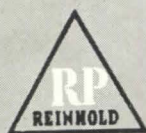


PROGRESSIVE ARCHITECTURE PENCIL POINTS]



EDITORIAL STAFF

Thomas H. Creighton	Editor
Charles Magruder	Managing Editor
George A. Sanderson	Feature Editor
Frank G. Lopez, Jr.	Technical Editor
Edith Lamar	Assistant Editors
Heinrich Weisselberg	
Charlotte Zager	Editorial Assistants
John Stegos	
John Hawley	Art Director
Mer A. Bennett	Drafting

EXECUTIVE AND BUSINESS STAFF

John G. Belcher	Publishing Director
Frank Armet	Production Manager
John Zellner	Circulation Manager
John Andrews	Promotion Manager

Published monthly by REINHOLD PUBLISHING CORPORATION, 330 West 42nd Street, New York 18, N.Y., U.S.A. Philip W. Reinhold, Chairman of the Board; Philip H. Hubbard, President; Burton Lowe, Executive Vice President and Treasurer; Gilbert E. Cochran, Vice President and Secretary; Francis M. Turner, Vice President; William P. Winsor, Vice President. Executive and editorial offices: 330 West 42nd Street, New York 18, N.Y. Subscriptions payable in advance: 1 year, \$4.00; 2 years, \$7.00; 3 years, \$8.00 in U. S. and Possessions, Canada and Pan American Union; \$2.00 extra for each year in all other countries. Single copies, \$1.00. Printed by Lotus Press Inc., 508 West 11th St., New York 1, N.Y. Copyright © 1947, Reinhold Publishing Corp. Trade Mark Reg. All rights reserved. Reentered as second class matter, January 1, 1947, at the Post Office at New York, N.Y., under the Act of March 3, 1879. Volume XXVIII, No. 9, Sept., 1947. Indexed in Art Index.

CONSUMER ACCEPTANCE

From every part of the United States we hear from the architects, "Of course you know that this is the most conservative part of the country. The design progress that is being made everywhere else will have to come very slowly here." The South looks enviously at New England; Vermont eyes the Middle West; Indiana casts longing glances at the West Coast; Oregon thinks Florida has greater advantages. You'd suppose that the situation was hopeless everywhere; yet the fact is that from each one of these regions come constant indications of a trend toward design in today's idiom.

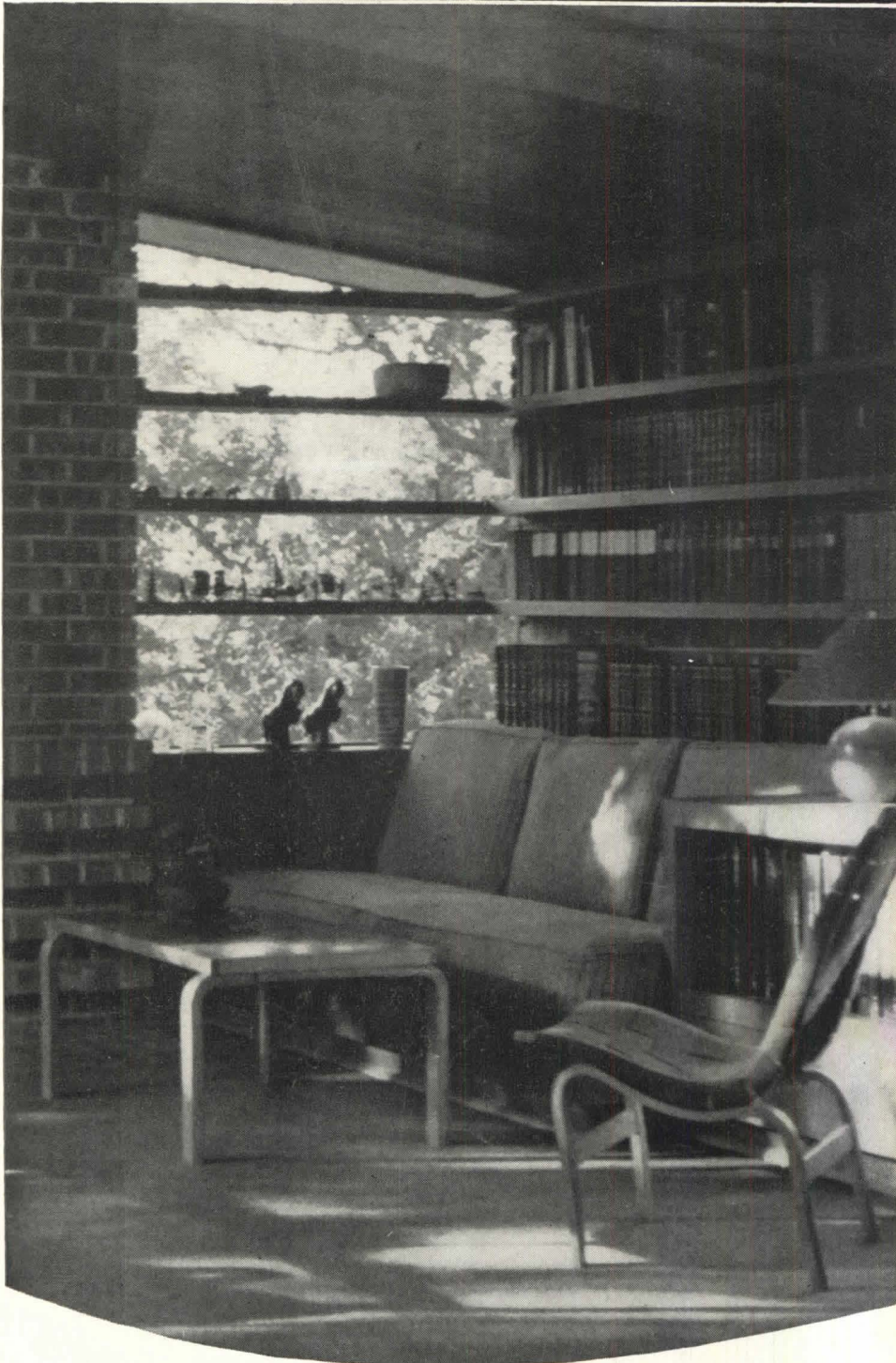
"Lack of acceptance" of architecture that is not copied from previous styles is the usual complaint. We have several theories about this lack of consumer understanding. One is that too many architects still approach a client with the question, "What style do you want?" instead of "What are your needs?" At the same time, it is perfectly true that consumer education in what constitutes good design has been very limited. Many clients who actually want homes think they must ask for styles. "Acceptance" comes slowly because there has not yet been enough indication of what is acceptable. It's a vicious circle.

Your editors are normally concerned with professional exchange, information, and inspiration. However, late into many a night we have been working on a book—*Homes, Selected by the Editors of Progressive Architecture*—which is intended for the general public. It is our hope that the architects (many of whom helped make the book possible) will find it a useful tool to prove to clients that today's architecture is not only appropriate for today but can be charming and beautiful and livable.

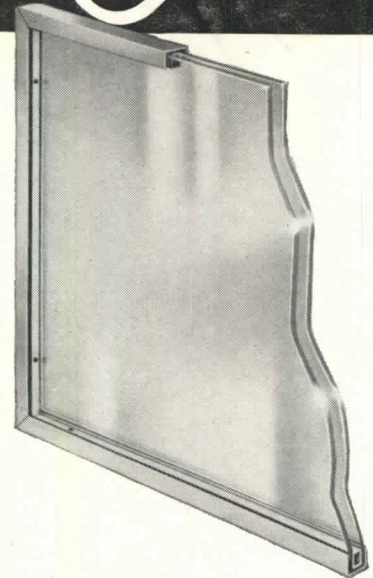
We now step back into our normal role and give you in this issue another in the series of Critiques, for professional reading. Our usual board of outside critics has been replaced this month by ourselves (we've lived with *Homes* for so long, we must be experts) and the owners of the houses presented. These are people who "accepted" a fitting design, have lived with it, and are candidly critical of some features. None of them long for the stately homes of England, however.

The Editors

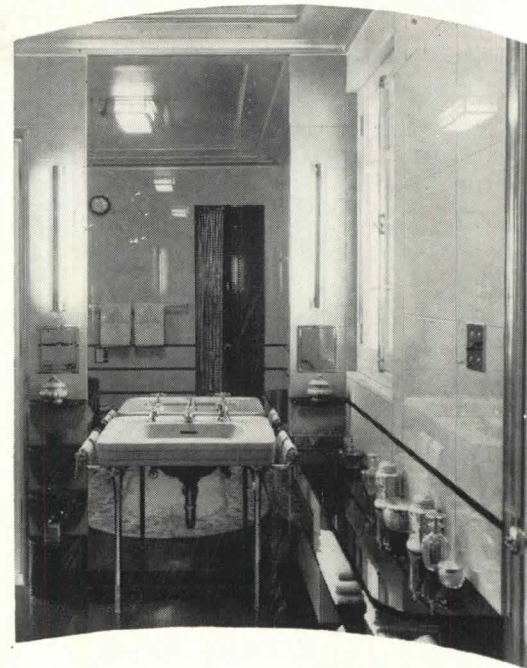
Suggestions for using *Glass*



The complete line of "Pittsburgh" glasses includes a quality glazing material for every conceivable need. Pittsburgh Polished Plate Glass has been famous for almost 70 years for its clarity, polished beauty, and absolute transparency. Pennvernon Window Glass is eminently satisfactory to meet all sheet glass requirements. And where *insulated* transparent windows are desired, Twindow, the window with built-in insulation, is unexcelled. Architects: W. A. Ganster & A. Hennighausen.



Twindow—"Pittsburgh's" new window with built-in insulation—when made with 2 panes of glass has nearly twice the insulating efficiency of ordinary windows. It has even greater insulating efficiency when made with additional panes. It cuts heating and air-conditioning costs . . . facilitates proper temperature maintenance.



Many attractive and practical bathrooms and kitchens have been designed with walls or wainscots of Carrara Structural Glass. This reflective polished glass is impervious to moisture and chemicals and is very easy to clean. The bath above has Carrara shelves and a large built-in mirror, as well as Carrara walls. Carrara is available in 10 smart colors. Architects: Walter T. Karcher & Livingston Smith.

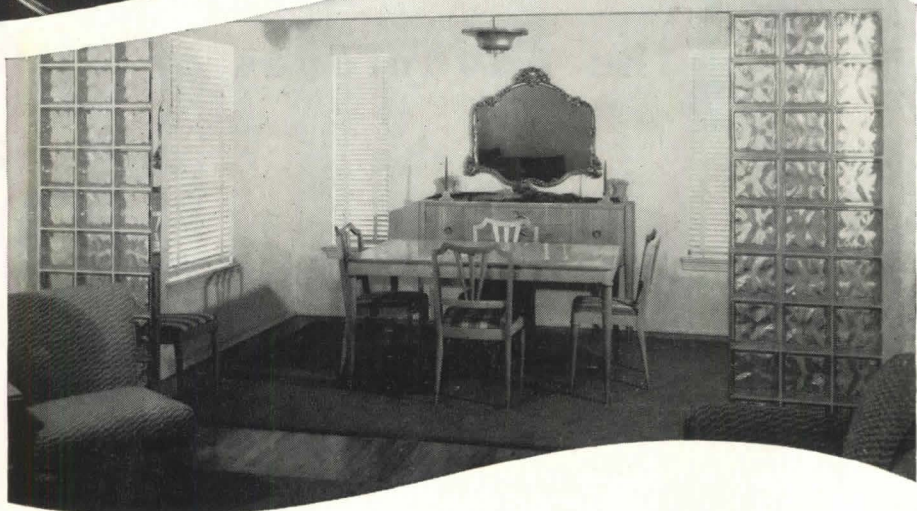
P I T T S B U R G H P L A T E G L A S S C O M P A N Y

in residential buildings



↑ **Pittsburgh Mirrors** can be used in countless ways to enhance the attractiveness of any interior. A large, structural mirror over the dining room buffet, as shown here, is one of the most popular applications. Other attractive and practical uses of mirrors: over the mantel; on bedroom and dressing room doors; on the back walls of the tub recess in the bathroom. Made from blue, flesh-tinted or green Plate Glass, polished Plate Glass and with silver, gold or gun-metal backing.

PC Glass Blocks offer numerous interesting possibilities in residences of both traditional and modern architecture—above work surfaces in kitchens . . . around front entrances . . . in stairwell walls, and for semi-partitions as shown here. These blocks transmit daylight generously yet provide privacy. They make rooms brighter, smarter, more cheerful. Their insulating properties cut heating costs.



We believe you will find much to interest you in our illustrated booklet of ideas concerning the use of Pittsburgh Glass in building design. Send the coupon for your free copy.

★ Design it better with

Pittsburgh Glass



"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

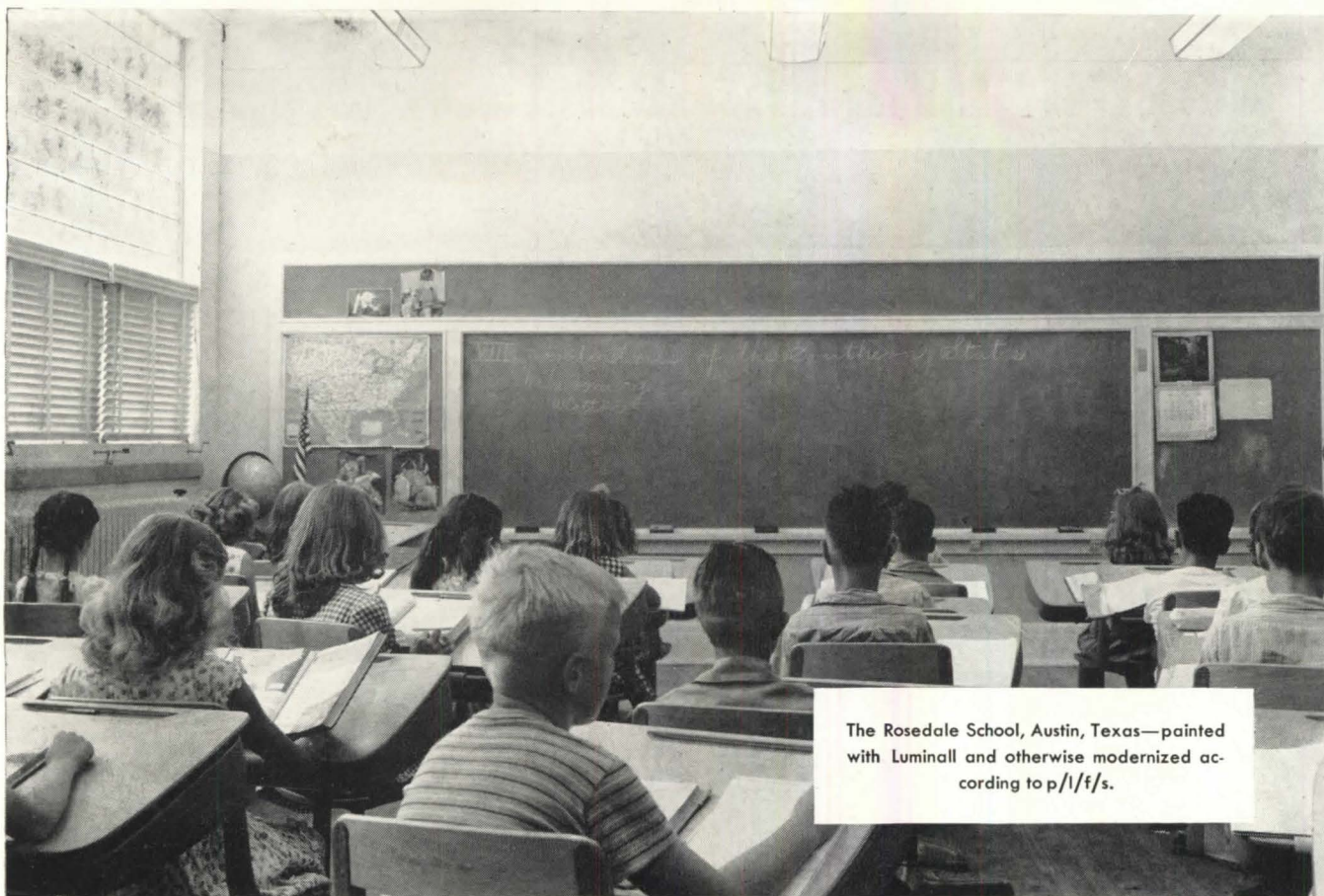
Pittsburgh Plate Glass Company
2294-7 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, your free booklet entitled "Ideas for the Use of Pittsburgh Glass in Building Design."

Name _____

Address _____

City _____ State _____



The Rosedale School, Austin, Texas—painted with Luminall and otherwise modernized according to p/l/f/s.

The Advantages of LUMINALL PAINT in the Harmon Technique

For convenience, p/l/f/s is used as an abbreviation of "painting, lighting, fenestration and seating as coordinated according to the Dr. Darell B. Harmon Technique."

When schoolrooms are modernized according to this technique, a profound improvement is noted in the educational progress of students as well as improvements in their physical well-being. The cost of p/l/f/s modernizing an old schoolroom has been as low as \$40 in some areas. This type of modernization is applicable to many factories, workrooms and offices.

Luminall paint is ideal for painting walls and ceilings in a p/l/f/s job. It is highly light-reflective—up to 90.6%

for white. It maintains this reflectivity because it does not "yellow" or discolor from age and exposure. It diffuses reflected light thoroughly. Luminall paint was used in the Mexia, Texas, Rosedale (Austin, Texas) schools which played such an important part in the development and testing of p/l/f/s.

Ask for a copy of Dr. Harmon's "LIGHT ON GROWING CHILDREN," reprinted from Architectural Record. On receipt of sketches showing dimensions and details of schoolroom, specifications will be furnished according to the Harmon Technique without cost or obligation. NATIONAL CHEMICAL & MFG. CO., 3617 S. May Street, Chicago 9.

Use Luminall to Save Time

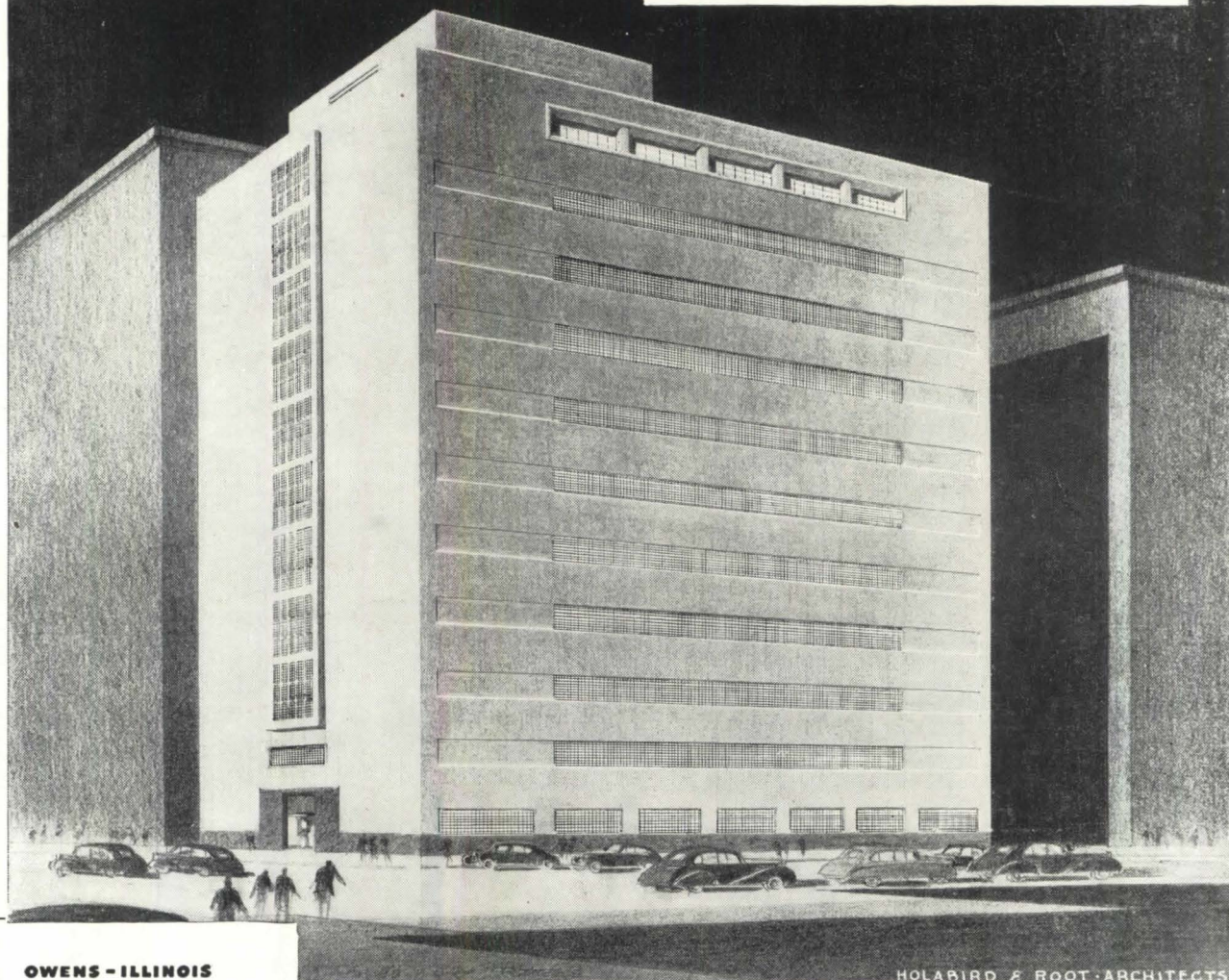
Use Luminall paint for finishing new work or remodeling jobs. You can apply it over damp plaster without damage to either plaster or decorating. Lets you deliver a complete job sooner. Luminall is a Casein base paint. Thins with water. Sold by more than 3000 leading paint merchants.



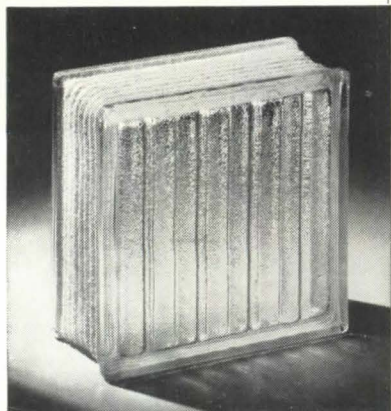
LUMINALL

the light-reflective
paint for interiors

Designed by Architects Holabird and Root, this 11-story unit of Illinois Bell Telephone Co.'s long distance switching center (already the world's largest) will house intricate, costly equipment. Insulux will provide daylight, the insulation necessary for economical air conditioning, and help block out dust and dirt in this structure planned to be built at Clark and Congress Streets, Chicago, Illinois.



OWENS-ILLINOIS
INSULUX
GLASS BLOCK



Insulux Glass Block is a functional building material, designed to do many things other materials cannot do. Investigate!

Glass block daylights unique building

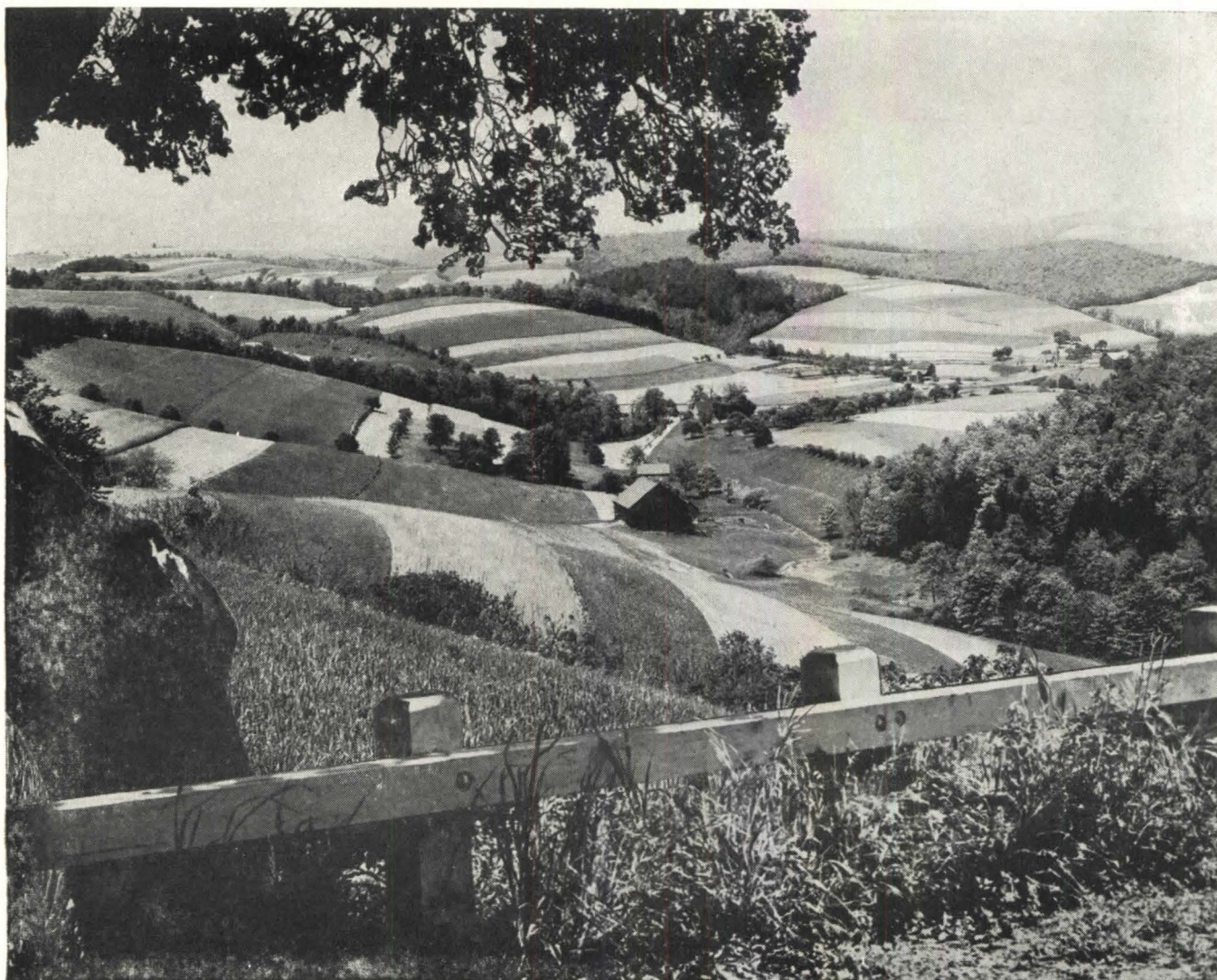
WITH an ease approaching magic, myriad calls from all parts of the world will pass through this unit of Illinois Bell Telephone Co.'s long distance switching center.

The building and its equipment—representing ten million dollars—have been carefully designed for smooth operation and economical maintenance. One note-worthy bit of planning by Architects Holabird and Root was the selection of Insulux Glass Block.

Insulux panels will not only bring in light, but provide good insulation. The result is lower cost air conditioning and heating operations.

Maintenance, too, is less costly with Insulux. The panels are not subject to rust, rot or corrosion. Infrequent washing keeps them sparkling. No painting is required.

Frequently Insulux Glass Block can make important contributions to efficiency while protecting processes and equipment in industrial and commercial buildings. For complete information write Insulux Products Division, Owens-Illinois Glass Company, Dept. D-32, Toledo 1, Ohio.



"above thy fruited plains"

This, too, is America. For true character is no better symbolized than by the fundamental goodness of the soil . . .

And the more than six million fertile farmsteads, peopled with the earthy, land-wise sons and daughters of the country, who multiply the talents of nature to feed and clothe their fellow men. Nowhere does the "nobility of man" find kinder expression!

On the farm, as in industry and commerce, imagination and determination have always mixed freely to achieve our highest aims. But the painful transition from tilling earth with sharpened sticks to roll-

ing the furrows of soil with multiple plows was no harder for the farmer to affect than the change from the sweep well to the automatic water system.

Only the invention and mass production of *steel pipe* finally banished the old oaken bucket and made fresh, pure water under pressure available at the turn of a tap in the house, the barn or the "north forty."

Today America is the "bread basket of the world" largely because *steel pipe* . . . for irrigation, stock watering, spraying, labor saving, sanitation and just plain convenience . . . has made farming a modern industry. It is the medium by which

and through which the energies of water, gas, steam, oil and other resources of America are made the servants of Americans. Yes, *steel pipe makes it possible!*

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!

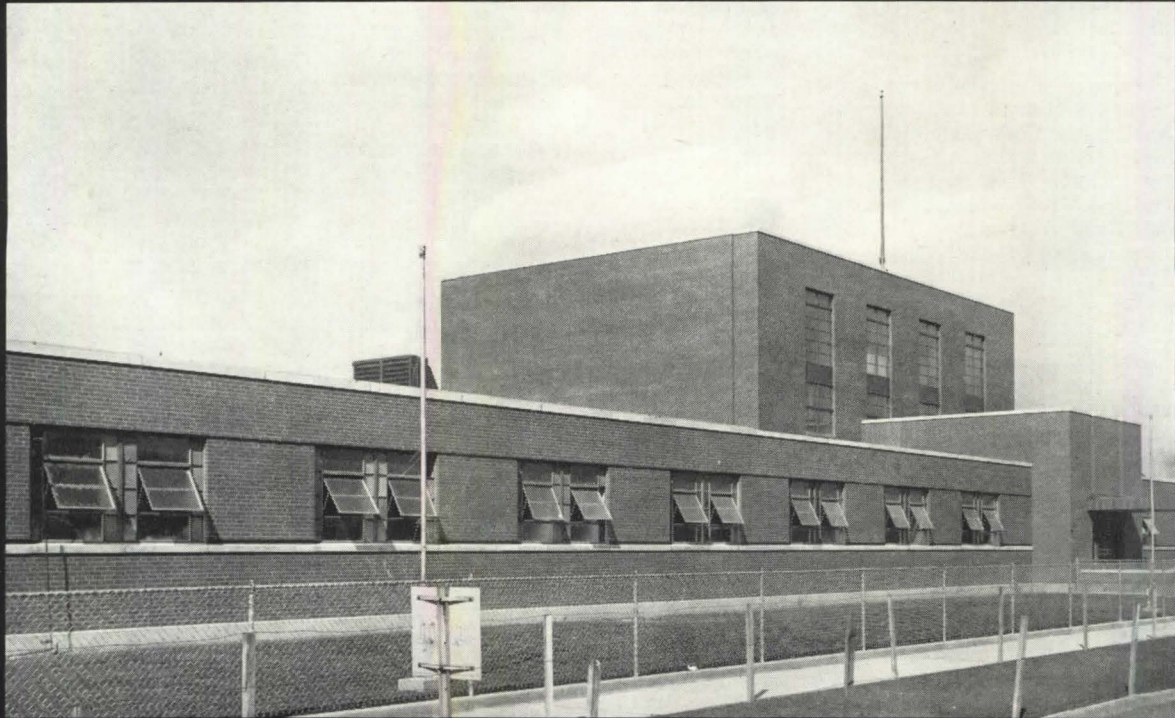


.. better living through pipes of steel for plumbing and heating purposes.

1818 HOPE'S 1947

LOK'D BAR STEEL WINDOWS

PIVOTED OR COMMERCIAL PROJECTED



Synthetic Yarn Building, Carbide and Carbon Chemicals Corporation, South Charleston, W. Va.

EXTRA STRENGTH...LONGER LIFE

Hope's Lok'd Bar Steel Windows, pivoted or commercial projected, oppose greater strength to the forces of wear and tear, and assure longer life even under abusive operating conditions.

The "Lok'd Bar" design creates a stronger joint between horizontal and vertical muntins. Hope's Lok'd Bar Windows stand up better against wind pressure and the shocks of closing ventilators.

There are no applied weatherings to cor-

rode or work loose. All sections are rolled in one piece and the inside and outside frames of all ventilators are solid welded at the corners. Integral weathering flanges close tightly on wide bearing surfaces, reducing wind infiltration, saving heating expense and providing greater comfort within.

For the life of the building, Hope's Lok'd Bar Steel Windows show less depreciation, cost less for upkeep and give more lasting satisfaction to the owner.

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

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

ARCHITECTS TELL US MORE ABOUT V. A. HOSPITALS

BASIC CONCEPTION WRONG

Dear Editor: We hasten to acknowledge your progress report on the V. A. program. This is an excellent and courageous move on your part and should have the enthusiastic support of the entire architectural profession.

The basic conception of the entire program is wrong and good results cannot be obtained until these fundamentals are corrected. The architect is almost completely isolated from the Medical Division of the V. A. which is equivalent to the client in private work. Too, the program assumes that the architect is incompetent to produce plans and specifications without every move he makes being checked and rechecked.

The architects that have been selected to do these buildings are in large capable of designing these projects without all the advice, supervision, detail checking, and reports, etc., from various branches of the Corps and V. A. The architects render satisfactory service to their clients on their own and can do the same for the Government. Buildings of reasonable cost produced in a minimum time can only be obtained if this unnecessary red tape is removed. The procedure to accomplish this is simple:

1. Provide the architect with the design criteria.
2. Provide the architect with access to the Medical Section of V. A.
3. Submit Phase A to a joint committee of Medical Section of V. A. and Engineer Corps. Submit Phase C to joint committee of Medical Section of V. A. and Corps.
4. From this point on, the planning should be under the control of the District Engineer, who alone would be responsible for seeing that the design criteria and suggestions from the various reviews were carried out, thus terminating the unbelievable delay and confusion caused by endless checking in Washington, which among other things prevents the architect from using his judgment on methods of keeping the building cost down. In other words, the Engineer Corps is partially responsible for the unhappy plight of the architects on this program.

Adopting a program as suggested, thus cutting out much of the red tape, would have these beneficial effects to speed up the program—reduce the cost of architectural services, reduce the cost of the Corps' administrative expenses, produce better hospitals at low cost.

The spirit of the personnel of the Engineer Corps has been most cooperative and we appreciate this no end. Our

criticism is entirely of the unfortunately incredibly involved red tape inherent in this system.

We believe that more emphasis should be given in your article on the ability of the private architect to produce practical functional designs, rather than emphasizing the inspirational and esthetic in comparison with the very poor planning done by V. A.

THOMAS F. ELLERBE
St. Paul, Minn.

THINKS DANGER PASSED

Dear Editor: This is to thank you for your article dealing with the Veterans Hospital Program. I have read it with great interest and think it is a very fair statement of the case.

One of my chief concerns during my tour of duty with the Institute was that the profession might be ground between the millstones of the V. A. and U. S. Engineers, who since the inception of this program have not always worked in complete sympathy with each other. However, I believe now that this situation has been largely clarified and the danger is passed.

I note by this morning's paper that the recommendations of some of the consultants to the Army Engineers and of some of the architects commissioned under this program have been adopted by General Bradley.

They are in effect to remove from the requirements of the V. A. hospitals most of the space not essential to hospitalization. This is indeed a healthy sign, although it will impose on the designing architects almost complete restudy of the lower floors.

JAMES R. EDMUNDS, JR.
Baltimore, Md.

COMPLETE UNDERSTANDING

Dear Editor: Your article is well written, it presents the facts fairly, and the general situation was about as you have stated at the time the article was written.

I understand, now, that the Office of Chief of Engineers, and the Veterans Administration have come together on a complete understanding, to the extent that no further delays are anticipated from the insistence of the Construction Department of the Veterans Administration to check the drawings of private architects during each step of their performance.

JOHN R. FUGARD
Fugard, Olsen, Urbain & Neiler
Chicago, Ill.

EASIER FOR ARCHITECTS

Dear Editor: Thanks for your August issue review of V. A. hospital work, and the alarms thereunder for the private architects. Architects with commissions to discharge for that program have been concerned with the matters you criticize, and have worked with A.I.A. staff men to protect our interests.

I believe it is common knowledge, now, that the Corps of Engineers, strong supporters of the private architects in my view, will dominate the program, will make it increasingly easy for the private architect to perform creditably on V. A. hospital work.

Let us hope the profession at large will be fully apprised of:

1. The alert, aggressive attention given by the American Institute of Architects to preserving a spirit of fair play by all concerned when the work of private architects was under review by the Veterans Administration and the Army Corps of Engineers.

2. The fine support given to private architects by the Corps of Engineers while V. A. hospital work is being done. Government work always has its tribulations. That being the case, I am glad to have Army Engineers' guidance thereunder.

We believe we are about to complete our V. A. hospital work in a satisfactory manner.

TUCKER & SILLING
Charleston, W. Va.

DESIGN SECTION FAILURE

Dear Editor: We have read with interest the August "Progress Report," The Veterans Hospital Program, and wish to congratulate you both on the accuracy of the reporting and your analysis of problems which have recently developed and which have been seriously impeding progress.

As stated in your article, the attempt to set up a Civil Service direct design section in the Veterans Administration was a dismal failure. General Omar Bradley, who accepted command of the V. A. only because he felt keenly an obligation to help his beloved veterans, took exactly the right step when he entrusted the Corps of Engineers with complete responsibility for procuring design and construction of the remaining 67 hospitals. There could be little doubt that if the V. A. Board of Review had confined its effort, as originally intended, to assuring itself that preliminary plan solutions would accommodate the functional requirements, stipulated in the original directive, all projects would now be under construction with many nearing completion. However, several conscientious former members of the V. A. design staff could not refrain from requesting retroactive changes in requirements which caused many months' delay and insisting on

(Continued on page 10)

uniform bearing capacity

The Raymond Method provides piles of uniform bearing capacity regardless of length of pile required. Adequate equipment and shells in sections 4 feet and 8 feet long permit driving each pile to uniform resistance with minimum shell waste.

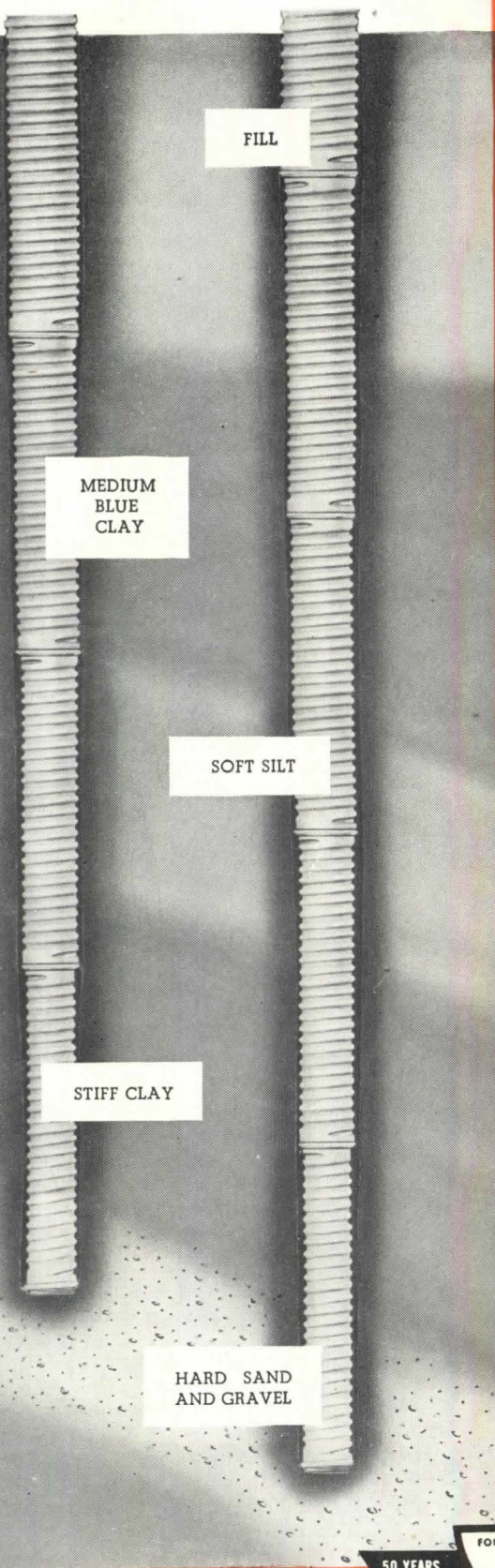
THE RAYMOND METHOD

1. Eliminates delays in driving test piles to pre-determine pile lengths.
2. Saves time required for casting and curing precast concrete piles.
3. Permits all piles to be driven to a uniform bearing capacity regardless of variations in soil conditions.

The principal purpose of a pile foundation is to obtain uniformity of bearing over the area occupied by the structure to be supported. The complete flexibility of Raymond Concrete Piles as to length assures attaining this result with varying subsoil conditions. This is how Raymond produces foundations of the highest possible quality and uniformity.

OTHER ADVANTAGES: Greater Carrying Capacity • Permanency • Engineered for the Job • Complete Satisfaction • Saving in Construction Cost

WHY NOT CONSULT US FOR FURTHER DETAILS ON RAYMOND FOUNDATION METHODS?



50 YEARS

FOUNDED
IN
1897

OF PROGRESS

SCOPE OF RAYMOND'S ACTIVITIES... includes every recognized type of pile foundation—concrete, composite, precast, steel, pipe and wood. Also caissons, underpinning, construction involving shore protection, shipbuilding facilities, harbor and river improvements and borings for soil investigation.

RAYMOND

CONCRETE PILE CO.

Branch Offices in Principal Cities
of United States and Latin America

140 CEDAR STREET • NEW YORK 6, N. Y.

VIEWS

(Continued from page 8)

certain features in design solutions which involved extravagant cost. We have seen no evidence to support the charge that these tactics were deliberately employed by several V. A. officials in the hope of sabotaging the collaboration between the Corps of Engineers and private firms and regaining complete control of the program. Every member of the Board of Review with whom we came in direct contact appeared more than anxious to be helpful, and they were extremely helpful in

explaining the desires of the V. A. hospital administrators. Nevertheless, requests for retroactive changes in functional requirements and insistence on costly features of design retarded progress and influenced cost. Hence, the recent impasse which we understand has just been overcome by returning complete authority for design supervision to the Corps of Engineers.

FRANK W. BAIL
Bail, Horton & Associates
Fort Myers, Fla.

A COSTLY VENTURE

Dear Editor: As one of the architectural firms trying to design a Veterans

Administration Hospital, we want to thank you for describing the situation with regard to the designing of veterans hospitals.

This is a clear, concise, and accurate statement of the whole matter, and to the architect employed a very costly venture. The trouble is that the Veterans Administration has not and never will agree to the design of veterans hospitals being taken out of their hands, and with General Bradley leaving, as we understand he is contemplating, we fear for the worst.

We appreciate your frank statement of facts and the more publicity given this matter, the more chance the general public has of realizing that the fault does not lie on the shoulders of the private architects who, from what I have seen, are doing an excellent job.

W. H. TUSLER
Magney, Tusler & Setter
Minneapolis, Minn.

WEISWAY IS THE WISE WAY

Weisway Cabinet Showers harmonize with modern building materials for beauty and durability.



Quality Cabinet Showers

Weisway Cabinet Showers are precision-built, to pre-war standards of quality, of materials that have been service-tested for 11 years. Guaranteed leakproof, they assure permanent satisfaction. *Weisway quality protects your reputation*—assures satisfied clients. Write for detailed information.

HENRY WEIS MFG. CO., INC.
921 Weisway Bldg., Elkhart, Ind.



Built-in installation of corner entrance model made possible by Weisway In-A-Wall adapter.

Weisway

HAD NO PRESSURE

Dear Editor: We have just received your August editorial on the Veterans Hospital Program. As architects for the Chattanooga Veterans Hospital, we can state that the general information and review of what has happened is, as far as we know, substantially correct as explained in your editorial. In our own case we have not experienced pressure from either the Army or the Veterans Administration to force any preconceived ideas of architectural design or period style. Except for the delays in Washington which you mentioned, and the consequent inconvenience and hardship, the program has been handled to our entire satisfaction and, as far as we know, the Government agencies feel the same way about our handling of the planning and designing of the Chattanooga project.

GILL & BIANCULLI
Chattanooga, Tenn.

Thus the response to our "Progress Report" in the August issue—reinforced by as many more letters from architects designing V. A. hospitals who thought it impolitic to permit us to quote them. One writer explained, "While there are some rather spicy comments which I should like to make, I believe it would be unwise to make them at the present time."

Editor.

WELL NAMED!

Dear Editor: When you changed from *Pencil Points* to *PROGRESSIVE ARCHITECTURE*, I criticized the new name. Your courteous acknowledgment and invitation to continue to express opinions prompts this letter.

Now I must apologize and accept the fact that the change of name was prophetic of a change of character. Gone are the glorified forms of classic design evolved from Scythian culture

(Continued on page 12)



—Reports L. H. MILLS
Leading Chicago Home Builder

Here is an outstanding record of economy and performance that speaks for itself. The use of Bruce Finished Floors in 948 units saves \$45,000 and 3,792 working days! The reason—the elimination of costly, time-consuming sanding and finishing on the job.

Throughout the country, builders choose Bruce Finished Flooring because it saves them time and money . . . and because it gives home owners more beautiful floors with a superior, longer-lasting finish.

E. L. BRUCE CO.
Memphis, Tenn.



Laurance H. Mills
President
Jack Alan Mills
Vice President
William F. McHugh
Asst. Vice President
Edward B. Baier
Sec'y and Treas.

MILLS AND SONS
and Associated Companies
REALTORS ... BUILDERS
Main Office
7610 Grand Avenue : Chicago 35, Ill.
Lackawanna 1402 : Elmwood Park 2500

Brokerage
Management
Home Building
Insurance

June 3, 1947.

E. L. Bruce Co.,
Memphis, Tenn.

Gentlemen:

As you know, we began purchasing Bruce Finished Flooring from Barr & Collins, in 1942, and have been using it exclusively in all of our housing construction. In fact, I understand that we were the first in the Chicago area to change over to this new type of hardwood flooring. Therefore, I am sure that you will be interested in the following data from our records.

- (1) Since 1942, we have installed Bruce Finished Floors in a total of 948 individual houses in our projects at Racine, Wis., and Elgin, Franklin-Park, Evanston and Elmwood Park, Ill.
- (2) On these four and five room units we have realized a saving in flooring costs averaging \$45 to \$50 per unit through the elimination of "on-the-job" finishing. This totals more than \$45,000 on all units completed to date.
- (3) In addition to the actual dollar savings mentioned above, we have gained many valuable days' working time ordinarily required for sanding and finishing. I couldn't even begin to estimate the value of this saving alone, but I think it is sufficient to point out that at a minimum average of four days per unit, this amounts to 3,792 working days.

Of course, Bruce Finished Floors have many other advantages, but I think that the above is sufficient to tell you why Mills and Sons have been and will continue to be enthusiastic boosters for these fine floors.

Also, I want to take this opportunity to congratulate E. L. Bruce Co. on their stabilized price policy. I was surprised in looking over my lists the other day to find that the list price of Bruce Finished Flooring is actually less in many cases than that of some unfinished strip floorings.

Keep up the good work.

Sincerely yours,

MILLS AND SONS
BY:

Laurance H. Mills,
President.

LHM:EH

BRUCE FINISHED FLOORS

VIEWS

(Continued from page 10)

through Greece and Rome. Not even a Tuscan order remains. This can be accepted in commercial buildings where utility is the controlling factor. But the "Progressive" residential exteriors featured in many recent issues as prize-winners create a sense of "inspiration" from some pre-dynastic period, and not so long ago "specialized" by one Chic Sale. Page 134 of your July issue proves I am not alone, and one of my associates dignified the designs as "chicken coops."

J. C. RUNYON
Falls Church, Va.

MORE LOGIC? . . . OR MORE ESTHETICS?

Dear Editor: The article of Mr. Kirchman has my interest. My comments on this are as follows:

Design is an emotional as well as an intellectual process. It is the intuition of the designer which gives direction whereas his intellect controls and reasons. The functional approach is therefore only a subordinated part of the creative act of designing as necessary it is.

Since 28 years I have tried to clarify this basic conception of contemporary architectural design by writing, teaching, lecturing. Through the first 10

years of development of the Bauhaus this twofold aspect of design has been the topic of lively discussion between faculty and students, apparent from all their publications. In spite of that, critics and opponents of the movement, here and abroad, have often emphasized the bare, rational, or functional aspect only, disregarding the more important emotional background of modern architectural design. Any new attempts to further clarify its inherent philosophy should be welcomed therefore.

But for heaven's sake, let's abolish the misleading designation, "International Style." It is true that the achievements of science and technique employed in modern architecture are international in character, but the tendency of the architectural spirit is to derive expression from regional conditions, from indigenous elements. Slowly but surely we shall depart from what I like to call "The International Style," those classical colonnades borrowed from the Greeks which adorn the town halls, bank buildings, museums, and ministries of the world from Moscow to Washington.

WALTER GROPIUS
Cambridge, Mass.

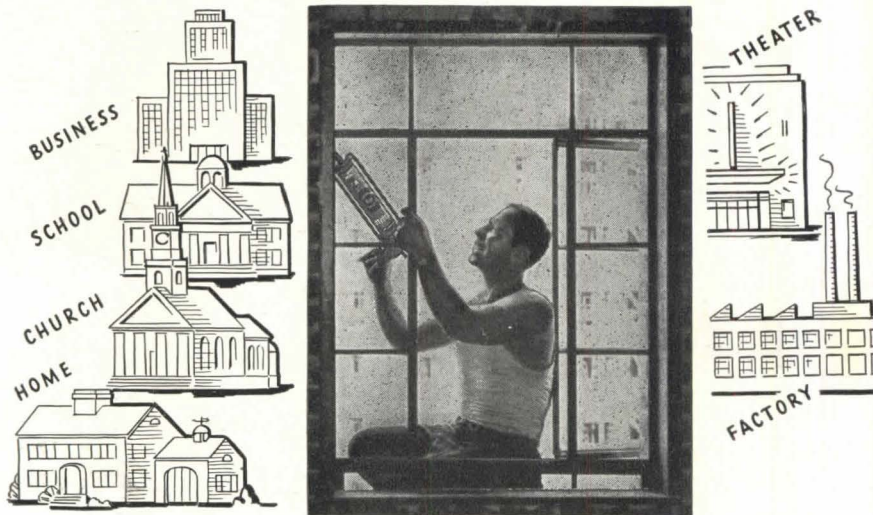
Dear Editor: I can only repeat what I said in 1939, it still applies—too much of our present-day design is "a passing fashion." It became eclectic, intolerant, ossified, especially in the hands of large commercial fellow travelers.

I wish that "modern" would mean to the public and architects a serious return to fundamental principles of good design of all times. A safe approach to good design is the elimination process leading to the simplest, most direct, and most economical solution of the problem.

ANTONIN RAYMOND
New York, N. Y.

Dear Editor: I thought the Kirchman statement extremely interesting because it puts so clearly those qualities which, to me, express the so-called international style, i.e., its "anti" determinations. I gather this movement is anti-gravity, anti-rational, anti-irrational, anti-functional, anti-scientific, atechnic, and so on to "geometric abstraction bleached white of sociocultural entity" and therefore, if it so continues, it will probably fail, philosophically, to be other than a ball balanced unnaturally on the nose of an intellectual performing seal. Its greatest failure, it seems to me, lies in its inability to develop common, vulgar, human reactions, those qualities so splendidly inherent in the two great Western creative periods—Hellenic and Gothic—and which have led in the past to several strong rebirths of the former. I do not despair, however, but that finally modern architecture will become adult and definitely "pro" human.

RALPH WALKER
New York, N. Y.



PROTECT *Every* BUILDING WITH PECORA CALKING COMPOUND

RAIN OR SNOW CAN'T BEAT THROUGH
BUILDING JOINTS CALKED WITH PECORA

Dependable weather protection in concentrated form for every type of building. Pecora Calking Compound, when used for sealing joints around window and door frames, and for pointing up masonry, assures these important benefits.

- FUEL SAVING
- FREEDOM FROM NEEDLESS DRAFTS
- NO MOISTURE SEEPAGE IN JOINTS
- NO NEEDLESS DUST INFILTRATION
- BETTER TEMPERATURE CONTROL FOR AIR CONDITIONING
- BETTER OCCUPANCY CONDITIONS

See SWEET'S for suggested specifications, or write us for descriptive folders and detailed information.



Pecora Calking Compound remains permanently elastic beneath its tough outer skin, and is impervious to heat, cold and moisture, even acid fumes. Time-tested for 38 years.

Pecora

PAINT COMPANY, INC.
 • Established 1862 by Smith Bowen
 • Member of Producers' Council

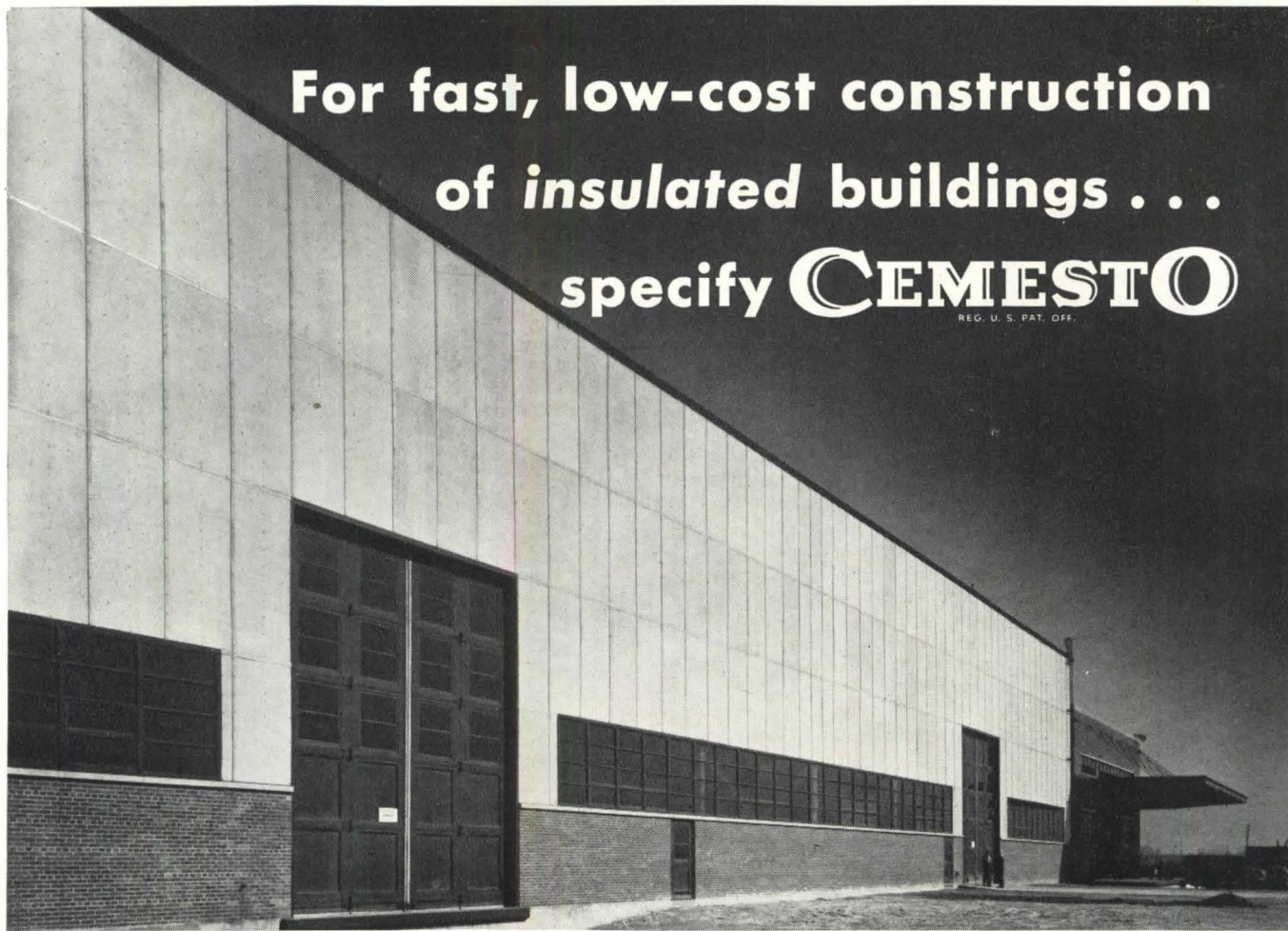
85TH
YEAR

SEDGLEY AVENUE & VENANGO STREET • PHILADELPHIA 40, PENNA.

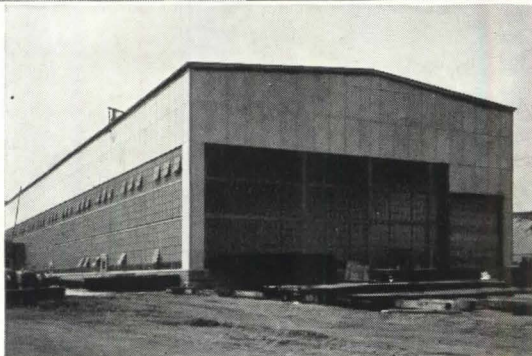
ROOF COATING • WATERPROOFING • DAMPPROOFING • SASH PUTTIES
MASTICS FOR DECORATIVE METAL TILE

For fast, low-cost construction
of insulated buildings . . .
specify **CEMESTO**

REG. U. S. PAT. OFF.



Albert Kahn Associated Architects and Engineers, Inc.



SHOWN HERE are only a few of the many commercial and industrial buildings built better and faster with Celotex Cemesto Board.

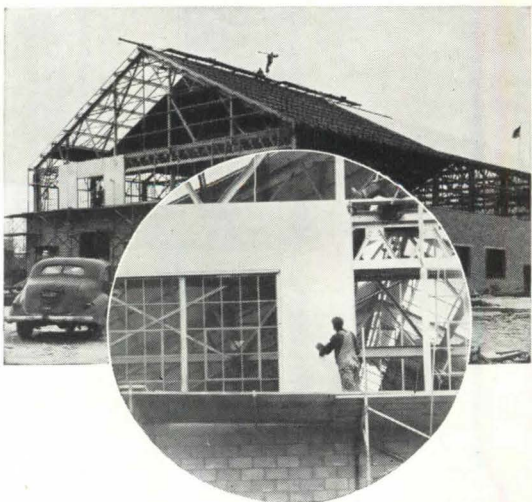
Cemesto is perfect for speedy, low-cost construction of insulated buildings. It offers thermal insulation, weather resistance inside and out, structural strength and siding . . . all at *one low cost*. In addition, Cemesto core is Ferox-treated to resist dry rot, fungus growth and termites.

Cemesto comes in standard size sheets in 1 1/8", 1-9/16" and 2" thicknesses; can be easily cut to fit job conditions; can be attached by nailing to wood, by bolts or clips to steel.

Thus Cemesto is an ideal material for use in exterior walls, roof decks or interior partitions. It does not require painting, so maintenance costs are low.

Write the Architectural Sales Service Department for complete details illustrating several methods for applying Cemesto for roof decks, exterior walls or interior partitions.

If you wish to furnish plans to us, we will be glad to prepare shop erection drawings showing the exact size of Cemesto panels required, together with estimate on cost of material pre-cut to fit.



THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

THIS MONTH

We present this month a Critique of homes, the fourth in the series of critical studies instituted by **PROGRESSIVE ARCHITECTURE** last year. A Philadelphia architect, **Robert Montgomery Brown**, designed the house in Wellesley, Massachusetts, which is first of the five houses in the Critique. Although he tells us he was a "backward child," Brown "somehow got through" Hotchkiss in 1926, Princeton in 1930, majoring in architecture, and New York University in 1933 for a B. Arch. in Construction. He started practice in Philadelphia in 1936, working in association with George Howe and Douglas Braik. During the years until 1942, when he joined the Navy, he claims never to have designed a "traditional" house or other building, and maintains he wouldn't know how to start. In February 1946 he returned to civilian life, although he says he has been wondering ever since why he wanted to get out!

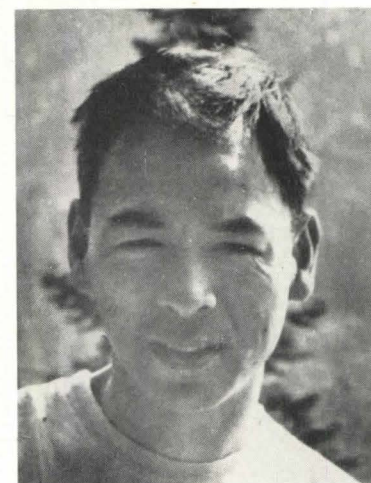
The team of Campbell & Wong, designers of the Quonset cabin at Fallen

Leaf Lake, California, was formed while both were working for another firm. **Worley K. Wong** is a graduate of the School of Architecture at the University of California, while **John Carden Campbell** received his training principally at the Rudolph Schaeffer School of Design. The designers, who have their office in San Francisco, include interior design and color consultation as a part of services rendered; and believe that the establishment of their own firm has enabled them to do the work they really want to do.

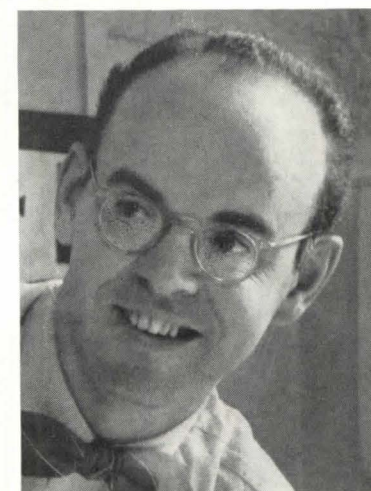
The house in Greensboro, North Carolina, the third house in the Critique, is a product of the 1938-1942 period when **Jack P. Coble**, architect, maintained his own office in the same city. A graduate of Cornell's College of Architecture in 1934, he spent the next two years "in the usual depression occupation," working for the Department of the Interior Park Service in South Carolina. 1936-1938 found the architect in New York, working mostly in the offices of Walker & Gillette and Fordyce & Hamby. Army service fol-



ROBERT MONTGOMERY BROWN



WORLEY K. WONG



JOHN CARDEN CAMPBELL

lowed the years of independent practice in Greensboro, and he is at present affiliated with Raymond Loewy Associates of New York.

The work of another San Francisco architect, **Clarence W. W. Mayhew**, is

NEXT MONTH

● The second full presentation of a winner of one of the Annual **PROGRESSIVE ARCHITECTURE** Awards for 1946 will be the lead feature of the October issue. It is the highway showroom-restaurant for A. G. Dewey Co., woolen goods manufacturers, at Quechee, Vermont, designed by E. H. and M. K. Hunter, architects, of Hanover, New Hampshire. Jurors conferring the Awards agreed that this example of the work of the youthful husband-and-wife team has a number of commendable points—which our fuller presentation will define.

● The "case history" of an architect who has successfully identified his practice with the needs of his community will be reviewed in the same issue. Sheldon Brumbaugh, convinced that an architect's devotion to his town would be repaid with ample work and commissions, chose Klamath Falls, Oregon, and has attempted to "do a complete job of architecture: community planning, all types of industrial, commercial, and institutional buildings, and of course houses." The first concern of Brumbaugh and his associates is to render an over-all service to the region in which they practice.

● The offices architects design for themselves offer an informal index to the range of their interests and professional inclinations. The editors have brought together for our readers photographs and plans of the "workshops" of architects E. Gunnar Peterson, Falmouth, Massachusetts; Donald Dwight Williams, Seattle, Washington; Parkinson, Powelson, Briney, Bernard & Woodford, Los Angeles, California; and Ralph C. Flewelling & Associates, of the same city.

● A clue to Harold Burris-Meyer's approach to the problem of theater acoustics may be found in the title of the article, "The Audience Hears," prepared for our technical section by this professor of physics at Stevens Institute of Technology, Hoboken, New Jersey. Also offered next month will be the concluding divisions of the Plant List started in this issue by James C. Rose, landscape architect, of New York, N. Y.

(Continued on page 16)

FOR PLASTER BASE



DOUBLE DUTY
INSULITE GIVES

Double

FOR THE MONEY!

Here are the facts: Double-duty INSULITE SEALED LOK-JOINT LATH performs *two* functions for inside walls—

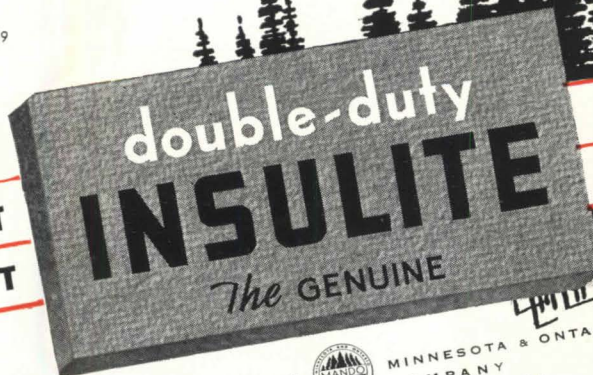
(1st) *Plaster Base*

(2nd) *Insulation*

Two values for the price of one. A distinct advantage, quickly understood and appreciated by your clients. The reasons—You need a plaster base anyway—so why not have one that *insulates* at the same time . . . in addition it provides vapor control. Double for the money! This is smart, modern, progressive construction procedure—functional and economical. Specify double-duty Insulite *Sealed Lok-Joint Lath*.

Refer to Sweet's File,
Architectural Section 10 a/9

INSULATES AS IT
BUILDS AS IT



BUILDS
INSULATES

"Insulite" is a registered
trade mark, U.S. Pat. Off.

INSULITE DIVISION
PAPER
MINNEAPOLIS 2, MINNESOTA

MINNESOTA & ONTARIO
COMPANY

THIS MONTH

(Continued from page 14)

represented in this month's Critique by the house on San Francisco Bay in Marin County. Mayhew studied at the Universities of Colorado, Illinois, and California, and then worked for three years with the firm of Miller & Pfeuger in San Francisco. In 1932 he opened his own office in Oakland, and then in 1938 moved across the bay to San Francisco, where he has been practicing ever since except for the war years.

Completing the study of private residences is the house in Princeton, New

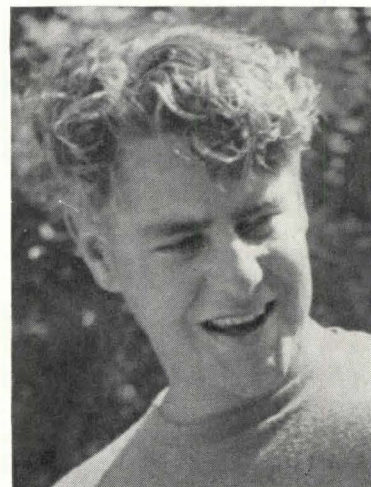
Jersey, designed by Kenneth Kassler, architect, of that city. Biographical notes on the architect were published in September 1946 PROGRESSIVE ARCHITECTURE.

From Oslo, Norway, comes the recently completed Radiohus, the new home of the Norwegian State Broadcasting Corporation, shown in this issue. The design by Nils Holter, architect, was chosen as the result of a competition held in 1935.

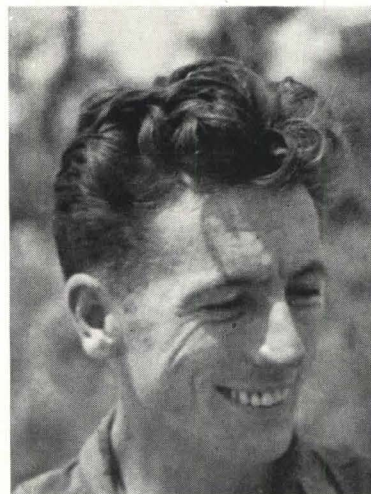
The Materials and Methods section this month offers interesting data on "Modular Gardens" by James C. Rose, landscape architect, of New York. After studying at Cornell and the Harvard Graduate School of Design, Rose went



JACK P. COBLE



CLARENCE W. W. MAYHEW



JAMES C. ROSE

out to the West Coast to start his practice. With the advent of war he returned to New York, where he worked on site plans for Camps Kilmer, Upton, Dix, and Shanks in the metropolitan area, as chief site planner in the office of Antonin Raymond. He was then in the Navy with construction troops in the Pacific. On his return to New York, he opened his own office for the general practice of landscape design.



Spencer Vacuum tools have swivel joints that make cleaning under desks easy

HOW WOULD YOU LIKE TO CLEAN A SCHOOL *with a broom?*

Just in case you are toying with the idea of saving a few cents a square foot on that new school, why not face the false economy of such a move? Here are a few facts you can substantiate from schools near you and the reports of educational authorities.

1. There is only one way to clean a school properly—that is with a powerful mechanical vacuum and vacuum tools suitable for every surface.
2. Brooms and dry mops spread dust and germs, weaken the control of epidemics, injure paint, draperies, rugs—and everything in the building.
3. Spencer Vacuum Cleaning is not more expensive, all costs considered. Repairs on the vacuum machine are as little as a dollar a year. Many have been in service thirty years or more. Spencer also cleans radiators, filters, projection machinery, boilers, and many other things that cannot be cleaned by hand.

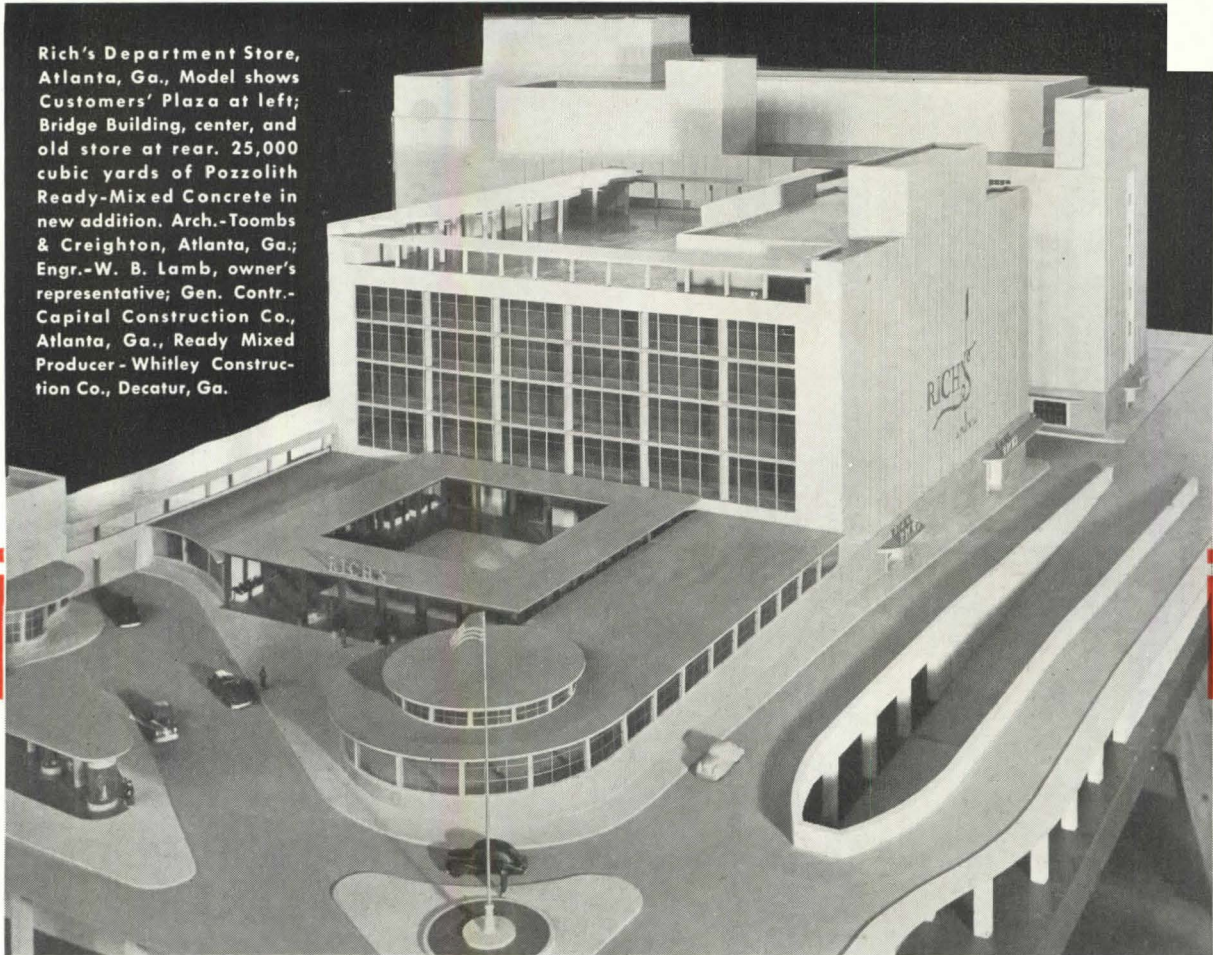
Stationary machines for new schools. Portable for small or old schools. Ask for the bulletins.

325A

SPENCER VACUUM
HARTFORD
CLEANING

THE SPENCER TURBINE COMPANY, HARTFORD 6, CONN.

Rich's Department Store, Atlanta, Ga., Model shows Customers' Plaza at left; Bridge Building, center, and old store at rear. 25,000 cubic yards of Pozzolith Ready-Mixed Concrete in new addition. Arch.-Toombs & Creighton, Atlanta, Ga.; Engr.-W. B. Lamb, owner's representative; Gen. Contr.-Capital Construction Co., Atlanta, Ga., Ready Mixed Producer - Whitley Construction Co., Decatur, Ga.



POZZOLITH CONCRETE *in* SOUTH'S LARGEST, MOST MODERN STORE

**OTHER MASTER BUILDERS
PRODUCTS IN WHICH CEMENT
DISPERSION IS EMPLOYED**

EMBECO...

For non-shrink grouting and reinforcement.

MASTERPLATE...

Industry's toughest floor... "the iron that stays on top."

OMICRON MORTARPROOFING

Controls shrinkage cracks; minimizes leaky brickwork, also re-tempering; contains stearate.

Basic problems of the large city department store have been overcome in this modern store design. Basic concrete problems also were overcome by designing the mix with Pozzolith, Cement Dispersion. Results:

- 1.** Easy, fast placing
- 2.** Increased density, watertightness, durability
- 3.** Elimination of honeycombing... great uniformity
- 4.** Reduced costs

Pozzolith, complying fully with the water-cement ratio law, makes better, more workable concrete.

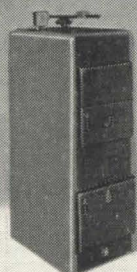
WRITE FOR NEW, ILLUSTRATED POZZOLITH BOOKLET

The* MASTER BUILDERS *Co
CLEVELAND 3, OHIO TORONTO, ONTARIO

A NEW, BETTER GENERATION OF A DISTINGUISHED FAMILY...

The Complete Line of NATIONAL HEAT EXTRACTORS

...for Coal, Oil or Gas Firing

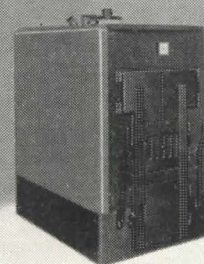
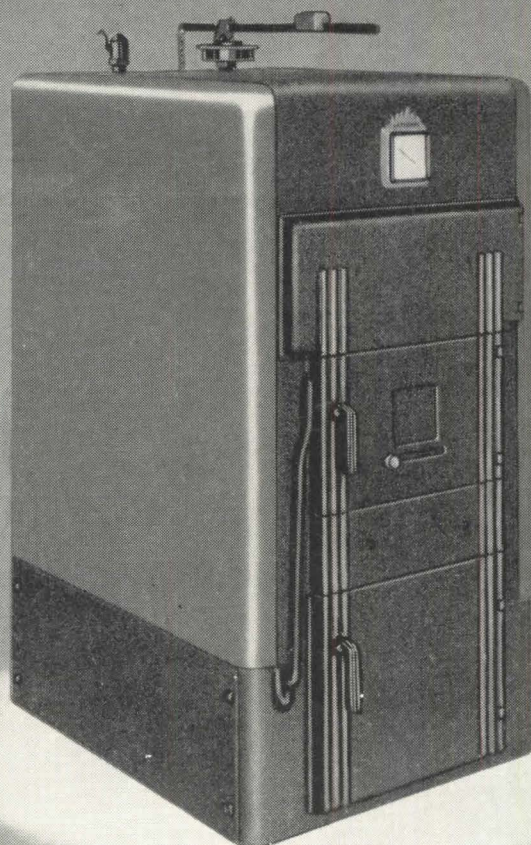


"100" SERIES

Smart and compact for small home installation in kitchen, basement or utility room.

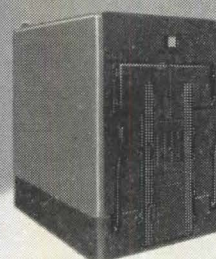


APPROVED RATINGS



"300" SERIES

For larger homes, small apartments and various commercial installations where more heat is needed.



"400" SERIES

The "400" and "500" are designed for very large installations where plenty of heat is required to serve many purposes. Characteristic HEAT EXTRACTOR construction.

"200" SERIES

Big boiler performance for homes of medium size and some commercial installations.

MORE Heat from Every Fuel Dollar!

That is the aim of National's design and research engineers—and their success is reflected in this new line of famous HEAT EXTRACTORS. A new, better generation of a distinguished family—the result of more than seven years of engineering design and research.

You'll Want ALL the Facts!

Contact your nearest National Radiator Company Heating Sales Branch, or write directly to The National Radiator Company, 221 Central Avenue, Johnstown, Pennsylvania for full NRC product information—without obligation.



"HEAT EXTRACTOR" is the modern term for heating boilers made by National which take full advantage of the "Heat Extractor Principle"—extended heating surface and multiple flue passes.

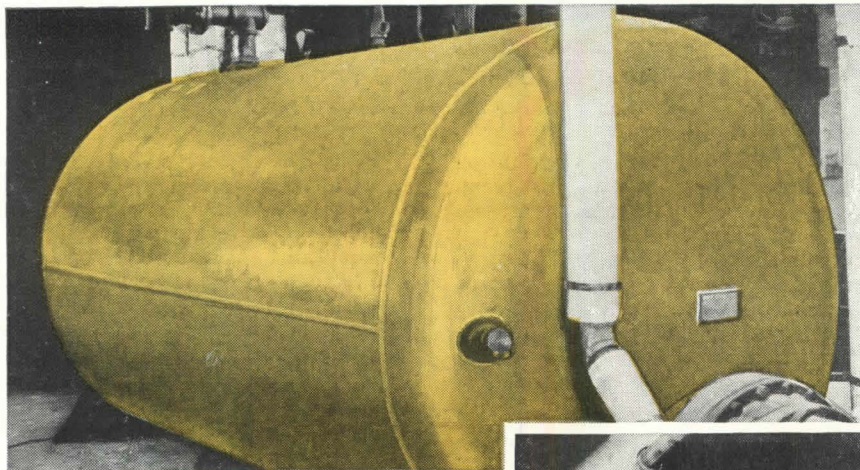
SMART APPEARANCE marks the complete new 100, 200, 300 and 400 Series National HEAT EXTRACTORS. Jackets are in colorful flame-red (crinkle finish) contrasting with the jet black crinkle finish cast into base and platework.

ECONOMICAL cost of operation is a feature of National HEAT EXTRACTORS. National engineers have designed each Series for fuel economy regardless of the type of firing or fuel recommended.

CONVERTIBILITY from hand firing to fully automatic firing is a feature of the HEAT EXTRACTOR line. Conversion may be easily accomplished after installation.

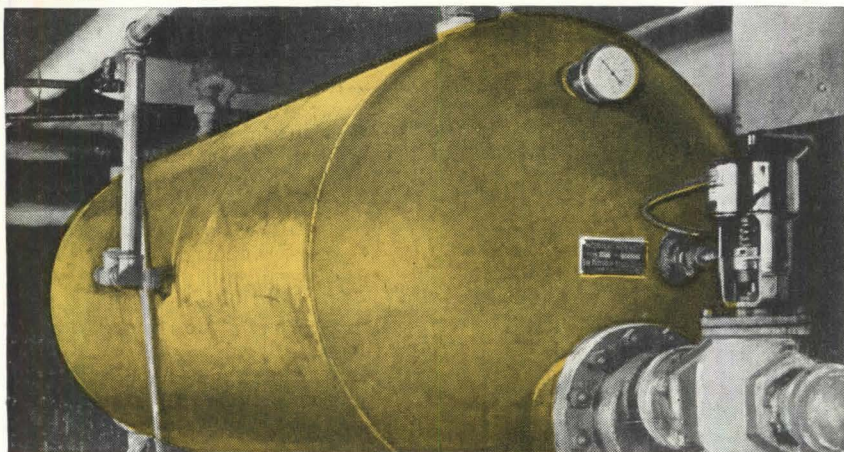
The NATIONAL RADIATOR Company

JOHNSTOWN, PENNSYLVANIA



At Left—Whitlock Everdur Type K Heater built for a New York laundry by The Whitlock Manufacturing Co., Hartford, Conn., replaced a rustable heater which had failed after LESS THAN FIVE YEARS OF SERVICE!

Below—This all-welded Patterson Everdur Water Heater was specially designed and manufactured by The Patterson-Kelley Co., Incorporated, East Stroudsburg, Pa., for a Pittsburgh bank. It maintains a working pressure of 100 pounds.



**NO MORE
RUST**

with

Storage Tanks of *Everdur*

ANY hot water storage heater is a major equipment item. Welded tanks of Everdur* Copper-Silicon Alloys protect the original investment and provide long and economical service.

Everdur Alloys are characterized by high strength, ready weldability by standard methods, and resistance to corrosion equivalent to that of copper. Everdur storage water heaters and service water heaters have long given outstanding satisfaction in many hospitals, laundries, textile plants, schools, apartments and office buildings. The chemical process industries utilize many types of Everdur pressure vessels

where corrosion-resistance is a vital engineering requirement, and long service life is desirable.

Leading equipment manufacturers are experienced in the fabrication of Everdur and will gladly quote on storage water heating and heat transfer requirements.

*Reg. U. S. Pat. Off.

4710

ANACONDA
from mine to consumer

Everdur

COPPER-SILICON ALLOYS

THE AMERICAN BRASS COMPANY

General Offices: Waterbury 88, Connecticut

Subsidiary of Anaconda Copper Mining Company

In Canada: ANACONDA AMERICAN BRASS LTD.
New Toronto, Ont.

PROGRESS REPORT

THE MODULAR SAVINGS PLAN

The would-be home buyers of America are about to be subjected to another high-pressure campaign—one loaded with ideas about cheaper ways to build. In the next few months, if Producers' Council and National Retail Lumber Dealers Association have their way, most of us will become thoroughly familiar with *The Industry Engineered House*.

Essentially, the "engineering" consists of determined application of the principles of modular design to house building. This part of the program promises to improve common building practice. Some possibilities beyond the design stage also are indicated. Certain sound changes in construction methods; the incorporation of as many standard units as possible (wood joists, masonry elements, sheet surfacing materials, etc.) in sizes now being produced by manufacturers; pre-cutting of other items (studs at one length for numbers

of these houses) at local distribution points, are a few points of this program. Supply procedure, as well as construction, could thus be simplified as the local retail lumber dealer would be encouraged to order exact quantities of materials, to stock standard parts continuously, possibly to assemble all the supply items himself and deliver them as a standard package.

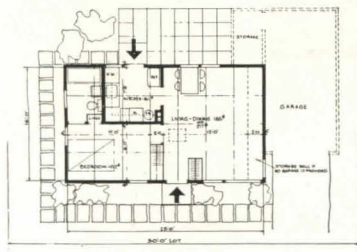
Two years ago, the Technical Committee of Producers' Council undertook to demonstrate the basic principles of modular coordination through application to actual home building. Chapman & Evans, New York architects with considerable experience in dealing with operative builders, were commissioned to produce some "typical" schematic plans. Then, A. Gordon Lorimer, A.I.A., former Chief Architect of Department of Public Works, New York City, and now a private consultant to Producers' Council, went to work on the full application of modular principles to designs compassing all the elements thought essential for the average small house. He is known as an ardent protagonist of the module, but it is easy to imagine the difficulties that he encountered in re-tailoring, say, a 12'-8" living room to utilize the four-foot planning module that accommodates the four-inch structural module advocated by A.S.A.'s A-62 Modular Coordination program. Then he faced the necessity of winning approval of the program from the interested committees and the Producers' Council members, many of them with ordinarily divergent interests. Agreement was finally reached, under the forceful leadership of Tyler S. Rogers, president of the Council; although on close analysis one can detect in the results some signs of having been watered down! The lumber dealers were called on to work out the distribution problems.

The houses themselves, of six basic types having one to four bedrooms and one to three baths, have pretty good circulation, employ such recognized economies as efficient plumbing layouts, and introduce various structural devices to permit maximum use of the module. Their wood frame details, being modular, are readily adapted to masonry construction. No claim is made that any of these are new developments; they are noteworthy instead for adherence to the tried-and-true methods and materials.¹ One scheme has a modern look, but some sacrifices to the usual concept of "public taste" are apparent. The plans are a considerable advance over the usual builder job. They utilize a basic unit of 16'x24" (or 28') singly and in several combinations. Standard 2"x10" joists cut exactly 16' are used.

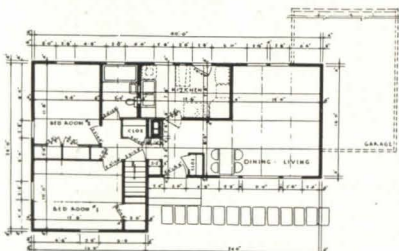
Examples of unfamiliar structural details are the floor and roof framing. Roofs are supported on wood trusses, 2' on centers, assembled from pre-cut members: 2"x6" rafters and 2"x4" ceiling ties supported at center of the span by a drop hanger to eliminate deflection. In usual floor construction employing 16-foot joists and 2"x10" headers at the sill, a clear span of exactly 16 feet inside would not be left to accommodate the standard four-foot panels of interior wall and ceiling surfacing materials. In order to make the dimensions "come out even," Lorimer has added short headers or blocks so that the joists need not extend under the studs, thus insuring the desired 16-foot clear span. This device

¹ "We describe these houses as 'small homes of quality materials—planned for adequate living and designed for minimum cost.' They are not intended to be the smallest or cheapest houses that could be built, because few people would want such houses." L. C. Hart, Co-chairman of Manufacturer-Dealer Coordinating Committee, presenting *The Industry Engineered House* to editors convened June 5, 1947, in Washington, D. C.

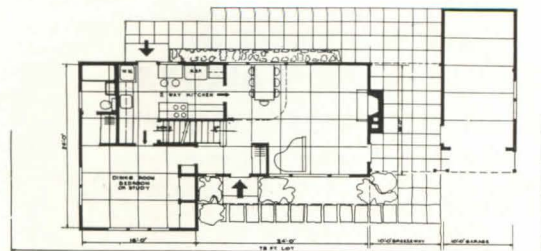
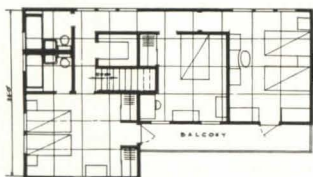
(Continued on page 22)



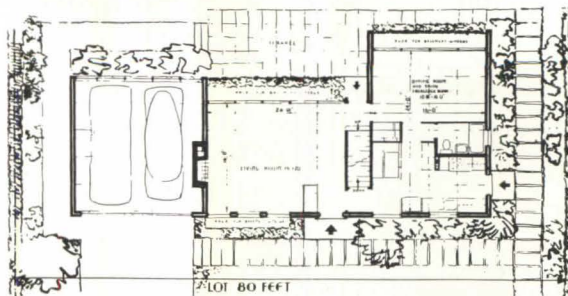
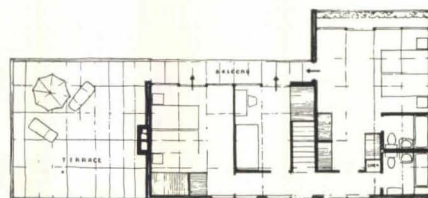
Type No. 1



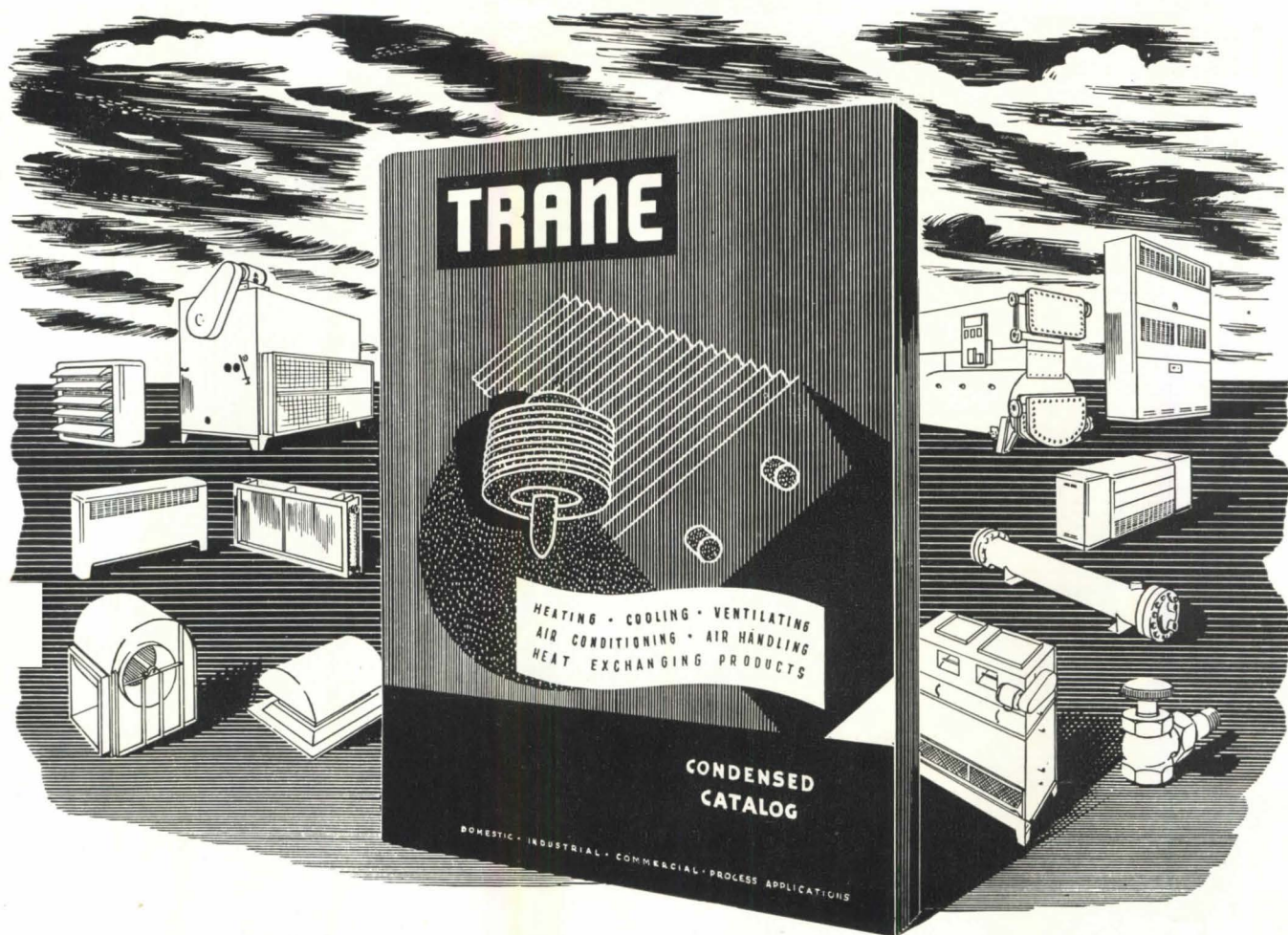
Type No. 2B (with basement)



Type No. 5 (3 or 4 bedrooms, 3 baths)



Type No. 5B (3 or 4 bedrooms, 3 baths)



BEHIND TRANE HEATING AND AIR CONDITIONING--

The Most Complete Line of Products in the Industry

Whatever the problem—whether heating an apartment—dehumidifying the air in a blast furnace—attracting mid-summer business to a restaurant—preventing ether explosions in a hospital operating room—Trane Heating and Air Conditioning Systems offer the correct solution. To make this versatility in heating and air conditioning possible, Trane furnishes the most complete line of products in the industry.

Trane products are developed, tested, and built to the highest engineering standards ... with the added advantage that every Trane product is designed to match every other Trane unit. Thus Trane systems give the performance that is only possible

when every component is operating in complete harmony with every other.

The completeness of the Trane line makes it possible for the architect, engineer, and contractor to specify from *one source* in planning Trane Heating and Air Conditioning Systems. Trane field offices in 85 principal cities co-operate with them.

* * *

The Convactor-radiator—modern successor to the old-fashioned cast iron radiator—has been engineered by Trane for universal application to steam and hot water heating systems, and is being produced in quantity so you can now secure it from local distributors' stocks.

TRANE

Manufacturing Engineers of Equipment for
HEATING AND AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN • Also TRANE COMPANY OF CANADA, LTD., TORONTO, ONTARIO



PROGRESS REPORT

(Continued from page 20)

is described as "a possible organized use of scrap" so we infer that there will be scrap even in modular construction! There are other such adaptations, but these serve to explain the approach.

The hundreds of hours of hard work that went into planning and "engineering" these houses received a substantial reward in June when the Office of Technical Services, U. S. Department of Commerce, approved a contract with University of Illinois Small Homes Council and a \$45,000 grant for the construction of six *Industry Engineered*

Houses in succession. The purpose is intensive investigation of ways to reduce cost of house construction, each finding to be checked by time and motion experiments during construction of the succeeding houses.

While all these factors—pre-cutting, standard sizing, packaging to permit economies in job organization, better construction techniques—have been practiced by many of the large building concerns, the research, purchasing, and distribution involved have been too much for the average small builder. He couldn't afford the first or do much about the others. This program will make the experience and study of the sponsors available to those men responsible for a

great percentage of the nation's houses, and might be expected to lift the quality of the average house, per building dollar spent.

This constitutes a pretty persuasive argument but there are one or two holes which must be mentioned. First, *The Industry Engineered House* is not, and is not intended to be, a house for the man of minimum income. Thus it doesn't prove that Government should leave to private industry the problem of housing those who can pay least.² Second, despite the Council's laudable intention³ of merely dramatizing the advantages of modular coordination in home construction, it has set itself up in the stock plan business because dealers and small builders will have to be furnished "the blueprints" promptly or the whole program will fall flat. Too much money and effort have been spent to permit that fate.

² L. C. Hart, Co-chairman of Manufacturer-Dealer Coordinating Committee told assembled editors the Council's views on planning for minimum cost but went right on to say, "With this project we have exploded the idea that the private building industry cannot be depended upon to solve its problems and that Government must do the job." (See also footnote ¹).

³ "The Producers' Council is interested in Industry Engineered Housing solely as a means of illustrating the economies which can be made in home building. It definitely is not interested in developing new house plans nor in promoting the sale of any particular type or design of home." A. Gordon Lorimer, A.I.A., in foreword to "The Industry Engineered Housing Program," copyrighted and distributed by Producers' Council and N.R.L.D.A., 1947.

IMPLEMENT OF ARCHITECTURE



Schlage lock trim offers a flexibility that ranges from stately, conservative locks to modern, contemporary designs. Knobs can be placed *anywhere* on the door. There is a Schlage design to effectively complement any scheme of decoration or architecture. For information on specific lock trim, see your builders' hardware man, or write direct to Schlage Lock Company, P. O. Box 3324, San Francisco.

SCHLAGE
LOCK COMPANY

SAN FRANCISCO • NEW YORK

ORIGINATORS OF THE CYLINDRICAL LOCK

V. A. PROGRAM UNSNARLED

Since our report here last month on the Veterans Administration hospital program, the difficulties we described have been fairly well straightened out. The Army engineers, once V.A. has approved preliminary designs, are to have complete charge of administration of the program. Some hospitals, for which at least the foundation contracts have been let, will go ahead as planned. Other plans will be revised to reduce costs (additional architect-engineer fees for this work will have to be negotiated) while V.A. will take over design of some of the previously unassigned jobs.

The problem of architect-Government relationships will arise again in other instances, however, and we were reassured that there was an alert, intelligent, and cooperative response of the profession when this particular program threatened to flounder.

Incidentally, criticism of the V.A. design staff last month in our Progress Report was our own; officers of the Corps of Engineers had merely emphasized the need to get an important job done as efficiently as possible—in the shortest time.

NOTICES

NEW ADDRESSES

FERRENZ & TAYLOR, 152 W. 42nd St., New York 18, N. Y.

NORMAN B. ENTWISTLE, 56 N. Hill Ave., Suite #9, Pasadena 4, Calif.

SIMONS & LAPHAM, 2nd Floor, 17 Broad St., Charleston, S. C.

FOR SKILLED HANDS

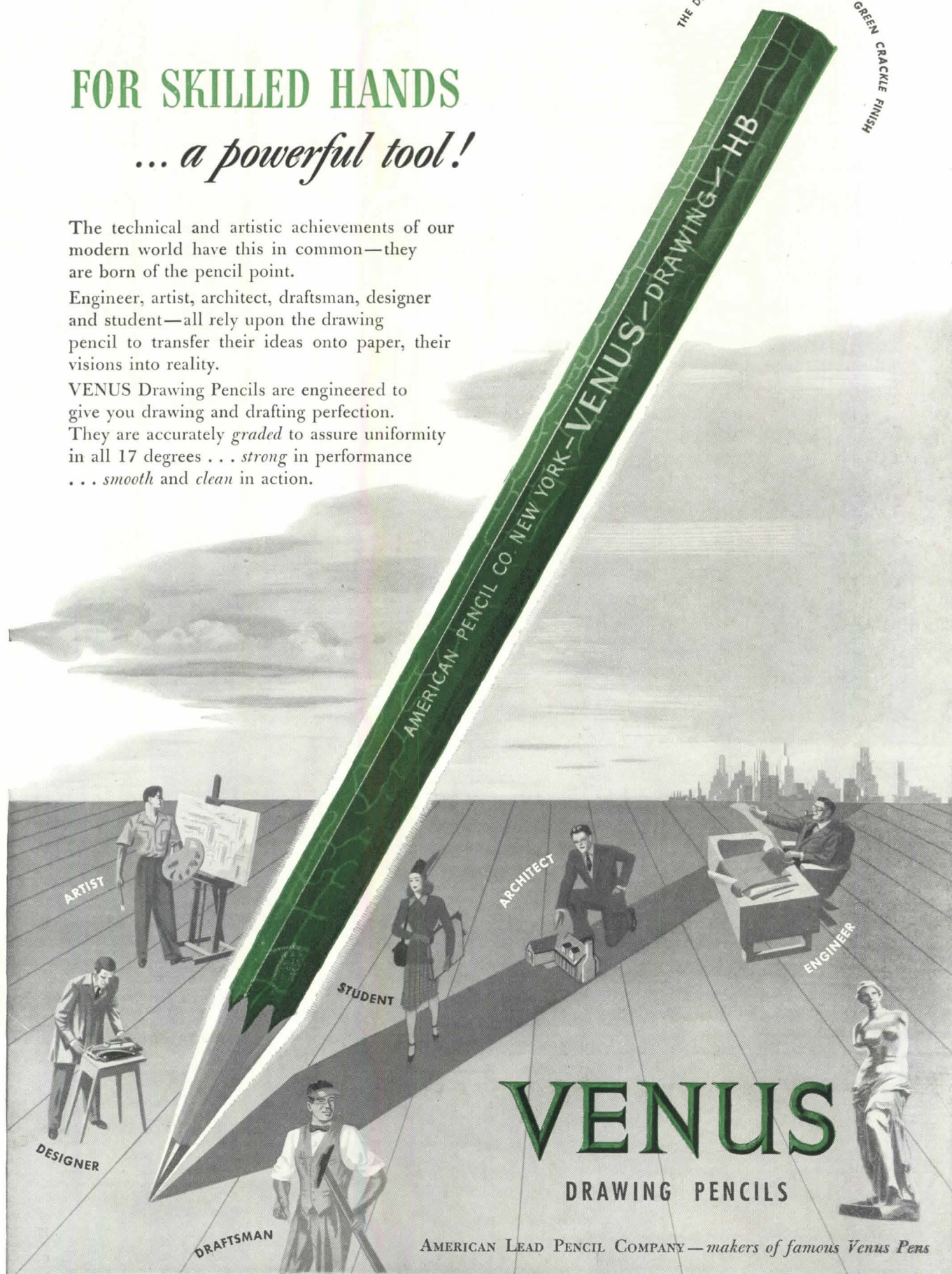
... a powerful tool!

The technical and artistic achievements of our modern world have this in common—they are born of the pencil point.

Engineer, artist, architect, draftsman, designer and student—all rely upon the drawing pencil to transfer their ideas onto paper, their visions into reality.

VENUS Drawing Pencils are engineered to give you drawing and drafting perfection. They are accurately *graded* to assure uniformity in all 17 degrees . . . *strong* in performance . . . *smooth* and *clean* in action.

THE DRAWING PENCIL WITH THE GREEN CRACKLE FINISH



VENUS

DRAWING PENCILS

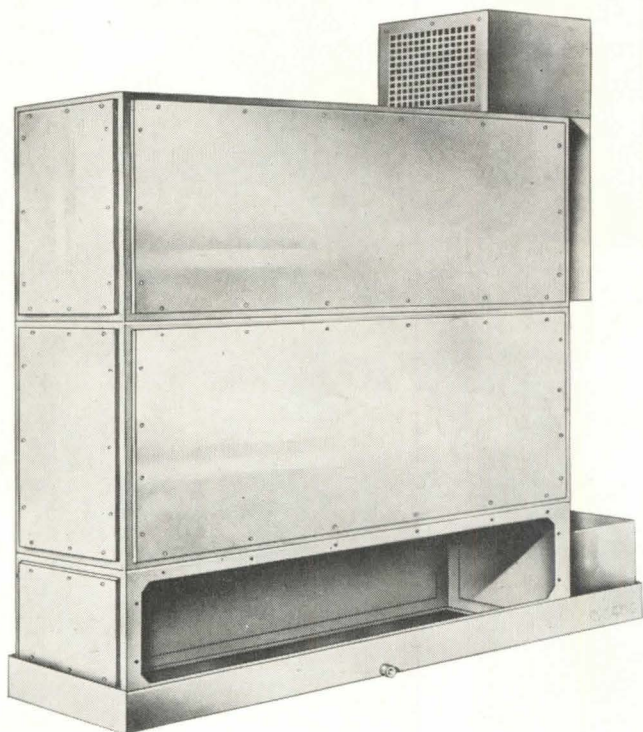
AMERICAN LEAD PENCIL COMPANY—makers of famous Venus Pens

WORTHINGTON

Air Conditioning and Refrigeration Report

Worthington Pump & Machinery Corporation, Harrison, New Jersey

SAVE 90% WATER COST



NEW EVAPORATIVE CONDENSERS WITH MANY FEATURES FOR EFFICIENCY

Corrosion Minimized—Greatly improved protective treatment guards against costly corrosion. All parts exposed to moisture are of zinc-coated steel, bonderized and coated with a rubber-base enamel containing special rust-inhibiting powder.

Easy to Clean, Stays Clean Longer—Prime surface, with no fins to clog. Accessibility through panel construction to every part makes cleaning simple and fast.

Water Treatment Device—Available for use where water is unusually hard or where corrosives are present.

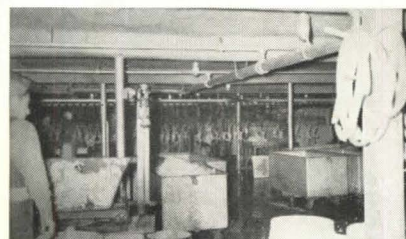
Made in five sizes, Worthington Series ECZ Evaporative Condensers combine practicability with heavy-duty durability to join the long list of Worthington "firsts" for efficient, low-cost refrigeration. *Worthington Pump and Machinery Corp., Harrison, N. J. Specialists in air conditioning and refrigeration for more than 50 years.*

A7-6

WORTHINGTON



*Air
Conditioning
and
Refrigeration*

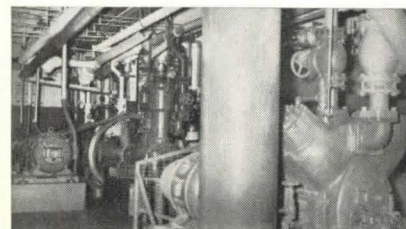


Before It's "Southern Fried" It's "Worthington Refrigerated"

Typical of many up-to-the-minute firms supplying the nation's food, the Jewell Poultry Company of Gainesville, Ga., makes Worthington refrigeration an important factor in its processing. Above is the main processing room, where 100,000 lbs. of chicken are prepared daily.



A part of the Jewell Company's storage space, with cartons of chickens ready for shipment. The workers' heavy clothing and the iced-up pipes indicate the low temperature that must be permanently maintained by Worthington equipment to prevent spoilage.



Refrigeration equipment at the Jewell Company. In the right foreground is a Worthington Freon-12 Condensing Unit. In the left rear are three Worthington Vertical Ammonia Compressors. Worthington units of these types are widely used throughout industry.

Why Integration?

You get refrigeration and air conditioning at its best when all parts of a system "pull together" smoothly. And remember that Worthington, as makers of so many "inner vitals"—compressors, condensers, turbines, pumps, valves, fittings, etc.—is better able to integrate these essential parts into a trouble-free, economical refrigeration or air conditioning system. . . . It's another reason why *there's more worth in Worthington*. See your nearby Worthington Distributor for details.



SHERARDUCT

Full weight, threaded rigid steel conduit.
"Sherardized" for enduring service.



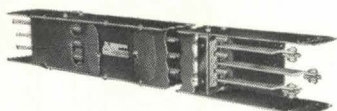
XDUCT JUNIOR

Thin wall Electrical Metallic Tubing.
Electro-galvanized.



METAL MOLDING

3 sizes with the "lay-in" principle.
Smooth, neat appearance.



IPI and IFB BUS

PLUG-IN and FEEDER BUS systems.
Just plug-in the loads.



PLUG-IN STRIP

Wired multi-outlet assembly
Outlets every 18"
For real convenience.



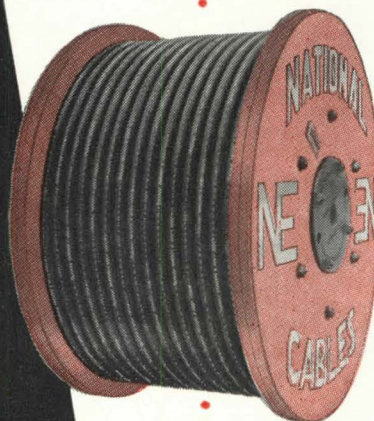
NEPCODUCT

Modern under-floor wiring system.
For power, light
and communication circuits.

EVERYTHING
IN WIRING
POINTS TO—



Modern
electrical systems for
every requirement



ELECTRICAL WIRE AND CABLE

Bare, insulated, ar-
mored and sheathed
wire and cable for
every location and re-
quirement. Complete
line of boxes and fittings
for all installations.

Since 1905, National Electric has been a leader in meeting the ever-changing demands of the Electrical Industry.

Today National Electric enjoys an enviable reputation as a trustworthy source of supply for complete wiring systems and fittings for every conceivable electrical requirement.



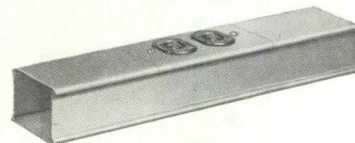
All N. E. products are approved by Underwriters' Laboratories

• Sold nationally through Electrical Wholesalers



GORILLA GRIPS

Precision connectors.
No special tools required.



SURFACEDUCT

2 1/8" x 1 5/8" raceway for loads to 50
amp. Lay-in the wires.
Snap on the capping.



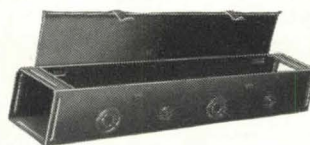
A.B.C. CABLE

Flexible steel armored bushed cable.
The bushing protects the wires.



FLORDUCT

Beveled, across-the-floor raceway.
Withstands the bumps.



WIREWA

Accessible 4 x 4 industrial wireway.
For circuits up to 600 volts.



LOOMWIRE

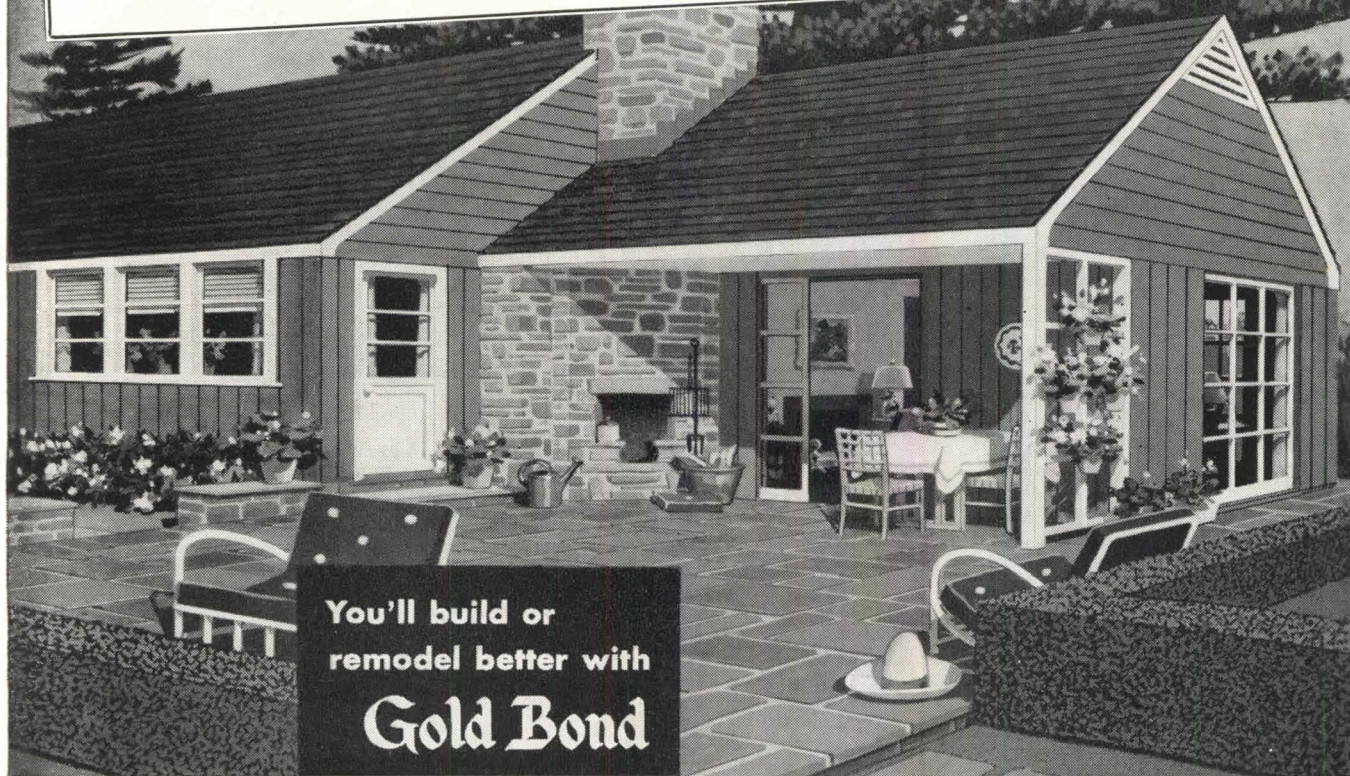
Non-metallic sheathed cable.
Complete line of Loomwire fittings
and boxes available.

National Electric Products Corporation
Pittsburgh 30, Pa.

*As seen
in Color in...*

THE SATURDAY EVENING
POST

● ANOTHER ad in the Gold Bond Campaign. Designed to rekindle the desire that should be first in the hearts of every American family...to own their own home. Judging from previous ads, hundreds of folks will request plans of this house and as usual the answer will be "Consult your local architect!" National Gypsum Company, Buffalo 2, New York.



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

You can start building sooner if you start planning now. See your local Gold Bond Dealer!

We call it "Outside Inn"

What! Build an open ranch house in cold Vermont? It sounded crazy until our architect suggested this clever idea. Now we just slide a panel and presto! We have a living room open to the summer breezes. Yet in winter we have a house as snug and easy to heat as any home in all New England...

There are a lot of good ideas for you here if you're planning to build or remodel. But some of the best ones aren't visible in this picture. For example, under the outside finish are wide panels of fireproof Gold Bond Gypsum Sheathing. They give the house greater structural strength and weather-protection because there are fewer joints. And thanks to modern building research, this better Gold Bond

sheathing costs even less than old-style inflammable sheathing!

Inside the sheathing, in between the wall studs, is another big idea for you. It's fireproof Gold Bond Rock Wool insulation that keeps the house warmer in winter and cooler in summer. Cuts heating bills by as much as 40%. Can be "blown" right into the walls and top ceiling of the house you're living in now.

Whether you're building a ranch house or a Cape Cod cottage, the inside walls will be stronger and better-looking if they're built of Gold Bond Gypsum Lath and Plaster, and painted with Gold Bond Sunflex. This wonderful new one-hour wall

paint comes in eleven fresh new colors that help to make any home bright and gay all year round.

Your Gold Bond lumber and building material dealer can now offer you over 150 Gold Bond building products all designed and engineered to help you build or remodel better. Each product is the best you can buy...and it will cost you no more than other materials. The surest way to have these finer, long-lasting materials used in your new home is to ask your architect to specify Gold Bond by name. Your local Gold Bond dealer will be glad to discuss your plans with you. See him first!

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

Over 150 tested Gold Bond Building Products for new construction or remodeling add greater permanency, beauty and fire protection. These include wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.

**DEMAND
THESE SIX
GOLD BOND
FEATURES
IN YOUR
NEW HOUSE**

**GOLD BOND FIREPROOF
GYPSUM SHEATHING**



Big, weatherproofed panels of Gold Bond Storm Sealed Gypsum Sheathing add structural strength and built-in fire protection. Costs less than old-style sheathing.

**GOLD BOND FIREPROOF
GYPSUM LATH**



Gold Bond Gypsum Lath is the perfect plaster base. Can't warp, expand or contract. Adds fire protection and structural strength for better wall and ceiling construction.

**GOLD BOND FIREPROOF
GYPSUM PLASTER**



Gold Bond Gypsum Plaster is especially processed to bond perfectly with gypsum lath. Builds fire-safe, rock-like walls and ceilings with greater durability and beauty.

**GOLD BOND FIREPROOF
FINISH LIME**



Over the plaster, goes a coat of Gold Bond Finish Lime. This is the smooth white finish that you see in a new house before the wallpaper or paint is applied.

**GOLD BOND FIREPROOF
ROCK WOOL INSULATION**



Builds a fireproof blanket of insulation around the house for greater year-round comfort, family health, and fuel savings up to 40%. Available for new or old homes.

**GOLD BOND SUN-
1-HOUR WALL PAINT**



Dries in one hour with no objectional painty, after-odor. Easier to apply. This modern decoration is now available at your dealer's in a full range of colorful tones.

**Yes...
Here's a family... ..that's a happy
triangle**



**Thanks to a far-sighted architect
who specified "oversize" pipe**

IT'S cleanup time" in this happy home, and that means right now, for everybody! No standing around to wait your turn at the bath. No distressing dribble at Dad's shower while the tub runs for Junior.

It was a far-sighted architect who set the stage for this happy scene--an architect who installed adequately sized steel piping--pipe that some people might call "oversize," big enough to supply all the water all the members of the family want all the time.

Every architect and builder can contribute to situations like this in America's homes, new and remodeled ones alike. A few dollars more, invested in larger diameter steel pipe, will provide amply for the extra shower to go in later, the automatic laundry equipment, the garbage disposal unit, the lawn sprinkler, and those other modern home conveniences that make far more pleasant living.

So do your bit for happier, healthier homes--specify steel piping adequate for tomorrow's needs.

FOR HAPPIER HOMES

**....INSTALL STEEL PIPING
ADEQUATE FOR TOMORROW'S NEEDS**



YOUNGSTOWN

THE YOUNGSTOWN SHEET AND TUBE COMPANY

GENERAL OFFICES - YOUNGSTOWN 1, OHIO

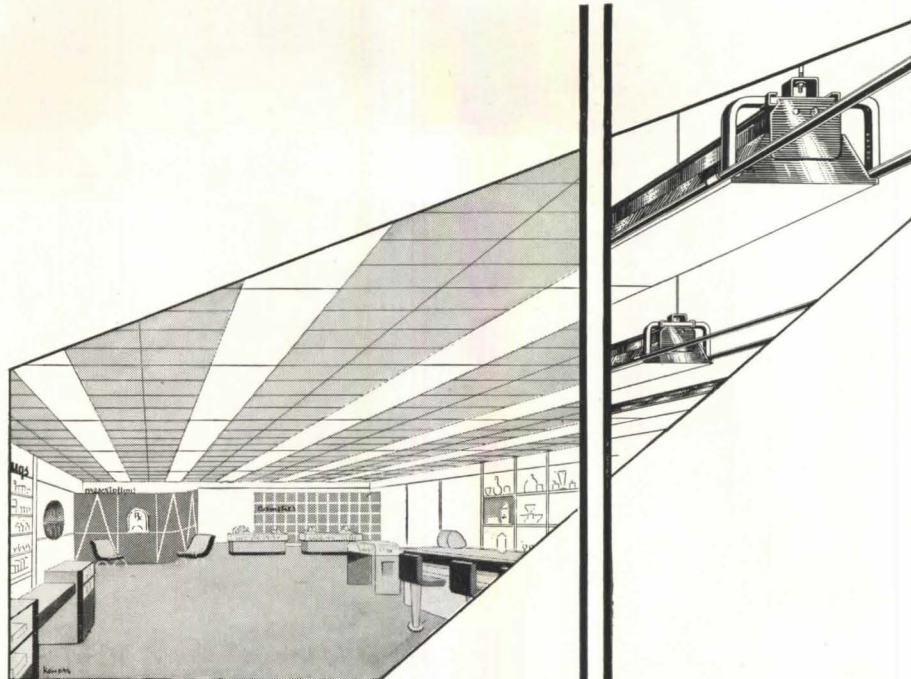
Export Offices - 500 Fifth Avenue, New York City

Manufacturers of

CARBON - ALLOY AND YOLOV STEELS

Pipe and Tubular Products - Sheets - Plates -
Electrolytic Tin Plate - Coke Tin Plate -

Conduit - Bars - Rods - Wire - Cold Drawn
Carbon Steel Rounds - Tie Plates and Spikes.



**you get good lighting
plus ceilings unlimited
with miller fluorescent
lighting systems**

For new construction or relighting of stores, offices, schools, factories, and public buildings, MILLER Fluorescent Troffer Lighting Systems offer new flexibility of application. The MILLER Furring Hanger (patented) makes possible the arranging of Troffer light units in blocks, light strips, or geometric patterns, to form any ceiling pattern desired . . . CEILINGS UNLIMITED. FURTHER . . . installation is simplified . . . 50 to 75% fewer supports from structural ceiling are needed . . . wiring costs are cut up to 50% . . . and conduit and conduit fitting costs cut up to 80%.

miller lighting service is all-inclusive

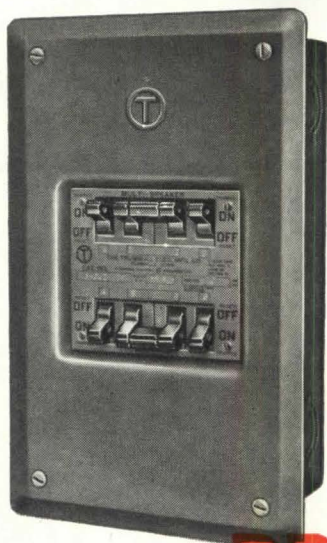
MILLER 50 and 100 FOOT CANDLERS (Continuous Wireway Fluorescent Lighting Systems) have been established as standard for general factory lighting. And MILLER incandescent and mercury vapor reflector equipment has broad factory and commercial application.

MILLER field engineers and distributors, conveniently located, are at your call.

THE miller COMPANY
SINCE 1844

ILLUMINATING DIVISION • MERIDEN, CONNECTICUT

ILLUMINATING DIVISION: Fluorescent, Incandescent, Mercury Lighting Equipment
HEATING PRODUCTS DIVISION: Domestic Oil Burners and Liquid Fuel Devices
ROLLING MILL DIVISION: Phosphor Bronze and Brass in Sheets, Strips and Rolls



TRUMBULL **T** ELECTRIC
MULTI-BREAKERS

PROTECT

**BUTLER  BUILT
HOMES**



Many factory-built homes are on the drawing boards but here's one that is being delivered. The Butler Mfg. Co. prefits this home with patented key-lock aluminum panels so that it can be erected in about two weeks . . . and expanded, as desired, with little trouble.

Such a modern home should have modern conveniences . . . so along with other features of safety and comfort, the builders have selected Trumbull Multi-Breakers for simplified protection of electrical circuits, thereby eliminating the old fashioned bother of replacing blown fuses.

For further information contact your local Trumbull Distributor.

THE TRUMBULL ELECTRIC MANUFACTURING COMPANY
PLAINVILLE, CONNECTICUT

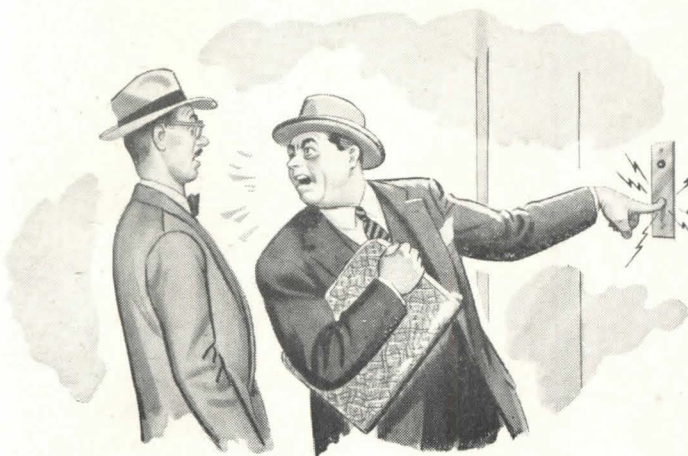
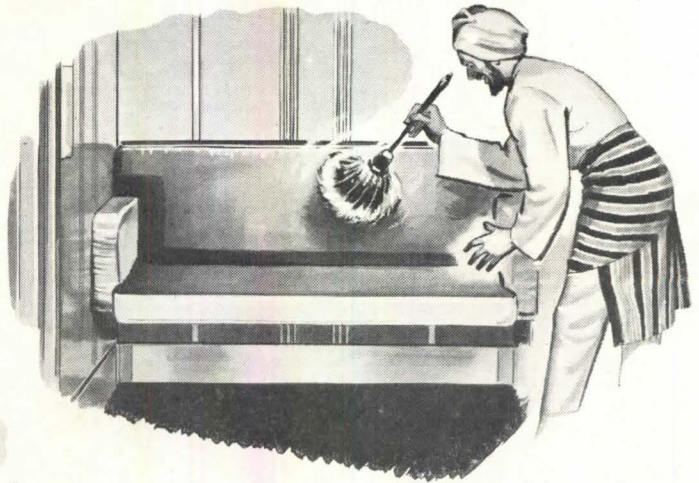
Other Factories at Norwood, Ohio, Seattle, San Francisco, North Hollywood



skylines... by Otis

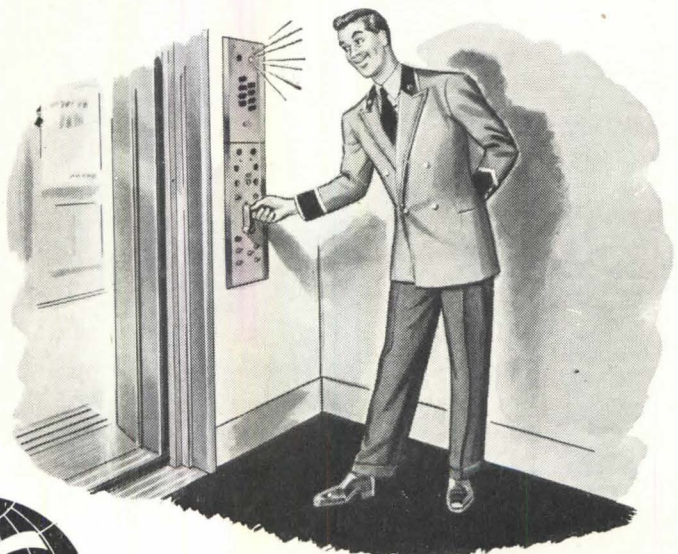
In metropolitan New York, for example, there are 26,188 Otis elevators—more than all other makes combined. So it goes in all the cities of America, and many abroad. Creator of skylines? It would certainly seem so!

FITTED FOR KINGS — East meets West and new meets old in an unusual elevator recently delivered to a Middle East potentate. As oriental in its satin and silk appointments as it is modern in its smooth operation and automatic control, this job is just another example of Otis ability to supply vertical transportation for *any* requirement.



LONG WAITS AND SHORT TEMPER — How long do *you* wait after pressing the "down" button before you hit it again? Seventeen seconds is average, according to Otis experts. Yes, cutting down waiting time is a big concern of Otis design engineers. They've been responsible for every major step in the development of safe and speedy elevator operation.

THE LIGHT TELLS HIM WHEN — Did you know that modern big-building elevators have a light which automatically signals the operator when to start? It's the visible part of an ingenious system developed by Otis to dispatch cars on a scientific basis, timed to the needs of the building and the hour. During rush hours it helps get heavy one-way traffic up or down without annoying delays. During off-peak hours it eliminates excessive waits caused by car movements getting out of balance due to hit-or-miss scheduling.



Have you a vertical transportation problem — in an office building, a factory, an apartment house, a store? If so, there is an Otis man in your city who will be glad to give you the benefit of our 94 years' experience.



ELEVATOR COMPANY

Offices in all principal cities

Fingertip Control

FOR THE LIGHTING THAT TELLS THE STORY



Subject . . . lighting plan . . . and control of light sources—are the three elements of dramatic lighting.

The first two are illustrated by these photographs of one plaster cast, each conveying a different message in response to varying lighting and arrangement.

The third element—control of light sources—is a matter which the architect can turn over to Ward Leonard's "result-engineering".

Consult Ward Leonard's section in your A.I.A. File*; then call in Ward Leonard engineers for recommendation of the proper equipment. Ward Leonard Electric Co., 22 South Street, Mount Vernon, New York. Offices in principal cities of U. S. and Canada.

CONTROL BY ELECTRONICS—You will be interested in recent Ward Leonard developments in Hysteresis electronic control of reactance type dimmers, using small values of current and miniature control devices. Dimming and switching controls for an entire theatre are compacted into a small unit for control by one person.

*Your A.I.A. File should contain Bulletins 71 on Non-Interlocking Dimmers, 72 on Interlocking Dimmers, 74 on Reactance Dimmers, 76 on Autostat Dimmers, 78 on Cycle Dimmers.

WARD LEONARD ELECTRIC CO.

*Where Basic Designs in Electric Controls are **R**esult-**E**ngineered for You*



St. Francis Hospital, Lynwood, California. George J. Adams, architect;
Hillman & Nowell, structural engineers; Thomas & Beyer, general contractors.

ARCHITECTURAL CONCRETE

puts longer legs on your building dollars

ARCHITECTURAL concrete permits casting both the structural and ornamental parts of your building in one operation. That promotes economy. It's a fact to remember in planning hospitals, hotels, schools, apartment houses and industrial plants. Architectural concrete is adaptable to a wide range of decorative treatments.

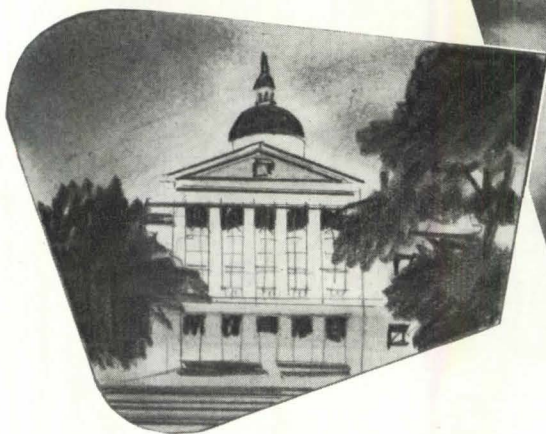
Moderate first cost, low maintenance expense, long life, fire-safety and **low annual cost** are advantages of architectural concrete to remember in planning any new building. Architects and engineers are invited to make full use of our services to secure maximum advantages of architectural concrete. See our catalog in Sweet's.

PORTLAND CEMENT ASSOCIATION

Dept. A9-25, 33 W. Grand Ave., Chicago 10, Illinois

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

A nine mile "Blood Stream"
WARMS THE HEART OF ATLANTA
...and helps her preserve her complexion!



Central Heating Made it Possible!

Thousands of people in downtown Atlanta enjoy the benefits of the district's central heating system. Buildings with clean, bright exteriors and well-lighted, well-heated interiors do a great deal to make their standard of living comfortable and pleasant. Few of them, however, are aware that below the ground is a veritable "blood stream"—48,486 feet of pipe mains distributing steam throughout the area from three boiler plants.

Among the 465 customers of the Georgia Power Company's steam distribution system are two United States Post Offices, the State Capitol, City Hall, Municipal Auditorium and other municipal buildings, as well as three housing projects. Commercial customers include 20 out of 26 office buildings, 6 out of 7 leading hotels, and practically all of the department stores and other retail establishments. Separate boiler plants previously maintained by many of these users have now been abandoned.

Central heating is not new to this progressive city. Operations were started in 1901, with about 50 customers, and have steadily expanded to the present impressive status. The operation is consistently profitable even though Atlanta's record of 2,865

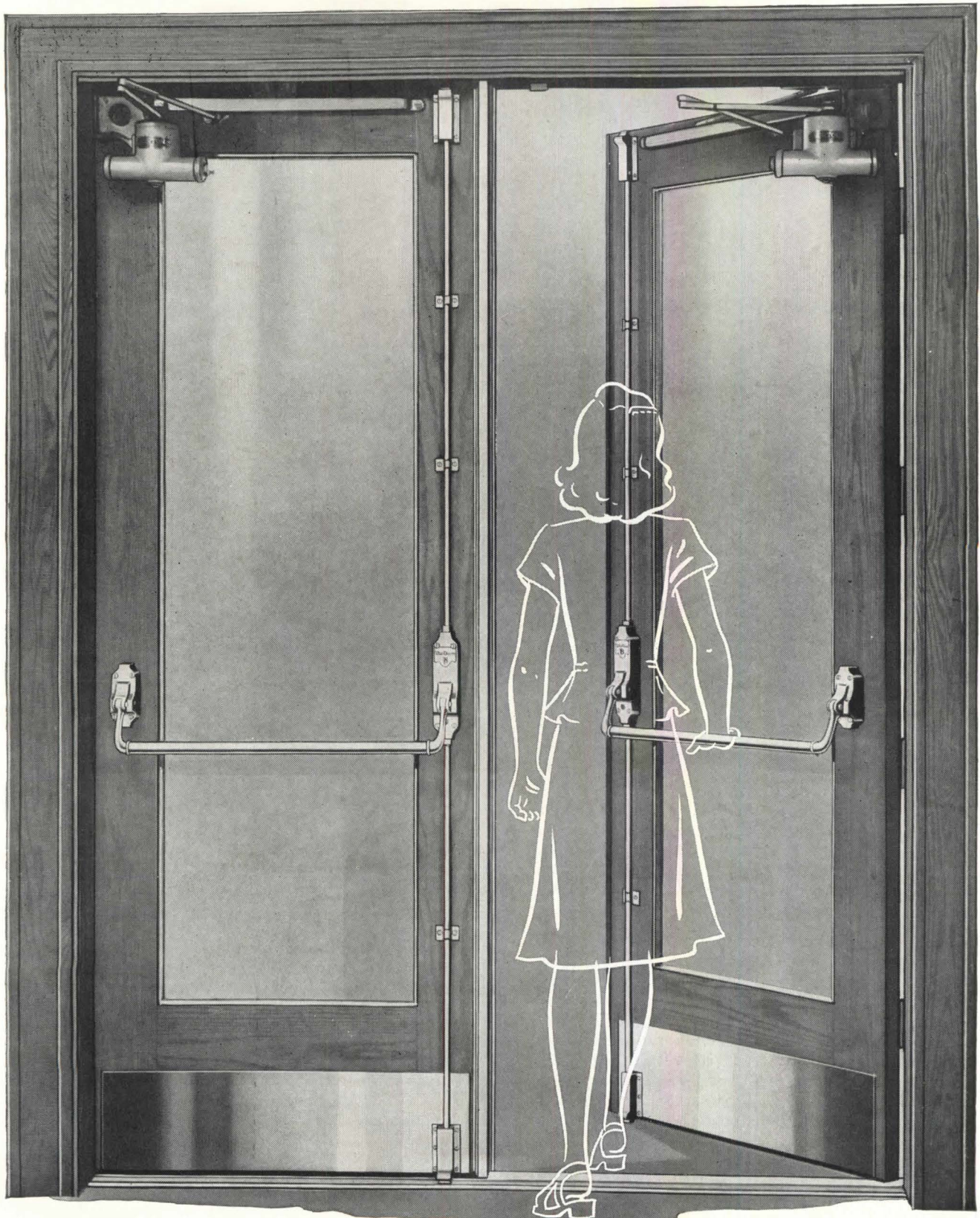
normal degree days is only approximately 55% of the number for a representative northern city like Pittsburgh. Since 1924 the Georgia Power Company has purchased all excess steam generated by the City's incinerator plant. This amounts to approximately 30% of the system's total annual requirements, and about 80% of its needs during the summer months.

The system offers many advantages to the numerous private and public buildings and the housing projects which it serves—gives them maximum functional use of their space, eliminates all the problems connected with individual boiler plant operation, fuel deliveries and ash disposal.

To assure high thermal efficiency and dependable, trouble-free operation, as well as ease and speed of installations, Atlanta's steam system includes a considerable footage of Ric-wil prefabricated insulated pipe units.

*Want help on Central Heating problems?
 Ric-wil case histories, project studies, other
 helpful literature available upon request.*

RIC-WIL
INSULATED PIPE CONDUIT SYSTEMS
THE RIC-WIL COMPANY • CLEVELAND, OHIO
CABLE ADDRESS: RICWIL, BENTLEY'S CODE



Von Duprin Self-Releasing Fire and Panic Exit Devices are made for just one purpose—to let people out of buildings easily, quickly, surely. They do their work supremely well, whether in daily operation or under the terrific strain of emergency action. They provide the safest, surest, fastest way out.

VON DUPRIN DIVISION, VONNEGUT HARDWARE CO., INDIANAPOLIS 9, INDIANA

Roddiscraft

The architect's door and plywood



Identified with architects for 50 years

Roddiscraft quality has been recognized by the architectural profession for more than fifty years. The Roddiscraft hardwood doors and plywood installed in buildings from coast to coast in accordance with architects specifications is a testimony to the reputation of Roddiscraft.

Roddiscraft has earned its reputation — by putting quality first — by never permitting production needs to become paramount.

Today's Roddiscraft solid core flush veneer doors and hardwood plywood are still a craftsman's product—a blending of fine workmanship and fine materials.

Remember — Roddiscraft beauty is more than veneer deep.

Roddiscraft

Roddis Lumber & Veneer Co.

MARSHFIELD, WISCONSIN

Nationwide Roddiscraft Warehouse Service

Cambridge 39, Mass. . . 229 Vassar St.	Long Island City, New York
Chicago 8, Ill. . . 1440 W. Cermak Road Review & Greenpoint Ave.
Cincinnati 2, Ohio . . 457 E. Sixth St.	Los Angeles 11, Calif. . . 2860 E. 54th St.
Dallas 10, Texas . . . 2800 Medill St.	Marshfield, Wis. . . . 115 S. Palmetto St.
Detroit, Mich. . . 11855 E. Jefferson Ave.	Milwaukee 8, Wis. . . . 4601 W. State St.
Kansas City 8, Mo. . . 2729 S.W. Blvd.	New York City, N. Y. . . 920 E. 149th St.
Louisville 10, Ky. . . 1201-5 S. 15th St.	San Antonio, Texas . . . 727 N. Cherry St.

DEALERS IN ALL PRINCIPAL CITIES



VISIBILITY OF THE ENTIRE SHOWROOM is made easy by large plate glass windows on front and side. The showroom is flooded with daylight—and at night exhibits the autos in a brilliantly-lighted, giant showcase.

Design

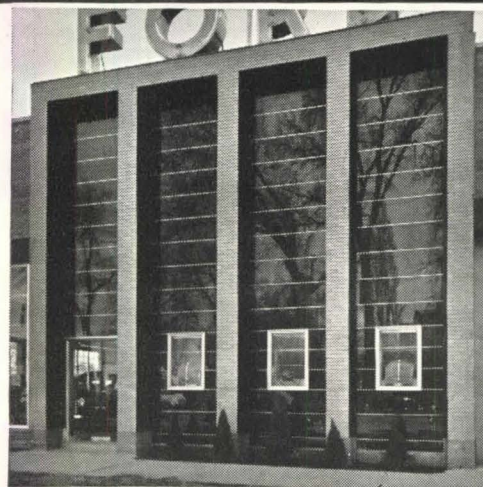
... FOR BEAUTY
... FOR PRACTICALITY
WITH *Glass*

Count on glass to provide the benefits your clients want in new storefronts. Beauty that catches attention . . . impressive display of merchandise day and night . . . and the practical matter of easy maintenance.

This dealer showroom in Salt Lake City takes advantage of the many benefits of glass. Transparency for visibility and light transmission. A hard, gleaming, weatherproof surface that always looks new and that doesn't need refinishing.

A Visual Front lets people *see in*. This principle of displaying the entire store to potential customers is being applied to stores of many types. Our colorful Visual Fronts book includes many ideas that you'll find helpful in your storefront planning. Write for it. Libbey-Owens-Ford Glass Company, 7197 Nicholas Building, Toledo 3, Ohio.

*®



THE BEAUTY OF GLASS is an important element in building design. Here, lustrous black *Vitrolite** glass facing over the solid area "dresses up" the front. *Vitrolite* is available in a range of colors. They permit wide latitude in decorative effects. *Tuf-flex** tempered plate glass doors enhance the beauty of the front.



A FEELING OF SPACIOUSNESS is achieved in the showroom, and the display appears to be doubled by the use of plate glass mirrors on the end wall. In addition, *Vitrolite* is used here for attractive facing on the counter. Note the recessed ceiling lighting through panels of *Reglex* patterned glass.

Architect: Young and Hansen, Salt Lake City.

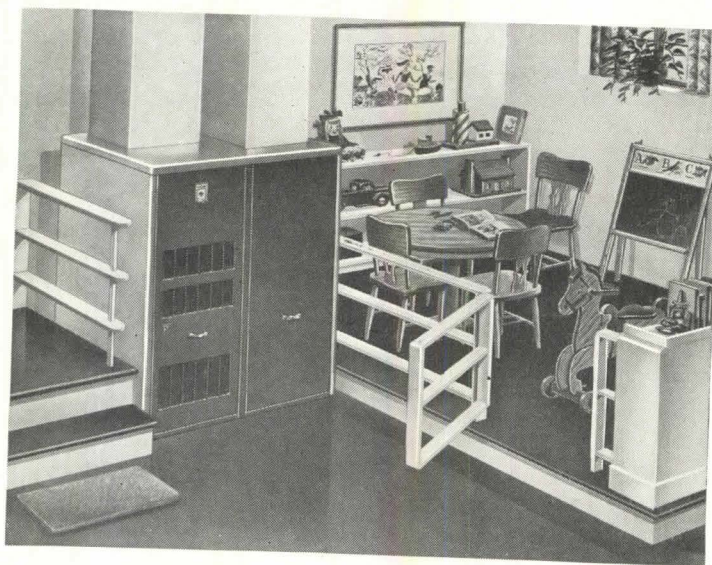


LIBBEY • OWENS • FORD
a Great Name in **GLASS**

With AMERICAN-Standard

*—more room
for work*

A trim trio of American-Standard products makes this combination kitchen and utility room for small homes unusually convenient, attractive, and sanitary. The **ROYAL HOSTESS Sink** is of rigid cast iron with a heavy coating of acid-resisting enamel. The **ALDEN Laundry Tray**, also made of sturdy cast iron enamelware, is of one-piece construction. The gas fired **BUDGET Water Heater** in its gleaming white enameled jacket completes the picture and provides plenty of hot water.



*—more room
for play*

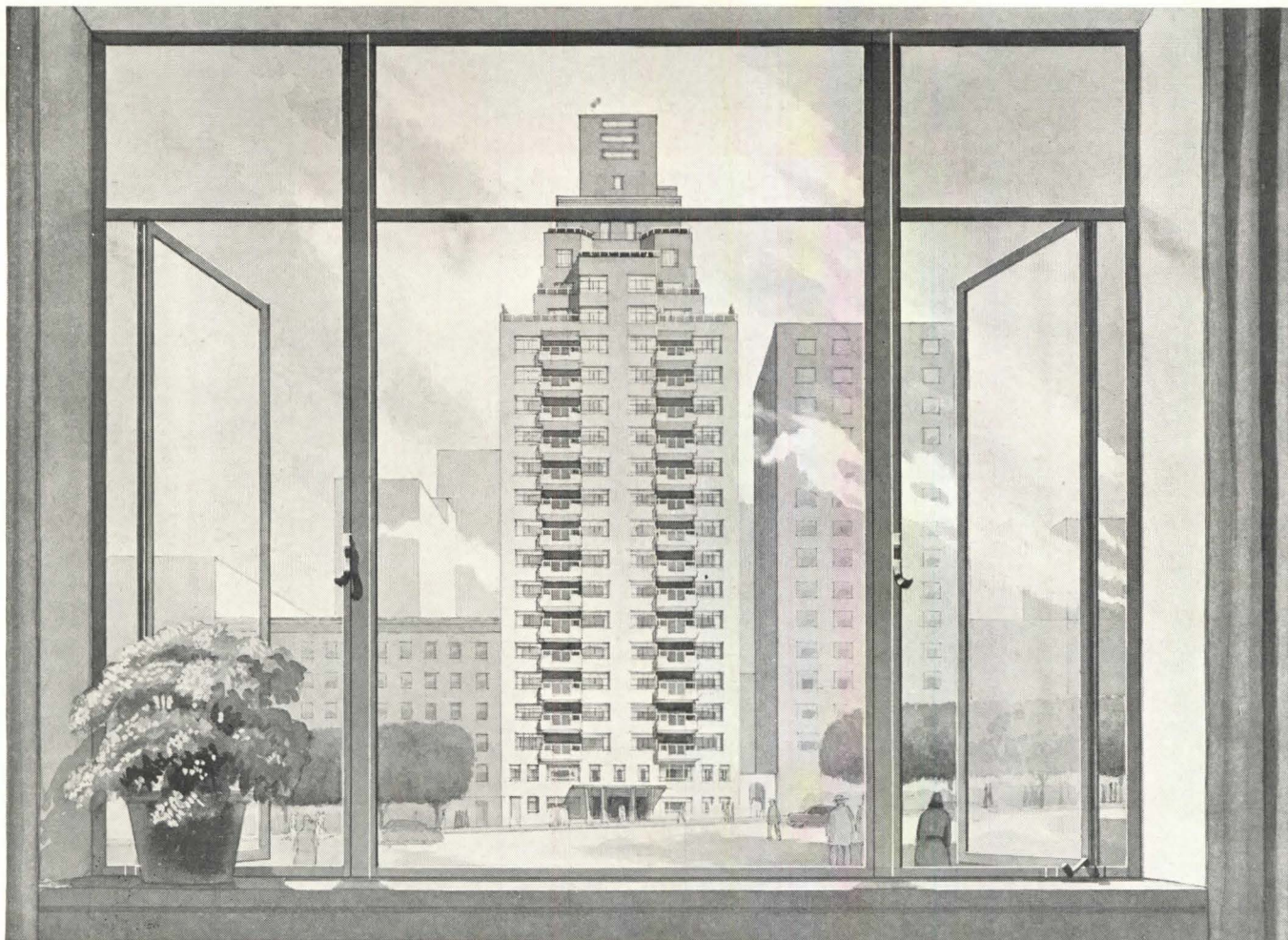
The streamlined Placid Two-Tone Blue jacket of the **SENECA Winter Air Conditioner** harmonizes perfectly with the attractive setting of this basement playroom and protects valves and controls. The Seneca, with its durable copper bearing steel heating element, provides the dual benefits of clean, conditioned air, and carefree, automatic heating. Burns natural, manufactured, mixed, or liquefied petroleum gas. In five sizes for small to medium sized homes.



■ You have the widest latitude in room arrangement when you use American-Standard products. Designed, engineered and styled to meet practically any need, they permit you to make the most of whatever space is available . . . enhancing any setting with their trim, smart lines and eye-catching beauty. And their efficient, economical operation over the years assures lasting customer satisfaction. For complete information, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

Serving the Nations' Health and Comfort

LOOK FOR THIS 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, Water Heaters, for all fuels—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.



Apartment House, 120 E. 79th St., New York.
Architect: Sylvan Bien, New York. Contractors:
S. Minskoff & Sons, New York. Adapted from the
original rendering by J. Floyd Yewell.

Modern design in apartment house planning demands the functional beauty of Lupton Metal Windows. Narrow frames and mullions assure maximum daylight, lending a feeling of spaciousness and luxury to each dwelling unit. Lupton Metal Windows offer controlled, draft-free ventilation. Outswinging ventilators catch and gently deflect air currents into the room. Extended hinges permit cleaning all glass from the inside. Metal frame screens for Lupton Metal Casements are easily attached on the inside of the window. There is a Lupton Metal Window for every type of building. Write for our new 1947 Catalog or see it in Sweet's.

MICHAEL FLYNN MANUFACTURING CO
700 East Godfrey Avenue, Philadelphia 24, Penna.
Member of the Metal Window Institute

LUPTON

METAL WINDOWS

PRESS THUMB

it's open

RELEASE.... and the lead is locked tight!



It's the patented collet in

A.W. FABER-CASTELL

LOCKTITE

which makes it 7 ways better
than any refill pencil you ever used.....

Clean

One hand operation. No need to touch the lead. Hold lead to paper, press button release and adjust length you desire by quick upward or downward movement of your hand. Thus you avoid getting graphite on your fingers to smudge your drawing.

No Breakage

An exclusive collet, machined to a thousandth of an inch tolerance, supports the graded lead all around. Prevents breaking or snapping even when you bear down hard.

Balanced

Every part is precisely proportioned, giving you a writing instrument which is perfectly balanced in your hand.

Guaranteed

If your LOCKTITE fails to give you perfect performance, return it to your Dealer or to us for immediate exchange.

Sturdy

Fine quality plastic and metal used in every part. Exposed metal parts are gold-plated. All expertly assembled.

Non-Slippage

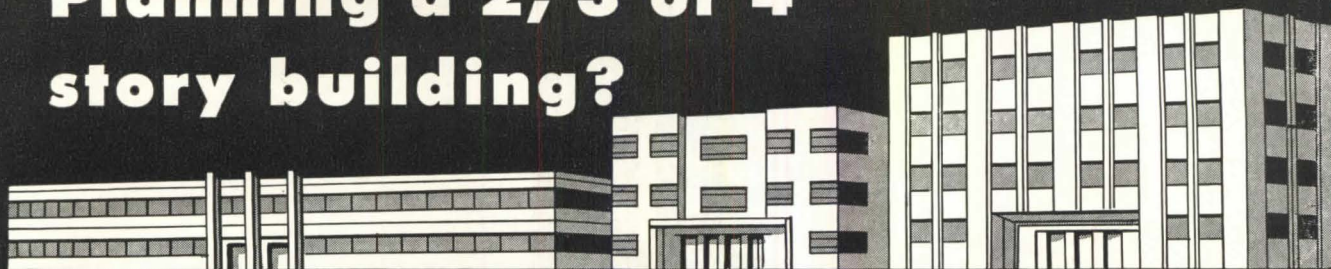
The same precision collet holds the lead in a bulldog grip. The lead positively cannot slide back into the holder.

Quick

Just press your thumb on the button to release clutch. Does away with two-handed screwing or turning operation.

A.W. FABER-CASTELL
PENCIL COMPANY INC. NEWARK 4, N.J.

Planning a 2, 3 or 4 story building?



The elevator that's PUSHED UP offers these special advantages

YOU SIMPLIFY CONSTRUCTION AND CUT BUILDING COSTS

Leave off the penthouse



Penthouses interfere with modern, streamlined designs. The Oildraulic Elevator requires no penthouse because it's **pushed up** from below by a powerful hydraulic jack . . . not pulled from above.

Lighten shaftway structure



No need for heavy, load-bearing supporting columns to carry the elevator and its load. Strongest possible support is given by the Oildraulic jack with its casing imbedded in the earth.

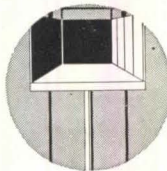
Cross off the machine room



Another economy and simplification is elimination of the special machine room. The compact power unit for an Oildraulic Elevator can be located in any convenient space and on any floor.

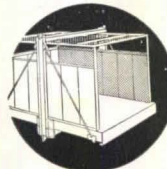
YOU GIVE OWNERS EXCEPTIONAL ELEVATOR SERVICE

Economical Oildraulic operation



This modern elevator reduces load lifting to simplest fundamentals. Car rises as oil is electrically pumped into hydraulic jack or jacks. Descent by gravity. Less power required. More economical.

Rugged Car Construction



Oildraulic Elevators are built to take hard wear. Construction is heavy-duty, with strongly reinforced sling and platform. Owners say they give the lowest cost service of any elevator.

Smooth, Accurate Landings



Guided by the highly efficient "Oildraulic Controller," this elevator operates smoothly and stops at floor landings with accuracy. Very important where loading and unloading is by power vehicle.

Data for architects

ROTARY LIFT CO.
1013 Kentucky, Memphis 2, Tenn.
Send complete information and Architects' Preliminary Layout Data to:

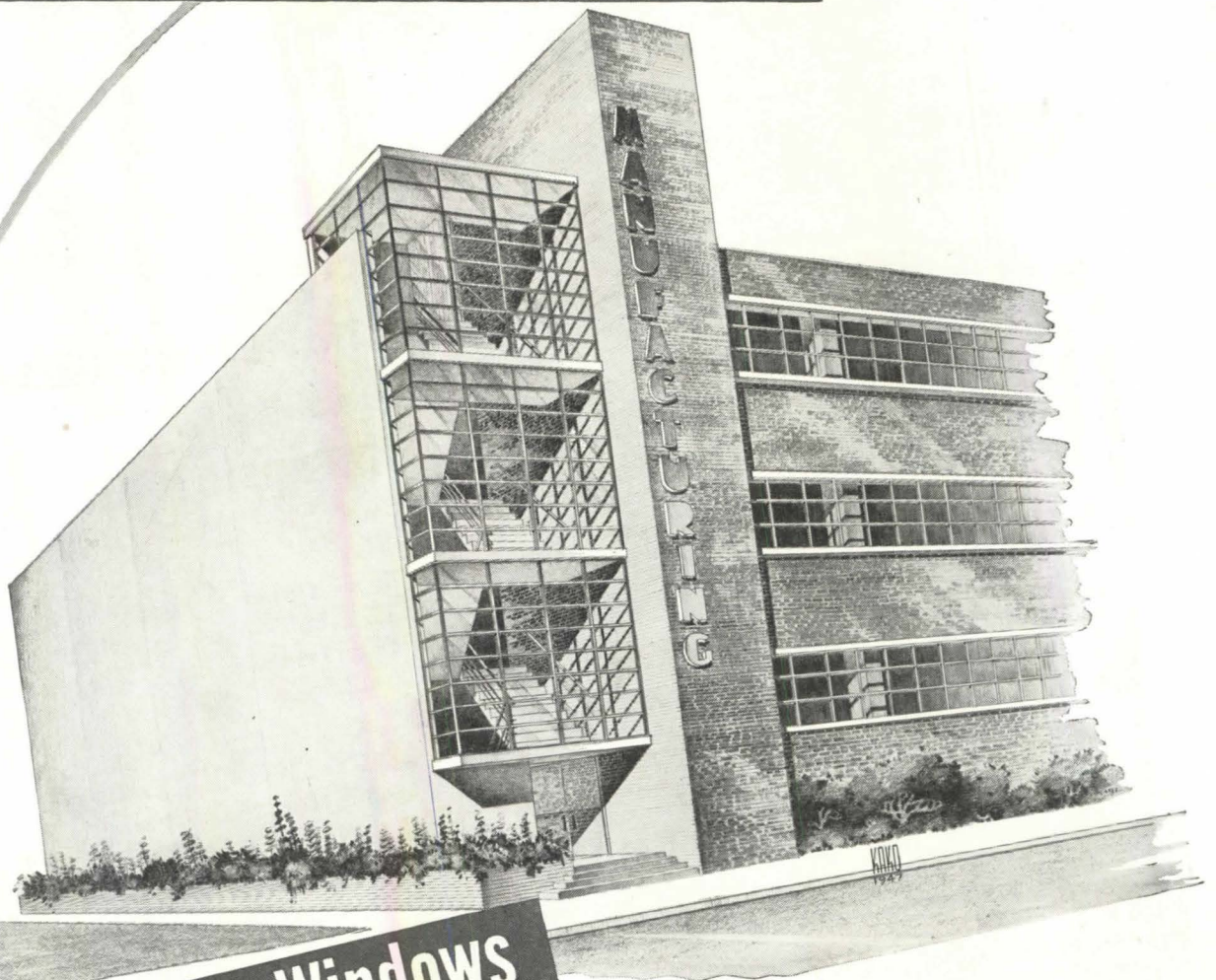
Name.....
Address.....
City & State.....



*Reg. U. S. Pat. Ofc.

Rotary*
OILDRAULIC ELEVATORS
The Elevator That's PUSHED Up

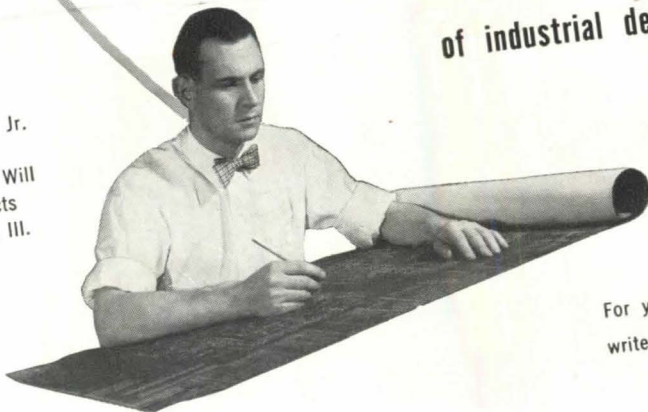
Perkins & Will design a factory . . .



Mesker Steel Windows

"Modern manufacturing plants owe much of their attractive appearance to intelligent handling of metal windows. As elements of industrial design, their possibilities are unlimited."

Philip Will, Jr.
of
Perkins & Will
Architects
Chicago, Ill.



For your copy of the Mesker Book of Industrial Windows,
write to Mesker Brothers, 4340 Geraldine Ave., St. Louis 15, Mo.



for Raceways in Concrete

THE MODERN WAY IS THE ELECTRUNITITE WAY



This knurled inside surface is an exclusive feature of the popular sizes of ELECTRUNITITE E.M.T. Actual tests have proved that this feature makes wire pulling up to 30% EASIER—one more reason why ELECTRUNITITE E. M. T. still is the world's easiest-to-install rigid steel raceway.

TIME-PROVED ELECTRUNITITE COMBINES E. M. T. CONVENIENCE WITH POSITIVE DEPENDABILITY

Talk with contractors who have used ELECTRUNITITE E.M.T.—the *original* lightweight rigid steel raceway. Let them tell you about its convenience, ease of handling and trouble-free, economical installation. *Then consider these facts:*

1. ELECTRUNITITE E.M.T. is made of tough, strong open-hearth steel that withstands abuse.
2. Because its protective zinc coating is unbroken by threads, ELECTRUNITITE E.M.T. provides continuous, unbroken corrosion-resistance—throughout the installation.
3. ELECTRUNITITE E.M.T. meets Underwriters' Laboratories requirements for adequate mechanical and electrical protection . . . and is approved by the National Electrical Code for use in exposed, concealed and concrete slab construction.

All are good reasons for including Republic ELECTRUNITITE E.M.T. in your wiring specifications. Like more information? Write 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:

Pipe—Sheets—Roofing
Enduro Stainless Steel
Toncan Enameling Iron
Electrunitite E. M. T.
Fretz-Moon Rigid Steel Conduit
Taylor Roofing Terns
Berger Lockers, Bins, Shelving
Berger Cabinets for Kitchens
Truscon Steel Windows, Doors, Joists
and other Building Products



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

PIONEERING *again*

Certain names in industry have a distinguished reputation for superiority. They symbolize leadership — a prestige earned through their pioneering work, the high quality of their product and the long and progressive service they have rendered to the professions and the trade.

We enjoy this distinction. We are proud of the public's confidence in our product which we have so painstakingly built up during our thirty-four years of service.

- **WE PIONEERED** the introduction of the washable, sunfast and sanitary decorative wall coverings.
- **WE PIONEERED** the introduction of wall coverings which, in addition to the above properties, combined valuable wall protective features to prevent plaster cracks and to afford years of uninterrupted service.
- **WE PIONEERED** the incorporation of color therapy principles in decorative wall coverings for hospital and institutional usage.

In keeping with this leadership **we are now pioneering again.** We are pleased to announce that, in addition to its many other advantages,

Fabron
REG. U. S. PAT. OFF

—THE fabric-plastic-lacquer wall covering—

SERVES AS A FIRE SPREAD PREVENTIVE

As a result of recent tests, FABRON is now listed by the Underwriters' Laboratories, Inc., sponsored by the National Board of Fire Underwriters, and its label of approval is affixed to each FABRON roll.

FABRON is the only wall covering that combines fire spread prevention with decorative, structural, practical and economical advantages.

FABRON is by far the most desirable treatment for walls and ceilings. FABRON is a real investment. It yields annual cumulative dividends in the savings it effects. Its superiority is unquestioned.

Further information will be sent to you on request.



FREDERIC BLANK & COMPANY, INC.

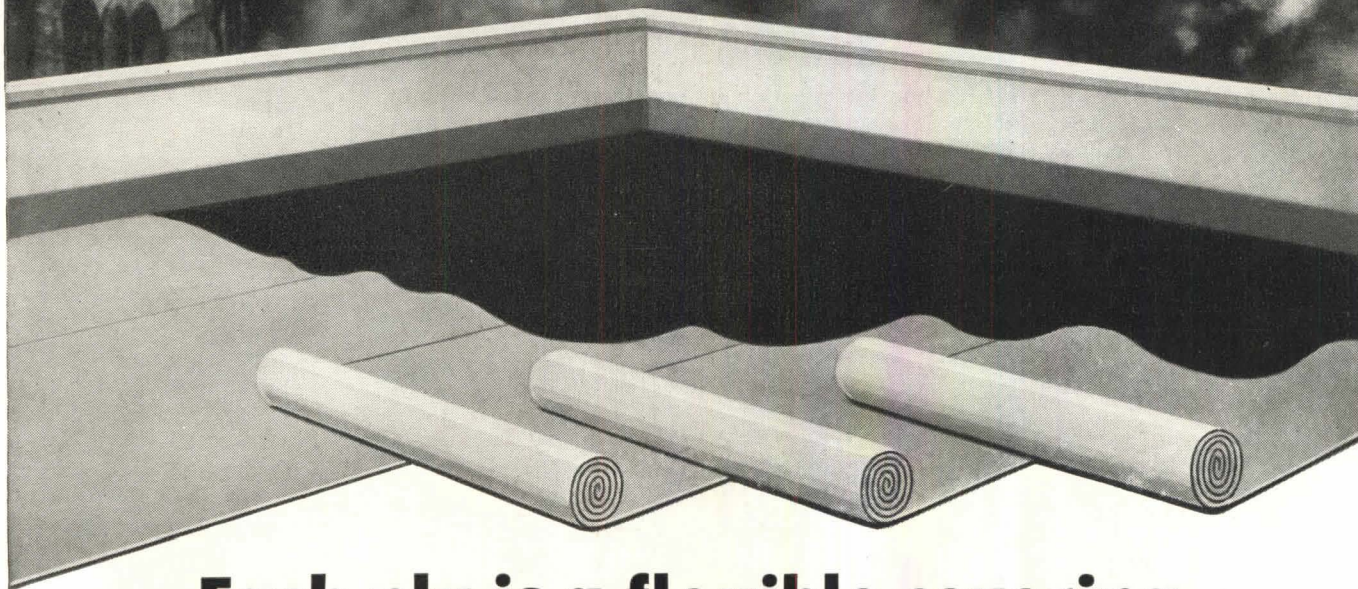
Established 1913

230 PARK AVENUE

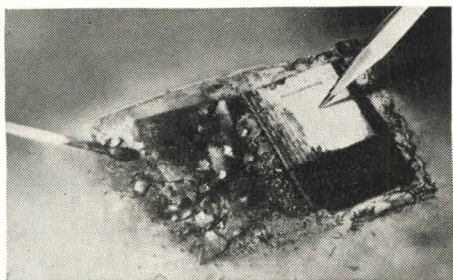
NEW YORK 17, N. Y.

FLEXSTONE BUILT-UP ROOFS

... guard against flying brands



**Each ply is a flexible covering
of stone—made of asbestos**



Make this Fire Test! The ordinary roofing felt, on the left side, was reduced to ashes by the consuming flame. But the J-M Asbestos Felt, on the right, remained unharmed . . . proving its fire resistance. We'll gladly send you the materials to make this convincing test yourself.

Protect your building from the hazard of flying sparks and burning embers. Insist on a Johns-Manville Flexstone Roof. *It will not support combustion.* That's because the felts in a J-M Flexstone Built-Up Roof are made of the magic mineral *asbestos*—fireproof, rotproof, long-lasting.

Flexstone Roofs are *smooth-surfaced*, too—permitting thorough drainage, eliminating the weight of slag or gravel, and making any damage easy to locate and repair. Need no periodic coating. Felts are perforated to insure smooth application.

All Flexstone Roofs are engineered to the particular requirements of your building—whether it's new construction or re-roofing. To insure skilled application, they are applied only by J-M Approved Roofers.

Three types available: Flexstone *Super "A," Standard, and Service*—each the finest that can be specified for its purpose. Write for brochure BU-51A, containing complete specifications. Johns-Manville, Box 290, N. Y. 16, N. Y.

Because of unprecedented demand, there may be times when we cannot make immediate delivery. Please anticipate your needs.



ohns-Manville FLEXSTONE BUILT-UP ROOFS



Are your clients bombarding you with WATERPROOFING QUESTIONS?



Today more than ever before, the public—your clients—are waterproofing conscious. For a ready reference, use Medusa Waterproofing literature. It tells the complete story of integral waterproofing, gives actual construction details, and shows why "built-in" waterproofing, made with Medusa Waterproofed Gray Portland Cement, is the best method to insure dry interiors.

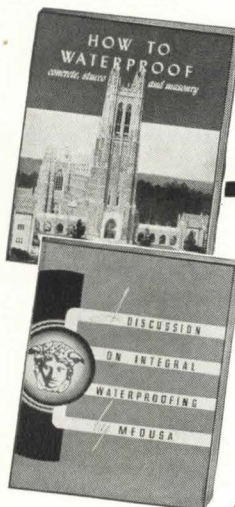
This "built-in" waterproofing makes waterproofing jobs easy. Just specify Medusa Waterproofed Gray Portland Cement*—the rest is automatic. That's because this cement has a waterproofing material mixed-in at the mill during manufacture. This means concrete made with Medusa Waterproofed Cement has the waterproofing "built-in" all the way thru. Waterproofing can't chip, peel, or crack because it is an integral part of the concrete. As long as there is concrete, there is waterproofing!

And Medusa "built-in" waterproofing is inexpensive—much less than the cost of the surface coats and repair bills. It requires no additional time or labor. It is mixed and placed exactly as regular gray cements, has the same structural strength,

but gives lifetime waterproofing as a bonus to your clients.

Let Medusa Waterproofed Gray Portland Cement make your waterproofing job easy. Specify it for all below grade and all above grade concrete that must repel or retain water. Thousands of buildings—small homes to large plants, built in the past forty years—attest to the fact that Medusa "built-in" Waterproofing is lifetime waterproofing.

Send a postcard today for your free copies of "Integral Waterproofing Explained" and "How To Waterproof Concrete, Stucco, and Masonry."



MEDUSA PORTLAND CEMENT COMPANY
1004 Midland Building, Dept. "J" • Cleveland 15, Ohio

*Where Medusa Waterproofed Cements are not available, use Medusa Waterproofing Paste or Powder.

FIFTY-FIVE YEARS OF CONCRETE PROGRESS

M E D U S A
PORTLAND CEMENT CO.

1004 Midland Bldg., Dept. "J", Cleveland 15, Ohio

Gentlemen: Please send me copies of the books "Integral Waterproofing Explained" and "How to Waterproof Concrete, Stucco, and Masonry".

Name

Address

City State

Also made by Medusa Products Company of Canada, Ltd., Paris, Ontario

The PLANNING BOARD



The Truscon Planning Board Says, "Normal delivery on many of our Steel Building Products is now possible. In fact, on all material for which raw material is readily available, a normal rate of production and delivery is currently in effect." However, since production and delivery schedules change from week to week, we suggest you contact the nearest Truscon sales office for the latest information.

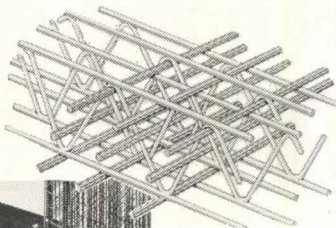
109 Tons of Truscon Welded Bank Vault Reinforcing in this job

When completed, the new John Hancock Mutual Life Insurance Company Office Building will be one of the most beautiful commercial buildings in Boston, Mass. And behind that handsome exterior will be a great measure of fortified strength to guard the physical and financial assets of the company. The bank vault in the John Hancock struc-

penetration, and No. 10 insurance rating. Write for folder giving complete details.

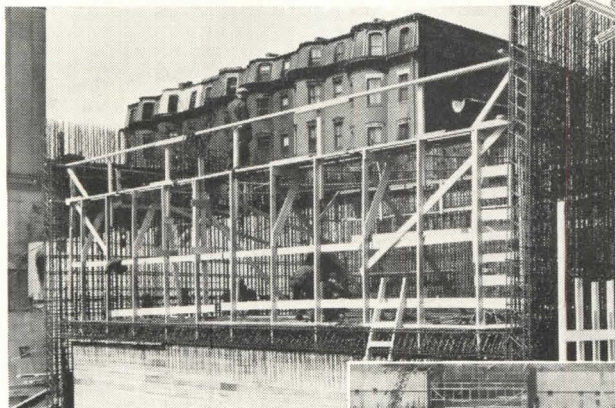
1200 Tons of Truscon Concrete Reinforcing Bars Also Used

The details of the foundations for the new John Hancock Life Insurance Company building also are interesting. Truscon furnished 1,200 tons of concrete Reinforcing Bars for the foundation slab and foundation walls. The foundation measures approximately 250 feet along each of the four walls. The foundation slab is 10 feet thick, supported on H piles. Some of these piles extend 120 feet below the bottom of the slab, to fill the requirement for resting on solid rock. The foundation walls are approximately 30 feet high. The 10 feet thick foundation slab is reinforced with 1 1/4" square bars both ways



Truscon Welded Bank Vault Reinforcing as used in the John Hancock Life Insurance Co., Building, Boston Mass. Cram & Ferguson, Architects. Turner Construction Co., Builders.

Truscon Concrete Reinforcing Bar as used in the Heavy Foundation of the John Hancock Life Insurance Co., Building.



ture is a masterpiece of design in impregnable strength. It required 109 tons of Truscon Welded Bank Vault Reinforcing to build this unusual part of the building. Contrary to the general run of vaults, the John Hancock vault extends from the sub basement floor through the basement to the first floor. This required that the bank vault walls act as supporting walls for the basement and first floors in that particular part of the building. The dual need for structural strength and vault protection was met adequately by the distinctive design of Truscon Welded Bank Vault Reinforcing.

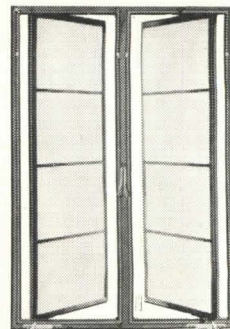
Where protection against unauthorized entry into a single room or an entire structure is paramount, use Truscon Welded Bank Vault Reinforcing. It assures maximum economy in the placing of construction materials, maximum efficiency of materials in resisting

top and bottom, spaced on an average of approximately 10" on center.

Truscon Steel Bars for reinforcing are applicable to a wide range of concrete work, such as concrete slabs, beams and girders, columns, walls, and footings; in the construction of buildings, bridges, tanks, and all other concrete structures subject to tension and compression stresses. Write for details.

Residential Steel Casements

In rooms where windows are opened and closed frequently or where ventilation needs are great and varied, Truscon Residence Steel Casements fill a utilitarian need in addition to being decorative. Side hinged casements can be opened to a position that will invite or retard the flow of air as desired. High, small or unusually placed window openings all become more useful and attractive when fitted with Steel Casements. Screens and storm sash are available at reasonable prices. Write for details.



Early in the 60's of the last century, Monier, a French gardener, conceived the novel idea of making flower pots and basins out of cement mortar embedded with wire, in order to increase the strength and simultaneously decrease the thickness and consequently the overall weight of the containers. To F. Joseph Monier, sometimes called the father of reinforced concrete, is given the credit for the invention of this comparatively new form of construction, probably because the patent issued him in 1865 constituted the first officially recorded endeavor involving the principle of reinforcing concrete.

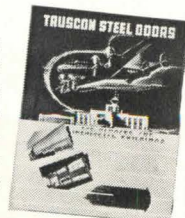
Prompt Delivery on Steel Joists

Truscon "O-T" Open Truss Steel Joists are again available for your use. Their outstanding features of adaptability, economy, fire-resistance, safety and permanence can once more be incorporated into your building plans, to provide maximum values in building construction.

The Truscon "O-T" Open Truss Steel Joist is a Warren truss having top and bottom chords of wide tee-shaped members and a plain round continuous web member. The bottom chord is continuous from end to end of joist and bent up at the ends to form the bearings. The underslung design of the bearing permits maximum head-room under the supporting girders. The open web allows the passage of pipes and conduits in any direction. Write for full details.

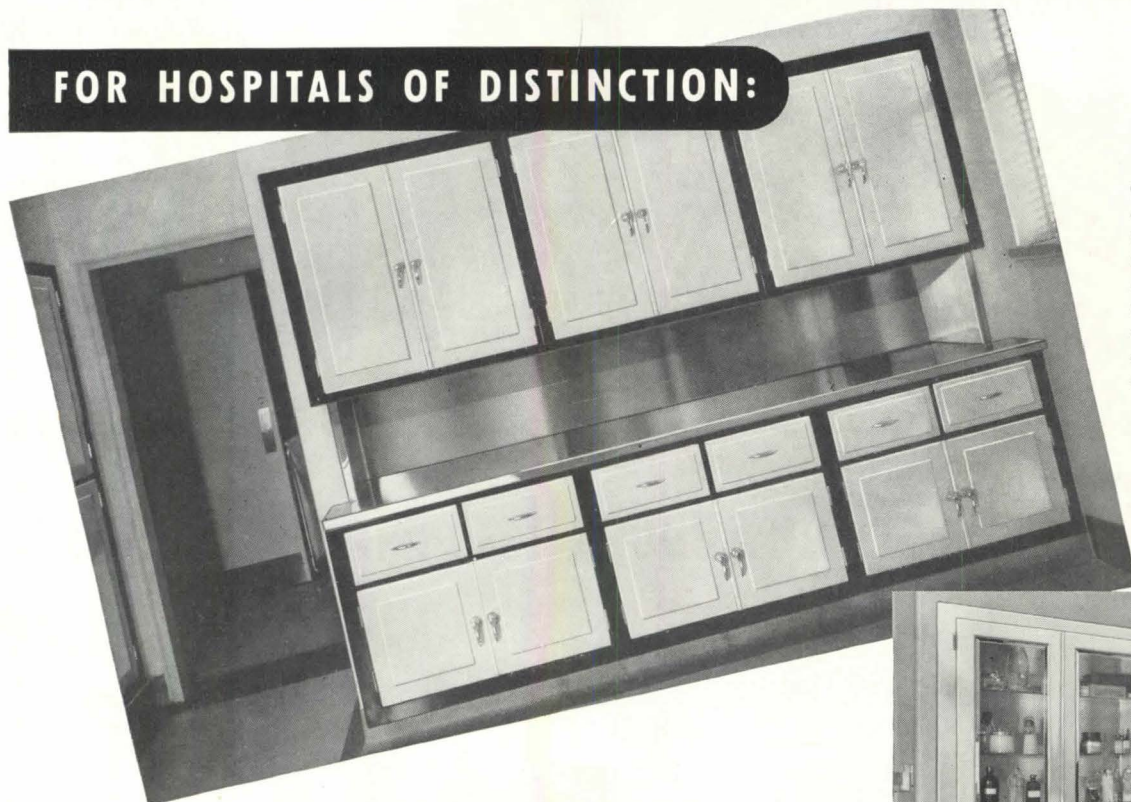
New Literature

A new 32 page catalog on Truscon's complete line of steel doors is now available. Includes illustrations, installation details and specifications. Write for your copy today.



TRUSCON
STEEL COMPANY
YOUNGSTOWN 1, OHIO
Subsidiary of Republic Steel Corporation

FOR HOSPITALS OF DISTINCTION:



Counter-type storage cabinet in unsterile workroom of Central Service Department. Adjustable stainless steel shelves, metal doors. Stainless steel counter top, back and end splashes.

SCANLAN-MORRIS

Recessed Cabinets

Authentic Guidance and Assistance
Available to Architects, Without Obligation

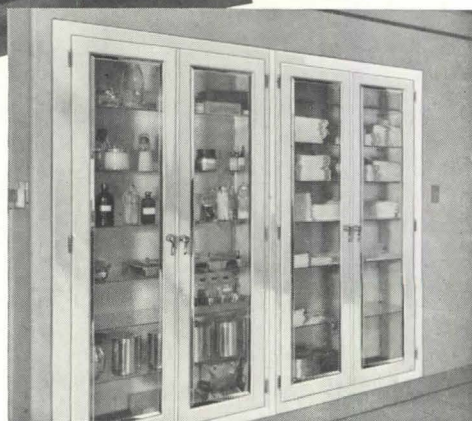
• Storage of supplies and materials in the modern hospital is greatly facilitated by the installation of Scanlan-Morris Recessed Cabinets—engineered to fit requirements.

Many years of direct contact with hospital superintendents, surgeons and architects, qualify the Scanlan-Morris Technical Sales Service Department to supply valuable assistance and authentic guidance in such installations—backed by more than 40 years of experience in designing and manufacturing hospital and surgical equipment (not only cabinets but also surgical lights, complete sterilizing equip-

ment and other hospital equipment).

Scanlan-Morris Recessed Cabinets are made in styles and sizes as required to serve the needs of the various hospital departments. Cabinet bodies are made of heavy-gauge steel, with double-lapped and sweated seams, insuring sturdy, dust-proof construction; frames are electrically-welded flat steel; doors and shelves may be of glass or metal, counters and shelves of stainless steel or other metal, as specified.

Mail the coupon for detailed information or submit your problems with floor plans for layout suggestions, without obligation.



Recessed supply cabinet in septic operating room



Recessed cabinet in maternity department. Upper section open and fitted with adjustable stainless steel shelves for holding mothers' treatment trays.

Ohio Chemical

MANUFACTURERS OF MEDICAL APPARATUS,
GASES AND SUPPLIES FOR THE PROFESSION,
HOSPITALS AND RESEARCH LABORATORIES



THE OHIO CHEMICAL & MFG. CO.

1400 East Washington Ave., Madison 3, Wisconsin

Represented in Canada by Oxygen Company of Canada, Limited, and Internationally by Airco Export Corporation, 33 West 42nd Street, New York

BRANCH OFFICES IN PRINCIPAL CITIES

THE OHIO CHEMICAL & MFG. CO.

1400 E. Washington Ave., Madison 3, Wis.

Send information on ☐ Scanlan-Morris Recessed Cabinets
(Please attach professional card or letterhead)

Name

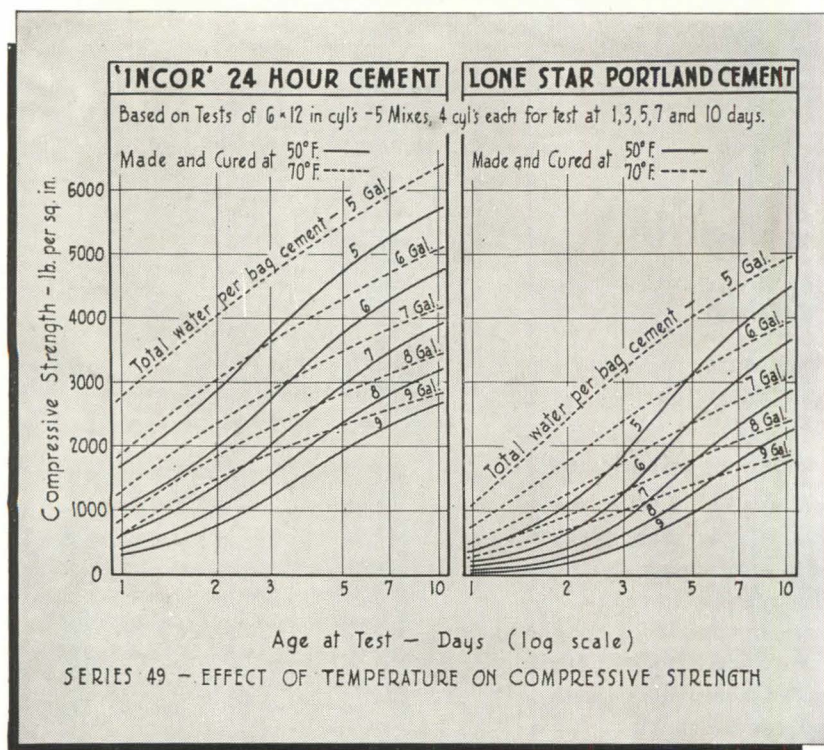
Address

City State PA

WEATHER FORECAST
Mild and Sunny Today, Turning
Cool Tonight—Frost Expected

IT WON'T BE LONG NOW!

GET SET FOR SUDDEN TEMPERATURE DROPS



USUALLY there's more risk of frost-bitten concrete in the Fall than in the dead of winter. Because, when it gets really cold, the tarps and salamanders are on the job. But in Fall it is apt to be 60° or 65° at noon and 32° or lower by midnight. Daily temperatures, averaging around 50°, retard hardening, slow down the job, and if a sudden freeze does set in, unprotected concrete may suffer.

That's why it pays and pays well to use 'Incor' 24-Hour Cement. At 50°, a common Fall condition, 'Incor' concrete attains stripping strength and is safe from freezing 2 or 3 days sooner than ordinary concrete. By using 'Incor' you maintain construction schedules, prevent job slowdown, and safeguard against frost hazard.

As temperatures go down, 'Incor' savings go up. Even in dead of winter, 'Incor' concrete with ONLY ONE DAY heat-curing at 70 degrees, is service-strong, safe from freezing. 'Incor'* cuts heat-protection expense in half—and at present fuel and labor costs, that means real money! Write for timely booklet on Cold Weather Concreting Economies—address Lone Star Cement Corporation, 342 Madison Ave., New York 17.

*Reg. U. S. Pat. Off.



LONE STAR CEMENTS MEET EVERY CONSTRUCTION NEED

LONE STAR CEMENT CORPORATION

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

LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS: 15 MODERN MILLS, 25,500,000 BARRELS ANNUAL CAPACITY

In this study of residential architecture, the fourth in our series of Critiques of particular building types, the editors themselves served as the jury to select the work for presentation, to study the drawings and photographs, question whatever was uncertain, and challenge whatever seemed a compromise. In addition to sending these proddings to the designers for their rebuttal, we also turned for information and comment to the highest court of all—the owners themselves. We asked them how the houses worked out as homes, what they particularly liked, and what they might prefer otherwise—their livability, in short. Thus, the discussion with each house is a brew of several ingredients—the architect's initial description, the editors' observations, the architect's rebuttal, and the owners' opinion. Below, we state in simple terms our basis for judging design progress in the residential category. These standards, incidentally, are the same ones we used in choosing the houses for the book, "HOMES—Selected By The Editors of Progressive Architecture," soon to be off the press. The five houses that constitute this Critique are among the nearly 100 that appear in the book.

A CRITIQUE OF 5 HOMES

● CRITERIA FOR JUDGING

PROGRESSIVE RESIDENTIAL ARCHITECTURE

Houses do not lend themselves readily to generalizations against which to measure the success of the design. For in the house, the architecture is provided for a very small unit—the individual family—and, as is well known, people are funny. Once this factor is accepted as the Wild Jack that it is, however, there are certain basic criteria which may be established.

BASIS FOR JUDGING THE PLAN

The plan should provide appropriate spaces for the necessities and pleasures of the family, with these spaces well inter-related and oriented for their several purposes. Whether the plan is "open" or the separate functions are thoroughly partitioned, the degree to which privacy is provided, whether the plan scheme is formal or informal—all these are matters of the particular family's preferences. They are good if the family wants them; bad if they are unwanted or inappropriate to the family's way of living.

MATERIALS AND STRUCTURAL METHODS

The materials should be appropriate to the purpose and economically employed. It doesn't matter whether they are newly developed products or time-honored; all of them constitute the raw materials with which the designer has to work. But we look for the logical, direct use of whatever materials are selected; we shall be critical where they are either falsely or extravagantly employed, and—since we are charting the course of architectural progress—we shall be on the watch for the intelligent use of newer materials that do a job better than could be done with older ones. So, with structural concepts. They must analyze well and be suitable to the use made of them and the place where they occur.

So far as possible, inasmuch as we accept simplicity and unity as valid basic criteria for judging the design of anything, we

look for the integration of structure, materials, and equipment with plan, rather than any one of these pasted or otherwise applied to the others.

FINISHED DESIGN

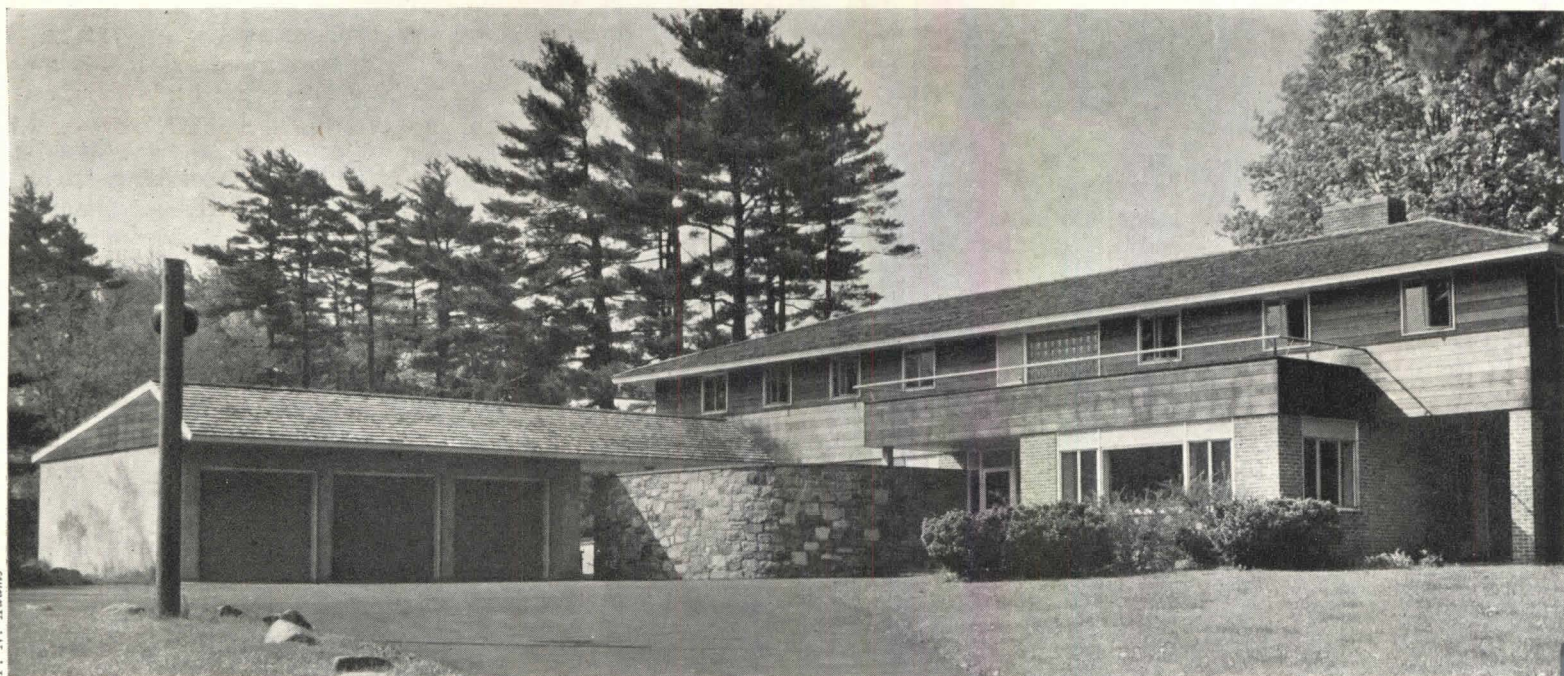
We don't care a hoot whether the final design employs a one-pitch roof, a two-pitch roof, or one that's flat as your hat, so long as it performs its shelter duties well and is an appropriate part of a coordinated design. Window walls or small, separated windows? Either, if they provide good light and the degree of relation to the out-of-doors that the family wants, and if they are elements of a consistent design.

On the esthetic side, the criteria that have always been valid still apply—good scale, good proportions, pleasing relationships, a satisfying sense of materials, contrast and color, and a final design unity. Fortunately, in our constant search for total advance, we are finding more and more work that checks not only on these esthetic bases, but that is also clearly progressive in plan, in use of materials, in structural imaginativeness, integration of all these, and general amenity.

THE FAMILY'S PERSONAL NEEDS

We leave to the last perhaps the major criterion of all in assaying successful, progressive design—the satisfying of the personal needs of the family for whom the house is provided.

We assume that a house that is easier to housekeep and maintain, informal in plan (if this makes the plan work better), and simple and unpretentious in design, is a proper home for persons well adjusted to today's living. We scorn both monuments and those who build themselves monuments to impress others. We look for indications of individual livability rather than conventionality or impressiveness. This seems also the democratic approach wherein citizens are part of something more than their own small worlds, where they have nothing to hide or fear, and where the concept of an integrated one world quite literally can begin at home.



DRIVE APPROACH. Poured concrete basement; furred brick for the first floor; all frame above. Sash: steel. Roofing: cedar shakes.

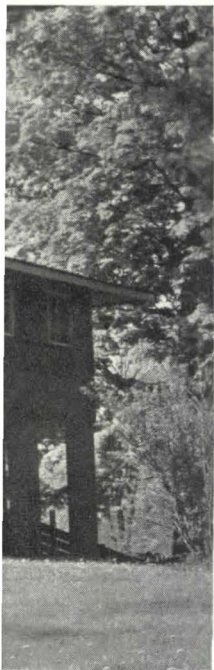
HOUSE IN WELLESLEY, MASSACHUSETTS

ROBERT MONTGOMERY BROWN, Architect

CRITIQUE: *Main points admired:* Unpretentious design approach to the large house; its adaptation to and orientation on a wonderful island site; forthright provision for the needs of a family with five children; excellent circulation throughout. *Main points questioned:* Use of the northeast deck upstairs; the stone wall enclosure of the service yard; whether the big basement space is all useful; and the almost institutional standardization of the children's rooms.



REAR. The redwood clapboards are oiled; trim is white, with soffits of overhangs painted pale blue.

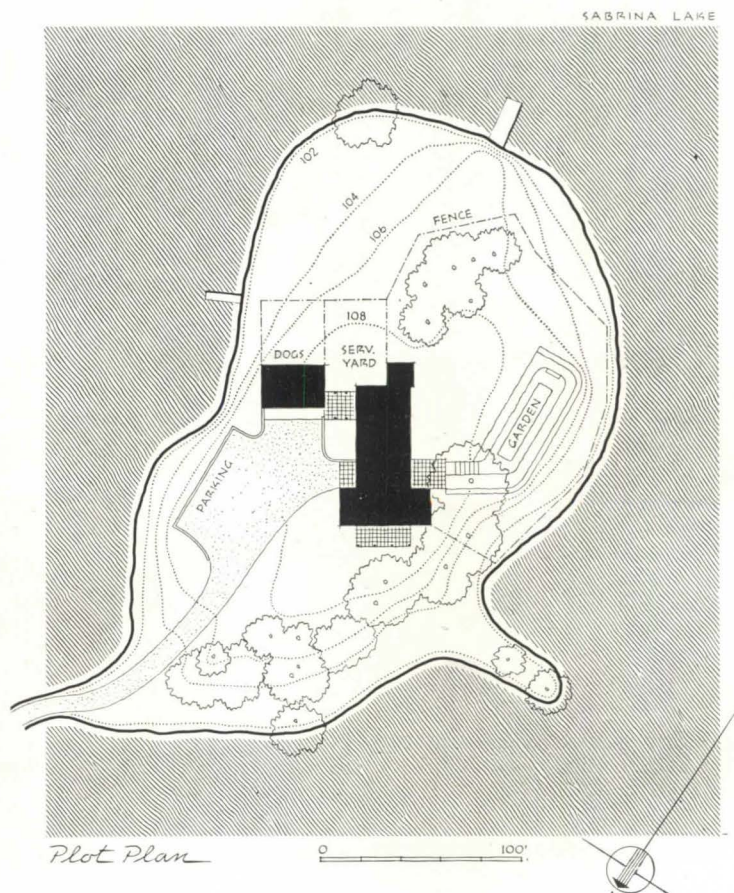


VIEW FROM WEST. The big porch is equally accessible from both adult and children's living rooms.

The design problem involved in this remarkable home of Mr. and Mrs. William Guernsey and their family was, according to the architect, "unusually simple, since they had no design 'fixations.' " Also, since Mrs. Guernsey is the architect's sister, he was well acquainted with the family's living habits and needs.

We had asked about the use of the upstairs deck on the driveway side of the house. The answer: "Its primary purpose is to keep rain out of the children's room beneath and to provide shelter at the front door. It is also a pleasant place to take a morning sun bath or sit in the shade in one's underwear in the afternoon. I have always liked bedroom-level decks for early morning 'weather feeling.' "

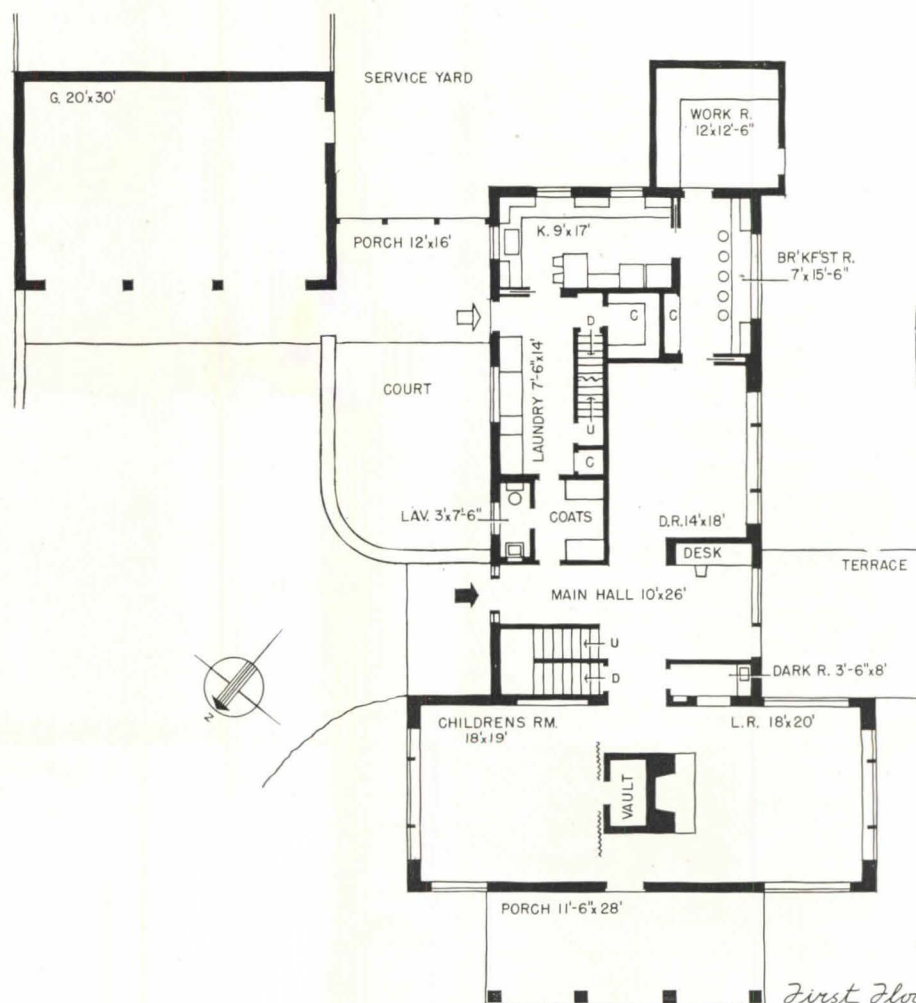
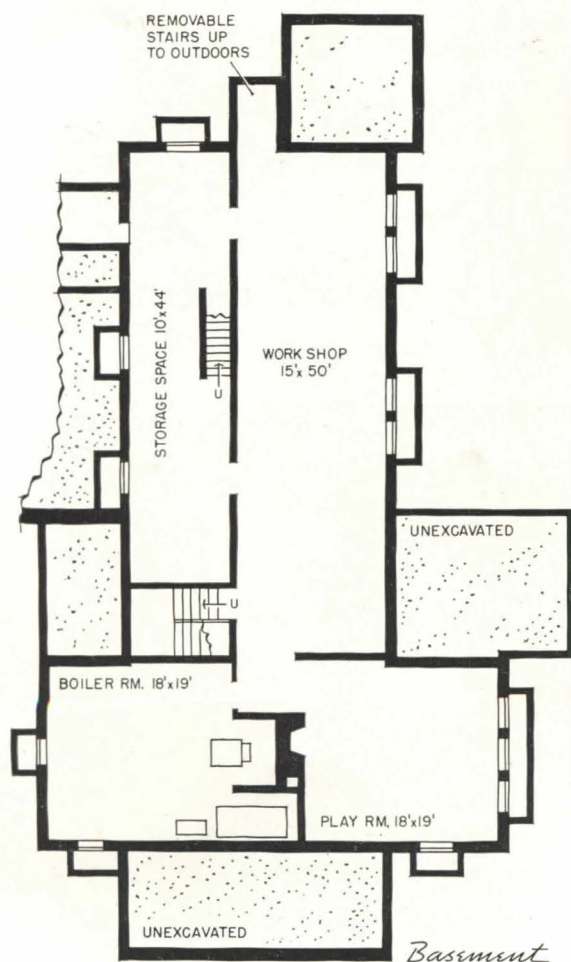
"What about the high masonry wall enclosing the service yard?" we queried. Someone thought it seemed a little heavy and questioned the use of stone, since this material is not used elsewhere. Direct questions received direct answers: "I feel it tends to reduce the apparent height of the house and render it lighter in effect . . . The stone has a much more pleasing color range than the photo indicates . . . It is an effective separation of service sights and sounds from the main approach . . . We all like it very much."





PLANS. The rows of stand-
ard bedrooms, the divided
main living room, the break-
fast room with stools at a
counter, the all-wood wall
finishes throughout (to be
nicked and bruised during
growing-up period, later to
be sanded and maybe
painted) are all answers to
the basic requirements.

ADULT LIVING ROOM



HOUSE IN WELLESLEY, MASSACHUSETTS

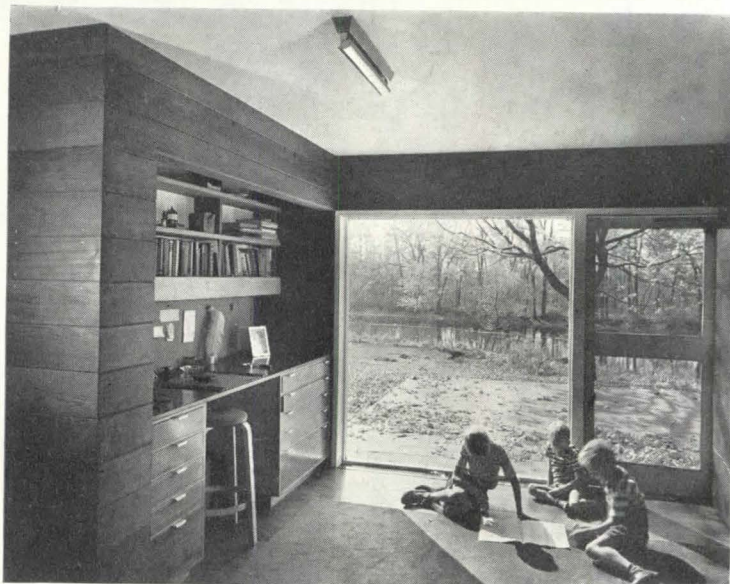
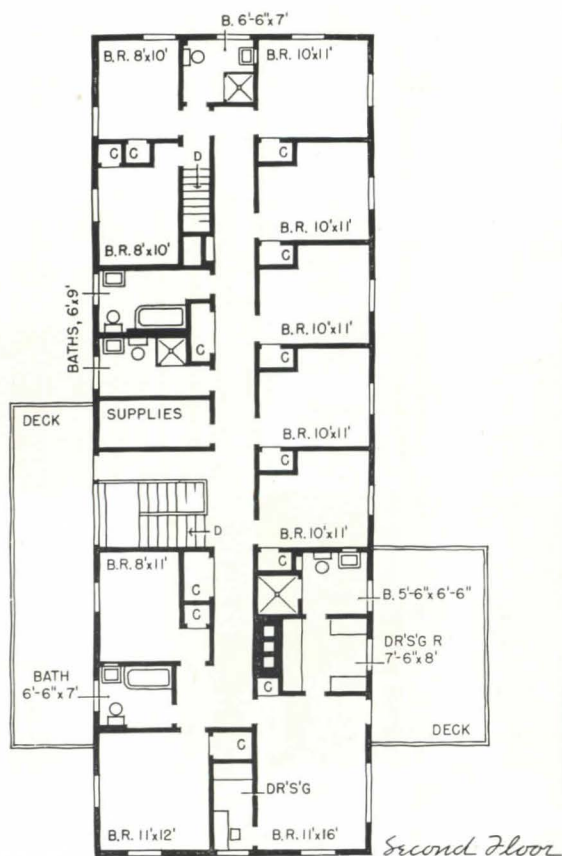
ROBERT MONTGOMERY BROWN

Architect

The only definite plan requirements were: separate bedrooms for three existing and two proposed children; separate living rooms for the children; and low maintenance.

As to the big basement space, the architect stilled our questioning: "It will all be used just as shown on plan . . . Incidentally, I am a great believer in basements. The space always ends up being used for something, and in ordinary soil conditions it is the cheapest space in the building and requires virtually no maintenance."

The standardization of the children's rooms was "a basic idea before any planning was done." The idea is somewhere between simple efficiency and enlightened military discipline: "It eliminates a whole raft of frictions over who has the best room, etc., etc."



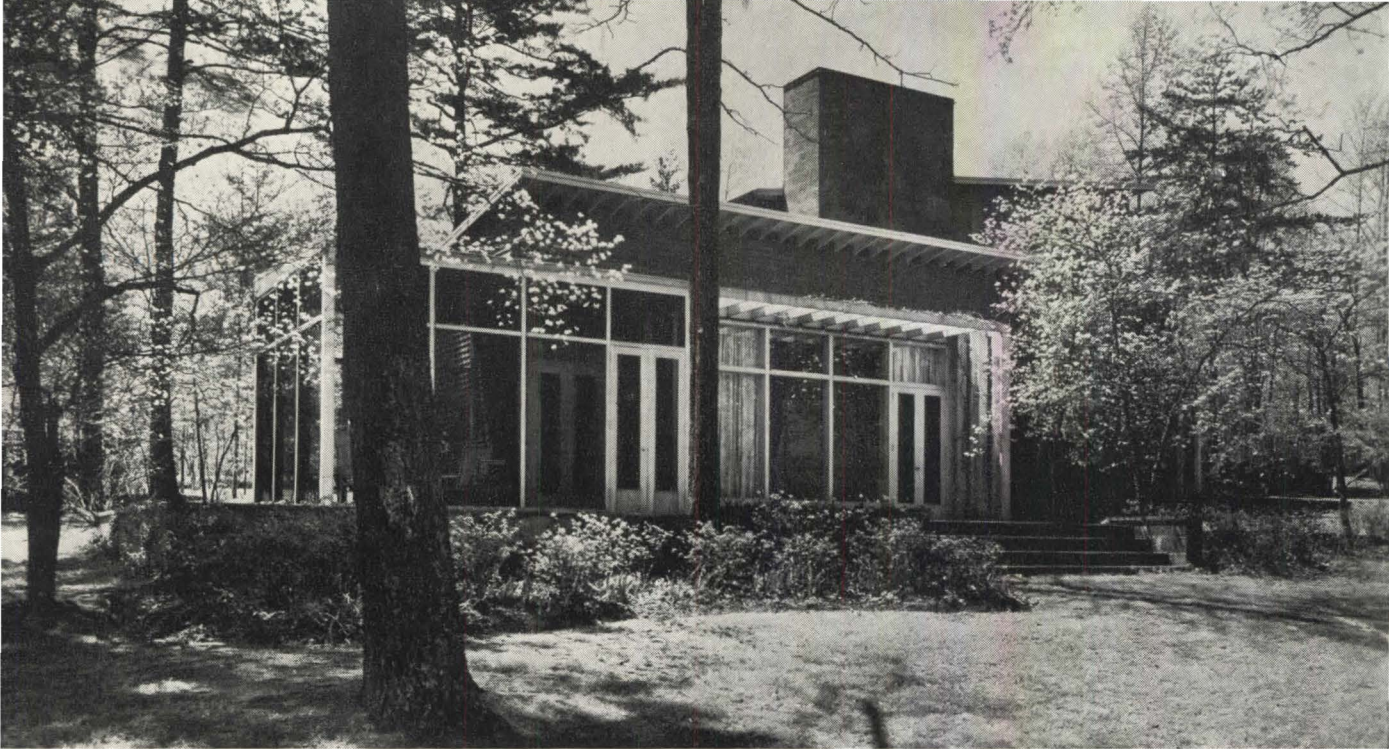
FRONT HALL. "Nerve Center" (keys, gloves, bills, etc.) at left.



DINING ROOM. All furniture except chairs designed by the architect.



CHILDREN'S LIVING ROOM. Note plain redwood finishes in all rooms.



F. S. Lincoln photos

NORTH. The house is of frame, built on a concrete slab; exterior finish is gray-stained cypress with white trim.

HOUSE IN GREENSBORO, NORTH CAROLINA

CRITIQUE: *Main points admired:* General plan organization; entrance hall serving all areas of house independently; undercover passage from storage room and garage to kitchen door; the apart, upstairs study-bedroom (the owner is a college professor); flexibility of children's bedrooms, with sliding partition between. *Main points questioned:* Orientation (service rooms, bedrooms facing west); change in level on ground floor; distance involved in party serving from kitchen to living room; guest bedroom above kitchen and opening into two bathrooms.

WEST. Covered passage to kitchen door at right.



FIREPLACE. "We like the arrangement extremely," says Mrs. Friedlaender.

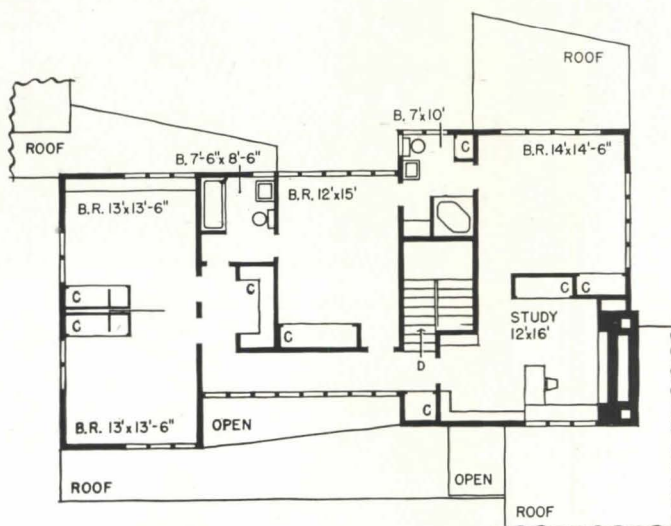
JACK P. COBLE, Architect

This is the home of Prof. Marc Friedlaender, his musician wife, and their two small boys.

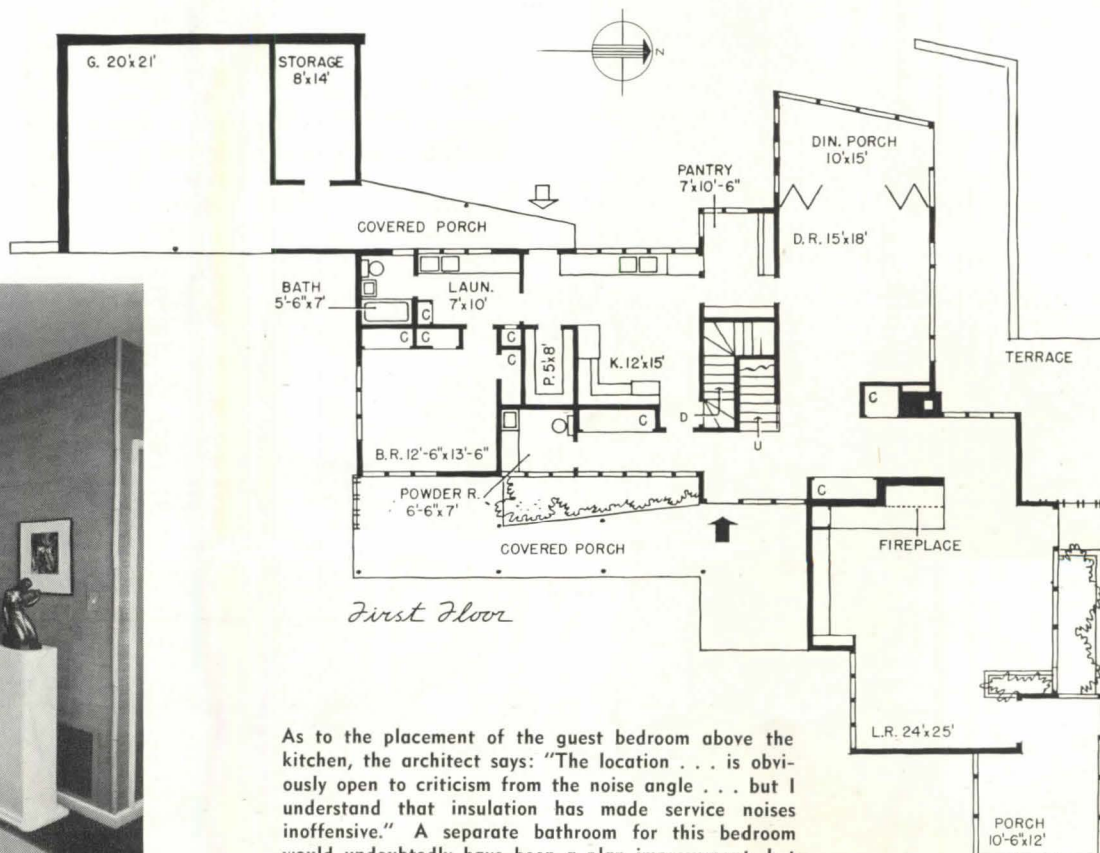
In discussing the main questioned points with both the architect and the owners, it appears that all were agreed about the placement of the house on the site; there is a delightful view of a lake to the north; hence the living room with its porch on this side. The western exposure of kitchen and bedrooms does, Mrs. Friedlaender reports, submit them to late afternoon sun and glare, but Mr. Coble points out that the prevailing breeze is from the west, and, because the house is in the woods, the western sunlight is considerably filtered. The separate levels for dining and living rooms accomplishes seclusion for the latter which is desirable for the privacy of musicales, but the stairs do make it a bit risky toting food for living room entertaining.



DRIVEWAY ENTRANCE



Second Floor

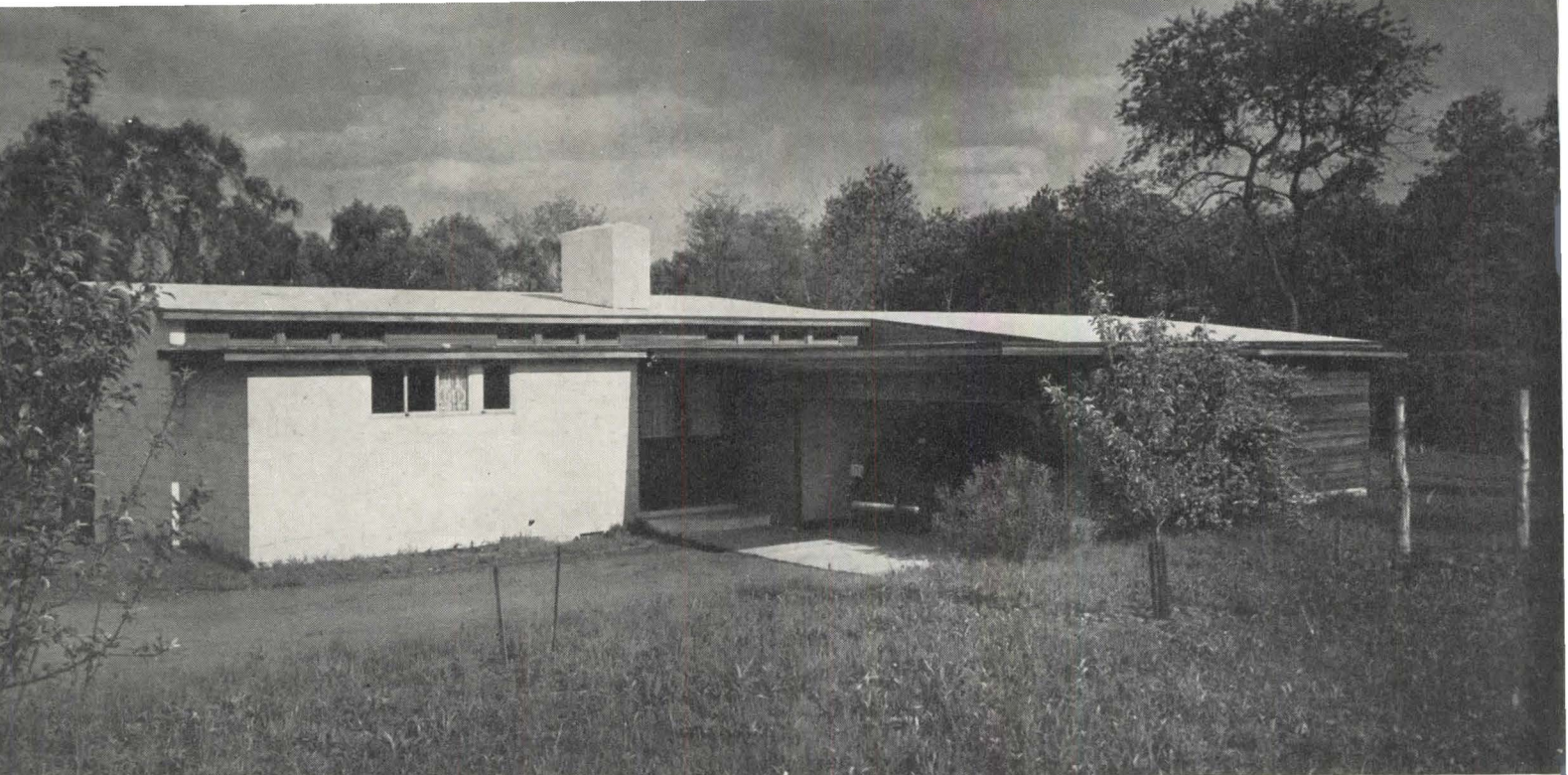


First Floor

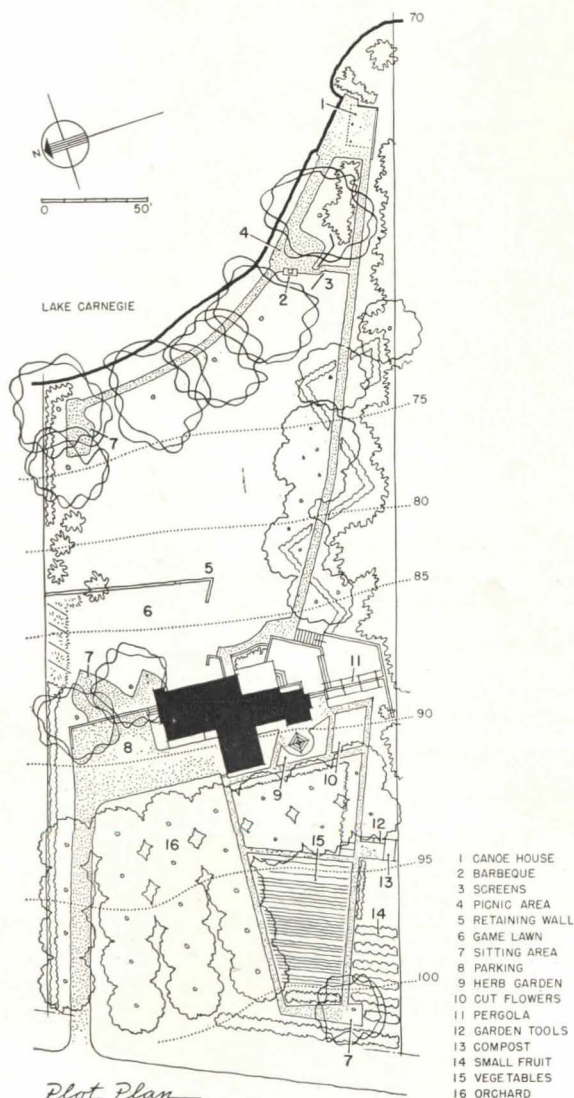


HALL TO DINING: Walls, green grasscloth.

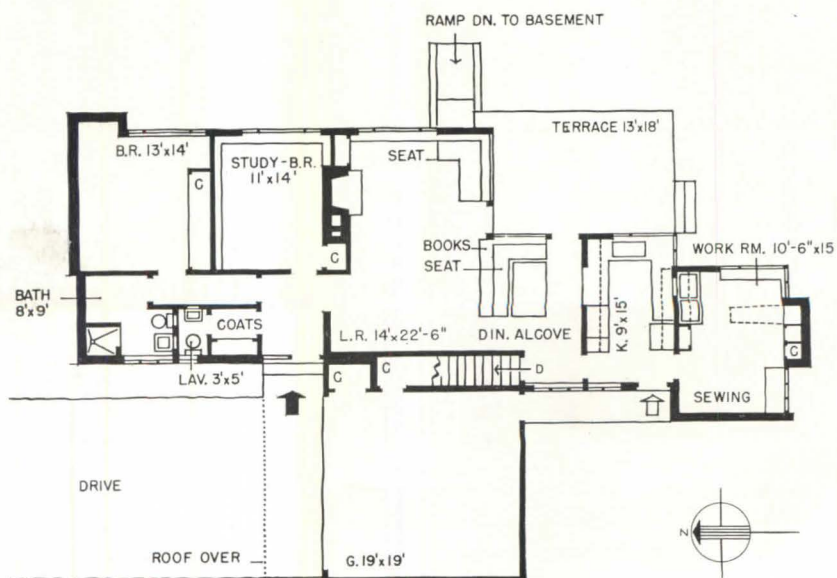
As to the placement of the guest bedroom above the kitchen, the architect says: "The location . . . is obviously open to criticism from the noise angle . . . but I understand that insulation has made service noises inoffensive." A separate bathroom for this bedroom would undoubtedly have been a plan improvement, but since the budget was exceeded in any case, "there was, of course, a stopping point."



APPROACH. In his landscape plan, Mr. Kiley has provided a cool orchard through which the drive will pass.



CRITIQUE: *Main points admired:* The floor plan as a whole; the sensible placement of main entrance alongside garage entrance; the good separation between sleeping and living quarters, but both directly accessible from the hall; the cross light and ventilation gained by the clerestory band. *Main points questioned:* The rather large space at the west end of the living room, well placed for its corridor use, but a bit difficult to use otherwise; what struck some as a rather arbitrary use of wall materials, such as the projecting masonry at the northeast corner and on the west end; a certain barren appearance, which was recognized as chiefly due to the fact that the house was photographed before the landscaping was in place (a point amply supported by the landscape plan indicated at left).



P. A. Dearborn photos



SOUTH. The corner porch, accessible from both living and dining spaces, may be screened for summer use.

HOUSE IN PRINCETON, NEW JERSEY

KENNETH KASSLER, ARCHITECT

DANIEL URBAN KILEY, Landscape Planner

The Walker Bleakneys have lived in a number of homes in the past 15 years and when they came to build this one, on a site above Lake Carnegie, they report, "We felt pretty confident of what we really wanted. Living in this house has confirmed those ideas." Their particular pleasures are having all the main living quarters on one level and the arrangement of the kitchen-dining-workroom.

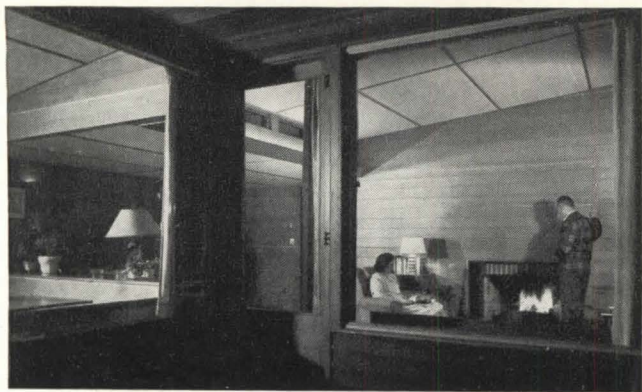
The western utility-hobby room takes care not only of the laundry, but their chief hobbies—sewing, plant care, writing, and radio work. They also like the many windows provided to welcome the lake view, while the house offers privacy toward the west. Taking advantage of the site slope, the architect has included a basement playroom, with outside door, to serve swimming or skating parties directly.

Regarding the use of materials—combined cinder block and standard frame—in which the editors felt a certain degree of arbitrariness, Mr. Kassler grants that this may be so, considered from the structural standpoint, but in this case, the use was based "entirely on a design consideration."



SOUTHEAST. Eventually, terraces at this corner will receive you, turn you around, and start you down again.

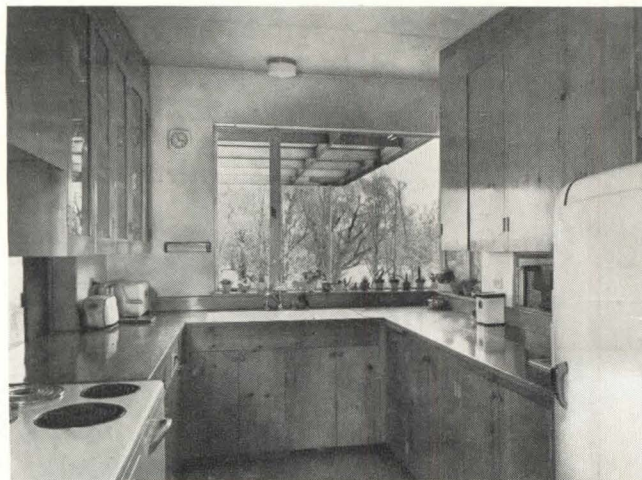
HOUSE IN PRINCETON, NEW JERSEY



LOOKING IN from the corner terrace.



DINING SPACE, across counter to living room.



KITCHEN

KENNETH KASSLER, Architect

Inside, the house is openly planned, as the owners do most of their own housework and there are no children. Easily maintained, waxed fir boards and battens constitute the wall surfaces throughout. Concerning the rather sizable area at the west end of the living room which serves as a corridor, Mr. Kassler says: "The space is also used for a chair group and incidental furniture. It is not the best possible solution."

Roger Sturtevant photos

THE HOUSE, perched on a shale cliff

HOUSE

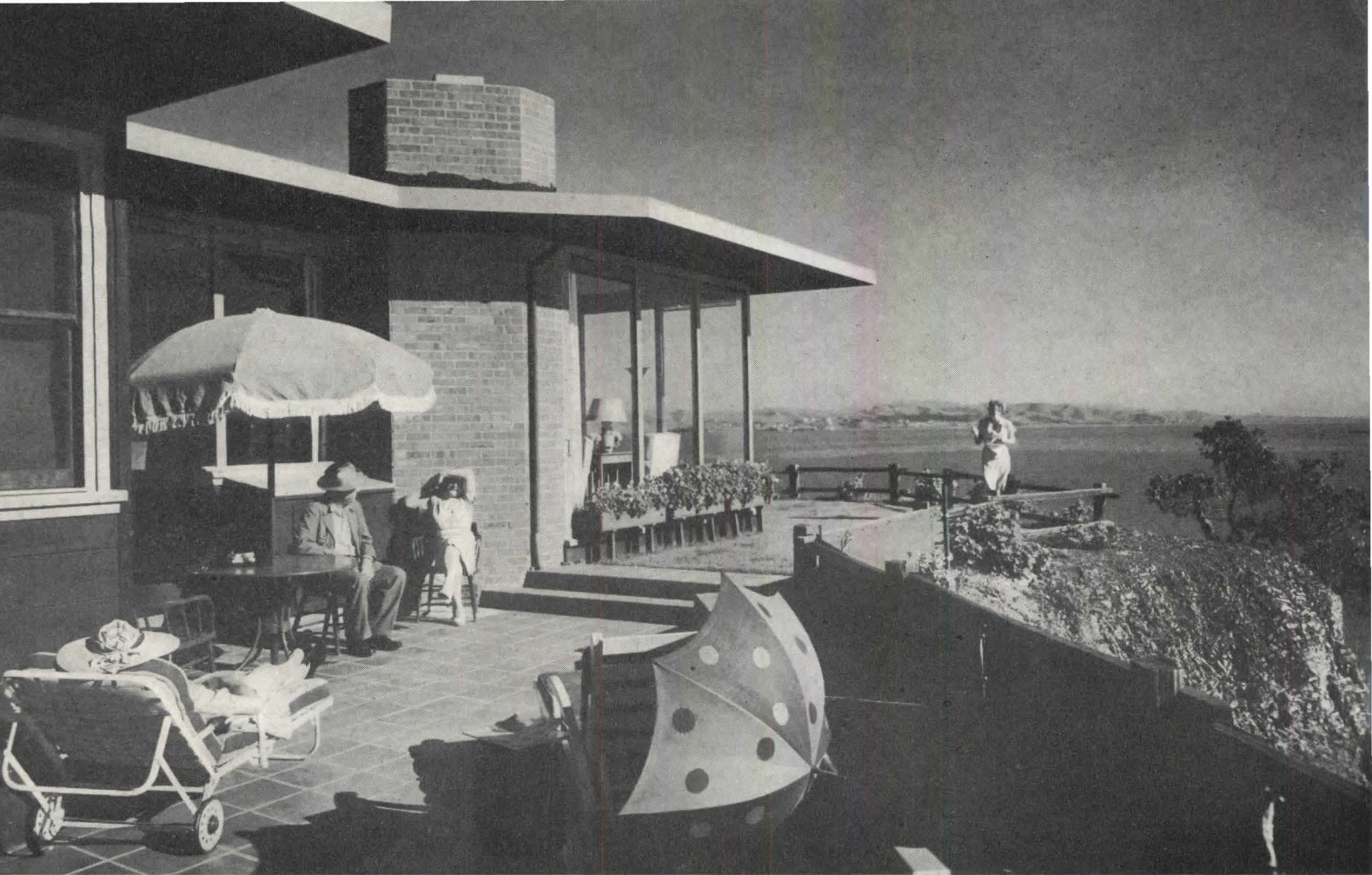


60 feet above the water, overlooks a vast east-to-west panorama of the Bay.

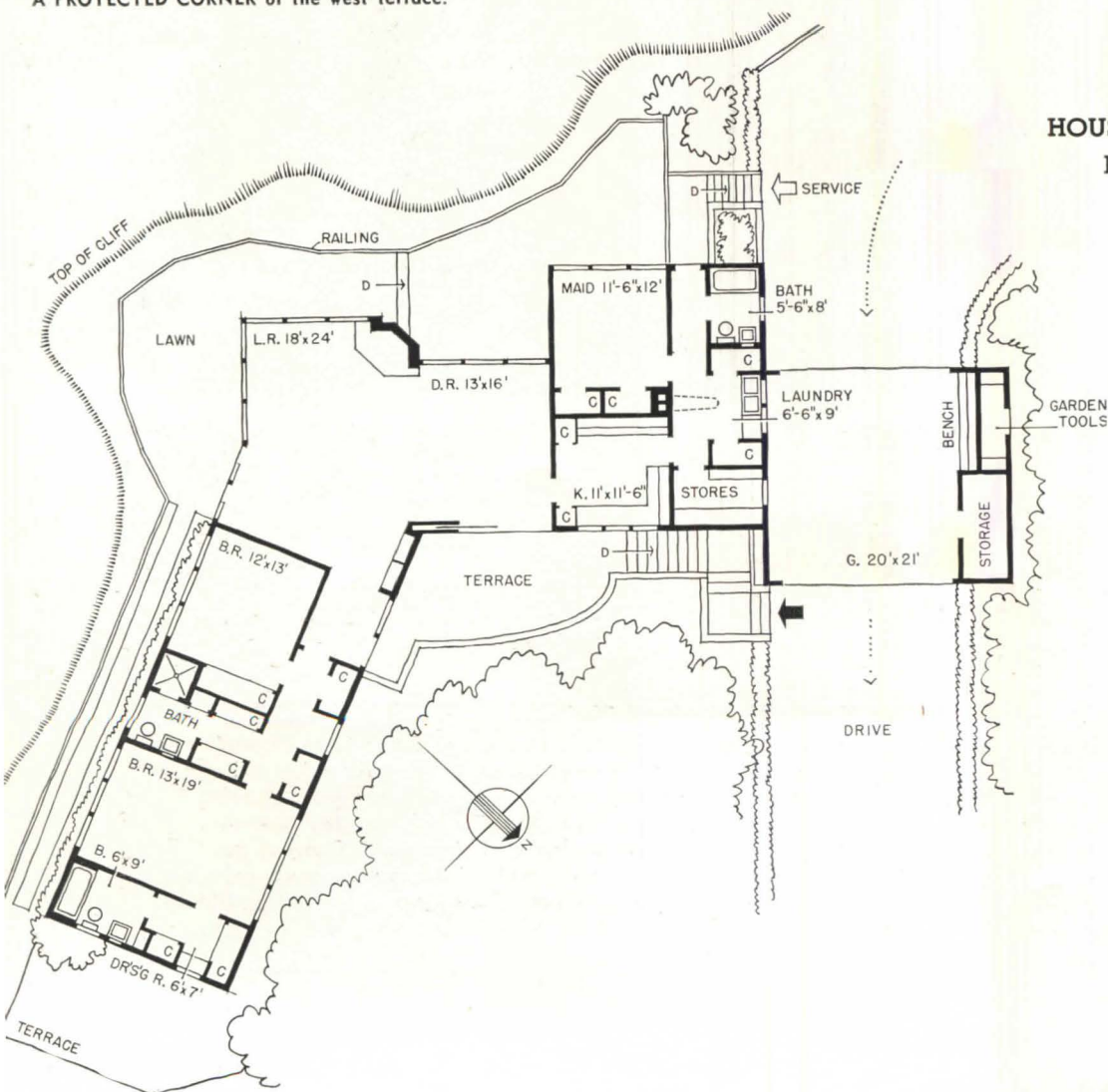
ON SAN FRANCISCO BAY, MARIN COUNTY, CALIFORNIA

CLARENCE W. W. MAYHEW
Architect

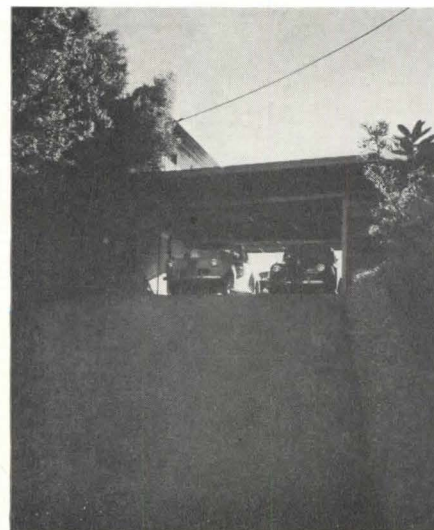
CRITIQUE: *Main points admired:* Extraordinary adaptation in plan and design to an extraordinarily scenic site; making a veritable show window of the house at the corner where the widespread view is at its most dramatic; in plan (see next page): ingenious use of a drive-through garage spanning the entrance driveway; good separation of main functions, so that bedrooms and main living rooms may be entered independently from the entry hall. *Main points questioned:* Apparent difficulty of access to the sitting terraces and outdoor viewing lawns; the problem of what happens when guests arrive and find both doors of the garage "porte-cochere" shut; the extremely odd shape of the combined living-dining room.



A PROTECTED CORNER of the west terrace.



HOUSE ON SAN FRANCISCO BAY MARIN COUNTY, CALIFORNIA



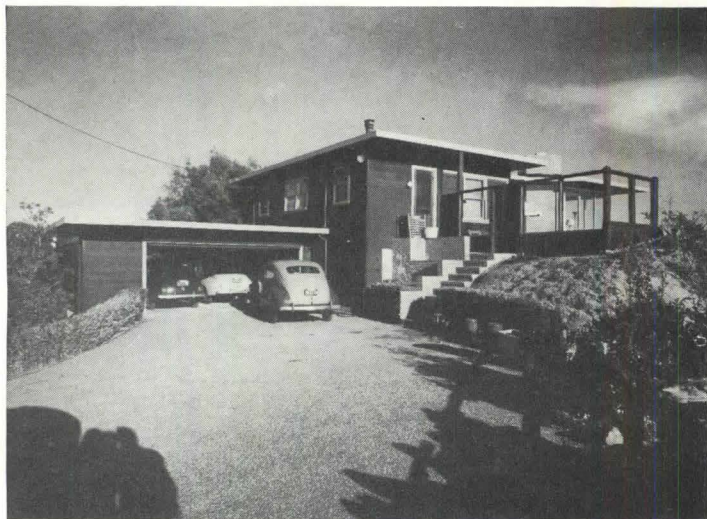
DRIVE-through garage "porte-cochere."



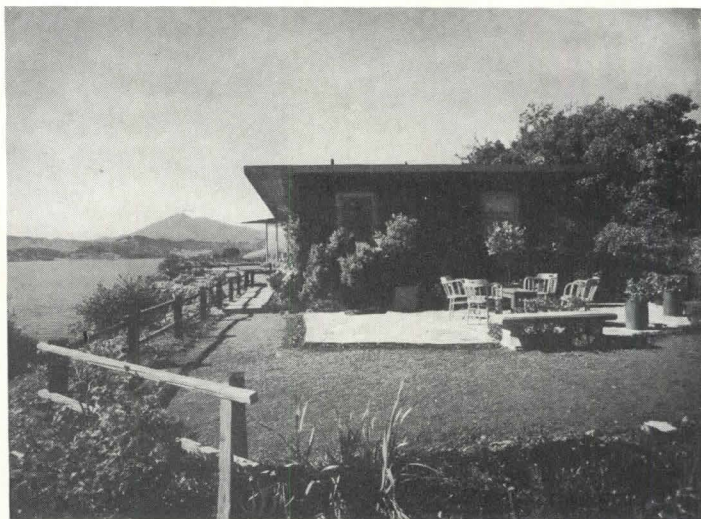
DINING-LIVING ROOM. Toward the view—and the winds—everything is sealed tight.

CLARENCE W. W. MAYHEW
Architect

Access to the terraces is indeed roundabout; but it is nobody's mistake that there are no sliding or hinged doors out from the big glass areas toward the Bay. And neither Mr. and Mrs. Fred Shingle who own the house or Mr. Mayhew would change this. For it is the architect's experience that for any site facing the frequently terrific winds off the Bay, there is simply no method of weatherproofing except to seal everything tight. Mrs. Shingle says: "We have experienced no inconvenience in going through the kitchen or around the house to reach the patio and lawn." As to what happens when guests find garage doors at both ends of the "portecochere" closed, it can be confusing, but Mr. Mayhew claims that "if you are a good driver, you can turn around!"

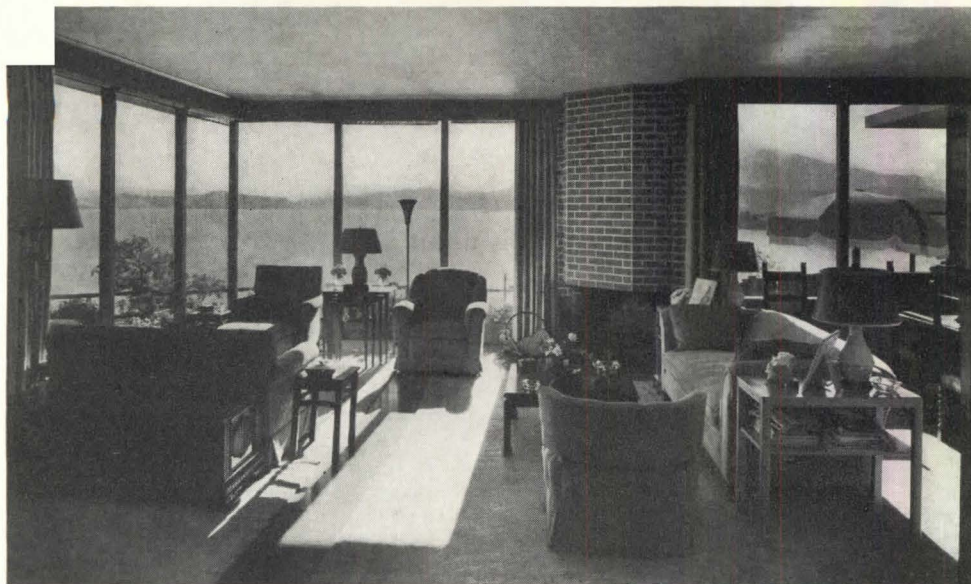


KITCHEN-DOOR SIDE. The glass screen windshields the terrace.



A TERRACE at the bedroom wing is usually out of the wind.

HOUSE ON SAN FRANCISCO BAY, MARIN COUNTY, CALIFORNIA



THE LIVING ROOM commands the view from the east-bay shoreline (left) to the islands to the south, and so on around to Marin County's Mount Tamalpais.

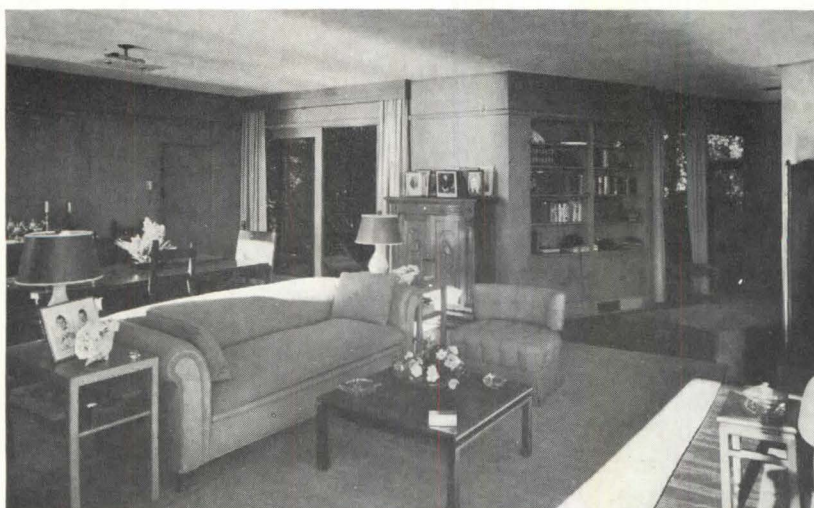
CLARENCE W. W. MAYHEW, Architect

The odd shape of the living-dining room results directly from bending the house plan to fit the bluff-top site and to obtain the full arc of the marvelous view. The break back, at the fireplace corner, defines the dining space inside the house and provides a relatively sheltered corner for outdoor sitting, although the architect feels it might have been just as well to have continued the wall line without this setback, thus avoiding one complication of an already complicated shape.



EVEN WITH A DEEP ROOF OVERHANG, the problem of glare from the water is aggravating at times. A partial expedient is the use of woven reed roller blinds which, when lowered, soften the glare without making the room gloomy.

TOWARD THE NORTH, the house opens out to a cool wooded hillside, so that it is usually possible to choose between sun and shade, wind protection, or full exposure for outdoor sitting.





Sonya Noskowiak photos

QUONSET CABIN, FALLEN LEAF LAKE, CALIFORNIA

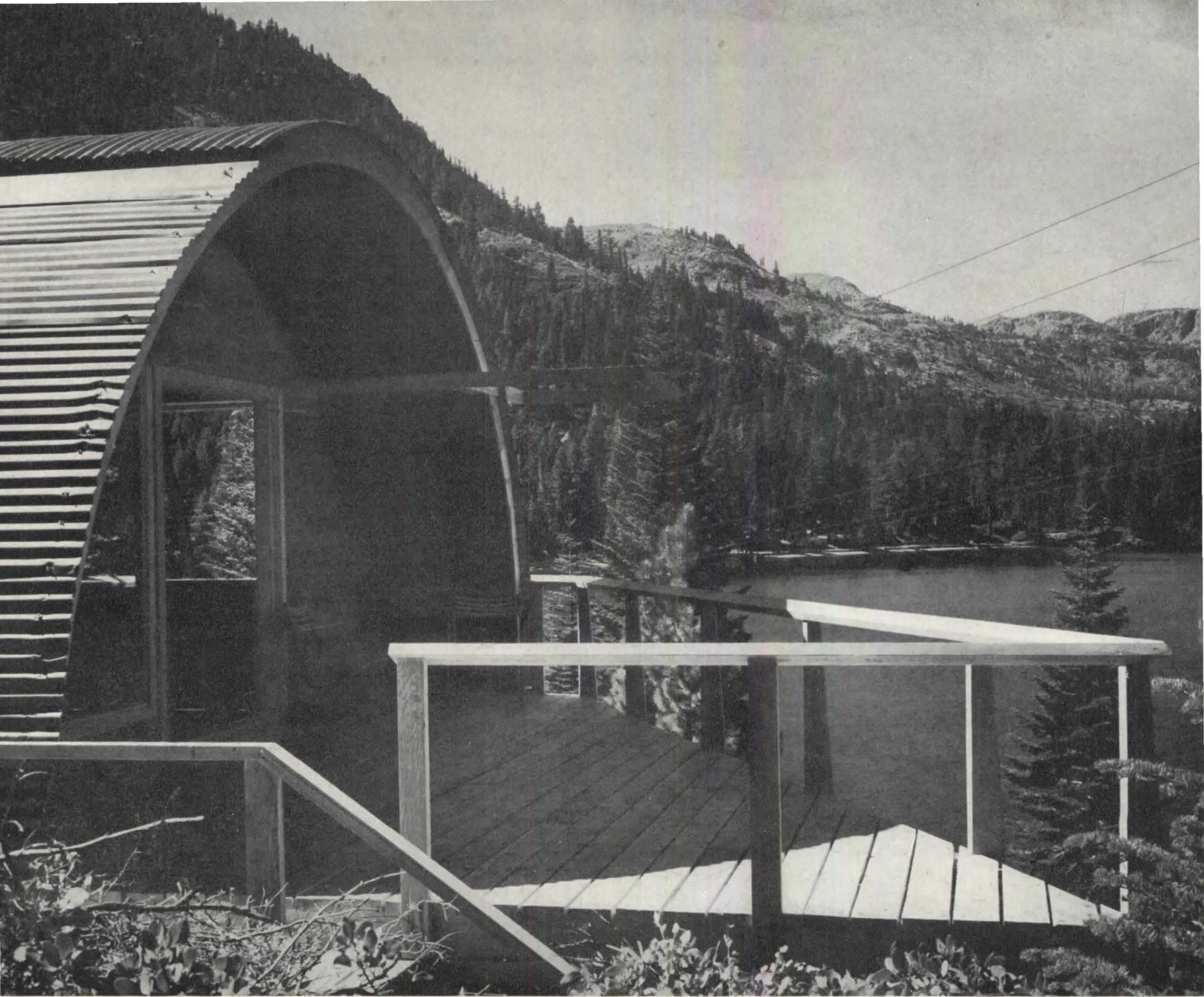
JOHN CARDEN CAMPBELL

Designer

& WORLEY K. WONG

Architect

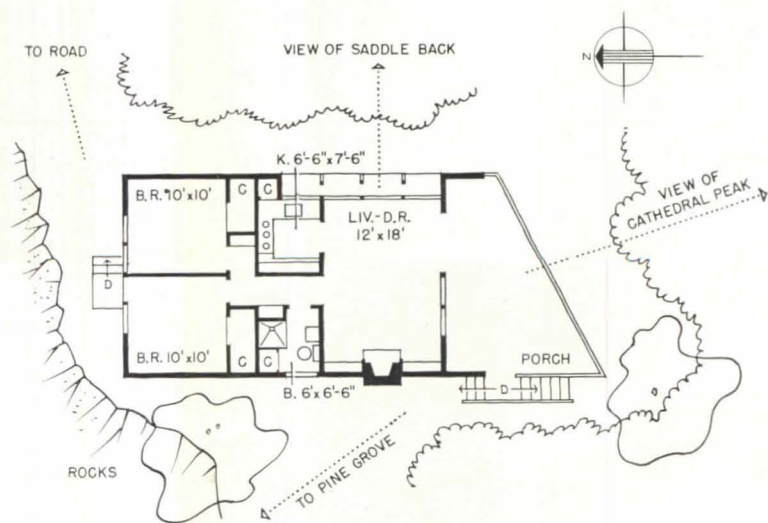
CRITIQUE: *Main points admired:* The imagination that found in the serviceable Quonset a new architectural potential (for more complete discussion, see article on p. 00); that, while enhancing the basic element in both plan and design, still respected the fundamental Quonset form rather than disguising it or attempting to make it look like something more conventional; the rationale of the Quonset itself which makes it almost impossible to point to something and say, "Here is a wall," and to something else and say, "Here is a roof"—a shelter, simply, and one that has stood the fire of the most severe tests in all sorts of climates; the straightforward and workable plan which the designers worked out within the defined space (see next page); ingenious details that capitalize on things inherent in the Quonset. *Main points questioned:* The fact that dropping the vertical wall within the curve necessarily cuts down on floor space, and the question whether this treatment is invariably to be preferred to allowing new construction to project out beyond the curve; the odd, almost pie-shaped porch; bringing the steps up to the porch way around at the back corner, which seems indirect and also partially cancels out this rear corner as a secluded sitting area.



COMING UP the stair to the porch, the visitor has the whole drama of the view burst upon him as he reaches the top of the steps.



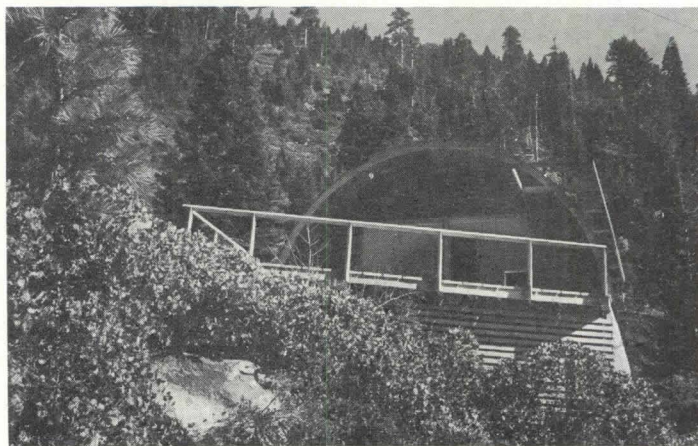
THE QUONSET SHAPE has been likened to a giant fallen tree.



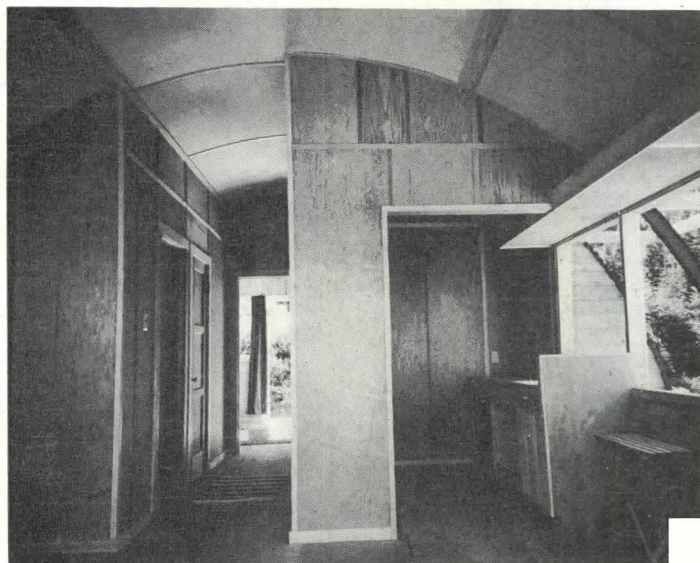
QUONSET CABIN
FALLEN LEAF LAKE, CALIFORNIA

JOHN CARDEN CAMPBELL, Designer
 & WORLEY K. WONG, Architect

The designers feel very strongly about the undesirability of allowing anything like dormers with orthodox roofs, or other things unrelated in form or structure to project from and compete with the basic, *continuous curved form* of the Quonset. Hence the dropped vertical wall within the curve. As for the projecting trellis above these windows: "Cutting the curved Quonset form with a plane in the medium of an eave or trellis is a subordinate entity and does not overpower the structure as dormers do." If more space is needed within the house, "add another rib and keep within the simple medium." The odd-shaped porch is explained by the fact that this angle parallels the access road beneath the house; had the porch been rectangular, it would have been both too near and too high off the road.

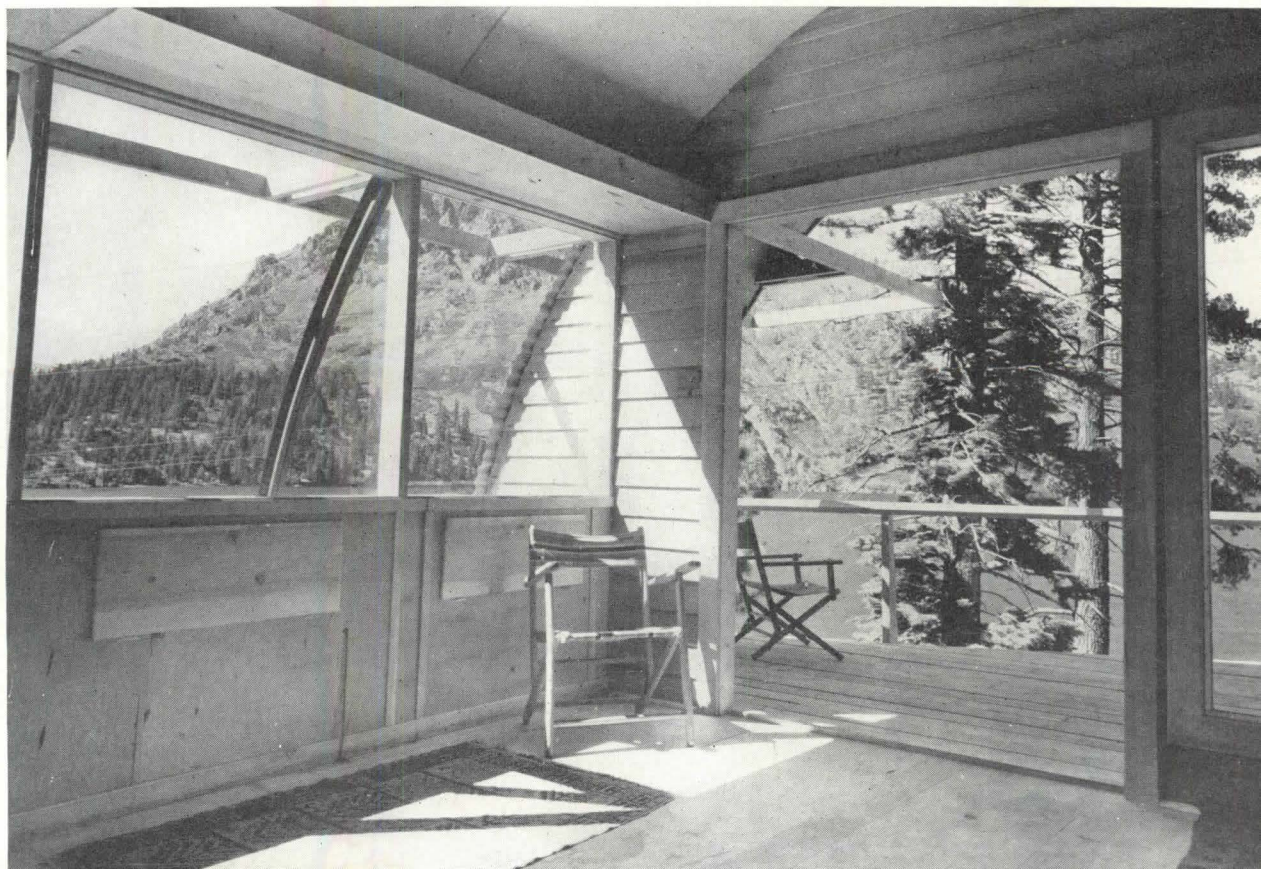


RECESSING the end wall produces a shadow-casting eave line.

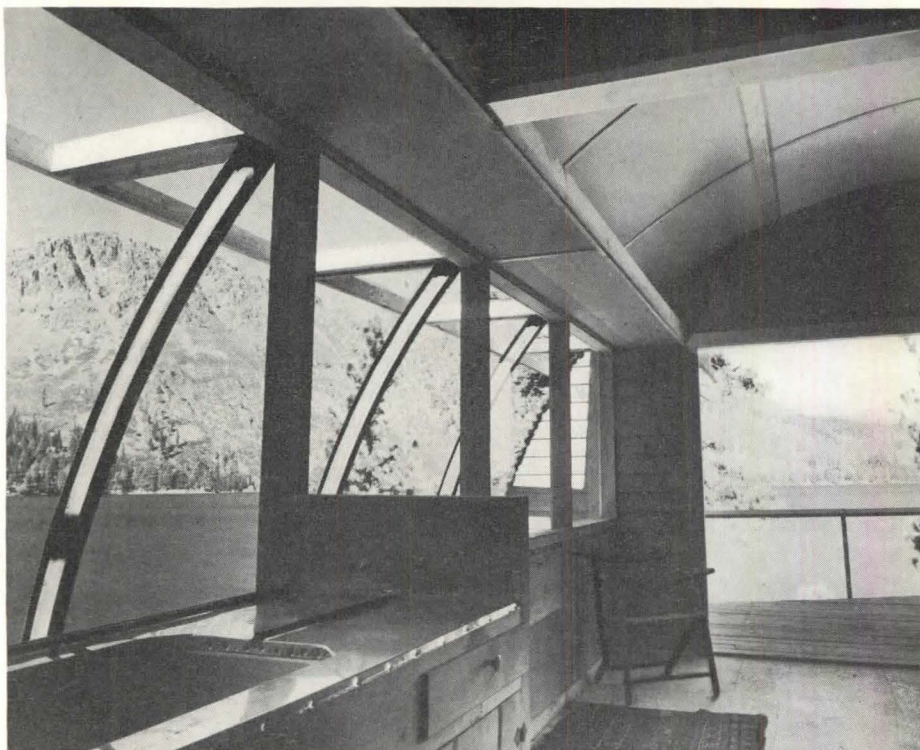


THREE WALLS of every room are vertical.

THE END WALL is mostly glass. Note the light trough above the windows that, in combination with the Quonset curve, forms an excellent lighting fixture. Above work counters, as in the kitchen, down light pierces the trough. The exterior ribs will eventually support vines.



QUONSET CABIN, FALLEN LEAF LAKE, CALIFORNIA

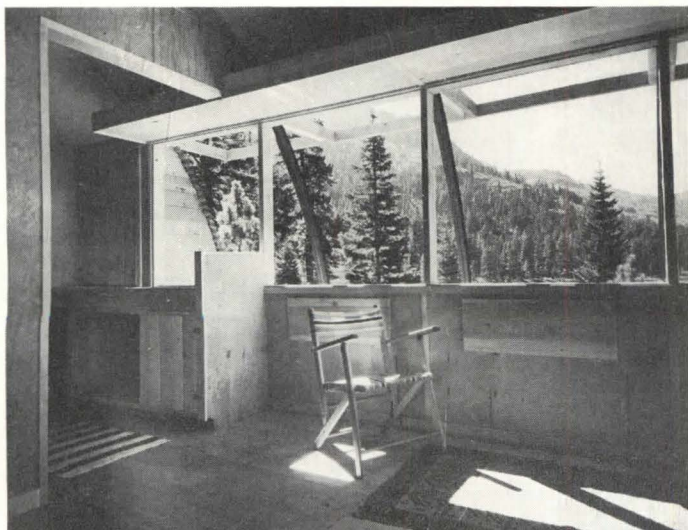


INTERIOR WALLS are surfaced with plywood.

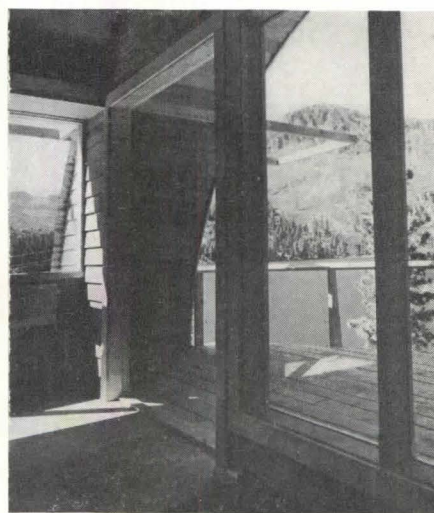
JOHN CARDEN CAMPBELL, Designer, & WORLEY K. WONG, Architect

How do the owners, Dr. and Mrs. Morris Felton of San Francisco, feel about the house? "At first," they tell us, "we were afraid that its strange form would not fit in with the surroundings . . . but we were very agreeably surprised that the cabin, painted green outside, with the wooden portions stained brown, fits in wonderfully—not only in our opinion, but also in that of our neighbors . . . It is just what we wanted for our vacation home."

The owners mention "the feeling of enormous space" within the 10-foot-high arch.



KITCHEN at left. Ventilating louvers occur under the windows.



THE CURVES AND PLANES of the house provide an ever-changing series of frames for the splendid views of mountains and lake.



GENERAL VIEW: south wing, foreground.



ENTRANCE HALL: on left, inquiry counter.



MAIN STAIRCASE



STUDIO CORRIDOR: wood-surfaced walls.



ARTISTS' LOUNGE: looking toward corridor.



ARTISTS' LOUNGE: studio corridor, right.



CONCERT HALL for orchestral broadcasts.

RADIOHUS, OSLO, NORWAY

NILS HOLTER, Architect

In the design of the studios in this Norwegian radio center, materials have been so chosen, organized, and applied that the rooms achieve a genuine architectural quality. Of all rooms, however, broadcasting studios can least afford to be judged on the basis of pure design. But when in addition to constituting convincing architecture, they also produce excellent sound conditions for broadcasting—for which we take the word of our correspondent—then a noteworthy contribution has been made to the field of progressive design.

The home of the Norwegian State Broadcasting Corporation, this great building, the winner of an architectural design competition, was only partly finished when the Nazis took it over in 1940. At Norwegian expense, the Germans pushed construction to the point where they could use the technical facilities. Since, many of the refinements of the original design have been included. In this presentation, we focus on the ground floor of the South Wing, where all of the studios are located. Offices, workshops, laboratories, etc., occupy the remainder of the building.

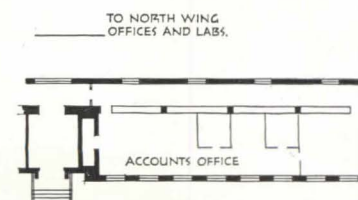


DRAMA. For underfoot noises: 4 types of floors; concrete, carpet, and wood stairs; crushed rock, etc., in bins under floor panels (left).

RADIOHUS, OSLO, NORWAY

NILS HOLTER, Architect

The studios and accommodations for the performers and guest artists occupy the entire ground floor of the South Wing. Except for the large concert hall, designed to seat 200, all of the studios are grouped in a single block, with control rooms so centralized that one of them oversees four studios at once. Double, sometimes triple walls occur between adjoining studios, and each room, constructed on its own concrete foundation, "floats" on rubber cushioning. The great concert hall is in a wing of its own, and the roof is a continuous curve from high above the stage down almost to ground level at the rear of the auditorium. Walls are of concrete, and the roof surface is copper. Each studio has its own special shape, and broken wall and ceiling lines have been developed in a variety of sound-conditioning materials. Doors to the corridor are placed at an oblique angle, and exactly parallel planes are avoided wherever possible to kill reverberations before they are born. The accompanying photographs clearly show some of the more interesting studio treatments. Lounges and waiting rooms for musicians and other performers are located just across a corridor from the studio block; outside window walls provide a pleasing outlook over the open, landscaped site.

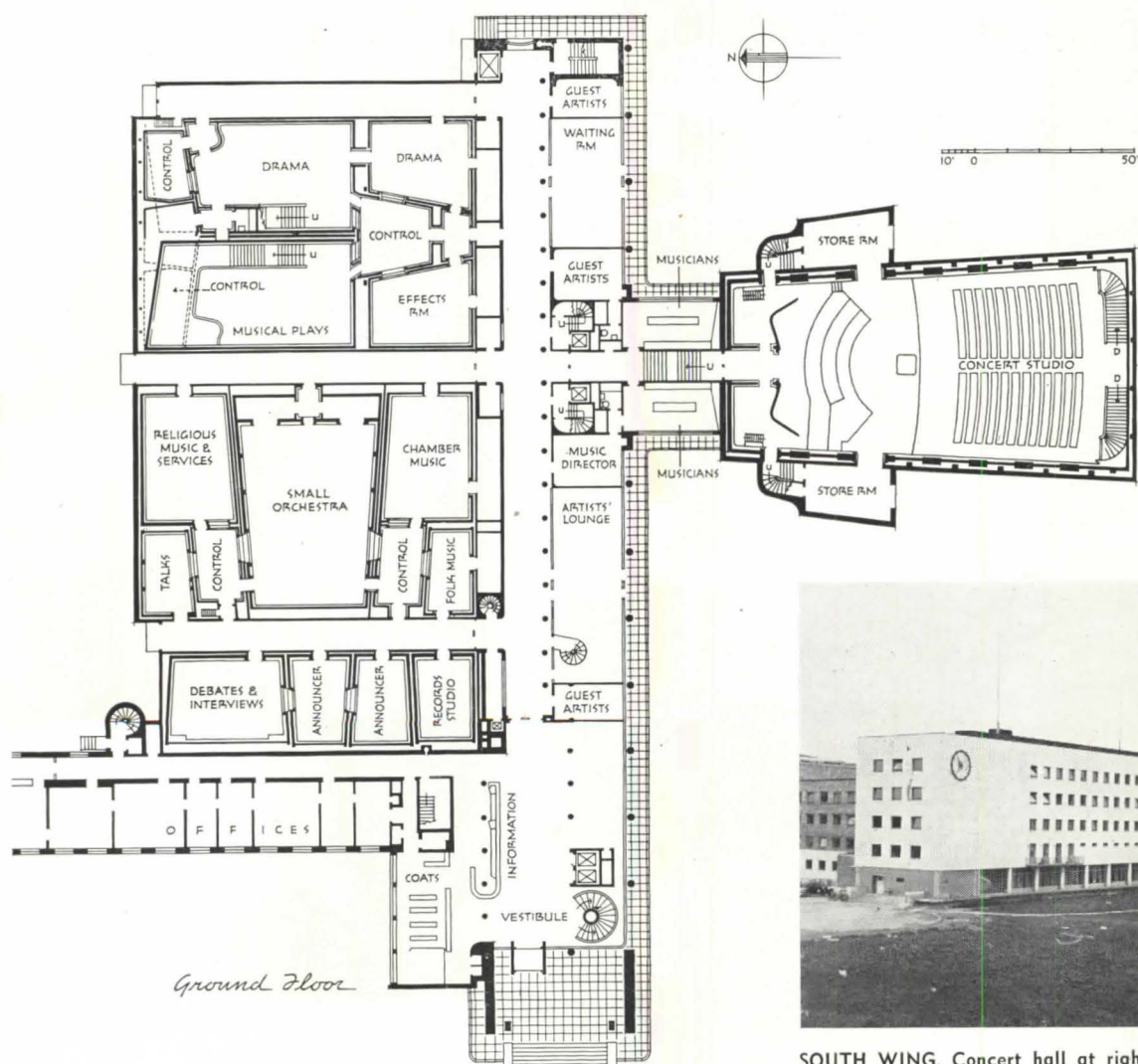




INTERVIEWS. Carpeting, draperies, perforated wood ceiling.



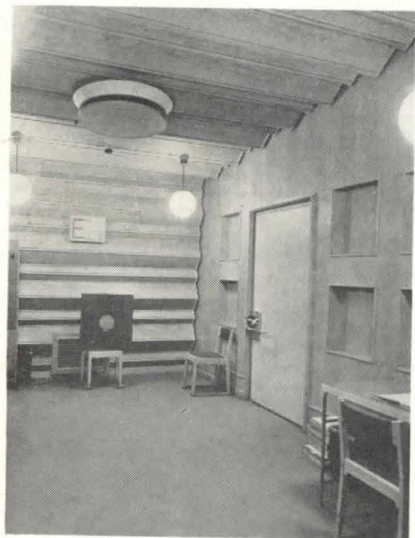
TALKS originate in this small, wood-paneled room.



SOUTH WING. Concert hall at right.

RADIOHUS, OSLO, NORWAY

NILS HOLTER, Architect



FOLK MUSIC STUDIO. The sawtooth wall and ceiling are all of wood. A twin turntable broadcasts musical recordings.



SMALL ORCHESTRAS are accommodated in this clean-cut room.

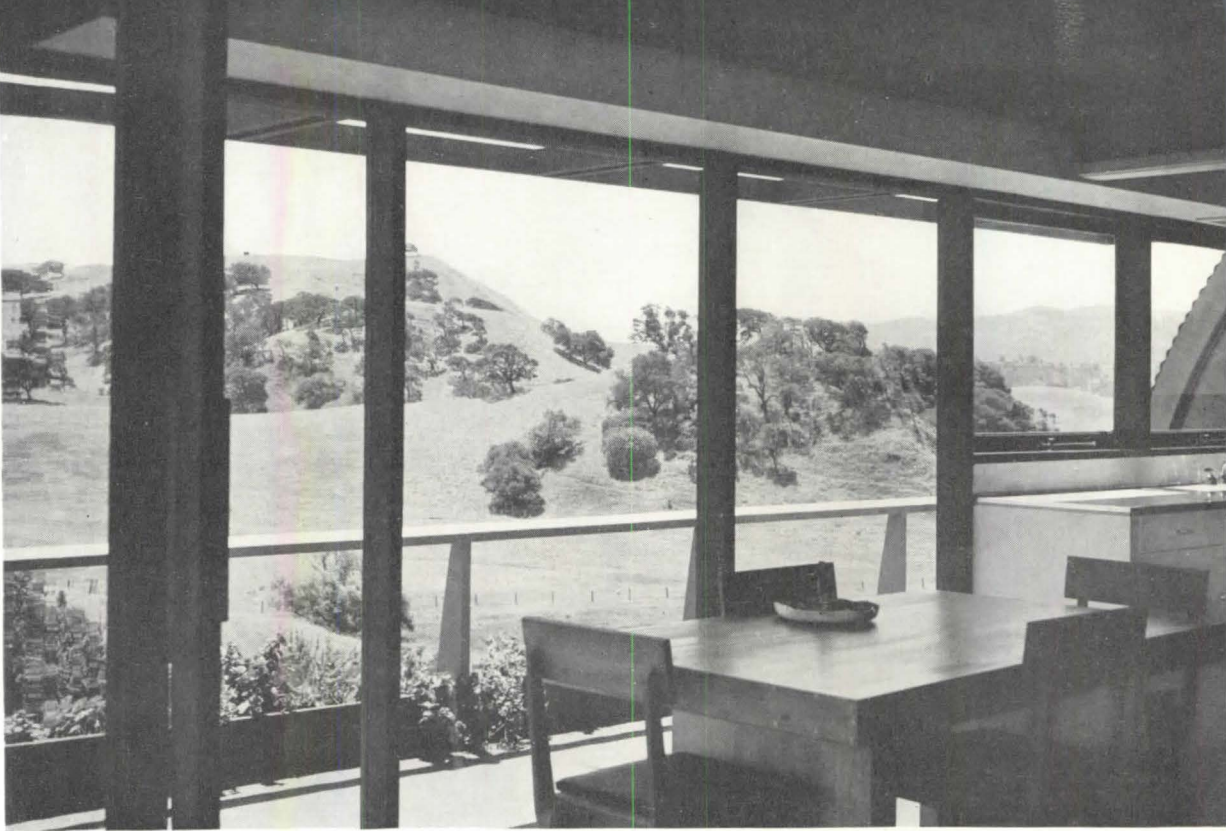


CHAMBER MUSIC STUDIO is similar in treatment to the small orchestra room; bent-section ceilings; walls of perforated acoustical panels.

MATERIALS AND METHODS

G. Grover

The Gary Grover house at Acalanes, Calif. (Campbell & Wong, architects), can be discussed on the basis of its success as a residence, quite apart from its satisfying adaptation of the mass-produced, light steel Quonset. Beautifully related to the site, the round form recalling rounded hills, its glazed walls are an entirely natural means of emphasizing the delicate yet strong curve of the arch. The shape of the living porch was determined by a large tree which has since been cut down.



MASS PRODUCTION + LIGHT STEEL

THE QUONSET PROVIDES A WORKING EXAMPLE OF TWO INTERESTING DEVELOPMENTS.

By FRANK G. LOPEZ

To a certain extent interest in mass-produced buildings has continued since the recent war, and the search for rational ways of using the less familiar materials has intensified. The wood, heavy steel, masonry, and reinforced concrete upon which we principally depend are all high in cost; perhaps we can get as good—or better—buildings at less cost by using something else.

Some months ago the American Iron and Steel Institute published specifications for design in light steel shapes. Now the average designer has a reliable basis for checking his work in this unfamiliar medium. The effect upon American building could be substantial. Light steel construction would

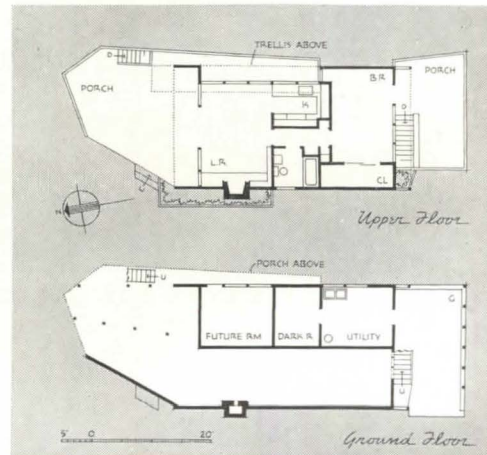
seem more suitable for industrialized production than for custom tailoring at the job because the material is less easy to work by hand in our traditional manner than, for instance, wood; and because substantially larger units than, say, masonry can be shipped economically.

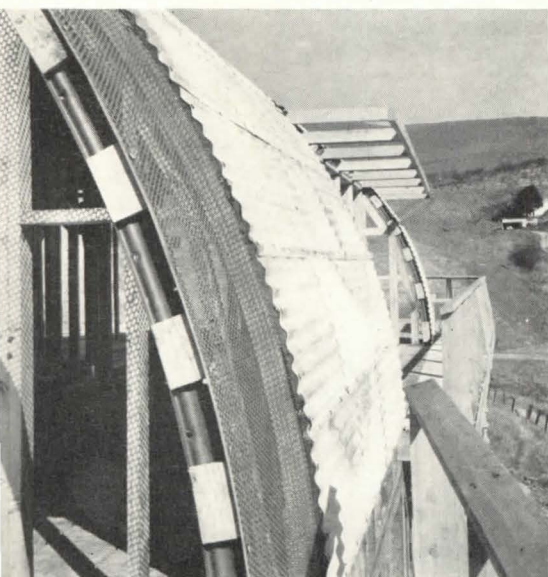
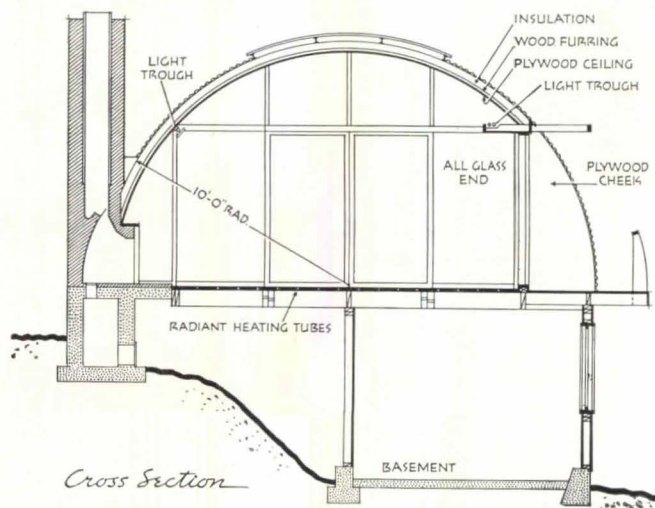
Mass production, industrialized production, prefabrication—what do such phrases really mean in relation to building construction? "Prefab," the most familiar term, has acquired a host of different connotations, from precutting of framing members to assembly of building units in factories either centralized and permanent or set up temporarily at the building site. The term

has been limited almost entirely to housing. Most of our building materials are mass-produced by industrial methods, and are mass-distributed. Wood, clay, stone, metallic ores, sand, etc., are processed in centralized plants into standard shapes, sizes, or small assemblies suitable for handling in distribution and on the job, and are then shipped in quantity to local distribution points. How far can these industrial methods be applied to complete structures?

The Quonset building, manufactured by the Stran-Steel Division of Great Lakes Steel Corporation, is a structurally complete unit produced by industrial methods; it is mass-distributed. To the

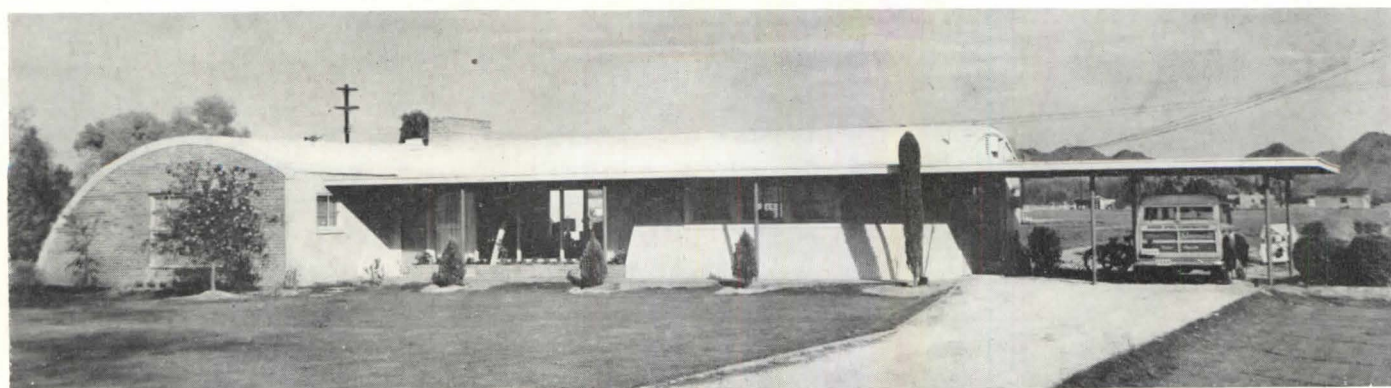
Sonya Noskowiak





Sonya Noskowiak photos

Further details of the Grover house: the standard Quonset "20" is modified at the longitudinal glass wall by omitting several normal framing members, a deviation for which the designers take structural responsibility (see text). Note the living room light troughs, which make the most of the curved "ceiling" as a light reflector without rendering it obtrusive. Heating: hot water from the utility room tank circulates through radiant tubing laid between rough floor boards above, to heat both upstairs and down. The round holes of the perforated metal hood, which reduces sky glare and will act eventually as a vine trellis, cast shadows which harmonize with the curved form. Corrugated steel is painted grayed moss green; sash trim and metal trellis, golden yellow; exposed wood, dark green stain.



Bishop house, Phoenix, Ariz. (T. Lawrence Milligan, architect), has three bedrooms. Two Quonset "24"s are used in a T-plan.

best of our knowledge it is the only premanufactured structure that is at present obtainable with reasonable ease anywhere in the country. As an example of what a truly industrialized segment of the building industry can provide, it merits close examination. What does the Quonset do to design? What can we get out of it? What is likely to be its future?

Familiar to all of us, the Quonset resulted from restudy of the British Nissen Hut, in the course of which Stran-Steel's nailable light steel structural members were incorporated in the building. Its semicircular framing members are shipped in sections; these and the bracing, corrugated sheet steel covering, standard openings, accessories, lugs, etc., are "packaged," so that the buyer receives the complete structural frame and exterior surfacing in units as large as can be handled satisfactorily, ready for job-assembly with nails, screws, and bolts. Along with the materials come standard assembly drawings. Foundations, insulation, interior surfacing, special trim and openings, equipment of any kind, all must be supplied by others. As long as the standard form is adhered to, the manufacturer is prepared to guarantee his product in any reasonable way. As soon as the basic form is substantially altered, the structural guarantee becomes the responsibility of the individual designer or builder.

The manufacturer encourages experimentation; he will furnish complete structural data, for instance, to those who wish to make some unorthodox adaptation and must have load tables, stress diagrams, etc., in order to engineer the adaptation soundly. Certain deviations which do not unduly affect the structure are considered standard; for example, wider-than-normal openings in the curved side walls if they do not necessitate cutting off more than two of the arched Stran-Steel studs. Since these are 4 ft on centers, the normal maximum width of clear side opening is a nominal 12 ft. The buildings are available in four models: Quonset "20" (20 ft wide by 24 ft long, increasing in length by multiples of 12 ft); the "24" (24 ft wide with one vertical side wall, same lengths as the "20"); the "36" (36 ft wide, same lengths as the "40"); and the "40" (40 ft wide, semicircular in section, in any multiple of a 20-ft length). Another type, the "Multiple," has repeating arched roof sections supported on interior columns and beams.

So far there has been only one recorded difficulty with labor, and that rather foolish. In a single case the builder encountered a situation in which ceilings could be sprayed though walls must be brush-painted. (Nobody could tell where walls stopped and ceiling began!) Wide experience has not yet revealed materials which cannot be used in conjunction with Quonsets. It is feasible to employ with them foundations, floors, insulation, interior finish, heating, lighting, and other equipment of any type desired. Dry interior surfacing (plywood, wallboards, etc.) has been successfully used; so have tile or lath and plaster. In discussing costs one must remember their wide variation from place to place, even in the same community under different circumstances, particularly in today's situation; and also the fact that the building frame and shell together constitute only a fraction of the

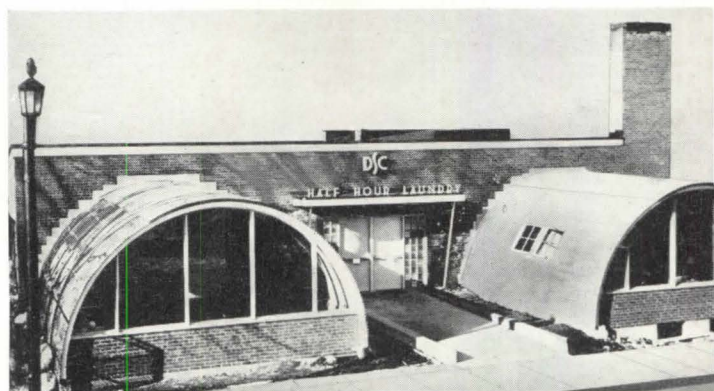
Quonset Village Motel, Colfax, Calif., has 21 Quonset "20" guest houses, Quonset "40" clubhouse 100 ft long.



Quonset Inn, Silver Springs, Md., is a "40" with special side entrance.



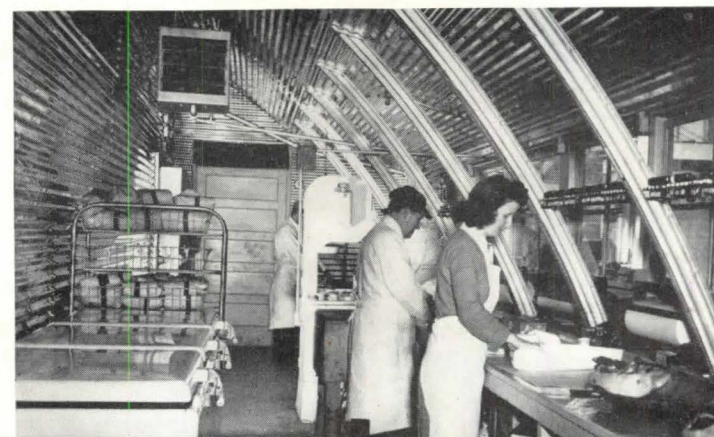
DSC Laundry, Burlington, Vt. (Freeman, French, Freeman, architects), has, in addition to the two Quonset "20"s visible, a "24" set behind the masonry wall. One front unit houses an office; the other, waiting room and nursery; rear unit, automatic washers.

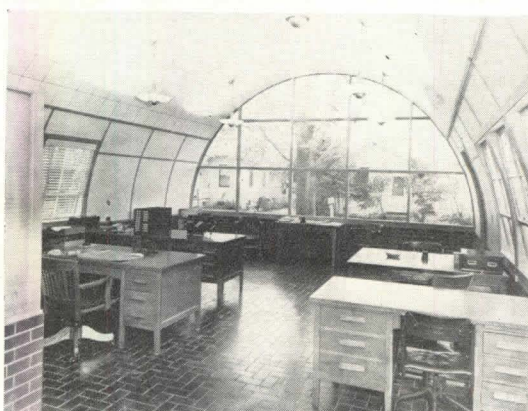
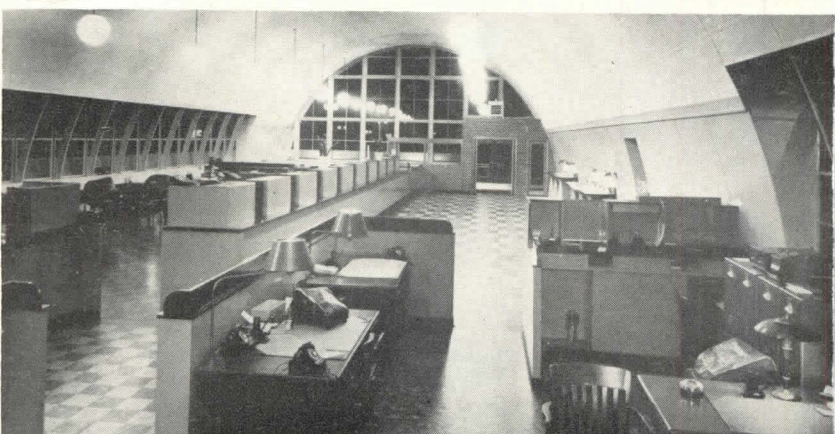


Shop interior, Veterans' Guild of America, a G.I. rehabilitation project, shows adaptability to modern industrial lighting and equipment.



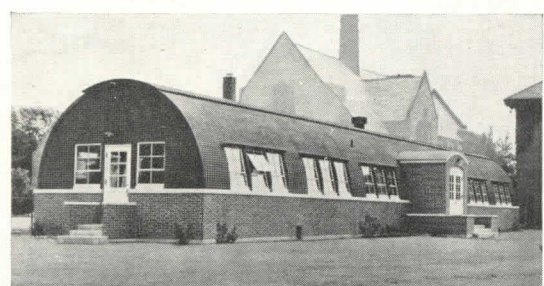
Processing room of a frozen-food locker plant in New Jersey has aluminum interior sheathing to reduce deterioration and maintenance. Note dormer and preparation-counter space so organized that arched ribs do not interfere.



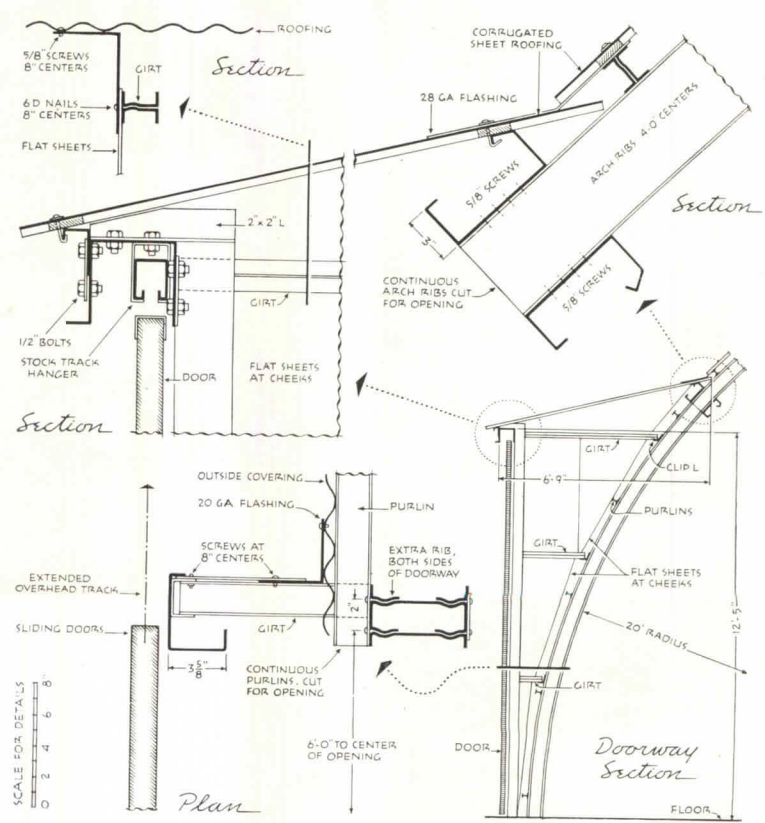


The pleasant offices of the Kraftile Co., Niles, Calif.

First National Bank, Uptown Branch, Portland, Ore. (Barrett & Logan, architects), is a 40 x 140 ft Quonset. Shell was erected in 4 days, building completed in a few weeks at a total cost of about \$31,400. Interior finish: rubber tile floors over concrete; walls, asbestos board to 8 ft, acoustic board above. Insulation: 2-in. glass wool. Exterior: exposed steel painted in eye-catching stripes, henna, peach, and lime.



Nursery school near Detroit, Mich., has a classroom at either end; entry, office, etc., in the center.



Adapted from standard Quonset details, these drawings show how a 12-ft sliding door is attached to the Quonset's curved side wall. Two adjoining arched ribs are cut for this—the maximum structural deviation for which the manufacturer assumes responsibility. Note that structural potentialities of the corrugated steel skin are not fully exploited; structurally the ribs carry the principal load.

total building operation. Stran-Steel has available several "packaged" standard residential models; one of these, known as the *Brighton*, was the subject of a detailed cost breakdown by a reliable contractor in the Detroit area. The *Brighton* is 20 x 36 ft, and is a two-bedroom house with living room, bath, and a utility kitchen containing the heating plant; it has no basement. In March, 1947, for that building erected in that locality, the total cost of a single Quonset ready for occupancy was under \$4,700; for projects of 25 or more, under \$4,400 per house. Of this, \$884.00 per house was the cost of the Quonset shell in both cases. The remainder was accounted for by all the usual items, ranging from permits, surveys, and grading to foundations, flooring, interior finish, heating plant, etc. Cost of land was *not* included, nor was any profit or overhead; these were rock-bottom figures.

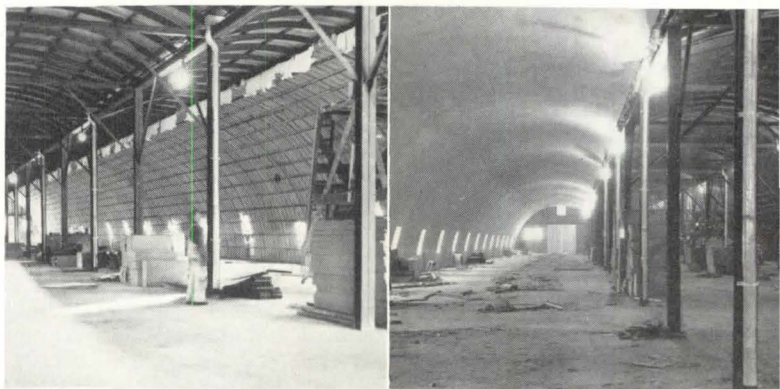
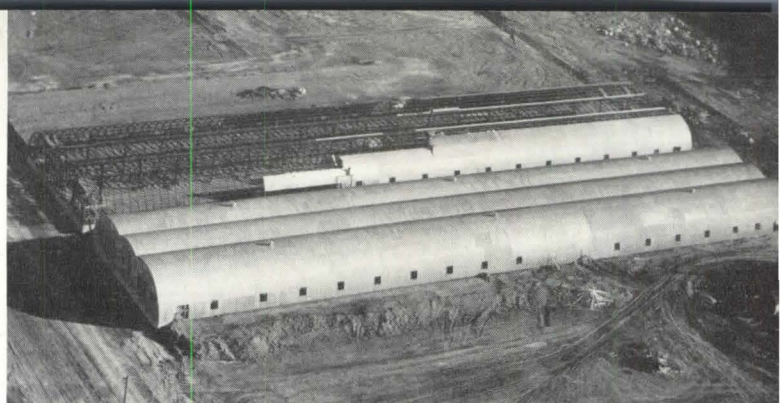
A glance at the accompanying illustrations will reveal only a few of the many different uses to which Quonsets have been put. It is difficult to estimate to what extent their apparent popularity is due to availability and reasonable cost in a time of great demand. However, we know personally of many cases of great enthusiasm, enough at least to balance the indifference of others.

Thus far we have discussed only the practical problems this particular mass-produced light steel building introduces. Esthetically the form is as old as the hills; any student knows the history of the barrel vault which, developed from the simple arch, flowered into the traditional Romanesque. Some know that the indigenous American buildings, at least along the Atlantic Coast, were framed of saplings, brought together and tied at the top, and covered with bark or thatch—the whole very much like a modern Quonset set up on vertical walls. How many know that the British, after they first landed here, lived for years in huts of wattles and thatch, of almost the same design? (The log house came much later, with Scandinavian immigration.)

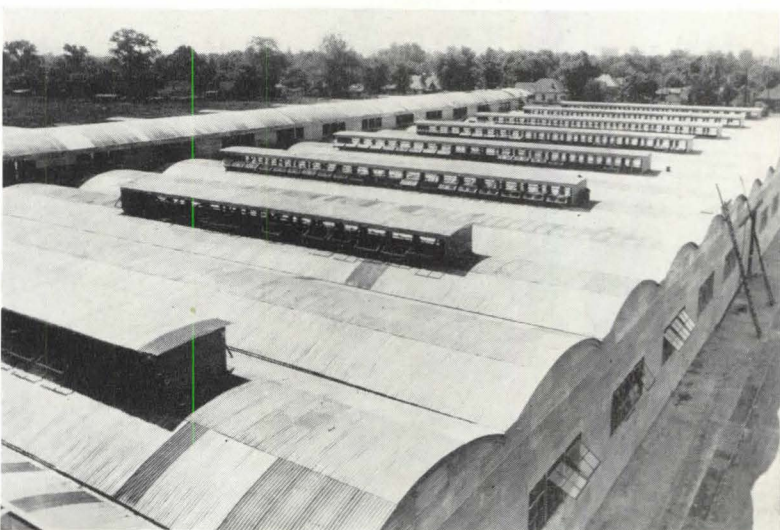
The firm of Campbell & Wong, architects of two houses shown in this issue, prefer not to apply dormers to Quonsets, in order to retain all the simplicity of the barrel form. They are not averse to vertical walls inside the curved plane, and they freely use light horizontal trelliswork and other devices to blend the form with its surroundings, or to accent it without overwhelming it. Theirs is not the only approach; Professor Bruce Goff, now of the University of Oklahoma, combined the Quonset barrel freely with masonry masses, expanses of glass, and delicate horizontals in his famous chapel for the Sea Bees. He has other Quonset projects under way; in one he proposes to join the rib sections so that, instead of continuing the arch to the ground, the roof sweeps upward in an S-curve whose high point, almost twice the usual Quonset height, is held up by mullions that also support a wall of glass.

Between such imaginative concepts and thoughtless slapping up of false fronts to conceal the barrel form there can be all the degrees of excellence one would expect from any architectural material. Thorough knowledge of it, respect for its limitations, and imagination should produce good architecture from the Quonset.

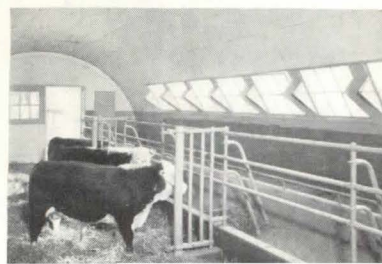
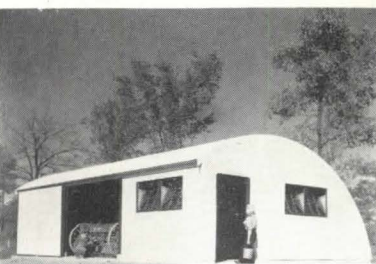
Multiple Quonset plant of York-Shipley, Inc., York, Pa., completed early in 1947. Photos show two triple-bay units; mineral wool insulation being installed; insulating board interior surfacing. F. J. Rempp, Archt.



Special adaptation of Multiple Quonsets; Great Lakes Steel Corp., Terre Haute, Ind.



Three adaptations to farm needs: Quonset set on vertical lower walls forms a barn that is highly satisfactory; interior of a stock barn showing interior metal sheathing, special windows, etc.; a "24" used for implement storage, etc.

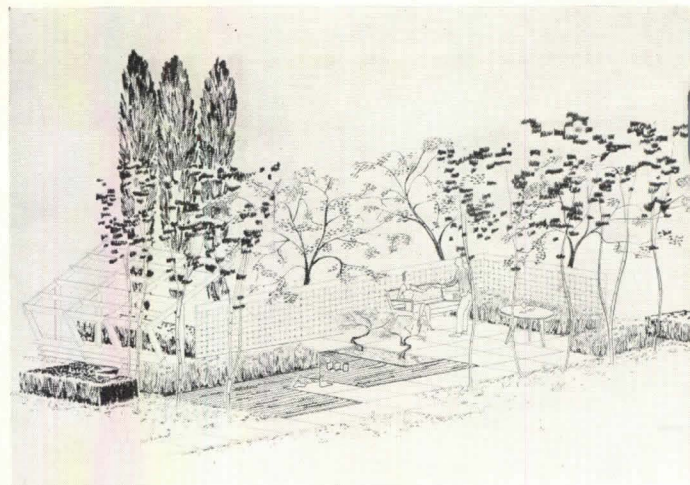


MODULAR GARDENS

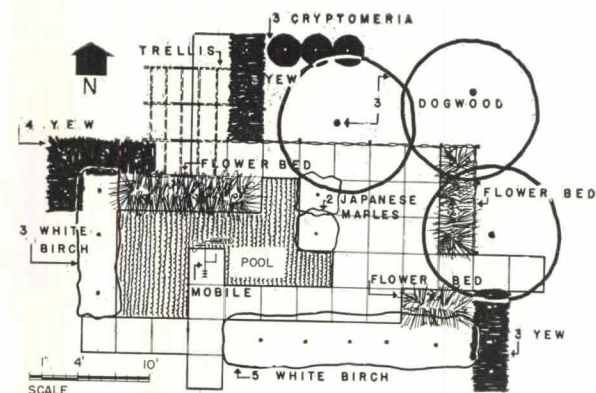
JAMES C. ROSE, Landscape Architect

The drawings on these and the next two pages show three gardens (and the units of which they are composed) that are designed for the most limited spaces. The largest is approximately 36 x 24 ft, the smallest 24 x 15 ft. For all practical purposes it is impossible to achieve an effective garden in less space. Yet these projects are not cramped, or stuffed into their restricted areas. They have been developed freely and liberally; each is capable of expansion or even some contraction. They are carefully planned to link with garden areas beyond, and with the houses of which they are parts. This does not mean that they are any the less effective as separate entities.

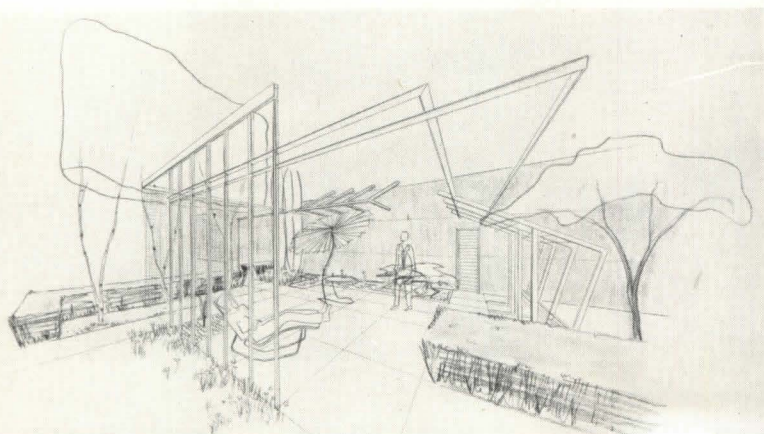
(Continued on page 78)



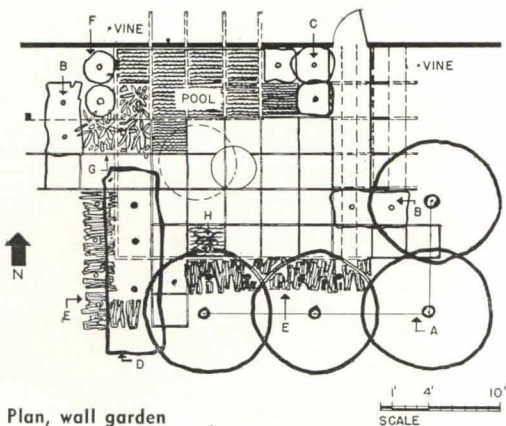
POOL GARDEN



Plan, pool garden

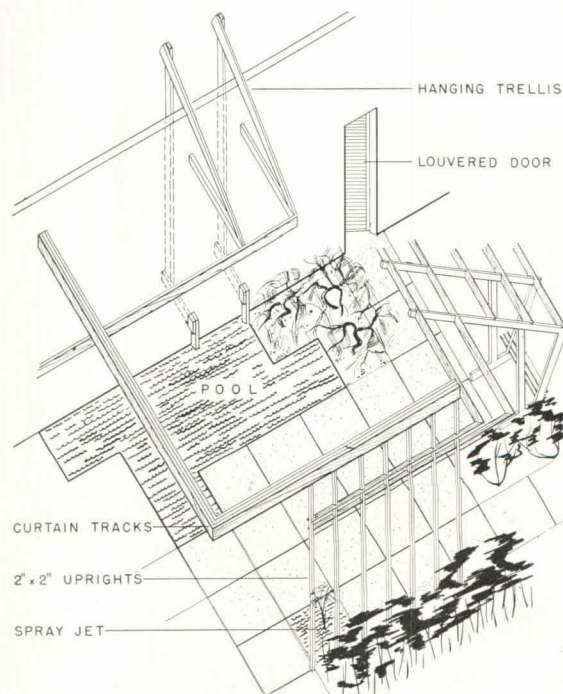


WALL GARDEN

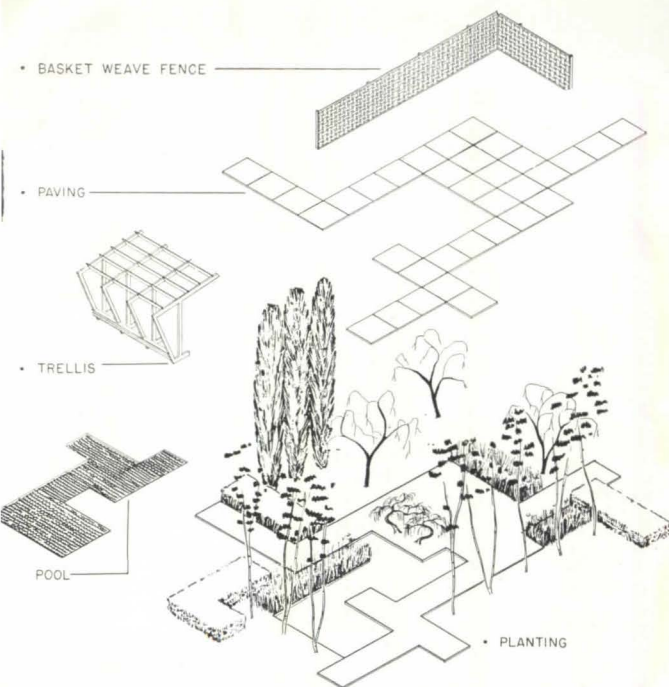


Plan, wall garden

- A DOGWOOD
- B EVONYMUS ALATUS
- C JAPANESE MAPLES
- D WHITE BIRCH
- E YEW HEDGE
- F CRYPTOMERIA
- G PERENNIALS
- H JET



Architectural units required



These simple units compose the pool garden

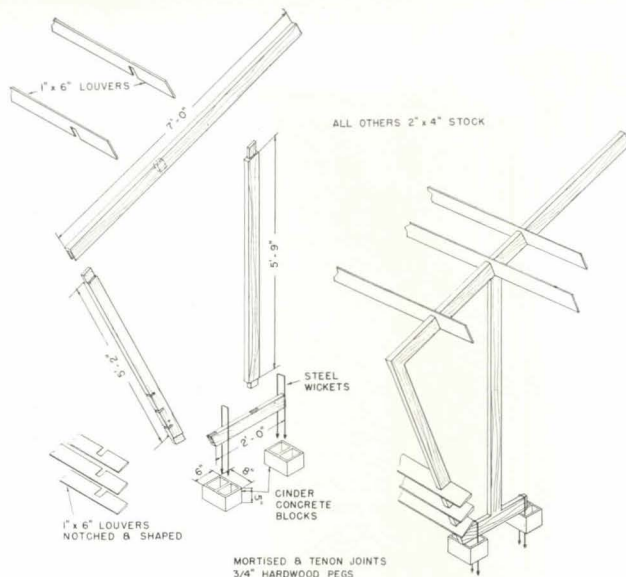
POOL GARDEN. This is the largest of these three "incidents," 36 x 24 ft; more than 50 of them could be fitted into one acre, or one could be adapted to the smallest suburban lot. The pool garden is designed as a casual garden opening directly from the kitchen, living room, or bedroom. A complete list of its standard parts:

Architectural Materials

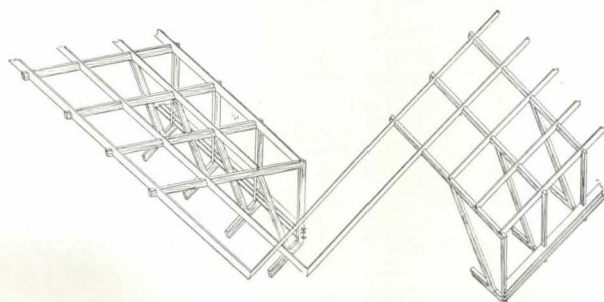
3 sections angular trellis with louvers
5 six-ft sections of 4-ft-high basket-weave fence
4 precast, colored, paving units each 3 ft square
3 three-ft pool sections
1 sculptured mobile

Planting

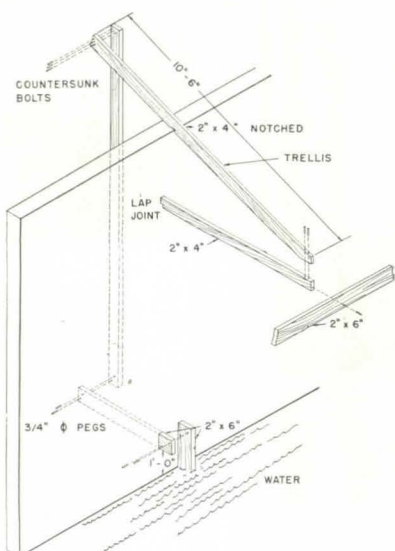
9 three-ft squares of flowers
8 white birches, 18 ft
3 flowering dogwood, 12 ft
3 Cryptomeria, 20 ft
2 Japanese maples, 3 ft
10 yews in hedges, 18 in.



Standard trellis details



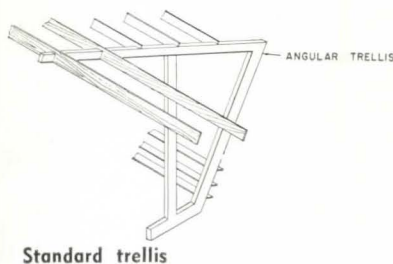
More complex assembly of the standard trellis



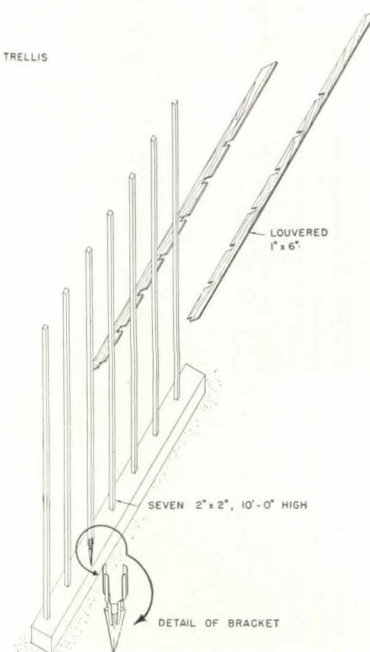
Support of hanging trellis



Fish-net curtain



WALL GARDEN. From an existing 12-ft wood wall, one trellis is suspended and anchored behind the wall as shown by dotted lines. The face of this trellis, in turn, supports the arm of a cantilevered curtain track. An exotic effect is created by using as a curtain a fish net woven in a free pattern of earth colors. With the trellis louvers extended and interlocked with slender uprights, this arrangement emphasizes the dramatics of tension; the parts are interdependent for support. All flowers and vines are annuals chosen for their hot-climate colors.



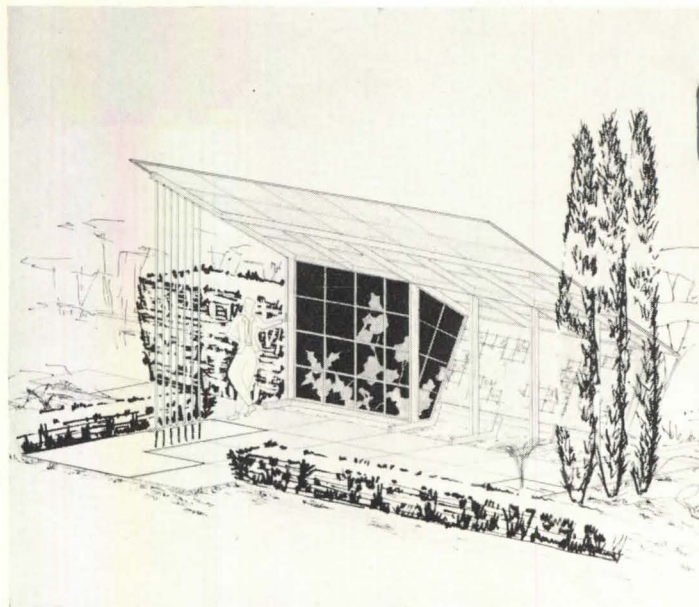
Details, vertical track supports

Each of these garden "incidents" is composed of precisely the same parts in varying arrangements. Basic to each is the angular trellis, which may be assembled in great variety to suit a particular garden. Paving throughout is of standard 3-ft square blocks, of precast and colored concrete. The standard reflecting pool is likewise assembled in 3-ft modular units. Around the pool the planting beds can be varied for seasonal effect by lifting paving sections and setting in their place plants just about to come into bloom. When the effect is past, the flowers can be removed and the paving restored.

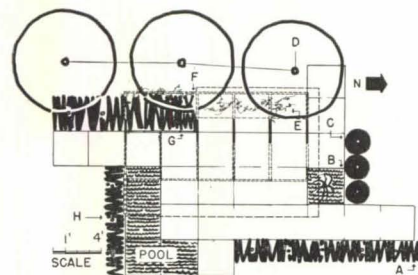
This is only one of several possibilities within each garden. One might decide on a permanent paving and flower bed pattern; the limits of the beds, being small and well defined by the paving, assure a well kept appearance. Similarly, one might decide to eliminate flowers, or to employ annuals only, or to grow only certain types, as iris and paeonia in June and chrysanthemums in the autumn. With modular paving that can thus be left in place or rearranged as needed, it is hard to imagine a more flexible garden scheme, or one more suited to the gardener with a yen for experimentation.

Planting

All planting is similarly done. Each plant is chosen for its height, spread, and form at maturity, and these dimensions become a definite module so that plants may be set and spaced with almost the same precision as trellis sections, paving, and pool. Even the smaller, less determinant plants (perennials, ground cover, bulbs) may be planted in a like modular relationship of single or multiple 3-ft squares. On the following pages is the first portion of a plant list schemed to aid in selecting materials. The second and concluding portion will appear next month.

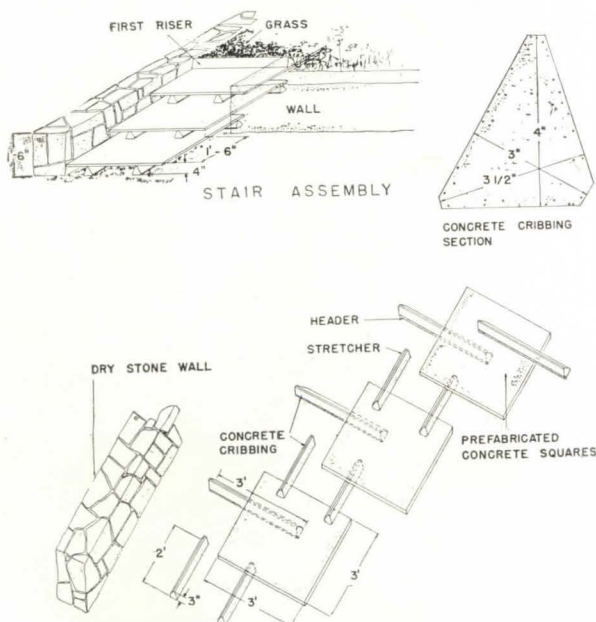


MORNING-GLORY GARDEN

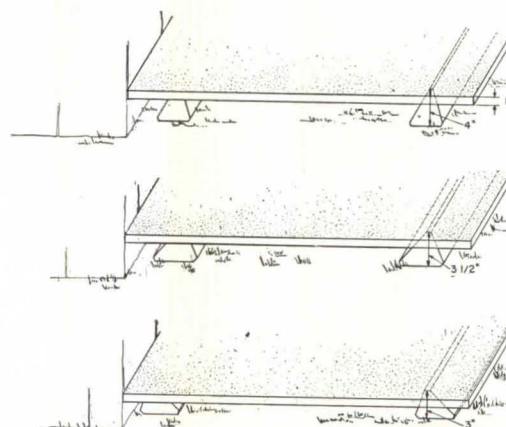


- A FLOWERING QUINCE
- HEDGE - 3'
- B JET
- C CRYPTOMERIA
- D FLOWERING CHERRY
- E MORNING GLORY
- F TURQUOISE VINE
- G EVONYMUS ALATUS
- H DWARF FLOWERING QUINCE - 18"

Plan, morning-glory garden

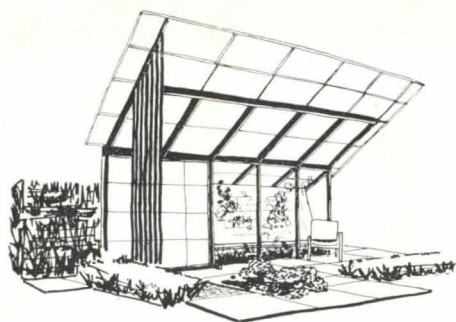


MODULAR STEPS FOR MODULAR GARDENS

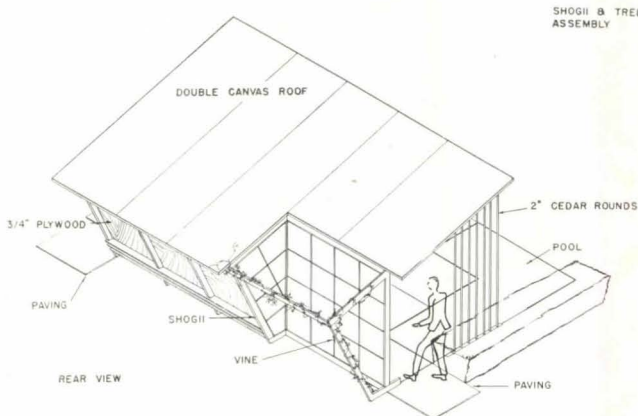
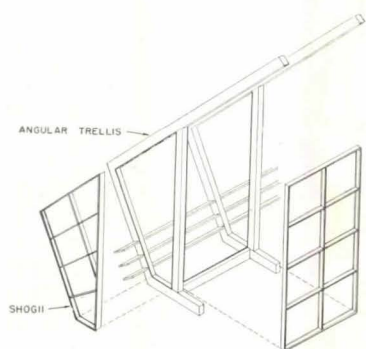


Variation of step dimensions

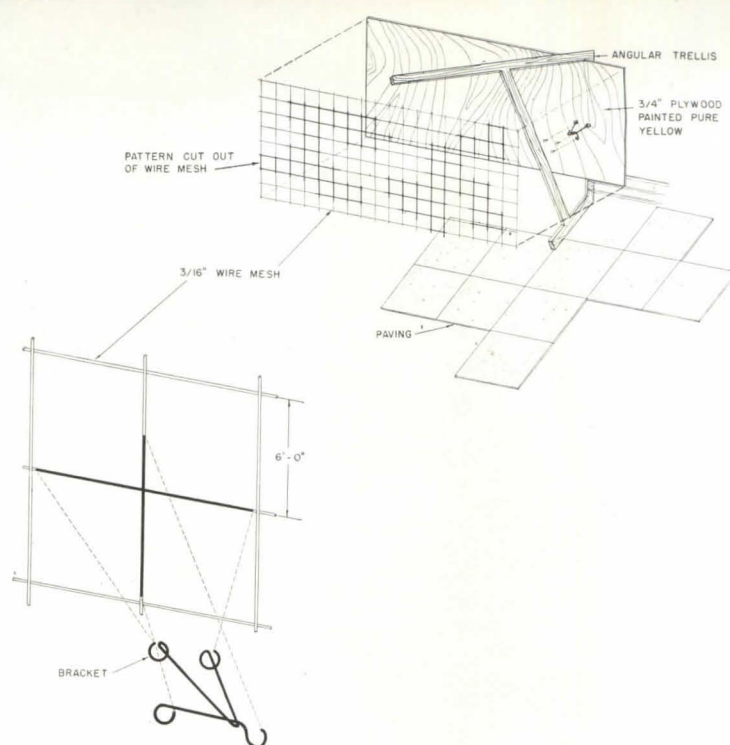
Using a single shape and size of precast reinforced concrete cribbing and modular paving squares, it is possible to obtain several dimensional variations. The secret lies in the dimensioning of the cribbing units used to support the slabs. Set on one side, the triangular cribbing produces steps 5 in. high; on another, 4 1/2 in.; on the other, 4 in. This adds to the preceding modular elements—trellis, paving, planting beds, pool, fence, and shoji—a seventh standardized item.



Trellis with shojis and canvas roof



Construction of the shelter



MORNING-GLORY GARDEN. The smallest garden shown, an "incident" in a larger landscape, links itself with other parts of the garden (house, orchard, terrace, etc.) by a free-flowing system of paths. Here is introduced another modular element, the shoji, a true curtain-wall of white spun-glass fabric (which will not rot) stretched across a hardwood frame. It is constructed in 3-ft modules for use within the 3-ft trellis interval. One special angular type is devised to fit into the trellis arch. The shojis can be removed, stored, and replaced like window screens. They are translucent, to prevent through vision yet transmit the silhouette of the shadowed plant form. This shelter is designed specifically to exploit blue morning-glories, which bloom in the morning but close after an hour of full sunlight. Morning-glories require good light to open by; the same light causes them to close. This shelter can trick the blossoms into remaining open all day; the shelter is faced just north of east, with a wide projecting roof sloping up toward the morning sun. The early light penetrates to the morning-glory bed and the flowers open. After a short exposure to the sun they are protected from it by the roof and shojis, yet the late afternoon sun may sparkle on the pool surface; being protected, the morning-glory blooms remain open.

PLANT LIST

TREES: Tracery

HEIGHT	SCIENTIFIC AND COMMON NAMES	CHARACTERISTICS, REMARKS, SPECIAL REQUIREMENTS
40 FT PLUS	<i>Acer rubrum</i> Red Maple	Mar., Apr.: red flowers. Oct., Nov.: red and yellow coloring.
	<i>Acer psuedoplatanus</i> Planetree Maple	Apr., May: yellow-green flowers in clusters 2 to 5" long. June, July: brownish-green winged seeds in showy clusters.
	<i>Ginkgo biloba</i> Ginkgo (Ginkgo)	Oct., Nov.: yellow coloring.
	<i>Gleditsia triacanthos</i> Honey Locust	Oct., Nov.: yellow coloring.
	<i>Liriodendron tulipifera</i> Tulip Tree	May: greenish-yellow flowers with orange centers. Oct., Nov.: yellow coloring.
	<i>Nyssa sylvatica</i> Black Tupelo	Oct., Nov.: intense red color. Trunk is light brownish-gray, smooth.
	<i>Pinus strobus</i> Eastern White Pine	Evergreen.
	<i>Quercus borealis</i> Northern Red Oak	Oct., Nov.: deep red to orange color.
	<i>Robinia psuedoacacia</i> Black Locust	May, June: fragrant white flowers. Sept., Oct.: pale yellow coloring.

TREES: Tracery

HEIGHT	SCIENTIFIC AND COMMON NAMES	CHARACTERISTICS, REMARKS, SPECIAL REQUIREMENTS
20 TO 40 FT	<i>Acer pennsylvanicum</i> Striped Maple	Apr., May: yellow-green flowers in long, drooping clusters. Oct., Nov.: clear yellow coloring. Branchlets green with longitudinal white stripes.
	<i>Betula alba</i> White Birch	Oct., Nov.: yellow coloring. Trunk white and peeling.
	<i>Betula lenta</i> Sweet Birch	Oct., Nov.: yellow coloring.
	<i>Betula papyrifera</i> Paper Birch	Oct., Nov.: yellow coloring. Trunk white, peeling, with pink or yellow tinge where no sun reaches it.
	<i>Betula populifolia</i> Gray Birch	Oct., Nov.: yellow coloring. Trunk grayish-white, does not peel.
	<i>Carpinus betulus</i> European Hornbeam	Trunk bluish-gray, smooth.
	<i>Populus tremuloides</i> Quaking Aspen	Oct., Nov.: yellow coloring.
	<i>Sassafras albidum</i> Common Sassafras	Oct., Nov.: intense red coloring.
12 TO 20 FT	<i>Amelanchier canadensis</i> Shadblow Serviceberry	May: small, abundant, fragrant flowers. June, July: red fruits. Oct., Nov.: red coloring.
	<i>Betula lenta</i> Sweet Birch	(See above.)
	<i>Betula populifolia</i> Gray Birch	(See above.)
	<i>Cercis canadensis</i> Eastern Redbud	May, June: purplish, dark pink flowers. Oct., Nov.: yellow coloring.
	<i>Laburnum alpinum</i> Scotch Laburnum	May, June: yellow flowers in long, drooping clusters.
	<i>Sassafras albidum</i> Common Sassafras	(See above.)

GROUND COVERS

12 IN. OR LESS	<i>Ajuga genevensis</i> Geneva Bugle	May, June: deep blue flowers in spikes. Sun or shade.
	<i>Ajuga reptans</i> Carpet Bugle	May, June: blue flowers in spikes. Sun or shade.
	<i>Arctostaphylos uva-ursi</i> Bearberry	May, June, July: pink to white flowers. Oct., Nov.: red fruit, bronze coloring. Sun, light shade.
	<i>Asarum shuttleworthii</i> Mottled Wild Ginger	May, June: purple flowers at base of plant. Full shade.
	<i>Convallaria majalis</i> Lily-of-the-Valley	May: fragrant white spikes. Sun, light shade.
	<i>Cornus canadensis</i> Bunchberry	May, June: white flowers. Light shade.
	<i>Epigaea repens</i> Trailing Arbutus	Apr., May: fragrant pink-white flowers. Full shade.
	<i>Euonymus fortunei kewensis</i> Kew Wintercreeper Euonymus	Evergreen. Sun or shade.
	<i>Euonymus fortunei radicans</i> Common Wintercreeper Euonymus	Evergreen. Sun or shade.
	<i>Gaultheria procumbens</i> Checkerberry Wintergreen	Evergreen. July, Aug.: pink-white flowers. Oct., Nov.: red fruit and deep red foliage. Light shade.
	<i>Hedera helix baltica</i> English Ivy	Evergreen. Full or light shade.
	<i>Maianthemum canadensis</i> Canada Beadruby	May, June: white flowers. July, Aug.: foliage dies down. Light shade.
	<i>Mazus japonicus</i> (none)	Evergreen. May: red flower spikes. Oct.: bronze coloring. Sun or light shade.
	<i>Mitchella repens</i> Partridgeberry	Evergreen. June: pink-white flowers. Aug., Sept.: bright red fruit. Light shade.
	<i>Pachistima canbyi</i> Canby Pachistima	Evergreen. Sun or shade.
	<i>Pachysandra terminalis</i> Japanese Pachysandra	Evergreen. Light or full shade.
	<i>Polygonum reynoutria</i> Dwarf Lace Plant	Sept.: pink flower sprays. Full sun.
	<i>Pulmonaria angustifolia azurea</i> Azure Cowslip Lungwort	Apr., May: blue flowers in clusters. Light or full shade.
	<i>Thymus</i> sp. Thyme	Evergreen. June, July: lilac flowers in clusters. Full sun.
	<i>Vinca minor</i> Common Periwinkle	Evergreen. May, June: solitary blue flowers. Sun or shade.

MANUFACTURERS' LITERATURE

PROGRESSIVE ARCHITECTURE—Pencil Points, 330 West 42nd Street, New York 18, N. Y. I should like a copy of each piece of Manufacturers' Literature listed.

We request students to send their inquiries directly to the manufacturers.

No.	No.	No.	No.
No.	No.	No.	No.
No.	No.	No.	No.
No.	No.	No.	No.

NAME

POSITION

FIRM

MAILING ADDRESS

☐ HOME
☐ BUSINESS

CITY

STATE

9/47

PLEASE PRINT

★ Editor's 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

1-123. *Thermolier, Catalog 6-E*, Grinnell Co., Inc. Reviewed August.

1-126. *Pressure Controllers, External-Pilot-Operated (Bul. 462)*, 19-p. illus. booklet of engineering, operating, and maintenance data on pressure controllers, diaphragm regulating valves, and control pilots. Capacity tables, installation details and data. Leslie Co.

1-124. *The National Fitters Guide (Form 488)*, The National Radiator Co. Reviewed August.

1-121. *How To Live In June All Winter (Bul. S-380-A)*, The Trane Co. Reviewed August.

★ 1-127. *Rules and Regulations for Installation of Heating Cable for Radiant Heated Buildings, Soil Heating*, 12-p. booklet (3½x6; Washington State Electrical Code). Code provisions, details. Div. of Safety, Dept. of Labor and Industries, Electrical License Div., State of Washington.

★ 1-128. *Base-Ray Taco Radiant Heating Systems (BT-147)*, 6-p. folder on installation of "Base-Ray" radiant baseboards of cast iron units; 3 systems of circulation. Typical layouts, recommended pipe connection data for both copper and steel tubing. Taco Heaters, Inc.

1-125. *USAIRCO Water Coils (Bul. 67)*, AIA 30-E, U. S. Air Conditioning Corp. Reviewed August.

1-129. *Refrigeration Units (C-1100-B42)*, 4-p. illus. folder on Freon-12 refrigerating units with air-cooled condensers. Selection tables, specifications. Worthington Pump & Machinery Corp.

Doors and Windows

4-98. *Storm Panels and Screens (Bul. 2005)*, Ceco Steel Products Corp. Reviewed August.

4-99. *Clark Over Head Doors*, Clark Door Co., Inc. Reviewed August.

4-101. *The Window of the Future Today!*, 4-p. illus. booklet on wooden awning windows in three tiers for commercial, residential, and institutional buildings; each tier is individually operated. Installation details, specifications. (Available in standard and special sizes.) Gate City Sash & Door Co.

4-102. *Golly! It's Magic (Bul. 2077)*, 4-p. illus. folder on removable double-hung window unit designed to facilitate easy washing. Casing holds screen and storm sash, has pivot-ventilators. Installation and removing instructions. Marquart Millwork Co.

4-97. *Hollow Metal Doors, Frames and*

Trims, Trussbilt, Div. of Siems Bros., Inc. Reviewed August.

4-103. *Orange Metal Doors, AIA 16-A*, 4-p. illus. folder on all-steel interior doors and door frames. Reversible for right and left hand; fire- and sound-retarding. Installation details. Virginia Metal Products Corp.

4-100. *Venetian Screen*, Warp Bros. Reviewed August.

4-104. *Design Into Your New Construction*, 4-p. illus. booklet on Dura-seal weatherstrip and sash balance which eliminates pulleys, cords, and weights on wood double-hung windows. Sash slide in aluminum tracks. Zegers, Inc.

Electrical Equipment and Lighting

5-85. *Now for Smaller Homes*, Cutler-Hammer, Inc. Reviewed August.

5-89. *Tulox Fluorescent Diffusers*, 4-p. illus. booklet on one-piece tubular transparent plastic diffusers that fit directly over fluorescent tubes to reduce glare. Available in clear and five basic colors. Installation and ordering data. Price list. Extruded Plastics, Inc.

5-90. *Color in Lighting*, 6-p. illus. reprint on the use of color in lighting; practical aspects of its measurement, specifications, and application data. Tables on effects of fluorescent; color temperature due to combinations of colored fluorescent lamps. General Electric Co.

5-86. *Surface-Attached Holoflux*, Holophane Co., Inc. Reviewed August.

5-87. *Are You Going to Build, Modernize, or Repair? (Form 2522)*, Pass & Seymour, Inc. Reviewed August.

5-91. *Tung-Sol (Form A-41)*, 8-p. illus. booklet on snap-action current intermitors and relays for use in precision circuit breakers and electrical controls. Functions, applications, advantages. Specification tables. Tung-Sol Lamp Works, Inc.

5-88. *Modern Electric Household Refrigeration and Home Freezing, Refer-*

ence Handbook No. 3, Westinghouse Electric Corp. Reviewed August.

Finishers and Protectors

6-99. *Magnesium Anodes for Cathodic Protection (Form DM-CP1)*, The Dow Chemical Co., Magnesium Div. Reviewed August.

6-100. *Suggestions from an Interior Decorator (F-85)*, National Chemical & Mfg. Co. Reviewed August.

6-102. *101 Useful Luminescent Applications*, 20-p. illus. booklet (3½x6) on the use of phosphorescent pigments in the house on light switches, stair treads, doorknobs, etc. Also fluorescent "black light" pigments for interior decoration in restaurants, theaters, etc. The New Jersey Zinc Sales Co.

6-101. *Protexol Fireproofing, AIA 19: A:33 (Circular 108)*, Protexol Corp. Reviewed August.

Insulation (Thermal, Acoustic)

9-69. *Ferro-Therm Steel Insulation*, American Flange & Mfg. Co., Inc. Reviewed August.

9-72. *Steel Sheets That Insulate*, 5-p. illus. reprint on low temperature insulating steel sheets. Lightweight; fire-, moisture-, and odor-resistant. Resist 95 to 96.7% of radiant heat. Insulation tests, installation data. American Flange & Mfg. Co., Inc.

9-73. *Facts You Should Know About Home Insulation (No. TD-2-346)*, 10-p. illus. booklet on application of Temlok rigid board insulation; lightweight, moisture- and vermin-proof. Said to reduce fuel consumption 30% or more. Installation data. Armstrong Cork Co., Building Materials Div.

9-70. *Styrofoam (Form PL-51)*, The Dow Chemical Co. Reviewed August.

9-74. *Insulating Varnishes (CDR-13)*, 42-p. illus. data book on insulating varnishes as finishers on coils, metal cast-

ings, pole leads, etc., to resist acids, alkali, moisture, and rust penetration. General Electric Co., Resin & Insulation Materials Div.

9-71. *P. C. Foamglas Insulation for Roofs (G423)*, Pittsburgh Corning Corp. Reviewed August.

Load-Bearing Structures

12-121. *Arketex for Modern Homes*, Arketex Ceramic Corp. Reviewed August.

12-122. *Build the Thermos Wall Way*, Concrete Thermos Wall Co. of America. Reviewed August.

12-123. *Fletcher Granite, AIA 8-B-3*, H. E. Fletcher Co. Reviewed August.

12-126. *Marble Forecast, AIA-22-A*, 6-p. booklet on domestic and imported marbles in standard and modular sizes. Approximate color ranges. Companies in production, types available. Marble Institute of America, Inc.

12-124. *Modern Developments in Reinforced Concrete, No. 18*, Portland Cement Assn. Reviewed August.

12-125. *Rilco Laminated Wood Rafters and Arches for Every Type of Farm Building (Cat. G)*, Rilco Laminated Products, Inc. Reviewed August.

12-127. *Modern Building with Wood*, 40-p. illus. booklet on light and heavy wood construction; examples of Teco connector, Lamella, and glued laminated construction. Data on timber connectors, termite shields, and framing anchors. Timber Engineering Co.

12-128. *Western Concrete Piles and Caissons*, 6-p. illus. pamphlet on the installation of concrete piles and caisson foundations. Types of piles available, characteristics, advantages, and specifications. Western Foundation Co. & Western Concrete Pile Corp.

Materials of Installation

13-56. *Casco Gluing Chart*, Casein Co. of America, Div. of The Borden Co. Reviewed August.

13-57. *Tremglaze Mastic Glazing Compound, AIA 26-B-2*, The Tremco Mfg. Co. Reviewed August.

13-58. *Chromtrim Aluminum Mouldings*, 25-p. illus. catalog on aluminum alloy trim for commercial and domestic use. Illustrated list on available trim, such as counter edgings, edgings for floor, drainboard, and sink frame installations; stair nosings; cove sections; panel dividers; inside and outside corners. Instructions on installation; tables on sizes; ordering data. R. D. Werner Co., Inc.

13-59. *Champion Light-Duty "C" Clamps (Bul. 49)*, a sheet on light-duty "C" clamps with lightweight alloy holder designed to provide maximum strength at points of greatest stress. Specifications, price list. The Western Tool & Mfg. Co., Inc.

Non-Load-Bearing Structures

14-40. *Julius Blum & Co., Inc.*, 115-p. illus. booklet on available ornamental and industrial metals (railings, moldings, tubings, shapes, and ornaments). Weights; specifications. Julius Blum & Co., Inc.

14-41. *Magnesium Alloys (Form No. DM 76C-75-C-746)*, 24-p. illus. booklet on magnesium alloys for many purposes, including characteristics, mechanical properties (tension, compression, etc.) of magnesium bars, rods, shapes, plates, sheets, strip suitable for structural purposes. The Dow Chemical Co.

14-42. *Textolite Laminated Plastics (CDP-548)*, 64-p. illus. booklet on the manufacture and application of sheets, rods, and rectangular tubes from laminated plastics. Engineering data; tables of electrical, physical, and mechanical properties; sizes and tolerances. Grades available, methods for fabricating laminates, and suggestions for ordering. General Electric Co.

14-38. *Ideas for Brighter Homes with Insulux Glass Blocks (1B67)*, Owens-Illinois Glass Co., Insulux Products Div. Reviewed August.

14-39. *Carrara, The Modern Structural Glass of Infinite Possibilities (G-6554)*, Pittsburgh Plate Glass Co. Reviewed August.

14-43. *Plastics, The Story of An Industry*, 36-p. illus. booklet on origin, development, and uses of plastics. Data on manufacturing, characteristics, and types of thermoplastic and thermosetting plastics, classification and uses of the rubber-like plastics. Employment opportunities, prospects, and importance of engineering in this field. List of trade papers and universities offering courses in plastics. Society of the Plastic Industry, Inc.

Sanitary Equipment, Water Supply and Drainage

★ 19-157. *Pump Engineering Data*, 416-p. illus. engineering manual (8½x5) on pumps. Types and engineering data. Application, capacity tables, formulas. Specifications, pump materials, properties. Drawings; pump equipment data; prices; freight rates. (Price \$2.00 per copy; make check or money order payable to Economy Pumps, Inc.) Economy Pumps, Inc.

19-143. *Waste King, Incinerator Products Co.* Reviewed August.

Two booklets from Rheem Mfg. Co., Appliance Div. Reviewed August:

19-144. *Automatic Electric Storage Water Heater, Series 60, AIA 29-D-2*.

19-145. *Water Softener, Series 2700, AIA 29-D-32*.

19-146. *Water Hammer—Its Cause and Cure (Bul. 120)*, Wade Mfg. Co. Reviewed August.

19-158. *Solves Today's Biggest Problems in Underground Pipe Insulation (Form 4704-3-47 SPS)*, 4-p. illus. booklet on insulated pipe conduit systems for underground steam, hot water, and oil lines. Description, specification, uses; engineering data and drawings. Dimension and capacity tables. Accessories. Ric-wil Co.

★ 19-159. *Washroom Advisory Service, AIA 29-i*, 24-p. illus. booklet on locker, wash room, and recreation room planning, layout, equipment for schools, industrial buildings, theaters, restaurants, etc. Drawings and dimensional data on many types of sanitary equipment. Architectural consulting service. Scott Paper Co.

19-160. *Yeomans Type HSD, Single Stage, Double Suction Pumps, AIA*

295 (Bul. 1600), 8-p. booklet on general purpose pumps for use in city water supply; condensate or make-up water service; air, brine, or hot water circulation; white water or overflow service in paper mills, etc. Handles clear liquids of low viscosity at moderate heads. Performance curves, details of construction; selection and dimension charts. Yeomans Bros. Co.

Specialized Equipment

★ 19-161. *American Standards, 4701*, 24-p. price list of 864 standards promulgated by the ASA, including construction and engineering standards. American Standards Assn.

19-162. *How to Get the Most Value with Ozalid*, primarily an instruction manual, telling how to use Ozalid printing and developing machines, with special instructions for each of 15 types of Ozalid paper, cloth, film, plastic, and color reproduction materials. Contains a minimum of the usual advertising. Operating data, specifications. Ozalid, Div. of General Aniline and Film Corp.

19-147. *A Message About Confessionals (Bul. 164)*, Burgess-Manning Co. Reviewed August.

19-148. *Sanitation Codes Demand Clean Glasses*, The Lofstrand Co. Reviewed August.

Two booklets from Midwest Mfg. Co. Reviewed August:

19-149. *Complete Kitchen-Kraft Steel Kitchens*.

19-150. *Kitchen-Kraft Steel Kitchen Cabinets*.

19-163. *Cooking Electrically (ER-46)*, 10-p. illus. consumer booklet on automatic electric range. Automatic timing controls. Instruction on baking, broiling, roasting, etc. Emphasis on adequate wiring. Specifications. National Electrical Mfrs. Assn.

Two booklets from Visual-Equipment Mfrs. Council. Reviewed August:

19-155. *Designs for Visual Education, Part I*.

19-156. *Designs for Visual Education, Part II*.

Surfacing Materials

19-151. *Suntile*, Cambridge Tile Mfg. Co. Reviewed August.

19-152. *Plastic Magnesium Oxide Chloride Flooring*, The Camp Co. Reviewed August.

19-153. *Gypsum Plaster Base Coats and Finishes, AIA 21-A-2 (AP-2)*, U. S. Gypsum Co. Reviewed August.

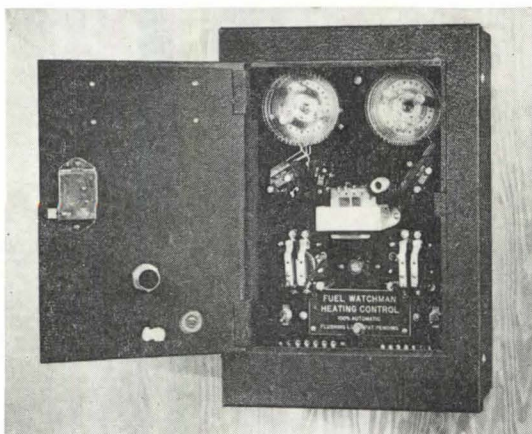
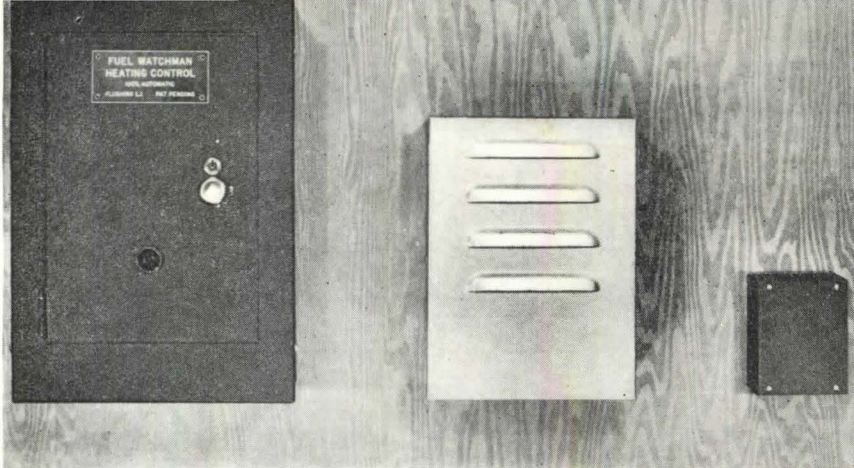
19-164. *Weldtex Striated Plywood*, 10-p. illus. booklet on plywood for walls, ceilings, furniture in residential and commercial buildings. Also Weldtex Exterior Grade Striated Plywood. Finishes; application methods. U. S. Plywood Corp.

19-154. *Zonolite Insulating Concrete Floors, AIA 37-A (Form CA-4)*, Universal Zonolite Insulation Co. Reviewed August.

Traffic Equipment

20-42. *Elevator Door Details (Form 667)*, Montgomery Elevator Co. Reviewed August.

Cordé's Photo



Three units comprise the new Fuel Watchman heat control: above, left, main control panel; center, outside thermostat; right, roof control. At left, main panel, opened, reveals the simplicity and ruggedness of the mechanism. At top of the main panel are the two sets of plastic dials referred to in the text.

EFFICIENT NEW HEAT CONTROL

The three units shown above, plus wiring designed to simplify installation, compose a remarkably sensitive and efficient heat control for large installations such as apartment houses. Known as the "Fuel Watchman" (manufactured by Fuel Watchman, 77-29 138th St., Flushing, N. Y.), it is not yet in quantity production although it has been thoroughly tested on a few local installations for several years with remarkably improved operation of heating systems and considerable savings of both fuel and manpower.

The roof control, preset at the factory, is located where it will receive direct sunshine for the greatest number of hours per day. It determines the amount of solar radiation being absorbed by the building, in order to prevent the system from overheating on mild, sunny days. The outside thermostatic control, mounted preferably on the north side of the building away from direct sunshine, operates selectors in the main panel at any of six predetermined temperature settings, which range from 60F to below freezing. The main panel is mounted in the boiler room and requires an electrical supply.

Inside the main panel are synchronous clocks on each of which are mounted six plastic schedule discs or dials (see illustration), one corresponding to each temperature setting. At 60F outside, one disc controls the boilers; at 55F,

another; and so on down to 30F or below. Relays, actuated by the discs to furnish the actual motive power for operating the boilers, are well oversized; the entire assembly is notable for its ruggedness, simplicity, and accuracy. Very little servicing has been necessary on units installed to date. The "Watchman" keeps the boilers in operation as long as there is a call for heat; when the design pressure builds up in the boiler the assumption is that the heat demand is satisfied and the boiler shuts off. This presupposes good design, installation, and maintenance of the heating system itself. Of course, a change in outside temperature will cause the controls to activate the boilers again. For morning "pickup," the control operates the boilers continuously on pressure in order to reach the desired building temperature quickly. The above applies to steam systems. For hot water systems, the control operates the circulating pump in a corresponding manner.

ELECTRIC RANGE FOR BUILDING IN

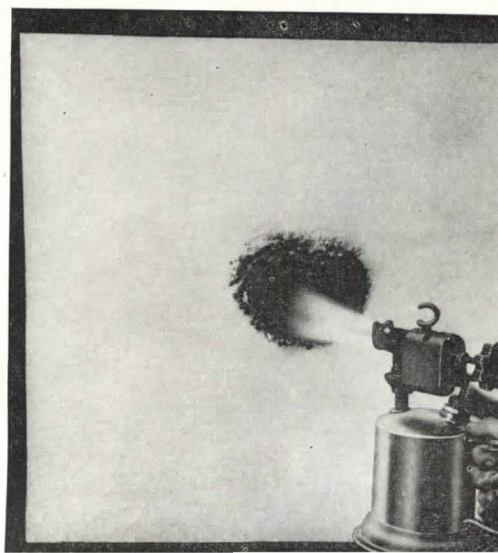
At last one range manufacturer (Thermador Electrical Mfg. Co., Los Angeles 22, Calif.) has produced a series of units which can be built into any kitchen design. There are four types of

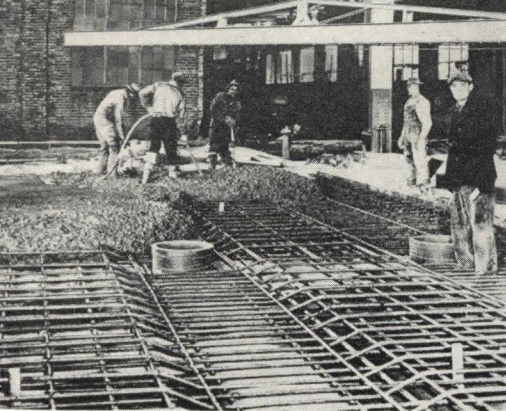
units (griddle, cooking unit, ovens, and wall heater), any or all of which may be installed together in any sequence or location desired. Called the "Thermador," the range's griddle unit can be installed flush with any counter top, as can the cooking unit which has three "burners" and a deep-well cooker for which switches provide five heating levels. The ovens can be built into any vertical cabinet at whatever height the housewife wants; the primary oven (there are two) has automatic time and temperature control, interior light, baking and broiling units, is large and well insulated. Secondary oven, nearly identical, lacks only the clock and "minute minder." Somebody should give this manufacturer a medal.

FIRE-RETARDANT PAINT

"Albi-R" (Albi Chemical Corp., New York, N. Y.) is a fire-retardant paint which, when exposed to direct flames as shown below, bubbles up into a charred mass of blisters that reportedly prevents the penetration of heat to any substance beneath. The new protective coating is easily applied by brush or spray. It is said to exceed the requirements of the 20-minute burning test (Fed. Spec. SS-A-118) and accelerated aging tests conducted at Purdue University showed no failure after the equivalent of 20 years' weathering. The product was recently dramatically pictured in *Life Magazine*. It is the only fire-retardant coating listed by the Underwriters' Labs, and it has been approved by the N. Y. City Board of Standards and Appeals for use on combustible materials.

"Albi-R", a new fire-retardant paint (Albi Chemical Corp., New York, N. Y.) forms an incombustible coating when subjected to flame.

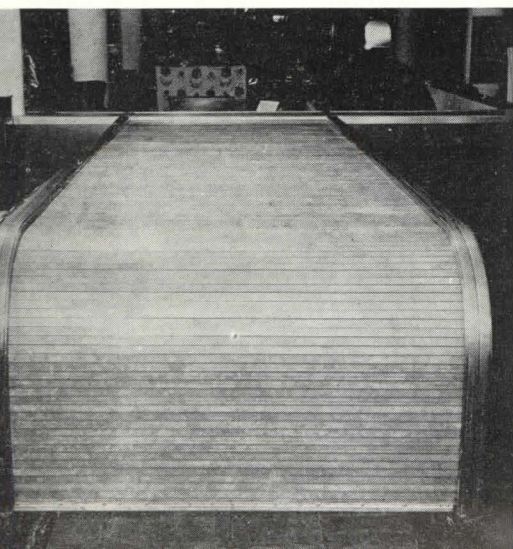




10 in. of concrete is poured to make a reinforced slab over radiant heating pipes in the quarter-mile-long warehouse being built by United States Steel's pipe-making subsidiary National Tube Co., at its Lorain, Ohio, plant. 25 miles of 1-in. steel pipe, grouped in the closed 3-acre system, which will heat more than 7 million cu ft of space.



Above, Ceco combination storm window and screen unit (Ceco Steel Products Corp., Chicago, Ill.): all aluminum, its bottom storm sash is "stored" by raising and locking in place; screen remains in position all year. Below, electrically operated rolling steel shutters for sealing an Escalator (Otis Elevator Co.) at top of each run operate either automatically in case of fire, by push button, or by manual cranking.



THIS MONTH'S PRODUCTS

AIR AND TEMPERATURE CONTROL

Fuel Watchman. Heat control for large installations which keeps boilers in operation until pressure indicates heat demand is satisfied, then shuts off automatically. Features a roof control which determines amount of sun radiation absorbed; relates this to actual heat produced, thereby preventing overheating. Fuel Watchman, 77-29 138th St., Flushing, N. Y.

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

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

DOORS AND WINDOWS

Ceco Storm Window and Screen Unit. All aluminum, bottom sash "stored" by raising and locking in place. Ceco Steel Products Corp., 5701 W. 26th St., Chicago, Ill.

Bakewell-Hydro-Hinge. Built like a hinge, for residential, commercial, and industrial use; eliminates all visible door closing mechanisms such as springs and hydraulic units. Adjusts to varying speeds; tamperproof and non-leakage. Bakewell Products, 1201 Riv Vista Ave., Los Angeles 23, Calif.

ELECTRICAL EQUIPMENT AND LIGHTING

Counter, Accent, and General Lighting Fixtures. Designed to illuminate without glare at low brightness; answers specific lighting problems. Downlight projects from inconspicuous source; blends into slightly illuminated ceilings; provides nearly shadowless illumination. Directional lighting is very flexible; used in downlight or angular accent light. Counter downlight projects long, narrow beam conforming to outline of counter top. Century Lighting, Inc., 419 W. 55th St., New York 19, N. Y.

"Circline," Fluorescent Fixture. Takes 32-watt lamp which banishes shadows; sends evenly diffused "daylight" in every corner of kitchen, bath, basement, hall, or workshop. Easy to install; holds new spring-type knock-out button for pull-chain or drop cord. 13" width; 4½" height. Homecraft Electronic Products, 1208 S. Kedzie Ave., Chicago 23, Ill.

FINISHERS AND PROTECTORS

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

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

California Redwood Stain. A protector which maintains color of redwood clapboards and sidings; also restores original color to faded redwoods. Gives redwood appearance to any wood. Samuel Cabot, Inc., 102 Oliver Bldg., Boston, Mass.

MATERIALS OF INSTALLATION

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

Clip-Grip Steel Studs, Clips, and Runners. Fireproof, clip-grip system of partition construction. Clip-grip studs are notched at ceilings and floor lines to accommodate facing material from ¼" to ½" thick. Steel floor and ceiling runners, when bolted to floors and ceilings, serve as track for partitions. Neslo Mfg. Corp., 516 5th Ave., New York 18, N. Y.

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

SANITARY EQUIPMENT

Chrome-Plated Faucet Handle. Fits all diameter valve stems, for standard sinks, baths, and lavatory fixtures. Eliminates need of replacing entire fixture when only handle is needed. Sturgis Plating & Mfg. Co., Sturgis, Mich.

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

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

SPECIALIZED EQUIPMENT

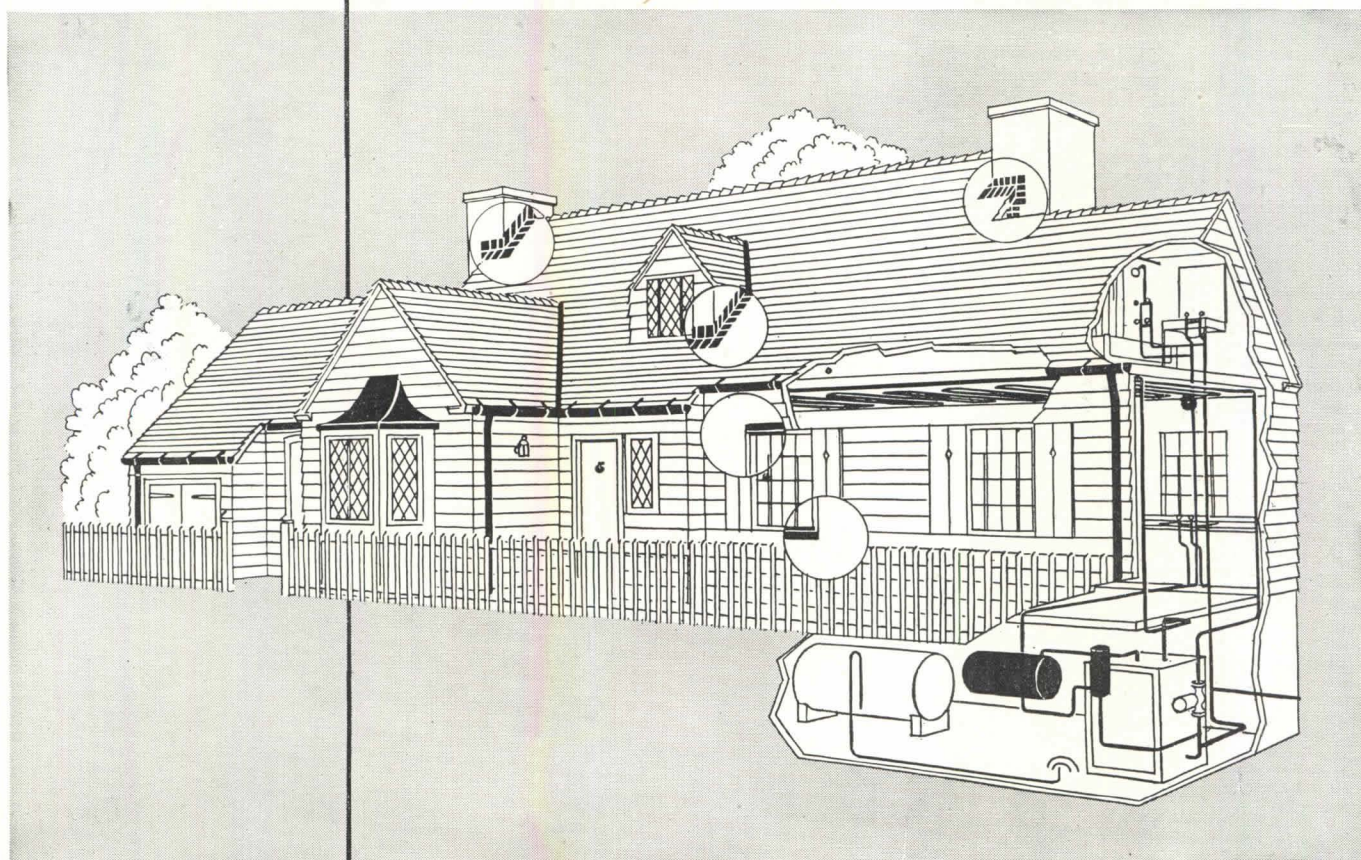
"Albi-R." Fire-retardant paint, forming bubble-mass when exposed to flame which prevents penetration of heat. Said to exceed 20-minute burning test (Fed. Spec. SS-A-118). Applied by brush or spray. Albi Chemical Corp., 9 Park Place, New York, N. Y.

SURFACING

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

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

COPPER AND COMMON SENSE



TROUBLE always costs more than REVERE COPPER

FROM the start of your plans throughout the life of the house, Revere Copper and Brass Incorporated works with you to insure your client's lasting satisfaction.

- Revere Literature helps you convey to your clients a better understanding of the part copper plays in protecting a home.
- Revere Research is constantly at work to develop the new data you need to design ever-finer copper construction.
- Revere's Technical Advisory Service, Architectural, is always ready to help you solve new or difficult problems.

It is because of this all-around cooperation—in addition to the consistently fine quality of Revere copper and brass building products—that *trouble always costs more than Revere Copper.*

Revere products include: Copper Water Tube for use with soldered fittings for hot and cold water lines and heating lines; Red-Brass Pipe; Sheet Copper and Herculoy for tanks, pans, ducts and trays; Copper oil burner, heat control and capillary tubes . . . and, of course, Sheet Copper for roofing, flashing and other sheet metal construction. They are handled by leading distributors in all parts of the country:

REVERE
COPPER AND BRASS INCORPORATED

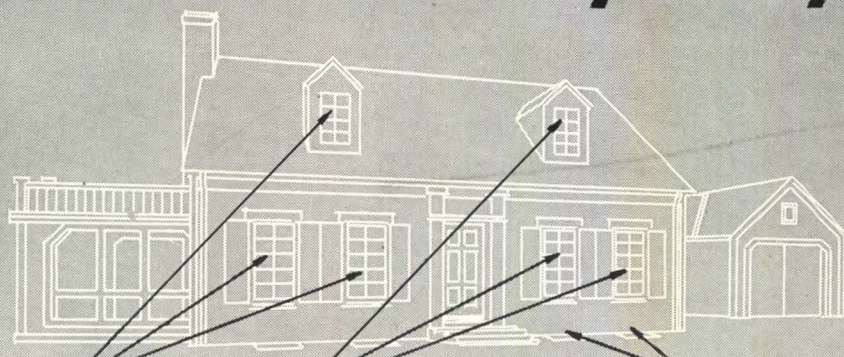
Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y.—Sales Offices in Principal Cities, Distributors Everywhere.

Here's

How to save money 3 ways



WINDOWS

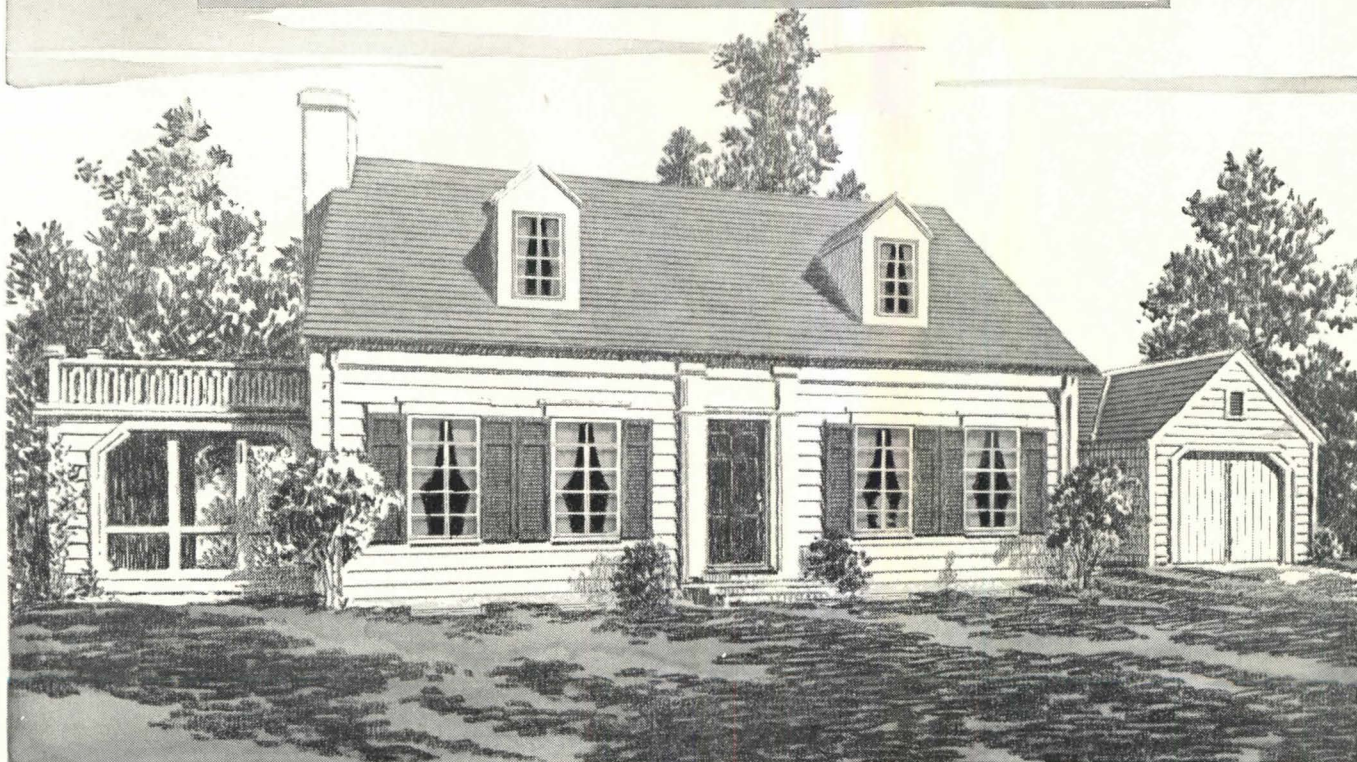
No repair costs
Rot proof

SCREENS

Cost less than
old style screens

BASEMENT WINDOWS

No repair costs
Termite proof



In construction products **CECO ENGINEERING**

a Way to Reduce Home Building Costs !

Have you ever asked yourself "How can home building costs be reduced?" Now, that's a practical question—and here at Ceko we have an answer. Certain Ceko products *will reduce* home building costs. Take steel windows for example: They cost less installed, because there are no hidden costs to overlook, such as hardware, prime coat, accessories, additional labor costs. Then, too, steel windows last, and last, and last. There is no need for repair—they cannot rot . . . they are bonderized and painted for protection against rust. And that goes for steel basement windows, too. Another way to save is provided by Ceko metal frame screens. Installed, they actually cost less than old-style screens, are factory finished—need no on-the-job painting, trimming or fitting. So, to reduce home building costs, recommend Ceko metal casements, basement windows, and metal frame screens.

WHY SPECIFY CECO?

Ceko does more than design and manufacture fine construction products. Besides their wealth of technical engineering skill there is available construction knowledge gained by 35 years of experience on the job. In 23 offices strategically located from coast to coast, Ceko stands ready to help you reduce home building costs. Call on Ceko today!

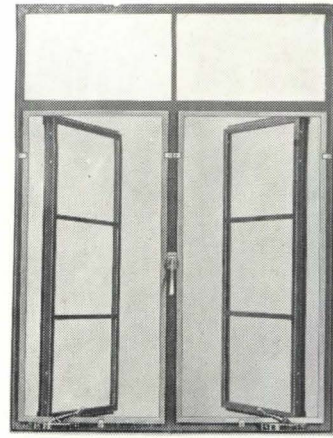
CECO STEEL PRODUCTS CORPORATION

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

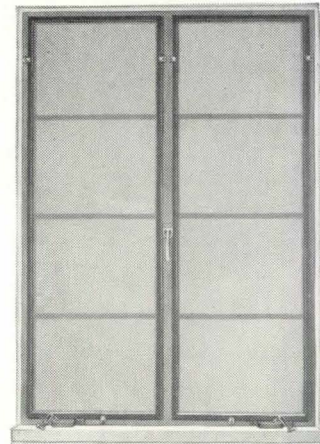
Offices, warehouses and fabricating plants in principal cities

**CECO
STEEL**

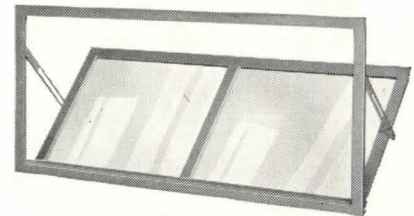
makes the big difference



Ceko steel casements are precision engineered, provide tighter weatherseal. They give 30% more light and allow controlled ventilation up to 100%. Easily washed outside from the inside . . . no risky ladders.



Note the trim appearance of Ceko metal frame screens. They come in standard types and styles for every purpose. They are custom built from steel, bronze, or aluminum and are wired with rust-proof screen cloth.



Ceko's economy basement windows are easy to install and easy to open and close. They are designed to provide partial or full ventilation in the basement. Newly designed combination storm window and screen also available.

Partial list of other Ceko Products

Combination All-Aluminum Storm-Panel-and-Screen for Wood Windows • Meyer Steelforms • Reinforcing Steel • Steel Joists • Roof Deck • Metal Lath and Accessories • Highway Products • Corrugated Roofing



Complete wall of Satinol Louvrex lets light filter from reception space to conference room. Offices of Robert Gruen Associates.

Interior window glazed with Satinol Louvrex assures privacy plus light. Designed by Robert Gruen Associates.



GAIN LIGHT...

through Walls as well as Windows

● To diffuse light generously...to borrow light from one room for another... designers and decorators choose *Patterned Glass*.

Clear or *Satinol*-finished, this fine glass lets light filter through freely...yet its distinctive patterns obscure the view, making *Patterned Glass* completely practical for light-transmitting panels, partitions, or entire walls.

Blue Ridge *Patterned Glass* is available in a wide range of linear, square or all-over patterns to add a sparkling look of luxury to modern or period settings. Consult your nearby L·O·F Glass Distributor. Write for our *Patterned Glass Modernization* book. Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company, 1097-A Nicholas Building, Toledo 3, Ohio.



BLUE RIDGE *Patterned* GLASS



FOR SOFT, DIFFUSED LIGHT • SMART DECORATION • COMPLETE PRIVACY

ATTRACTIVE • ECONOMICAL • LOW UPKEEP

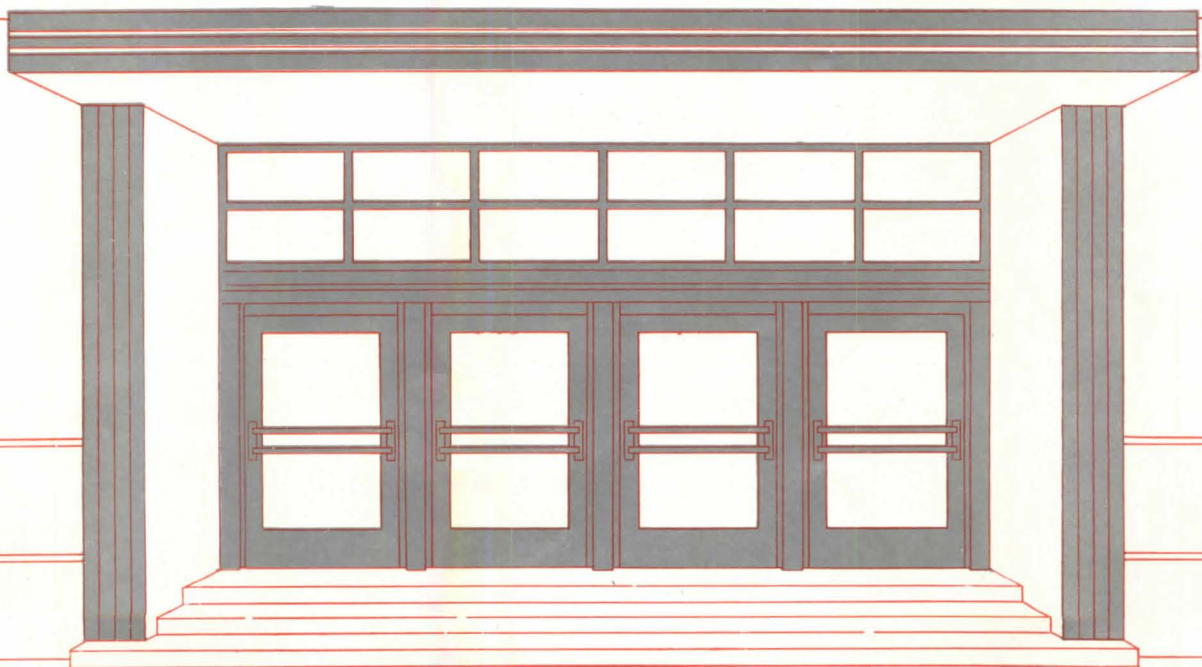
ALCOA

Architectural Extruded Shapes

When design problems call for distinctive appearance and low upkeep, turn to Alcoa Architectural Extruded Shapes. Here you may find the answer, and at reasonable cost.

Alcoa Extrusions, produced in standard or special designs, can eliminate the need to build up sections from formed plate and sheet and rolled shapes such as angles, channels and tees. First cost is reasonable. Assembly time and labor costs are reduced. Rust-proof, corrosion-resistant, Alcoa Aluminum, available in a variety of finishes, provides distinctive appearance.

Alcoa's years of experience in the design and production of extruded shapes is available to all architects. For information, write for a copy of the Alcoa Architectural Extruded Shapes Booklet (A.I.A. File No. 15 J), or call your nearby Alcoa sales office. ALUMINUM COMPANY OF AMERICA, 1868 Gulf Building, Pittsburgh 19, Pennsylvania.



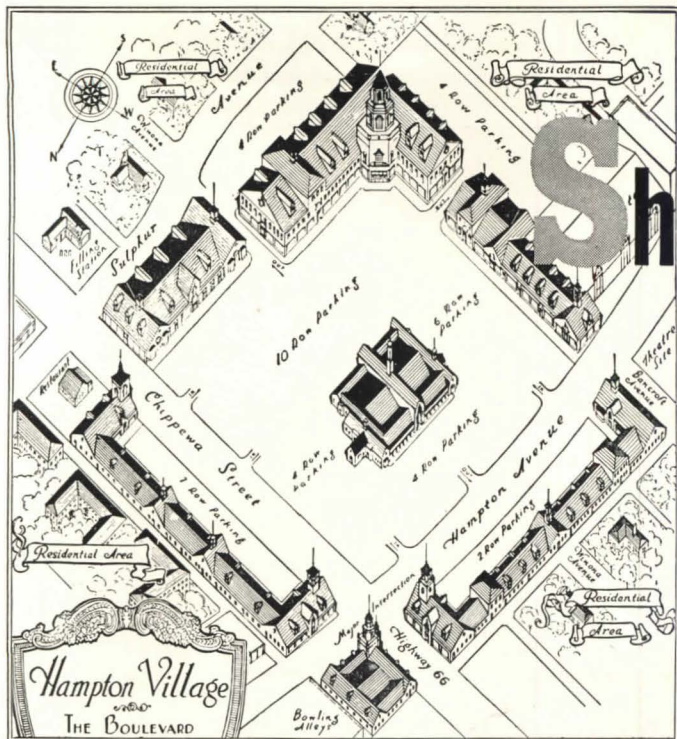
MORE PEOPLE WANT **MORE** ALUMINUM FOR **MORE** USES THAN EVER

ALCOA FIRST IN ALUMINUM

REG. T. M.

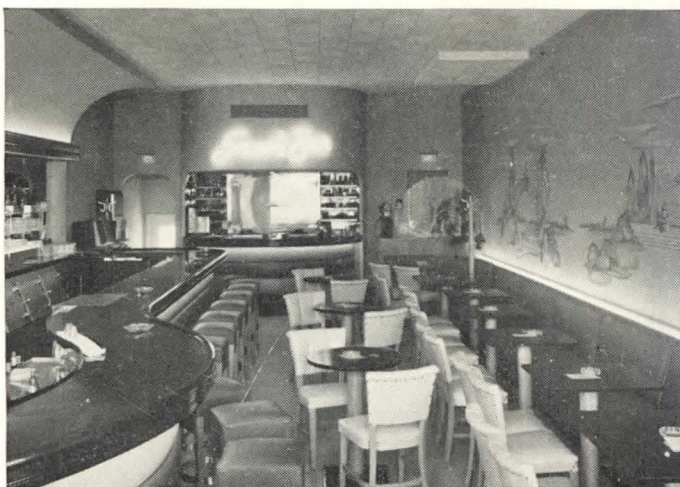


IN EVERY COMMERCIAL FORM



Shoppers' paradise will be

From snack bar to florist shop, Hampton Village's stores will be equipped with **Servel All-Year Gas Air Conditioning**



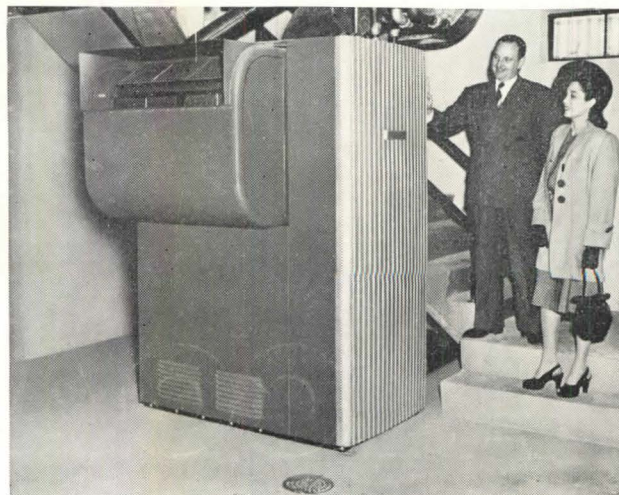
Smartly styled snack bar and cocktail lounge. Servel Air Conditioner keeps customers cool in summer, warm in winter, and clean and comfortable all year 'round . . . helps boost patronage, too.



Modern-designed florist shop. Servel Air Conditioner pays big dividends by keeping flowers fresh and attractive—winter and summer.

HAMPTON VILLAGE—located in the midst of one of St. Louis' most fashionable urban and suburban areas—is not only one of the largest drive-in shopping centers in America, but it's the *only* one that will be completely air conditioned. This \$11,000,000 project covers an area equal to 14 city blocks...and will include 110 retail stores.

What's more, every Hampton Village shopper, salesman, and worker will enjoy the comforts and health-giving benefits of Servel *All-Year* Gas Air Conditioning.



Individual Servel Air Conditioners are installed in each store . . . and controlled by the tenant. Here's a typical basement installation.

Servel, Inc. is a member of the Producers' Council, and is engineering its products to conform with accepted practices in modular planning.

in St. Louis All-Year Air Conditioned



Each of the 22 stores now completed has its own self-contained Servel unit. Each tenant has complete control over the temperature in his store by simply using the Servel Selectrol. In summer, Servel circulates air that's refreshingly cool and free from humidity. In winter, the same unit provides comfortable, properly humidified warmth. All year long, Servel keeps the air clean and draft-free.

It's easy to see why Hampton Village chose Servel in preference to other kinds of air condi-

tioning equipment. No other type provides the simplicity of control and flexibility of service. This is especially important in a super shopping center, where the air conditioning must satisfy the practical and comfort requirements of several different kinds of retail businesses.

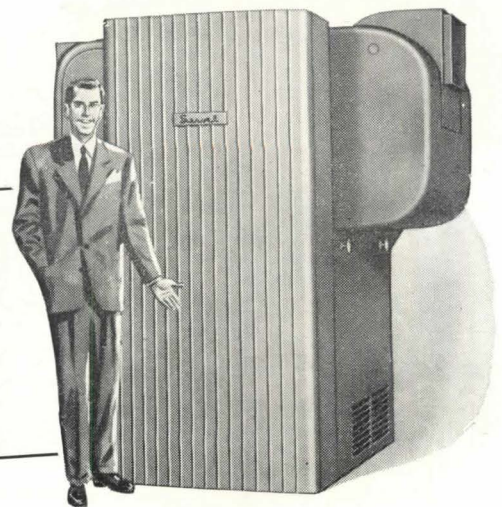
For complete information on *all* the advantages and conveniences of Servel All-Year Gas Air Conditioning, see your local Gas Company ... or write to Servel, Inc., 4709 Morton Avenue, Evansville 20, Indiana.

TRIED . . . PROVED . . . SUCCESSFUL

(From Boston to San Diego . . . From Bismarck to Miami)

The Servel All-Year Gas Air Conditioner is already operating successfully in hundreds of installations from coast to coast. Some have been running for more than seven years. The equipment is tried, tested . . . and *approved* by users everywhere.

Servel
All-Year GAS AIR CONDITIONER





The Crane Sunnyday Kitchen

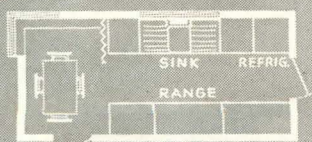
Sunnyday for home owners

Home owners brighten up at first sight of this new Crane Sunnyday Sink. Here is *beauty*—sparkling vitreous enamel that wipes clean in a flash. Here is *convenience*—an extra deep basin... two generous drainboards. And here is *Dial-ese*, the amazing Crane faucet that harnesses water pressure to aid in closing, yet opens at the barest touch of a finger!

Features like these carry through a wide range of Crane sinks, embracing a style for every taste

and a price for every building budget. And the quality that goes with them—always associated with this best-known name in plumbing—you'll find *that* kind of quality in beautiful Crane bathrooms, too. You'll see it again in heating, whether for hot water, steam, or warm air . . . for coal, coke, oil, or gas.

The Crane line now in production is in your copy of "Crane Service for Architects." If you do not have a copy, ask your Crane Branch for one.



Approx. Size: 11' x 7' 6"

At left is the floor plan of the kitchen shown. Of course, the Crane Sunnyday Sink lends itself to smaller arrangements, too, as suggested in the two kitchens on the right.



Approx. Size: 8' x 10' 6"



Approx. Size: 9' x 8' 7 1/2"

CRANE

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

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

Color Dynamics

Pittsburgh's modern painting method uses the energy in color as an aid in Color Therapy...speeds convalescence of hospital patients—increases efficiency of hospital staffs.



Pittsburgh's new system aids you to suggest the right colors to use in hospitals!

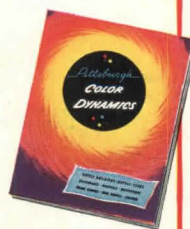
AN entire hospital that radiates warmth, cheerfulness, comfort. Patients' rooms and wards whose colors hasten recovery. Operating rooms that reduce eye fatigue. Nurses' stations that promote alertness and efficiency. Corridors and solariums that are cheerful at all times.

That's the kind of institution you can plan, too, if you use Pittsburgh's system of **COLOR DYNAMICS** in its decoration.

Working with medical men and psychologists, Pittsburgh's color experts and technicians have based this new painting method upon the reactions of human beings to color.

In many hospitals and sanatoriums, **COLOR DYNAMICS** has transformed drab and uninviting institutions into charming and attractive establishments in which patients have made speedier recoveries and entire staffs have done their work more pleasantly and efficiently.

You will find the story of **COLOR DYNAMICS** as an aid to Color Therapy explained in our new book on this subject. Send for your free copy today. Pittsburgh Plate Glass Company, Paint Division, Dept. PA-97, Pittsburgh 22, Pennsylvania.



Paint **RIGHT** With Color Dynamics Paint **BEST** With Pittsburgh Paints!

The benefits of **COLOR DYNAMICS** are made more enduring when you use Pittsburgh's long-lasting quality paints. There's a **PITTSBURGH PAINT** for every need!

WALLHIDE—in three types: **PBX**—extra durable finish which can be washed repeatedly without streaking or spotting. **SEMI-GLOSS**—for higher sheen. **FLAT**—velvet-like finish for offices, libraries, dining rooms. These paints are enriched with "Vitolized Oils" for live-paint protection.

WATERSPAR ENAMEL—for furniture, woodwork, metal trim—its rich gloss resists marring and abrasion.

FLORHIDE—for floor surfaces. Quick-drying, tough, can be scrubbed frequently with soap solutions.



PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.

PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

THE DIVIDING LINE BETWEEN
TRUE AND FALSE
ECONOMY...



**IS NOT ALWAYS
APPARENT!**

Low initial cost should never be the only reason for specifying or recommending a product. True economy considers the service rendered and its replacement cost. A piping system should render efficient and long-lasting service to be a true economy for your client.

Streamline Copper Pipe and Solder Type Fittings are made from copper and bronze which have long been recognized as the most durable of metals for piping and a multitude of other purposes. There are many cases on record where copper has lasted for hundreds of years and, with the exception of a slight tarnish, remain just as serviceable as when first installed.

Streamline Copper Pipe connected with Streamline Solder Fittings cannot rust and is unaffected by vibration. Streamline affords a permanently reliable conducting system with the first cost little, if any, higher than materials that corrode and leak a few years after installation. In the plans which are on your board now, provide efficiency and long life in the piping system by writing in Streamline Copper Pipe and Solder Fittings.

STREAMLINE

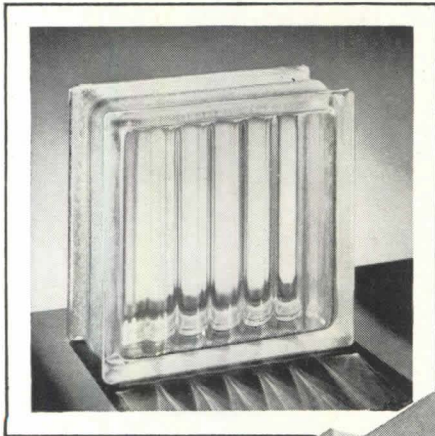
TRADE MARK REG. U. S. PAT. OFFICE

COPPER PIPE AND FITTINGS

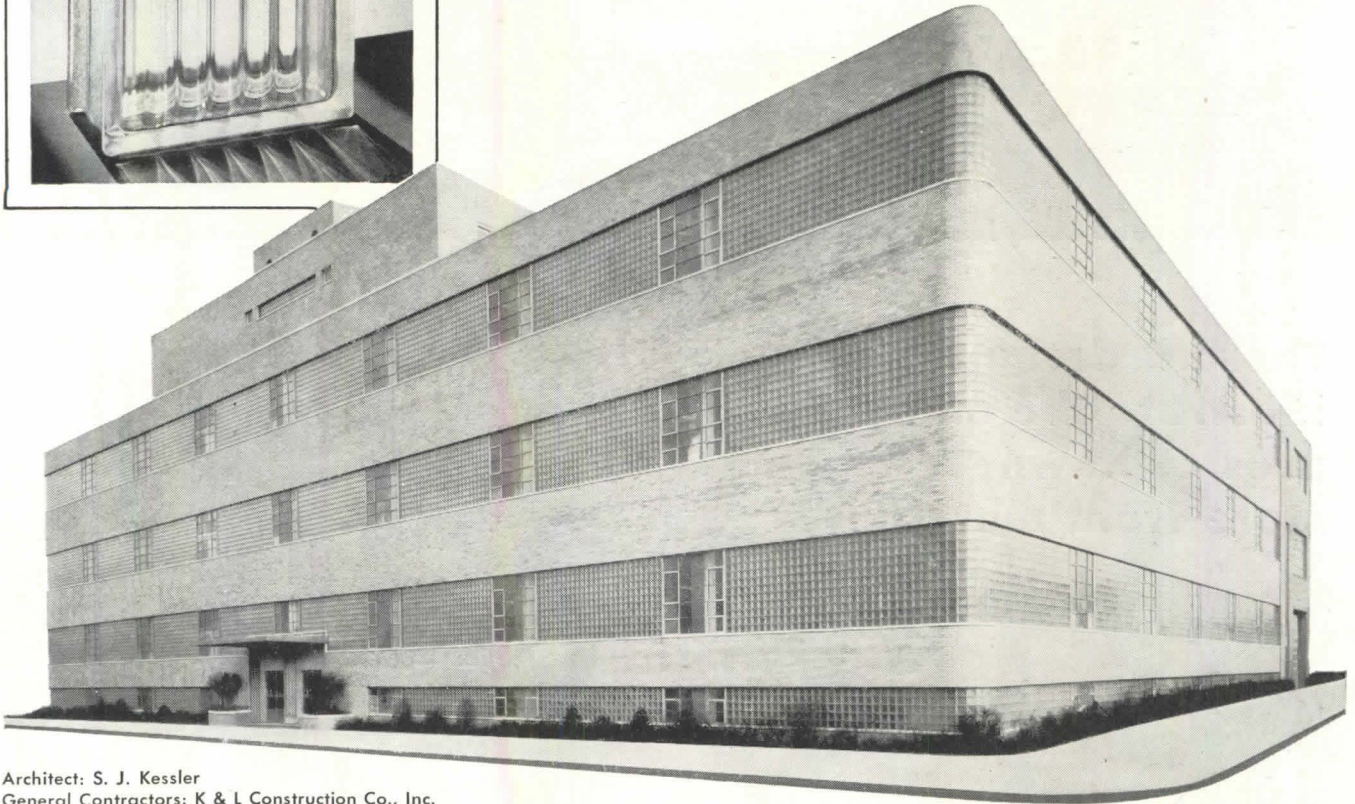
MUELLER BRASS CO.

PORT HURON, MICHIGAN

The modern material for modern buildings



PC GLASS BLOCKS



Architect: S. J. Kessler
General Contractors: K & L Construction Co., Inc.

▶ Modern appearance, modern efficiency, modern economy—those are the main advantages your clients get when you specify PC Glass Blocks.

Panels of gleaming glass blocks make any plant a thing of beauty. Spacious interiors, with plenty of cheery clear daylight, are pleasant places to turn out good work. And the light can be directed to where it is needed most, even to areas remote from light openings.

PC Glass Blocks are hollow, have definite insulating properties. Heat losses through light

transmitting areas are reduced to the minimum. Desired temperatures are easier to maintain and condensation is minimized. Infiltration of destructive dust and grit is prevented.

These are some of the reasons why many architects are specifying PC Glass Blocks for new construction and for modernizing projects. You will want to know all the advantages your clients get with PC Glass Blocks. Send the convenient coupon today for our authoritative booklet. The Pittsburgh Corning Corporation also makes PC Foamglas Insulation.

PC GLASS BLOCKS . . . the mark of a modern building



T. M. REG. U.S. PAT. OFF.

GLASS BLOCKS

Distributed by **PITTSBURGH PLATE GLASS COMPANY**
by **W. P. Fuller & Co.** on the Pacific Coast and
by **Hobbs Glass Ltd.** in Canada

FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS

Pittsburgh Corning Corporation
Room 664, 632 Duquesne Way
Pittsburgh 22, Pa.

Please send along my free copy of your new book on the use of PC Glass Blocks for Industrial Buildings. It is understood that I incur no obligation.

Name.....

Address.....

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

4 WAYS TO SOLVE THIS STORE FRONT PROBLEM



**Out-of-Date Appearance
Poor Display Facilities
Inadequate Identification**

**These 4 designs
illustrate the many
uses of Kawneer
store front materials**

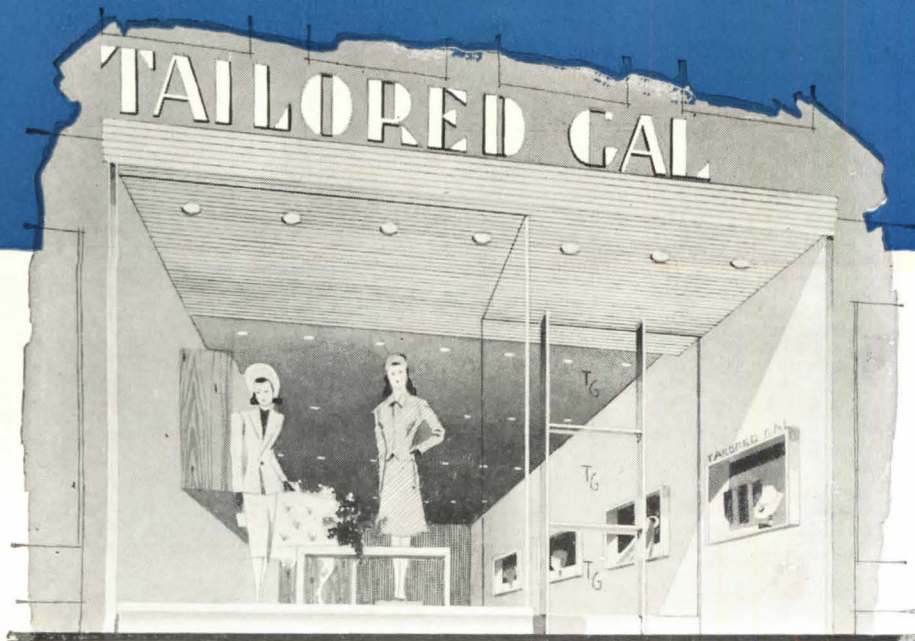
1

All four of these store fronts feature an inviting entrance, a Kawneer Full-Vision Door, and a row of shadow-boxes which direct eyes and feet inside. Clean-lined design below uses aluminum Zourite to face the ceiling above the show window.



2

This entire store has the unified appearance and display value of a big frame shadow-box. This effect has been gained by treating the top and sides of the front with the same stock framing member. The right wall has been covered with Zourite.

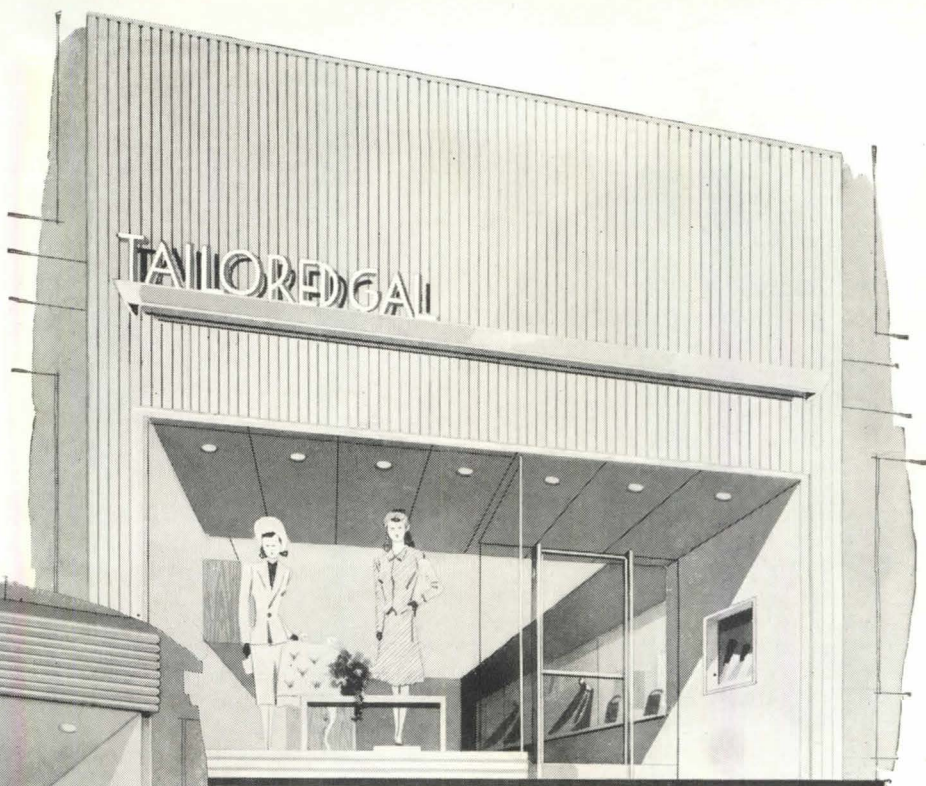


*These four stores
were designed by
Ketchum, Ginó, and Sharp,
Architects, New York City*



3

Here the dramatic appeal of a theatre stage sets off the mannequins. The reeded shape which covers the awning box is repeated as sign backing. The graceful member which faces the bulkhead was used as an awning box cover in Design No. One.



4

By lowering the ceiling above the show window and entrance and by covering the entire sign area with Zourite, this front puts strong emphasis on advertising power. The awning hood acts as a ledge for the sign and further stresses the shop's name.

YOU GAIN NEW FREEDOM IN DESIGNING WITH KAWNEER STORE FRONT MATERIALS

Modern store designing is a challenge for new ideas—and Kawneer materials make these ideas practical by offering a complete range in members and assemblies which answer every store front requirement.

Each of the four store fronts above does an outstanding selling job. Each attracts customers, shows them merchandise, and then pulls them inside to buy.

Yet different interpretations of the problem and the varied use of Kawneer metals result in four unique designs.

With Kawneer materials you can make full use of floor-to-ceiling lights of glass, flush glazing, full vision doors, and many other striking elements of modern de-

sign. You can create a limitless variety of store fronts because these materials have been styled and engineered to meet the demands of contemporary architecture.

Write for the booklets which detail, describe and picture the K-47 line, Zourite, and Kawneer entrances. The Kawneer Company, 770 N. Front St., Niles, Mich.

kawneer
SALES-BUILDING
STORE-FRONTS

FROM THE TECHNICAL PRESS

JOHN RANNELLS

SCHOOLS

LIGHTING, COLOR, FURNISHING. *"Portfolio" of articles in the May 1947 The Nation's Schools, 919 N. Michigan Ave., Chicago 11, Ill.*

Classroom Lighting, The Harmon Technique, Mildred Whitcomb. Functionalism with Color, Faber Rirren. Modern Trends in School Lighting, Russell C. Putnam. Safety Through Color, Anthony F. Kimbell.

Gathered in these articles is a good summary of the modern approach to classroom design, centered particularly around the work of D. B. Harmon, who has built a new theory and technique of classroom planning. As director of school services in the Texas State Department of Health, his studies led to the conclusion that the whole body is involved in the process of seeing; that strains resulting from trying to see in a poor visual environment can distort the whole child, his eyes, his muscles, his body structure, his learning. The results of the Texas experiments are familiar and stimulating. They are in line with recent criteria of illuminating engineers regarding "brightness distribution" for visual tasks but, fortunately for us architects, Dr. Harmon's thinking takes in a lot more territory than one field of engineering.

The material of these articles has largely been published before in more technical journals. Harmon's all-over approach is being followed in fields other than schools and may bring about great improvements in office and factory working conditions.

Cafeteria Planning. *"Portfolio" of articles in the June 1947 The Nation's Schools, 919 N. Michigan Ave., Chicago 11, Ill.*

Nine brief articles, all illustrated by views and floor plans, cover several types of school cafeterias, serving from 100 to 1500 meals. Several are combined with the home economics department. The benefits of relating the school lunch program to the community are repeatedly stressed.

Television for Tomorrow's Schools. *Edward Stasheff. The Nation's Schools, 919 N. Michigan Ave., Chicago 11, Ill. June 1947.*

This article by the program director in charge of television for the radio station of the New York Board of Education is concerned mainly with the use of television as an educational medium. Already (by this fall) a dozen stations are active, with many more on the way. Through cooperation with the broadcasters the schools can make civic

events come alive and forums and quiz tournaments between team from different schools can be shared by the entire city's pupils of equivalent grades.

Provisions for television in school construction is very simple: one-inch conduit run from the roof to several "stations" in the building.

FROM OTHER PUBLICATIONS

Solar House Heating—A Problem of Heat Storage, Maria Telkes. Solar Heat Test Structure at M. I. T., F. N. Hollingsworth. Heating and Ventilating, 148 Lafayette St., New York 13, N. Y. May 1947.

Long-term storage of solar heat has been shown by previous research at M. I. T. to be uneconomical. Short-term storage, as in the floors of Keck's "Solar" house, can supplement the heating system on sunny days. But a moderate collection temperature is essential for a solar heating system which could replace a conventional system. Data from the U. S. Weather Bureau indicate that relatively short-term heat storage is sufficient for the Boston area.

After analyzing heat storage based on specific heat of water, concrete, etc., Dr. Telkes describes a new method utilizing the heat of fusion of chemical compounds (In this case Glaucers Salts, melting point about 90°F). The great advantage is the continued absorption of heat without rise in temperature of the compound. The sun wall heat storage system would consist of a stack of chemical containers behind double glass with an insulating curtain between to be drawn at night for holding the heat, and a heat control device on the inside for disseminating the heat to the room.

A great deal of development work is indicated. Experiments are in progress at M. I. T. to study this and other systems of heating by solar energy alone. Heating analysis indicates that it is entirely feasible in the Boston area where a total heat-storage capacity for nine average days of solar energy should be sufficient.

Shell Concrete Construction. F. S. Snow. The Architects' Journal, 13, Queen Anne's Gate, Westminster, S.W. 1, England. Apr. 24, 1947.

A brief account of concrete shells, both designs and structures. Only uniformly distributed loads can be considered, of course. Great accuracy is required in formwork. The great advantage is conservation of steel and concrete and the light loads resulting with long spans. Architects should find many uses for this type of construction with its distinctive shapes.

How Fire-Safe is a Fireproof Building? *John S. Ahern. Engineering News-Record, 330 W. 42nd St., New York 18, N. Y. June 12, 1947.*

The tremendous hazard of open stairways and (in older buildings) open elevator shafts makes the elimination of such conditions a "must." And the closures are not so costly; they are rendered ineffective most frequently because they are inconvenient. The other basic requirements for fire-safety are reduction of combustible material, adequate exit facilities, and detection and extinguishing devices. And it's up to the architect to insist on his commercial client building up to safety requirements when building codes do not cover.

Roof Trusses with Welded Joints Tested by Jacking. *Engineering News-Record, 330 W. 42nd St., New York 18, N. Y. May 29, 1947.*

All-welded trusses of 40 to 50 ft span for the roof of General Electric Company's new electronic devices research and manufacturing center were connected to columns one above the other in pairs and tested by jacking them apart and observing deflections. Joints were whitewashed to show up any cracks which might develop. The trusses performed satisfactorily under test loads, measured deflections conforming closely with computed ones. After these tests general production welding for the entire project was started. The trusses were all flush-bottomed, made up of H-sections, allowing piping and air conditioning ducts to fit into the truss framing. The building is about 300 ft by 730 ft, with most bays 40 ft by 50 ft.

Time Lag in Radiant Heating. Warren E. Wilson. Heating, piping and Air Conditioning, 6 N. Michigan Ave., Chicago 2, Ill.

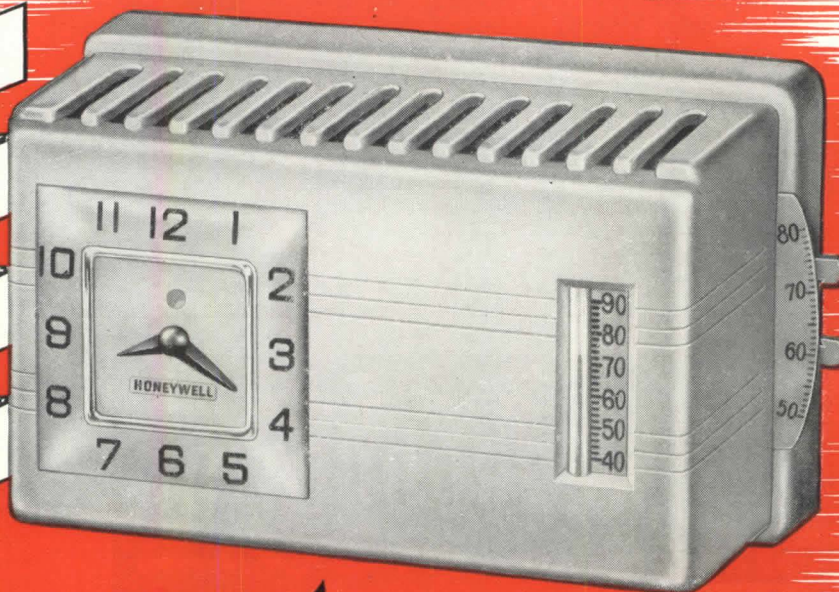
It is shown that the principal factors determining the time lag of a floor panel heating system are the amount of mass below the ducts or pipes carrying the heating medium which respond to changes in temperature of the heating medium, and the temperature of this mass at the beginning of a daily heating cycle.

The characteristics of the operation of the radiant floor panel heating system indicate the desirability of continuous operations to maintain constant temperature of the lower mass. Also the use of massive radiant floor panels in "solar construction" is undesirable, since the heating system does not operate during the day, thus permitting cooling of the lower mass.

(Continued on page 100)

HONEYWELL CLOCK THERMOSTATS

.....are here again!



THE NEW

Chronotherm

Check these ten outstanding DESIGN FEATURES

- 1 Simplicity of overall design. No troublesome intricate mechanisms. Exceptionally compact.
- 2 New bimetal element . . . assures more accurate temperature control, yet sturdy and dependable.
- 3 Fingertip external adjustment for day-night temperature settings.
- 4 Gradual morning pickup insures accurate temperature being restored to the daytime setting without overshooting.
- 5 Ease of time settings for day and night operation.
- 6 External fingertip wheel for setting clock . . . hands may be set as easily as a watch.
- 7 Low speed clock motor . . . the ultimate in quiet, accurate clock operation.
- 8 Clock motor provides 30 times more power than required.
- 9 Easily removable clock assures ready means of replacement.
- 10 Separable wall plate for easy mounting.

Here's *BIG* news and it's *opportune*.

Once again Honeywell leads the way—this time with the entirely new Chronotherm, the finest electric clock thermostat ever built.

Coming at this time in the face of a possible fuel shortage, the Chronotherm has special, added significance because it saves fuel. This feature alone creates an immediate demand. Your clients will be quick to appreciate the advantage of extended fuel supplies, lower heating costs.

You'll want to specify this control as a mark of the newest and most modern improvements in the homes you're designing. And don't overlook the Chronotherm as part of every home remodeling and modernizing project. When you explain how the new Chronotherm saves fuel by automatically lowering temperatures during the night and providing more accurate control at all times, it's a matter of timely interest to every home owner. And they'll recognize the advantages of increased comfort and convenience. Call the Honeywell branch in or near your city or write for complete information at once. Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada: Toronto 12, Ontario.

MINNEAPOLIS
Honeywell
CONTROL SYSTEMS

REVIEWS

(Continued from page 98)

The Size of Dwellings. A memorandum by Ruth Glass. *The Architects' Journal*, 13, Queen Anne's Gate, Westminster, S. W. 1, England. Apr. 10, 1947.

The new British housing, so admirably researched and engineered, consists predominantly of 3-bedroom dwellings, yet the predominant family size requires smaller houses and a balanced project should have a variety of sizes in proportion to family size. From this paper, with its well presented distribution

tables, it appears that the British housing program is getting off-balance in a very important particular.

The Use of Aluminum Alloys. E. G. West. Paper read at a meeting of the R.I.B.A. Architectural Science Board. *Journal of the Royal Institute of British Architects*, 66 Portland Place, London W. 1, England. June 1947.

The tremendous interest in the use of aluminum in building in England since the war suggested this resume of its present status in terms of: (1) characteristics of aluminum and aluminum alloys of special interest to architects; (2) some existing applications of aluminum in building; (3) the present posi-

tion of new and experimental uses of aluminum in building; (4) points requiring attention when designing in aluminum.

The architectural status of this metal in Britain seems to be much the same as here, with, however, a freer use structurally where the light weight is advantageous. The paper and the subsequent discussion bring out that aluminum must be used structurally in terms of its own properties; that its design is not analogous to steel.

HANDBOOKS, MANUALS

Architectural Metal Handbook. Earl P. Baker and Harold S. Langland. *National Association of Ornamental Nonferrous Metal Manufacturers*, 209 Cedar Ave., Takoma Park, Washington 12, D. C., 1947. 8½" x 11", 319 pp., illus. \$5.00

Here is a much-needed comprehensive manual on architectural metal published by the industry as a standard handbook. The information given is remarkably complete, yet so well arranged that information on any particular item is concise and clear. A couple of chapters cover descriptions and properties of the various metals and alloys together with metal working techniques. Then the bulk of the book (about 200 pages) is taken up with drawings and descriptions of architectural metal products; mostly drawings, for the descriptions are brief. Most of the drawings carry a note on what should be specified or shown on details and what is to be considered architectural metal and what is to be covered by other trades. In fact, one of the great benefits of this book is its clarity in defining the boundaries between related trades. Its greatest merit is the great range of items on which precise information is given.

The remainder of the book is taken up with richly informative chapters on metal products related to architectural metal, paints and finishes, specifications, Ornamental Metal Code of Standard Practice, classification of materials, tables of material data, and glossary and index.

Conspicuously lacking is any real discussion of corrosion and electrolysis. Also lacking is any indication of whose products are being illustrated. The book does not replace manufacturers' literature but rather gives the designer a background for the best utilization of manufacturers' literature.

How To Recognize and Control Termites in Illinois. B. G. Berger. *Illinois Natural History Survey, Circular 41. Natural History Survey Div., Urbana, Ill.* 44 pp., 6" x 9", illus. Feb. 1947.

Very thorough treatise on termite damage and means of prevention and treatment. The many photographs and diagrams apply to termite control anywhere in this country. It is a tricky subject, not to be dispatched by a couple of metal shield details, although adequate detailing and supervision of new construction is the best preventive.

(Continued on page 102)

**NEW
FAST
COMPLETE**

Direct Process

REPRODUCTION

**Makes Black and White Prints, Exposes
Blue Prints or Ammonia Type Prints**

Faster, More Efficient than Ever

FOR INTERMITTENT OR CONTINUOUS DUTY



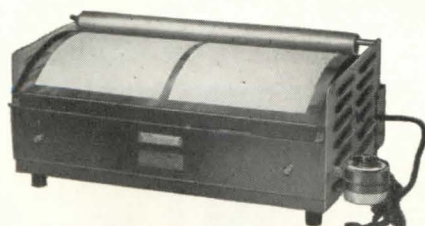
Latest combination unit gives you immediate, clear, sharp, black and white prints as you need them — at minimum cost! No other equipment needed. Prints up to 44" width, in any lengths, at speeds up to 42 inches per minute. Also exposes blue prints or ammonia-type prints. Finger-tip rheostat speed control. New Alzak aluminum reflector increases exposure power. Many other features. Complete unit includes the new, improved, Harvey B-2 (2-tube) or B-3 (3-tube) Continuous Printer, Directo Developer, and Combination Stand. Occupies space 20" deep, 70" wide.

Send for Free Bulletin!

FEATURES

- Variable Speed Drive
- New Alzak Reflector
- Cooper-Hewitt Mercury Lamps
- Improved Feed
- Simple, Easy to Operate
- Plugs in Anywhere

Make Blue or Black and White Prints on the **SPEE-DEE** in 30 seconds!

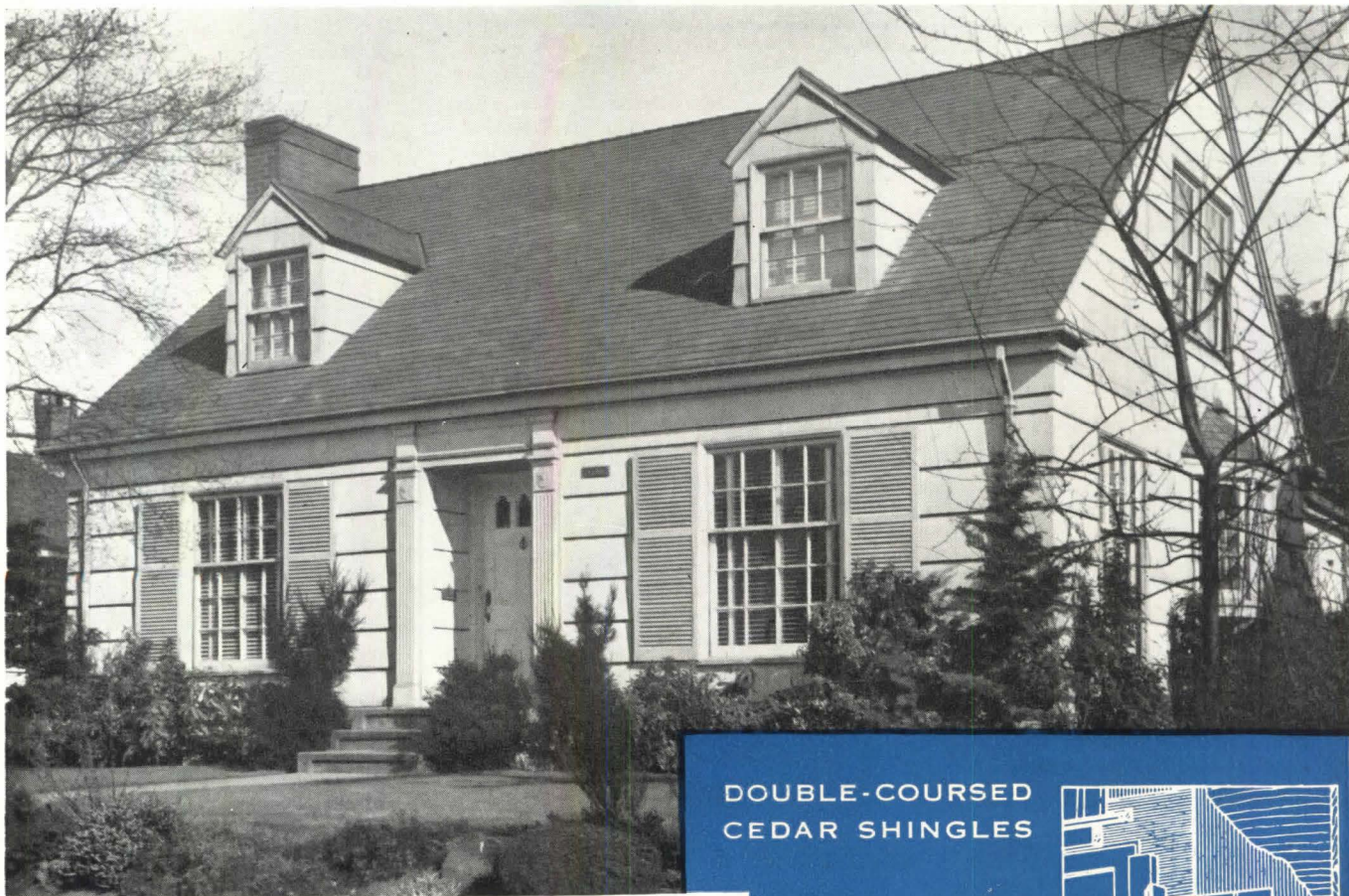


Handiest, most practical low-priced sheet printer! Quickly reproduce drawings, tracings, charts, letters. Plugs in anywhere on 115 volts A.C. or D.C. Oversize printing surface eliminates crowding of prints, overlapping or blurred edges. Capacities: 12" x 18" and 18" x 24" \$35.00 and up. 10 day free trial.

Send for Free Spee-Dee Bulletin

Peck & Harvey

Mrs. of Blue Printing & Photographic Equipment
5735 N. Western Ave., Chicago 45, Illinois
Export Agents: Wonham, Inc., 44 Whitehall St., New York 4, N. Y.



Surprisingly Versatile

Red Cedar Shingles for roofs and sidewalls offer the architect, builder and contractor surprising versatility in one standard material. Available as natural "Certigrade" shingles, or as processed shakes, either stained or unstained, cedar shingles are adaptable to homes of all sizes.

Surprisingly Economical

Sidewalls double-coursed with cedar shingles or cedar shakes are economical because the double application allows wider weather exposures. The under layer is completely concealed—permits the use of low grade, economical shingles. Result is a warm, tight, attractive side-wall.

RED CEDAR SHINGLE BUREAU

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

DOUBLE-COURSED CEDAR SHINGLES

WINDOW AND WINDOW TRIM

EACH UNDERCOURSE SHINGLE MAY BE HELD IN PLACE WITH A SINGLE 3D NAIL

TWO 3D SMALL-HEADED NAILS PER SHINGLE FOR OUTER-COURSE. NAILED 1/4" FROM EDGES AND 1" TO 2" ABOVE BUTT LINE

NO. 2, NO. 3 OR "UNDERCOURSING" SHINGLE FOR UNDERCOURSE

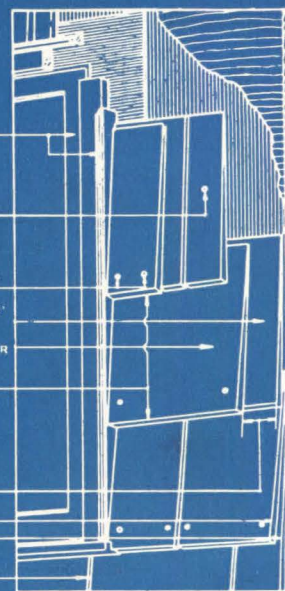
NO. 1 OR NO. 2 SHINGLE OR CEDAR SHAKE FOR OUTER-COURSE

MAXIMUM WEATHER EXPOSURE
UP TO 12" FOR 16" SHINGLES
UP TO 14" FOR 18" SHINGLES
UP TO 16" FOR 24" SHINGLES

BREAK ADJACENT COURSE JOINTS AT LEAST 1/4"

OUTER-COURSE 1/4" LOWER THAN UNDERCOURSE

EITHER TIGHT OR SPACED JOINTS



WINDOW DETAIL

Send for Complete Blueprint

RED CEDAR SHINGLE BUREAU
5510-A White Building, Seattle 1, Washington

Please send me free blueprints detailing various applications of Red Cedar Shingles.

NAME _____
ADDRESS _____
CITY and ZONE _____ STATE _____



**SPECIFY "CERTIGRADE"
CEDAR SHINGLES**



REVIEWS

(Continued from page 100)

Reference Manual of Modern Gas Service. Prepared by the American Gas Assn., 420 Lexington Ave., New York, N. Y. 8½" x 11" loose-leaf post binder.

Each section (kitchen planning, heating, etc.) of this bulky collection of catalog sheets has an excellent general discussion with data on design, installation, types of system, etc. In this setup the catalog material and text complement each other. It is a method which should be used more generally in presenting technical material.

BOOKS

General Standards of Construction and Equipment. Appendix A from Chapter I of Title 42, Public Health Service, Federal Security Agency. Reprint from Federal Register. Government Printing Office, Washington, D. C.

Pursuant to the provisions in Public Law 725 (Federal Hospital Survey and Construction Act) the Surgeon General of the U. S. Public Health Service promulgated regulations under which the Act will be administered. Any architect planning or having the prospect of planning a hospital, whose client desires to benefit under this law, should famil-

iarize himself thoroughly with these regulations.

Of particular interest to the architect is Appendix A, which sets forth the standards for planning, construction, and equipment. The Appendix gives both the minimal and desirable standards to insure that the taxpayer's money will be properly employed. The standards do not prevent a community from planning on a higher standard of medical and nursing care if it should desire it.

Appendix A consists of four sections. The first is introductory in nature, while the second deals with site survey and soil investigation. Section III is the most extensive and important, as it deals with the standards of planning and construction. It sets forth in considerable detail programs for general, tuberculosis, mental, psychiatric, and chronic disease hospitals; and or also programs for nurses' homes schools of nursing, public health centers, and public health laboratories. It further deals with finishes, structural codes, and structural, mechanical, electrical, elevator, refrigeration, kitchen, and laundry installations. The last part of this section deals with the preparation of plans, specifications, and estimates. This is most important to the architect as it recommends for his guidance the desirable submissions and the degree of development and content of the documents at each submission, so as to standardize procedures for the benefit of all concerned.

The fourth section deals with equipment under three headings. Under the first heading comes built-in equipment to be included in construction contracts. The other two take up movable, depreciable, and non-depreciable equipment. The architect will, of course, be primarily concerned with the built-in equipment.

The above standards were worked out with great care and with the advice of public bodies like the American Hospital Association, National Tuberculosis Association, American Psychiatric Association, etc. Nevertheless, it should be observed that the standards are seldom mandates. Quite often they are "desirable but not mandatory," and frequently latitude is afforded in their application to the end of providing adequate medical services, economical operation, and maintenance.

The above should dispel any fears that the standards are just another stifling instrumentality. They are not a Congressional act, correspondingly difficult to budge. They are the creation of an agency (under the law) which has long enjoyed the respect of most people—the United States Public Health Service. It is already evident that when necessary they can be amended without moving heavy artillery. Extensive amendments are even now in preparation.¹ From personal experience I can

¹ Amendments to Appendix A, Title 42, Public Health Service, Federal Security Agency, July 16, 1947.

* THIS TELLS YOU HOW TO GIVE SAFE EXIT TO CORROSIVES

This new, 12-page bulletin tells you how, why and where you should use Duriron acid-proof drain equipment for corrosive wastes.



The booklet first tells you about Duriron; its composition, advantages, physical properties and corrosion-resisting ability. This high-silicon iron is compared with other materials and its superiority for handling corrosives is shown in dramatic visual form.

A handbook on Duriron drain line material for handling corrosive wastes, the bulletin gives engineering data, sizes, dimensions and drawings of the various pieces of Duriron equipment... instructions on how to install... information on application in chemical laboratories, industrial installations, engraving plants and other places where corrosives are handled. Installation photos and a partial list of existing installations in various types of plants are also included.

Today's high cost of repairs makes the Duriron drain line installation even more economical than ever.

Find out how you can protect your waste disposal system against costly corrosion. Write for this new, free bulletin today. Ask for Bulletin 703.

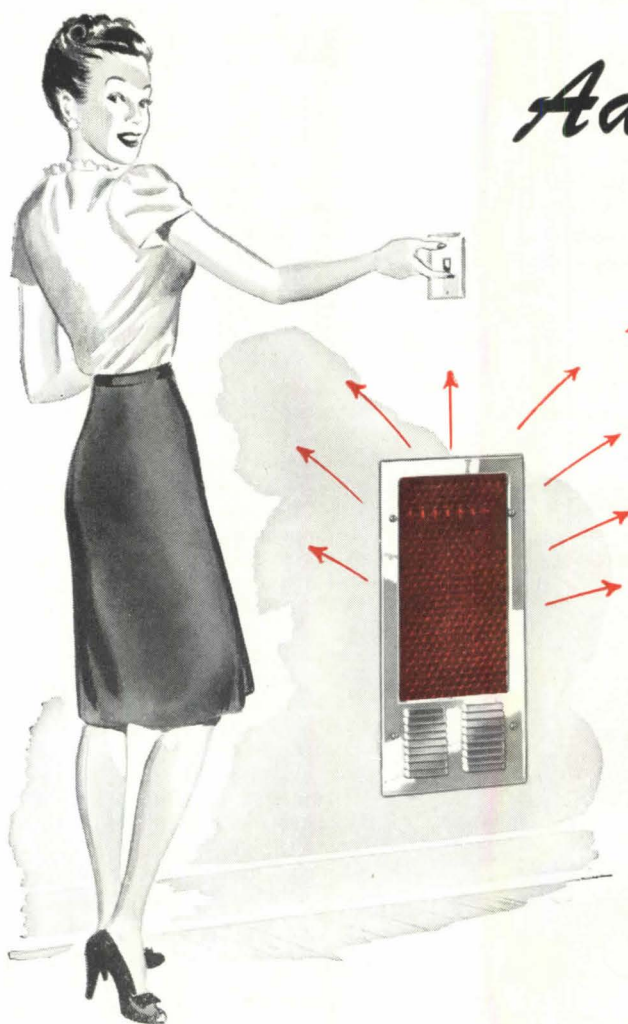
THE DURIRON CO., INC. • DAYTON 1, OHIO

Branch Offices in Principal Cities

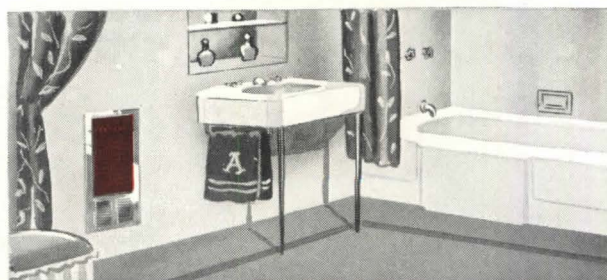
DURIRON

ACID PROOF

DRAIN PIPE



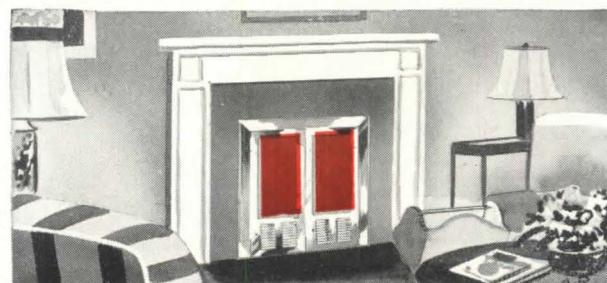
Adds to the Comfort, Convenience and *Value* of the Home!



Ⓐ Quikheters can easily be installed in any room in the house. They are particularly ideal for bathrooms. They quickly eliminate the chill from the room and make shaving and the morning bath or shower a pleasant task.



On chilly damp mornings when the regular heating system is not in operation, or on those blustery, winter days when the cold just will seep in Ⓐ Quikheters will keep baby's room warm and healthful.



Ⓐ Quikheters are available in single units of 1,000 and 1,500 watts and twin units of 2,000 and 3,000 watts. The latter are particularly adaptable for installation in mantels or fireplaces.

“ELECTRIC”
FA QUIKHETER

Frank Adam Electric Quikheters provide that “Extra” which adds so much to the value, comfort, convenience and enjoyment of the home. Quick-acting, requiring only the flip of a conveniently located switch to send forth a flood of warm air into the room, these attractive, economical and long-lasting units afford substantial savings in fuel and add greatly to the beauty and utility of the home.

Install one of these units in your home today. Your electrical contractor can give you complete details or write for Bulletin No. 77.



Frank Adam Electric Co.

ST. LOUIS 13, MISSOURI

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

REVIEWS

(Continued from page 102)

say that anyone finding the standards unreasonable or oppressive in any respect will obtain sympathetic consideration from the Office of Technical Services of the Division of Hospital Facilities in USPHS in Washington.

Looking at the standards and the law under which they were created from the long point of view, here we have for the first time in our history an instrumentality for hospital planning in which the architect will play a significant

role, and the nation will go far toward acquiring adequate health facilities.

ISADORE ROSENFELD

PRECISE, RESTRAINED

Ung Dansk Arkitektur (Young Danish Architecture) 1930-1945. *Helge Finsen. Schoenbergske Publishers, 3 Landemærket, Copenhagen, Denmark, 1947. 211 pp., Danish text; 17 pp., English summary; illus.*

A vital architectural movement was inaugurated in Denmark following the 1930 Stockholm exhibition at which the functionalism of Le Corbusier was formally introduced into the Scandinavian

countries. This movement manifested many of the features of the International School. "Nevertheless, some specific Danish features can easily be discerned, the most conspicuous being a certain mental equilibrium, a distaste for the highflown, even embarrassment in the expression of emotion—receptiveness combined with independence. This characteristic balance of mind is at once the nation's strength and its weakness, combining a gift for simplicity and clarity with a lack of imagination and of a sense of the sublime."

The photographs of Danish work reproduced emphasize clean, precise, restrained architectural effects, generally characteristic of Scandinavian work. Insofar as the single photographs at small scale permit judgment, some of the buildings pictured would be outstanding anywhere: house at Rungsted by Frits Schlegel; house at Anchersvej and apartment house Ordrupvej 70 by Mogens Lassen; Town Hall at Aarhus by Arne Jacobsen and Erik Moeller; Town Hall for Søllerød Kommune, Holte, by Arne Jacobsen and Fleming Lassen; Town Hall and Sportshal at Gladsaxe and Radiohuset, Rosenørns Allé, Copenhagen, by Vilhelm Lauritzen; apartment house, Vestersoegade, Copenhagen, by Kay Fisker and C. F. Moeller; and the interiors of Biograf-teater, Skive, by H. Toft-Hansen, and Council Chamber in Town Hall, Holte, by Jacobsen and Lassen.

Such design factors as function, composition, rhythm of facade are briefly discussed in the English summary; also building materials, residential town planning, terraces, flats, detached houses, schools, auditoriums, public buildings, and structures for industry, business, agriculture. In the Danish text these subjects are considered more fully and more information of a general nature is offered for nontechnical readers.

English legends for the pictures, in addition to the Danish, would be helpful. The literary style of the English summary merits commendation.

LAWRENCE E. MAWN

RECENT ENGLISH ARCHITECTURE, 1920-1940

Published by Country Life Ltd., 2-10 Tavistock St., London W.C. 2, England, for the Architecture Club, 1947. (To be republished later this year by Charles Scribner's Sons, 597 Fifth Ave., New York, N. Y.)

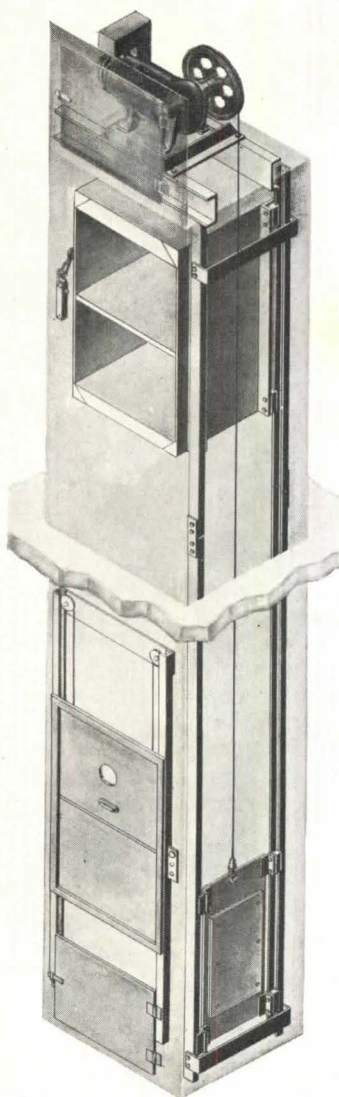
This is an exhibition in book form of photogenic buildings selected for conservatives. It is much less like the Museum of Modern Art's recent *Built in U. S. A.* than *Town and Country's* One Hundredth Anniversary Issue (there are three large country houses by Sir Edwin Lutyens which show his sensitive and reticent handling of traditional forms). It is an English counterpart to something the National Acad-

ELECTRIC TRACTION DUMB WAITERS by Sedgwick

FOR MORE THAN 54 YEARS Sedgwick Machine Works has specialized in the design and manufacture of elevators and dumb waiters. The improved Sedgwick Electric Traction Dumb Waiters are the result of this specialized knowledge and experience, and are generally used for installations where three or more landings are to be served. Widespread use of this equipment contributes to convenience, efficiency and economy in hospitals, hotels, restaurants, clubs, libraries, schools and other commercial, institutional and industrial buildings.

The machine consists of single speed elevator-type high torque, low starting current motor, with worm gear reduction built as one unit and an electric brake. The worm is special alloy steel, machine finished. Worm shaft is provided with ball or roller bearings designed to take both radial and thrust loads. Worm gear is special analysis cast bronze with teeth accurately hobbled and smoothly finished. Gear is mounted on alloy steel sheave shaft provided with roller bearings. Worm gearing operates in a sealed case, filled with special lubricant, providing automatic lubrication to all parts. The electromagnetic brake is adjustable to provide accurate floor stops with all loads and to compensate for wear of brake lining.

The control is fully automatic with a bank of buttons at each opening, permitting car to be called and dispatched from any landing. Combination door locks and switches are provided for the hoistway doors to prevent operation of any door except when car is at the door.



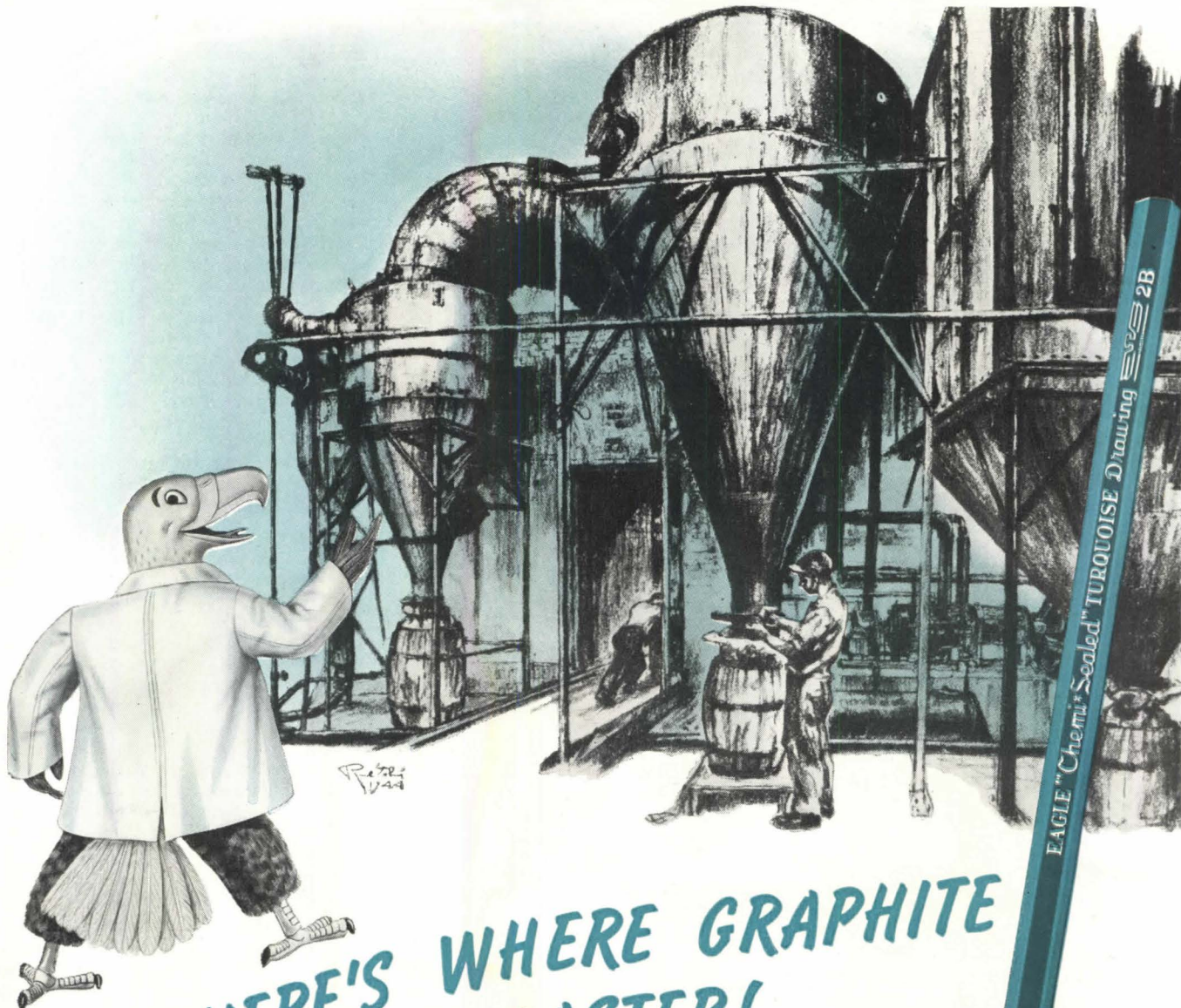
Isometric Drawing of
Sedgwick Electric Traction Dumb Waiter

STANDARD DIMENSIONS						
Size Number	2T-1	2T-2	3T-1	3T-2	3T-3	5T-1
Capacity in Pounds	200	200	300	300	300	500
Speed in F.P.M.	50	100	50	100	175	50
Car Width in Inches	24	24	30	30	30	36
Car Depth in Inches	24	24	30	30	30	36
Car Height Inside, Inches	36	36	36	36	36	48
Clear Inside Hoistway Width, Inches	33	33	39	39	39	45
Clear Inside Hoistway Depth, Including Doors, Inches	29	29	35	35	35	41

For additional information and prices; for data on Sedgwick dumb waiter doors; and for specific recommendations—address

SEDGWICK MACHINE WORKS, 150 West 15th Street, New York 11, N. Y.
ELECTRIC AND HAND POWER ELEVATORS AND DUMB WAITERS

(Continued on page 106)



HERE'S WHERE GRAPHITE MEETS ITS MASTER!

BECAUSE it is a natural lubricant, graphite stubbornly resists reduction to particles of extreme fineness. We knew we could make basically better drawing leads if only we could invent a mill for grinding graphite far finer than it had ever been ground before.

HERE'S OUR MIRACLE MILL, an exclusive patented Eagle process that utilizes the entirely new principle of making graphite *grind itself* down to micron size . . . 1/25,000th of an inch. The particles average four times finer than in the graphite normally used.

AND HERE'S THE PENCIL with the superb new lead we hoped for . . . so dense that it takes a needle point and *holds* it under pressure . . . draws long lines of uniform width . . . and deposits an opaque mark that reproduces perfectly.

TRY TURQUOISE YOURSELF AND SEE! Just write us, naming this publication, your dealer and the grade you desire. We'll send you a *free sample* to test in your own hand. You will be delighted!

EAGLE "CHEMI-SEALED"
(SUPER BONDED)
TURQUOISE

DRAWING PENCILS AND LEADS

EAGLE PENCIL COMPANY, 703 E. 13th St., New York 9, N. Y.

Eagle Pencil Company of Canada, Ltd., Toronto

*Reg. U. S. Pat. Off.

10¢ EACH
... less in quantities

EAGLE "Chemi-Sealed" TURQUOISE Drawing PENCIL 2B

REVIEWS

(Continued from page 104)

emy of Design might have sponsored in this country; that is, Coolidge, Shepley, Bulfinch & Abbot would be more conspicuous than Skidmore, Owings & Merrill. Hence we have Sir Giles Gilbert Scott and E. Grey Wornum well represented, but only one or two buildings by Tecton, Nicholson, and Fry.

We in this country are more familiar with English domestic than public building, so it comes as a surprise to see distinguished public buildings such as the Greenwich Town Hall. The ecclesiastical buildings range from the familiar Liverpool Cathedral to the dramatic Church of St. Saviour at Eltham. Schools, stations, banks, and some flats are also shown.

Two large buildings, the London Passenger Transport Building and the University of London, both by Adams, Holden & Pearson, in which the multistory masses are derived from American skyscrapers, lack decision, clarity, and life. There is perhaps too great an effort to be monumental at an unfamiliar scale. This is a criticism which non-Britons have always leveled at English efforts to design large public buildings. The compensating virtue of John Bull's architecture is the finely-wrought, thoughtfully studied detail of most of the examples illustrated here. We seem by comparison to have never had time for such meticulous refinement in texture and scale.

The medium-sized houses illustrated are inferior to the equivalent American product, since they tend to be stiff, blank, and angular, which qualities are emphasized by the lack of even minimal planting.

With the single exception of Laughing Water, a roadhouse at Cobham by Clough Williams-Ellis, there are no playful or light touches such as Tecton has done so brilliantly in zoos. The Comet Roadhouse near Barnet by Musman is described as "carrying on the Pickwickian tradition of the coaching inn, cheerful and solid." I beg to disagree; it is too, too solid, like the administration building of a large industrial plant.

There is a consistent attempt to support the emphasis on national tradition stressed in the introduction. I wonder what the national tradition really is, medieval or Georgian? Does it include Albi (plate 38) and cubism (plate 58)? Perhaps it is a more fundamental attitude such as sound scholarship, or excellence of workmanship. Bows to tradition are made by the misuse of porticos, as in the Town Hall at Daguenham and the City Hall at Norwich. In both the porticos appear irrelevant, inadequate, and artificial. We have come a long way in the last decade and even

(Continued on page 108)

Quick as a wink
YOU CAN GET
2 different shading screens
ON YOUR TRACING

CRAFTINT
DOUBLETONE

in tracing vellum form was developed to speed up shading thousands of war time drawings. With the quick flick of a brush Craftint DOUBLETONE Tracing Vellum will give you two separate tones—(1) a line pattern; (2) a cross-hatch, directly on your tracing.

Drawings can be reproduced as blueprints, Ozalids or similar methods—or photographed and duplicated in any other form of printing... DOUBLETONE Tracing Vellum is ideal for preparing parts catalogs, exploded views, cut-a-ways, mechanical, technical, perspective and three dimensional drawings.

At your art supply dealer. Or write on business letterhead for samples and chart showing 16 doubletone patterns.

THE CRAFTINT MANUFACTURING CO.
1627 Collamer Ave. • Cleveland 10, Ohio

HANDY! ROOF INCLINE FINDER



FREE! Here's practical help for you

What roofing do you prefer?

• As you know, the answer depends on the incline of the roof deck. What's ideal for one job may be a makeshift for another. That's why Ruberoid roofers have such an advantage! For no matter what type of roofing is indicated—whether smooth-surface Asbestos Felt and Asphalt, or Coal Tar Pitch and Tarred Felt with gravel or slag surfacing, or Asphalt Felt and Asphalt with gravel and slag surfacing—Ruberoid makes them all—and in specifications to meet any need!

RUBEROID

BUILT-UP ROOFING

The RUBEROID Co., Executive Offices: 500 Fifth Ave., N. Y. 18, N. Y.
Asphalt and Asbestos Building Materials. Thermo! Insulations.

• When placed with its bottom edge on the roof, the pendulum of this useful device instantly swings to indicate the slope in inches per foot. It's a handy tool in making estimates—helps determine correct type of roof to use. Made of transparent plastic and ruled so that it can also be used as a protractor to take off the roof slope from drawings. Free on request—just fill in the coupon below, and mail today.

MAIL THIS COUPON TODAY.

The RUBEROID Co., 500 Fifth Ave., New York 18, N. Y.
Please send me the free Roof Incline Finder.

Name _____

Street _____

City _____ State _____

Just as **WHITE** enhances
a table setting...



Fine Terrazzo Floor of Atlas White Cement, Hotel Victor, Miami Beach, Florida

Concrete craftsmen choose Atlas White Cement

A lustrous white tablecloth forms a background for silver to sparkle and candles to gleam. So, too, a matrix of Atlas White Cement sets off the color values of aggregates or pigments in Terrazzo, Stucco, Cement Paint and Architectural Concrete Slabs. Such a "setting" has the uniform clarity to complement the desired color overtones, whether in contrast or blend.

Atlas White complies with Federal and ASTM specifications for portland cement. It has the same advantages for concrete and is used in the same way. Cleaning is easy. Maintenance costs stay low.

For further information on the uses of Atlas White Cement, see SWEET'S Catalog, Sections 12B/7 and 13B/7, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, New York.

PA-C-19

FOR BEAUTY AND UTILITY
ATLAS WHITE CEMENT
FOR TERRAZZO, PAINT, SLABS, STUCCO



"THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries
Sunday Evenings—September to June—ABC Network

REVIEWS

(Continued from page 106)

a layman must smile at the feebleness of these genuflections toward the academy. In one case the main block of the building slides along behind the columns without so much as a molding to show that the portico has come to rest somewhere in front of it. In the other, the columns, imported from Gothenburg, suggest that the scaffolding has not yet been cleared away.

Since portable exhibitions of this kind may become more numerous, it is worth while considering whether this one will accomplish the purpose intended. People will look at these pictures as they look at LIFE, but they will not be "using their eyes, understanding what they see . . ." or "able to criticize intelligently" unless more guidance and stimulation are provided. There is very little text, exceedingly brief captions, no dates, no plans, no drawings, no information (Did this building survive the blitz?)—merely fifty-odd photographs of exteriors and ten of interiors. Such captions as the following will not breed up a race of critics: Plate 1, "A successful application of modern idiom to a public building conceived in the classical manner"; Plate 5, "An interior producing an impressive effect largely by simple treatment and good proportions" (What are good proportions?); Plate 22, "A free handling of Georgian suavity for a building essentially modern and utilitarian in purpose." This might be considered a suave way to beg the question, but are we out to make fun or to influence people?

C. L. V. MEEKS

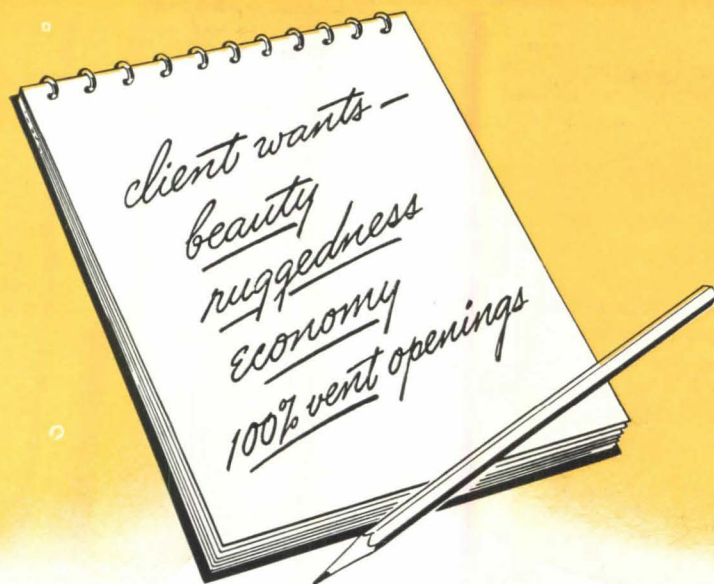
PATRICK GEDDES IN INDIA

Edited by Jaqueline Tyrwhitt, in co-operation with H. V. Lanchester and Arthur Geddes. Introduction by Lewis Mumford. Lund, Humphries & Co., Ltd., 12 Bedford Square, London W.C. 1, England, 1947. 103 pp., illus. 10 shillings

It has become commonplace to refer to Patrick Geddes as a planner and as a social critic; it is uncommon to find someone who has actually read anything Geddes wrote. This attractive little book, in presenting portions of the many reports on towns in India principally prepared between 1914 and 1919, makes it possible to discover his main contributions to the thinking about city planning as well as his prejudices.

The argument for the "diagnostic survey," now so generally accepted, is presented as simply as it has ever been done. (In these reports Geddes was writing for groups and individuals who had to be educated from the ground up.) It is interesting to note that his defense of "conservative surgery"—demolition of the worst structures, open-

(Continued on page 110)



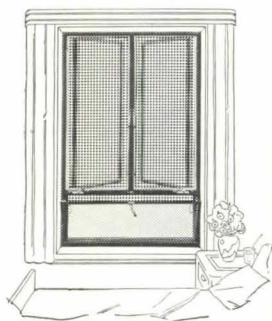
SPECIFY FENCRAFT CASEMENTS

Clubs, dormitories, nurses' homes, restaurants and many other buildings call for windows that combine the beauty and easy operation of a residential-type casement with extra ruggedness and excellent provision for ventilation.

For such uses Fenecraft Standard Casement Windows fill the bill. They're expertly made by craftsmen of America's oldest and largest steel window manufacturer. They're quality windows in every respect, suitable for the finest buildings.

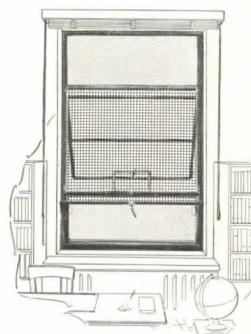
ECONOMY THROUGH STANDARDIZATION

Fencraft Casements, as well as Fenecraft Projected and Fenecraft Combination Windows, are standardized in a range of sizes to fit almost any need.



FENCRAFT COMBINATION WINDOW

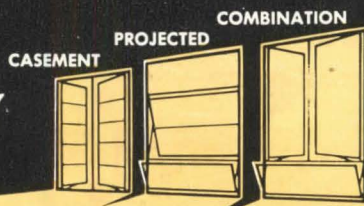
Generous fresh-air ventilation. Swing leaves deflect breezes into the room. In-tilting sill vent protects against drafts.



FENCRAFT PROJECTED WINDOW

Protection from weather, even when open. Open-out vent acts as canopy over opening. Open-in vent deflects air upward, sheds water outside.

Fenestra



FENCRAFT INTERMEDIATE STEEL WINDOWS

Detroit Steel Products Company,
Dept. PA-9
2253 East Grand Blvd.,
Detroit 11, Michigan

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

Name _____

Company _____

Address _____

There's one thing similar in all of these businesses



Aircraft parts and equipment must go to consignees the fastest way. That's why the aviation industry is such a large user of Air Express. *Speed pays.*

Ocean-fresh seafood, and choice fruits and vegetables are shipped to hotels all over the country by Air Express. There's profit in it. *Speed pays.*



Builders and architects ship blueprints by Air Express daily. This speedy service is ideal and low cost for light as well as heavy shipments. *Speed pays.*



Speed pays in your business, too!

Air Express supplies the speed of delivery that's vital to your business. Air Express goes even coast-to-coast overnight. And with faster planes and increased schedules, Air Express serves you better than ever today. Rates are low for shipments of most any size and weight. For example: 21 lbs. goes 900 miles for only \$5.80. Use Air Express regularly!

- Low rates—special pick-up and delivery in principal U.S. towns and cities at no extra cost.
- Moves on all flights of all Scheduled Airlines.
- Air-rail between 22,000 off-airline offices.
- Direct air service to and from scores of foreign countries.



AIR EXPRESS

GETS THERE FIRST

Write today for Schedule of Domestic and International Rates. Address Air Express Division, Railway Express Agency, 230 Park Ave., New York 17. Or ask at any Airline or Railway Express office. Air Express Division, Railway Express Agency, representing the Airlines of the United States.

1927 — 20TH YEAR OF GETTING THERE FIRST! — 1947

REVIEWS

(Continued from page 108)

ing of irregular streets, and preservation or even formation of open spaces where shrines or wells existed, instead of hacking a gridiron of new thoroughfares through the town—is thoroughly consistent with Sitte's earlier call for broken streets and open plazas.

Geddes detested "planners" of the Robert Moses type: he mentions a case where a city engineer reported to him that "as both water and drainage schemes are in contemplation, the city must deny itself the luxury of city planning." He concludes that "the policy of sweeping clearances should be recognized for what I believe it is; one of the most disastrous and pernicious blunders in the chequered history of sanitation."

Geddes believed firmly in maintaining regional and even local character and accommodating natural customs. Yet he realized that "there must be no mere sentimental renewals of village customs now obsolete, or of artistic embellishments now outworn." Thirty years later, that lesson has still not been learned.

T. H. C.

THE PREFABRICATED HOUSE

Raymond K. Graff, Rudolph A. Matern, Henry Lionel Williams. Doubleday & Co., Inc., Garden City, N. Y., 1947. 7" x 10", 132 pp., illus., index. \$2.75

Aimed at the consumer, this book calls itself, "A Practical Guide for the Prospective Buyer." Written in an easy, diffuse style, it contains a lot of information about houses in general and how to approach their planning (from the owner's point of view) and gives, at least by implication, a great many more reasons for hiring an architect than for buying a prefab. The book is full of warnings, particularly as to what the customer is getting for his money and how much has to be done before delivery and after assembly on the site.

For one seeking specific guidance, the information given is general to the point of exasperation. According to the jacket blurbs all the buyer's basic questions are answered, whereas the book mainly poses questions (and poses them very well, we must admit). If it were titled, "An Introduction to The Prefabricated House," we could recommend it. Perhaps the publishers insisted on the authoritative subtitle?

The format and illustrations (drawings and photographs) are attractive, and some 200 manufacturers of prefabricated houses are listed.

JOHN RANNELLS

NOTICE

RICHARD M. BENNETT, former chairman of the Department of Architecture, Yale University, has been made a partner in the firm of LOEBL & SCHLOSSMAN, architects-engineers, Chicago, Ill.

Rolling Steel DOORS

Manually • Mechanically • Power Operated

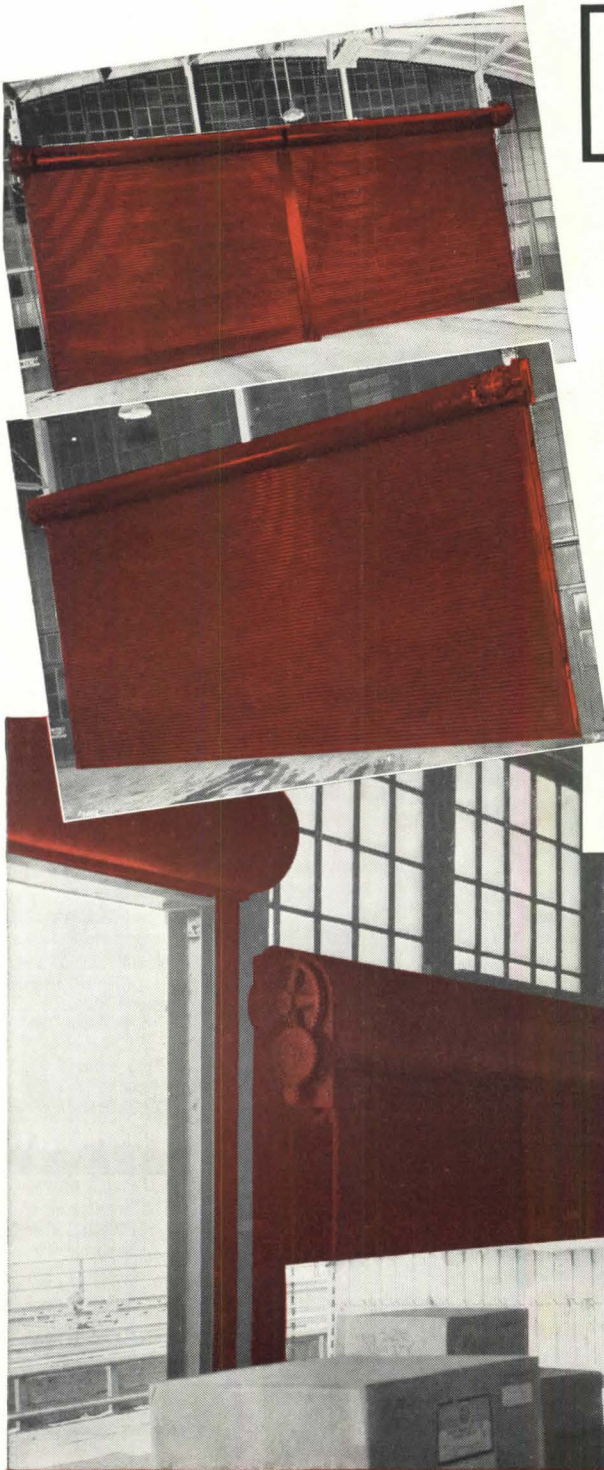
No matter whether it is a wide garage opening, requiring two doors with a removable post, large openings in an industrial plant, or a warehouse with many openings, vertically operating Rolling Steel Doors are more satisfactory, provide greater protection, and are more economical over a period of time. In Mahon Rolling Steel Doors you will find the latest developments in doors of this type . . . more compact operators, and other features very desirable from a standpoint of operation and general utility. See Mahon Insert in Sweet's File for complete information, specifications and installation details, or call in a Mahon representative.

THE R. C. MAHON COMPANY

Detroit 11, Michigan • Western Sales Division, Chicago 4, Illinois

Representatives in All Principal Cities

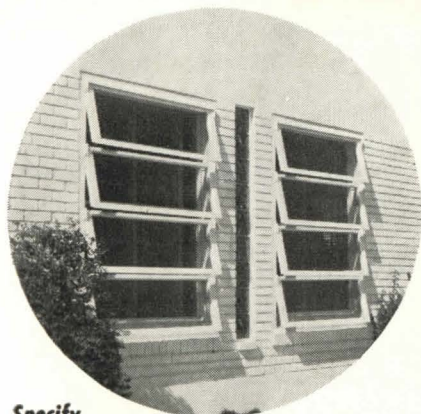
Manufacturers of Rolling Steel Doors, Shutters and Grilles, and Mahon Steel Deck for Roofs, Sidewalls, Partitions, Acoustical Ceilings, Permanent Floor Forms and Oversize Doors.



ROLLING STEEL DOORS, SHUTTERS AND GRILLES TO MEET EVERY REQUIREMENT

MAHON

**For
BETTER VENTILATION
BETTER HEALTH
GREATER CONVENIENCE**



Specify

**AWNING WINDOWS
by
GATE CITY**

Developed to provide comfort in the hot Southern climates, Gate City Awning Windows are winning architectural acceptance in every other section of the country. No other type of window offers so many advantages at such reasonable cost.

- Draft-free, safe ventilation in any weather.
- Adequate circulation without fans or other equipment.
- Indoor installation of screens and storm sash.
- Sun control (when specific types of glass are used).
- Smooth, no-stick worm and gear drive.

Available Now!

Complete window units with sash, glazing and hardware installed, and with bronze wire screen, are available for prompt shipment from our warehouse. If desired, your local supplier or manufacturer of wood sash can purchase and assemble the KD parts—or manufacture the wood parts himself and assemble the window locally. * Write today for further information. Gate City Sash & Door Co., Dept. P, Fort Lauderdale, Fla.

* Write for special requirements if interested in purchase of hardware only.



Export Sales Representative, Frazar & Company, 50 Church Street New York 7, N. Y., U. S. A. Cable address: Frazar, N. Y. Agents in principal cities throughout the world.

JOBS AND MEN

NOTICE: Advertisements for this section must be addressed to Jobs and Men, C/O PROGRESSIVE ARCHITECTURE, 330 West 42nd St., New York 18, N. Y. Legible copy, accompanied by check or money order for \$3.00, will be accepted not later than the 5th of month preceding publication. Insertions may not exceed 50 words.

MEN WANTED

ARCHITECTURAL DRAFTSMEN — senior and junior. Opportunity permanent connection. Reply full particulars. Hunt-Caton & Associates, Chattanooga, Tenn.

ARCHITECTURAL DESIGNER AND DRAFTSMEN—capable of taking preliminary sketches and developing working drawings and details on schools, hospitals, and industrial buildings; excellent salary; medium-sized office; permanent; housing facilities available. Send record of experience and samples of work. Raymond N. Le Vee & Associates, 203 E. College Ave., Appleton, Wis.

SENIOR ARCHITECTURAL DRAFTSMEN—permanent positions open with Los Angeles firm of Austin, Field & Fry. Must be experienced in monumental, commercial, industrial, and educational projects. Inform fully as to education, age, salary requirements, and all other pertinent data. 629 Chamber of Commerce Bldg., Los Angeles, Calif.

INSTRUCTOR—to teach structural design and related courses to architectural students. Apply to Paul Weigel, Department of Architecture, Kansas State College, Manhattan, Kans.

ONE YOUNG ARCHITECT—wanted and also one architect, not so young. Participating associateship in one year if satisfactory. C. Julian Oberwarth, 301 Second St., Frankfort, Ky.

ARCHITECTS—with designing ability, or architectural designers. Wanted immediately for permanent position in Palm Beach. Give experience and qualifications in first letter. Simonson and Holley, Architects, Plaza Circle, Palm Beach, Fla.

CHIEF DRAFTSMAN—wanted to handle drafting room. Must be experienced in all phases of architecture, such as hospitals and commercial buildings. Submit references, salary expected, and samples of work to Michael J. DeAngelis, 1403 Temple Bldg., Rochester 4, N. Y.

INSTRUCTORS — architectural design, structural design, building materials and equipment, and freehand drawing instructors needed at architectural schools for Fall sessions. Those interested apply to Professor Paul Weigel, Chairman of the Committee on Employment for the Association of Collegiate Schools of Architecture, Kansas State College, Manhattan, Kan.

EXPERIENCED ARCHITECTURAL DESIGNER, TWO DRAFTSMEN—wanted immediately. Draftsmen must be capable of working

drawings. An opportunity for qualified men. Give complete history in first letter. Box 48, PROGRESSIVE ARCHITECTURE.

EXPERIENCED MECHANICAL ENGINEER—wanted by well-established architectural firm in Minnesota employing about eight men. Top salary and opportunity of business participation. Box 49, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL DRAFTSMAN—excellent opportunity. Must have three to ten years' experience. Varied work in small progressive office in Chicago suburb. Drafting, detailing, supervising, design opportunity if qualified. Excellent bonus arrangement. Box 50, PROGRESSIVE ARCHITECTURE.

CONSTRUCTION SUPERINTENDENT — for West Coast projects of national apparel chain store organization. Must be capable coordinator. Knowledge of cabinet-work and detailed finishes essential. Write in detail, stating experience, background, age, and salary expected. Box 56, PROGRESSIVE ARCHITECTURE.

TOP ARCHITECTURAL DESIGNER — must be renderer, draftsman, modern designer with background of historical architecture. University graduate supplemented by European travel and study or training at the American Academy in Rome. Good background, diplomatic, pleasing personality. Prospective future partnership. Give complete information and references. Box 59, PROGRESSIVE ARCHITECTURE.

JOBS WANTED

ARCHITECTURAL DRAFTSMAN—20 years' experience, all types buildings, project development to finished working drawings. Also, interiors and store fixtures of higher class. U. S. Civil Service rating for dependability, experience, fitness: 92%. Eastern U. S. preferred. Unencumbered. Address, "Delores," American Institute of Music Bldg., 207-9 N. Foushee St., Richmond, Va.

ARCHITECT-ARTIST AND DELINEATOR—of long experience, offers services for freelance architectural renderings and perspectives, bird's-eye views of architectural treatment of engineering structures such as highways and bridges. Theodore A. de Postels, A.I.A., Studio at 644 Riverside Drive, New York 31, N. Y. AUdubon 3-1677.

SALES REPRESENTATION—steel products, steel kitchens, steel furniture, and plastic material for home construction, commercial, and industrial buildings.

(Continued on page 114)

DARE: To 10,000 "Confirmed Skeptics"

to write on, walk on, smear beautiful Stainproof VARLAR

— and prove it's the most amazing wall covering ever known!

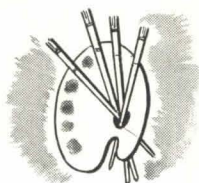
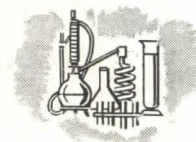


Varlar is so enduring it can be washed 25,000 times—and still look new! Not a claim—but fact, proved by critical tests in the laboratory and actual usage. Proved, too, that oil, ink, grease, mercuriochrome, jam, crayon, syrup, candy, vinegar, pencil, lipstick, hot kitchen grease, dirt accumulation—STAINS OF ALL KINDS—easily, quickly wash off Varlar with ordinary soap and water.

Not a plastic-coated paper, Varlar has no coatings to crack, peel or discolor. Its stainproofness goes *clear through*, lasts for life... resists water, fire, vermin, bacteria, too!

Skeptical? Then send handy coupon for FREE Varlar sample. Make your own tests with any of the staining agents above, watch Varlar come clean with soap and water. 90 breathtakingly beautiful styles... plaids, florals, weaves, stripes, pictorials, solid tones... go up easily as wallpaper. Send coupon today.

A scientific triumph after 9 years research! Now ready to begin a new era of low-cost wall beauty and maintenance in hospitals, schools, theaters, hotels, restaurants, buildings of all kinds.



World-famed artists and wallpaper designers styled Varlar. New use of plastics achieves dramatic, full-dimensional designs... true-to-life colors never before possible.

Never Before Such Enduring Beauty

VARLAR

Stainproof Wall Covering

VARLAR, Inc., Division of UNITED WALLPAPER INC. Chicago

Available in Canada through Trimz Co., of Canada, Ltd., Toronto

MAKE THIS FREE TEST NOW!

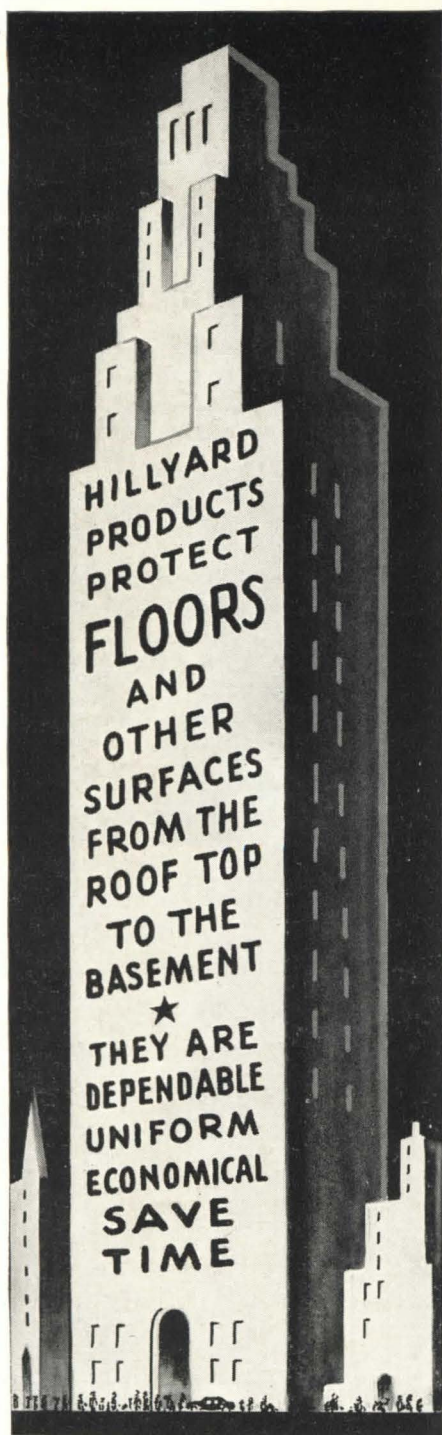
VARLAR, INC., Dept. C-97
Merchandise Mart, Chicago 54, Illinois

I'm skeptical, but willing to be shown. So send my FREE Varlar sample and I'll make my own tests.

Name

Address

City Zone State



Hillyard Floor Treatments **SAVE** all types of floors in every type of institution . . . they are Uniform, Dependable, and Economical, and bring out the natural beauty of every type floor.

Send for our new **FREE** book "Floor Job Specifications" full of helpful hints on economical floor maintenance.

HILLYARD SALES CO.'S

DISTRIBUTORS
HILLYARD CHEMICAL CO. ST. JOSEPH, MO.
370 TURK ST. SAN FRANCISCO 2, CALIF. 1947 BROADWAY, NEW YORK 23, N. Y.

JOBS AND MEN

(Continued from page 112)

Wanted for Pacific Northwest by engineering draftsman with broad technical, economical, and artistic knowledge. 15 years' private experience, 3 years with U. S. Government department. Box 47, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL DRAFTSMAN — veteran, 22 years of age. Have some experience. Efficient, ambitious, eager to advance. Salary secondary. Frank Puleo, 425 Hawthorne St., Brooklyn 3, N. Y.

ARCHITECT-DESIGNER—with varied experience of 20 years, including work in foreign countries, desires position of responsibility in connection with interesting work. Can handle projects from sketches through working drawings. Prefer opening that will offer definite future with incentive. Location immaterial, but advise working and living conditions. Box 51, PROGRESSIVE ARCHITECTURE.

ARCHITECT—now practicing in Midwest wants to move to Southwest, Northwest, or Alaska. Reputation in modern churches, hospitals, and parochial work. Could help your firm build up clientele. Confidential correspondence invited. Box 52, PROGRESSIVE ARCHITECTURE.

DRAFTSMAN, DESIGNER — good family, holds Cambridge school certificate. Age 25, single. In possession of I.C.S. diploma in architectural engineering. Six years' varied experienced in residential and industrial design. Main interest: furthering architectural talent. Require position with small firm offering interesting work, good future, and satisfactory working conditions. Box 53, PROGRESSIVE ARCHITECTURE.

DANISH ARCHITECT — member of the Danish Society of Academic Architects, 30 years old, practice with some of the finest architects in Denmark. Now chief architect in a Swedish office. 8 years' experience on all types of buildings. Coming to U. S. in October. Minimum salary \$125 a week. Prefer the East. Box 54, PROGRESSIVE ARCHITECTURE.

GRADUATE ARCHITECTURAL DESIGNER—experienced, 28. Currently employed in East as residential designer. Desires interesting, creative work in contemporary vein in growing community. Seeks position with young, progressive firm engaged in residential design, urban planning, or general practice. Florida, Pacific Coast, or foreign. Box 55, PROGRESSIVE ARCHITECTURE.

ARCHITECTURAL APPRENTICE — desires opportunity to learn. Finished complete home study architectural course. Typist, math major. Wishes replies only with sincere intentions. Desires work in accord with qualifications. No experience. Prefers situation in warm climate. Box 57, PROGRESSIVE ARCHITECTURE.

MODELS — for contemporary architecture; for contemporary displays. Box 58, PROGRESSIVE ARCHITECTURE.

Franklin built a special press for perfect reproduction

"On a prospect of being employed to print some paper money in New Jersey" . . . Franklin made several copper plate engravings of ornamental designs. To secure faithful reproduction of these fine designs, he also took the trouble to "contrive" a copper plate press — the first in this country.



"PRE-TESTED"

Ben. Franklin

DRAWING PENCILS

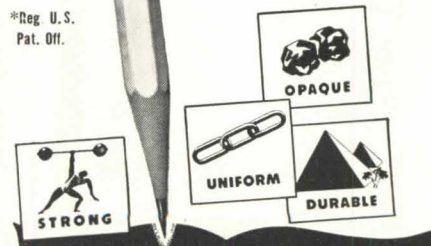
Assure faithful reproduction of your drawings . . .

The strong, durable Ben. Franklin lead gives you clean, opaque black lines—lines that reproduce clearly, with no loss of tone or sharpness. And you'll like the way the Ben. Franklin holds its point as you draw long, smooth, unvarying lines. Blaisdell's scientific PRE-TESTING guarantees you uniformity—of tone and degree—in every Ben. Franklin pencil.

For better reproduction—for cleaner, easier drawing—try the Ben. Franklin. Order from your dealer, or write for a free sample, naming this magazine and the degree you wish.

MADE IN 17 DEGREES
6B TO 9H

*Reg. U.S.
Pat. Off.



Blaisdell "PRE-TESTED"

Ben. Franklin

DRAWING PENCIL

*Blaisdell PENCIL CO. • ESTABLISHED 1893 • PHILADELPHIA, PA.

Specify **ANEMOSTAT** DRAFTLESS AIR-DIFFUSION

for an
air-conditioning job
you'll be proud of!



The best "advertising" for functional-minded architects, engineers and contractors is the excellence of their own craftsmanship . . . represented by modern structures that make living and working more pleasant. That is why they invariably regard an air-conditioning installation with Anemostat draftless air-diffusion as a job well done. A job that advertises them. A job to be proud of!

Anemostat takes the "raw materials" of air-conditioning and actually "processes" them into COMFORT. There are no draft-producing grilles or registers, for Anemostat air-diffusers distribute the conditioned air in pre-determined, controlled patterns. Result: there are

no drafts . . . no dead air pockets . . . room temperature and humidity are equalized throughout.

Because Anemostat wall or ceiling diffusers permit employment of stepped-up duct velocities and greater temperature differentials, duct sizes and duct outlets may be reduced — an important economy feature. Because Anemostats have no moving parts to wear out, maintenance cost is nil.

Thousands of Anemostat installations throughout the country — in virtually every industry — are putting new comfort into air-conditioning. So, remember to specify Anemostat draftless air-diffusion for an air-conditioning job you'll be proud of!

HOW ANEMOSTATS COMPLETE AIR-CONDITIONING

The patented Anemostat distributes air — of any duct velocity — in all directions and in a multiplicity of planes. Simultaneously, counter-currents created by the device siphon into the Anemostat room-air equal to about 35 per cent of the volume of the supply air. This room-air is mixed with the supply-air within the diffuser before the air-mixture is discharged into the room. Furthermore, velocity of the incoming air is instantly reduced within the Anemostat by air-expansion.

In this way, the Anemostat noiselessly diffuses air of any duct velocity throughout the entire room . . . eliminates drafts . . . closely equalizes temperature and humidity . . . prevents air-stratification. There is no substitute for Anemostat air-diffusion!

Write for
information.

ANEMOSTAT

REG. U. S. PAT. OFF.

ANEMOSTAT CORPORATION OF AMERICA
10 East 39th Street, New York 16, N. Y.

REPRESENTATIVES IN PRINCIPAL CITIES

"NO AIR-CONDITIONING SYSTEM IS
BETTER THAN ITS AIR DISTRIBUTION"

AC-1117

homes

Small

Medium

Large

SELECTED BY THE EDITORS OF PROGRESSIVE ARCHITECTURE

New England

Midwest

Northwest

Southwest

South

Pacific Coast

Middle Atlantic

A NEW REINHOLD BOOK

\$5.00

The editors of PROGRESSIVE ARCHITECTURE got to thinking about the need for a book on houses for architects to show to their clients. They write and edit each month for a professional audience; perhaps, for once, they should do a job which would appeal to—and, if possible, influence—the great consuming, home-building public. Maybe, they thought, they should do a book.

Here's the book. Working through many a spring and summer evening and top of the morning, they've come up with a collection of HOMES selected for their livability, their friendliness, and intimacy, their invitation to informal attractive living. They've done this for only one reason—to give you a useful book that will help you interest your clients in good residential architecture; to promote design progress yet further; to show in page after page what all of us know anyway—that today's architecture can be charming and beautiful and livable.

The book is cloth-bound with a cover designed by Stamo Papadaki. There are 287 handsome architectural photographs and 116 plan drawings by Elmer Bennett. All regions are represented, and many, many architects. There is just enough text to explain—in easily understood terms—what the trends are in home design, and why these houses are good, in planning, use of materials, and in many details of design and construction.

CREIGHTON, LOPEZ, MAGRUDER, SANDERSON

REINHOLD PUBLISHING CORPORATION
Dept. P.A. 330 West 42 New York 18, N. Y.

Enclosed find \$_____ for _____ copies of HOMES. (Add 2% sales tax to your remittance for orders delivered in New York City.)

Name _____

Address _____

City _____

State _____

"HIGH EFFICIENCY... FUEL ECONOMY... LONG SERVICE"

*... expresses Mr. Litchfield's
endorsement of
Petro heating systems*

Mr. Litchfield is right! High efficiency, fuel economy and long service do identify Petro Oil Burner performance . . . today as for over 40 years.

Of the three, none is more important than long service.

For even a conventional oil burner system will serve well for a while. But it takes the skillful design, precision engineering and sound construction built into a Petro oil burner to make possible the many years of reliable performance for which Petro is widely noted among thrift-minded building management.

Mr. Litchfield puts it this way:

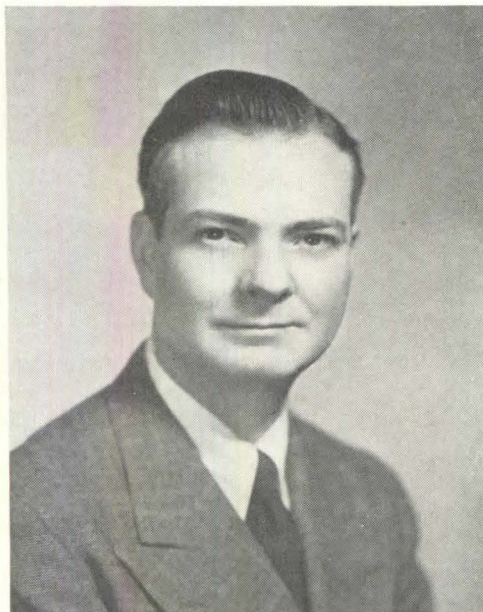
"Their (Petro systems) high firing-efficiency in ratio to the oil input adds up to fuel economy. The Petro system is constructed for long service . . ."

Our technical manuals should be in the data files of architects, engineers and others that are concerned with specifying and installing oil heat systems. Write!

INDUSTRIAL MODELS: No. 5 or No. 6 fuel oil; manual, semi- or automatic operation; 8 sizes to 450 bhp. Thermal Viscosity pre-heating.

DOMESTIC MODELS: No. 3 or lighter oils; "conversion" and combination-unit types, 7 sizes. Patented "Tubular Atomization."

FULL DATA on Petro Industrial Burners are in catalog files of Sweet's and Domestic Engineering. Details on Petro Domestic Burners available in separate catalog. Copy of either sent gladly on request.



Mr. Clarence B. Litchfield is a partner of the firm of Alfred Hopkins and Associates, New York, N. Y., nationally known architects who long have been identified with many of the country's prominent buildings. Among these are: Merchant Marine Academy, Kings Point, N. Y.; Federal Penitentiary, Terre Haute, Ind.; U.S.C.G. Petty Officers Training School, Groton, Conn.; U. S. Postal Concentration Center, New York, N. Y.; U. S. Disciplinary Barracks, Lumpoc, Calif.; B. Altman & Co. Store, Manhasset, N. Y.; Residence & School for Nurses, Bellevue Hospital, New York, N. Y.

PETRO

REG. U. S. PAT. OFF.

cuts steam costs

PETROLEUM HEAT AND POWER CO. • Makers of Good Oil Burning Equipment Since 1903 • Stamford, Conn.

In October...

BRASCO will reveal an entirely new metal store front setting, complete, fully integrated and specifically designed to meet the architectural demands of tomorrow's enlarged, full-visibility fronts.

Features of the new line will include...

- ★ Five glass-holding sash—one rolled in heavier gauge than hitherto available.
- ★ Fingertip setting—a unique principle (patent applied for) which entirely eliminates glass-setting screws.
- ★ Greatest visibility—larger glass areas incorporating Brasco's deeper grip.
- ★ Outstanding rolled members in stainless steel or anodized aluminum, for every structural requirement—diversified to permit individuality and full personal expression.
- ★ Heavy-duty bars, substantially reinforced—essential for heightened glass areas.

With Brasco's present line, the new construction will round out the most comprehensive selection of rolled members available for modern store front design.



BRASCO MANUFACTURING COMPANY
HARVEY • (Chicago Suburb) • ILLINOIS

ERIE ARCHITECTURAL PORCELAIN ENAMEL



A completely modern store front fabricated and erected by the Erie Enameling Company. The porcelain panels are available in any colors, sizes and shapes for use in new construction or the modernizing of Store Fronts, Service Stations, Restaurants, Food Stores, Offices and Factory buildings.

ADVANTAGES:

1. All colors, textures, shapes and sizes.
2. Complete protection against corrosion.
3. Light in weight.
4. Readily applied to masonry, steel, or wood.
5. Indefinitely weather resistant.
6. Damaged panels may be replaced.
7. Easily cleaned.
8. Fire resistant.

WRITE FOR ARCHITECTURAL DETAILS & SPECIFICATIONS

THE ERIE ENAMELING COMPANY

ERIE

PENNSYLVANIA






Makers of Fine Pencils since 1889

KIMBERLY
DRAWING PENCILS
CORRECTLY SUITED TO EVERY DRAWING PURPOSE
Architects, Engineers and Draftsmen like the satisfying results they achieve when using KIMBERLY Drawing Pencils. They are also discovering the beauty of color renderings done with the new

MULTICHROME
COLORED DRAWING PENCILS—50 Brilliant Colors
Multichromes in sets of 12-24-36-48
Kimberlys in 22 accurate degrees, 6B-9H, Extra B Layout Pencil, and Tracing 1-2-3-4.
Buy them from your art supply dealer

General Pencil Company 67-73 FLEET STREET, JERSEY CITY 6, N. J.

A NEW REINHOLD BOOK

Here is the most comprehensive book of its kind ever written. It covers the professional, business, and legal aspects of architectural practice. Commissions for professional services are traced in minutest detail from the day the client arrives to the last payment for work performed. Theory and practice are successfully woven throughout the book.

Clinton H. Cowgill, A.I.A.
Ben John Small, A.I.A.

Architectural

Practice

The social and economic implications of contemporary practice are translated in terms of ready-to-use forms, guides, advice, graphic illustrations and the like. Accounting procedures, bookkeeping systems almost every procedural form an architect requires for his practice, agreements of every nature, specifications, insurance and bond requirements are all presented in orderly sequence. The pre-publication price is \$9.00. This offer is good until October first when, it is expected, the books will be ready for delivery.

REINHOLD PUBLISHING CORPORATION

Dept. P.A. 330 West 42 New York 18, N. Y.

Enclosed find \$_____ for _____ copies of
Architectural Practice. (Add 2% sales tax to your
remittance for orders delivered in New York City.)

Name _____

Address _____

City _____ State _____

For Comfort While Working



Fig. 200 MHB

HALLOWELL

STEEL STOOLS AND CHAIRS

"Hallowell" Stools and Chairs of Welded Steel are *designed* for "seating" comfort—and a wide variety of styles and types enables us to meet your every requirement. They are of sturdy, welded, wobble-proof construction . . . available in fixed or adjustable heights . . . with or without back rests and foot rests . . . and in a *full range* of heights. For complete details about these long-wearing, comfortable factory stools and chairs, write for your "Hallowell" Catalog.

"Unbrako" and "Hallowell" Products are sold entirely through Industrial Distributors.

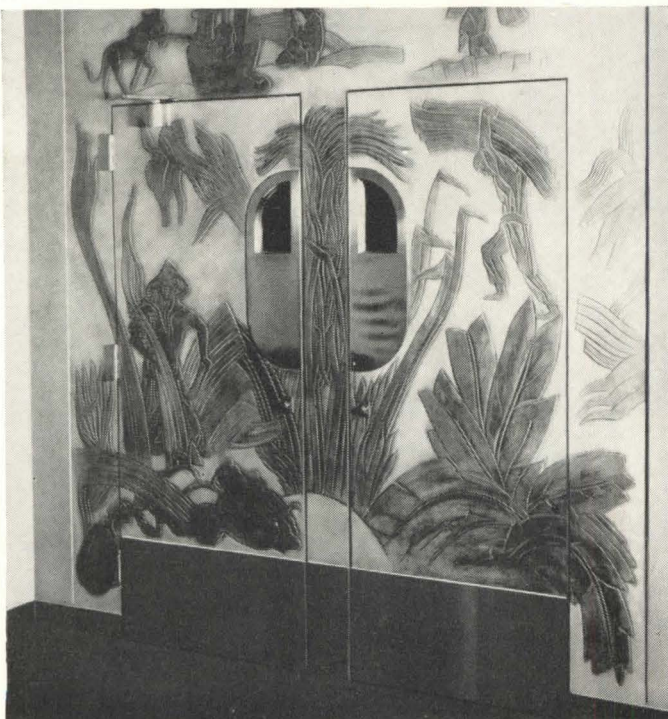
OVER 44 YEARS IN BUSINESS



Fig. 210RHB

STANDARD PRESSED STEEL CO.

JENKINTOWN, PENNA., BOX 588 • BRANCHES: BOSTON • CHICAGO • DETROIT • INDIANAPOLIS • ST. LOUIS • SAN FRANCISCO



As specialists in the fabrication of bronze, aluminum, steel and stainless steel, we offer our services wherever hollow metal doors, interior trim, elevator enclosures, office partitions, cold rolled mouldings and metal specialties are required.

Beauty and Utility IN HOLLOW METAL

An example of Jamestown Metal Corporation's fine craftsmanship in the modern manner. The unusual treatment of these doors is typical of the versatility of Jamestown Metal artisans. Your inquiries will receive prompt attention.

Main Factories and Offices of Jamestown Metal Corp.



Jamestown Metal Corporation
104 Blackstone Avenue Jamestown, N. Y.

Joseph H. Abel, A.I.A.
Fred N. Severud, A.S.C.E.

Landscaping

Architectural
Design

Apartment

Houses

Structural
Engineering

Mechanical
Equipment

Here is the second volume of Reinhold's
"Progressive Architecture Library" series.

It is an authoritative and comprehensive volume
giving the latest design, engineering, heating, elevator
and landscaping information on apartment houses.

Mr. Joseph H. Abel, A.I.A., gives complete information
on over-all and specific design problems,
as well as an analysis of how good design can affect the return on investment.

Mr. Fred M. Severud, A.S.C.E., includes in his section
a discussion of the latest developments in structural systems,
use of concrete, steel and wood framing.

Mr. Clifford Strick, editor of *Heating and Ventilating*,
has outlined the fundamentals of many possible heating systems
which may be used in apartment houses.

Mr. H. M. Nugent and Mr. W. H. Easton, Jr., of the Otis Elevator Company
have made a careful analysis of the problems in vertical transportation.

Mr. Alfred Geiffert, A.S.L.A., suggests many possible treatments in landscaping.
There are over 400 illustrations.

We have set a pre-publication price of \$9.00.

This offer is good until October 1, 1947,
when, it is anticipated, the book will be ready for delivery.

PROGRESSIVE ARCHITECTURAL LIBRARY

REINHOLD PUBLISHING CORPORATION
Dept. P.A. 330 West 42 New York 18, N. Y.

Enclosed find \$_____ for _____ copies of
Apartment Houses. (Add 2% sales tax to your re-
mittance for orders delivered in New York City.)

Name _____

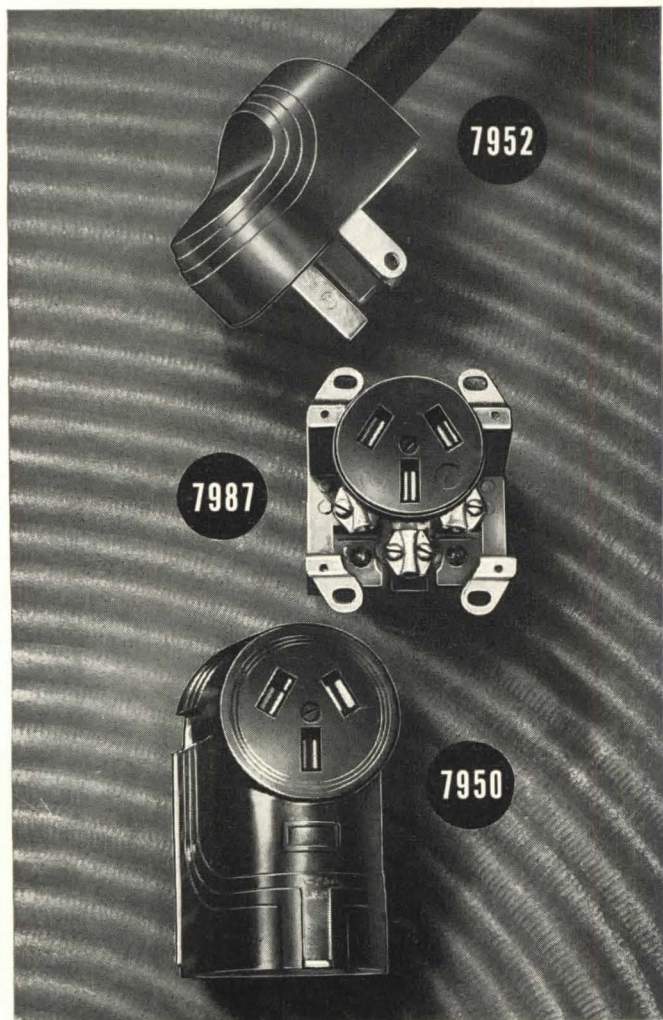
Address _____

City _____ State _____

H&H

THREE-WIRE
50 AMP., 250 V.

RANGE OUTLETS



These quickly-wired Outlets and Caps have every improved feature for easy installation *and use*. Straight-in wiring with solderless connectors make fast work of range hook-ups. Cap and Receptacle combination make a neat, compact installation with attractive harmony of design.

Range Cap No. 7952 is of polished black Bakelite, designed to match the Receptacles. Range Outlet No. 7950 is surface type; polished black Bakelite. Also available in white Ivorylite: No. 7950-I. Range Outlet No. 7987 is flush type; polished black Bakelite. If wanted with .040" brush brass plate, specify No. 7990; with .060" plate, No. 7991.

HART & HEGEMAN DIVISION

**ARROW-HART & HEGEMAN ELECTRIC
COMPANY, HARTFORD 6, CONN., U.S.A.**

FOR PERFECT FIREPLACES IN MODERN HOMES...



Photo by
Ezra Stoller



An ordinary fireplace pumps 200 cubic feet (2 to 3 large rooms full) of already warmed air out of the house each minute. In tightly constructed homes, replacement air can't come in from outdoors in sufficient quantity to supply the chimney draft. Result—partial vacuum... back-puffs... smoke.

The *Fresh-Aire Fireplace Unit* is manufactured to help you—in designing Fireplaces for modern, fully weather-stripped homes with central heating. It draws replacement air from outdoors, into the heating chambers, and circulates it, comfortably warm, through the living quarters. No uneven temperatures, no interference with heat controls—and a net gain in evenly distributed warmth.

Here are four more reasons why so many *Bennett Fresh-Aire Fireplace Units* are specified:

1. Thoroughly ventilates and "refreshes" the air.
2. Complete freedom to design the mantel... normal brick firebox sidewalls... no floor grilles.
3. A complete form for *smoke-free* internal proportions of throat, damper, smoke chamber and shelf—assurance that the fireplace will be *built* as you *designed* it.
4. Small first cost is quickly offset by savings in construction and fuel.

Bennett Warm-Aire Units—for perfect fireplaces in camps, southern homes, playrooms, etc. Draws cool air from the floor, heats and recirculates it evenly throughout the room, and to adjacent rooms or upstairs.

Write us at 947 Cedar St. for Catalog—or see Sweet's.

MAKERS OF FLEXSCREEN
Reg. U.S. & Canada Pat. Off.

BENNETT-IRELAND INC.

Chartered in 1906
NORWICH, NEW YORK

WHAT'S IN A NAME-plate? PLENTY..



Here's a boiler name-plate that's as informative as a trip through the boiler plant. The four-leaf clover symbol with the "H" in the center is the familiar mark of the American Society of Mechanical Engineers. The Fitzgibbons steel boiler upon which it appears, in design, materials, and workmanship, exceeds the standards set by this engineering authority. That's something to know about a boiler.

Then take the "SBI" Symbol on the other corner. It means that the Boiler has been laboratory tested in accordance with the Steel Boiler Institute Code and its rating proven accurate. It eliminates wishful thinking, disappointment, and dissatisfaction in boiler performance. You know what that boiler will do.

The third symbol is the Fitzgibbons trade mark, (Reg. U. S. Pat. Off.) which for over sixty years has been regarded as a top-flight mark of steel boiler excellence.

For further confirmation, if such were needed, see the stamp of the Hartford Steam Boiler Insurance Service, on the tube extension. Their representative inspects Fitzgibbons steel boilers before shipment, and "OK's" them only after rigid examination.



This is the bare boiler without trim or insulation. The quickly attached jacket, now available, covers and protects everything including burner and all controls.

FITZGIBBONS 400 SERIES

is the steel boiler that in the small and medium size home will help any oil burner do its utmost. Quick-heating, enduring, quickly installed, easily serviced, it is ideal for replacement or new installations. From name plate to boiler plate you're betting on a sure thing when you select a Fitzgibbons steel boiler. Full data in the bulletin — write.

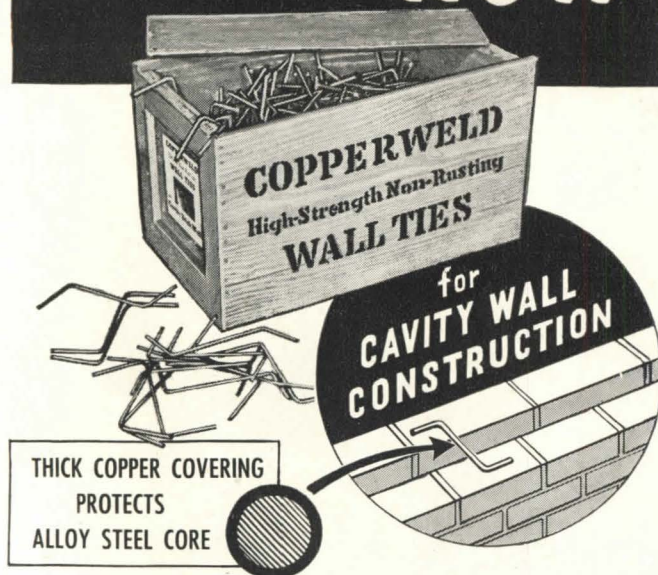
Fitzgibbons Boiler Company, Inc.

101 PARK AVENUE, NEW YORK 17, N. Y.

Manufactured at: OSWEGO, N. Y.

Sales Branches in Principal Cities

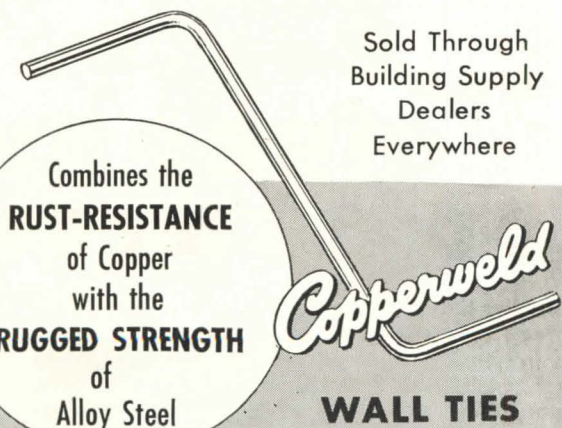
AVAILABLE NOW



You can safely order Copperweld Wall Ties for cavity wall construction without any fear of delay in delivery. Our increased production now makes them available promptly.

The permanence of any cavity wall is definitely assured when Copperweld Wall Ties are used. Made by our exclusive Molten-Welding Process, these ties have a thick, protective covering of pure copper permanently welded to an inner core of alloy steel. This provides a wall tie with the strength of steel and the long life of non-corroding copper—a tie that can be depended upon to function as a permanent bond throughout the life of the wall.

Made in two sizes—6" and 8"—and packed 500 of one size to a box. Descriptive literature sent on request.

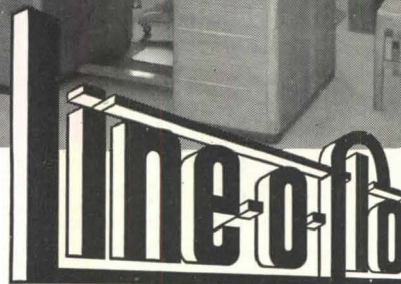


COPPERWELD STEEL COMPANY

GLASSPORT, PA.

Sales Offices in Principal Cities

BARBER-COLMAN



CEILING OUTLETS

Keyed to Modern Architectural Concepts.....

A Vital Contribution to Continuity of Design.....

Available for Prompt Delivery

Model "LS" LINE-O-FLO, the basic unit, made in 3 styles to accommodate any installation arrangement.

Model "LL" LINE-O-FLO, designed to receive Model M21118 DAY-BRITE lighting unit (made by Day-brite Lighting, Inc., St. Louis).



A NEW APPROACH TO AIR DISTRIBUTION

LINE-O-FLO air distribution outlets can be used singly, or end-to-end in continuous strips. Units are constructed of scientifically-designed, rolled-steel members, with orifices simulating Venturi throats having carefully-engineered bell mouth approaches. This outlet has high diffusion efficiency. Room air is rapidly induced into the primary air stream to quickly equalize the temperature differential. Write today for a copy of Bulletin F-2741 giving descriptive and engineering data. Your Barber-Colman representative can show you a sample unit and discuss details.



BARBER-COLMAN COMPANY

1230 ROCK STREET • ROCKFORD, ILLINOIS

MIRACLE *in Peoria*

**A HOUSING REALITY--
NOT A HOUSING PLAN!**

**HUNDREDS OF MOR-SUN U-4-G GAS-FIRED FORCED
AIR FURNACES SUPPLY HUNDREDS OF G. I. HOMES
WITH YEAR ROUND INDOOR COMFORT!**

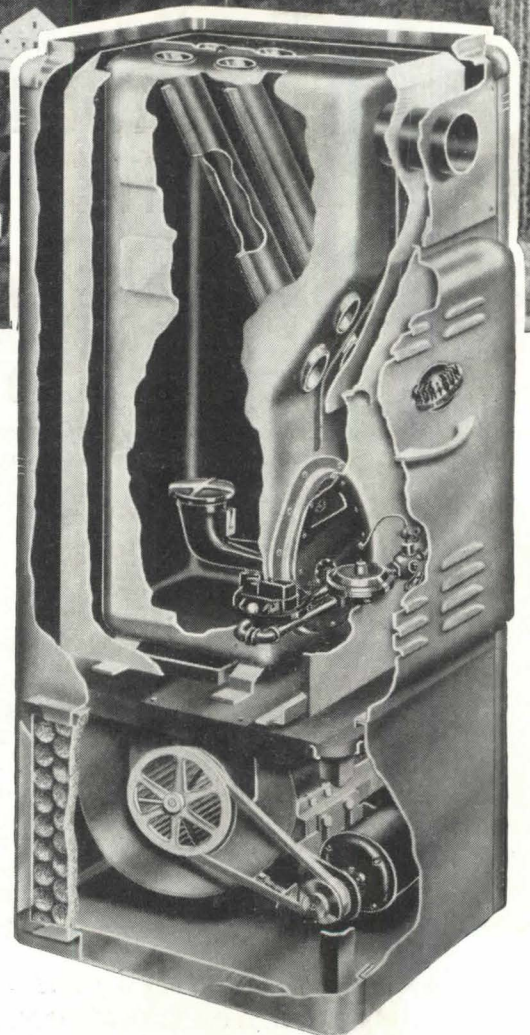


Hundreds of G.I. families are living in prefabs* in Peoria—
and every one is equipped with a MOR-SUN Heating System!

And what a system! With a house heat loss of 45,000 BTU's, the
MOR-SUN packaged gas-fired blower furnace—with a capacity of
72,000 BTU's—in a centrally located service room—took only three hours
of two men's time** to install (including the runs to the
various rooms)!

Each of these hundreds of G.I. families has more than a heating plant—
each has a MOR-SUN U-4-G*** that supplies year-round indoor comfort!

You Get MORE with a MOR-SUN!



*General Contractors — Best Construction Co., Peoria

**Heating Contractors — Lee Wagener Co., Peoria

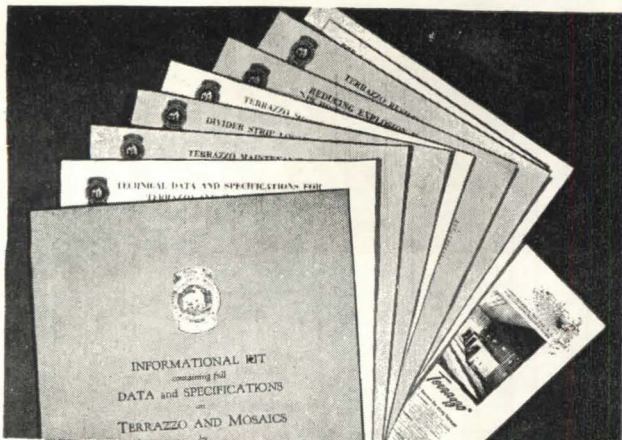
***MOR-SUN Midwest Sales Representative —

F. C. Evans, St. Louis



MORRISON STEEL PRODUCTS, INC., BUFFALO 7, N. Y.

"The Sun Never Sets with MOR-SUN"



FREE to Architects, Engineers, Draftsmen

REVISED and UP-TO-DATE

INFORMATIONAL KIT

ON *Terrazzo*

LIFETIME FLOORS

*A Practical, Handy Reference Kit
That Gives You Complete Data on:*

- Specifications
- Installations
- Applications
- Tests and Facts
- Maintenance
- Reducing Explosion Hazards

TERRAZZO flooring has a place in every plan on your drafting board. To help you with your planning, we have created this TERRAZZO A.I.A. Informational Kit to serve you with the information you want at a moment's notice . . . providing complete data on type of TERRAZZO and how to specify, not only for flooring, but also for bases, wainscots, walls, stairways, and door trims.

Order Your Kit Today

This Kit is the TERRAZZO file reference you've always wanted and needed. It's yours now free of charge. Write at once for your copy.

**THE NATIONAL TERRAZZO AND
MOSAIC ASSOCIATION, Inc.**

1420 New York Ave., N. W., Dept. H, Wash. 5, D. C.

EASY... does it.

GRAND RAPIDS Invisibles SASH BALANCE

THE PRACTICAL SPIRAL SASH BALANCE

Easy to operate . . . the touch of a finger is enough to raise or lower the ordinary sash.

Easy to install . . . just drive two fasteners and a screw, that's all! **Easy to specify . . .** because a few standard sizes fit 95% of your jobs. And it's the one balance that's ideal for repairing or modernizing and for narrow trim and corner windows. **Easy to sell . . .** supported by national advertising to 134,445,000 home-minded magazine readers. Tests in the laboratory and in thousands of homes assure smooth lifetime operation in all climates.

Get Complete Installation Data
See how Grand Rapids Invisibles save time and materials. Write TODAY for fully-illustrated specifications and installation instructions.

SEE OUR CATALOG IN SWEET'S

GRAND RAPIDS HARDWARE COMPANY

565 11th Street, N. W. • GRAND RAPIDS 2, MICHIGAN

Quality Leaders in Sash Hardware for 50 Years



GRAND RAPIDS SASH PULLEYS

No. 103 face plate, cone bearing type and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.



Good News
for all
typewriter
users!

BULLETIN...FROM THE TYPEWRITER LEADER OF THE WORLD.

NEW YORK—A NEW ALL-ELECTRIC TYPEWRITER IS NOW AVAILABLE TO BUSINESS ORGANIZATIONS EVERYWHERE.

SUPREME EASE OF OPERATION, LETTERS OF SURPASSING ATTRACTIVENESS, AND SPEED THAT ONLY ELECTRIC ENERGY CAN PROVIDE, ATTAIN NEW HIGH STANDARDS OF TYPEWRITER PERFORMANCE.

COMPLETELY NEW, THE UNDERWOOD ALL-ELECTRIC IS DESIGNED IN CRISP, CLEAN POSTWAR LINES—TO MAKE IT THE "WORLD'S MOST BEAUTIFUL TYPEWRITER."

MECHANICALLY, IT IS THE PRODUCT OF THE BEST OVERALL EXPERIENCE IN TYPEWRITER ENGINEERING AND DESIGN. MORE THAN FIFTY YEARS' EXPERIENCE IN MANUFACTURING TYPEWRITERS, PLUS TIME-TRIED FEATURES OF UNDERWOOD ELECTRIC ACCOUNTING MACHINES ARE BACK OF THIS LATEST UNDERWOOD PRODUCT.

HERE IS THE LAST WORD IN TYPEWRITER PERFECTION. BEFORE YOU BUY ANY TYPEWRITER BE SURE TO HAVE YOUR LOCAL UNDERWOOD REPRESENTATIVE DEMONSTRATE THE ALL-ELECTRIC FOR YOU.

Copyright 1947 Underwood Corporation



Underwood

All Electric

Typewriter... made by the Typewriter Leader of the World

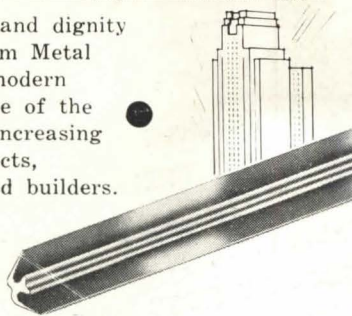
Underwood Corporation
Typewriters... Accounting Machines
... Adding Machines... Carbon
Paper... Ribbons and other Supplies
One Park Ave., New York 16, N. Y.
Underwood Limited
135 Victoria St., Toronto 1, Canada
Sales and Service Everywhere

SEPTEMBER,

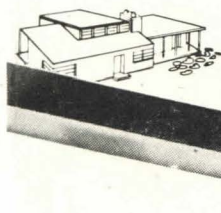
LEADING ARCHITECTS *Specify*

Chromtrim METAL MOULDINGS

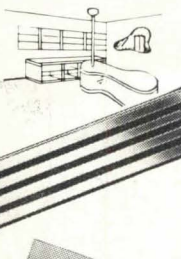
The design symmetry and dignity of line which Chromtrim Metal Moulding imparts to modern interior planning is one of the many reasons for its increasing popularity with architects, industrial designers and builders.



Wall paneling and surface covering of any color or texture is enhanced by the functional beauty of this easy to install metal trim. You can specify Chromtrim with complete confidence.



Chromtrim's fine quality, mechanical specifications, durable finish and ease of handling will contribute to the appearance and durability of every installation and bring equal satisfaction to you, your client and the mechanic who installs it.



80 dimensionally accurate profiles, designed in matching groups to serve every installation requirement. Sold only through a nationwide distributor organization. See insert in Sweet's Architectural File. Write for Chromtrim Catalog No. 2 today.



R. D. WERNER CO., INC.

Manufacturers of Metal and Plastic Products
295 FIFTH AVENUE NEW YORK 16, N. Y.
Factories: New York, N. Y. — Greenville, Pa.

2 ways to stop

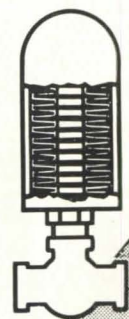
WATER HAMMER

① TEMPORARY (makeshift, inadequate)

The conventional vertical pipe-and-cap air chamber has only one virtue—*cheapness*. The air soon leaks out or is absorbed by the water washing in and out. It is then waterlogged, without a compressible cushion of air, completely ineffective. The water hammer condition returns to annoy with its noise, damage with its constant pressure shocks, whenever quick-acting valves close.

② PERMANENT (scientific, guaranteed)

Air cushion *sealed* within a flexible metal bellows . . . that will stand millions of cycles of operation . . . air never in contact with water, *cannot* escape . . . this is the WADE SEALED AIR CHAMBER. Can be hung in *any* position . . . accurately, scientifically sized to fit each job. The result of 20 years of engineering and research, thousands have been installed, given *positive* protection for years.



First Example: RESTAURANTS



Water-glass filling fountains almost always cause water hammer. A Number 6 WADE SEALED AIR CHAMBER installed in the 1/2" or 3/4" supply pipe within 7 feet of each lever-action quick-closing valve stops all chattering, noise and vibration.

Second Example: BAKERIES

Automatic snap-acting meters measure exact amounts of water for dough mixing. One Number 28 WADE SEALED AIR CHAMBER at each control valve prevents water hammer shock damage to 1 1/2" or 2" service piping.

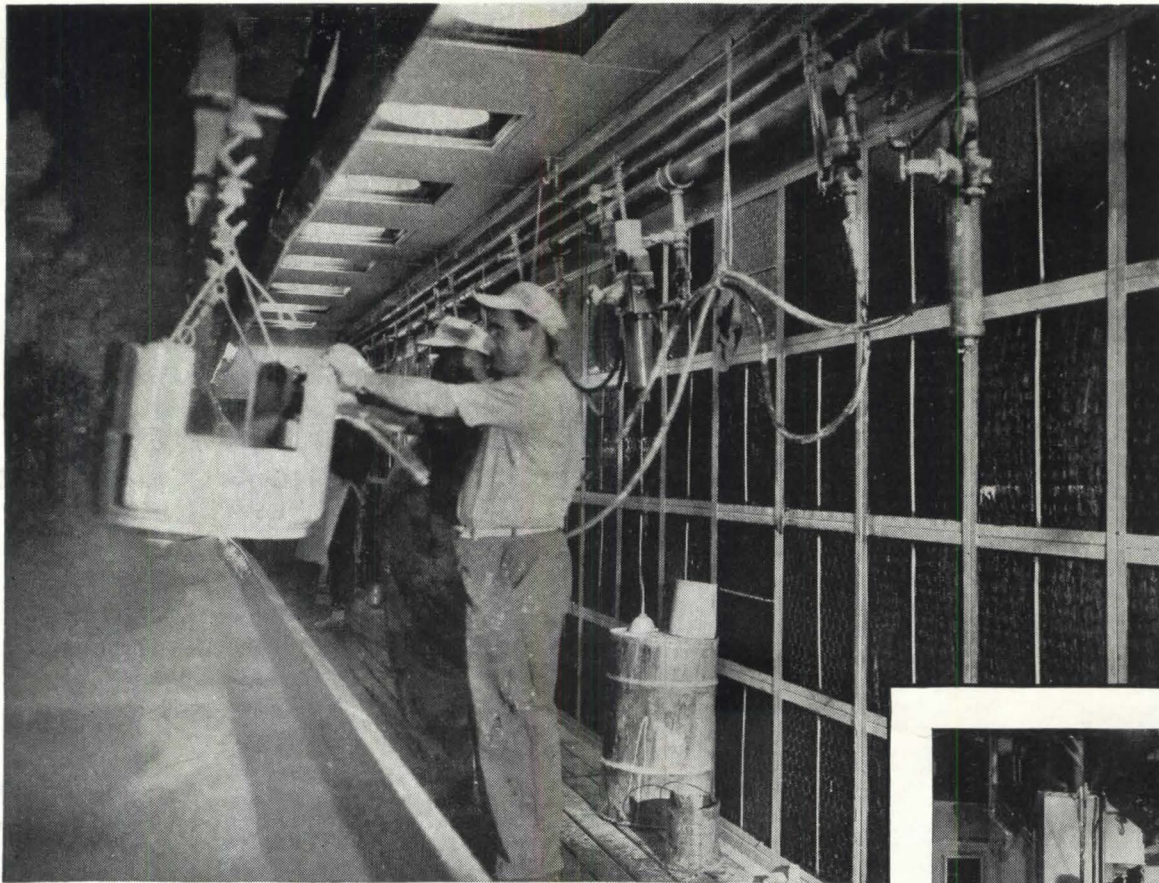


LITERATURE AVAILABLE FREE

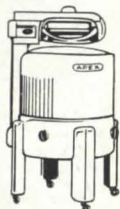
{1} Reprint of article "Water Hammer—Its Cause and Cure" by Prof. L. H. Kessler of Northwestern University. {2} Wade Bulletin #120 on uses, selection and installation of Sealed Air Chambers. Write for copies.

WADE SEALED AIR CHAMBERS

81 NO. STATE STREET, ELGIN, ILLINOIS



DUST-STOPS help give *Apex* washers a superior finish



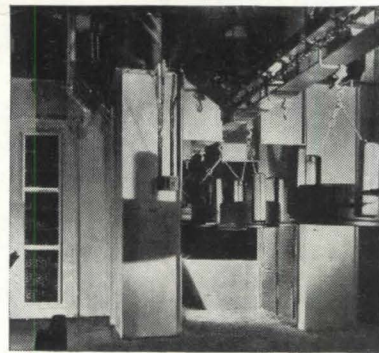
Here's an important section of the production line in the Apex Electrical Mfg. Co. plant in Cleveland, Ohio. It's the spray booth where DUST-STOP Air Filters (behind the operators and in the air intake areas at the doorway) prevent dust, dirt and foreign matter from causing costly damage. DUST-STOPS also protect electrical controls and other equipment from air-borne paint.

Because DUST-STOPS can be replaced easily and economically, maintenance time and costs are kept at the minimum.

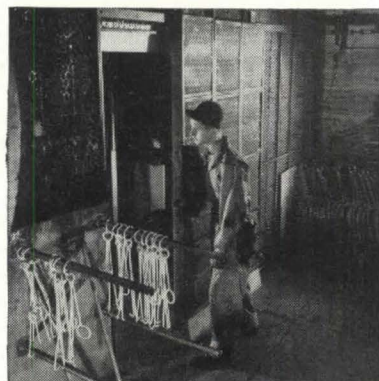
DUST-STOP Air Filters are used in commercial and industrial heating, ventilating and air conditioning systems of all sizes. They may be installed in custom-built or the complete, ready-to-assemble, steel frame cells—to handle any cfm of air required. And DUST-STOPS are readily available from suppliers in nearly every community.

See Sweet's Files for complete information or write for booklet—"Air Filtration in Central Systems" (A 5.2.1), Owens-Corning Fiberglas Corporation, Dept. 827, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario.



DUST-STOPS are adaptable to a wide range of requirements—in huge buildings or custom-built areas.



DUST-STOPS mounted on this sliding door provide filtered protection for sensitive electrical controls.

DUST STOP^{*}

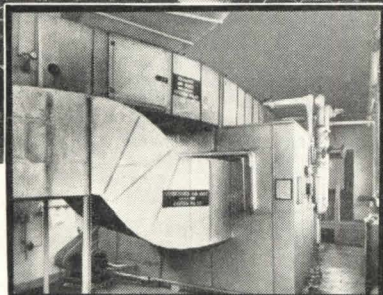
*T. M. REG. U. S. PAT. OFF.

AIR FILTERS a Fiberglas product

FOR DEPENDABLE AIR CONDITIONING Use **YOUNG** Heating and Cooling Coils



Young Coils are used in the air conditioning systems of the Wisconsin Electric Power Co. in the Public Service Building, Milwaukee, Wisconsin for offices and the main auditorium.



Stuffy, indoor rooms now become comfortable and healthful with controlled, fresh-air conditioning by Young coils and air conditioning units. Since every job has a different set of requirements, the way to the best possible end result . . . to have the added assurance of unflinching efficiency and customer satisfaction . . . is to call on Young Engineers to recommend the proper equipment for the specific job. There are Young cooling coils and air conditioning units for every conceivable size of installation . . . from the smallest home to the largest public building. Young Products have earned a reputation for long, trouble-free service . . . because Young has specialized in the design and manufacture of Heat Transfer Equipment for two decades! On your next heating and cooling job, do as architects and contractors everywhere are doing . . . call on Young's staff of trained engineers without obligation.

YOUNG HEAT TRANSFER PRODUCTS



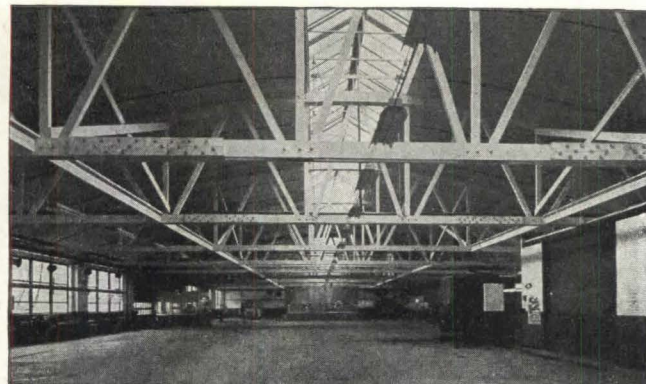
YOUNG RADIATOR CO.
Dept. 577-J Racine, Wis., U.S.A.
Sales & Eng. Offices in all Principal Cities

AUTOMOTIVE AND INDUSTRIAL PRODUCTS

Gas, gasoline, Diesel engine cooling, radiators • Jacket water coolers • Heat exchangers • Intercoolers • Condensers • Evaporating coolers • Oil coolers • Gas coolers • Atmospheric cooling and condensing units • Supercharger intercoolers • Aircraft heat transfer equipment

HEATING, COOLING AND AIR CONDITIONING PRODUCTS

Convectors • Unit Heaters • Heating coils • Cooling coils • Evaporators • Air conditioning units •



IMMEDIATE DELIVERY **AMERICAN BOWSTRING WOOD TRUSSES** **REDUCE BUILDING COSTS**



Send for Architects
Data Sheet Free

25th Anniversary 1922-1947

AMERICAN ROOF TRUSS CO.

Phone PLaza 1772
6856 STONY ISLAND AVE.
CHICAGO, 49

Phone ADams 1-4379
272 W. SANTA BARBARA AVE.
LOS ANGELES, 37

DISCUSSING HEATING IN
A MEETING?

HOW
WOULD
YOU
ANSWER

THE QUESTION . . . WHAT IS THE BEST
HEATING SYSTEM
FOR OUR PARTICULAR NEEDS?

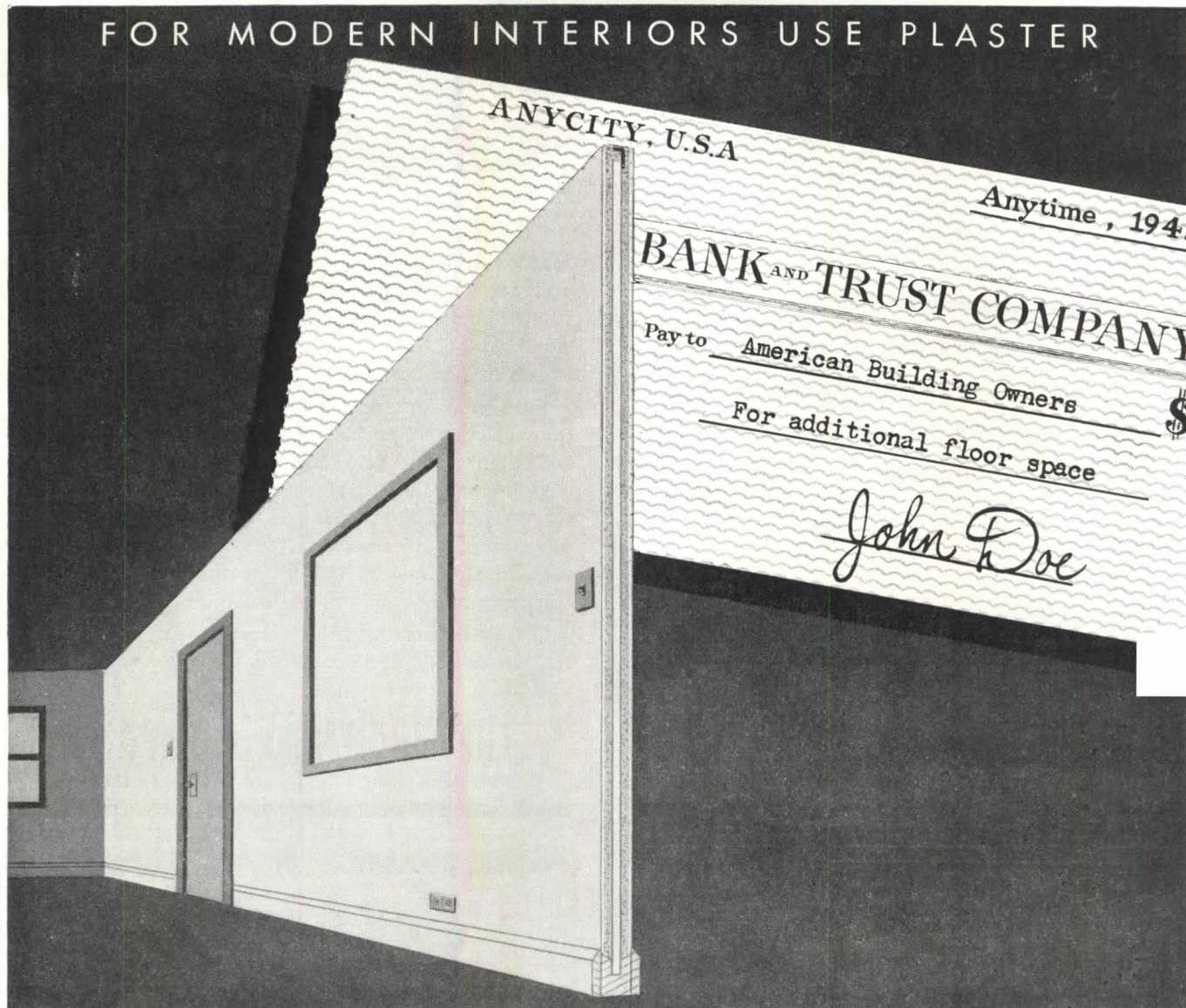


HERE IS
A WAY OF
DETERMINING
THE ANSWER

If you want completely automatic control of healthful room temperatures with "overheating" eliminated; low operating and maintenance costs; simplicity and heating adequacy in all weathers—the answer is "Dunham Differential Heating". It may be installed in existing heating plants without replacing radiation, piping or boilers. Write for Bulletin No. D-947. C. A. Dunham Co., 450 East Ohio St., Chicago 11, Illinois.

DUNHAM DIFFERENTIAL HEATING
MEANS BETTER HEATING
CHICAGO • TORONTO • LONDON

FOR MODERN INTERIORS USE PLASTER



MORE ROOM—MORE RENT WITH 2-INCH SOLID ROCKLATH AND PLASTER PARTITIONS

Planning buildings that produce more rentable space—that's the way today. This can be done with 2-Inch Solid Partitions of ROCKLATH* plaster base and RED TOP* Plaster.

With 2-Inch Solid ROCKLATH and RED TOP Plaster partitions, an additional three inches of space is obtained along the full length of the partition, compared to a four inch masonry non-bearing partition approximately five inches in thickness when plastered. In an average 20 ft. by 20 ft. office this means 5

square feet of additional office space.

Thus your clients obtain a greater rentable floor space. Truly, 2-Inch Solid ROCKLATH and RED TOP Plaster partitions result in More Room—More Rent.

This advantage, plus a saving in weight, accounts for the modern trend toward this new method of partition construction. Write U. S. G., Dept. 122, Chicago 6, for your copy of the new technical information booklet "2-Inch Solid ROCKLATH and Plaster Partitions, AIA File No. 20-B-3."

*Trade Marks Reg. U. S. Pat. Off



United States Gypsum

For Building • For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint

ARCHITECTURAL TERRA COTTA



DESCRIPTIVE LITERATURE • CONSTRUCTION DETAILS •
COLOR SAMPLES, AVAILABLE ON REQUEST • PRELIM-
INARY SKETCHES OR FINISHED DRAWINGS SENT TO US
FOR CONSTRUCTION OR COST INFORMATION WILL
RECEIVE PROMPT ATTENTION.



FEDERAL SEABOARD TERRA COTTA Corp.

8 E. 40th STREET NEW YORK 16
NEW YORK

An excellent working guide
to architectural principles and practices

New Second Edition

SIMPLIFIED ENGINEERING FOR ARCHITECTS AND BUILDERS By HARRY PARKER

This useful book has been revised to take into consideration new building code requirements and corresponding changes in unit stresses. The features which made the first edition so popular characterize this up-to-date edition. The following comment is typical of what users think:



"I find this the most useful reference book in engineering that I have. Not only does the work live up to its title in being simple, but it does so in a way which thoroughly explains the problems considered. The text is in sufficient detail to answer the great majority of everyday structural questions and, being concise, does so quickly and clearly."

—VERNE S. SWAN, Architect,
Utica, New York

Contents include: Principles of Mechanics, Direct Stresses; Timber Construction; Steel Construction; Reinforced Concrete; Roof Trusses.

1947 245 Pages \$3.00

FREE EXAMINATION COUPON

JOHN WILEY & SONS, INC. PA-9-47
440 Fourth Ave., New York 16, N. Y.

Please send me, for ten days' FREE EXAMINATION, a copy of Parker's SIMPLIFIED ENGINEERING FOR ARCHITECTS AND BUILDERS. If I desire to keep the book, I will remit \$3.00 plus postage; otherwise I will return the book postpaid.

Name
Address
City State
Employed by

(Offer not valid outside U.S.)

BUILT FOR OIL OR GAS FIRING

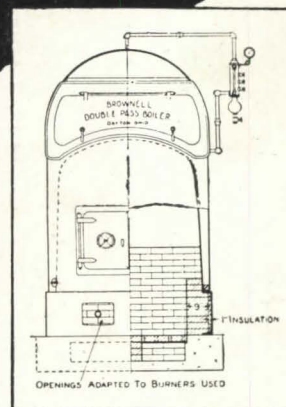
Brownell Double-Pass Firebox Boilers are especially designed to burn volatile fuels. When so ordered, they are arranged for oil or gas burners.

Furnace volume and fire-tube systems in these boilers are balanced and generous to promote economical fuel consumption. Surpassing mere code requirements, Brownell engineers incorporate in the boilers many factors which increase efficiency and promote length of service.

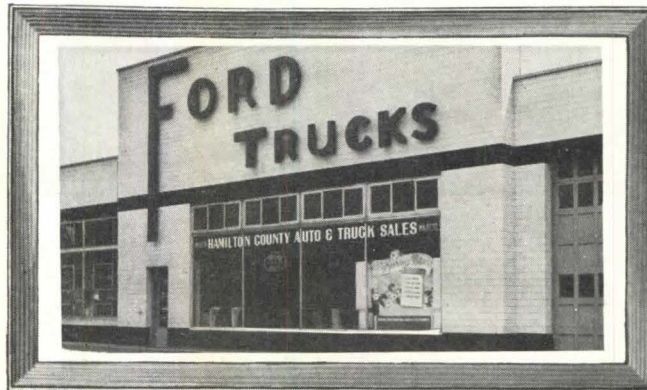
Detailed information is given in our bulletin No. RM-1. Ask for a copy. When we answer, we'll give you the name of our nearest agent.

THE BROWNELL COMPANY

432 N. FINDLAY ST., DAYTON 1, OHIO



Drawing of Brownell Double-Pass Firebox Boiler arranged for oil or gas firing.



TRULITE LETTERS

tailor-made!

Tailor-made Trulite letters are available in any size, any shape . . . in porcelain enamel, stainless steel, or combination of both. Made to your specifications, in any style, Trulite letters can be furnished with electrode holes for neon or socket holes for bulb lighting. Trulite letters—the sign of distinction on any building.



Better Signs for



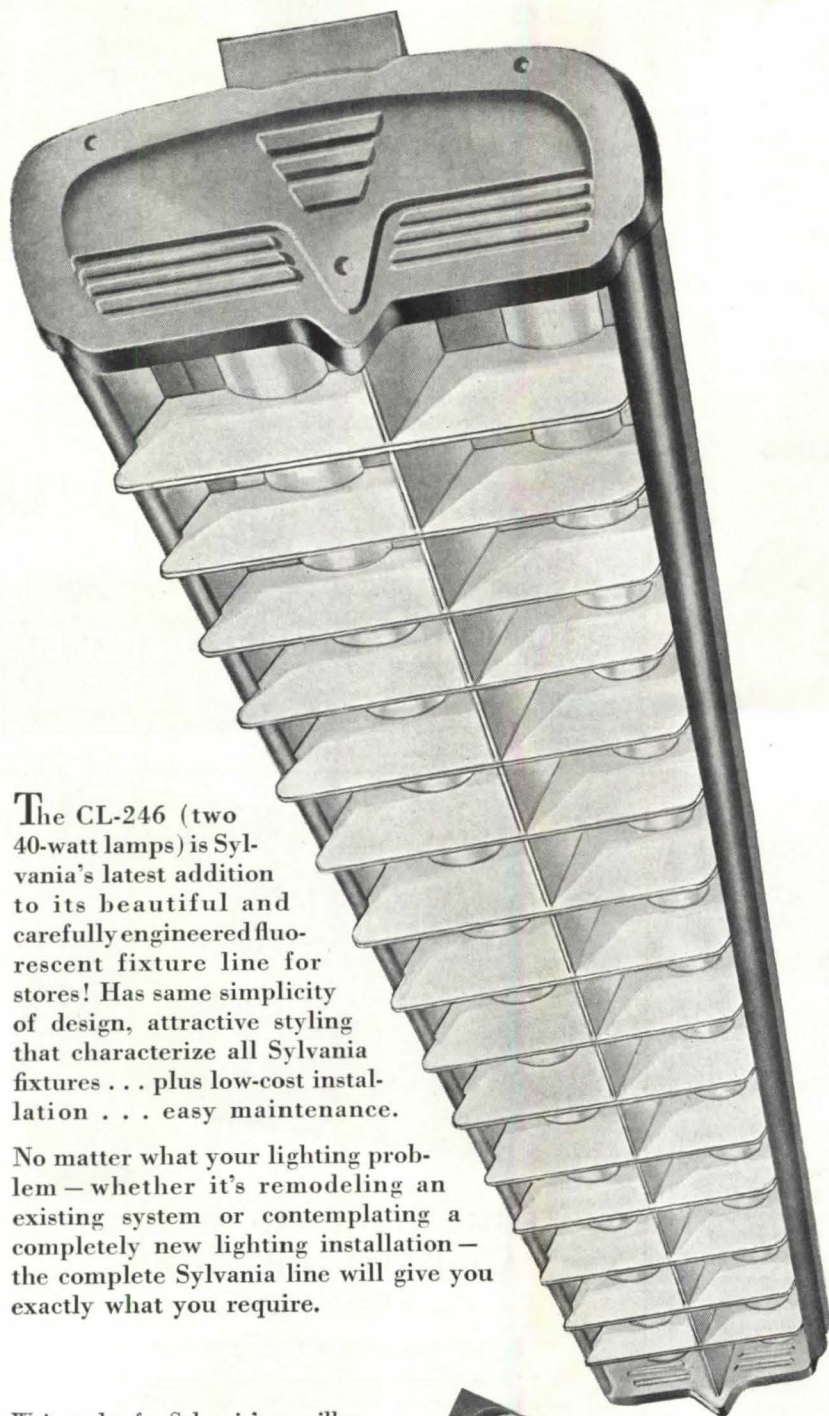
Better Buildings

BARROWS PORCELAIN ENAMEL CO.

LANGDON ROAD & PENN. R.R., CINCINNATI 12, O.

THE MOST COMPLETE
LINE OF
FLUORESCENT FIXTURES

FOR STORES



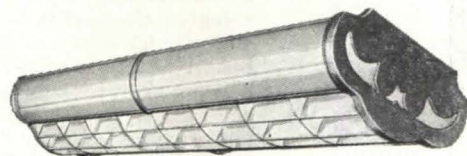
The CL-246 (two 40-watt lamps) is Sylvania's latest addition to its beautiful and carefully engineered fluorescent fixture line for stores! Has same simplicity of design, attractive styling that characterize all Sylvania fixtures . . . plus low-cost installation . . . easy maintenance.

No matter what your lighting problem — whether it's remodeling an existing system or contemplating a completely new lighting installation — the complete Sylvania line will give you exactly what you require.

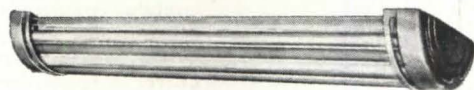
Write today for Sylvania's new illustrated descriptive booklet entitled *The Right Ways To Light Your Merchandise*. Sylvania Electric Products Inc., Lighting Division, 213 Derby St., Salem, Mass.



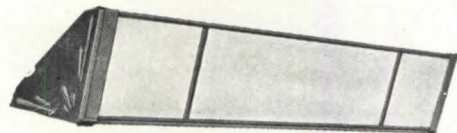
"Fluorescent at its Finest"
FOR STORE, OFFICE, FACTORY, HOME



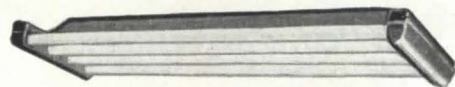
C-205 Complete with two 40-watt lamps. By pressing two fastening levers, the entire assembly swings down, providing a basket for lamps.



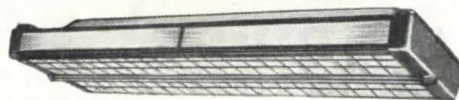
C-200 Ideal for grocery, variety and drug stores! Reflector is joined to top-housing with only 3 screws and can be removed without disturbing wiring, ballast, starters or lampholders.



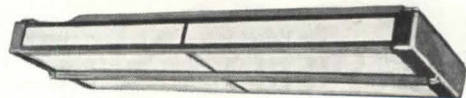
C-201 Glass-diffused; four 40-watt lamps. Fluted panels are hinged to end caps and swing outward or lift away from the fixture entirely.



C-440 Complete with four 40-watt unshielded lamps. The end caps snap open and swing down for easy lamp or starter replacement.



CL-440 The shield assembly of this louvered version of C-440 hinges downward and may be completely removed for easy cleaning.



CG-440 Equipped with glass diffusing panels, this four 40-watt fluorescent fixture combines low fixture brightness with high light output and efficiency.

SYLVANIA ELECTRIC

ECONOMICAL BEAUTY AND PROTECTION

for the Small Home

Cabot's Creosote Stains bring out all the natural beauty of wood shingles, clapboards, or siding in a wide choice of colors from brilliant hues to weathering browns and grays. The high content of pure creosote oil assures long lasting protection. For construction economy, Cabot's Stains are quick and easy to apply... cost one-third as much as good paint... won't peel or blister even on green lumber.

Free Booklet—"Stained Houses" contains complete information, illustrations, and color card! Write: Samuel Cabot, Inc., 1284 Oliver Bldg., Boston 9, Mass.

Cabot's **CREOSOTE STAINS**



Available Now!

**CHENEY
FLASHING**

3-Way Bond

16 OZ. COPPER

**CHENEY
FLASHING
REGLET**

16 OZ. COPPER

WRITE FOR
DESCRIPTIVE FOLDER P

CHENEY INDUSTRIES, Trenton, N. J.

CHENEY FLASHING is again being made by the original inventor who pioneered the art of thru-wall flashing eighteen years ago.

No thru-wall flashing can operate successfully unless it has the two very important features that are found in CHENEY FLASHING—proven weep-hole drainage and the three-way bond, vertical as well as longitudinal and lateral.

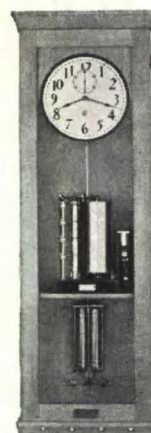
Remember, the inferior two-way flashings, crimped copper and membranes, have neither the vertical bond nor do they drain moisture from the wall fast enough. Furthermore, their first cost advantage has disappeared because today Cheney Flashing is no longer a specialty—it's a standard commodity.

**MASTER
CLOCKS**

**SECONDARY
CLOCKS**

**PROGRAM
MACHINES**

**BELLS—
BUZZERS**



**EMPLOYEE
TIME
RECORDERS**

**SYNCHRONOUS
PROGRAM
SYSTEMS**

JOB TIMERS

HORNS

Engineering skill in design plus precision workmanship is your assurance that a Cincinnati Signalling System will give long, dependable, trouble-free service.

Any size is available to fit specific needs, from a simple one or two station installation to a multi-station system suitable for a large institution.

We will be glad to supply you with any information which you may require.

Write Us Today—Catalog PA

THE CINCINNATI TIME RECORDER CO.
1733 CENTRAL AVE. CINCINNATI 14, O.

**ELLIOTT'S
"DT" Reproduction
TRACING
CLOTH**

(REG. U. S. PAT. OFF.)

DT

**ELIMINATES HAND TRACING
ACCURATE — INEXPENSIVE
PERMANENT**

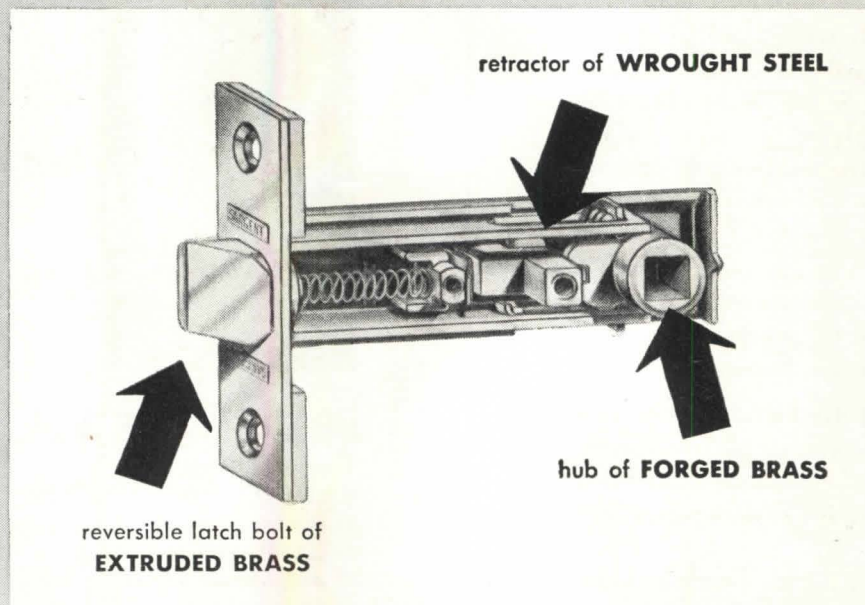
For fast duplicating of Tracings or Drawings

"D T" is a specially prepared waterproof tracing cloth for making reproductions direct from new or old tracings, ink or pencil drawings or subjects on opaque papers. Its use assures errorless copies with lines of permanent black.

We will make duplicate Tracings for you or furnish "D T" Tracing Cloth for your own use.

Write Dept. 2-B . . . for full information

B. K. ELLIOTT COMPANY
DRAWING MATERIALS—SURVEYING INSTRUMENTS
Pittsburgh • Detroit • Cleveland



SARGENT Bored-In Lock With Auto-Release

Sargent now offers you a complete line of Bored-In Lock Sets in a variety of trim that will take care of your full requirements.

Made From Strongest Materials—During the war it was necessary to use substitute materials in Sargent Bored-In Locks. Now that is ended. As you will see in the illustration above, all essential parts of the *new* Sargent Bored-In Locks are made of the finest, strongest materials: extruded brass for latch bolts, forged brass for hubs, wrought steel for retractors.

Reversible—Every Sargent Bored-In Lock Set will fit either left or right hand doors. The latch bolt heads may be revolved for use on reverse bevel doors.

Auto-Release Feature—Every Sargent Bored-In Lock provides the convenience of automatic release. This distinctive Sargent feature gives full security when the room is occupied and free access at all other times.

Quickly Installed—Installation is quick and economical because both holes are bored with one size bit. Use of Sargent Boring Jig assures perfect alignment of lock.

Complete Line—The complete line of Sargent Bored-In Locks includes sets with Regular Shank Knobs, French Shank Knobs, Glass Knobs and steel trim sets. For complete specifications and prices, write to Sargent & Company, Water Street, New Haven, Conn.

**Sargent Bored-In Lock Sets
Are Available for Prompt Delivery**

SARGENT & COMPANY
NEW YORK • NEW HAVEN, CONN. • CHICAGO



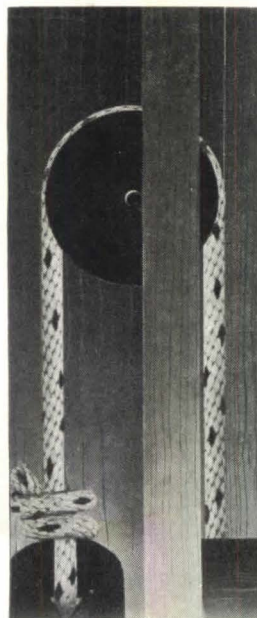
Architectural TERRA COTTA

• • • • Northwestern Terra Cotta is a burned clay building material of highest quality; used extensively for exterior and interior facing. It is obtainable glazed or unglazed in a variety of textures — is available in many colors — resists the stains of smoke and grime — is easily cleaned — is fire-safe, durable.

• • • • Terra Cotta is ideal for ashlar walls — is most economical of all building materials for repeat ornament — brilliantly reflects floodlighting

• • • • *Architectural Services:*
Descriptive literature; construction details; color samples; cost estimates from architects' sketches or drawings.

Northwestern Terra Cotta
C o r p o r a t i o n
1750 Wrightwood Ave., Chicago 14, Ill.



The Colored Spots are
our Trade Mark, Reg.
U.S. Pat. Off.

SPOT SASH CORD

WITH WEIGHTS AND PULLEYS

— the one method of hanging windows that has been proved by generations of actual use to provide perfect and permanent balance.

SAMSON CORDAGE WORKS • BOSTON 10, MASS.

**WHERE DO YOU
DRAW THE
LINE IN
PENCILS!**

Where do you draw the line in the selection of the material you work with! Are you satisfied with second best or do you want the very best? Do you look for the finest straight grained cedar and the smoothest lead? In short do you look for the KOH-I-NOOR pencil? Perfect uniform grading in every degree makes KOH-I-NOOR the PREFERRED pencil for the artist and technician.

Send for Leaflet No. 8



The RIGHT pencil for the RIGHT job
KOH-I-NOOR PENCIL COMPANY, INC., BLOOMSBURY, NEW JERSEY

ARCHITECTURAL ENGINEERING

A Practical Course (HOME STUDY) by Mail Only
Prepares Architects and Draftsmen
for structural portion of

STATE BOARD EXAMINATIONS

For many this is the most difficult section of the examinations. Qualifies for designing structures in wood, concrete or steel. Successfully conducted for the past thirteen years. Our complete Structural Engineering course well known for thirty-seven years.

Literature without obligation—write TODAY

WILSON ENGINEERING CORPORATION

College House Offices Harvard Square
CAMBRIDGE, MASSACHUSETTS, U. S. A.

SPRING BACK BINDERS

For

PROGRESSIVE ARCHITECTURE

(Formerly Pencil Points)

TWO INCH CAPACITY \$2.50

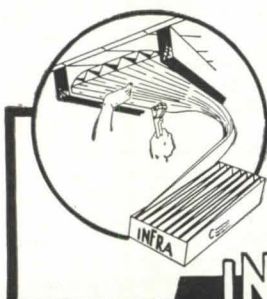
REINHOLD PUBLISHING CORP.
330 W. 42nd ST. New York 18, N. Y.

In Insulation...
**HERE IS SOMETHING
 BETTER UNDER THE SUN!**

From the architect's point of view, insulation is specified with thermal efficiency as a prime consideration. **INFRA ACCORDION ALUMINUM INSULATION** has C factors of:
 .072 (DOWNWARD HEAT; equals 6-7/8" rockwool)
 .095 (UPWARD HEAT; equals 3-1/2" rockwool)
 .10 (LATERAL HEAT; equals 3-1/3" rockwool)

That's why more and more architects specify **INFRA ACCORDION ALUMINUM INSULATION!**

Interesting up-to-the-minute **FACTS** about **Infra** . . . such as actual absence of condensation, mold-proof characteristics, ease and economy of handling and installation . . . are now available. A list of recent **Infra** installations, with names of architects, sponsors and builders . . . and a sample of **INFRA** . . . is also yours for the asking.



Thermal factors stamped on every carton

REJECTS
INFRA-RED RAYS

INFRA
Insulation
 INCORPORATED
 10 MURRAY STREET - NEW YORK, N. Y.

ALUMINUM AND TRIANGULAR
 AIR CELLS
 CONSERVE WINTER HEAT
 REPEL SUMMER SUN

Lively Rubber FOR BETTER ERASING



**WELDON ROBERTS
 ERASER NO. 85**

Titian

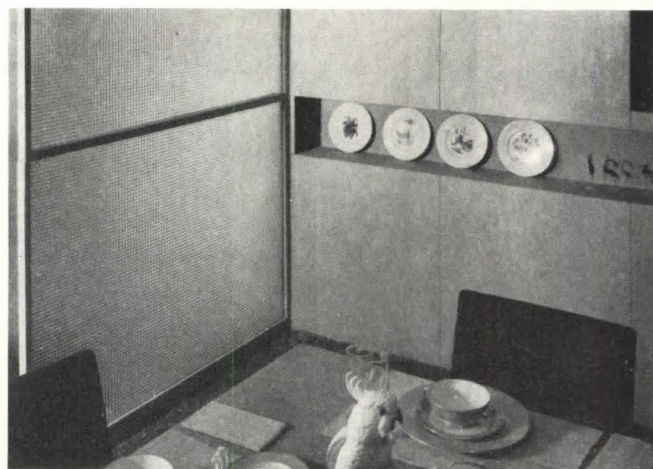
Velvety Titian is made of live, pink rubber, double-bevel, bias shaped, for studio and drafting room. **Titian's** sharp edges pick out fine lines accurately. The broad sides and flat ends clean large surfaces quickly.

Ask your stationer or art supply dealer to introduce you to **Titian!**

WELDON ROBERTS RUBBER CO.

NEWARK 7, N. J.

Weldon Roberts Erasers
Correct Mistakes in Any Language



SELECTIVE SCREENING

For the Modern Home Interior

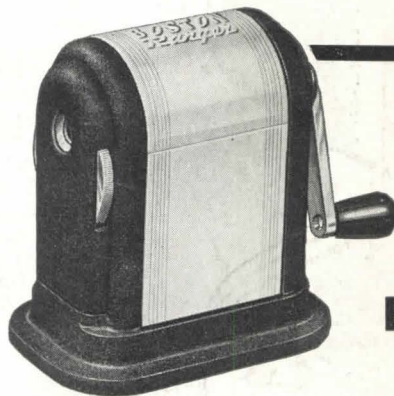
A particularly attractive glass for increasing the overall usefulness of the contemporary house. By selective glass screening, the architect may divide living areas to give the added-room effect, so desirable in the modern small home.

For dining and breakfast alcoves, gameroom and den areas, **MAGNALITE DIFFUSING GLASS** provides a handsome and useful answer to the problem of space arrangement.

Descriptive Brochure M45 and samples on request

J. MERRILL RICHARDS, 25 Huntington Ave., Boston 16, Mass.

Magnalite DIFFUSING
 GLASS
 Manufactured by
 Mississippi Glass Co.



The new
BOSTON
Ranger

the Pencil Sharpener for today's & tomorrow's needs

A modern, double-bearing pencil sharpener—creating a totally new standard of sharpening service. Some of its outstanding features are: solid steel cutters with 15 cutting edges • point adjuster giving choice of points, semi-blunt, standard and fine • guide for sharpening pencils of various thicknesses • automatic stop, preventing waste • double-bearing operation for extra-long life • modern styling—the projections usually appearing in pencil sharpeners are eliminated.

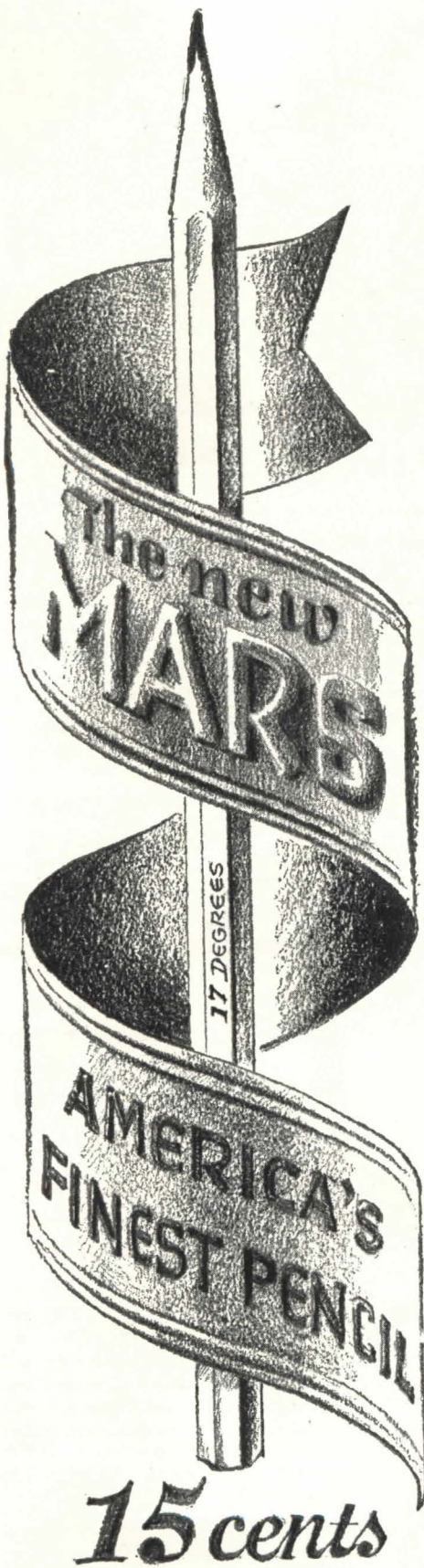
The **ranger** combines rugged construction with beautiful appearance and modern design.

G. HOWARD HUNT PEN CO.

Camden, N. J.

**SPEEDBALL PENS
 HUNT PENS**

BOSTON
Ranger
 PENCIL SHARPENER



15 cents

"DEMAND THE BEST!"

J. S. STAEDTLER, INC.

53-55 WORTH STREET
NEW YORK, N.Y.

INDEX TO ADVERTISERS

Adam, Frank, Electric Co.	103	Miller Co., The	28
Air Express Division of Railway Ex- press Agency	110	Minneapolis Honeywell Regulator Co.	99
Aluminum Co. of America	89	Morrison Steel Products, Inc.	127
American Lead Pencil Co.	23	Mueller Brass Co.	94
American Radiator & Standard Sanitary Corp.	37	National Chemical & Mfg. Co.	4
American Roof Truss Co.	132	National Electric Products Corp.	25
Anaconda Copper Mining Co.	19	National Gypsum Co.	26
Anemostat Corp. of America	115	National Radiator Co.	18
Arrow-Hart & Hegeman Electric Co. ..	124	National Terrazzo and Mosaic Association, Inc.	128
Barber-Colman Co.	126	Northwestern Terra Cotta Corp.	138
Barrows, W. A., Porcelain Enamel Co.	134	Ohio Chemical & Mfg. Co.	47
Blaisdell Pencil Co.	114	Otis Elevator Co.	30
Blank, Frederic, & Co., Inc.	43	Owens-Corning Fiberglas Corp.	131
Blue Ridge Sales Division, Libby- Owens-Ford Glass Co.	88	Owens-Illinois-Glass Co., Insulux Products Div.	5
Brasco Manufacturing Co.	119	Peck & Harvey	100
Brownell Co.	134	Pecora Paint Co.	12
Bruce, E. L., Co.	11	Petroleum Heat & Power Co.	118
Cabot, Samuel, Inc.	136	Pittsburgh Corning Corp.	95
Ceco Steel Products Corp.	86, 87	Pittsburgh Plate Glass Co.	2, 3, 93
Celotex Corp.	13	Portland Cement Assn.	32
Cheney Industries	136	Raymond Concrete Pile Co.	9
Cincinnati Time Recorder Co.	136	Red Cedar Shingle Bureau	101
Committee on Steel Pipe Research of American Iron & Steel Institute	6	Reinhold Publishing Corp.	116, 117, 121, 123
Copperweld Steel Co.	126	Republic Steel Corp., Steel and Tubes Division	42
Craftint Manufacturing Co.	106	Revere Copper & Brass, Inc.	85
Crane Co.	92	Richards, J. Merrill	139
Detroit Steel Products Co.	109	Ric-Wil Co.	33
Dunham, C. A., Co.	132	Roddis Lumber & Veneer Co.	35
Duriron Co., Inc.	102	Rotary Lift Co.	40
Eagle Pencil Co.	105	Ruberoid Co.	107
Elliott, B. K. Co.	136	Samson Cordage Works	138
Erie Enameling Co.	120	Sargent & Co.	137
Faber, A. W., Inc.	39	Schlage Lock Co.	22
Federal Electric Co., Inc.	141	Sedgwick Machine Works	104
Federal Seaboard Terra Cotta Corp.	134	Servel, Inc.	90, 91
Fitzgibbons Boiler Co., Inc.	125	Spencer Turbine Co.	16
Flynn, Michael, Mfg. Co.	38	Staedtler, J. S., Inc.	140
Gate City Sash & Door Co.	112	Standard Pressed Steel Co.	122
General Pencil Co.	120	Streamline Pipe & Fittings Div.	94
Grand Rapids Hardware Co.	128	Sylvania Electric Products, Inc.	135
Hart & Hegeman Div.	124	Trane Co.	21
Hillyard Chemical Co.	114	Trumbull Electric Mfg. Co., The	29
Hope's Windows, Inc.	7	Truscon Steel Co.	46
Hunt, C. Howard, Pen Co.	139	Underwood Corp.	129
Infra Insulation, Inc.	139	U. S. Gypsum Co.	133
Insulite Division, Minnesota & Ontario Paper Co.	15	U. S. Plywood Corp.	3rd Cover
Insulux Products Division, Owens- Illinois Glass Co.	5	United Wallpaper, Inc.	113
Jamestown Metal Corp.	122	Universal Atlas Cement Co.	108
Johns-Manville Corp.	44	Vonnegut Hardware Co.	34
Kawneer Co.	96, 97	Wade Manufacturing Co.	130
Koh-I-Noor Pencil Co., Inc.	138	Ward Leonard Electric Co.	31
Libbey-Owens-Ford Glass Co.	36, 83	Weldon Roberts Rubber Co.	139
Lone Star Cement Corp.	48	Weis, Henry, Mfg. Co., Inc.	10
Mahon, R. C., Co., The	111	Werner, R. D., Co.	130
Master Builders Co.	17	Westinghouse Electric Corp.	Back Cover
Medusa Portland Cement Co.	45	Wiley, John, & Sons, Inc.	134
Mengel Co., Inc.	3rd Cover	Wilson Engineering Corp.	138
Mesker Brothers	41	Worthington Pump and Machinery Corp.	24
Milcor Steel Co.	2nd Cover	Young Radiator Co.	132
		Youngstown Sheet & Tube Co.	27

Advertising and Executive Offices
330 West Forty-Second Street, New York 18, N. Y.
JOHN G. BELCHER, Publishing Director

FRANK J. ARMEIT, Production Manager • JOHN ANDREWS, Promotion Manager

Advertising Representatives
DOUGLASS G. PILKINGTON, District Manager, 22 West Monroe St., Chicago 3, Ill.
D. B. WILKIN, District Manager, 1133 Leader Building, Cleveland 14, Ohio
EDWARD D. BOYER, JR., District Manager, 330 West 42nd St., New York 18, N. Y.
HAROLD D. MACK, JR., District Manager, 330 West 42nd St., New York 18, N. Y.
DUNCAN A. SCOTT & CO., Mills Building, San Francisco, Calif.
448 South Hill St., Los Angeles 13, Calif.



FEDERAL
Cold Cathode
FLUORESCENT LIGHTING
**Technical
Data**

Another **FEDERAL FIRST**

Complete technical data on Federal Standard Cold Cathode lighting fixtures and lamps is now available to engineers, architects, designers—everyone planning improved lighting.

Federal Electric Company is the first in the industry to provide complete factual data for installation and performance of Standard Cold Cathode lighting units. This data has been published in convenient folder form to assist you in computing lighting installations. The data covers Federal's complete fixture line.

OTHER FEDERAL FIRSTS

FIRST to design completely modern functional fixture units (25 types available).

FIRST to develop automatic lamp processing equipment for manufacture of reliable Cold Cathode lamps.

FIRST to standardize the trouble-free positive contact pin base for Cold Cathode lamps, obsoleting the ferrule-type carried over from the neon sign type of lighting.

FIRST to provide a safe socket—approved by Underwriters for residential use.

FIRST to provide complete engineering service.



INDUSTRIALITE



CURVELITE

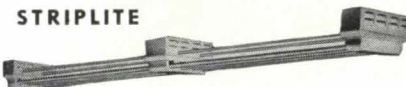


FLUSHLITE

Sky-tex glass as shown or supplied with louvers



STRIPLITE



STREAMLITE

Your
FREE COPY

has been reserved—write today for
Federal Cold Cathode Fluorescent
Lighting Technical Bulletin 110.

FEDERAL ELECTRIC COMPANY, Inc.
8700 SOUTH STATE STREET ? CHICAGO 19, ILLINOIS

WHO SAYS ARCHITECTS CAN'T TAKE CRITICISM? I saw a student project from V.P.I. judged by a group of Virginia architects, and then was astonished to see the architects offer a sampling of their work to be criticized by the students. I think this may be more than an amusing idea. It should be profitable to both masters and tyros; certainly the students in this case took the job very seriously.

I WISH MORE ARCHITECTS COULD MAKE THE PROPER DISTINCTION AMONG (A) PUBLICITY, (B) PUBLIC RELATIONS, (C) PUBLIC EDUCATION, AND (D) PROFESSIONAL EXCHANGE OF INFORMATION. The confusion about the purpose of these various activities does a lot of harm, and stands in the way of much good that might be accomplished.

Publicity is a business activity. By definition, it is information appearing in public print, to advance the interests of a given person. It is made difficult, but by no means impossible, because of the antipathy to professional advertising. It is usually an individual matter, but at times proper ethical publicity, to gain more business, may be done by professional societies. Various newspapers and magazines directed toward client groups will accept stories, if they are properly prepared, which over a period of time will result in more commissions.

Public relations activities have a long-range value in a business sense, but in their immediate application should simply raise architects as a group (and architecture as a product) in the public esteem. Serving on civic committees, participation in community activities, professional activities which don't pay off today or tomorrow and may help fellow architects as much as yourself—these things are for the purpose of establishing a friendly, understanding relationship with the public.

PUBLIC EDUCATION IS MUCH MORE TRICKY. Frankly, I don't know many architects I'd trust with the job, until they had prepared themselves carefully. It's a matter of understanding completely what architecture is, forgetting the technical and professional jargon, and transmitting this knowledge to generally uninterested lay people. It is a dangerous activity because few of us are trained teachers; explaining residential design to the Thursday Afternoon Women's Club is just as difficult as a schoolmarm's job in teaching plane geometry to high school kids. The

wrong approach can do irreparable harm, and yet the job is very important. There must be more speaking, more writing in popular magazines, and more "appreciation" courses in the schools, by architects, for lay people. If public relations activity is long-term publicity, public education is long-term public relations. One architect I know traces several of his most interesting commissions to the spreading influence of a one-semester course he gave in the local high school on architecture and town planning.

Russel Guerne de Lappe, of Berkeley, California, writes of another interesting experience. After speaking before a high school class on the subject of architecture, he asked each student to write him a letter telling what his conception of an architect had been before the talk, and what his revised estimate was.

A number of students gained knowledge of the social responsibility of an architect. One wrote: "Previous to your talk I thought an architect just designed houses and went ahead and built them (with the help of carpenters). But after your talk I had a different idea. He not only designs houses, but buildings that are to be used by the public. He plans how certain things will help people and communities and also tries to keep things that hinder communities away from them."

Many at least gained understanding of the amount of work involved in design. For instance, a student wrote: "At first I thought that all an architect did was to draw up plans and sell them. Now I see that besides that you must go through so much more work, and some of the work needs so much research and detail. I now realize that an architect's life is really a hard one."

THESE THINGS—PUBLICITY, PUBLIC RELATIONS, PUBLIC EDUCATION—ARE ALL BASED ON CONTACT WITH THE PUBLIC. The fourth activity is (or should be) intra-professional. As an architect, I hate to see public contact muffed. As an editor, it annoys me to find architects confusing publicity with their own professional growth. In the medical profession, the discoverer or the developer of a new therapy is anxious to spread word of it, in a technical sense, to his confrères, for the good of the practice of medicine. What publicity

he may get, in the popular press, is something else again.

In architecture this distinction is, unfortunately, seldom true. We on *PROGRESSIVE ARCHITECTURE* write, edit, and publish for those engaged in the practice of architecture. That's why we've been able to develop the Critique, as a professional analysis of outstanding work. Yet we get work submitted with a covering letter reading, "My client and I would like publicity on the enclosed job. Can you publish it in an early issue?"

Whereupon we yawn and go back to reading Astragal's column in *The Architects' Journal*. We aren't interested. If the architect concerned wants publicity, we'll advise him on how to go about getting it, ethically and efficiently—if his work deserves it. On the other hand, if he wants professional publication, if he's filled with the warm feeling of pride that comes when you've done something you're so proud of that you want to show it and tell about it to your fellow designers, all over the United States and Possessions, Canada, and Pan American Union (\$2.00 extra for each year in all other countries), then we'll put away our marbles and talk seriously about publication. I think that is the role of the technical press, as distinguished from the consumer press. A surprisingly large number of architects fail to make the distinction.

If anyone wants, I can recommend several good publicity agents. On the other hand, I can recommend a good professional magazine. Don't press me; we're very shy here.

IN THIS BUSINESS WE HAVE A CLOSE CONTACT WITH THE ARCHITECTURAL PHOTOGRAPHERS. By and large they are a group of fine people, competent, interested, and good fun to work with. We applaud and wish success to the professional guild they have just formed.

Sometimes, however, a photographer will do some peculiar things (perhaps, as in the case of some architects, because of client desires). For example, we've just seen two sets of photographs of an interior alteration. One set is honest; the other, by retouching, shows the design the way the architect wishes it had come out. I don't quite know who is fooling whom.

And then we have a statement of prices from another photographer which reads, "If clouds are desired in the print . . . \$1.50 extra." I'm not sure whether that quotation is per cloud or for a whole bank.

Thomas H. Coughlin