



THE AMERICAN ARCHITECT

FOUNDED 1876

January 1931

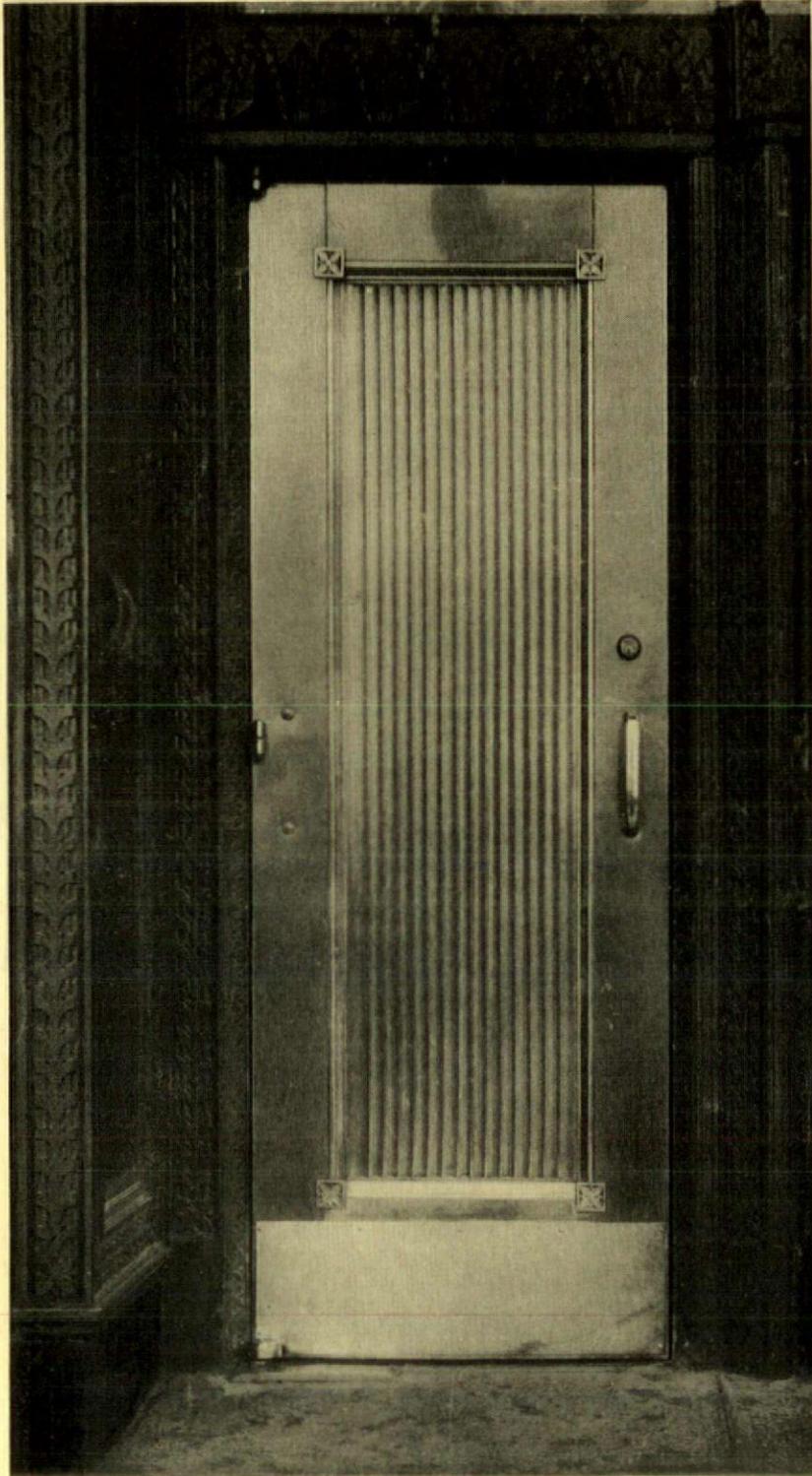
*Northwestern National Bank Building,
Minneapolis.*

*Graham, Anderson, Probst and White,
Chicago, architects.*

One of the several entrance doors.

Specify

**THORP
DOORS**



IN the entrance doors to the Northwestern National Bank Building is again found the faithful execution of the architect's design that characterizes Thorp craftsmanship. The treatment is simple and dignified, yet an impression of strength, impregnability is created. The doors are of bronze with ornamental fluted panels, extruded bronze mouldings, and cast bronze ornaments.

The Northwestern National Bank Building occupies a full one-half city block, rising 16 stories high. All entrance doors of the type illustrated and all stair doors and frames throughout the building are by Thorp. The latter bear the Underwriter's label.

THORP FIREPROOF DOOR CO., Minneapolis, Minnesota

Make R-W responsible for -- Elevator Door Equipment

over
50 years
1880/1931

To specify and provide for complete R-W elevator door installations, is to place the entire responsibility for safety, silence, economy and maintenance upon the R-W engineering staff. R-W equipment is *preferred equipment* everywhere . . . hangers, closers, checks, interlocks, the PowR-Way electric elevator door operator, and signal systems of all modern types. Consult an R-W engineer at any time. Write today for catalog No. 44.

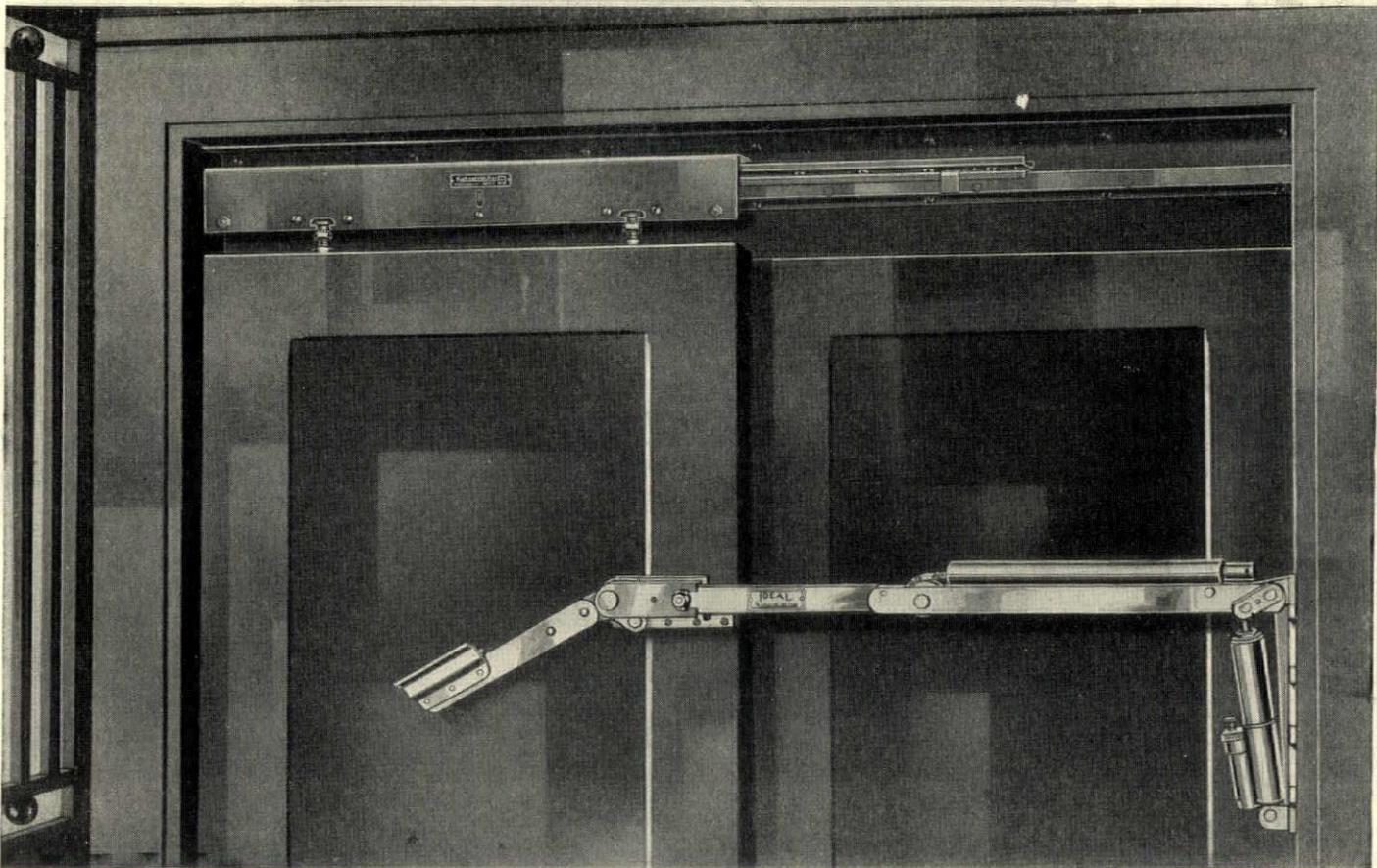


"Quality leaves its imprint"

Richards-Wilcox Mfg. Co.

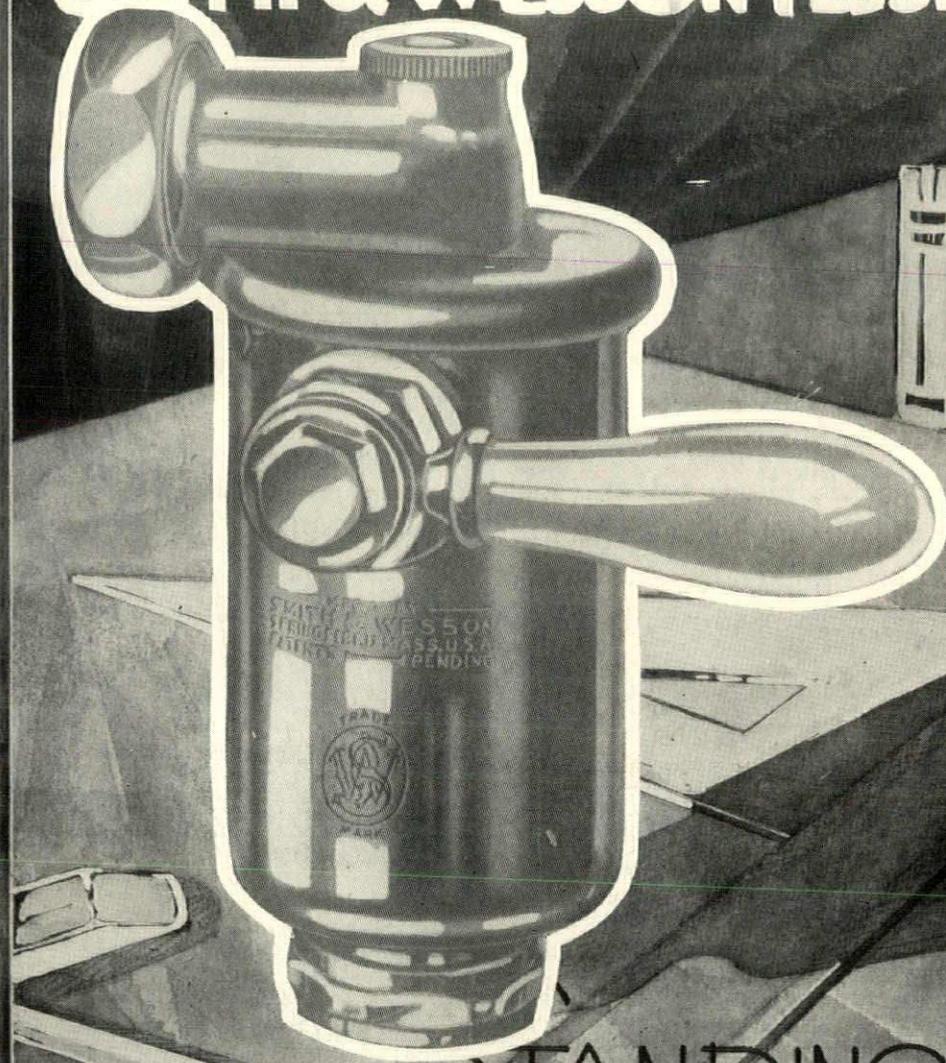
"A HANGER FOR ANY DOOR THAT SLIDES"
AURORA, ILLINOIS, U.S.A.

Branches: New York Chicago Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines Minneapolis
Kansas City Los Angeles San Francisco Omaha Seattle Detroit Atlanta Richards-Wilcox Canadian Co., Ltd., London, Ont. Montreal Winnipeg



Rich-Wil hangers are characterized by extreme quiet and long service, perfect alignment, minimum friction, quick adjustments.

SMITH & WESSON FLUSH VALVES



STANDING ALONE

IN DESIGN—

The Smith & Wesson Flush Valve is a success because of its simplicity.

There is nothing to wear out, nothing to give trouble. Checked performance over a long period of time under most severe conditions, shows complete efficiency.

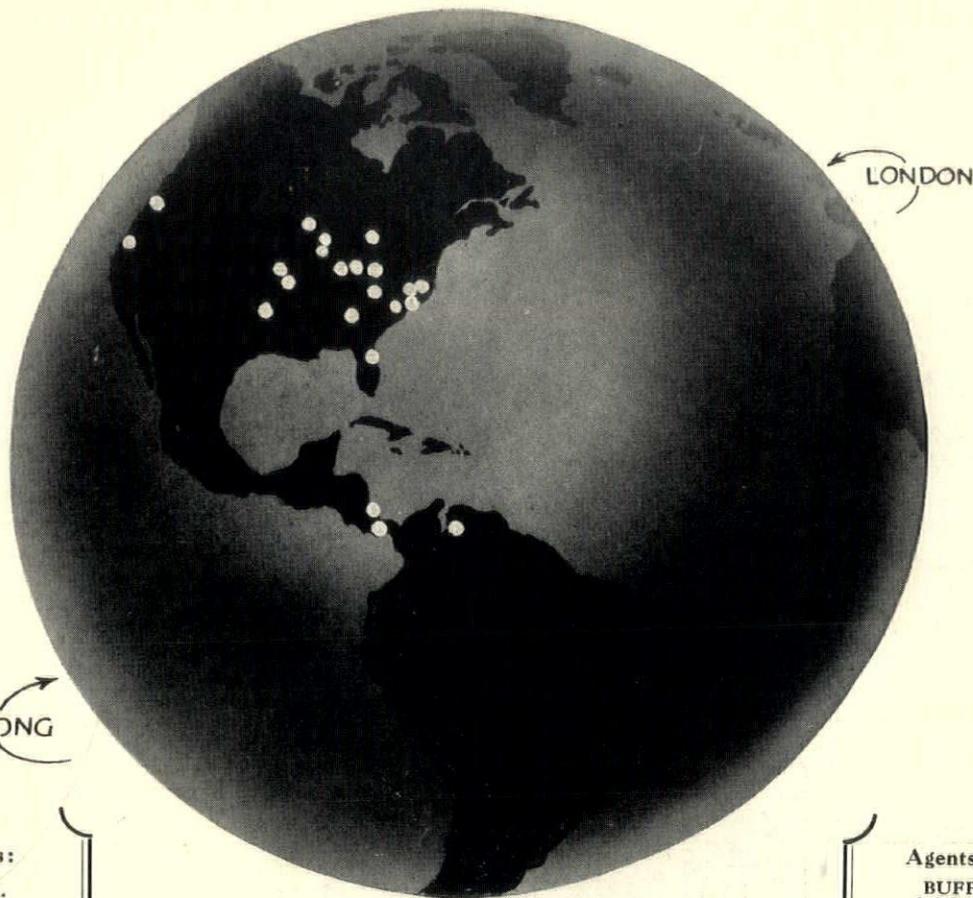
SMITH & WESSON

Flush Valve Division

SPRINGFIELD

MASSACHUSETTS





HONGKONG

LONDON

District Offices:

ATLANTA, GA.
49 Forsyth St.
(H. D. Oliver)
BALTIMORE, MD.
201-7 E. Fayette St.
(K. K. Kirwan)
BOSTON, MASS.
31 St. James Avenue
(H. A. Mohr)
CHICAGO, ILL.
111 W. Monroe St.
(H. D. Raymond)
CLEVELAND, OHIO
1621-23 Euclid Ave.
(F. W. Johnson)
DETROIT, MICH.
107 Clifford St.
(G. D. Raymond)
HOUSTON, TEXAS
1116 Texas Ave.
(G. F. Weismann)
KANSAS CITY, MO.
114 West 10th St.
(A. C. Everham)
LOS ANGELES, CAL.
311½ South Spring St.
(O. C. Struthers)
MIAMI, FLA.
141 N. E. 3rd Ave.
(G. P. Morrill)
PHILADELPHIA, PA.
225 South 15th St.
(J. M. Townsend)
PITTSBURGH, PA.
Cor. 4th Ave. & Wood St.
(W. F. Hall)
SAN FRANCISCO, CAL.
111 Sutter Street
(W. H. Young)
WASHINGTON, D. C.
912-17th St., N. W.
(Kirby Smith)

Agents' Addresses:

BUFFALO, N. Y.
1 West Genesee St.
(F. C. Hibbard)
CARACAS, VENEZUELA,
S. A.
HONG KONG, CHINA
(Hong Kong Piledriving,
Excavation & Const. Co.)
LONDON, ENGLAND
105 Baker St. W. 1.
(J. & W. Stewart)
MILWAUKEE, WIS.
217-23 Wisconsin Ave.
(J. D. McCord)
MONTREAL, CANADA
10 Cathcart St.
(Raymond Concrete Pile
Company, Ltd.)
PORTLAND, ORE.
1301 E. 31st Street
ST. LOUIS, MO.
611 Olive St.
(McCreery & Taussig)
ST. PAUL, MINN.
152-60 E. 6th St.
(G. W. Oakes)
PANAMA, C. Z.
(J. G. Stockelberg)
BOGOTA, COLOMBIA,
S. A.
(Robert K. West)
MARACAIBO,
VENEZUELA
(James Thompson)
TOKYO, JAPAN
2688 Sanno, Omori
(J. L. Knopp)

SO, when next you wonder if Raymond can handle that contract at a certain place—remember our far-flung offices . . . visual evidence of a great organization equipped to render satisfactory service "the world over."

CAST IN PLACE PILES
COMPOSITE PILES
PRECAST PILES
PIPE PILES

*"A form for every pile
A pile for every purpose"*

BUILDING FOUNDATIONS
BULKHEADS AND DOCKS
UNDERPINNING ETC.
BRIDGES

RAYMOND CONCRETE PILE CO.
NEW YORK: 140 Cedar Street
CHICAGO: 111 West Monroe Street

RAYMOND



UNUSUAL PLASTICITY

UNLESS the bricklayer is given good, rich, mortar, he cannot do quick, neat, economical brickwork. One part Brixment, three parts sand, makes a mortar plastic like a straight lime mix and strong as the brick itself.

It is unusually easy to spread, and when the bricklayer throws up a head-joint, the mortar sticks to the brick. Louisville Cement Company, Incorporated, Louisville, Kentucky.

CEMENT MANUFACTURERS SINCE 1830
Mills: Brixment, N. Y. and Speed, Indiana

BRIXMENT

for **MASONRY** and **STUCCO**





Creating a new room and new business . . .

Education of the public to demand beautiful bathrooms has not only created a charming room for American homes. It has provided a profitable new activity for architects, bringing commissions to plan modernized interiors for older homes, as well as increased opportunities in new ones. Crane Co. is anxious to give architects every co-operation in developing this field. Customers are always advised that color decoration and good arrangement require the advice of their architects to be truly successful. Informed representatives at Crane Exhibit Rooms are ready to assist architects in selecting materials and working out ideas.

CRANE

FIXTURES, VALVES, FITTINGS, AND PIPING,
FOR DOMESTIC AND INDUSTRIAL USE

Crane Co., General Offices: 836 S. Michigan Ave., Chicago + 23 W. 44th St.,
New York + Branches and sales offices in one hundred and ninety-six cities

Valves 

 Fittings.

THE ECONOMY CONCRETE CO.
and THE DECORATIVE STONE CO.

Announce their
consolidation to form

The
DEXTONE
Company

This consolidation of two pioneer cast stone manufacturers presents resources over one million dollars, and combined experience of more than 45 years, on a total of over 5,000 notable building operations.

The new Company will continue the manufacture of cut cast stone of the highest quality, under a capacity of 35,000 cubic feet per month.

Dextone presents the largest and most adequately equipped plant in the country, with a personnel and management superior in knowledge and experience to any other similar organization.

The new Company, through its expanded and perfected organization, modern equipment, and laboratory research, will render architects and builders a most valuable assistance wherever the highest quality of cut cast stone is required.

DIRECTORS

Louis A. Falco, President
C. Van de Bogart, Treasurer
James E. Wheeler, Secretary
H. R. Allen, Vice President
J. R. MacKay, Vice President
E. M. Falco M. A. Falco
W. L. Kitchel



The DEXTONE COMPANY, NEW HAVEN, CONNECTICUT

NEW YORK OFFICE, 101 PARK AVENUE

MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA

MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA

MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA

PERSONALITY



Always a Sign of Quality Terra Cotta

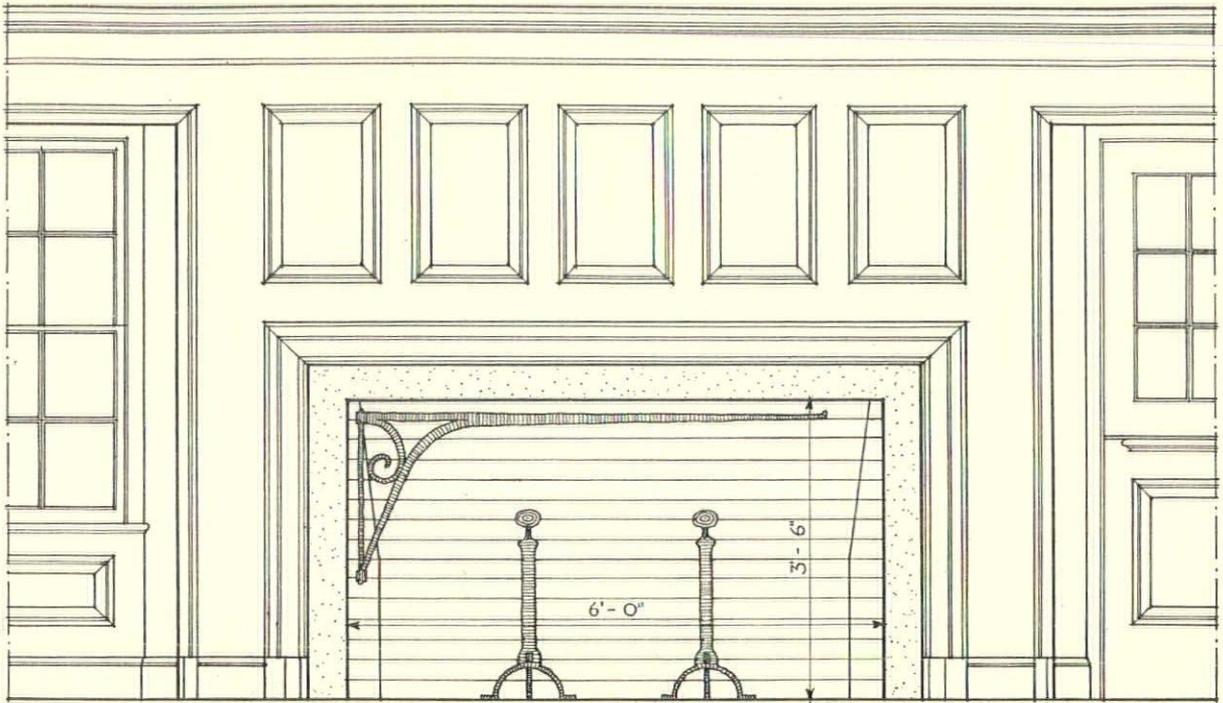
Midland Terra Cotta Company

105 West Monroe Street, Chicago, Illinois

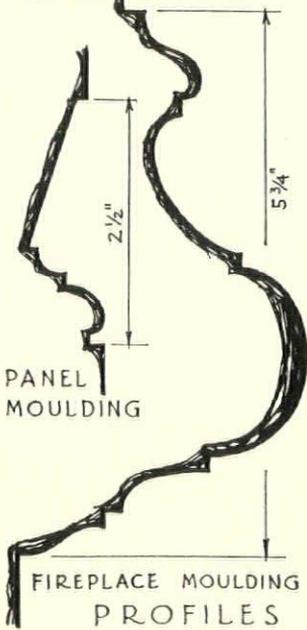
MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA MIDLAND TERRA © TIA

COVERT

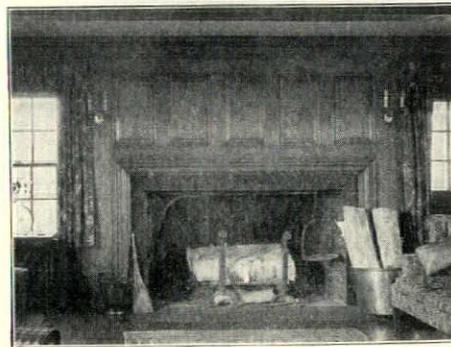
Fireplace Construction



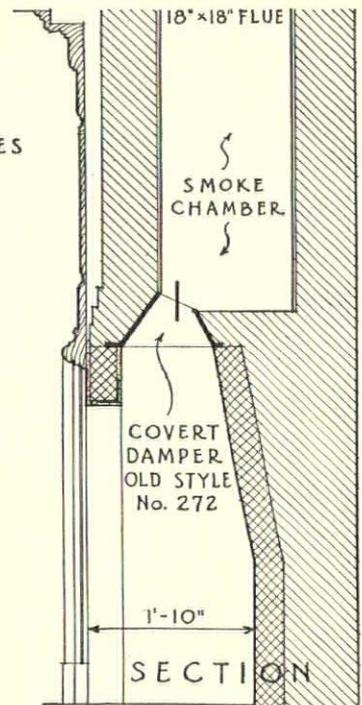
SCALE IN FEET - ELEV. & SECT.
ALFRED M. BUTTS



LIVING ROOM
PRETTY BROOK FARM
PRINCETON, N. J.
ARTHUR C. HOLDEN & ASSOCIATES
ARCHITECTS



COVERT
FIREPLACE DAMPERS



THIS IS THE FIRST OF A SERIES ON "SUCCESSFUL FIREPLACES"
IF YOU WILL SEND US YOUR ADDRESS WE SHALL GLADLY FORWARD YOU A COMPLETE SET OF THE SERIES
THE H. W. COVERT COMPANY, 229 East 37th Street, New York



You can always plan a restful bedroom if you base your decorative scheme on Embosstex Linoleum Floors. Its soft, delicate texture is suited to interiors where interesting color is desired without definite pattern. Color shown is Lavender No. 2 Embosstex Granite.

For the Floor Where You Want Soft Color Without Pattern

EMBOSSTEX Linoleum is one of the newest Armstrong creations. It suits the occasion where color is desired without pattern. The unique textural surface lends a softness to the color much to be desired where restfulness is a factor. This type of linoleum floor, exclusively Armstrong's, can be had in a range of eight colors.

The modern architect knows the value of thoughtful color selection in conjunction with the planning of homes. He knows that a knowledge of decoration means client satisfaction and that successful interiors bring prestige to the architect.

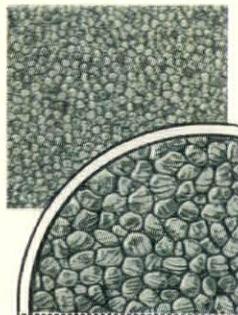
By specifying Armstrong's Linoleum, the architect assures his client

of many worthwhile "floor advantages." Armstrong Floors are comfortable and quiet under foot because they are resilient. The spot-proof Accolac-Processed surface simplifies cleaning. This means less effort in the household and smaller overhead in business institutions, where cleaning and maintenance costs are factors.

May we send you free a copy of our file-size specification book? It

contains many floor facts which have been compiled for your own use. We shall also be glad to send you upon request colorplates and samples of Armstrong's Linoleum. This product is also represented in Sweet's.

Should you desire advice on the decorative use or practical application of Armstrong's Linoleum, just address Armstrong Cork Company, Floor Division, Lancaster, Penna.

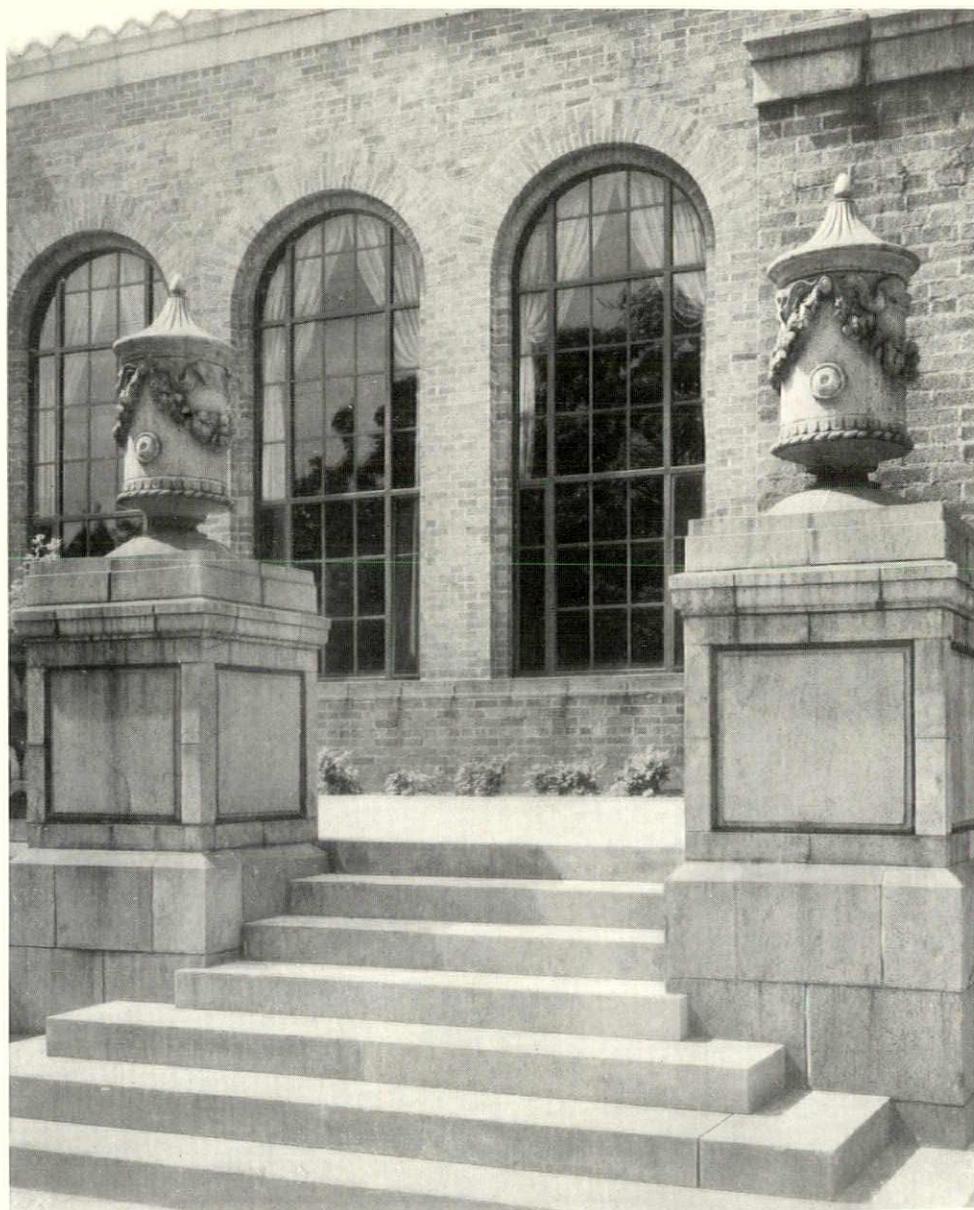


Nothing has ever before been produced in linoleum with the soft textural surface of Embosstex. The enlarged section illustrates the unusual beauty of this new-type floor.

Armstrong's Linoleum Floors for every room in the house

PLAIN · INLAID · EMBOSSED · JASPE · PRINTED · LINOTILE and ARMSTRONG'S CORK TILE

INTERNATIONAL CASEMENTS



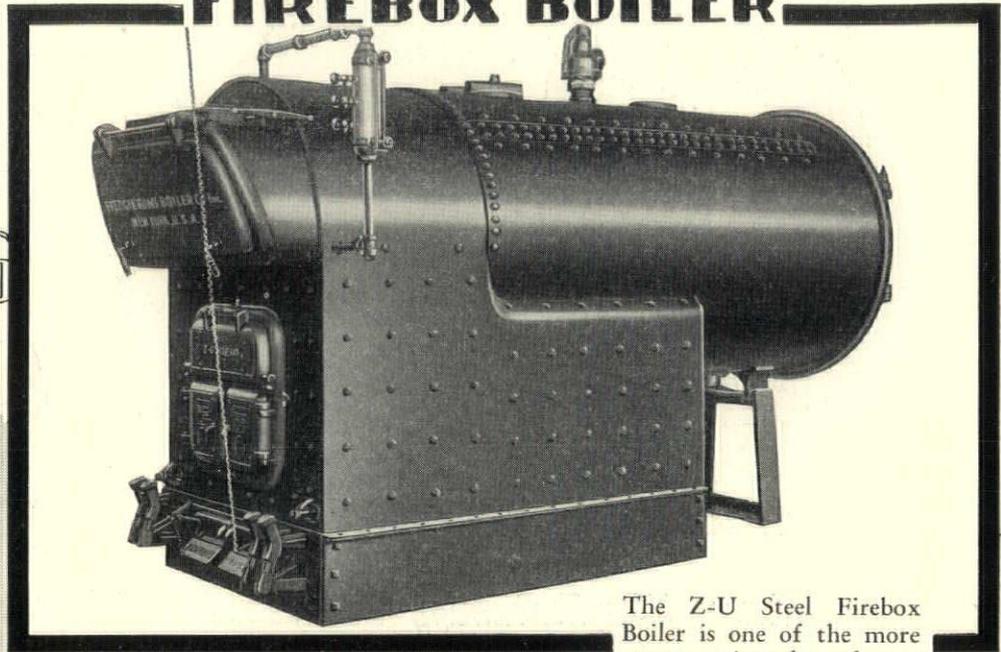
Glenville Branch Library, Cleveland, Ohio

Walker & Weeks, Architects

STRUCTURAL details of the above windows are shown in the International Casement Co.'s new catalog No. 15, "'Biltin' Sub-Frames with International Casements," copies of which are now being distributed.

INTERNATIONAL CASEMENT CO., INC., JAMESTOWN, NEW YORK

Z-U FIREBOX BOILER



1886

1931

*This
begins*

*our 46th consecutive year
of building steel boilers
exclusively - - - - -*

For a generation and a half without a break, we have concentrated our best thoughts and efforts on the building of steel fire-tube boilers of the type that requires no brick setting.

During our early pioneering days when boilers were built by hand, our shop at Oswego, N.Y. turned out boilers that were noted everywhere for their excellent quality and a brand of workmanship that set a standard for steel boiler construction.

Steady growth has been the reward of the uninterrupted maintenance of these high standards until today our shop, with the latest addition just completed, provides ample space and every facility for the expeditious manufacture of a line of steel boilers that meets every heating and power requirement.

FITZGIBBONS BOILER CO., Inc.

General Offices: 570-7th Avenue, New York

Works: Oswego, N. Y.

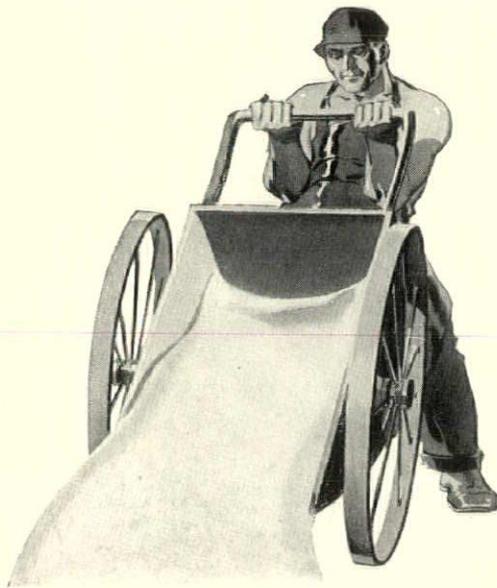
*For Central, Southern and Western States with Branches and
Representatives in Principal Cities*

Sold by **KEWANEE BOILER CO., Inc.**

General Offices: 570-7th Avenue, New York

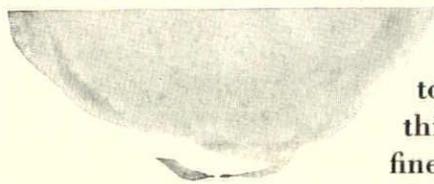
*In New England, Middle Atlantic States, Virginia and District
of Columbia with Sales Branches in Principal Cities*

The Z-U Steel Firebox Boiler is one of the more recent triumphs of our long experience in steel boiler building. Its unique design insures complete combustion with absolute minimum of excess air, and also provides the highest possible degree of efficiency in heat transfer. The Z-U Catalog explains these achievements clearly. Write for a copy.



...SAND

from the finest pits of West Virginia for superior lighting in Selfridge's, London

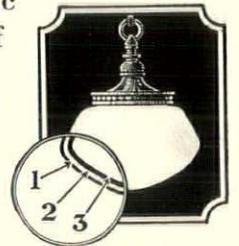


DARK sand pits . . . and brilliant Selfridge's, London . . . half across the earth . . . far, indeed, yet closely bound together. For the great Celestialite lighting globes that hang in this prominent English department store hark back to the finest sand pits of America.

Selected with extraordinary precaution is the sand ultimately destined for this famous "next-to-daylight" lighting glassware. Sharp-cut, fine as golden dust . . . sand carried over magnetic plates that draw off and sift out iron, sand washed by tons of water . . . such only is the sand that is selected for Celestialite. Thus, so familiar a substance as sand is maintained at the highest standard of quality.

This is the evidence that Celestialite is as fine as any lighting glassware obtainable. Illuminating experts and lighting engineers have recognized this. They have recommended and installed it in many of the most prominent department and chain stores.

The Celestialite installation in Selfridge's Department Store, London, England, is shown below, at the right. Write us at once for information that will secure you just as fine a lighting system. We will also send you free, a section of Celestialite, showing its distinctive three-layer construction.



CELESTIALITE'S three layers:

- The Reason for Its Superiority
- [1] A layer of crystal clear transparency—for body and strength.
 - [2] A layer of white glass—to diffuse the rays and soften the light.
 - [3] A layer of blue glass—to whiten and perfect the light.

CELESTIALITE

(Registered and Patented)

NEXT TO DAYLIGHT

Gleason-Tiebout Glass Company, 200 Fifth Ave., New York

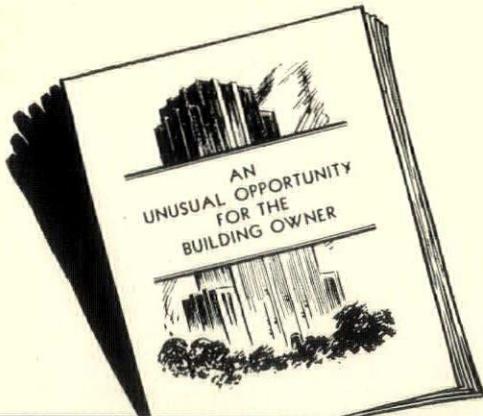


MODERNIZING

Is a Service which will create a new Achievement for the Architect and Consulting Engineer

DUNHAM DIFFERENTIAL HEATING

THE HEATING SYSTEM THAT "CHANGES GEARS WITH THE WEATHER"
"Cool" Steam (133° F.) "Warm" Steam (133° to 212° F.)
"Hot" Steam (above 212° F.)



C. A. DUNHAM CO.
450 East Ohio Street, Chicago

Please send your booklet, "An Unusual Opportunity for the Building Owner."

Name

Street

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

Owners and managers of offices, industrial and apartment building properties are earnestly seeking ways of reducing operating and maintenance costs. This is not a temporary condition. It will more and more become the objective of better business management.

This becomes an opportunity, almost an obligation, for you to point the way to your existing clientele how these economies may be effected in operating the properties which you created for them.

"Heating" looms large in operating costs. It offers one of the biggest potentialities for savings. The Dunham Differential Vacuum Heating System, since it was announced in 1927, has proved that change-over installations pay for themselves in a few years' time. It is the only heating-system-change-over backed by a "pays for itself out of fuel savings plan."

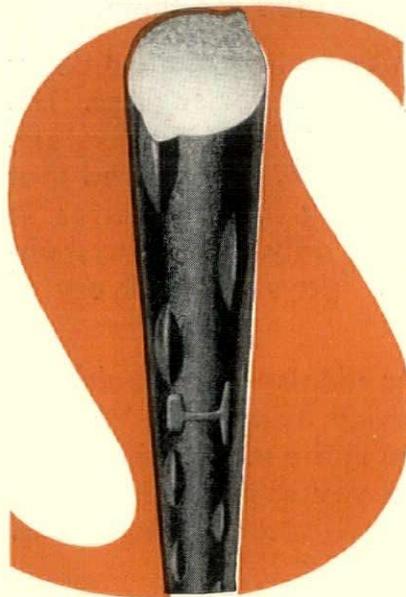
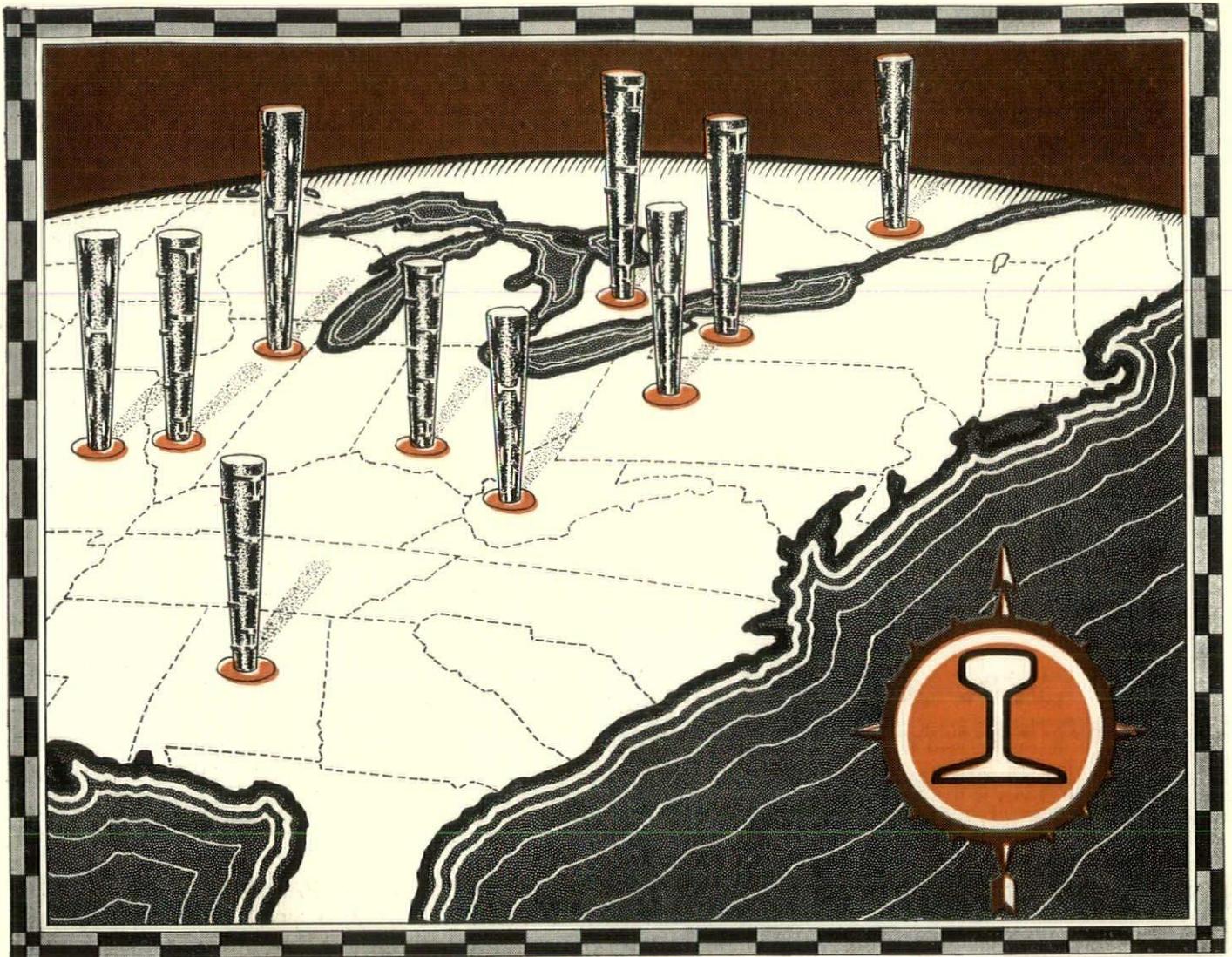
Have you not a client—or clients—who would appreciate this kind of service from you? We will gladly cooperate with you in the survey of existing heating systems and give you data on (1) economies which can be effected, (2) cost of change-over.

C. A. DUNHAM CO.

450 EAST OHIO STREET

CHICAGO, ILLINOIS

Over eighty branch and local sales offices in the United States and Canada bring Dunham Heating Service as close to you as your telephone. Consult your telephone directory for the address of our office in your city. An engineer will counsel with you on any project.



STEEL FOR TWO NATIONS

Rail Steel reinforcing bars—produced at strategic industrial centers—serve the important construction of two nations—Uniform standard quality of the associated industry is insured by specifying CESA G31 or ASTM A16-14 as rolled by:

Buffalo Steel Company · Tonawanda, N. Y.
 Calumet Steel Company · Chicago, Ill.
 Connors Steel Company · Birmingham, Ala.
 Franklin Steel Works · Franklin, Pa.

Laclede Steel Company · St. Louis, Mo.
 Missouri Rolling Mill Corp., St. Louis, Mo.
 Pollak Steel Company · Cincinnati, Ohio
 West Virginia Rail Co., Huntington, W. Va.

Mills in Canada:

Burlington Steel Co., Ltd. Hamilton, Ont. Canadian Tube and Steel Products Ltd., Montreal

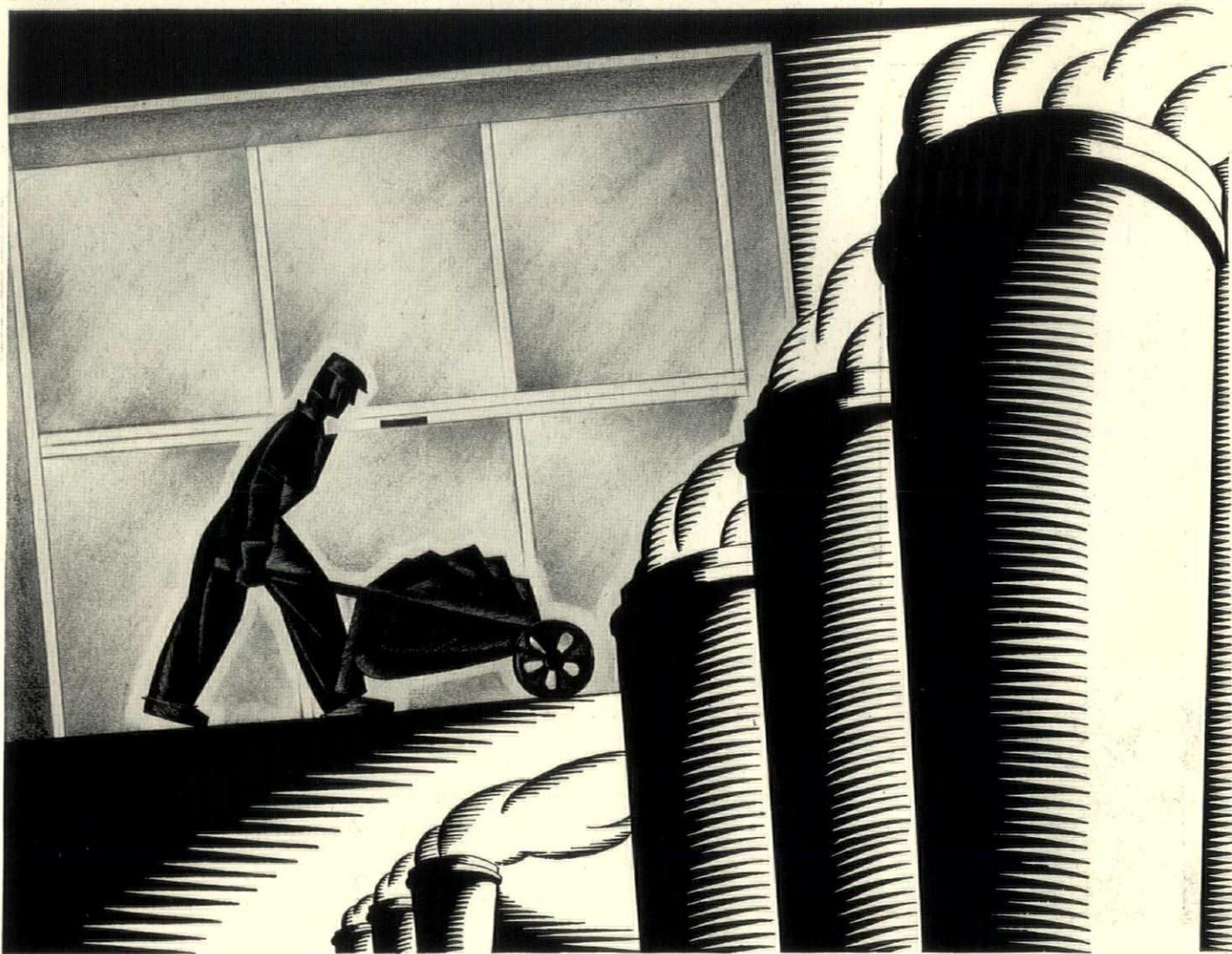
For further information write

Rail Steel Bar Association, Builders Bldg., Chicago

RAIL STEEL

for concrete reinforcing

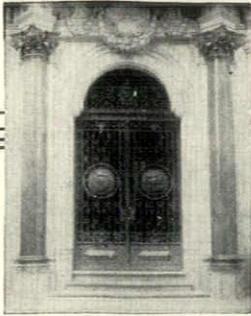
THE DOORWAY OF AMERICA'S FREIGHT ELEVATOR TRAFFIC



PEELLE MOTORIZED FREIGHT ELEVATOR DOORS

smoke . . . pennant-like flung from industry's mast-head—the smokestack. Smoke . . . symbol of activity that bespeaks both the physical energy of man and the mechanical effort of machines. Wherever the smoke of industry signals activity there you will find Peelle Doors in an active role. Products that feed, clothe and amuse a nation, transport it, house it—these things and more travel the vertical shaftway route that passes through Peelle Doors. Their wide-spread installation, their varied use and proven performance presents evidence of recognized efficiency. Motorized—Peelle Doors afford instant entrance and exit at the touch of a button—and by their greater speed and simplicity of operation reduce interior traffic costs. A Peelle catalog will be gladly sent upon request, or consult our engineers.

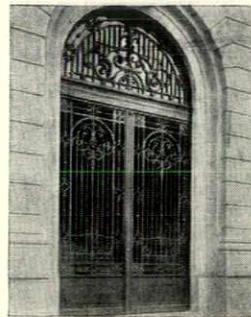
THE PELLE COMPANY, BROOKLYN, NEW YORK
Boston, Chicago, Cleveland, Philadelphia, Atlanta and 30 other cities
In Canada: Toronto and Hamilton, Ontario



MAIN ENTRANCE
PORTUGUESE BANK BUILDING
Stanley Equipped



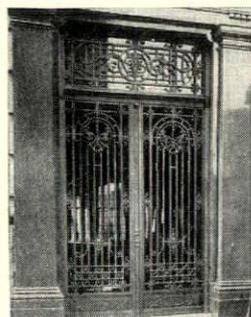
MAIN ENTRANCE
CASA PALMARES
Stanley Equipped



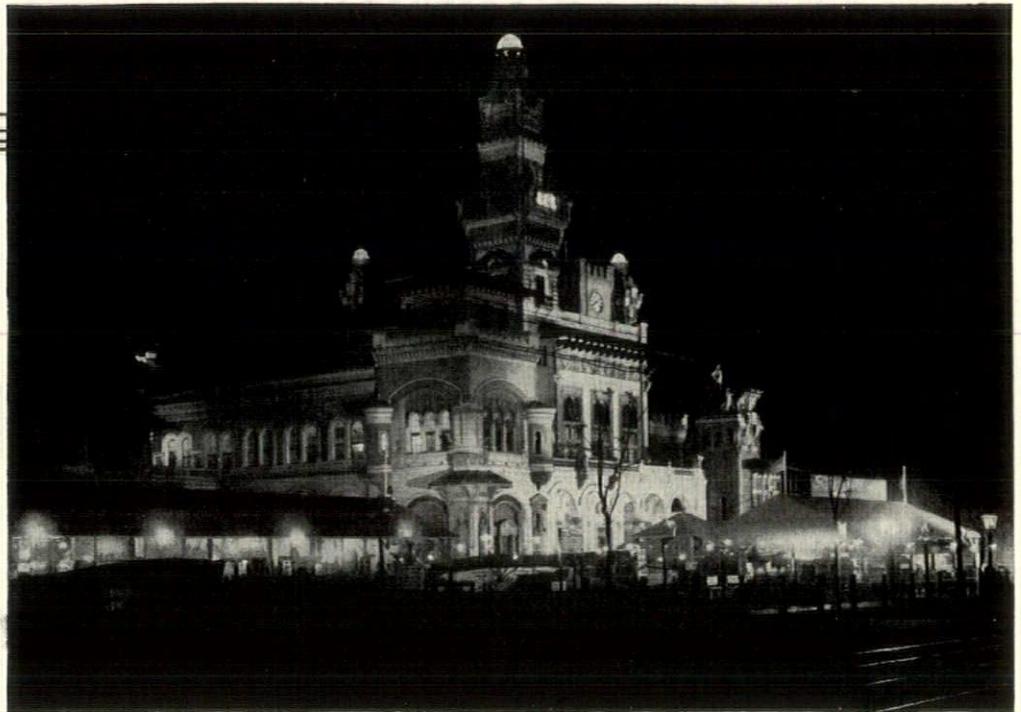
MAIN ENTRANCE
SAO PAULO POST OFFICE BUILDING
Stanley Equipped



GATES OF THE LONDON &
RIVER PLATE BANK BUILDING
Stanley Equipped



ENTRANCE DOOR
RAMOS DEAZEVEDO BUILDING
Stanley Equipped



PALACE OF PERMANENT EXPOSITIONS
Stanley Equipped

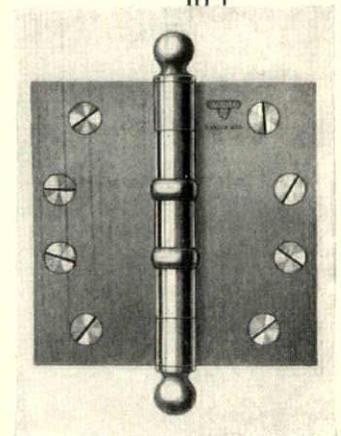
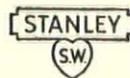
In Sao Paulo, Brazil

Illustrated here are a few examples of the work of F. P. Ramos DeAzevedo & Co., leading architects of Sao Paulo, each one of which is equipped with Stanley Ball Bearing Hinges.

It is interesting to note that to insure smooth trouble-free operation of doors, Stanley Ball Bearing Hinges are specified by architects the world over.

You will find our "Architects Manual of Stanley Hardware" a most useful book in making up hardware specifications. We shall be glad to send you a copy.

THE STANLEY WORKS
New Britain, Conn.



STANLEY BALL
BEARING HINGES

No ARCHITECT is sold by *Extravagant Claims*

He will judge
a new material for himself!

BI-FLAX is a new material, the only material of its kind. It is our belief that extravagant claims will never sell you this new material . . . that as a competent judge you will study Bi-Flax, and formulate your own opinion of its value.

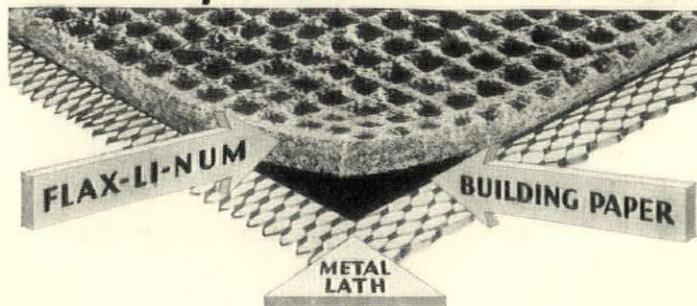
We can tell you about the distinctive features of Bi-Flax. That Bi-Flax is the only insulated plaster base material in which the insulation functions as insulation alone, and as a result . . . Bi-Flax has maximum insulation value. That

Bi-Flax combines the high insulating value of Flax-li-num with flat expanded painted metal lath, and is the only insulating plaster base of steel that provides a positive mechanical key.

We could tell you of many other features of Bi-Flax, but we feel that in the final analysis, Bi-Flax will only gain your approval and acceptance when you have examined it yourself.

The attached coupon is for your convenience. It will bring you a sample of Bi-Flax . . . that you may examine this new building material, the only one of its kind.

BI-FLAX The *Only* Material of Its Kind



Please give individual
name as well as name
of firm that samples
may be mailed to your
personal attention.

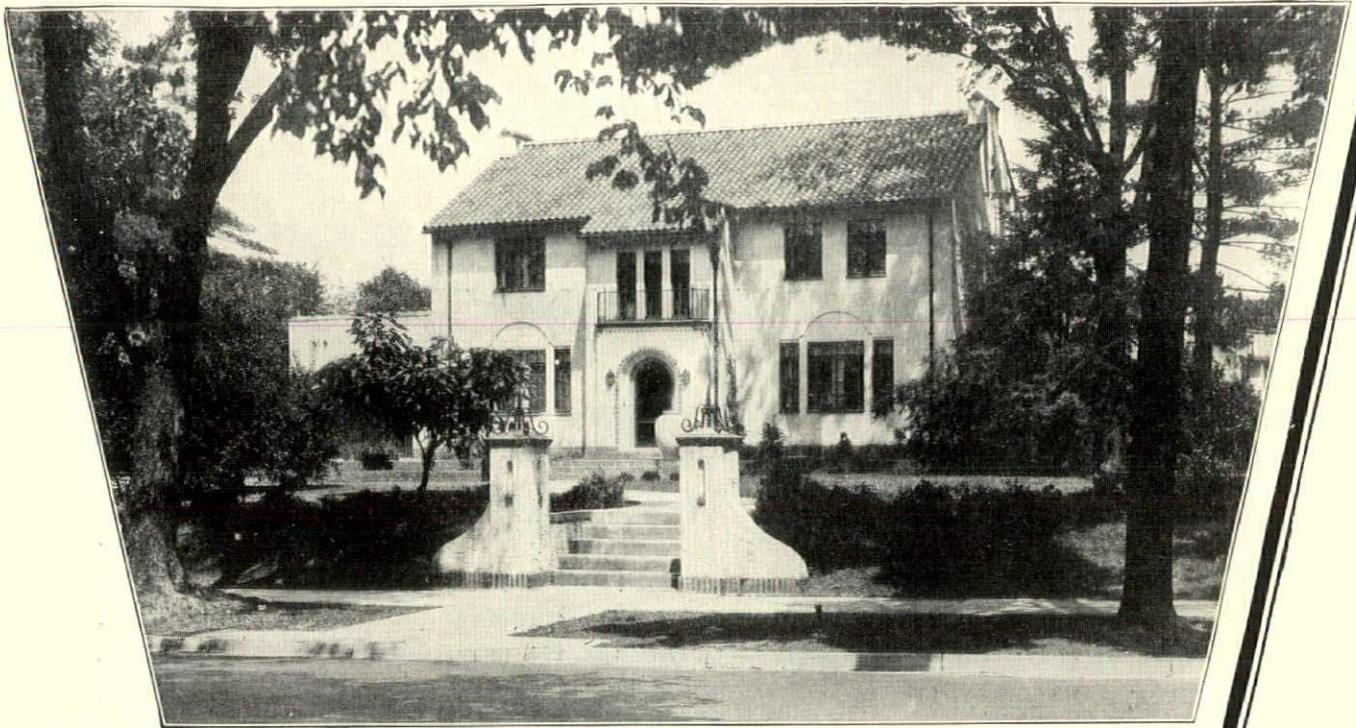


FLAX-LI-NUM INSULATING COMPANY, ST. PAUL, MINNESOTA
Please send for my inspection a sample of BI-FLAX.

NAME _____

FIRM NAME _____

ADDRESS _____



Residence of John Bayer, La Crosse, Wis. Otto A. Merman, architect;
Mike Nowak & Sons, plastering contractors, both of La Crosse.

for
true reproduction
of color in stucco
ATLAS WHITE
portland cement

Now that color is so much in demand among prospects for homes and business buildings, Atlas White stucco becomes increasingly valuable to the architect. With it, an almost unlimited variety of tints, color combinations and textures are obtainable.



Atlas White portland cement is pure white. Being of a neutral color itself, it makes possible in the finished stucco the true shade or color desired whether pigments or natural-colored sands be used as the medium of coloring.

Atlas White, because of its adaptability to color, has intrinsic value to owners and architects as a building material.

CHICAGO
NEW YORK
NEWARK
PHILADELPHIA
BOSTON
ALBANY
PITTSBURGH
CLEVELAND
COLUMBUS

Universal Atlas Cement Co.

Subsidiary of United States Steel Corporation

Concrete for Permanence

MINNEAPOLIS
DULUTH
ST. LOUIS
KANSAS CITY
DES MOINES
OMAHA
OKLAHOMA CITY
BIRMINGHAM
WACO

FOUNDED 1876



The Cover

RUE DE L'ABBYE, a bit of old Paris, caught the attention of Leo Rackow on his recent trip to Europe and so he made the water-color reproduced on this month's cover. It was shown in Mr. Rackow's recent exhibition at the Dudensing Galleries, New York City.

Mr. Rackow is one of the younger "moderns." He studied at the New York School of Fine and Applied Art and under Bridgman and Frank Vincent Dumond at the Art Students League. During his recent stay in Paris he painted with Leger.

Next Month

DESIGN—A New York store was designed with an atmosphere intended to make the sale of \$50 shoes easy.

CIVIC—A park system that shows a profit each year.

ESTIMATING—What an architect has to say who has learned how to do it.

TRAVEL—Kairwan, where they serve plenty of local color with their architecture.

BENJAMIN FRANKLIN BETTS, A.I.A., *Editor*
ERNEST EBERHARD, *Managing Editor* HARRY F. CAHILL, *Advertising Manager*
RAY W. SHERMAN, *Editorial Director* EARLE H. MCHUGH, *General Manager*

IN THIS ISSUE

Cover—A Water-Color by Leo Rackow

Architects Can Help Revive Prosperity <i>By Benjamin F. Betts</i>	21
Snow Days—Photograph and Poem <i>By H. LeRoi Ames</i>	22
Charles F. Butler Congratulates a Young Iconoclast <i>By William Harlan Hale</i>	24
Only Local Architects Can Reduce the Breadline.....	27
The Drawings for the New Waldorf-Astoria <i>By Kenneth M. Murchison</i>	28
Easy to Keep As a Check Book—A System for the Small Office <i>By Henry J. McGill</i>	36
...And Still We Call It a Profession! <i>By Benjamin F. Betts</i>	38
How to Plan a Practical Kitchenette <i>By David M. Kendall</i>	40
The N. W. Ayer Building, Designed From An Organization Chart <i>By Ralph B. Bencker</i>	42
Architects Must Cooperate to Reduce Construction Accidents <i>By Samuel R. Bishop</i>	48
Sketches <i>By W. D. White, Ralph J. Bishop and N. H. Kamps</i>	50
Eight Ventilating Systems That Did Not Work—and Why <i>By Samuel R. Lewis</i>	52
Modern Architecture Can Be Vitalized by Creative Craftsmen <i>By Harrison Gill</i>	54
As It Looks to the Editors.....	58
And Abroad	60
What Architects Are Talking About.....	62
The Arch Collapsed—Who Was to Blame? <i>By George F. Kaiser</i>	64
The Readers Have a Word to Say.....	66
Books	70
New Materials.....	74
New Catalogs	80

THE AMERICAN ARCHITECT, *Published monthly by* INTERNATIONAL PUBLICATIONS, INC.
Fifty-seventh Street at Eighth Avenue, New York, N. Y.

William Randolph Hearst, President; Ray Long, Vice President; Thomas J. White, Vice President; Arthur S. Moore, Secretary; Austin W. Clark, Treasurer. Copyright, 1931, by International Publications, Inc. Trade-mark registered. Single copies, 50 cents. Subscription price: United States and Possessions, \$5.00 per year; \$7.00 for two years; Canada, \$1.00 extra; foreign countries, \$2.00 extra. Entered as second-class matter, April 5, 1926, at the Post Office at New York, N. Y., under the act of March 3, 1879. THE AMERICAN ARCHITECT is fully protected by copyright and nothing that appears in it may be reproduced either wholly or in part without permission.



A NEW FLATTER GLASS—AT THE OLD PRICE

IT'S hard to believe, when you examine the two flat, brilliant surfaces of this new glass and note their new freedom from waviness, streakiness, and other old-time imperfections—that such remarkable window glass costs no more than the ordinary kind. You immediately picture the finer, clearer windows it will make—and the saving of time for the glazier

PENNVERNON
flat drawn
WINDOW GLASS

—because there's no "wrong" side to watch for. But if you haven't yet given yourself that experience—have the Pittsburgh Plate Glass Company's warehouse in your locality provide you with samples. And write for a new booklet showing the new way this surprising glass is made. Address Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

Architects can help revive P R O S P E R I T Y

By Benjamin F. Betts, A.I.A.

BEING logical leaders of the building industry, architects have an opportunity to demonstrate their ability to coordinate, organize, and carry through projects of great magnitude. Organized effort is essential. To assure quick action in securing a resumption of building activity architects in every community throughout the United States should unite in the common cause and, through emergency committees, determine upon the course of action best suited to meet local needs. The following activities are suggested as important features of the program.

Impress upon all government bodies the importance of placing the design of all authorized public buildings immediately in the offices of private architects. Red tape should be set aside. Federal, state and municipal architects need have no fear that they will have little or nothing to do as a result of such action. They will have plenty to do in keeping projects moving and in supervising construction. Throughout the United States many public buildings are needed. Essential construction should be undertaken as rapidly as possible.

SINCE a large public works program cannot replace the effect of a large volume of private building enterprises, urge private builders, whose plans are completed or are temporarily delayed, to build now in order to take advantage of existing low price levels. This is a matter upon which the public should be promptly informed.

In co-operation with realtors and financial interests, determine the local needs for housing, public and commercial construction. Advocate that actual building shortages be made up as quickly as possible. Avoid suggestions that will lead to uneconomic overbuilding in any class of structure.

Urge the building public to proceed with plans for buildings in anticipation of coming demands. If this can be done many architects, draftsmen and others can be assured of employment.

ACTIVITY in architectural practice is a reliable barometer of business conditions. It forecasts a depression and is the first to respond to prosperity. The way to relieve the unemployment of persons connected with the building industry, which will immediately put into general circulation many millions of dollars to the benefit of all industries, is to get some building work started.

Architects must take the lead by finding out what must be done and then determining the best way to accomplish the desired results.



SNOW DAYS

photograph and poem

by H. LeRoi Ames

Snow days, are always, merry days, to me;
Next best, among the rest,
Are summer days at sea.

The quiet falling snow flakes
And winter skies, so clear,
Take me back to childhood
'Midst scenes I hold most dear.
I like to hear the whir of snow
At night when whistling North-winds blow,
And see it shine with silver glow
Of moonlight, on the fading year.

Snow days, are always, merry days, to me;
I like them even better,
Than summer days at sea.

ART vs. YALE UNIVERSITY

• William Harlan Hale is a senior at Yale University who is preparing for a career in literature and journalism. During an extended stay in Europe he became a convinced opponent of antiquarianism and eclecticism in American building. He writes: "The present article is the outcome of three years' close observation of the astounding architectural developments at the University and the growing realization of their artistic failure." Mr. Hale's article was recently published in the "Harkness Hoot," an undergraduate periodical of progressive interests, which he and another student started last fall.

The article attracted the attention of Mr. Butler, chairman Committee on Education, A.I.A., and a partner of Robert D. Kohn, president A.I.A. Mr. Butler suggested that it be brought to the attention of the entire architectural profession through publication in THE AMERICAN ARCHITECT.

THE HARKNESS **HOOT** A YALE UNDERGRADUATE REVIEW

ART VS. YALE UNIVERSITY
Challenging Yale's Girdler - Gothic
and Its Builders — 8 Pages Pictures

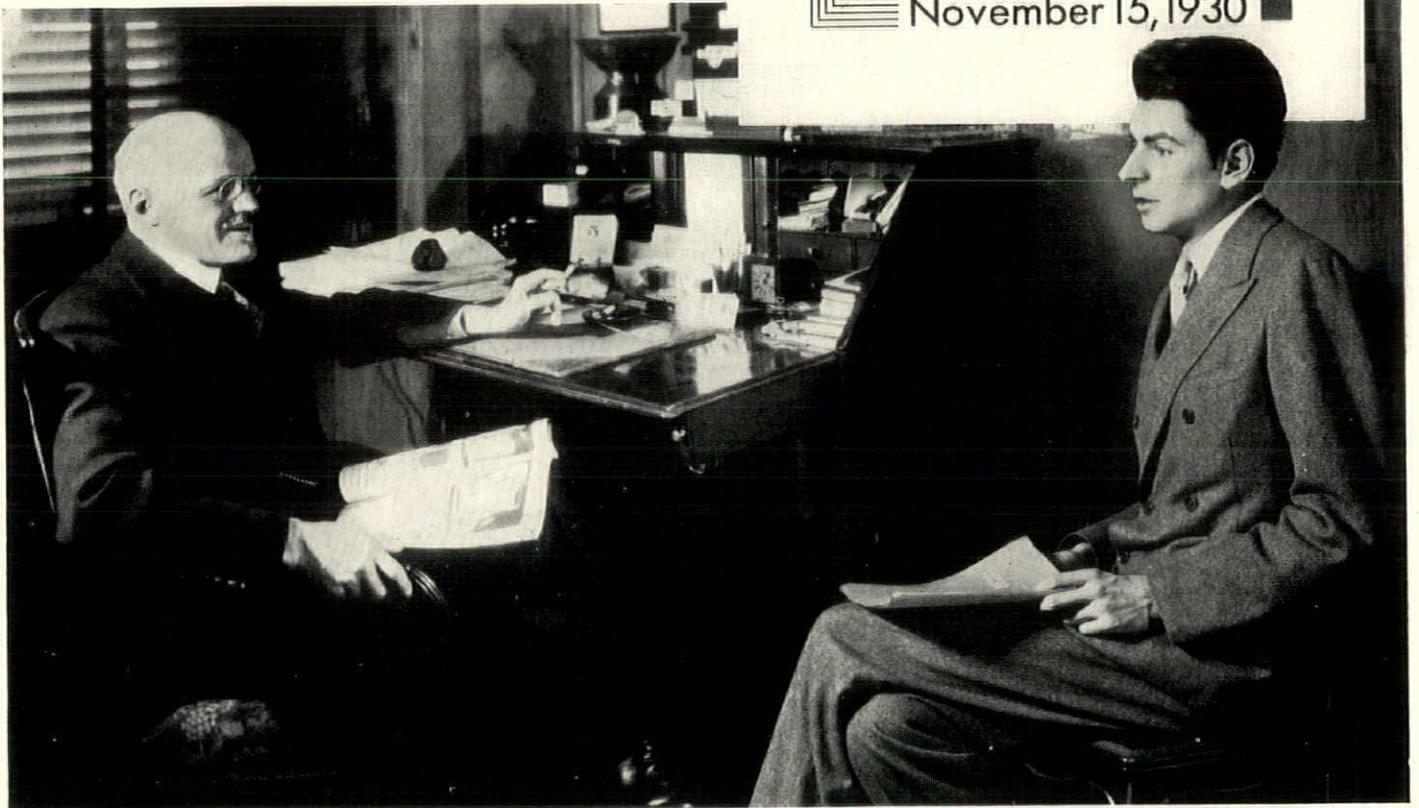
CONSPIRACY IN BOULDER
Describing the Machine Opposing
Ex-Dean W. L. Cross for Governor

YALE WRITERS : THE BENETS
The Second of a Series of Essays

Stories, Verse, Editorials, Parody

Twenty-five Cents a Copy

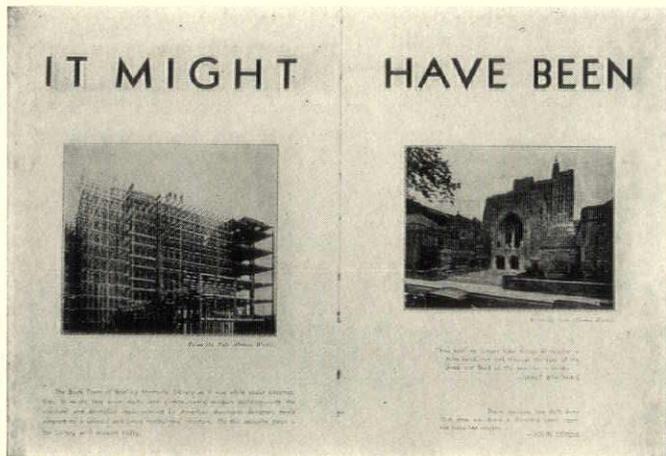
November 15, 1930



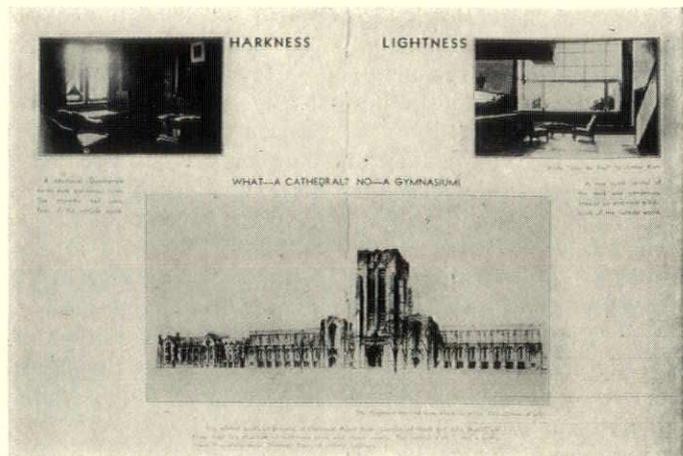
What's wrong with collegiate architecture is discussed by Mr. Butler and Mr. Hale

CHARLES BUTLER, F. A. I. A.

Congratulates a



"IT MIGHT HAVE BEEN"



"HARKNESS"

"LIGHTNESS"

Pages from the Harkness Hoot

"NOTWITHSTANDING the very real progress in architectural appreciation which has taken place in recent years, intelligent criticism of even a single piece of architecture remains the rarest of commodities.

"It is therefore a great pleasure to read an intelligent criticism by a young layman, not of an individual building, but of the entire tendency so evident in collegiate architecture, a tendency which appears to the writer at variance with the normal progress of our art and fraught with real danger.

"A cynic has said that architects never read and rarely think. Mr. Hale's article is well worth reading and should certainly force us to do some serious thinking."

Charles Butler, F.A.I.A.
Chairman Committee on Education, A.I.A.

VARIOUS and abundant are the benefits which Yale has come to bestow. Able are its teachers, and overwhelming are its physical resources. The youthful pilgrim to its portals can but gasp with astonishment at the increasing glory of the institution. He is overpowered by the material splendor of the vast buildings which are now being erected in all directions about him. The generosity of wealthy graduates has been almost without limit; the ambitiousness of the University's construction and reconstruction plans has been commensurate with the fund at hand; and the fruit of this marriage of vision and finance is an achievement of colossal physical magnitude. We have the Sterling Memorial Library, designed in the Gothic-skyscraper style, and probably the largest library building in the world; we have the new Law School, a close second in majesty; the House Plan Quadrangles, importers of a dozen European traditions; and, among others, the new

Gymnasium—so constructed as to permit Yale students to play squash in a Gothic Cathedral Tower. Could anything be grander?

Indeed, the whole building plan of the University seems like the embodiment of an architect's most luxurious and idealistic dream. There were few commercial restrictions to be considered; an abundance of land was provided, with splendid vistas; full play was given the fantasies and exuberances of selected designers and craftsmen. The owners, far from being a mob of crabbed, rent-chasing speculators, were a conclave of teachers of the highest culture and the most commanding achievements. And instead of working as pinched academicians, they were the possessors of a fund of thirty or forty million dollars. Was there ever—save perhaps in the hallowed periods of Athens and Renaissance—so inspiring an opportunity for a free architecture expressing noble ideals with unlimited resources? Is it not true that Yale, with its learned leaders, is in the position of being the greatest patron of vital American architecture today?

But alas! A survey of the University's new buildings gives the observer a pang of disappointment. The mission seemed so exalted, the opportunity so supreme—that he is struck with amazement at the blank failure of the present builders. Yale has misled its admirer; it has deceived its benefactors; indeed—the admission is an inevitable one—it has played traitor to art. Afforded the chance of achieving a new creation, it has fallen back, slavishly and ignobly, into the past. It has denied the present, and repudiated all the day's achievements. It has taken no thought of the future. It has forgotten art, and become obsessed with archaeology.

Who, of all the arch-imposters at pseudo-architecture who flooded the world throughout the last century, ini-

young Iconoclast

tiated the idea that a University, by reason of its particular nature, should be built only in the Gothic style? Who, indeed, was the inept copyist who first suggested that a building should be built in any "style" at all? Let us remember that in living architecture there is no such thing as "style"; the term appears only when architecture is considered as a phenomenon of the past. The Greeks did not build in "Doric style"; the architects of Henry VII's Chapel never heard the term "Tudor Gothic"; and Bernini would have stared in amazement if you had told him that the baldachin in St. Peter's was in the "Baroque style." These artists were building in the only manner that was possible to them; they had taken the collective experience of the past, and revitalized and furthered it with their own new vision. But the builders of Yale—oh! these are gentlemen of a different character. They have a very special way of art. They will gloat over the Louis XVI cartouches in Woodbridge Hall (built 1901), or over the strict Corinthian colonnade before the Dining Hall (1927), or over the Venetian appliqué facade of the Law School (1894), or

over the geometric Gothic window in Harkness Tower (1920). They will smile with patriarchal benignity when the young student identifies the antique "style" of a new building under construction. They will go into raptures when you tell them that nothing could be a better copy of Wrexham Tower, England (built 1506) than Wrexham Tower, Yale (1920). How remarkable, how baffling an attitude! And how strange an art!

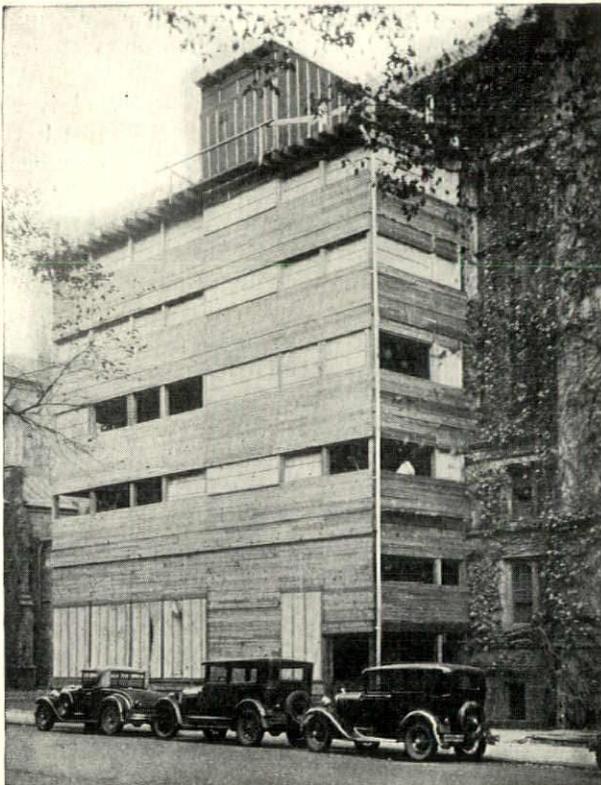
ART? Or is it not art at all? Is it, on the contrary, rather the merest, cheapest, most uninspired copy-work? Is it, perhaps, a sign of a total lack of artistic vision and integrity? What sort of an "art" is it that can do no better than imitate what was done five hundred, a thousand, two thousand years ago? What sort of an architecture is it that tries to hide the life of 1930 A.D. under the shrouds of the life of 500 B.C.? What manner of a designer is he who tries to turn a President's Office into a Petite Trianon, a dormitory into a fortress, and a Law School into a cathedral? Finally—the question is posed in all humility—what sort of a Faculty of the Arts is it that will sanction such artistic bastardy?

By definition art includes only true art; whatever is false and tries to hide its own being under misleading disguise is a denial of art. No man and no nation who possessed a life-giving creative sense ever dreamed of copying the work of a previous age. We associate the phenomenon of imitation with people who are sterile, with eras whose tendency is retrogression and atavism. The entire Nineteenth Century, from the point of architecture, was such a period. Nothing was created, but everything was revived: there were neo-Egyptian, neo-Classical, neo-Gothic buildings, but no living buildings. And this disease of primitivism and falsity was inherited by the Twentieth Century, and especially by America.

Beginning with the lumbering atrocities of the General Grant style and the jig-saw period, we progressed to the Pennsylvania Station, whose main section is an imitation Roman Bath; to the Washington Monument, which is incongruously an Egyptian obelisk; to the Lincoln Memorial, which is a colossal Athenian shrine (poor man—how he would have preferred his log-cabin!). In our pursuit of what is dead and dusty with the weight of antique centuries we have further progressed to the deceitful and lying classical pilasters 'way up on the Grand Central Building in New York; to the twenty-story Tudor country mansions on Forty-second Street; to ten thousands of childish and respectable homes built to ape French castles, Swiss chalets, Pompeiian villas and Castilian monasteries. Excluding for the moment from consideration the new functional method of architecture, we come upon the observation that our nation of hundred-per-cent Americans has proudly progressed from its only native style (i.e., the Colonial) to a myriad of styles whose only common tendency is to be as un-American as possible.

BUT above and beyond all that, we have progressed to the Sterling Memorial Library, built at a cost of about seven million dollars by Yale University, and safely constructed—alas!—for the ages. Few works can equal it as a monument of lifelessness and decadence; none can surpass it in extravagance and falsity.

A well-known modern Swedish architect, visiting Yale a while ago, was shown the (Continued on page 126)



"YALE'S ONLY ATTEMPT
AT A LIVING ART"

The temporary wooden scaffolding erected on the High Street side of the Old Library for aid in removing the books to the new Sterling edifice.

Why do we call this building a work of art? Because, designed for a specific function, it was carried out to do no more than suit that function as well as possible. Because it makes no pretensions to being what it is not. Because the designer considered his problems of material, size, light, safety and efficiency so ably that he inevitably produced a work of fine lines and proportions. Because any building (as well as any motor car or airplane or engine) that accomplishes its function with the greatest degree of excellence is a thing of beauty.

The structure has since been torn down.

"Only
local
architects
can
reduce the



LOCAL BREAD LINE"

"YOU tell me that local architects should do government work. Just why do you make that statement?" The reporter leaned back in his chair, feeling that he had laid a nice stymie for this firebrand of an architect who had written a vitriolic letter to his editor.

"Just this." And the architect hitched his chair forward, enthusiasm for the justness of his cause making him insistent on selling this young reporter. "What does a government architect in Washington know about materials and building conditions here? Nothing, I tell you, absolutely nothing! Why he'd just as soon as not specify N. C. pine down in this part of the South where we never even see a stick of it! He just doesn't know. And because he doesn't know, his plans figure high, they have to be redrawn two or three times, and delays multiply to beat the band!"

"Maybe you're right, but I can't get excited about that," remarked the reporter. "There is no story there."

"Oh, so you want something sensational!" accused the architect, rising heatedly and walking about the room. Thumping his fist angrily, he demanded:

"How about the breadline down at the Mission? How many men do you think would be there if one thousand construction jobs were made available tomorrow?" Down his fist thumped again. "Not a one outside of your professional panhandlers!"

"Yeah?" The reporter seemed quite interested in a couple of sparrows squabbling on the window ledge.

"Well, let me tell you this. Those men could be put to work inside of six weeks if local architects were put on the job of getting out that new post office. With Washington handling the drawings, it will be nearer six years before a spade is turned. And you and your nice little newspaper sit back and smugly talk about all this government work relieving unemployment! Bah!" and he slumped back in his chair.

"You're talking now, Mister. Shoot some more!" The sparrows were forgotten and out came pad and pencil.

"Congress has appropriated millions to speed public works. Trying to get that work out is like trying to bring our city water supply in through a two-inch pipe. It can't be done. We're only one of hundreds of communities, all with our unemployed hoping, praying for that flood of public work which will put food into the mouths of their loved ones. And Washington proposes to dole it out through a two-inch pipe!"

"We're with you on that. But how can my newspaper help?"

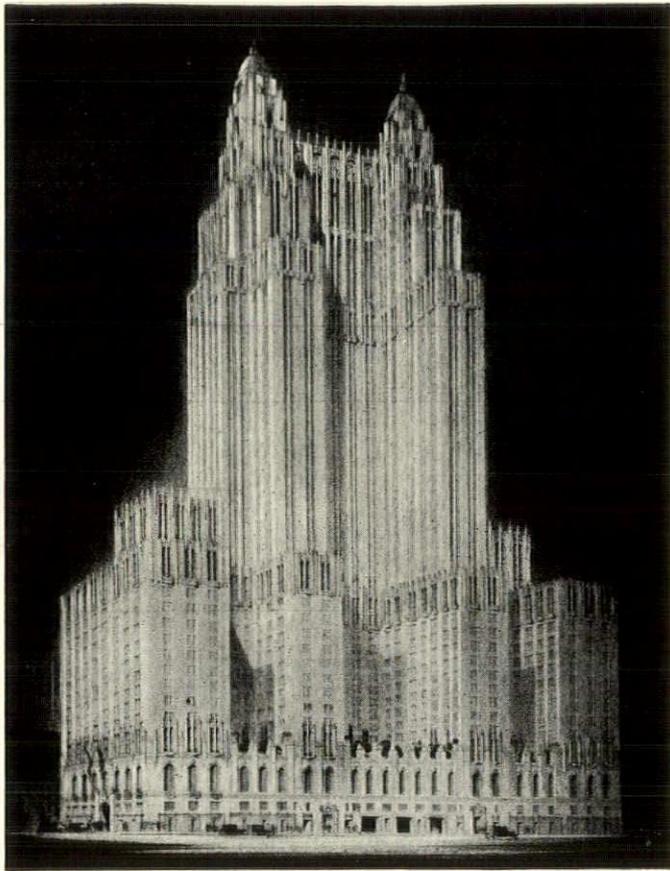
"Get the story over to the public. When you have, we architects will be ready with a sane and sound method to pick local architects who know local conditions and who can do a thoroughly good job. And, here's one thing you can bet your bottom dollar on, there'll be no politics played in their selection.

How should the government select local architects?

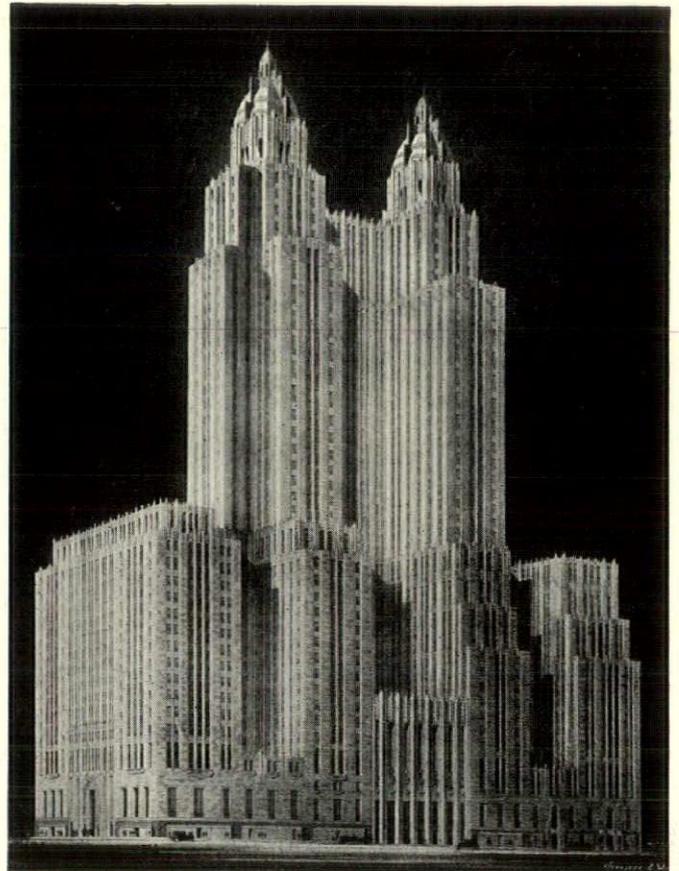
WHEN the public demands the immediate action that only local architects can give, how are those architects to be selected? How can politicians be kept from appointing the unfit? Should the A.I.A., operating nationally, handle the appointments, after conferring with local chapters? Or what? The solution is of vital importance to the profession, for unless resulting action is

sound and practical, the architectural profession may receive a black eye from governmental work that will take years to overcome.

The editors of THE AMERICAN ARCHITECT want a discussion of the best solution in not more than 1,500 words for which \$75 will be paid. Please mail your solution to the editors before January 31.



THE FIRST STUDY showed a strong Gothic influence in the details of an impressive mass of modern character



LATER STUDIES retained a perpendicular Gothic character but showed less Gothic precedent in the details

THE DRAWINGS

for the new Waldorf-Astoria

By KENNETH M. MURCHISON, F.A.I.A.

Schultze & Weaver, Architects

Photographs by Palmer Shannon

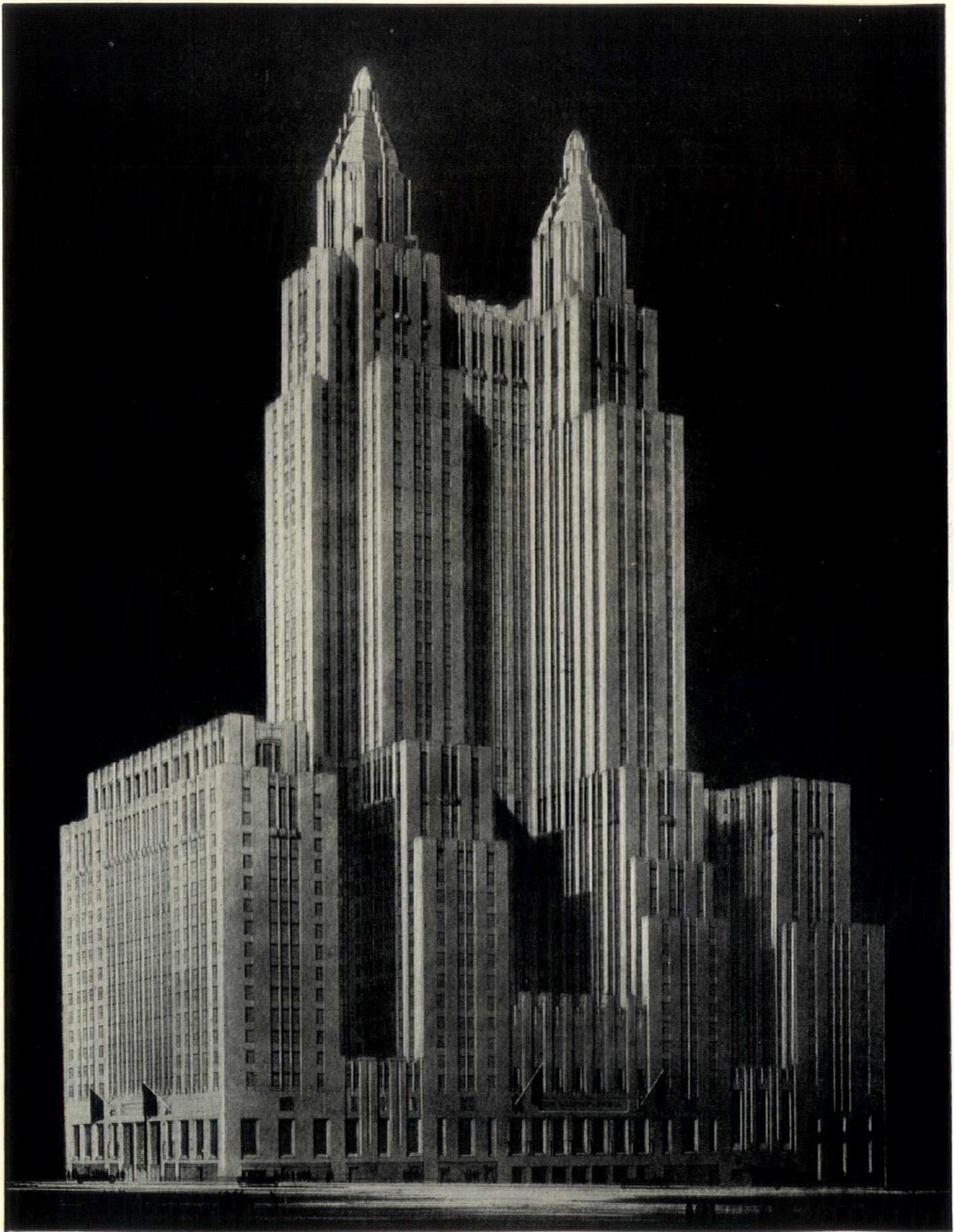
A PROBLEM in plan indeed was the new Waldorf-Astoria, combining as it will a transient hotel, an apartment house, a great ballroom and entertainment layout, a garage for private railroad cars, various exhibition rooms and everything one can think of, the whole thing mounting forty stories in all and occupying a plot 200 x 405 feet.

The old Waldorf-Astoria was a national institution, known the wide world over as the first really great American hotel ever to be constructed and as having entertained from time to time all strata of society, from emperors to architects, from presidents to plumbers.

The architects' present job was to plan the greatest hotel of all time, a structure designed to take care of dozens of functions at the same moment, leaving any of the house guests who weren't invited to a certain party

quite ignorant of any such affair going on right under their noses. This hotel, mind you, has to do a stilt-walking act over the New York Central Railroad tracks, with the 20th Century booming along in full operation all through the building operation, thus seriously disturbing the peace of mind of the riveting gangs. The site chosen was the block previously occupied by the Railroad Y. M. C. A. and the New York Central Power House. It measures about six hundred feet between Park and Lexington Avenues and two hundred feet between Forty-ninth and Fiftieth Streets. The Y.M.C.A. had to be moved further east and the power plant lowered down in a hole adjoining the Grand Central Terminal before the new job could be started.

The main entrance of the new Waldorf-Astoria is in the center of the Park Avenue facade. There is also a



FINAL STUDY

Superfluous ornament was eliminated, fenestration is more interesting, and mass and tower pinnacles are simplified in accordance with the spirit of modern design

FOR JANUARY 1931

PRELIMINARY STUDY

of the Park Avenue elevation rendered by Lloyd Morgan. There is little indication here of the modern feeling which gradually crept into the design, later studies showing a refreshing elimination of ornament and a development of more interesting fenestration and corner treatment

very ample driveway, wide enough for a complete turn of a Rolls-Royce, under the center of the building connecting the two side streets, to be used both for the ballroom entrance and for the regular residents of the hotel.

The plan of the first floor shows an appreciation in the architects' office of the value of circulation. From the entrance lobby, going east, one enters Peacock Alley (named after the first original haunt of the lounge lizards and the bustle-beauties of the Ailing Eighties and the Gay Nineties). This Alley in turn leads to other wide corridors and lounges completely surrounding the main lobby, where the office is situated, and where you dig up your last simoleon to pay the bill.

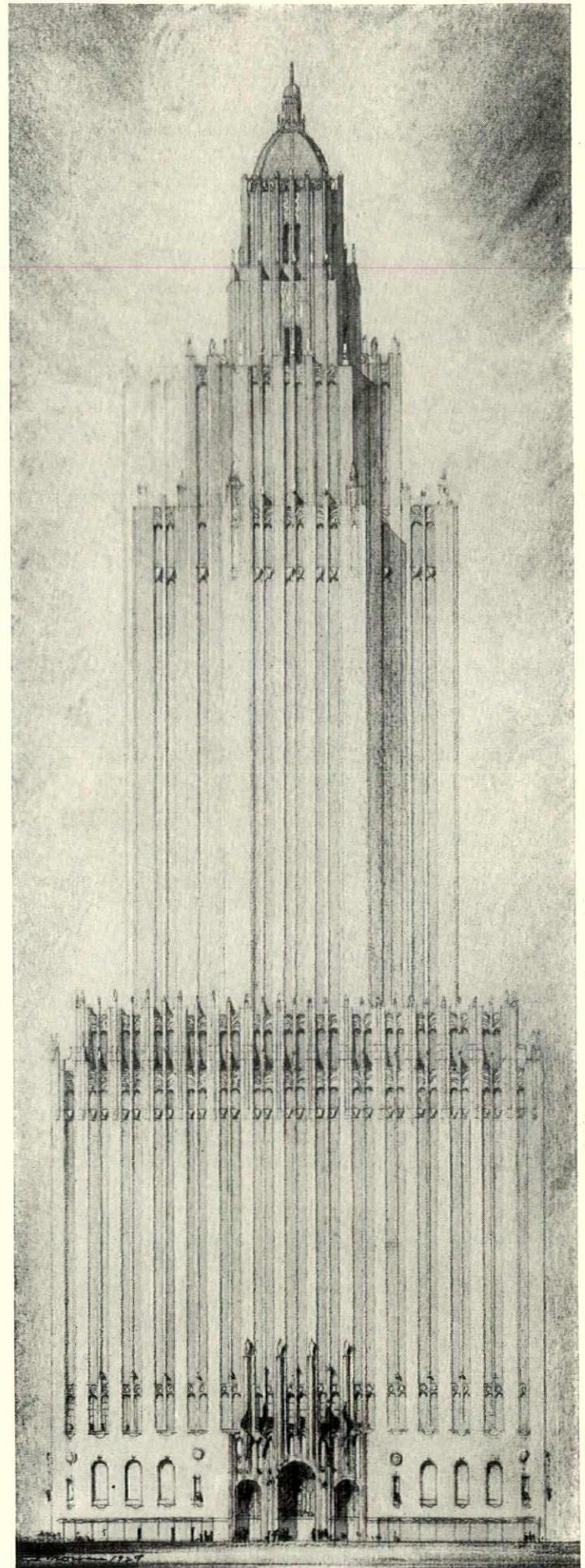
The elevators are sprinkled around in a most knowing manner. There are east service elevators and west service elevators, seven in all, for the transient guest floors. Ten passenger elevators are allotted for this portion of the hotel. Then for the tower—the apartment section where we find living rooms as large as thirty-two by twenty-four feet—there are four passenger and four service cars, besides which there are three enormous elevators for the ballroom and one automobile lift; not, as you might think, for the purpose of parking your Austin in your parlor but for showing the latest novelties at a swank motor car show. In fact, on the ballroom floor plan, the architects have traced a line of travel from the auto lift to the exhibition room, showing that architects never forget anything, no, never. (What, Never? Well, hardly ever!)

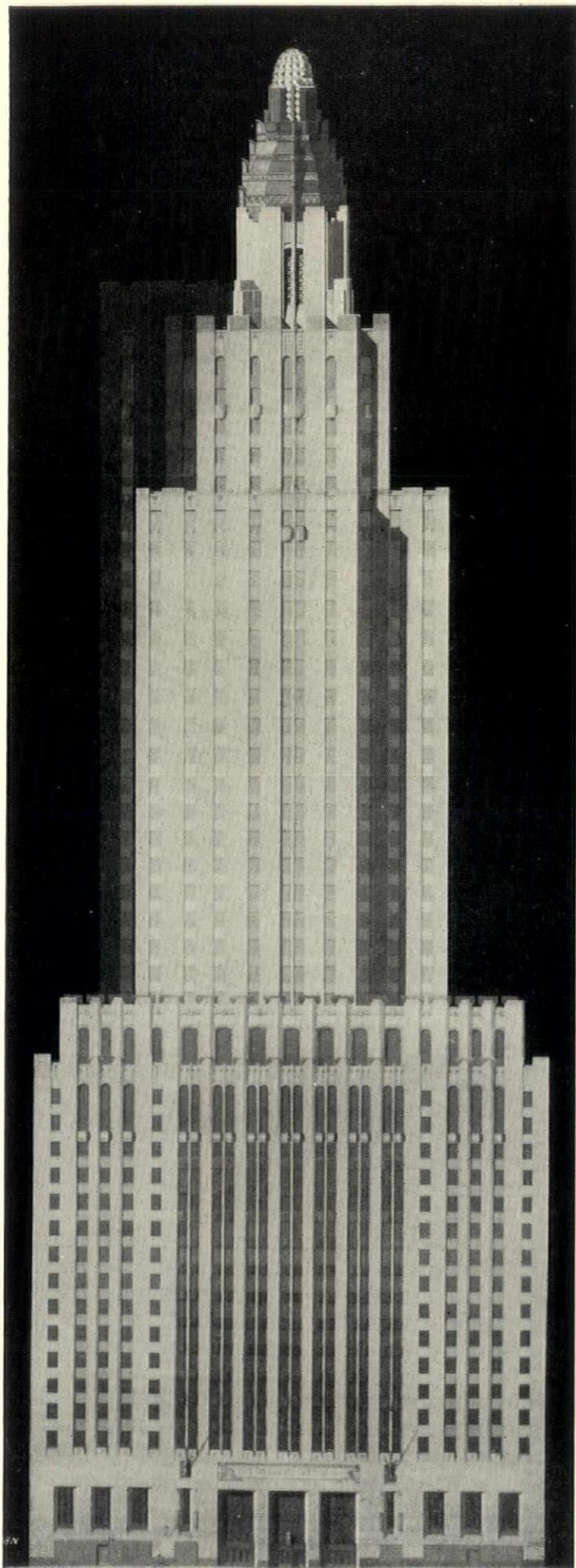
Owing to the fact that the New York Central refused to give up any of its track space for kitchen purposes, the architects were compelled to put the hotel galley in the mezzanine floor, in between the main restaurants and the ballroom levels, where their great banquets are held.

The kitchen is on the northerly side of the hotel but its tentacles spread in all directions, grasping the Rose room, the Blue room, the men's restaurant and the banquet service room in a most capable manner.

Leonard Schultze and Fullerton Weaver probably know the hotel problem better than do any architects in this country. They know that the merchandise they sell is service and they make it possible for the hotel operator to sell service to his patrons with the minimum of expense and with the least possible waste of time.

They know the vexing problem of room service. Now a lady having breakfast in a hotel dining room is a rare sight these days. If she is seen there, then





FINAL STUDY

of the Park Avenue elevation, rendered at quarter-inch scale by Lloyd Morgan. It presents a much more modern conception than the first study. Practical use was made of this jumbo-like drawing by photographing it down to 1/16" scale for working drawings and up to 3/4" scale for the details

she has just alighted from a sleeping car, nine times out of ten. So what she wants is room service. And the men, too, breakfast these days in their rooms, when they can swallow at all, after a late night and a lot of cut stuff.

The circulation of the architects was never at a low ebb. The ballroom floor plan exhibits it to the n'th degree, what with four ante rooms, an exhibition room and lounges and corridors without end (for truly there should be no end to circulation). The ballroom itself is a magnificent gesture, modernistic in finish but classic in foundation, the orchestra space being semi-circular in form, with doors on each side through which great armies of cotton-gloved Waldorf waiters will come in stately procession, course after course, from soup to tips, bossed by the great Oscar, of Waldorf fame and of a prestige nationwide.

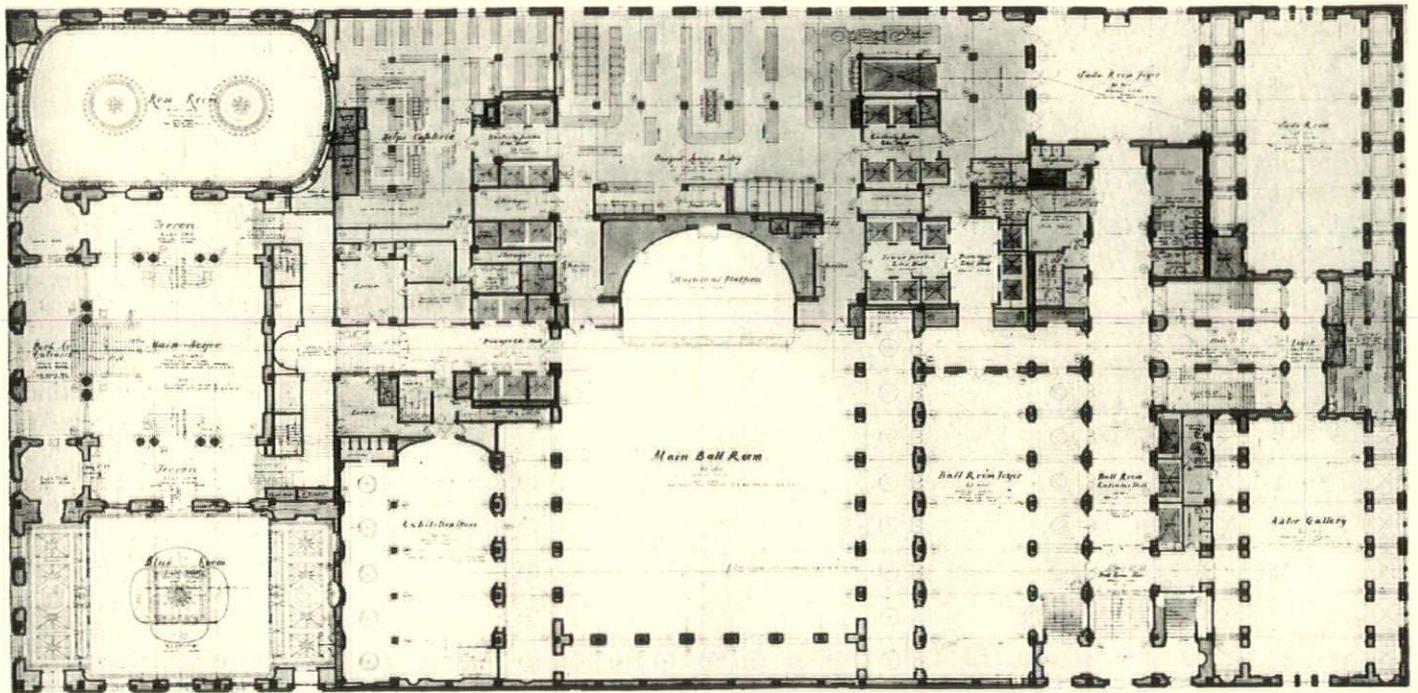
If you could shift your attention for a moment from the menu to the ceiling, you would see that the lighting is to be done by means of inverted troughs, cunningly concealed in a sort of a cutaway setback invention of the electrical talent employed.

The decoration of the ballroom is very simple and dignified and, with its well-studied and successful proportions, this room should have an enthusiastic reception from the first moment of its birth. It is a fine example of restrained modernistic. One of the best we have seen.

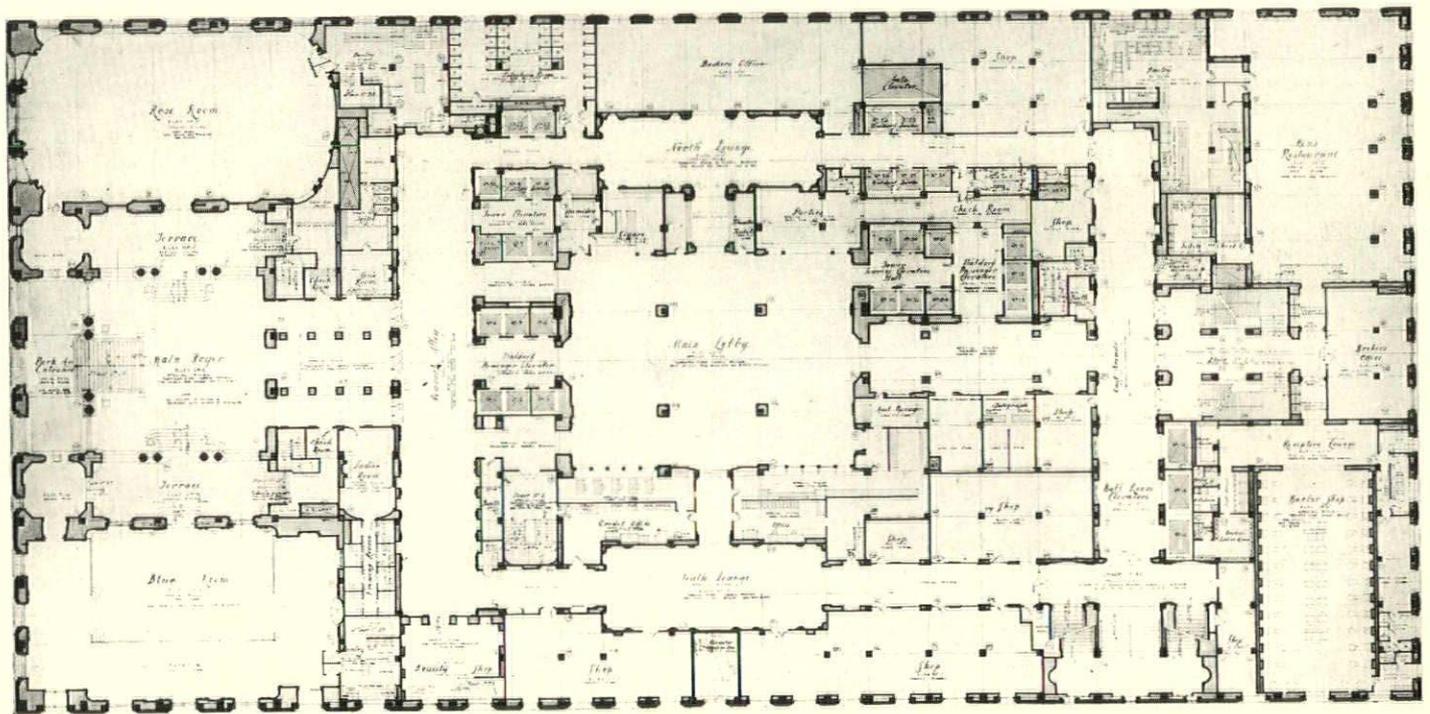
The circulation admits of this entire floor being connected with the two main restaurants on the Park Avenue side. At the same time the entire ballroom suite may be cut off from the main entrance and the hotel lobby, as will be the case when a large function is given.

The architects of New York, or at least those flying the colors of the Beaux-Arts Society, have given this ballroom plan their professional approval, for after studying over the possibilities of the layout with Mr. Schultze they signed up with Mr. Lucius Boomer, the President of the Waldorf-Astoria, for the ballroom as being the locale of the Beaux-Arts Ball for five years, commencing in January, 1932. All this providing that the Beaux-Arts Ball Committee does not die of old age and fallen arches before that time finally comes to pass.

When we get to the plans of the upper floors we find the typical hotel guest room plan followed in general, except that the courts are staggered in this case, owing to the depth of the ballroom. Many of the rooms have entrance halls and trunk rooms. Upstairs in the apartment suites there are beautiful



OLD NAMES of famous Waldorf rooms are retained on the ballroom floor plan. There is the Rose Room, the Blue Room and quite an assortment of other colors. Even an automobile lift is provided to this busy floor



CIRCULATION was carefully studied in the first floor plan. The famous Peacock Alley is at the left and leads to the main lobby, which is entirely surrounded by corridors and lounges where one can recover after paying the bill

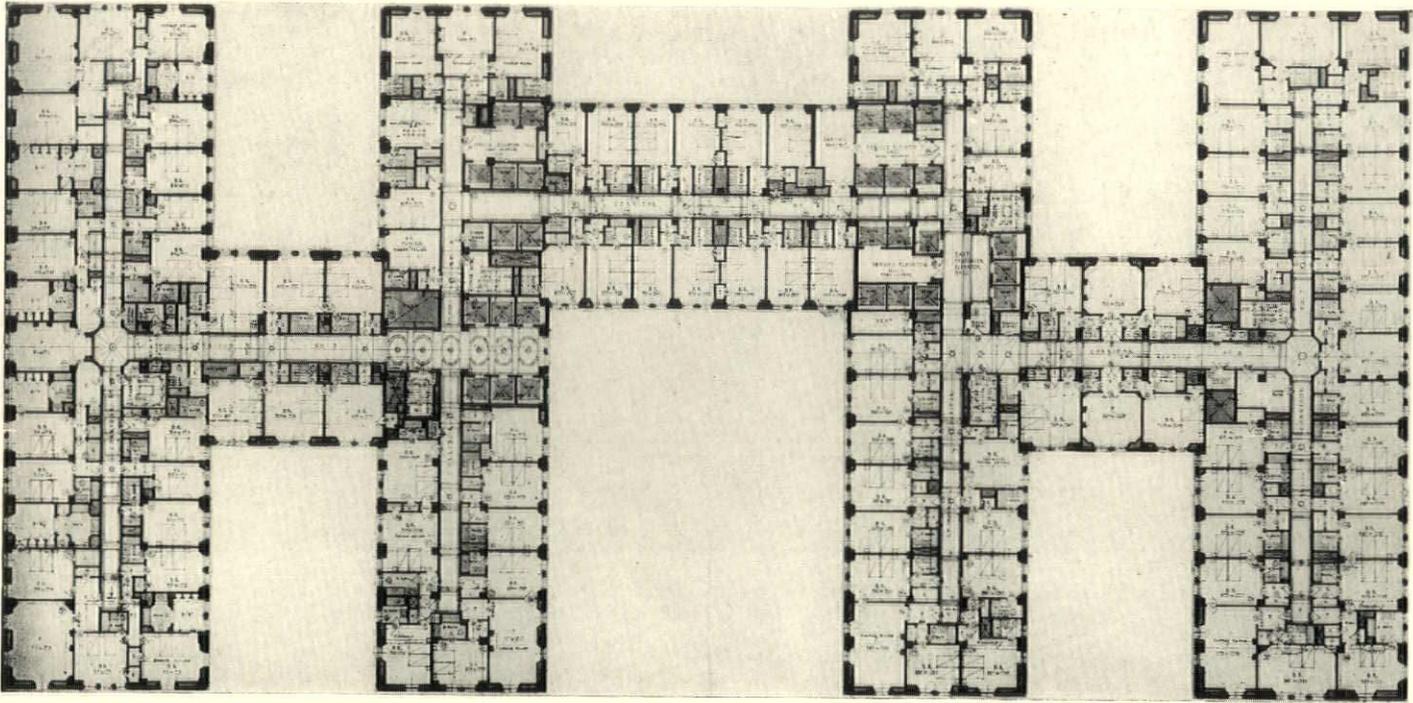
apartments, with dining rooms and bath-dressing rooms of splendor quite unbelievable.

The architects have arranged a complete kitchen located on the 18th floor designed to serve the apartments, the Canadian Club and the roof garden. It is rumored that Mr. Boomer is considering the employment of women cooks for this section so that the good old brownstone front boarders will get that good old Irish potato taste in their food, thus reminding them of the good old days of the whiskers and pug dog period.

So the plans of the Waldorf-Astoria leave nothing to

be desired, so far as hotel requirements are concerned. Likewise, the completeness of the data and the way it is exhibited on the drawings. But there are other things to be considered—the design of the building itself, the style and the treatment.

Three perspective studies of the building are shown on the first two pages of this article. The original study was evidently based on a modernistic Gothic. Many little spear points hurl themselves upward all over the facades, giving a sort of a glorified Woolworth Tower-St. Patrick's Cathedral effect.



ALL OUTSIDE ROOMS on this typical floor plan, which has nice corridors and plenty of elevators which can even let you off where you want to go. Yes, the room numbering contract was quite a hefty one

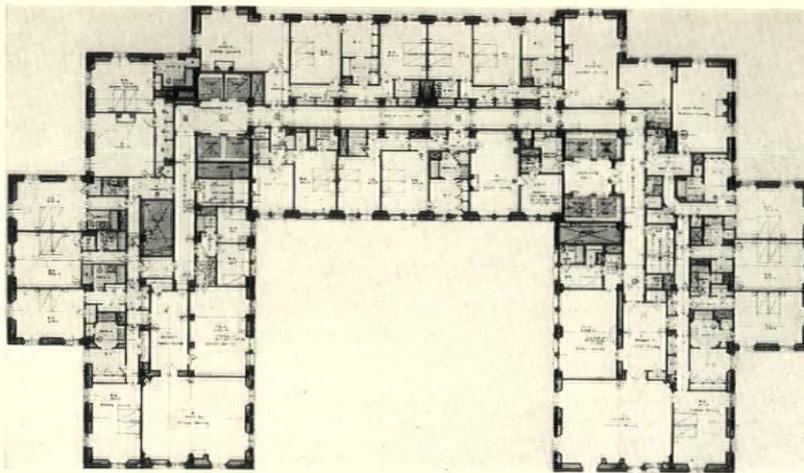
The second study retained a good deal of the perpendicular Gothic feeling, with the mass of the ball-room being finally settled as to location and height. This study shows a lessening of the Gothic influence.

But the architects must have reached the conclusion that the mass was so dignified and so overpowering that all kinds of fussy detail could be omitted. So their final perspective

drawing shows a striking improvement over the first two in the elimination of ornament and in the more interesting fenestration and corner treatments. The pinnacles of the towers, too, were modified and modernized.

An interesting example of the amount of study given to the exterior is the fact that a rendered drawing was made of the principal elevation to a quarter-inch scale and this drawing was kept up to date during the progress of the work in the office. Lloyd Morgan, a former Paris Prize man, was the draftsman who crawled like a potato bug all over this fifteen-foot sheet. This jumbo-like piece of draftsmanship and acrobatics was used in a practical way, being photographed down to one-sixteenth inch scale for the working drawings and up to three-quarter inch scale for the details.

The main entrance is of a simplicity most refreshing when one recalls the old Waldorf, with its red terra cotta ornament and its Moorish towers—it is nothing more than



LIVING ROOMS as large as thirty-two by twenty-four feet make living in the tower quite a spacious affair

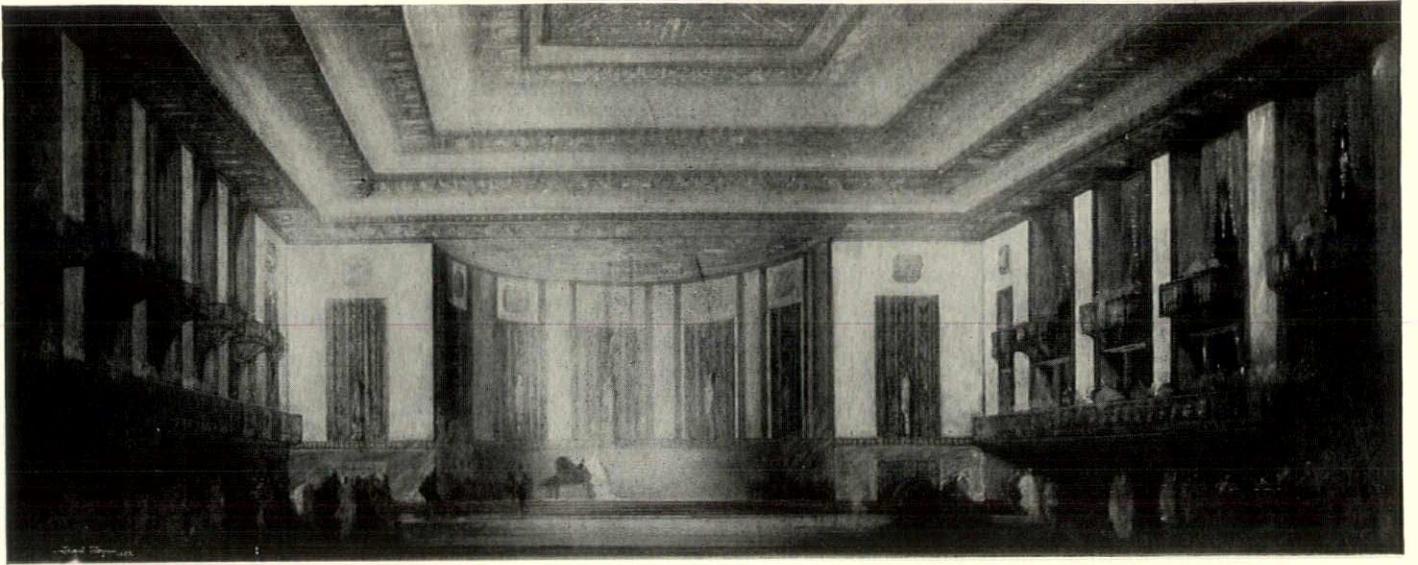
a band spelling The Waldorf-Astoria, framed at each end by a swell bas-relief modeled by Charles Keck.

When it came to the materials used on the exterior, the architects got very fussy and insisted that their brick be a sort of super-brick which should carry the fame of the Waldorf-Astoria down through the entire history of brick-making. So they demanded a pure gray

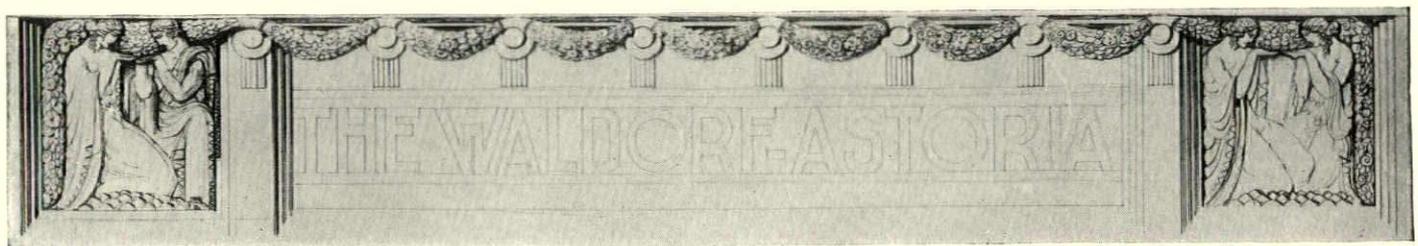
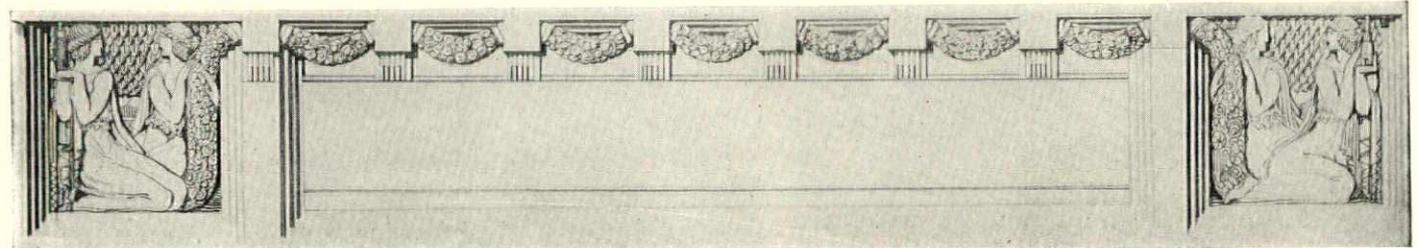
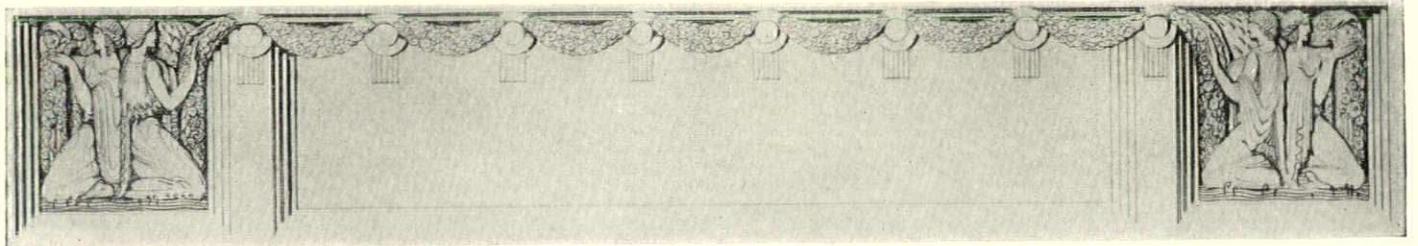
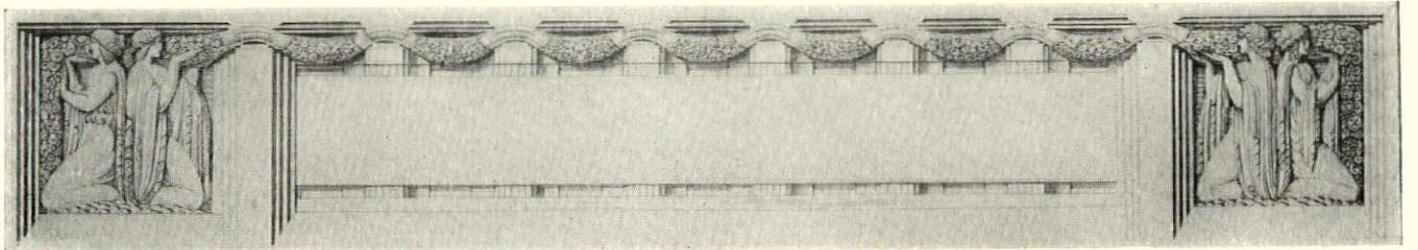
brick that would be a fine match for limestone, something never before attained. Buff-grays, near-grays, and not-so-near grays were rejected with scorn until they finally got what they wanted. The brick manufacturer was so overjoyed when he got a color O.K. that, out of sheer gratitude, he dubbed the product "Waldorf Grays."

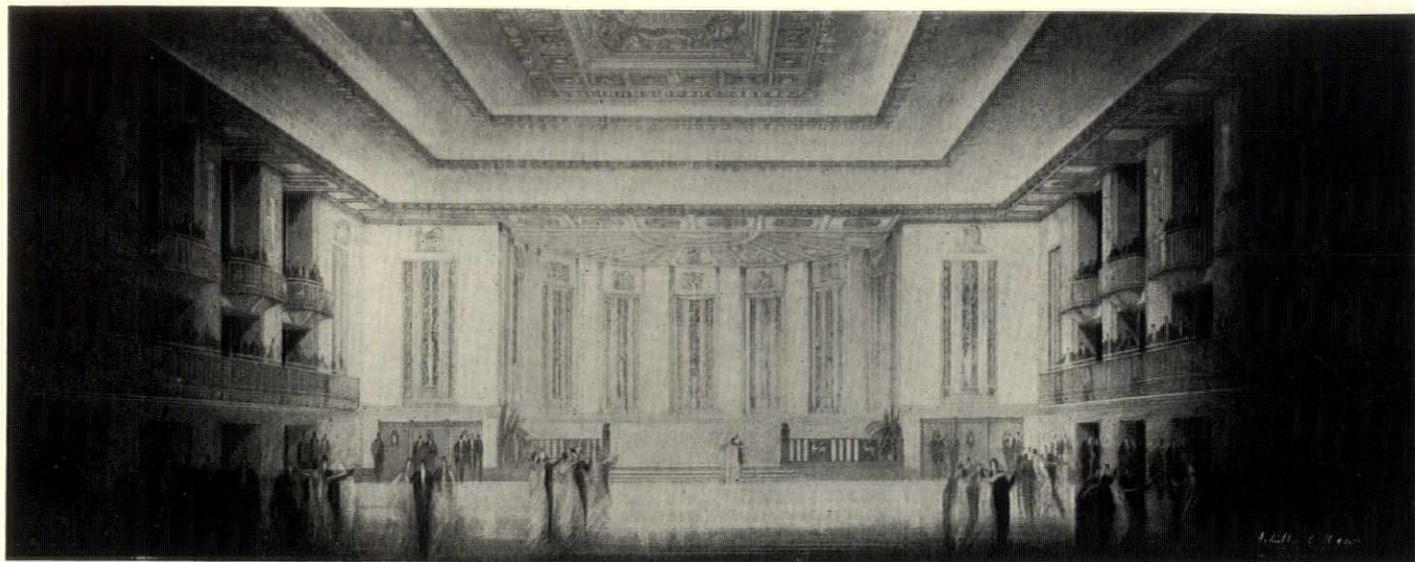
The drawings of the interiors, likewise by Lloyd Morgan, are most interesting and facile. Many are rendered in color, the lobby and the Rose room and the Blue room in particular being very promising as to finished results. The architects intend to finish the main lobby with some secret wood which has lately been discovered and which looks so much like marble that alas! when one sees it, the same old hymn will be sung—"I Dreamt That I Dwelt."

It would be difficult to conceive of any architectural office having turned out a finer set of drawings than have Schultze and Weaver for the new Waldorf-Astoria. All the working drawings are of uniform size, bordered,



PRELIMINARY STUDY of the ballroom of the *Waldorf-Astoria*, a pastel by Lloyd Morgan. The final study shows a better proportion of details and a treatment suggesting greater spaciousness





FINAL STUDY of the ballroom, rendered by Lloyd Morgan. Modern thinking has inspired a more clean-cut design and the room becomes one that is quite evidently in the mode of today



DETAIL AND PANEL STUDIES for Park Avenue entrance. Above is a detail from a full size drawing. At left are preliminaries and final study of the panel. The design was gradually simplified until the final scheme, shown at the bottom of the page, was arrived at. Drawings by P. Rigal

beautifully lettered and fit indeed for exhibition purposes. Besides the plates shown in the accompanying pages, there are literally thousands of drawings showing corridors, bathrooms, painted decoration of every description and the numberless details of bronze and tile and hardware and marble and plaster work which go to make up so complicated a structure. An exhibition of the most important drawings was recently held at the Architectural League and it was welcomed as a great inspiration to the architects and draftsmen of New York to see how a busy office, engaged on several large jobs at the same time, still found time and energy to turn out drawings which are models of completeness and accuracy.

A modern hotel is perhaps the most intricate of structures. The mechanical work alone is enough to make the designer permanently dizzy, especially when he tries to find room for all the pipes and gadgets and cover plates and vent ducts that the engineer demands. And the new Waldorf-Astoria is going them all one better.

For instance, instead of the usual telephone in a bedroom there will be a double arrangement so that you and Gertrude can both talk from the bedside to any old outsiders at the same time. And there will be no less than one hundred and eight telephone operators on the staff, so when you send a five-dollar Christmas present down to the telephone girl, it won't go far.

Every kind of "tel" will be found in Mr. Boomer's up-to-tomorrow hostel. Telephone, telegraph, telautograph (a mistake eliminator), television (soon), and other what-nots too delicate to mention.

As in a theatre program, some acknowledgements should be made, such as:

Mr. Balcom designed the structural work.

The mechanical work was laid out by Clyde Place and everyone except Clyde believes it will work.

Messrs. Schultze and Weaver worked three and one-half years on the sketches.

Fifty draftsmen are still lettering the working drawings.

The architects are expected to recover their health within a short time—just as soon as they are threatened with a new job.

Easy to keep as a check book

A
SYSTEM

for the
SMALL OFFICE

By Henry J. McGill, A. I. A.
of New York City



LIKE it or not, every practicing architect knows, from sore experience, that it is worth while keeping a strict accounting of where blueprints go—and when; and a strict accounting of extra orders and other details.

We have developed what we will call, for lack of a better term, a “painless method”; so called because it makes the keeping of the record almost automatic, and reduces labor.

A system, to be good, must reduce to a minimum the misadventure of the “human element.” Therefore, an extremely simple system is a virtue, yielding its own reward.

Understand, of course, that this entire resumé applies, however, only to the small or average-sized office; larger offices are in a position to buy more “human element,” filing cabinets, storage rooms and other accessories before the fact.

About these two matters, with reference to our small practice, we have given considerable thought, and by reason of the editor’s suggestion, we pass whatever merit there may be contained in them, along to you.

Five years ago we discarded cards, postals, books of record, etc., as a means of keeping track of blueprints and retained only one feature: the duplication pad furnished by blueprint companies. As there is no difficulty about making out a blueprint order, we thought there would be very little additional trouble in placing on the order the additional information about the name of the party, or parties, to whom blueprints were to be sent. This may seem to be altogether too simple, but the fact remains that the record is complete and we have found it entirely adequate and serviceable after five years’ trial. We are thus able to trace the history of every blueprint from the simple medium of the blueprinter’s order blank.

The matter of extra and credit orders and the unquestioned authorization of them has been solved in an extremely easy way, not only to the extent of keeping a

• **BLUEPRINTS...** *On each order for blueprints is put the names of the persons who are to receive them.*

• **CREDITS AND EXTRAS** *These are written on colored letterheads, with carbon copies, signed by the owner—one for the architect, one for the contractor, and one for the owner’s files.*

• **A LOOSE-LEAF BINDER** *holding colored letterheads for extras and credits is kept for each job.*

• **AT FINAL SETTLEMENT** *contractor’s bills and credits are checked with the colored letterheads.*

record, but likewise obtaining the owner’s authorization. We attain the happiest results, and make it possible at the end of each job to settle up accounts without friction. It is practically only a matter of addition and subtraction. This little system justifies itself by five years of proven helpfulness.

In the first place, every architect has a letterhead. We go just a step farther and have the letterhead reproduced on a certain number of pink sheets and a certain number of blue sheets. Then we have a few words added in the set-up. For instance, those for extra orders are pink and are marked in large type across the bottom, “Special Order Form,” and spaces are provided for the order number and the amount of the order. In the same manner, on the blue copy is printed “Credit Order Form,” with a space likewise provided for the order number, and one for the amount.

When we have an extra or a credit, we merely dictate the same letter we would have under ordinary circumstances, but instead of typewriting it on the plain letter-

GRAY PAPER
A copy of this letter is sent to the contractor

COPY to MR. RICE

HENRY J. MCGILL, A. I. A. Architect, NEW YORK CITY
OFFICES at 415 LEXINGTON AVENUE & MURRAY HILL 4837.

22 MARCH 1930 ABOUT PRECIOUS BLOOD
R. C. CHURCH.

REVEREND EDWARD F. BROPHY,
32-23 30TH STREET,
ASTORIA, N. Y.

REVEREND AND DEAR FATHER:

Mr. Rice has suggested the omission of agricultural drains, and has offered to make a considerable credit for their omission.

When we hear further from him about this matter, we will communicate with you.

VERY SINCERELY YOURS, *Henry McGill*

HENRY J. MCGILL, A. I. A. Architect, NEW YORK CITY
OFFICES at 415 LEXINGTON AVENUE & MURRAY HILL 4837.

26 MARCH 1930 ABOUT PRECIOUS BLOOD
CHURCH, ASTORIA, N. Y.

REVEREND EDWARD F. BROPHY,
32-23 30TH STREET,
ASTORIA, N. Y.

REVEREND AND DEAR FATHER:

We are enclosing herewith three copies of Credit Order Form covering the omission of agricultural drains around the building and the dry wells necessary to receive them.

As mentioned in the credit order, the sandy condition of the soil makes it unnecessary to have these.

Please sign all three copies and return them in the enclosed stamped addressed envelopes, to the contractor and to ourselves, retaining one copy for your own files.

Sincerely yours, *Henry McGill*

WHITE PAPER
This letter, with enclosures, is sent to the client

architect's copy

HENRY J. MCGILL, A. I. A. Architect, NEW YORK CITY
OFFICES at 415 LEXINGTON AVENUE & MURRAY HILL 4837.

26 MARCH 1930 ABOUT PRECIOUS BLOOD CHURCH
ASTORIA, N. Y.

MR. LAURENCE J. RICE,
372 BURNIS STREET,
FOREST HILLS, N. Y.

DEAR MR. RICE:

We herewith accept your allowance of Three Hundred Dollars (\$300.) for the omission of agricultural drains around the building and the dry wells necessary to receive them.

We agree with you that the sandy condition of the soil would make these drains unnecessary and we wish to avail ourselves of every opportunity to save money for the owner.

In all future correspondence, kindly refer to this amount as General Contract Credit #2.

Very sincerely yours,
OFFICE OF HENRY J. MCGILL

AUTHORIZED BY:
PRECIOUS BLOOD R. C. CHURCH,
Edward F. Brophy, D. R.

ORDER No. 2
AMOUNT \$300.00

BLUE PAPER
Credits are in letter form, counter-signed by client

HENRY J. MCGILL, A. I. A. Architect, NEW YORK CITY
OFFICES at 415 LEXINGTON AVENUE & MURRAY HILL 4837.

4 MARCH 1930 ABOUT PRECIOUS BLOOD
R. C. CHURCH, ASTORIA

Mr. Walter J. Ryan,
5644 Van Cleaf Ave.,
Corona, Long Island, N. Y.

Dear Mr. Ryan:

We herewith accept your estimate of ONE HUNDRED FORTY DOLLARS (\$140) for supplying and installing statutory bronze finish inlet valves for twenty-one vacuum cleaner outlets.

In future correspondence, please refer to this item as plumbing contract extra order No. 2.

Very sincerely yours,
OFFICE OF HENRY J. MCGILL.

AUTHORIZED:
PRECIOUS BLOOD R. C. CHURCH,
Edward F. Brophy,
PASTOR.

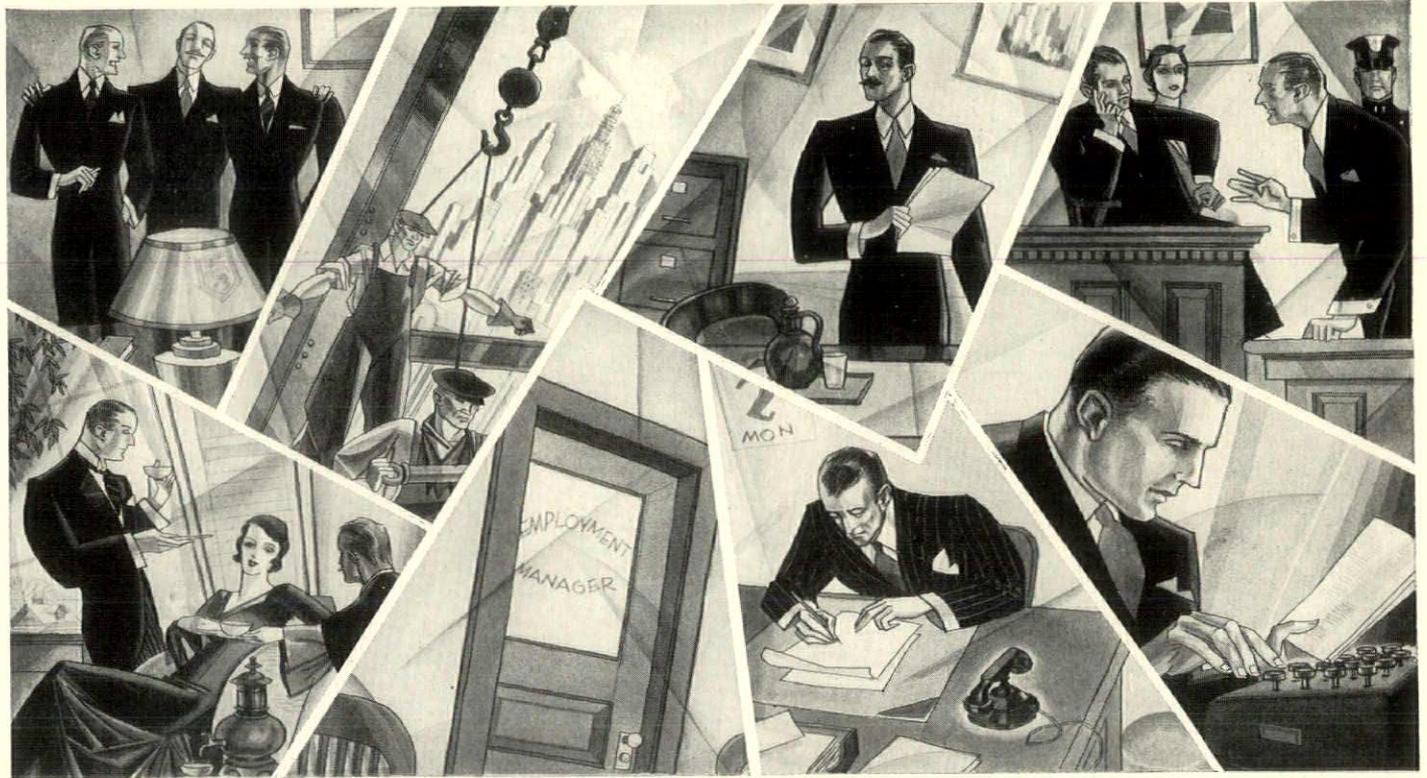
PLUMBING
ORDER No. 2
AMOUNT \$140.00

PINK PAPER
Extras are authorized in letter form, counter-signed by client

FRICITION AND EXTENSIVE BOOKKEEPING are avoided by this simple system, for it is easy to get an immediate decision on extras and credits as they arise, whereas if left to the end of the job as a lump sum, disputes might occur through misunderstandings. To determine total credits and extras, it is necessary merely to take the blue and pink sheets and add up the figures in the lower right hand corner

head we type it on the proper colored paper—making three such copies. On each copy, at the bottom, a place is provided for the owner to insert his signature. All three copies, whether it is an extra order or a credit, are sent to the owner. If he approves of the conditions and the amount, he signs all three copies, and, as instructed, sends one copy to the contractor, one to the architect and retains the third copy for his own files. To facilitate matters and encourage promptness, we enclose stamped addressed envelopes for the owner's convenience. A special loose-leaf binder is kept for each job and the orders and credits are kept in numerical order. When issuing certificates and at the time of final settlement, the checking of each contractor's bills with

these orders is a simple matter. The architect is not required to hold lengthy conferences with the owner as to the propriety of each order, because all these matters have been settled at the time they are authorized, at which time all concerned are familiar with the matter in hand. We here illustrate four sheets—the regular letterhead, the special order form, the credit form and the regular copy sheet—which are actual copies. It was thought at one time that orders could be numbered in advance, to avoid the possibility of duplication, but as the simplicity of the system requires consecutive numbering for each individual job, it was found impractical to provide (Continued on page 130)



SOCIETY MAN · EMPLOYMENT MANAGER · INSURANCE BROKER · AUDITOR

WHO said that the practice of architecture is a profession? Who said that architects are not business men? They are business men. They are making a commodity—buildings. They have a service to offer that at times is highly personal in character. But fundamentally they differ little if any from any other manufacturer of a product.

Any argument that the architect is not a business man has no place in today's program. As soon as he leaves school and seeks a position as a draftsman he becomes a business man. He must sell his ability, in most cases to an employer who knows nothing about him or what he can do. If he isn't a business man he will in all probability remain a draftsman all his life. But assuming that he has initiative, and has passed through a reasonable period of gaining experience, if he is a normal individual he will set about to establish his own practice.

He seeks clients and finds himself a salesman. He takes on legal obligations; becomes involved in contracts and finds that he must be something of a lawyer, at times even an arbitrator who must have the wisdom of a judge. In keeping track of the cost of a job to prevent overpayment to the contractor, he becomes an auditor. In selecting the materials that go into a building, isn't he a purchasing agent? The architect incurs debts and the first thing he knows has people owing

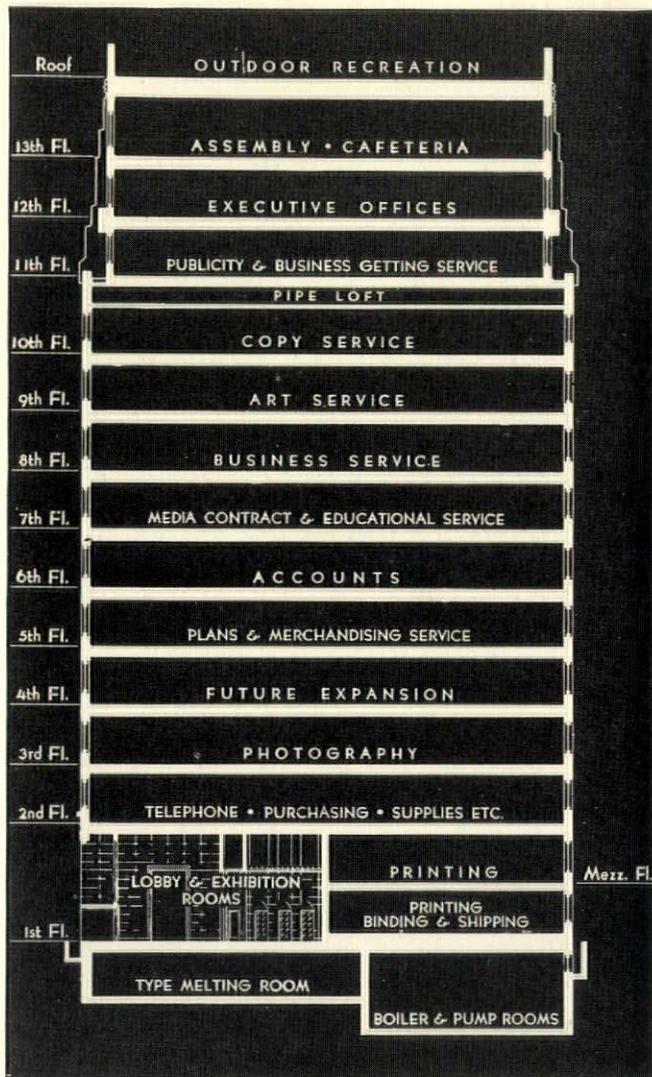
AN address delivered by editor of The American Institute of the Tennessee Chapter, in response to a resolution

him; he has become something of a banker. The office must be conducted on a business-like basis and he assumes the role of an office manager. Draftsmen and others must be employed; the architect is an employment manager. On the average job he finds that he must be both a mechanical engineer and a structural engineer; out on the job as a construction superintendent—he must be a diplomat and a democratic "mixer." At times he must be able to drink tea with the ladies and be a social light. At other times he must address a club or building committee and be a public speaker. At the building department he may find it necessary to be something of a politician. Nine times out of ten he is a research engineer. Again he is called upon to determine the investment value of a site and proposed building. He has entered the world of finance and economics. Even

...and still we call

THE N. W. AYER BUILDING designed from an Organization Chart

By RALPH B. BENCKER, A.I.A.
ARCHITECT



AN ANALYTICAL STUDY was made of the functioning of the organization before any preliminary work was done on plans.

This study disclosed the interrelation of the various departments and the normal routing of work through them. In addition to this information, essential to determine the height of the building and details of plan, other necessary features disclosed themselves—such as the use of suspended ceilings and evenly spaced windows to give maximum flexibility to subdivision of office space and placing of lighting fixtures.

ARCHITECTS, in writing of buildings they have designed, usually write from the viewpoint of the finished structure, explaining how the building is arranged and describing the materials used. THE AMERICAN ARCHITECT, however, asked me not to write in this manner, but to start at the beginning and tell why the finished structure was designed as built, and why it was considered a proper design to house the advertising headquarters of N. W. Ayer & Son, Inc.

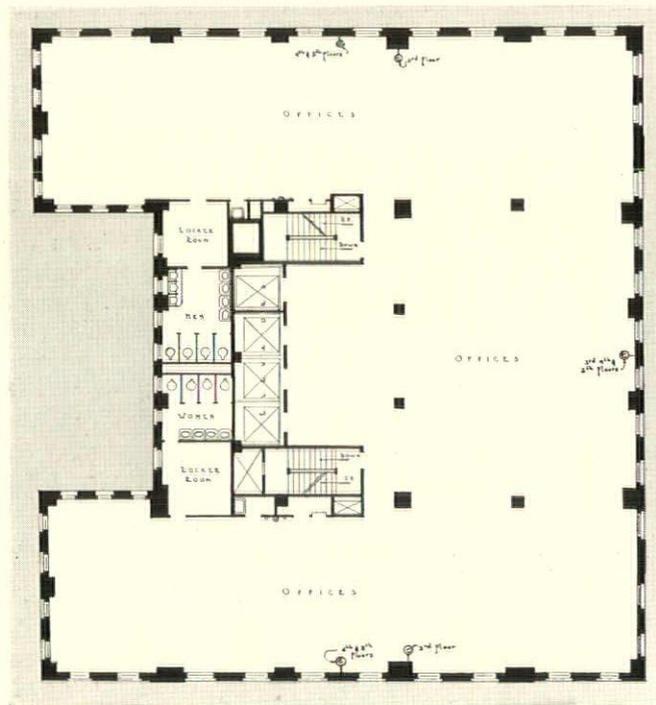
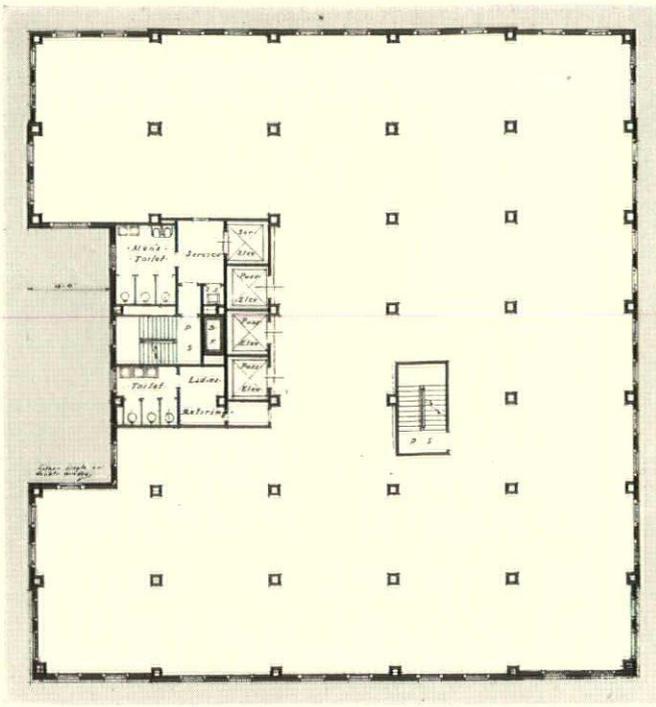
The selection of the architect of this building was made without his knowing anything about it until one afternoon I was asked to attend a meeting of the members of the firm. Shortly after that, I was shown the site, a lot 103 feet by 115 feet, in Washington Square, West—an old historic section of Philadelphia.

I was asked whether or not I thought an eight or nine story building would be appropriate in this location. While I have never thought that I could be classed as particularly humorous, I instantly visualized the width of the site and the height of the building as a cube of white marble which suggested the side of a dice, only I failed to see how the number "6" would give enough windows. I could only reply, "Well, we'll see how it works out."

After being shown the space then occupied by an organization of over seven hundred employees, scattered on several floors of four or five different buildings, and learning how the numerous departments of an advertising agency function, I realized that here was a problem to be solved that involved more than what the height of the building should be.

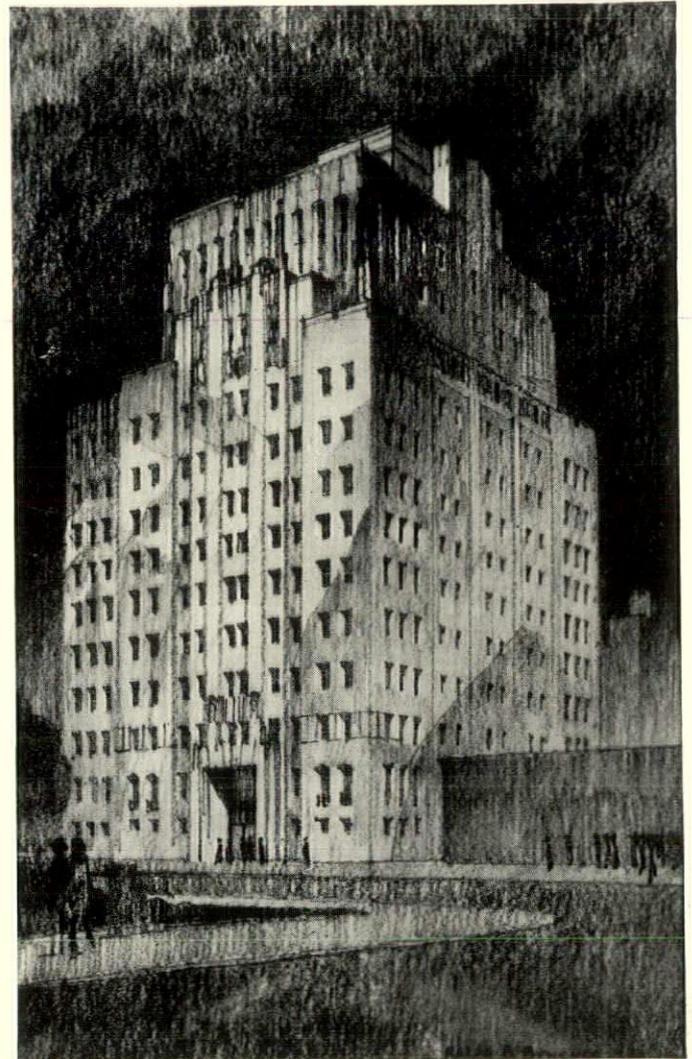
Numerous meetings with the members of the firm were held that seemed to me as having been devised as a series of instructions on the aesthetic requirements of the design. I was told that the structure was to be designed "as of the present and tomorrow" and of such character that it would take its place gracefully in the historic atmosphere of its locality; that it was to have the dignity of the Lincoln Memorial, but with no borrowed forms; and that material and purpose should determine the design, with form moulded to decoration rather than decoration to form.

The first step in a practical direction was to develop a typical floor plan having a maximum amount of usable

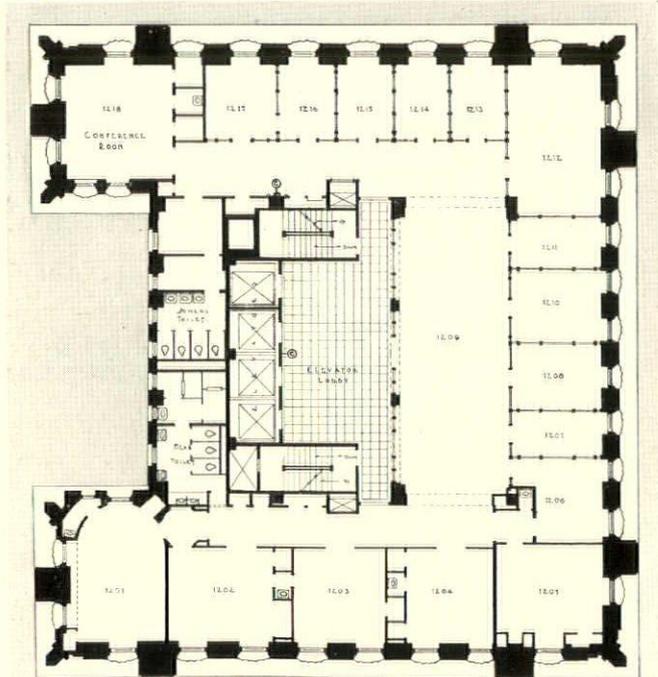


PLAN STUDY COMMENCED with a typical floor. Elevators were placed near the light court, making it easy to handle visitors from a central point. A preliminary study, shown at the top of this page, had too many columns. The final typical plan, above, has fewer columns and the stairs provide inter-floor communication from each elevator lobby

PLAN OF TWELFTH FLOOR, shown at right, indicates the flexibility of the typical floor plan



REJECTED sketch No. 1, which was regarded as being forced in its number of breaks and setbacks

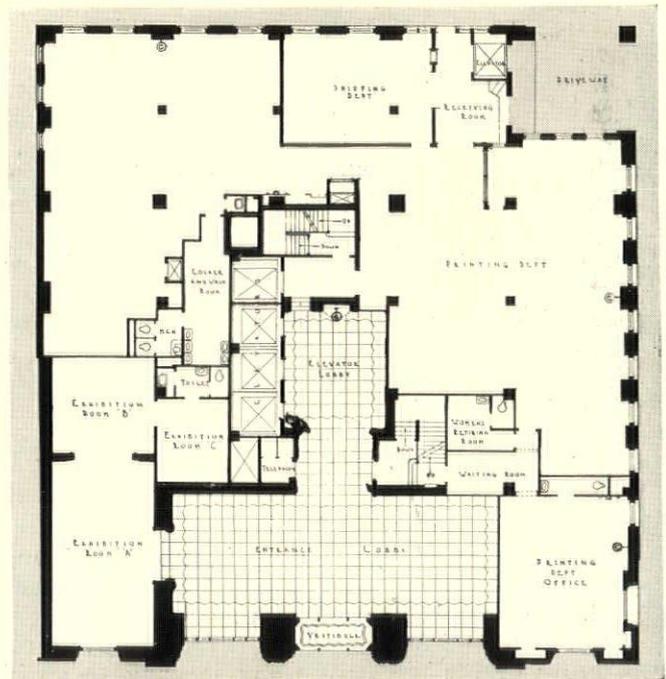
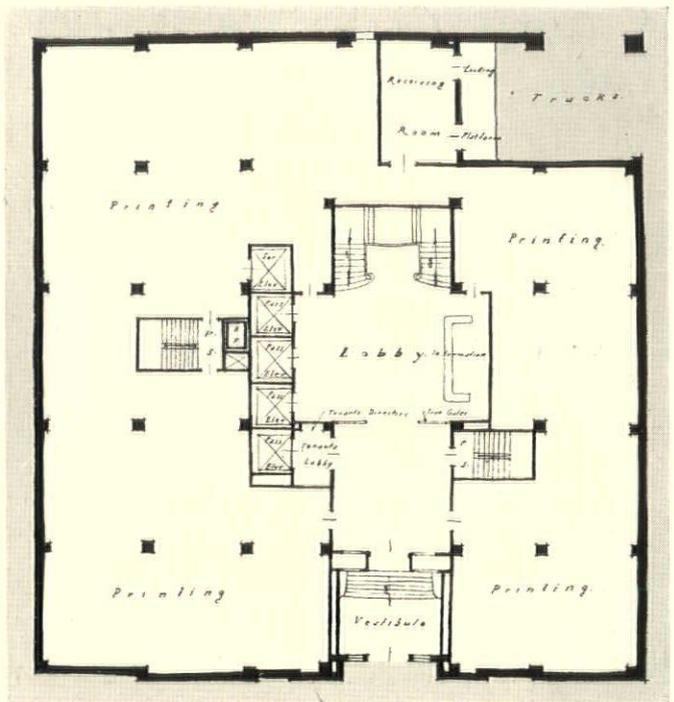


The plan was developed

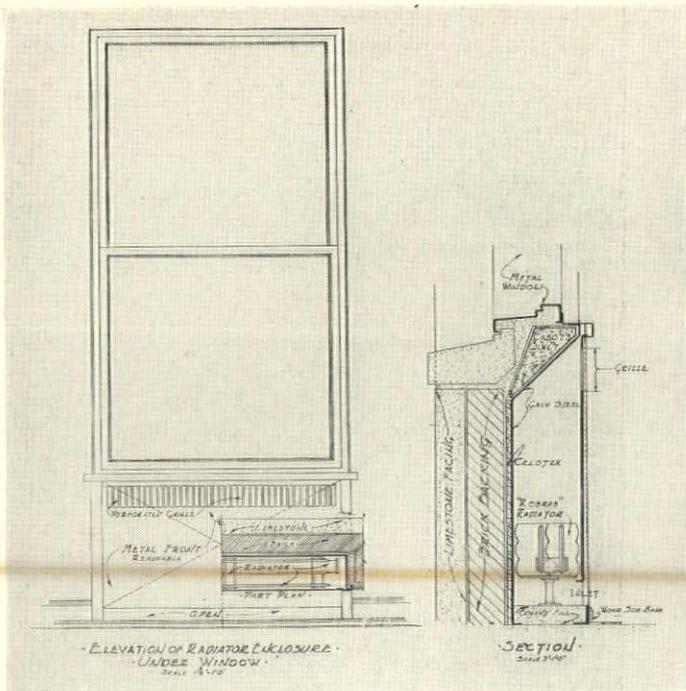
THE AMERICAN ARCHITECT



ACCEPTED sketch No. 2, the result of many studies, from which a quarter inch scale model was made



THE GROUND FLOOR PLAN had to make provision for a large number of visitors. The preliminary plan, shown at the top of the page, was faulty in that visitors would not be under full control, and the printing plant was not concentrated. The final plan, shown above, remedied this fault and in addition provided three rooms where exhibits can be held



WINDOW UNITS consist of metal frames, sash, and radiator front, the radiators being recessed in walls

to make production easy

SPACE for many visitors

floor space. The location of the site assured permanent light on three sides, north, east and west. Adjacent property to the south had not at this time been acquired by the company and since there existed the possibility of a high building being erected on this side at a future time, it was determined that a light court twenty feet deep would be essential as a protective measure. This arrangement permitted retaining an unbroken side of one hundred fifteen feet of northern exposure, and had the further advantage of securing good cross circulation of air from the southwest, which is the desirable exposure for summer comfort in Philadelphia.

SINCE floor space adjacent to a light court is seldom highly desirable, it was decided to use this space for service facilities. This automatically placed the elevators, stairs, lavatories, and lockers approximately in the center of the building and took advantage of an area that is generally of little value for office and working space. This had the further advantage of allowing easy control of traffic entering and leaving each floor.

In the early stages of studying the problem, it was determined to make the window openings, in plan, fifty per cent of the walls in order to secure a good distribution of daylight. This seemed to demand regular window spacing, which later involved the design of the exterior.

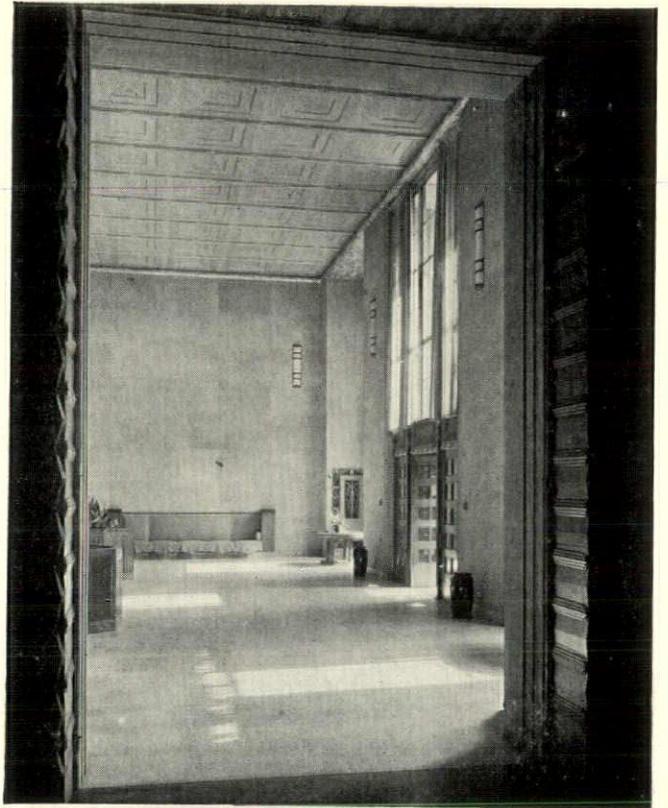
As the study of the problem progressed, it became apparent that it would be highly desirable to have as much free floor space as possible unobstructed by columns to permit flexibility in later subdivision of any floor. Floor spans of thirty-eight feet were therefore adopted, which reduced to two the number of free standing columns that would interfere with large areas of working space on any floor.

In determining upon a suspended plaster ceiling placed one and one-half inches below the fireproofing of the girders and avoiding the use of decorative beams or other breaks in the ceiling, two factors were considered. An unbroken ceiling area would permit the spacing of electric light outlets as required to give a proper intensity of illumination on any working area without their being limited in location by beams or other projections. The level ceiling also would permit the location of partitions, as might be later desired, extending to the ceiling at practically any point and limited only by window locations.

Lighting outlets on each office floor were arranged to be controlled in groups of five or six from main panel boards on each floor and also to be individually controlled by pull cords. The quantity of lighting fixtures required made it possible to obtain fixtures of special design at no greater cost than that of standard units.

The slight additional cost of concealed brass radiators was considered justified by the resulting saving in floor space and ease in cleaning. The radiators are recessed in the walls below the window sills.

Investigation disclosed (Continued on page 104)



THE ENTRANCE LOBBY is used as a waiting room. Visitors do not enter elevator lobby until authorized

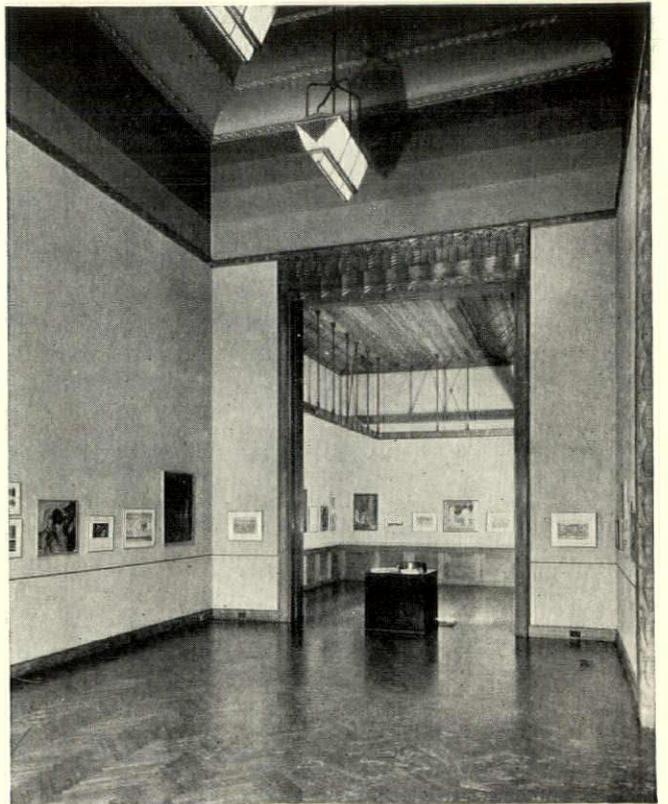
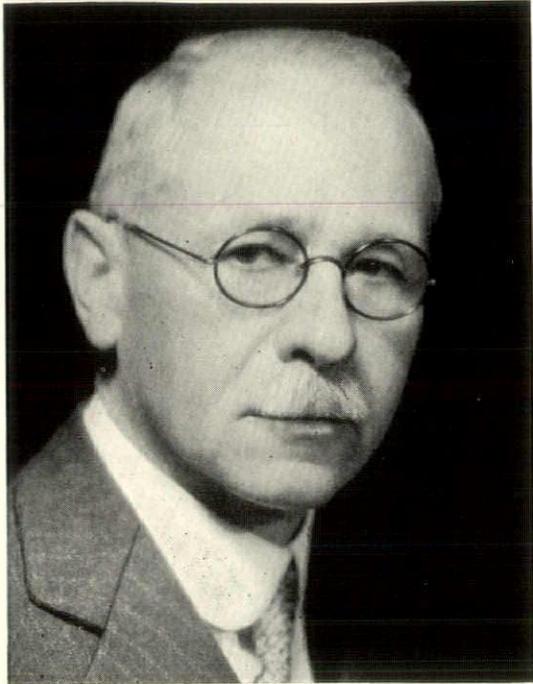


EXHIBIT ROOMS are located off the main lobby, where staff members and the general public can enjoy them

had to be provided



ELEVATOR LOBBY, to which visitors are directed after authorization from those whom they desire to see. This arrangement minimizes the number of visitors admitted to the working part of the building, and consequently reduces the number of those using the elevators



Reduce Construction Accidents

BY SAMUEL R. BISHOP

Chairman, Committee on Health and Safety A. I. A.

- *Accidents in the construction industry cost \$250,000,000 annually—and they are on the increase.*
- *As the architect is the administrative head of the jobs on which he is employed, it is entirely within his province to insist in his specifications on certain safeguards which will protect the men on the job, men who are indirectly the architect's own employes.*
- *Mr. Bishop explains what his committee has found to be logical safeguards which should be incorporated in every architect's specification.*

ONE of the most serious burdens that the construction industry is carrying today, the most costly and one which is purely a liability, is that of accidents. It is a tax involving an annual loss of nearly \$250,000,000, made up of insurance premiums, compensation costs and loss of time and man power.

Much has been written about making buildings safe against accidents, and more said. Contracting and labor organizations have issued manuals for the guidance of their safety committees and for the education of their mechanics, and warning signs have been posted for the benefit of the men. But have accidents decreased or are they decreasing? In general, taking the country as a whole, reports say no.

A recent report published by the Industrial Commission of the State of New York says—"This month's increase in accidents was shared by the entire State except the Albany district, and the additional deaths were confined mainly to construction work which reported fifty-four deaths, with twenty-six for transportation and thirty from personal causes."

Another report issued from the same source in the height of last year's building season states "The construction field, which at this season is employing a great

number of men, had the greatest number of fatal accidents; sixty-two being reported, more than any previous month for the year." And the record of accidents on one recent demolition operation in the City of New York tells us that there was a total of fifty-four accidents, which included two deaths, two amputations, sixteen fractures, together with burns, scalp wounds, etc.

Well, what's the answer to this?

Is this condition due to lack of education, for want of legislation, just thoughtlessness and carelessness on the part of employes, or what? It would seem as though we all possessed enough intelligence and have received sufficient education to avoid accidents if we see ourselves facing danger, but it's human nature to take chances. How many times in going through our buildings on inspection trips will we step across an embarricaded well-hole rather than walk around it; saying to oneself—I guess I can make it—but suppose instead of that, one said—suppose I don't make it. Then surely one would be more apt to go around the well-hole. Legislation and a State Inspection service might compel the erection of adequate safeguards yet more depends on our own care and thoughtfulness.

A short time ago, there was submitted to our office



TEN MEN WERE KILLED

on this remodeling job . . . a few words in the architect's specifications might safeguard the workmen and prevent such accidents

force in their own State. In addition I suggest the following clauses that can be inserted in the specification as a separate section for the contractors guidance.

DEMOLITION

1. Workers shall not be permitted to start the demolition of a building or structure until all gas, electricity, water and other supply lines from the outside, except such as are especially provided for use in connection with the work of demolition, are effectively shut off.

2. Glazed sashes and glazed doors shall be removed at the start of demolition operations.

3. Chutes for the removal of materials and debris shall be provided in all such parts of demolition operations that are more than fifteen feet above the point where the removal of material is effected. They shall not extend in an unbroken line for more than twenty-five feet, but shall be equipped

at intervals of twenty-five or less with substantial stops to prevent descending material from attaining dangerous speeds.

4. The bottom of each chute shall be equipped with a gate or stop with suitable means for closing or regulating the flow of material.

5. In the demolition of buildings, walls shall be removed part by part. No wall, chimney, or other construction shall be allowed to fall in mass, except in special cases and under competent supervision. Scaffolds or staging shall be erected for workers, if walls or other construction are too thin or too weak to work on.

6. During demolition, chutes, floors, stairways and other places affected shall be sprinkled frequently to keep down the dust.

7. Stairs and stair railings shall be kept in place and in usable condition as long as possible. Steps and landings shall be kept free from debris.

8. Floor openings, unless covered or otherwise protected, shall be provided with guard rails and toe boards.

EXCAVATION

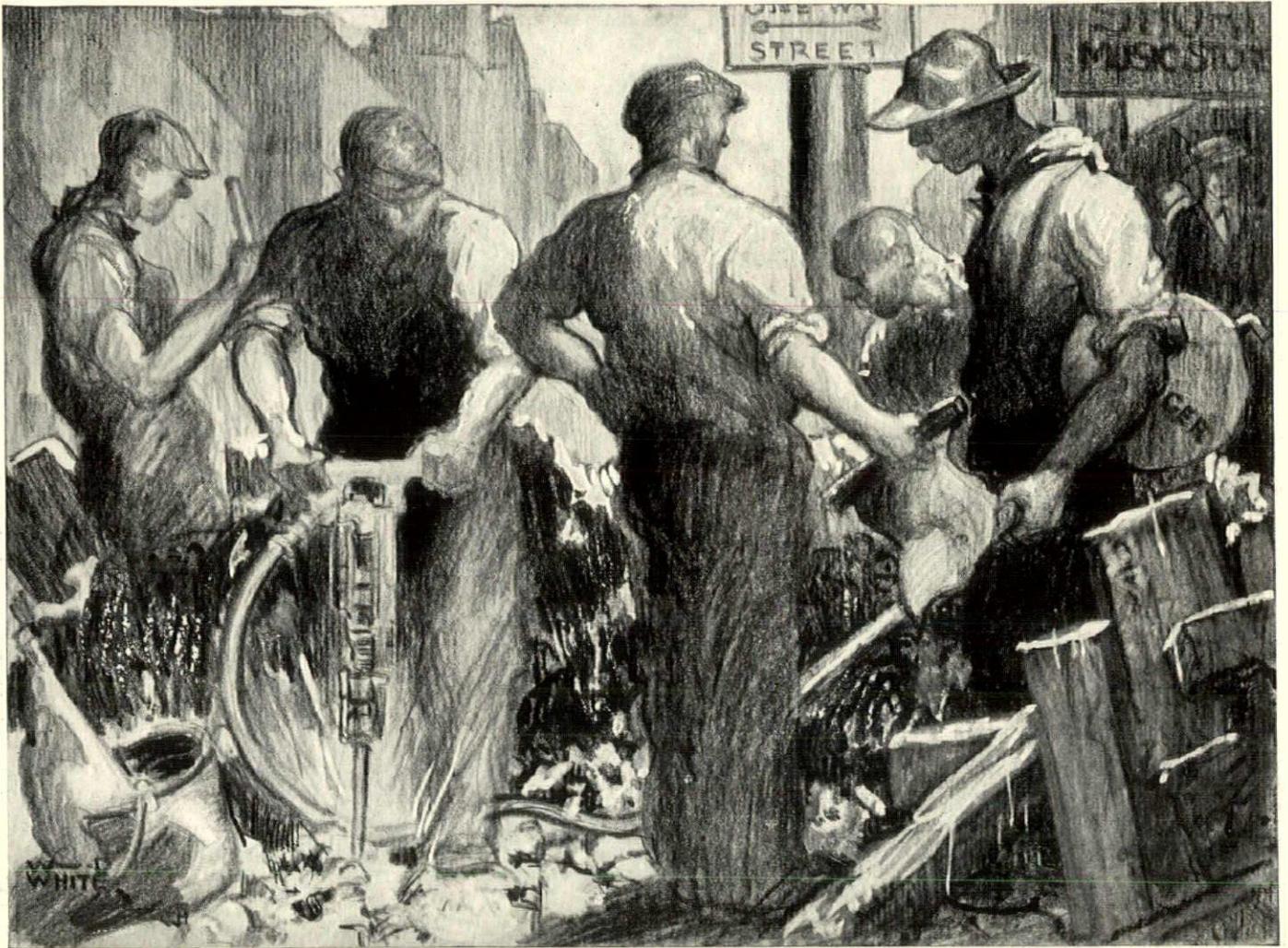
1. The sides of every (Continued on page 86)

for criticism a specification which contained this clause; "Contractor shall install all safeguards and devices necessary to insure safety to workmen." I have read a great many specifications during the past 15 years, issued not only from the offices of New York architects, but from architects all over the country and this was one of the few instances (yes, very few) where I have seen any reference to safeguards for the prevention of accidents.

In one recently published article I read,—“Accident prevention is dependent upon whole-hearted cooperation between employer and employes, neither alone can achieve the goal of safety.” Well said,—but what can the employe do about cooperation if the employer will not install the safeguards?

To date, architects have given little thought to this question, either individually or as a body, yet they can become a vital force, and through their influence do much to improve the situation.

Architects can insist on the erection and maintenance of safeguards in all buildings erected from their plans and specifications, or built under their supervision, and in the preparation of their specifications, can make reference to safety laws and regulations that may be in



MORE DECIBELS IN A CITY'S DIN

By W. D. White, Edge Moor, Delaware

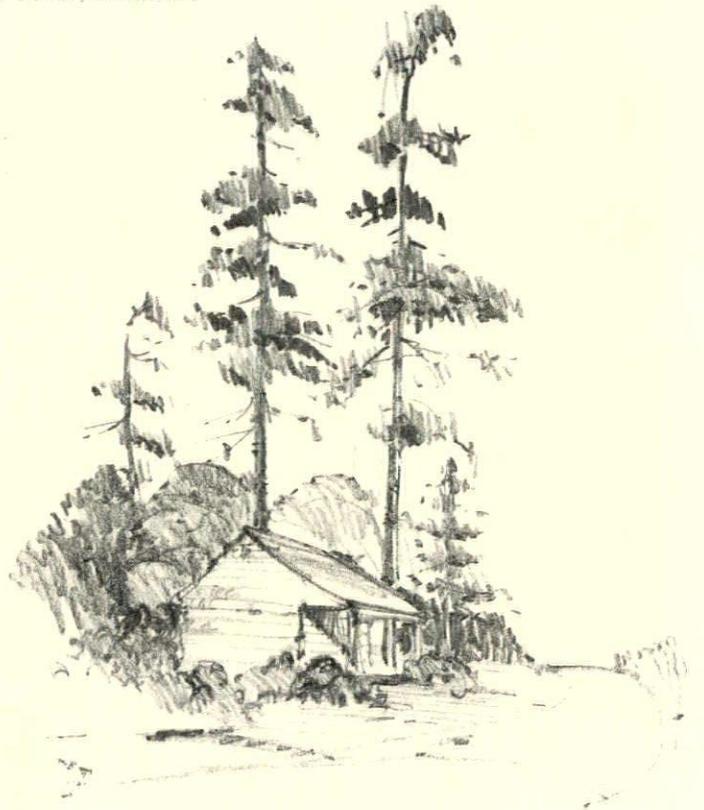


THE WATER BOY

By W. D. White

OUT OF THE FORESTS

By Ralph J. Bishop, Tacoma, Washington





W H I L E T H E W O R L D S L E E P S O N

By W. D. White



•
B E A U T Y B O R N
O F T O I L

*By N. H. Kamps
Pasadena, California*

•
S K E T C H E S B Y W . D . W H I T E , R A L P H J .
B I S H O P a n d N . H . K A M P S

FOR JANUARY 1931

Ventilating Systems THAT DID NOT WORK ... and why

By SAMUEL R. LEWIS, M. E.

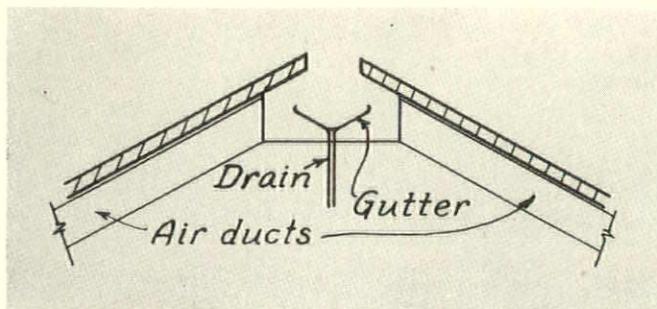


FIGURE 1

TROUBLE caused by exhaust openings that look north, demanded by the architectural design, would have been avoided if this ridge vent scheme had been adapted

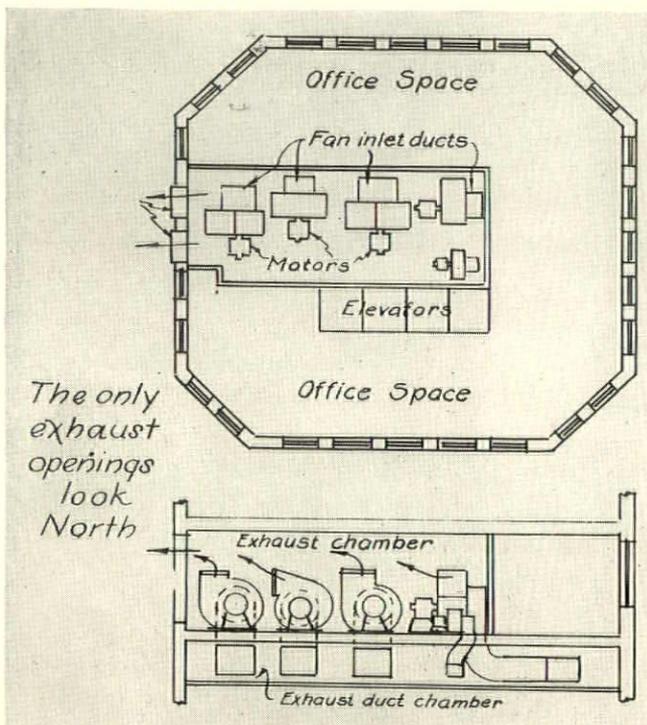


FIGURE 2

WIND PRESSURE from the north resulted in weaker fans being overcome by the stronger. Outlets from all fans were taken into the same room. The situation shown in the above plan and section of a tower building is not uncommon

UNLESS the mechanical engineer has conferred with the architect or unless the architect is unusually air-minded, the mechanical equipment may be unsuccessful, an otherwise beautiful building may be disfigured, and the owner may be put to the expense of unnecessary investment.

There is a metropolitan library, a great stone building covering a block, with a ventilating system which has been abandoned for years. This plant was condemned because the architect had the exhaust openings look north horizontally through dormer windows. The exhaust fans could not overcome the cold north wind pressure. Back-drafts and sealing-up of the outlets ensued.

A competent mechanical engineer would have prevented this episode by using up-looking exhaust fan outlets. Probably the architect concluded that there was no way to have such outlets without disfiguring the building. But there are ways in which this can be avoided. One of these is by means of an up-looking split ridge, as shown in Figure 1. The slot-outlet may be as narrow as desired. A width of from twelve inches to eighteen inches is practicable. Below the slot, which can only be seen by bird's-eye view, there is a water-tight, drained outlet chamber, to which the spent air may be brought by duct. The stronger the wind the more effective the slot-outlet becomes.

Outlets of this type may be used in flat roofs, and are effective if not too wide, and if they are not near higher parts of the building where the wind may cause local pressure zones.

The Mather Tower in Chicago has an elaborate ventilating system and the exhaust fan outlets all look up and operate successfully. They cannot be identified, however, by the casual observer.

In a similar tower in Columbus, Ohio, the exhaust from the laundry in the sub-sub basement rises through an adequate duct, straight as an arrow, to the nineteenth story, where there is a big centrifugal fan. Unfortunately the mechanical engineering of this building was subserviated to the architectural design, and the big exhaust fan turns its breath of hot laundry air through metal louvers which look north. Despite an enormous expenditure of motive power, the fan cannot

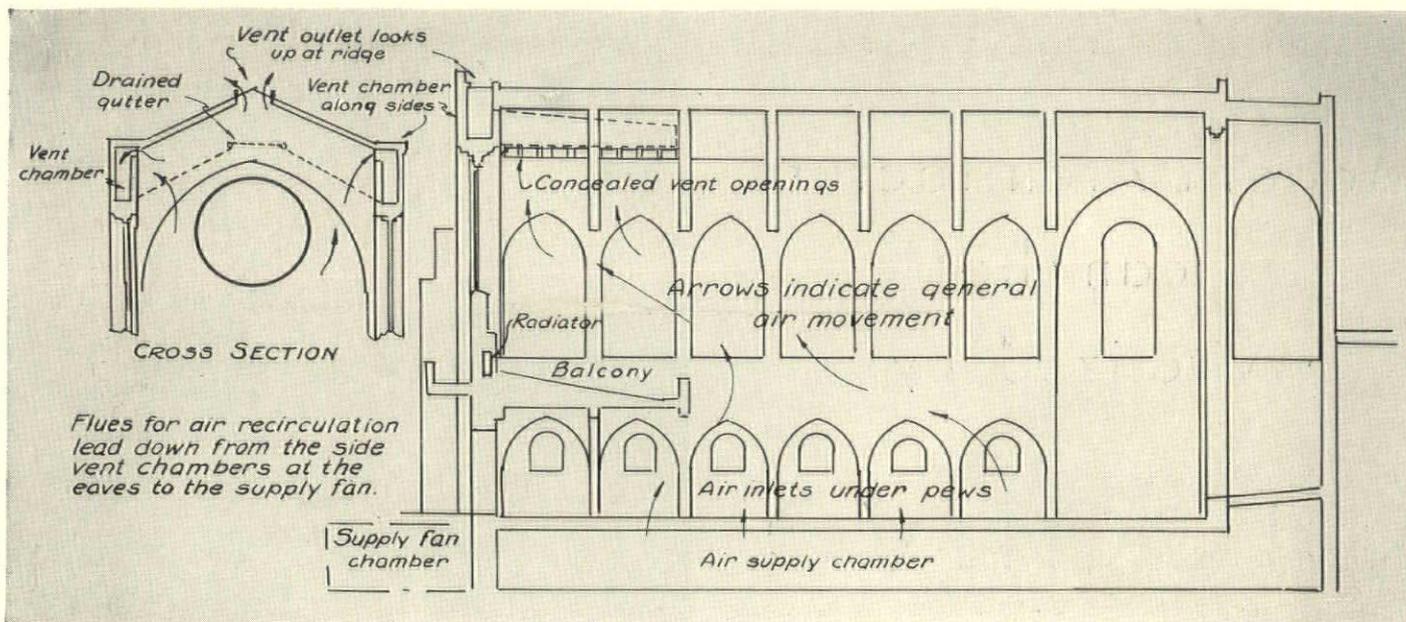


FIGURE 3

ONLY AN AVIATOR can see the up-looking outlet at the ridge of this church. It is a modification of the ridge vent detailed in Figure 1. This arrangement worked

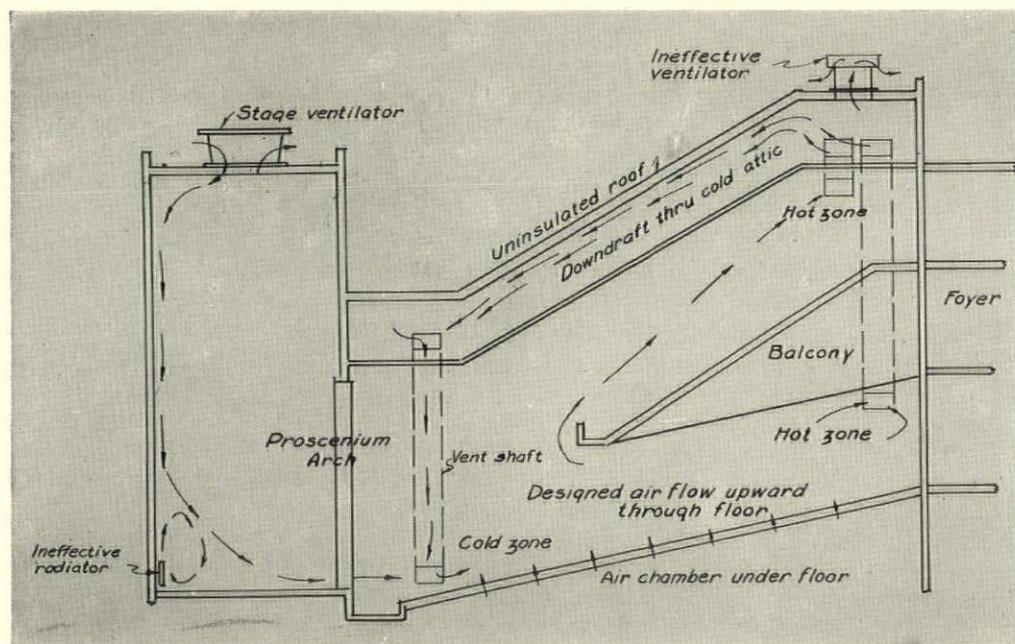


FIGURE 4

FRONT SEATS COULD NOT BE SOLD in this theatre because defects in the ventilating system made them cold and drafty. An uninsulated roof caused a down draft from the cold attic

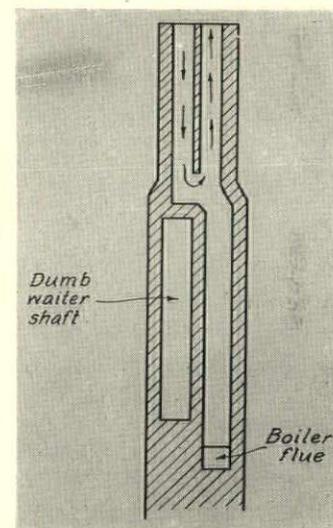


FIGURE 5

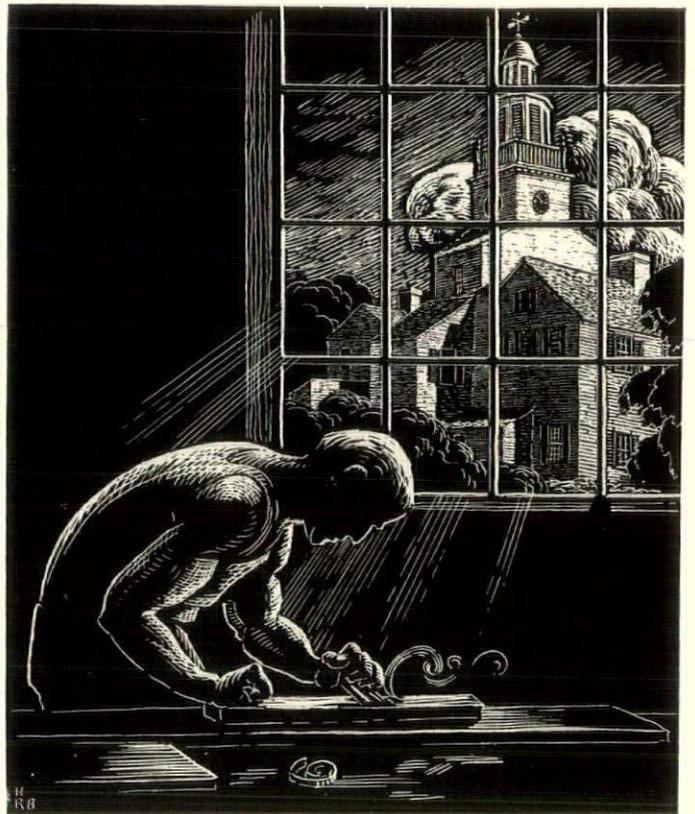
VIOLATION of the principle of one flue to a piece of equipment. The heating system did not work because the architect connected the boiler flue with a false flue on the mistaken principle that the larger the flue the better would be the draft

overcome the wind pressure, and the hot air accordingly is not removed, much to the inconvenience of the employees.

This laundry exhaust fan outlet must be changed, a very serious problem, since the fan chamber is against the base of a twelve story tower. If the outlet looks up it will be of necessity so close to the tower that wind pressure, reacting from contact with the tower, will dam it up, and when the hot air does escape it will re-enter the building through higher windows.

There is another tower building in Chicago, in which the mechanical engineer apparently was missing, his place being usurped by a fan-seller who donated the engineering services. The various fans serving bath departments, restaurants, toilets, etc., are grouped in one room on about the twentieth story. All fans discharge with open outlets into the same room which houses the fans and motors, as shown in Figure 2, the only escape for the air being through openings in the north facade of the building, which is (Continued on page 92)

Modern Architecture
can be
vitalized by
Creative
Craftsmen



FROM DEFT HANDS came the fine early American architecture designed by Samuel McIntire, carpenter-woodcarver-architect, of whom it has been said, "Charming things came from McIntire . . . we have never been able to improve them"

A FEW years ago the writer gave up the practice of architecture to enter the studio of a metal craftsman in New York and discovered one condition which made a never-to-be-forgotten impression. It was an attitude of the craftsman and his associates, assumed without pretense and a belief taken for granted, that architects and "designers", as such, had never in the past and were not today creating truly significant, sincere or logical metal work, and lacking these qualities, it followed that such work was not and could not be truly beautiful.

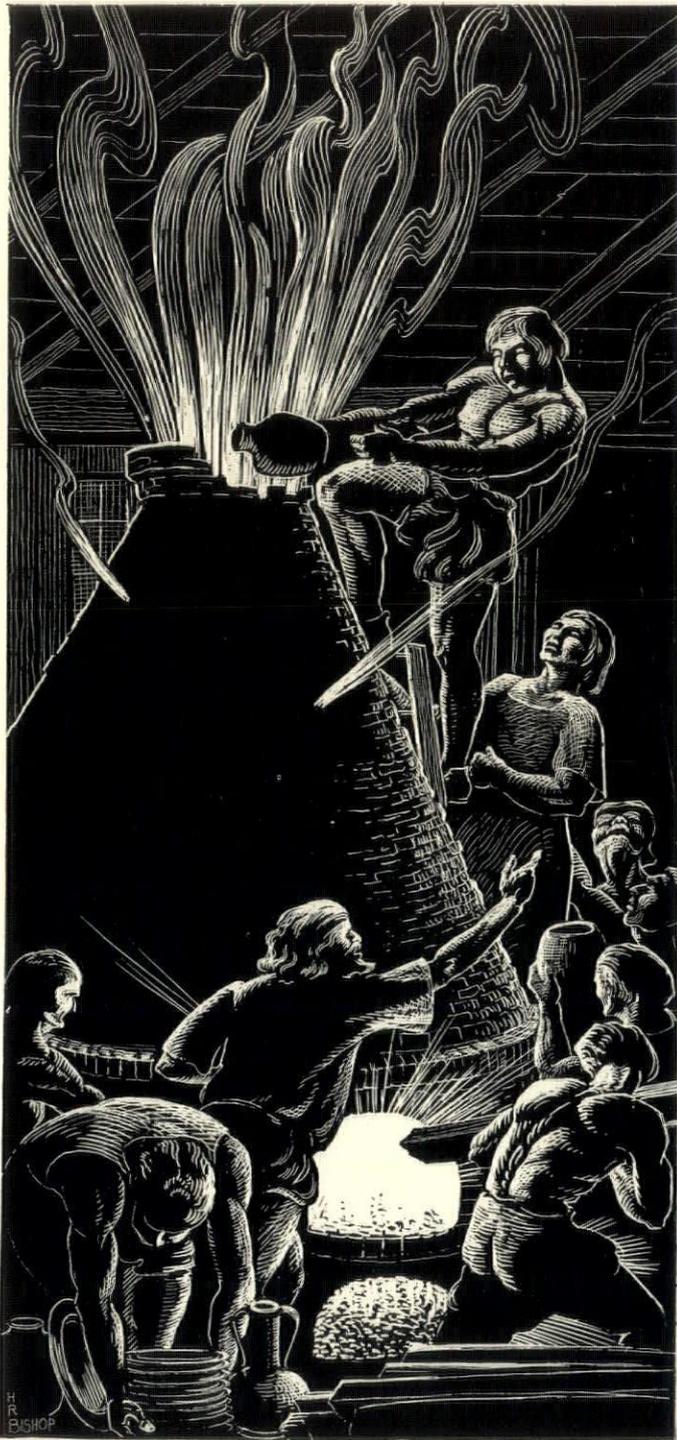
As the months passed in study and research, as the atmosphere of the shop became more familiar and the various techniques were gradually learned and used to control design instead of being tortured into the execution of designs conceived without this intimate knowledge, that attitude which had seemed strange at first was absorbed and accepted. After this mental change had taken place and was consciously recognized, and the months stretched out into years, a research was started to discover whether any historical basis existed for the feeling of the craftsman toward the architect or whether the writer had been subjected to some sort of hypnotic influence. The result of the investigation is here presented in its essential features.

Any discussion or investigation of craftsmanship inevitably leads to the consideration of the medieval guilds and the achievements of masters in many arts which once were held to be on an equal footing with architecture, painting and sculpture. Bashford Dean

states, "Frances I, one of the greatest of art lovers, gave Negroli (armorier) and Titian equal honors, and he ennobled his swordsmith, Serafino de Brescia."

From the twelfth to the fifteenth centuries we find all of the crafts being developed to unsurpassed achievements. Buildings were conceived and carried to completion by the collaboration of several artists, each a master in his field. The masters of construction, whether masonry or carpentry, worked on an equal footing, a *titre égal*, with the masters of carving, forging and glazing. Gothic art still holds its place as the supreme achievement of the race in the harmonious and perfect use of many materials decoratively employed in a single structure. Guilnard has called these artists who collaborated with the designers of construction the *Maitre Ornamentistes*.

LEAVING all of this behind us and skipping several centuries we arrive at the latter part of the nineteenth century. Craftsmanship had become a thing of the past, "art" was a term limited to painters, sculptors and architects. The craftsman had degenerated to a workman. The architecture of this period affords, as we all know, the worst examples of creative art which have ever been perpetrated. As a living art it no longer existed, so that when animation began to show itself in the nineties it took the form of "revivals" and the most admired architect was the one who was the most learned archeologist, the most painstaking student of the past. The craftsman movements started by Rosetti, Morris



PERSEUS holding the head of Medusa, Cellini's famous bronze, would have failed in its casting through lack of metal had the designer not risen from a sick bed and, through his knowledge of metals, used family cooking utensils to supply the lack

and others in England had but little effect on architecture and they had taken the same attitude of "revival" of former mannerisms.

The problem of discovering what has happened might be described as one of differential calculus. We find a maximum in the high Gothic and a minimum in the late nineteenth century. The change was gradual from high to low, but if we can fix the point at which the influence causing this change becomes recognizable, then we shall be able to explain the attitude of the artist-craftsman

By

HARRISON GILL

*Architect and Director
of design and craftsmanship
Wm. H. Jackson Company*

to the architect today. Seldom has this attitude been openly expressed by the craftsman, because of fear that he might be involved in a reaction which would result in loss of work or economic pressure.

In tracing the history of the practice of architecture as distinguished from the history of buildings, we immediately find ourselves in a field which has been but poorly explored. So many discussions become involved in the definition of terms that we will not try to trace the word "architect" as it has appeared, disappeared and reappeared in architectural history. What is far more important is how buildings have come into existence as we know them and admire them.

The original meaning of the word "architect" has long since been lost sight of; it was "chief carpenter" or "master craftsman." The modern profession of architecture had no counterpart in ancient Babylonia, Assyria, Egypt, Greece or throughout the middle ages. During the period preceding the Renaissance the various collaborating artists were coordinated and employed by a financial agent, sometimes called the bursar, who was in no sense an artist or designer himself, though he may often have been a man of discriminating taste.

THROUGHOUT the ages when architecture reached its most noble forms, the various masters worked together in harmony with a common heritage and tradition. Each knew intimately the characteristics of his materials and the tools with which they were formed. This condition brought forth the Gothic cathedral, just as nearly two thousand years before the collaboration of Ictinus and Phidias, with others who left indications of their individuality, had created the Parthenon.

All architectural work up to the time of the Roman empire was primarily a matter of craftsmanship, that is, design was controlled by materials and the structural problems which gave expression and concrete realization to the requirements of the community. But as soon as the early Etruscan traditions came in contact with the motives of Greek architecture we find two influences running a parallel course. The Roman architect, as an engineer, developed the arch, semi-circular vaulting and the monolithic dome, whereas in his capacity as artist and decorator he covered his walls with a veneer of mouldings and orders which had little or no relation to the structural basis. This attitude has been strikingly paralleled by American architecture since the introduction of steel and reinforced concrete. It took the fall of the Roman Empire to overcome the illogical nature of their design. The building art which developed in Europe from the sixth to the fifteenth centuries was a logical development throughout and, fundamentally, was far more akin to Grecian art than the Roman had been.

No great architecture has ever been created by the effort of a single mind

The beginning of the Renaissance in Italy was imbued with the same feeling for craftsmanship that for centuries had pervaded the work of more northern lands. Classic art had always been a familiar thing to the Italian, even though it was neglected and ignored. Such men as Ghiberti, Cellini and Michael Angelo were craftsmen before they were designers. But as they drew their inspiration from Rome, naturally they fell into the attitude of designing superficially. Drawing became more important than materials. Draftsmanship supplanted craftsmanship.

Slowly the position of the master ornamentalist, who had always been able to draw as well as work with other tools, was subordinated to the authority of men who could only draw. The development of new forms languished, the copying and reassembling of old forms and motives consumed the energy of the designers. This attitude tended to reduce the worker to the status of a mechanic who merely executed the designs of others. Thus started the stagnation which resulted during the nineteenth century. The last flower of a disappearing craftsmanship is to be found in the Rococco, which was the final effort to create original work.

AS the eighteenth century drew to a close and formal, restrained classicism gained the ascendancy, sculpture and painting became divorced from architecture; the other crafts which were, perhaps, more dependent on building for their existence, finally disappeared. The metal worker, the glass painter, the plasterer, the cabinet maker were no longer artists. Men of creative ability found no attraction in these fields.

When Sir Christopher Wren, as Crown Surveyor, designed buildings for the Stuarts, we find the metal work

being done by Tijou, who had no direct contact with the "architect" as far as the records show. At this time lead work and painted glass were already dead arts. The school of smiths influenced by Tijou lasted a little longer. Cabinet makers and wood carvers continued to flourish for some time and culminated with Chippendale. In each case, as the growing profession of architecture encroached on the design of the crafts, the quality and originality of the work deteriorated. The final supremacy of the architect in all fields of design was attained by Robert Adam. From this point onward there is not much to be said for English architecture or decorative art. The Victorian era was quite obviously the only logical conclusion.

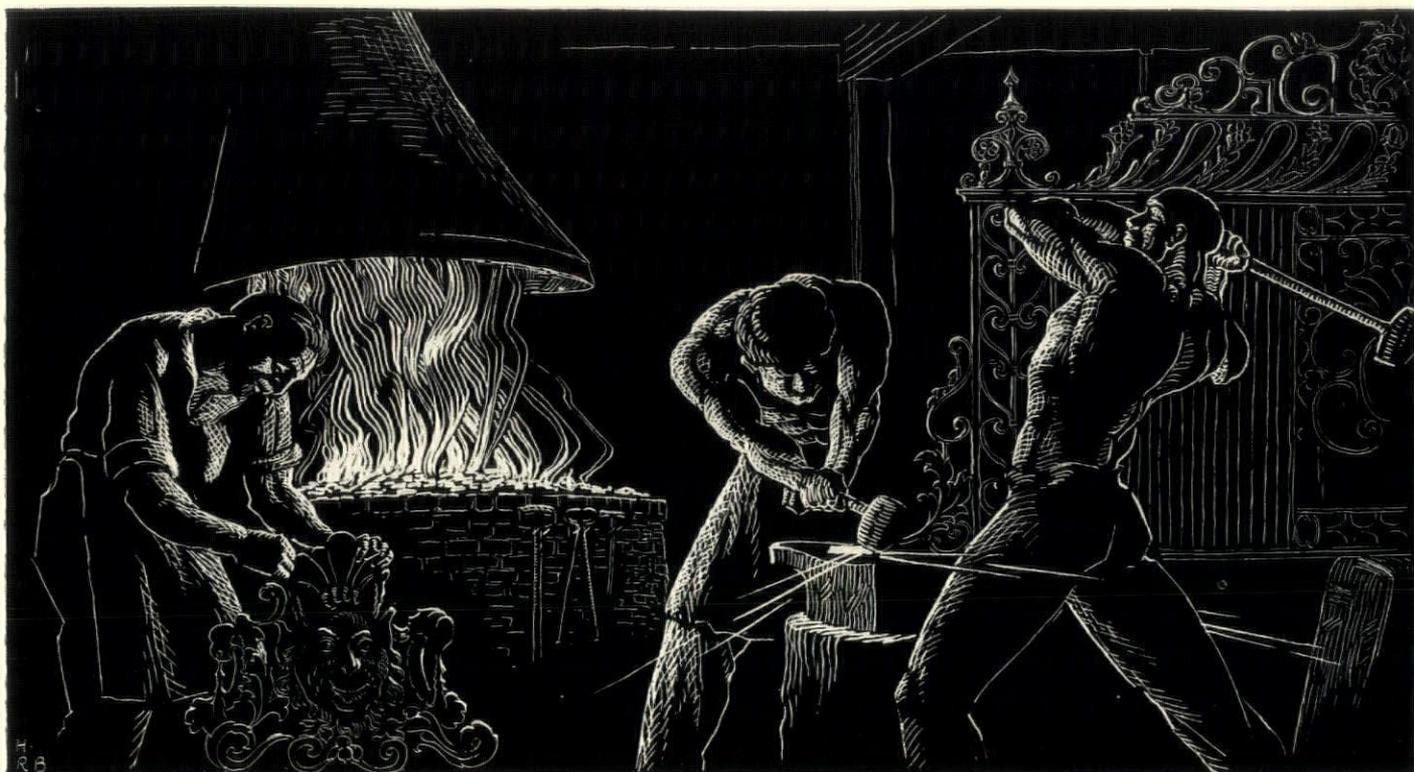
IN America we find our Colonial domestic architecture being developed by carpenters and other craftsmen. All of the work of the early period was of this nature, and whatever originality may be found in early American work can only be attributed to the artistic ability and creative imagination of these "workmen." Our first architects were amateurs, such as Thomas Jefferson. A few European trained architects were imported and thus was launched the profession in America. We all know what it accomplished from 1820 to 1890.

This "jack-of-all-trades" type of architectural practice is the reason for the attitude of the few craftsmen we have today. Every student who has explored the history of design has come to the same conclusion; some have but sensed it superficially, some have seen it clearly, and others, particularly those practicing the decorative arts, have felt it bitterly. It is the logical realization of the fact that no great architecture has ever been created by the effort of a single mind which has caused the

GLAZED COLORS for terra cotta were developed to be used on the buildings of Florence by a sculptor who knew his materials
—Luca Della Robbia



Drawings
by
HORACE
RAYMOND
BISHOP



IRONWORK ON WREN'S BUILDINGS was designed and executed by Jean Tijou, an embosser and designer who revived the smithcraft of England through his sound knowledge of the material with which he worked

extreme modernist to forego all ornamentation until such time as a new craftsmanship is developed which will be an integral part of our age.

Gerald K. Geerlings, in his "Metal Crafts in Architecture," states: ". . . wrought iron . . . has been used almost continuously from the twelfth century . . . and the greatest achievements were wrought by the craftsmen themselves . . ."; and again— ". . . the best (bronze) works were created by a collaboration of sculptor or designer with the founder . . . During the eighteenth and nineteenth centuries no architectural or sculptural bronze of importance was executed."

In referring to lead work the same author says: "After the beginning of the seventeenth century leader heads became less interesting. The architect played a more important role by dictating design, and as has happened in all metal crafts at all times when such has been the case, the natural qualities of the material were lost sight of. . . . Mechanical skill took precedence over beauty of design. . . ." In discussing the same material Lawrence Weaver says in his "English Lead-work"; ". . . it sounds like attenuated paradox to speak of lead as a novel material. As, however, lead was almost forgotten during the nineteenth century, it offers problems which are virtually new. . . ."

THE most scathing and, perhaps, bitter description is found in "English Ironwork," by J. Starkie-Gardner published in 1911: ". . . when professional architecture became established with Mansard in France and Wren in England, that is to say when so much professional work was thrust *ex officio* on them as Crown Surveyors

that their whole time became absorbed in it, they did not break with custom, but continued an almost free hand to the skilled artists and craftsmen who were their contemporaries and assistants. During Wren's career the designs for iron work were left wholly to the executants. . . . Gibbs' *Book of Architecture*, published in 1728, is the first work by an architect comprising designs for wrought iron work. . . . Viewing these plates one feels . . . the doom of smithcraft as a fine art. . . . Iron work not designed by themselves was henceforth rigorously excluded from stately buildings that architects were erecting . . . the great smiths who succeeded Tijou left no equally important successors.

"THE tendency of the architect to monopolize all designing; not only of the structure, but of its decoration and contents increased progressively, culminating in the brothers Adam . . . By them the *maitre ornemaniste* or professional craftsman and designer, the very originators of all applied design, were finally suppressed and squeezed out of existence, the result being, within a few decades, the utter collapse of all art in the early Victorian days. . . . The architect alone, among professional men, seeks to become all-embracing and would monopolize every branch of design. . . . Yet no profession has perhaps ever had less cause to boast its progress than modern architecture, for it has not yet even equalled . . . the results achieved by . . . master minds in association with capable and zealous craftsmen. Whenever and wherever Art reached its noblest expression in the past, there were master craftsmen and *maitre ornemanistes* held in honor and esteem."

As It Looks

What Will Seattle Do?

THE Kehrer Lumber Company, Seattle, has appointed W. V. Mackay & Company, advertising agency of that city, to direct a territorial newspaper and direct-mail advertising campaign featuring its house plans." So reads a news item in the December 6 issue of *Printers' Ink*, an advertising journal. The question is, what are Seattle architects going to do to meet this type of competition?

House Organ Favors Architect

MATERIAL producers haven't accorded the architect, generally, the appreciation that is due him. He can become a tremendous factor in insuring better building and cleaner competition." So states an editorial in the December issue of "Building Economy," house organ of the Common Brick Manufacturers' Association. This idea, aggressively repeated by THE AMERICAN ARCHITECT, needs the widest publicity for the good of the general public as well as of the profession itself.

Apple Sellers and Salesmanship

ONE of the most astonishing things about the selling of apples by the unemployed is the wide variation in efficiency in even this simple job. A box of apples costs wholesale, \$2.25 in New York City. Any man with \$2.25 can take a box of apples to any corner, sell them, and pocket the entire profit. Yet in spite of the utter simplicity of this, employers have arisen among the unemployed. One unemployed has eight other "unemployed" working for him, covering the corners on adjacent blocks. All the boss does is to keep other vendors away from the territory and pocket the profits.

Think and Talk Prosperity

HOUSE organs often contain pithy items that make us think. A recent copy of "Business Today" contained the following good advice: "Conditions are improving—but prosperity rarely breaks out in a trot. If we are to hurry it, we must have patience, faith and be willing to do our share of work. Turn a deaf ear to panic praters—think and talk prosperity."

Newspaper Editorials

ARE the newspaper editors giving more attention to architecture in their editorial pages or is it but an impression? Selected at random: On November 10, 1930, the editor of the *New York World* commented upon the architecture of hot-dog stands. Five days later the *New York Sun*, commenting upon the "Triumph of the Setback," referred to the new Empire State Building as "unquestionably the finest example we have of the type of architecture called 'the setback.'" And a few days later the *New York American* printed an editorial

based upon the awarding of a gold medal to Cass Gilbert by the Society of Arts and Sciences. This editorial comments particularly upon the design of the Woolworth Building and states in part: "The Woolworth, with its soaring lines and anatomy of steel girders, is as modern as this minute. . . . Modern art is all very well. But the lesson the Woolworth teaches is that the architect, or any other artist, is only cheating himself when he disdains all that man has done in a thousand years. Architecture should be a flowering of all that man has felt in a million yesterdays." Editorials of this nature are of great benefit in focusing the attention of the public upon architecture that is seen daily by thousands of persons.

Apartments of Flexible Size

WHY shouldn't an apartment house planned with two and three room apartments take care of the family which desires five or six rooms? There is, in Westchester County, New York, an owner clever enough to have had his apartments so planned that any two or three small apartments can be thrown together into one large suite, merely by cutting a door through certain predetermined partitions. His leases on such apartments are all for long terms and the tenants are of the most desirable class.

Architects Must Sell Themselves

AS President of the Tennessee Chapter of the A.I.A., A. B. Baumann, Jr., said, in an address to the Chapter, "Selling architecture to the man in the street is not all, for we must first sell ourselves. To do this means a complete understanding of our functions as architects and a better insight into the business side of architecture. We should above all know the costs of our drafting and overhead as well as readjust our charges in an established form that will permit us to do our work well, and at the end show a profit instead of a loss." This is a sane, logical view of the problem confronting architects everywhere today.

Architect Writes for House Organ

IN an increasingly large number of cases, manufacturers are showing a realization of the fact that the viewpoint of the architect must be taken into consideration, for his is that of an expert from the user's point of view. It is rare, though, for a manufacturer to appreciate the value of the architect as a requested contributor to house organs. So it is interesting to note that D. Allen Wright, a Detroit architect, wrote the leading article in a recent issue of the house organ of the National Building Units Corp. The editor's note states, "It is our belief that the National Building Units News should contain, from time to time, articles written from the standpoint of the user, rather than the producer, of Straud Cinder Units." More manufacturers could, with profit, do likewise.

to the Editors . . .

Doctor's Advice Respected

WHY is a doctor's advice respected almost universally, whereas architects, as a whole, do not enjoy similar confidence? Quite probably because the public is well aware of the fact that the physician has received from four to seven years of intensive training at a medical school; that he has studied every branch of medicine including chemistry, biology, anatomy, and countless others; that he has probably spent at least two years as a hospital interne; and, in addition, has passed a series of rigid State Board examinations. The public knows that, as well as what a doctor is supposed to do. But it has no correspondingly comprehensive idea of the training—and functions—of the architect. Until it is informed, it cannot be expected to assume any attitude other than what it has.

Safeguarding Originality

BELIEVE it or not, a recent cartoon by Ripley recalls the story of how Ivan the Terrible, in the sixteenth century, made sure that Kern, architect of the Cathedral of St. Basil in Moscow, would never again be able to construct a similar church. The Czar had the architect's eyes put out after the cathedral was completed. A horrible idea to think about, but an effective one. An architect's eyes are practically his biggest assets.

Is Barbering a Profession?

THE Master Barbers of America tried to have their craft listed as a profession in the census, instead of under "domestic and personal services." They cited a Kansas Supreme Court decision, which reads: "Like the surgeon and dentist, when the barber moves he attracts to himself those having confidence in his ability, and the greater his professional skill, the more difficult it is to alienate from him those to whom his services have given satisfaction." Which recalls, by contrast, the reply of P. D. Armour, founder of the packing business which bears his name, when asked what he called himself. "Why, I am a butcher, of course." Is this desire to be numbered among the professions merely an inferiority complex?

Builder Shows Sound Sense

A CIRCULAR letter is being sent out over the signature of H. C. Turner, president Turner Construction Company, in which he states, "Not since 1922 have we constructed buildings at such low prices as during this year, and in my judgment, the moment it becomes clear that business is improving depression prices for materials will be withdrawn and the cost of buildings will increase. There can be no better time than the present to consider the advantages of a new building—how much will it cost, when should it be started and how long will it take to build. These facts are essential for a sound decision. In 1921 we made similar studies for a

number of companies. Some benefited thereby. Write or telephone me. We shall be glad to assist you." This letter is one reason why the Turner Construction Company is an important organization—it knows how to sell its services. That same sense of salesmanship is urgently needed by the architectural profession.

Paging a Mayor

IS there any record of an architect of a municipal building being later elected by the people to "sit" in a building of his own conception? This query is raised by a reader of THE AMERICAN ARCHITECT. It would be interesting to have this question answered. If a mayor-architect exists will he please make himself known? Incidentally it would be interesting to learn whether, having "sat" in the building, he changed his conception of how a municipal building should be planned.

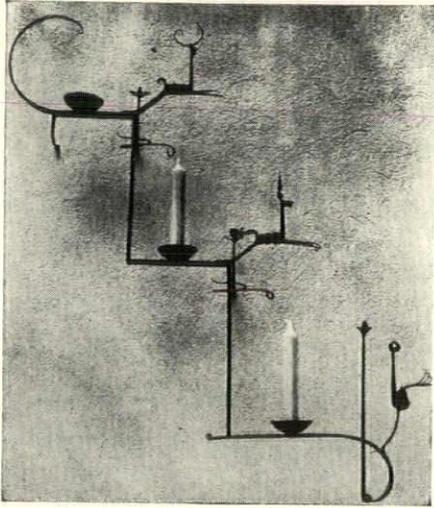
Functionalism in England

FUNCTIONALISM as a topic of conversation among architects receives as much attention in England as in the United States. Discussion of this live topic develops many curious points of view. According to an account of a discussion of "function" in architecture held at the Architecture Club in London, it developed that one speaker had a passionate hatred of old oak. "He was sure that whatever a 'functional' building should or should not be, it must at least be entirely devoid of old oak, that worst of all symbols of architectural sentimentality." Another speaker thought "that the people who will really be able to appreciate 'functional' architecture 'are now busy with their bottles.'"

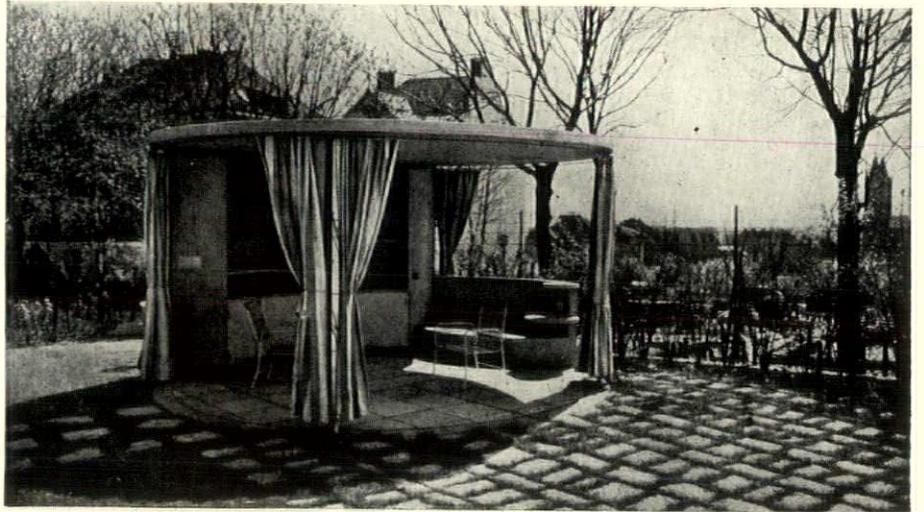
Oklahoma City Rates Houses

OKLAHOMA CITY has proved that it is easy to raise the quality of construction in small houses through control of financing. Less than a year ago, building and loan associations of that city formed the Better Homes Construction Bureau and announced that no new construction would be financed which had not been supervised and inspected by this bureau. Bureau inspectors present a detailed report from which is determined the classification of the house. There are three such classifications, class A permitting loans up to 75 per cent of the appraised value, class B up to 50 per cent, and class C up to 30 per cent. In less than four months, class A houses increased from 6 per cent to 33 per cent, class B from 17 per cent to 49 per cent, and class C decreased from 16 per cent to 1 per cent. The success of the Bureau was such that other loan agencies quickly joined in the work so that now it is practically impossible to get a loan on houses not supervised by the Bureau. An unforeseen by-product of the work of the Bureau has been increased mortgage funds, for confidence in this much abused branch of the building industry has been restored in Oklahoma City.

...and ABROAD



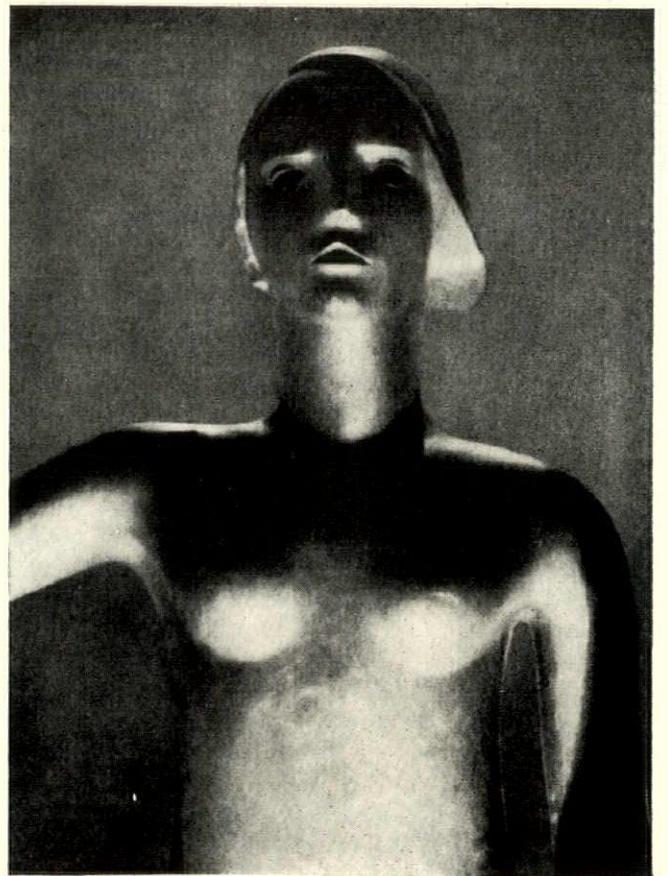
WALL CANDELABRA designed by Siegfried Prutz in iron. From "Diekunst," October, 1930



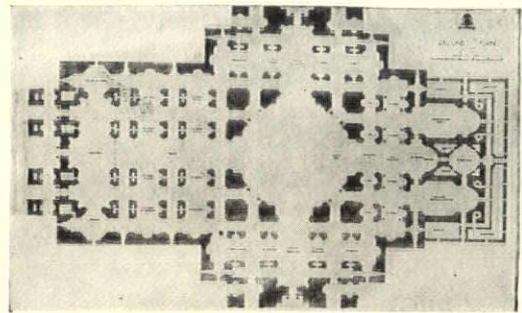
CURTAINS make this tea house in Vienna practical to use in all kinds of weather. From "Modern Bauformen" for October, 1930



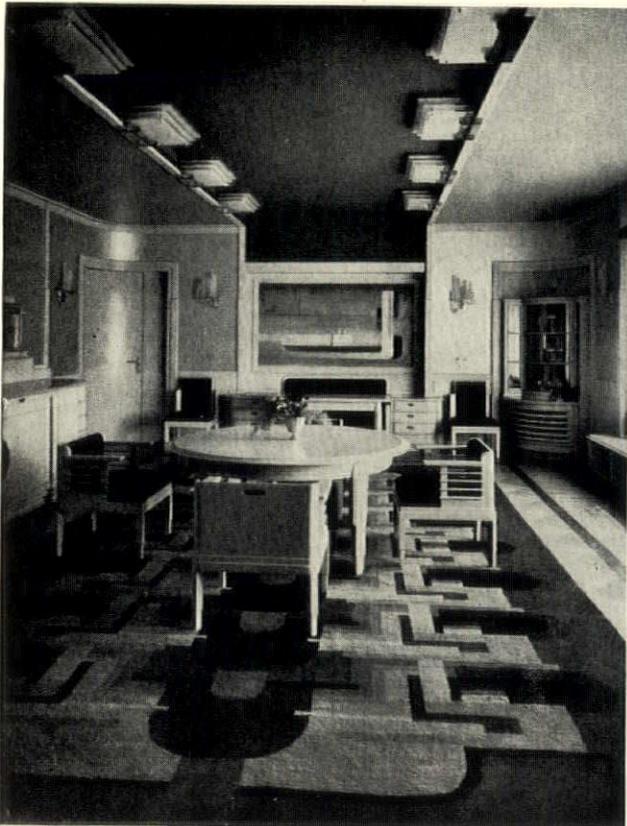
KNEELING WOMAN, by Joseph Csaky. From "Diekunst" for November, 1930



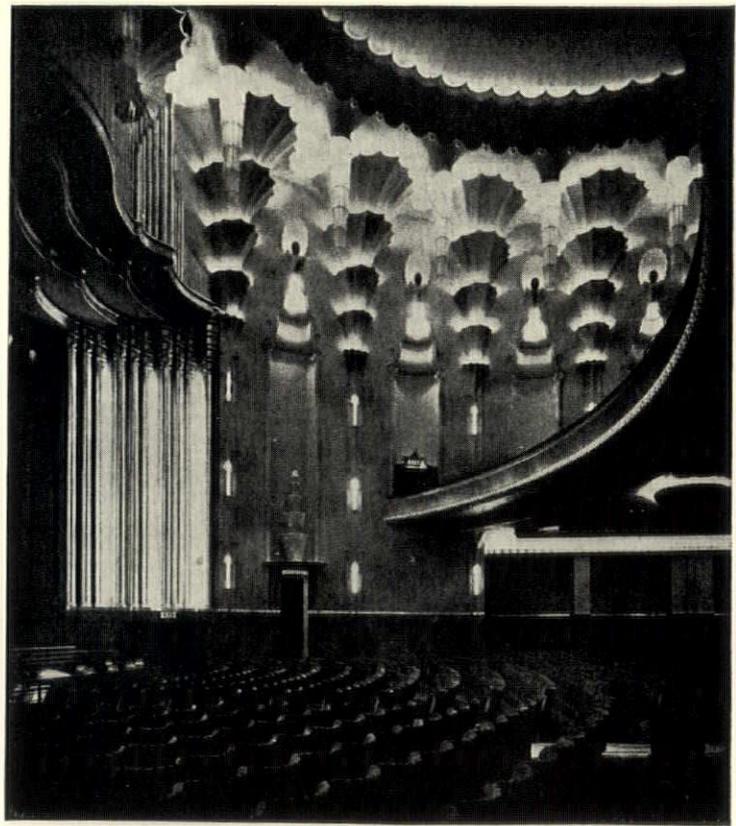
BRONZE DETAIL, by Hermann Brachert. From "Diekunst" for October, 1930



SIR EDWIN LUTYENS designs a Roman Catholic Cathedral for Liverpool. This preliminary study indicates an unusual plan that expresses a bold, impressive mass. Selected from "The Builder" of London, issue of September 19, 1930

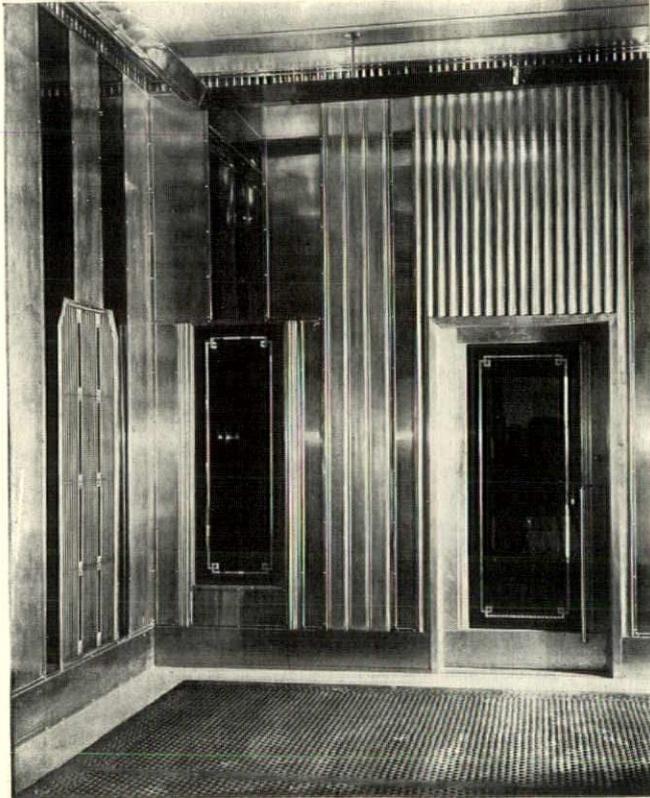


THILO SCHODER based the design of this modern dining room on the use of straight and curved lines in both architecture and furnishings. From "Diekunst," November, 1930



"CHAMPAGNE, a slightly sweet champagne," is the descriptive comment on the New Victoria Theatre, London, made in "The Architect & Building News," issue of October 24, 1930. W. E. Trent and E. Wamsley Lewis, architects

WHAT ARCHITECTS

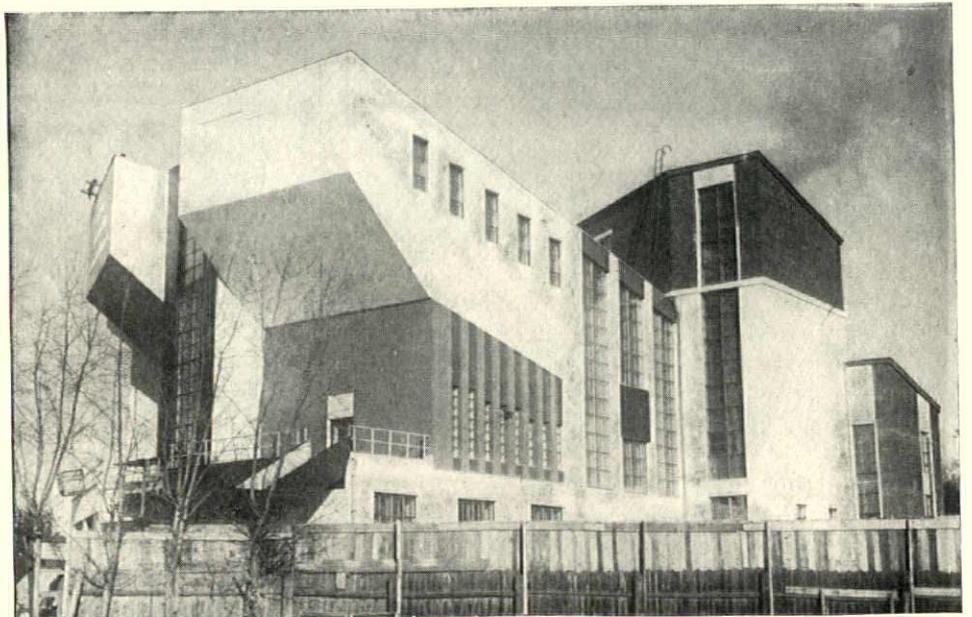


DARK STEEL-BLUE GLASS and Allegheny metalware combined in contrasting panels in the La Salle-Wacker Building, Chicago, at a cost stated to be slightly less than marble. Holabird & Root and Rebori & Wentworth, architects

REMOVAL of the speed limit on elevators, two-car elevator trains, and two elevators in each shaft are contemplated in the new elevator code proposed in connection with the revision of the building code of New York City, according to recent newspaper reports.

STEAMBOAT ARCHITECTURE

Obviously inspired by the steamboat theories of Europe, yet expressing frankly the possibilities of modern cantilevered construction. A clubhouse for municipal employes, on the outskirts of Moscow



New York to Remove Speed Limit on Elevators

"Material Prices Can Go No Lower," Says Laurence

New Jersey A. I. A. Uses Radio

"MANY of us believe that our future is tied closely to that of the architects and that our countryside deserves more attractive houses." So states a real estate man, R. Eugene Curry, associated with the Rye-Harrison office of Prince & Ripley, in a letter to the organ of the Westchester County Society of Architects. He continues, "If you as a group reach the interest and attention of real estate salesmen, show us how houses may be adapted to sites, how privacy may be secured by placing, what exposures are best, how to conceal garage entrances, it will be a double blessing. We will be able to speak with more intelligence and show the client that an architect is necessary to get the full benefit of every plot."

RADIO talks sponsored by the New Jersey Chapter of the American Institute of Architects are being given over station WOR at weekly intervals. The talks started on December 4 with a general talk by Jas. O. Betelle. On December 11, Gilbert Higby discussed the selection and purchase of a site. On December 18th Prof. S. W. Morgan talked about "What Style for My Home?" The next talk will be given by Wm. O. Ludlow on January 8, his subject being "The Owner's Part in Designing His House." On January 15, C. V. R.

ARE TALKING ABOUT

Future of Real Estate Men Depends On
Architects

"Airports Influence Real Estate Values,"
Says Pettit

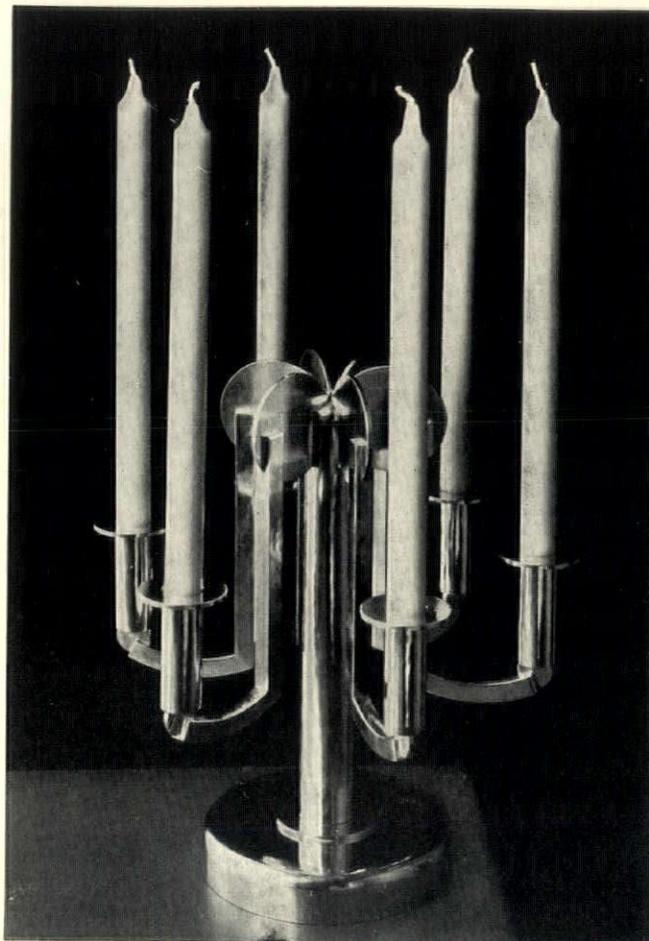
First Windowless Store

Bogert will discuss "Interior Design and Mechanical Equipment," and the final talk will be given on January 22 by Arthur Holmes, his subject being "Preparing the Budget for the New Home." Broadcasting commences at 2.50 P.M.

A WINDOWLESS retail store has been opened in Washington, D. C., by Parker-Bridget. The only opening to the street is the door. This is said to be the first store in this country intentionally constructed without windows of any kind. The store, which has been in operation for about three months, seems to please its customers and the owners report less soiled merchandise, which is an important advantage in the days of soot-laden air.

"WITHIN the next decade I believe that aviation is going to have as revolutionary an effect on land values as had the automobile during the past twenty years," predicts Walter R. Pettit of A. S. Pettit & Sons, a New York real estate firm. "That this is no unsubstantial belief is evidenced by the fact that wherever airports have been built to date, there has been noted a distinct upward trend in real estate values."

"MATERIAL prices today are at the lowest point they are likely to reach," states F. S. Laurence, executive secretary of the Producers' Council. "Representing, as they do, about sixty per cent of the cost of construction, the opportunity exists now for build-



MODERN GERMAN silver-work. A candlestick designed and executed by H. T. Wilm, and exhibited at the Museum of Fine Arts, Boston, as part of an exhibition prepared by the American Federation of Fine Arts, New York

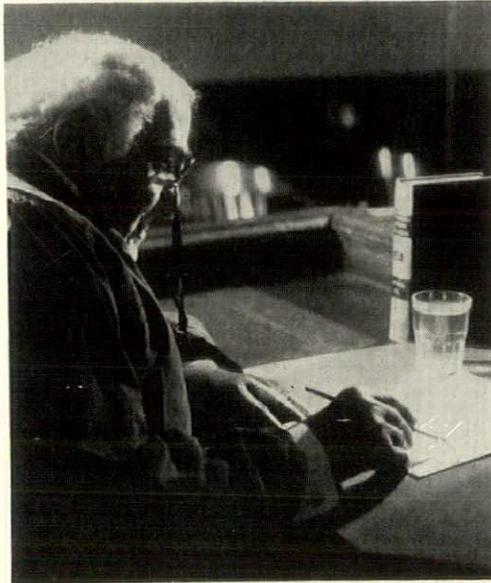
ing to go ahead more economically than if deferred until later, when construction has resumed its full normal swing and demand for material forces the prices up. . . Architects and producers of materials hope, by conferring together, to arrive at methods in the development and use of materials which (Continued on page 96)



SILVER WITH EBONY HANDLES

A coffee set designed by Aage Weimar and executed by Evald Nielsen. Exhibited at the Museum of Fine Arts, Boston, as part of an exhibition prepared by the American Federation of Fine Arts

THE ARCH COLLAPSED who was to blame?



By
GEORGE F.
KAISER, LL.B.

WHAT HE DID. Both Drake and Dunham had been well and favorably known as architects for many years. They were often called upon to draw plans and specifications for motion picture theatres and the like, even though the buildings were to be erected in distant cities. When the Central Motion Picture Theatres Co., Inc., sued Drake and Dunham for damages on a claim of furnishing faulty and defective plans and specifications, the architects investigated the claim carefully. When attempting to advise their client of the result of this investigation, the client refused to listen and pressed his suit to trial.

WHY HE DID IT. It appeared at the trial that upon completion of the building, an archway provided collapsed and damaged other portions of the building. Of course the contractor claimed that the plans and

specifications were faulty and the owners listened because he was at hand while the architects were some distance away.

WHY HE SHOULDN'T HAVE DONE IT. The courts have held in similar cases that it is incumbent upon the owner claiming damages, where the architect merely prepared plans and specifications, to show that there was a substantial compliance with the plans and specifications. When a variance appears involving the integrity of the mode of construction of the affected part, and it is so far material that it may have been the direct cause of the injury complained of, the architect is not liable. Thus where it appeared that the plans and specifications called for stone skewbacks, and the utility and necessity of these supports for the arch was unquestioned, their omission would defeat a recovery for the owner against the architect.

Rights of Employee Under Commission Arrangement

WHY HE DID IT. It appeared at the trial that into an agreement in 1925 it was stipulated that Greene should take charge of Dolan's branch office in another city, that he was to supervise all the work entrusted to him, and that he was to prepare all necessary plans and specifications. For these services Greene was to receive a salary and a ten per cent commission on all business which was secured by the branch office. The agreement was renewed yearly until 1929, when it was terminated. At its termination all Greene's salary had been paid to date. Dolan conceded that about \$200.00 in commissions were due Greene, but Greene demanded over \$4,000.00 in commissions, claiming that amount represented ten per cent of the net profits of the branch office for the previous year. When Dolan refused to pay the amount that Greene demanded, the latter instituted suit.

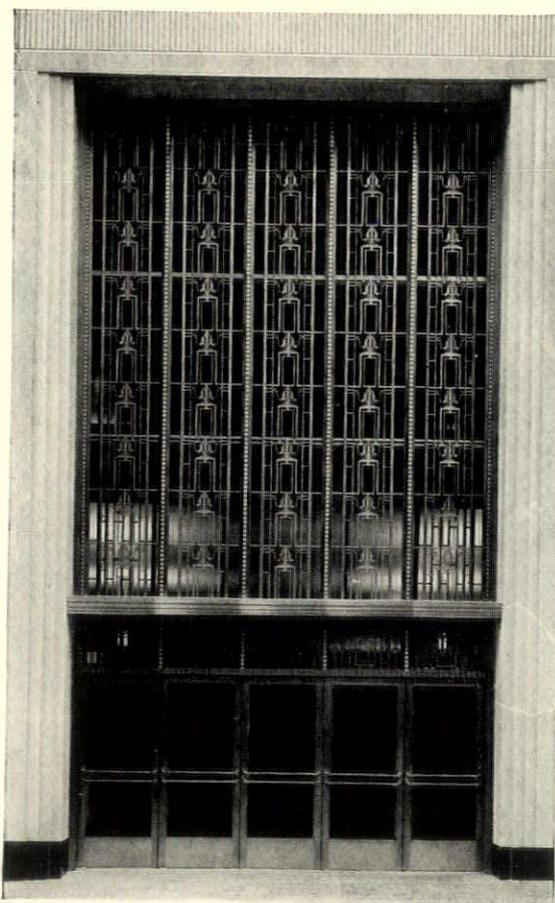
WHY HE DID IT. Greene claimed he was entitled

to the commissions sued for, including a commission of over \$3,000.00 on a high school contract, as the plans and specifications had been prepared by the branch office. He did not supervise the work, but severed his connection before the contract was let.

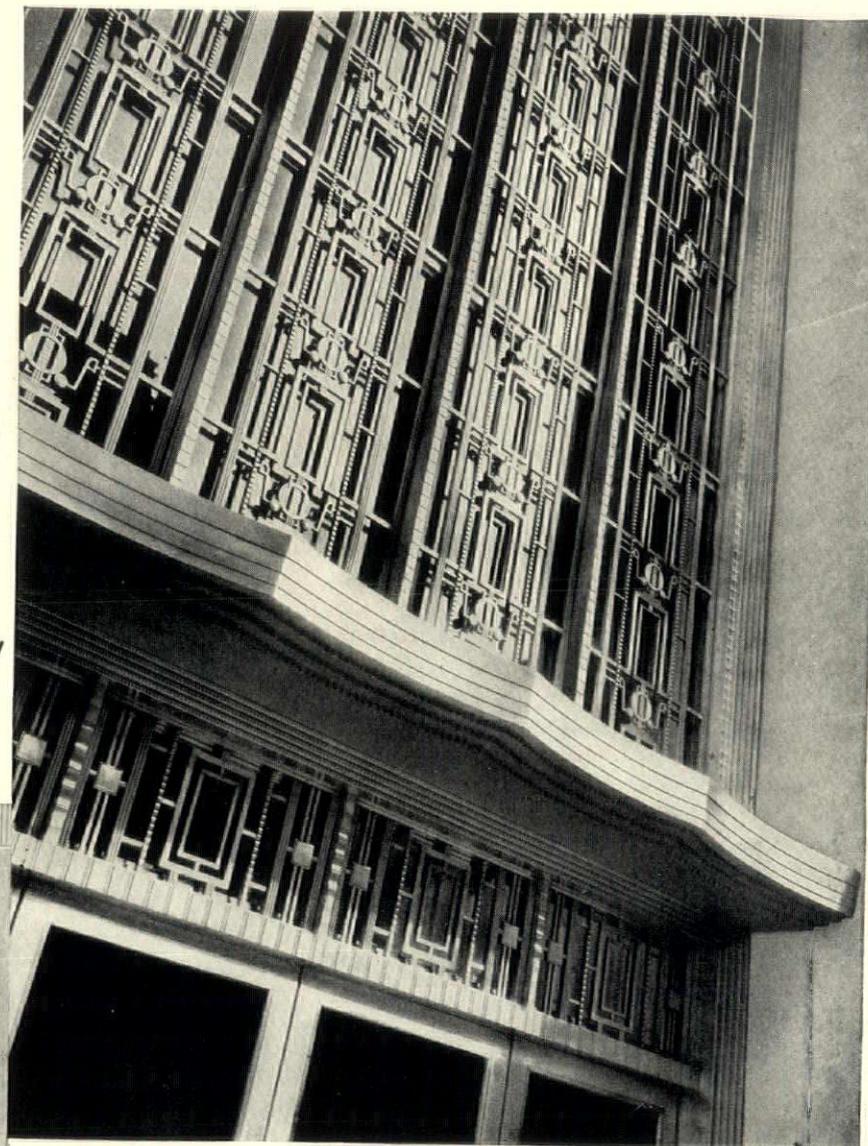
WHY HE SHOULDN'T HAVE DONE IT. The court, in deciding that Greene was not entitled to commissions on the high school job, pointed out that Dolan had been selected as architect at a meeting of the local school board, and Greene had nothing to do with securing the contract. The court also decided that as Greene's duties under his contract were clearly defined so as to include the preparation of all necessary plans and specifications and the supervising of all work in the vicinity of the branch office, he did not perform any service entitling him to a commission on the high school contract, but was merely entitled to the small amount of commissions on contracts actually procured by him.

James B. Newman
of the Firm of Ely Jacques Kahn
describes

"AN ENTRANCE OF DISTINCTION"



PHOTOGRAPH BY SIGURD FISCHER



"The main entrance of the new Bonwit Teller Store was designed to fit an existing building of distinction, to add a note of quiet refinement to the facade indicative of the store within, and to fulfill the utilitarian purpose of throwing a great deal of light across a lofty lobby into the front of the first and second stories. The general size and shape were approximately determined by existing conditions and the light factor led to the general open quality.

"The time of delivery was of vital importance, setting more than any other factor the opening date of the store. The entire inner and outer entrance metal work was installed by the General Bronze Company five days ahead of schedule, while at the same time their craftsmen were kept out of the way of the other trades."

The Metal on the Bonwit Teller Store Entrance is Nickel Silver
Architects: The Firm of Ely Jacques Kahn. Contractors: Cauldwell & Wingate.

"DISTINCTIVE PRODUCTIONS IN ALL METALS"

GENERAL BRONZE CORPORATION

480 HANCOCK STREET · LONG ISLAND CITY, N. Y.

THE READERS

Have a Word to Say

• PROOF THAT PRIVATE ARCHITECTS ARE BETTER QUALIFIED THAN GOVERNMENT ARCHITECTS

The Secretary of the West Texas Chapter, A.I.A., wrote the following letter to Lance Edward Gowen, secretary of the Washington State Chapter, A.I.A., and sent copies to President Hoover, Robert Kohn, Congressman Wurzbach, Congressman Garner, the president of the National Chamber of Commerce, and *THE AMERICAN ARCHITECT*:

In reply to your letter of October 15th, the West Texas Chapter of the American Institute of Architects feels that you would be interested in the construction now under way at Randolph Field, Texas, and the part taken in this work by San Antonio architects.

This field is to be, as you may know, the chief aviation school of the U. S. Army and is a project of considerable magnitude, housing ultimately a personnel of about five thousand.

The Quartermaster Corps of the Army started the preparation of plans for this work. Seemingly it was beyond their capacity. Prosecution of the work was lagging, due to waiting for plans and to further delays caused by the necessary revision of plans to come within the appropriations.

To expedite the work and in accordance with the recommendation of President Hoover, eleven San Antonio architects were selected and commissioned to prepare plans for some of the buildings. This in the aggregate amounted to a large percentage of the whole. There was no appropriation for one of these jobs and figures have not as yet been taken on one other. Of the remaining nine all but two were let on first opening of bids and came within the appropriation. Of these two one exceeded the appropriation and while the other came within the appropriation, the architects were instructed to revise plans for increased size of building. This was let on second opening and came within the appropriation.

In mentioning this we do not intend to cast any reflections on the Quartermaster Corps. We have found that in this Corps there are men of ability who are well qualified for construction work. We do, however, feel it to be an indictment of what up to recently has been the practice of the U. S. Government to entrust to one or more departments of the Government in Washington, the architectural work, in its entirety, of government construction throughout the nation.

It is manifestly unfair to assume that such an isolated department can design the work as well and spend the national funds as intelligently as the leading architects in the different localities who not only have made it their life work to gain their architectural knowledge and experience but who are also more familiar with local conditions, such as climate, character of foundations, available materials, methods, etc. This also applies to the consulting engineers, both structural and mechanical, who work in conjunction with the architects. In select-

ing architects the government can readily ascertain their qualifications for any particular class of work.

It may be argued that competent local architects are not everywhere available. This in some cases may still be true, but it is rapidly ceasing to be a fact. An examination of the work published in architectural magazines in recent years should be convincing.

Appended you will find a tabulation to date of the work contracted for at Randolph Field. This was prepared by the San Antonio Builders Exchange. Although it may possibly contain some minor inaccuracies, it can be considered on the whole as essentially correct. It is submitted for your examination without further comment.—*Robert M. Ayres, Secretary, West Texas Chapter, A.I.A.*

The tabulation mentioned is a list of buildings at Randolph Field and the history of the opening of bids. The significant thing is that when the drawings were prepared by the Quartermasters' Department bids were rejected from one to three times on most of the buildings, whereas when drawings were prepared by local architects, the first opening of bids resulted in awarding of contracts in the great majority of cases and in no case was a third opening necessary. Thus not only money but considerable time was saved by employment of local architects.

• WHEN I WORKED FOR CRAM

Editor, THE AMERICAN ARCHITECT:

I think that a period comes in every professional man's life when he wonders whether the office force is working for him or he for the force. Mr. Ferguson, of Cram and Ferguson, used to pin up typewritten statements in the old draughting room at 15 Beacon Street, containing in two deadly columns a concise statement of the income received from various jobs and the amounts paid out to us poor, but unworried, slaves. I earned more money on the famous Bryn Athyn church than either Cram or Ferguson. Of course, Mr. Cram had the highest drafting standards and it meant nothing to him for a beginner to waste two older men's time helping the boy to design a gargoyle at full size. Frank Cleveland, the head designer, might be found doing up a package of important drawings, while the office boy—who later became head designer for Maginnis & Walsh—was reveling with the delightful surprises inherent in mixed washes.

All of this is as it should be. Cathedrals don't mix with time clocks. We repaid Cram occasionally by working all night and far into the next morning to get a rush job out on time. And I am sure that every man and boy, who really got to know him, loved him devotedly.

R. Clipson Sturgis took a dirty crack at Cram only a short time ago in the *Times*. I was all hot and bothered about it, though I haven't laid eyes on my old boss for years. He stated in effect that Cram was no designer, that Goodhue did it all. He was wrong. We draughtsmen thought that *we* did it all! I have never seen the



*Residence of Alexander Barker, Cross River, New York
Henry Corse, Architect*

Inevitable seems the choice of this roof of Brittany Tile to crown the beauty of an English type of house. Equally perfect is the effect when the right tile is used to roof a building of Georgian architecture—or Colonial—or Spanish. Versatile in style, varied in color, tile is the adaptable roofing material of lasting service and changeless beauty. At your request one of our representatives will call; or we will mail you a catalogue.

LUDOWICI - CELADON COMPANY

Makers of IMPERIAL Roofing Tile

New York: 565 Fifth Avenue—CHICAGO: 104 South Michigan Avenue—Washington: 738 Fifteenth Street, N. W.

equal of Mr. Cram as a logical, resourceful draughtsman in his ability to conceive and carry on simultaneously plans, sections, elevations and sensitive details at quarter scale transmitted directly from the most beautiful little thumbnail sketches on the margin of each sheet. Goodhue was a draughtsman, emotional, artistic, unhidebound. He loved bastard styles, because they gave him an opportunity to express his own whimsies. Cram was, and is, a designer with a builder's instinct.

To be sure, he chose to build with stone and timber, and shut his eyes, as far as he could, to modern innovations. But, within the relatively narrow field in which he exploits his genius, he is a master builder who can visualize logically and express that vision on paper with clarity. With the greatest economy of drafting, he would put no more on any one sheet than was absolutely required to show us boys what it was all about. It is an awful temptation, once you have a plan pinned down, to stick at it longer than you should—to worry and fuss about problems that could be solved simply if you have strength of character enough to take the sheet up and work the problem in section or elevation. Cram would keep a half-dozen sheets going at the same time—with thumb tacks strewn all over the floor. He was our admiration and despair.—*Robert Tappan, architect, Forest Hills, L. I., N. Y.*

• GRAFT 1900 YEARS AGO

Editor, THE AMERICAN ARCHITECT:

I thought possibly the following might be of interest to you. It is an extract from "Magic Spades," by R. V. D. Magoffin and E. C. Davis, published by Henry Holt and Company, New York, page twenty-nine.

"***The foundations (podia) of many Roman temples are built of big oblong blocks of tufa. To hold them from shifting, they were keyed together with various sorts of bronze clamps in countersunk holes. When the temple of Castor in the Roman Forum was enlarged in the days of the early empire, a contract was let for furnishing the bronze clamps. Some years ago, when a few layers of the foundation were removed, the clamps were found holding the outside blocks to the next row within, but nowhere else was there a clamp found. The clamp holes were all there, ready and waiting, but they were as empty as they had been for 1,900 years. There must have been a nice little 'graft' arranged between the contractor and the inspector."

This has given many of us in the building game a chuckle.—*Edith G. Shiner, Rahway, N. J.*

• NORTHERN CALIFORNIA CHAPTER THANKS AMERICAN ARCHITECT

Editor, THE AMERICAN ARCHITECT:

I regret that the attention to your letter of September 24th concerning advertising slogans has not been more prompt.

The matter was taken up with the Directors of the Chapter and received their enthusiastic approval.

It was their desire, and I believe yours, that the letter be read at a Chapter meeting. The nature of the program did not permit this to be done at the October meeting and action had to be postponed until our meeting of November 25th.

At that time, the meeting was informed of the effort being made by THE AMERICAN ARCHITECT to induce manufacturers to embody the thought "consult an Architect" in their advertising.

I am pleased to inform you that the suggestion was very favorably received and commented upon by the members. Upon motion which was unanimously carried, the Secretary was instructed to convey to you the Chapter's hearty approval of the scheme and to thank you for the interest and leadership of THE AMERICAN ARCHITECT in promoting the suggestion, which it has so kindly credited to the Northern California Chapter.—*James H. Mitchell, Secretary, Northern California Chapter.*

• EVERY ARCHITECT CAN USE THIS PUBLICITY IDEA

Editor, THE AMERICAN ARCHITECT:

Apropos your publicity campaign to make the architect a better understood professional, may I suggest an addition? This has worked quite well with me.

Write to the local library and tell them how much you appreciate the architectural books and the current architectural magazines in the reading room. Tell them that these mediums are good publicity for the kind of architecture "we would like to see more of in ———."

Let all architects communicate this spirit to the libraries—then to the communities—watch us grow.—*F. William Bang, of the architectural office of Perry, Shaw and Hepburn, Boston.*

• OF COURSE, BUT WHO WILL TELL THIS MAN HOW?

Editor, THE AMERICAN ARCHITECT:

Is it possible to so furnish and decorate an office (real estate and insurance) as to draw trade? If so, I would want the office to express dignity and inspire confidence, and yet avoid an air of extravagance. Any information you can furnish on the project will be fully appreciated.—*J. Carlton Hurley, real estate and insurance, 30 Canton Street, Baldwinville, N. Y.*

• CORRECTION AND CREDIT

Editor, THE AMERICAN ARCHITECT:

On page 67 of the November issue of THE AMERICAN ARCHITECT an advertisement of the General Bronze Company appears.

The Mayo Clinic entrance of Rochester, Minnesota, is shown and described as "Mankato Stone." This is to advise this is an error as we furnished the work in Indiana Limestone.—*J. B. Blackburn, assistant vice-president, Indiana Limestone Company.*

THE Brooklyn Chapter, A. I. A., has appropriated \$100 to aid unemployed draughtsmen through the Architects Emergency Committee. At the meeting at which this action was taken, William P. Bannister, Chairman of the Legislative Committee, emphasized the serious problem which confronts architects in combating unfriendly legislation.

STRUCTURAL STEEL CREATED THE SKYSCRAPER

STEEL CARRIES ACRES TO THE SKY

A CROWDED CITY pleads for space . . . swiftly, floor on floor, the sure steel climbs—and thirty-five or forty city "plots" stand where there was one before.

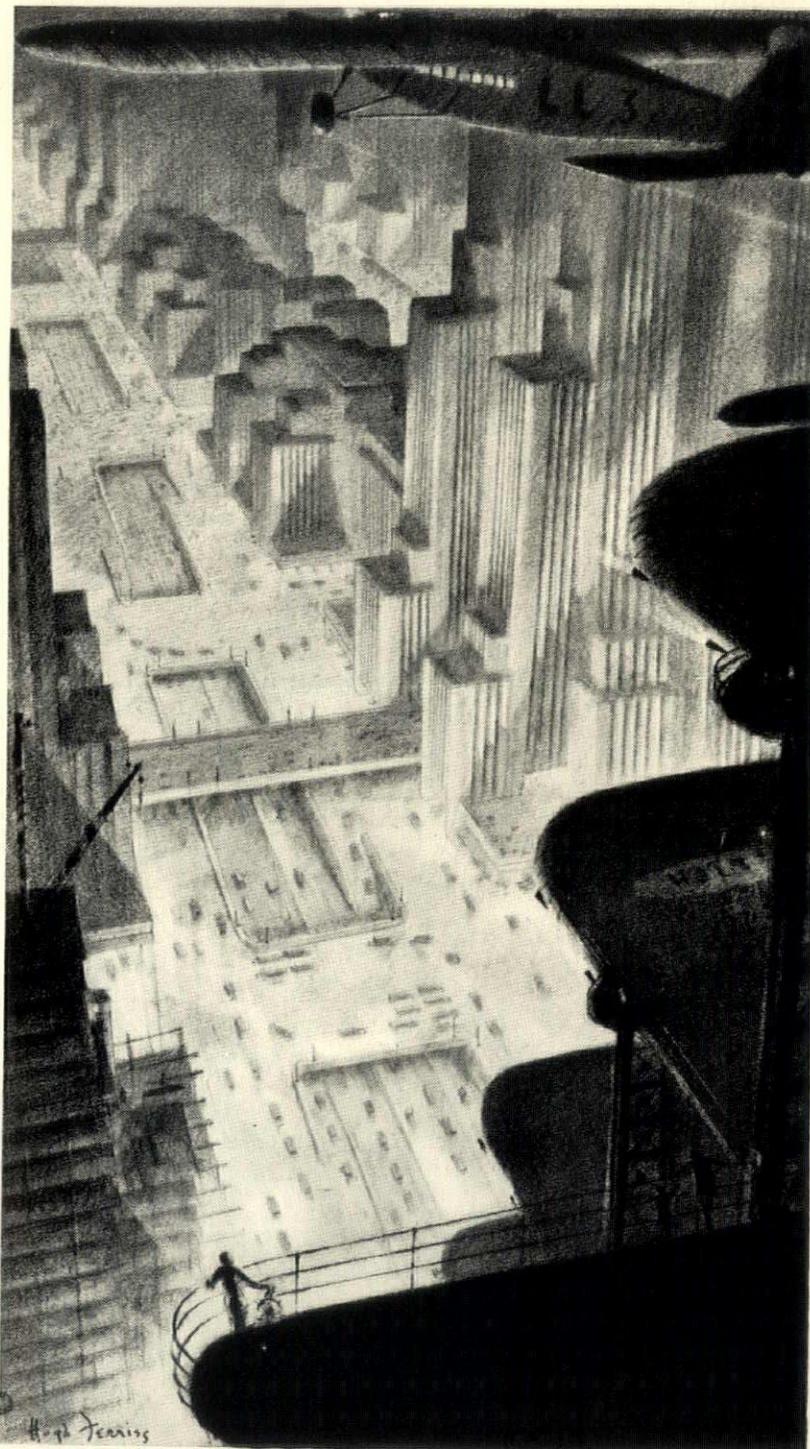
Structural steel not only multiplies the precious bit of ground. It increases *rentable* floor area. Its great strength is not handicapped by excessive bulk, so interiors may be larger without conspicuous construction members. Steel comes to a job ready to go into place. It is unaffected by rain, freezing or intense heat. Erected quickly, wherever and whenever men can work, it saves time, labor, interest charges.

More and more homes, small apartment and mercantile houses, small industrial plants and small as well as large bridges are being built with *structural* steel. Architects and builders are realizing that the employment of steel merely to give strength and security to weaker materials is a compromise with its many advantages when used in the form of structural shapes.

Before building anything, find out what steel can do for you. The Institute serves as a clearing house for technical and economic information on steel construction, and offers full and free co-operation in the use of such data to architects, engineers and all others interested.



The co-operative non-profit service organization of the structural steel industry of North America. Through its extensive test and research program, the Institute aims to establish the full facts regarding steel in relation to every type of construction. The Institute's many publications, covering every phase of steel construction, are available on request. Please address all inquiries to 200 Madison Avenue, New York City.—In Canada, to 710 Bank of Hamilton Bldg., Toronto, Ontario. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas, San Francisco and Toronto.



"SKYSCRAPER HANGAR IN A METROPOLIS," BY HUGH FERRISS. AN ENLARGEMENT, ON SPECIAL STOCK FOR FRAMING, WILL BE MAILED WITHOUT CHARGE TO ANY ARCHITECT, ENGINEER OR BUSINESS EXECUTIVE.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

STEEL INSURES STRENGTH AND SECURITY



Interior, Board of Trade Building, Chicago. Holabird and Root, architects. From "Architectural Annual, Chicago, 1930"

ARCHITECTURAL ANNUAL, CHICAGO, 1930

Ralph W. Hammett, architectural editor; Gerald Bradbury, managing editor. Published by the Architectural Annual Company, 1444 Conway Building, Chicago. Illustrated; 126 pages; size 9¼ x 12¼; price \$5.00.

THIS is a book which shows Chicago's architectural accomplishments for the years 1929-1930, and consists of a series of pictures of various new buildings erected in that city during those years. Interiors and details are shown as well as exteriors.

The various classes of buildings are divided into sections including commercial buildings; shops and stores; public buildings and institutions; theatres and museums; clubs, hotels and apartments; ecclesiastical buildings; and residences.

PERSONALITIES IN AMERICAN ART

By W. Francklyn Paris, M.A., L.H.D. Published by the Architectural Forum, 521 Fifth Avenue, New York. Illustrated; 112 pages; size 5¾ x 8¾; price \$2.00

HERE is a character study of eight men whose influence upon American art or whose encouragement of American artists entitle them to public esteem and gratitude: James McNeill Whistler, Lloyd Eliot Warren, Edgerton Swartwout, J. Sanford Saltus, Augustus St. Gaudens, Clinton Ogilvie, Samuel F. B. Morse, and William M. Chase. Mr. Paris, in his capacity as Director of the Hall of Remembrance of New York University, was instrumental in placing the busts of five of these men in that Hall.

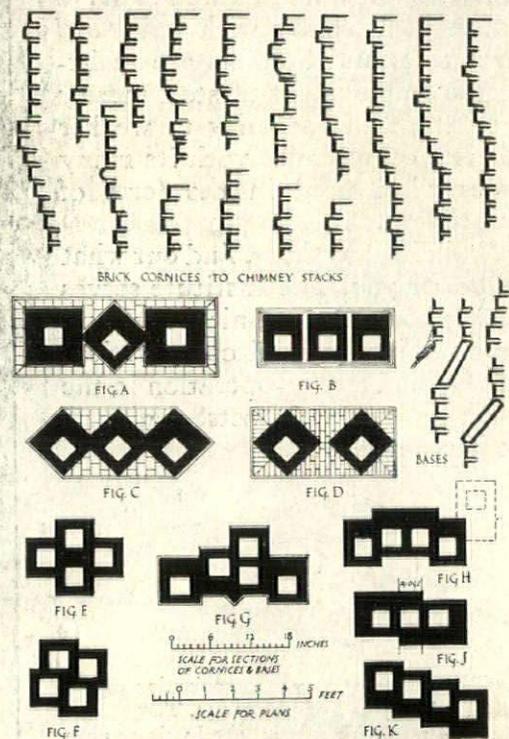
The book is extremely personal and the idea of the author is revealed in his preface. "In a lifetime spent in the study and practice of the 'Beaux Arts' it has been my good fortune to approach and know a number of artists

whom a hurrying world stopped long enough to label 'great' and because they had proved to me the most valuable company, spiritually, I used what feeble talents I possessed to trumpet their glory and chronicle their fame."

DOUGLAS FIR USE BOOK

Published by the West Coast Lumbermen's Association, 364 Stuart Building, Seattle, Washington. 204 pages; size 5¼ x 8; price \$1.00

CONTAINS design tables and their application, showing the proper use of Douglas Fir for structural purposes. Contains chapters on the basic laws for structural grades, determination of working stresses and their calculation, grading for preservative treatment and the working stresses for treated grades, grade use recommendation, analysis of useful span limits for joists and beams, etc. There are many tables, formulae, etc. The book is one which will be of considerable interest to architects and structural engineers.



Plans and details of old chimney-stacks. From "The Elements of Domestic Design"

THE ELEMENTS OF DOMESTIC DESIGN

By Arthur J. Pentz. Published by The Architectural Press, 9 Queen Anne's Gate, Westminster, S. W. 1, London, England. Illustrated; 102 pages; 9¾ x 12½; price 15s.

THIS is an unusual book, one that makes details a vehicle for conveying the spirit of design rather than a mere matter of how to put things together.

Making the
"Talkies" safe
with
A. D. T.

*Landmarks of
Modern Protection*



PRODUCING "talkies" at the Metro-Goldwyn-Mayer Studios at Culver City, Calif., requires over \$11,000,000 of property. Complete protection against fire is essential — that's why A. D. T. Central Station Watchman Supervisory and Fire Alarm Service is employed.

The margin of safety is greater with A. D. T. — every move of the watchmen is constantly supervised — fire alarms promptly transmitted directly to the fire department.

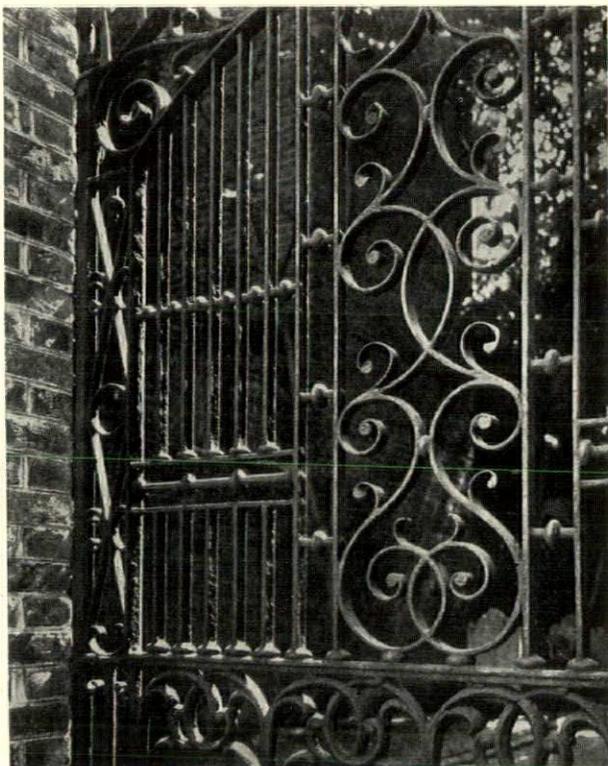
There are A. D. T. protection services for operation through A. D. T. Central Stations or for owner operation. See our catalog in Sweet's or write for complete data.



Leila Hyams, Metro Star, featured in the popular motion picture, "The Big House", shows how to use A. D. T. in case of fire.

Controlled Companies of
American District Telegraph Company
155 Sixth Avenue, New York, N. Y.

Mr. Penty's theory of design is woven around a house he built at Ditchling, Sussex. His introduction to the general subject is full of sage comment. When he approaches the material of which the house is built, he discusses brickwork and how to obtain a truly artistic job. This section is followed by details of the house together with details of old chimneystacks; each plate is faced by text on the subject, well worth reading. He has sections on wall copings, brick details from Italy and Belgium, eaves details, stonework, woodwork, etc. In every case his approach is from the artistic standpoint; how to get effects and how to catch the true domestic spirit in architecture. There are interesting chapters on "Informal Roof Planning," which is accompanied by 56 illustrations, and "Informal Fenestration."



One of two photographs of side gate, St. Paul's Church. From "Colonial Ironwork in Old Philadelphia"

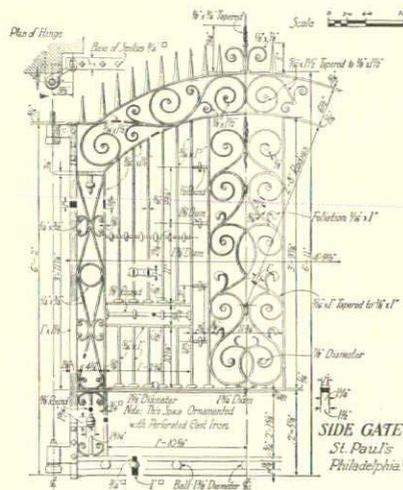
COLONIAL IRONWORK IN OLD PHILADELPHIA

By Philip B. Wallace; measured drawings by William Allen Dunn; introduction by Fiske Kimball. Published by the Architectural Book Publishing Company, Inc., 108 West 46th Street, New York. Illustrated; 147 pages; size, 9½ x 13; price \$15.00.

PHILADELPHIA was at one time not only the capital of the United States but also the commercial center of its chief region of iron production. This peculiarly happy combination, with the fortunate circumstance that Philadelphia has preserved its older sections more nearly intact than has any of the larger Colonial cities of the North, has resulted in there being a wealth of fine old ironwork waiting to be recorded.

Philip Wallace, the author, is numbered among the best architectural photographers in this country. The illustrations, from his collection, are outstanding for their photographic quality and their subject matter.

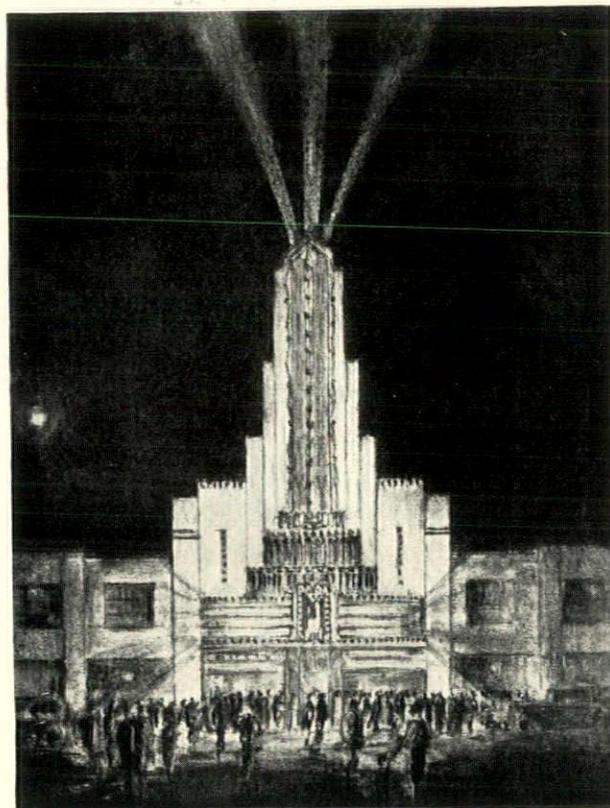
The measured drawings by Mr. Dunn are entirely adequate and are reproduced at a sufficiently large scale to be thoroughly practical for reference purposes. There are many of these drawings scattered through the book,



Measured drawing of side gate, St. Paul's Church. From "Colonial Ironwork in Old Philadelphia"

though not every subject photographed has been measured. In frequent cases, there are a number of detail photographs of the same subject in addition to some pages of measured drawings.

Several delightful pages are devoted to foot scrapers ranging from the very simple to the very ornate, yet all with the peculiar charm so characteristic of the exquisite craftsmanship of Colonial days.



Sketch for a theatre, northeast Philadelphia. Magaziner, Eberhard and Harris, architects. From "American Theatres of Today," vol. 2

AMERICAN THEATRES OF TODAY VOLUME 2

By R. W. Sexton. Published by the Architectural Book Publishing Company, Inc., 108 West 46th Street, New York. Illustrated; 164 pages; size 9½ x 12½; price \$13.50.

THEATRE architects will find this book one worth careful reading and study, for it gathers together in one volume the tested ideas of (Continued on page 132)

A MONUMENT TO MODERN METHODS

IN Cincinnati, on a lot that originally sold for eight dollars, a fourteen million dollar structure is rearing its 47 stories upward toward the clouds.

Embodying every advance of architectural and engineering science, this magnificent building will stand as a monument to the modern progress of America.

Playing an important part in this progress—enabling the successful development of plans—is American Steel & Wire Company Wire Fabric (the steel backbone of concrete).

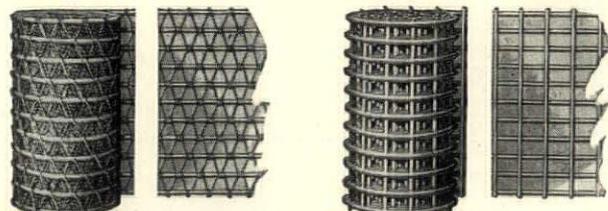
Recognized as the most efficient and economical means of concrete reinforcement, this product is in general use throughout the nation. An evidence of interest on your part will bring detailed information and literature.



The Carew Tower, Cincinnati, Ohio—Walter Ahlschlager, Architect, Chicago—Delano & Aldrich, Associate Architects, New York—Starrett Building Co., Contractors, Chicago—Lieberman & Hein, Consulting Engineers, Chicago



Wire Fabric being laid on floors of Carew Tower



Triangle Mesh Wire Fabric Reinforcement. Furnished in rolls or sheets.

Electric Weld Wire Fabric Reinforcement. Furnished in rolls or sheets.

AMERICAN STEEL & WIRE COMPANY

208 S. La Salle Street, Chicago

SUBSIDIARY UNITED STATES STEEL CORPORATION

30 Church Street, New York

Other Sales Offices: Atlanta Baltimore Birmingham
Denver Detroit Kansas City Memphis Milwaukee
Pittsburgh Salt Lake City St. Louis

Pacific Coast Distributors: Columbia Steel Company,
San Francisco Los Angeles Portland Seattle Honolulu

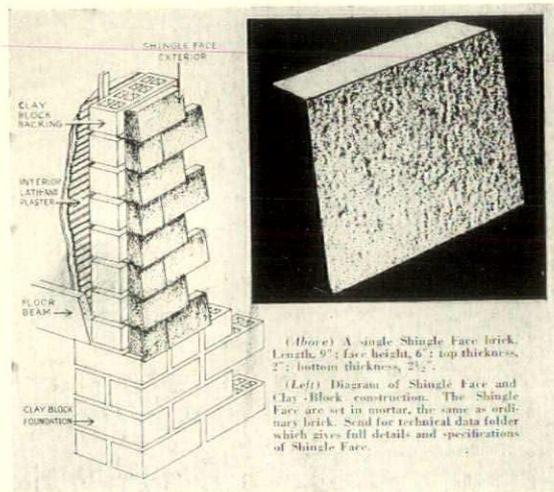


Boston Buffalo Cincinnati Cleveland Dallas
Minneapolis-St. Paul Oklahoma City Philadelphia
Wilkes-Barre Worcester

Export Distributors: United States Steel Products Co.,
30 Church St., New York City

NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY TO KEEP IN TOUCH WITH THE PROGRESS MADE BY PRODUCERS



New Type of Brick Units

Two new types of brick units have been placed on the market by the Sayre & Fisher Brick Company, Sayreville, N. J. One of these new types is called "shingle face." It has an angled face which gives the wall a shingle effect. The length of the unit is 9", the face height 6", the top thickness 2", and the bottom thickness 2½". Since one unit laps over another, there is great protection from moisture penetration. The unit comes in various colors and textures, and can be used with any type of backing.

The other type of unit is called "Clay Block." This is a burned clay product declared to give a moisture proof wall superior to any wall of equal thickness.

Colored Cement Floors

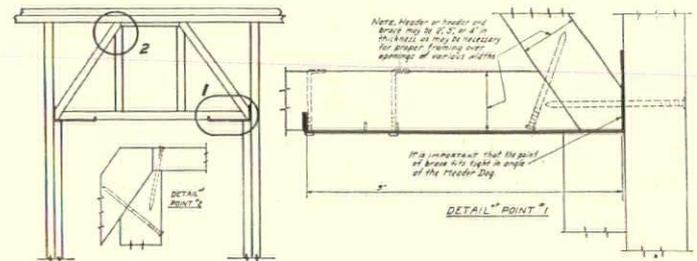
A product called "Colored Metalicron" has been developed by the Master Builders Company, Cleveland, Ohio, for use in building inexpensive slip-proof cement floors in colors. The material is mixed with Portland cement and troweled as usual. It is said that the product provides protection from color clouding by soluble salts.

Water Filter

A new water filter that is easy to clean has been announced by the Alsop Engineering Corp., 39 West 60th Street, New York. It can be connected to the water line and protects the entire plumbing throughout the building in addition to insuring a clean water supply.

New Building Paper

Cordex, a new building paper, is being marketed by the National Steel Fabric Company, Pittsburgh. The cords are built in the paper itself, running lengthwise through it. The paper is coated with a Mastic compound. It comes in rolls of 500 sq. ft. and is 36 inches wide.



To Prevent Plaster Cracks Over Doors and Windows

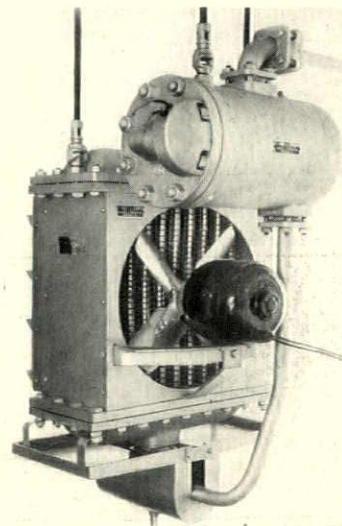
"Header Dogs" are announced by the Donley Brothers Co., 13900 Miles Avenue, Cleveland, Ohio. These dogs are made of flat steel 12" long and turned up at each end, and are securely fastened to the bottom member of the door header. They use the 2" x 4" door header as the tension member of the truss, the dogs forming the connection at the ends, and prevent the spreading of members at the heel of the truss. Their use, it is said, cuts down the amount of lumber necessary and prevents plaster cracks over doors and windows. They come in two widths, 3⅝" for the usual 4" partition, and 5½" for wide openings and in partitions using 6" studding.

Insulated and Ventilated Package Receiver

A new steel package receiver is announced by the Donley Brothers Co., Cleveland, Ohio. It has an insulated outer door and an inner door ventilated by four louvres, which protect against freezing in winter and over-heating in summer. The outside door locks automatically as it is closed and is released by opening the inside door. It can be recessed in the wall.

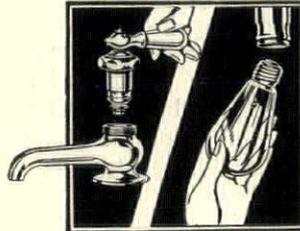
New Cooling Device

The Grinnell Unit Cooler is a new device placed on the market by the Grinnell Company, 260 West Exchange Street, Providence, R. I. It is designed to replace the conventional pipe coil system used in storage boxes and other rooms that require refrigeration.





Less than \$1 for repair parts in 5 Years



Every Chicago Faucet has a standardized, removable unit which fits all Chicago Faucets.

It can be removed to replace the seat or washer with the same ease that you would change a light bulb.

Any Chicago Faucet can be changed from compression to self-closing (or vice-versa) by simply changing the unit.

Chicago Faucets continue to make new records in economy—this time in the department store of L. Oransky & Sons, Des Moines, Iowa. Jos. P. Buchanan, chief engineer, writes:

“The above building is equipped with Chicago Faucets throughout, as well as the new addition built two years ago. They have not given us the least trouble and I don’t believe that I have used more than one dozen of your seat washers in the 5 years that I have been chief engineer here.”

Just a month ago the building superintendent of the Bankers Building in Chicago informed us that they spent only 4c per faucet per year for maintenance and repairs.

Your clients will thank you if you specify and insist on Chicago Faucets because of the very low annual maintenance costs—and the fact that Chicago Faucets never need replacing.

We have a new 76-page catalog, also a cut-open sample, both of which are yours. Mail the coupon.

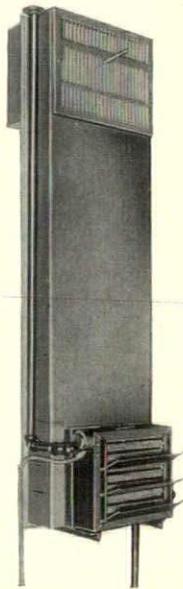
The Chicago Faucet Company
2700-22 N. Crawford Ave., Chicago.

I'm a progressive architect who wants to save clients' money on faucet maintenance, so send me your catalog and cut-open sample, free.

Name

Address

CHICAGO FAUCETS



Cabinet Unit Heater

Summer ventilation with outside air and winter ventilation with inside air are both possible with the new cabinet unit heater recently developed by the Wolverine Tube Company, Detroit, as it provides an intake through the wall of the building as an alternate source of air. Either or both of the inlets together can be used at any time. Immediately above the air inlets is a steel wool air filter, which is removable for cleaning. The quietness of operation of the unit is such that the manufacturer recommends its use in offices. It comes in various sizes.

Coated Fabric Wall Coverings

A new line of decorative and washable fabric wall coverings called "Wal-Tex" has been announced by the Columbus Coated Fabrics Corporation, Columbus, Ohio. The designs were prepared under the supervision of Miss Virginia Hamill, an internationally known art critic, and cover both conventional and modernistic numbers, including eggshell dull prints. Satinsques made in metallic finishes are also offered for the first time.

Insulated Aluminum Wires and Cables

The General Cable Corporation, 420 Lexington Ave., New York City, has brought out a varied line of insulated aluminum wires and cables under the trade name, "Alectral," which is declared to have certain advantages due to lightness of weight. Where tensile strength is required, steel strands are used in combination with the aluminum.

Balmi-Aire Conditioner

This air conditioner, made by the U. S. Blower and Heater Co., Minneapolis, Minn., can be used with any steam or hot water heating plant and one conditioner will humidify any house of from seven to ten rooms. It can either be used to replace a radiator as a heating unit, or may be installed as an additional heating and humidifying unit. Overall dimensions are height 33½", width 12½", and length 23½".

Architectural Rubber for Floors, Walls, and Trim

Royalite is the name of a new product developed by the United States Rubber Company, 1790 Broadway, New York, as a covering for floors, walls and for interior trim. This material is declared not to be an imitation of any known material but to have a character all its own. The colors and textures are new and were developed in the company's laboratories in collaboration with Ben Nash, a well-known colorist.

Insulating Plaster Base

An insulating paper-backed plaster base is announced by the Genfire Steel Company, Youngstown, Ohio. The new product, known as Insulmesh, is composed of wide mesh expanded metal with a backing of corrugated paper board which has been chemically treated to render it non-inflammable. It combines the rigidity and fire-resistance of metal lath with insulating qualities afforded by dead air cells. The material is furnished in sheets, 27" x 48".

It is claimed that economies in the plaster are made possible because the paper backing prevents any wastage and that the corrugations, while saving plaster, also form ribs which add to the rigidity of the finished wall. It may be used as an interior or exterior plaster base.

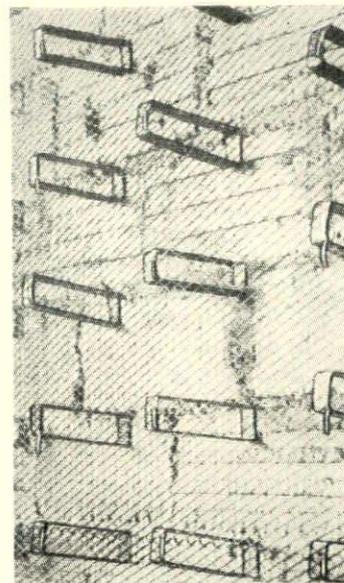
New Type Steel Roofing Sheets

What is said to be an entirely new principle in strengthening steel roofing and side wall sheets is announced by the H. H. Robertson Company, Grant Building, Pittsburgh, Pa. These sheets are made with V-shaped corrugations which act like beams. They can therefore be used on wider spans or in lighter gauges. They are claimed to be strong enough to carry insulation and built-up roofing, or can be used as a self-contained roof. The steel sheets are covered with asphalt, asbestos felt and a heavy waterproofing envelope.

Protection of Mortar Joints

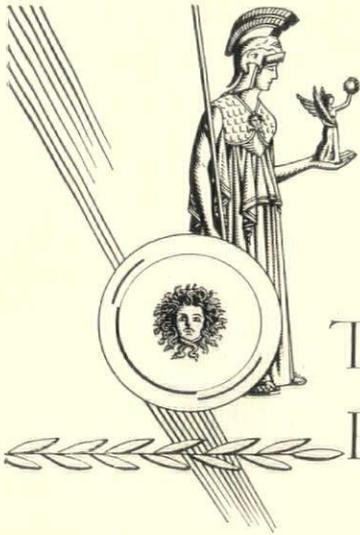
An admixture which is said to prevent efflorescence, leakage, crazing, cracking and spalling of masonry mortar joints, has been placed on the market by the Master Builders Company, Cleveland, Ohio. It is called "Brikron," and its two ingredients arrest the formation of soluble salts and prevent moisture seepage.

New Type Furring Brackets for Masonry Walls



The Red Top Inner-wall Furring Bracket, introduced by the United States Gypsum Company, 300 West Adams Street, Chicago, offers a practical method of furring metal lath over all types of masonry walls. These brackets are set in the soft mortar joints as the work progresses. The brackets have prongs which serve to fasten the metal lath. Furring may be from 1¼" to 4¼" in depth, providing a dead air space which can be used for electrical conduits, piping, radiator connections, etc. The brackets are made of 16 gauge copper steel painted.

The brackets are made of 16 gauge copper steel painted.



THE WISDOM OF SPECIFYING RU-BER-OID BUILT-UP ROOFS

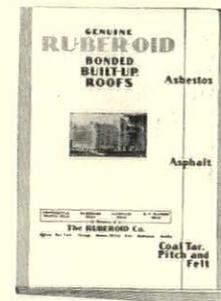
Architects specify the type of built-up roof that best fits *each* building. Whether that choice is Asbestos, Coal Tar Pitch and Felt, or Asphalt, The Ruberoid Co. can afford to be impartial. Ruberoid has them all.

Ruberoid's flexible specifications meet any condition of climate, atmosphere, unusual wear or roof design. Their price range makes them attractive for any work. Their service record is proved over a long period of years.

To safeguard the architect, the builder and the owner, RUBER-OID Built-up Roofs are guaranteed both as to workmanship and material for 10, 15 or 20 years, according to the speci-

fication used. This guarantee is backed by a National Surety Bond. These guaranteed or bonded roofs are applied only by approved roofing contractors of known skill and reliability.

For ready reference, you will find a complete catalog of RUBER-OID Built-up Roof specifications in 1931 Sweet's. Should you desire extra sets of these specifications, or face a roofing problem resulting from unusual conditions, there is an engineering department at each Ruberoid office listed below. Simply write or 'phone. Your inquiry will receive our prompt attention.



The RUBEROID Co.

ROOFING MANUFACTURERS FOR OVER FORTY YEARS

Sales Divisions: RUBEROID MILLS—CONTINENTAL ROOFING MILLS
SAFEPAK MILLS—H. F. WATSON MILLS—ETERNIT

ASPHALT SHINGLES AND ROLL ROOFINGS—ASBESTOS-CEMENT SHINGLES AND CORRUGATED SHEETS—ASBESTOS, ASPHALT, COAL TAR PITCH AND FELT BUILT-UP ROOFS—ASBESTOS SHEATHINGS, FELTS, MILL BOARD, PIPE COVERINGS—KRAFT WATERPROOF PAPERS—COAL TAR AND ASPHALT FELTS AND SHEATHINGS—ASPHALT WATERPROOFING PAINTS AND CEMENTS—DRY FELTS AND SHEATHINGS

Offices & Factories: New York, N. Y.—Chicago, Ill.

Millis, Mass.—Erie, Pa.—Baltimore, Md.—Mobile, Ala.

Now—Rolled in the Central West
... for the



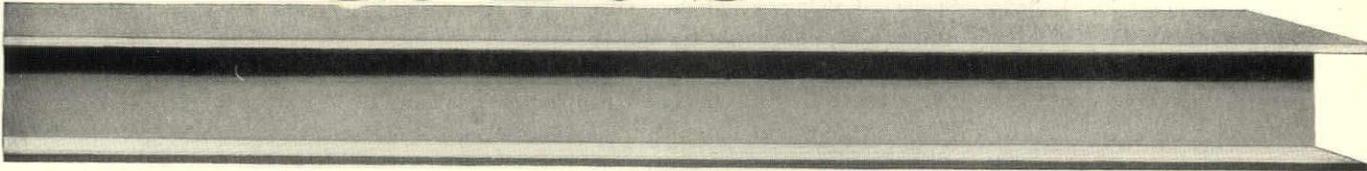
Illinois Steel

Subsidiary of United States

THE AMERICAN ARCHITECT

Central West

C. B. S E C T I O N S



The Central West now has a source of its own for the production of the popular C. B. SECTIONS, previously manufactured only by Carnegie Steel Company at Pittsburgh. Illinois Steel Company, at South Chicago Works, manufactures a complete series of C. B. SECTIONS. Production facilities for these Sections include a new open hearth plant, soaking pits, rolling mill, and ample storage facilities located adjacent to mills for the production of American Standard structural shapes. Thoroughly modern facilities for preparing and shipping C. B. SECTIONS assure expeditious service.

Company

Steel Corporation

208 SOUTH LA SALLE STREET, CHICAGO, ILLINOIS

NEW CATALOGS

Covering What Manufacturers Have to Say About
the Advantages and Uses of Their Products

KAWNEER STORE FRONTS

50 . . . Illustrated booklet of the Kawneer Company, Niles, Mich. Contains many pictures of store fronts with a brief introduction.

NAPANEE KITCHEN EQUIPMENT UNITS

51 . . . Loose leaf sheets with pictures in colors of kitchen in which Napanee units are used, description, and drawings showing elevation and plan of units. Also contains general specifications of Napanee kitchen equipment and other data. A.I.A. file 35 c 12.

HANDI-IRONING CABINET

52 . . . Illustrates and describes this product of the Creo-Dipt Company, Inc., North Tonawanda, N. Y., which is a metal ironing cabinet pivoted so that it can be used in corners or where space is limited, as well as under more favorable circumstances. A.I.A. file 35 n 9.

HOMES WITH BEAUTIFUL FLOORS

53 . . . Brochure containing illustrations in color of a colonial living room, a directoire dining room, a Dutch kitchen, a modern library, a colonial bed room, and a Spanish hall in which rubber flooring was used. Also contains other illustrations and a description of the advantages of rubber floors. Issued by the Goodyear Tire & Rubber Co., Inc., Akron, Ohio.

MODERN IDEAS FOR THE USE OF TILE

54 . . . Pictures of bathrooms and other rooms are shown in colors in this booklet of the Robertson Art Tile Co., Trenton, N. J., which also contains many illustrations of patterns in colors. It gives an excellent idea of the use of colored tile in various designs.

MUELLER STREAMLINE COPPER WATER TUBE AND FITTINGS

55 . . . Catalog B of the Mueller Brass Co., Port Huron, Mich. These products are for plumbing, heating and industrial uses, and are not connected by threading so that there is no bulky joint. A. I. A. file 29 b 4.

SOUND DEADENING OF FLOORING MATERIALS

56 . . . Illustrated booklet of the United States Rubber Flooring Institute, Providence, R. I., which was prepared by its research staff. Contains results of tests on sound deadening of various flooring materials.

CARRARA MODERN STRUCTURAL GLASS

57 . . . Booklet illustrated by photographs and drawings of elevator lobbies, corridors, and other rooms in which this glass was used. Issued by the Pittsburgh Plate Glass Co., Pittsburgh, Pa. A. I. A. file 22 f.

STRUCTURAL TILE WITH A WALL TILE FINISH

58 . . . Describes "Krafftile," made by the Krafftile Company, Niles, Cal., which combines hollow tile construction and faience tile finish. Contains general outline of necessary specifications, and other interesting data. A. I. A. file 10 a 1.

DUO-TOR AUTOMATIC INCINERATOR AND WATER HEATER

59 . . . Issued by the Duo-tor Manufacturing Co., Dayton, Ohio, and containing full information about this product, covering installation and operation. Includes installation diagrams and questions and answers about the product.

PLANK FLOORS AS CRAFTED BY BRUCE

60 . . . Contains illustrations in color and black and white of rooms in which oak planks are used. Gives various information about this product, made by E. L. Bruce Co., Memphis, Tenn. A. I. A. file 19 e 9.

SEDGWICK DUMB WAITERS AND ELEVATORS

61 . . . Illustrated catalog issued by the Sedgwick Machine Works, 150 West 15th Street, New York. It contains information about the various products made by this company, including fuel or wood lifts, log lifts for fireplaces, etc., as well as the more usual types. A. I. A. file 33.

PRESERVATION OF STEEL TANKS BY THE BRISK METHOD

62 . . . Illustrated booklet of the Brisk Dampproofing Company, 103 Park Avenue, New York, explaining the advantages of the Brisk Method, manner of application, and other information. A. I. A. file 25 c 51.

WAL-TEX BOOK OF SAMPLES

63 . . . Sample book of this washable coated fabric for wall coverings, issued by the Columbus Coated Fabrics Corp., Columbus, Ohio.

INTERNATIONAL CONCEALED RADIATORS

64 . . . Illustrates and describes the concealed radiators made by the International Radiator Corp., Port Chester, N. Y. Contains drawings showing elevations and sections of typical installations. A. I. A. file 30 c 4.

WATSON STEEL AND BRONZE BANK EQUIPMENT

65 . . . Contains pictures of banking room with accompanying drawings in blue print form of the particular rooms illustrated. A. I. A. file 35 h 5.

ONE-PIECE STEEL JOISTS

66 . . . "Bates-X" expanded steel joists are illustrated and described in this booklet issued by the Bates Expanded Steel Corp., East Chicago, Ind. Explains method of bridging and gives other desirable structural information together with tables of safe loads. A. I. A. file 13.

(Continued on page 134)

● AMERICAN ARCHITECT

January, 1931

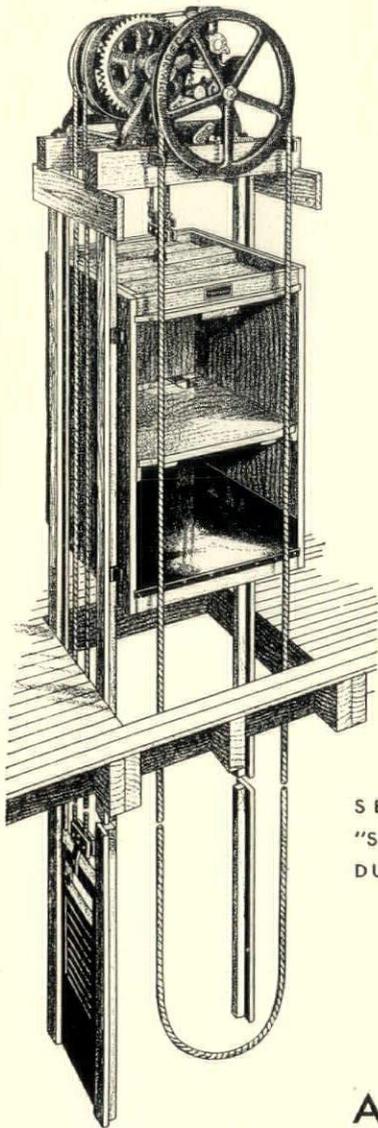
57th Street at Eighth Avenue, New York City

Please see that I receive the following catalogs reviewed on this page:

Numbers
Name
Address
Occupation

A SEDGWICK DUMB WAITER

For HEAVIER Service



SEDGWICK
"SEDG-VERSAL"
DUMB WAITER

FOR average loads up to 150 lbs., and capacity loads of 300 lbs.... the "SEDG-VERSAL" Compound Geared Dumb Waiter represents the most marked advance in equipment of this type. Fitted with automatic brake or band brake as desired. The principal features are: (1) Two sets of machine cut gears, with sufficient gear reduction to enable operator to readily raise heavy loads; (2) By rearrangement of gears, various speeds and capacities can be effected, making possible (3) the efficiency of five different types of dumb waiter equipment. These features are important where average or capacity loads cannot be determined in advance, or where there is a possibility of future changes in service requirements.

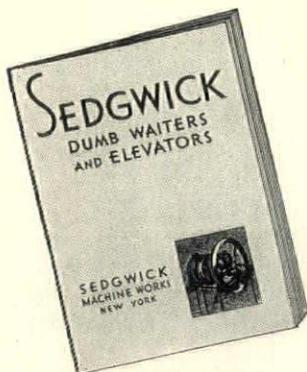
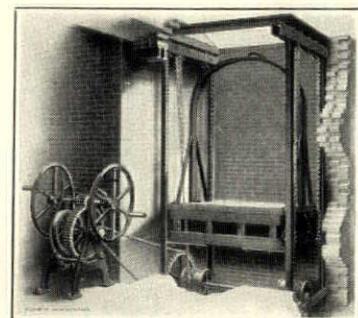
for BANKS · STORES
HOSPITALS · HOTELS
CLUBS · RESTAURANTS
SCHOOLS · INSTITUTIONS

Other advantages are: Machine is a completely contained operating unit. All bearings are of steel roller type. Full diameter hoist wheels carry cables directly from car to counter weight without intermediate sheaves. Car is carried by two special safety cables, each independently attached, one always acting as safety for the other. See complete description in our new catalog. *Every Sedgwick Dumb Waiter is guaranteed for FIVE YEARS against defective material and workmanship.*

AND—

An Improved SIDEWALK ELEVATOR

Built in capacity loads up to 2,500 lbs. An economical and efficient lift for basement-to-sidewalk service. Makes cellar space in store buildings more valuable at very moderate cost for installation.



New Complete Catalog

Contains much helpful data, such as blue prints, specifications, and a special chart of suggested uses of Sedgwick equipment for various types of structures. Copy gladly sent on request.

SEDGWICK MACHINE WORKS

148 WEST 15th STREET

NEW YORK, N. Y.

BALTIMORE, MD.
509 North Charles St.
BOSTON, MASS.
120 Fulton St.

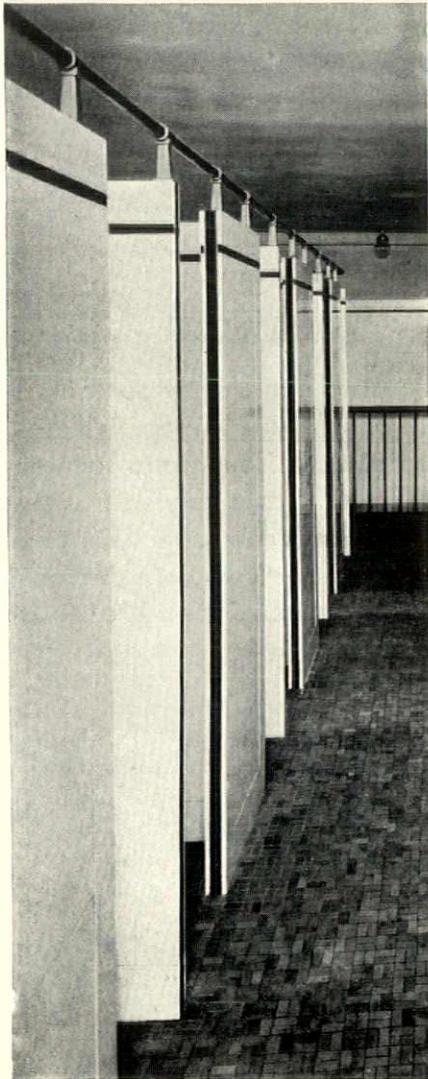
CHICAGO, ILL.
400 W. Madison St.
CLEVELAND, O.
1737 E. 18th St.

DETROIT, MICH.
1233 Griswold St.
LOS ANGELES, CAL.
722 Story Bldg.

SEATTLE, WASH.
332 Pioneer Bldg.
WASHINGTON, D. C.
614 11th St., N.W.



Where modern BEAUTY and SANITATION is demanded leading Architects use VITROLITE



Girls' shower room at Lackawanna High School, Lackawanna, N. Y. Finished in white Vitrolite with black trim.

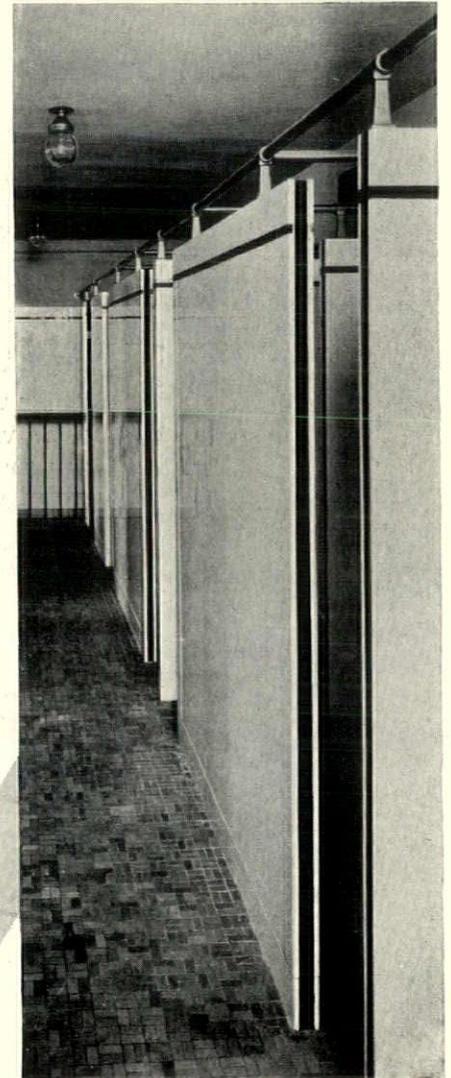
A Twentieth Century Product — yet as old as the earth's formations — is bringing modern beauty and sanitation into thousands of shower compartments, toilet partitions, bathrooms, kitchens, lobbies, corridors, etc. For architects have come to realize that here is a product that is in itself the very spirit of the modern trend.

The shower compartments pictured here are typical of many Vitrolite installations. In addition to the Lackawanna High School shower rooms pictured here, Vitrolite has also been installed in the Bethlehem Park School, the Washington School, and the Roosevelt School — all of Lackawanna, N. Y.

Vitrolite comes in many beautiful colors and surface textures, will not craze, warp or discolor, lasts a lifetime, and can be kept spotlessly clean with a damp cloth.

*Send for Vitrolite Samples
and Structural Catalog*

VITROLITE
"BETTER THAN MARBLE"



Architects—Bley and Lyman, Buffalo, N. Y. Select Vitrolite for the work mentioned above.

THE VITROLITE COMPANY

120 S. LA SALLE ST., Room 1105, CHICAGO, ILL. Factory: PARKERSBURG, W. VA.
REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. AND CANADA

NEW YORK CITY

LOWER MANHATTAN



1798

Before the use
of Elevators.



1876

22 years after Elisha Otis
made the first Safe
Elevator.



1908

A few years after the Otis
high-speed gearless elec-
triclelevator was perfected.



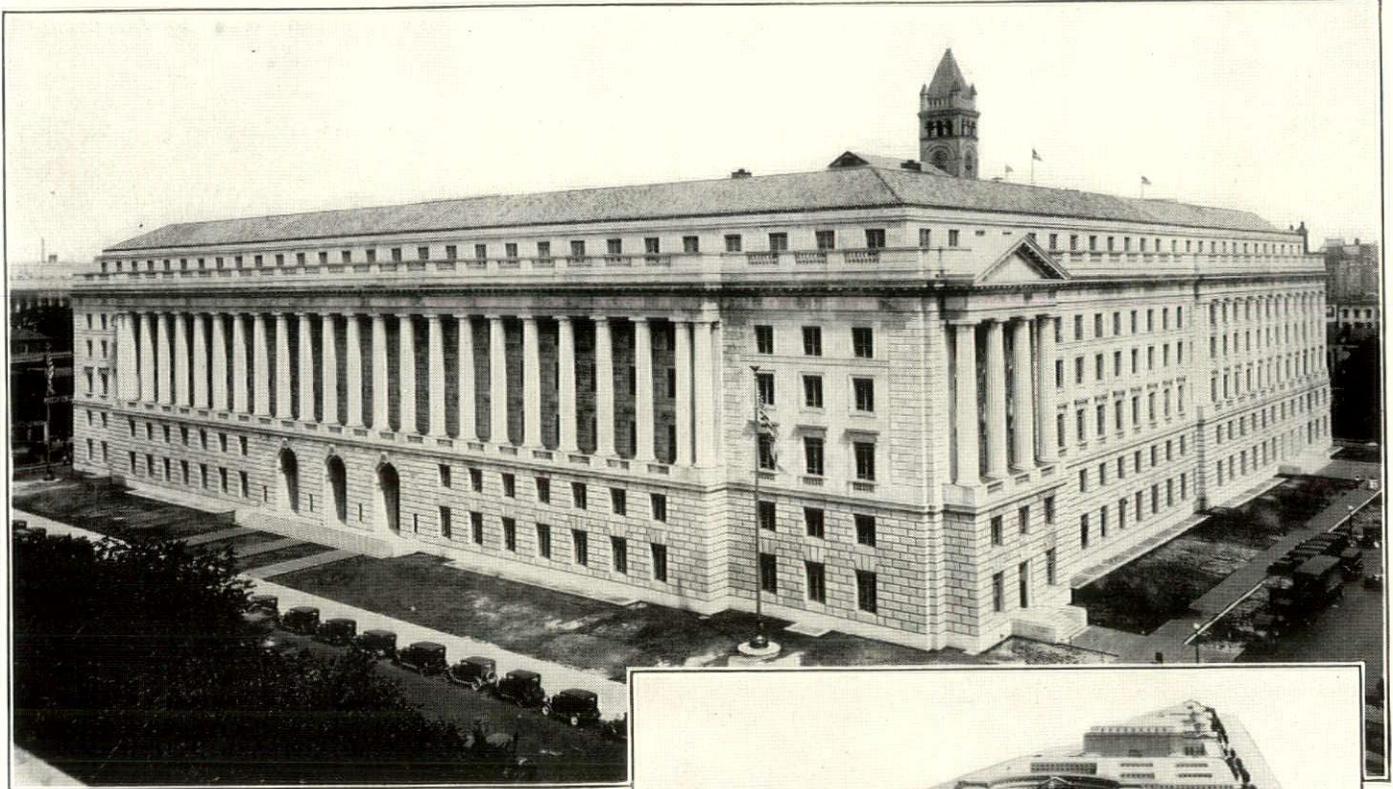
1930

6 years after the intro-
duction of Otis Signal
Control Elevators.

ITS GROWTH IN 132 YEARS

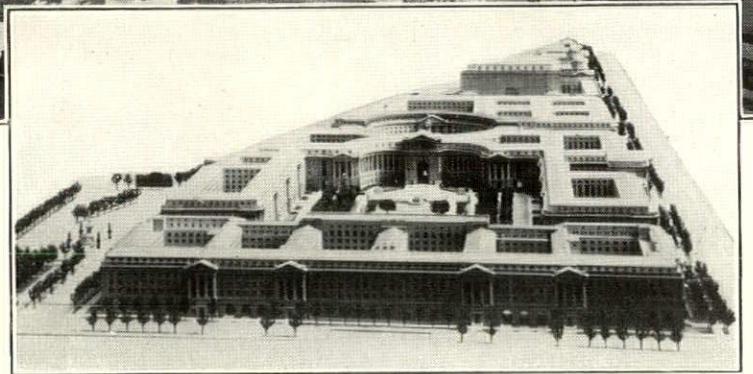
Presented to illustrate an outstanding example of the effect
which the seventy-six years development of the Otis Elevator
Industry has had on the cities of the World.

OTIS ELEVATOR COMPANY
OFFICES THROUGHOUT THE WORLD



Internal Revenue Building, Washington, D. C. Treasury Department. Architects. James A. Wetmore, Acting Supervising Architect. James Baird Company, Builders. Built largely of Variegated Indiana Limestone.

(Right) Architectural model of group of buildings included in Government's building program, which it is estimated will involve a hundred million dollars exclusive of land for sites, etc.



© Henry Miller News Picture Service, Inc.

Indiana Limestone Selected for First of New Government Buildings

THE first building in Washington's hundred million dollar construction program is constructed almost entirely of Indiana Limestone. This newest addition to the city's fine architecture emphasizes again the importance of materials in achieving the result you are after. It is proof anew that the fine-grained, light-colored stone from the hills of southern Indiana is considered by the architectural profession as suitable for the most noteworthy buildings of modern times.

Indiana Limestone is the logical answer to your demand for a material that is artistically and economically appropriate. By its natural

beauty, ease of fabrication and accessibility to the markets of the country, it fills these requirements. Large scale production and modern fabricating methods make it moderate in cost. It is entirely practicable for the small building as well as for the larger project.

ILCO Limestone, from the proven, time-tested quarries of Indiana Limestone Company, provides the high quality limestone required for modern building.

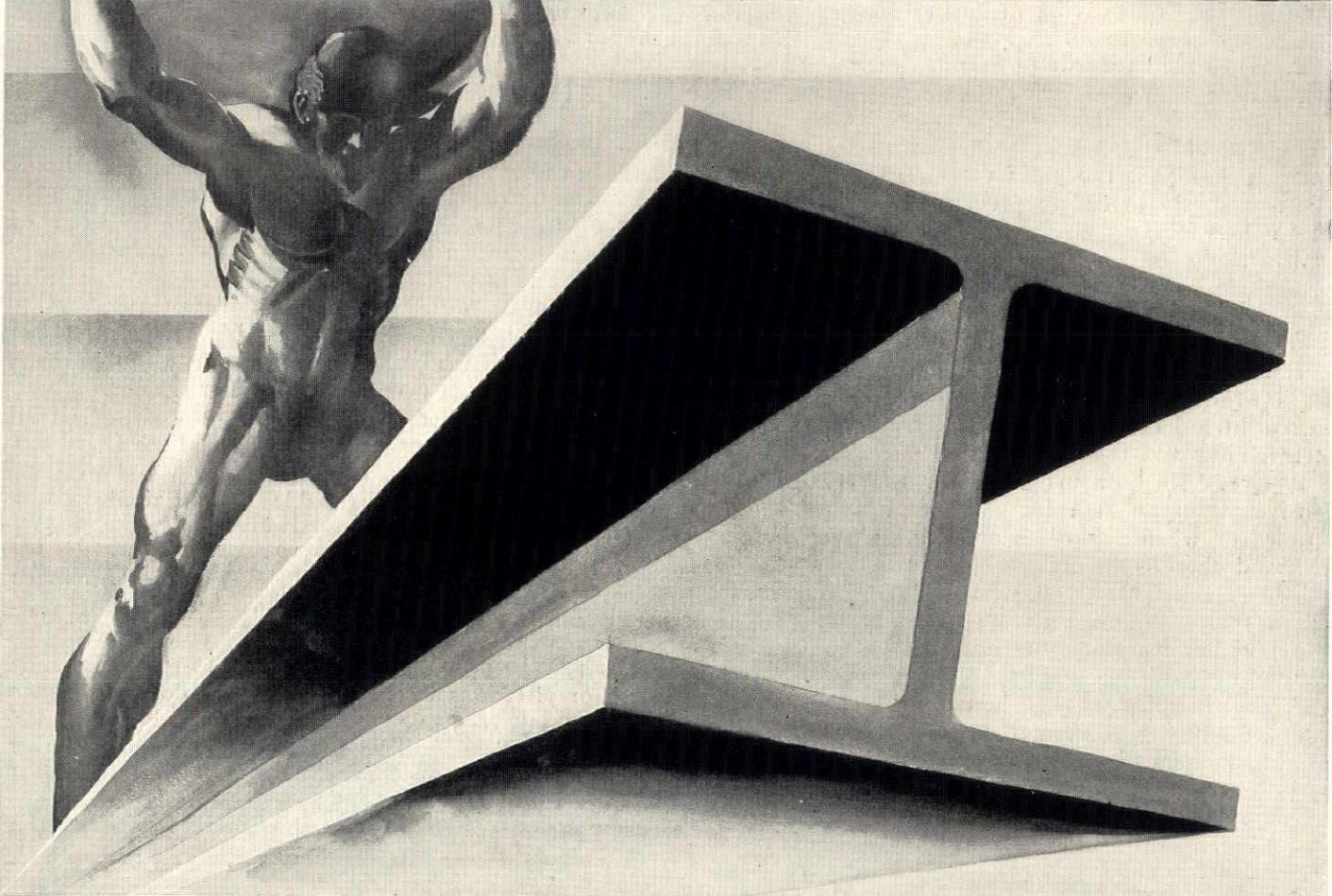
Let us submit an estimate on the construction you are planning. Address Dept. 1165, Service Bureau, Bedford, Indiana.

INDIANA LIMESTONE COMPANY

General Offices: Bedford, Indiana

Executive Offices: Tribune Tower, Chicago

GIANTS OF THE EARTH



CARNEGIE BEAMS

OUT of the dim mists of antiquity come myths of giants . . . of Atlas who upheld the blue vault of heaven . . . of Hercules and his twelve stupendous tasks . . . of Goliath and Cyclops and a host of others.

Today another race of giants shoulder the world's work. Carnegie Beams are the modern giants of the earth. Introduced less than four years ago, they have been conspicuous in recent notable construction. The Empire State Building, the Chrysler Building, the new Waldorf-Astoria, Hotel New Yorker, the Irving Trust Company Building, the Koppers

and Grant Buildings in Pittsburgh, the Penobscot and Fisher Buildings in Detroit, the Department of Commerce Building in Washington, Strawbridge & Clothiers Store in Philadelphia, the Carew Tower in Cincinnati, No. 1 LaSalle Street and the Palmolive Building in Chicago . . . these and countless others are borne on the broad shoulders of Carnegie Beams. Such widespread usage is the best indication of their adequacy to the needs of architects and designers. Their broad flanges present advantages applying to any type of construction involving the use of Structural Steel, regardless of size or type of architecture.

C B's (Carnegie Beams) are ready to serve you. They're fit for any job.



CARNEGIE STEEL COMPANY » PITTSBURGH

Subsidiary of United States Steel Corporation

Reduce Construction Accidents

(Continued from page 49)

excavation in connection with a building operation shall be sheet-piled, braced or shored when necessary to prevent the soil from caving in on those engaged in work within such excavation.

2. When the excavation of trenches for pipes or other purposes in connection with building operations exceeds four feet in depth in loose or running soil, or five feet in depth and eight feet in length in stiff soil, other than rock or hardpan, the sides of such trenches shall be sheet-piled and braced to prevent the soil from caving in on those engaged in work in such trenches.

3. Every trench five feet or more in depth shall have means of escape provided at least every twenty-five feet.

BLASTING

1. Explosives for blasting in connection with a building operation and kept at or near the work, shall be stored in a labelled shed or magazine especially constructed for and restricted to that purpose.

2. Every shed or magazine for the storage of explosives shall be kept locked, except when being inspected or when explosives are being placed therein or removed therefrom, under the immediate charge of a reliable, competent person, who shall not be assigned any duties that interfere with the care and supervision of such shed or magazine and its contents, and it shall be painted red with the word "Explosives" in black.

3. Blasting charges shall be tamped only by means of wooden tamping rods, and explosives shall be primed or set into place by steady even pressure only.

4. No blast shall be fired until the rock or other substance to be loosened or shattered has been covered on all sides with strong woven matting of rope or wire, and a number of heavy logs or timbers securely tied together by cables of sufficient weight to prevent the scattering of the loosened or shattered material.

5. Before a blast is fired, warning thereof shall be given to all persons in the vicinity that would be in danger of being hit by a possible missile projected by the blast, and opportunity given to find a place of safety.

SIDEWALK SHEDS

1. When sidewalk sheds are used for the storage of materials or their preparation in the construction of a building, they shall be constructed of sufficient strength and stability to sustain safely the weight of such materials, and the shocks incident to their handling or preparation, and the accidental jars from trucks passing by or delivering material, in addition to service as a protective covering over the highway.

2. Suitable overhead protection shall be provided for such workers as may be employed on sidewalk sheds in the preparation of materials used in the construction of a building.

3. The underside of the sidewalk shed shall have sufficient light (natural or artificial) to insure safety.

TEMPORARY FLOORING

1. In buildings or other structures of skeleton construction, the entire tier of beams on which the struc-

tural iron or steel work is being erected, generally called the working floor, shall be thoroughly planked over, except spaces required for construction work, for raising or lowering materials, and for stairways or ladders.

FLOOR OPENINGS

1. All floor openings used as hoistways or elevator shaftways shall be guarded on all sides, except those sides or so much of them as are used for loading or unloading, either by barriers not less than six feet high, along or near the edges of such openings, or by guard rails not less than two feet distant at all points (measured in a horizontal direction) from edges of openings.

2. All floor openings used as stairways, or for the accommodation of ladders or runways, shall be guarded by railings and toe boards on all those sides or so much of them as are not necessarily open for traffic purposes.

3. All other floor openings shall be guarded on all sides by solid barriers or by railings and toe boards, or shall be planked over, or otherwise covered over by temporary construction, capable of sustaining safely four times such loads as are likely to bear thereon.

LADDERS

1. Except where either permanent or temporary stairways or suitable runways are required or allowed, ladders shall be provided to give access to all floors, stagings or platforms where work is being done more than five feet above ground, permanent or temporary floor.

2. All ladders shall be substantial in construction so as to carry safely the loads to be placed thereon.

3. Ladders leading to floors, stagings or platforms shall extend at least three feet above the level of such floors, stagings or platforms.

SCAFFOLDS

1. Properly constructed scaffolds shall be provided for all work which cannot be done safely by workmen standing on permanent or solid construction, except when such work can be done safely from ladders.

2. All scaffolds shall be substantially constructed, safe for at least four times their loads, and shall be secured to prevent swaying.

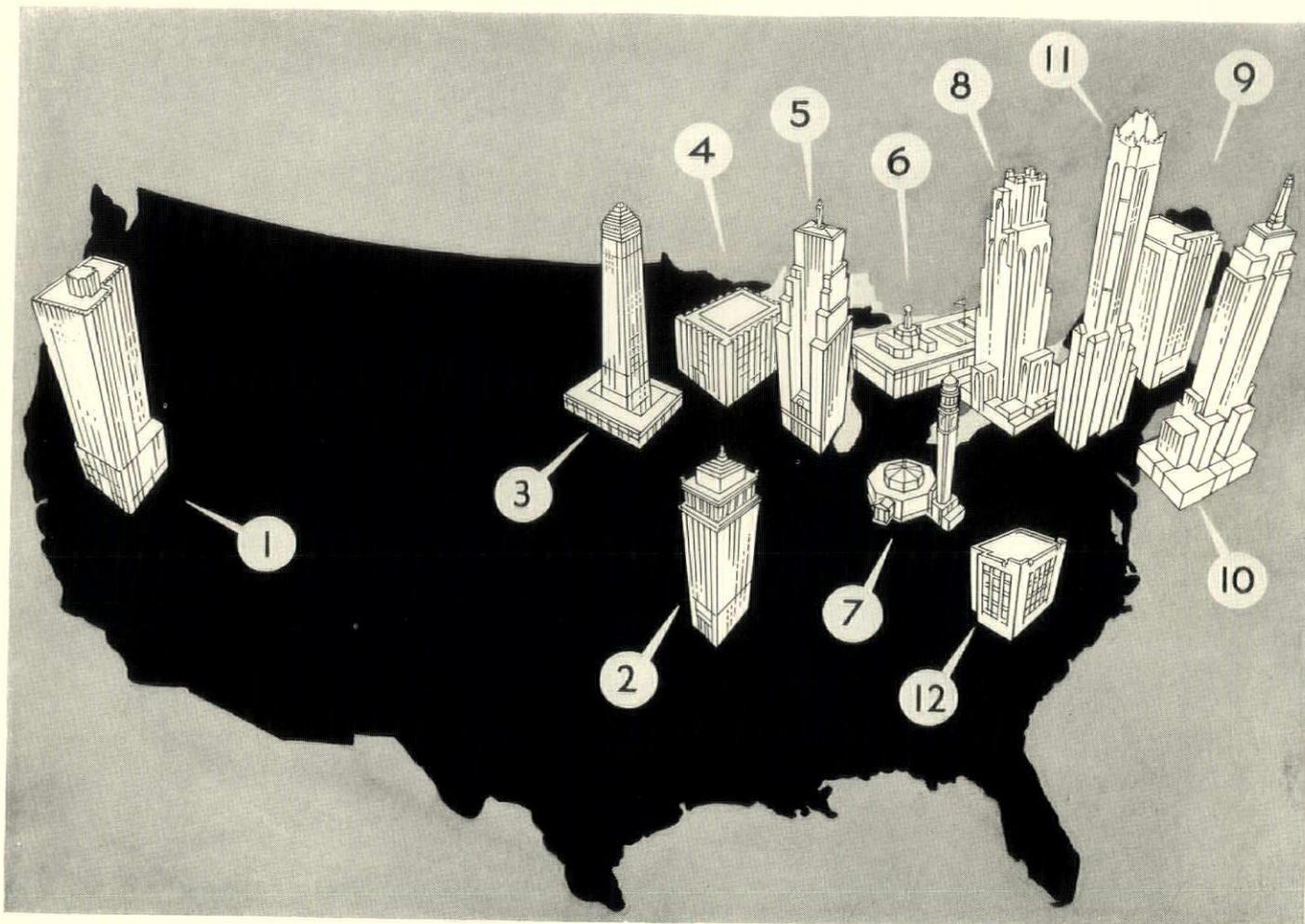
3. Barrels, boxes or other similar unstable objects shall not be used as supports for planking intended as scaffolds or places of work.

LIGHTING

1. All parts of buildings under construction and all sheds, scaffolds and other equipments in connection with such buildings, where workers are engaged in work or where they must necessarily pass to and from their work, or in its performance, shall have sufficient light, either natural or artificial, to insure safety.

FIRST AID

1. On every building operation, an ample supply of iodine or other approved antiseptic solution and aseptic gauze bandages shall be provided and maintained in a suitable and accessible cabinet.



Aluminum castings used in these buildings were made from Alcoa Aluminum Alloy No. 43

Page 1 How Prominent Architects have used Alcoa Aluminum in 48 Important Buildings

1 450 SUTTER BUILDING, San Francisco, California. Architect: Miller and Pflueger, San Francisco. General Contractor: Lindgren and Swinerton, Inc., San Francisco. Sub-contractor on aluminum work: Michel and Pfeffer Iron Works, San Francisco, California. ALCOA ALUMINUM used for elevator doors, entrances, grilles, directory board, lighting fixtures.

2 ST. LOUIS CIVIL COURT HOUSE, St. Louis, Missouri. Architect: Plaza Commission, Inc. Working under the direction of the Plaza Commission. Architects: George D. Barnett, Inc.; T. P. Barnett Company; Preston J. Bradshaw; Helfensteller, Hirsch and Watson; William B. Ittner; Klipstein and Rathmann; LaBeaume and Klein; Mauran, Russel and Crowell. Engineers: Brussel and Viterbo; Frederick C. Taxis. ALCOA ALUMINUM used for sheet roofing, fascia, decorative sphinxes, conduit.

3 FOSHAY TOWER, Minneapolis, Minn. Architect: Magney and Tusler, Inc., Minneapolis. General Contractor: National Contracting Company, Minneapolis. Sub-contractor on aluminum work: Crown Iron Works Company, Minneapolis. ALCOA ALUMINUM used for guard rail and ladder rungs.

4 A. O. SMITH CORPORATION, Engineering and Research Laboratory, Milwaukee, Wisconsin. Architect: Holabird and Root, Chicago, Illinois. General Contractor: Wisconsin Bridge and Iron Company; A. O. Smith Corporation, Milwaukee. Sub-contractor on aluminum work: Super Steel Products Company, Milwaukee. ALCOA ALUMINUM used for windows, cornice, coping, pilasters, plynth blocks.

5 CHICAGO BOARD OF TRADE BUILDING, Chicago, Illinois. Architect: Holabird and Root, Chicago. General Contractor: Hegeman-Harris Company, Inc., Chicago. Sub-contractor on aluminum work: Shean Steel Window Company, Chicago; Gorham Manufacturing Company, Providence, R. I. ALCOA ALUMINUM used for batten seam roof, sliding sash on promenade deck, gutters, smoke hood and statue.

6 WAYNE COUNTY AIRPORT, Detroit, Michigan. Architect: Giffels and Vallet, Inc., Detroit. General Contractor: Gallagher and Flemming, Detroit. Sub-contractor on aluminum work: Anchor Steel Engineering Company. ALCOA ALUMINUM used for spandrels, cornice and light fixtures.

7 FIRST CHURCH OF CHRIST SCIENTIST, Cleveland, Ohio. Architect: Walker and Weeks, Cleveland. General Contractor: Crowell and Little Construction Company, Cleveland. Sub-contractors on aluminum work: Industrial Asbestos Company and The John Harsch Bronze and Foundry Company, Cleveland. ALCOA ALUMINUM used for sheet roof, cast ornamental bells, tower dome and finial.

8 CATHEDRAL OF LEARNING, Pittsburgh, Pennsylvania. Architect: Chas. L. Klauder, Philadelphia. General Contractor: Stone and Webster, Pittsburgh and New York. Sub-contractor on aluminum work: Stone and Webster, Pittsburgh and New York. ALCOA ALUMINUM used for spandrels.

9 EDISON ELECTRIC ILLUMINATING COMPANY BUILDING, Boston, Massachusetts. Architect: Bigelow, Wadsworth, Hubbard and Smith, Boston. General Contractor: W. A. and H. A. Root, Boston. Sub-contractor on aluminum work: A. L. Smith Iron Works, Chelsea, Mass. ALCOA ALUMINUM used for spandrels.

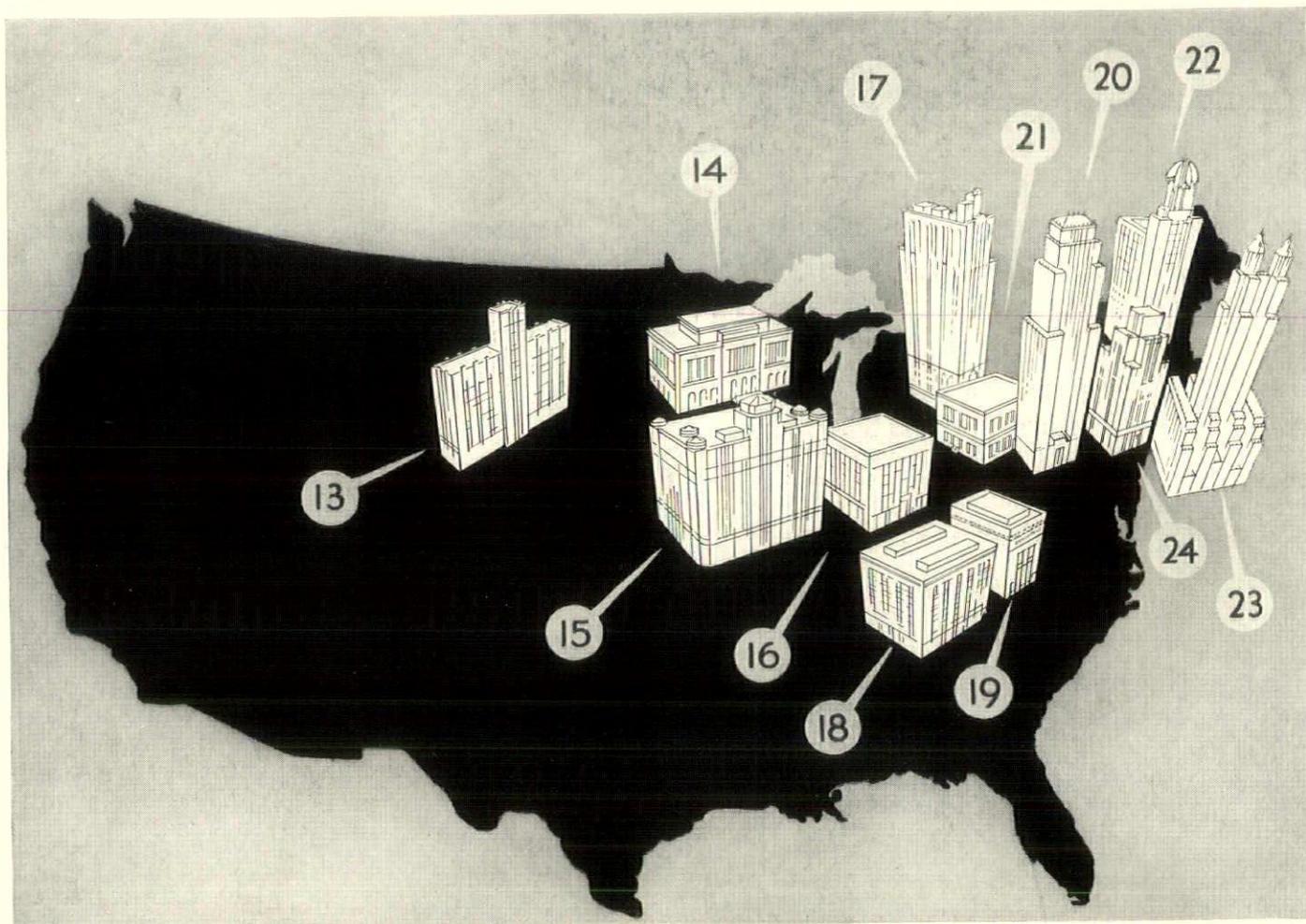
10 EMPIRE STATE BUILDING, New York City, N. Y. Architect: Shreve, Lamb and Harmon, New York. General Contractor: Starrett Brothers & Eken, Inc., New York. Sub-contractors on aluminum work: C. E. Halback and Company, Brooklyn, N. Y.; Wm. H. Jackson Co., Brooklyn, N. Y.; General Bronze Corporation, Long Island City; W. S. Tyler Company, Cleveland, Ohio. ALCOA ALUMINUM used for store fronts, spandrels, moldings, elevator doors and trim, mooring mast sheathed with aluminum, wings cast in aluminum.

11 RADIO VICTOR BUILDING, New York City, N. Y. Architect: Cross and Cross, New York. General Contractor: A. L. Hartridge Company, Inc., New York. Sub-contractors on aluminum work: Atlas Iron Works, New York; Wm. H. Jackson Co., Brooklyn, N. Y. ALCOA ALUMINUM used for window sills, decorative metal work in lobby, exterior ornamental metal work.

12 SOUTHERN BELL TELEPHONE AND TELEGRAPH BUILDING, Greensboro, North Carolina. Architect: Marye, Alger and Vinour, Atlanta, Georgia. General Contractor: Barge-Thompson Company, Atlanta. Sub-contractor on aluminum work: Price Evans Foundry Corporation, Chattanooga, Tennessee. ALCOA ALUMINUM used for spandrels.

ALCOA ALUMINUM





Aluminum castings used in these buildings were made from Alcoa Aluminum Alloy No. 43

Page 2

They commanded a metal that lent itself readily to architectural design and fine detail

13 CREIGHTON UNIVERSITY, Omaha, Nebraska. Architect: Leo A. Daly, Omaha. General Contractor: A. Borchman and Son, Omaha. Sub-contractor on aluminum work: Kraus and Trustin, Omaha. ALCOA ALUMINUM used for spandrels.

14 MILWAUKEE COUNTY COURT HOUSE, Milwaukee, Wisconsin. Architect: Albert Randolph Ross, Milwaukee. General Contractor: Capitol Ornamental Iron Works, Rockford, Illinois. ALCOA ALUMINUM used for grille work.

15 MERCHANDISE MART BUILDING, Chicago, Illinois. Architect: Graham, Anderson, Probst and White, Chicago, Illinois. General Contractor: John Griffiths and Son Company, Chicago. Sub-contractors on aluminum work: Hansell-Elcock Company, Chicago; A. S. Schulman Electric Company, Chicago. ALCOA ALUMINUM used for light brackets, miscellaneous extruded moldings and castings.

16 HOWARD AVENUE TRUST AND SAVINGS BANK BUILDING, Chicago, Illinois. Architect: Jens J. Jensen, Chicago. General contractor: Wm. G. McNulty and Brothers, Chicago. Sub-contractors on aluminum work: The E. M. Weymer Company, Inc., Chicago; American Iron and Wire Works, Chicago. ALCOA ALUMINUM used for inscription panels and plaques, entrance grilles, vestibule grilles, lobby door frames and grilles, mail boxes, balcony railing, check desks, desk light fixtures, calendar frames, wickets for bank tellers, vault screen, gate to banking enclosure, etc.

17 UNION INDUSTRIAL BANK BUILDING, Flint, Michigan. Architect: Smith, Hinchman and Grylls, Detroit, Michigan. General Contractor: Realty Construction Company, Flint. Sub-contractor on aluminum work: General Bronze Corporation, New York. ALCOA ALUMINUM used for spandrels, banking room windows, name plates, store fronts, street letters, grilles, flag pole base, stair and balcony railings.

18 WARNER BROTHERS PICTURES, Inc., Cleveland, Ohio. Architect: J. Milton Dyer, Cleveland. General Contractor: Hunkin-Conkey Company, Cleveland. Sub-contractor on aluminum work: The John Harsch Bronze and Foundry Company, Cleveland. ALCOA ALUMINUM used for spandrels, store fronts, entrances, elevator doors, grilles, lobby trim, etc.

19 GUARDIAN BANK BUILDING, Cleveland, Ohio. Architect: H. W. Johnson, Cleveland. Sub-contractor on aluminum work: The John Harsch Bronze and Foundry Company, Cleveland. ALCOA ALUMINUM used for store fronts, doors, bank screens, check tables and spandrels.

20 KOPPERS BUILDING, Pittsburgh, Pennsylvania. Architect: Graham, Anderson, Probst and White, Chicago, Illinois. General Contractor: Mellon Stuart Company, Pittsburgh; Rust Engineering Company, Pittsburgh. Sub-contractor on aluminum work: P. Larsen Company, Pittsburgh. ALCOA ALUMINUM used for spandrels and elevator cab doors.

21 GULF RESEARCH BUILDING, Pittsburgh, Pennsylvania. Architect: Schwab, Palmgreen and Merrick, Pittsburgh. General Contractor: Mellon Stuart, Pittsburgh. Sub-contractor on aluminum work: P. Larsen Company, Pittsburgh. ALCOA ALUMINUM used for spandrels, mullions, doors and flashing.

22 GENESEE VALLEY TRUST BUILDING, Rochester, New York. Architect: Voorhees, Gmelin, and Walker, New York. General Contractor: A. Frederick and Sons Company, Rochester. Sub-contractor on aluminum work: Francis Metal Door and Window Corporation. ALCOA ALUMINUM used for bank room windows, spandrels, grilles, wings, mullions, light reflectors.

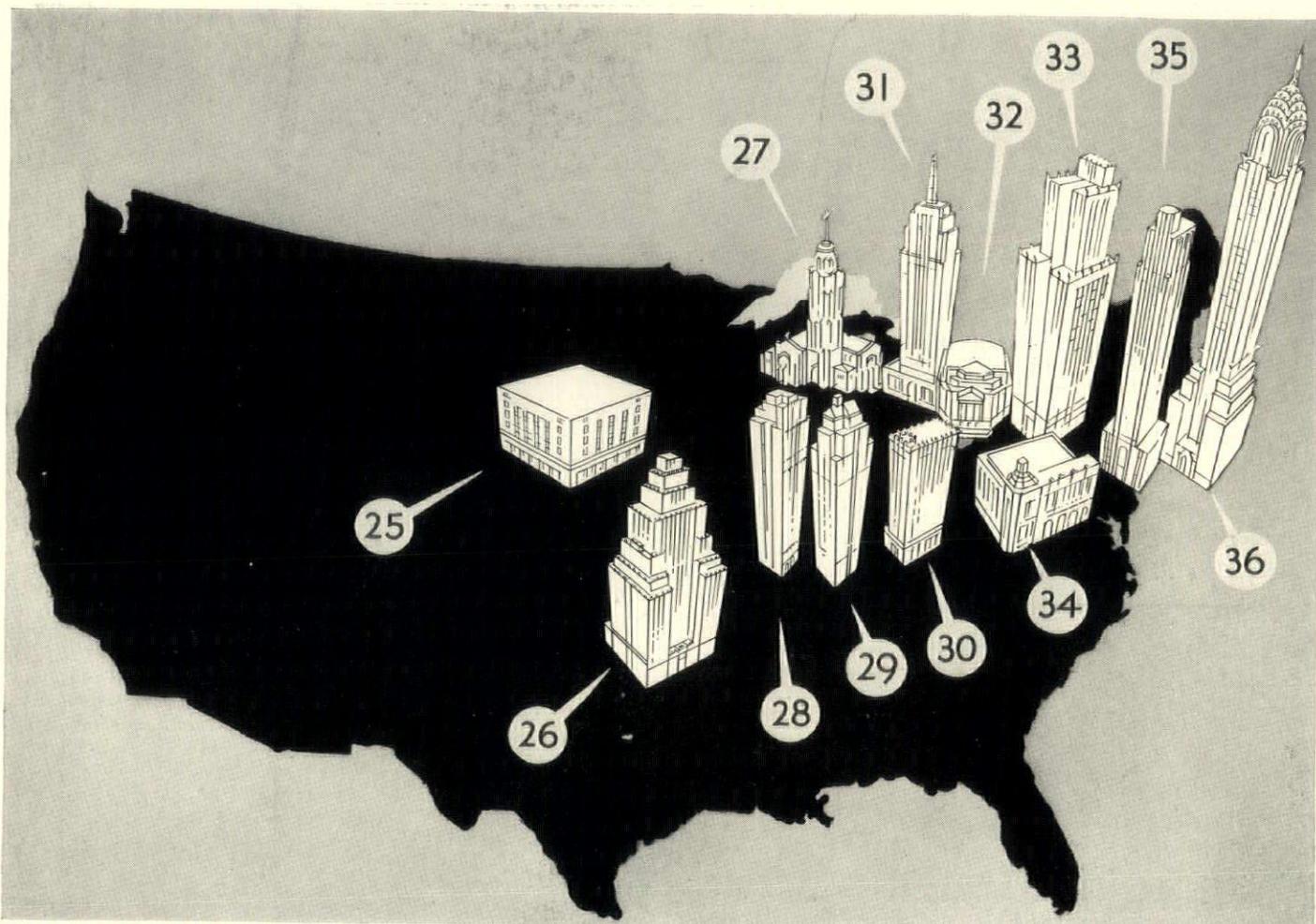
23 WALDORF ASTORIA HOTEL, New York City, N. Y. Architect: Schultze and Weaver, New York. General Contractor: Thompson-Starrett Company. Sub-contractor for aluminum work, General Bronze Corporation, Long Island City, N. Y. ALCOA ALUMINUM used for spandrels.

24 HERSH TOWER, Elizabeth, New Jersey. Architect: Myers and Shanley, Newark, New Jersey. General Contractor: Turner Construction Company, New York City. Sub-contractors on aluminum work: General Bronze Corporation, New York City; Del Turco and Brothers, Inc., Harrison, New Jersey (Terrazzo). ALCOA ALUMINUM used for spandrels, sills, sash, grilles, mullions, store fronts, screens, beltline, entrance vestibule, lobby, elevator doors, lighting fixtures, gutters, terrazzo strips, pilasters.

ALCOA ALUMINUM



THE AMERICAN ARCHITECT



Aluminum castings used in these buildings were made from Alcoa Aluminum Alloy No. 43

Page 3

They secured permanence—saved handling unnecessary weight—cut cost of erection

25 FAIDLEY BUILDING, Omaha, Nebraska. Architect: McDonald and McDonald, Omaha. General Contractor: A. H. Brodkey Company, Omaha. Sub-contractor on aluminum work: Kraus and Trustin, Omaha. ALCOA ALUMINUM used for spandrels, store fronts, mullions.

26 PARK PLAZA HOTEL, St. Louis, Missouri. Architect: Bauman and Schopp, St. Louis. General Contractor: Koplar Construction Company, St. Louis. Sub-contractor on aluminum work: Usona Mfg. Company, St. Louis. ALCOA ALUMINUM used for radiators, supplied by the Thermal Unit Heating Company, Chicago; elevator doors, furnished by the Dahlstrom Metallic Door Company; moulding, stair rails.

27 ST. SEBASTIAN CHURCH, Milwaukee, Wisconsin. Architect: Herbst and Kuenzli, Milwaukee. General Contractor: Edward Steigerwald and Sons, Inc., Milwaukee. Sub-contractor on aluminum work: Jos. Romberger Sheet Metal Works, Milwaukee. ALCOA ALUMINUM used for roof, gutters and down-spouts.

28 1242 LAKE SHORE DRIVE APARTMENT BUILDING, Chicago, Illinois. Architect: Robert S. DeGolyer and Company, Chicago. General Contractor: Turner Construction Company, Chicago. Sub-contractor on aluminum work: Kohl and Vick Iron Works, Chicago. ALCOA ALUMINUM used for spandrels, balconies, window jambs and sills.

29 DRAKE TOWERS, Lake Shore Drive, Michigan Avenue, Chicago, Illinois. Architect: Benjamin H. Marshall, Chicago. General Contractor: Benjamin H. Marshall, Construction Department. Roofing and sheet metal construction, Advance Roofing and Sheet Metal Works, Inc. ALCOA ALUMINUM used for shingles.

30 CENTRAL UNION BANK BUILDING, Evansville, Indiana. Architect: McGuire and Shook, Indianapolis, Indiana. Associate Architect: Walker and Weeks, Cleveland. General Contractor: M. J. Hoffman Construction Company, Evansville, Indiana and Detroit, Michigan. Sub-contractor on aluminum work: International Steel and Iron Company, Evansville, Indiana. ALCOA ALUMINUM used for spandrels and window sills.

31 OLD MERCHANTS NATIONAL BANK AND TRUST COMPANY BUILDING, Battle Creek, Michigan. Architect: Weary and Alford, Chicago, Illinois. General Contractor: Walbridge and Aldinger, Detroit, Michigan. Sub-contractor on aluminum work: General Bronze Corporation, New York City, N. Y. ALCOA ALUMINUM used for spandrels, grilles, main entrance, mullions.

32 SEVERANCE HALL, Cleveland, Ohio. Architect: Walker and Weeks, Cleveland. General Contractor: Crowell and Little Construction Company, Cleveland. Sub-contractors on aluminum work: Industrial Asbestos Company, Cleveland; The John Harsch Bronze and Foundry Company, Cleveland. ALCOA ALUMINUM used for roof, doors, marquee, stair case, terrazzo strips, grilles, panels, etc.

33 GRANT BUILDING, Pittsburgh, Pennsylvania. Architect: Henry Hornbostel, Pittsburgh. General Contractor: Thompson-Starrett Company, Pittsburgh, Pennsylvania and New York City, N. Y. ALCOA ALUMINUM used for spandrels, guard rail, sheet roof on pent house.

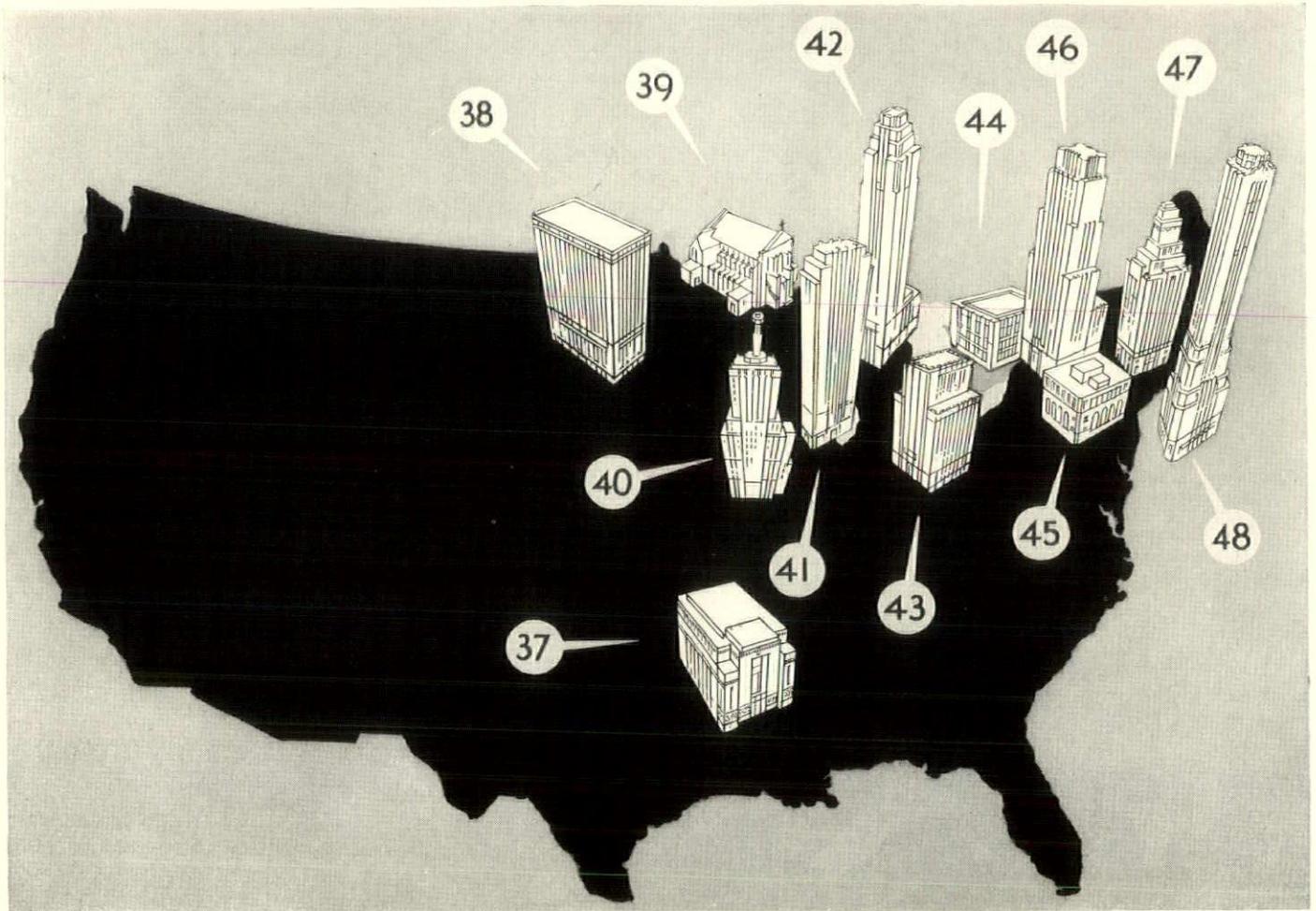
34 MT. LEBANON MUNICIPAL BUILDING, Mt. Lebanon, Pennsylvania. Architect: Wm. H. King, Jr., Pittsburgh. General Contractor: H. S. Miller and Son, Pittsburgh. Sub-contractor on aluminum work: Star Ornamental Iron Company, Pittsburgh. ALCOA ALUMINUM used for roofing, flashing, skylights, spandrels, stair and balcony railings, entrance hardware.

35 1616 WALNUT STREET BUILDING, Philadelphia, Pennsylvania. Architect: Tilden, Register and Pepper, Philadelphia. General Contractor: Wark and Company. Sub-contractor on aluminum work: General Bronze Corporation, New York. ALCOA ALUMINUM used for spandrels and interior lobby.

36 CHRYSLER BUILDING, New York City, N. Y. Architect: Wm. Van Alen, New York. General Contractor: Fred T. Ley and Company, Inc., New York. Sub-contractors on aluminum work: Sexauer & Lemke, Inc., Long Island City; Benjamin Reiser, Inc., New York City; Abbot and Ney Co., Inc., New York City, N. Y. ALCOA ALUMINUM used for spandrels, window sills, flag pole base, door saddles, louvers, window ventilators, parapet hand rail, coping panels, roof drains and leader outlets.

ALCOA ALUMINUM





Aluminum castings used in these buildings were made from Alcoa Aluminum Alloy No. 43

Page 4

They used a metal that does not require surface protection...is free from corrosion... does not streak adjoining surfaces

37 UNION TRUST BUILDING, Little Rock, Arkansas. Architect: Thompson, Sanders and Ginocchio, Little Rock. General Contractor: International Casement Company, Jamestown, New York. Sub-contractor on aluminum work: P. Larsen Company, Pittsburgh, Pennsylvania. ALCOA ALUMINUM used for spandrels, grilles, mullions and jambs.

38 NORTHWESTERN BANK BUILDING, Minneapolis, Minnesota. Architect: Chicago, Ill. General Contractor: Charles Haglin and Sons Company, Minneapolis. Sub-contractor on aluminum work: General Bronze Corporation, Minneapolis. ALCOA ALUMINUM used for spandrels.

39 HOLY GHOST CHURCH, Milwaukee, Wisconsin. Architect: Eschweiler and Eschweiler, Milwaukee. General Contractor: Czaplewski Brothers, Inc., Milwaukee. Sub-contractor on aluminum work: Biersach and Niedermeyer, Milwaukee. ALCOA ALUMINUM used for roof, gutters and down-spouts.

40 LINDBERGH BEACON TOWER, PALMOLIVE BUILDING, Chicago, Illinois. Architect: Holabird and Root, Chicago. General Contractor: Lundoff-Bicknell Company, Chicago. Sub-contractor on aluminum work: Gorham Manufacturing Company, Providence, Rhode Island. ALCOA ALUMINUM used for tower, structural steel encased in aluminum extruded members, projector housing.

41 430 NO. MICHIGAN BLVD. BUILDING, Chicago, Illinois. Architect: Loeb, Schlossman and Demuth, Chicago. General Contractor: Lundoff-Bicknell, Chicago. Sub-contractor on aluminum work: The American Architectural Iron Works, Chicago; Paltridge Metal Equipment Company, Chicago; E. M. Weymer

Company, Chicago. ALCOA ALUMINUM used for lobby and entrance vestibule grilles and ornaments, elevator doors, door and transom frames.

42 CENTRAL NATIONAL TOWER, Battle Creek, Michigan. Architect: Holabird and Root, Chicago, Illinois. General Contractor: Lundoff-Bicknell Company, Chicago. ALCOA ALUMINUM used for flashing, louvres, screens, metal decks and ventilators.

43 THE OHIO BELL TELEPHONE COMPANY, Dayton, Ohio. Architect: Schenck and Williams, Dayton. General Contractor: H. R. Blagg Company, Dayton. Sub-contractors on aluminum work: General Bronze Corporation, Minneapolis, Minnesota; Van Kannel Revolving Door Company, New York; Cutler Mail Chute Company, New York; Campbell Metal Window Corporation, Baltimore, Maryland; Dayton Stencil Works, Dayton; Edward Meyer and Company, Cincinnati, Ohio. ALCOA ALUMINUM used for spandrels, grilles, store fronts, entrance doors to main building and stores, revolving doors, elevator doors, windows, ventilating ducts, louvres, mail chutes, directory board.

44 MICHIGAN DIAMOND EXCHANGE BUILDING (Ohio Bell Telephone Company), Cleveland, Ohio. Architect: Hadlow, Hughes, Hick, and Conrad, Cleveland. General Contractor: Crowell and Little Construction Company, Cleveland. Sub-contractor on aluminum work: Kilroy Structural Steel Company, Cleveland. ALCOA ALUMINUM used for spandrels, window sills, grilles, foye fence and gate, entrance doors.

45 COUNTY OFFICE BUILDING, Pittsburgh, Pennsylvania. Architect: Stanley Roush, Pittsburgh. General Contractor: S. M. Siesal Company, Pittsburgh, Pennsylvania and Milwaukee, Wisconsin. Sub-contractor on aluminum work: General Bronze Corporation, New York City. ALCOA ALUMINUM used for windows, thresholds, kick plates, mop strips.

num work: General Bronze Corporation, New York City. ALCOA ALUMINUM used for windows, thresholds, kick plates, mop strips.

46 CENTRAL DEPOSITORS BANK, Akron, Ohio. Architect: Walker and Weeks, Cleveland, Ohio. General Contractor: Carmichael Construction Company, Akron. Sub-contractor on aluminum work: The John Harsch Bronze and Foundry Company, Cleveland, Ohio. ALCOA ALUMINUM used for store fronts, entrance and lobby doors, grilles, terrazzo strips, bank screens, check tables, stair railing, etc.

47 NEW YORK TRUST BUILDING, New York City, N. Y. Architect: Cross and Cross, New York. General Contractor: Thompson-Starrett Company, New York. Sub-contractors on aluminum work: Reliance Bronze and Steel Company, New York; Campbell Metal Window Corp., New York; The Long Island Wire Works, Inc., Brooklyn, N. Y. ALCOA ALUMINUM used for double hung windows, revolving doors, banking room windows, elevator cabs and doors, directory board, grilles, counter screens, and cage work.

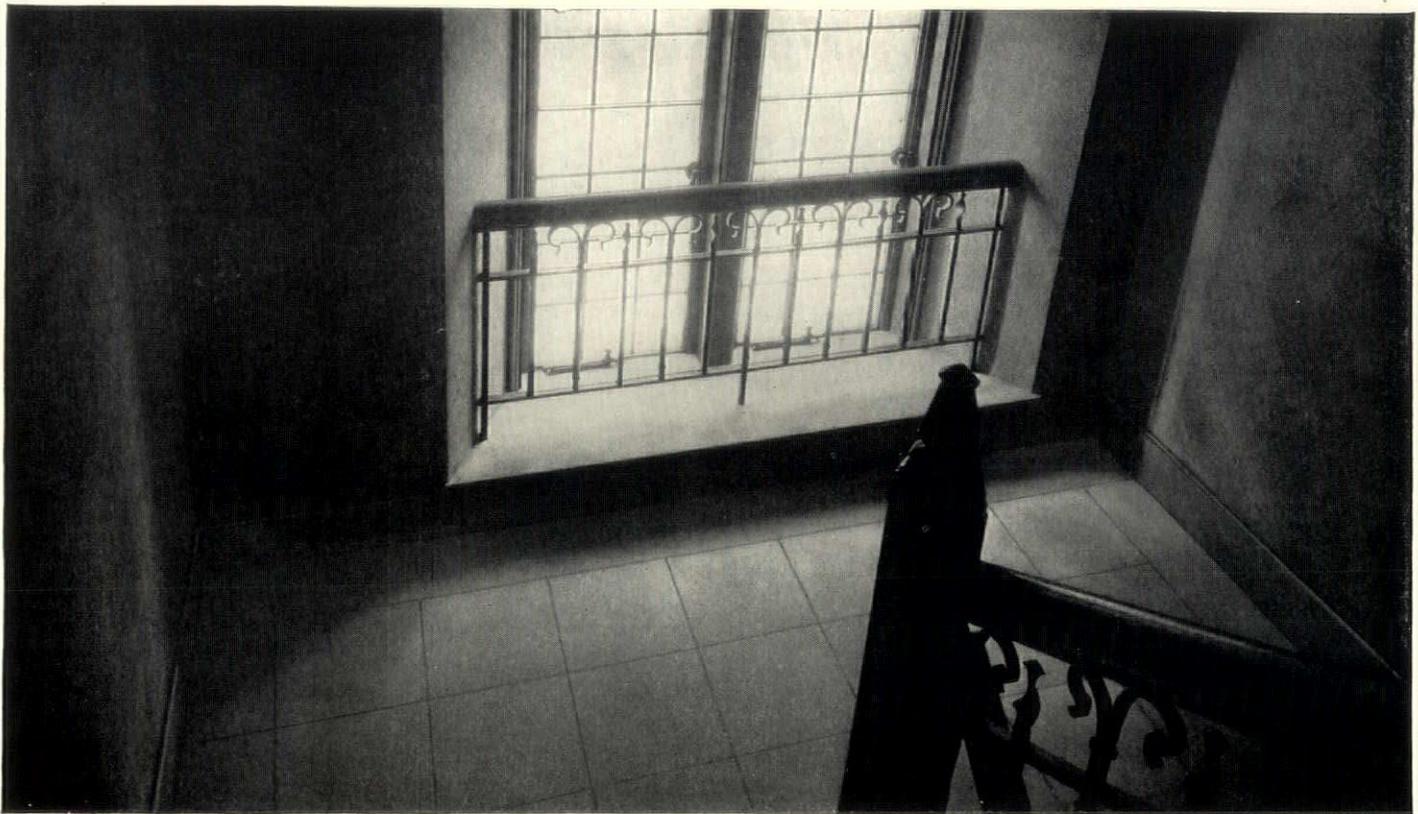
48 CITY BANK-FARMERS TRUST BUILDING, New York City, N. Y. Architect: Cross and Cross, New York. General Contractor: George A. Fuller Company, New York. Sub-contractors on aluminum work: C. E. Halback Company, Brooklyn, New York; Sexauer & Lemke, Long Island City; Richey Browne & Donald, Inc., Maspeth, L. I. ALCOA ALUMINUM used for spandrels, casement windows, window sills, hand rails and bridge.

Our nearest office will gladly send a representative to talk with you about the architectural uses of ALCOA ALUMINUM. ALUMINUM COMPANY OF AMERICA; 2440 Oliver Bldg., PITTSBURGH, PA.

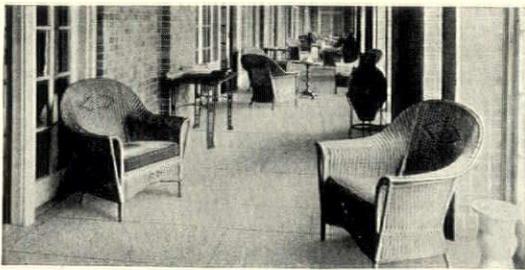
ALCOA ALUMINUM



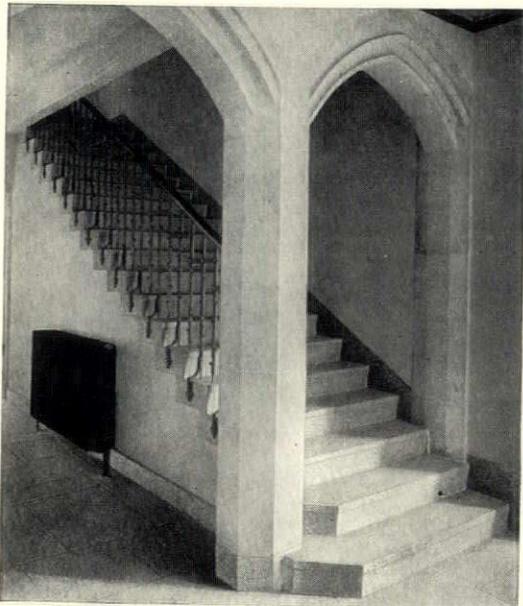
THE AMERICAN ARCHITECT



Suitable, from every angle, for sills, stools, floors, treads and base



Alberene Stone floor in the loggia of the Penn Athletic Club, Philadelphia



Alberene Stone stair treads, floor tiles and base — St. Paul's Presbytery, Pittsburgh

COLOR, durability, economy of upkeep, appearance — consider Alberene Stone from every angle and you will find it meets your requirements.

Its natural light blue-grey tone harmonizes with practically any color scheme.

Sills, exposed to extreme changes of weather, do not chip, scale or split, because the stone is impervious to moisture. Selected, hard Alberene Stone has proven its lasting qualities under severe daily use for stair-treads and landing platforms in schools and public buildings.

Its freedom from staining and its ease of cleaning make for economy particularly since the stone does not show its age. The brochure "Architectural Alberene" shows actual color reproductions of commonly used building stones in conjunction with Alberene, also gives pertinent facts as to the known durability of the stone. We will send you a copy of the brochure, gladly.

ALBERENE STONE COMPANY, 153 West 23rd Street, New York
 Branches at Chicago :: Pittsburgh :: Cleveland :: Boston :: Philadelphia
 Richmond :: Newark, N. J. :: Rochester :: Washington, D. C.
 Quarries and Mills at Schuylers, Virginia

ALBERENE STONE

THE NATURAL STONE OF DIVERSIFIED UTILITY

Ventilating System That Did Not Work

(Continued from page 53)

some thirty-five stories high.

Complaint was made that on certain days certain departments would overheat, that at times the fans seemed too small, etc. It is obvious that with heavy wind pressure from the north the resistance against all four exhaust fans is increased enormously, and that under this outside pressure the weaker fans tend to be overcome by the stronger fans, and that trouble must follow.

There is no reasonable way to correct this piece of reprehensible engineering short of tearing out partitions and remodeling the floor plans of the remaining fifteen stories of the tower in such manner as to provide a separate discharge flue for each of the five exhaust fans each extending all of the way to the top of the tower.

○N one occasion four exhaust fans in the attic of a big Masonic Temple discharged side by side into an adequately large masonry chimney which was built up satisfactorily high above the roof pent houses.

There was trouble in heavy doses from this plant. They did not always operate all four exhaust fans. If but one fan were shut down there was enough resistance to the outgoing air flow from the other fans to cause back-drafts and howls of protest from the departments served by the shut-down fans.

If all fans were operated, all of them were cut down as to output, due to the added static pressure caused by the chimney-resistance. If but one fan were operated it would handle too much air due to lowered resistance.

Fortunately this trouble was cured easily by installing transverse metal partitions which separated the discharge duct of each fan from its neighbors all of the way to the outside.

In Columbus there is a lofty Gothic church which gives no chance for chimneys or ventilators or even split ridges for exhaust-escape since there is no attic. The architect, in this case one of wide experience, permitted development of a modification of the ridge vent.

There is a copper lined passage from vent openings at the ceiling along the side walls through which the air passes in the heavy masonry around to the up-looking outlet in the ridge. Only an aviator can see this opening. There are remotely-controlled cut-off dampers, and there are down-going flues for recirculation.

Air inlets for ventilating systems do not cause nearly as much difficulty between the architects and the engineers as do the outlets.

If the outlet looks up through the roof the best place for the inlet may be as close as possible to the outlet, but looking out sideways. The spent air, usually warmer than the incoming air, rises, and very seldom contaminates the incoming air under these conditions.

If the outlet looks up through the roof an ideal inlet will be through a window opening just below the parapet or eaves, where there should be freedom from surface dust and from roof dust.

Did you ever have a window in an office or apartment house which looked out on the roof below a set-back? This roof not only accumulates dust from the neighbors' chimneys, but also gathers cigar and cigarette butts and

all manner of debris from the stories above it, which with every wind eddy is shoveled into your window.

There is common sense in the suggestion, to the tenant of such a place, that we abolish set-backs and build truly pyramidally inclined side walls.

There is a large city hall which is uncomfortable and unhealthy, and which daily receives unhappy advertising on account of overheating and evil odors, because the architect used center vertical pivots on the great single-sash windows. You can't get any outside air without danger of getting too much air with these windows. You can't keep out the rain and snow. Weatherstrips are of no avail—curtains are hopeless. Any mechanical engineer could have prevented this mistake.

There is a large auditorium in which the high, rear portion of the seating area gets unsufferably hot, while the best front seats can't be sold because they are so cold. This occurs because the architect omitted roof insulation, yet expected the warm spent air from the space below the leaky, suspended ceiling to climb up into the frigid attic, and then to pass upward and out through gravity ventilators.

The cool air from the uninsulated and unheated attic of course falls through the leaky ceiling and lowest exhaust flues, as shown in Figure 4. It gathers in the bottom of the seat space around the orchestra, while air from the rear of the seat space, passing to the attic, gets cold and completes the vicious circle.

A competent mechanical engineer would have foreseen and could have prevented this case. The architect, a good fellow, was in a city where mechanical engineers were noticeable by their absence. The boiler salesman who advised the architect knew nothing of the characteristics of the air currents in large public halls.

A small public library had its chimney alongside of a one-story dumb-waiter, which was built into the chimney breast, as shown in Figure 5. The architect, not wishing to show an abrupt terminal of the chimney breast above the dumb-water carried the space above the little elevator and topped it to look like a chimney. Unfortunately the architect did not end his labors there but, thinking that the larger the chimney area the better the draft, he connected the short chimney above the dumb-waiter into the main chimney.

THE mechanical engineer could have saved much grief in this case, as of course the unheated dumb-waiter chimney had a consistent downdraft which satisfied the suction-activity of the slightly-warmer main chimney, leaving the boiler in the basement practically without draft.

The steel chimney of a forty-story office building carrying the heated gases from the boilers is better concealed behind corridor walls rather than behind the walls of revenue-producing areas. In one case where the tenants paying a high rental began to move out because of excessive heat in their walls it was found that while an annular space between the steel and the masonry was provided, the air in this space was practically as warm as were the gases in the chimney itself.

TRADE **YALE** MARK

FINE BUILDERS' HARDWARE
equips many of the world's important buildings

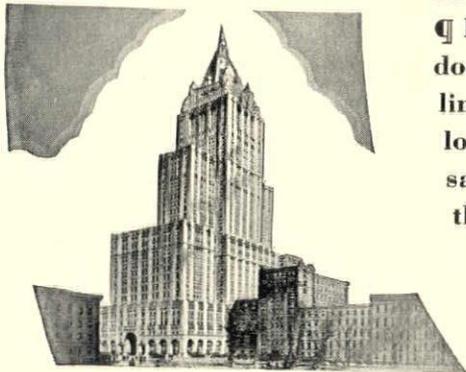
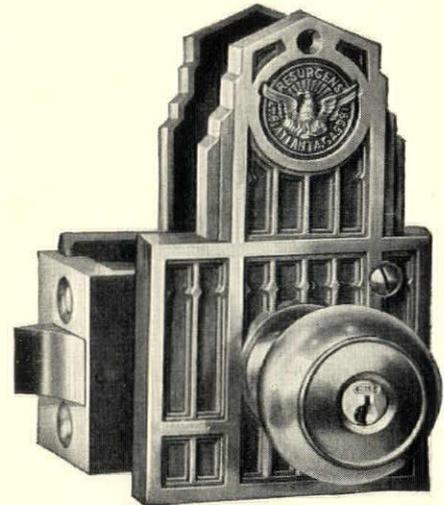


In the most important buildings in any community, anywhere, look for the name on that structure's locks, hardware and door closers. It is significant to note how often the name is YALE.

☐ Yale Fine Builders' Hardware is the most practical, as well as the most beautiful, equipment of its kind.

☐ For the now widely used hollow metal doors, Yale has developed a complete line of standard template locks—each lock instantly interchangeable in the same mortise and in every door throughout the building. This is the greatest simplification of installation the architect and builder has ever known.

☐ Yale Fine Builders' Hardware is available in a wide variety of patterns to complement any school of architecture—and also made in special designs to the architect's order. In all Yale Hardware you will find that fidelity to quality of material and accuracy of design that so distinguishes true craftsmanship.



THE YALE & TOWNE MFG. CO.
STAMFORD, CONN., U. S. A.
Canadian Works at St. Catharines, Ont.

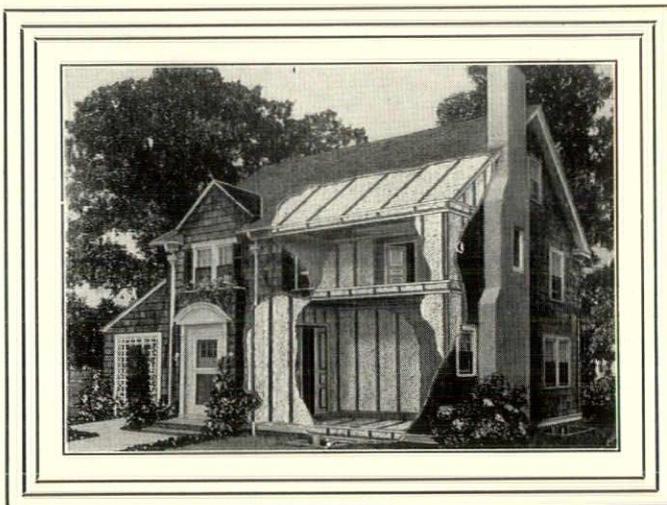


YALE MARKED IS YALE MADE

Insulate with U. S. MINERAL WOOL

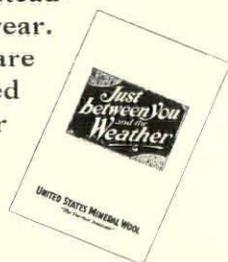
The perfect insulator

COLD PROOF . . . HEAT PROOF . . . FIRE PROOF
SOUND PROOF . . . VERMIN PROOF



You Build Better Homes!

THE value of insulation is recognized by all architects and builders. No house would be built without it, if the individual builder would investigate its use. The small original, and last, installation cost, is more than offset by the actual savings which steadily continue year after year. These important savings are explained in our illustrated booklet. Send for your FREE copy and sample of Mineral Wool.



UNITED STATES MINERAL WOOL CO.
280 Madison Avenue, New York

Western Connection—Columbia Mineral Wool Co.,
South Milwaukee, Wisc.

U. S. MINERAL WOOL CO., DEPT. F
280 Madison Ave., New York
Send FREE sample and illustrated booklet to

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

Investigation by the mechanical engineer disclosed that the architect and the owner had added an observatory in the top of the tower, and that they had built a thick brick wall tightly around the outside of the chimney, cutting off entirely any movement of air upward through the annular space.

There is usually no difficulty on account of chimney heat in lofty buildings if consistent air inlets to the annular space are provided, and if the heated air is exhausted from this space. Sometimes it is expedient to repeat this performance several times during the progress of the stack from bottom to top of a lofty building.

In a large residence in Lake Forest the architect designed the heating plant with a gas-fired boiler for operation during residence by the family, and with an oil-fired boiler for operation during the absence of the family.

The two boilers, each with its separate chimney, were placed side by side in a very well-built basement heater room. All windows and doors were weatherstripped, and as the heater room door opened into the lower hallway it was always closed.

TRouble in large shipments arrived promptly. An oil-fired boiler requires a reasonable draft. The gas-fired boiler requires a very slight draft. If there is too much draft in the case of a gas boiler the boiler cannot be efficient. In this case the pilot lights would go out. Neither boiler seemed big enough for the duty required. Sometimes both boilers seemed too small. The heater room was suffocatingly hot.

The owner finally sent for a mechanical engineer. The latter promptly threw a wrench through the heater room window. The boilers, either or both, promptly began to function.

They had had no air to burn.

We must have air to burn with gas or oil or coal or wood. With the window and the door closed the only chance the oil-fired boiler had for air was to pull it by main strength down the chimney of the gas-fired boiler. There wasn't enough chimney area and the friction was too great, and besides under such a condition the gas-fired boiler was more or less out of luck!

The owner still believes that the mechanical engineer in this case is a great man.

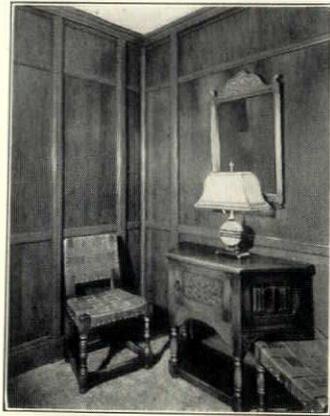
Many architects believe that the ideas of a consulting engineer called in occasionally may be constructive and helpful. They like to send him prints of their early sketches of the floor plans before very much detail has been worked out. They like to have him sit in on early visits with the owner so that he too may grasp something of the psychological background.

There is great virtue and appreciable reward in these days of telephone and letter and telegram in occasional face-to-face contact as an aid to human understanding.

If the engineer is allowed to see the early sketches and to grasp something about what the owner desires, he can very much more easily and satisfactorily assist the architect to provide for the owner's satisfaction.

Arnaldo Gladosch, architect, Caixa do Correio 130, Rio De Janeiro, Brazil, who is building a 26 story office and theatre building, wishes to receive catalogs and manufacturers' literature as he desires to use mostly American products.

THE MCMXXXI EXHIBIT OF MOVABLE PARTITIONS



NEW YORK CITY

THE ENTIRE TOP FLOOR • TEN EAST FORTIETH STREET

OUT of the factory, up from the shipping-room, and in from the general office, have come steel partitions—to grace the President's suite.

Authoritative architectural design and manufacturing refinements, together with the introduction of modern color schemes and natural grainings, have made sectional steel paneling worthy of the architect's use for decorative as well as practical purposes.

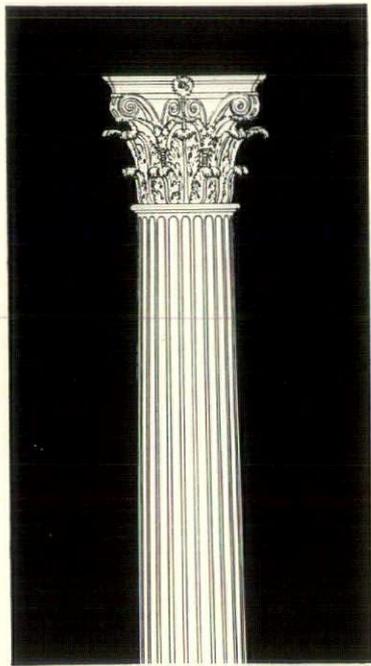
In recognition of steel's progression from workshop to inner sanctum, the Hauserman organization has devoted five thousand square feet of space to the most complete and detailed exhibit of movable steel partitions and demonstration of their manufacture ever assembled for the architect's inspection.

You are invited to attend this showing, to familiarize yourself with the developments in design, mechanical construction, appearance and speed of dismantling and re-erecting, that will characterize movable steel partitions of the future.

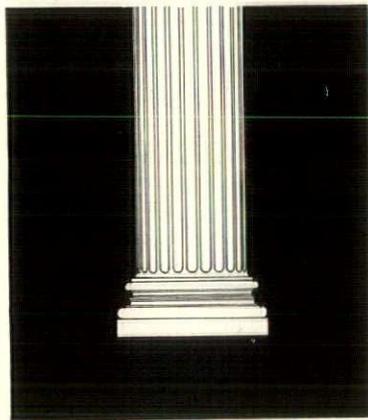
HAUSERMAN
MOVABLE STEEL
PARTITIONS

CREATED AND SPONSORED BY

THE E. F. HAUSERMAN COMPANY • *Factory and Executive Offices:* CLEVELAND, O.
COMPLETE SALES AND SERVICE ORGANIZATIONS AT TWELVE STRATEGIC POINTS

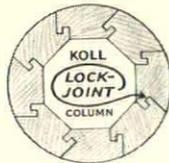


COLUMNS CERTAIN TO GIVE SATISFACTION



~ and here's why

- 1 Hartmann-Sanders Lock-Joint construction absolutely prevents warping, loosening and opening up at the joints.
- 2 Every Hartmann-Sanders Column is a faithful reproduction, from authentic sources, and correct according to the five orders of architecture.
- 3 Only clear lumber is used, without knots or defects—from woods especially chosen for proved resistance to weather.
- 4 All columns above fourteen inches are water-proofed inside; all flutes are stopped; metal reinforcing is used where required—details which give exceptional lasting quality.
- 5 Each stave is turned to correct entasis. Thus, finished columns are perfect in proportion, and there are no thin or weak places.
- 6 Workmanship is careful and exact. Every detail is perfectly executed. The completed column gives an effect of unusual beauty.
- 7 An unusually wide range of choice is available—columns of every style and kind are shown in Hartmann-Sanders' catalog. Large columns, twenty feet and more in length are a specialty.
- 8 Hartmann-Sanders Columns are guaranteed to give complete and lasting satisfaction. Their use will protect your reputation and eliminate replacement costs.



HARTMANN-SANDERS

Send for Catalog. Dept. Z

2155 ELSTON AVE., CHICAGO

6 EAST 39th ST., NEW YORK CITY

What Architects Are Talking About

(Continued from page 63)

will realize permanent economies in the cost of construction. . . Very substantial economies in the necessary costs of construction have already been accomplished by the joint effort of the Producers Councils and the American Institute of Architects."

"THE modern architect no longer thinks of a building first in terms of exterior design," points out Ely Jacques Kahn, chairman of the exhibition and architecture committee, Architectural League of New York. "He does not start by designing the facade and fitting the requirements of the building into the scheme later. Instead, he begins by studying the functions and purposes of the building. He starts with the inward working parts, the digestive tract, if you will, and works outward. Once assured that his plans promote the smooth operation of all working units, he proceeds with the design for the exterior. By keeping his lines simple and in conformity with the functional requirements of the structure and eliminating unnecessary furbelows, the architect working in contemporary design is guided by reason, by common sense; in providing shelter he is assuring the best functioning of light, heat, air and other requirements of living."

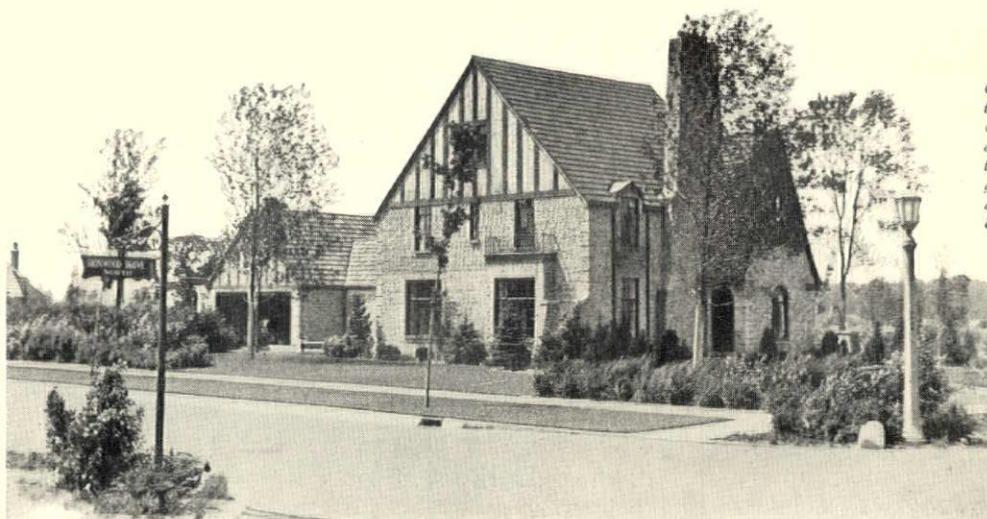
SKYSCRAPERS in 325 A.D.? So much so that Constantine issued an edict forbidding the construction of buildings more than 100 feet high because tall buildings were shutting off the view from his palace on the Golden Horn. As many as four stories had to be taken off some buildings, which indicates that they were about 140 feet high or the equivalent of a modern skyscraper of twelve or fifteen stories.

A NATIONAL safety code for mechanical refrigerators of all types, both domestic and commercial, has been approved by the American Standards Association. This code permits the installation of multiple systems in apartment houses with adequate safeguards.

A COOPERATIVE office building will shortly be started at 30 Broad Street, New York, and will be owned by the Continental Bank and a number of New York Stock Exchange and Curb firms.

CASS GILBERT was awarded the gold medal of the Society of Arts and Sciences, which terms his genius the well-spring of architectural beauty in modern cities, for his masterpiece, the Woolworth Building. In addition, the Society authorized erection of a bronze tablet in the building memorializing Mr. Gilbert's achievement.

PROGRAMMES for the Le Brun Travelling Scholarship competition, conducted by the New York Chapter A. I. A., will be issued about January 15, 1931, calling for drawings to be delivered about March 15. Nomination blanks may be obtained from the secretary of any A. I. A. chapter.



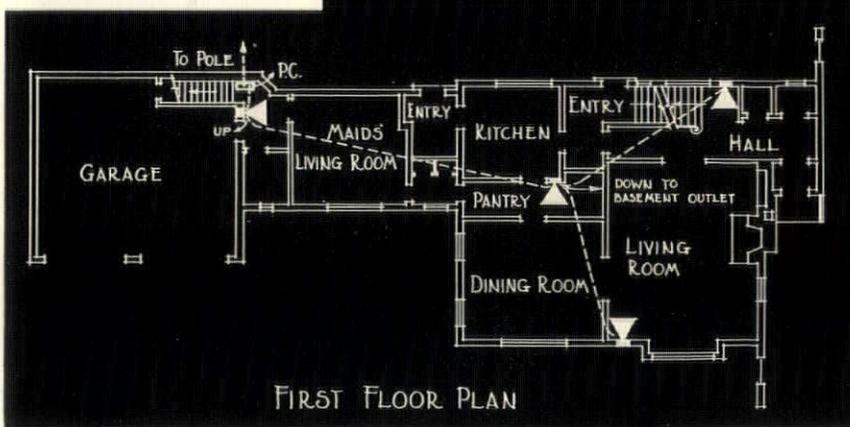
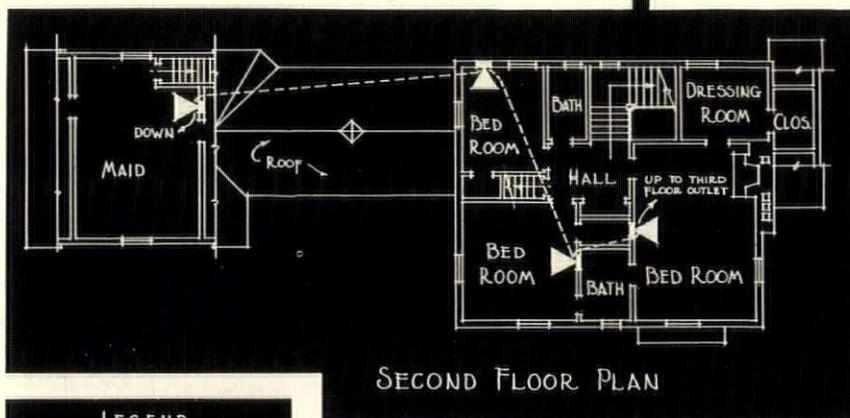
Complete telephone convenience is provided for in the residence of Mr. Russell F. Smith, 501 N. Ironwood Drive, South Bend, Indiana, by ten telephone outlets, including one in the basement and one on the third floor. Two central office lines permit greater freedom in using the service. Built-in conduit carries all necessary wiring. FETT, PEARSON & GOFFENEY, Architects, South Bend, Indiana.

TODAY, TELEPHONE CONVENIENCE IS PLANNED IN ADVANCE

MODERN HOMES, built for comfort and convenience, have telephones throughout . . . in living room, library, kitchen, garage, bedrooms, nursery . . . wherever time and steps can be saved by quick communication.

Many architects, in planning new or remodeled residences, now specify conduit for telephone wiring within the walls and floors. In this way, it is possible to provide telephone outlets at the most convenient locations in each of the important rooms. All wiring is completely concealed, thereby giving greater freedom from certain types of service interruption. Moreover, the home owner may use any number of outlets at a time, and can readily expand or rearrange his service to meet changing requirements.

Your local telephone company will be glad to assist you in planning the telephone arrangements for any of your projects. There is no charge for the service. Just call the Business Office.



If You Insist On EFFICIENCY PERMANENCE and ECONOMY You'll Insist On RIC WIL

RIC-WIL EFFICIENCY is a known quantity . . . not guesswork . . . for every test made on Type F installations has shown better than 90% with one recent test showing an efficiency of 95.6%. And efficiency spells economy in fuel. In addition, Ric-wil is so well engineered . . . so simple in construction . . . that it brings labor costs down to a minimum.

Ric-wil construction permits a narrower and shallower trench, no extra digging for drain tile and no hand curving trench bottom to cradle the conduit. Ric-wil Conduit cradled on the Base Drain, makes an interlocking construction that will not sag . . . pipes and conduit remain in alignment indefinitely. And Dry-paC Insulating Filler remains water-proof indefinitely. Thus Ric-wil Systems are permanent . . . they eliminate heavy yearly repair bills.



Type F System, two pipe installation, showing application of Dry-paC insulating filler, Base Drain, external pipe supports and the famous Loc-lip Side Joint . . . all features exclusive to Ric-wil.

HEATING RATES for 1930-1931

Our Condensed and Tabulated Heating Rates for 1930-1931 are just off the press. A request on your business letterhead will bring as many copies as you require. No obligation, of course.

Investigate Ric-wil Conduit Systems thoroughly before you decide on your underground pipe conduit. Write for our catalog and details of typical installations.



THE RIC-WIL COMPANY
1562 Union Trust Building . . . Cleveland, Ohio
Branches: New York · Atlanta · Chicago
AGENTS IN PRINCIPAL CITIES

REG. U. S. PAT. OFF

RICWIL

CONDUIT SYSTEMS FOR
UNDERGROUND STEAM PIPES

KING ALBERT of Belgium, through Charles Hallaert, acting Belgian Consul, has presented the insignia of Officer of the Crown to John Mead Howells, and that of a Chevalier of the Order of the Crown to Raymond M. Hood, both New York architects, in recognition of their work in connection with the plans for the new buildings of the University of Brussels.

"THE world's best designers have been retained by the motor car companies to turn out models which, even in the cheapest lines, meet all requirements of beauty and convenience," states Irving Fisher, Professor of Economics, Yale University. "Not so in the designing of homes. The mass of the American people can buy cheap cars in exquisite models, but they must put up with speculative housing; that is, cheap housing, with ugly interiors unhandily arranged; with shoddy buildings, erected with little regard to proper relationship of houses and apartments to facilities for school, recreation and shopping. With the present aggregations of capital awaiting favorable opportunity for investment why not put them into finance and development companies that will apply the most modern principles of home architecture and town planning to the needs of the masses as successfully as motor car transportation has been provided for the masses?"

PALMER SHANNON will hold an exhibition of Cameragraphs at the Architectural League of New York the last two weeks in January. The exhibit will include reproductions of architectural drawings and will show the work of New York craftsmen for the past year.

AN elevator that can move vertically and also rotate is stated by the Architectural Review of London to be a new and clever invention for use in multifloor garage buildings. Stalls on each floor radiate from the elevator shaft for the accommodation of automobiles. It is claimed that twenty cars can be housed in an area of 4,380 square feet on each floor and all can be removed in less than one hour. According to the figures quoted an allowance of 219 square feet must be made for each car.

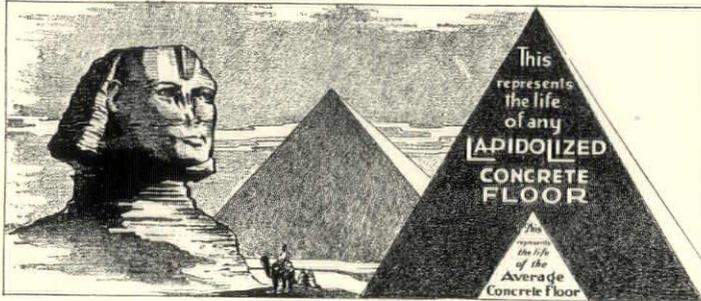
"THE artist's place in industry must be safeguarded, and the piracy of design stopped at all costs," said Lee Simonson, president of the American Union of Decorative Artists and Craftsmen at a meeting of those interested in the Vestal bill, which is a measure to protect original design. "A fabric design, a decorative art object, or a piece of craftwork may be copied and re-copied with no way of halting the pilfering."

SOCIETY of Beaux Art elections resulted in Harvey Wiley Corbett as president; C. C. Zantzinger of Philadelphia, vice-president; Julian Clarence Levi, secretary; Lansing C. Holden, Jr., treasurer; Phillip Allain Cusachs, chairman committee on education; and Joseph H. Friedlander, chairman of Paris prize committee.

THE American Society of Heating and Ventilating Engineers will hold their thirty-seventh annual meeting at the William Penn Hotel, Pittsburgh, January 26-29, 1931.

L. SONNEBORN SONS, Inc.

GUARANTEE:



LAPIDOLITH

TRADE MARK

The Original Liquid Concrete Floor Hardener

Turns Concrete Floors Granite-Hard
and Protects Them from Crumbling,
Dusting and Wearing Down

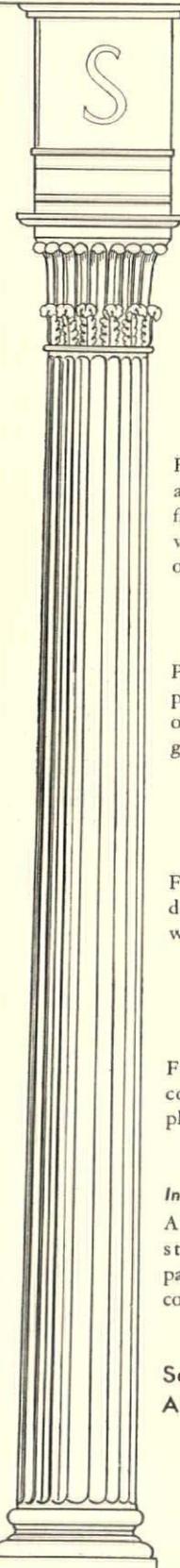
PPRICE-CUTTING COMPETITION, inferior materials—yes, we know it's mighty hard to produce an A-1 job. But specify Lapidolith Concrete Floor Hardener. Have it applied by a trained Sonneborn service crew, at no extra contracting cost. *There's* a job that need not cause you one minute's worry.

Lapidolith is a liquid chemical compound which penetrates deeply into the porous cement and binds the loose particles into a close-grained mass, *granite-hard*. Goes on like water. Hardens over-night. Floors, Lapidolith-treated, resist wear, water, chemicals, oil, and are dustproof.

No integral admixture can do the work of Lapidolith. Such mixtures only *accelerate* the initial set of concrete. They have no permanent effect beyond that. Lapidolith hardens concrete floors *permanently*.

More than a billion square feet of concrete floors have been preserved by Lapidolith—in offices, stores, schools, factories and institutions—in scores of the most outstanding buildings in America. Let us refer you to floors in your community which were Lapidolized years ago and are still smooth and hard after ruinous, grinding usage.

We will gladly quote prices direct to architects so that you can know in advance exactly what a first-class floor hardening job will cost. Sonneborn *guarantees* Lapidolith. Sonneborn makes good. Send for samples and full particulars.



Some Other Sonneborn Products

LIGNOPHOL

For finishing, preserving and wearproofing wood floors. Penetrates wood with life-giving gums and oils.

HYDROCIDÉ NO. 633

Plaster bond and damp-proofing paint for interior of exterior walls above ground.

HYDROCIDÉ NO. 648

Mastic, Semi-Mastic

For waterproofing and damp-proofing foundation walls and footings.

HYDROCIDÉ INTEGRAL

Paste, Powder

For waterproofing mass concrete, stucco, cement plaster and brick mortar.

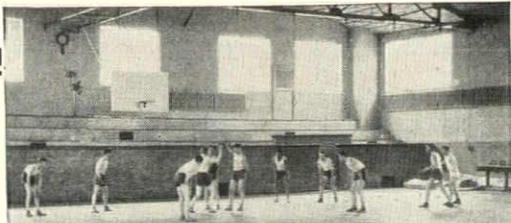
CEMCOAT

Interior and Exterior Paints

A tough, lasting paint that stays white after other paints turn yellow. Also in colors.

See data in Sweet's
Architectural Catalog.

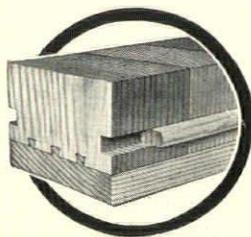
L. SONNEBORN SONS, Inc., 114 FIFTH AVENUE, NEW YORK



Seldom a Fall and... NEVER A SPLINTER

This illustrates a Bloxonend Floor in the gymnasium of the West Senior High School, Green Bay, Wis. C. C. Reynolds, Architect.

A gymnasium floor of Bloxonend minimizes falls and speeds up gymnastics and games because it provides a sure, safe footing. The end-grain fibres form its surface, positively eliminating the hazard of splinters. The floor is long-lived, resilient, sound-absorbing, takes an excellent finish and stays smooth. Powdered boric acid (easily removed with a damp cloth) makes it just right for dancing. Specified by leading architects for gymnasiums, shops and the better type industrial plants. Illustrated informative booklet on request.



BLOXONEND comes to the job in 8-ft. lengths with small tough blocks of Yellow Pine dovetailed endwise onto base-boards. The end-grain fibres form the wearing surface.

CARTER BLOXONEND FLOORING CO.

Kansas City, Missouri

Branches in Leading Cities—See Sweet's

BLOXONEND
Lays Smooth **FLOORING** *Stays Smooth*

TIMBER specifications that make use of the clause "all material shall be cut from live trees," are out-of-date, according to the Forest Products Laboratory, which states that wood from dead trees may be perfectly sound, strong and serviceable for the purpose at hand. The Laboratory recommends that the live-tree clause be replaced by "The (material) shall be free from all forms of decay and from checks that are more injurious than the permissible shake. (In poles, piles, etc.) worm holes, blight, fire, or other scars or patches are permitted provided the wood is sound, the depth of scar does not exceed one-tenth the diameter of the timber at the scar, and wormholes are not more injurious than the knots permitted."

A NEW odorless varnish has been developed, according to Arthur J. Norton, an industrial chemist of North Tonawanda. In addressing the American Chemical Society he said, "the use of laminated board is now possible for manufacturers of refrigerators and work of similar nature. This varnish is made to a definite viscosity which is sufficiently high to insure uniform coverage, and yet low enough to guarantee thorough penetration."

"TO my mind it is important for industry to appreciate the fact that the prosperity of the United States is founded on a high wage scale," is told to stockholders of General Motors by its president, Alfred P. Sloan, Jr. "To reduce the wage scale would, in my judgment, not only delay the return of more normal times but would put a limit, and an unnecessary limit, on the future prosperity of the country."

HOTEL and institutional architects will be served by a new Hotel and Institutional Mart at the corner of 53rd Street and Madison Avenue, New York. It is planned to have, under one roof, installed and in actual operation every piece of equipment used in hotels, hospitals, schools and other institutions. Temporary offices have been established at 369 Lexington Avenue.

COMMUTING by air can be expected to develop in New York as a by-product of East Side housing along the river, according to Douglas L. Elliman, a well known real estate man. He states, "speedboat and airplane will provide interchangeable residence between town house and country estate."

TO demonstrate what religious motives may mean to present day art and to bring about a closer relationship between art and the Christian religion is the main aim of the Kunst-Dienst Dresden, a German association for the advancement of religious art. Exhibits on contemporary church architecture, metal work, painting, etc., have been shown in a number of German cities. It is planned to hold a similar exhibition in the United States this spring.

SAFEGUARDING of loans is the object of a resolution recently passed by the United States Building and Loan League, which recommends to its members supervision of construction of all houses on which money is lent.

MAHON

ROLLING

STEEL DOORS

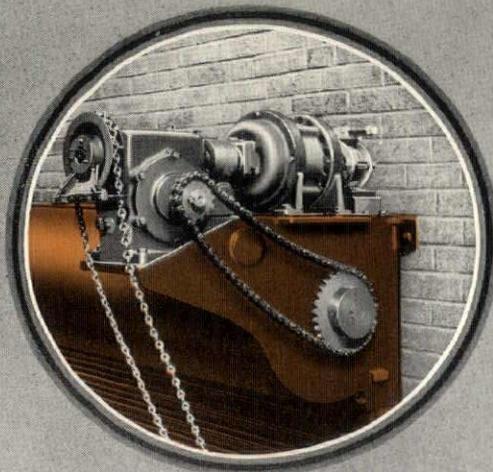
MAHON Rolling Steel Doors, approved by the Underwriters' Laboratories, Inc., are manufactured in many labelled and non-labelled types to meet perfectly every requirement of industrial or commercial use. Your investigation of these doors will reveal a high quality product, with many advantages, designed to provide maximum protection and dependable service without maintenance. Write today for estimates and our catalog containing complete information and architectural data.

THE R. C. MAHON CO.
Detroit, Mich.

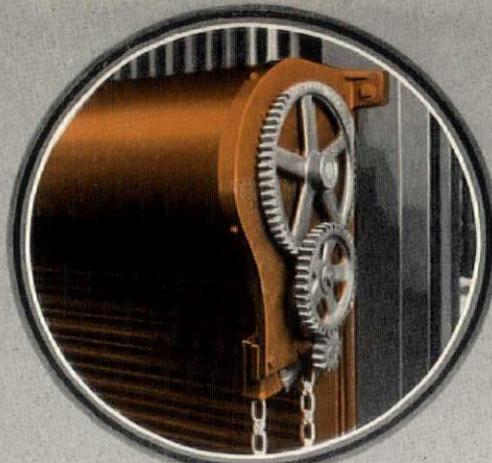
Representatives in All Principal Cities



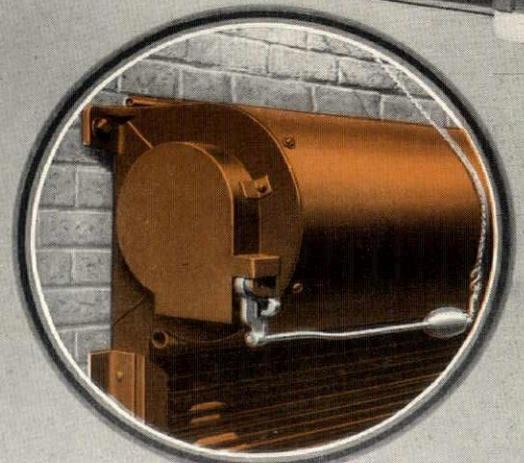
Mahon Rolling Steel Doors
 with Hinged Post



Mahon's Standard Power
 Operating Unit



Mahon's Hand Chain
 Operating Gear



Mahon's Fusible Automatic
 Closing Device



THE CAREW TOWER
Cincinnati · · · Ohio

Architect
Walter W. Ahlslager, Inc.
New York and Chicago

Associate Architects
Delano & Aldrich
New York

General Contractors
The Starrett Building Corporation
Chicago

58 ROOFS PROTECT THIS BUILDING

This outstanding example of modern architecture, housing two department stores, a hotel, an office building, a garage and a host of shops, has 58 separate roof surfaces, each protected by a Carey Built-up Roof.

Carey Roofs are selected for important structures because they possess definite advantages. Built of perfect bonding Carey felts and asphalts, every application step is controlled by rigid specifications. Carey Approved Roof Contractors perform the work, and the finished roof is bonded for 10 or 20 years, according to the type roof selected.

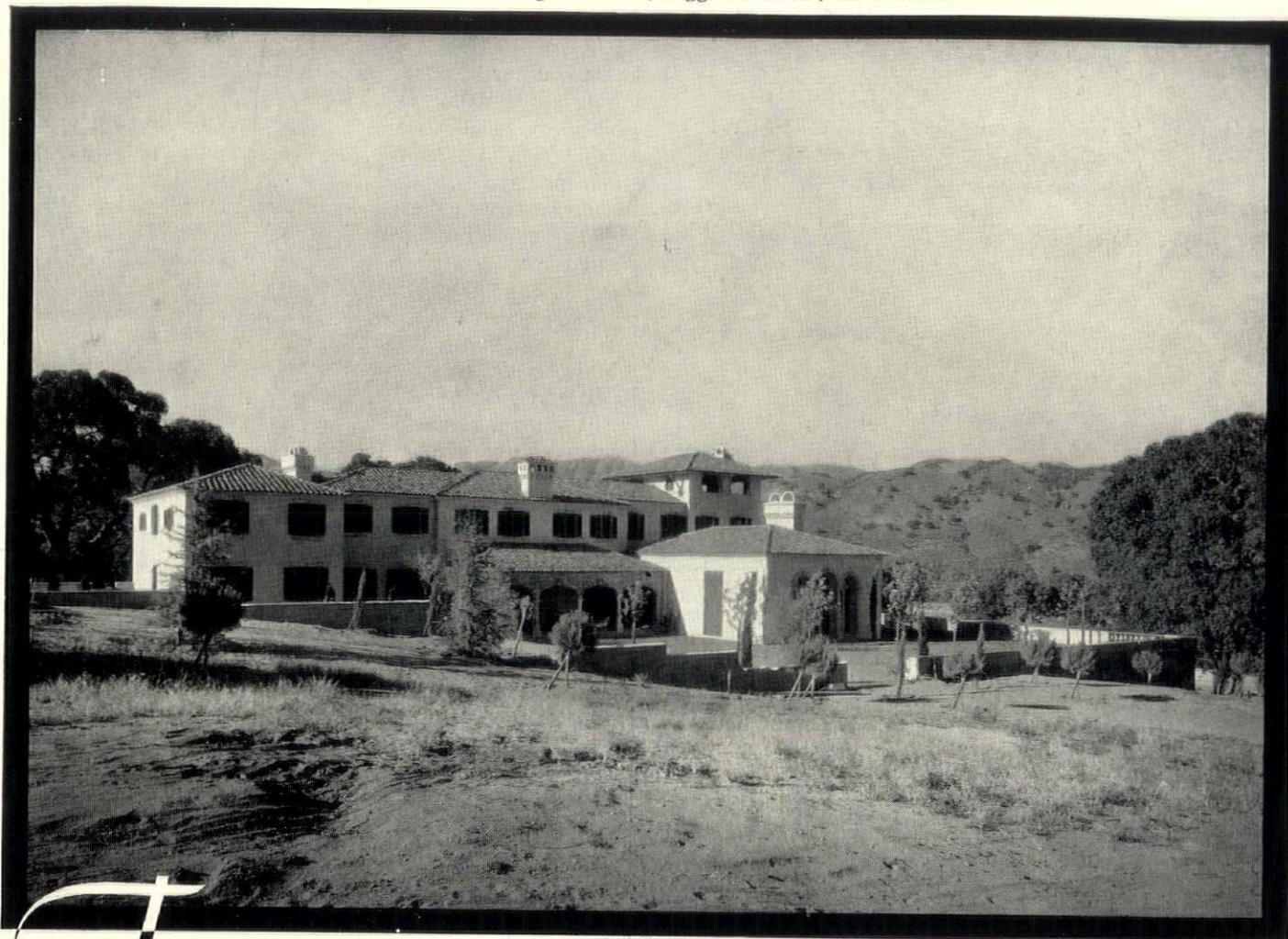
The Carey Specification Book, containing complete data on built-up roofs for all styles of construction, will be mailed on request.

THE PHILIP CAREY COMPANY

Carey
BUILT-UP ROOFS

Lockland, CINCINNATI, OHIO

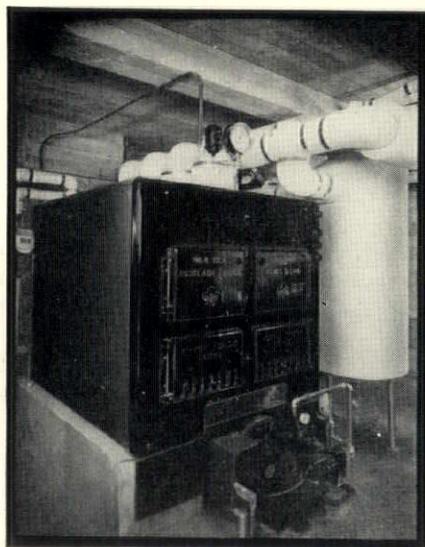
● Architect, Burrell Hoffman, New York City—Mechanical Engineers, Hunter & Hudson, San Francisco—Builder, Dowsett-Ruhl Company, San Francisco—Heating Contractor, Higgins & Kraus, San Francisco.



This beautiful California residence

IS WARMED BY AMERICAN RADIATORS

- Not only is this one of the loveliest residences in Northern California, but every detail of it has been designed for comfort as well as beauty.
- An Ideal Redflash Oil Burning Boiler sends healthful even warmth to concealed Corto Radiators in every room.
- The architect made sure that the owner would find it just as desirable a home after completion as it appeared in the plans.

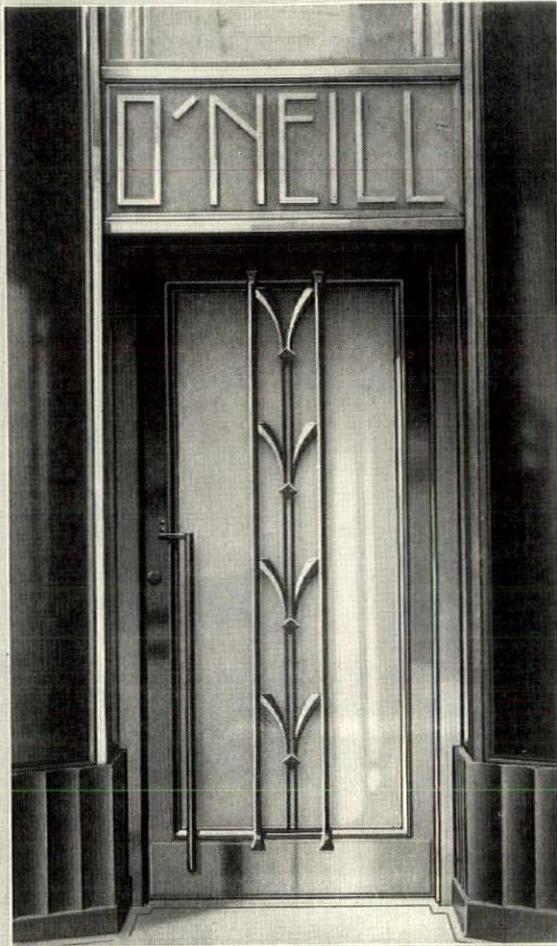


AMERICAN RADIATOR COMPANY

DIVISION OF
AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 West 40th Street, New York, N. Y.

METAL DOORS



O'NEILL LINEN SHOP, MICHIGAN SQUARE
BLDG., CHICAGO
Architects, Holabird and Root

A faithful interpretation of the architect's design is assured by Kawneer custom-built service. Doors can be furnished in bronze or aluminum alloy. Send for descriptive circular.

THE
Kawneer
COMPANY

NILES, MICHIGAN, Subsidiary, BERKELEY, CALIFORNIA
RUSTLESS METAL STORE FRONTS, WINDOWS and DOORS
ALSO ORNAMENTAL BRONZE AND IRON

N. W. Ayer Building

(Continued from page 47)

that counter balanced metal windows should be obtained with a removable metal cover to conceal the radiators. These provided, as an integral part of the window unit, metal sash and frames, metal sill and radiator front at reasonable cost.

Flexibility in the ultimate use of floor space, in addition to consideration of a minimum number of columns and the use of a flat ceiling, was also considered from the standpoint of utility in the floor construction. To provide any desk wherever located with telephone service, light, motor, bell call, or other electrical device and avoid removal of the floor covering, three lines of underfloor duct conduit were extended around the building following the wall lines. These ducts were spaced from seven to nine feet on centers.

Linoleum cemented to a smooth finished cement surface was determined as most suitable for floors.

The final problem to be solved for a typical floor was that of ventilation. It was assumed that each floor would have an average population of seventy-five persons. It was believed that open windows, and air leakage around windows, stairways, elevators and conveyor shafts, would be sufficient to keep air in circulation, if excessive heat from radiators could be controlled. A system of temperature regulation was therefore selected that would control the temperature of individual floors.

This completed the design of a typical floor and the next problem was that of how many floors would be necessary.

A STUDY was made of the number of employees and the amount of space occupied in the quarters then occupied by the organization. A study was also made of the additional space required for future expansion of the organization, and the ratio of increase in certain departments over others to care for increased business. The interrelation of the various departments of the company was studied to determine the necessary proximity of one department to another.

The space requirements of the various departments were plotted on the typical floor plans. The eight or nine story building then began to take an upward movement, much to the joy of the architect, for the exterior proportions of a cube ceased to be longer possible. Early studies disclosed that, allowing for reasonable expansion, the various departments alone required eleven floors. Other considerations indicated the need for a building of fourteen stories, or thirteen stories and a mezzanine.

While the requirements of the printing department did not present the same problem as that of a large publishing company, it did offer for solution a problem in weight, vibration and noise. To publish the "N. W. Ayer & Son's Directory of Newspapers and Periodicals" and prepare sample printing and proofs of advertisements furnished to publishers, requires twenty-six machines including printing presses, linotype machines and other equipment requisite to a modern printing plant.

Many changes have taken place in operation, motive power and appliances used in printing during the past

NEW PILLSBURY MILL gives a tip on roof insulation



MEMORANDUM
Note interesting
use of Cork on
roof of new
Pillsbury Mill
in Minneapolis

*Every building you design has a roof . . .
and every roof can use cork as this mill does*

IN a flour mill, the roof must do more than just shed water. In every building, a really good roof stops heat almost as completely as it shuts out rain.

Take this new Pillsbury Mill, for example. Where flour is made, temperature and relative humidity must be carefully controlled. If heat escapes through the roof, inside temperatures drop, moisture in the air condenses, and the moisture content of the wheat and flour varies. So Pillsbury has insulated this roof with 3 inches of Armstrong's Corkboard, an effective barrier to the passage of heat.

Not every roof needs so much protection. For office buildings and others where there is no condensation, 1½ or 2 inches of insulation

suffices to cut fuel costs and increase tenants' comfort. In any thickness from one inch up, Armstrong's Corkboard supplies an easily laid, permanent insulation.

Cork Products are playing an increasing part in every type of building use. In addition to roof insulation, Armstrong's Corkboard is ideally suited for insulating walls of buildings. Cork serves, too, where low temperatures must be maintained. The new quick-freeze industry relies on Corkboard in thicknesses from 6 to 12 inches to hold temperatures as low as sixty degrees below zero. Armstrong's Corkoustic, the insulating acoustical material, absorbs sound and reduces noise in schools, churches, and public

buildings. Cork Machinery Isolation eliminates noise and vibration from all types of machinery. Cork Pipe Covering prevents loss of refrigeration from cold lines. Armstrong's and Nonpareil Insulating Brick line stacks in hotels and apartment houses to keep heat from adjoining rooms.

Architects are continually finding new uses for Armstrong's Cork Products. Cork may be just the material you are looking for to fit some unusual installation. Armstrong engineers are available for insulation advice, and Armstrong research facilities will gladly be placed

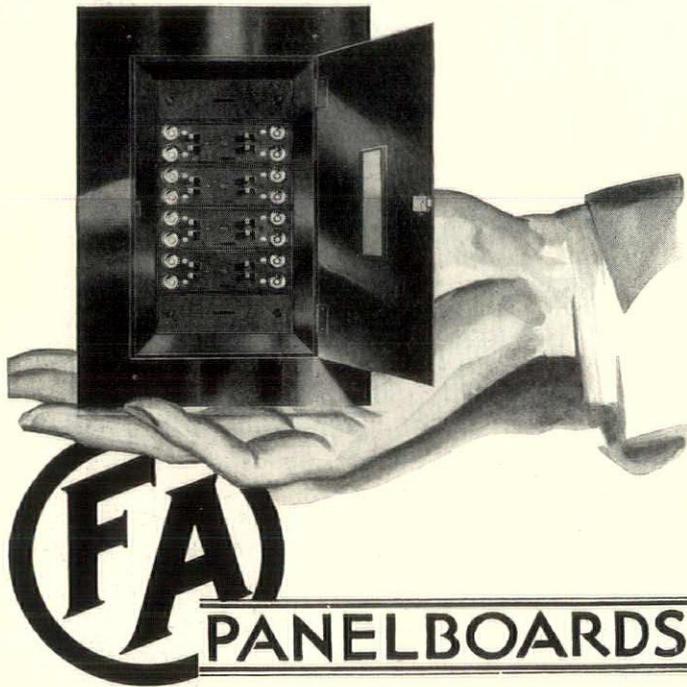
at your disposal on new and unusual uses. Write to Armstrong Cork & Insulation Co., 936 Concord St., Lancaster, Pa.

Armstrong's
(A)
Product

Armstrong's Cork Products

CORK BOARD . . . CORK COVERING . . . CORKOUSTIC . . . CORK MACHINERY ISOLATION . . . INSULATING BRICK

At your service



Completely at your service day after day, without maintenance or loss of safety — simply because these characteristics are built in every standardized **FA** Panelboard.

Bulletin No. 50 describes the new Leader LNTP — the **FA** Catalog covers the balance of the **FA** Line. There is one for every purpose.



Frank Adam
ELECTRIC COMPANY
ST. LOUIS

- | | | |
|--|--|---|
| Atlanta, Ga.
L. A. Crow,
64 Cone St., N. W. | Los Angeles, Calif.
E. Zinsmeyer,
1127 S. Wall St. | San Francisco, Calif.
Lee Van Atta,
340 Fremont St. |
| Baltimore, Md.
Wolfe-Mann Mfg. Co.
312 S. Hanover St. | Memphis, Tenn.
C. B. Rutledge,
203 Monroe Ave. | Seattle, Wash.
Electric Engineering
Sales Company,
2914 First Ave., S. |
| Boston, Mass.
J. J. Cassidy,
231 Congress St. | Minneapolis, Minn.
Leo. H. Cooper,
422 Builders' Ex. Bldg. | Tulsa, Okla.
P. E. Ebersole,
214 S. Victor St. |
| Buffalo, N. Y.
Ralph E. Jones,
1890 Hertel Ave. | New Orleans, La.
W. J. Keller,
203 Natchez Bldg.
Magazine & Natchez Sts. | Toronto, Can.
Amalgamated Elec.
Co., Ltd.
Gen. Sales Office,
370 Pape Ave. |
| Chicago, Ill.
Major Equipment Co.
Inc.
4603 Fullerton Ave. | New York
Fred Kraut,
182 North 11th St.
Brooklyn | Vancouver, Can.
Amalgamated Elec.
Co., Ltd.
Granville Island |
| Cincinnati, Ohio
E. F. Schurig,
44 East Third St. | Omaha, Nebr.
B. J. Fleming,
213 S. 12th St. | Winnipeg, Man., Can.
Amalgamated Elec.
Co., Ltd.
677 Notre Dame Ave. |
| Dallas, Texas
R. S. Wakefield,
1814 Allen Bldg. | Orlando, Florida
F. W. Knoepfel,
610 Richmond Ave. | Hamilton, Ont.
Amalgamated Elec.
Co., Ltd.
18 Mary St. |
| Denver, Colo.
Alex. Hibbard, Inc.
1940 Blake St. | Philadelphia, Pa.
W. A. McAvoy,
244 North 10th St. | Montreal, Can.
Amalgamated Elec.
Co., Ltd.
1006 Mountain St. |
| Detroit, Mich.
H. H. Norton,
2683 Wabash Ave. | Pittsburgh, Pa.
B. Frank Perry, Inc.
319 Third Ave. | |
| Kansas City, Mo.
Robert Baker,
19 E. 14th St. | St. Louis, Mo.
O. H. Rottman,
3650 Windsor Place | |

ten years. To provide for similar changes with minimum alteration in the next ten years it was considered essential to provide a flexible system of floor construction in the printing department. It was also determined that the working platforms of all machines should be level with the floor line. The floor construction in the printing department was therefore located twelve inches below the finished floor line, to provide for the foundation required to distribute the weight of the machines on the structural slab. The space between foundations was filled with poured gypsum since it is light in weight and can be easily removed at any time that alterations are necessary. The use of gypsum also provides for ease in the introduction of future pipes, wire or other utilities as occasion demands.

FOR convenience in handling delivery trucks and for structural economy, the ground floor and the mezzanine were fixed as the most suitable locations for the printing department. This added to the problem of insulation against vibration and noise, particularly in the entrance lobby. A system of suspended insulation and the breaking of all through contact of walls, ceilings and machinery was selected. This method has proved remarkably successful.

The copy department preferred space high up, with north light for the art department, and located close to the plan department. The plan department was located on the fifth floor and the other departments allocated space on the other floors according to the extent of intercommunication between departments that appeared desirable.

Sufficient space was needed where, when occasion requires, all employees can be gathered together; a cafeteria and general assembly room for employees at noon, first aid and hospital rooms, and outdoor recreational spaces. To avoid disturbing the closest possible contact between departments, all of these were placed in the extreme upper part of the structure. Outdoor recreation space is provided on the tile roof area above the cafeteria and assembly room.

SINCE thousands of communications daily pass from department to department, a method had to be found to expedite this service. Sufficient messenger service to handle this was found to be slow and costly. A continuous belt vertical conveyor was adopted as the most efficient solution of the problem. A receiving and discharging station is provided on each floor. Communications are placed on the receiving shelf, a button is pressed to indicate the destination, and the communications are picked up and automatically discharged wherever desired. The pushing of one button does not interfere with any previous direction given by another button that the conveyor is carrying out.

Serious study was given to the matter of handling people entering the building. For this type of building and business it was determined that the most satisfactory method would be to use the main entrance lobby as a waiting room. Callers make all inquiries and arrangements for appointments with departments on the upper floors through the attendants at the information desk in the lobby. No bulletin boards or other means of identifying the location of departments or employees are furnished. Callers waiting for an interview are thus



Trinity Methodist Episcopal Church
Springfield, Mass.

Allen & Collens,
Architects

In the 1930 Christian Herald competition, this Church won first prize in the large church class, and grand prize for all classes. This Church is equipped with a Tudor Stone Roof—a slate peculiarly well adapted for the roofing of church buildings. The specification of a Tudor Stone Roof does not mean that a quantity of slate sufficient to cover the building will be cut haphazard and delivered at the job, for every Tudor Stone Roof is designed especially for the building it is to cover, and the slate is mined and cut at our Vermont quarries for that particular project.

Rising and Nelson Slate Company

WEST PAWLET, VERMONT

Architects' Service Department: 101 Park Avenue, New York City

CHICAGO

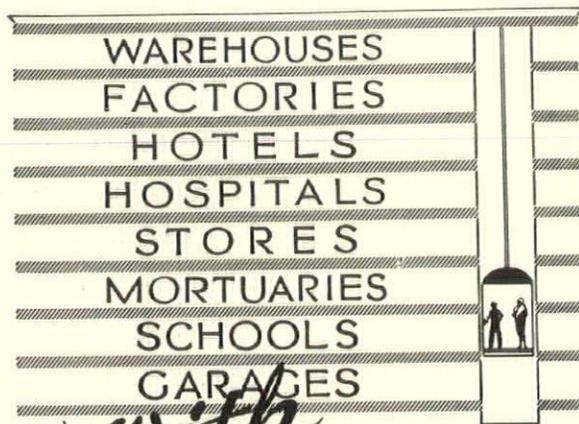
DETROIT

BALTIMORE

PHILADELPHIA

BOSTON

Tying The Floors Together



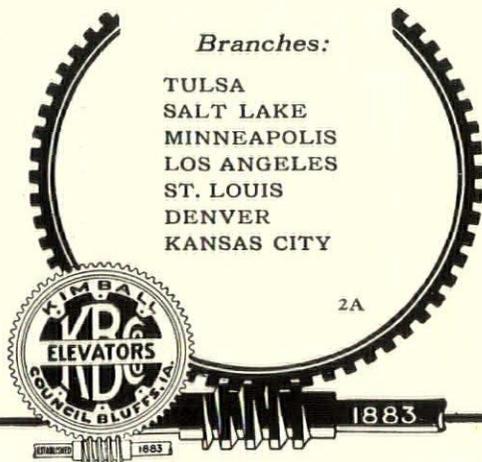
with
**KIMBALL
 ELECTRIC
 ELEVATORS**

It may be two floors or forty that you wish tied together with vertical transportation.

There is a Kimball Elevator and Machine made to perform the specific task which you have in mind . . . The ranges in Kimball elevators extend from the simple hand power machines to the passenger speed machines traveling 600 vertical feet per minute. We place an especial emphasis on the Kimball line of inexpensive and easily installed Light Electrics with lifting capacities ranging from 1,000 to 5,000 lbs.

Write for detailed information on the type of machine you require.

KIMBALL BROS. CO.
 1119-27 Ninth St. Council Bluffs, Iowa



not required to go beyond the ground floor. This has worked out satisfactorily, since it reduces to a minimum the opportunity for strangers to wander through the building. Employees, by the way, as befits members of a great family, use the main entrance.

Exhibitions of interesting phases of art, important to modern advertising, were considered essential as stimulating to the organization. Three exhibition rooms were therefore planned on the ground floor adjacent to the main entrance lobby. This location was selected as being most easily accessible for employees and the public alike. Those waiting for appointments can also be more suitably entertained than by "just waiting."

Throughout the study of the planning and equipping of the building, the architect was greatly assisted by the recommendations and the results shown by the analytical study of the functioning of the organization, made by H. A. Hopf & Company, Management Engineers and Building Planning Specialists, who had been retained by the owners.

DURING the time that plan arrangements were being studied, various experiments were made as to the general appearance of the exterior, different materials were considered, and before the final arrangement of departments was determined, exterior design No. 1 was developed but viewed as forced in its number of breaks and set-backs. Many additional studies, about twenty, were made leading up to the preliminary sketch shown as No. 2. Our clients were not enthusiastic enough to satisfy me regarding this design, and it was decided to have a one quarter inch scale model made. They liked and approved the design as shown by the model. While I felt that the model did not portray accurately the design as I could visualize the completed building, it was of assistance in helping our clients to study the design.

We believed that the final design indicated a building which, while new, would introduce no discordant note to this historic section of "old Philadelphia."

"Shot sawed" varigated and buff Indiana Limestone was selected as the material that would be most suitable to a structure of such simplicity of form and directness of line.

The upper three floors were stepped back, so that a receding silhouette could be obtained. Starting at the line of the setback, on each elevation growing out of the strength of the masonry in the shaft of the building were two pylons, terminating in sculptured figures.

Receding piers on the external angles, which permitted freedom in determining the silhouette outline, were studied in connection with the outline produced by the pylons. We decided that natural floral forms for the motif of decorative ornament would not be as desirable as forms more closely symbolical of the use for which the building was designed. We therefore adopted as the foundation for all ornament the human figure, representing "Truth," the open book as the vehicle of advertising, and the bird as the early messenger symbolizing the widespread power of advertising.

With the exception of the panels in bronze, depicting various branches of the advertising industry, on the entrance and doors in the lobby, the three ornamental motifs noted were used as the decorative element.

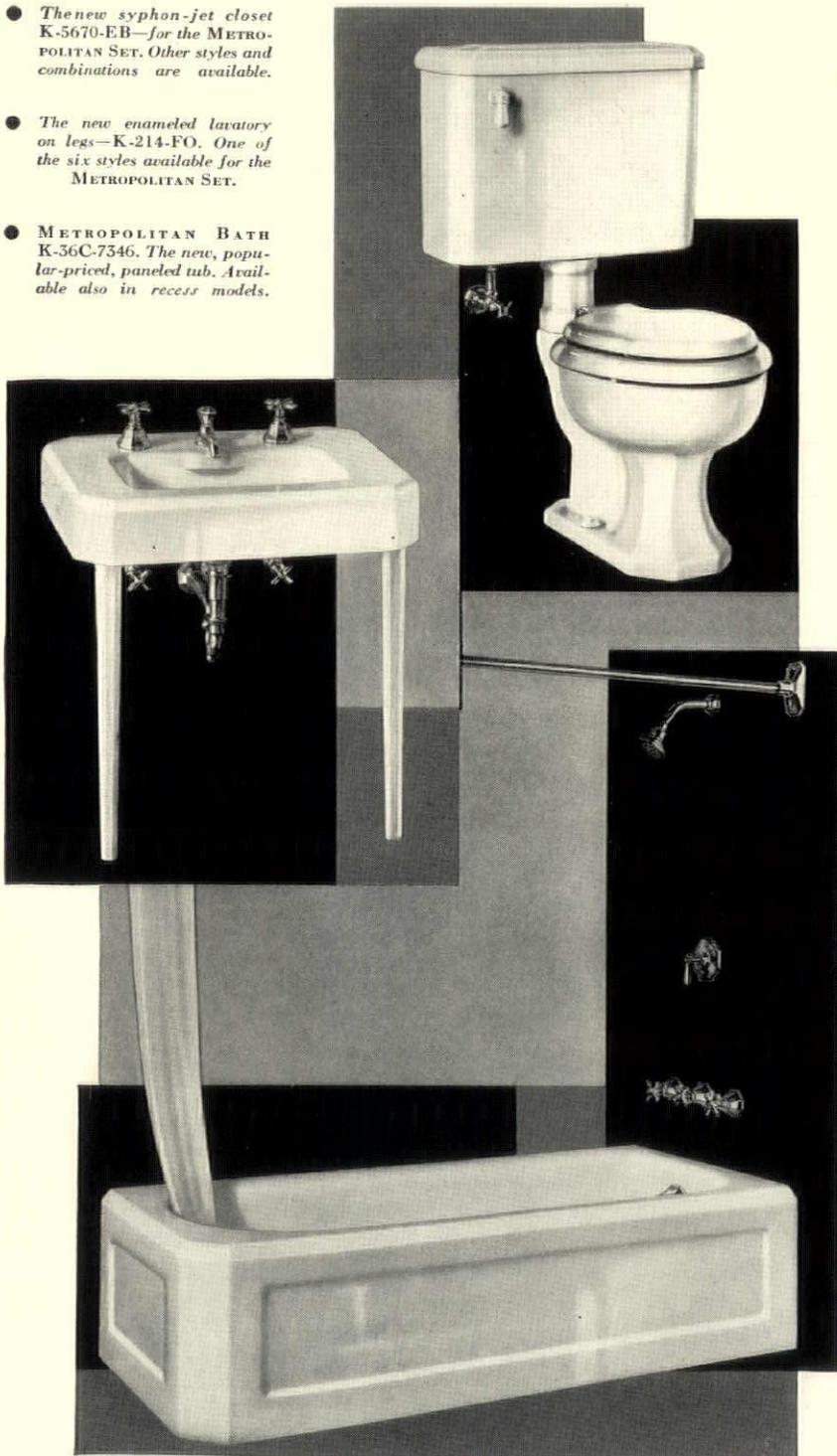
We desired a permanent material with quiet color note for the main lobby walls. To fill this requirement,

NEWS

THE "Metropolitan Set" . . . MATCHED FIXTURES

A BRAND-NEW SERIES OF RELATED FIXTURES AND FITTINGS—MODERN, BEAUTIFUL, DESIGNED TO HARMONIZE ESPECIALLY WITH EACH OTHER. ORIGINAL WITH KOHLER!

- The new syphon-jet closet K-5670-EB—for the METROPOLITAN SET. Other styles and combinations are available.
- The new enameled lavatory on legs—K-214-FO. One of the six styles available for the METROPOLITAN SET.
- METROPOLITAN BATH K-36C-7346. The new, popular-priced, paneled tub. Available also in recess models.



IF YOU'VE had your eye on plumbing trends, you've watched the demand for matched fixtures gather speed. Bathrooms, important as they are, have been getting brighter, more important all the time. And lately, home-hunters and home-owners, keen about the decorative effect, have been asking for lavatories, baths, and closets *that go together*.

Now, for the first time in plumbing history, a manufacturer is deliberately merchandising these related fixtures and fittings — at popular prices! Knowing your bathroom, knowing the architectural treatment of the house, you simply choose the Kohler set which best suits. Easy as one-and-two! And from the smooth shining glaze of the enamel or vitreous china, to the distinguished fittings, *every* fixture in that set agrees perfectly in design, style, quality, and color with the others!

The first of the new sets is illustrated — an exclusive Kohler design. You have a choice of sizes and models. Octachrome fittings are new, too—made of the finest brass, they do their work surely, silently, positively. . . . All-Kohler plumbing is a lifetime investment in comfort. Complete Kohler bathrooms with matched fixtures, a great step forward, promise unflinching beauty and satisfaction.

Kohler Co. *Founded 1873.* Kohler, Wis.—*Shipping Point, Sheboygan, Wis.* —*Branches in principal cities.* . . . Look for the Kohler trade-mark on each fixture and fitting.

KOHLER OF KOHLER

rustic buff Indiana Limestone of varying shade and texture was selected as being the most desirable material. Several tones of blue-gray Appalachian marble was used for the floor; the plaster coffered ceiling was planned to be in green and silver, while the elevator lobby above the stone walls was to be in a rosy-rust color. Three large silvered metal windows form the east side of the lobby, overlooking Washington Square. These were planned to borrow through the seasons the natural beauties of the foliage, the sun, the rain and snow, as a shifting scene of interest in the lobby.

The galleries just off the lobby were desired with a more intimate setting. Walnut floor with walnut paneling and hewn and carved walnut door jambs and ceilings were planned. The walls of the main gallery, seen through the lobby, are of woven blue-green material, making a quiet but colorful background for exhibits.

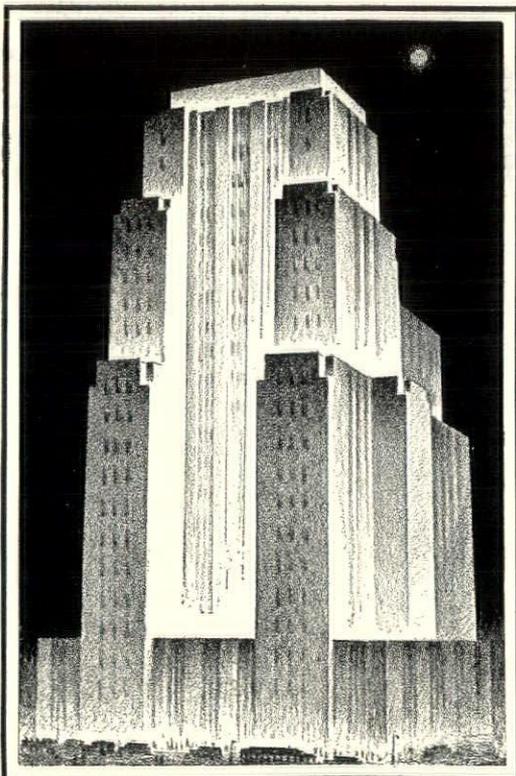
The method of handling the sculpture and models for ornament presented a problem. Previously, the architects had not found any sculptor who they felt would enter into the spirit of the program. Kelly & Sabatini of Philadelphia were recommended and, while they had had very little building experience in modelling, and while the early work they had done in small statuettes and panels indicated rather a cubistic trend that would not be suitable for the building, nevertheless it was felt that their previous work suggested a capacity to give the clients what was desired. So the architect recommended the employment of the sculptors on the same basis as he was employed. An estimate was made for

the entire requirements of modelling and carving, an allowance was placed in the general contract, and the work was executed as directed by the owners and the architect.

This method worked out very satisfactorily, the clients taking a great interest in inspecting and criticising the models. Such an arrangement permitted experimental models to start as soon as the contract was signed, giving practically unlimited time for studies to be made in clay. The sculptors worked continuously on models and carving during the whole time of construction.

It is for others, and Time, to state whether our work has been done well. Our clients recently told us that they like the design better as they live with it, and that they have obtained what they desired in a building suited to the conduct of their business.

A CLEVER plan to create interest in art has been inaugurated by the Philadelphia Art Alliance. The idea is to establish circulating picture clubs all over the United States, a start having already been made in several cities. The plan provides for visiting the galleries of the Art Alliance Circulating Picture Club and borrowing one painting and two etchings which may be taken home and retained for one month. Only a small yearly membership fee is charged for the privilege. At the end of the month, members may either purchase on an easy payment plan, or return the pictures and exchange them for others.



TOWERS *of* LIGHT *in* COLOR...

OCCASIONALLY there is a building erected so striking in appearance and so unique in location that the architect and owner realize prestige and profit from it to an unusual extent • When a building is not so favored, we suggest an investigation of floodlighting in color and motion. It is effective, dignified, and surprisingly inexpensive, when compared with other forms of publicity • You are assured of our cooperation in furnishing you with adequate information on Mobile Color Lighting, and you will be placed under no obligation in using this service.

- Vitrohm Dimmers for all lighting control purposes, arc and spot light ballasts and rheostats, and other electric control devices are among the products made by this company.

WARD LEONARD ELECTRIC CO
MOUNT VERNON N Y



Private Dining Room, Saltzman's Restaurant, Lincoln Building, New York City

The decoration of the Saltzman's Restaurant, Lincoln Building, New York City, is a typical example of painted decoration as executed by the Rambusch organization.

BANKS
CHURCHES
CLUBS
SYNAGOGUES

RAMBUSCH

Painting, Decorating and Murals

2 West 45th St. ~ New York City

HOTELS
RESTAURANTS
THEATRES
PUBLIC BUILDINGS

Established Forty Years



*A California House
from January Good
Housekeeping,
Myron Hunt, F.A.I.A.
Architect*

GOOD ARCHITECTURE BEGINS AT HOME

LIKE charity, good architecture should begin in the home. But again like charity, too often it is found far afield. In the new Memorial Library, perhaps, but seldom in the homes of the building committee; in the first National Bank Building, but too rarely in the house which shelters its president.

Why this should be is not Good Housekeeping's place to reason.

But, as a leading advocate of higher standards of living, it is Good Housekeeping's place to make good domestic architecture as much a part of the American scene as, for example, labor saving household appliances.

And that is what Good Housekeeping is trying to do. Every month, not one or two, but ten or twelve editorial pages are given to the design and construction, the decorating, furnishing and equipping of houses. In fact, Good Housekeeping Studio of Architecture and Furnishings, as this department is known, is one of the major departments of the magazine.

This effort to teach the layman (and his wife) to understand and appreciate the need and value of the architect's services, is all the more important because Good Housekeeping's 1,750,000 readers are largely those people who, by intelligence, ideals, environment and income, are the architect's logical prospects. It is a development which every architect, every manufacturer of building materials should know and follow.

GOOD HOUSEKEEPING

Everywoman's Magazine

Nixdorf Hotel, Milwaukee,
Wis. Archt., M. Tullgren &
Sons Co. Contractors, Robt.
L. Reisinger & Co. Ground
floor shops equipped with
Desco Store Fronts.



Desco
METAL
REG. U.S. PAT. OFFICE

STORE FRONTS

Increase Store Rental Values

For full architectural details see Sweet's catalog. Write us for complete working data and price list. Remember, too, wherever you are there is a distributor near you. We also carry a complete line of "Desco" construction material in our New York City Warehouse.

The use of Desco Store Fronts on a building is not only good design but good business. Their beauty and character improve the building's appearance. Their admirable ability to set off window displays is an important quality to the merchant and enhances the rental value of the ground floor shops. Then, too, their flexibility guards the glass against abnormal wind pressure. Made in a wide variety of metals, including solid copper (plain or embossed), solid bronze in all standard finishes and aluminum alloy (white metal), Desco Store Fronts harmonize with any building design. Specify Desco Store Fronts for your next building.

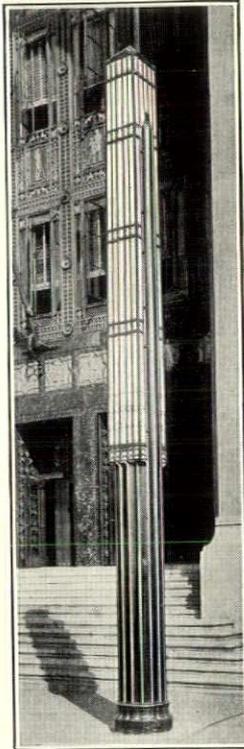
DETROIT SHOW CASE CO.

1670 West Fort Street / Detroit, Michigan

New York City Office and Warehouse—344-346 East 32nd Street
Pacific Coast Office—450 Skinner Building, Seattle, Washington

EXTERIOR LIGHTING FIXTURES

by
SMYSER-ROYER



Flood Light Standard
FIDELITY MUTUAL
LIFE INSURANCE
COMPANY
Philadelphia, Pa.
ZANTZINGER,
BORIE & MEDARY
Architects

THIS flood light standard in Cast and Wrought Iron is typical of the fine craftsmanship in exterior lighting fixtures by Smyser-Royer. It is 26 feet high and is one of a pair designed by Zantzinger, Borie and Medary, Architects, to serve as a flood light standard and street lamp for the Fidelity Mutual Life Insurance Co., in Philadelphia. Beauty of design has been blended with craftsmanship in metals to produce a fixture as enduring as the building itself.

SMYSER-ROYER COMPANY

MAIN OFFICE AND WORKS YORK, PA.
PHILADELPHIA OFFICE . . . 1700 WALNUT STREET

And Still We Call It a Profession

(Continued from page 39)

the idea that they are artists first and the less they have to do with business the better they like it. The attitude and cause are easy to understand. Architects spend many years studying design and then, abruptly thrown out in the business world, they are expected to know business methods by intuition or learn by costly experience. They have never studied business. Their entire education has been directed away from this important side of their future work. I believe that the time will come when business fundamentals will be included in our school curriculums and men will leave our universities with a better conception of what lies before them and be better able to cope with business problems.

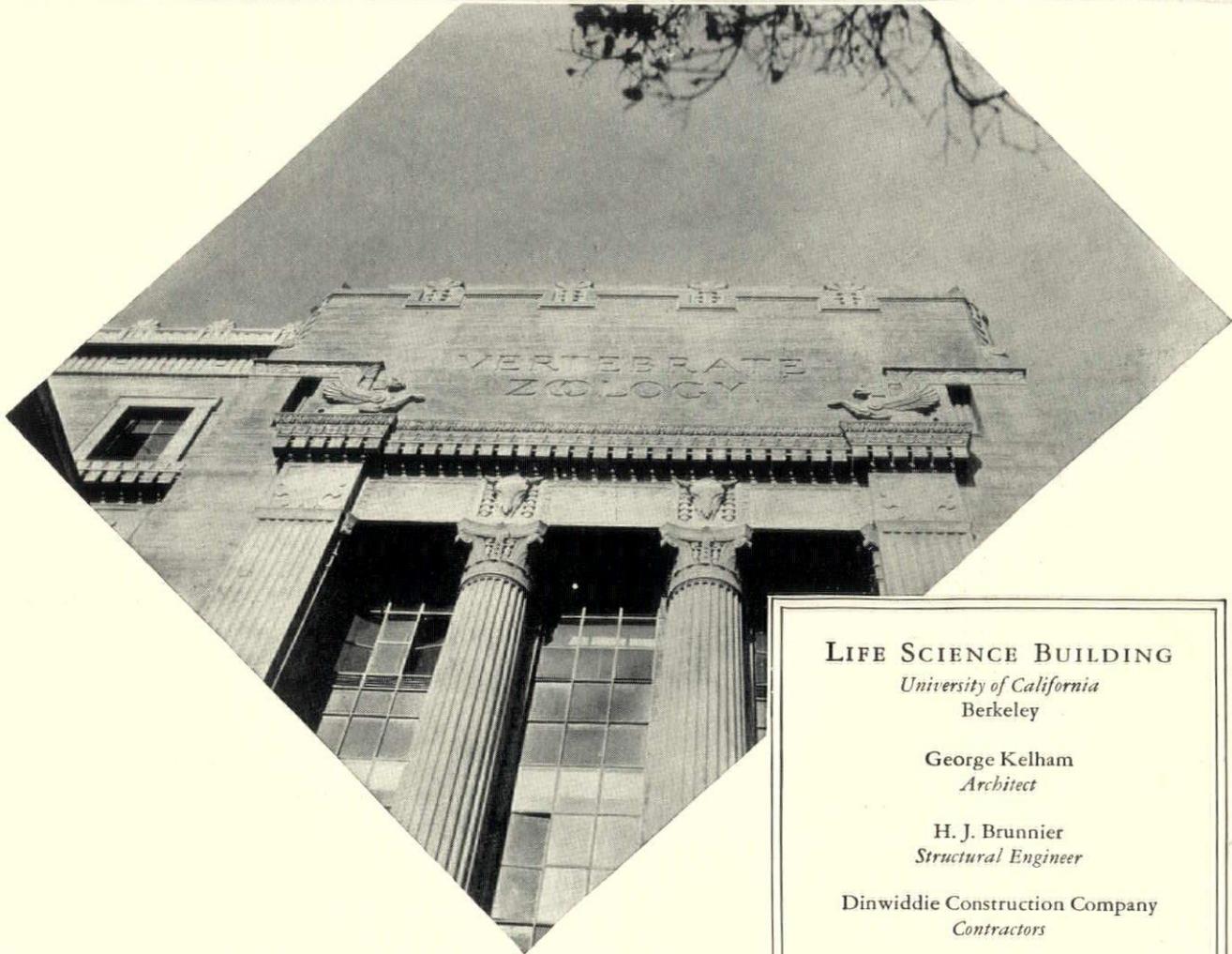
Acting as the owner's agent, the architect is not true to his trust if he is not a good business man in the administration of his client's money. Does he make the owner spend more than necessary? When bids come in are they twenty-five per cent higher than the estimate he gave the owner? When the job is completed has the cost of handling it left him with no profit? When the owner asks for a statement of the cost of the job at any time during construction can he tell him promptly what has been spent, what the next certificate will amount to, and what the balance of the cost will be?

At the start of his career the average architect displays a disregard of good business by entering into a partnership without a proper legal agreement. An agreement may be very simple in form but in case of a misunderstanding, a desire to part company, or death of one of the partners, it proves to be a valuable document. It is a simple and businesslike thing to do. The existence of the document in itself would probably do much toward promoting harmony between the partners. Yet how many architects enter into this important relationship with only a mutual verbal agreement that profits, if any, will be shared alike?

HOW many new clients are permitted to leave the office without having signed a contract and without an understanding of what the architect is to be paid for his service? In most cases lack of this can be attributed to fear or an inferiority complex that we hear so much about. Fear of what? Usually that the client will think the cost of an architect's service is too high and as a result that the job will be lost. Better lose the job than find later on that an adjustment must be made that results in the work being a total loss or ends in a violent misunderstanding—possibly in court. Some kind of contract and understanding with the client as to the basis of payment is the sign of a good business man. Other business men, at heart, like it. It breeds confidence in an architect's business ability.

How many business men attempt to conduct their business without a suitable cost accounting system? The necessity for a cost accounting system seems so obvious that one hesitates to mention it. Yet architects as a whole have in the past given the matter entirely too little attention. Whether the office is opened as a one-man organization or as a more elaborate one, no time should be lost in installing a system of this kind. Without this no architect can expect to properly conduct his business. Without it he cannot properly safeguard the

MONOLITHIC CONCRETE



Copies of the booklet, "Monolithic Concrete Buildings,"
will be mailed upon request

LIFE SCIENCE BUILDING

*University of California
Berkeley*

George Kelham
Architect

H. J. Brunner
Structural Engineer

Dinwiddie Construction Company
Contractors

All of San Francisco

PORTLAND CEMENT *Association*

Concrete for permanence and firesafety

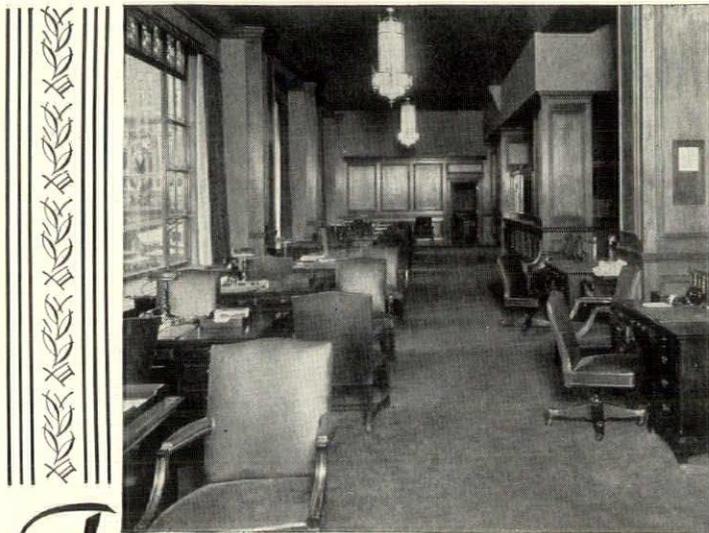
33 W. GRAND AVENUE, CHICAGO

*A National Organization
to Improve and Extend the Uses of Concrete*



Chairs..

THAT CONTRIBUTE TO BUSINESS PRESTIGE



Fine furniture goes far toward creating an atmosphere that expresses character and business standing . . . and B. L. Marble Chairs are in every sense *fine furniture*. ¶ In these chairs there is distinction of design . . . a rare quality of workmanship and material that commends them to the discriminating architect. B. L. Marble Chairs meet the highest requirements as to design and utility. Prestige gained through a long period of years has made them the acknowledged standard of comparison. ¶ Complete catalog and full information will be mailed to architects and specification writers.

This Chippendale design is one of many period types shown in the B. L. Marble Catalog.



There is a B. L. Marble Chair for every specific requirement of the modern office.

The
B. L. MARBLE CHAIR COMPANY
BEDFORD, OHIO

NEW YORK OFFICE: 101 PARK AVENUE :: TELEPHONE: CALEDONIA 7026

interest of his clients. It is his duty to know what a job is costing and where the money is going. In justice to himself and his client no architect can go on without knowing what his office costs are or what the cost of a particular job amounts to in rent, light, heat, supplies and office help.

Without a cost accounting system, how can the architect know whether or not he can afford to pay himself an adequate salary and whether or not he will have a bank balance when the job is completed. A cost accounting system quickly indicates whether or not a job is running too high in drafting time and if certain classes of work are more costly to handle than others. If you cannot make a profit on a job, why take the responsibility of conducting a business?

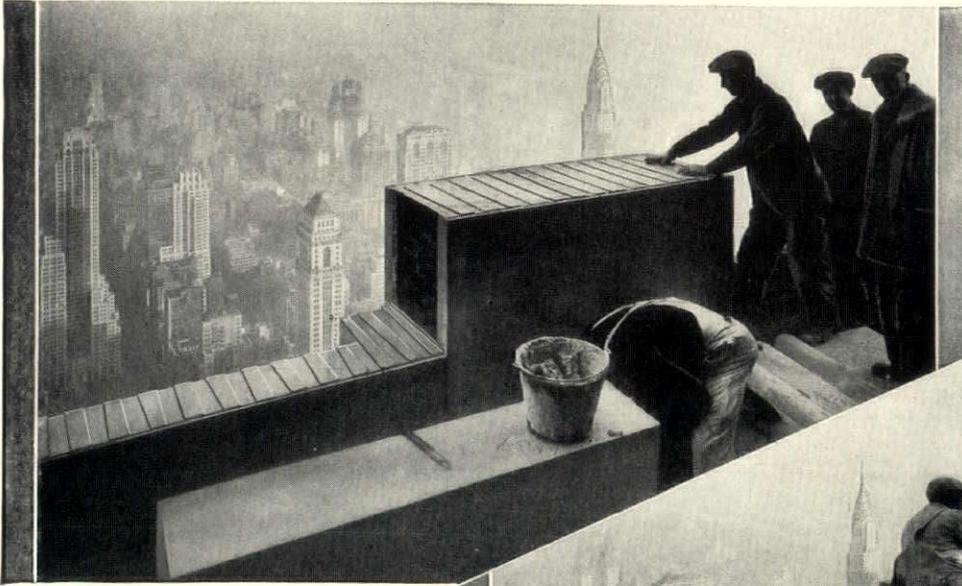
ONE other matter that requires serious attention is that of greater accuracy in preliminary estimates. The apparent inability of architects to forecast within a reasonable amount the cost of a projected structure has been for years the profession's standing joke. To the client it is far from being a bit of humor. To him it is a serious matter. The reasons for inaccurate estimates are too well known to require comment. The answer is to properly warn the owner when his or her demands begin to get out of bounds; to keep better records of job costs; to use more common sense and good judgment in preparing preliminary estimates; to keep abreast of fluctuations in labor and material prices; to learn to include all items in an estimate that an owner expects to have included; and to adopt a better and more exact method of arriving at the cost than that of a rule of thumb method or rash guess. How many times have clients been told by a friend who has been through a building experience to make an allowance of thirty per cent more than the architect said the job would cost? Poor estimates have created in the mind of the public the impression that a building designed by an architect always costs more.

The matter of adequate fees should also be given consideration. The public will pay what it believes a service to be worth, hence the public must be given the service it desires and for which it will pay, and those who practice architecture must know upon what basis they can afford to render this service. It is in this connection that a cost accounting system becomes invaluable. The present method of expecting or hoping that the average return on a number of projects will show a profit on the books—if there are any—at the end of the year is fundamentally wrong and unbusinesslike.

THE prevailing method of charging for architectural service by a percentage of the cost of the building leaves much to be desired. It is at best a rule of thumb method used to arrive at a charge for service that in effect determines the cost of the service before the facts are actually known. In general it is entirely fair neither to the client nor the architect. The flat rate or lump sum method is not much better except that it has the advantage of usually being more acceptable to the client. The retainer fee plus the cost of service rendered as used in a few offices is more nearly ideal; certainly it is safer and basically sounder than either of the other methods. It too has drawbacks that have prevented its widespread acceptance.

Is there any doubt that the public needs to be better

DOES NOT BREAK THE BOND



Left: Cheney Flashing being installed on parapet above the 86th Floor, Empire State Building. Note keyways in flashing ready for mortar to form "The Unbreakable Key Bond." Note also tower of the Chrysler Building below.

Right: Setting coping stones onto the mortar bed which has been laid over the flashing.

Note the absence of dowels. Cheney Flashing—"Does Not Break the Bond"—the only type of flashing that permits the elimination of dowels.



THE HIGHEST PARAPET ON EARTH PROTECTED FOREVER AGAINST SEEPAGE AND LEAKS WITH

CHENEY

INTERLOCKING THRU-WALL FLASHING

THE EMIPRE STATE BUILDING nears completion a miracle of modern architecture and modern methods of construction.

Everlastingly Protecting its many parapet walls will be found the equally modern Cheney Interlocking Thru-Wall Flashing.

Cheney Flashing is the only Ready-to-use Thru-Wall Copper Flashing on the market that scientifically prevents seepage, leaks, efflorescence, disintegration of walls and the rusting of steel spandrels and lintels.

Cheney Flashing is built into the wall as the masonry progresses without fitting, soldering or loss of time. It runs completely thru the wall and forms a positive unbreakable key-bond in every direction within the mortar bed.

In selecting Cheney Flashing to protect the Empire State Building—the Architects eliminated the dowels in the stone copings, the amount saved thereby making the Cheney Flashing less expensive than plain copper.

CHENEY SERVICE—Our Engineers are available to assist you in detailing plans and specifications, or plans may be forwarded to our offices for this purpose. There's no obligation. Valuable information on the use of Cheney Flashing is contained in the New Cheney Catalog. Write for it today.

THE CHENEY COMPANY

953 MAIN STREET - - WINCHESTER, MASSACHUSETTS

NEW YORK

PHILADELPHIA

PITTSBURGH

DOES NOT BREAK THE BOND

informed on the functions of the architect? If there is, then why is it that as one architect recently said, "The stock plan factories have gobbled up all the small house business and the big building concerns have grabbed all the big jobs with the result that there aren't enough jobs in between to go around?" If the public knew the truth, could this situation long exist?

A realtor will sell a property, improved through the expert knowledge of an architect, and usually receive five per cent for the service. The architect probably received six per cent or less on the cost of the building. The contractor ten per cent. If the owner raised any argument relative to fees, which did he protest?

The results secured in other fields of human endeavor have demonstrated beyond any element of doubt what can be accomplished through the medium of paid advertising. Numerous products and entire industries have been built up into big businesses through properly conducted advertising campaigns. Had these campaigns been investigated it would have found that they all followed certain fundamentals in their design and that all were based upon the particular requirements of an individual problem.

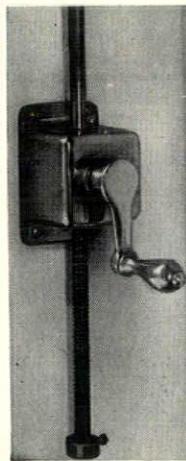
AN advertising campaign to benefit architects must be designed to meet the needs of the problem. It must be designed to make people *want* to employ an architect. The design of a campaign is analogous to designing a building and you go about it in exactly the same way. You find out what needs to be done and then go ahead and do it. The advertising of the profession can be conducted in a dignified manner and it should be actuated

by an altruistic spirit rather than a selfish motive.

The advice of a famous surgeon to his son illustrates the importance of motive. The son wanted to study medicine. His father told him that if he was basing his choice upon the possibility of becoming wealthy that he might better do something else. But that if he based his desire upon the good he could do humanity, he would be successful and need have no concern about making money, for financial success would come automatically.

The architectural profession has a real service to render the public. The public should know about it. The public convinced will then pay what the service is worth and those rendering honest service will have little cause to worry about the returns that will accrue from any expenditure made for an intelligent advertising campaign. Why doesn't the architect obtain more business and a fee in better proportion to the value of the service he renders? The answer lies in the fact that the public does not understand the part that the architect plays in the building industry. Must the profession stand by and see its functions absorbed by magazines selling stock plans, engineers, contractors, and building-construction organizations? Who is going to tell the man in the street—will it be the banker, the contractor, the building supply dealer, the manufacturer of building materials? Hardly, they have their own problems. The telling must be done by the architects themselves.

The question of advertising has been discussed for about ten years. Isn't it time that something is done about it, for in spite of their unwillingness to admit the truth, architects have proven themselves to be business men and frequently good business men. They are



**Heavy Sash
Easily Operated and Firmly Held**

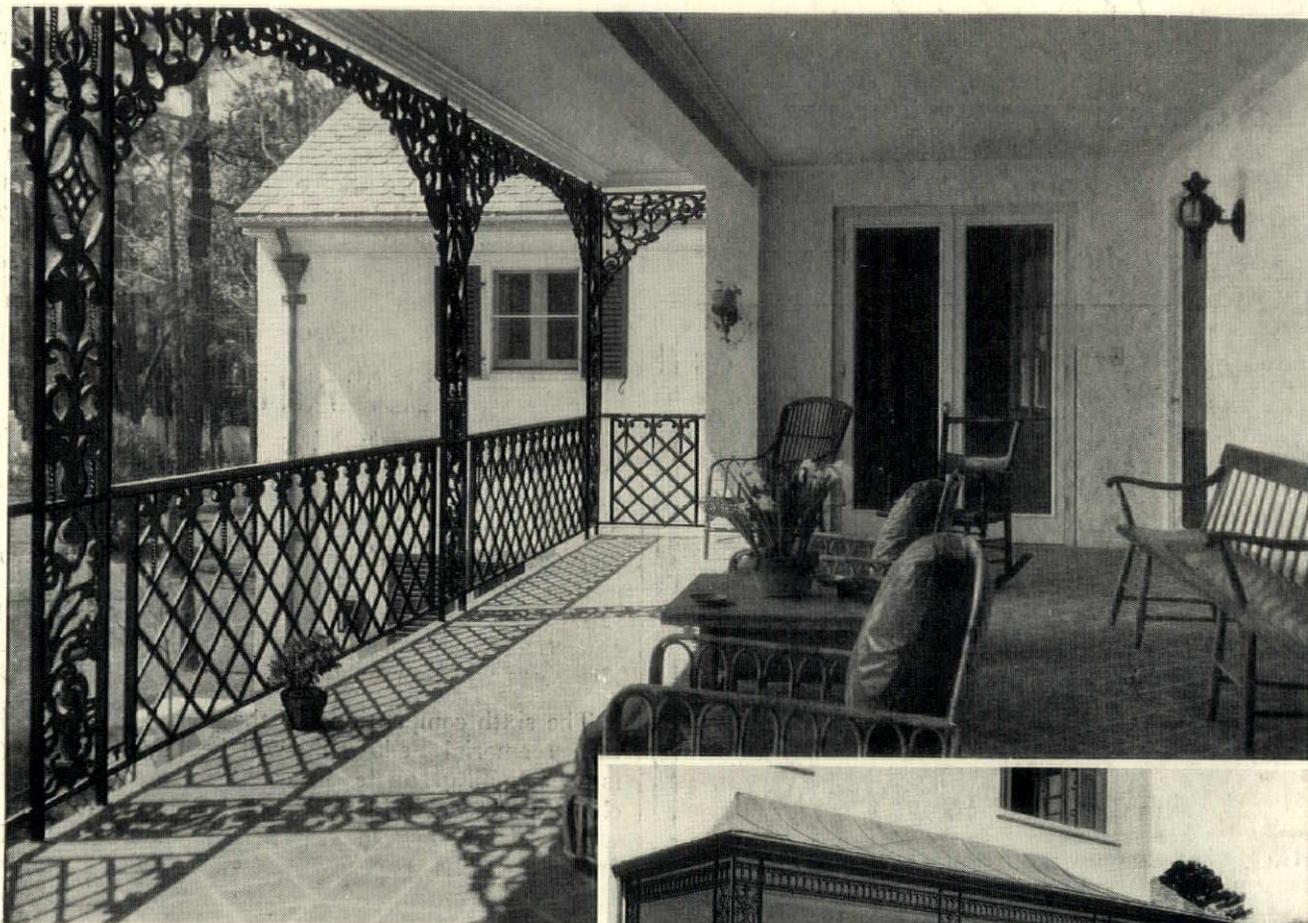
THE use of Lord & Burnham apparatus makes it safe and easy to open and close large ventilating units, such as this, at the mezzanine floor of the American Book Building, New York. The screw thread type of apparatus used here, holds heavy sash rigidly, at any angle, from tight closed to full open. The small picture above shows the screw thread control rod, and bronze operating box.

Lord & Burnham Co.

SASH OPERATING DIVISION

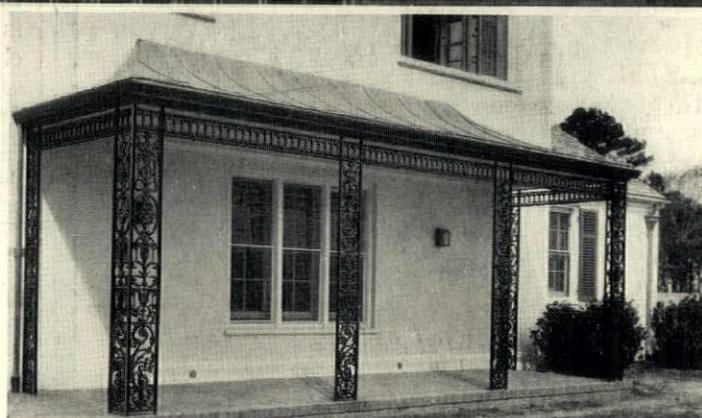
Graybar Building New York City

Representatives in all principal cities of the United States and Canada



Seymour H. Knox Residence, Aiken, South Carolina

“Metal Work by FISKE”



Peabody, Wilson & Brown, Architects

THE Seymour H. Knox residence at Aiken, S. C., is one of the many luxurious homes throughout the United States where the ornamental metal fittings have been executed by FISKE. The preference for FISKE is constantly growing among architects and especially among architects whose specifications always call for the *finest*. For they realize that to specify “metal work by FISKE”

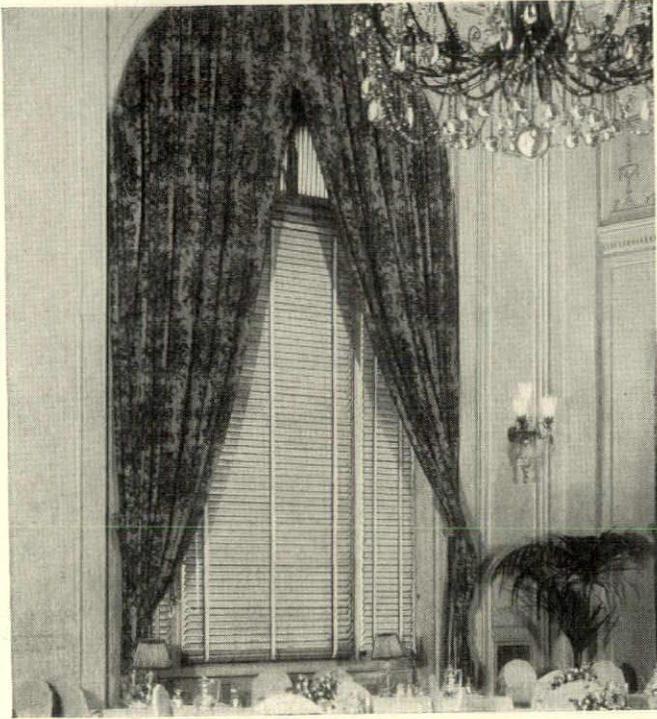
is to specify the *finest* in workmanship, materials and perhaps what is even more important — over 70 years of experience in close cooperation with architects and builders.

The FISKE organization maintains complete consultory and design services which are always available to architects interested in ornamental metal work. Write for illustrated catalogue.

J.W.Fiske IRON WORKS
80 Park Place ~ New York
ESTABLISHED 1858

SPECIALISTS IN ORNAMENTAL METAL WORK

In Hotels, too
VICTORIA VENETIANS
add to
ARCHITECTURAL BEAUTY



The beautiful and restful dining room of the Hotel Cleveland, famed hostelry at Cleveland, Ohio

THIS attractive installation in the Hotel Cleveland is typical of the use of Victoria Venetian Blinds in the finer hotels and clubs, nation-wide. No other type of window equipment gives the delightful lighting effects, softening and deflecting the sunlight . . . at the same time allowing draftless ventilation. Victoria Venetians are furnished in all colors and tones. They fit into any decorative scheme.

THE BOSTWICK-GODELL CO.

Blinds since 1894

NORWALK, OHIO

*Representatives in Principal Cities
 See Sweet's for detailed specifications.*



VICTORIA
VENETIANS
The Better Blinds

required to have a smattering of banking and finance; be purchasing agents, cost accountants, auditors, office managers, employment managers, engineers, politicians, lawyers, judges, and salesmen. And in addition they have to find time to design buildings. This is a great profession—a great business. There is no other like it or none that requires so fine a type of man; men who have the ability not only to create, and to serve humanity but to organize and carry through to completion projects of great magnitude.

There is no finer profession than that of architecture. There is no finer or cleaner business than that of the practice of architecture.

COMPETITIONS

The Harrington & King Perforating Co., Chicago, is sponsoring a competition for a radiator grille. First prize is \$300, with four other cash prizes, and \$20 for each design, not awarded a prize, which the company may desire to use. The competition is under the auspices of the Architectural Sketch Club of Chicago, and the program committee consists of George M. Nedved, architect, as chairman, and Louis Pirola and T. O. Menees. Drawings will be received February 15, 1931.

The sixth competition for the James Harrison Steedman Memorial Fellowship will be held this spring. It is open to all graduates in architecture of recognized architectural schools in the United States who shall have worked for at least a year in the office of a St. Louis architect and be between twenty-one and thirty-one years old. The governing committee for the Fellowship is composed of J. Laurence Mauran, Louis La Beaume, and Gabriel Ferrand. Full information may be obtained from Gabriel Ferrand, head of the School of Architecture, Washington University, St. Louis. Application blanks must be filed before January 24, 1931.

BULLETINS

WIND PRESSURE ON CIRCULAR CYLINDERS AND CHIMNEYS. By Hugh L. Dryden and George C. Hill of the Bureau of Standards. This is Research Paper No. 221 issued by the Bureau of Standards. Price 15 cents.

SEAMS FOR COPPER ROOFING. By K. Hilding Beij, of the Bureau of Standards. Research Paper No. 216 of the Bureau of Standards. Price 15 cents.

REPORT OF THE BUILDING RESEARCH BOARD FOR THE YEAR 1929. Published by the Department of Scientific and Industrial Research, 16 Old Queen Street, Westminster, S. W. 1, London. Contains data on research on building materials made by this organization. Price 2s. 6d.

PERSONALS

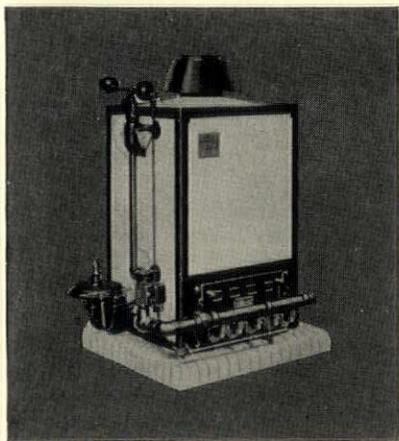
The architectural firm of F. C. Hirons-F. W. Mellor has been dissolved and the offices of Frederick W. Mellor are now located at 25 West 45th Street, New York City.

Pierson and Wilson, architects, have moved their offices to 1621 Connecticut Avenue, Washington, D. C.

J. Charles Schwindler, formerly of Davidson and Schwindler, architects, has opened an office at 212-14 Balcony Building, Kansas City, Mo., and desires manufacturers' catalogs and A. I. A. filing data.

THE AMERICAN ARCHITECT

NOW... automatic heat is practical
for **ANY SIZE HOME**



**IDEAL
GAS
BOILERS**

GAS distribution has increased so rapidly that it is now available in almost every part of the country. At the same time rates for house heating are being lowered everywhere.

Home owners want the comfort and convenience of heating that is 100%

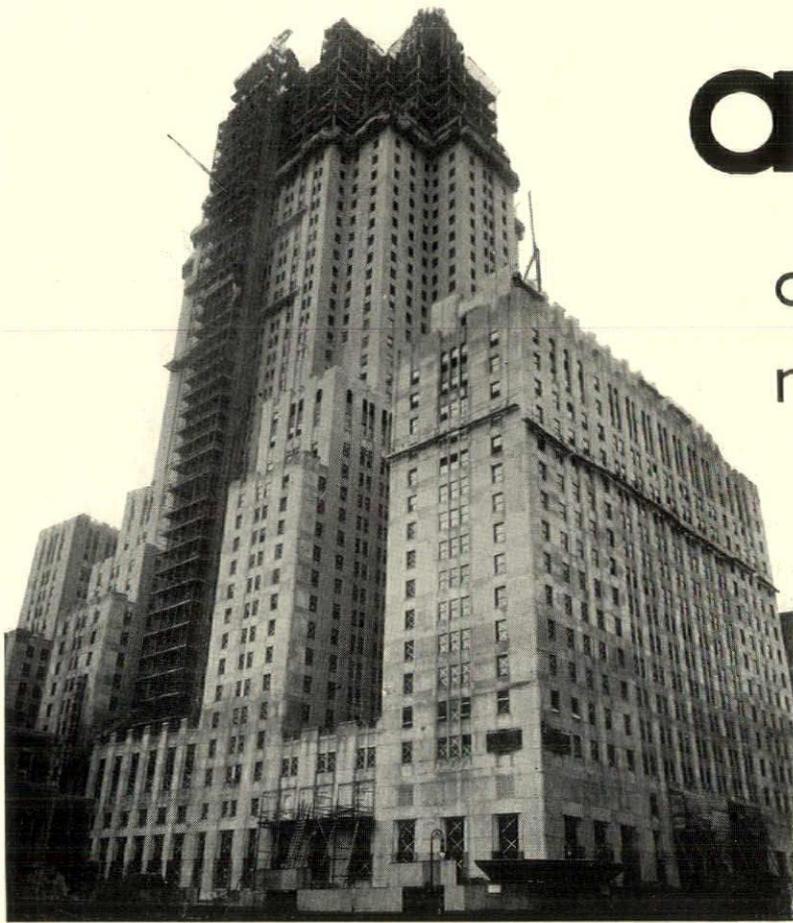
automatic. And now that Ideal Gas Boilers are no longer luxuries, you can give your owners this efficient, care-free heating. And you can be sure that it will go on giving perfect satisfaction year after year—a constant reminder of your good judgment.

AMERICAN RADIATOR COMPANY

DIVISION OF

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 West 40th Street, New York City



Waldorf Astoria Hotel Building, New York City, Schultze & Weaver, Architects, Thompson-Starrett Co., Inc., Builders. Although the Indiana Limestone is not carried above the 13th floor, except for trim, the use of harmonizing Fiske Waldorf Grays in the upper stories enables the architects to keep the feeling of stone throughout. All Waldorf Grays used in this building are large size units.

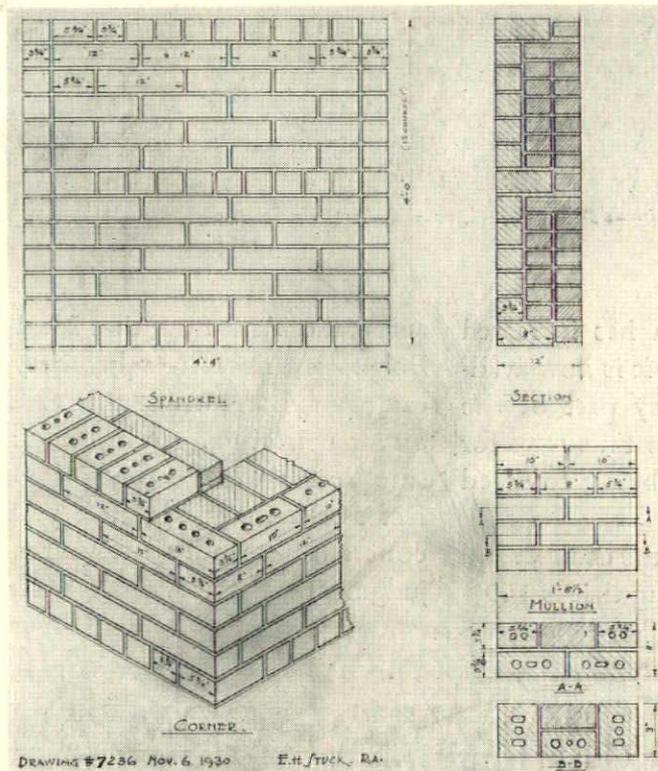
a new

developed for the new Waldorf Astoria

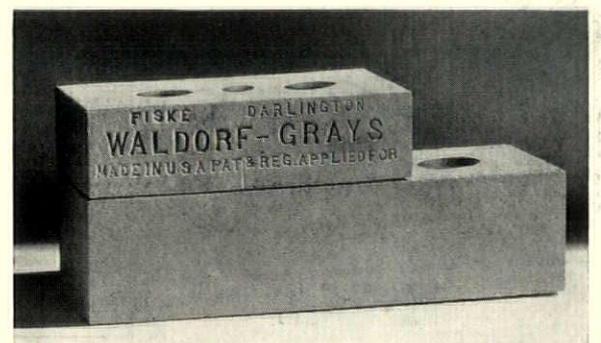
Brick and stone can now be used together without sacrificing the feeling of stone desirable in many types of buildings.

In Waldorf Grays, Fiske & Company, Inc., offers a pure gray brick which is the best match for limestone yet produced in clay ware. Scale in keeping with stone is achieved by the use of the larger units in which Waldorf Grays are furnished, running from standard sizes up to 12 inches. The use of large units reduces the mortar joint area 25% thus yielding a more positive color effect in the wall mass.

Waldorf Grays open many interesting possibilities. We invite your investigation.



Details showing method of laying and bonding of the oversize Waldorf Gray units as used in Waldorf Astoria Hotel Building. 1/2 inch joints.



Two Waldorf Grays—Top, standard brick size, back showing; below, one of the larger units, face showing.

MAKERS OF "TAPESTRY" - HARVALES - CALEDONIAN - DARLINGTON GRAYS

brick

designed to go
with limestone

WALDORF-GRAYS*

TRADE MARK REG. U.S. PAT. OFF.

The new Waldorf Grays described on the opposite page, in color and size of units represent as distinct an advance in the art of brickmaking as "Tapestry" Brick, the Black Brick used in the American Radiator Company Building and other successful developments pioneered by Fiske & Company, Inc.

Every new Fiske Brick has been worked out step by step with the architectural profession. And every Fiske Brick is backed by the same kind of service that fulfilled the exacting requirements of the Waldorf Astoria—reported to be the largest order ever placed in New York for brick units going into a single building.

Anyone can offer to cooperate. Fiske & Company, Inc., has the experience and facilities which make such cooperation valuable.

*The name "Waldorf Grays" is a registered trademark, the exclusive property of Fiske & Company, Inc. Every Waldorf Gray unit is trademarked as shown on the opposite page.



Laying up Waldorf Grays on an upper story of the Waldorf Astoria. Note size of units compared to standard bricks. Mortar is still fresh in this photograph—dries out to same color as brick.

FISKE & COMPANY, Inc.

18 NEWBURY STREET, BOSTON

17 WEST 46TH STREET, NEW YORK

MILTON REDS - WALDORF GRAYS AND OTHER HIGH GRADE FACE BRICK

SHOULD YOU SUBSCRIBE *to* HOME & FIELD?

Residential architects should read Home & Field for two reasons.

First because it provides an unusual opportunity to check up on one's plans and progress through seeing the work of others.

Second because each issue emphasizes the importance of the architect so effectively.

The houses shown in Home & Field are achievements to which important architects have contributed. Credit lines invariably appear in text or caption of each article.

Thus Home & Field creates a wider appreciation of the necessity of architectural supervision in design and construction.

Home & Field will delight you as a magazine allied with your profession. It merits your interest because of the good work it is doing.

We will gladly send you a sample copy of a recent issue without obligation.



HOME & FIELD presents many fascinating and originally conceived settings. This one will appear in a forthcoming number.

HOME & FIELD
572 MADISON AVENUE
NEW YORK

Quality Steel Casements to Meet Any Condition

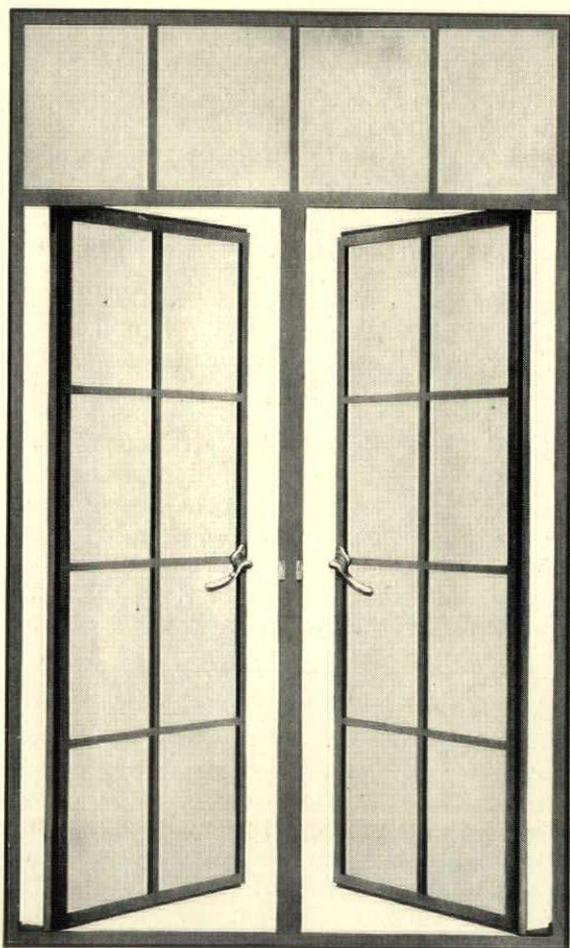
In its Standard and Heavy Type Steel Casements Truscon provides quality windows for the most modest or pretentious building. The numerous standardized units and sizes meet the particular requirements of individual installations.

All Truscon Casements are of high quality materials and workmanship, and are moderately priced. Where desired, they are furnished complete with screens. Prompt deliveries are made from stocks in Truscon warehouses throughout the country.

The aim of Truscon Window Service is to co-operate with architects in selecting the window that will give the best results. Suggestions, catalogs, quotations will be furnished on request.

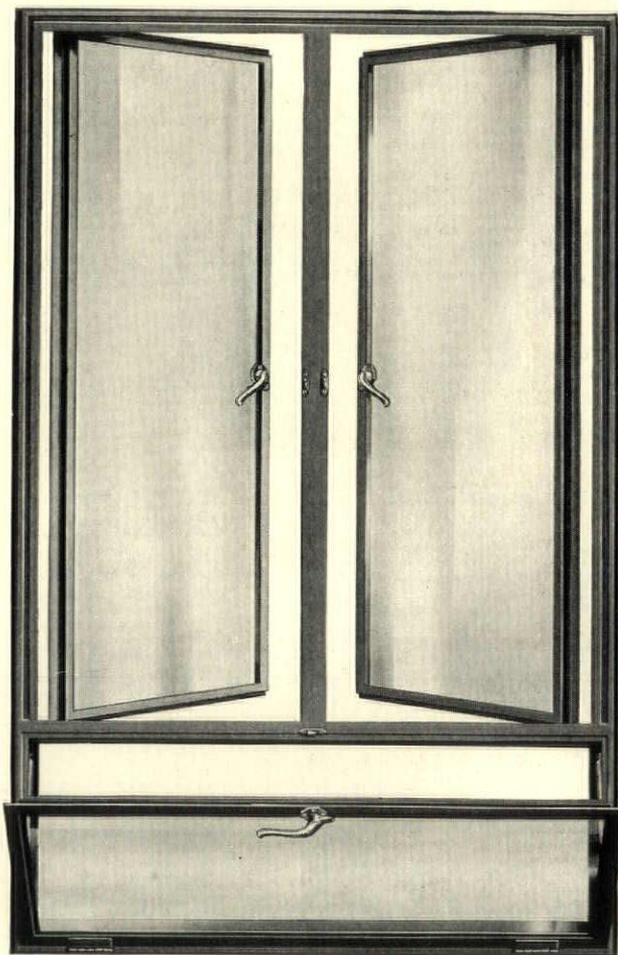
TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO

Sales and Service Offices in All Principal Cities



STANDARD STEEL CASEMENTS

The popular steel window for modern homes. Many distinctive features. Furnished in combination units, eliminating assembly in the field.



HEAVY TYPE STEEL CASEMENTS

For fine homes and other buildings. Built of extra heavy sections. Furnished with pressed steel frames to harmonize with monumental buildings.

TRUSCON

STEEL WINDOWS—STEEL DOORS—STEEL JOISTS—METAL LATHS—STEELDECK ROOFS—REINFORCING STEEL

architectural
TERRA COTTA



Detail, Bendix Bldg.,
 Los Angeles, Calif.

Carl Jules Weyl,
 Architect

TERRA COTTA

Because it is easily modelled, an extensive use of terra cotta is always extremely practical even for industrial buildings.

The photograph shows one of a series of panels symbolizing Invention, Education, Progress, etc. At small cost, the Bendix Building is thus set apart from its neighbors and given individuality.

NATIONAL
TERRA COTTA
 SOCIETY
 230 PARK AVENUE
 NEW YORK

NATIONAL TERRA COTTA SOCIETY

Please send me your plates

TERRA COTTA — STANDARD CONSTRUCTION

Name _____

Address _____

City _____

State _____

Butler Congratulates a
 Young Iconoclast

(Continued from page 26)

Library while it was still unfinished and the sixteen-story Book Tower stood only as a structure of steel girders and braces in geometric patterns. "Ah," said the architect, looking up in surprise and relief, "at last you are doing something really modern at Yale! How glad I am. Of course, you will do no more than cover the steel tower with glass?"

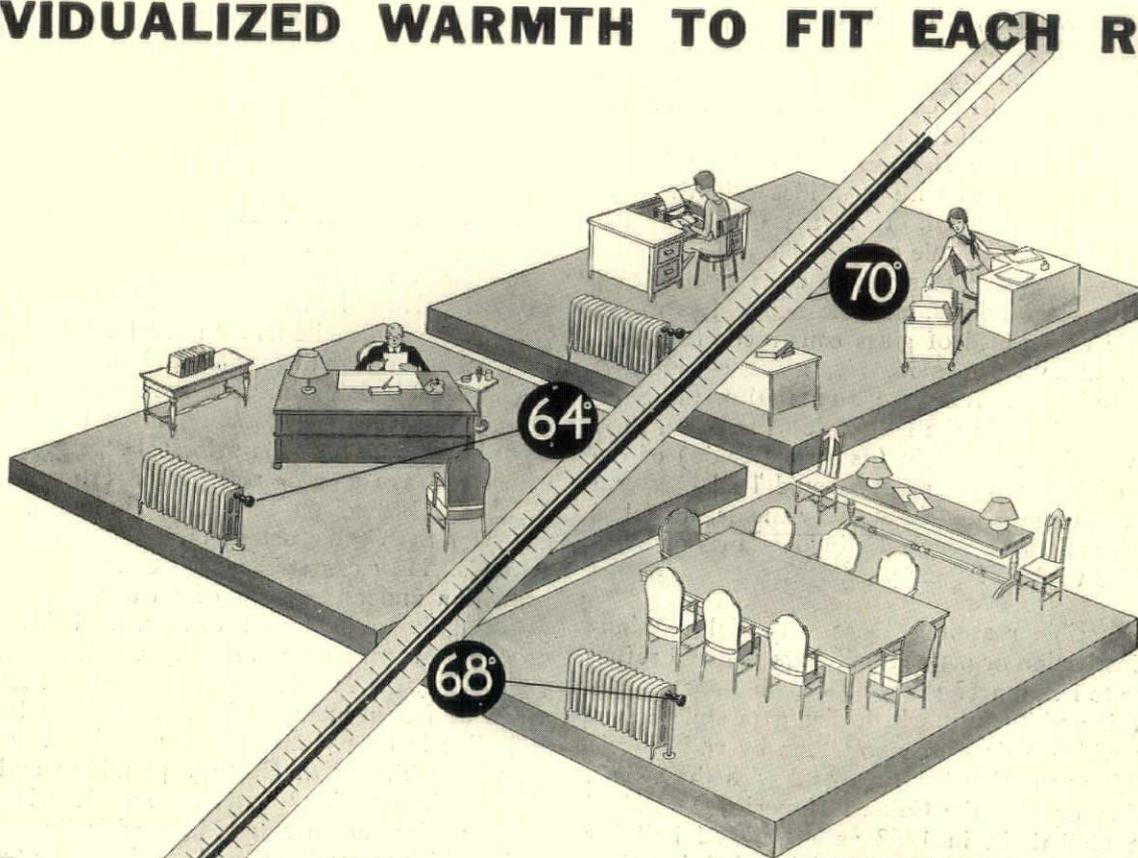
How complete was his disappointment when told that the tower was instead to be mantled with heavy stone blocks, with pinnacles, Gothic buttresses and Early English lancet windows! How utterly must he have been disgusted to see stone vaults, instead of supporting the roof, being supported by the roof! Or to see buttresses, instead of holding up a wall, actually being held up by steel! All this, in the University whose motto is *Lux et Veritas*. There is not one suggestion of *Veritas* in the Sterling Library;—and for that matter there is precious little of *Lux*. To put deeply splayed Gothic church-windows with heavy mullions and leaded panes into reading rooms which require the maximum of light and air, is the last word in folly. To turn a whole structure that could have been modern and life-giving into a great, gloomy reconstruction out of a forgotten past, is no less than an arch-assault upon every aesthetic conscience that must behold it.

Is the Sterling Library beautiful? Is there anything admirable in a highly functional building which dresses up like a cathedral, its entrance hall a nave, its reading rooms a crossing, and its delivery desk a high altar? Is there anything remotely artistic in a vast pile whose first court is a sentimental cloister and whose second court is a Wall Street lightshaft? Is there any honesty in hiding the magnificent function of a tower of books under a cloakage that has no more relation to it than to a grain elevator? Is there any degree of beauty in modern professional rooms decked out in the Fourteenth Century Hotel Statler style? If such things are beautiful, then there is no present and can be no future. If these matters seem praiseworthy, then we are only comic shadow-men of the past.

REPUDIATE modernity? Deny the achievements of the living? Ignore what alone is alive? It seems almost incredible. When the world is witnessing a sweeping rebirth of genuine architecture, and when every clear-headed designer who is not bound to copies and formulas is envisioning a new order of forms and masses and relationships, then the builders of Yale join the tribe of impotent imitators who grind out their lifeless plagiarisms. When just America, of all the countries in the world, has directly inspired the entire new art with its masterly contributions to functional architecture (such as steel girders, grain elevators, suspension bridges, hangars, factories) the designers of Yale's buildings reject the only American art and try to import Venice, Oxford, Rouen and Rome. When we could have a new gymnasium built in the splendid style of concrete, steel and life-spreading glass, we have a gymnasium that is to be built as a cheap and adulterous abbey, bleak with battlements and buttresses. There is only one style of architecture today, and that is the living style. Open,

THE AMERICAN ARCHITECT

INDIVIDUALIZED WARMTH TO FIT EACH ROOM



“Made to Measure” HEAT

Sylphon Automatic Radiator Valves assure a better general heating for any building—because they prevent fluctuating room temperatures, one common cause of fuel waste. The Sylphon Automatic Radiator Valve is made to do just one job—and does it. Sensitive to the slightest temperature changes of the surrounding air—it steadily holds the warmth of any one room at exactly the degree most satisfactory to the occupants. Once its marked thermostatic head is set at “Hot,” “Medium,” or “Cold” there the temperature stays. Practically the entire thermometer range of comfort may be scaled for the individual warmth selection and once set all further radiator attention is avoided. Sylphon Automatic Radiator Valves positively eliminate uneven, injurious and wasteful heat for Factory, Office Building, Apartment or Home.

A COMPLETE RADIATOR CONTROLLING DEVICE

The Sylphon Automatic Radiator Valve is a combination packless valve and temperature control unit. Its motor element is the dependable Sylphon Bellows. It has no electrical or mechanical accessories to get out of order. Easily installed and inexpensive—architects and engineers specify it with full confidence in its lasting efficiency.

It is fully described (both types—angle and globe) in our illustrated printed matter which will be gladly sent. Write today for Bulletin AJ-250.

No. 875 AUTOMATIC RADIATOR VALVE

FULTON SYLPHON Co.
KNOXVILLE, TENN., U.S.A.

Representatives in all Principal Cities in U. S. A. — European Representatives, Crosby Valve & Eng. Co., Ltd., 41-2 Foley St. London, W. 1., Eng.; Canadian Representatives, Darling Bros., Ltd., 140 Prince St., Montreal, Que., Canada.

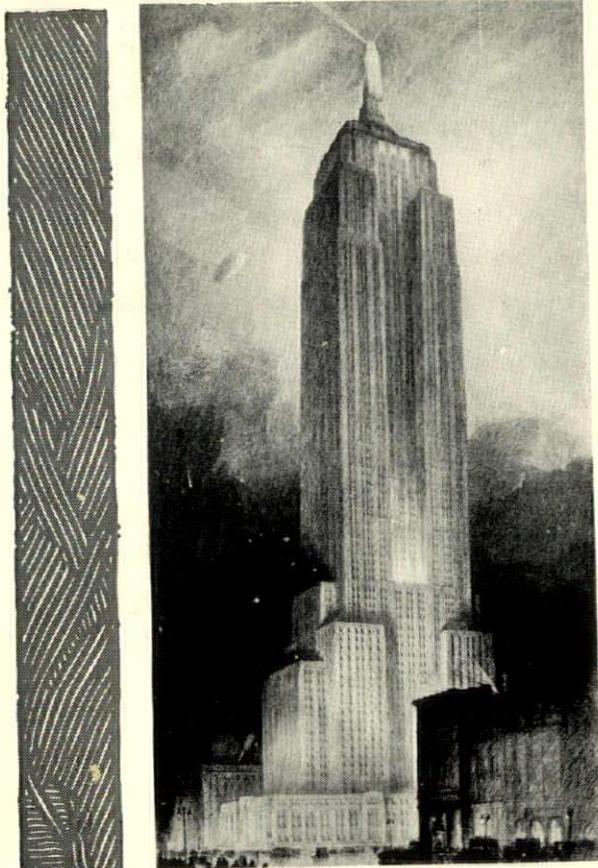


free, strong, unacademic, it has vast visionary possibilities. It is superbly adapted to the form of communal housing which the University desires—see only the results which such men as Le Corbusier, Gropius, Wright, Behrens have achieved. In the living-house it is eloquent with a warm but severe simplicity of design; in the public building it vibrates with new ideas; in the skyscraper it soars heavenward. It is the Gothic of the Twentieth Century, not a stale copy of the Gothic of the Thirteenth Century. Due to steel we have cheaper and lighter walls, larger windows, less bric-a-brac, less waste, and the whole new world of glass construction. Above all, we have more light, more air, more cleanliness: therefore more health. Were the Memorial or the Sterling Quadrangles built in the best style of the day, their inhabitants would not complain (as they now do) of the dismal lack of light; their rooms would be larger and clearer because there would be no silly moats, no faked buttresses, no artificially cracked window-panes or overhanging gables to dwarf their possibilities.

WHAT possible reason is there why Yale—or any other institution or plan of buildings—should refuse to contribute to living art? What conceivable relation has Yale to Gothic architecture, which died as a style before the land on which Yale stands was seen by white men? What possible connection has its world with the Greek, the Florentine, or even the Colonial American? Indeed Connecticut Hall, built in 1752 as a Colonial building during the full splendor of the Colonial period, is a definite artistic masterpiece; but its imitator McClellan Hall

(built in 1925; rightly named "Hush") is an impostor, a dead thing, a futile theft. We are men living in 1930, and we cannot try to live like men of 1750. We are not Colonial Americans, but riders of the enormous tides of a new world.

What the Yale builders are trying to do is to deny the fact that a building must have relation to the age in which it is constructed. They seem to believe that there is no need for it to express the character of the people for whom it was built or the purpose for which it was intended. Now it happens that Harkness Memorial Quadrangle is, despite its mediaeval character, a delightful place to live in; the architect, James Gamble Rogers, should get his full due. But there are damning objections. Its rooms are eternally dark; it suffers already from hints of decay (the principal stone selected is one which will age quickly and give a crumbling antiqued effect); and it violates all canons of taste by deliberately misusing the Gothic details and ornaments in which it abounds. How can students be educated to artistic appreciation under the eaves of an architecture that puts water tanks into church towers, and lavatories into oriels? It runs counter to every creative conception: it demands that the modern young man nurture himself on a diet of frozen mediaevalism. Why should students of 1930 live in bogus Elizabethan mansions? Why should they have Twentieth Century plumbing and Fifteenth Century fenestration? Why have modern ideas, modern books, modern manners, and hypocritically ancient gables under which to confine them? Is there any truth in such an art as this? Does it have the least imaginable signi-



Again HALBACK EXECUTION Clicks with Time Schedules

IN the erection of the Empire State Building, execution of the metal work on the exterior walls was intrusted to C. E. Halback & Co. and William H. Jackson Company in collaboration.

This work includes window jambs and mullions of polished nickel chrome steel, and spandrels of cast aluminum.

In addition to which Halback & Co. are solely responsible for the miscellaneous iron work throughout the building, including all stairways.

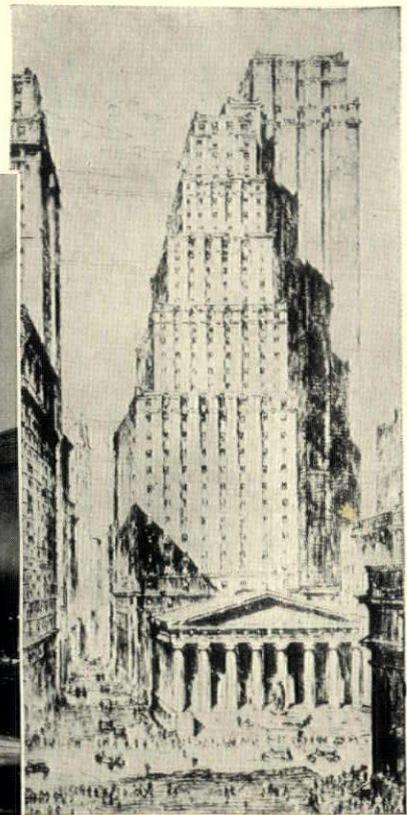
As a result of the unit control of this vast amount of work, the exterior and interior metal work crowded close on the heels of the purely structural operations, with never a hitch or delay in delivery or placing of the materials.

The Empire State Building, Fifth Ave., at 34th St., New York City. Shreve, Lamb and Harmon, Architects. Starratt Brothers & Eken, Inc., Builders. Owned by Empire State, Inc.

C. E. HALBACK & Co.
BANKER ST., BROOKLYN, N. Y.

◊ WORKERS IN METALS FOR ARCHITECTURAL PURPOSES ◊

THE LARGEST BANK IN THE WORLD *uses* ★ ★



ABOVE: An etching of the Chase National Bank Building, New York. LEFT: Interior showing W. & J. Sloane Battleship Linoleum.



DOUBLE-WAXED LINOLEUM



This Service Free to Architects

We maintain a service department to assist architects in planning or specifying linoleum floors. This service is at your disposal without charge. Write for copy of Architects Data Book and ask for a representative to call if you wish advice on specific problems. Address: Architects Service Department, W. & J. Sloane, 577 Fifth Avenue, New York City.

THE Chase National Bank, New York merged recently with the Equitable Trust Company, thereby becoming the largest bank in the world, with assets of \$2,800,000,000.

In the downtown offices of the Chase National Bank, 12,800 square yards of W. & J. Sloane *double-waxed* Battleship Linoleum are used.

More and more frequently architects' specifications call for W. & J. Sloane Linoleum, both because of its inherent quality and because of its wide range of colorful patterns.

W. & J. Sloane Linoleum is made

with a natural fine-textured finish, the result of extra-processing in the grinding and mixing of raw materials and extra pressure in the calendars. It is then *double-waxed at the plant* by an exclusive Sloane process.

When you specify W. & J. Sloane Linoleum you assure your clients of the finest money can buy. It comes to the job double-waxed, is easy to handle and is ready for use the instant it is laid. Examine this superfine finish before you write the specifications. We will gladly send you quality samples.

★ W. & J. SLOANE DOUBLE-WAXED LINOLEUM

fiance for present or future? It seems dubious just what lesson of honesty the young man can derive from such misuses and untruths. It seems questionable what creative growth the buildings might be able to inspire. They represent the craft of the archaeologist, the handwork of the dust-grabbing academe; they constitute an outwardly charming but inwardly sterile art of escape.

"Modern scholarship had its birth and spent its youth in Gothic buildings; therefore modern scholars should continue to work in mediaeval buildings"—that, in brief, is the argument of the reigning builders. Read it again; it is a fine example of pedantic sophistry. It perfectly expresses the ideal of academic isolation, of escape from the present, of flight from the fact. It lies at the core of the musty pedagogy that still spreads its decaying odor through the halls of our colleges today. It confronts the student's desire to prepare himself for life, activity, creativeness, with the call to an academic hermit-existence. It erects dead buildings to inhabit, and proclaims a dead ideal to follow.

No life, no vision, no sympathy with what lives and breathes, no understanding of anything that is not in books—this is the condemnation which we pronounce upon the builders of the new Yale. Immense sums of money and surpassing opportunities have been given them, and the future of art at Yale placed into their custody. They have defrauded the trust, they have deceived the generations that are to follow. Gaunt, lifeless, untruthfully antique, their vast structures are doomed to press their dead-weight upon the thousands and ten thousands who must inhabit them and who, as young men, would hope to be free.

To enslave these young men into the past, to feed them on untruths, to instill in them a mockery of what is modern and creative—it constitutes a strange method of education. Watching the new buildings of Yale as they rise, we must consider them a blunder against which to protest, a betrayal to despise. We must repudiate the attitude which motivates them, and the minds that bid them flourish. Ashamed of our closeness to these vast structures and dead accumulations, we turn our eyes away. And all that remains is to look forward to a time when Yale will at last assume the place which it has long ignored. Only in that future hour will art and Yale marry, for only then will a new order be envisioned.

A System for the Small Office

(Continued from page 37)

the required economical number of sheets. While giving up this feature, we have exercised one care, however, and that is the checking up of the consecutive numbers, as duplication would lead to confusion.

This little system is, after all, hardly more complicated than a check book.

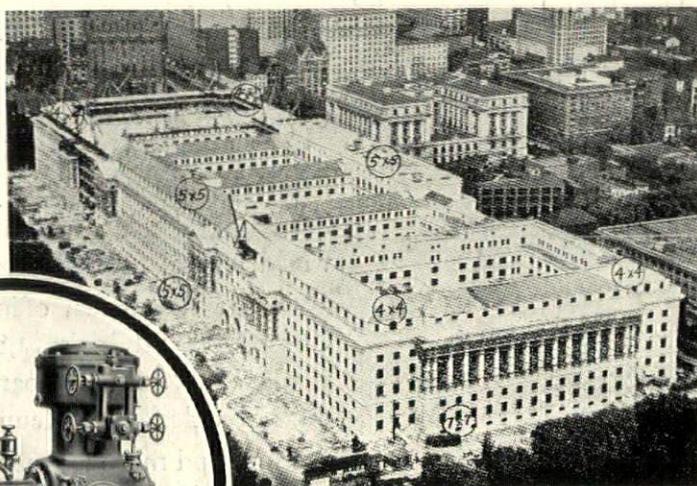
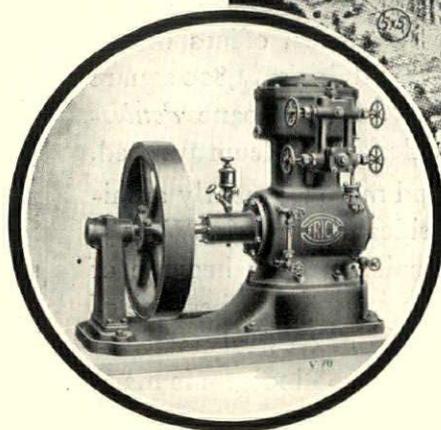
The business accounting of the entire job is adequately taken care of—the result is the easy and quick settlement of each job.

The system is infectious. The contractor is impressed with confidence, as, of course, the owner is—but we find the contractor using, on his requisitions, the same amounts and the same numbers that are on the orders



The Refrigerating Machine That Made Refrigeration Dependable

will give the same efficient refrigerating service in the mammoth Department of Commerce Building that it has shown in many older and very exacting cases. Eight separate Frick plants will cool the drinking water, hold proper temperatures in the storage rooms, and condition the air.



Department of Commerce Building
Washington, D. C.

Each of the machines on the eighth floor is a Combined Unit, connected to an open-type drinking water cooler. The 7x7 machine furnishes cold water for the air conditioning system. Ten rooms, attached to the restaurant kitchen, are refrigerated by the 5x5 machine in the basement.

Branch offices and distributors in 80 principal cities.

Frick Company
WAYNESBORO, PA., U.S.A.
ICE MACHINERY SUPERIOR SINCE 1882

Send for copy of Architects Catalogue Binder.



THE MODERNISTIC MOVEMENT

Plate 4

The Baker Shoe Store, on Hollywood Boulevard, has been called the most attractive store front in the Motion Picture City. That is a real tribute, for Hollywood is one of the most beautiful of California Cities.

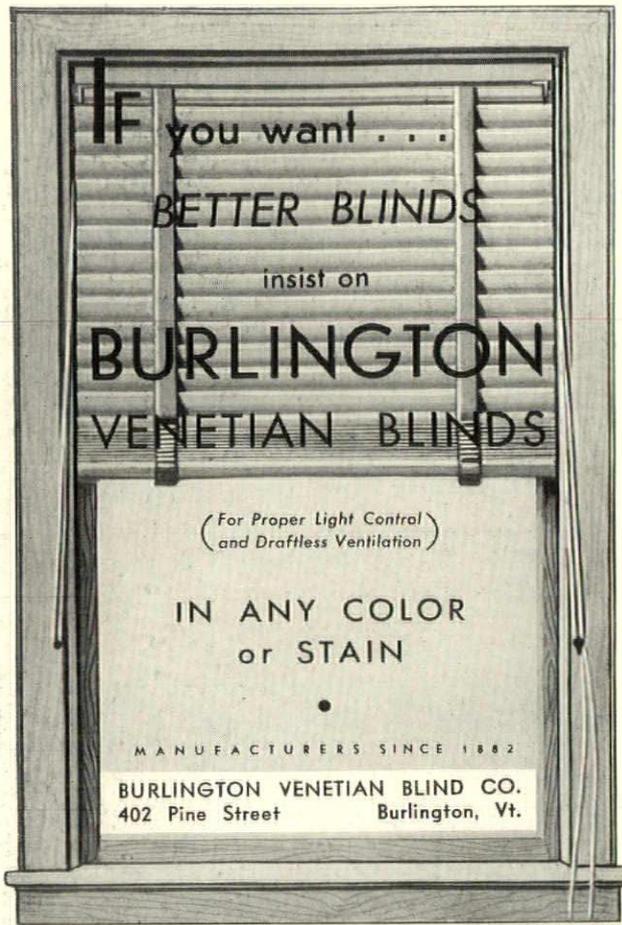
Noteworthy as a product of the new school, the Baker Store is none the less unusual as an example of marble work. Black and Gold, Belgian Black and White Vermont were the varieties used. It was designed by Myron Hunt and H. C. Chambers.

VERMONT MARBLE COMPANY—PROCTOR, VERMONT

Branches in the larger cities

See Sweet's Architectural Catalogues for specifications and other data

VERMONT MARBLE



THE CUTLER MAIL CHUTE

Is backed by —

An experience of forty-eight years.

A factory equipped and operated for our own work exclusively.

A force of experienced erectors in the field.

A determination to keep our product and service up to the highest possible standard.

Correspondence invited.

CUTLER MAIL CHUTE CO.

GENERAL OFFICES AND FACTORY
ROCHESTER, N. Y.

and the checking of each monthly requisition is "child's play."

Sometimes a client with a legal frame of mind, or legally advised, will request just such a system with each order countersigned. Of course, we are only too happy to show that such a system is the backbone of our accounting system. On the other hand, we have had some clients object. One offered the objection that it indicated that we had no confidence in his word. It was very easy to parry this, however, by giving assurance that we had no doubt of his word, but rather of the fellow who was being authorized to do the work. When he showed a sympathetic understanding of this side, we then expanded on the other virtues of the system. For more than five years now, we have had the most splendid cooperation in keeping straight one of the architect's chief responsibilities—making it simple, too.

And—a little method is better than a lot of madness.

• BOOKS •

(Continued from page 72)

men who are expert in the various phases of theatre work they write about.

Chapter headings and authors give an idea of the valuable scope of the book. There is "Tendencies in the Design of the Present Day Theatre," by R. W. Sexton; "The Design of the Modern Theatre," by Armand D. Carroll; "A Standard Method of Planning a Theatre," by Albert Douglas Hill; "The Decoration of a Theatre," by Harold W. Rambusch; "Electrical Installation in the Modern Theatre," by Edward B. Silverman; "Theatre Acoustics," by Edwin E. Newcomb; "Heating and Ventilating a Theatre," by Edwin A. Kingsley; "The Theatre Owner and the Architect," by Leon Fleischman; "The Theatre of Tomorrow," by Ben Schlanger; and "Checking List for a Theatre," by Albert D. Hill.

This text part of the book, which is accompanied by many photographs and drawings, is supplemented by over one hundred pages of photographs, sketches, and scale drawings of theatres, both exteriors and interiors as well as details.

MAPPING AND LETTERING

By Malcolm Lloyd. Published by P. Blakiston's Son & Co., Inc., 1012 Walnut Street, Philadelphia, Pa. Illustrated; 58 pages; size 11 x 8; price \$2.50

A TEXT book for students, draftsmen and engineers, which includes the construction of the basic alphabets and the elements of map design. It is based largely on the methods of the U. S. Government Departments, more particularly the U. S. Geological Survey, and the best practice of the engineering departments of many of the larger railways and corporations. The book contains a large amount of well condensed information.

THE A. I. A. will invite the International Congress of Architects to meet in Washington, D.C. in 1933, under a program which would include a one day meeting in New York and another in Chicago.

"YOUNGSTOWN"
*in the Specifications Means
 Ease in the Installation . . .*

WHEN YOUNGSTOWN pipe is specified for the plumbing, heating, sprinkler or refrigerating systems of a building it is a specification that means an easy installation for the contractor. This life-time steel pipe, while tough and sturdy, is, nevertheless, easy to cut, thread and install on the job, making its installation both easier and faster—features which instantly appeal to contractors.

Coupled with this greater ease of installation is its long-lived endurance which insures a permanent piping job, benefiting the contractor, architect and owner alike.

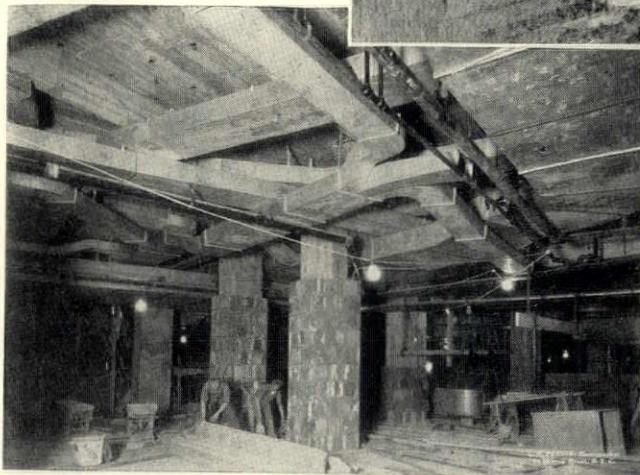
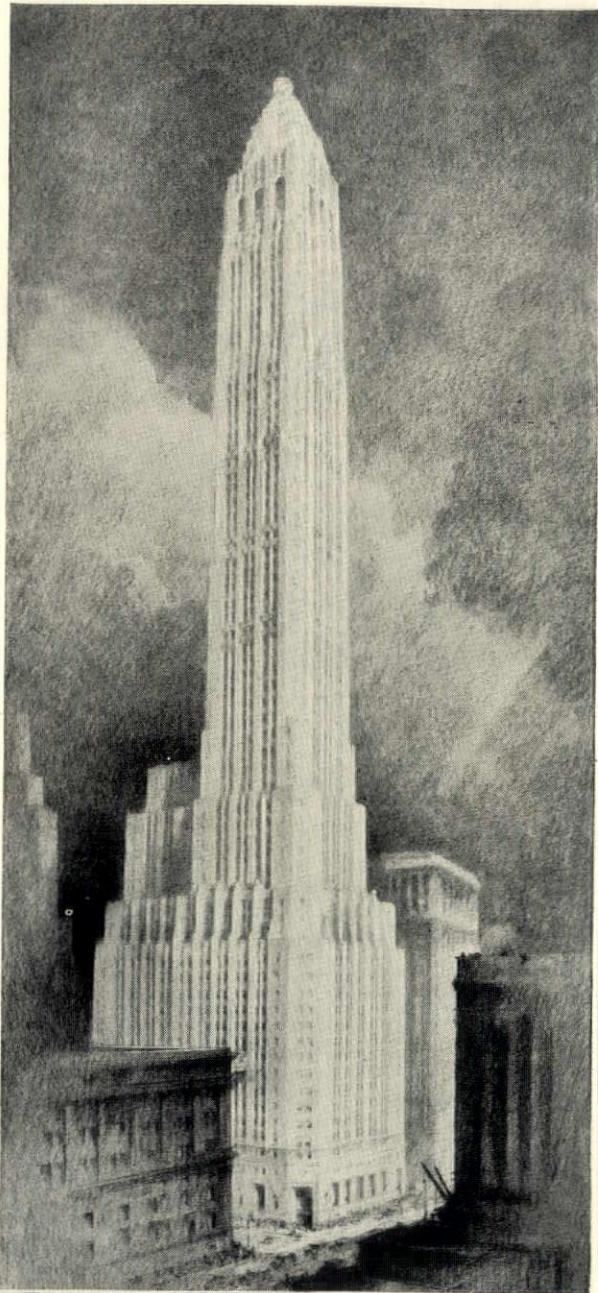
If you are not now using Youngstown steel pipe, try it in your next job. It is specified by leading architects, and stocked by leading jobbers and dealers from coast to coast.

The **YOUNGSTOWN SHEET AND TUBE COMPANY**

One of the oldest manufacturers of copper-steel, under the well-known and established trade name "Copperoid"
 General Offices—YOUNGSTOWN, OHIO

DISTRICT SALES OFFICES

- ATLANTA—Healey Bldg.
- BOSTON—80 Federal St.
- BUFFALO—Liberty Bank Bldg.
- CHICAGO—Conway Bldg.
- CINCINNATI—Union Trust Bldg.
- CLEVELAND—Terminal Tower Bldg.
- DALLAS—Magnolia Bldg.
- DENVER—Continental Oil Bldg.
- DETROIT—Fisher Bldg.
- KANSAS CITY, MO.—Commerce Bldg.
- MEMPHIS—42 Kiel Ave.
- MINNEAPOLIS—Andrus Bldg.
- NEW ORLEANS—Hibernia Bldg.
- NEW YORK—30 Church St.
- PHILADELPHIA—Franklin Trust Bldg.
- PITTSBURGH—Oliver Bldg.
- SAN FRANCISCO—
 55 New Montgomery St.
- SEATTLE—Central Bldg.
- ST. LOUIS—525 Louderman Building
- YOUNGSTOWN—Stambaugh Bldg.
- LONDON REPRESENTATIVE—
 The Youngstown Steel Products
 Co., Dashwood House, Old
 Broad St., London, E. C. England



The City Bank—Farmers Trust Bldg. New York City, where permanence is assured in the plumbing system by Youngstown Steel Pipe, and in the ventilating system by Youngstown Copperoid Steel Sheets.

Architects—**CROSS & CROSS**
 New York

Mechanical Engineer—**CLYDE R. PLACE**, New York

Builders—**GEORGE A. FULLER CO.**, New York

Plumbing Contractor—**J. L. MURPHY CO.**, New York

Ventilating Contractor—**BAKER SMITH & CO.**, New York

YOUNGSTOWN

GALVANIZED SHEETS PROTECT



SAVE WITH STEEL

New Catalogs

(Continued from page 80)

BENNETT BONDED FIREPLACE

67 . . . Illustrated booklet of the Bennett Fireplace Corp., Norwich, N. Y., describing the manner of operation of this fireplace unit which also acts as a heater by utilizing the warm air which usually goes up the chimney. Contains a number of well executed pencil sketches showing methods of using the product in a fireplace, and a number of photographs showing that the location of the gratings is flexible.

DETAILS AND DATA FOR SCREEN INSTALLATIONS

68 . . . Detail plates of standard window construction showing how to provide for Orange aluminum frame screens, or any metal frame screens. Issued by the Orange Screen Co., Maplewood, N. J. In addition to a number of detail drawings, contains suggestions for specifications and other data pertinent to screens. A. I. A. file 35 p 1.

ACOUSTONE, THE USG ACOUSTICAL TILE

69 . . . Illustrated booklet describing Acoustone, an incombustible material used in acoustical treatment made by the United States Gypsum Co., 300 West Adams St., Chicago. Describes various architectural effects possible and discusses painting the surface without destroying acoustical properties.

GRATES, FRANKLIN STOVES, AND FIRE FRAMES

70 . . . Booklet containing pictures of authentic reproductions of antique originals, issued by Todhunter, 119 East 57th Street, New York. Also has historical discussion of the various types of work illustrated. A. I. A. file 14 e.

NEWMANCO STOREFRONTS DE LUXE

71 . . . Illustrated booklet containing detail drawings of various types of storefronts in bronze, monel metal, nickel and aluminum made by the Newman Manufacturing Co., Cincinnati, Ohio, also suggested specifications and pictures of typical installations. A. I. A. file 15 a.

HOW TO DRAPE YOUR WINDOWS

72 . . . A booklet illustrated in full colors and black and white intended to be completely informative upon all the different types and styles of window and door draping treatments in use today. It also furnishes the information necessary to deal with special window problems, and associates the most appropriate and practical types of drapery hardware with the various styles of windows. Published by the Kirsch Company, Sturgis, Mich.

DISH, SILVER, AND GLASS CLEANING MACHINES

73 . . . Illustrated looseleaf literature describing the various types of dish, silver, and cleaning machines made by Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. A. I. A. file 35 c.

BLOWERS, HEATERS, WASHERS

74 . . . Air conditioning equipment made by the United States Blower and Heater Corporation, Minneapolis, Minn., is illustrated and described in this booklet. Also contains a technical section containing climatic conditions compiled from U. S. Weather Bureau Data, relative humidity tables and graphs, etc. A. I. A. file 30 d.

NON-CLOGGING PUMPS

75 . . . Bulletin 126 illustrated and describing pumps for sewage handling and drainage in municipal sewage disposal plants, lift stations, buildings, and industrial plants. Issued by the Chicago Pump Co., 2336 Wolfram Street, Chicago, Ill.

AN INEXPENSIVE HUMIDIFIER

76 . . . Illustrates and describes the Aqualator, made by the Wilcolator Company, 17 Nevada Street, Newark, N. J., which is a humidifier for use in houses, offices, apartments, public buildings and industrial plants. Gives data on dangers of dry air and explains operation of this apparatus. A. I. A. file 30 f 1.

BASEBALL FIELD LIGHTING

77 . . . Illustrated booklet showing typical installation diagrams and placing of lights. Lighting data bulletin 2225 issued by the Crouse-Hinds Company, Syracuse, N. Y.

GOLF DRIVING RANGE AND MINATURE GOLF COURSE LIGHTING

78 . . . Lighting data bulletin 2224 issued by the Crouse-Hinds Company, Syracuse, N. Y., giving lighting layouts and installation information.

WOLVERINE UNIT HEATERS AND COPPER RADIATION

79 . . . Illustrated booklet giving various data and information relative to unit heaters, etc., made by the Wolverine Tube Co., 1411 Central Avenue, Detroit, Mich.

TERRA COTTA FOR PUBLIC BUILDINGS

80 . . . Artistically printed booklet published by the National Terra Cotta Society, 230 Park Avenue, New York, giving pictures of public buildings on which

terra cotta has been used. Gives information relative to the advantages of this material for this class of work. A. I. A. file 9.

MAKE WALKWAYS SAFE

81 . . . Catalog of the American Abrasive Metals Co., 50 Church St., New York. Contains data on specifying non-slip surfaces and illustrates the various products made by this company. A feature is that perspectives accompany the detail drawings making visualization easy.

WALL UNITS OF ATLANTIC TERRA COTTA

82 . . . A catalog prepared especially for the designer in the architect's office and enabling him by selecting units of the required bond to assemble them readily on his drawings for a proposed wall or partition. Also gives construction drawings showing how these wall units were used on the Waldorf-Astoria, American Museum of Natural History power house, and for various other exterior and interior uses. Published by the Atlantic Terra Cotta Co., 19 West 44th Street, New York City. A. I. A. file 9 c.

CHENEY INTERLOCKING WALL FLASHING

83 . . . Booklet illustrating and describing this type of interlocking wall flashing which does not break the bond. Shows construction photographs illustrating manner of use, as well as detail drawings and specifications. Issued by the Cheney Company, Winchester, Mass. A. I. A. file 12 h 1.

MODERN AMERICAN HARDWARE BY SARGENT

84 . . . Finely printed booklet, with no text, illustrating modern designs in hardware made by Sargent & Company, New Haven, Conn. Each design is accompanied by a pencil sketch of a building in which it has been used.

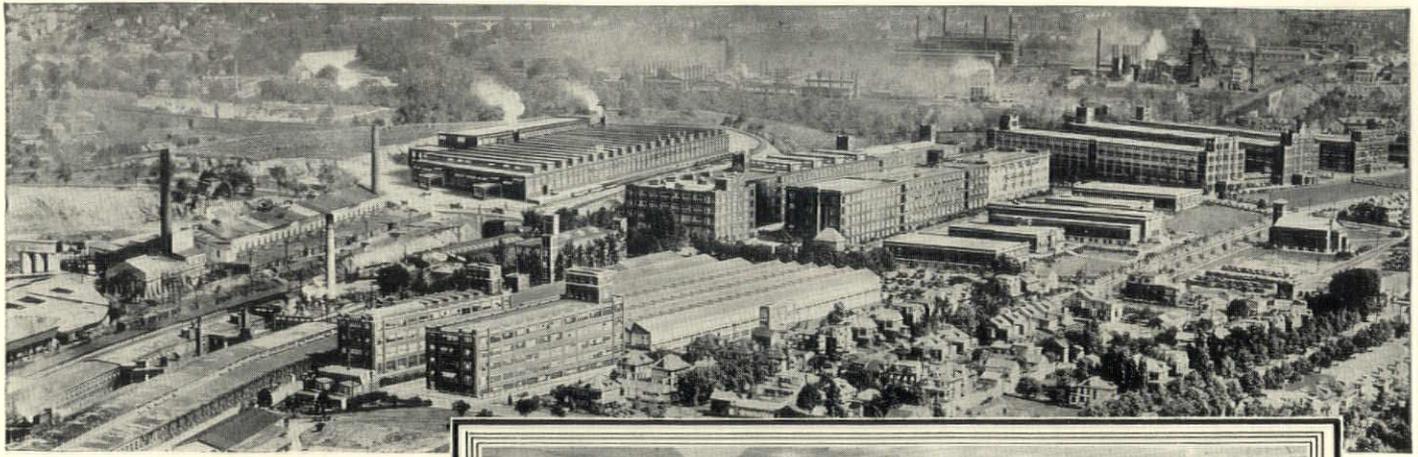
HANDBOOK ON GAS HEATING

85 . . . Contains a detailed description of all models of gas furnaces and controls made by the Bryant Heater & Mfg. Company, Cleveland, Ohio. It explains in detail methods of figuring warm-air heating installations and the application of Bryant equipment to various sizes of installations. A. I. A. file 30 b 1.

ILCO BLOUNT DOOR CHECK

86 . . . Catalog A of the Independent Lock Company, Fitchburg, Mass., illustrating and describing the various door checks made by this company.

(Continued on page 136)



View of Wyomissing Industries,
near Reading, Pa.

These Plumbing Fixtures furnished by
Reading Foundry & Supply Co.



Our Guarantee

We make but one grade of ware—the best that can be produced — and sell it at reasonable prices. We sell no seconds or culls. Our ware is guaranteed to be equal in quality and durability to any sanitary ware made in the world. The Te-pe-co trade mark is found on all goods manufactured by us and is your guarantee that you have received that for which you have paid.



TE - PE - CO

for Factory Plumbing

LEADING architects place Te-pe-co All-Clay Plumbing Fixtures in their specifications for factories as a matter of course.

Nowhere are better fixtures needed, both in material and design. Nowhere may harder service be expected.

Te-pe-co has always carefully studied the needs of factory installations. We have designed fixtures to economically—quality considered—meet the requirements where sanitary facilities must be provided for large groups of workers. Many years of experience in this work is at your service. We will gladly help you solve such problems.

THE TRENTON POTTERIES COMPANY

TRENTON, NEW JERSEY, U. S. A.

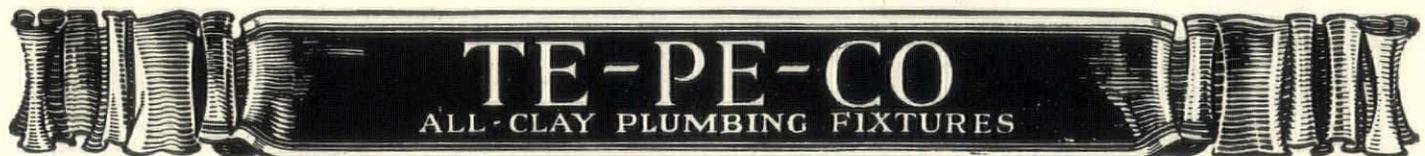
National Showroom—New York City
101 Park Ave., Entrance on 41st St.

Branch Offices
Boston, Philadelphia, San Francisco

Export Office: 115 Broad Street, New York City

Partial list of Industrial Plants that are Te-pe-co equipped:

Atwater Kent Factories	Philadelphia, Pa.	Oakland Motor Car Co.	Pontiac, Mich.
Leeds & Northrup Co.	Philadelphia, Pa.	Ford Assembly Plant	Charlotte, N. C.
Wyomissing Industries	Reading, Pa.	New Schreff Factory	Charlestown, Mass.
Hudson Motor Car Co.	Detroit, Mich.	International Harvester Co.	Fort Wayne, Ind.
Fisher Body Corp.	Detroit, Mich.	Fox Film Production Plant	New York City
Chevrolet Motor Co.	Flint, Mich.	Ford Motor Co.	St. Paul, Minn.



New Catalogs

(Continued from page 134)

STEEL BATHROOM CABINETS

87 . . . Catalog 30B of the United Metal Box Co., Inc., 473 President Street, Brooklyn, N. Y., illustrating and describing the steel bathroom cabinets made by this company. A. I. A. file 29 i1.

WELDED PRODUCTS CORP.

88 . . . Catalog illustrating and describing products made by the Welded Products Corp., Kansas City, Mo., such as radiator enclosures and shields, incinerators, bathroom cabinets, toilet and shower partitions, etc. Also specification sheets on these various items.

NEW EXPRESSION IN COLOR

89 . . . Illustrates in colors an attractively finished face glazed structural clay tile for use in both interior and exterior load bearing and non-load bearing walls and partitions. Made by the National Fireproofing Corp., Fulton Bldg., Pittsburgh, Pa.

CAMPBELL PIVOTED INDUSTRIAL WINDOWS

90 . . . Contains specifications and typical installation details of weatherstripped horizontally pivoted windows and weatherstripped commercial and architectural projected windows made by the Campbell Industrial Window Company, Inc., New York City. A. I. A. file 16 e.

CAMPBELL WEATHERSTRIPPED CASEMENTS

91 . . . Contains specifications and construction details of casement windows made by the Campbell Industrial Window Company, Inc., Pershing Square Bldg., New York City.

METAL PROTECTIVE FINISHES

92 . . . Issued by the Sherwin-Williams Co., Cleveland, Ohio, this booklet discusses various types of metal protective paints in common uses, also information on preparation of metal surfaces for receiving paint, and specifications for various purposes.

HERMAN NELSON SYSTEM OF VENTILATION

93 . . . Large booklet illustrating and describing the new system of ventilation developed by the Herman Nelson Corporation, Moline, Ill., particularly in connection with school work. Contains a history of ventilation and the science of ventilation. Sets up various conditions and shows how the system meets those conditions. The booklet is very complete and covers its subject in an unusually interesting manner.

COWLING PRESSURE RELIEVING JOINT

94 . . . Explains the use of the pressure relieving joint made by the Cowling Pressure Relieving Joint Co., 226 West Superior Street, Chicago, Ill., which is intended to overcome the problem of cracked and spalled facing blocks in buildings of stone, terra cotta, marble, and granite. Contains pictures of many buildings in which used. A. I. A. file 8 c 4.



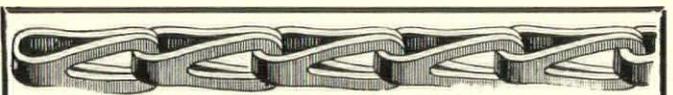
Heating and Ventilating Units



YOU can specify PeerVent Units with complete confidence. They are positively silent in operation, highly efficient, and dependable. Peerless Units built *nineteen years ago* are still giving perfect satisfaction. The latest PeerVent is improved throughout—better radiator, better motor, better fans, and better controls. Write for Peerless catalog.

PEERLESS UNIT VENTILATION CO., Inc
Pioneers in Unit Ventilation
BRIDGEPORT, CONNECTICUT

Resident Engineers in Principal Cities from Coast to Coast



"RED METAL" (Solid Bronze)
"GIANT METAL" (Phosphor Bronze)
AND STEEL (Cold Rolled)

SASH CHAINS

**For Economy
and
Satisfaction Use
SASH CHAINS**

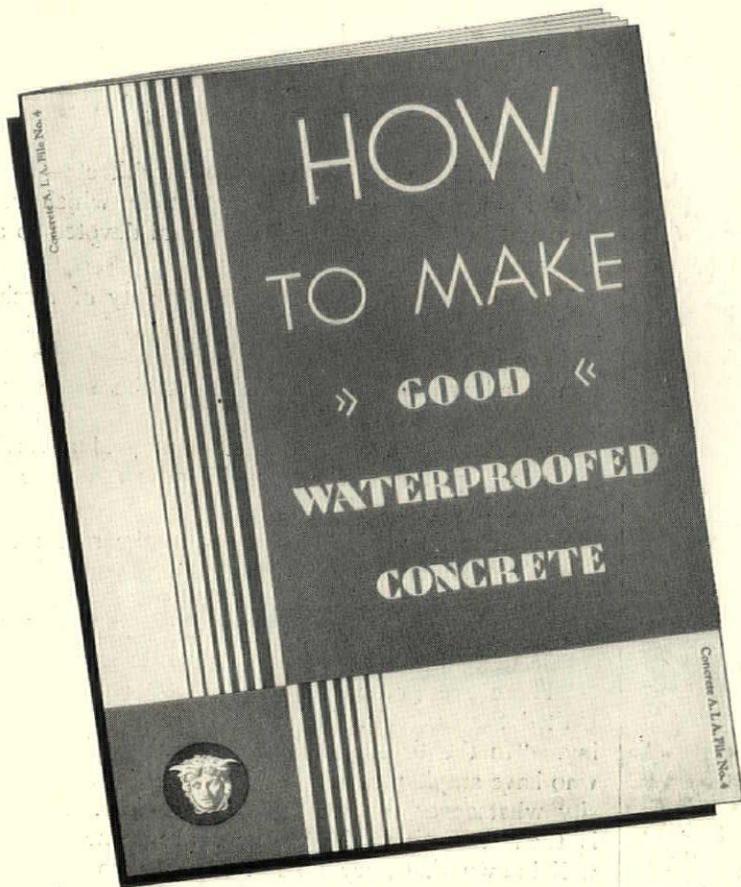
Manufactured by

THE SMITH & EGGE MFG. CO.

Bridgeport, Conn.

ORIGINATORS OF SASH CHAIN

See page C-2928 Sweet's Catalog and Page No. 147
American Architect Specification Manual



facts

WHAT ARE THE FACTS ABOUT WATERPROOFING CONCRETE?

THERE are many theories, fancies and fallacies on how to waterproof concrete and mortar. But waterproofing theories are not acceptable. Architects and builders need facts based on years of experience.

Over 27 years ago the Medusa Portland Cement Company invented integral waterproofing. In this period experience with the use of Medusa Portland Cements—Waterproofed—White or Gray, has given us undisputable facts on waterproofing concrete and mortar. Hundreds of structures, some dating back to 1903—all Medusa waterproofed—represent facts that prove the permanency and efficiency of Medusa Waterproofing for concrete and mortar.

Medusa Portland Cements—Waterproofed—(Gray or White) are made by incorporating Medusa Water-

proofing material with the Portland cement by the "Medusa Process" during manufacture. **THE FACTS ARE**—that this type of waterproofing assures permanent, uniform water repellency throughout the mass of concrete or mortar—**THAT ONE BAG** delivers two materials (Portland cement and waterproofing) to the job, saving time in handling and supervision necessary to make good waterproofed concrete or mortar—and that it is permanent and efficient.

The complete facts on waterproofing concrete and mortar are found in the Medusa Book on "How to Make Good Waterproofed Concrete." Let us send you a complimentary copy.

MEDUSA PORTLAND CEMENT COMPANY
1002 ENGINEERS BUILDING CLEVELAND, OHIO

MEDUSA WATERPROOFED WHITE and GRAY CEMENTS



Manufacturer of Medusa Gray Portland Cement (Plain and Waterproofed); Medusa White Portland Cement (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Portland Cement Paint and Medusa-Mix, The Masonry Cement

DIRECTORY

ALTING, CHARLES F. 705
ASHLAND GENERAL HOSPITAL 311

BAER, I.
BLDMG.
PROTOP.
BRIDGE

COOIN.
CONMR.
CONTR.
CCTZHU

DUPIC

ENGBE

HENDLY
HANSER
HEERON
HILBER

INTERN.
ASSTS. UNION OF N. AMER.

**They Must Be Good
To Be Where They Are!**

Tablet & Ticket Directories serve 80%
of the prominent office buildings in
America.
We render a complete service not
obtainable elsewhere — Equipment —
Strip—Maintenance.
Stock models or special construction
to meet every need.

The TABLET & TICKET CO.

1021 WEST
ADAMS ST.
115 EAST 23RD ST.
NEW YORK



CHICAGO
ILLINOIS
407 SANSOME ST.
SAN FRANCISCO

Est. 1870

WE RENT OR SELL

JONES, VAUGHN T. 303-7

MCCLUTE POTTERY CO. 715

K

S

15

22

23

27

29

31

34

37

39

41

44

47

49

509

LAST COLG



INTER-COMM-PHONE SYSTEM

The Stromberg-Carlson Inter-Comm-Phone System is satisfying the service demands of offices, factories, and large residences where simultaneous conversations are necessary, but where the volume of traffic is not large enough for a switchboard system and a paid operator.

Easy to operate, cuts down useless running around, speeds production and increases efficiency. Made by a firm with more than thirty-five years' experience.

Write for literature describing Stromberg-Carlson Telephone and Radio apparatus and trade discounts.
Stromberg-Carlson Telephone Manufacturing Co.,
Rochester, N. Y.

Stromberg-Carlson

Advertising Journal Talks About Architects' Advertising

"ADVERTISING Appeals to Architects—If It Is Free," is the title of an article which recently appeared in "Printers' Ink," a journal devoted to advertising. The article is as follows:

The president of the Michigan Society of Architects, L. Sukert, of Detroit, has the old-fashioned idea—or perhaps in this case it is new-fashioned—that architects should advertise their services just the same as does everybody else who has something to sell. It is his contention that men in his profession should advertise on the group plan—advertise architectural service rather than architecture itself.

Mr. Sukert took his idea down to the recent convention of the American Institute of Architects at Washington, and all the satisfaction he got was that of telling it to his associates. He was told by the officials of the Institute that "we do advertise but we do not pay for it."

"There are probably about 10,000 architects in the United States," Mr. Sukert told the Washington meeting. "In the first place there are some few architects who have ample means and who therefore have no necessity whatsoever for selling their services. Architecture is their avocation. Then there are some who are so well known that they do not have to go out and seek business. Then there are the rest of the 10,000 who have to go out and sell.

"The publicity committee, by its efforts, has been selling architecture and good taste. It has not been selling the functions of the architect to the public. It has not been informing the public. The attempt is being made to inform the public of architecture generally, but not to inform the public of the things that the architect does and how he does them.

"Let me put it this way. I learn of a possible prospect. The prospect hasn't the faintest idea what the architect can do for him. He has already been approached by several construction outfits who have already made him an offer to prepare plans and specifications for nothing. He can't see any reason why he should pay an architectural fee. My job becomes that of selling him architectural service, not architecture, and I find myself selling not my own architectural service, but architectural service in the broader sense.

"Perhaps the third or fourth architect who calls upon that prospect reaches him at a time when he has been sufficiently educated by the predecessors so that he finally decides to employ or commission an architect. The first two or three have done the missionary work which should have been done by Institute publicity.

"How are we going to reach such persons and tell them the truth about ourselves? How are we going to educate them concerning the services which they may expect of the architect?

"Now, I have racked my brain, we in Detroit have racked our brains, and we can't see any way except by group publicity, and by reaching them through the periodicals that the ordinary man, the man in the street, if you please, reads.

(Continued on page 140)



HOLLYWOOD, CALIFORNIA
Paramount Studios have used a million square feet of Insulite.



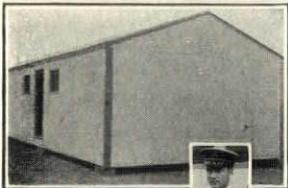
NEW YORK CITY
The City Bank Farmers Trust Bldg. used Insulite Roof Insulation.



MEXICO
Agua Caliente Hotel used Insulite for insulation and sound deadening.



SOUTH AMERICA
The roof of this Buenos Aires building is insulated with Insulite.



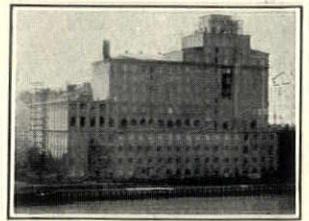
AT THE SOUTH POLE
Insulite insulation was used in the huts of the Byrd Expedition.



ENGLAND
Insulite corrected the acoustics in this Newcastle-on-Tyne Theatre.



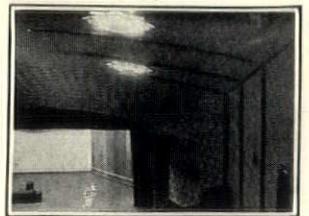
FRANCE
Old Luxembourg Palace, Paris, has Insulite lined Telephone booths.



SWEDEN
The Sport Palace, Stockholm, insulated throughout with Insulite.



GERMANY
Stuttgart Newspaper uses Insulite for insulation and sound deadening.



JAPAN
Acoustics of the Tokio City Hall, improved with Insulite Acoustile.

AROUND THE WORLD THE EFFICIENCY OF **INSULITE** *The Wood-Fiber Insulating Board* IS RECOGNIZED

ANY product—a safety razor, a giant locomotive, or an insulating board—must have superior features to gain world wide acceptance. Over vast areas of the Globe,—even in the Polar regions and sunny Japan, Insulite has been tested and approved. In England, France, Germany, and the Scandinavian countries, the popularity of Insulite is rapidly increasing. For over fifteen years, architects in the United States have appreciated the greater efficiency of Insulite and have been specifying it for roof insulation, for sheathing, as a plaster base, and as an aid in controlling sound and temperature.

Insulite has received this world wide approval because it combines the advantages of strength, durability, and high insulating efficiency. Insulite is made from the strong, tough fibers of northern woods, chemically treated to resist moisture and is not subject to rot or disintegration. Insulite Sheathing has several times the bracing strength of lumber horizontally applied. Insulite Lath is scientifically designed to eliminate plaster cracks and unsightly lath marks, and in addition, grips plaster with much greater strength than wood lath.

Let us send you additional information about Insulite and its many uses in the construction field. Let us tell you about Insulite Roof Insulation—how it reduces heat loss and prevents condensation and how the ship lapped units insure a "heat sealed" roof. You will want to know more about the new improved Insulite Acoustile and its effectiveness in correcting acoustics or deadening noise. Write today for samples and the Insulite A. I. A. File of Specifications and Details.

THE INSULITE CO.

(A Backus-Brooks Industry)

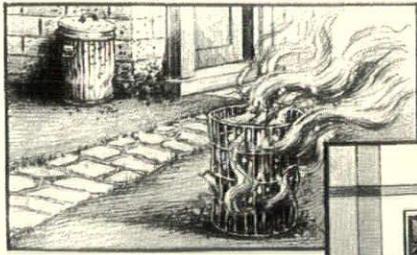
1200 Builders Exchange, Dept. 23A

Minneapolis, Minn.

OFFICES IN ALL PRINCIPAL CITIES

INSULITE

the Wood-Fiber Insulating Board



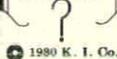
Which home owner is better satisfied?

YOUR greatest asset as an architect is satisfaction among your clients — the solution of the waste disposal problem is an important step in assuring satisfaction.

The Kernerator solves forever the problem of disposing of garbage, rubbish, newspapers, magazines, sweepings, tin cans, bottles, etc. To the housewife, the hopper door in the kitchen is a symbol of complete convenience.

Kernerator has become the accepted standard of incineration in the architectural profession. It is guaranteed by a financially responsible manufacturer. It is serviced through a nation-wide organization. See our catalog in Sweet's or write for A. I. A. folder.

With GAS or OIL for HEATING — what will you do with WASTE and RUBBISH?



KERNER INCINERATOR COMPANY
354 N. Richards St. Offices in over 150 cities Milwaukee

KERNERATOR

REG. U. S. PAT. OFF.
INCINERATION

FOR NEW AND EXISTING BUILDINGS

Color
vitality
strength
character
dignity
distinction
beauty

All synonymous with

ORIGINAL MINNESOTA PINK

"The Constructive Granite"

North Star Granite Corporation
St. Cloud, Minnesota

Won't Lose Dignity by Advertising

"For some reason or other everybody seems to have an idea that advertising and publicity are low-brow. If it is low-brow, why do the finest industries, the biggest corporations, the most dignified manufacturers, use it? And certainly advertising doesn't have to be low-brow. You have seen some of the most marvelous kinds of publicity in the daily papers. 'The Penalty of Leadership'—one of the most marvelous pieces of advertising that was ever written—isn't low-brow. It is most dignified. We of the Institute need not think, because we may be investing in advertising or publicity, just because it is such that we are losing one nickel's worth of the dignity and of the high standing we hope to maintain.

"I would like to hear, and I think there are a great many others who would, why our committee, which has so ably carried on its work, states in its report that it opposes group advertising when that, to me at least, is apparently the only way that we are going to reach these million and one building projects that we can't put our fingers on until after they have been begun by contractors and it is too late for architects."

At the conclusion of Mr. Sukert's remarks the chairman of the meeting asked the members to wait a little while so that they could hear "our publicist (the publicist being a Mr. Grady) answer the gentleman from Detroit."

Said Mr. Grady:

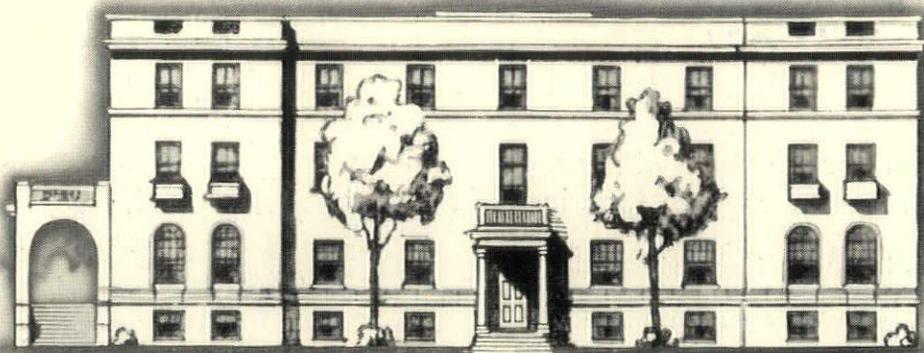
"The answer to the gentleman from Detroit is that we do advertise but we do not pay for it. An industrial concern advertises because it must pay for it. The Institute advertises by indirection. In other words we can gain the same end through news without charge that an industry gains through advertising by paying for it and that is the sole answer."

Mr. Sukert disclaimed any wish to start an argument, but he could not understand why all this free advertising upon which the Institute seems to rest its case leaves the prospect in the same darkness about the services of the architect that he was in before the advertising started. After repeated efforts, according to information given "Printers' Ink" by a member of the Michigan Society of Architects, he was unable to persuade the Institute to say just why it persisted in regarding group advertising by architects as unethical.

Newspapers will be interested to note that it is the Institute's apparent intention to go right along with its plan for free advertising. This gets about as far as free advertising ever gets in the production of practical results—which is to say that it gets nowhere at all.

THE Washington Bicentennial will be held in Washington, D. C., in 1932. The Bicentennial Commission plans to allocate various weeks in the spring and summer of 1932 to special features of the celebration. The Commission has under consideration a "Plan of Washington" week to be held coincident with the convention of the Institute, which will probably be held during the first week in May, 1932.

ANATIONAL safety code for mechanical refrigerators of all types, both domestic and commercial, has been approved by the American Standards Association. This code permits the installation of multiple systems in apartment houses with adequate safeguards.



MODERN LIGHTING *and* ADEQUATE
WIRING ASSURE COMFORT *and* CONVENIENCE
in NURSES' HOME

by EMIL R. JOHNSON
Registered Architect
Uniontown, Pa.

It was recognized in planning the Nurses' Home for the Brownsville Hospital at Brownsville, Penna., that electricity had a most important part to play in the future usefulness of the building. For here was to be the home of a group of hard-working nurses. There must be home-like surroundings to assure complete relaxation. Every facility for recreation and leisure must be provided.

† † †

This indicated the need for a wiring installation that would be particularly fitted to the conditions. Suggestions from the wiring and lighting bureau of the local electric service company helped materially in reaching a happy solution of the problem.

Their recommendations on the use of light, both for decorative and utilitarian purposes, were based on a sound understanding of the part light can play in providing welcome comfort and convenience. Their knowledge of trends in the ever widening applications of electricity suggested standards for a wiring installation that would be adequate for both present and future requirements.

† † †

This collaboration with the lighting and wiring bureau resulted in an installation that provides for 1.75 watts per square foot. Lighting can

be increased to 3.50 watts per square foot or by 100 per cent, without change in the wiring. On the panel-boards one additional circuit for future use is provided for every five active circuits. There are lighting outlets in clothes presses and over each shower stall. Plenty of convenience outlets are available in bedrooms, recreation rooms and corridors. Electric cooking and electric laundry facilities are provided.

† † †

Whatever upward trend there may be in the use of electricity and in requirements for light, the Brownsville Nurses' Home will be able to keep pace with increasing standards at minimum cost.

For information about trends in lighting standards and about adequate wiring call on the lighting bureau of your local electric service company or write direct.

NATIONAL ELECTRIC LIGHT ASSOCIATION, 420 LEXINGTON AVENUE, NEW YORK, N. Y.

"I want..."

A department conducted without charge as a service for readers of *The American Architect*

ARCHITECTURAL DESIGNER, long and varied experience on first class work. Quick sketches, perspectives, details, etc. Wishes position outside New York. *American Architect Want No. 64.*

ARCHITECTURAL DRAFTSMAN, college graduate, 4 years experience, wants position in office of architect, construction company, or builder doing first class work. Location immaterial. *American Architect Want No. 65.*

OPPORTUNITY for Young Man as associate with one of the oldest, successful architect's firms in Detroit. References and capital required, for 49% interest. *American Architect Want No. 66.*

MANUFACTURER'S REPRESENTATIVE—Architect of ten years experience, own practice, desires connection with manufacturer of building material or equipment as representative or executive. Bank and other references furnished. *American Architect Want No. 67.*

YOUNG MAN who has been serving in an architectural capacity with a large local builder desires to connect with a manufacturer, specialty house, contractor or other firm as contact man or for promotional sales work. Will entertain a proposition anywhere east of the Mississippi. *American Architect Want No. 68.*

DRAFTSMAN, would like position representing some firm as Contact Man, etc. Prefer some firm where work will be rewarded by advancement. *American Architect Want No. 69.*

POSITION WANTED, nine years experience in architectural drafting and estimating. Want detailing or estimating for manufacturer. Age 31, college education, married. *American Architect Want No. 70.*

PLANT DESIGNER, educated, traveled, wishes position with architectural office specializing in country houses. Able to design draught plans and sketch perspectives; estimate, supervise, planting, interview clients. Any city. *American Architect Want No. 71.*

UNIVERSITY GRADUATE in architecture, member of A. I. A. and registered in New York and New Jersey, leaving organization where for twelve years he has been employed as designer, executive, and contact man, desires a position with a reputable architectural office. *American Architect Want No. 72.*

The American Architect receives many requests for information, covering everything from men who seek positions and architects who require men or want back copies of a magazine. To make this service as useful as possible, such requests will be published without charge. Address your reply to The American Architect Want No. . . . () and enclose in a separate envelope. It will be readdressed and forwarded.

Types of subjects eligible for listing are: Architects seeking designers, draftsmen, engineers, specification writers or other assistants—men seeking positions—partner wanted—practice for sale—architects draftsmen and students who have books for sale or exchange, or who want back issues of a magazine—firms seeking a man with architectural training—architects who wish commercial connections, etc.

ARCHITECTURAL DRAFTSMAN all around experience on building and miscellaneous lines open for position. Great Lake States. Low Salary. Samples. *American Architect Want No. 73.*

AMERICAN ARCHITECT, 1885 to 1900 containing drawings by D. A. Gregg are desired, also location of any of Gregg's original drawings. *American Architect Want No. 74.*

ARCHITECT, New York City, will do drafting and detailing in own office for other architects or will accept position with another architect. *American Architect Want No. 75.*

BUILDING MATERIAL representative; Architect well connected in New York City desires position as manufacturer's or building material representative to contact with architects. *American Architect Want No. 76.*

CONSTRUCTION SUPERINTENDENT, graduate civil engineer, eight years experience, all types of construction, desires position. Vicinity of New York preferred, but will go anywhere. *American Architect Want No. 77.*

ARCHITECT, specializing in Ecclesiastical work with special reference to Tudor, Gothic and Colonial. Can take job from sketches to completion, including furnishings. Foreign and American training. *American Architect Want No. 78.*

CAST STONE DRAFTSMAN desires position, preferably as chief draftsman. Seven years experience in all phases. Can also estimate. Will situate anywhere. *American Architect Want No. 79.*

WANTED—High class designer for church and school buildings. Must be good at Gothic. Location 150 miles from New York. State experience, reference, salary expected. *American Architect Want No. 80.*

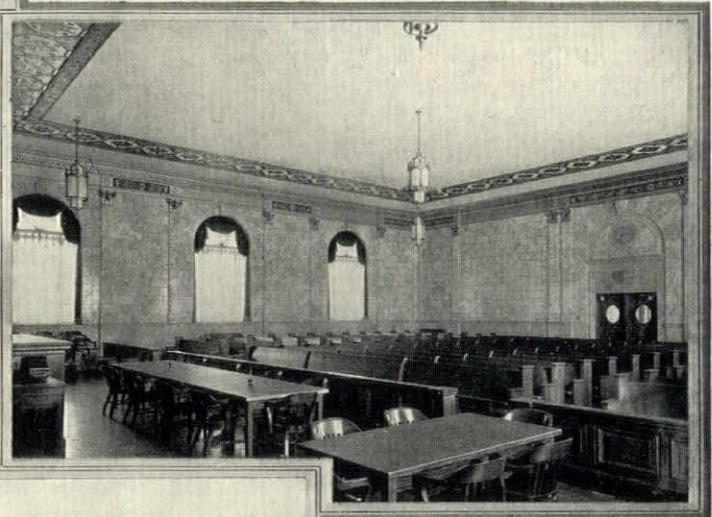
ARCHITECT with many years experience in various parts of the United States and Canada would like position with well established firm, either as contact man, salesman or in an executive position. Will go anywhere, prefer New England or New York. *American Architect Want No. 81.*



VENTILATION FOR COURT ROOMS and other Public Buildings



Buckeye Heatovent Ventilation in addition to its nation-wide use in Schools, Colleges, and Churches is being more and more used in Court Rooms, Telephone Exchanges, Lodge Rooms, and Meeting Halls.



CARROLL COUNTY COURT HOUSE
CARROLLTON, GEORGIA

Architect: Wm. J. J. Chase, Atlanta, Georgia
Heating Contractor: Wm. E. Manning & Sons

Ask for
Bulletins
Nos. 124
and 126
describing
and
illustrating
Buckeye
Heatovent
Units



Over 15,000 Buckeye Heatovent Units are rendering modern ventilating service in Schools, Colleges, Churches and other Public Buildings in forty-three states and Canada.

THE BUCKEYE BLOWER COMPANY

Main Office
& Factory



400 Dublin Avenue
Columbus, Ohio

Sales and Service Offices

ATLANTA
BALTIMORE
BOSTON
BUFFALO

CHICAGO
CLEVELAND
DALLAS
DENVER

DETROIT
GRAND RAPIDS
HARRISBURG, PA.
INDIANAPOLIS

KANSAS CITY, MO.
LOS ANGELES
MILWAUKEE
MINNEAPOLIS

NEW YORK CITY
NEWARK
PHILADELPHIA
PITTSBURGH

PORTLAND, ORE.
RICHMOND, VA.
SALT LAKE CITY
SAN FRANCISCO

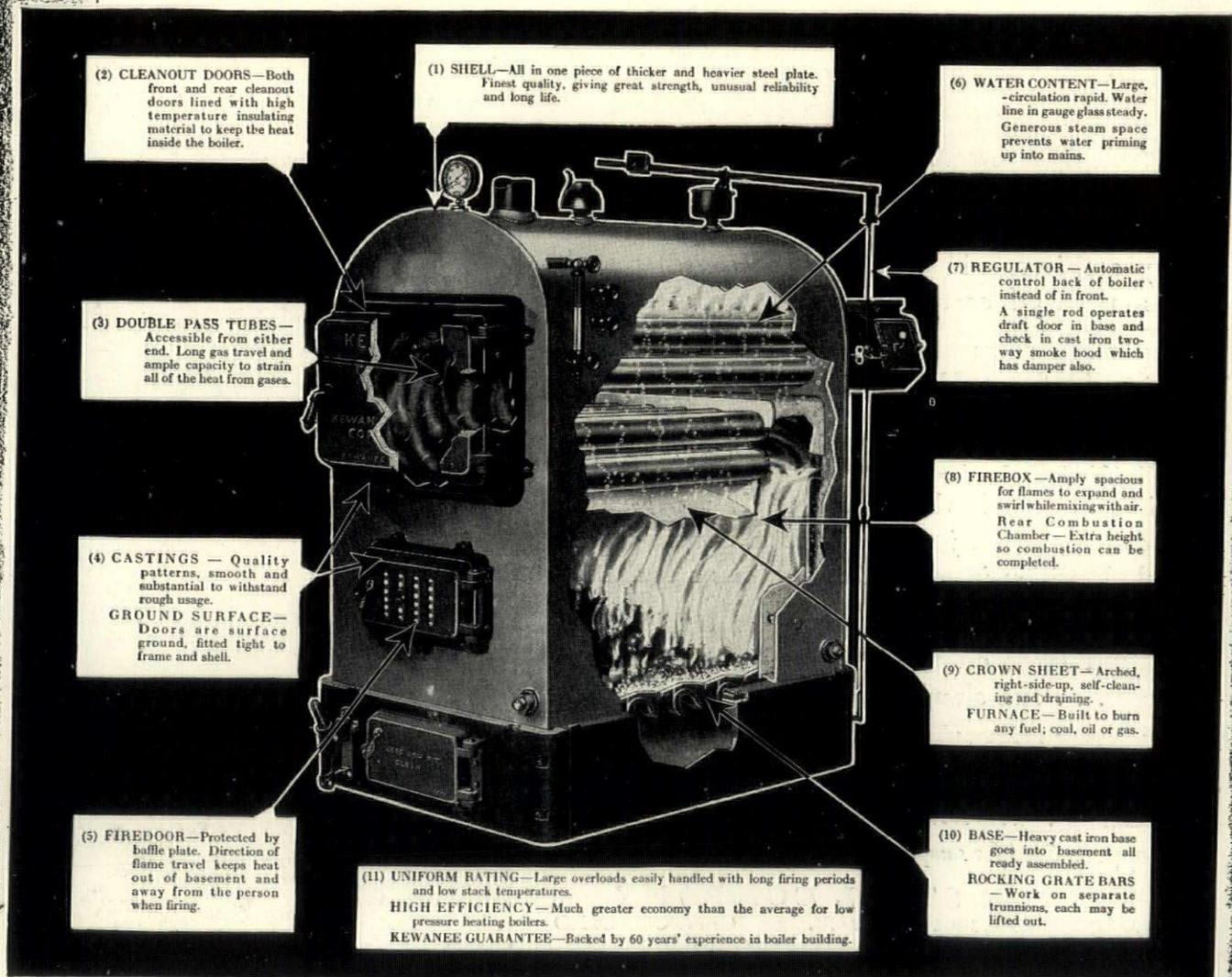
SEATTLE
SYRACUSE
ST. LOUIS
YOUNGSTOWN

TOLEDO
IN CANADA
TORONTO
ONTARIO

KEWANEE

Type "R" STEEL BOILER for Smaller Buildings

COMPARE the new Kewanee Steel Boiler with any other small heating boiler made, and it is quickly seen that the buyer certainly *gets more* by investing in Kewanee. The sectional view shows some of the unusual Kewanee features. Ask for Catalog Number 88.



Tapped for Ezelso Water Heater

KEWANEE BOILER CORPORATION

division of American Radiator & Standard Sanitary Corporation

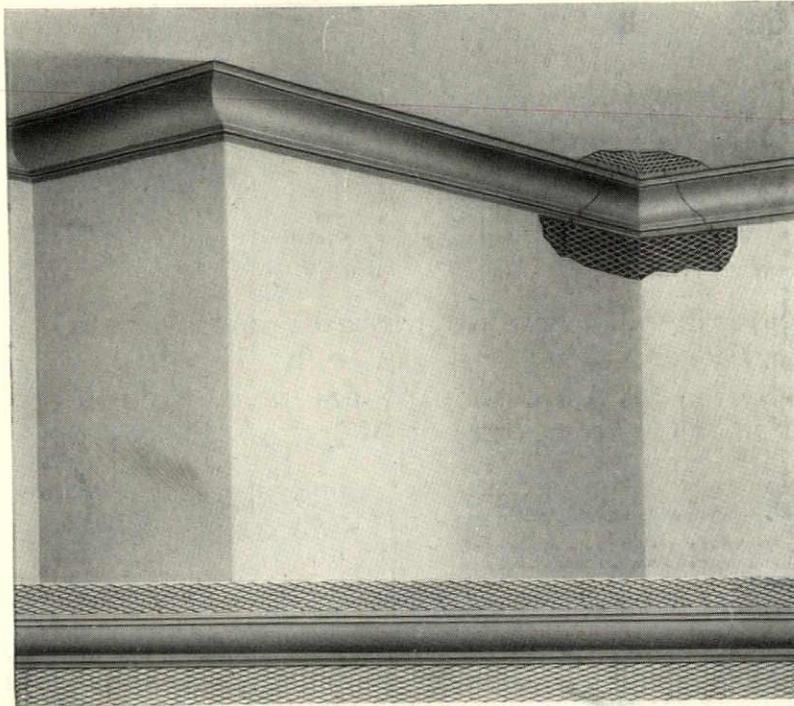
Branches in Principal Cities

KEWANEE, ILLINOIS

MEMBER OF STEEL HEATING BOILER INSTITUTE

MILCOR ANNOUNCES

A New Metal Cornice With Expansion Wings



●
Permanently
Keyed to the
Plaster on
Ceiling and Wall
●

Every architect will appreciate the advantages of the new metal cornice now offered by *Milcor*.

Being made of metal, this cornice will not crack. Having the famous *Milcor* expansion wings at each side, cornice cannot pull away from the plastering. The plaster is reinforced right up to the edge of the cornice.

An invisible joint has been perfected . . . by depressing the cornice, at the joint, the exact thickness of the metal. Precision in manufacture assures a perfect fit.

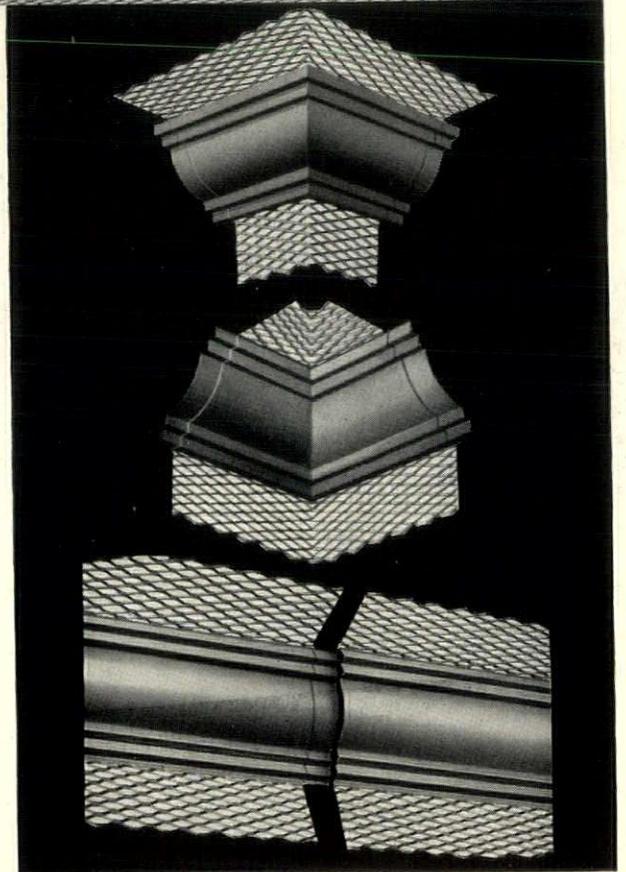
The mitre joint on the new *Milcor* cornice saves time and labor on the job. It is formed at the factory . . . and always fits perfectly.

Lead coated terne sheets are used . . . which will receive and hold a paint job to harmonize with the walls and ceilings. The new *Milcor* cornice is also available in copper. *Send for sample sections and complete information.*

MILCOR STEEL COMPANY

MILWAUKEE, WIS., 1401 Burnham St. CANTON, OHIO
Chicago, Ill. Kansas City, Mo. La Crosse, Wis.

Sales Offices: New York, 418 Pershing Square Building; Boston, Mass., 726 Little Building; Atlanta, Ga., 207 Bona Allen Building; Minneapolis, Minn., 642 Builders Exchange Building; Little Rock, Ark., 104 W. Markham Street



MILCOR PRODUCTS