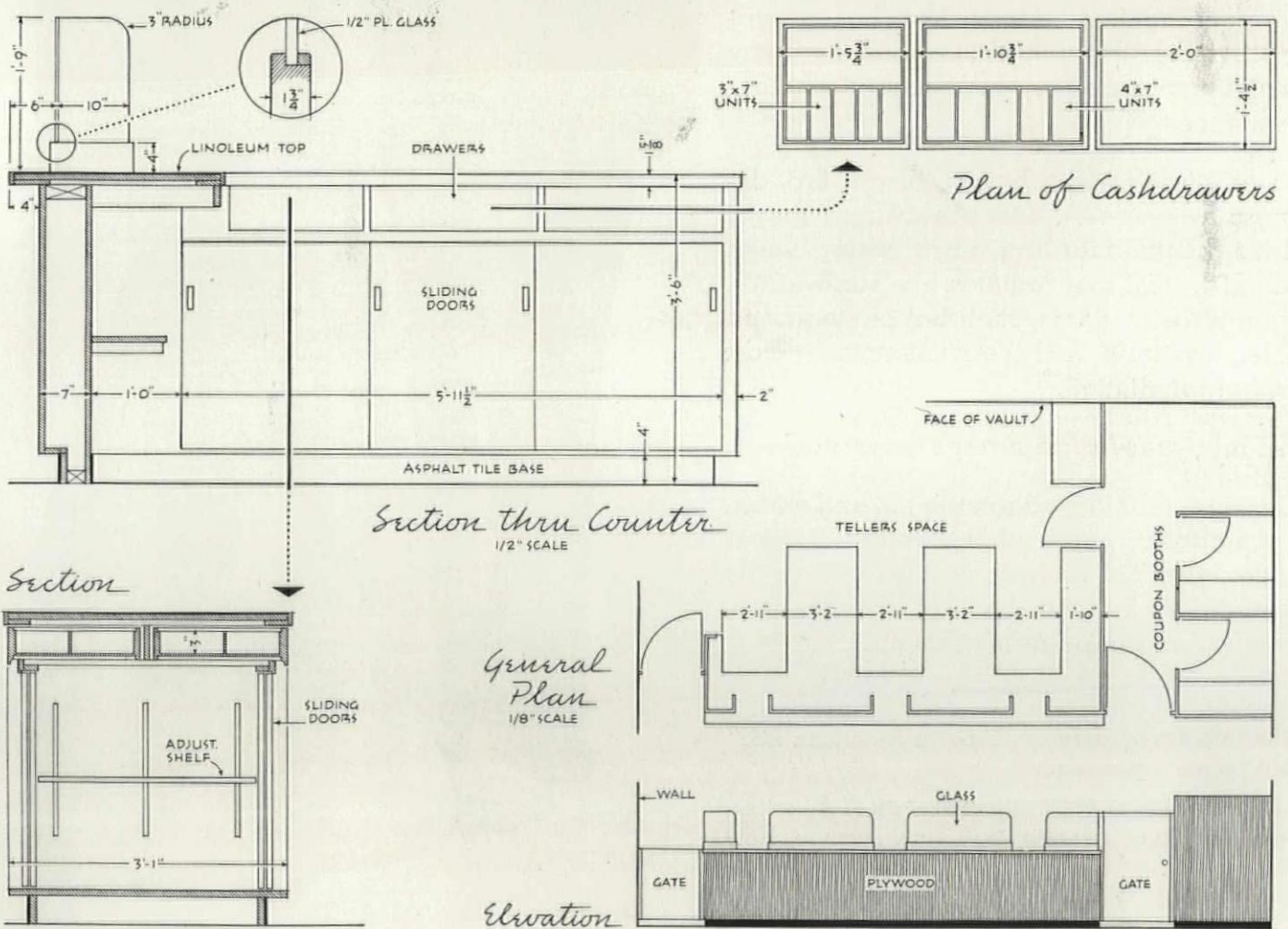
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NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

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PLUMBING AND HEATING  
VALVES • FITTINGS • PIPE



Hedrich-Blessing Studio



**RIPON STATE BANK**  
Ripon, Ohio

**AULER, IRION & WERTSCH, INC.**  
Architects

*because of Steel Pipe*

## **They'll "live better ever after"**

Lucky couple! The honeymoon need never be over for them. A bright horizon, aglow with opportunities for better, happier living, lies invitingly ahead.

She will not come back home to a lifetime of household drudgery like her grandmother did. He will never know the petty irritations caused by lack of modern conveniences.

They'll just press a button, turn a tap, depress a lever . . . and presto! . . . they'll have health-guarding pure water when needed, heat that radiates like sun-warmth from walls or floors, fuel that is clean and safe, comforts and conveniences almost without limitation.

*All this, steel pipe makes possible!*

Durable, reliable, adaptable . . . and within pocketbook's reach of everyone . . . steel pipe goes on serving and extending its usefulness for the health, convenience, comfort and happiness of us all.

---

The interesting story of "Pipe in American Life" will be sent upon request.

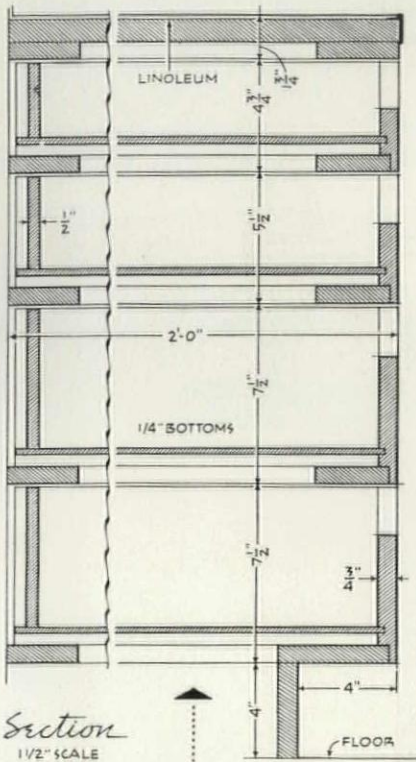
COMMITTEE ON STEEL PIPE RESEARCH of American Iron and Steel Institute, 350 Fifth Avenue, New York 1, N.Y.



## **STEEL PIPE MAKES IT POSSIBLE!**



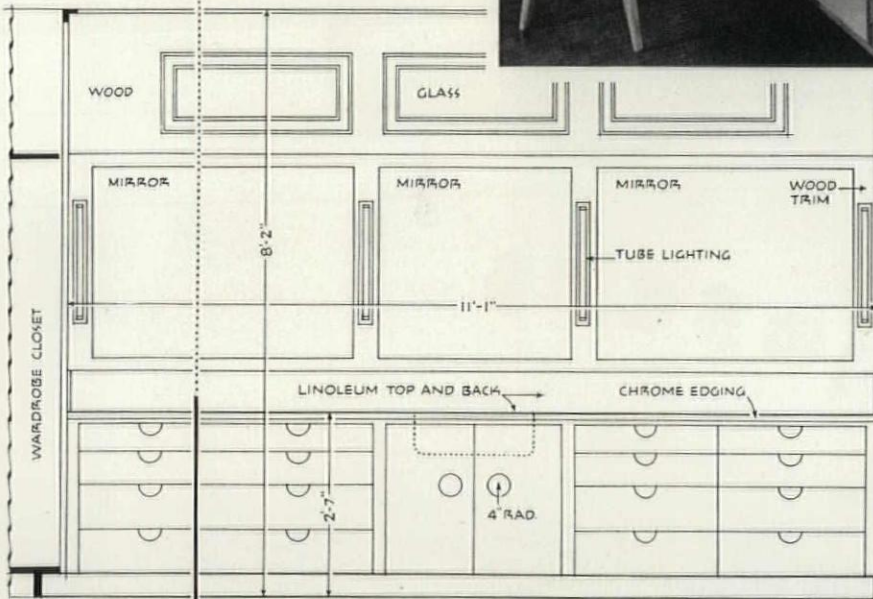
*. . . better living through pipes of steel for plumbing and heating purposes.*



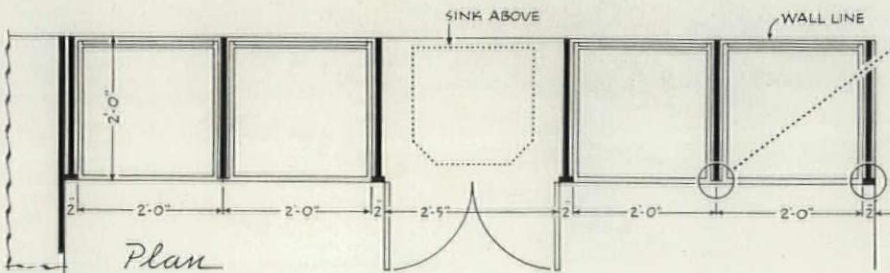
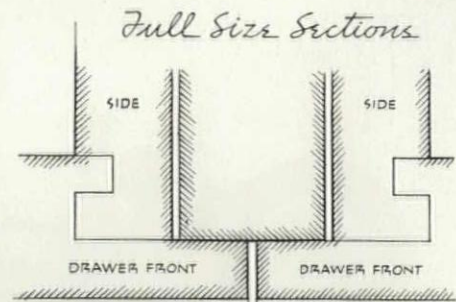
Section  
1/2" SCALE



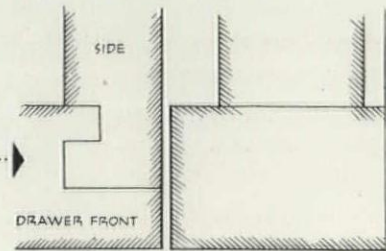
Julius Shulman



Elevation  
3/8" SCALE

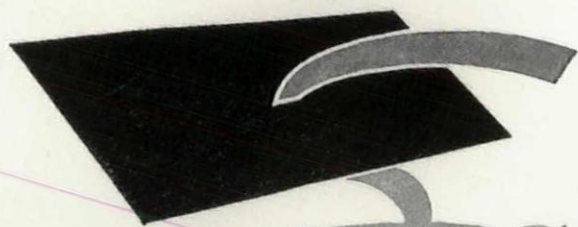


Plan

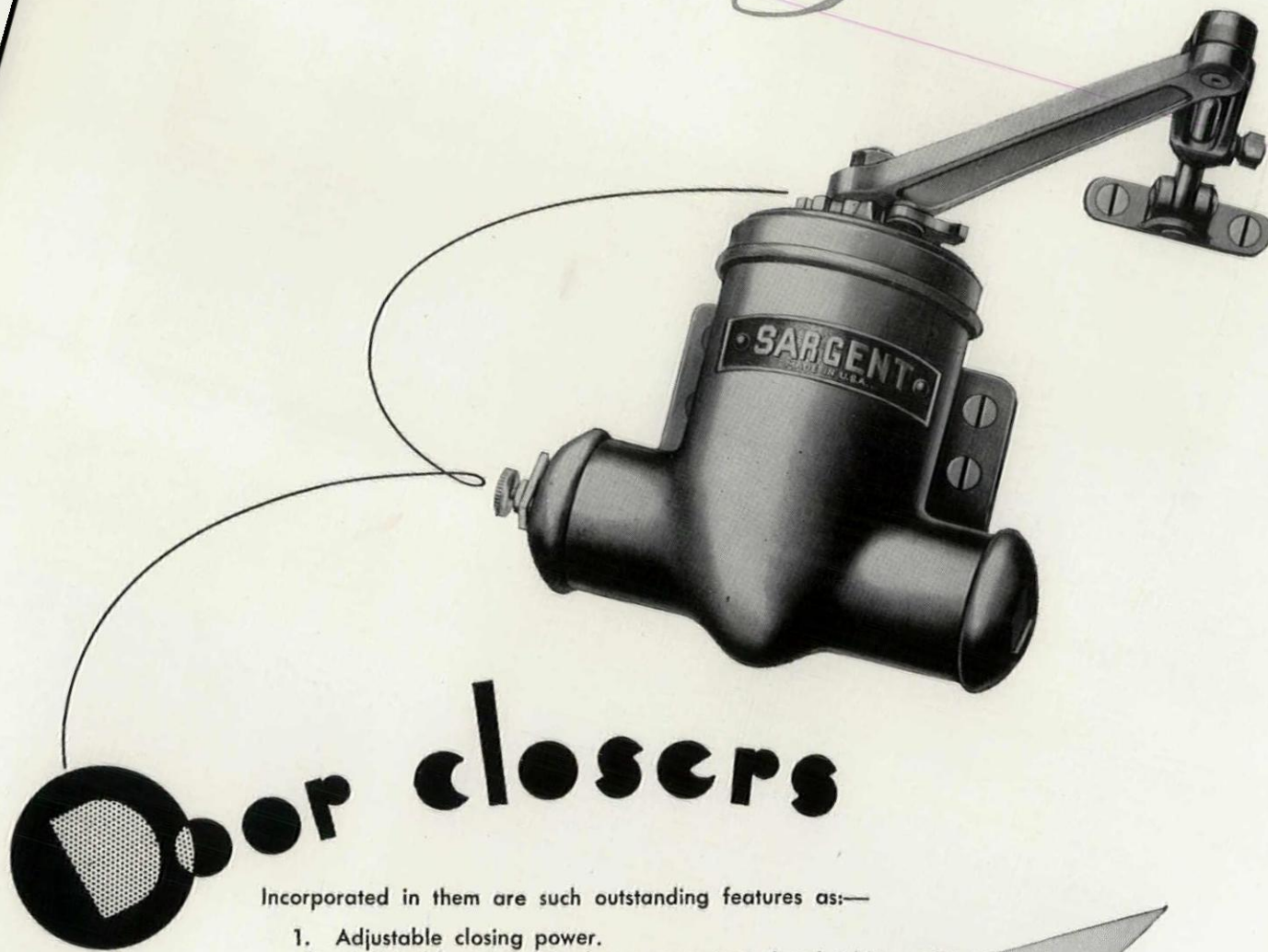


**RALPH CLIFFORD HOUSE**  
Los Angeles, California

**CLIFFORD-LINDSTROM**  
Designers



# Sargent



## Door closers

Incorporated in them are such outstanding features as:—

1. Adjustable closing power.
2. Adjustable valve control—separate control at latching point.
3. Universal in application—not handed.
4. Adaptable through standard attachments to any type of door.
5. Very desirable rack & pinion closing control.
6. Long-lived adjustable spring.
7. Essential parts precision ground.
8. Most efficient packing prevents leakage around spindle.
9. Extremely simple to apply.
10. Special units for hospital doors, coupon booth doors, telephone booth doors and fire tower doors, etc.

*When you specify Sargent, you are assured of the finest.*

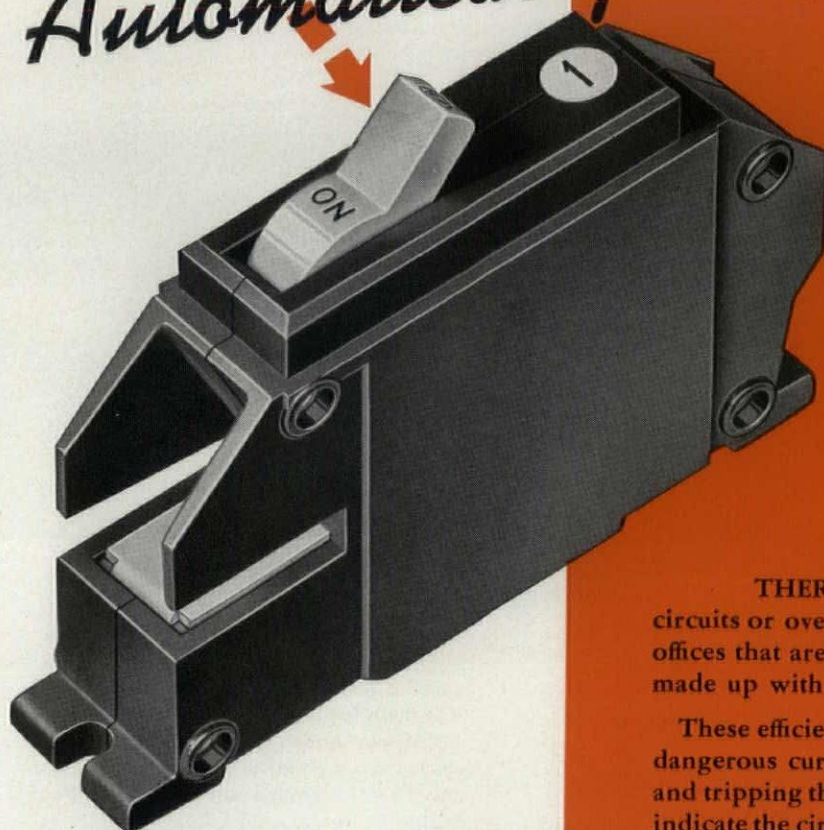
**SARGENT & COMPANY**  
NEW HAVEN, CONN.

NEW YORK

CHICAGO

THIS HANDLE

*Automatically Trips Off*



when  
**SHORT  
CIRCUITS**  
or  
**DANGEROUS  
OVERLOADS**  
Occur!

THERE'S NO WORRY about short circuits or overloads in the plants, stores and offices that are equipped with **FA** Panelboards made up with **FA** Thermag Circuit Breakers.

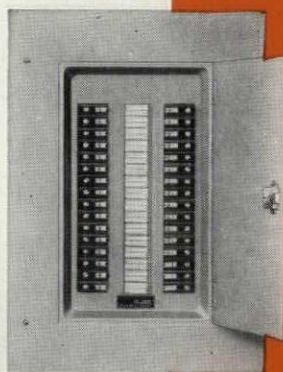
These efficient circuit breakers interrupt any dangerous current by operating *automatically* and tripping the handle to the "off" position to indicate the circuit in trouble. There's no intermediate handle position . . . nothing to replace . . . no danger of shock.

This modern safety and convenience is the result of a thermal-magnetic action that automatically opens the troubled circuit . . . and as long as the trouble remains, the circuit breaker will continue to trip to the "off" position when any attempt is made to restore service.

Once the cause of trouble has been eliminated, the circuit breaker handle can easily be flipped to the "on" position, restoring the circuit to normal operation.

See your nearest **FA** Representative for more details (he's listed in Sweet's), or write direct for Bulletin No. 301.

*For Automatic*  
**CIRCUIT PROTECTION**  
*install*  
**FA** **PANELBOARDS**  
*with*  
**THERMAG**  
**CIRCUIT BREAKERS**



*Shockproof and simple to operate, **FA** Thermag Panelboards can be installed in any size plant, store or office. Capacities: 15 to 50 amps. for 120 volts AC service only; single or double pole; 4 to 42 branch circuits with 3 wire and 4 wire solid neutral mains.*



**Frank Adam Electric Co.**

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Makers of BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE  
EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER

**HERE'S THE IDEAL**

# *All-Year air*



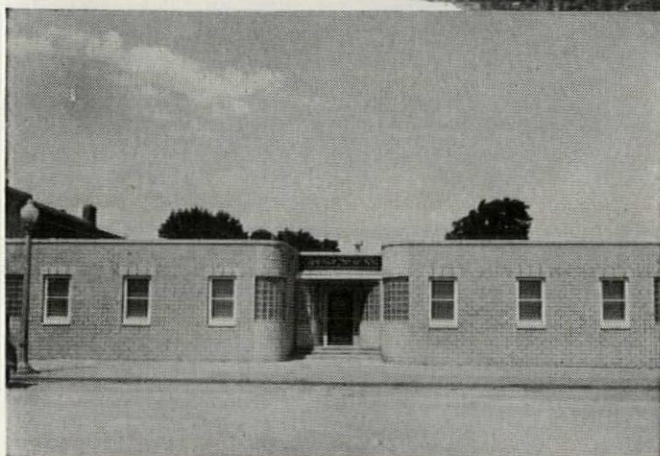
From his attractive new office at 924 Noble Avenue, Bridgeport, Connecticut, Dr. Leonard C. Scalzi writes: "It gives me a great deal of pleasure to tell you how completely satisfied I am with the performance of the Servel All-Year Air Conditioner which was installed in my offices last September.

"As you know, I had originally planned on using electrical air conditioning equipment, and I am glad now that I changed my mind. The Servel unit is so simple to operate, so efficient, so quiet, and so economical, that I am quite sure I made the wiser choice.

"When you told me about the Servel All-Year Air Conditioning, you mentioned the hundreds of owners who were completely satisfied with its performance. You may now add me to that list!"

*Cordially,*

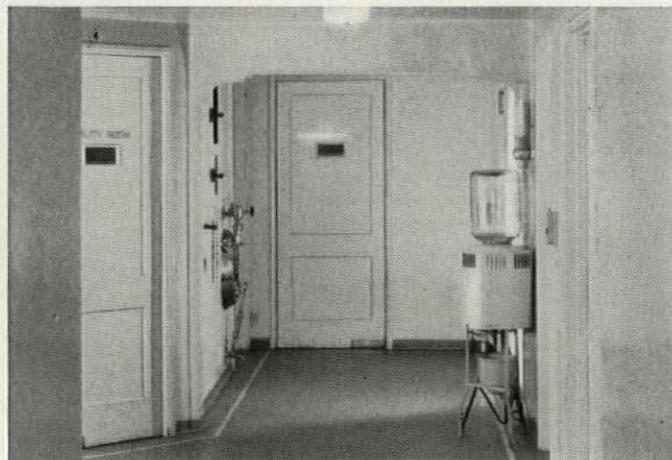
*Leonard C. Scalzi M.D.*



"We have been most pleased with our Servel unit. I can unhesitatingly recommend it as an efficient, economical method of year-round air conditioning," writes Dr. A. C. Traverse, of the Stephenson-Traverse Clinic, 515 College, Alva, Oklahoma.



"We selected Servel All-Year Air Conditioning for our Clinic because of its low cost and economy of operation. The heating and cooling efficiency of this unit is excellent," writes E. A. Weinheimer, M. D., 201 E. Jackson, El Campo, Texas.



Interior view of Cottage Hospital, Pomona, Cal. Dr. W. D. Stahl says: "The Servel unit has exceeded my expectations, especially since it was possible to utilize the existing duct system previously used for forced air furnace. It has proved most satisfactory."

# *conditioning* **FOR DOCTORS' OFFICES**

## Servel *All-Year* Air Conditioning wins praise from M.D.'s the country over

You've got many points in your favor when you talk Servel Air Conditioning to doctors planning to build or modernize offices, clinics, or small hospitals. Hundreds of Servel units are already successfully providing an ideal indoor climate—the year round—in doctors' establishments, in homes, offices, and stores the country over. All the owners are delighted with the efficiency, simplicity, and economy of Servel operation, as the representative testimonials on these pages indicate.

### **Cools in summer, heats in winter**

With one simple unit, Servel supplies *complete, year-round* air conditioning. In summer, at the flip of a switch, Servel circulates refreshingly cooled air, from which sticky, wilting humidity has been removed. Servel also filters out irritating dust, dirt, and pollen.

In winter, again at the flip of a switch, the same unit floods every room with clean, even, draft-free warmth, to which just the right amount of moisture has been added for comfort. There are no drafts, no uncomfortable layers of hot or cold air. In between seasons, when neither heating nor cooling may be necessary, Servel provides draft-free circulation of

filtered air at prevailing outdoor temperatures.

Planning your clients' buildings around Servel *All-Year* Gas Air Conditioning gives you an opportunity for many innovations in design. You can effect construction economies, too, which will materially reduce the net cost of the conditioner.

Doctors are air conditioning-conscious. Make the most of your opportunities by talking Servel *All-Year* Air Conditioning to them and to other interested clients. Send today for complete information on Servel's long list of successful installations in doctors' offices and clinics, in homes, in retail stores, and in offices the country over. Get the facts from your local Gas Company, or write Servel, Inc., 4807 Morton Avenue, Evansville 20, Indiana.



"Ideal for efficient work in medical offices," says Dr. Fred L. Scott, of Huntington Park, California, about the temperature and humidity conditions maintained in his offices throughout every season by the economical Servel *All-Year* Air Conditioner.



**FIRST AGAIN** with the world's

**FIRST ELECTRONIC** signal control elevators



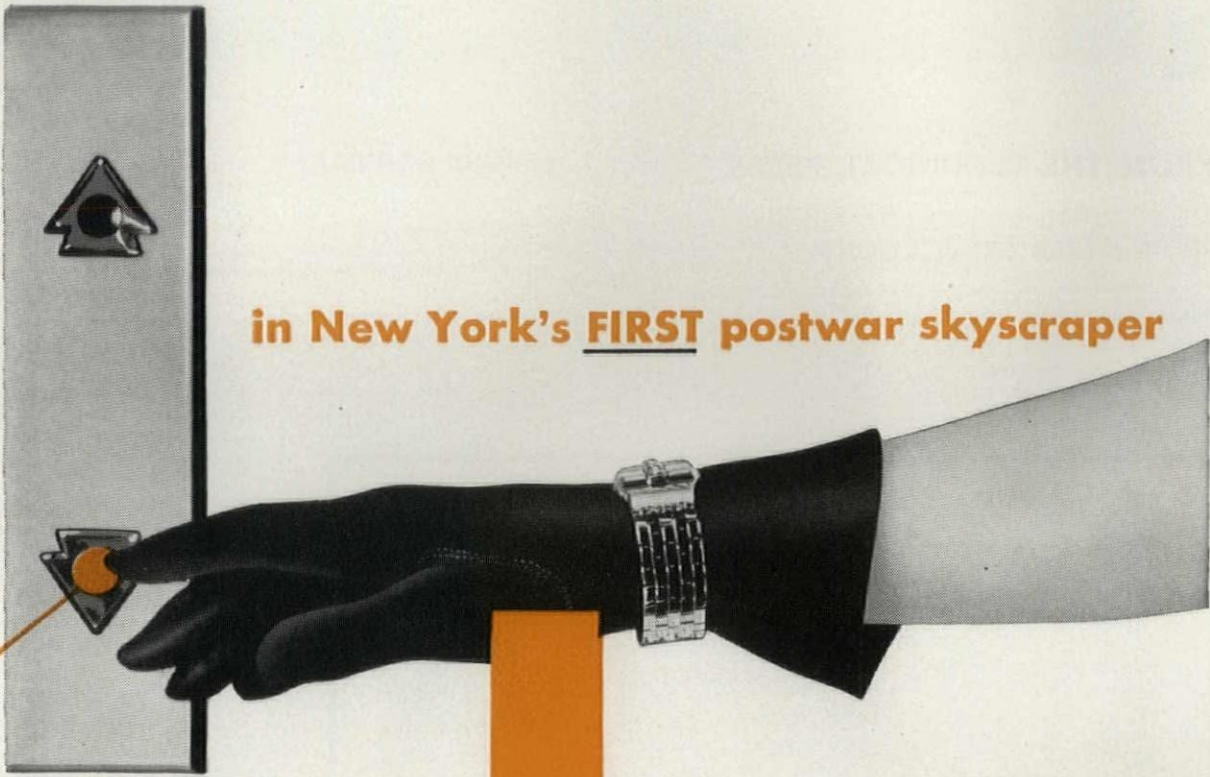
OTIS engineers, who were working on electronics before World War II, have applied the magic of this new science to improve Signal Control operation. As a result, you can now summon an elevator by simply *touching* a plastic arrow in the landing fixture.

The instant your finger contacts a 'touch button' a directional arrow lights up. The light shows that your call has been registered. As the elevator approaches your floor the overhead lantern also lights up. Both lights remain aglow until the car has stopped, you have entered, and the doors have closed. It's all controlled electronically.

OTIS Electronic Signal Control gives you continuous and visible evidence that it has received and remembered your call — evidence that is pleasantly and attractively reassuring.

Otis Elevator Company. Offices in all principal cities.

AS ALWAYS, OTIS LEADS THE WAY . . .



in New York's FIRST postwar skyscraper

*The first installation of OTIS Electronic Signal Control can be seen in the Universal Pictures Building, 445 Park Avenue, New York City. It operates the four local and four express elevators that serve 21 floors and a penthouse. OTIS Electronic Signal Control is applicable to all elevators. But for the immediate present, it will be confined to large buildings where elevators travel at speeds of 500 feet per minute or more.*



**ELECTRONIC SIGNAL CONTROL**  
**ELEVATORS**

THIS TIME WITH THE MAGIC OF MODERN ELECTRONICS

## FROM THE TECHNICAL PRESS

By JOHN RANNELLS

## FROM OTHER PUBLICATIONS

**Foot-candle Levels.** *Matthew Luckiesh.*  
Illuminating Engineering, April 1948.  
Illuminating Engineering Society, 51  
Madison Ave., New York 10, N. Y.

A very pointed evaluation of standards in the field of illuminating engineering. Might well be used as an approach to the problem of standards generally

(standards being stepping stones on the path of progress).

The author's classification of foot-candle levels comprises: threshold; ideal; optimum; recommended. The gist of his argument is in favor of flexibility, aiming for ideal conditions. Establishing "just enough" as standard tends to degrade general practice, which would otherwise tend naturally toward at least tolerable conditions. Without ideal conditions as a goal standards become static, out of date, a drag on progress.

The paper is concerned with close visual work and considers three kinds of visual tasks, of very different requirements, impossible to illuminate in terms of a single standard: (a) black details to be seen against a "white" background (b) black details seen against a dull background (c) very low brightness contrast, as sewing with black thread on dark cloth. For any one task three foot-candle levels can be determined: threshold; optimum; ideal. The recommended level for any one task is not so easy. It is necessarily a compromise involving (for instance) economy, practicability, and conservation. There is danger in letting such a compromise become fixed as a standard.

Threshold levels for Task A above are of the order of 10 foot-candles and up, varying with size of type, brightness contrast, etc.; Task B, 100 foot-candles and up; much more for Task C. Of course we are able to adapt to such threshold levels, but we do so at the expense of eyesight or reserve energy.

If we are to continue working we must work at optimum levels of illumination—the most favorable level considering one certain factor such as production, rate of reading, or the like. Such a standard, however, does not take in enough territory. There are more factors in achieving speed of reading, for example, than foot-candles alone. Ideal illumination would enable us to get the most out of the effort with the least drain on our reserves.

Recommended levels, usually compromises between threshold and ideal, are of course different for the various tasks. For the examples given in the paper they vary from 50 to 1875 foot-candles. This great range has to be available if we are to handle such divergent tasks as those outlined (and such tasks are common in industry today). We are used even to higher levels of illumination under outdoor conditions. In fact, Man evolved his seeing mechanism under very high levels of illumination so they are fairly "natural." Under artificial light, however, high levels of illumination result in high brightness

*Kellogg Fine Papers (division of U. S. Envelope Co.) Radio City, N. Y.*



## A Candidate for the Cabinet

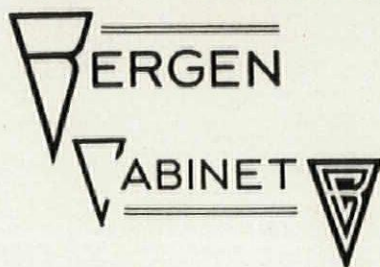
A candidate for the Cabinet . . . Bergen Cabinet, we hasten to add . . . always has the following qualifications:

1. Vision, to integrate modern design with modern merchandising.
2. Desire, to see his plans translated into tangible form without compromise or deviation.
3. Acumen, to recognize the absolute necessity of engaging the right craftsmen to implement the first two qualifications.

*Among the distinguished members of our "Cabinet" is Kellogg Fine Papers, a division of U. S. Envelope Co., with Showrooms at Radio City, New York. Mr. Harold Guy is the designer.*

Visit our Booth No. 36 at the National Store Modernization Show . . . July 6-10 . . . Grand Central Palace, N. Y. C.

*Bergen—sure the success of your modernization program with*



*Architectural woodwork that makes the designer's plan an enduring reality*

1552-56 Bergen St., Brooklyn, N. Y. — Phone PResident 2-3121

(Continued on page 96)

History will be made  
under a roof of  
**ANACONDA  
COPPER**



**P**ARTY DELEGATES assembled in the huge Philadelphia Municipal Auditorium will select their candidates for the nation's highest office. Hon. Bernard A. Samuel, Mayor of Philadelphia, will welcome the delegates to the first of the national conventions which opens here on June 21st.

This spring more than 100,000 pounds of Anaconda Copper were used in reroofing the barrel vault type roof which covers this vast amphitheatre. The proven durability of copper, its fabricating qualities, corrosion resistance, appearance and low maintenance costs, combined to give this time-tested metal preference over all other materials considered.

Design and supervision of this tremendous roofing job were in the hands of Joseph A. Roletter, Director of City Architecture, and Thomas Buckley, Director of Public Works. The J. Edward Linck Sheet Metal Works of Philadelphia and Washington were the contractors.

4859

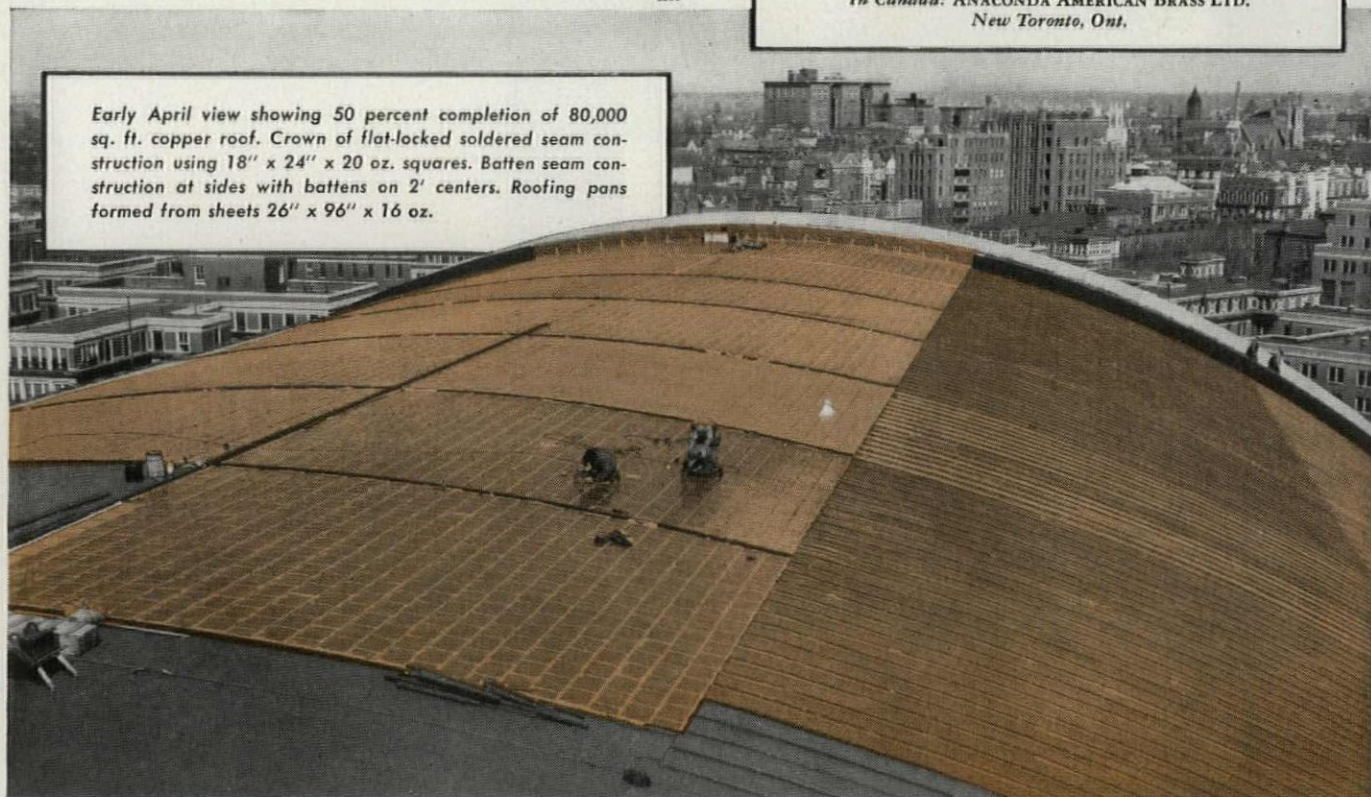
The Philadelphia Municipal Auditorium, erected in 1930, has a seating capacity of more than 13,000 in the main hall.

ANACONDA  
from mine to consumer  
**Anaconda**  
**COPPER**

**THE AMERICAN BRASS COMPANY**

General Offices: Waterbury 88, Connecticut  
Subsidiary of Anaconda Copper Mining Company  
In Canada: ANACONDA AMERICAN BRASS LTD.  
New Toronto, Ont.

Early April view showing 50 percent completion of 80,000 sq. ft. copper roof. Crown of flat-locked soldered seam construction using 18" x 24" x 20 oz. squares. Batten seam construction at sides with battens on 2' centers. Roofing pans formed from sheets 26" x 96" x 16 oz.



## Reviews

(Continued from page 94)

contrasts and all the tricks of "brightness engineering" must be brought into use if we are to save our eyes. We have seen "usual" foot-candle levels raised greatly in the past 10 years. There seems to be no limit short of ideal seeing conditions.

"Adequate light, proper lighting, easy seeing, and good seeing conditions are universally important and are challenges worthy of all the knowledge and

ingenuity that we possess."

**Park Ridge Schools.** *Lawrence B. Perkins, architect.* *The Magazine of Light, Vol. 17, No. 1, 1948. Lamp Dept., General Electric Co., Nela Park, Cleveland, Ohio*

A "ceiling of light" gives an initial reading at desk level of 60 foot-candles. 60-inch Slimline lamps on 24-inch centers, are set close to the white-painted

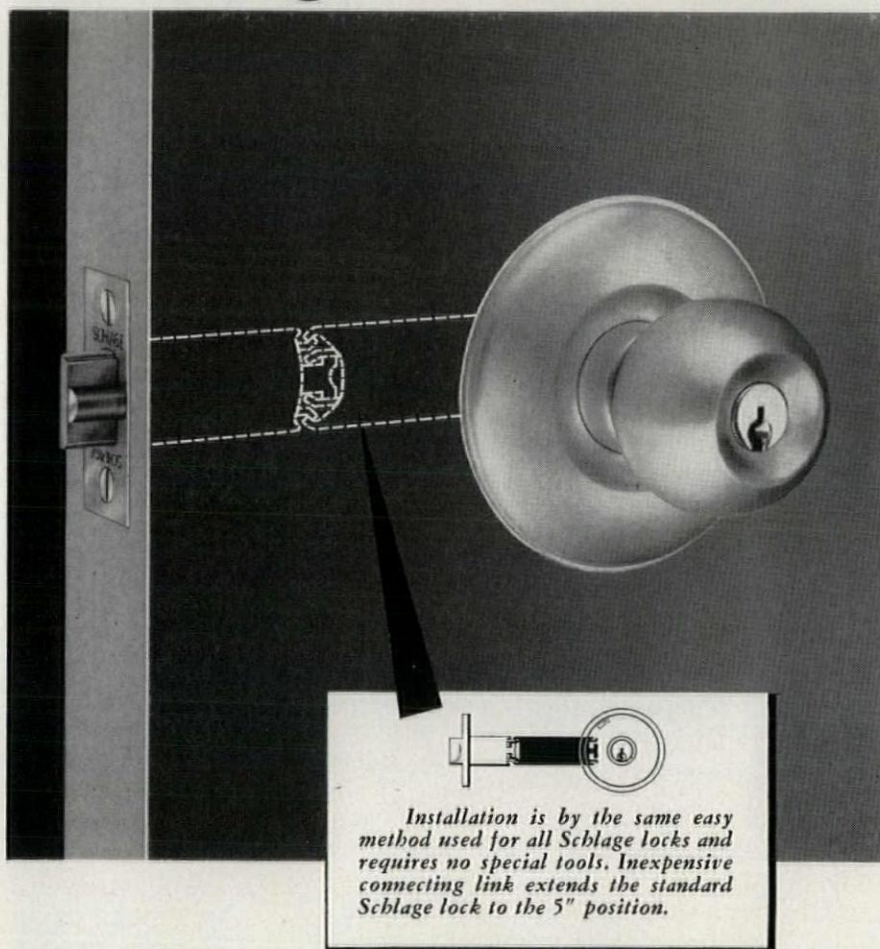
ceiling, with "egg crate" louvers flush with the bottom of the beams. The "egg crate" is more like a subway grating, very simple and attractive.

**Relighting Government Buildings.** *The Magazine of Light, Vol. 17, No. 1, 1948.*

Startling "before and after" photographs illustrate these articles describing the rehabilitation of the card-punch section in the Bureau of Internal Revenue and the entire GPO (Government Printing Office, biggest printing plant in the world). Improved production in the card-punch room paid for the renovation five times over in the first year. The revamping included repainting and refinishing, not only walls and ceilings but machines, desks, and floors, as well as fluorescent lighting.

The renovation in the GPO included furred ceilings to avert a replastering job which incidentally provides a flush reflecting surface for the new fluorescent lights. Repainting helped enormously, too.

## Schlage 5" Backset



### A new dimension in Lock Placement

Schlage's exclusive 5" backset allows knobs and escutcheons to be installed away from the conventional "jammed-in" position near the edge of door. This new dimension results in greater convenience and balanced appearance. It also allows, for the first time, the use of large decorative escutcheons.

See Schlage  
in Sweets Architectural  
File



**SCHLAGE**  
**LOCK COMPANY**  
SAN FRANCISCO NEW YORK

ORIGINATORS OF THE CYLINDRICAL LOCK

## HOSPITAL PLANNING

**Hospital Planning Portfolio.** *The Modern Hospital. March 1948. The Modern Hospital Publishing Co., Inc., 919 N. Michigan Ave., Chicago 11, Ill.*

### Who Should Take Part in Planning Our Hospitals?

A round-table discussion participated in by architect, administrator, consultant, and trustee, called together by *Modern Hospital*. Emphasizes the necessity of having a survey made by a competent consultant *before* any plans are drawn, and determining realistically what the project may cost before going to the community for funds.

### Basic Considerations in the Hospital Design.

Nathaniel A. Owings.

Controlling factors in the design of a contemporary hospital are (1) environmental requirements including site consideration, orientation of patients' bedrooms and sound control (2) efficiency of operation, and (3) economy of construction.

Enough space must be used to establish a "suburban character—a place where grass and trees can live." This means either moving to the country or clearing enough space in the city. (The author proposes 10 percent coverage or less.) The patients' rooms must face south, necessarily in a straight line, and this establishes the form of the structure.

The article is illustrated by typical plans and views of the VA Hospital at Fort Hamilton, Brooklyn.

### Programming, Planning, Construction, and the Role of the Architect, and the Factors that Affect Costs.

Division of Hospital Facilities, U. S. Public Health Service.

Two more excellent articles on hospital planning. The first outlines the various

(Continued on page 98)

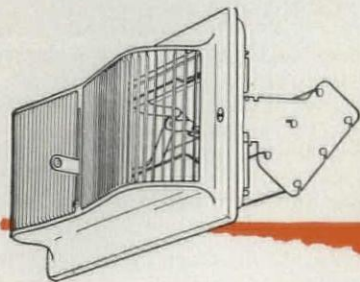


CLASSIC BEAUTY

## THE **NEW** HONEYWELL REGISTER!

### DESIGN FEATURES

1. Balancing becomes a QUICK, ONE-MAN job.
2. Branch quadrants can be eliminated, when velocities are under 800 fpm.
3. Installation costs are drastically cut.
4. Smart new appearance and functional design.
5. No streaks on walls and ceilings.
6. Manual shut-off for fuel saving and convenience.



Self-contained volume dampers accurately meter the air with an adjustable lever at the register itself. Locking feature guards against unbalancing system.

WITH the new Honeywell *air diffusion* Register, unsightly wall and ceiling streaks are eliminated.

Built into the back of this forced air register is a seal of sponge rubber. This rubber gasket, together with its wide diffusion, assures streakproof operation. Stress this feature to clients and prospects. Point out how the Honeywell Register puts an end to a frequent cause of costly redecorating. And, in addition, explain how the streamlined contour of the extended grille affords unbelievable smooth, even air diffusion into every nook and cranny of the room. On both high and low wall installations, temperatures are the same across the room as they are near the register. The air is diffused in every direction instead of being concentrated in a narrow stream.

It's advantages like these that explain why the new Honeywell Register represents such a spectacular improvement in performance—plus striking beauty. Minneapolis-Honeywell, Minneapolis 8, Minn. In Canada: Leaside, Toronto 17, Ontario.

MINNEAPOLIS  
**Honeywell**  
CONTROL SYSTEMS

## Reviews

(Continued from page 96)

stages of a complete project: program, schematic stage, preliminary drawings, working drawings, award of contract, construction, equipment. The importance of the program and schematic stages has been too often overlooked in the architect's fondness for making impressive sketches (and the fondness of all Boards for "pictures").

The second article stresses the variety of factors that must be considered in

addition to construction costs (equipment, site survey and soil investigation, architects' and consultants' fees, acquisition of site, landscaping, fund drives, etc.). The fallacy of using "per bed" costs is exposed and a realistic evaluation in terms of the actual structures is advocated.

Repatriation General Hospital,  
Concord, New South Wales.

A. G. Stephenson, architect.

A very handsome, up-to-date military hospital for 600 beds, featuring balconies at all wards. Triple-hung windows giving access to the balconies seems an excellent solution to the problem of summer and winter exposure. The project was completed in January 1942, a considerable contrast with our own Veterans Hospital program.

St. Luke's Builds a Quonset Ward.

Earl Finberg.

Urgent need for additional bed space at St. Luke's Hospital, Duluth, Minn., was filled in short order by Quonset construction at a cost of \$1685 per bed. With radiant heating and plenty of insulation the temporary structure provides satisfactory accommodations for 30 patients, pending the carrying out of the hospital's expansion program.

## MANUALS, PAMPHLETS

*Theory and Use of Architectural Acoustic Materials.* Paul E. Sabine, Ph.D. Sound Absorption Coefficients of Architectural Acoustic Materials. Bulletin No. X, 1948. *Acoustical Materials Ass'n*, 205 W. Monroe St., Chicago, Ill.

In the former of these two publications, Dr. Sabine gives a clear exposition of the meaning and use of acoustical terms and the phenomena of reflection and absorption of sound. In describing the problems most frequently encountered (acoustical defects in auditoriums, sound conditioning work rooms, etc.), he gives simple explanations, illustrated by the solution of typical problems, and makes recommendations for the use of suitable corrective material. Design of interiors for good acoustics with a minimum of "padding" is hardly touched upon. This is, after all, the province of the acoustical consultant—rather beyond the architect.

The second publication covers sound absorption data for the various commercial materials, presented concisely and attractively in tabular form. Tables are included for absorption of seats and audience and for general building materials (including openings).

*Manual on Wood Construction for Prefabricated Houses.* Prepared by the Forest Products Laboratory, Forest Service, U. S. Dept. of Agriculture, in collaboration with the Technical Staff of the Housing and Home Finance Agency, U. S. Govt. Printing Office, Washington 25, D. C. Illus., index. \$1.50

Not only is this a comprehensive manual "for prefabricated houses," it is a complete text on wood as a housing material. There is full discussion of properties of the various woods, grading, preservatives, finishes, insulation and ventilation, gluing, etc. Presented very clearly and completely, with numerous tables, diagrams, and photographs.

(Continued on page 100)

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## Reviews

(Continued from page 98)

### BOOKS

#### STRUCTURAL DESIGN

*Elementary Structural Analysis.* Wilbur and Norris. McGraw Hill Publishing Co., 330 W. 42nd St., 1948. 523 pp., \$6.00.

College textbooks seem to be a necessary

evil. They probably will remain such until the typical college is transformed from a "Place of Teaching" to a "Place of Learning." This must be taken into consideration whenever such books are critically examined, because of the relatively little freedom left to authors

to determine the scope and extent of material covered. The book which is accepted by the average college for undergraduate engineering students necessarily reflects present methods of educating which, in the opinion of those most concerned with it, are far from being what they should be.

The first question that arises therefore is whether the authors succeeded in turning out an acceptable compromise. The answer to this question is in the affirmative, in the case of *Elementary Structural Analysis*. The book covers the requirements of the usual curriculum of structural theory, but also incorporates important topics which are, unfortunately, often not considered part of undergraduate courses. For example, the book covers such topics as experimental structural and stress analysis by means of models, various methods of deformation measurements, measurement of surface strains, and the applications of photo elasticity. These subjects, today, should become standard knowledge of the engineer as soon as he departs from the uninteresting routine work. The chapters dealing with this subject are entirely justified and it is hoped that the subjects will find their way into more college courses for civil engineers.

An attempt is also made to call the readers' attention to related structures which ordinarily are not considered within the civil engineering field, such as airframes, ship structures, chemical engineering structures, etc. Familiarity with related structures can be extremely useful. They offer stimulation and inspiration to the structural designer when seeking solutions in his own field. It would have been a welcome addition if more space had been allotted to these topics.

The introductory chapter of the book acquaints the student with some basic considerations underlying the design and construction of civil engineering structures: live and dead loads, make-up of girders and trusses and floor systems, factors of safety, etc. The authors also call attention to the difference between the practical structure and its abstraction used in the design procedure. In other parts of the book they also emphasize the inevitable inexactitudes of most design assumptions, the understanding of which is of great importance to the inexperienced designer.

Eight chapters of the book cover general topics of analytical and graphic statics: determination of reactions, shear, axial forces and bending moments, influence lines and deformations of determinate and indeterminate structures. Six separate chapters deal with types of structures: roof and bridge trusses of various kinds, three-dimensional framework, gravity structures, and (somewhat arbitrarily separated) long-span structures. In the last mentioned chapter, only a few pages are devoted to

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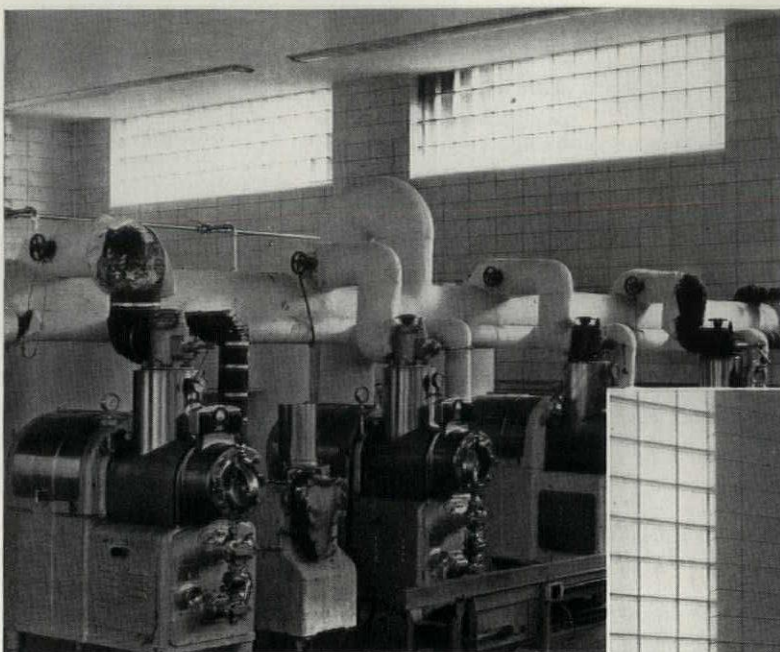
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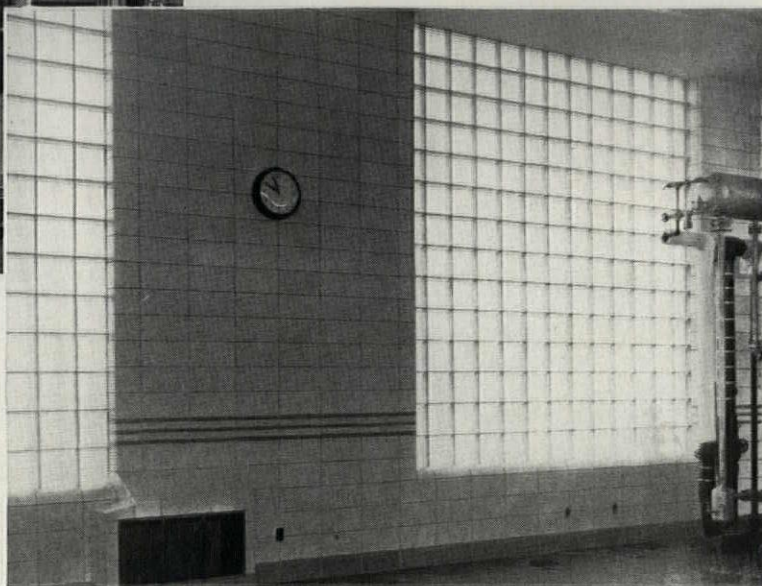
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(Continued on page 102)



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## Reviews

(Continued from page 100)

arches which, unless they are intended to be covered in a special course of study, deserve a more extensive treatment.

Considerable space is used to describe the various methods which can be used to determine deflections of different types of structures. The usefulness of knowing a great variety of techniques on this somewhat limited topic is questionable.

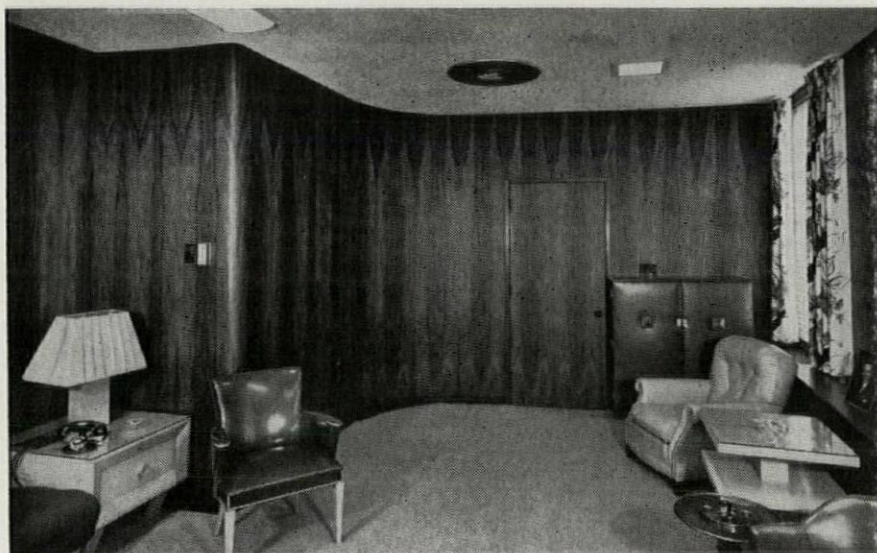
The general approach of the book is based on a strict separation of analysis and design, being concerned only with the latter. This is done quite intentionally, as the authors point out, since it is in accordance with current (and past) college practice. A slight departure from this artificial and rigid separation might have been of great benefit, contributing to the better understanding of the subject.

At this point also the rigorousness of the proofs should be mentioned. The desirability of the presentation of such proofs seems to be beyond question, however the feasibility of carrying out these intentions in engineering college textbooks is something of a problem. It appears that the authors have compromised at a level which, in their judgment (based on their positions and experience at M.I.T.), corresponds to the knowledge of the average undergraduate students in the elements of higher mathematics. This knowledge, as most practicing engineers have probably observed, is rather low . . .

The most important requirement of the textbook however is clarity of expression. *Elementary Structural Analysis* fulfills this to a high degree. The contents within each chapter are easy to understand, are systematic and very thoroughly presented. The efforts of the authors on this score are especially praiseworthy. The illustrations, which are of primary importance in technical literature, are also done with great care: special notations have been introduced in the figures to permit the student to differentiate at a glance between applied forces and reactions. The numerous and detailed illustrative examples contribute to further understanding of the subject. This type of clarity of exposition is the real measure which will ultimately determine the usefulness of the book not only to the student but also to the practicing engineer and the interested architect.

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### AN INTRODUCTION TO STANDARDS IN BUILDING

D. Dex Harrison. E. & F. N. Spon Ltd., 57 Haymarket, London, S.W.1, England. 1947. 84 pp., illus. 8s. 6d.

This little book is packed full of the liveliest discussion of building standards that has yet appeared. It takes modular construction in stride and gives a good historic background to dimensional coordination generally. (The old 40-inch ell is a better planning module than the foot or yard and is very close to the meter. Another old standard, 42 inches, is to be seen in American Colonial work, also French and Russian). A 3-inch module, conforming to their brick coursing, is as much in favor in England now as the 4-inch. If they should go in for universal coordination it is likely that they would settle on a 3 inch-42 inch system, and wouldn't that be a mess, alongside the 4 inch-40 inch American standard?

The continual establishment and revision of standards is a natural process that legal enactments merely help (or hinder). Establishment of minimum standards (in housing, for example) generally results in beating down all standards. Unless we regularly bring

(Continued on page 104)

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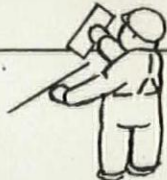
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## Reviews

(Continued from page 102)

standards of all kinds up for review we tie ourselves down to outworn methods. "A standard should only arise against a proved need and it shall be kept flexible throughout its career." Our minds must be kept flexible too, for the only sure thing is change. That's a bit hard for us to grasp if we think of standards as fixed. It takes a comprehensive look at all kinds of standards, such as the author shows us here, to give us the basis for keeping up with our standards and keeping our standards up with us.

JOHN RANNELLS

### FLOOR FINISHES

A Guide to their Selection. *Penelope Whiting. E. & F. N. Spon Ltd., 57 Haymarket, London, S.W.1, England. 1948. 79 pp., illus. 7s. 6d.*

Floor surfacing materials competently reviewed in terms of appearance, cleanliness, hard wear, warmth, quietness, and effects of damp, oils, acids, alkalies, and heat. One of the publisher's series on architecture and building. Attractively illustrated and quite comprehensive, in small scope.

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### NOTICES

#### APPOINTMENTS

The New York firm of ADAMS & WOODBRIDGE, headed by Lewis G. Adams and Frederick J. Woodbridge, has been appointed consulting architects to Columbia University, in connection with the university's long-range plan of architectural coordination and development. The firm will have architectural supervision over present and future properties and buildings of Columbia. Duties will include consultation in connection with alterations, maintenance, landscaping, and so forth. Under the terms of the arrangement, Adams & Woodbridge will not design any buildings for Columbia. The university will continue to have contracts with private architectural firms.

RICHARD J. NEUTRA has been appointed guest lecturer on theory of design, city and regional planning, and architectural design for a three-day session to be conducted by the Summer Quarter, Montana State College, July 26th through July 28th. Complete information may be obtained from the Director, Summer Quarter, Montana State College, Bozeman, Mont.

(Continued on page 106)

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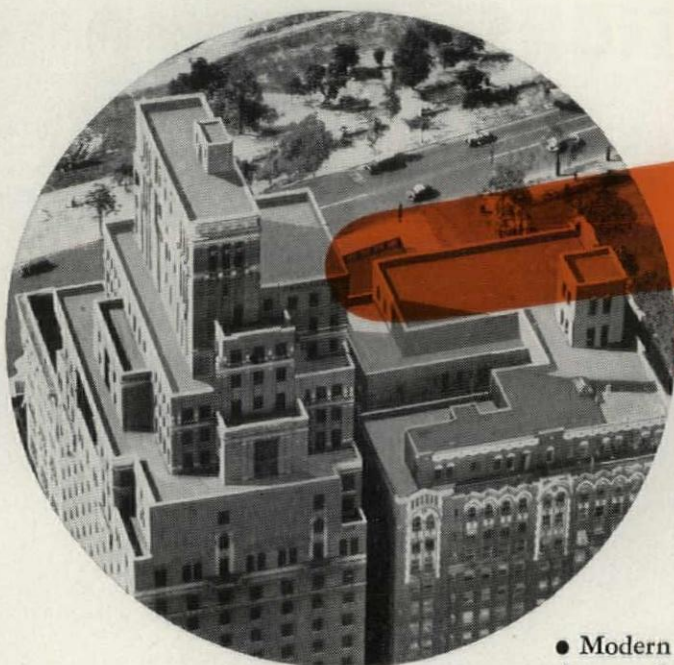


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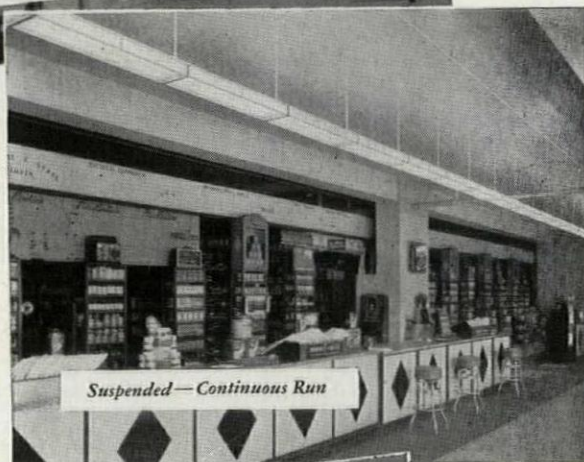
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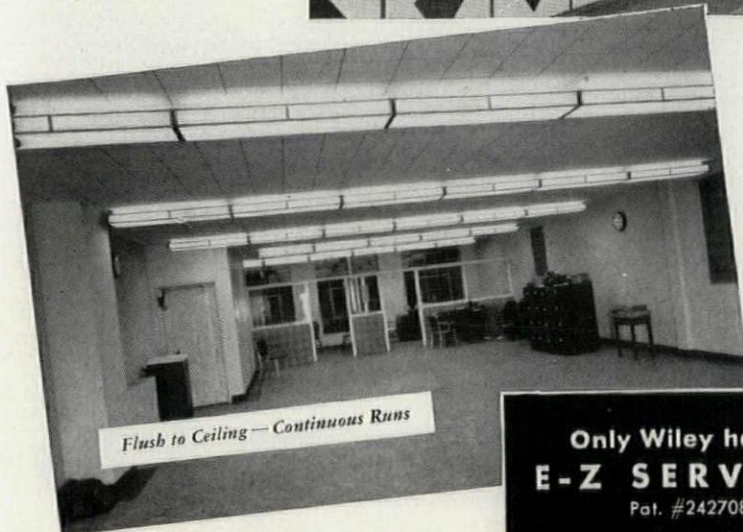
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## Notices

(Continued from page 104)

The appointment of JOHN E. BURCHARD as dean of humanities at the Massachusetts Institute of Technology has been announced. Mr. Burchard is director of the Albert Farwell Bemis Foundation and director of libraries at the Institute.

MICHAEL CZAJA, associate professor of architecture, State College of Washington, has been appointed visiting professor of design at Stanford University for the summer session June 22nd to August 22nd.

HENRY J. BETTMAN, member of the architectural firm of Garriott, Becker & Bettman, has been appointed chairman of the Cincinnati City Planning Commission.

### ELECTED

CHARLES G. RUMMEL, architect, who has been associated for many years with Naess & Murphy, Chicago, Ill., was elected recently to the Board of Directors of the Economic Club of Chicago.

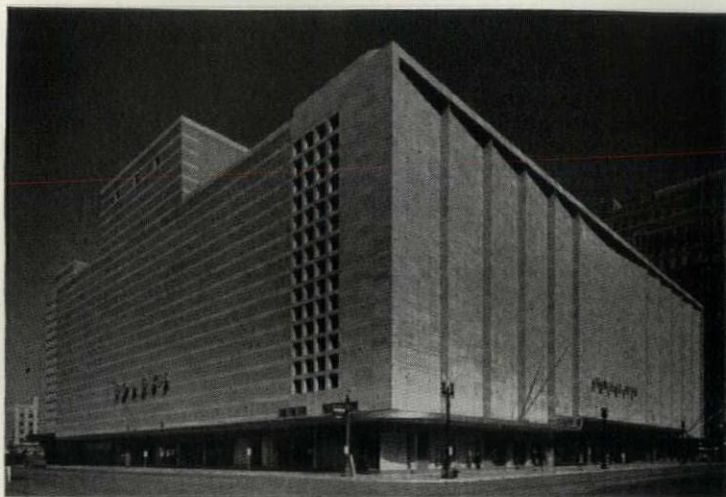
### FELLOWSHIP

John Henry Bickel III, of Louisville, Ky., has been named winner of the GEORGE G. BOOTH TRAVELING FELLOWSHIP COMPETITION for 1948. Announcement was made recently by the College of Architecture and Design, University of Michigan, which sponsored the competition. Mr. Bickel plans to travel in Europe.

### COMPETITION

A Manufacturers' Advisory Committee to the Museum Design Project, Inc., which is co-sponsor with the Museum of Modern Art, New York, of the current LOW-COST FURNITURE COMPETITION, was created recently. The new Advisory Committee will make available to the Project expert opinion on current problems of manufacture and distribution. The Committee's detailed information will be published in a bulletin and distributed to the competitors and research teams. This is the first time an entire industry has banded together on a nationwide scale in a single project to produce well-made furniture within the average man's income. Prizes and grants totaling \$55,000 are offered in this competition, which closes on October 31, 1948. Nearly a thousand entries, from the United States and 30 foreign countries, have been received to date.

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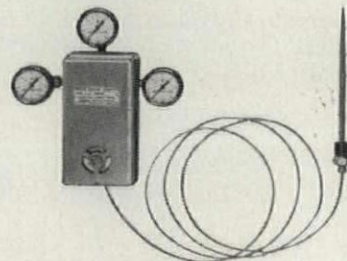
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## MAN TAKES COMMAND

(Continued from page 48)

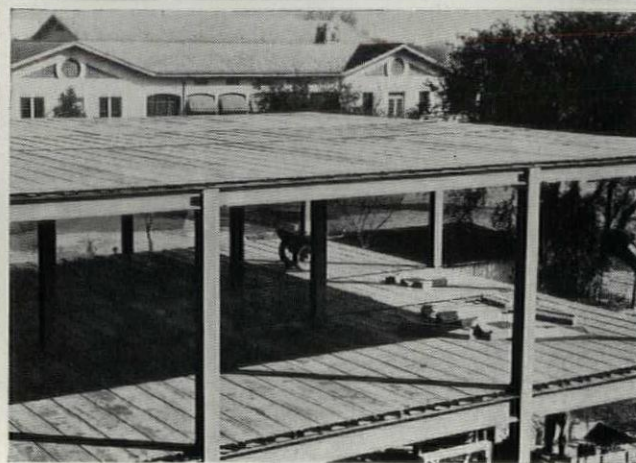
business making portable iron bathtubs devoted himself, before 1939, to recording the progress of his industry and his plant. But such self-interest and self-respect are unfortunately rare.

Despite the wholesale destruction of American records—incidentally our own Patent Office, Giedion tells us, added to the holocaust by cleaning out its precious collection of models in 1926—there remain tracts open for scholarly investigation, waiting only to be staked out. In his new book, Giedion has shown how much an original and indefatigable investigator can accomplish when he goes into such virgin territory. He has taken a whole series of mechanical improvements, from the Yale lock to the adjustable chair, the Pullman compartment, and the modern bathroom, and shown not merely how they were technically developed, but what influences played a part in their conception and what results they had on building and social life. Even without the admirable text that accompanies them, the hundreds of illustrations alone would be worth the price of the book: incidentally, the publishers deserve a special word of commendation for their farsightedness in not practicing any false economies in producing such a classic work: a praiseworthy decision indeed in this panicky period of American publishing.

For the architect, the most important part of Giedion's book is the last two-thirds, in which he deals with the mechanization of human surroundings, with the changing conceptions of comfort and domestic efficiency, and the counterplay of taste in diverting interest from mechanical dexterity and craftsmanlike design to the superficial shell. Giedion's insights in this field are extraordinarily fertile, not least when they are most daring. He shows, for example, that each age has its characteristic posture and its style of sitting, stiff or relaxed, painful or comfortable; and produces chairs and sofas that correspond to its essential style of life. "Form follows (human) function." His richly stored mind, filled with examples and instances from modern painters and poets, throws cross-lights from apparently unrelated areas: thus he relates the vast imbecilities of Victorian decoration to the irrational images of surrealism.

Perhaps Giedion's most brilliant contribution to the appraisal of mechanization is his exhaustive inquiry into the great series of designs in patent furniture which came to life in the mid-nineteenth century, accompanying the invention of the sleeping car and the dining car on railroads: a period of incipient rationalization in all the household arts, which unfortunately was blighted, from the Nineties onward, by

(Continued on page 110)



Duval County Psychiatric Hospital, Jacksonville, Florida—Architect: Reynolds, Smith & Hills; Contractor: George D. Auchter Company

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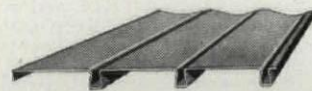
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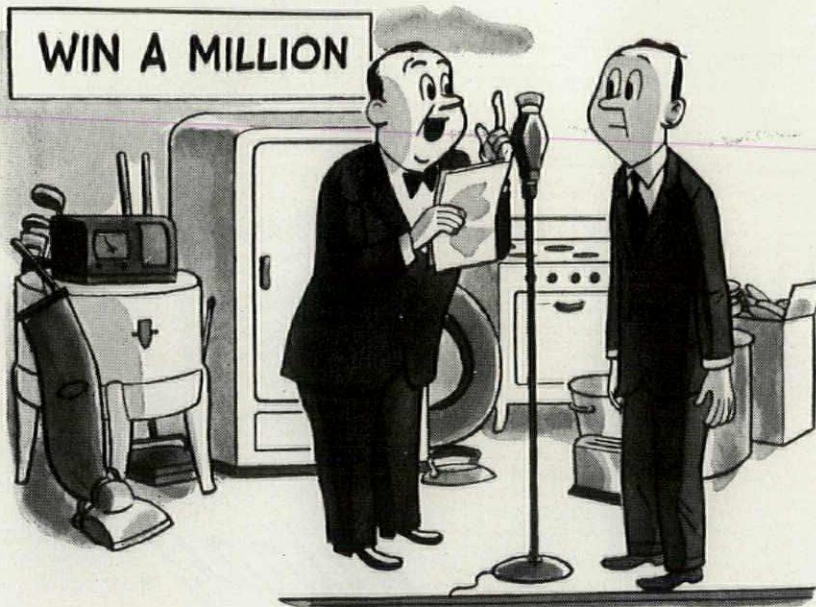
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## MAN TAKES COMMAND

(Continued from page 108)

the spread of "good taste" in forms which sacrificed fresh invention to the refined mimicry of antiquarian objects. But his treatment of mechanization in the kitchen and the bathroom is equally penetrating; for he relates the improvement of kitchen utilities to feminism and the servant problem, quotes Catherine Beecher and Harriet Beecher Stowe in their forgotten book, *The American Woman's Home*, and goes on to show the direct influence of the efficiency engineers in the redesigning of the kitchen, not least through the studies done by Lilian Gilbreth, wife and collaborator of one of the early efficiency engineers, Frank B. Gilbreth.

This book is a history of mechanization, replete with indispensable dates, figures, names, illustrations, and at the same time an interpretation of the nature of modern man in relation to the machines and utilities he has created. As an interpreter, Giedion raises questions of the widest importance. Should, for example, the bath be merely a means of superficially removing dirt, or should it become once more, as it has been in so many other cultures, an instrument of regeneration, a transformation of soul as well as body, accompanied by a collective ritual of conversation, art, physical exercise? This question is not settled automatically by the mass production of cheap plumbing: for it is quite conceivable that in many parts of the world there will be a return to the communal bath and a diminishment of the private bath: a matter which would profoundly alter the internal plan and the general design of housing projects.

There is so much to praise in this work that one hesitates to mention its few shortcomings. There are occasional oversights, for example, like the failure to describe or illustrate the original Morris chair, one of the soundest contributions to adjustable furniture, and to analyze its progressive vulgarizations and debasements in the United States. As might happen with a foreign observer, relying mainly on documentary evidence, he underestimates a little the influence of the Craftsman movement. Much harder to account for than these oversights is the very abrupt account of the introduction of mechanization itself: overwhelmed by his concern with source material Giedion has, apparently, paid little attention to other interpreters of mechanization; hence he overlooks the decisive contribution of the mechanical clock, the very pattern of repetition and standardization, of timed movement and spaced timing; and he passes by the self-imposed regimentation of the human personality, in the ideal types of the monk, the business man, the soldier. These are matters that have been treated at some length elsewhere

(Continued on page 112)



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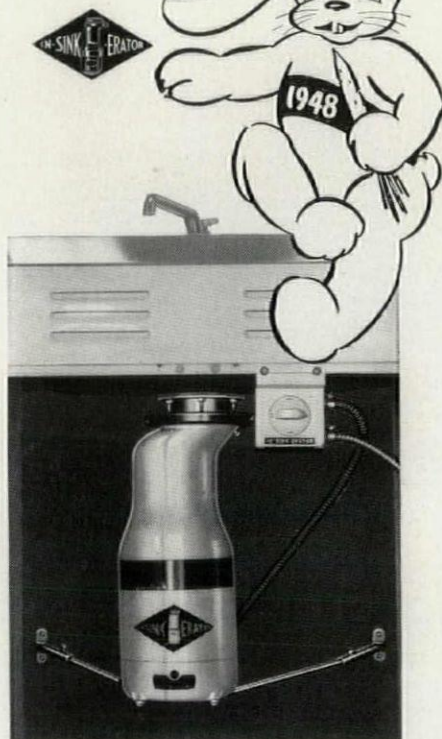
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## MAN TAKES COMMAND

(Continued from page 110)

and the neglect of them leads to an inadequate account of even motion itself, while it keeps Giedion from doing full justice to the antiorganic nature of the original processes of mechanization.

In the last chapter, "Man in Equipose," the author endeavors to point the moral that is implicit in the series of brilliant monographs that make up this book. He shows that mechanization, being in a sense as impersonal as nature, equally needs control if man is to protect himself against its inherent perils: indeed, because "mechanization sprang entirely from the mind of man it is the more dangerous to him" if only because "mechanization reacts on the senses and on the mind of its creators." He calls attention to the need for a more organic kind of equilibrium; indeed, he says that "our period demands a type of man who can restore the equilibrium between inner and outer reality." "We have refrained," Giedion continues, "from taking a positive stand for or against mechanization. We cannot simply approve or disapprove. One must discriminate between those spheres that are fit for mechanization and those that are not; similar problems today arise in whatever sphere we touch."

From my standpoint, these concluding observations are pure gold; and the great virtue of Giedion's book, among its many extraordinary virtues, is the fact that it provides the data on which such judgments may be made. *Mechanization Takes Command* is, after all, the preface to a far more important book, still unwritten, to which each of us must contribute a chapter. The title of that new work is: *Man Takes Command*.

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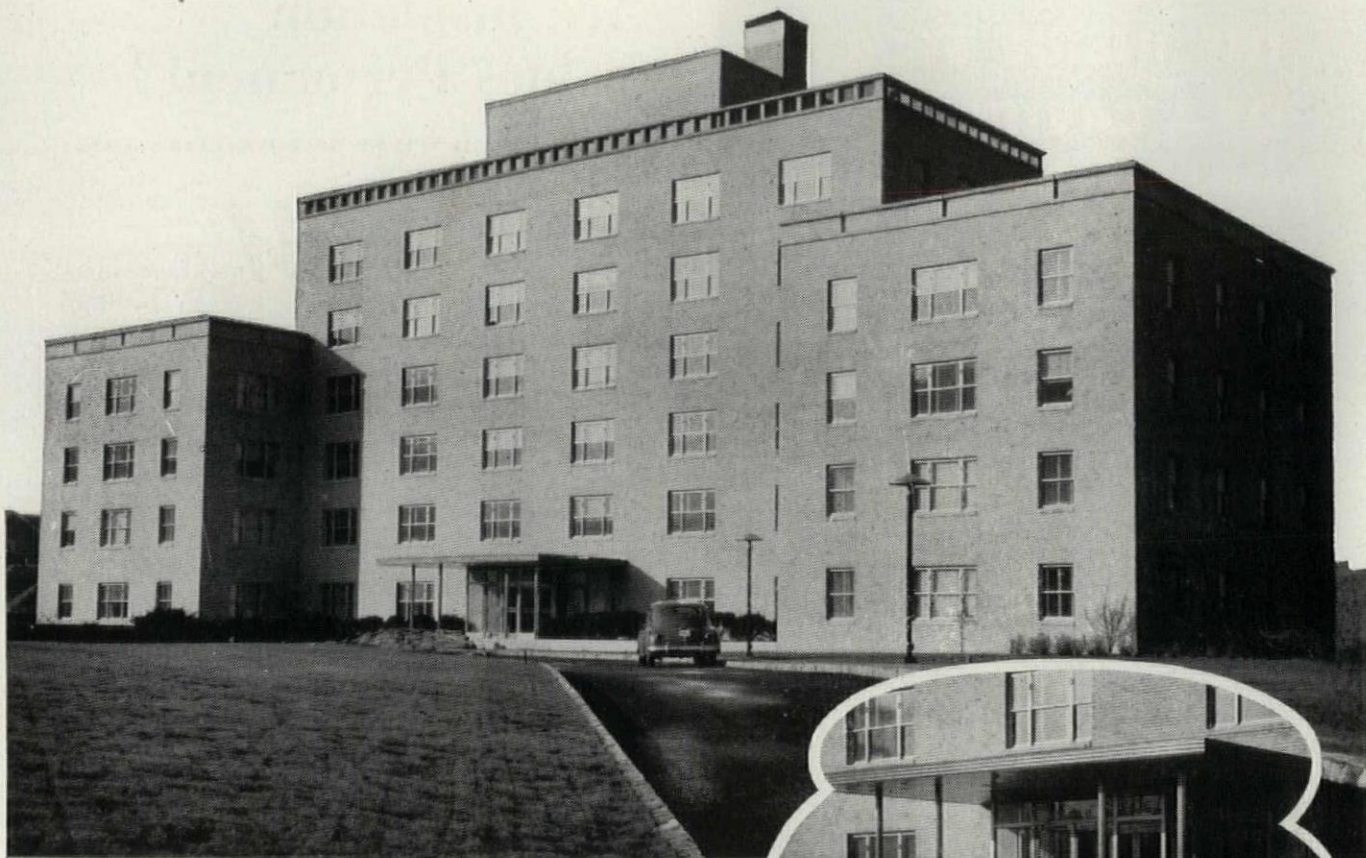
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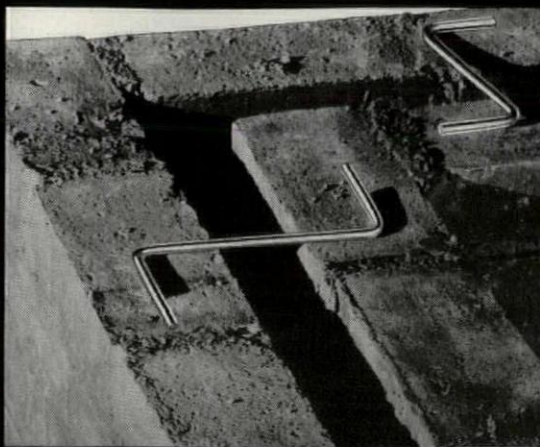
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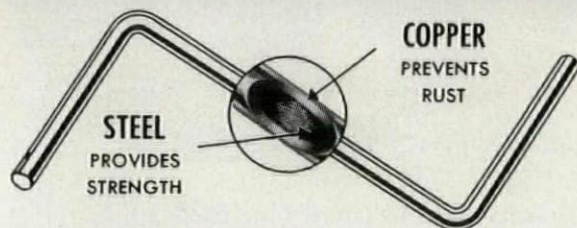
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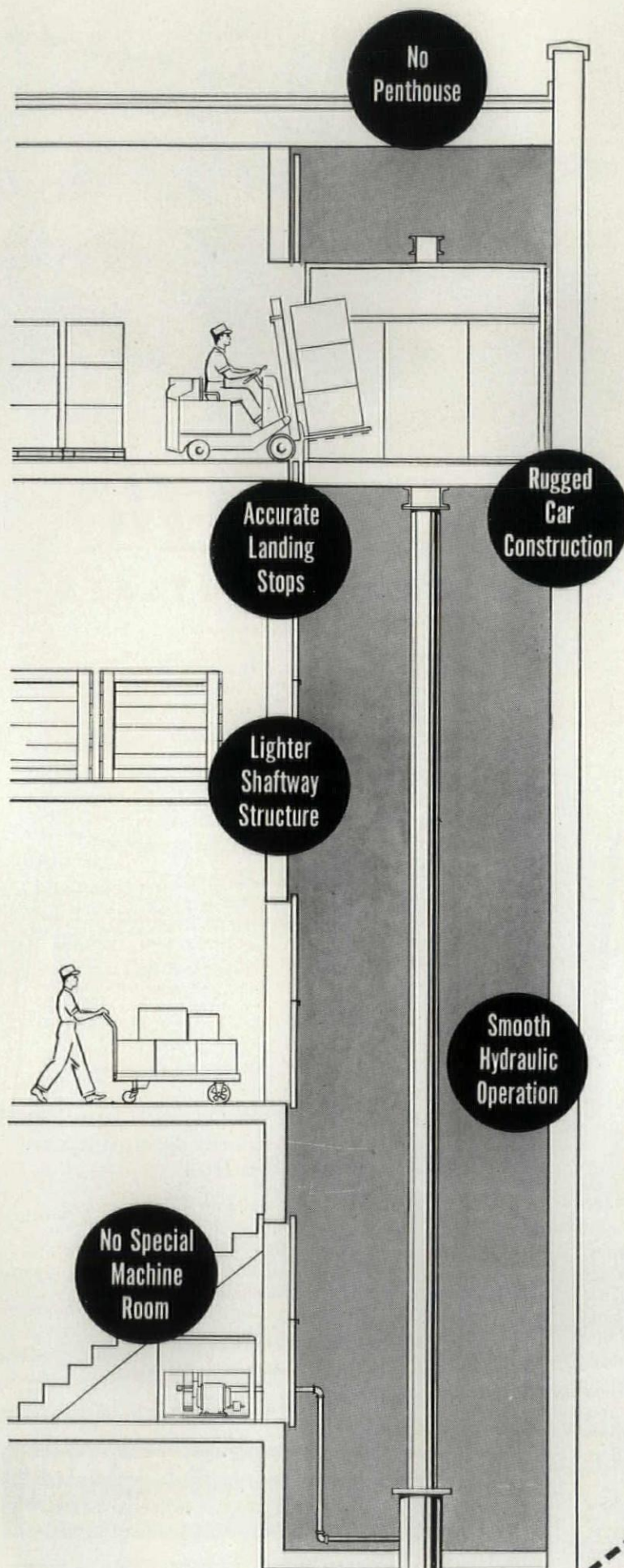
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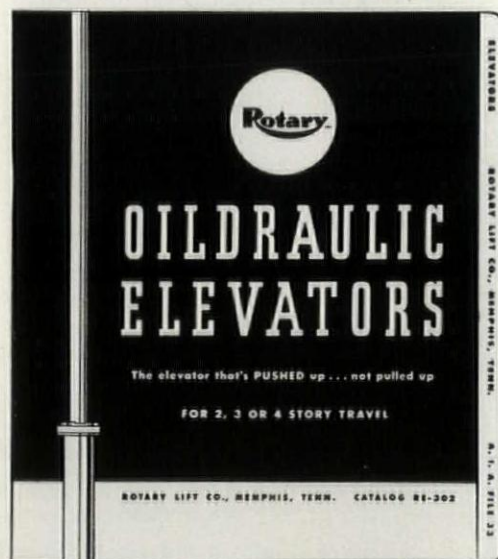
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400	1	.007	-	1	.009	-	1	.012	3	1	.014	7	1	.016	9	400
450	1	.009	-	1	.011	-	1	.014	7	1	.016	9	1	.018	11	450
500	1	.011	3	1	.013	7	1	.016	9	1	.018	11	1	.020	13	500
550	2	.004	-	1	.015	9	1	.018	11	1	.020	13	1	.022	15	550
600	2	.004	-	1	.017	11	1	.020	13	1	.022	15	1	.024	17	600
650	2	.005	-	2	.008	-	1	.022	15	1	.024	17	1	.026	19	650
700	2	.006	-	2	.009	-	1	.024	17	1	.026	19	1	.028	21	700
750	2	.006	-	2	.010	-	1	.026	19	1	.028	21	1	.030	23	750
800	2	.006	-	2	.011	-	1	.028	21	1	.030	23	1	.032	25	800
850	2	.006	-	2	.012	-	1	.030	23	1	.032	25	1	.034	27	850
900	2	.006	-	2	.013	-	1	.032	25	1	.034	27	1	.036	29	900
950	2	.006	-	2	.014	-	1	.034	27	1	.036	29	1	.038	31	950
1000	2	.006	-	2	.015	-	1	.036	29	1	.038	31	1	.040	33	1000

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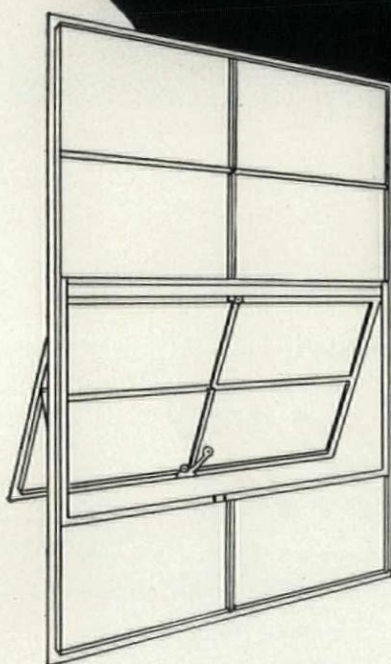
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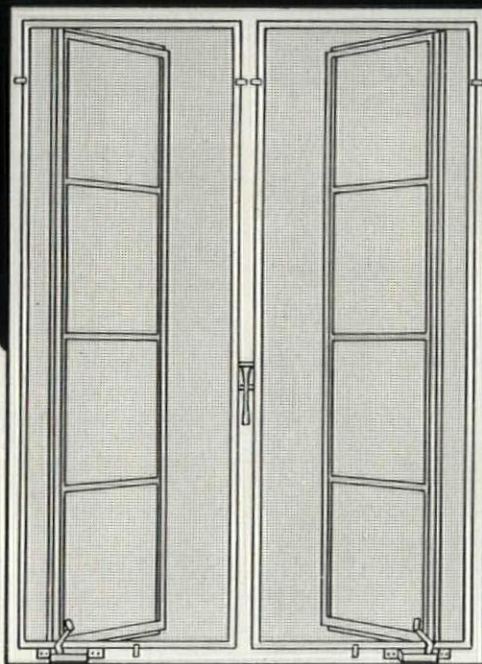
## STEEL WINDOWS

and Metal Frame Screens



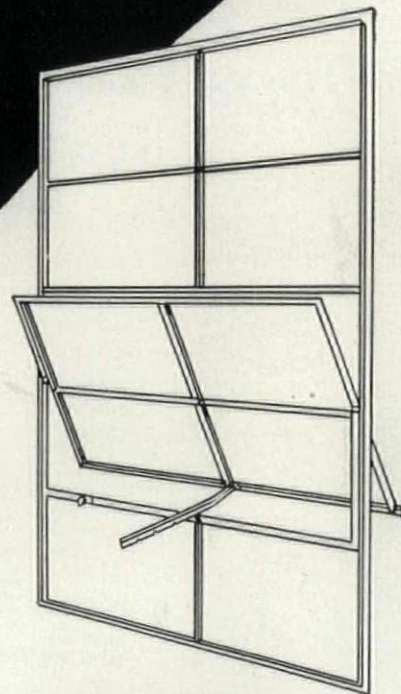
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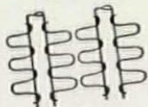
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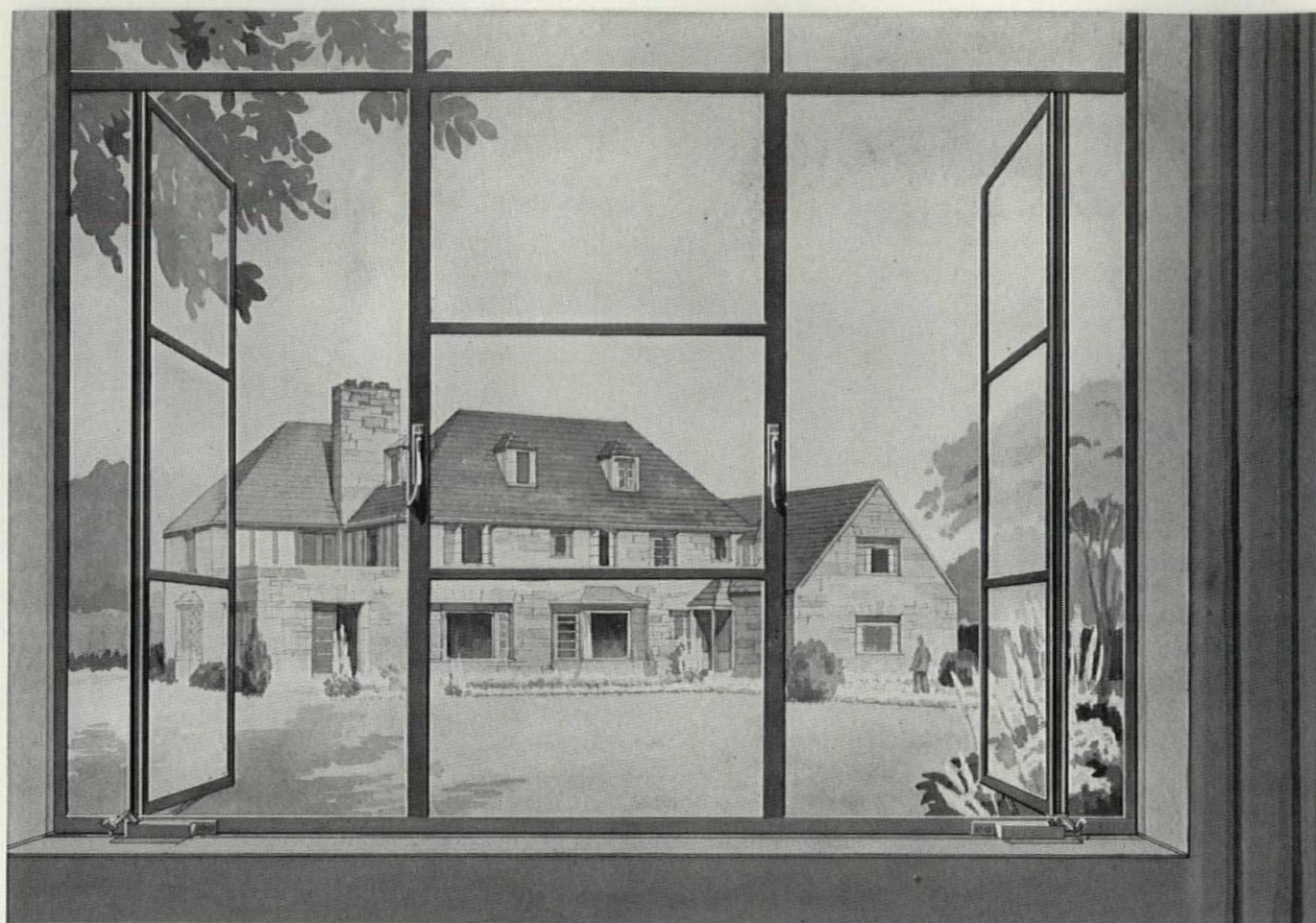
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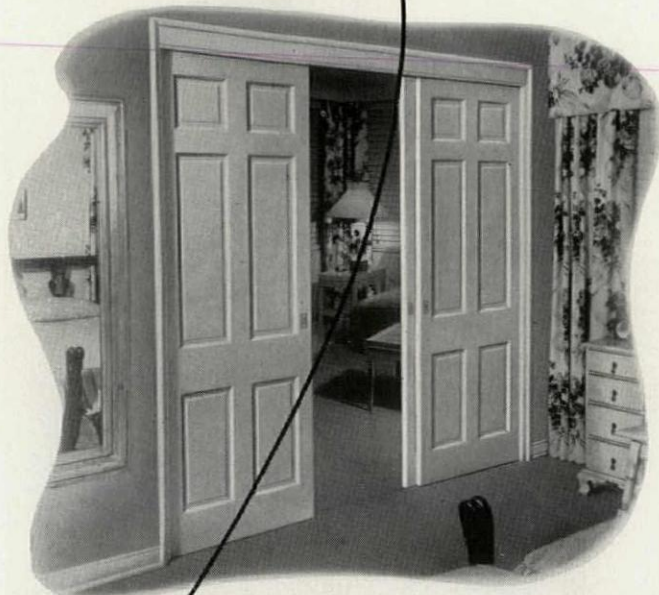
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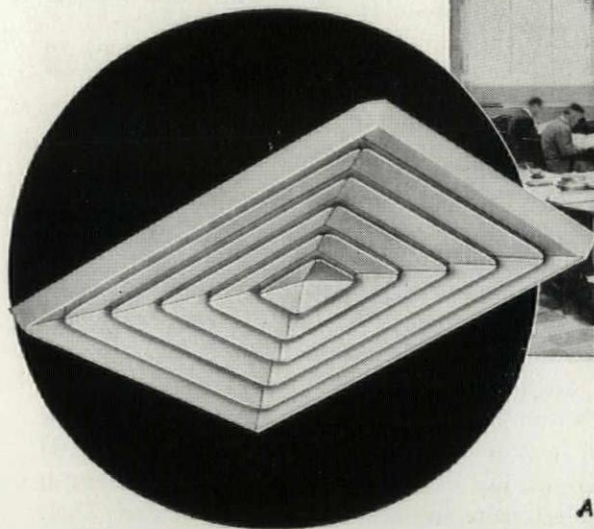
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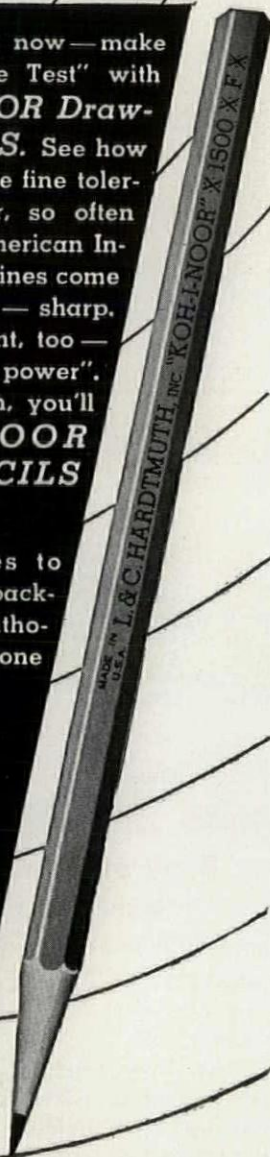
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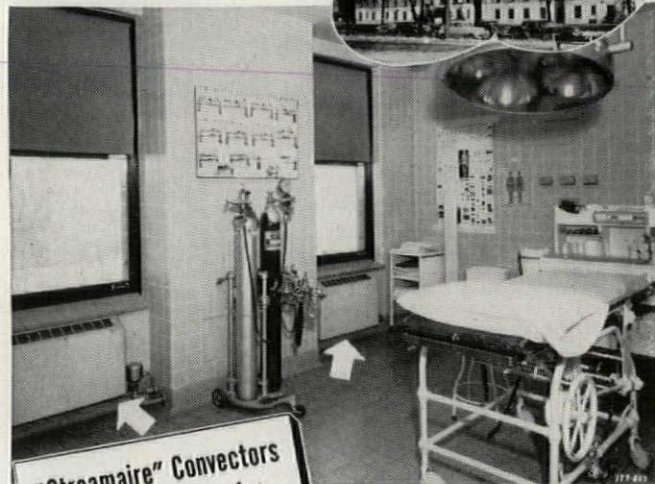
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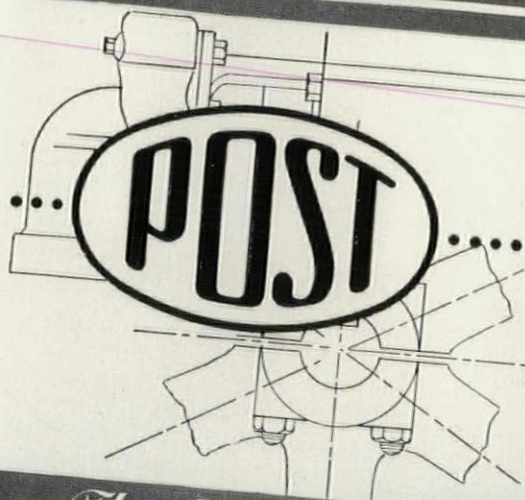
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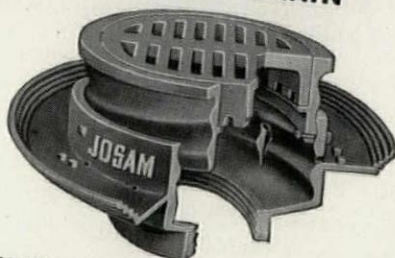
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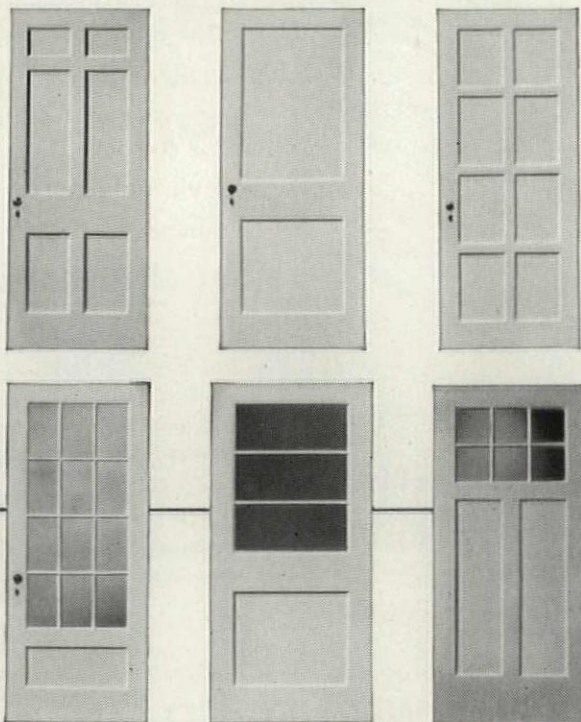
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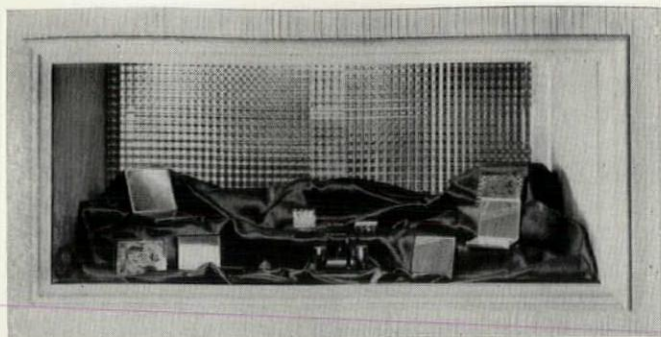
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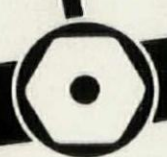
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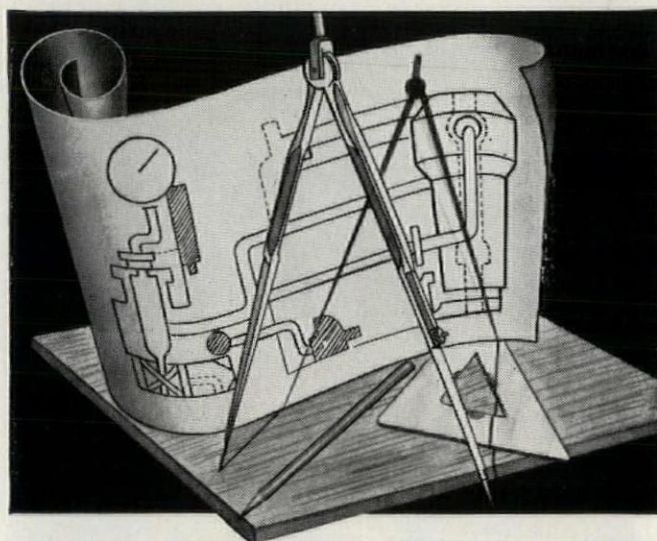
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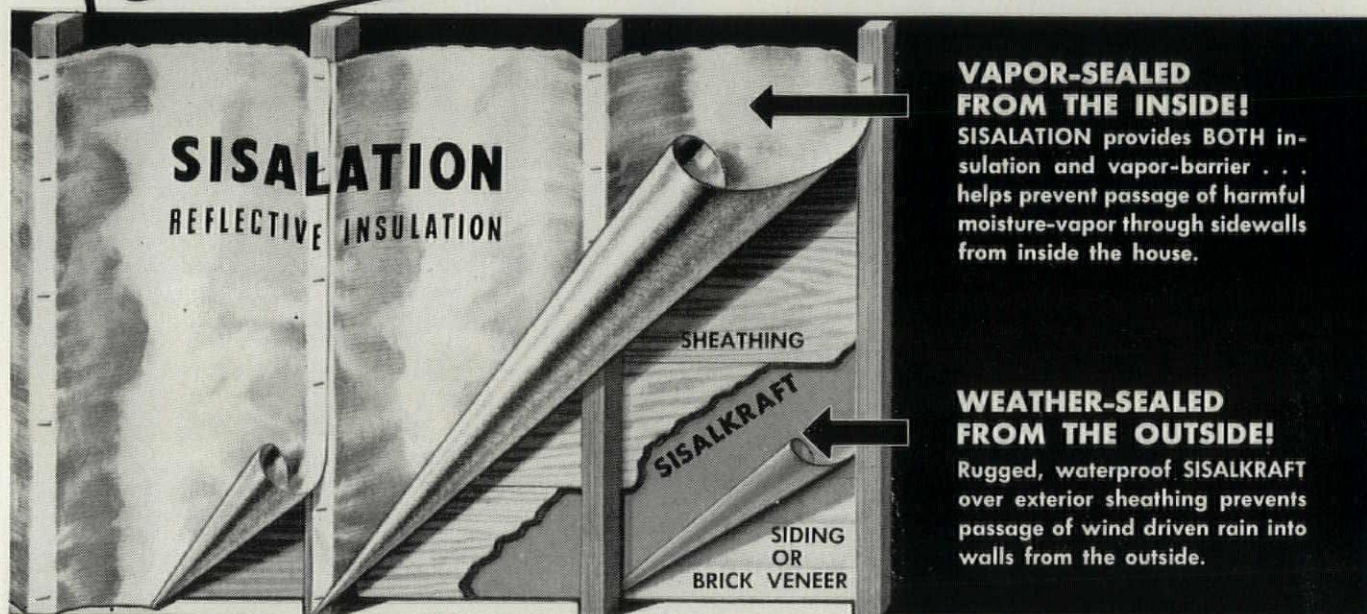
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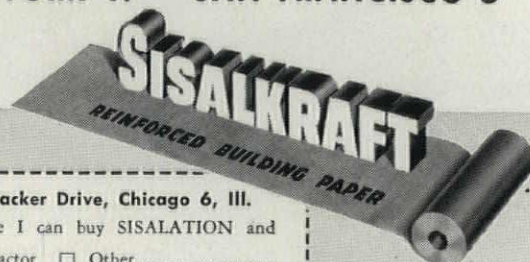
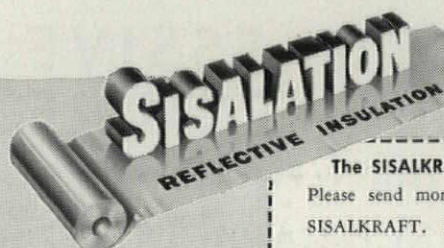


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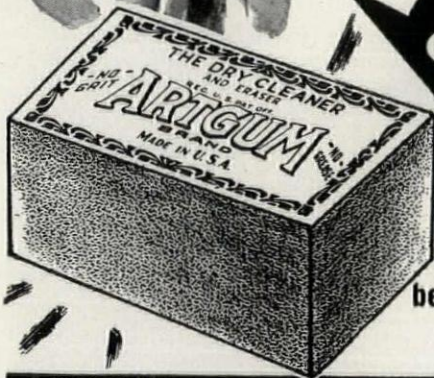
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# P.S.

## DURING THE LAST YEAR I'VE TANGLED, IN PRINT, WITH A NUMBER OF PLANNERS.

This worries me, because I hate to disagree with people whom I admire tremendously—Frederick J. Adams, for instance. Mr. Adams, head of the Department of City and Regional Planning at M.I.T., President of the American Institute of Planners, “wonders sometimes if we are speaking the same language.” The principal difference of opinion has had to do with the architect’s role in planning, and, basically, whether the planning process in which geography, geology, and the other disciplines play the most important role is an end in itself, or whether it must culminate in a creative act and result in three-dimensional expression, to which the other studies are preliminary and on which they are dependent. Some architect-planners—Bob Weinberg and Henry Churchill among them—have supported our point of view. Others, as I said, disagree.

**WE’VE REJECTED A NUMBER OF MANUSCRIPTS BY PLANNERS DURING THE LAST YEAR**, because they were examples of what Churchill calls “hocus-pocus such as the substitution of six-syllable words for the shorter ones used by common folk to say the same things.” If planning is a democratic process, which it must be, then why can’t planners express themselves simply and clearly? I’d like to be fair and present both sides of this matter, but I’ve just sent back a manuscript which argued that architects are small peanuts in the planning process, because planning is so important and different that they can’t be expected to understand it. The author said:

“The uniqueness of comprehensive planning is established: a) in the philosophical and theoretical base on which it rests, b) the composite and distinctive knowledge comprising its intellectual corpus, c) the particular methodology of planning, d) the features of operation which it exhibits, and e) the existence of a substantial and rapidly expanding literature dealing specifically with the subject.”

That’s what’s the matter with planning. What does the man mean? As far as I can figure out, when the fancy words

are removed it stands as a rather unimpressive statement:

Planning is different from architecture because a) it is a theory, b) it requires study, c) it is logical, d) (I give up on this one) and e) people write about it.

**I’M SORRY TO SEE CONTROVERSY ABOUT THE “PLANNER” AS A PROFESSIONAL DISTINCT FROM THE ARCHITECT**, and about “planning” as a process separate from the design of man’s physical environment in any other sense, because many excellent studies, valuable to the practicing designer, are coming from the work of those engaged in the statistical and theoretical aspects of planning. They are valuable as adjuncts of planning; the mistake would be to consider them complete in themselves. They come to life only when and if communities and buildings result from them. The best study I’ve seen in a while is called *Planning the Neighborhood*, a booklet prepared by a subcommittee of the American Public Health Association Committee on the Hygiene of Housing (headed by Frederick J. Adams), which has been published by the Public Administration Service, 1313 East Sixtieth Street, Chicago 37, Illinois. It costs \$2.50, and it’s well worth it. A tremendous amount of study and analysis has gone into it, and it is packed with useful data indispensable to anyone planning a community or planning a structure which he would like to see part of a community.

However, this is a study for ideal living. The Committee, for instance, “supports the view that one- and two-family houses, including their row or group forms, are the generally preferable type for families with growing children.” That’s wonderful, and few would disagree. But the cold hard fact is that thousands of families with growing children are living, and will continue to live for many years, in multiple-family dwellings, new if they are fortunate but old and decrepit in most cases. Even if the most progressive housing legislation were passed and implemented tomorrow, many of these buildings would not be torn down and replaced in our lifetime.

**THERE ARE OTHER APPROACHES TO THIS PROBLEM**. I belong to the Municipal Art Society in New York—an organization which considers civic problems from the point of view of esthetics. It is now discussing seriously a proposal by its president, Architect Charles Platt, for

the “beautifying” of slum areas in the city, which may have important planning implications.

The proposal is that the City Housing Authority, in addition to concerning itself with new housing projects, should attempt the integrated improvement of several nine-block “slum” areas. Dangerously obsolescent buildings would be condemned and removed (the hope would be to clear one full block in the center of the group); blocks within the area would be cleaned, but not physically altered in any important sense. The suggestion is that a pilot study be made of several such districts, to see whether, by cooperation of tenants and landlords and the help of the Authority, an improvement in community living could be made for families who have no real hope of moving elsewhere.

It is a dangerous proposal. The objections are obvious—this is, in a sense, putting sugar candy on what remains a bitter pill. Palliative measures can never take the place of replanning. The buildings should be torn down and the land should be redeveloped. And yet—will these things be done—would they, for many generations, even under the most favorable conditions?

**PATRICK GEDDES SUGGESTED SOMETHING SIMILAR TO MR. PRATT’S PROPOSAL, FOR SEVERAL TOWNS IN INDIA, YEARS AGO**. He called it “conservative surgery,” and said about it: “Even if, as rarely happens, the new site offered is both suitable and acceptable to the people expelled, they are practically excluded by the present cost of building in favor of the more prosperous classes. . . . The method of Conservative Surgery, on the other hand, brings out different and encouraging results; first it shows that the new streets prove not to be really required since, by simply enlarging the existing lanes, ample communications already exist; secondly that, with the addition of some vacant lots and the removal of a few of the more dilapidated and insanitary houses, these lanes can be greatly improved and every house brought within reach of fresh air as well as of material sanitation.”

The point is that the proposal opens interesting possibilities and should result in serious debate and perhaps some attempts to prove whether or not it would work and, if it did, whether or not it’s socially desirable. And the proposal comes not from planning statistics, but from a consideration of the visual aspects of the run-down portions of the city. Who’s the planner now?

*Thomas H. Wright*

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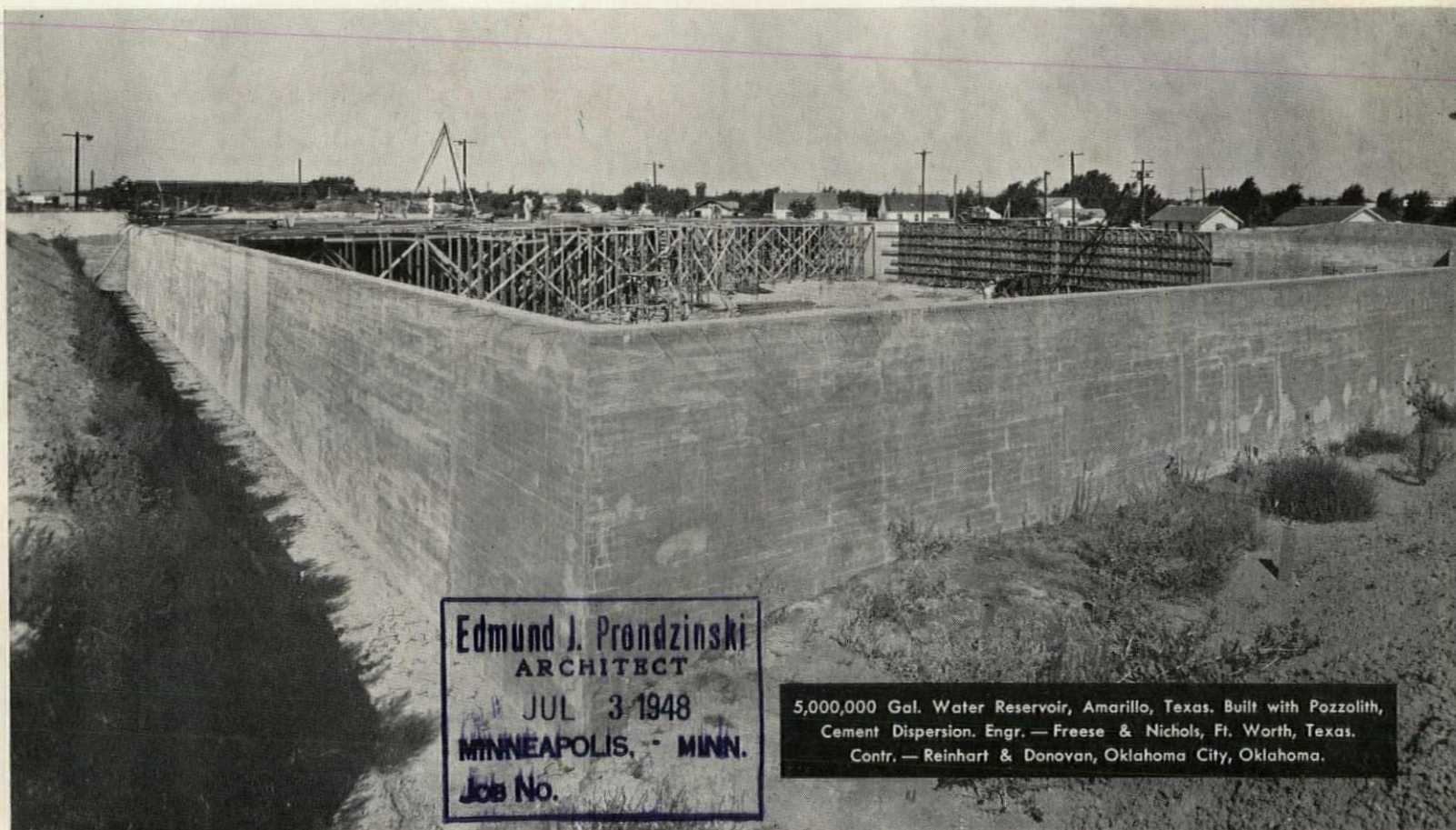
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